1ST PRINTING - DC

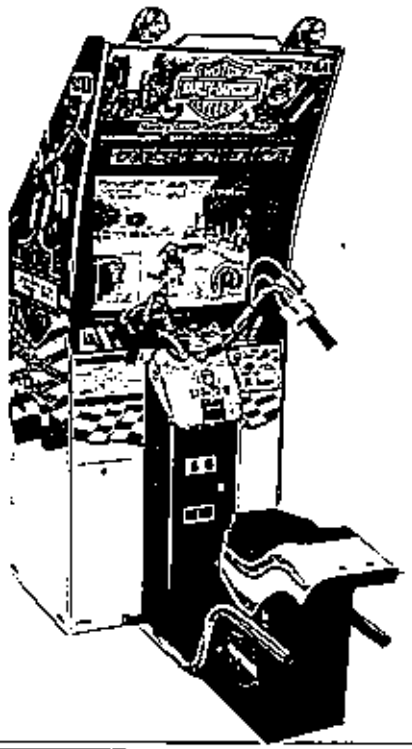
SEGA™

MOTOR HARLEY-DAVIDSON CYCLES®

Harley-Davidson & L.A.Riders

STD TYPE

OWNER'S MANUAL



STOP
IMPORTANT!

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

SEGA ENTERPRISES, LTD.

MANUAL NO. 420 - 6367 - 01

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SPECIFICATIONS

Installation space	: 765 mm (W) × 1,641 mm (D) (30.1 in. × 64.6 in.)
Height	: 1,960 mm (77.1 in.)
Weight	: Approx. 180 kg. (396.8 lbs.)
Power, maximum current	: 450W 5.20A (AC 110V 50 Hz AREA) 430W 5.00A (AC 110V 60 Hz AREA) 430W 4.60A (AC 120V 60 Hz AREA) 430W 2.60A (AC 220V 50 Hz AREA) 420W 2.50A (AC 220V 60 Hz AREA) 440W 2.50A (AC 230V 50 Hz AREA) 420W 2.40A (AC 230V 60 Hz AREA) 440W 2.40A (AC 240V 50 Hz AREA) 420W 2.30A (AC 240V 60 Hz AREA)
For TAIWAN Power, current	: 430W 5.20A(MAX.) 220W 2.70A(MIN.)
MONITOR	: 29 INCH COLOR MONITOR

INTRODUCTION OF THE OWNER'S MANUAL

This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards the product, Harley-Davidson & L. A. Riders STANDARD TYPE.
This manual is intended for the owners, personnel and managers in charge of operation of the product. Operate the product after carefully reading and sufficiently understanding the instructions. If the product fails to function satisfactorily, non-technical personnel should under no circumstances touch the internal system. Please contact where the product was purchased from.

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE
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DEFINITION OF LOCATION MAINTENANCE MAN AND SERVICEMAN

WARNING!

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

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

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

"Location's Maintenance Man" :

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

Activities of Location's Maintenance Man :

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

Serviceman :

Those who participate in the designing, manufacturing, inspections and maintenance service of the equipment at an amusement equipment manufacturer.
Those who have technical expertise equivalent to that of technical high school graduates as regards electricity, electronics and or mechanical engineering, and daily take part in the servicing & control and repair of amusement equipment.

Serviceman's Activities :

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

1. HANDLING PRECAUTIONS

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

WARNING!

- Before performing the 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 effects.
- To avoid electric shock or short circuit, do not plug in or unplug quickly.
- To avoid electric shock, do not plug in or unplug with a wet hand.
- Do not expose Power Cords and Earth Wires on the surface, (floor, passage, etc.). If exposed, the Power Cords and Earth Wires are susceptible to damage. Damaged cords and wires can cause electric shock or short circuit.
- To avoid causing a fire or electric shock, do not put things on or damage Power Cords.
- When or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or electric shock.
- In case the power cord is damaged, ask for replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause a fire or electric shock.
- Completely make connector connections for IC BD and others. Insufficient insertion can cause an electric shock.
- To avoid causing a fire or electric shock, do not make Specification changes by removing, converting and making additions unless otherwise designated by SEGA.
- Be sure to perform periodic maintenance inspections herein stated.

IMPORTANT!

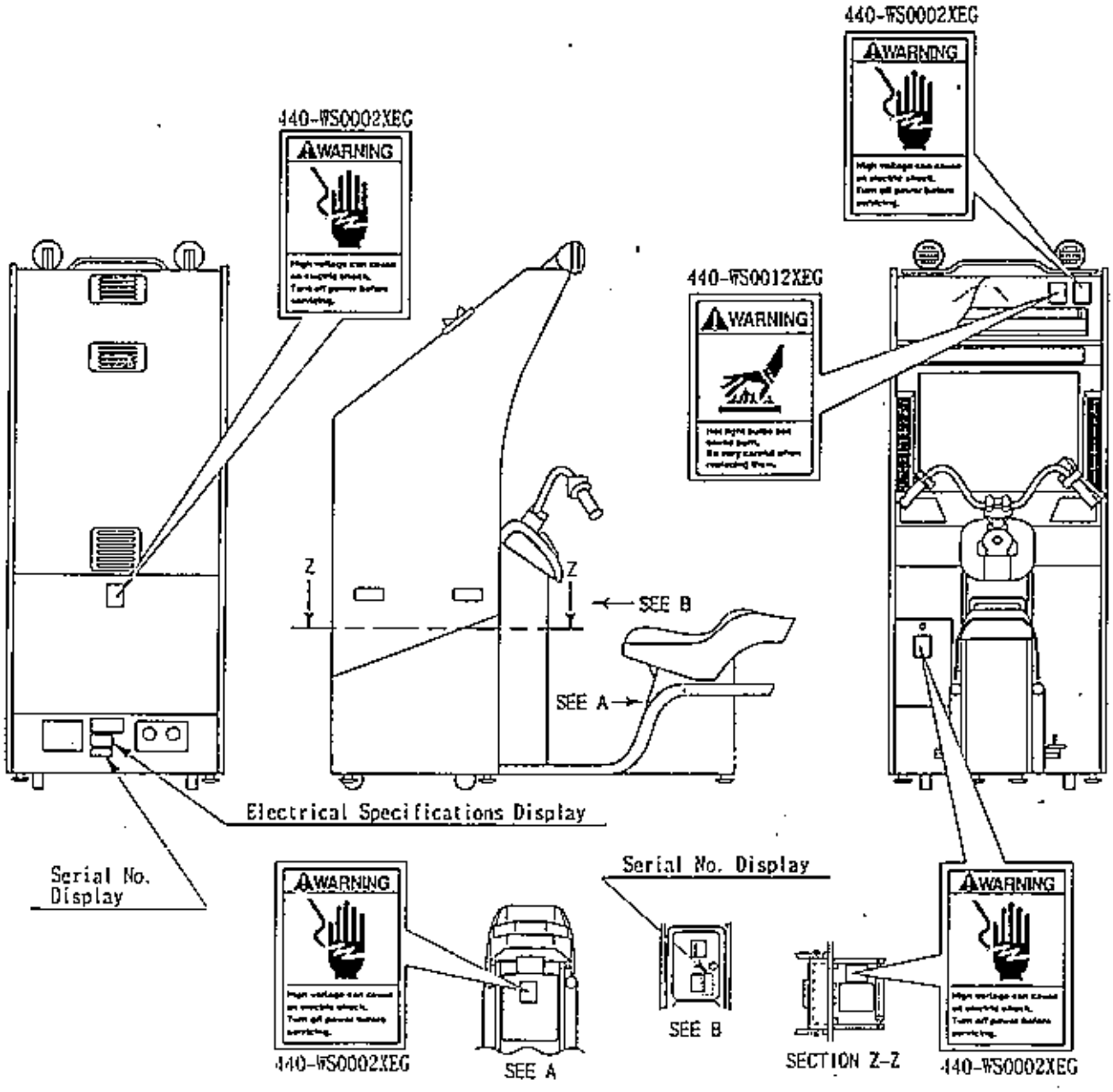
- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- When cleaning the CRT surfaces, use a soft, dry cloth. Do not apply chemicals such as thinner, benzine, etc.
- The electronic parts on the IC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

CONCERNING THE STICKER DISPLAY

SEGA product has Stickers describing the product manufacture No. (Serial No.) and Electrical Specifications. Also it has a Sticker describing where to contact for repair and for purchasing parts. When inquiring about or asking for repair, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial No. indicates the product register. Identical machines could have different parts depending on the date of production. Also, improvements and modifications might have been made after the publication of this Manual. In order to meet the above situations, mention the Serial No. when contacting the applicable places.

CONCERNING WARNING DISPLAYS

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



2. PRECAUTIONS CONCERNING INSTALLATION LOCATION

This product is an indoor game machine. Do not install it outside. Even indoors, avoid installing in places mentioned below so as not to cause a fire, electric shock, injury and or malfunctioning.

- Places subject to rain or water leakage, or places subject to high humidity in the proximity of an indoor swimming pool and or shower, etc.
- Places subject to direct sunlight, or places subject to high temperatures in the proximity of heating units, etc.
- Places filled with inflammable gas or vicinity of highly inflammable/ volatile chemicals or hazardous matter,
- Dusty places.
- Sloped surfaces
- Places subject to any type of violent impact.
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- The operating (ambient) temperature range is from 5˚C to 40˚C. Only in the case a projector is employed, the temperature range is from 5˚C to 30˚C.

LIMITATIONS OF USAGE REQUIREMENTS

- Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage and frequency requirements. A plate describing Electrical Specifications is attached to the product. Non-compliance with the Electric Specifications can cause a fire and electric shock.
- This product requires the Breaker and Earth Mechanisms as part of the location facilities. Using them in a manner not independent can cause a fire and electric shock.
- Ensure that the indoor wiring for the power supply is rated at 7A or higher (AC single phase 110~120V area), and 7A or higher (AC 220~240V area). Non-compliance with the Electrical Specifications can cause a fire and electric shock.
- Be sure to independently use the power supply equipped with the Earth Leakage Breaker. Using a power supply without the Earth Leakage Breaker can cause an outbreak of fire when earth leakage occurs.
- Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.
- When using an extension cord, ensure that the cord is rated at 7A or higher (AC 110~120V area) and 7A or higher (AC 220~240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

STOP

IMPORTANT!

- Note that for transporting the machine into the location's building, the minimum necessary dimensions of the opening (of doors, etc.) are 0.8m (W) and 2m(H).
- For the operation of this machine, secure a minimum area of 0.9m (W)× 1.9m (D). For ventilation, provide an approximately 15cm. space between the rear part of the cabinet and the wall.

Electric current consumption

MAX. 5.20A (AC 110V 50 Hz)
MAX. 5.00A (AC 110V 60 Hz)
MAX. 4.60A (AC 120V 60 Hz)
MAX. 2.60A (AC 220V 50 Hz)
MAX. 2.50A (AC 220V 60 Hz)
MAX. 2.50A (AC 230V 50 Hz)
MAX. 2.40A (AC 230V 60 Hz)
MAX. 2.40A (AC 240V 50 Hz)
MAX. 2.30A (AC 240V 60 Hz)
MAX. 5.20A (For TAIWAN)

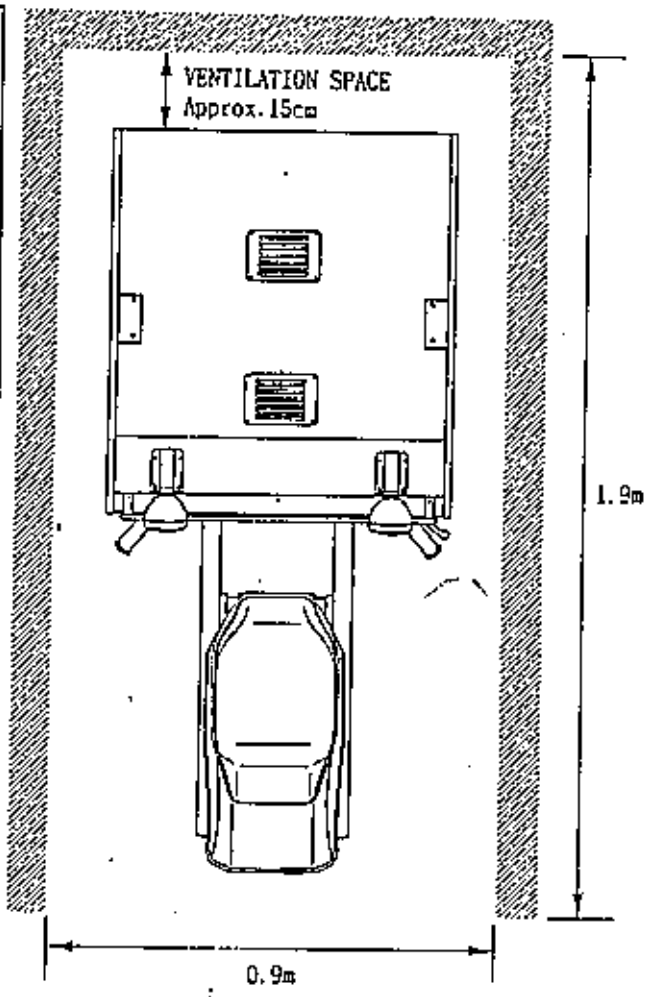


FIG. 2

3. PRECAUTIONS TO BE HEEDED FOR OPERATION

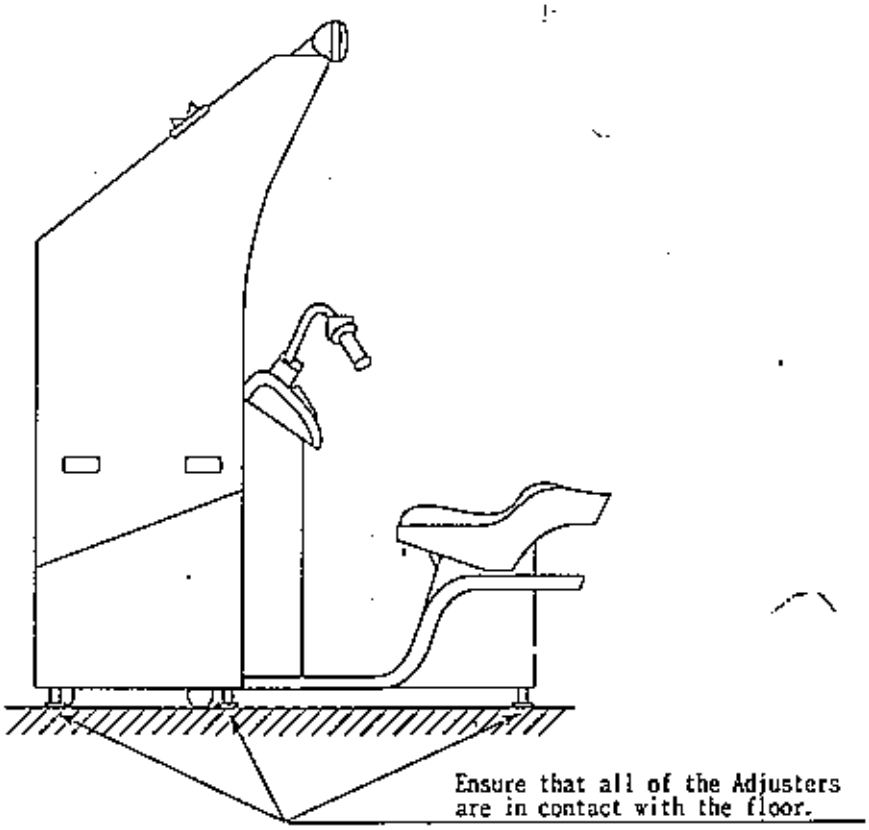
For the safe operation of the product, be sure to comply with the following precautions.

BEFORE STARTING OPERATION

WARNING!

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

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



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

- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step.
- To avoid electric shock accidents, 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, flower pots, cups, water tanks, cosmetics, and receptacles/containers/vessels containing chemicals and water.

CAUTION!

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

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.

WARNING!

- To avoid electric shock and short circuit accidents, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.
- To avoid falling down and injury resulting from falling down, immediately stop the customer's leaning against or climbing on the product, etc.
- To avoid electric shock and short circuit accidents, do not allow the customers to unplug the power plug without a justifiable reason.
- To avoid injury resulting from falling down, and electric shock accidents due to spilled drinks, instruct the player not to place heavy items or drinks on the product.

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.

4. NAME OF PARTS

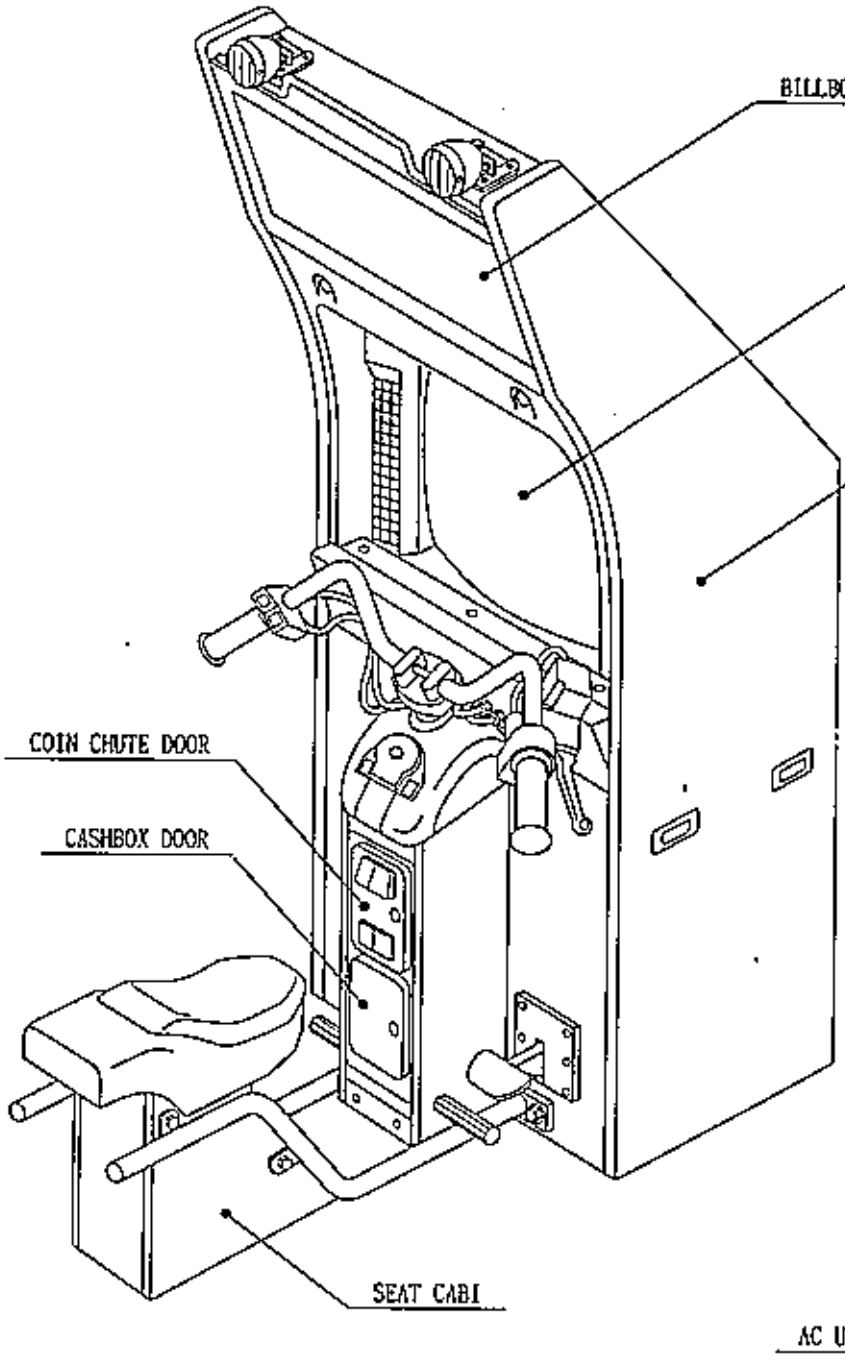


FIG. 4 a OVERVIEW

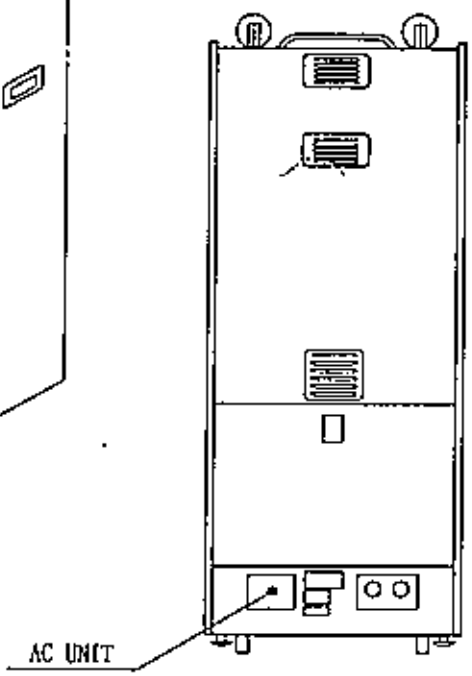


FIG. 4 b REAR VIEW

TABLE 4

	Width × Length × Height	Weight
CABINET	765mm × 951mm × 1,960mm	158kg
SEAT CABI	336mm × 1,132mm × 617mm	22kg
When assembled	765mm × 1,640mm × 1,960mm	Approx. 180kg

5. ACCESSORIES

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

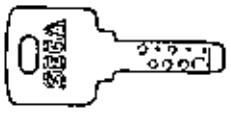
TABLE 5 ACCESSORIES

DESCRIPTION — OWNERS MANUAL
Part No. (Qty.) — 420-6367-01 (1)
Note

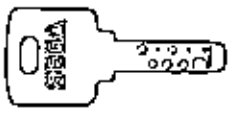
Figures

If Part No. has no description, the Number has not been registered or can not be registered. Such a part may not be obtainable even if the customer desires to purchase it. Therefore, ensure that the part is in safekeeping with you.

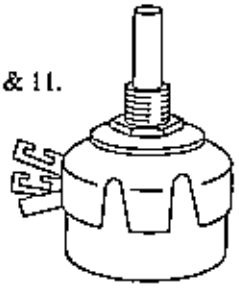
KEY MASTER
220-5576 (2)
For opening/closing the doors



KEY
(2)
For the CASHBOX DOOR



VOL CONT B-5K OHM
220-5484 (1)
For spare, refer to Section 10 & 11.



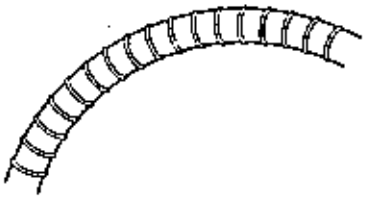
AC Cable (Power Cord)
600-6724
600-6729 (1) : TAIWAN
600-6695
600-6695-01 (1) : USA
600-6618 (1) : OTHERS
Used for installation, see 3 of Section 6.

FUSE 8000mA 125V
514-5036-8000 (1)
For spare, refer to Section 16.

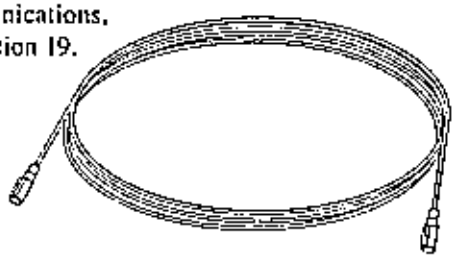
POP PANEL
429-0162-91 (1)
For communications, refer to Section 19.

CONN 29
310-5287-29 (1)
For communications, refer to Section 19.

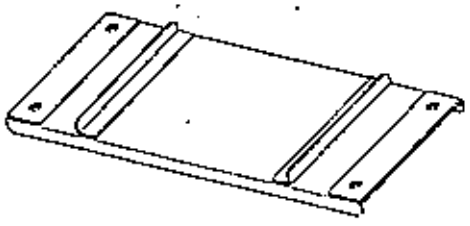
FLEX TUBE
310-5285-290150 (1)
For communications, refer to Section 19.



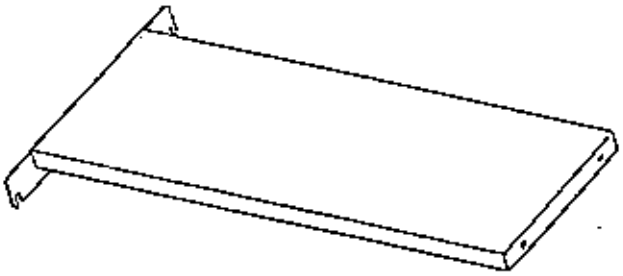
ASSY FIBER CABLE
600-6275-0500 (3)
For communications, refer to Section 19.



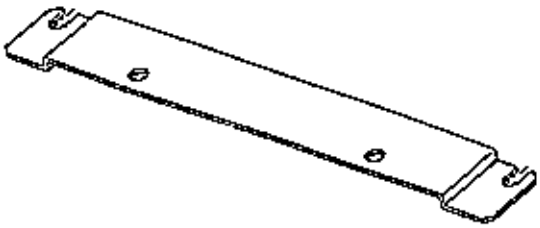
UPPER JOINT
HLD-0001 (1)
For communications, refer to Section 19.



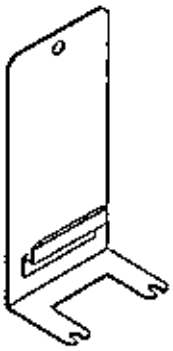
LOWER JOINT
HLD-0002 (1)
For communications, refer to Section 19.



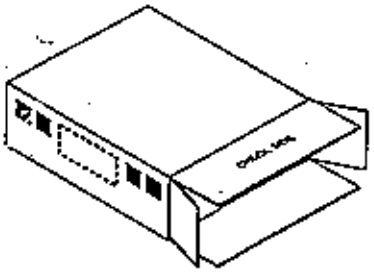
JOINT PLATE
HLD-0003 (1)
For communications, refer to Section 19.



POP HOLDER
HLD-0004 (2)
For communications, refer to Section 19.



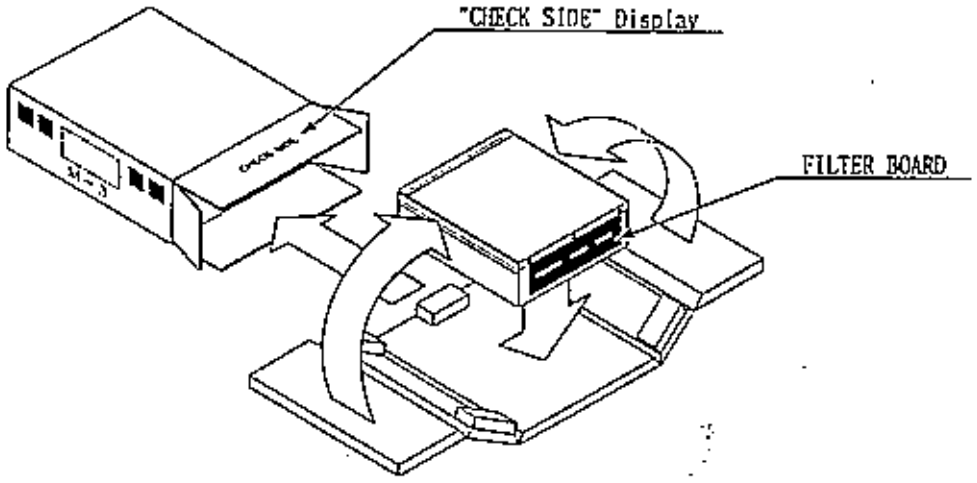
CARTON BOX
601-8928 (1)
Used for transporting the Game Board. Refer to the following.



HOW TO USE THE CARTON BOX

STOP
IMPORTANT!

- When asking for the replacement or repair of the product's Game Board (MODEL 3 BOARD), be sure to put the Game Board together with the Shield Case in the Carton Box. Otherwise, the request is not acceptable.
- Put the Shield Case in the Carton Box by paying attention to the correct direction as per the following instructions and as shown by the instructions printed on the Carton Box. 'Handling in an erroneous manner can damage the Game Board.



Wrap the Shield Case with the packing material and put it in the Carton Box as shown. Putting it upside down or packing otherwise in the manner not shown can damage the Game Board and parts.

6. ASSEMBLING AND PRECAUTIONS

WARNING!

- Perform the assembly work by following the procedure herein stated. Failing to comply with the instructions can cause an electric shock.
- Assembling should be performed as per this manual. Since this is a complex machine, erroneous assembling can cause an electric shock or damage to the machine resulting in not functioning as per specified performance.
- When assembling, be sure to perform the work by plural persons. Depending on the assembly work, there are some cases in which performing the work by a single person can cause personal injury or parts damage.
- Ensure that connectors are accurately connected. Incomplete connections can cause electric shock and short circuit accidents.

When carrying out the assembly work, follow the procedure in the following 4-item sequence:

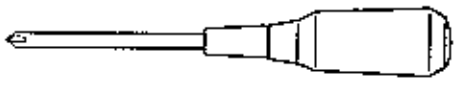
1 ASSEMBLING THE CABINET

2 SECURING IN PLACE (ADJUSTER ADJUSTMENT)

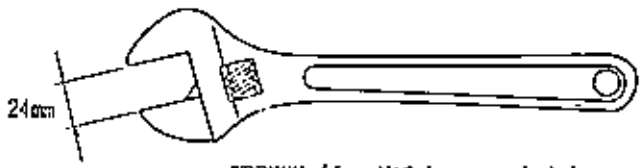
3 POWER SUPPLY, AND EARTH CONNECTION

4 ASSEMBLY CHECK

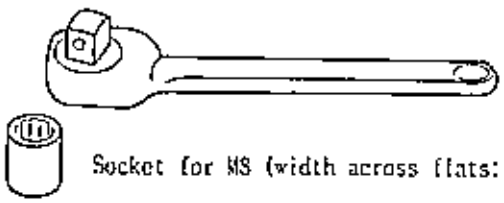
When assembling, make sure that tools such as a Phillips type screwdriver, wrench (for M16 hexagon bolt), and socket wrench (M8 hexagon bolt and nut) are available.



Phillips type screwdriver



WRENCH (for M16 hexagon bolt)



Socket for M8 (width across flats: 13 mm)

SOCKET WRENCH

1 ASSEMBLING THE CABINET

WARNING!

- Ensure that connectors are accurately connected. Incomplete connections can cause electric shock and short circuit accidents.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.

CAUTION!

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

① Tightly fit the seat cabi to the cabinet in a manner to insert it in.

② Secure to the cabinet with 2 hexagon bolts and 2 truss screws.

③ Secure the earth wire with the screw.

④ Connect the connector. (2P white)

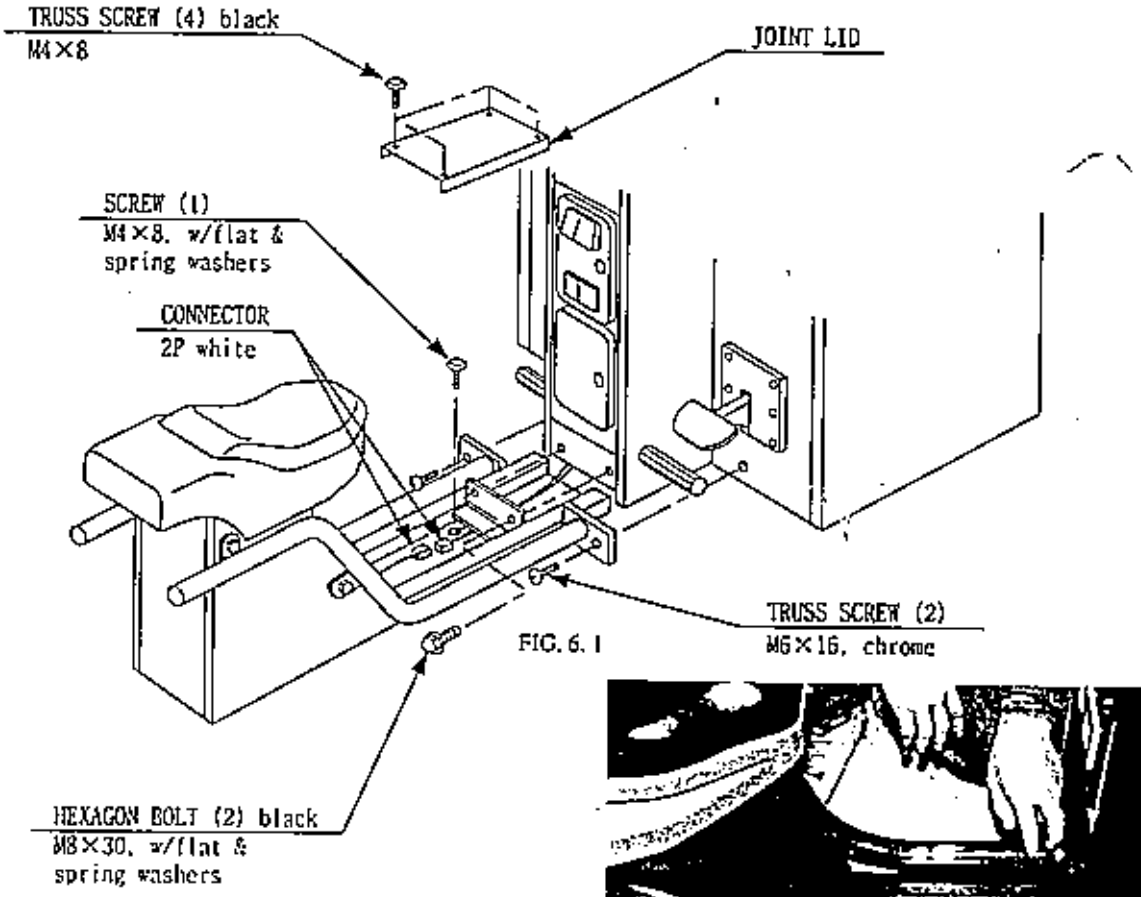


FIG. 6. 1

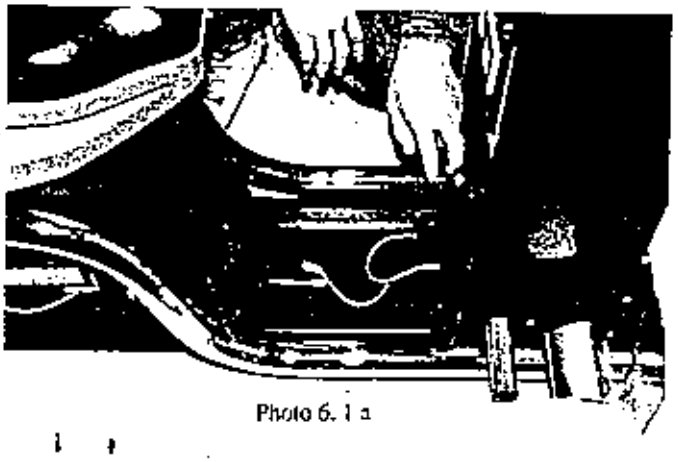


Photo 6. 1 a

⑤ Install the joint lid.

Photo 6. 1 b

⑥ Secure the joint lid with 4 screws.

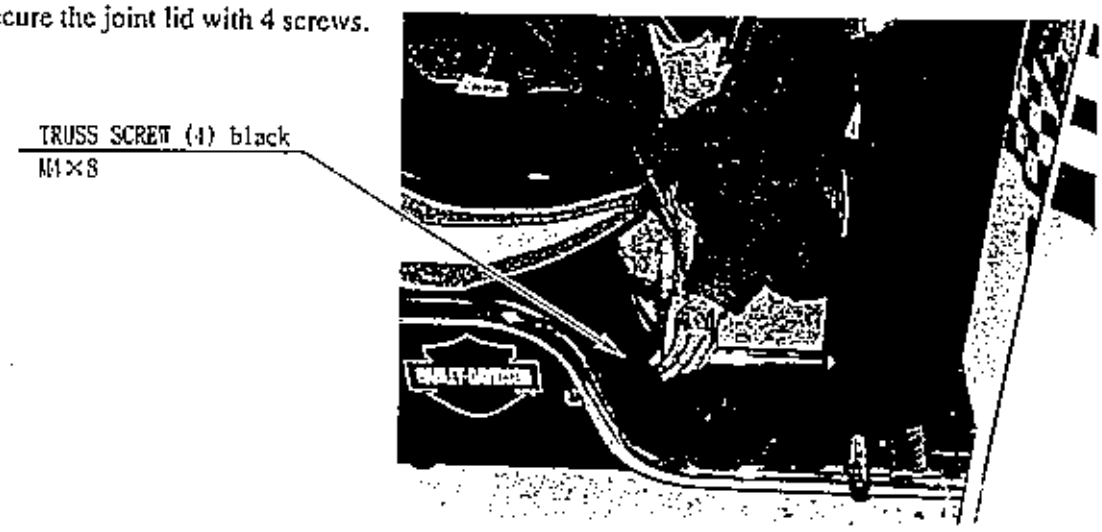


Photo 6. 1 c

2 SECURING IN PLACE (ADJUSTER ADJUSTMENT)

WARNING!

> Make sure that all of the adjusters are in contact with the floor. If they are not, the cabinet may move causing an accident.

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

① Move the machine to the installation position. When installing the machine close to a wall, be sure to secure passage space to enable the player to get in the machine.

② Cause all of the adjusters to make contact with the floor. By using a wrench, make adjustments in the height of the adjusters to ensure that the machine's position is level.

③ After making adjustments, fasten the adjuster nut upward and secure the height of the adjuster. (FIG. 6. 2 b)

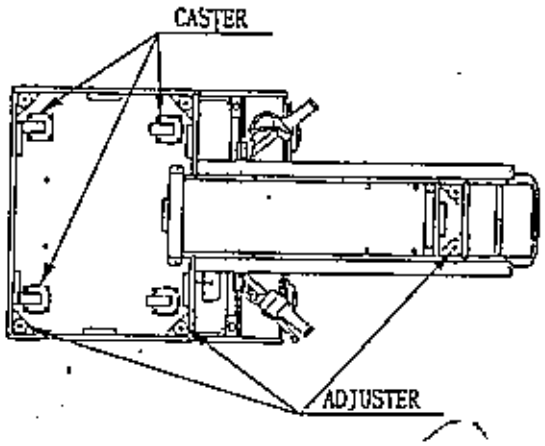
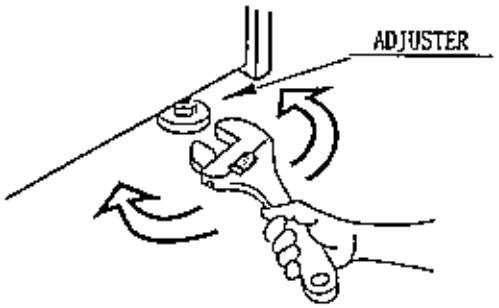


FIG. 6. 2 a BOTTOM VIEW



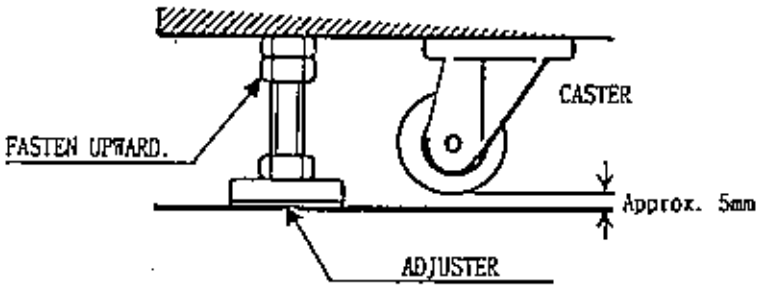


FIG. 6. 2 b ADJUSTER

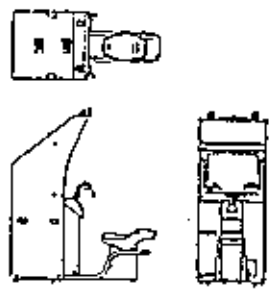


FIG. 6. 2 c
Refer to this Fig. (Scale:1/100) for the layout of the place of installation.

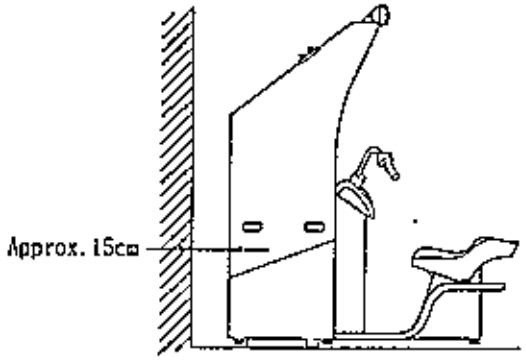


FIG. 6. 2 d
Provide sufficient space so as to allow for ventilation by the ventilation fan.

3 POWER SUPPLY, AND EARTH CONNECTION

WARNING!

- 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 the 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 an 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.

① The AC unit is mounted on the rear of the Cabinet. The AC Unit incorporates the Main SW, Earth Terminal and the Inlet which connects the Power Cord. Firmly insert the Power Plug into the Plug Socket and the other side of the plug to the Inlet. Turn the Main SW ON to turn power ON.

② Ensure that the Main SW is OFF.

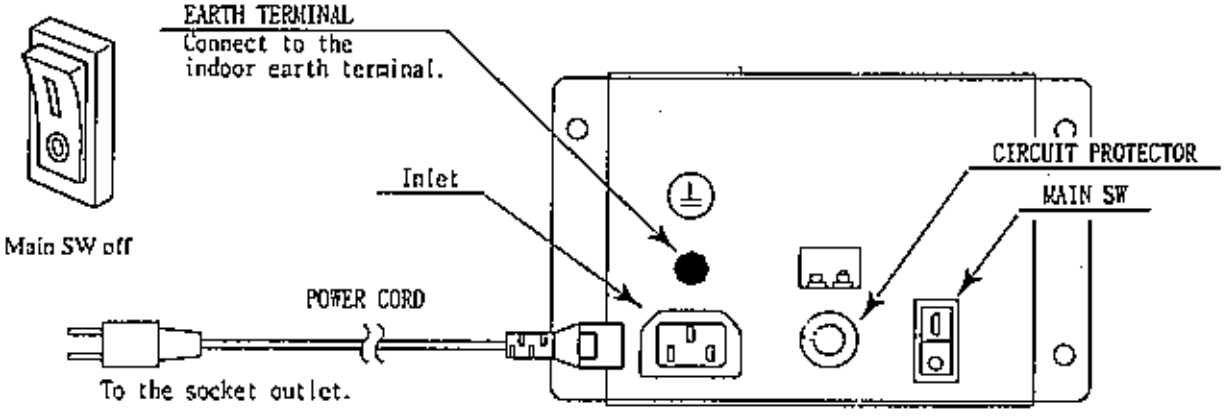


FIG. 6. 3 a AC UNIT

③ Connect one end of the earth wire to the AC Unit earth terminal, and the other end to the indoor earth terminal. The AC Unit earth terminal has a Bolt and Nut combination. Take off the Nut, pass the end of earth wire through the Bolt, and fasten the Nut.

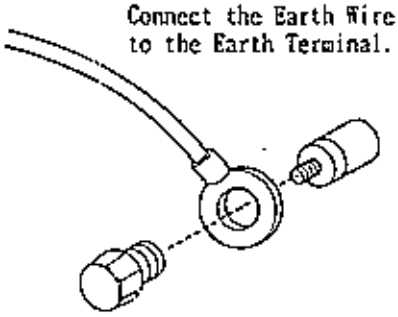


FIG. 6. 3 b Earth Wire Connection

④ Firmly insert the power cord into the plug socket and inlet.

⑤ Perform wiring for the Power Cord and Earth Wire. Install protective covering for the Power Cord and Earth Wire.

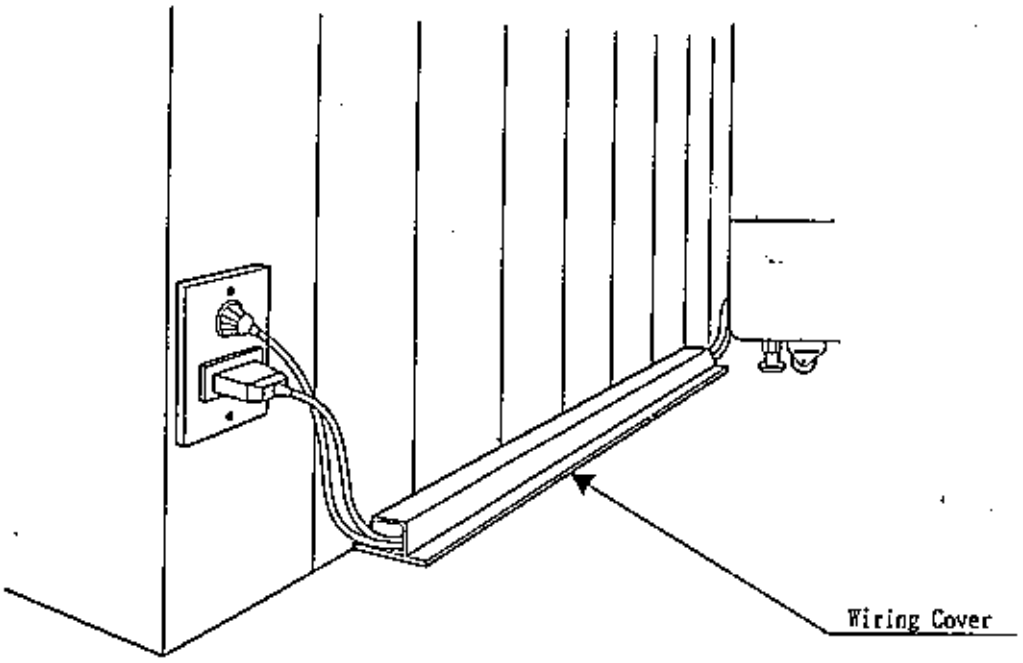
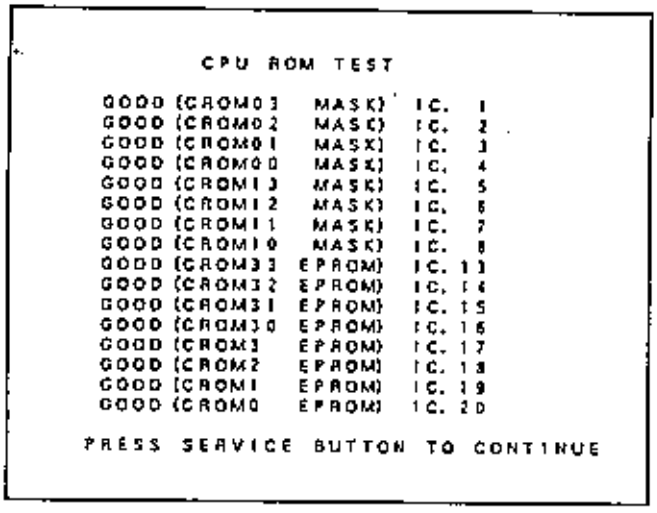


FIG. 6. 3 c Connecting Power Cord and Earth Wire

4 ASSEMBLY CHECK

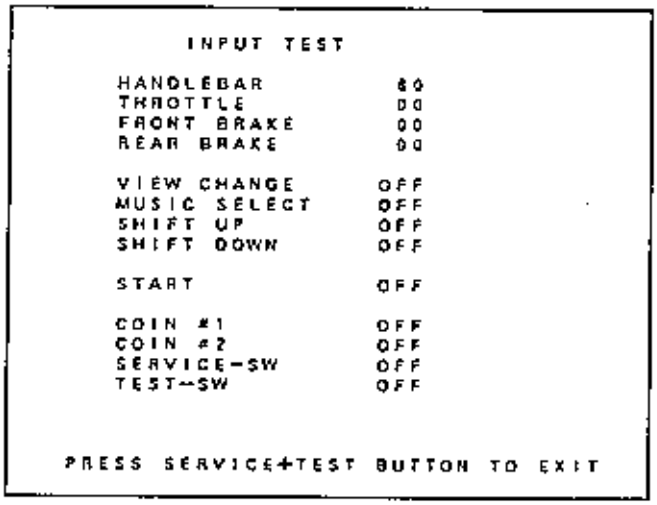
In the TEST MODE, ascertain that the assembly has been made correctly and IC BD. is satisfactory (refer to Section 9).
In the test mode, perform the following test:

(1) MEMORY TEST



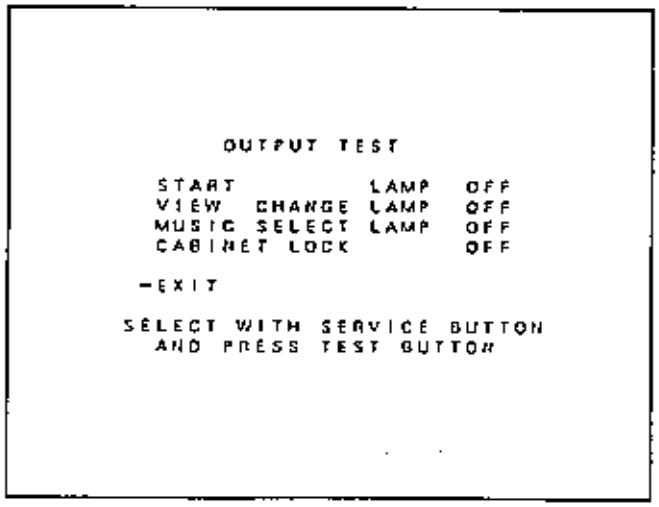
Selecting the MEMORY TEST on the test mode menu screen causes the on-board memory to be tested automatically. The game board is satisfactory if the display beside each IC No. shows GOOD.

(2) INPUT TEST



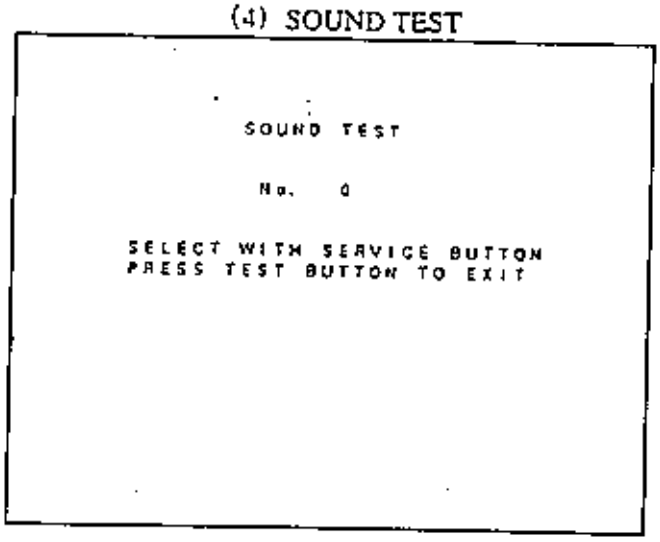
Selecting the INPUT TEST on the test mode menu screen causes the screen (on which each switch and V. R. are tested) to be displayed. Press each switch. For the coin switch test, insert a coin from the coin inlet with the coin chute door being open. If the display beside each switch indicates "ON," the switch and wiring connections are satisfactory. Check the display of V. R. value for the handlebar and accelerator & brake. If the V. R. values are not satisfactory, refer to Sections 10 & 11.

(3) OUTPUT TEST



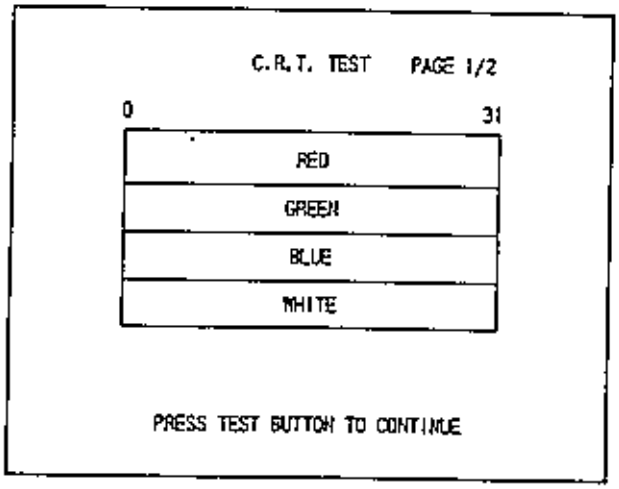
In the output test mode, carry out lamp test to ensure that each lamp lights up satisfactorily.

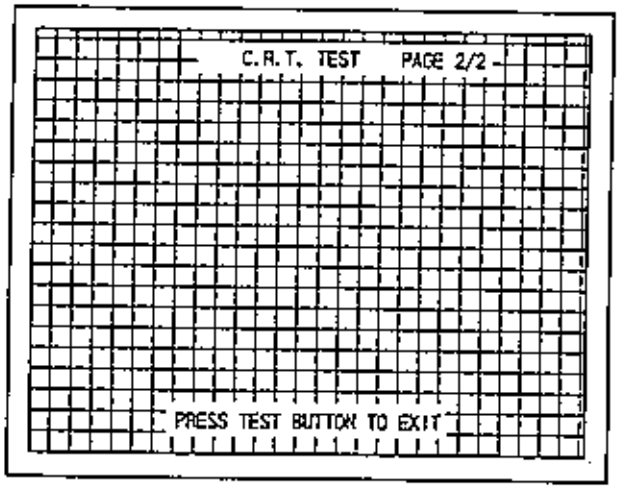
(4) SOUND TEST



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

(5) C.R.T. TEST





In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the monitor is tested) to be displayed. Although the monitor adjustments have been made at the time of shipment from the factory, make judgment as to whether an adjustment is needed by watching the test mode screen. If it is necessary, adjust the monitor by referring to Section 13.
Use the DEMAGNETIZER SW for the color deviation caused by the monitor's magnetization (refer to Section 9).

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

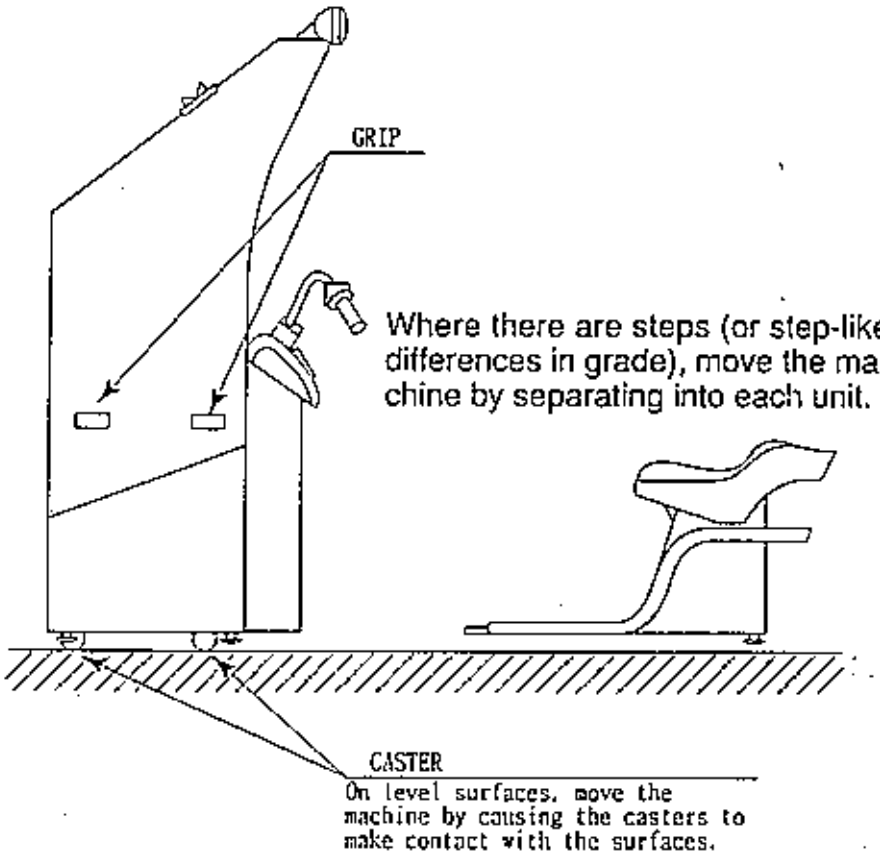
7. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE

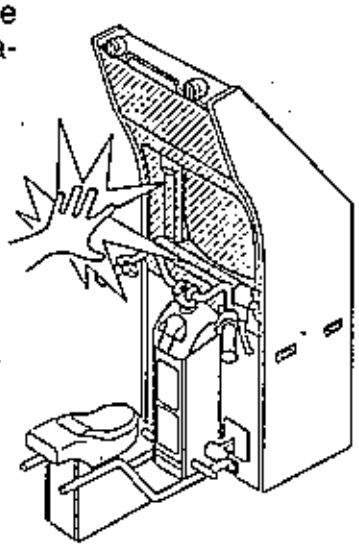
WARNING!

- When moving the machine, be sure to pull out the plug from the power supply. Moving the machine with the plug as is inserted can cause the power cord to be damaged, resulting in a fire and or electric shock.
- When moving the machine on the floor, retract the Leg 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 an electric shock and or short circuit.
- When lifting the cabinet, be sure to hold the catch portions or bottom part. Lifting the cabinet by holding other portions can damage parts and installation portions due to the empty weight of the cabinet, and cause personal injury.
- Where there are steps (or step like differences in grade), be sure to separate the cabinet when moving. Inclining the cabinet in a state as is joined can damage the joint portion due to the empty weight of the cabinet, and also, if damaged, the damaged parts fragments can cause injury.

CAUTION!

Do not push glass made parts or plastic parts. Failure to observe this can damage parts, and the damaged parts fragments can cause injury.





Pushing the glass made or plastic parts can damage the parts and cause injury.
Also, moving the machine by holding the handlebar can damage the handlebar.

FIG. 7

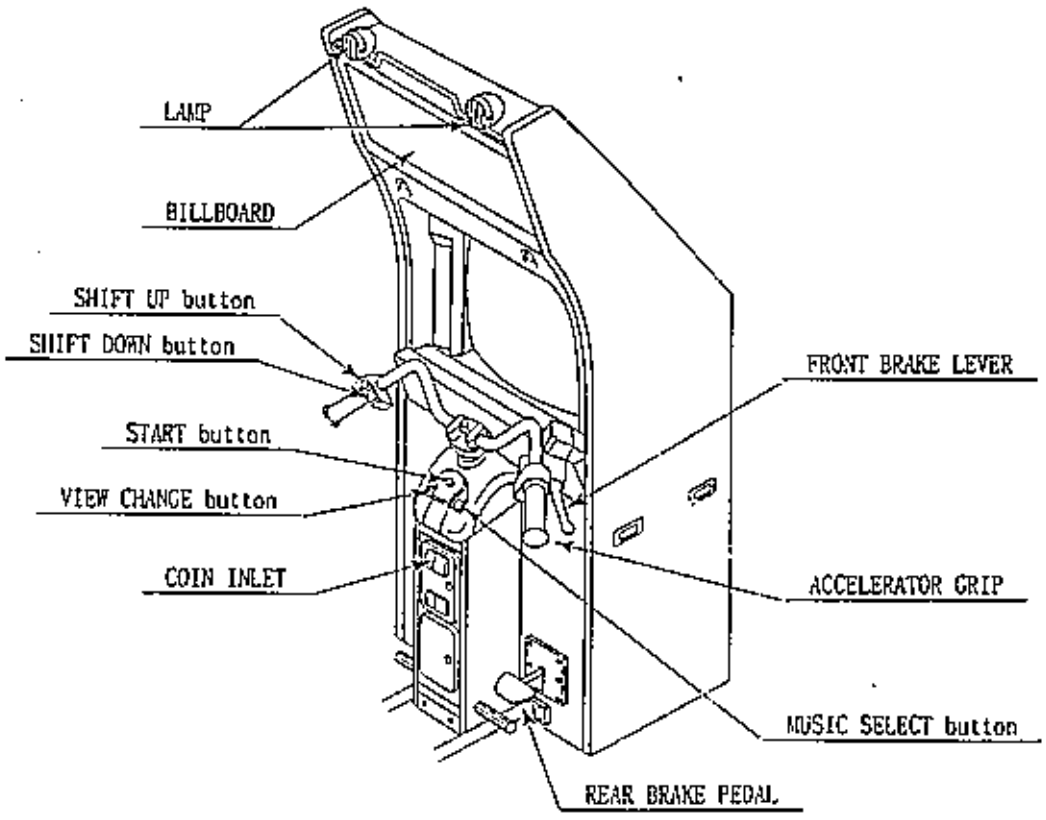
8. CONTENTS OF GAME

The following are operations and responses obtained when the machine functions satisfactorily. Any functioning different from the following may have been caused by a certain fault. Immediately investigate and eliminate the cause of malfunctioning to ensure satisfactory operation.
The explanations herein mainly refer to the case where the game machine is used independently. In the communication play, some points may differ from the following explanations.

When energized, the Billboard's fluorescent lamp is always lit.
During ADVERTISE (in the status a coin(s) is not inserted), the contents of game and HOW TO PLAY, etc., are audio-visually explained. Note 1
The status of the on-tank 3 buttons will change to and from lighting up / flashing / Lights-out.
Although the Start button is unlit during ADVERTISE, it blinks if even one coin is inserted, and is always lit during game play.
The View Change button and Music Select button are unlit during ADVERTISE and lit when the Select mode is displayed. During game, these flash alternately.
The two lamps of the Billboard flash during ADVERTISE and Select mode display, light up during game and flash for approximately 3 seconds at the time of passing the checkpoint.
In the case of communication play, the lamps light up during game, flash for approximately 3 seconds when passing the checkpoint (in the top position), and light out for 3 seconds when passing the checkpoint (in the second position or lower).

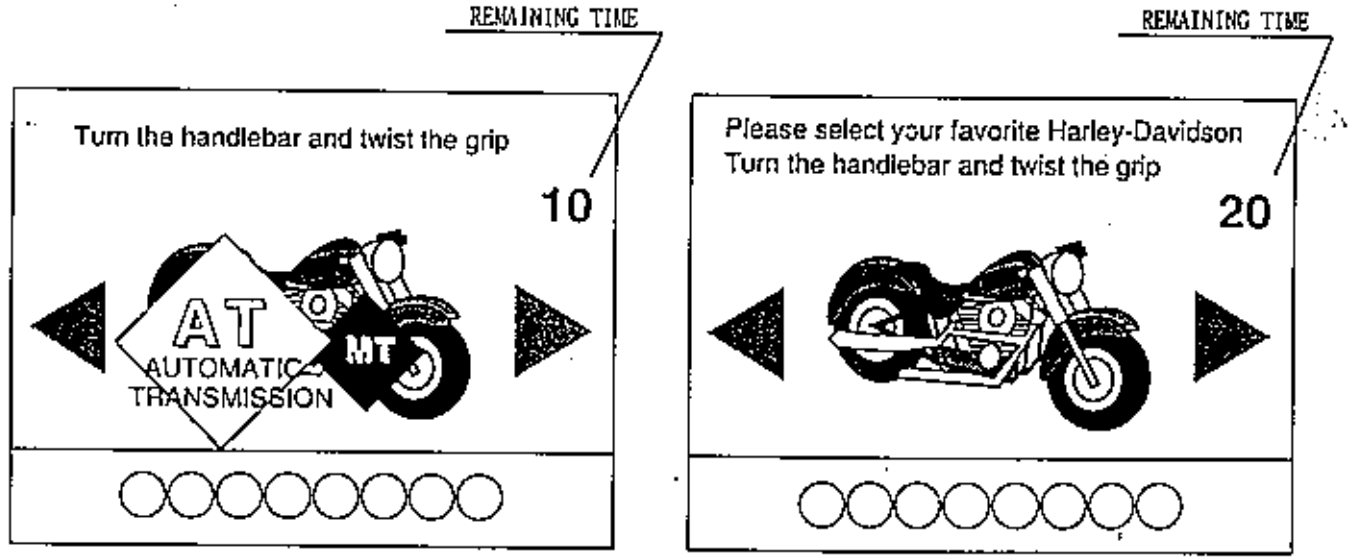
① Be seated.

② Insert a coin(s). When one play worth of coin(s) is inserted, the Select mode appears.



③ Select in order of BIKE and TRANSMISSION. Turn the handlebar to select and turn the ACCELERATOR GRIP to decide. Note 2

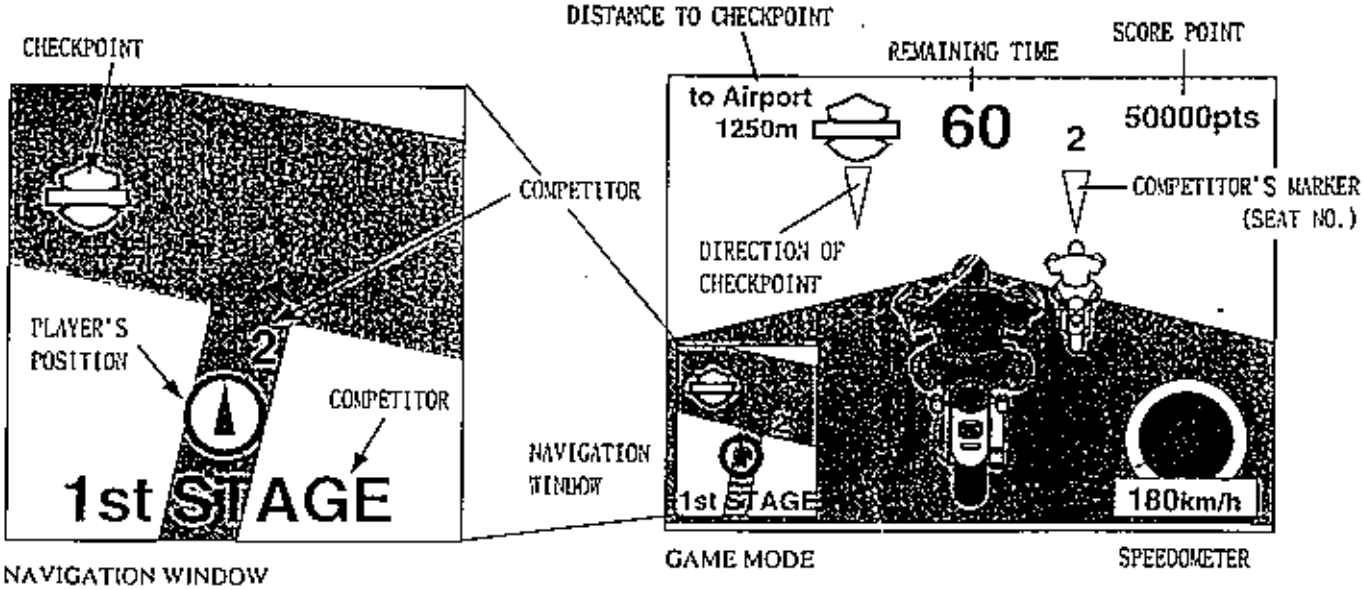
When the Select mode is displayed, countdown starts. At count 0, BIKE and TRANSMISSION being selected are automatically decided.



BIKE SELECT　　TRANSMISSION SELECT

④ When TRANSMISSION is decided, the race starts. The checkpoint (destination) is displayed on the screen, and Time Limit countdown starts.
At the same time the race starts, the View Change button and Music Select button alternately light up / light out.
Pressing the View Change button changes the View point in the game mode.
Pressing the Music Select button changes the BGM (background music).

⑤ The distance to the checkpoint is displayed on the upper left section of the screen. The remaining time is indicated on the upper center, score points on the upper right , navigation window (map) on the lower left, and speedometer on the lower right.



In the Specifications for USA, the distance to a checkpoint is displayed in feet and the Speedometer indicates MPH.

⑥ Run towards the checkpoint by judging the route from the arrow and NAVIGATION WINDOW. Passing the checkpoint within the time limit results in a Stage Clear. The time limit is extended and the next checkpoint is displayed.

⑦ If the player fails to pass the checkpoint within the time limit, the game is over.

⑧ Passing all of the checkpoints results in a Game Clear. Note 3 The successful player can see the ending mode.

⑨ After a game over, the accomplishment results are displayed on the map.

⑩ If the player scores high points, the Name Entry mode appears. Turn the handlebar, select character, and turn the Accelerator Grip to register the initial, etc.

Note 1: Setting change can be made to no sound output during ADVERTISE.

Note 2: In the case where several machines are linked for communication play, the bike appearing first in the Select mode is predetermined by the ID number of each cabinet set for the communication play.

Note 3: The setting of the number of checkpoints required for game clear is changeable.

KNACK OF GAME PLAY

- To make full use of bike characteristics.

  Each of the 5 types of bike has specific characteristic. High points can be earned by fully utilizing the bike characteristics and selecting the type which suites best for the player.

- To memorize the courses.

  The player will surely accomplish a game clear by selecting the course on which he can make full use of the bike characteristics instead of overly relying on the map and arrow.

9. EXPLANATION OF TEST AND DATA DISPLAY

By operating the switch unit, periodically perform the tests and data check. When installing the machine initially or collecting cash, or when the machine does not function correctly, perform checking in accordance with the explanations given in this section.
The following shows tests and modes that should be utilized as applicable.

STOP
IMPORTANT!

CAUTIONS TO BE HEEDED WHEN USING THE TEST MODE:

- In the case where plural machines are linked for communication play, if even one seat enters the test mode, all of the linked seats also enter the test mode. Therefore, if any one of the linked machines is in play, use care so as not to use the test mode.
- The contents of the setting changes made will not be effective unless the test mode is finished in the test mode. When the setting is changed, be sure to "EXIT" in the menu mode.
- Do not press the Test button during network check at the time of turning power on or exiting from the test mode. If any one of the linked machines uses the test mode during network check, all other Seats will continue network checking. Cause all of the Seats to reenter the test mode and then have all of the Seats exit from the test mode simultaneously.

TABLE 9 EXPLANATION OF TEST MODE

ITEMS	DESCRIPTION	REFERENCE SECTIONS
INSTALLATION OF MACHINE	When the machine is installed, perform the following: 1. Check to see that each setting is as per standard setting made at the time of shipment. 2. In the INPUT TEST mode, check each SW and VR. 3. In the OUTPUT TEST mode, check each of lamps. 4. In the SELF-TEST mode, check ICs on the IC Board. 5. Set the present time.	9-9, 9-10 9-5 9-6 9-3, 9-4 9-13
MEMORY	Choose MEMORY TEST in the MENU mode to allow the MEMORY test to be performed. In this test, PROGRAM RAMs, ROMs, and ICs on the IC Board are checked.	9-3, 9-4
PERIODIC SERVICING	Periodically perform the following: 1. MEMORY TEST 2. Ascertain each setting. 3. In the INPUT TEST mode, test the CONTROL device 4. In the OUTPUT TEST mode, check each of lamps.	 9-3, 9-4 9-9, 9-10, 9-13 9-5 9-6
CONTROL SYSTEM	1. In the INPUT TEST mode, check each SW and VR. 2. Adjust or replace each SW and VR. 3. If the problem can not be solved yet, check the CONTROL's moves.	9-5 10, 11
MONITOR	In the MONITOR ADJUSTMENT mode, check to see if the monitor adjustment is appropriately made.	9-8 13
IC BOARD	1. MEMORY TEST 2. In the SOUND TEST mode, check the sound related ROMs.	9-3, 9-4 9-7
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc.	9-14

9—1 SWITCH UNIT AND COIN METER

WARNING!

Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

STOP

!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 functioning of each SW is as follows:

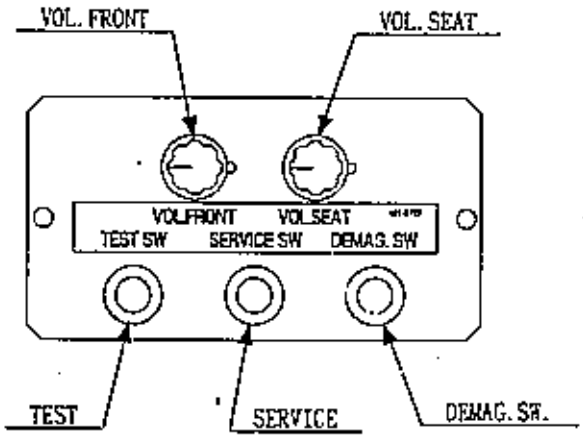


FIG. 9. 1 a SWITCH UNIT

TEST BUTTON: TEST — For the handling of the test button, refer to the following pages.

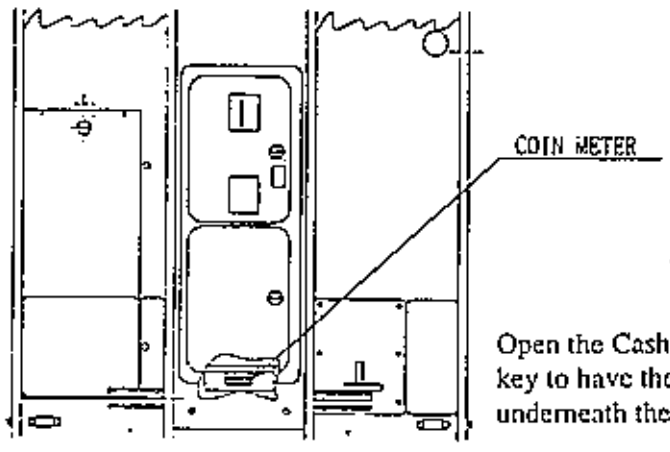
SERVICE BUTTON: SERVICE — Gives credits without registering on the coin meter.

DEMAG. SW: DEMAG. SW — Eliminates the on-screen color unevenness caused by CRT magnetization. Use this switch before adjusting monitor color.

VOL. FRONT: VOL. FRONT — Adjusts the sound volume of the monitor's left / right Speakers.

VOL. SEAT: VOL. SEAT — Adjusts the output of the under-the-seat Vibration Device.

COIN METER



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

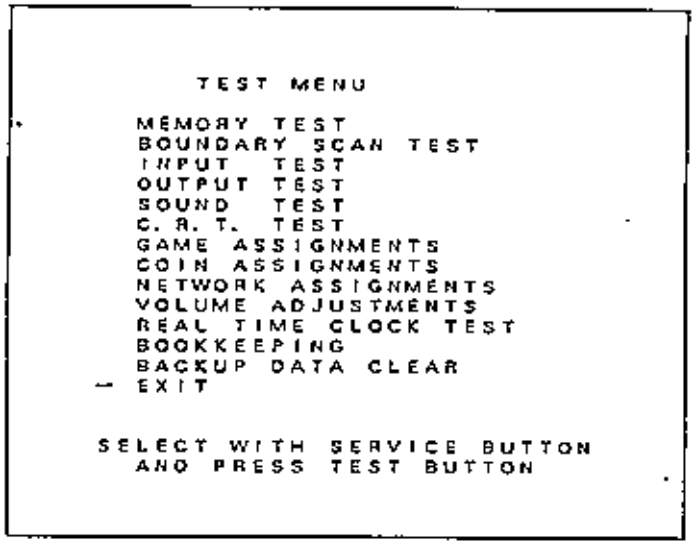
FIG. 9. 1 b

COIN METER

9—2 TEST MODE

The test menu mainly allows the board to be checked for accurate functioning, coin assignments to be set, and also the monitor to be checked.

USING THE TEST MODE



① Press the test button to display the test item menu.

② Press the Service button to move the arrow. Bring the arrow to the desided item and press the test button to execute testing the item.

③ Select EXIT and press the test button to exit from the test mode and return to the game mode.

FIG. 9. 2 Menu Mode

In the test mode, the following buttons can also be used for operation.

SHIFT UP & VIEW CHANGE buttons:	To move → upward.
SHIFT DOWN & VIEW CHANGE buttons:	To move → downward.
START button:	The selected item's execution and OK.

9—3 MEMORY TEST

When you select MEMORY TEST, test of each IC on the IC Board is executed in the order of CPU ROM TEST → CPU RAM TEST → VIDEO BOARD ROM TEST → VIDEO BOARD RAM TEST.

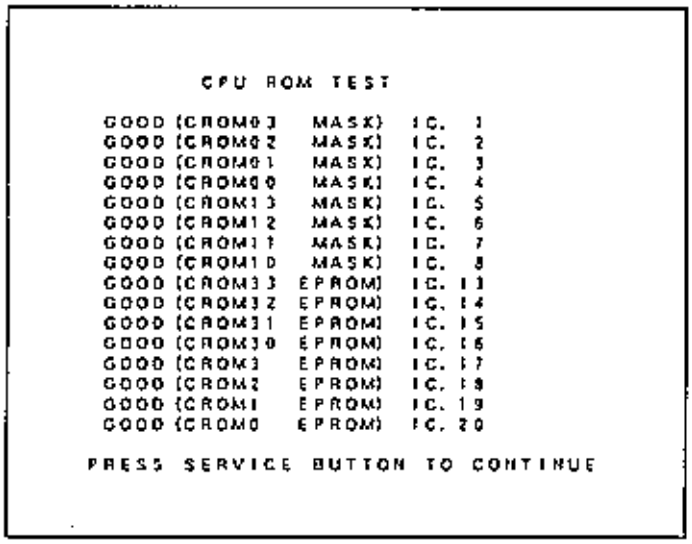


FIG. 9. 3 a MEMORY TEST (I)

- During test, "TESTING NOW" will be displayed instead of "PRESS SERVICE BUTTON TO CONTINUE" and "PRESS TEST BUTTON TO EXIT" in FIGs. 9. 3 a~d.
- As a result of the test, GOOD will be displayed if the IC is satisfactory and BAD will be displayed if the IC is abnormal.
- When the test is complete, if FIGs 9. 3 a~d are displayed, it is satisfactory.
- After finishing the VIDEO BOARD RAM TEST, press the test button to return to the menu mode.

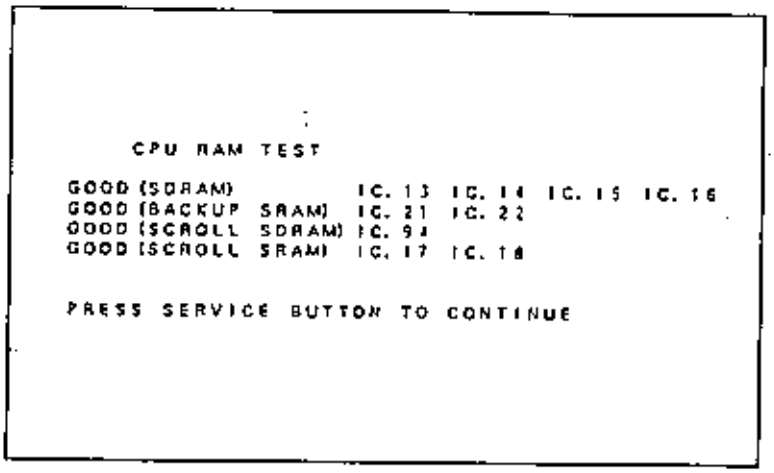


FIG. 9.3 b MEMORY TEST (2)

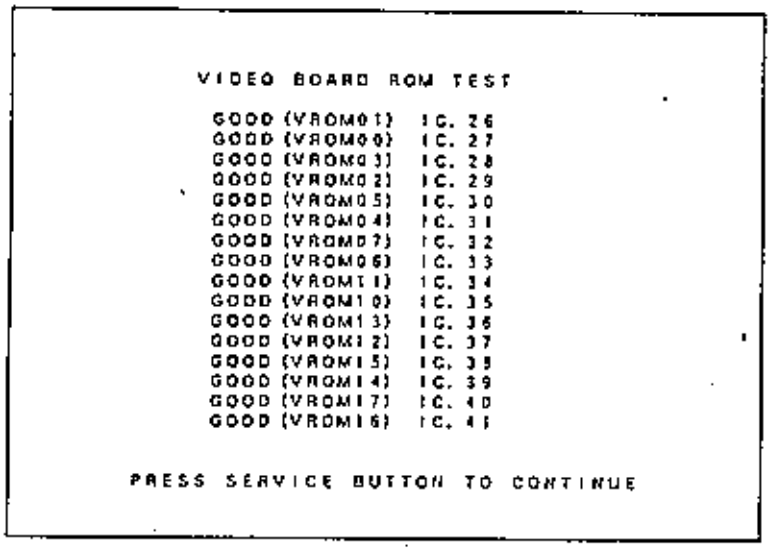


FIG. 9.3 c MEMORY TEST (3)

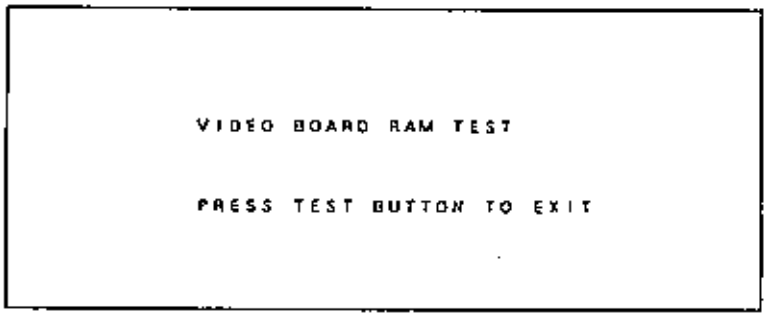


FIG. 9.3 d MEMORY TEST (4)

STOP
IMPORTANT!

Upon finishing the test, cause the Test Menu to return on the screen, turn the power off and turn it back on again. To avoid malfunctioning, perform IC Board initialization by turning the power off and then turning it back on again.

Selecting "BOUNDARY SCAN TEST" causes the Game Board's testing in terms of hardware to be performed automatically.

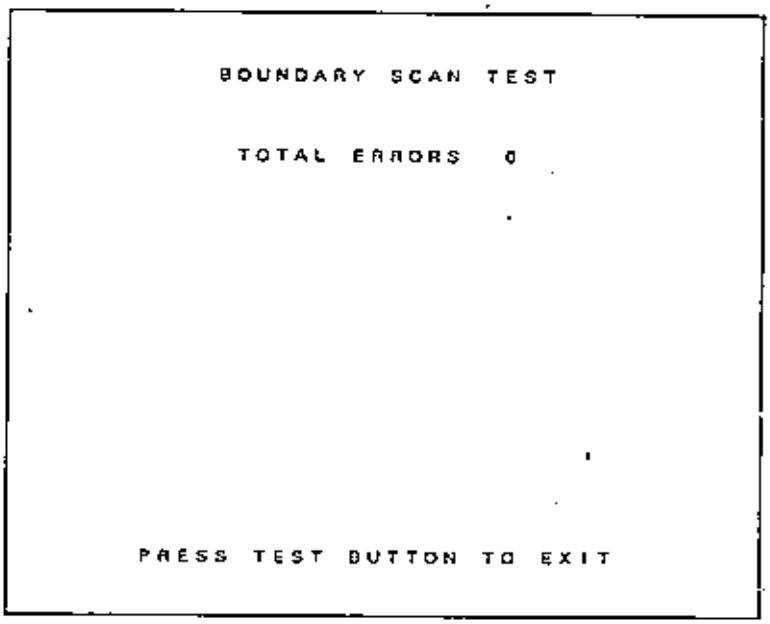


FIG. 9.4 BOUNDARY SCAN TEST

- When the test is completed, if the results are shown as above, it is satisfactory.
- After finishing the test, press the Test button to have the Menu mode return on the screen. Next, turn the power off and then turn it back on again. To avoid malfunctioning, have the Board initialized by turning the power off and then on.
- If there is any hardware problems, error message is displayed. Please contact the offices herein stated or where the product was purchased from.

9—5 INPUT TEST

STOP
IMPORTANT!

> The volume values in this test are obtained by converting the minimum value to 00 & the maximum value to FF from the Volume values set in the Volume setting mode and thus, differ from the values displayed in the Volume setting mode.

Selecting INPUT TEST displays the following on the screen and enables you to check the status of each switch and each Volume value of the cabinet.
On this screen, periodically check the status of each switch & V.R.

- By pressing each switch, if the display on the right-hand side of the name of each switch changes to ON from OFF, the SW and the wiring connections are satisfactory.
- To check the Coin SW of "COIN #X", open the Coin Chute Door and insert a coin into the Coin Inlet.
- Simultaneously pressing the Service button and the Test button returns the Test Menu on the screen.

```
INPUT TEST

HANDLEBAR        80
THROTTLE         00
FRONT BRAKE      00
REAR BRAKE       00

VIEW CHANGE      OFF
MUSIC SELECT     OFF
SHIFT UP         OFF
SHIFT DOWN       OFF

START            OFF

COIN #1          OFF
COIN #2          OFF
SERVICE-SW       OFF
TEST-SW          OFF

PRESS SERVICE+TEST BUTTON TO EXIT
```

FIG. 9. 5 a INPUT TEST

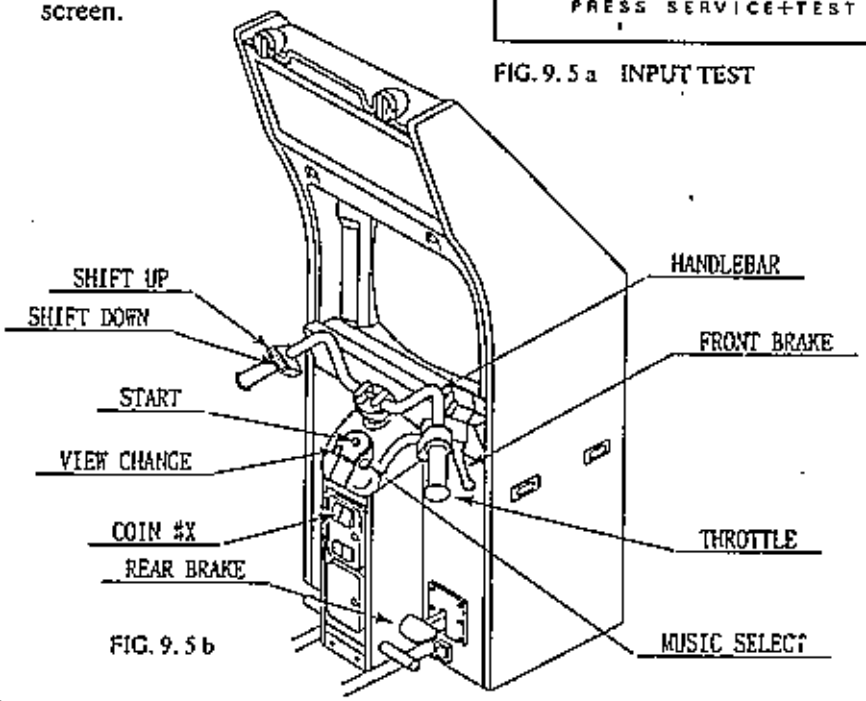
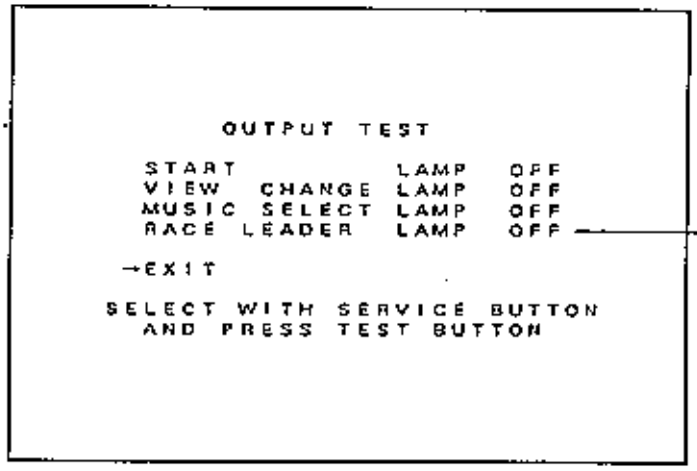


FIG. 9. 5 b

- When the Handlebar is turned fully to the left and right, if the HANDLEBAR value varies between 00 (left) and FF (right), and if the value is around 80 when the Handlebar is returned to the center, it is satisfactory.
- When the Accelerator Grip is moved, if the THROTTLE value varies between 00 and FF, and if the value is about 00 when force is not exerted, it is satisfactory.
- When you grip the Front Brake Lever, if the FRONT BRAKE value varies between 00 and FF, and if the value is about 00 when force is not exerted, it is satisfactory.
- When you step on the Rear Brake Pedal, if the REAR BRAKE value varies between 00 and FF, and if the value is about 00 when force is not exerted, it is satisfactory.

9—6 OUTPUT TEST

In this test, the on-tank button's lamp and Race Leader Lamp can be checked. Periodically check each lamp in this mode.



In the Game Assignments, setting "CABINET TYPE" to "DELUXE" causes "CABINET LOCK" to be displayed.

FIG. 9.6 a OUTPUT TEST

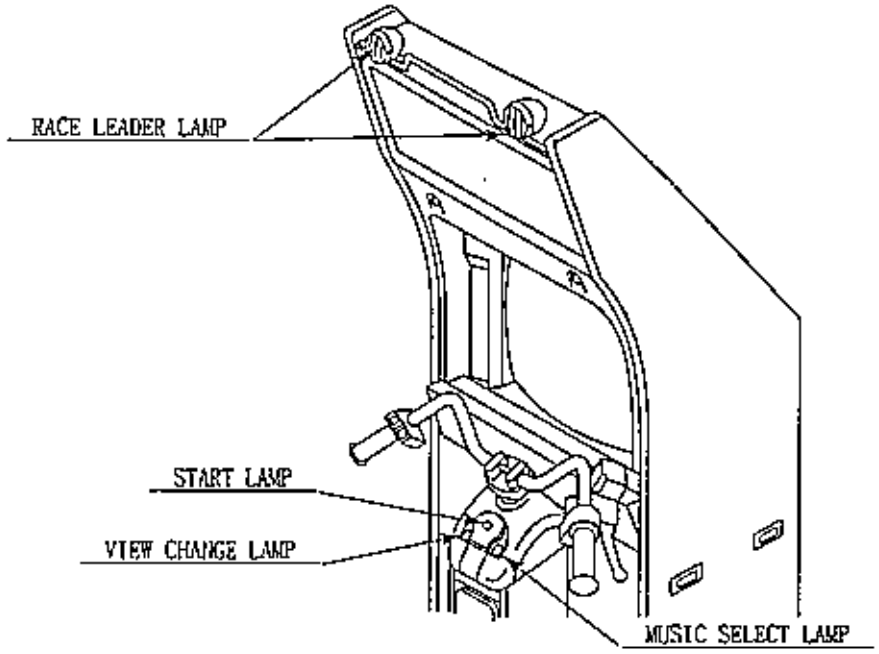


FIG. 9.6 b LAMP

- Press the Service button to bring the arrow to each item and press the test button to have the display beside each item to alternate ON ⟷ OFF. When ON is indicated, if the lamp lights up and when OFF is indicated, if the lamp lights out, then each lamp is satisfactory.

9—7 SOUND TEST

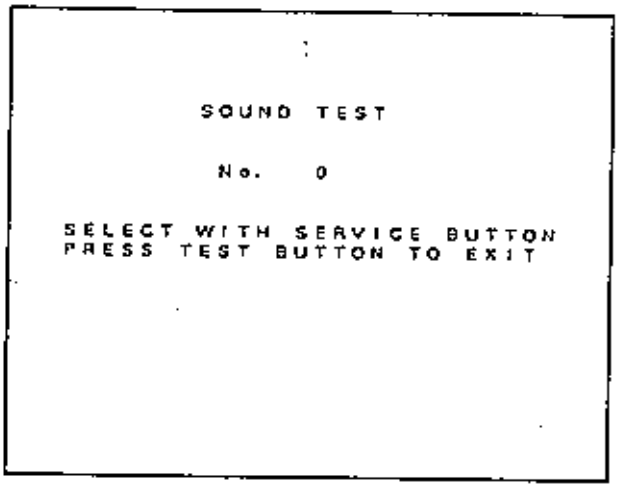


FIG. 9. 7 SOUND TEST

This enables sounds used in the game to be checked. Sound related memory and each speaker are checked. Every time the Service button is pressed, the numeral beside No. counts up and different sound is emitted. Press the test button to return to the menu mode (FIG. 9. 2)

9—8 C.R.T. TEST

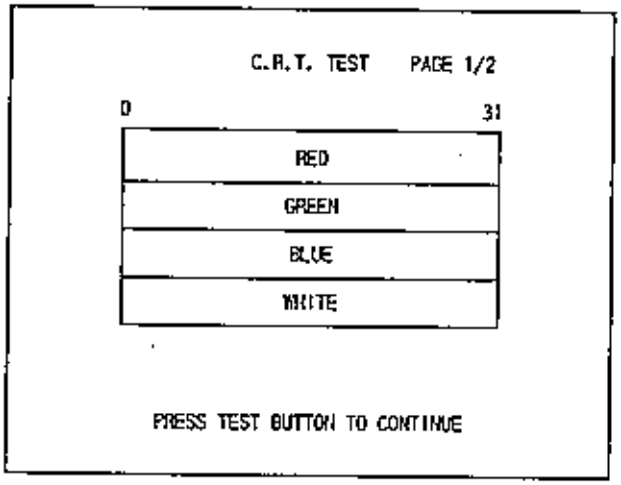


FIG. 9. 8 a C.R.T TEST (1/2)

Select C. R. T. TEST to cause the Monitor to display the screen shown left, allowing Monitor adjustment status to be checked.

Periodically check the Monitor adjustment status on this screen.

The screen (1/2) enables color adjustment check to be performed. The color bar of each of the 4 colors, i. e., red, green, blue and white, is darkest at the extreme left and becomes brighter towards the extreme right.

Press the TEST BUTTON to shift to the next page (2/2).

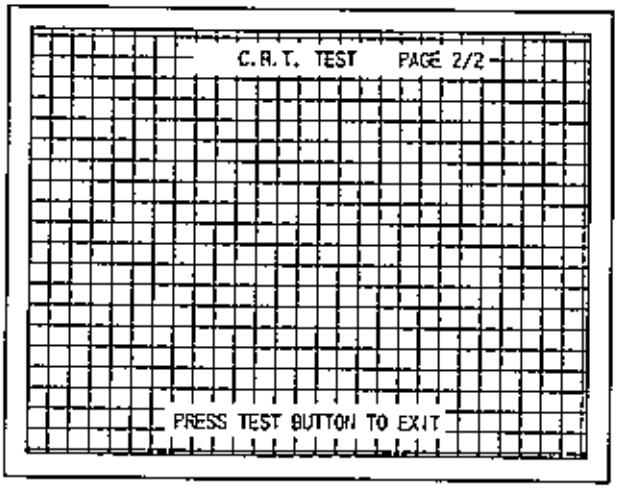


FIG. 9. 8 b C.R.T TEST (2/2)

The screen (2/2) allows screen size and distortion to be tested.

Check if the Crosshatch Frame Line goes out of the screen and if the crosshatch lines are distorted.

Press the TEST BUTTON to return to the Menu mode. (FIG. 9. 2)

9—9 GAME ASSIGNMENTS

Selecting the GAME ASSIGNMENTS in the menu mode causes the present game setting to be displayed and also the game setting changes (game difficulty, etc.) can be made. Each item displays the following content.
In the case of communication play, settings in this mode for all of the machines linked for interactive play are the same as those set by the MASTER unit, except for "CABINET TYPE," "B.G.M. VOLUME, " and "ENGINE VOLUME."

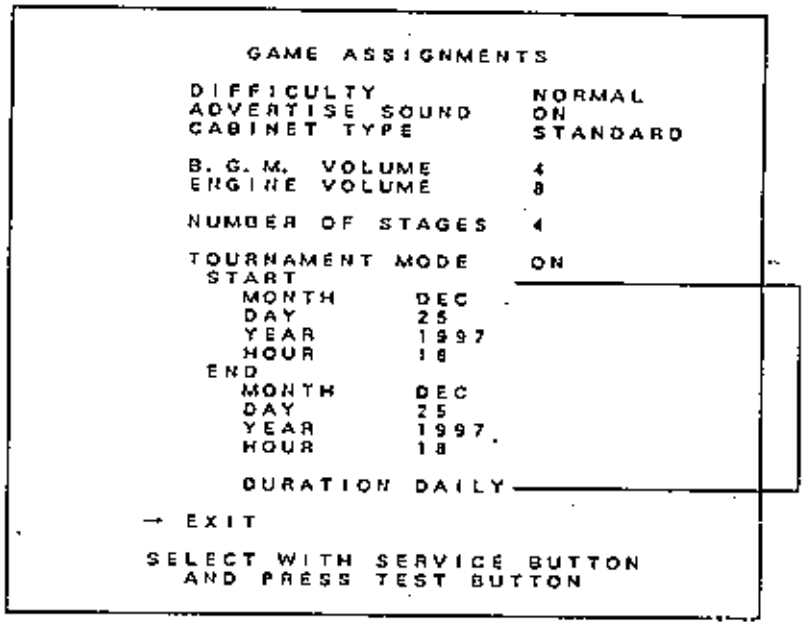


FIG. 9. 9 GAME ASSIGNMENTS

SETTING CHANGE PROCEDURE

① Press the SERVICE BUTTON to move the arrow ">" to the desired item.

② Choose the desired setting change item by using the TEST BUTTON.

③ To return to the MENU mode, move the arrow to EXIT and press the TEST BUTTON.

● DIFFICULTY : The remaining time awarded at the time of starting game is set in increments of 5 seconds.

● ADVERTISE SOUND : Sets whether ADVERTISE sound is to be emitted or not.
To emit sound: ON Not to emit sound: OFF

● CABINET TYPE : Set to "DELUXE" or "STANDARD" as applicable. Setting to a wrong type can cause the following failure. Be sure to set correctly.

Example of failure: ○ In communication play, the Race Leader Lamp does not satisfactorily light up / flash / light out.

○ The cabinet appearing in the operation explanation mode differs from the type to be used.

● B. G. M. VOLUME : BGM VOLUME adjustment (1～8)

● ENGINE VOLUME : ENGINE VOLUME adjustment (1～8)

● NUMBER OF STAGES : Sets the number of stages needed to accomplish Game Clear. (3, 4, and 5)

● TOURNAMENT MODE : During the period set, special bookkeeping for ranking is executed. When set to ON, as shown above, the date of TOURNAMENT mode start, the end date of TOURNAMENT mode, and items of bookkeeping periods are displayed. DURATION refers to the unit of bookkeeping periods. The setting can be selected from among DAILY, WEEKLY, BI-WEEKLY, and MONTHLY.
Note: Be sure to set the present time when the TOURNAMENT mode is set to ON (9 - 13).

9—10 COIN ASSIGNMENTS

The "COIN ASSIGNMENTS" mode permits you to set the start number of credits, as well as the basic numbers of coins and credits. This mode expresses "how many coins correspond to how many credits."

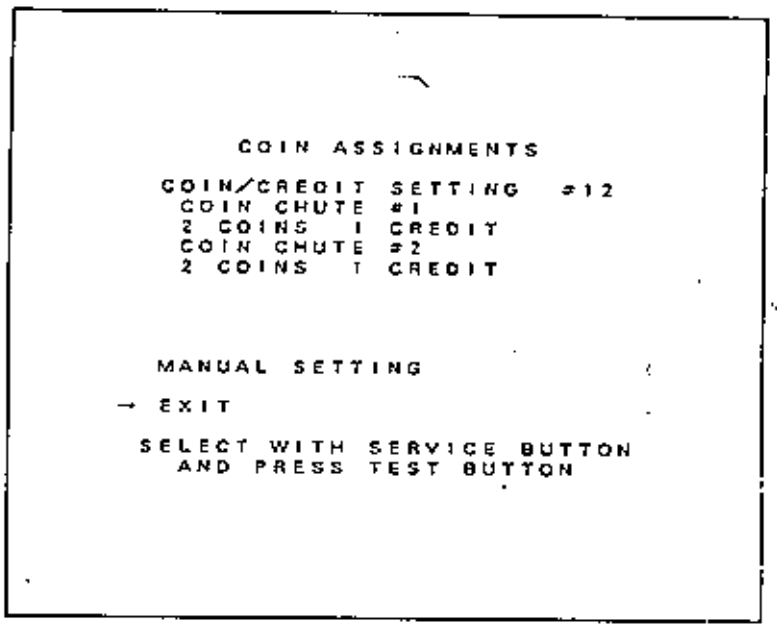


FIG. 9. 10 a COIN ASSIGNMENTS

● COIN/CREDIT SETTING — "How many coins correspond to how many credits."
In this machine, selection as per Table 9. 10a is possible.

● MANUAL SETTING — Allows for finer settings. (Table 9. 10 b)

SETTING CHANGE PROCEDURE

① Press the Service button to bring the arrow to COIN/CREDIT setting.

② Press the TEST BUTTON to choose the desired setting item.

③ Bring the arrow to EXIT and press the TEST BUTTON to return to the menu mode.

TABLE 9. 10 a COIN/CREDIT SETTING

NAME OF SETTING	FUNCTIONING OF COIN CHUTE #1	FUNCTIONING OF 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 CREDIT S	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 2 COINS 3 CREDITS	1 COIN 1 CREDIT 2 COINS 3 CREDITS
SETTING #16	1 COIN 3 CREDIT S	1 COIN 1 CREDITS 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 2 COINS 2 CREDITS 3 COINS 3 CREDITS 4 COINS 5 CREDITS	1 COIN 1 CREDIT 2 COINS 2 CREDITS 3 COINS 3 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 4 COINS 2 CREDITS 5 COINS 3 CREDITS	2 COINS 1 CREDIT 4 COINS 2 CREDITS 5 COINS 3 CREDITS
SETTING #24	1 COIN 3 CREDIT	2 COINS 1 CREDIT 4 COINS 2 CREDITS 5 COINS 3 CREDITS
SETTING #25	1 COIN 1 CREDIT 2 COINS 2 CREDITS 3 COINS 3 CREDITS 4 COINS 4 CREDITS 5 COINS 6 CREDITS	1 COIN 1 CREDIT 2 COINS 2 CREDITS 3 COINS 3 CREDITS 4 COINS 4 CREDITS 5 COINS 6 CREDITS
SETTING #26	1 COIN 1 CREDIT	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

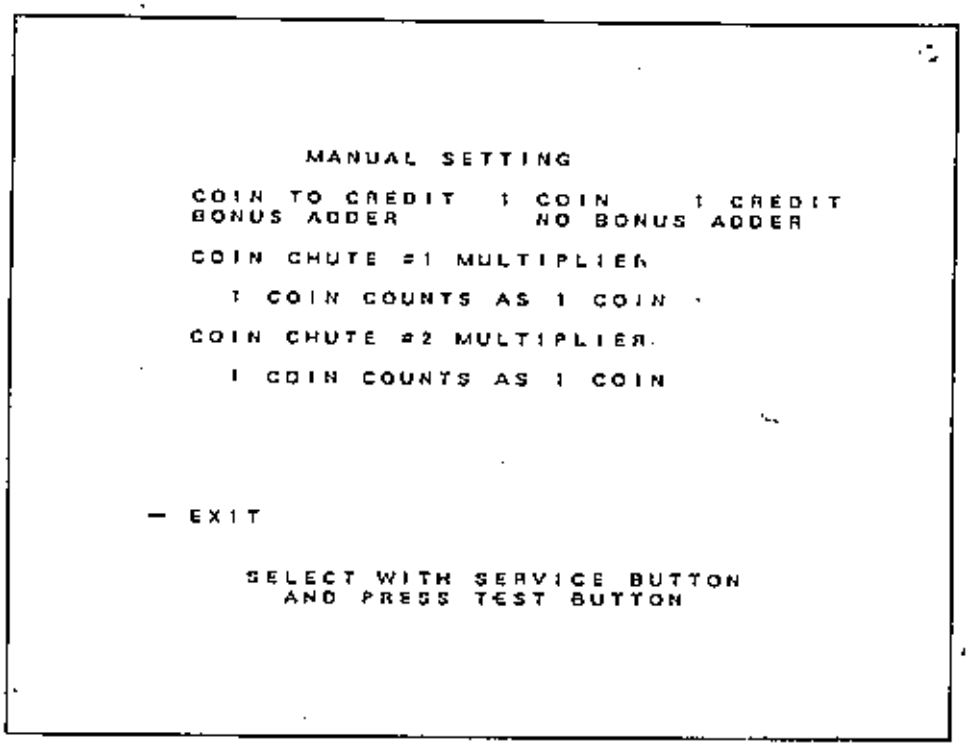


FIG. 9. 10 b COIN ASSIGNMENTS

- COIN TO CREDIT — Determines conversion coin/credit.
- BONUS ADDER — This sets how many conversion coins should be inserted to obtain one SERVICE COIN.
- COIN CHUTE #X MULTIPLIER — This sets how many inserted tokens one conversion coin represents.

TABLE 9. 10 b 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 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

9—11 NETWORK ASSIGNMENTS

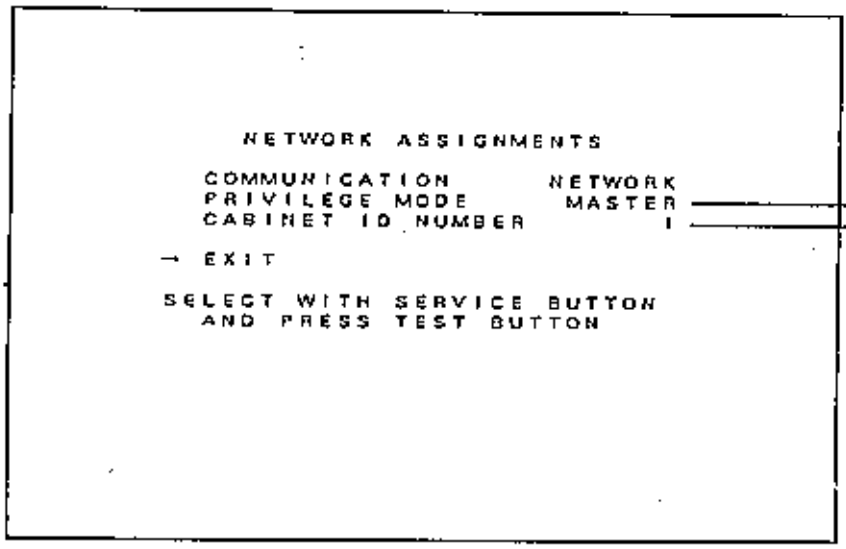


FIG. 9.11 NETWORK ASSIGNMENTS

- **COMMUNICATION**
  Select NETWORK or STAND ALONE. When NETWORK is selected, the following are displayed.

- **PRIVILEGE MODE**
  In the case plural machines are used for interactive play, set one of them to MASTER and set the rest of them to SLAVE. The Game Assignments set to the MASTER cabinet will also be applied to the SLAVE cabinets. Changing the settings by the SLAVE units is ineffective.

- **CABINET ID NUMBER**
  In the case plural machines are linked for interactive play, set the CABINET ID NUMBER in the order of 1, 2, 3, and 4 starting from the leftmost cabinet as seen from the front of the cabinet. If an identical number is set to 2 or more cabinets or if setting is made in the wrong order, the display during game will be incorrect. Be very careful of this point.

CAUTION!

At the time of HANDLEBAR VOLUME setting, the Bike banks to a great extent as the handlebar is turned fully within the movable range. Use care so as not to cause falling down accidents.

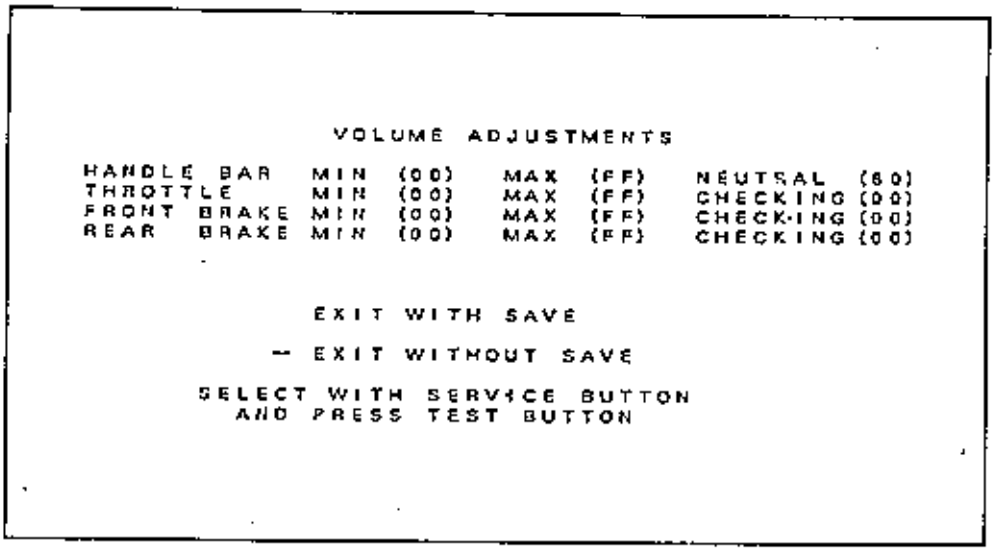


FIG. 9. 12 a VOLUME ADJUSTMENTS

In the case an appropriate value is not displayed in the INPUT TEST mode, the Volume value can be adjusted in this mode.

Set an appropriate Volume value by moving the Handlebar, Accelerator Grip, Front Brake Lever, and Rear Brake Pedal fully within the movable range. The numeral values are hexadecimally displayed.

HANDLE BAR

After turning the handlebar fully to the left and right, return it to the center and ensure the status in which force is not exerted.

ACCELERATOR (THROTTLE)

After fully moving the Accelerator Grip, let go your hold and return to the status in which force is not exerted.

FRONT BRAKE

Fully grip the front brake and let go your hold, then return to the status force is not exerted.

REAR BRAKE

Fully step on the Rear Brake Pedal and then release to return to the status force is not exerted

The value in the parenthesis ( ) refers to the real value (without conversion) and differs from the Volume value shown in the INPUT TEST mode (FIG. 9. 5 a).

- Bring the cursor to EXIT WITH SAVE and press the test button to have the contents of the new input setting registered and to return to the menu mode.

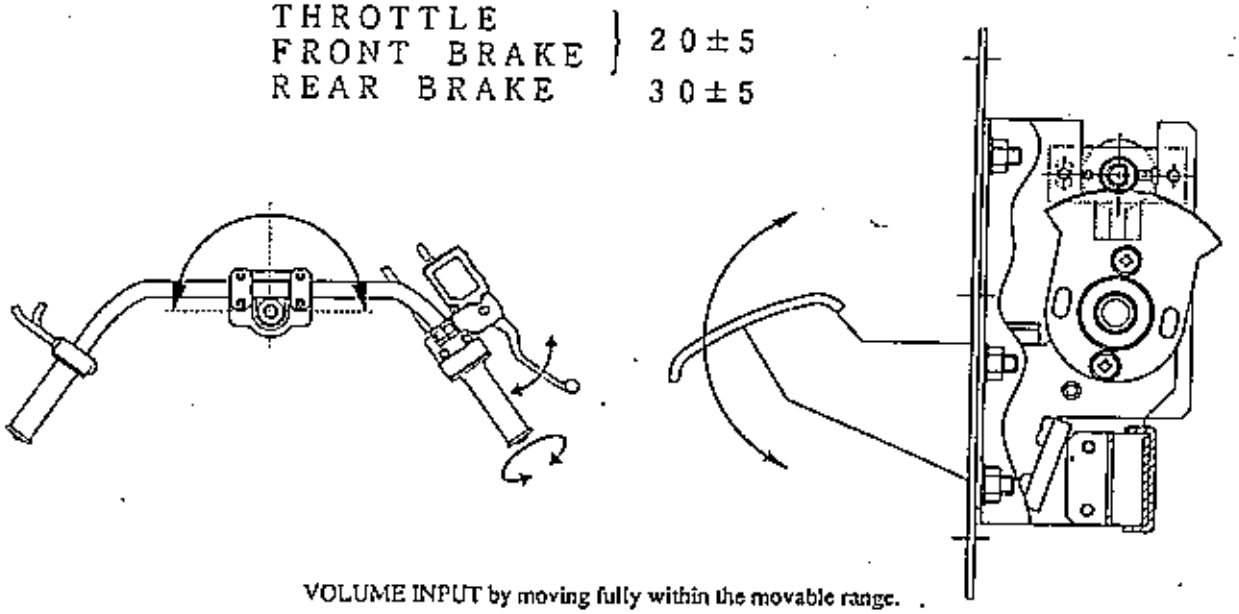
- Bring the cursor to EXIT WITHOUT SAVE and press the test button to return to the menu mode without changing the contents of the setting.

If adjustment can not be made even in the setting of this mode, then Volume Gear deviation and Volume malfunctioning may be considered. Refer to Sections 10 and 11 to take countermeasures.

APPROPRIATE VALUE OF VOLUME

When force is not exerted and hands and feet are released, if the following values are displayed, and when force is applied, if Volume value varies in a natural manner, then the Volume is appropriately secured and satisfactorily functioning.

HANDLE BAR	80±5
THROTTLE FRONT BRAKE	20±5
REAR BRAKE	30±5



VOLUME INPUT by moving fully within the movable range.

FIG. 9. 12 b

9—13 REAL TIME CLOCK TEST

STOP
IMPORTANT!

Check time setting every month, and correct if time setting is incorrect. Failing to observe this can cause the TOURNAMENT mode display to be irregular.

The system of the product has calendar functions. In the Game Assignments, if the TOURNAMENT mode is set to ON, ensure that the present time is correct in this mode.
If the TOURNAMENT mode is not used, the present time need not be adjusted.

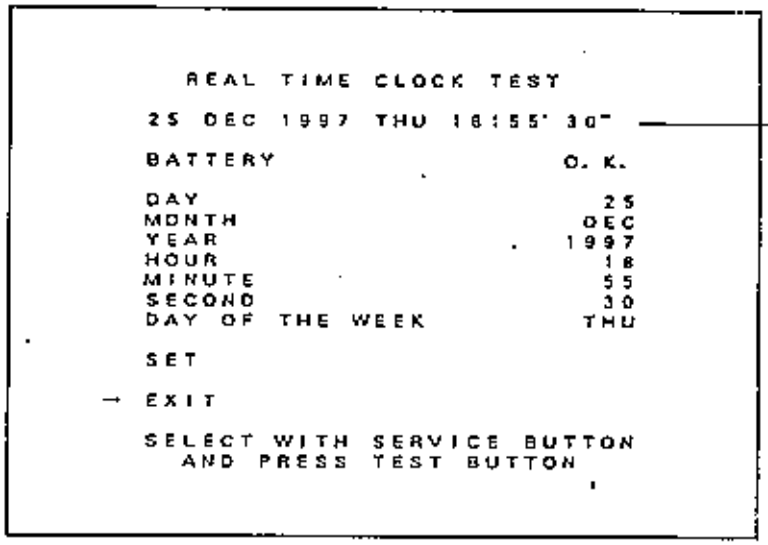


FIG. 9. 13 REAL TIME CLOCK TEST

SETTING CHANGE PROCEDURE

① Press the Service button and bring the arrow to the desired item to be changed.

② Press the test button and bring the arrow to year, month, day, and hour to be set.
"DAY OF THE WEEK" is automatically determined when year, month, and day are set.

③ Bring the arrow to "SET" and press the test button. The system calendar display changes to the time set.

④ Move the arrow to "EXIT" and press the test button to return to the menu mode.
Time can not be changed unless procedure ③ above is not performed.

●BATTERY Indicates the status of the on-game-board battery. If "ERROR" is displayed, some sort of trouble must have occurred. Contact where you purchased the product from or the office herein stated.

9—14 BOOKKEEPING

Selecting the BOOKKEEPING in the menu mode displays the bookkeeping data up to the present on the following 2 pages.
Press the TEST button again to proceed to the next page.

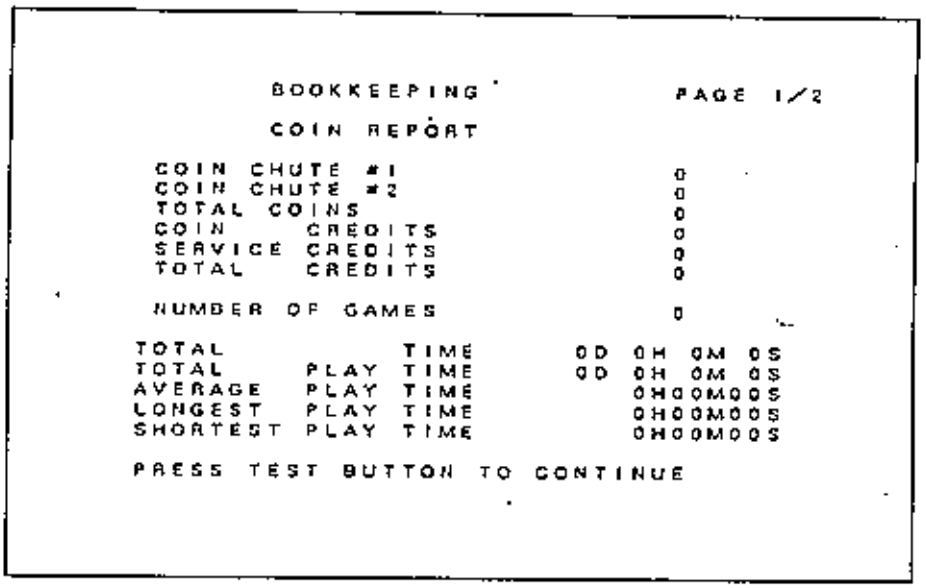


FIG. 9. 14 a BOOKKEEPING (1/2)

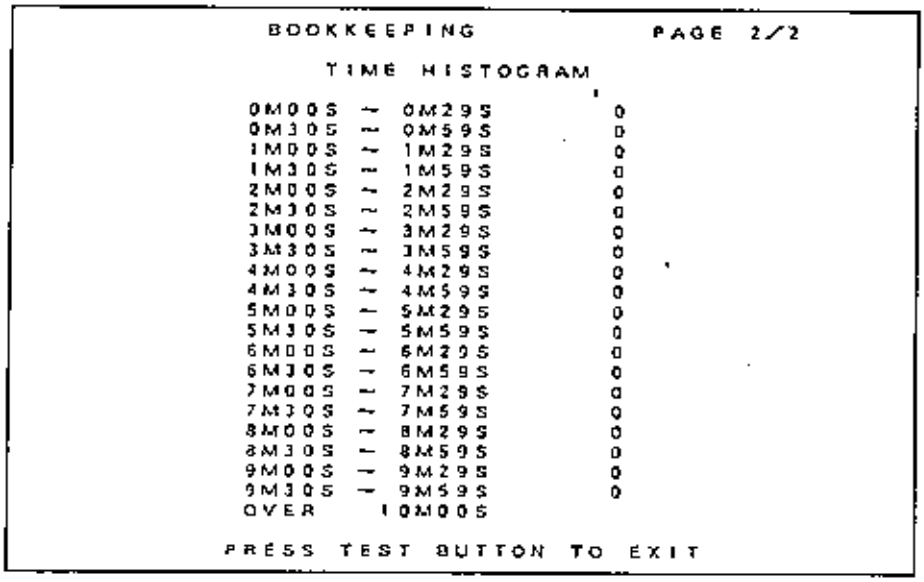


FIG. 9. 14 b BOOKKEEPING (2/2)

● COIN CHUTE	Number of coins put in. As seen from the front of the cabinet, the right-hand side is #1 and the left- hand side is #2.
● TOTAL COINS	Total number of coins inserted in each coin chute.
● COIN CREDITS	Number of credits registered by inserting coins
● SERVICE CREDITS	Credits registered by the SERVICE button
● TOTAL CREDITS	Total number of credits (COIN CREDITS + SERVICE CREDITS)
● TOTAL TIME	The total energized time.
● TIME HISTOGRAM	By-playtime play frequency.

9—15 BACKUP DATA CLEAR

The contents of BOOKKEEPING can be cleared. When clearing the BOOKKEEPING contents, bring the arrow to "YES (CLEAR)" by using the Service button, and press the Test button. When clearing is finished, "COMPLETED" will be displayed and then the menu mode returns. Bring the arrow to "NO (CANCEL)" and press the Test button to have the Menu mode return on the screen without clearing the data. Note that this operation does not affect the contents of the game setting.

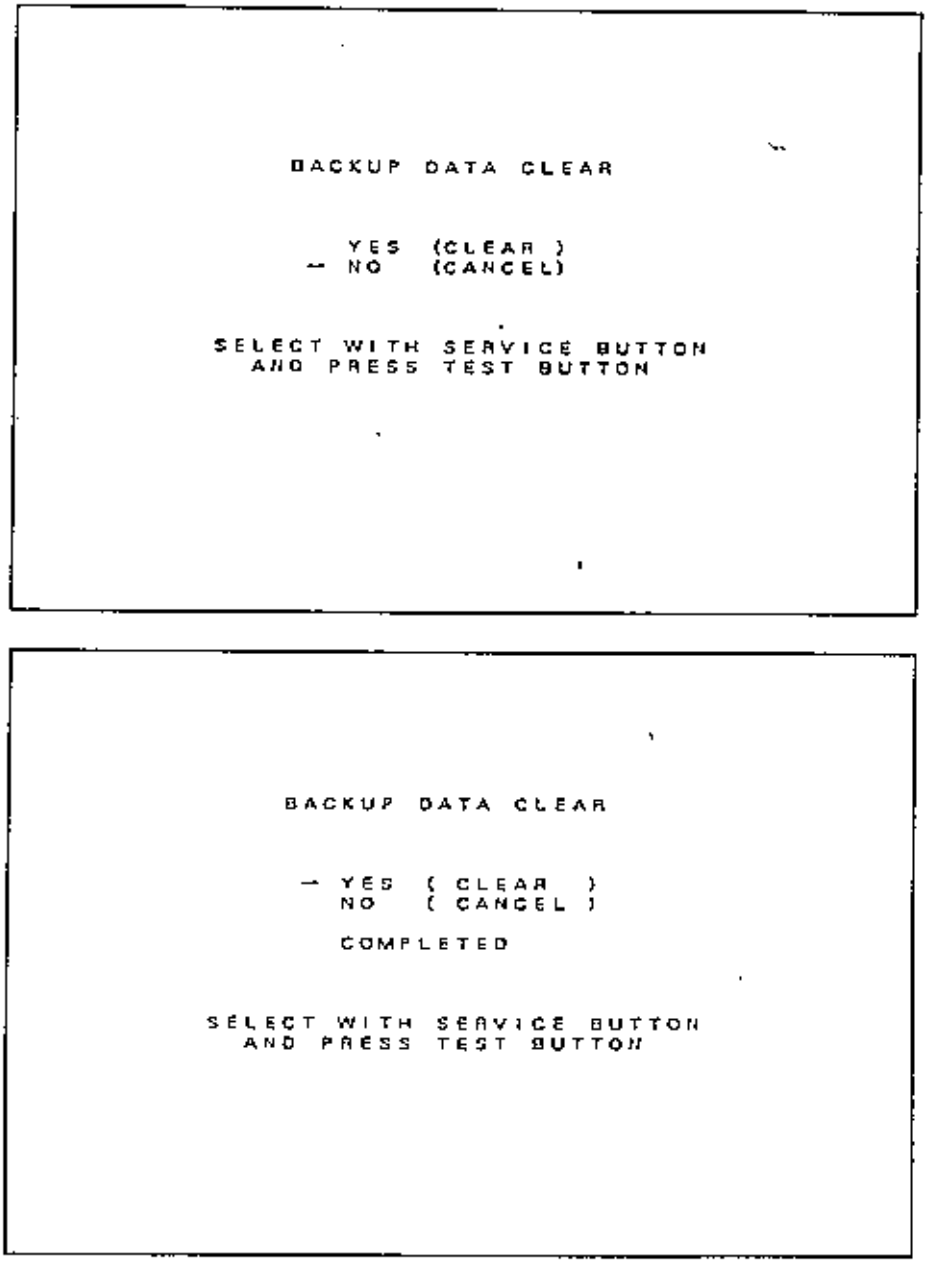


FIG. 9. 15 BACKUP DATA CLEAR

10. HANDLEBAR

WARNING!

- In order to prevent an electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.
- Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

10—1 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.
Take out the 4 screws and remove the VR Cover.
The Front Brake Volume is inside the VR Cover.

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.

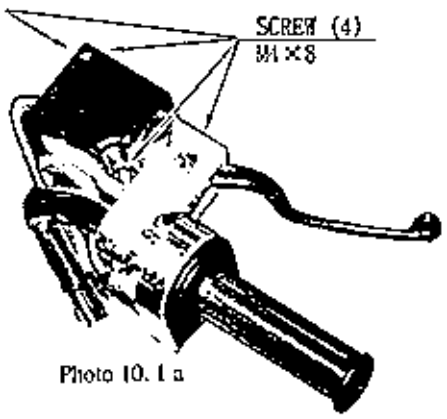


Photo 10. 1 a

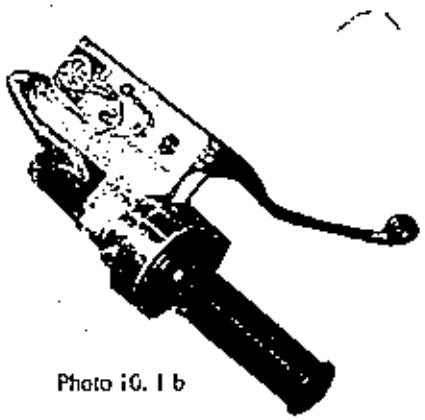


Photo 10. 1 b

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 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.

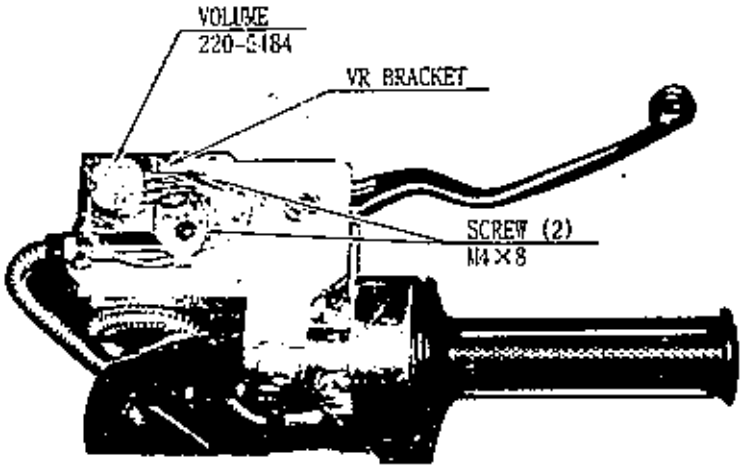


Photo 10. 1 c

10—2 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.

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

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.

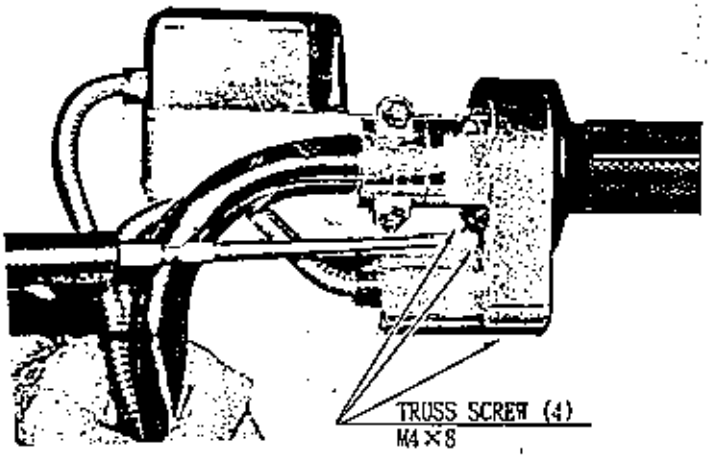


Photo 10. 2 a

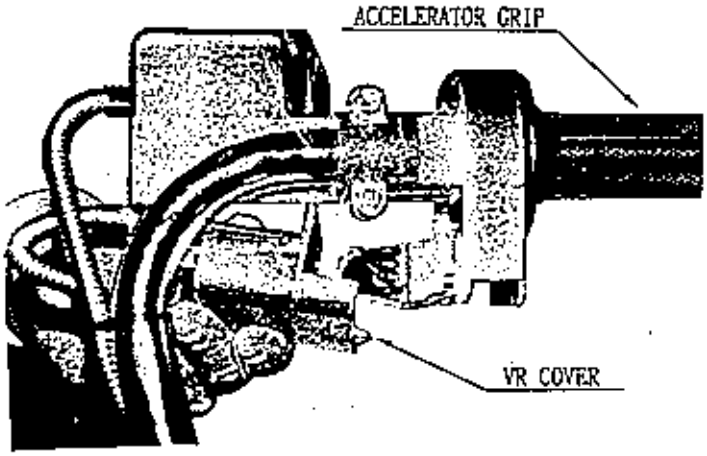


Photo 10. 2 b

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.

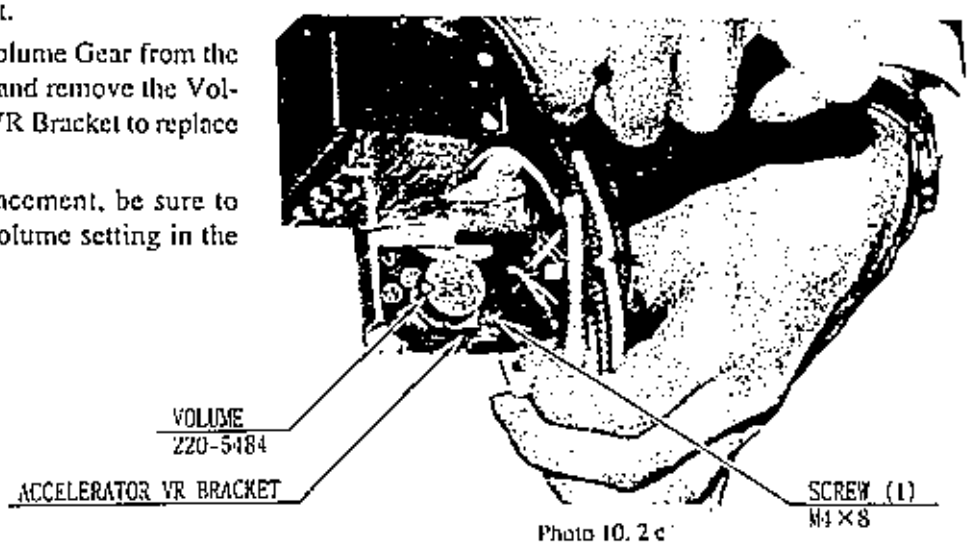


Photo 10. 2 c

10—3 ADJUSTING / REPLACING THE HANDLEBAR VOLUME

In the test mode, if the Handlebar Volume's value movements are irregular, adjust or replace the Volume.

① Remove the 4 screws.

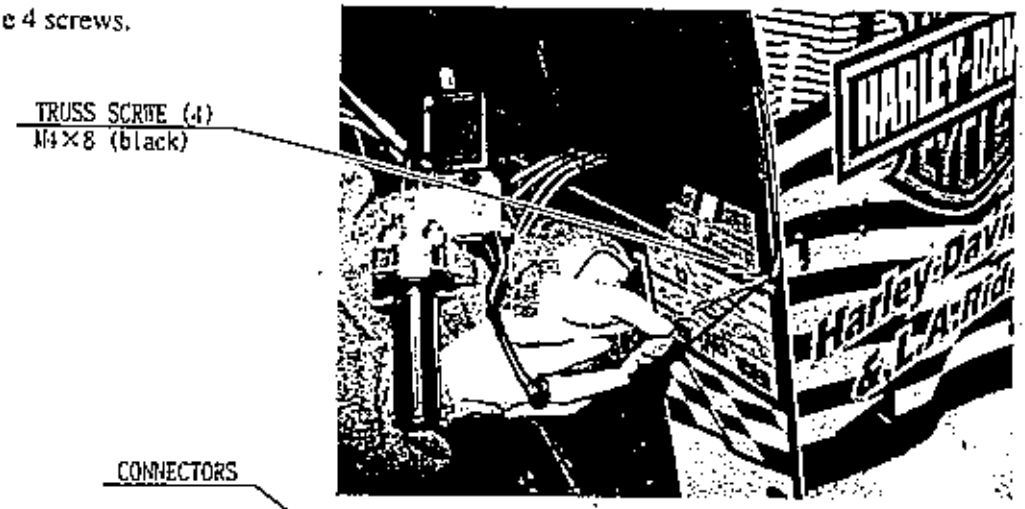


Photo 10. 3 a

② Disconnect the 3 connectors and remove the mask cover.

When the mask cover is removed, monitor screen adjustment knob appears (Section 13).

Photo 10. 3 b

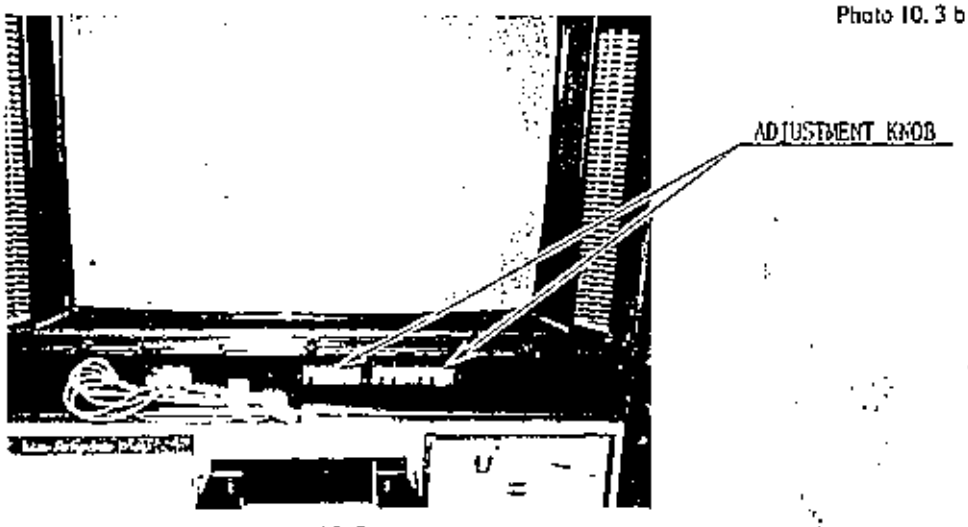


Photo 10. 3 c

③ Remove the bolt w/hexagon hole and pull out the handle from the shaft.

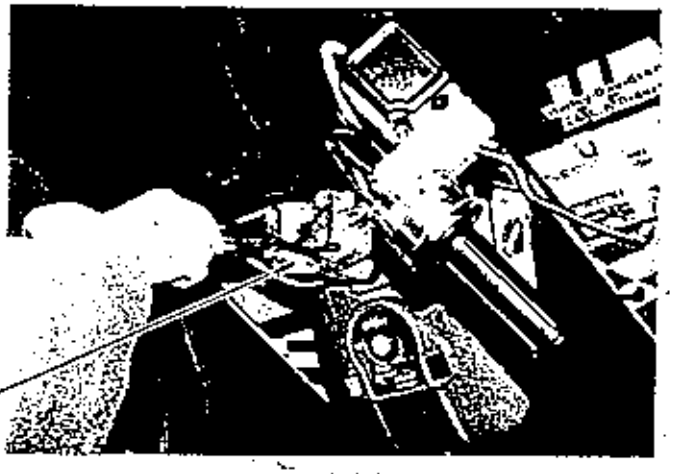


Photo 10.3 d

Photo 10.3 e

④ Take out the 3 screws, disconnect the connector inside the tank, and remove the tank.

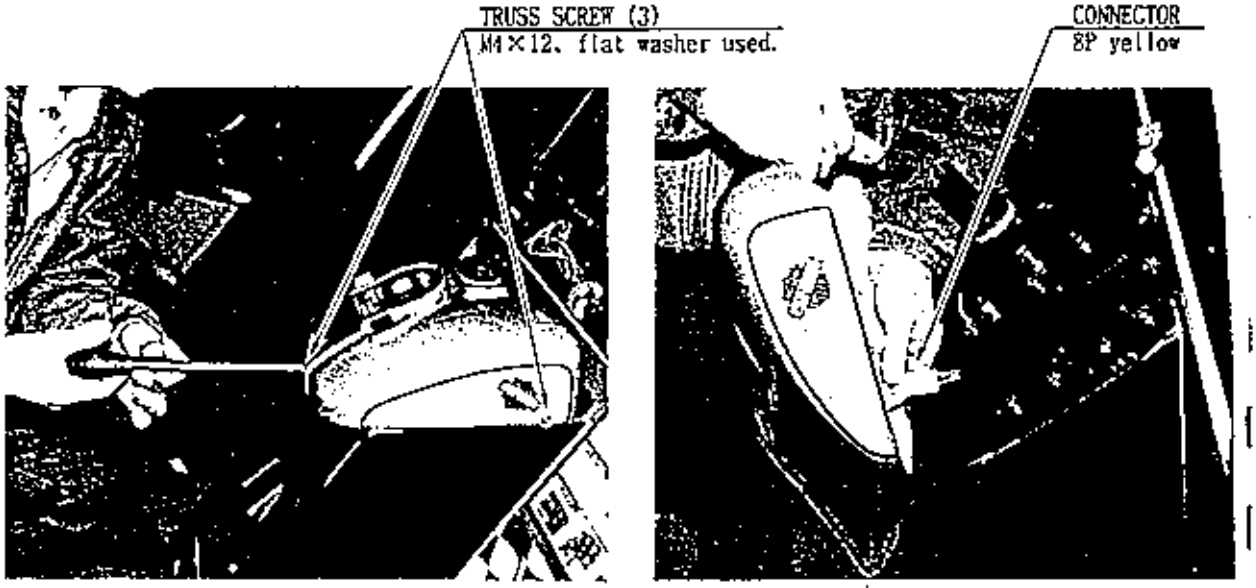


Photo 10.3 f

⑤ Remove the screw which secures the earth wire.

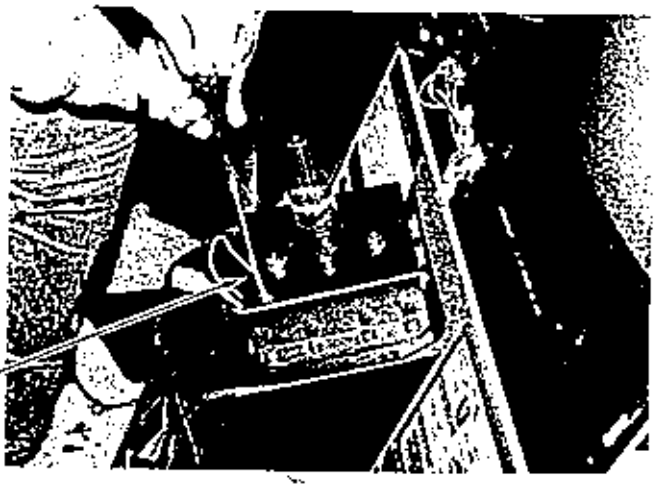


Photo 10. 3 g

⑥ Remove the 4 hexagon nuts which secure the centering mecha. By viewing the centering mecha from above, remove the hexagon nuts from the 4 corners only.

Photo 10. 3 h

⑦ Carefully lift the centering mecha and disconnect the connector connected to the centering mecha.

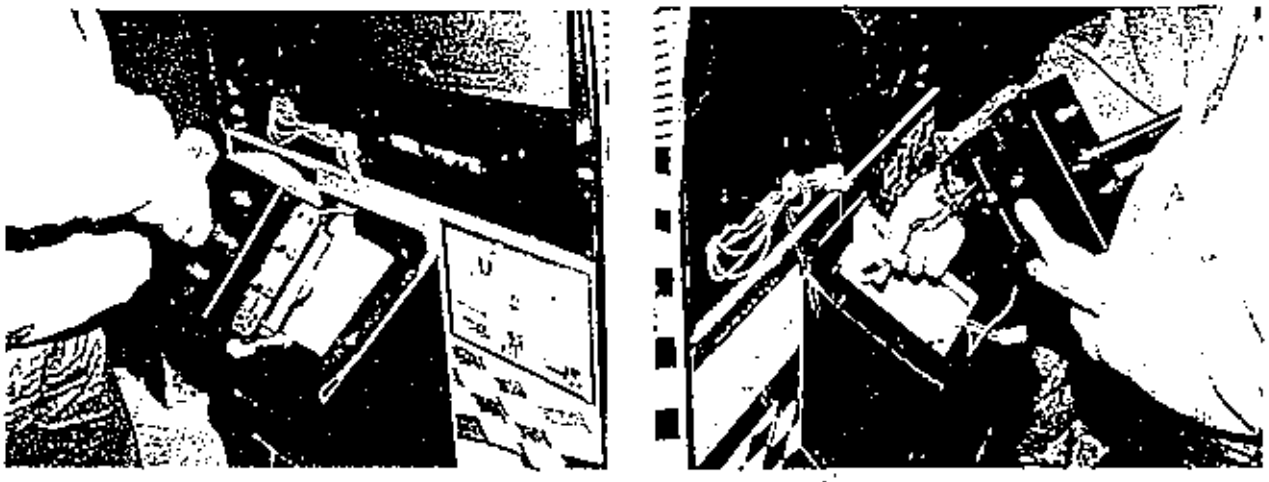


Photo 10. 3 i

V.R. ADJUSTMENT

WARNING!

Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

① Loosen the 2 screws which secure the V.R. Bracket to move the V.R. Bracket.
② Move the V.R. Bracket to disengage ADJUST GEAR mesh and move the V.R. shaft in the manner so that the V.R. shaft cut portion faces the opposite side of ADJUST GEAR as shown.
③ Have the gears meshed and tighten the 2 screws.
④ Carefully turn the Handle Shaft to the left/right and check to ensure that the value variation is within the mobile range of the Volume.
⑤ After finishing adjustments, be sure to perform Volume Setting in the Test mode.

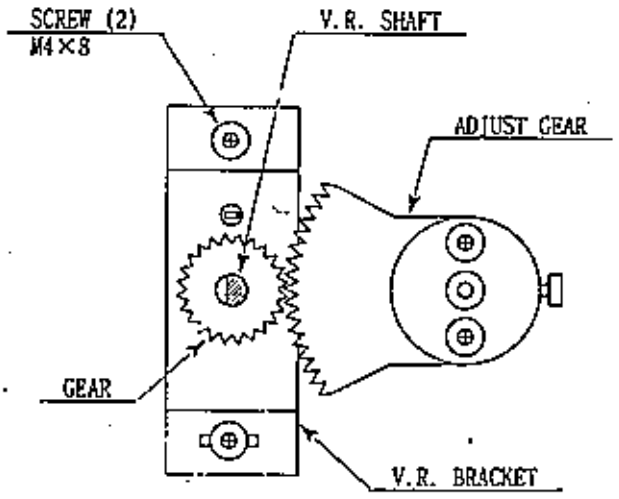


FIG. 10. 3

V. R. REPLACEMENT

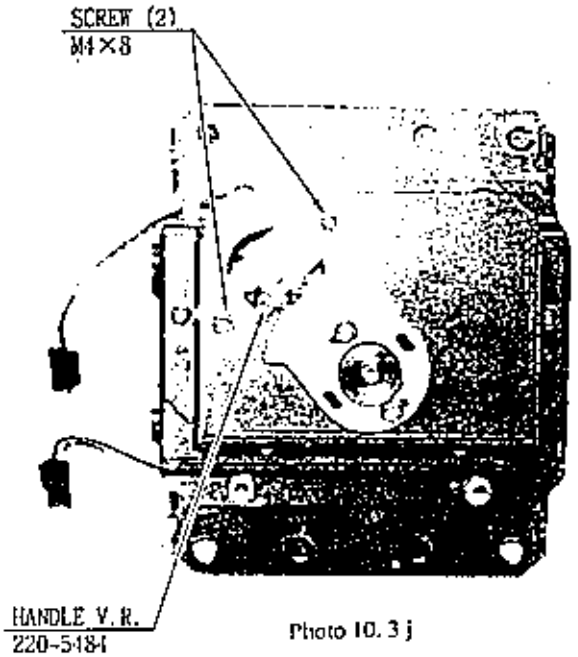


Photo 10. 3 j

① Take out the 2 screws which secure the Volume Bracket to remove the Volume Bracket.

② Remove Volume Gear from the V. R. to replace the V. R.

③ After the replacement, perform Volume Setting in the Test mode.

STOP
IMPORTANT!

- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to places other than those specified. Greasing to undesignated places can cause malfunctioning and the qualitative deterioration of parts.

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

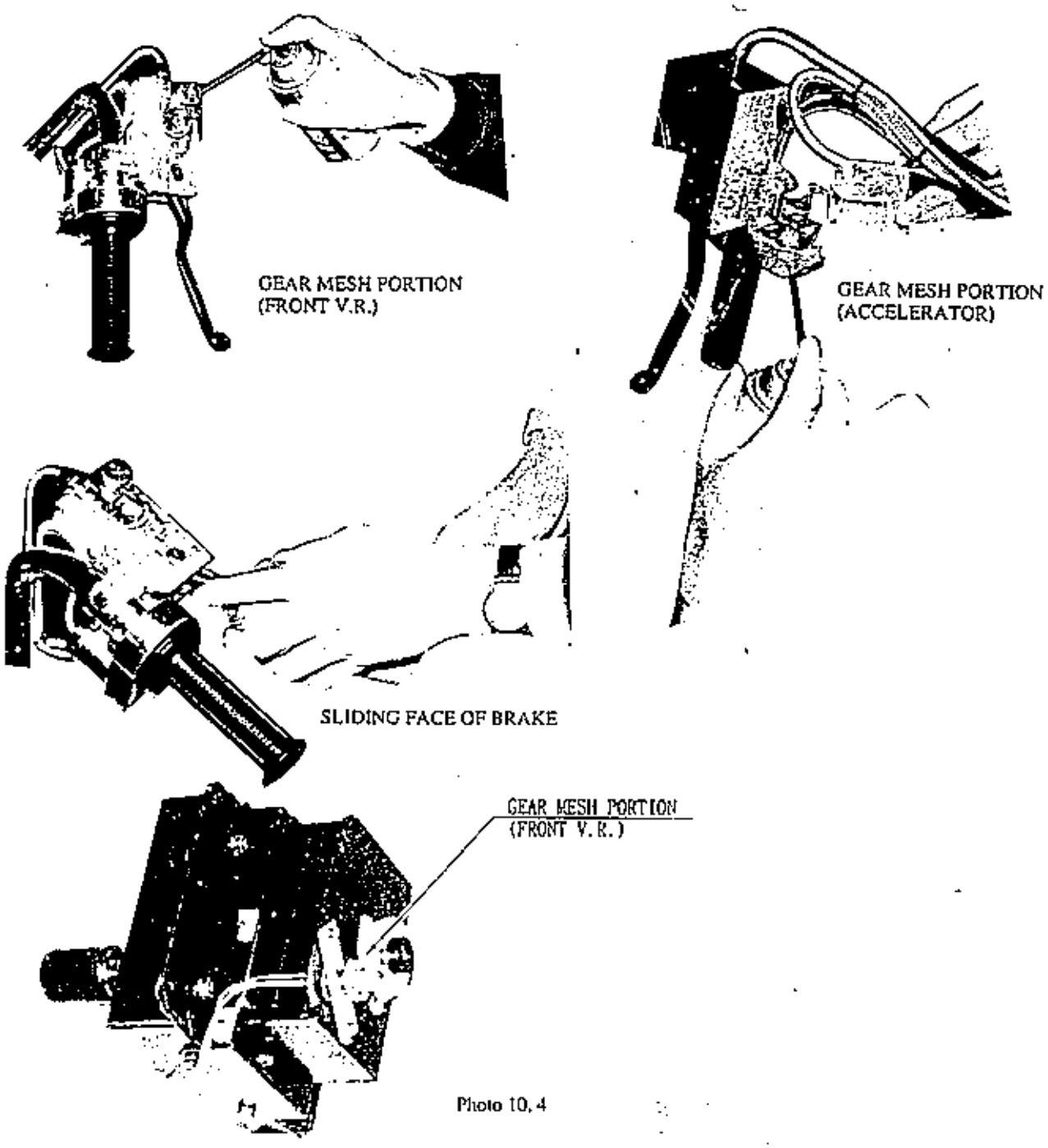


Photo 10. 4

11. FOOT BRAKE MECHA

WARNING!

- In order to prevent an electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.
- Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

11—1 ADJUSTING AND REPLACING THE VOLUME

In the test mode, if the Rear Brake's (Foot Brake's) volume movements are irregular, adjust or replace the Volume by using the following procedure.

① Remove the 6 screws.

② Disconnect the connector, and remove the Foot Brake Mecha from the cabinet.

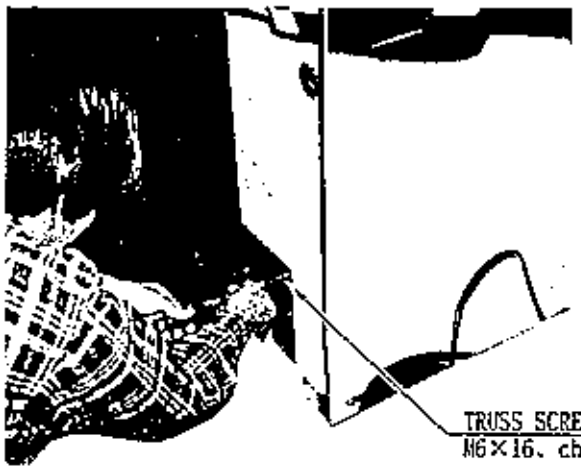


Photo 11. 1 a

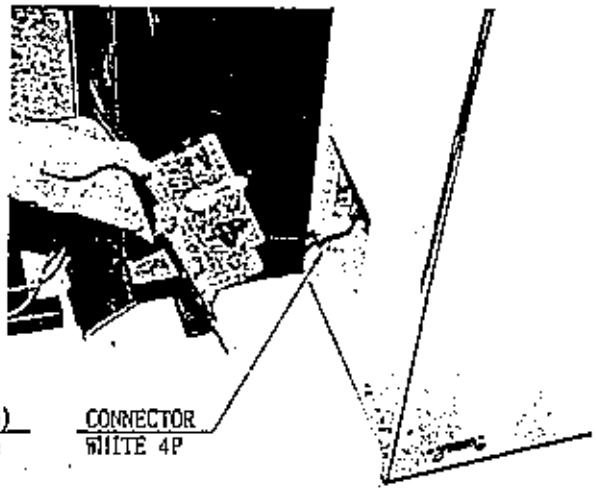


Photo 11. 1 b

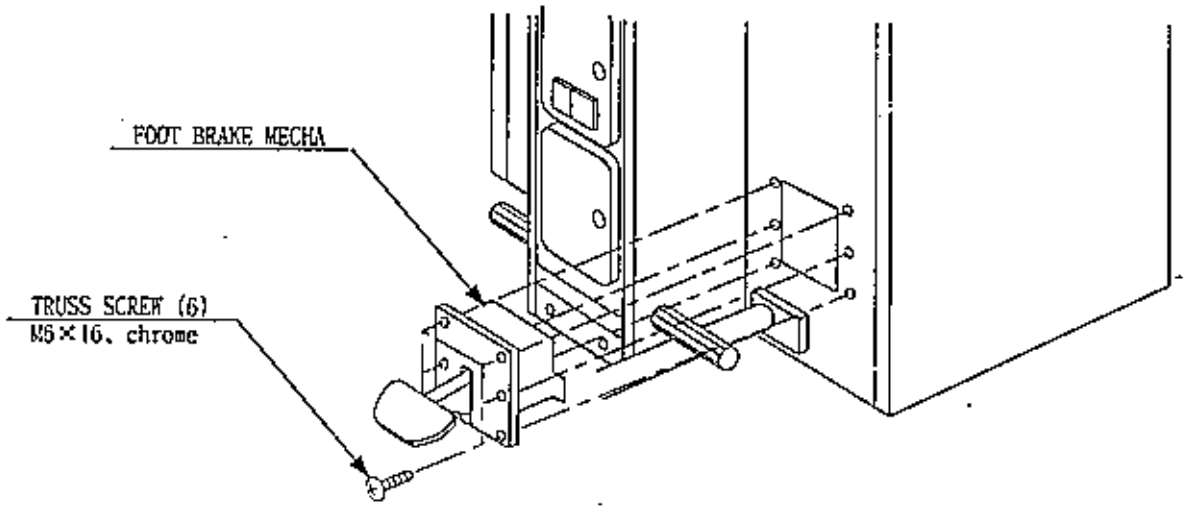


FIG. 11. 1 a

V.R. ADJUSTMENT

① Loosen the 2 screws which secure the VR Plate to move the V. R. Plate.

② Move the VR Plate to disengage the Adjust Gear mesh. Move the Volume Shaft and ensure that when force is not exerted on the pedal, the cut face of the Volume Shaft faces the direction shown.

③ Have the gears meshed and tighten the 2 screws. At this time, adjust gear backlash.

④ Carefully move the pedal fully within the movable range and check if the Volume range is exceeded.

⑤ After finishing adjustments, be sure to perform Volume Setting in the Test mode.

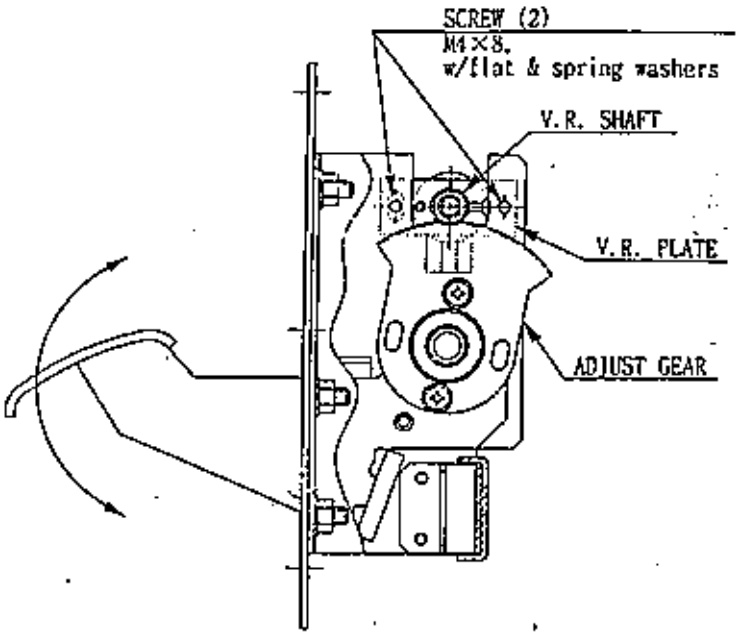


FIG. 11. 1 b

V. R. REPLACEMENT

① Remove the 2 screws which secure the VR Plate so as to remove the VR PLATE.

② Remove Volume Gear from the V. R. to replace the V. R.

③ After the replacement, perform Volume Setting in the Test mode.

11—2 GREASING

STOP
IMPORTANT!

- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to places other than those specified. Greasing to undesignated places can cause malfunctioning and the qualitative deterioration of parts.

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

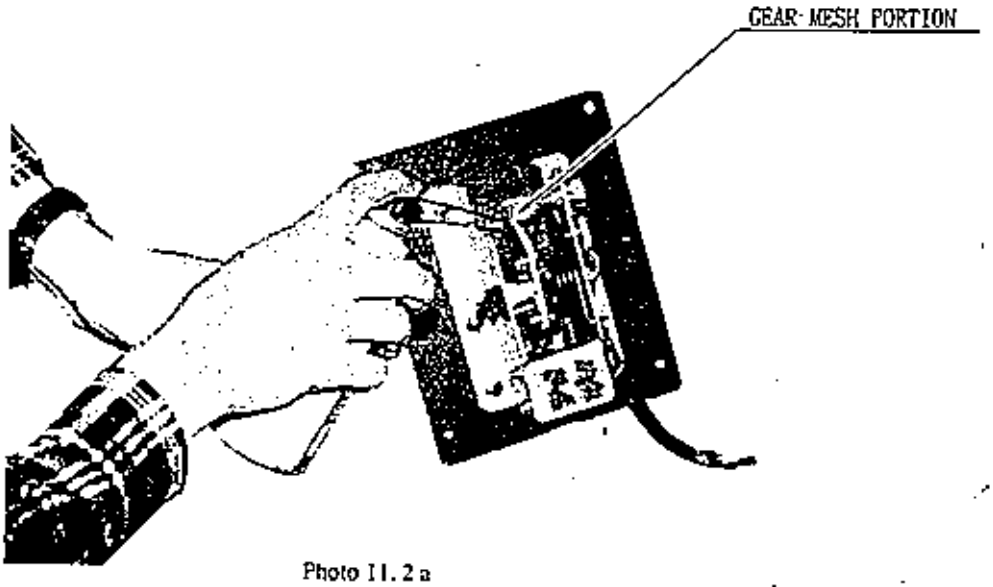


Photo 11. 2 a

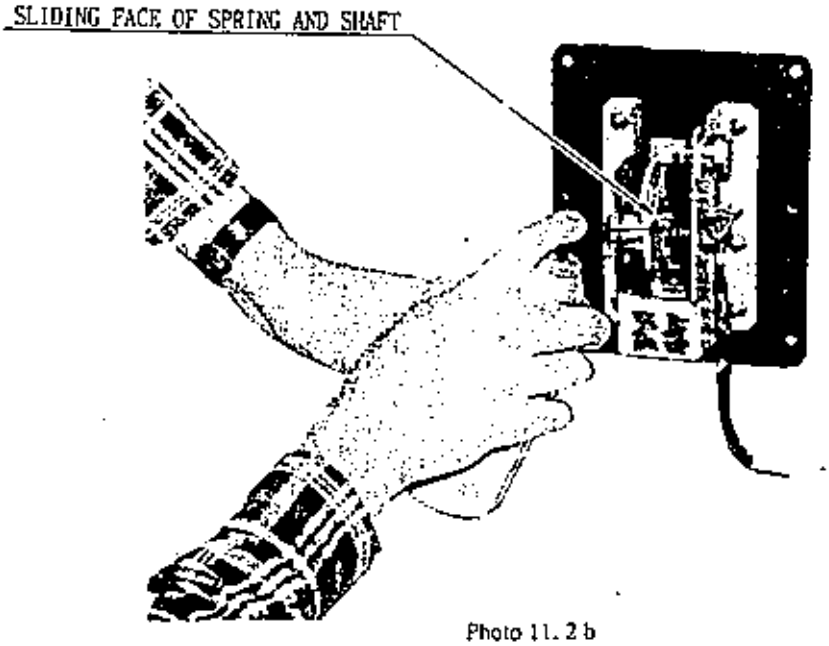


Photo 11. 2 b

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

STOP
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.

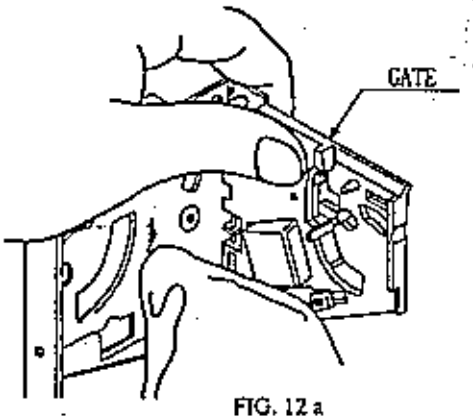


FIG. 12 a

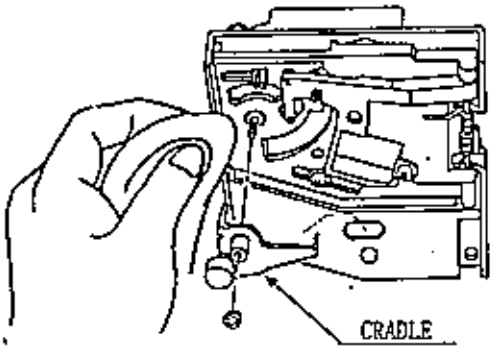


FIG. 12 b

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 shaft.
⑤ Remove stain from the shaft and pillow 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?

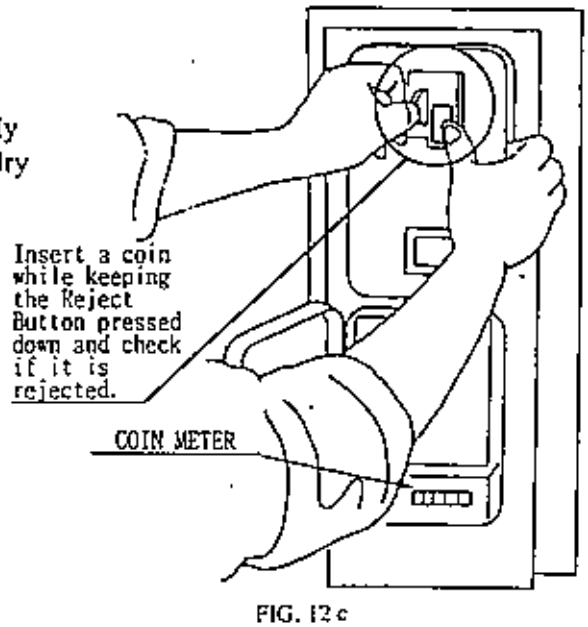


FIG. 12 c

13. MONITOR ADJUSTMENTS

13—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.

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

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.

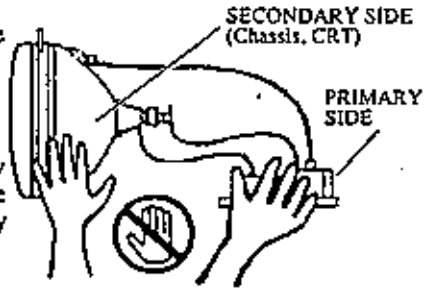
Indicates that access to a specific part of the equipment is forbidden.

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

- 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.

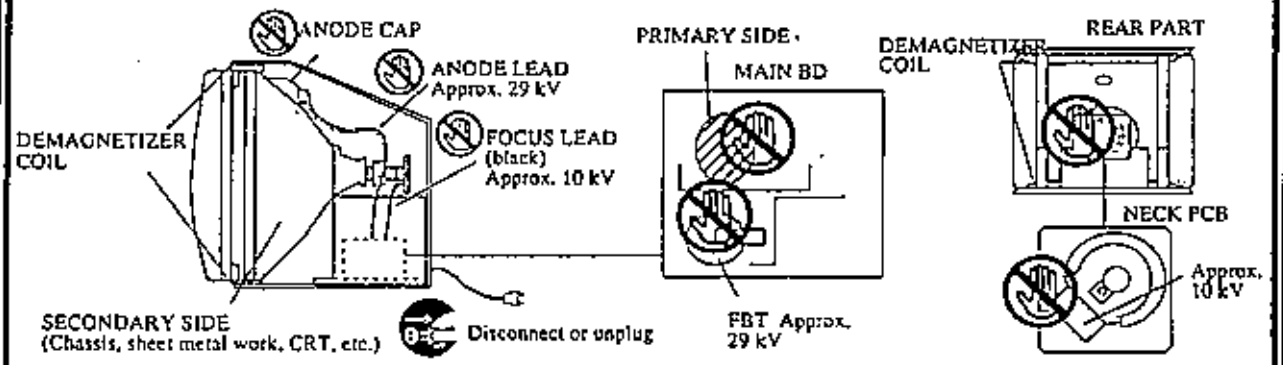
- Primary side and Secondary side

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.

- 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.

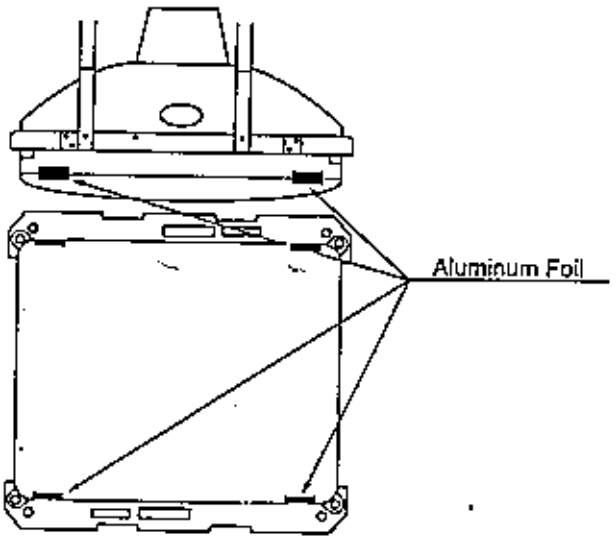
- Installation and removal

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).

CAUTION!

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. For the caution to be heeded when cleaning, refer to the Section of Periodic Inspection Table.

- 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.



13—2 CAUTIONS TO BE HEEDED WHEN CLEANING THE CRT SURFACES

CAUTION!

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.

13—3 ADJUSTMENT METHOD

WARNING!

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

To make adjustment, remove the mask cover. Take out the 4 screws, remove the mask cover, and adjustment knob appears.

There are 2 Monitor Manufacturers (NANAO and SANWA). The Adjustment Control Layout differs depending on the specific Maker. When performing the adjustment, check the Maker by referring to the following.

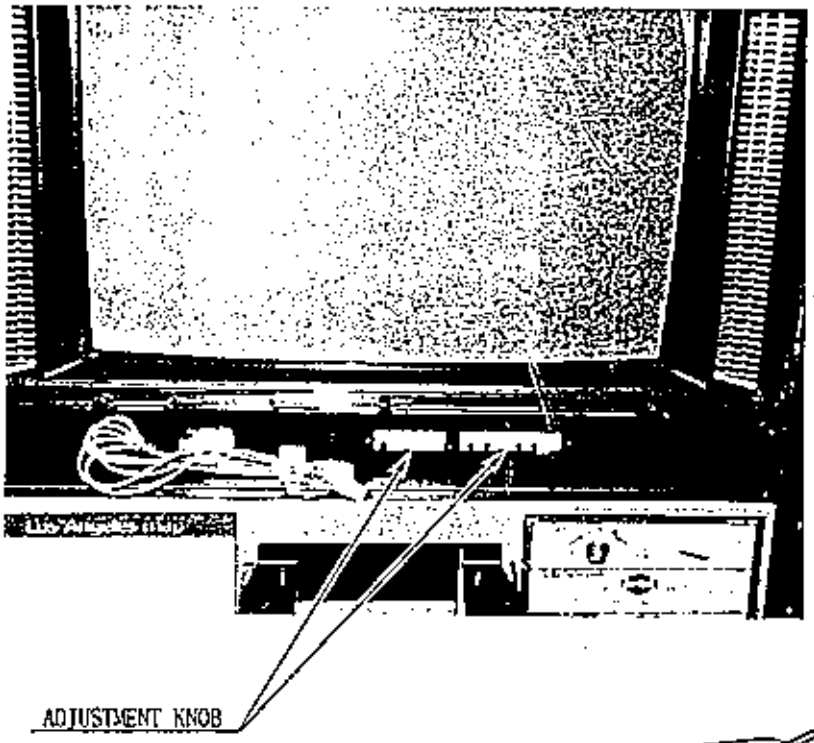
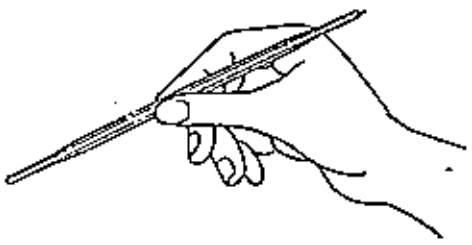


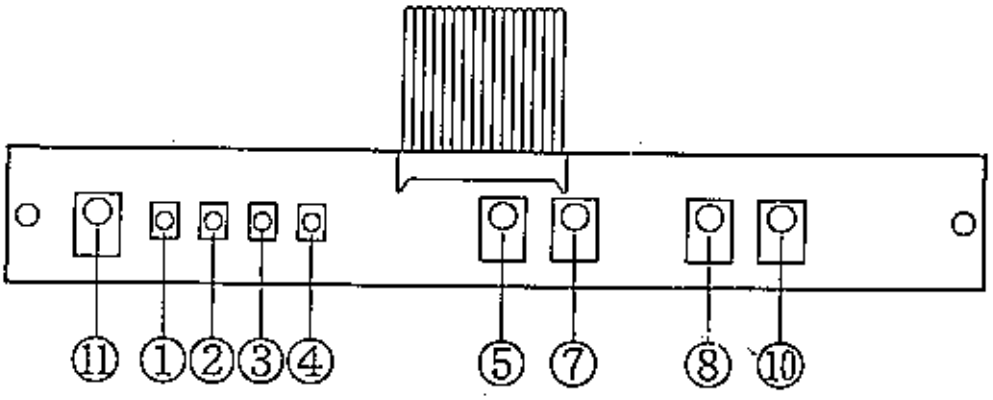
FIG. 13. 3 a



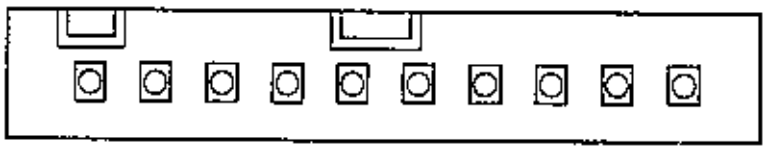
For adjustment, use the Resinous Adjustment Rod.

FIG. 13. 3 b

NANAO monitor: 2 0 0 — 5 2 4 2 — 2 4 — 0 4 (24K mode)



SANWA monitor: 2 0 0 — 5 2 4 3 — 2 4 (24K mode)



①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
R GAIN	G GAIN	B GAIN	BRIGHT	H SIZE	H HOLD	H POSI	V SIZE	V HOLD	V POSI

① R-GAIN .....
② G-GAIN ..... Controls colors.
③ B-GAIN .....
④ BRIGHT ..... Controls screen brightness.
⑤ H. SIZE ..... Controls horizontal screen size.
⑥ H. HOLD ..... Provides horizontal synchronization, i.e., controls right/left hold.
⑦ H. POSI ..... Controls horizontal display position on screen.
⑧ V. SIZE ..... Controls vertical screen size.
⑨ V. HOLD ..... Provides vertical synchronization, i.e., controls up-down hold.
⑩ V. POSI ..... Controls vertical display position on screen.
⑪ CONTRAST .... Adjusts image contrast.

14. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS

WARNING!

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

CAUTION!

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

REPLACING THE FLUORESCENT LAMP

① Out of the 3 screws securing the sash, take out the 2 screws, one each from both sides, and remove the lamp frame.

② Remove the sash by taking out the center screw.

③ Remove the Billboard Plate to replace the fluorescent lamp.

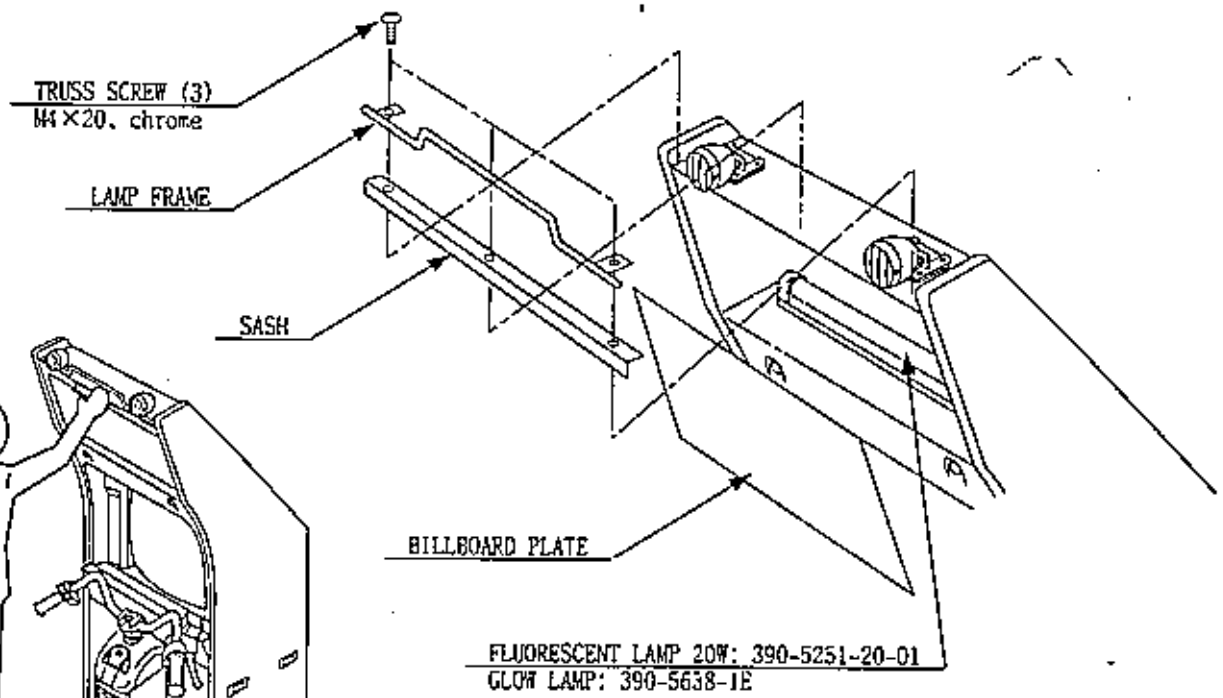


FIG. 14 a

When performing work, prepare a step.

FIG. 14 b

REPLACING THE LAMP

① Take out the screw to remove the lamp from the lamp body.

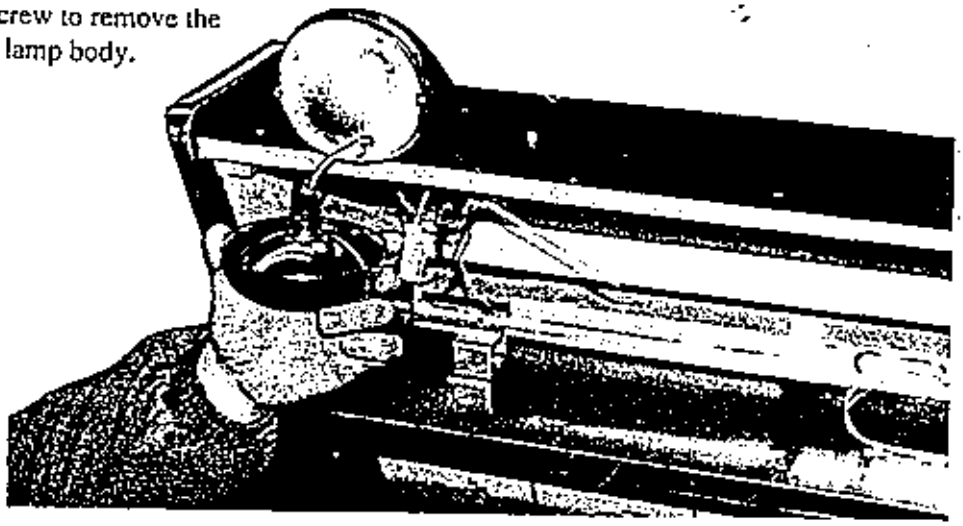


Photo 14 a

② By using a flat blade screwdriver, remove the 3 inside fasteners.

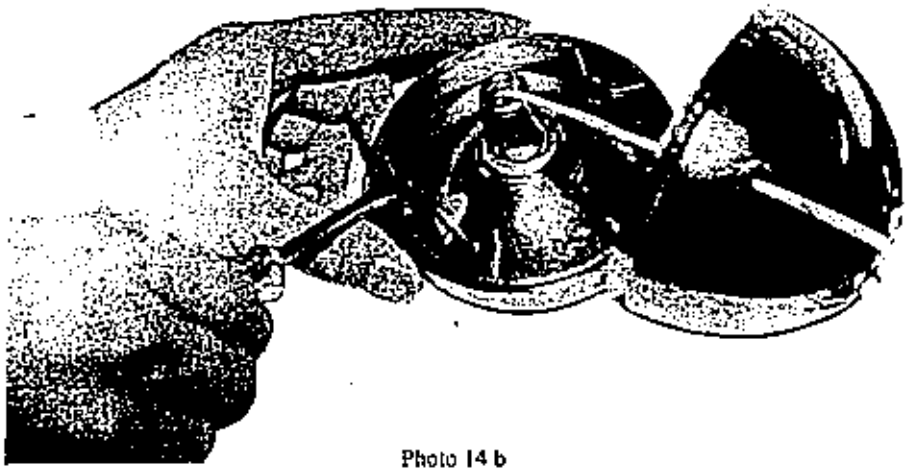


Photo 14 b

③ As shown left, disassemble the lamp parts and replace the lamp.

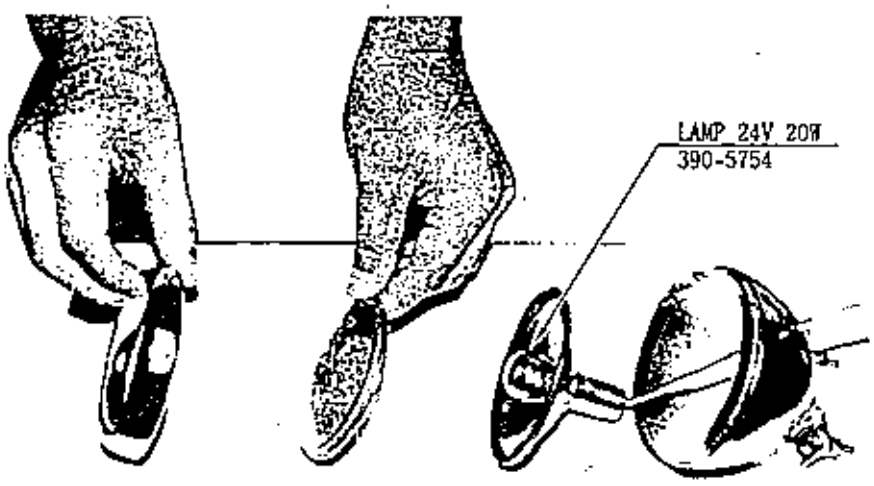


Photo 14 c

15. 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 a fire or electric shock.
- Periodically once a year, request the place of contact herein stated or the Distributor, etc. where the product was purchased from, as regards the interior cleaning. Using the prduct 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 15

ITEMS	DESCRIPTION	PERIOD	REFERENCE
HANDLEBAR	Check VOLUME VALUE.	Monthly	9 – 5
	Check SW.	Monthly	9 – 5
	Greasing to gears and sliding face.	Tri-monthly	10 – 4
FOOT BRAKE MECHA	Check VOLUME VALUE.	Monthly	9 – 5
	Greasing to gears and springs.	Tri-monthly	11 – 2
COIN CHUTE DOOR	Check COIN SWes.	Monthly	9 – 5
	Coin insertion test.	Monthly	12
	COIN SELECTOR cleaning.	Tri-monthly	12
MONITOR	Check adjustments.	Monthly or when moving.	9 – 8
	Cleaning CRT face.	Weekly	13 – 2
POWER PLUG	Inspection and cleaning	Annually	See above.
INTERIOR	Cleaning		
Cabinet surfaces	Cleaning	As occasion arises.	See below.

CLEANING THE CABINET SURFACES

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

16. TROUBLESHOOTING

WARNING!

- In order to prevent an electric shock, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.

For troubleshooting, first check the connection of wiring connectors.

TABLE 16 a

PROBLEMS	CAUSE	COUNTERMEASURES
When the main SW is turned ON, the machine is not activated.	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	The CIRCUIT PROTECTOR functioned due to momentary overcurrent.	After eliminating the cause of overload, have the Circuit Protector of the AC Unit restored .
	Power supply unit fuse is blown due to momentary overload.	After eliminating the cause of overload, replace the Power supply unit fuse (Photo 16 a ~ b). 514-5036-8000 FUSE 6.4 ϕ × 30 8000mA 125V
The color on the monitor is not correct.	Incorrect monitor adjustment.	Make appropriate adjustments.
Monitor screen has a color deviation.	Affected by the magnetic field changes of the periphery, such as other machines, location building's steel frames, etc.	Press the SW Unit's DEMAG. SW to make screen adjustment.
The on-screen image of the monitor sways and or shrinks.	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	In sufficient power capacity.	Secure sufficient power capacity.

CIRCUIT PROTECTOR

WARNING!

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 could result in generation of heat and a fire.

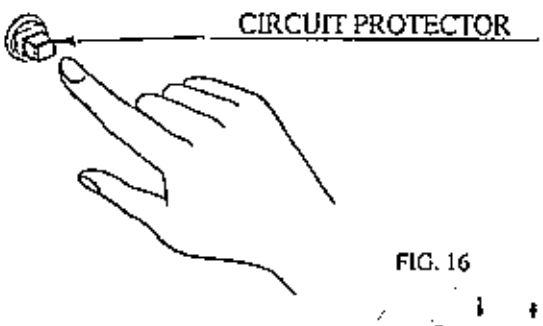


FIG. 16

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

TABLE 16 b

PROBLEMS	CAUSE	COUNTERMEASURES
The image is displayed, but the Billboard does not light up.	Fluorescent Lamp's connection failure.	Check for connection of 3p white connector within Billboard Plate (see [1], Sec. 6).
	Fluorescent Lamp needs replacement.	Replace Fluorescent Lamp (see Sec. 14).
Leader lamp doesn't light up.	Lamp need replacement.	Replace the lamp (see Sec. 14).
	The connector is disconnected.	Check for connection of 2p white connector within Billboard Plate.
In communication play, the Leader Lamp does not satisfactorily light up/ flash/ light out.	Incorrect Cabinet Type Setting	Correct Cabinet Type setting. (9-9)
Sound is not emitted.	Connector connection is incorrect.	Connect connectors accurately (see [2], Sec. 6).
	Sound volume adjustment is not correct.	Adjust the SWITCH UNIT's sound adjustment volume (control) (9-1).
	Sound related Board and Memory are irregular.	Perform sound and memory test (9-7).
Sound is emitted from the Speaker but not from the vibration device.	Poor connection of connector between Front cabinet and Seat cabinet.	Connect connectors accurately.
	Incorrect volume adjustment.	Adjust Switch Unit Volume Adjustment V.R.
Operation is unsatisfactory.	Poor V. R. setting.	Perform Volume setting. (9-12)
	V. R. deviation or malfunctioning.	Adjust or replace the V. R. (see Sec. 10, 11).
	Poor mesh of V.R. GEAR.	Adjust GEAR mesh (see Sec. 10, 11).
	Spring failure due to secular change of Accelerator and Brake mechanism.	Replace the spring.
Shift operation is not satisfactory at the time of Manual Transmission.	Shift SW malfunctioning.	Replace SW.
NETWORK check will not finish.	Communication cable's connection failure.	Check for communication cable disconnection.
		Check if communication cable is correctly connected. (19-2)
	Communication play setting is wrong.	Correctly set in the test mode. (19-3)
Communication play is not possible.	Communication cable's connection failure.	Check for communication cable disconnection.
		Check if communication cable is correctly connected. (19-2)
	Communication play setting is wrong.	Correctly set in the test mode. (19-3)

REPLACEMENT OF FUSE

WARNING!

- In order to prevent an electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause a fire or electric shock.
- After eliminating the cause of the blowing of fuse, replace the fuse. Depending on the cause of fuse blowing, using the fuse as is blown can cause generation of heat resulting in a fire.

Take out the 2 truss screws and remove the back door to replace fuse.

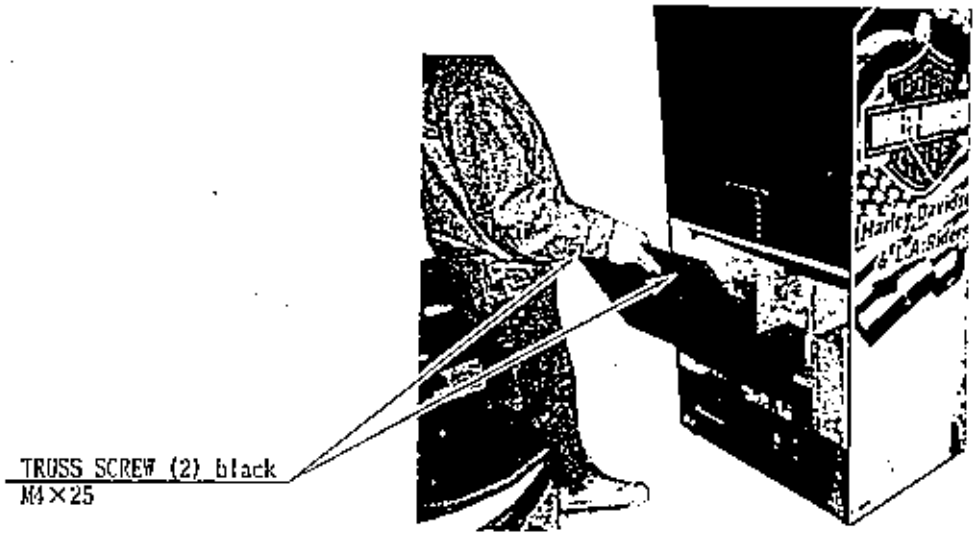


Photo 16 a

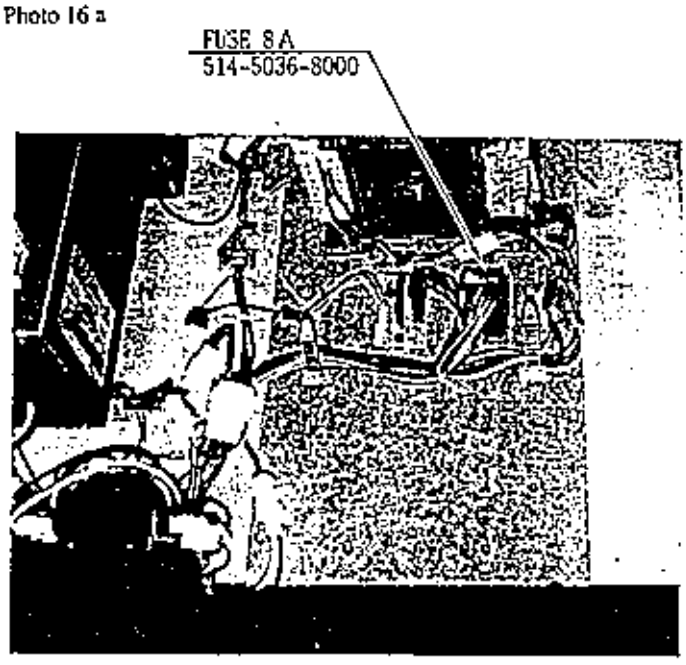


Photo 16 b

17. GAME BOARD

WARNING!

- In order to prevent electric shock and short circuit accidents, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause a fire or electric shock and short circuit accidents.
- Do not expose the Game BD, etc. without a justifiable reason. Exposed Game BD, etc. can cause electric shock accidents and malfunctioning.

CAUTION!

- 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.
- When asking for the replacement or repair of the product's Game Board (MODEL 3 BOARD), be sure to put the Game Board together with the Shield Case in a Carton Box. Otherwise, the request is not acceptable.

17—1 REMOVING THE GAME BOARD

① Remove the 2 screws which secure the Front Door.

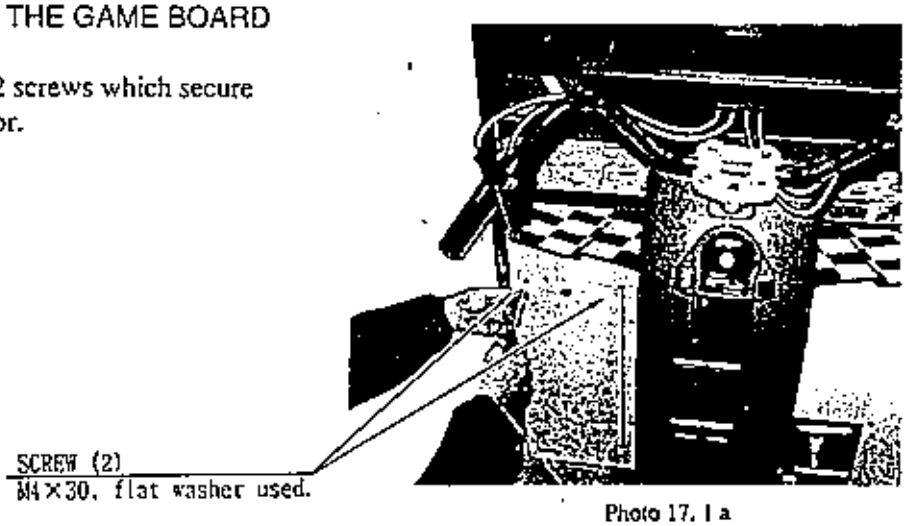


Photo 17. 1 a

② Unlock and remove the Front Door from the cabinet.

③ Disconnect all of the connectors connected to the Shield Case. (Blue 2P, Black 4P, Black 6P, white 8P, Black 10P, Black 12P, Red 12P, Blue12P)

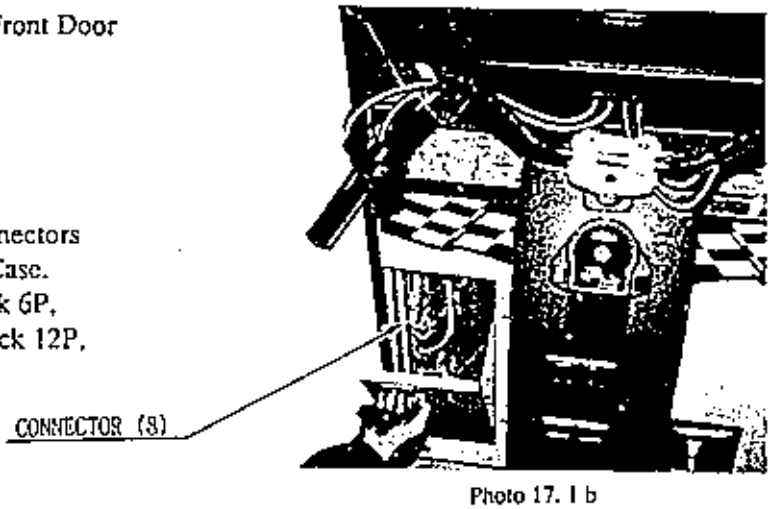


Photo 17. 1 b

④ Remove the 2 screws from the wooden base on which the Shield Case is mounted.

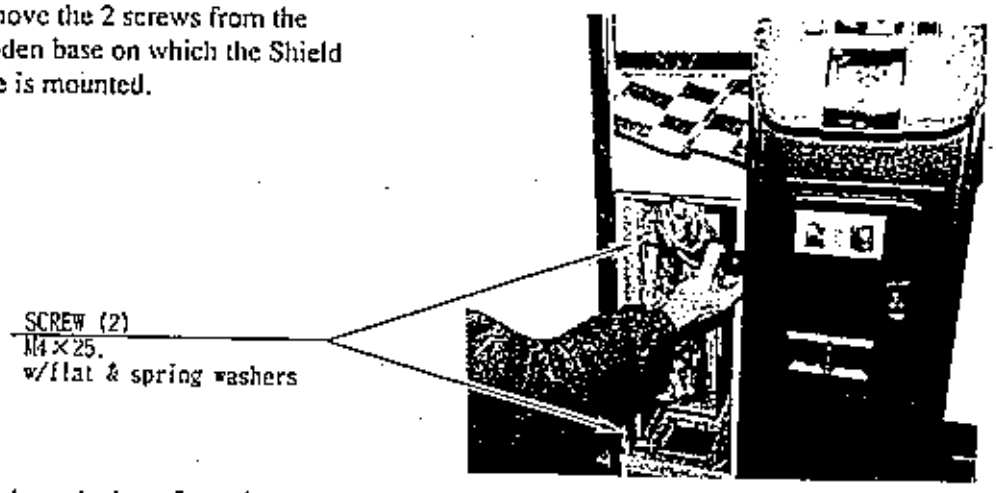


Photo 17. 1 c

⑤ Withdraw the base from the cabinet together with the Shield Case as is mounted.

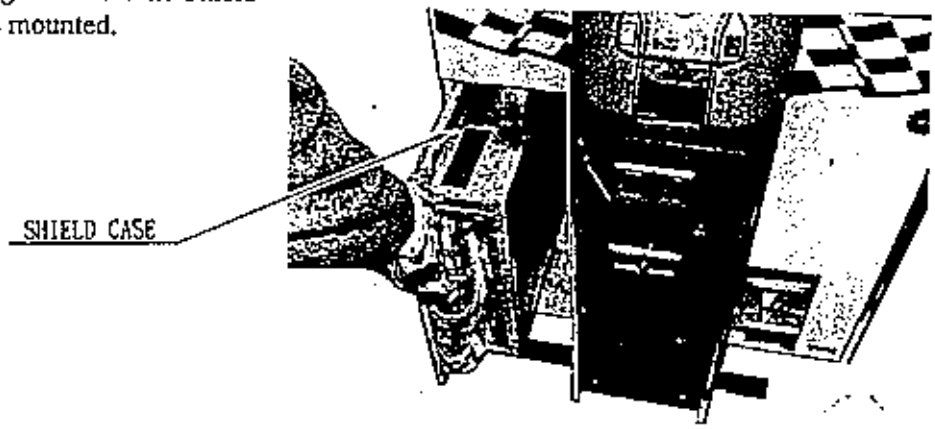


Photo 17. 1 d

⑥ Remove the 3 screws, take out the Shield Case Lid, and the Game Board will appear.

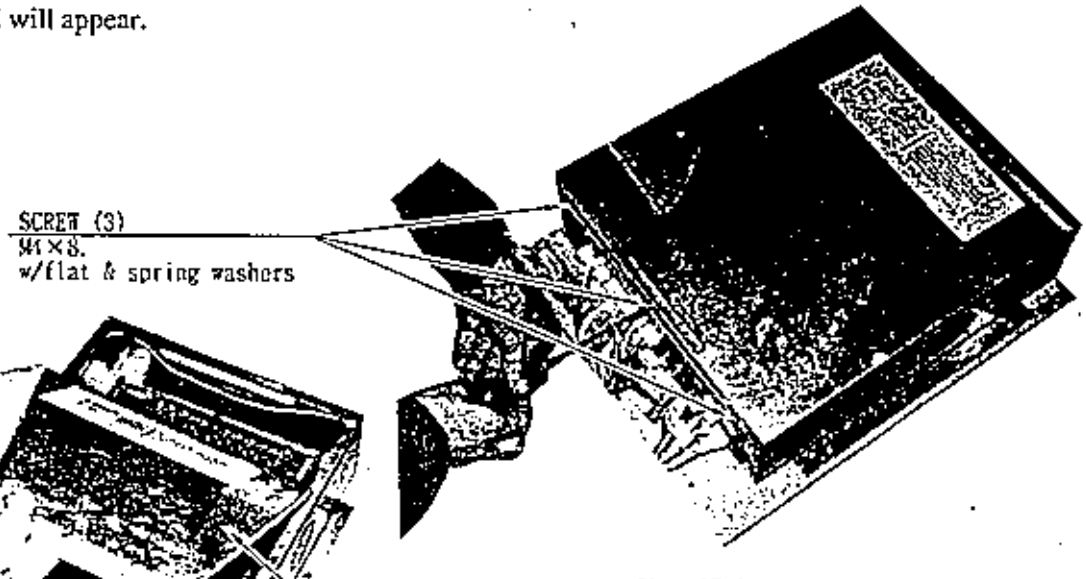


Photo 17. 1 e

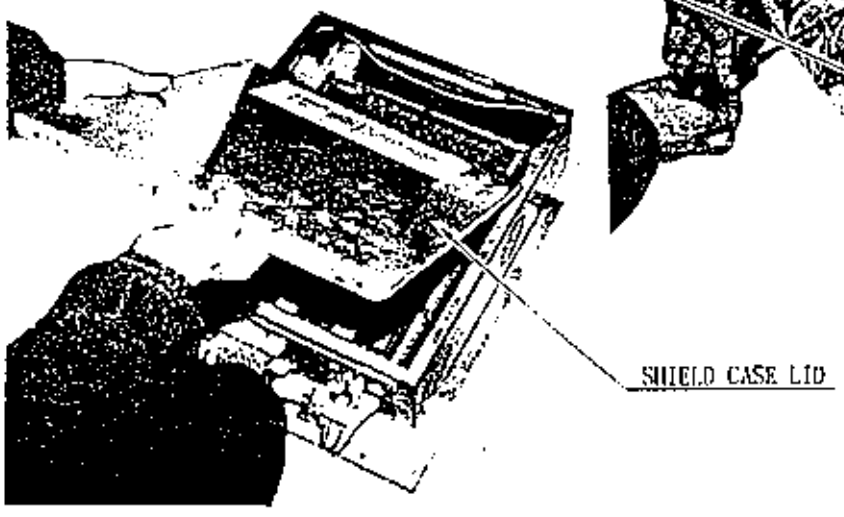


Photo 17. 1 f

17−2 COMPOSITION OF GAME BOARD

GAME BD HARLEY DAVIDSON (833-13325)

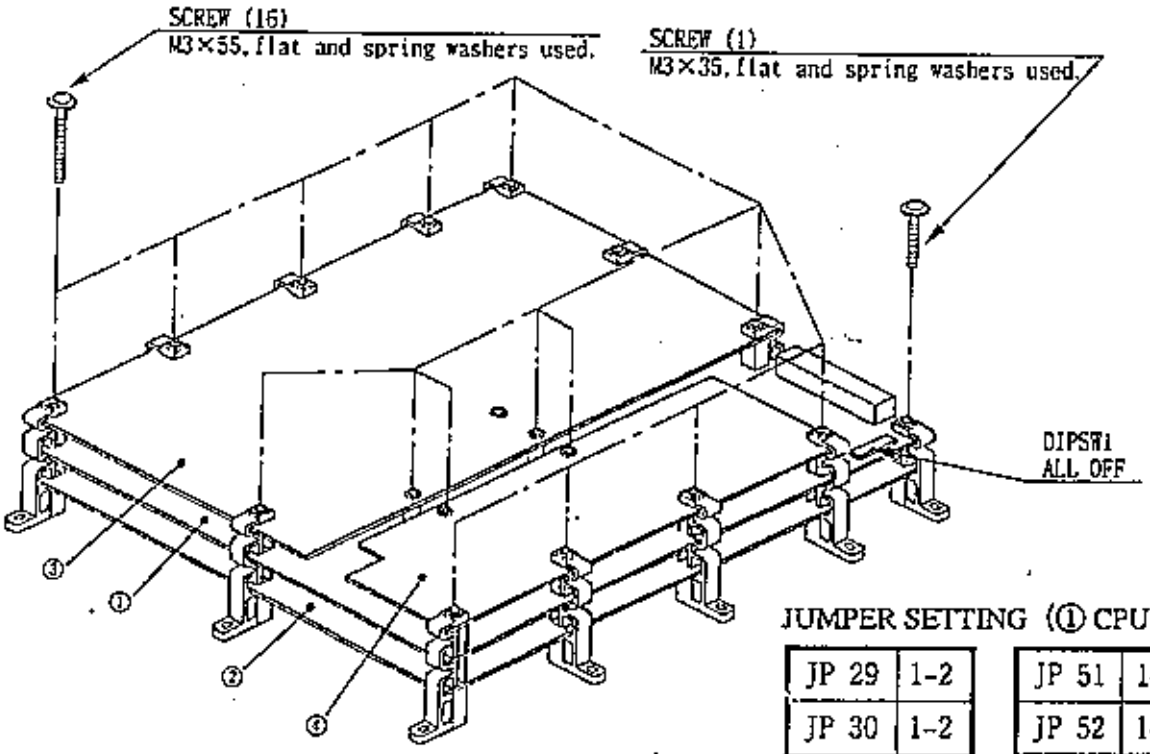


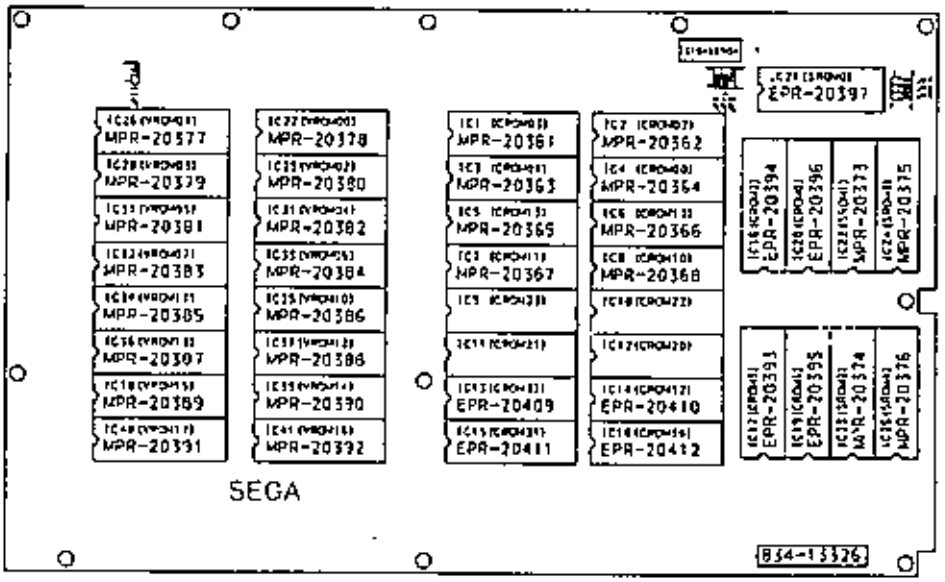
FIG. 17.2

JUMPER SETTING (① CPU BD)

JP 29	1-2
JP 30	1-2

JP 51	1-2
JP 52	1-2
JP 53	1-2

ROM BD HARLEY DAVIDSON (834-13326)



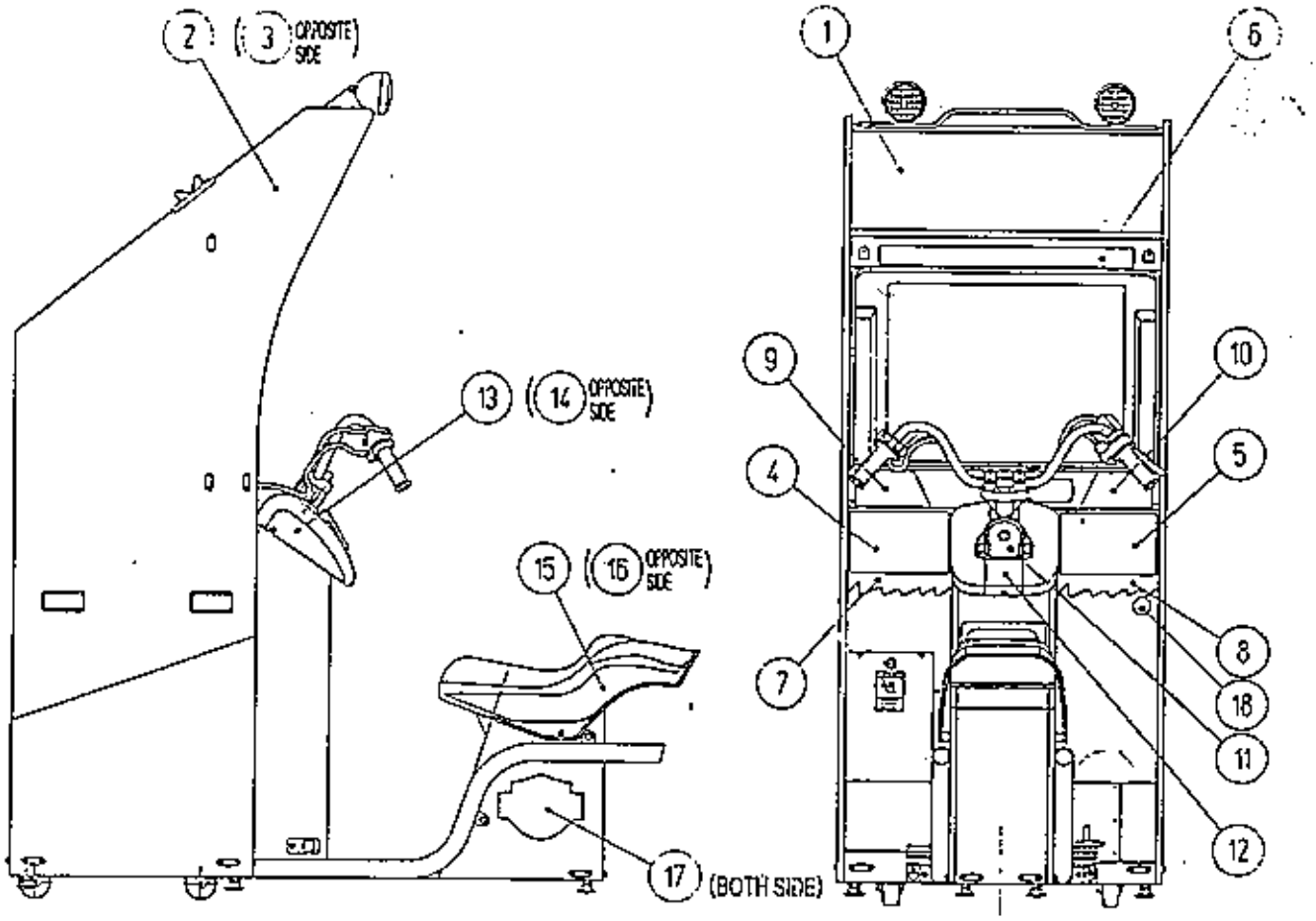
JUMPER SETTING

JP1	1-2
JP2	2-3
JP7	2-3
JP8	2-3
JP9	2-3
JP11	1-2
JP13	2-3

No.	PART No.	DESCRIPTION
①	837-12715	MODEL3 STEP2 CPU BOARD
②	837-12716	MODEL3 STEP2 VIDEO BOARD
③	834-13326	ROM BD HARLEY DAVIDSON
④	837-11861-91	MODEL3 COMM BD COM

18. DESIGN RELATED PARTS

For the Warning Display stickers, refer to Section 1.



No.	PART No.	DESCRIPTION
①	423-0318-91	BILLBOARD PLATE HLD STD
②	HLD-1110X	STICKER CABI L
③	HLD-1111X	STICKER CABI R
④	422-0654	PLAY INSTR HLD STD A
⑤	422-0655-01-91	PLAY INSTR HLD STD B ENG
⑥	422-0656-91	SUB INSTR HLD STD
⑦	HLD-1117	STICKER CABI FRONT L
⑧	HLD-1118	STICKER CABI FRONT R
⑨	HLD-1104-A	STICKER MASK COVER L
⑩	HLD-1104-BX	STICKER MASK COVER R
⑪	HLD-1082-B	STICKER FUEL TANK A
⑫	HLD-1082-C	STICKER FUEL TANK B
⑬	HLD-1082-DX	STICKER TANK L
⑭	HLD-1082-EX	STICKER TANK R
⑮	HLD-3055-B	STICKER REAR FENDER L
⑯	HLD-3055-C	STICKER REAR FENDER R
⑰	HLD-3051-CX	STICKER BAR AND SHIELD
⑱	421-9747	STICKER HLD OLP

19. COMMUNICATION PLAY

WARNING!

- Before performing between-cabinets connection work, be sure to turn the power SW off and unplug the power plug from the plug socket. Failure to observe this can cause electric shock or short circuit accidents.
- Perform assembling as shown in this manual. Erroneous assembling can cause electric shock accidents and malfunctioning.

By linking 4 machines, up to 4 persons can play simultaneously. Although accessory parts are to be installed for communication play, some of the parts will remain as spare.

19—1 INSTALLATION PRECAUTIONS

1) Since multiple machines are to be linked, sufficient power corresponding to the number of machines used need to be supplied. As a standard, amperage per machine is 7A (AC100~110, 120V area and 220~240V area).

2) Due to the parts used for communication play, the interval between machines is 20 cm. If the parts are not installed, adjacent players will come into contact with each other and this can cause accidents and trouble.

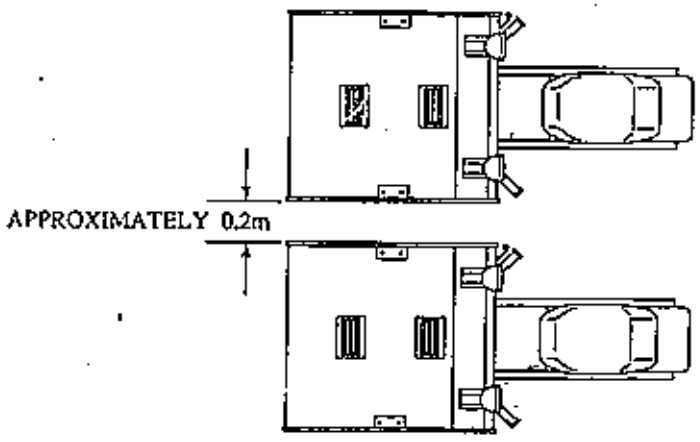


FIG. 19. 1

19—2 CONNECTING THE COMMUNICATION CABLES

STOP
IMPORTANT!

The Communication Cable is optic-fiber made and will break if excessively bent. Handle with care.

Connect machines with the protective tube and pass the communication cable in the tube. Depending on the number of machine units to be linked, connect the communication cables (optic fiber cables) in the manner shown in Figure 19. 2 b.

① Take out the 2 screws and remove the back door.

Photo 19. 2 a

Photo 19. 2 b

② Take out the 4 screws and remove the Fiber Lid Base.

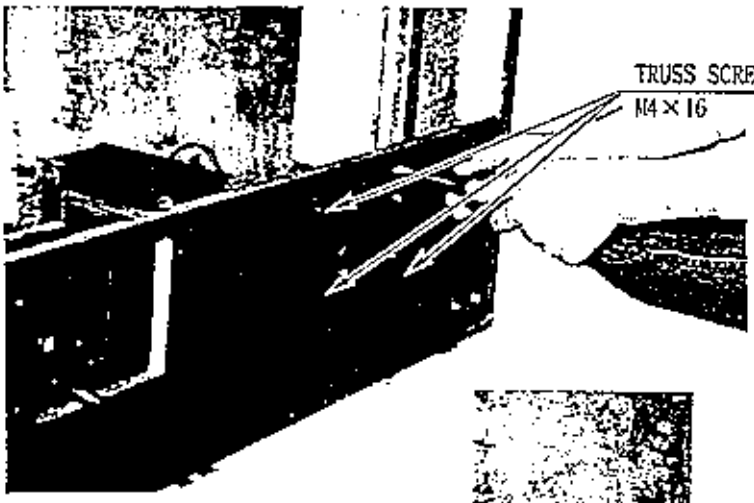


Photo 19. 2 c

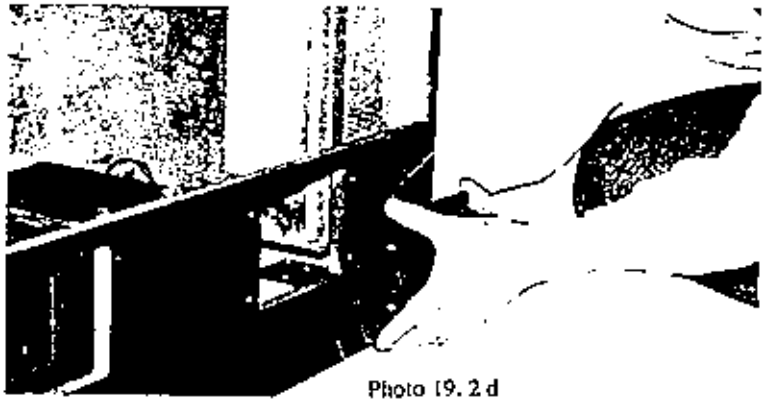
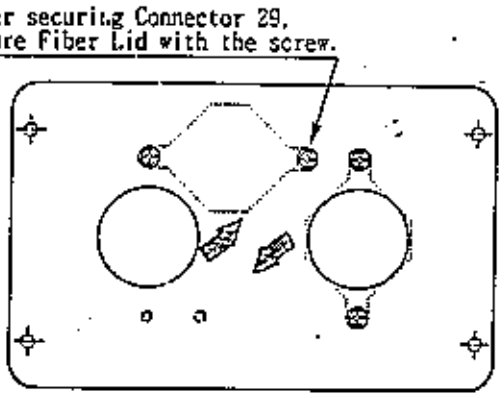


Photo 19. 2 d

③ Loosen the screw and turn the Fiber Lid so as to install Connector 29 to the Fiber Lid Base. Take out the nut from Connector 29 and insert Connector 29 into the Fiber Lid Base hole, then fasten the nut to secure.



④ Insert Protective Tube to Connector 29. With a click sound, the tube is secured to the connector.

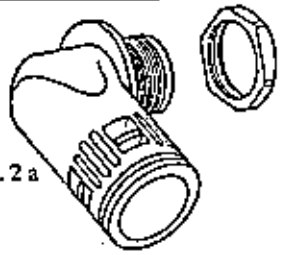


FIG. 19. 2 a

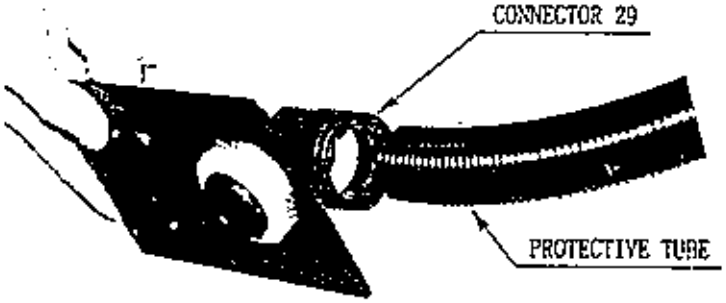


Photo 19. 2 e

Photo 19. 2 f

⑤ Pass the communication cable through the Protective Tube.

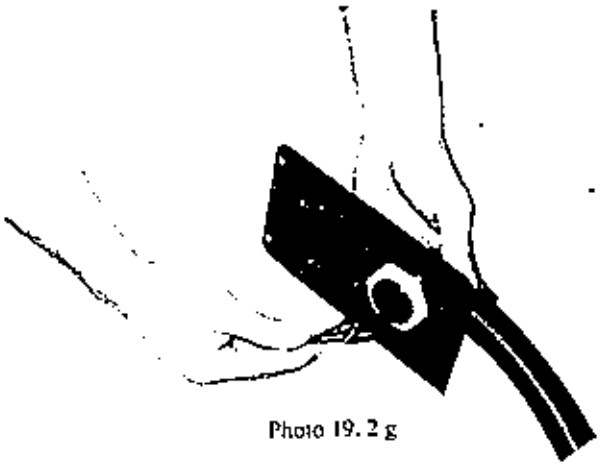


Photo 19. 2 g

⑥ Reinstall Fiber Lid Base to the original position.

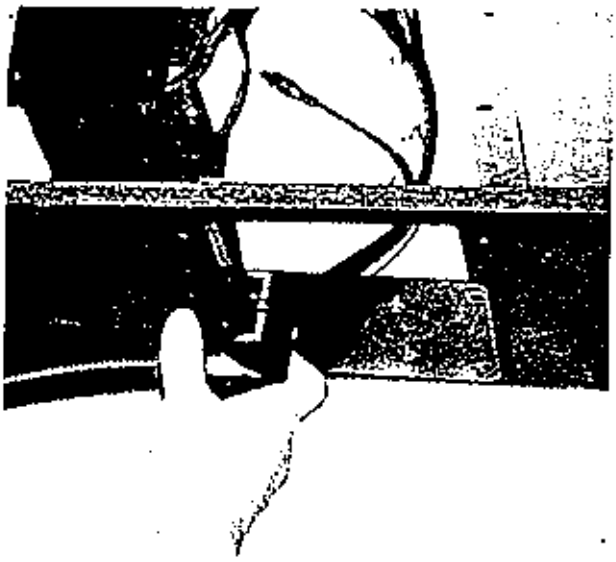


Photo 19. 2 h

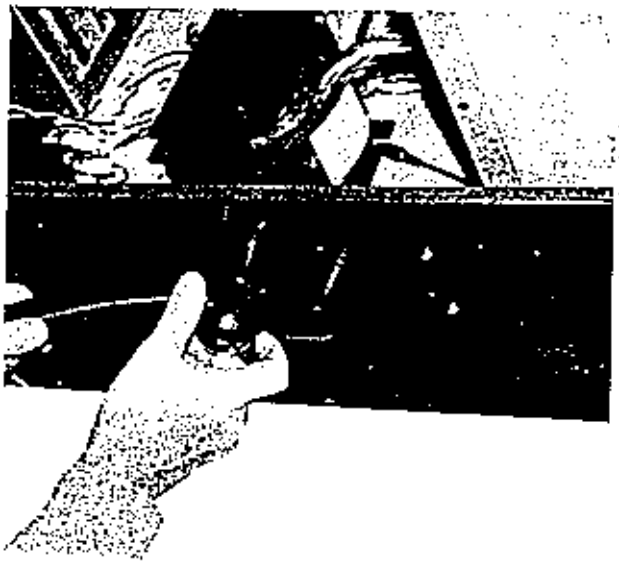


Photo 19. 2 i

⑦ Take out the 2 screws, unlock & remove the Front Door, and the Shield Case appears. The communication cable insertion connector is with the Filter Board in front of the Shield Case. Take off the Cap from the connector and insert the communication cable.

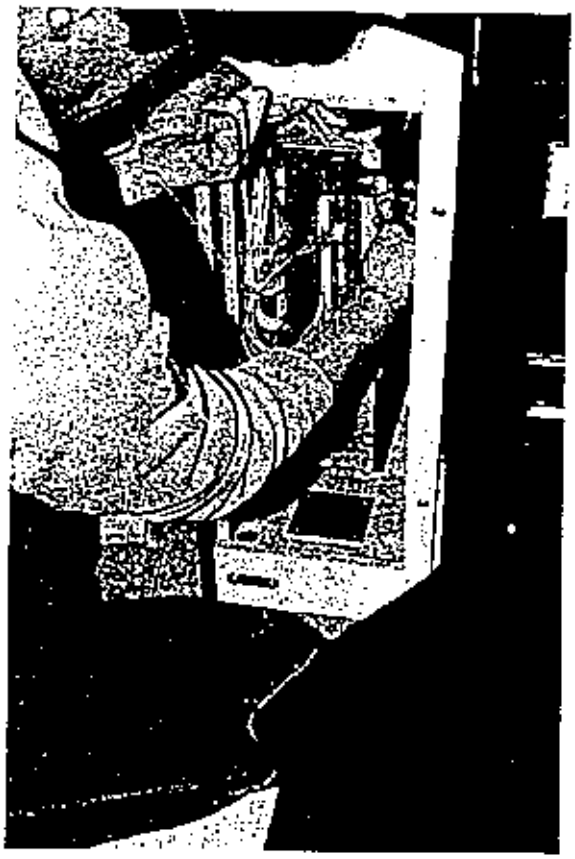


Photo 19. 2 j

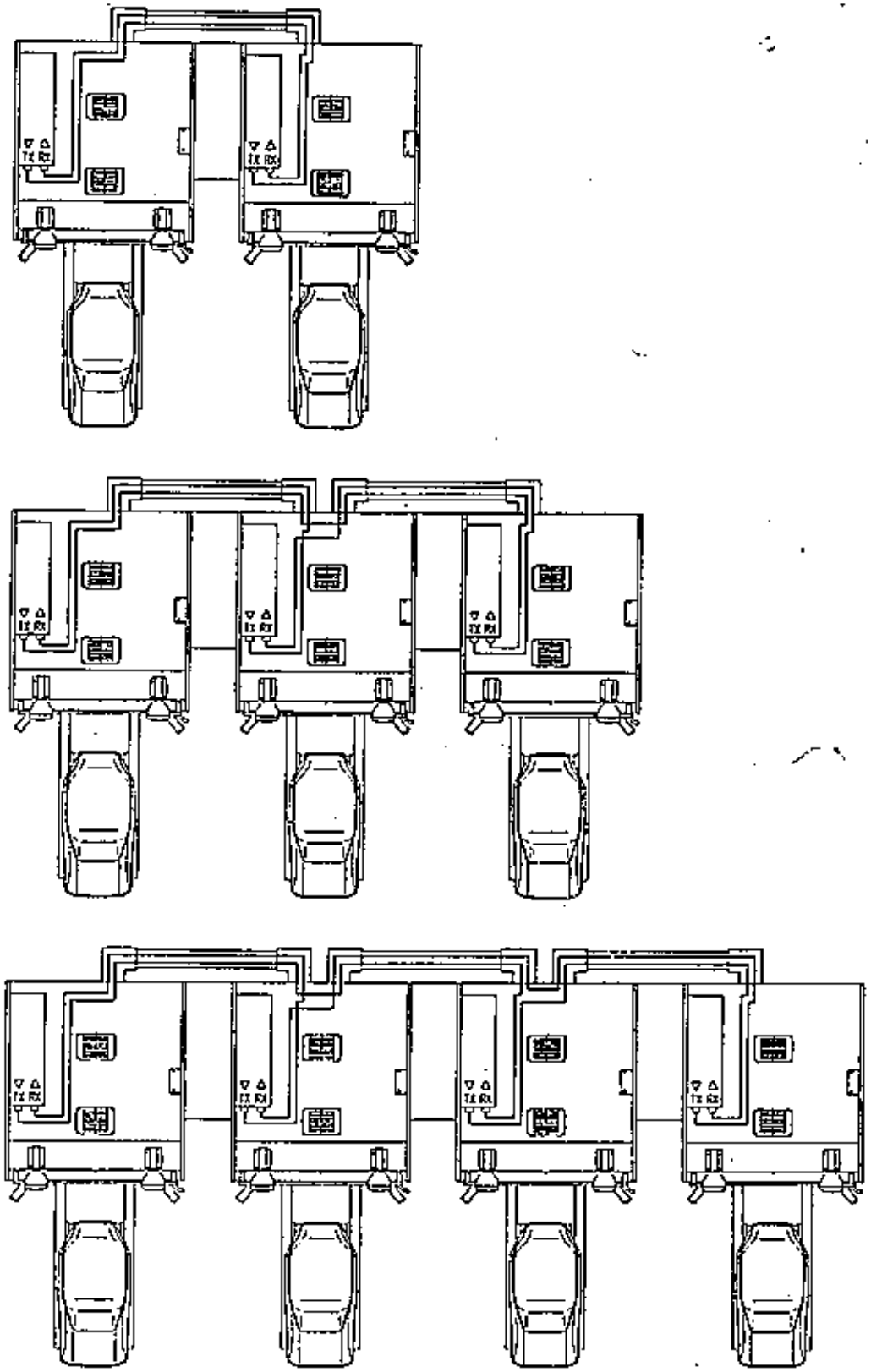


FIG. 19.2 b

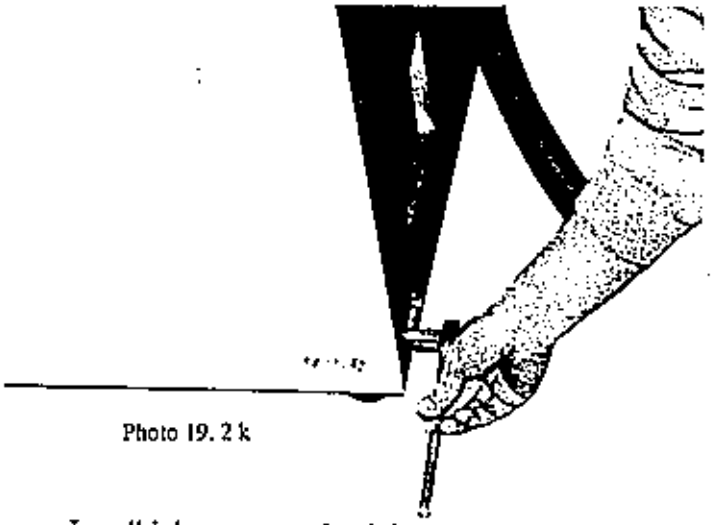


Photo 19. 2 k

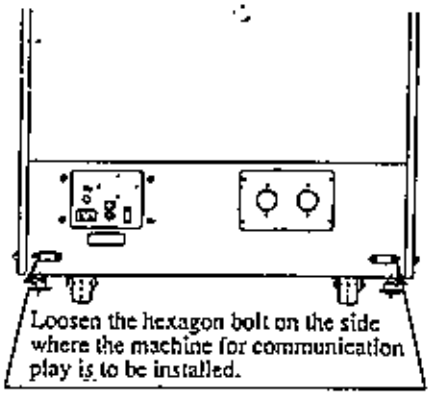


FIG. 19. 2 c

Install joint parts used to join interactive play machines together.

⑧ Loosen the hexagon bolt on the lower rear of the cabinet. Loosen the hexagon bolt on the side where machines are to be linked for communication play.

⑨ Insert the notch portion of the lower joint to the loosened hexagon bolt and retighten the hexagon bolt.

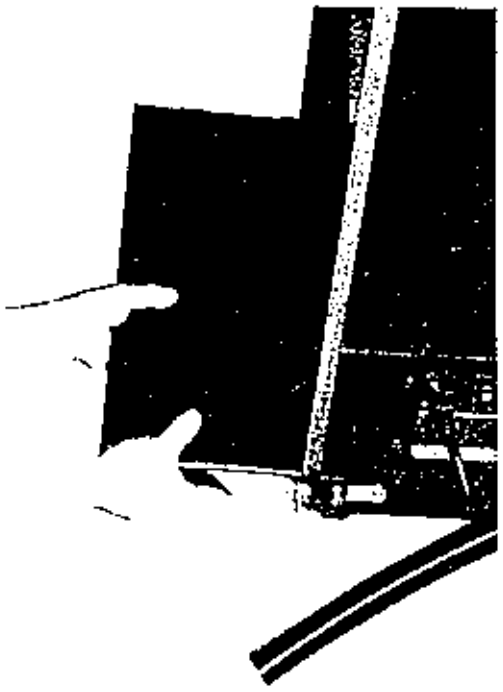


Photo 19. 2 l

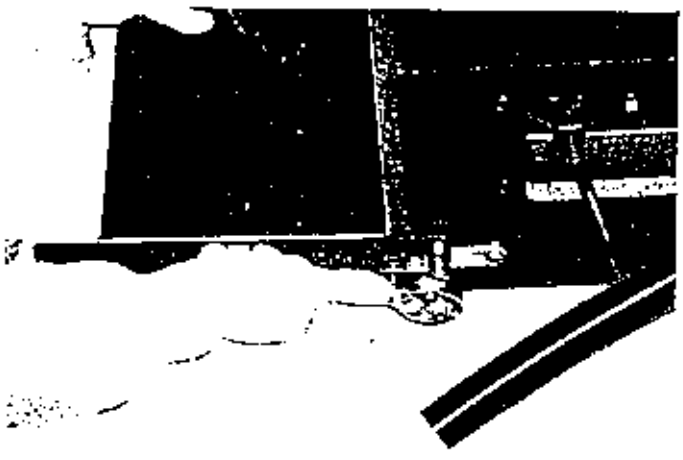


Photo 19. 2 m

⑩ As in the rear of the cabinet, loosen the hexagon bolt of the side where the lower joint in front of the cabinet is to be installed.

⑪ Insert the Joint Plate's notch portion to the loosened hexagon bolt and retighten the hexagon bolt. At this time, align the Joint Plate's hole and the Lower Joint's screw hole, then tighten the hexagon bolt.

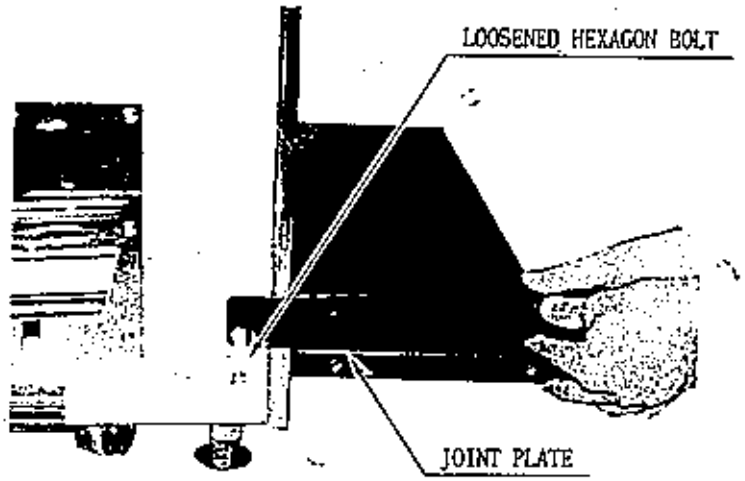


Photo 19.2 n

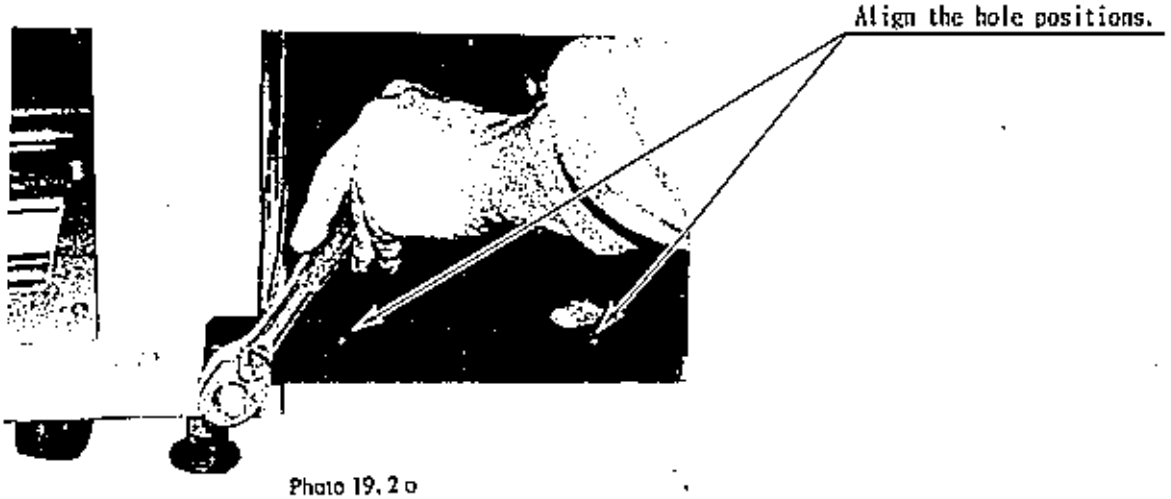


Photo 19.2 o

⑫ Secure the Joint Plate and Lower Joint with the 2 hexagon bolts.

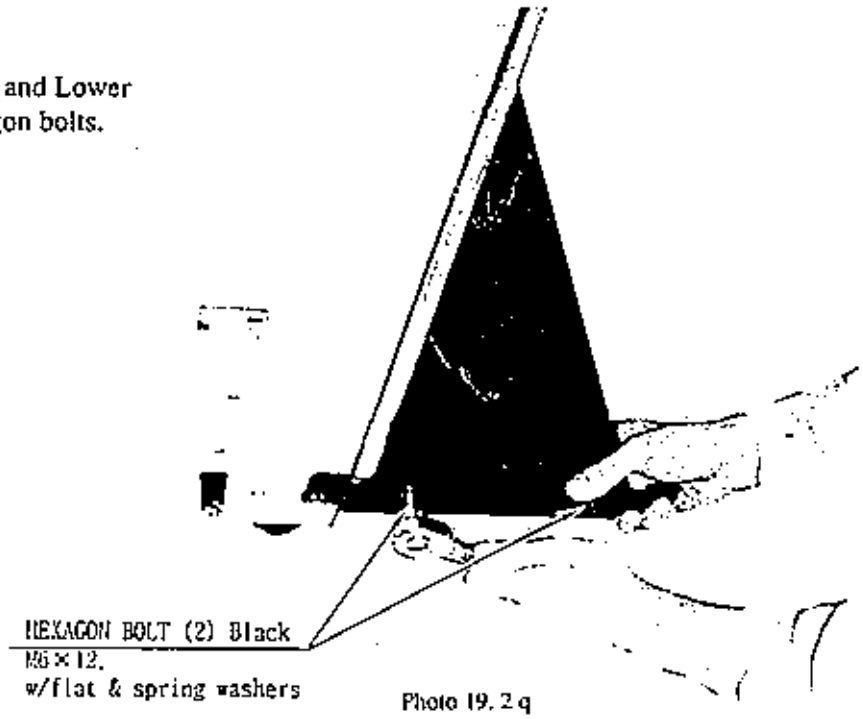


Photo 19.2 q

⑬ Remove the Shipping Hook Bracket from the side where the Joint parts are to be installed.

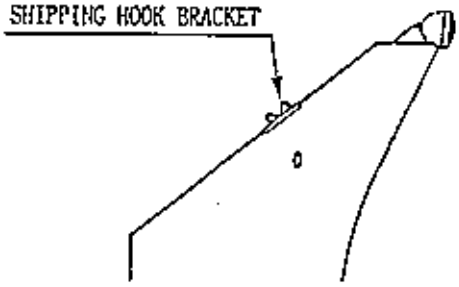


FIG. 19. 2 d

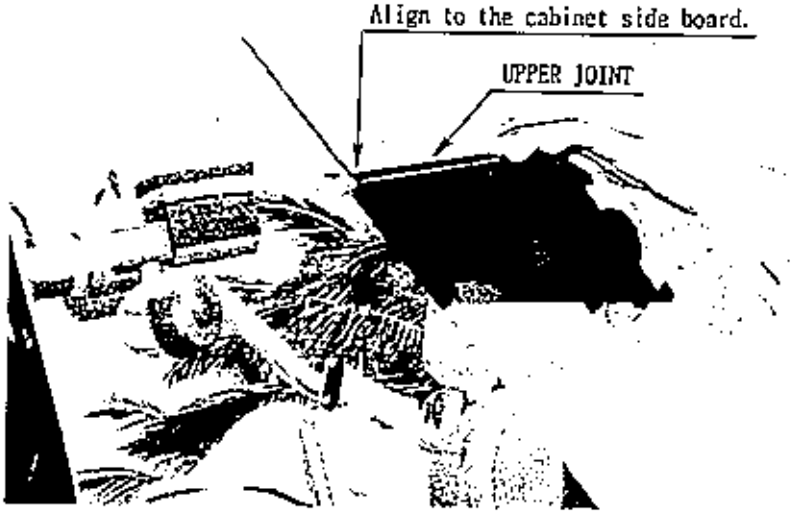


Photo 19. 2 q

⑭ Secure the Upper Joint by using the 2 hexagon bolts which secured the Shipping Hook Bracket.

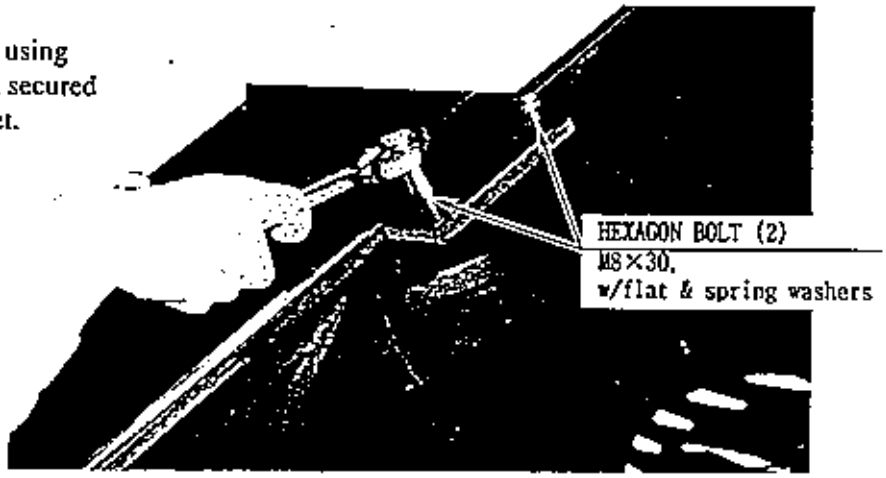


Photo 19. 2 r

⑮ Remove the 2 screws out of a total of 4 screws,which secure the Lamp Holder, from the rear side and utilize these to install the POP HOLDER.

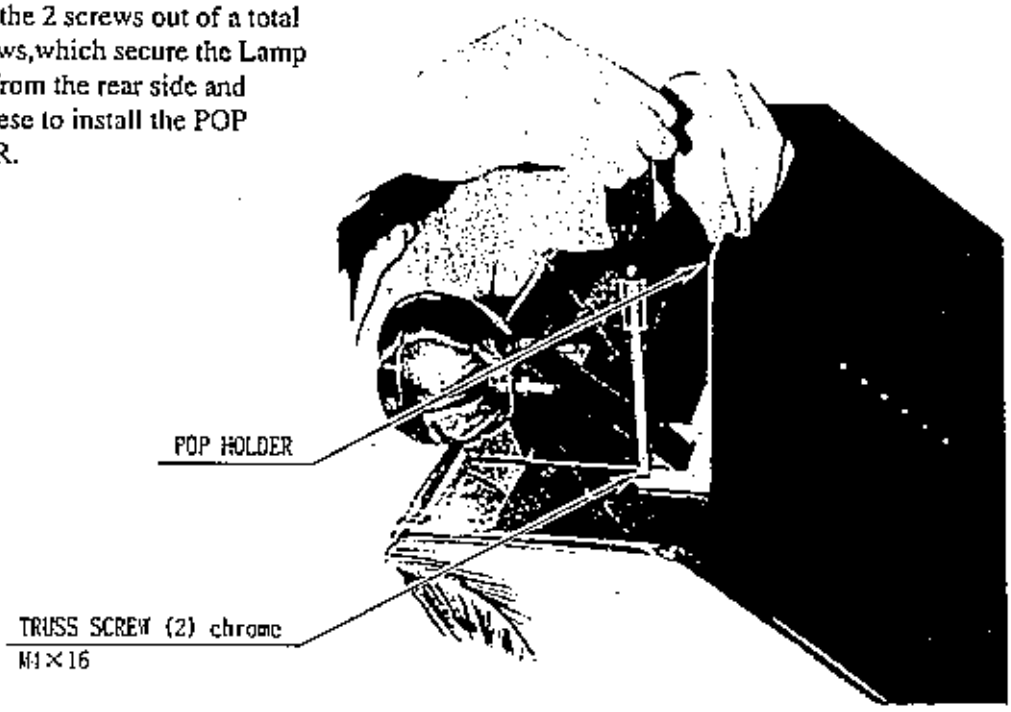


Photo 19. 2 s

⑯ In the similar manner as above, connect the communication cable for the other machine and install joint parts.

⑰ By using 2-sided tape, install the POP PANEL to the POP HOLDER installed for the adjoining machines.

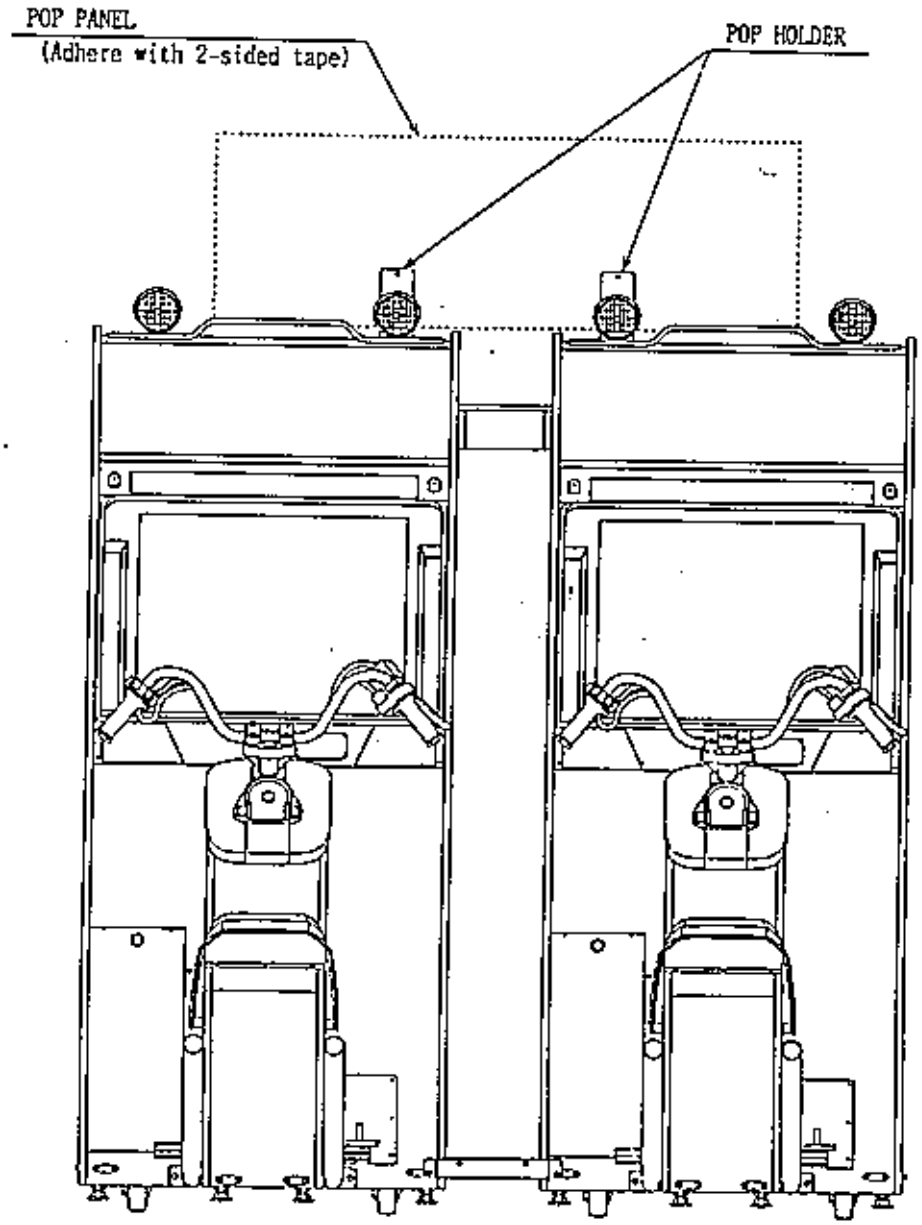


FIG. 19. 2 e

19—3 SETTING FOR COMMUNICATION PLAY

STOP
IMPORTANT!

During communication play, if communication is interrupted due to a certain cause, ERROR MESSAGE will be displayed, then the NETWORK check mode appears on the screen automatically.

Cause all of the seats to enter the Test Mode and change the NETWORK ASSIGNMENTS of each seat for communication play. For the changing procedure, refer to the explanations of Section 9.

① Press the TEST button to enter the test mode and choose "NETWORK ASSIGNMENTS."

② Bring the arrow to COMMUNICATION and select "NETWORK."

③ Bring the arrow (→) to PRIVILEGE MODE and press the Test button to set one of the plural seats (basically the leftmost seat) to "MASTER." Set other seats to "SLAVE."

④ Bring the arrow mark (→) to "CABINET ID NUMBER," press the TEST button and set the seat number of the machines sequentially to No. 1, No. 2, No. 3 and No. 4 as applicable starting from the extreme left facing the monitor's front side. If the same number is set for 2 or more cabinets, or if the sequential order is incorrect, the game display, etc. will be confused (different from the actual status). Therefore, be careful of this point.

In the case of communication play, all the settings other than CABINET TYPE, B.G.M. VOLUME, and ENGINE VOLUME from among the Game Assignments will be executed by the MASTER SEAT. All other seats ("SLAVE") are subject to the setting change made by the "MASTER" seat.

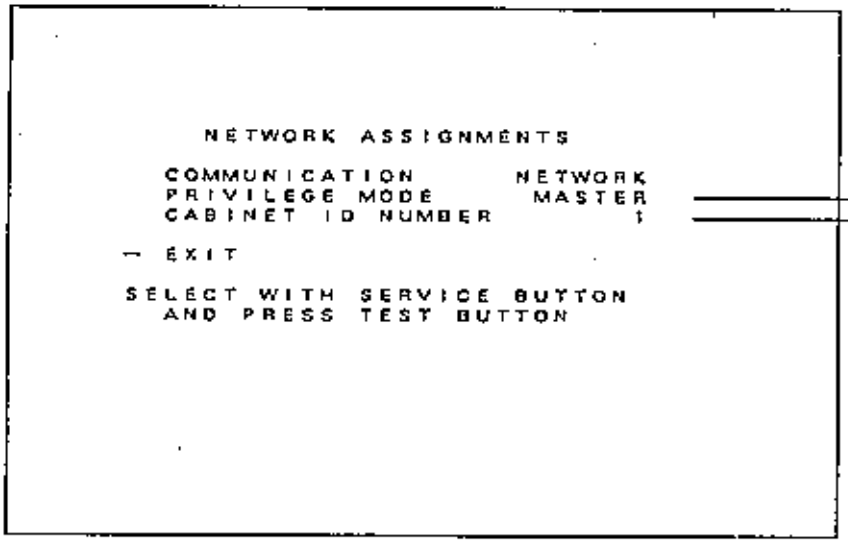


FIG. 19.3 NETWORK ASSIGNMENTS

19—4 NETWORK CHECK

With the communication play setting, NETWORK check is executed when the power is turned on or the test mode is exited.

During the network check, the screen shown right will be displayed. If communication play setting and communication cable connection are correct, the Game mode (the ADVERTISE mode) is displayed and the network check is finished.

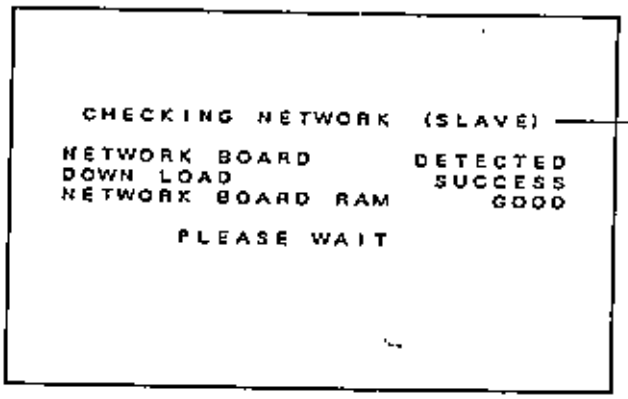


FIG. 19. 4 a NETWORK CHECK

If communication play setting error or communication cable error is found, the screen shown right appears. Press the test button to enter the test mode. Check and correct the communication play setting.
Check communication cable connection by watching FIG. 19. 2 c.

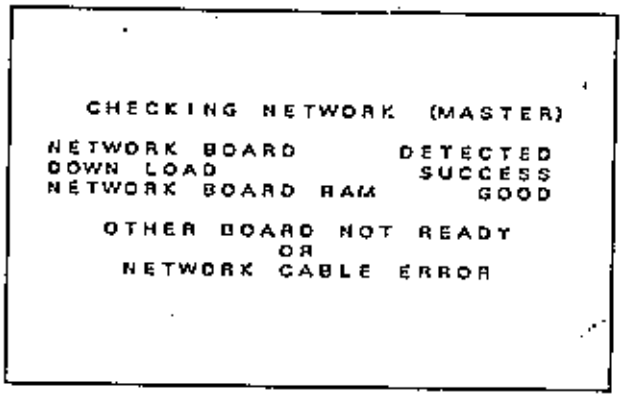


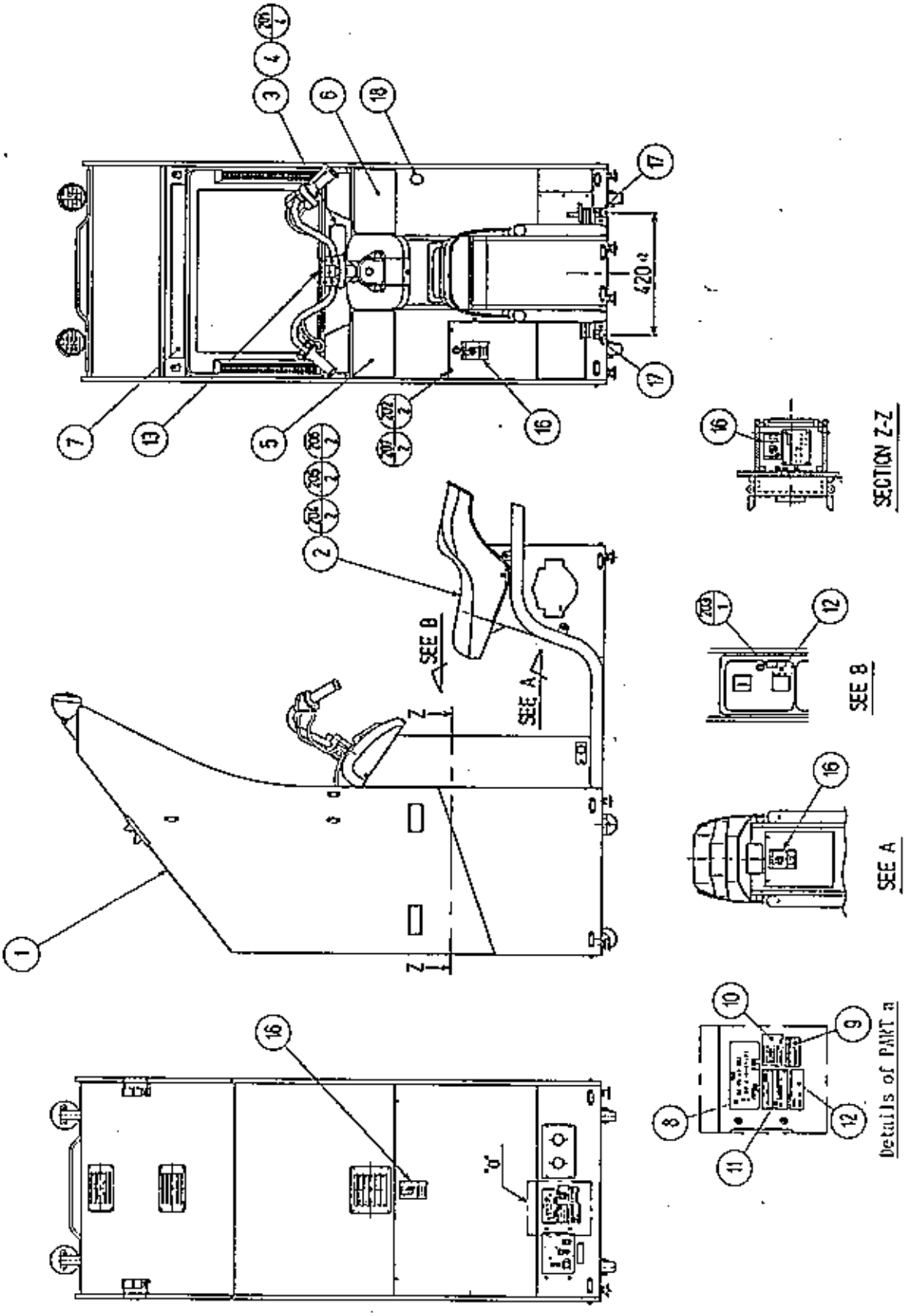
FIG. 19. 4 b NETWORK ERROR

During communication play, if communication is interrupted due to a certain cause, the screen shown in FIG. 19. 4 c appears and then, network check starts automatically.
In the network check, if an irregularity such as the communication cable disconnection is detected, the screen shown in FIG. 19. 4 b appears.

FIG. 19. 4 b NETWORK ERROR OCCURRED

20. PARTS LIST

① TOP ASSY HARLEY-DAVIDSON STD (D-1/2)

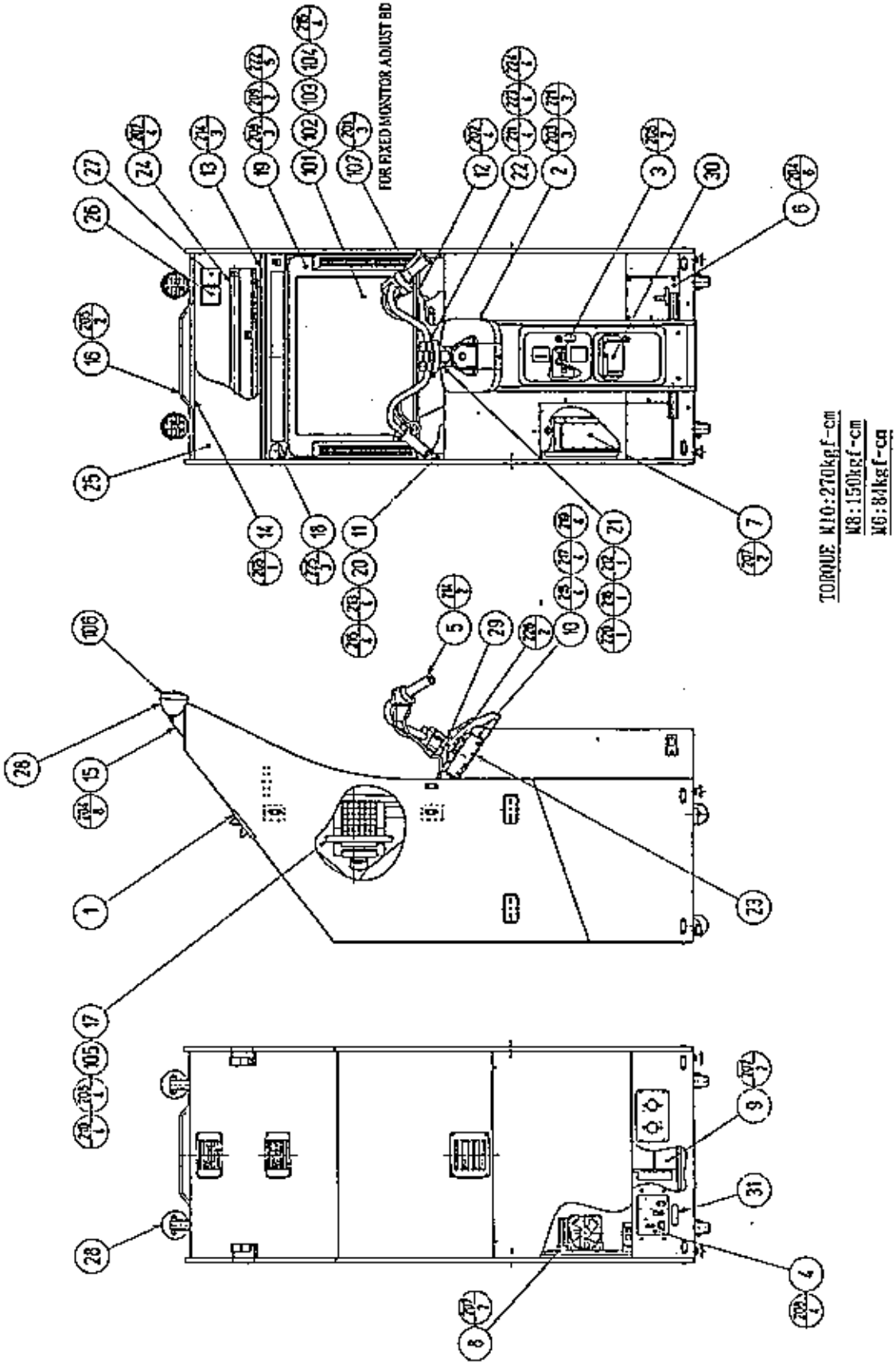


① TOP ASSY HARLEY-DAVIDSON STD

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-10001	ASSY CABINET	
2	HLD-3050	ASSY SEAT CABI	
3	DYN-0011	DENOMI PLATE W/O ORIGINAL	
4	421-7308- ～	DENOMINATION SHEET 1GAME ～	
5	422-0654	PLAY INSTR HLD STD A	
6	422-0655-01-91	PLAY INSTR HLD STD B ENG	
7	422-0656-91	SUB INSTR HLD STD	
9	421-6594-91	STICKER CERTIFICATE	
11	421-7987	STICKER ELEC SPEC	OTHERS
	421-8408	STICKER ELEC SPEC TAIWAN.	TAIWAN
12	421-7988-91	STICKER SERIAL NUMBER	
14	SGM-4481	POLY COVER 950×900×2100	
15	SGM-4429	POLY COVER 800×300×900	
16	440-WS0002XEG	STICKER W POWER OFF ENG	
17	421-8885	STICKER CAUTION FORK	
18	421-9747	STICKER HLD OLP	
20	421-9776-01	INST SH HLD STD TRANSPORT ENG	
201	000-T00412-0C	M SCR TH CRM M4×12	
202	000-T00430-0C	M SCR TH CRM M4×30	
203	008-T00412-0B	TMP PRF SCR TH BLK M4×12	
204	000-T00616-0C	M SCR TH CRM M6×16	
205	030-000830-SB	HEX BLT W/S BLK M8×30	
206	060-F00800-0B	FLT WSHR BLK M8	
207	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
208	030-000612-SB	HEX BLT W/S BLK M6×12	
209	060-F00600-0B	FLT WSHR BLK M6	
210	000-P00408-W	M SCR PH W/PS M4×8	
401	601-6604-70	CARTON BOX 70	
402	SGM-2675	POLYETHYLENE BAG 240×370	
403	420-6367-01	OWNERS MNL HARLEY DAVIDSON STD ENG	
405	220-5576	KEY MASTER FOR 220-5575	
406	SGM-4111	KEY BAG	
407	310-5285-290150	FLEX TUBE 29-0150CM	
408	310-5287-29	CONN L 29	
410	600-6724	AC CABLE CONNECT TYPE 15A	} TAIWAN
	600-6729	AC CABLE CONNECT TYPE 15A	
	600-6618	AC CABLE CONNECT TYPE FOR EXP	AC 220～240V AREA
411	220-5484	VOL CONT B-5K OHM	
412	600-6275-0500	ASSY FIBER CABLE 5 0500CM	
413	514-5036-8000	FUSE 6.4×30 8000MA 125V	
414	HLD-0001	UPPER JOINT	
415	HLD-0002	LOWER JOINT	
416	HLD-0003	JOINT PLATE	
417	HLD-0004	POP HOLDER	
418	429-0162-91	POP PNL HLD STD	
／	BVG-0026	SHIPPING BRKT	
／	421-6690-06	STICKER 110V	AC 110V AREA
／	421-6690-03	STICKER 220V (80556)	AC 220V AREA
／	421-6690-05	STICKER 240V	AC 240V AREA

② ASSY CABINET (HLD-10001)

(D-1/3)



② ASSY CABINET (HLD-10001)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1100	ASSY SUBCABI STD	
2	HLD-1080	ASSY FUEL TANK	
3	HLD-1090	SW UNIT	
4	HLD-1095	AC UNIT	
5	HLD-2000	ASSY HANDLE	
6	HLD-2800	ASSY FOOT BRAKE MECHA	
7	HLD-4700	ASSY MAIN BD STD	
8	HLD-4500	ASSY ELEC	
9	HLD-4600	ASSY PWR SPLY	
10	MJT-3650	ASSY CENTERING MECHA.	
11	HLD-1103	MASK HOLDER LOWER	
12	HLD-1104	MASK COVER	
13	HLD-1105	SASH LOWER	
14	HLD-1106	SASH UPPER	
15	HLD-1107	LAMP HOLDER	
16	HLD-1108	LAMP FRAME	
17	HLD-1109	SP BRKT	
18	GBN-1076	MASK SUPPORT	
19	TTR-1067X	MONITOR MASK	
20	117-5235	PLATE 6-30	
21	MJT-3603	MOUNT BLOCK	
22	MJT-3612	HANDLE HOLDER	
23	HLD-1116	TANK BASE	
24	HLD-1130	ASSY FL	
25	423-0318-91	BILLBOARD PLATE HLD STD	
26	440-WS0012XEG	STICKER W HIGH TEMP ENG	
27	440-WS0002XEG	STICKER W POWER OFF ENG	
28	421-7501-49	STICKER 24V 20W	
29	MJT-3005	CALLAR	
30	253-5366	CASH BOX	
32	HLD-1126	GUARD PLATE	
33	HLD-1127	CUSHION	
101	200-5242-24-04	ASSY CLR DSPL 29 TYPE 100V	
101	200-5243-24	ASSY CLR DSPL 29 TYPE 24K 100V	
102	280-5112	BUSH FOR TV	
103	280-5113	COLLAR FOR TV	
104	280-5114	SPACER 6.4-25×2	
105	130-5152	SPKR BOX MINI DOME 12W	
106	390-5753	ASSY LAMP 24V 20W	
107	280-5185-15	SPACER TUBE L=15	
108	601-5526-155	BUSH 1.6T	
201	000-P00325-W	M SCR PH W/FS M3×25	
202	000-T00408-0B	M SCR TH BLK M4×8	
203	000-T00412-0C	M SCR TH CRM M4×12	
204	000-T00416-0C	M SCR TH CRM M4×16	
205	000-T00420-0C	M SCR TH CRM M4×20	
206	000-P00416-W	M SCR PH W/FS M4×16	
207	000-P00425-W	M SCR PH W/FS M4×25	
208	000-T00520-0B	M SCR TH BLK M5×20	
209	000-T00530-0B	M SCR TH BLK M5×30	

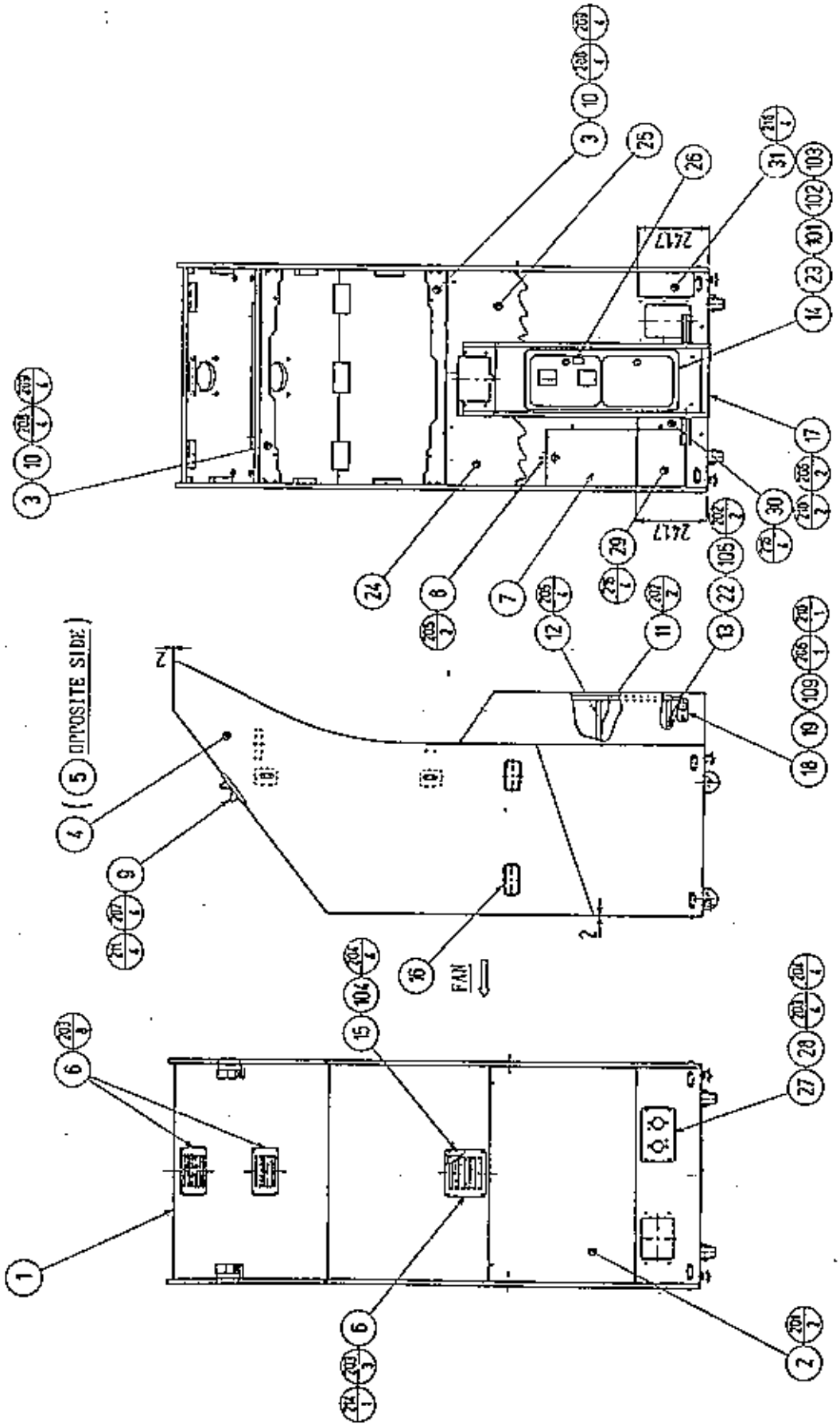
② ASSY CABINET (HLD-10001)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
210	011-T03512	TAP SCR TH 3.5×12	
211	020-000620-0Z	HEX SKT H CAP SCR BLK OZ M6×20	
212	020-001020-0Z	HEX SKT CAP SCR BLK OZ M10×20	
213	031-000630-0C	CRG BLT CRM M6×30	
214	050-F00400	FLG NUT M4	
215	050-F00600	FLG NUT M6	
216	050-H00800	HEX NUT M8	
217	060-F00800	FLT WSHR M8	
218	060-F01000-0B	FLT WSHR BLK M10	
219	060-S00800	SPR WSHR M8	
220	060-S01000-0B	SPR WSHR BLK M10	
221	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
222	068-552016-0B	FLT WSHR BLK 5.5-20×1.6	
223	060-F00600-0B	FLT WSHR BLK M6	
224	060-S00600-0B	SPR WSHR BLK M6	
225	000-P00408-W	M SCR PH W/FS M4×8	
226	060-F01800	FLT WSHR M18	
301	600-6985-054	WIRE HARN EARTH LEADER LAMP	

③ ASSY SUBCABI STD (HLD-1100)

(D-1/3)



③ ASSY SUBCABI STD (HLD-1100)

(D-2/3)

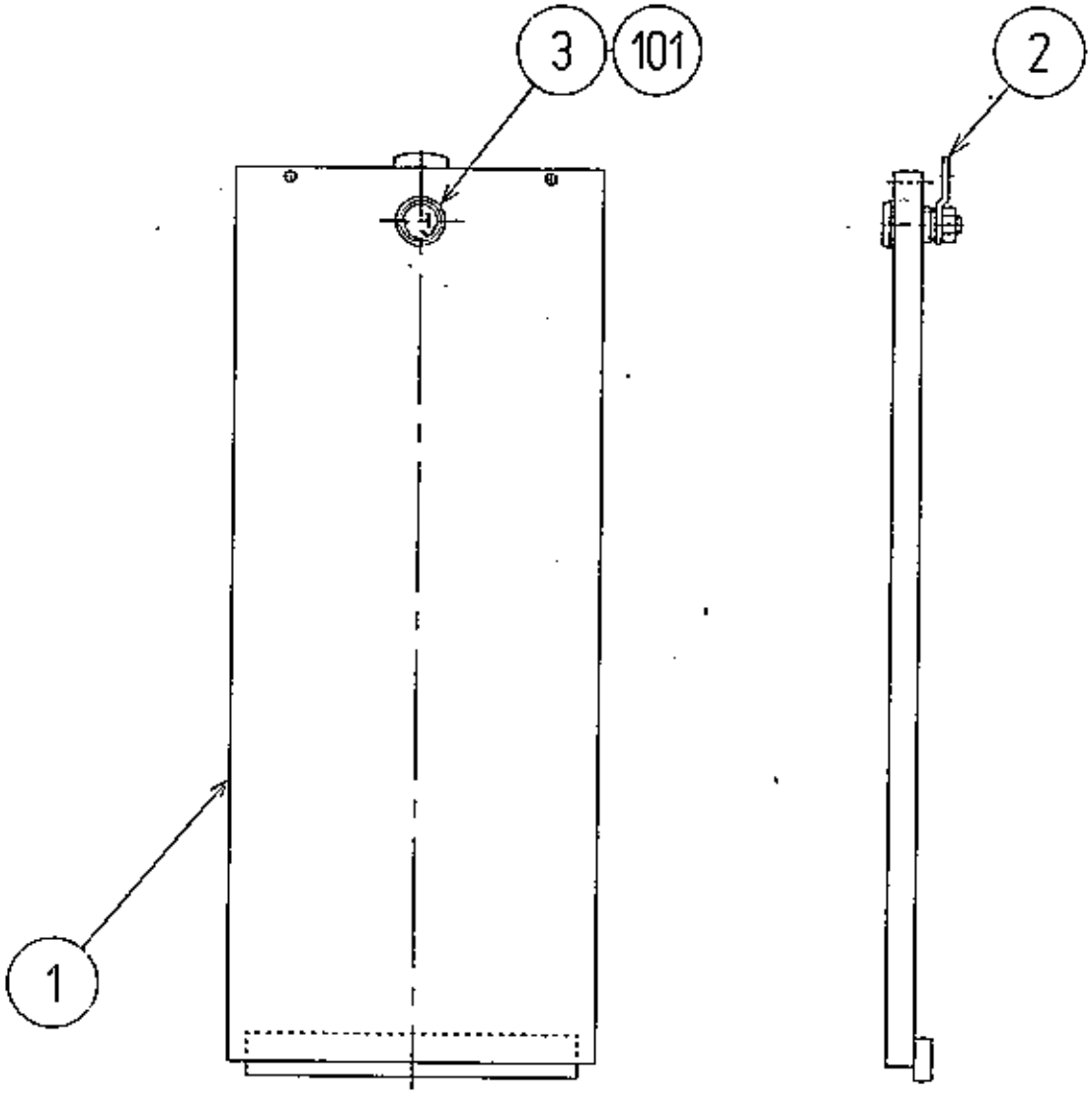
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1101	WOODEN CABINET	
2	HLD-1102	BACK DOOR	
3	GBN-1074X	MONITOR SUPPORT	
4	HLD-1110X	STICKER CABI L	
5	HLD-1111X	STICKER CABI R	
6	UP-1018	AIR VENT	
7	HLD-1120	ASSY FRONT DOOR	
8	117-5098	TNG RETAINER PLATE	
9	105-5258-01	SHIPPING HOOK BRKT RED	
10	117-5235	PLATE 6-30	
11	105-5169	LOCK BRACKET W	
12	105-5171	CHUTE PLATE SINGLE	
13	HLD-1112	METER BRKT	
14	DP-1167	TNG LKG	
15	HN-1042X	FAN BRKT	
16	253-5396-91	CABINET HANDLE	
17	HLD-1113	JOINT HOLDER	
18	HLD-1114	FOOT REST	
19	HLD-1115	STEP RUBBER	
20	HLD-1140	ASSY AC HARNESS	
21	HLD-1150	ASSY DC HARNESS	
22	421-6591-01	STICKER COIN METER	
23	421-7501-02	STICKER 6.3V 0.15A	
24	HLD-1117	STICKER CABI FRONT L	
25	HLD-1118	STICKER CABI FRONT R	
27	HLD-1119	FIBER LID BASE	
28	HLD-1122	FIBER LID	
29	HLD-1123	FOOT COVER A	
30	HLD-1124	FOOT COVER B	
31	HLD-1125	FOOT COVER C	
101	220-5482-91- ～	ASSY C.C 2DR ～	
	220-5237-92- ～	ASSY C.C 2DR ～	
102	220-5574	CAM LOCK W/KEYS	
103	220-5575	CAM LOCK MASTER W/O KEY	
104	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
105	220-5412	MAG CNTR W/CONN	
106	280-5009	CORD CLAMP 21	
107	280-0419	HARNESS LUG	
108	601-0460	PLASTIC TIE BELT 100MM	
109	253-5416	END CAP	
110	310-5029-F20	SUMI TUBE F F 20MM	
111	310-5047-6D0010	VINYL TUBE 6D-0010CM	
201	000-T00425-0B	M SCR TH BLK M4×25	
202	000-P00420-W	M SCR PH W/FS M4×20	
203	000-T00416-0B	M SCR TH BLK M4×16	
204	000-P00312-W	M SCR PH W/FS M3×12	
205	011-T00312	TAP SCR TH 3×12	
206	030-000620-S	HEX BLT W/S M6×20	
207	030-000830-S	HEX BLT W/S M8×30	
208	031-000630-0C	CRG BLT CRM M6×30	

③ ASSY SUBCABI STD (HLD-1100)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
209	050-F00600	FLG NUT M6	
210	060-F00600	FLT WSHR M6	
211	060-F00800	FLT WSHR M8	
212	011-F00310	TAP SCR FH 3×10	
213	011-T03512	TAP SCR TH 3.5×12	
214	000-T00425-0B	M SCR TH BLK M4×25	
215	050-F00400	FLG NUT M4	
216	079-000008	SCR NAIL THH STNLS 1.5×16	
301	600-6985-026	WIRE HARN SPEAKER	
302	600-6455-02	WIRE HARN C.C DOOR SINGLE	
304	600-6985-055	WIRE HARN EARTH CASTER	
305	600-6972-0270	WIER HARN EARTH ID5 0270MM	
306	600-6972-1230	WIRE HARN EARTH ID5 1230MM	
307	600-6985-004	WIRE HARN EXT SMALL LAMP	
308	600-6985-056	WIRE HARN EARTH HOLDER LOWER	
309	600-6985-057	WIRE HARN EARTH HOLDER UPPER	
310	600-6985-058	WIRE HARN EARTH FL BASE	

④ ASSY FRONT DOOR (HLD-1120)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1121	FRONT DOOR	
2	DP-1148X	LKG TNG	
3	117-0062	PLATE LOCK RETAINER	
101	220-5575	CAM LOCK MASTER W/O KEY	

⑤ ASSY AC HARNESS (HLD-1140)

ASSY WIRE (HLD-1140) is comprised of the following wire harnesses.
An ASSY DRG. is unavailable.

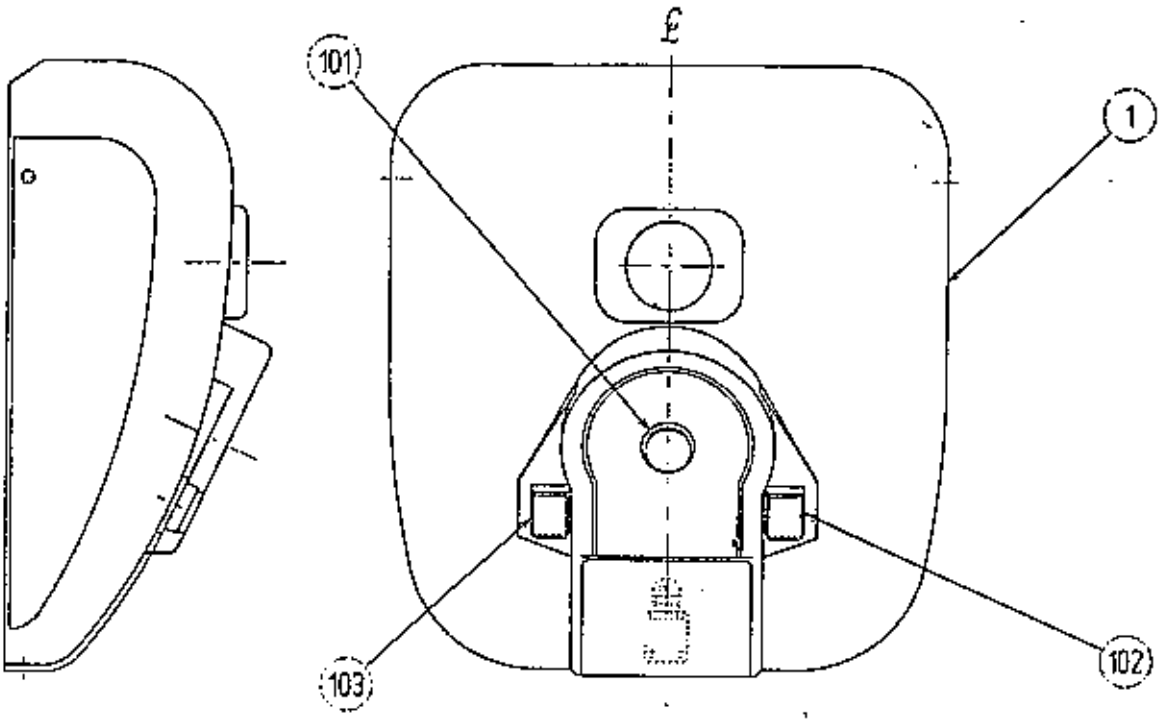
ITEM NO.	PART NO.	DESCRIPTION	NOTE
101	601-0460	PLASTIC TIE BELT 100MM	
301	600-6985-032	WIRE HARN EXT AC100V	
302	600-6985-034	WIRE HARN EXT LEADER LAMP	
303	600-6985-035	WIRE HARN EXT RGB	
304	600-6985-051	WIRE HARN EARTH AC HARNESS	

⑥ ASSY DC HARNESS (HLD-1150)

ASSY WIRE (HLD-1150) is comprised of the following wire harnesses.
An ASSY DRG. is unavailable.

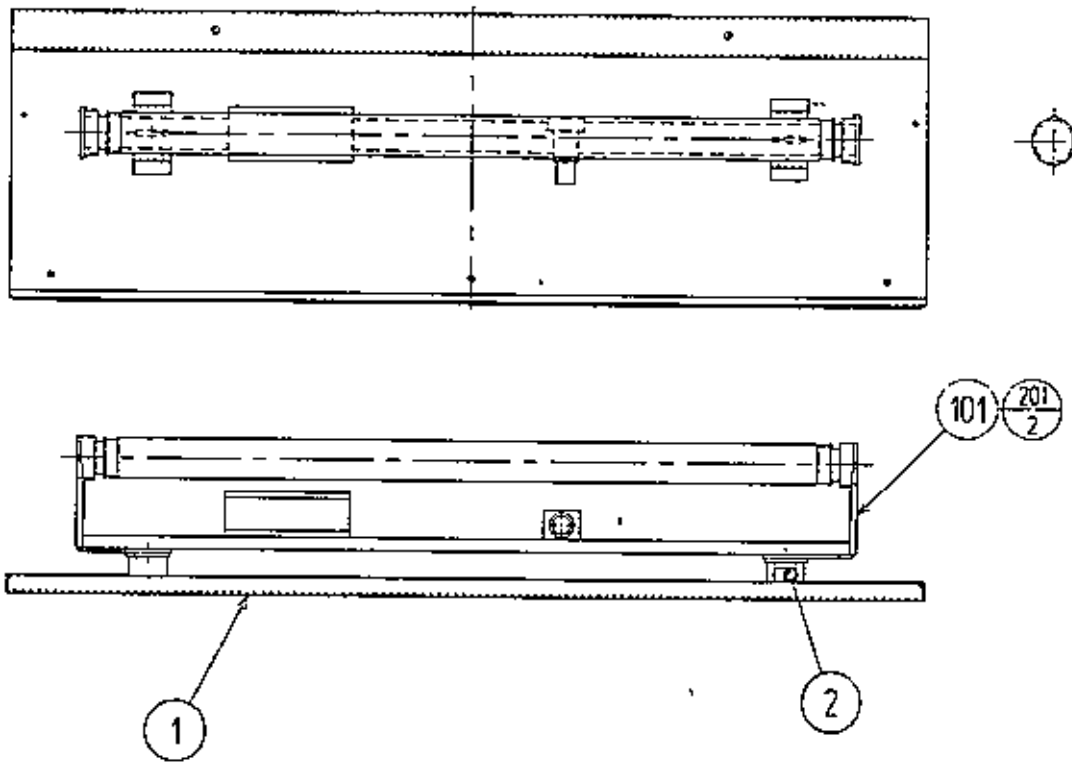
ITEM NO.	PART NO.	DESCRIPTION	NOTE
101	601-0460	PLASTIC TIE BELT 100MM	
301	600-6985-027	WIRE HARN EXT SW REGU 10P	
302	600-6985-028	WIRE HARN EXT SW REGU 12P	
303	600-6985-029	WIRE HARN EXT SOUND	
304	600-6985-030	WIRE HARN EXT BASS SHAKER	
305	600-6985-031	WIRE HARN EXT SOUND VR	
306	600-6985-036	WIRE HARN EXT COIN	
307	600-6985-037	WIRE HARN EXT CONT PNL	
308	600-6985-038	WIRE HARN EXT CONT VR	
309	600-6985-039	WIRE HARN EXT SSR	
310	600-6985-052	WIRE HARN EARTH DC HARNESS	

⑦ ASSY FUEL TANK (HLD-1080)



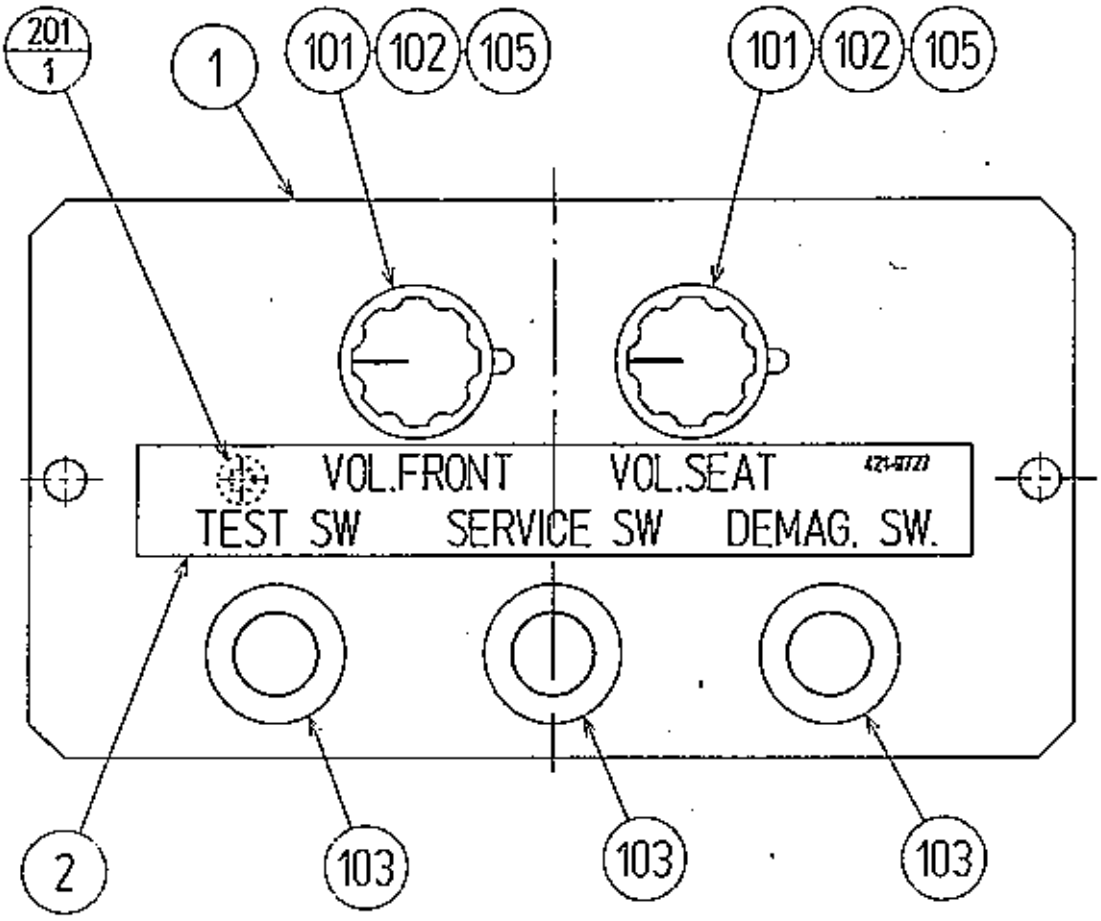
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1082	FUEL TANK	
101	509-0161	SW PB TYPE 1T YEL W/LAMP	
102	509-5779-RE	SW PB W/LAMP 6V RED	
103	509-5779-YE	SW PB W/LMAP 6V YELLOW	
104	280-5009-01	CORD CLAMP 21	
301	600-6985-045	WIRE HARN FUEL TANK	

⑧ ASSY FL (HLD-1130)



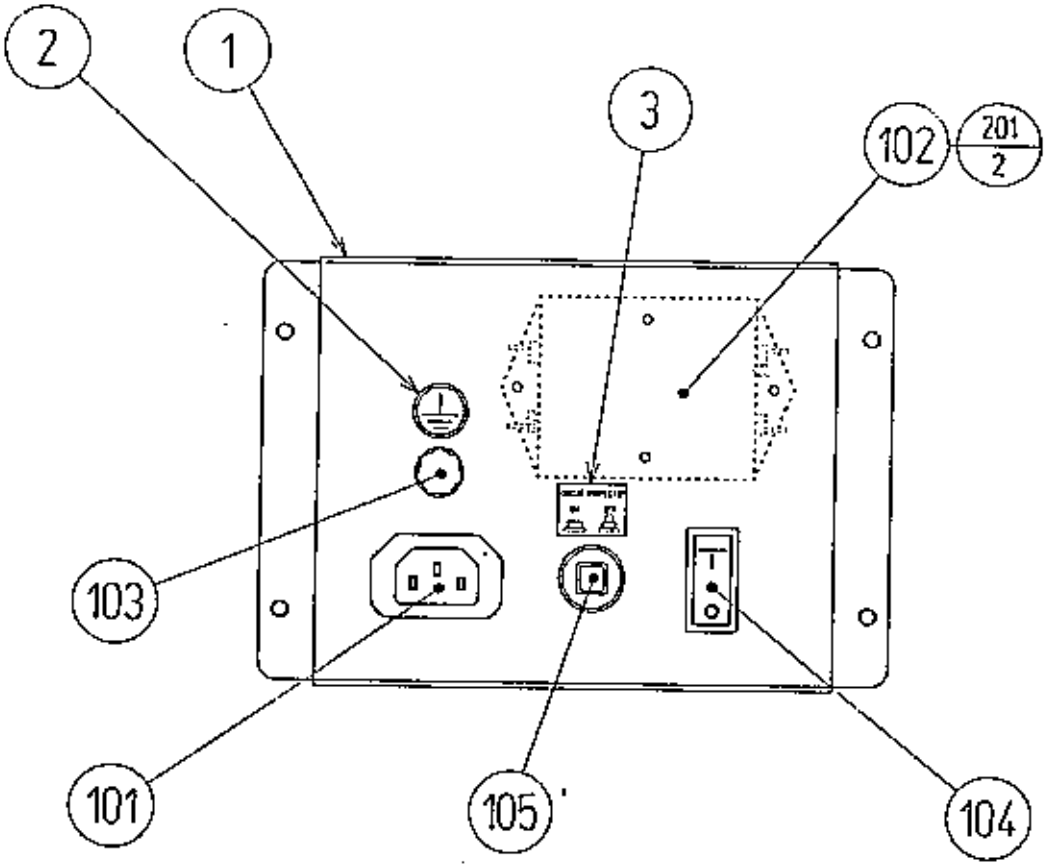
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1131	FL BASE	
2	421-7501-17	STICKER FL 20W	
101	390-5538-20SD	ASSY FL20W SD W/CONN HIGH L	
	390-5636-20SD	ASSY FL20W SD W/CONN HIGH S	
	390-5637-20SD	ASSY FL20W SD W/CONN HIGH T	
102	280-5275-SR10	CORD CLAMP SR10	
201	000-P00420-W	M SCR PH W/FS M4×20	
301	600-6985-033	WIRE HARN FL	

⑨ SW UNIT (HLD-1090)



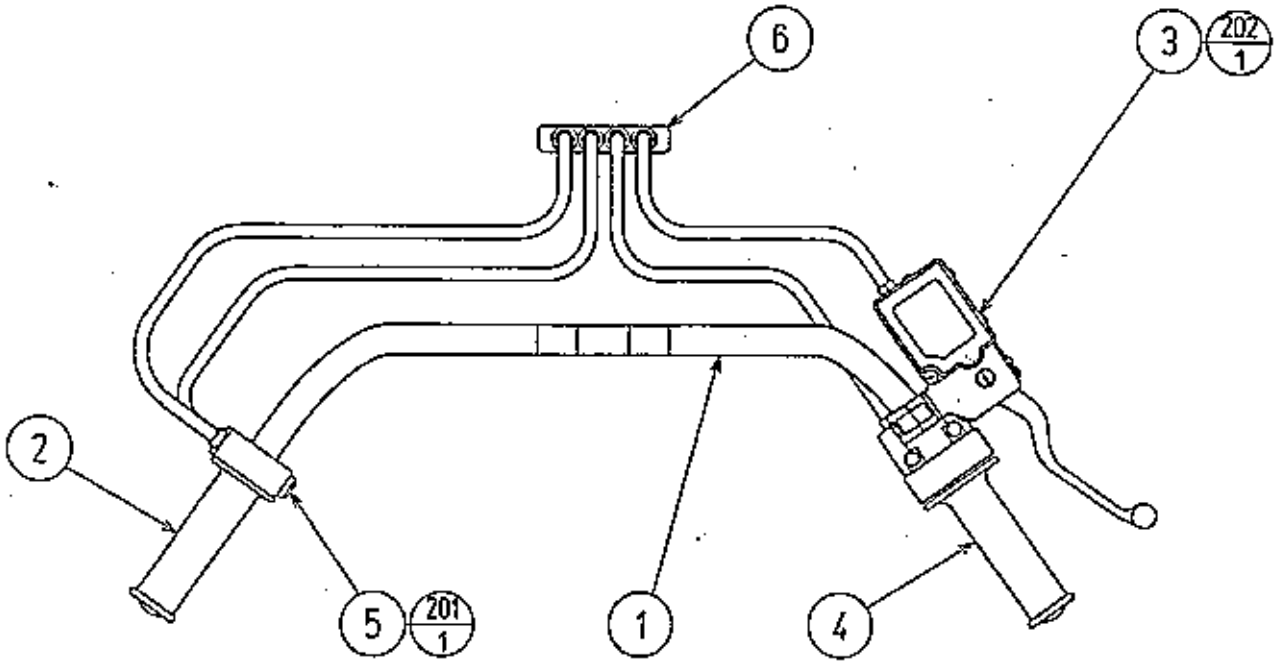
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-1091	SW PLATE	
2	421-9727	STICKER SW PANEL	
101	220-5179	VOL CONT B-5K OHM	
102	601-0042	KNOB 22MM	
103	509-5028	SW PB 1M	
104	601-0460	PLASTIC TIE BELT 100MM	
105	310-5029-015	SUMI TUBE F D 15MM	
201	050-F00400	FLG NUT M4	
301	600-6985-040	WIRE HARN SW UNIT TEST & SERVICE	
302	600-6985-041	WIRE HARN SW UNIT SOUND VR	
303	600-6985-042	WIRE HARN SW UNIT VIBRATOR VR	
304	600-6985-043	WIRE HARN SW UNIT DEMAG	
305	600-6985-053	WIRE HARN EARTH SW UNIT	

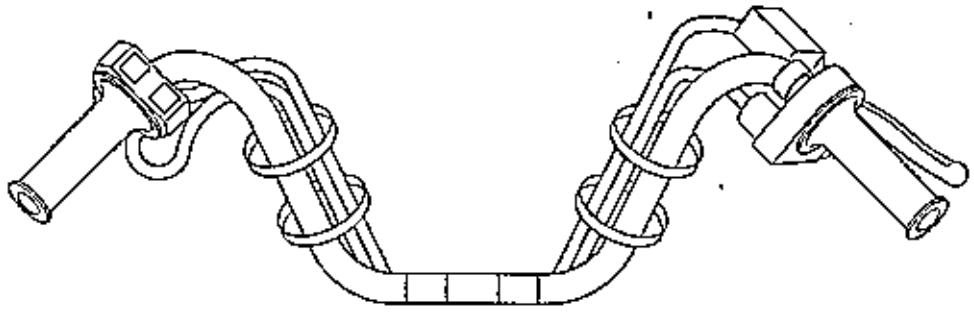
⑩ AC UNIT (HLD-1095)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	JPT-1541	AC BRACKET	
2	421-8202	STICKER EARTH MARK	
3	421-7468-02	STICKER C.P W/PIC	
101	214-0202	AC INLET PANEL TYPE	
102	270-5115	NOISE FILTER 15A GT-215J	
103	280-0417	TERMINAL BINDING POST BLACK	
104	509-5453-91-V-B	SW ROCKER J8 V-B	
105	512-5046-8000	C.P 8000MA CE UL	TAIWAN
	512-5046-5000	C.P 5000MA CE UL	AC 220~240V AREA
106	280-5009-01	CORD CLAMP 21	
107	601-0460	PLASTIC TIE BELT 100MM	
108	310-5029-F20	SUMI TUBE F F 200MM	
201	010-P00306-F	S-TITE SCR PH W/F M3×6	
301	600-6985-001	WIRE HARN INLET & C.P	
302	600-6985-002	WIRE HARN MAIN SW	
303	600-6985-003	WIRE HARN NOISE FILTER	
304	600-6925-043	WIRE HARN EARTH AC INLET	
305	600-6985-050	WIRE HARN EARTH AC UNIT	

⑪ ASSY HANDLE (HLD-2000)



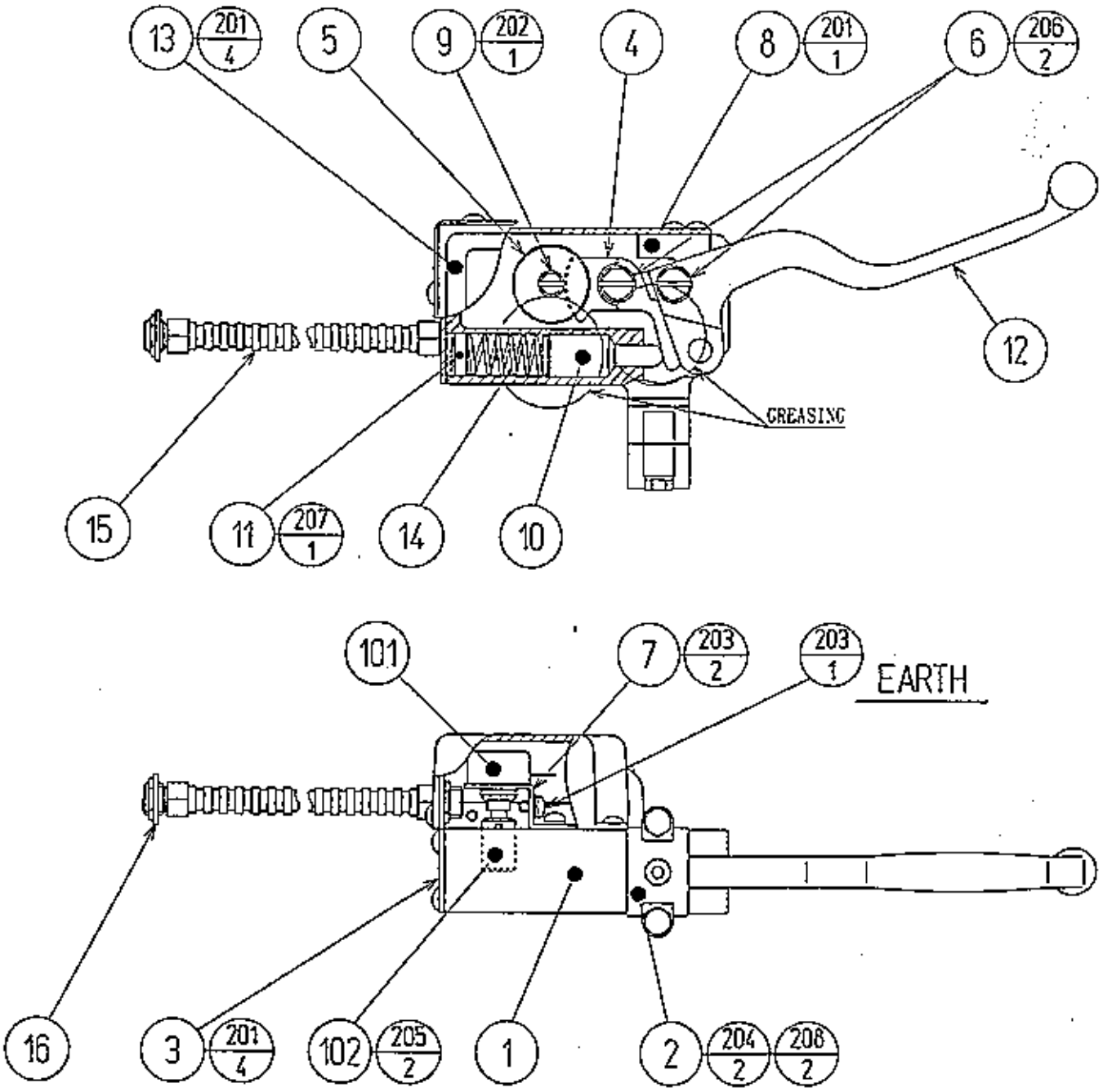


SCREW FASTENING TORQUE TO BE M4:18kgf-cm
ONLY ③ ④: 100kgf-cm

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-2001	HANDLE BAR	
2	HLD-2002	GRIP LEFT	
3	HLD-2500	ASSY BRAKE MECHA	
4	HLD-2600	ASSY THROTTLE	
5	HLD-2700	ASSY SHIFT SWITCH	
6	HLD-2003	PLATE PROTECT TUBE	
101	601-6788	PLASTIC TIE BELT BLACK 4.8×188	
201	000-T00420-0B	M SCR TH BLK M4×20	
202	000-T00412-0B	M SCR TH BLK M4×12	

⑫ ASSY BRAKE MECHA (HLD-2500)

(D-1/2)



SCREW, NUT FASTENING TORQUE TO BE
M4:18kgf-cm
M6:73kgf-cm

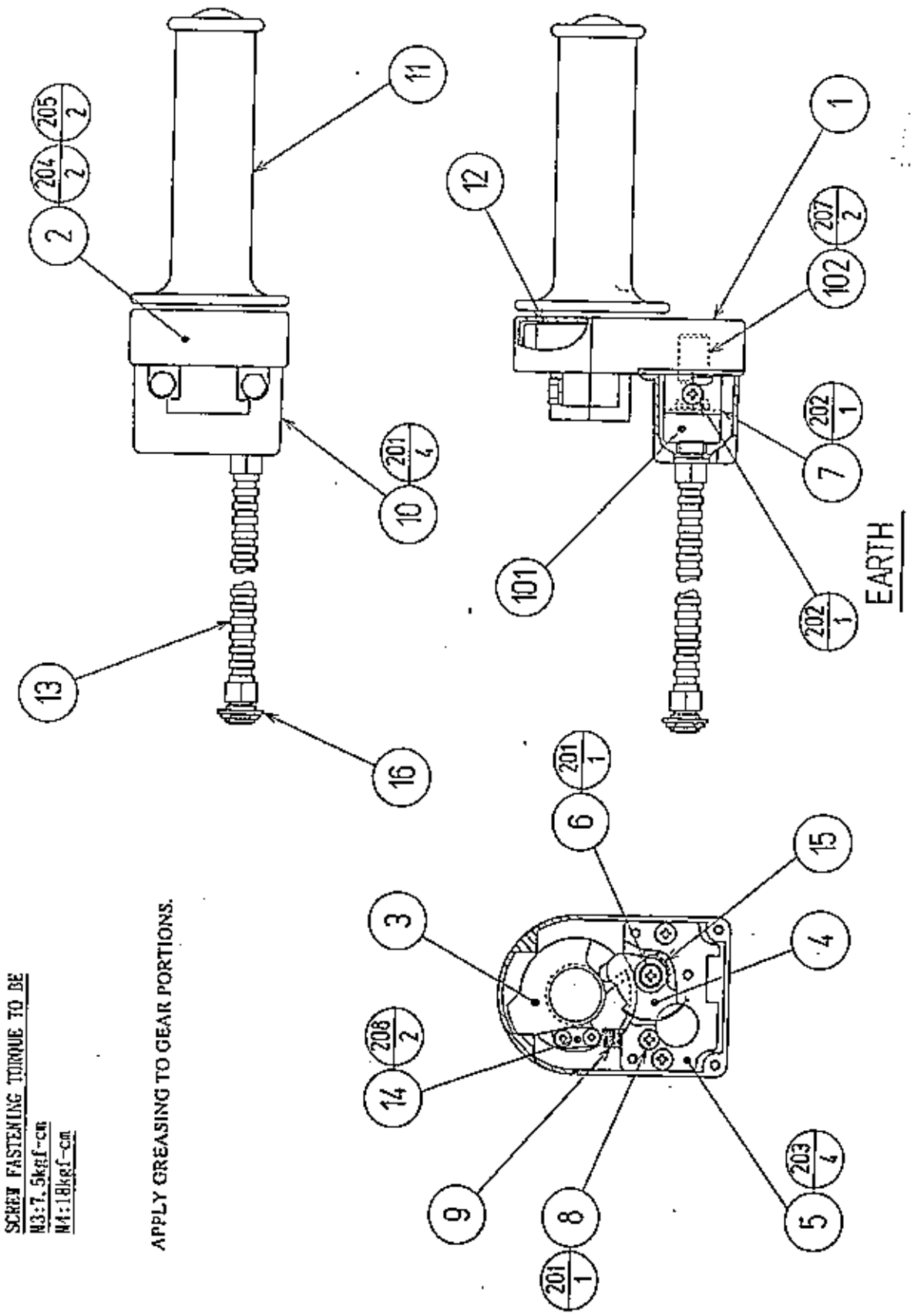
APPLY GREASING TO ALL OF THE GEAR & SLIDING PORTIONS.

⑫ ASSY BRAKE MECHA (HLD-2500) (D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
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	HLD-2510	MASTER PISTON	
11	HLD-2511	END CAP	
12	HLD-2512	BRAKE LEVER	
13	HLD-2513	VR COVER	
14	HLD-2514	RETURN SPRING	
15	601-10023	PROTECT TUBE	
16	HLD-2004	TUBE WSHR	
101	220-5484	VOL CONT B-5K OHM	
102	601-7944	GEAR 15	
103	310-5029-F20	SUMI TUBE F F 20MM	
104	280-5275-SR10	CORD CLAMP SR10	
201	000-T00408-0B	M SCR TH BLK M4×8	
202	050-C00400-3B	CAP NUT TYPE3 BLK M4	
203	000-P00408-W	M SCR PH W/FS M4×8	
204	030-000620-SB	HEX BLT W/S BLK M6×20	
205	028-A00306-P	SET SCR HEX SKT CUP P M3×6	
206	FAS-500015	CAP NUT BLK M6	
207	065-S016H0-Z	STP RING BLK OZ M16	
208	060-F00600-0B	FLT WSHR BLK M6	
301	600-6984-033	WIRE HARN FRONT BRAKE	

⑬ ASSY THROTTLE (HLD-2600)

(D-1/2)

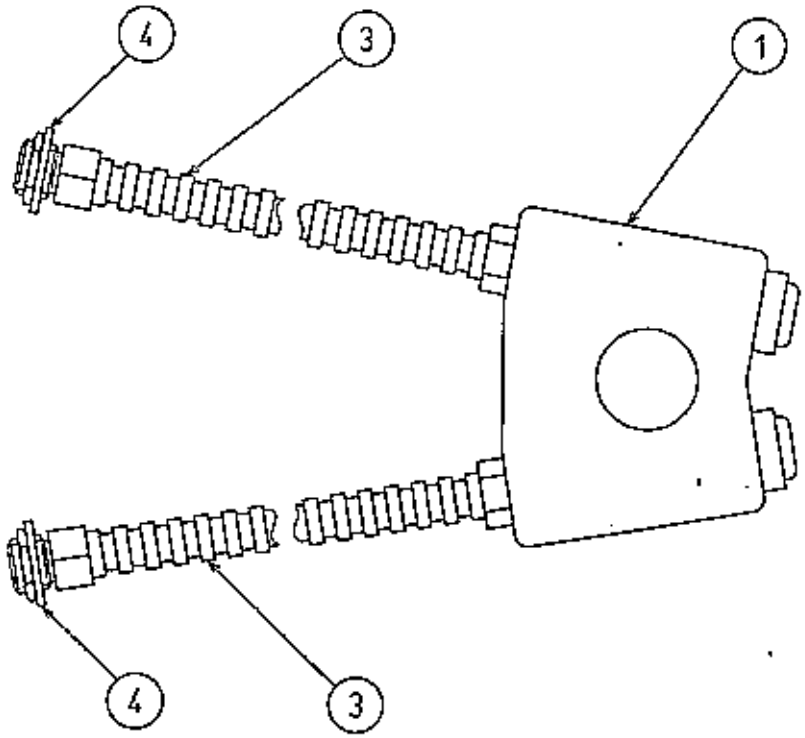


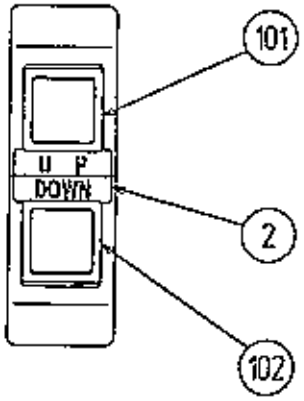
⑬ ASSY THROTTLE (HLD-2600)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
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	
13	601-10023	PROTECT TUBE	
14	HLD-2613	SPRING STOPPER	
15	HLD-2614	GEAR SPRING	
16	HLD-2004	TUBE WSHR	
101	220-5484	VOL CONT B-5K OHM	
102	601-7944	GEAR 15	
103	310-5029-F20	SUMI TUBE F F 20MM	
201	000-T00408-0B	M SCR TH BLK,M4×8	
202	000-P00408-W	M SCR PH W/PS M4×8	
203	000-F00408	M SCR FH M4×8	
204	030-000625-SB	HEX BLT W/S BLK M6×25	
205	060-F00600-0B	FLT WSHR BLK M6	
207	028-A00306-P	SET SCR HEX SKT CUP P M3×6	
208	012-P00306	TAP SCR #2 PH 3×6	
301	600-6984-032	WIRE HARN THROTTLE	

⑭ ASSY SHIFT SWITCH (HLD-2700)

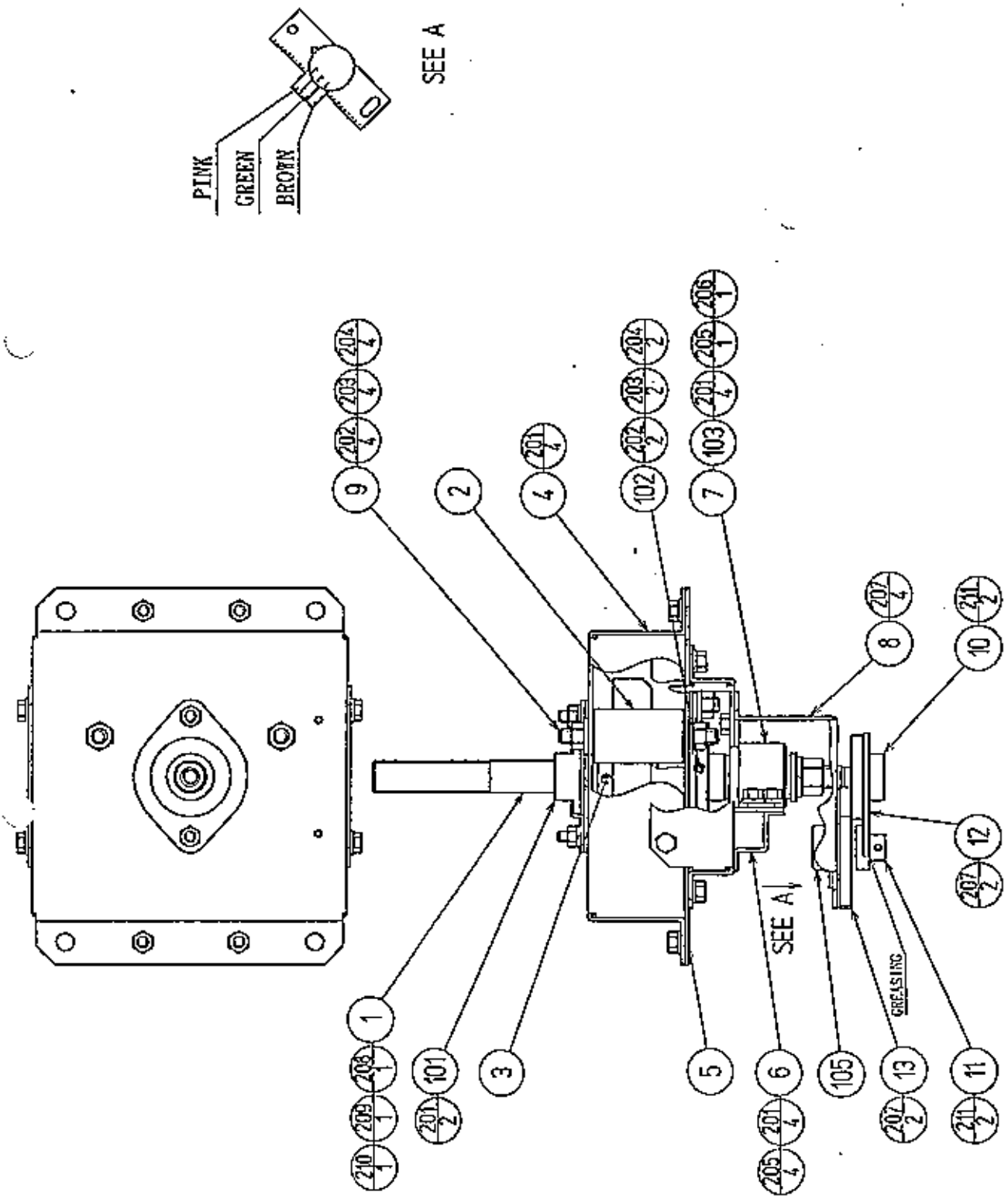




ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-2701	SWITCH CASE	
2	421-7752	STICKER UP DOWN	
3	601-10024-01	PROTECT TUBE EX S	
4	HLD-2004	TUBE WSHR	
101	509-5003	SW PB TYPE 1T GREEN 14.2	
102	509-5003-03	PB SW RED	
301	600-6985-046	WIRE HARN SHIFT SW STD	

⑮ ASSY CENTERING MECHA (MJT-3650)

(D-1/2)



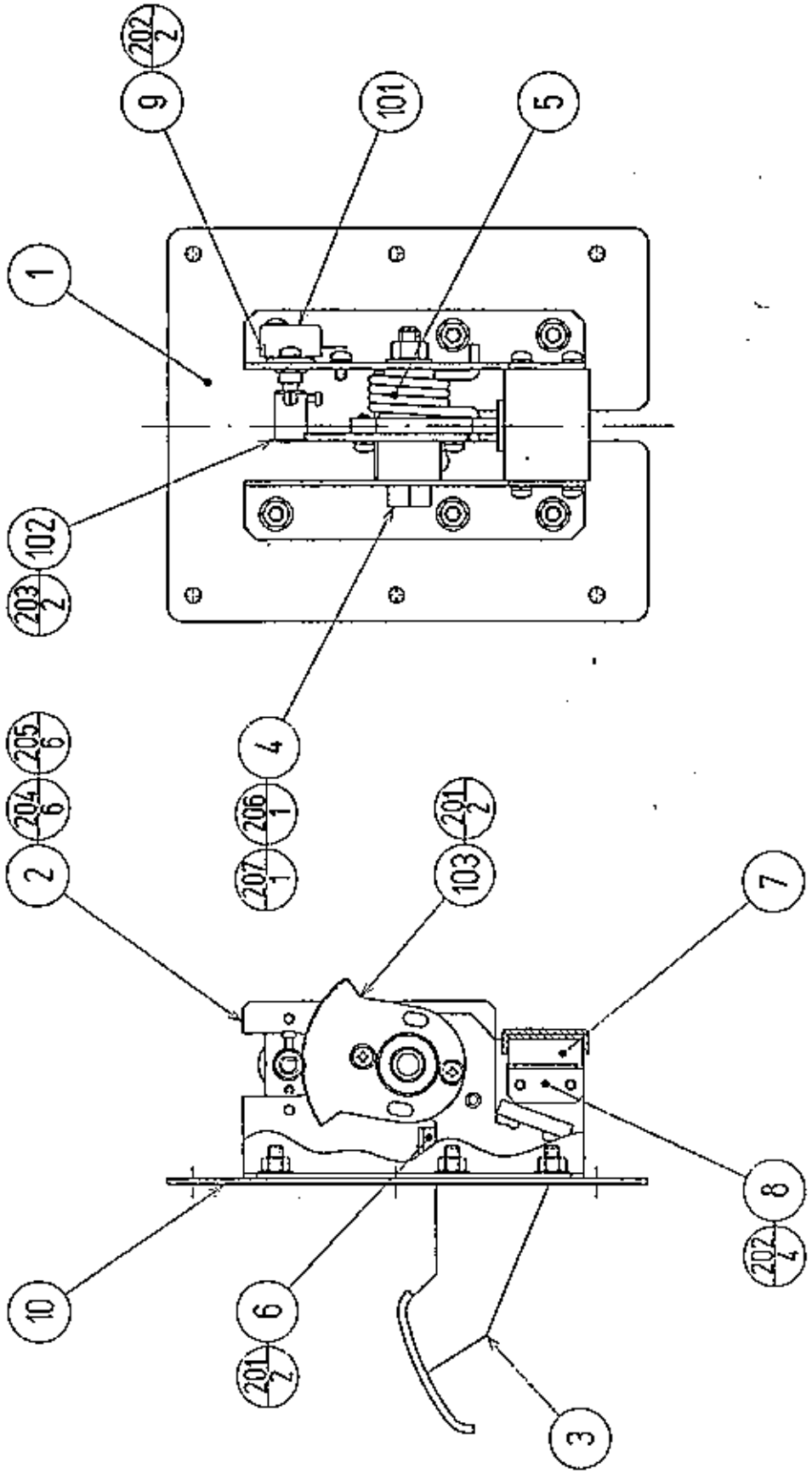
⑮ ASSY CENTERING MECHA (MJT-3650)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	MJT-3651	MAIN SHAFT	
2	MJT-3652	STOPPER	
3	MJT-3653	COLLAR B	
4	MJT-3654	MECHA CASE A	
5	MJT-3655	MECHA CASE B	
6	MJT-3656	LOSTA HOLDER	
7	MJT-3657	HOLDER	
8	MJT-3658	VR HOLDER	
9	MJT-3659	SHAFT	
10	TTR-2010	GEAR HOLDER 110	
11	601-6555	GEAR Z=30 M=0.75	
12	601-6450	GEAR 110	
13	RDY-2106	VR BRACKET	
101	100-5096	BEARING 17	
102	100-5043	BEARING 25 FYH SBP FL 205	
103	601-8847	LOSTA DR-S-18×30	
104	310-5029-F20	SUMI TUBE F F 20MM	
105	220-5373	VOL CONT B-5K	
	220-5484	VOL CONT B-5K OHM	
106	280-5275-SR10	CORD CLAMP SR10	
201	050-F00600	FLG NUT,M6	
202	060-F00800	FLT WSHR M8	
203	060-S00800	SPR WSHR M8	
204	050-H00800	HEX NUT M8	
205	030-000612-S	HEX BLT W/S M6×12	
206	060-F00600	FLT WSHR M6	
207	000-P00408-W	M SCR PH W/FS M4×8	
208	060-F01200	FLT WSHR M12	
209	060-S01200	SPR WSHR M12	
210	050-H01200	HEX NUT M12	
211	028-A00410-P	SET SCR HEX SKT CUP P M4×10	
301	600-6790-072	WIRE HARN STEERING VR	

⑯ ASSY FOOT BRAKE MECHA (HLD-2800)

(D-1/2)



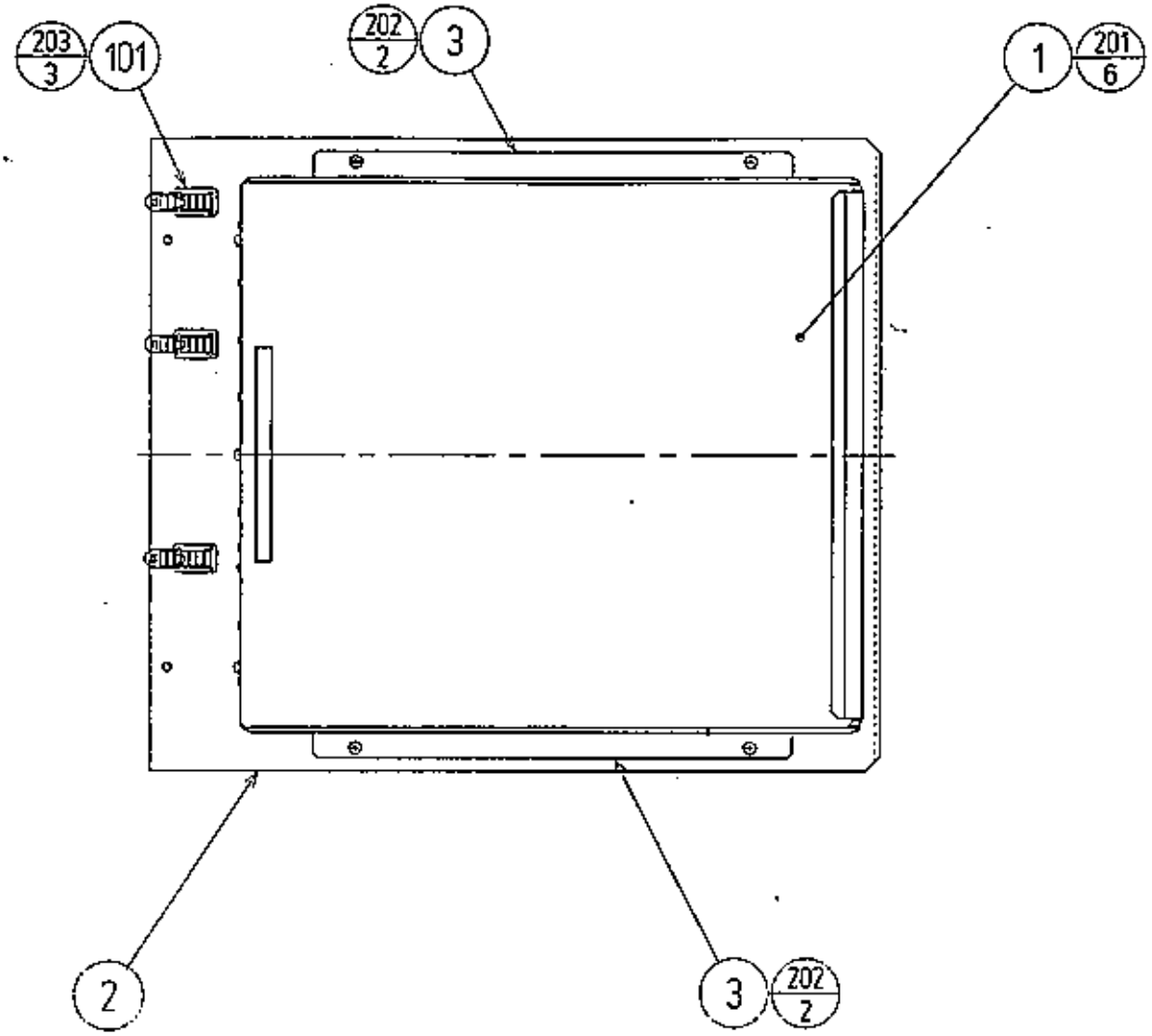
APPLY GREASING TO SLIDING FACE OF ④, ⑩②

⑯ ASSY FOOT BRAKE MECHA (HLD-2800)

(D-2/2)

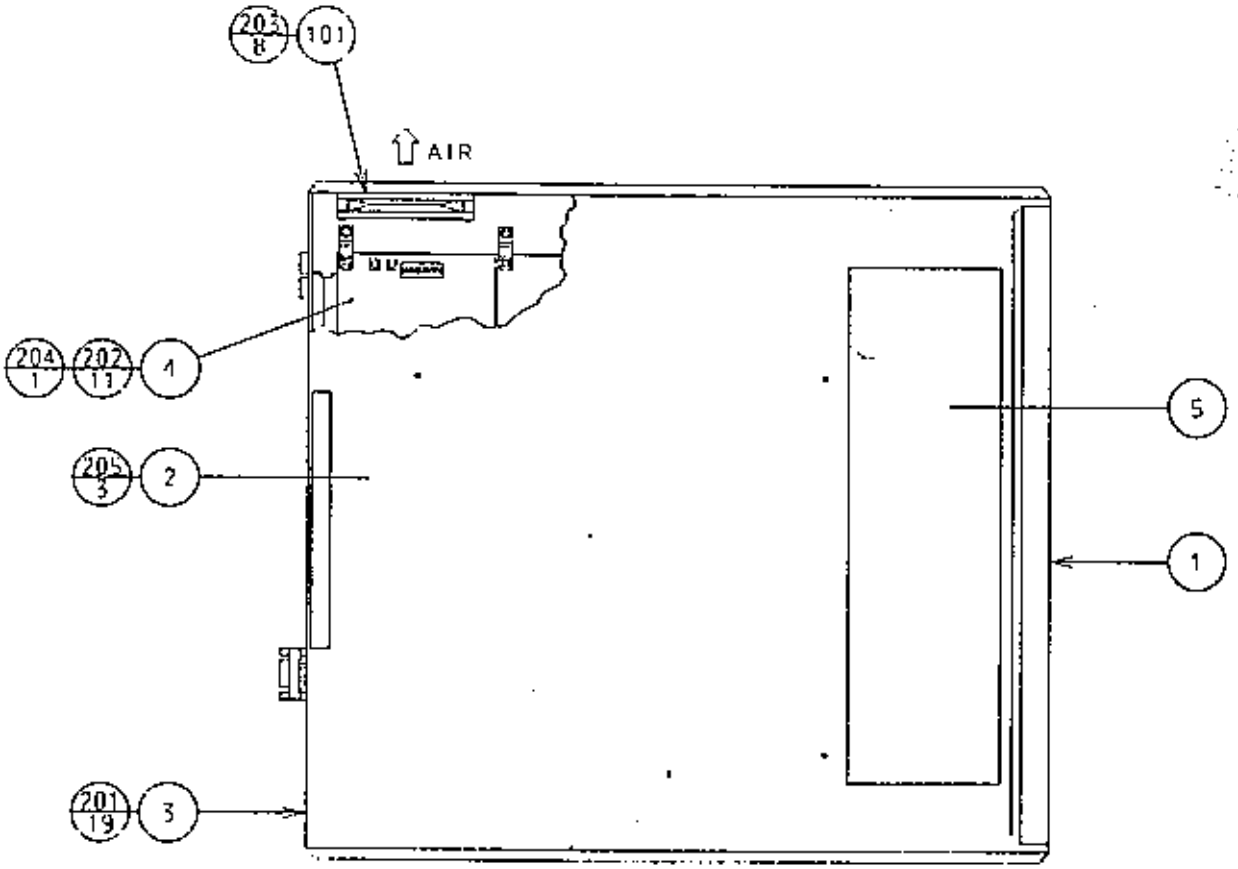
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-2801	PEDAL PLATE	
2	HLD-2802	PEDAL BRKT	
3	HLD-2803	BRAKE PEDAL	
4	HLD-2804	PEDAL SHAFT	
5	HLD-2805	TORSION SPRING	
6	HLD-2806	STOPPER RUBBER UPPER	
7	HLD-2807	STOPPER RUBBER LOWER	
8	HLD-2808	RUBBER HOLDER	
9	POW-2613	VR PLATE	
10	HLD-2809	PROTECT PLATE	
101	220-5373	VOL CONT B-5K	
	220-5484	VOL CONT B-5K OHM	
102	601-7944	GEAR 15	
103	601-6450	GEAR 110	
104	310-5029-F20	SUMI TUBE F F 20MM	
105	280-5275-SR10	CORD CLAMP SR10	
201	000-P00412-W	M SCR PH W/FS M4×12	
202	000-P00408-W	M SCR PH W/FS M4×8	
203	028-C00308-P	SET SCR CH CUP P M3×8	
204	050-U00600	U NUT M6	
205	060-F00600	FLT WSHR M6	
206	050-U00800	U NUT M8	
207	060-F00800	FLT WSHR M8	
301	600-6984-027	WIRE HARN REAR BRAKE	

⑰ ASSY MAIN BD STD (HLD-4700)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-4400	ASSY SHIELD CASE	
2	HLD-4701	WOODEN BASE MAIN BD	
3	105-5241	SHIELD CASE BRKT	
101	280-5009	CORD CLAMP 21	
102	601-0460	PLASTIC TIE BELT 100MM	
201	000-P00408-W	M SCR PH W/FS M4×8	
202	000-P00412-W	M SCR PH W/FS M4×12	
203	011-F00310	TAP SCR FH 3×10	
301	600-6985-020	WIRE HARN MODEL3 DC	
302	600-6985-021	WIRE HARN MODEL3 SOUND	
303	600-6985-022-91	WIRE HARN MODEL3 RGB	
304	600-6985-023	WIRE HARN MODEL3 DIGITAL I/O	
305	600-6985-024	WIRE HARN MODEL3 ANALOG I/O	

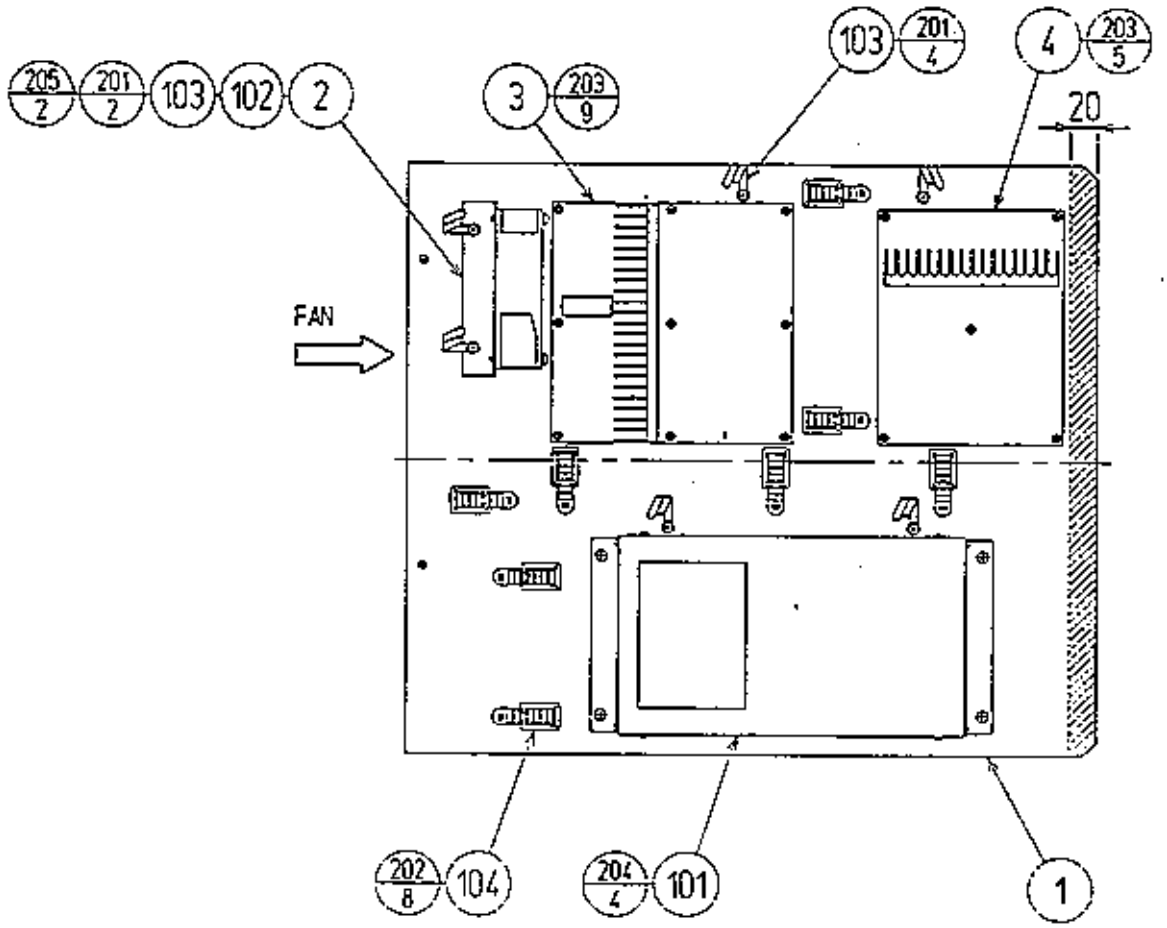
⑱ ASSY SHIELD CASE (HLD-4400)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5240Y	SHIELD CASE MODEL3	
2	105-5242X	SHIELD CASE LID MODEL3	
3	839-0932	FILTER BD MODEL3 SPG	
4	833-13325	GAME BD HARLEY DAVIDSON	
5	421-9174-01	STICKER CAUTION ANTISTATIC	
6	421-6510-13325	STICKER 833-13325	
7	601-8928	CARTON BOX MODEL3	
101	260-0064	FAN MOTOR DC12V	
102	280-5275-SR10	CORD CLAMP SR10	
103	601-0460	PLASTIC TIE BELT 100MM	
201	010-P00308-F	S-TITE SCR PH W/F M3×8	
202	010-P00310-F	S-TITE SCR PH W/F M3×10	
203	000-P00320-W	M SCR PH W/FS M3×20	
204	010-P00365-F	S-TITE SCR PH W/F M3×65	
205	000-P00408-W	M SCR PH W/FS M4×8	
301	600-6739-54	WIRE HARN FAN MOTOR	

⑲ ASSY ELEC (HLD-4500)

(D-1/2)

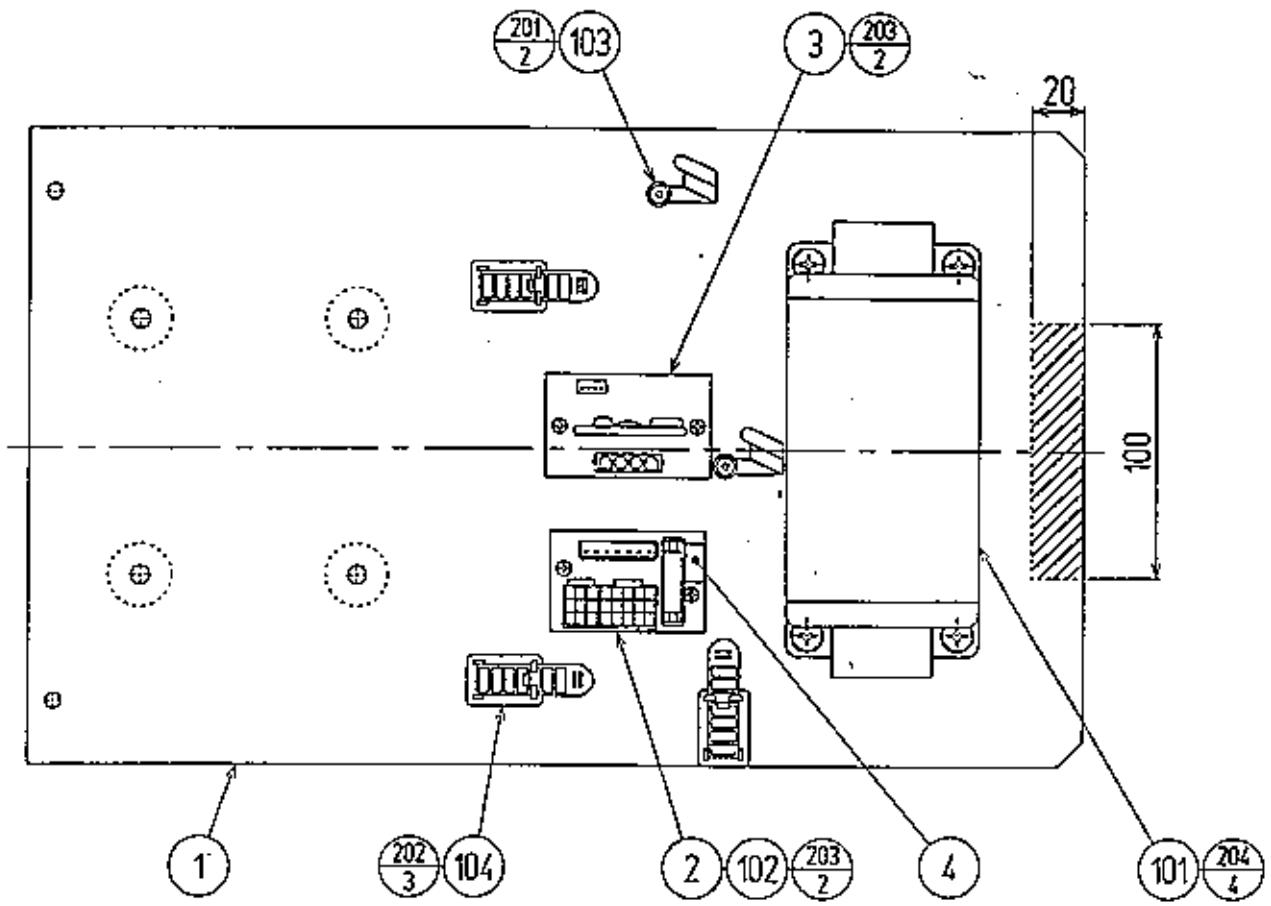


⑲ ASSY ELEC (HLD-4500)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-4501	WOODEN BASE ELEC	
2	BY-4102	FAN MOTOR BRACKET	
3	838-13142	BASS AMP 50W×2	
4	838-11650-36	EQ. PWR AMP HLD STD	
101	400-5330-02-91	SW REGU FOR MODEL3	
102	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
103	280-0419	HARNESS LUG	
104	280-5009-01	CORD CLAMP 21	
201	011-T03512	TAP SCR TH 3.5×12	
202	011-F00310	TAP SCR FH 3×10	
203	011-P00325	TAP SCR PH 3×25	
204	000-P00412-W	M SCR PH W/FS M4×12	
205	000-P00445-W	M SCR PH W/FS M4×45	
301	600-6985-011	WIRE HARN SW REGU AC	
302	600-6985-012	WIRE HARN SW REGU 10P	
303	600-6985-013	WIRE HARN SW REGU 12P	
304	600-6985-014	WIRE HARN SOUND AC	
305	600-6985-015	WIRE HARN SOUND PASS	
306	600-6985-016	WIRE HARN SOUND IN	
307	600-6985-017	WIRE HARN BASS SHAKER OUT	
308	600-6985-018	WIRE HARN SOUND VR	
309	600-6985-019	WIRE HARN SPEAKER OUT	

⑳ ASSY PWR SPLY (HLD-4600)

(D-1/2)



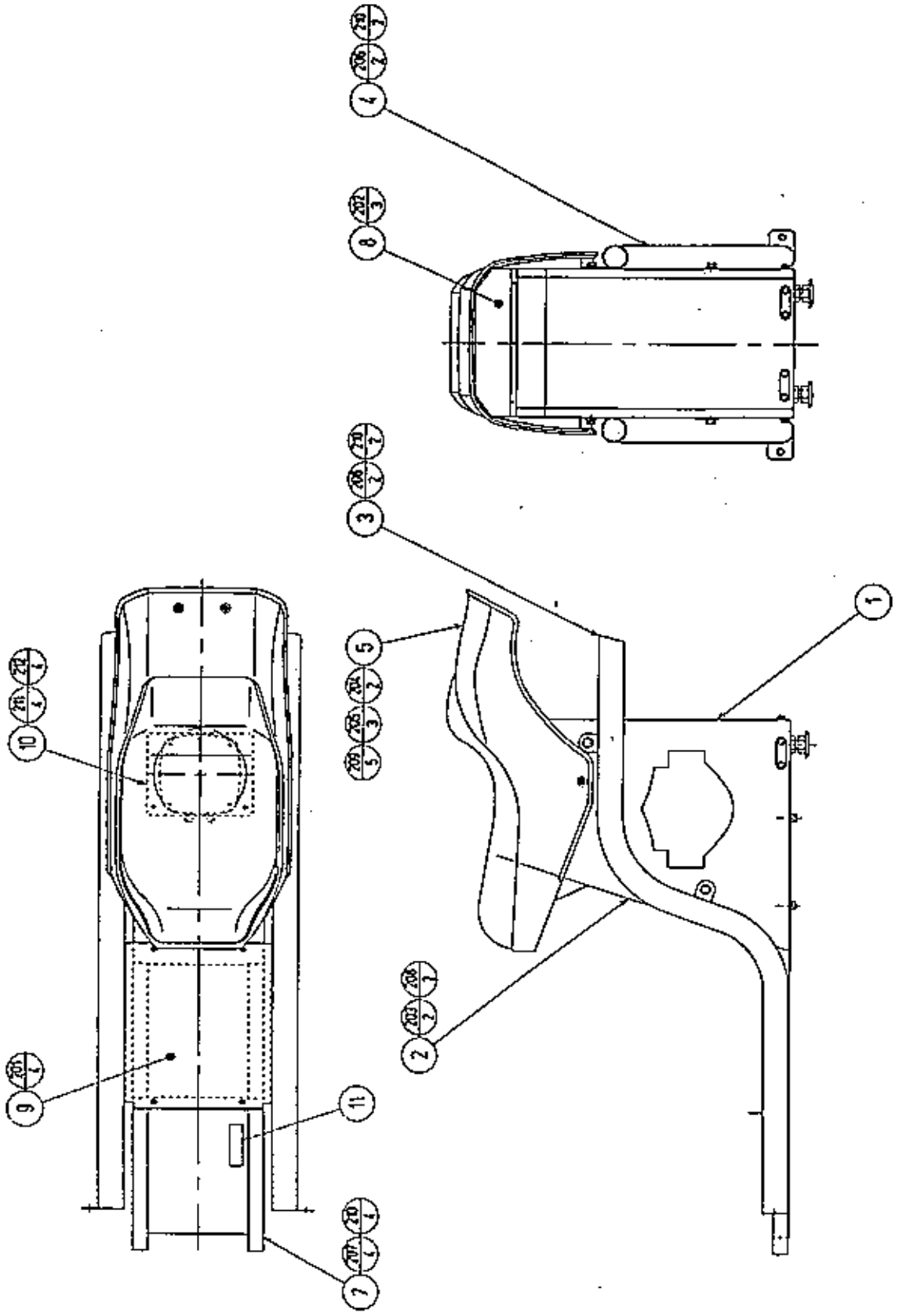
⑳ ASSY PWR SPLY (HLD-4600)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-4601	WOODEN BASE PWR SPLY	
2	838-11856-01	CONNECT BD W/FUSE & COVER	
3	839-1011-01	SSR 1EA BD BR	
4	421-6595-07	STICKER 8A	
101	560-5380	AUDIO XFMR 12.8V6A 23V9.6A×2	
102	514-5036-8000	FUSE 6.4×30 8000MA 125V	
103	280-0419	HARNESS LUG	
104	280-5009-01	CORD CLAMP 21	
201	011-T03512	TAP SCR TH 3.5×12	
202	011-P00310	TAP SCR PH 3×10	
203	011-P00325	TAP SCR PH 3×25	
204	000-P00616-W	M SCR PH W/FS M6×16	
301	600-6985-006	WIRE HARN CONN BD IN	
302	600-6985-007	WIRE HARN CONN BD OUT	
303	600-6985-008	WIRE HARN XFMR IN	
304	600-6985-009	WIRE HARN XFMR OUT	
305	600-6985-010	WIRE HARN SSR	
/	560-5308	AUTO XFMR 100-240V 800VA	
/	000-P00616-W	M SCR PH W/FS M6×16	
/	600-6985-005	WIRE HARN AC OUT EXPORT	

㉑ ASSY SEAT CABI (HLD-3050)

(D-1/2)

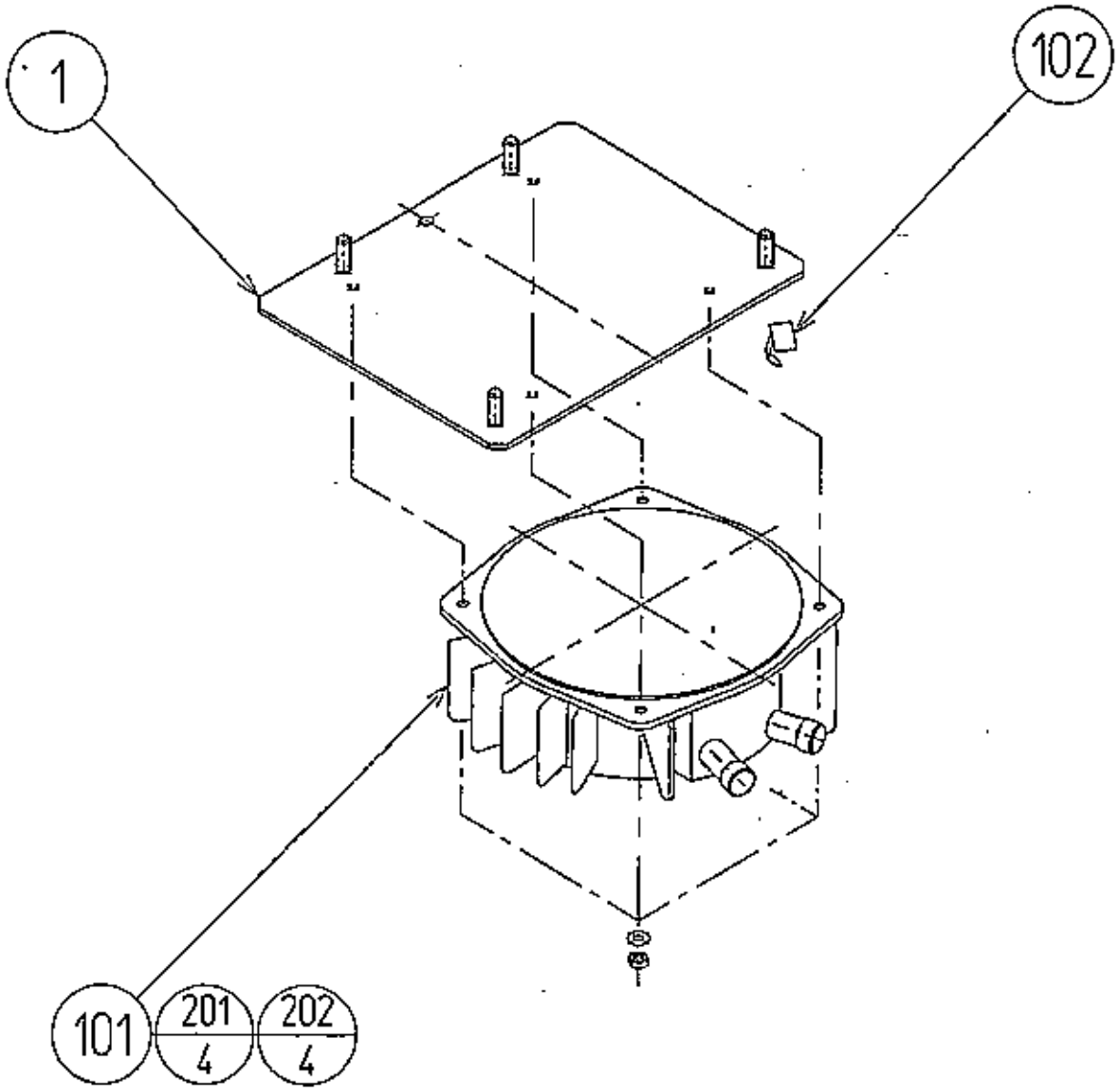


㉑ ASSY SEAT CABI (HLD-3050)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-3051	SEAT CABINET	
2	HLD-3052	MAINTENANCE LID	
3	HLD-3053	EX PIPE L	
4	HLD-3054	EX PIPE R	
5	HLD-3055	REAR FENDER	
7	HLD-3057	JOINT FRAME	
8	HLD-3058	FENDER STAY	
9	HLD-3059	JOINT LID	
10	HLD-3600	ASSY VIBRATOR	
102	280-5275-SR10	CORD CLAMP SR10	
201	000-T00408-0B	M SCR TH BLK M4×8	
202	000-T00416-0B	M SCR TH BLK M4×16	
203	000-T00425-0B	M SCR TH BLK M4×25	
204	000-T00412-0C	M SCR TH CRM M4×12	
205	000-T00425-0C	M SCR TH CRM M4×25	
206	030-000820-SB	HEX BLT W/S BLK M8×20	
207	030-000860-SB	HEX BLT W/S BLK M8×60	
208	068-441616-0B	FLT WSHR BLK 4.4-16×1.6	
209	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
210	060-F00800-0B	FLT WSHR BLK M8	
211	050-U00600	UNUT M6 .	
212	068-652016	FLT WSHR 6.5-20×1.6	
301	600-6985-025	WIRE HARN BASS SHAKER IN	

㉒ ASSY VIBRATOR (HLD-3600)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HLD-3601	MOUNT PLATE	
101	130-5172	BASS SHAKER	
102	280-5275-SR10	CORD CLAMP SR10	
201	050-U00400	U NUT M4	
202	060-F00400	FLT WSHR M4	
301	600-6985-044	WIRE HARN VIBRATOR	

21. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

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

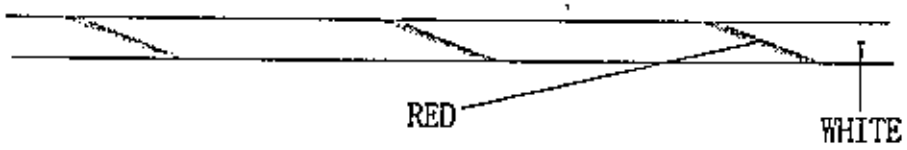
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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

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

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

<Example> 51 ····· WHITE / RED



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

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