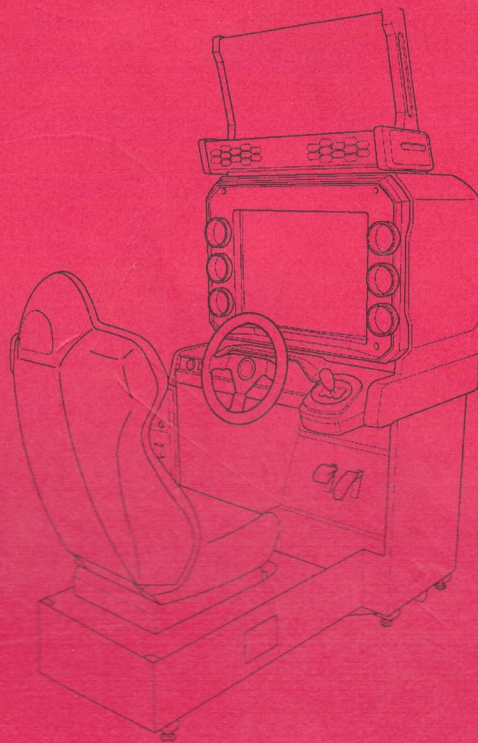


**namco®**



## WANGAN MIDNIGHT MAXIMUM TUNE 3

# OPERATION MANUAL

The actual product you have received may differ slightly from the illustration.



### WARNING

- To ensure safe operation of the product, be sure to read this Operation Manual before use.

NAMCO AMERICA INC



## IMPORTANT

Read PRECAUTIONS and INSTALLATION  
Sections before operating game

## RF Notice

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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# INTRODUCTION

---

Thank you for purchasing the "WANGAN MIDNIGHT MAXIMUM TUNE 3" game machine (hereafter referred to as the "machine").

This operation manual describes:

- How to install, operate, relocate, transport, maintain and discard the machine safely and properly
- How to operate the machine correctly and make full use of its features
- How to ensure safety of players and bystanders

In the case the Conversion Kit is used, the following manual is also provided.

- Wangan Midnight Maximum Tune 3 Conversion Procedure Manual

Inquiries concerning the machine and repairs

- For further information about the machine and repairs, please contact your distributor.

The software used in the game machine is protected by copyright laws.

It is prohibited to copy, adapt, distribute publicly, or use the software for purposes other than the operation of this machine.

Infringement of the copyright laws may subject persons to criminal penalties.

Do not use the recording media containing the software in a machine other than the specified game machine. Doing so can result in equipment malfunction.

Parts of the software used in this game machine are protected by GNU General Public License ("GPL") and GNU Lesser General Public License ("LGPL"). Customers are allowed to obtain, modify and redistribute the source codes of those parts of the software. However, this does not imply that the source codes of the entire software can be obtained, modified or redistributed, although they constitute portions of the product.

Regarding GPL and LGPL, visit the following Web sites.

<http://www.fsf.org/licensing/licenses/gpl.html>

<http://www.fsf.org/licensing/licenses/lgpl.html>

If you wish to obtain GPL/LGPL source codes used in this machine, please contact our company.

This product does not meet to European RoHS Directive. Resale to European precincts is not possible. An importer may be punished. In order to use this machine in the foreign country. It must suit the regulation of each country.




# **1. SAFETY PRECAUTIONS** - Be sure to read these instructions to ensure safety -


## **Instructions to the owner:**

- If you entrust another party to perform installation, operation, relocation, transportation, maintenance or discarding of the machine, instruct the concerned party to read and observe all the instructions and precautions in this operation manual regarding the particular action to be taken.

## **1-1 Magnitudes of risk**

On the labels attached to the machine and in this operation manual, safety precautions and property damage are classified as shown below in accordance with the magnitude of the particular risk.

 **WARNING** : Failure to avoid the risk may result in death or serious injury.

 **CAUTION** : Failure to avoid the risk may result in minor injury or property damage.

Notes related to machine functions but not to safety are marked with the following label:



: Notes related to functions or protection of the machine.

## **1-2 Definition of the term “technician”**

This operation manual is written for arcade personnel. However, the sections marked “To be conducted by a technician only” in the table of contents are written for technicians. These tasks must be conducted by technicians only.

**Technician:** A person engaged in machine design, manufacture, inspection or maintenance service for a manufacturer of amusement equipment, or a person who has technical knowledge related to electricity, electronics or mechanical engineering at a level equal to or higher than that of technical high school graduates, and who is engaged routinely in the maintenance (repair) of amusement machines.



## 1-3 Top-priority safety precautions

### WARNING

- Should any problem occur, turn off the power immediately to stop operating the machine. Then, unplug the power cord plug from the service outlet. Operating the machine without correcting a problem may cause a fire or accident.
- The monitor remains hot and charged with high voltage even after the power switch is turned off. Do not touch those parts to avoid electric shock and burns.
- Dust accumulated on the power cord plug may cause a fire. Check the power cord plug regularly and remove dust.
- Insert the power cord plug firmly into a service outlet. Poor contact may cause overheating that can lead to a fire or burns.
- A damaged power cord can cause a fire, electric shock or electrical leakage. Observe the following instructions.
  - Keep the power cord away from heating devices.
  - Do not twist the power cord.
  - Do not bend the power cord forcibly.
  - Do not alter the power cord.
  - Do not bundle the power cord.
  - Do not pull the power cord. (Always unplug by holding the power cord plug, and avoid pulling the power cord.)
  - Do not place anything on the power cord.
  - Do not get the power cord caught by the machine, other products or wall.
  - Do not do anything else that might damage the power cord.
- Do not wet the power cord or power cord plug with water. Water can cause an electric shock or leakage.
- Do not touch the power cord with a wet hand. Doing so can result in an electric shock.
- The power rating for the machine is 120 VAC, 6 A. To prevent fire and electric shock, always use indoor wiring that conforms to the machine's power specifications.
- Operate the machine with a power supply voltage in the range of 110 to 120 VAC. Using the machine with a supply voltage outside this range may cause a fire or electric shock. To ensure that the machine operates in optimum condition, maintain the power supply at 110 to 120 VAC.
- Use only specified parts to replace consumables and service parts (including fasteners). To order parts, contact your distributor.
- Do not convert the machine without permission. Do not perform any work that is not described in this operation manual. Unauthorized conversion of the machine may create unforeseen hazards.
- When transferring the ownership of the machine, be sure to provide this operation manual with the machine.



## 1-4 Description of warning labels attached to the machine

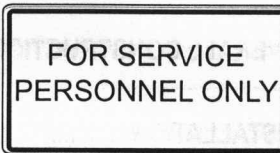
### WARNING

- The warning labels describe important safety precautions. Observe the following:
  - To make sure that the warning labels attached to the machine are easily legible, install the machine at a proper location with ample illumination and keep the labels clean at all times. Also, make sure that the labels are not hidden behind another game machine or other objects.
  - Do not remove or alter the warning labels.
  - If the warning labels become dirty or damaged, replace them with new labels. To order warning labels, contact your distributor.

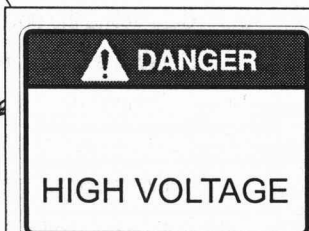
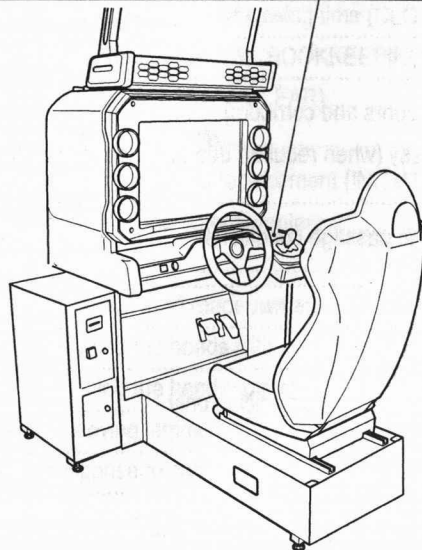
\* The labels indicated by dotted lines are pasted on the inside surfaces of covers.

A very small percentage of the population has a condition which may cause them to experience epileptic seizures or have momentary loss of concience when exposed to certain kinds of television pictures or patterns that are commonly present in our daily enviornment. These persons may experience seizures while whatching certain kinds of television pictures or playing some video games. - People who have not had any previous seizures may nonetheless have an undetected epilectic condition. If you or anyone in your family has experienced symptoms linked to an epileptic condition (seizure or loss of awareness) immediatly consult your physician before playing any video games.  
-We reccomend parents observe their children while they play video games. If you or your child experience any of the following symptoms dizziness, altered vision, eye or muscle twitches, loss of awareness,dissorientation or convulsions IMMEDIATLY DISCONTINUE USE and contact your physician.

VG44-007943-00



VG44-02642-00



VG44-05532-00  
(INSIDE)

High-voltage parts refer to specific internal parts located on the back side of the monitor device.

The part inside contains lethel HIGH VOLTAGE.



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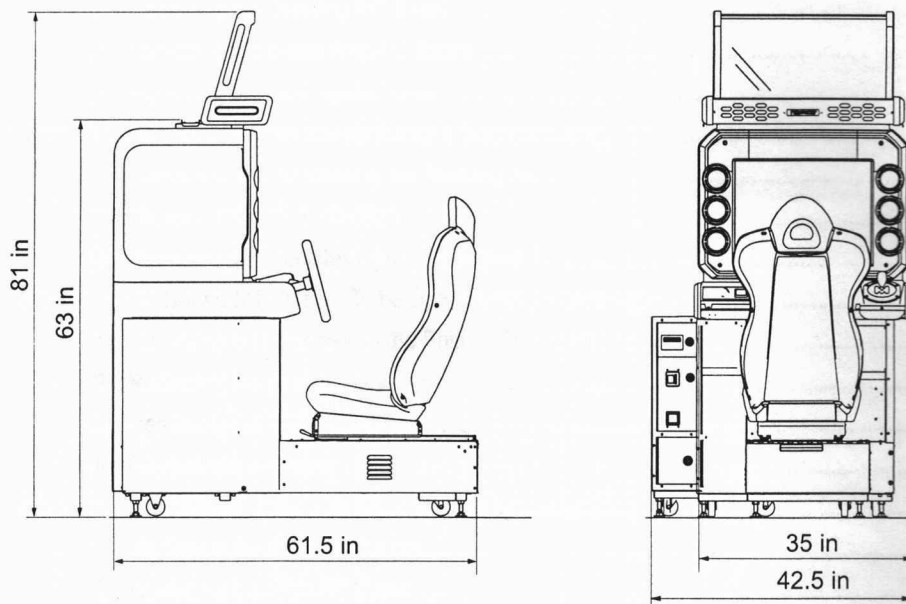
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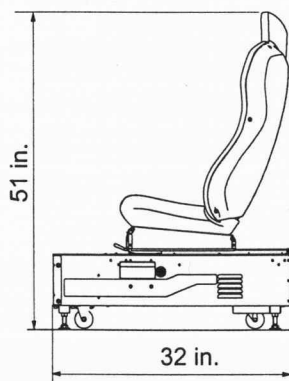


## 2. SPECIFICATIONS

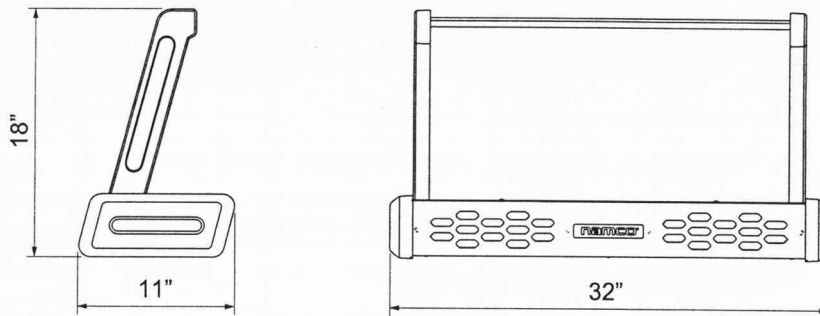
- (1) Rated power supply 120  $\pm$  10 VAC (50/60 Hz)
- (2) Maximum power consumption 330 W (110-VAC power supply)
- (3) *Maximum current consumption* 6 A (120-VAC power supply)
- (4) Capacity of coin box Approx. \$2500
- (5) Monitor 27-inch color monitor
- (6) Dimensions:
  - Packed for shipping: 47.25 (Wide) x 70 (Depth) x 68.5 (High) [in]
  - ① As installed  
42.5 (W) x 61.5 (D) x 81 (H) [in]



- ② When divided
  - Bottom base: 34 (W) x 32 (D) x 51 (H) [in]



Signboard box: 32 (W) x 11 (D) x 18 (H) [in]



(7) Weight		
(1) As installed		568 lb
(2) When divided		
Base Assy		330 lb
Monitor Assy		210 lb
Signboard box		18 lb
(3) Packed for shipping		
		725 lb

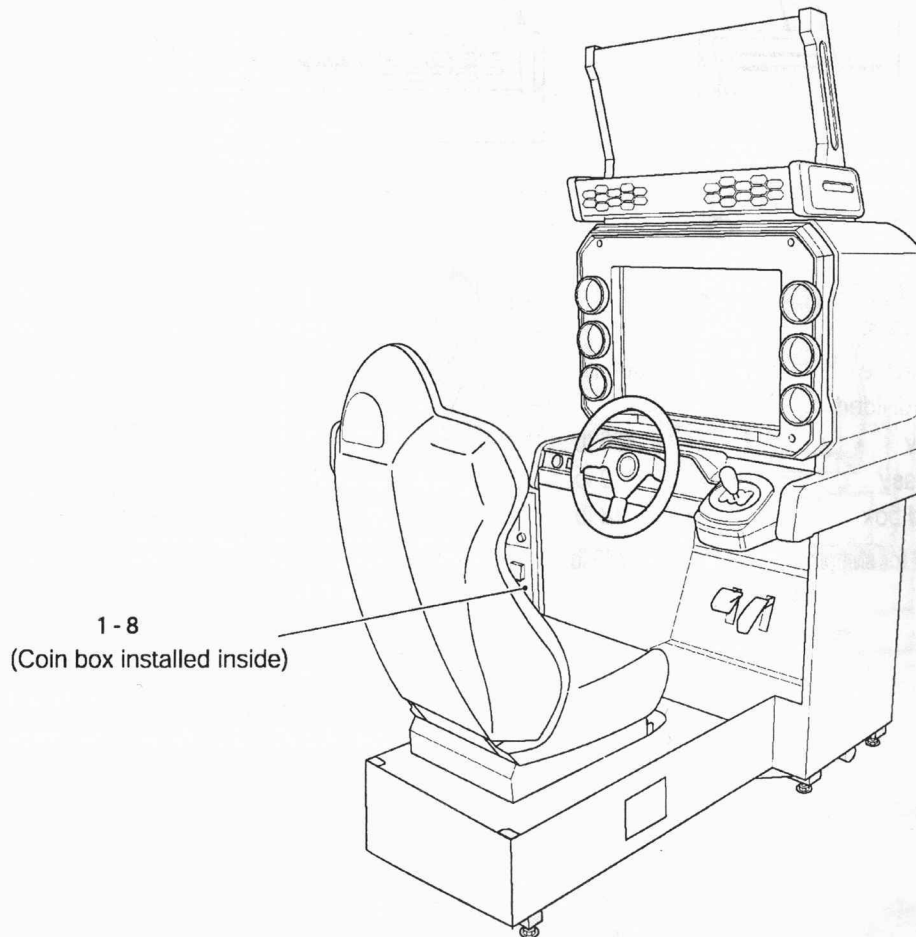


### 3. CHECKING THE PACKAGE CONTENTS

The product package contains the following parts.






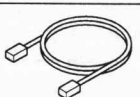
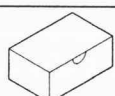
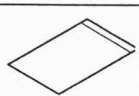
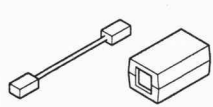


- Make sure all the parts shown below are contained in the product package.
- If parts are missing, contact your distributor.



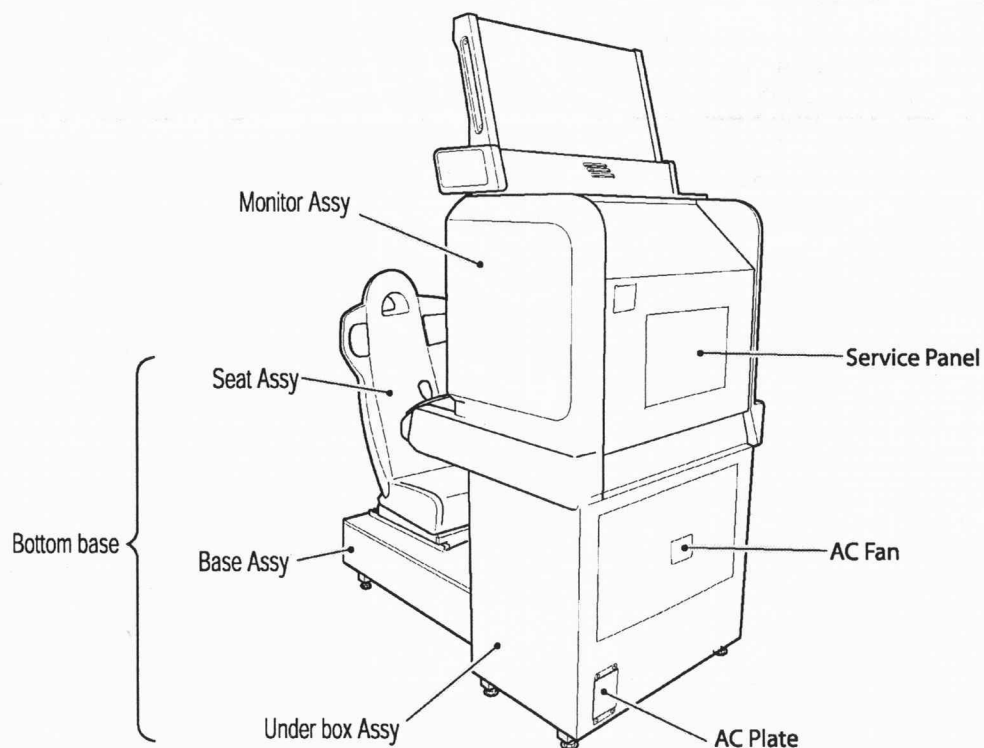
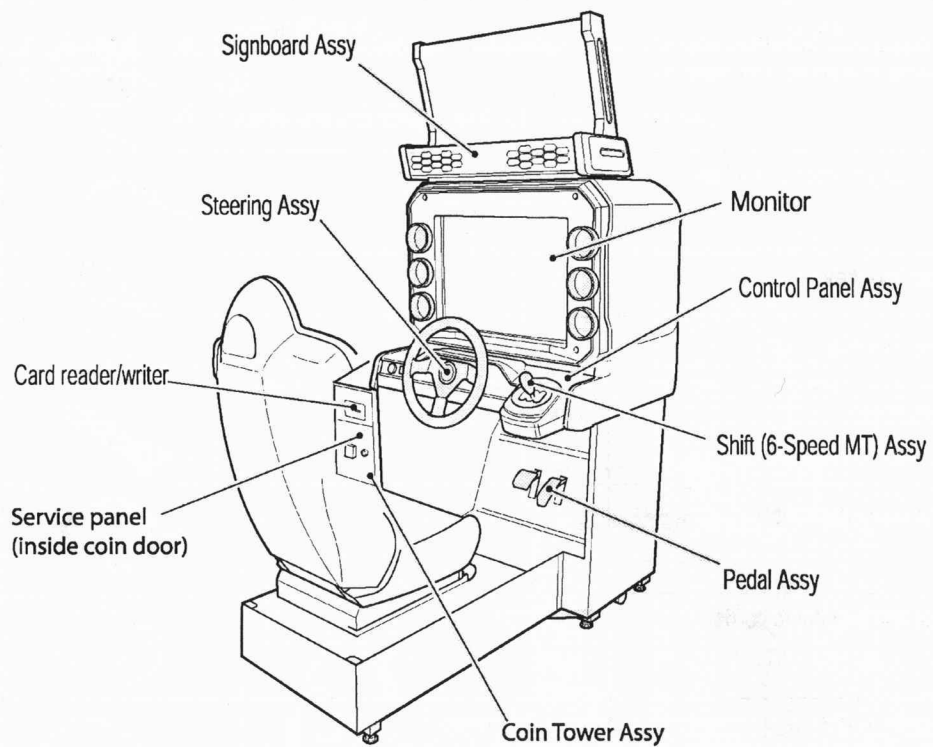
### 3. CHECKING THE PACKAGE CONTENTS

#### • Accessory list

No.	Name	Specification	Qty
1	Operation Manual (this manual)		1
2	Torx tamperproof wrenches	T-25, T15, T-40, T-27 & M3 	5 total
3	Rear door key		2
4	Coin door key		2
5	Power cord	3 meter 	1
6	Communication cable		1
7	Magnetic rewritable cards	1 pk of 50 	1
8	Cleaning cards	1 pk of 4 cards 	1
9	Cross conversion kit		1



## **4. OVERALL CONSTRUCTION** (Components and Their Names)



## 5. INSTALLATION

### WARNING

- Install the machine according to the instructions and procedures in this operation manual. Failure to follow the specified procedures may result in a fire, electric shock, injury, or machine malfunction.
- Insert the power cord plug firmly into the service outlet. Poor contact may cause overheating that can lead to a fire or burns.
- Be sure to connect the ground lead. Using the machine without proper grounding can result in an electric shock if electric leakage occurs. (See P. 25 "5-6 Connecting the power cord and ground lead.")
- Install the machine securely to the floor by using the level adjusters. Unstable machine installation can result in an accident or injury. (See P. 18 "5-3-1 Adjusting the level adjusters.")

### 5-1 Installation conditions

#### WARNING

- Do not block the air vent holes on the back side of the machine with items or a wall. If the air vent holes are blocked, the inside of the machine becomes hot, and a fire or machine malfunction can result.

#### 5-1-1 Locations to avoid

#### WARNING

- The machine is designed for indoor use. Never install the machine outdoors or at any of the following locations:
  - Places in direct sunlight
  - Places exposed to rain or water leakage
  - Damp places
  - Dusty places
  - Close to heating devices
  - Hot places
  - Extremely cold places
  - Places where dew condensation may occur due to temperature differences
  - Places where the machine may become an obstruction in emergencies (such as near emergency exit) and place where fire extinguisher or similar equipment is installed
  - Unstable places or locations where vibrations are produced



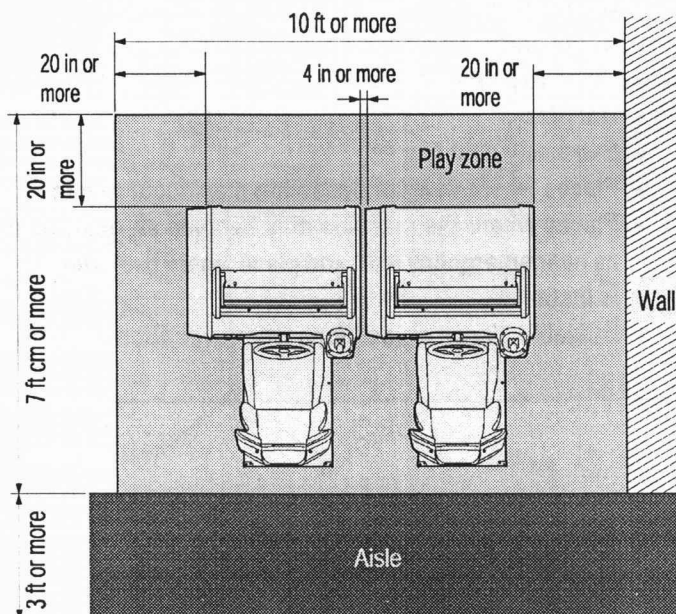
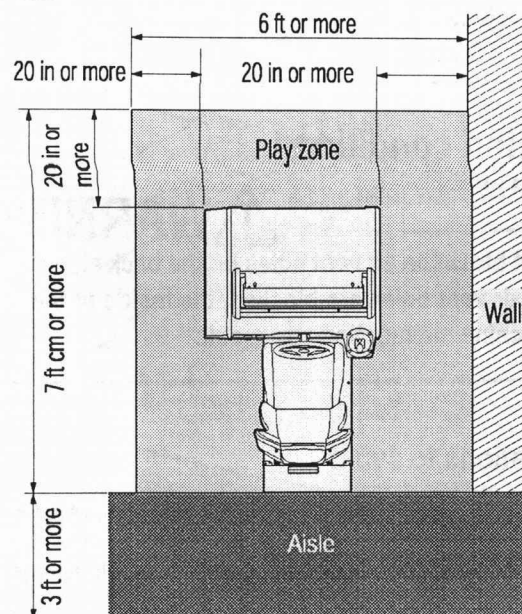
### 5-1-2 Play zone of installed machine

## ⚠ CAUTION

- Set a play zone so that players can move away from the machine without bumping into observers or passersby.

## NOTICE

- Provide a space of at least 20 in between the back side of the machine and the wall or adjacent machine so that the rear panel can be easily removed for maintenance.
- A ceiling height of at least 8 ft is required.
- When two machines are installed, provide a space of at least 4 in between the units.



---

## 5-2 Required dimensions of carry-in passage (such as doors and corridors)

The doors and passages must be larger than the dimensions indicated below so that the machine can be carried to the installation site.

32 (W) x 64 (D) x 80 (H) [in]  
Weight: 568 lb

The machine can be divided into the following components if the carry-in passage is small.

- **Ride base**  
35 (W) x 32 (D) x 51 (H) [in]  
Weight: 330 lbs
- **Monitor Cab Assy**  
35 (W) x 44 (D) x 63 (H) [in]  
Weight: 210 lbs
- **Signboard Assy**  
32 (W) x 11 (D) x 18(H) [in]  
Weight: 18 lb

Regarding the method of separating the units, refer to the sections from P. 16 "5-2-1 Separating the signboard box from the Monitor Assy" to P. 17 "5-2-2 Separating the ride base from the Monitor Assy.")

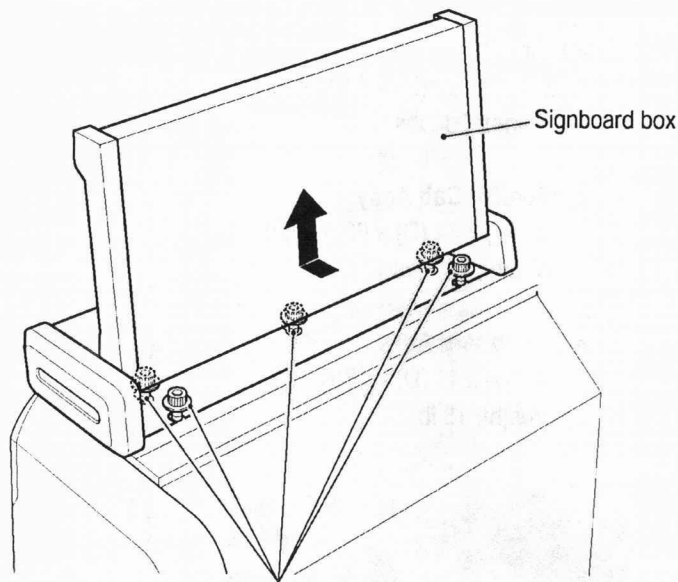


**5-2-1 Separating the signboard box from the Monitor Assy (when required due to passage conditions) - To be conducted by a technician only -**

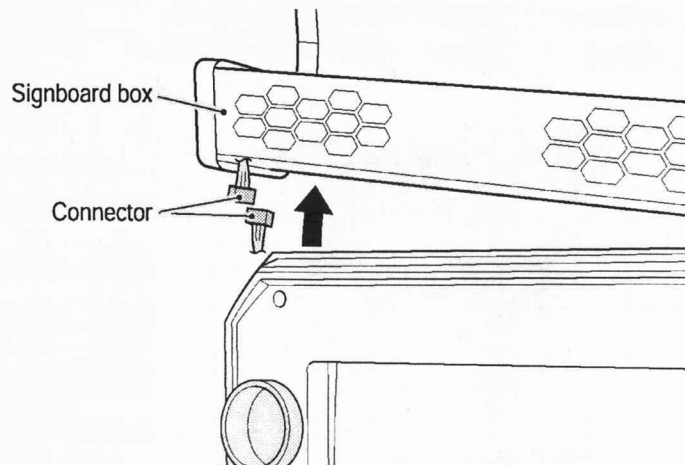
**! CAUTION**

- The signboard box weighs approximately 18 lb. The following task should be performed by two or more persons in a large work area to prevent accidents.

- 1** Loosen the five flange socket bolts (10-24) that hold the signboard box in place.
- 2** Move the signboard box toward the front, and lift the front side.



- 3** Disconnect the connector, and dismount the signboard box.

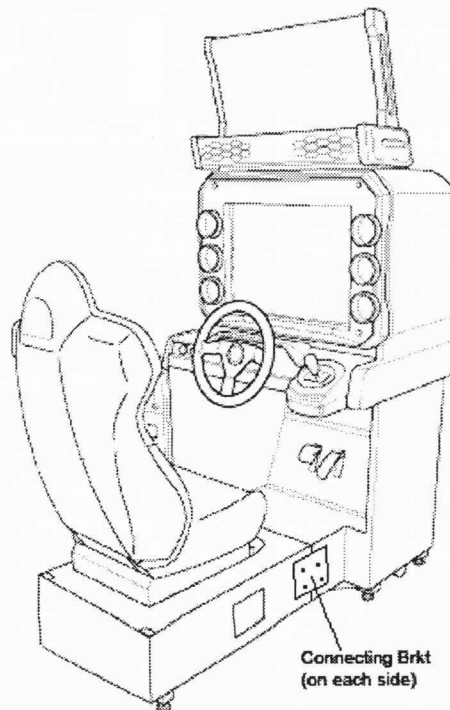


- 4** To reinstall, follow the removal sequence in reverse.

---

### 5-2-2 Separating the Seat Base from the Monitor Cabinet Assy

- 1** Remove the four screws from the two connecting brackets. One on each side of the base assembly.
- 2** Remove the connecting brackets.

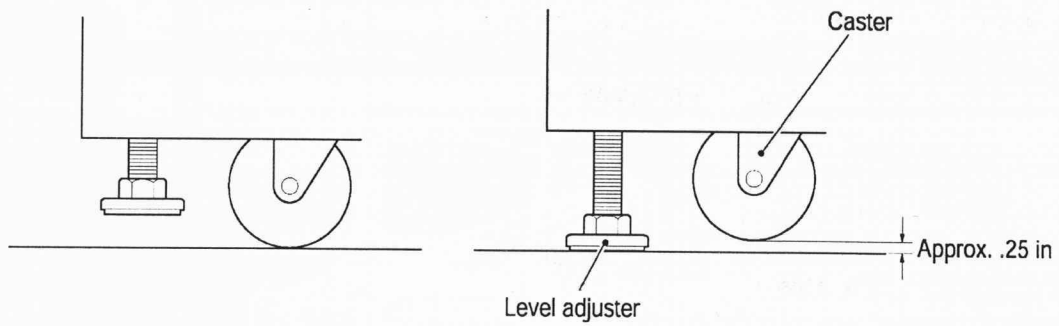


- 3** Carefully move the seat base assembly away from the monitor cabinet assembly.
- 4** Disconnect the harness connectors leading to the seat speakers.

## 5-3 Assembly

### 5-3-1 Adjusting the level adjusters

Lower the level adjusters until the casters are lifted about 1/4 inch from the floor.  
(Two level adjusters on the underbox and two level adjusters on the Seat Base Assy: total of four)





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## Notes

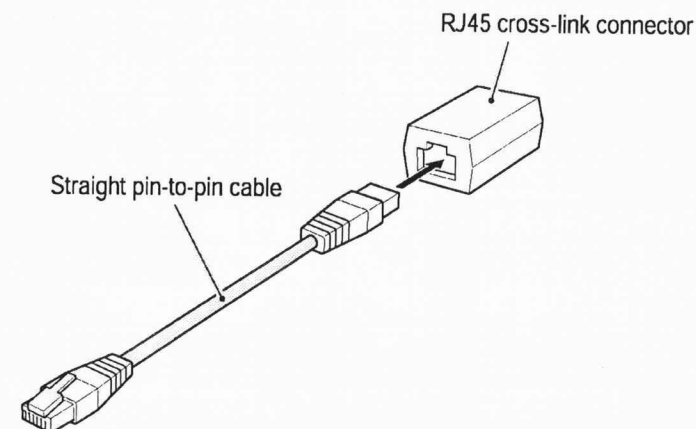
## 5-4 Connecting the communication cable - To be conducted by a technician only -

Two to four units of this game machine can be connected for interlinked operation.

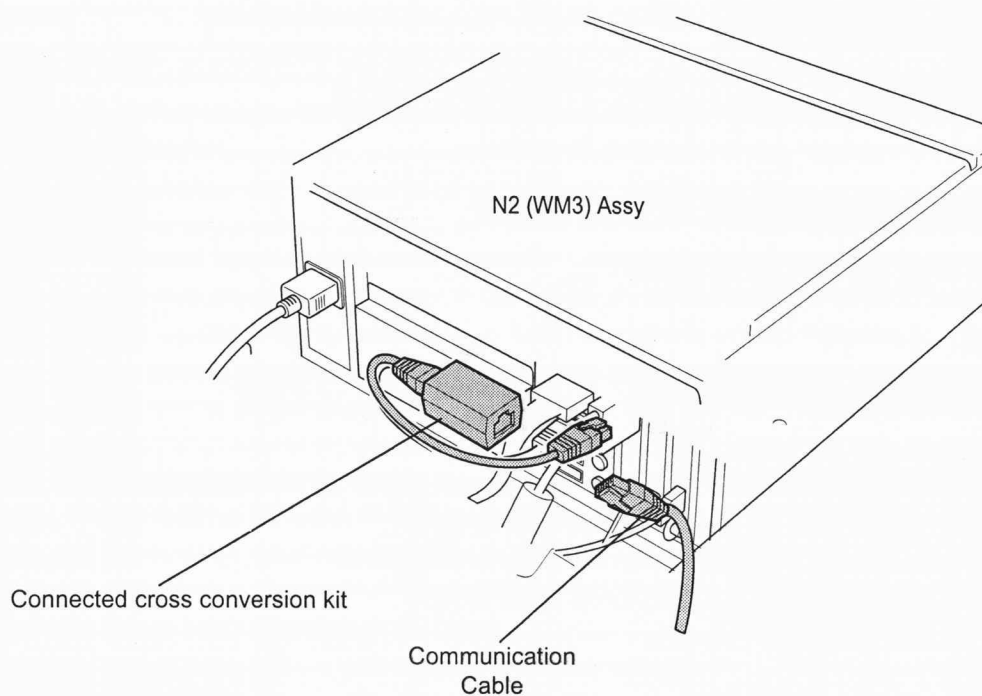
\* The following procedure is not necessary when the machine is used for a stand-alone operation.

### 5-4-1 When setting up two game machines

- 1** Remove the lower monitor cabinet rear door.
- 2** Locate the RJ45 cross-linked connector and short straight cable plugged into the main pcb or in the coin box.  
\*\*USE ONLY ONE OF THE RJ45 CONNECTORS WHEN LINKING TWO GAMES.  
USING TWO RJ45 CONNECTORS WILL NOT ALLOW THE LINKING FUNCTION TO WORK PROPERLY\*\*

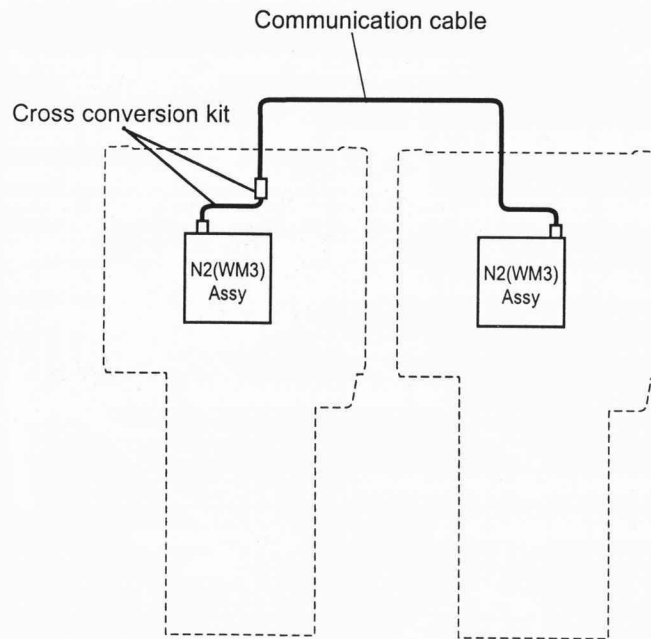


- 3** Route the provided communication cable through the notch in the bottom surface of the rear door opening.





- 5** Follow the same procedure to install the communication cable in the other machine. Install the cross conversion kit only in the unit on the left side as viewed from the front. The cross conversion kit provided with the machine on the right side is not used. Keep this kit with other accessory parts in a safe place. Installation of two cross conversion kits disallows proper communication between the machines.



Communication cable routing diagram

\* Route the communication cable as shown below.

### 5-4-2 When setting up three or four game machines

For connection of two game machines, refer to "5-4-1 When setting up two game machines" on page 20.

#### (1) Connection diagram

Use three (or four) communication cables provided with the game machines and one hub (sold separately) to connect the units as shown below. **The provided cross conversion kits are not used.**

Before setting up the game machines, call (630) 238-2248 to obtain a hub specified below from Namco America.

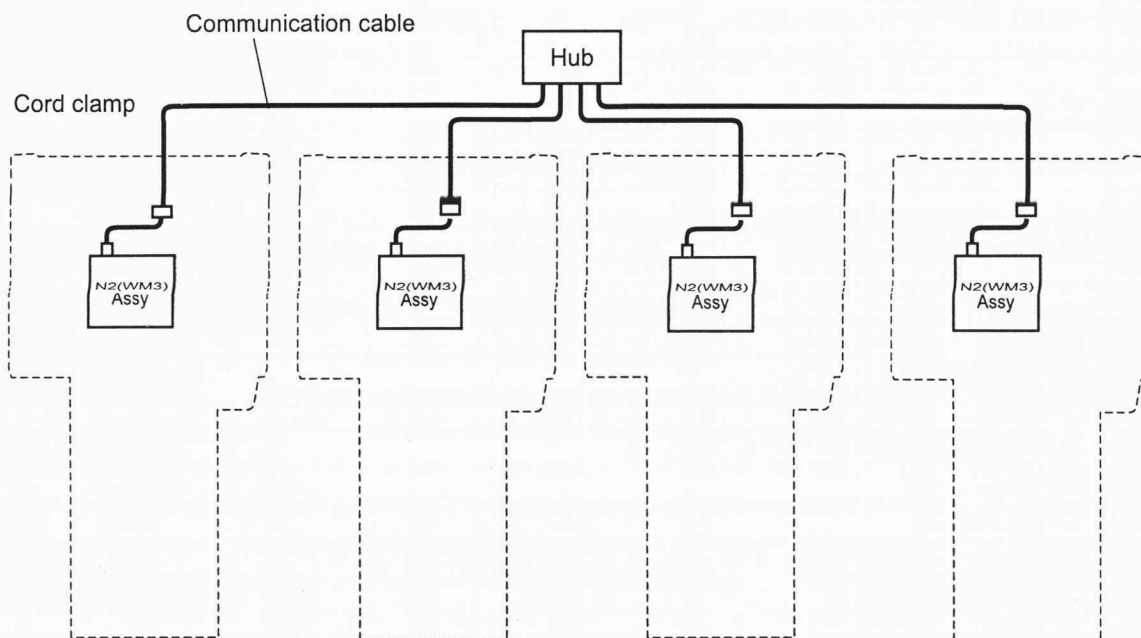
(The hub is not necessary when the game machine is operated individually or when only two units are connected for communication-linked competition game play.)

We cannot guarantee proper communication-linked competition game operation if a hub other than the one specified below is used.

[Specified hub model]

Hub, 5-port switch

NAI p/n: MB45-11146-00



Follow the same procedure to install the communication cables to the other machines (one to three units), and connect the other ends of all the communication cables to the hub (obtainable through Namco America). (See P. 23 "5-4-2 (1) Connection diagram.")

**The provided cross conversion kits are not used.** Keep those kits with other accessory parts in a safe place.

Connect the AC adapter of the hub to a power outlet, and check that the Power lamp turns on.

- Read the manual provided with the hub carefully for the handling of the hub.
- Install the hub on the rear panel or bottom plate of a machine using a bracket or other fixture supplied with the hub. Do not place the hub on the floor to prevent the hub from being splashed with water, floor wax or other substances.
- Supply power to the hub at the same time or before supplying power to the game machines. If the hub is not supplied with power when the self-test (See P. 70 "Self-test") is completed, the communication function will not work properly. In that case, turn off the power switches of the game machines, then turn on the hub. After confirming that the Power lamp turns on, switch on the game machines.

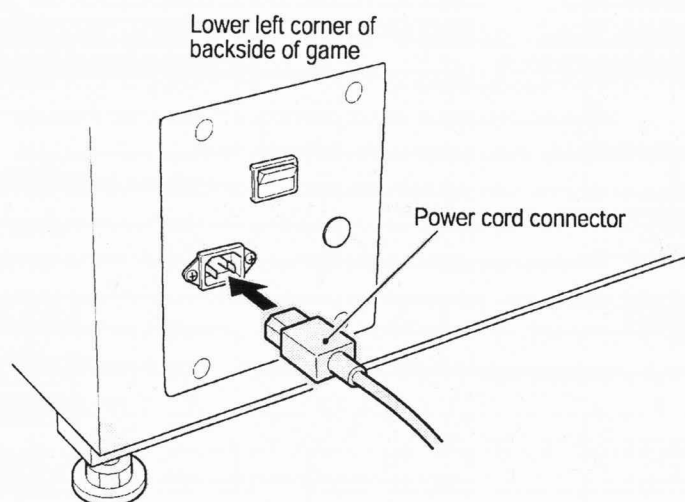


## 5-5 Connecting the power cord and ground lead

### WARNING

- Be sure to ground the machine using the following method. Failure to connect the ground lead may cause an electric shock in the event of electric leakage.
  1. Connect the ground lead by using the 3-pin plug.

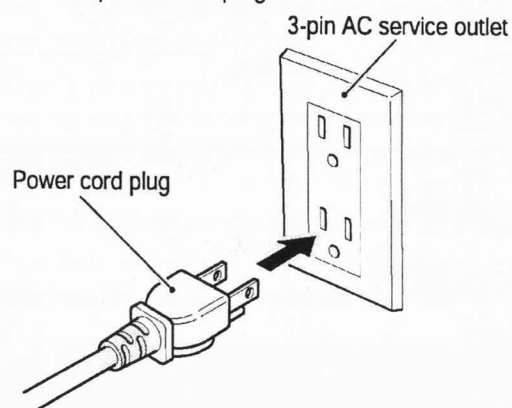
- 1** Insert the connector of the power cord into the power supply input socket located on the back side of the Underbox Assy.



- 2** Insert the power cord plug into a service outlet.

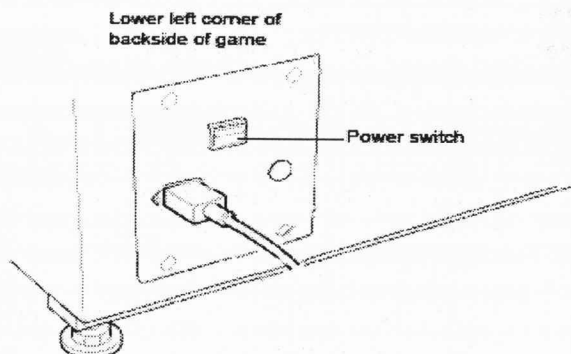
#### (1) With a 3-pin service outlet

Simply insert the power cord plug into the service outlet



## 5-6 Switching on the power

- 1** Turn on the power switch located at the lower left corner on the back side of the Monitor Cabinet Assy.



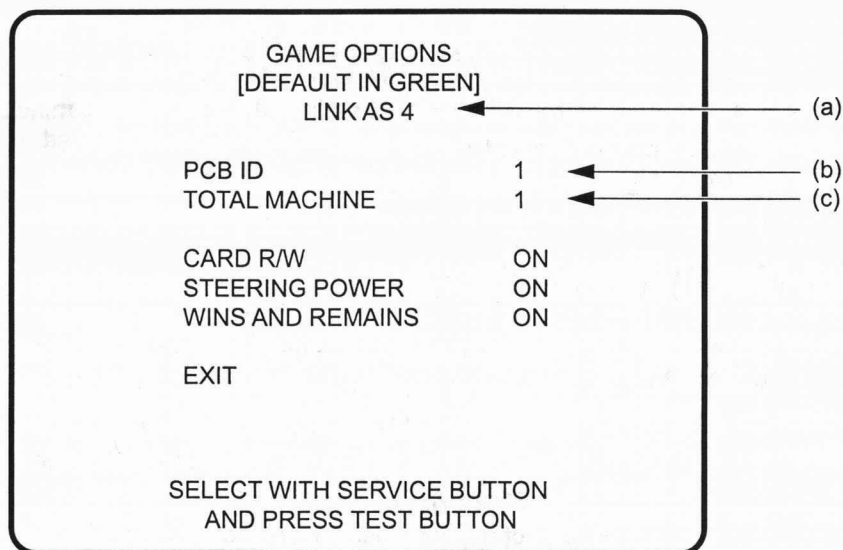
- NOTICE** • When turning on the power switch, be sure to turn on the power switches of all communication-linked units within 5 minutes. Failure to do so may disallow proper communication.
- The communication condition can be checked with the indication "Maximum number of communicable units: X" (X indicates the number of communicating units) that appears at the upper right corner of the title screen.

## 5-7 Setting the communication parameters

Two to four game machines can be connected for communication-linked competition game play.

\* The following procedure is not necessary when the machine is used for a stand-alone operation.

- 1** Turn on the power switches of all connected units.. (See P. 26 "5-6 Switching on the power.")
- 2** Press the Test switch to display the MENU screen on each unit (See p. 39 "7-4-1 Description of the MENU screen.").
- 3** On each unit, press the Service switch and select "ENTER GAME TEST." Then, press the Test switch to display the ENTER GAME TEST screen.
- 4** On each unit, press the Test switch and select "GAME OPTIONS." Then, press the Test switch to display the GAME OPTIONS screen.
- 5** Set PCB ID (b) to "1" through "4" (when connecting four units) sequentially from the machine on the left side to the machine on the right.
- 6** Make sure that the display of each unit shows the communication status (a) as described on the following page.
  - When two units are set up: "LINK AS 2."
  - When three units are set up: "LINK AS 3."
  - When four units are set up: "LINK AS 4."
- 7** Select "EXIT" to return to the game screen.



GAME OPTIONS screen



- When returning to the game screen, be sure to complete the process in all game machines in connection within five minutes; otherwise, the game machines may fail to communicate properly.  
The communication status can be confirmed by checking the indication "Maximum of X units can be communicated" (X: indication of number of units) at the upper left corner of the title screen.
- When turning off the power switch, wait until the game played by the other game machines ends. Turning off the power switch of one game machine may affect the game being played with other machines.
- When turning on the power switch, turn on the power switches of all units in connection within five minutes; otherwise, the game machines may fail to communicate properly.  
The communication status can be confirmed by checking the indication "Maximum of X units can be communicated" (X: indication of number of units) at the upper left corner of the title screen.

## 5-8 Adding cards

\* Add cards to the card reader/writer.  
(See P. 79 "7-6 Adding cards.")

## 5-9 Confirmation after machine installation

After the machine has been installed and connected, perform the pre-service check (see P. 31 "7-1 Pre-service check" and P. 39 "7-4 Test mode").  
Also, set the game pricing and sound level as needed. (See P. 37 "7-3 Adjustment" and P. 39 "7-4 Test mode.")



## 6. MOVING AND TRANSPORTING

### WARNING

- Do not leave the machine on a slope; otherwise, the machine may topple or cause an unforeseen accident.

### 6-1 Moving (on the floor)

#### NOTICE

- Move the machine carefully to prevent damage to the machine.
- The overall machine height is 80 in (with the signboard box attached). Check the height of doors and other openings. If necessary, dismount the signboard box. (See P. 16 "5-2-1 Separating the signboard box from the Monitor Assy.")
- Do not apply excessive force to plastic parts since they can break easily.
- Always fully retract all level adjusters when moving the machine even for a short distance.
- Be sure to turn off the power and disconnect the power cord when moving the machine.

- 1** Fully retract all four level adjusters. (See P. 18 "Adjusting the level adjusters.")
- 2** After moving the machine, set up the machine in accordance with the directions in "5. INSTALLATION" on page 13.

### 6-2 Transporting

#### WARNING

- When manually carrying the machine, separate the signboard box from the Monitor Assy for easy transportation. If the machine is not divided, an unexpected accident may occur when loading on or unloading from a truck or carrying it on stairs.

#### NOTICE

- Do not apply excessive force to plastic parts since they can break easily.
- Do not apply impact to the machine when raising or lower the machine.

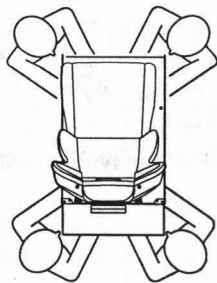
**6-2-1 Division - To be conducted by a technician only -**

- 1** Separate the signboard box from the Monitor Cabinet Assy, and separate the ride base from the Monitor Cab Assy, as necessary. (See P. 16 "5-2-1 Separating the signboard box from the Monitor Assy" and P. 17 "5-2-2 Separating the seat base from the Monitor Assy.")
- 2** Fully retract all four level adjusters on the Main Unit Assy. (See P. 18 "Adjusting the level adjusters.")

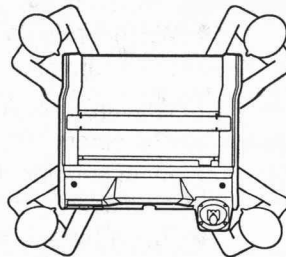
**6-2-2 Manual transport (carrying up or down the stairs, etc.)**

## ! WARNING

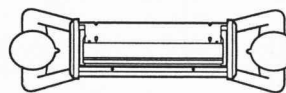
- When manually carrying the machine, be sure to divide the machine into the ride base, Monitor Cab Assy and signboard box. (See the sections from P. 16 "5-2-1 Separating the signboard box from the Monitor Assy" and P. 17 "5-2-2 Separating the seat base from the Monitor Cab Assy.") If the assembled machine is manually carried (on stairs, etc.), an unexpected accident can occur.
- Manual carrying must be conducted by the appropriate number of people specified below. An attempt to carry the machine by an insufficient number of people may result in accidents or injury.
  - Ride Base (330 lb): 4 persons or more
  - Monitor Cab Assy (210 lb): 4 persons or more
  - Signboard box (18 lb): 2 persons or more



Ride base



Monitor Assy



Signboard box



- Do not apply impact to the machine when lowering the machine.

## 7. OPERATION

### WARNING

- Should any problem occur, turn off the power switch immediately to stop operating the machine. Then, unplug the power cord. Operating the machine without correcting a problem may cause a fire or accident.
- Dust accumulated on the power plug may cause a fire. Check the power plug regularly and remove dust.
- Insert the power cord firmly into the service outlet. Poor contact may cause overheating that can lead to a fire or burns.
- Before operating the machine, check to make sure that the machine has been installed according to the instructions in this operation manual. (See P. 13 "5. INSTALLATION.") If the machine installed improperly, a fire, electric shock, injury or malfunction may result.
- The warning labels describe important precautions. Observe the following.
  - To make sure that the warning labels attached to the machine are easily legible, install the machine at a proper location with ample illumination and keep the labels clean at all times. Also, make sure that the labels are not hidden behind another game machine or other objects.
  - Do not remove or alter the warning labels.
  - If warning labels become dirty or damaged, replace them with new labels. To order warning labels, contact your distributor.
- To ensure safe operation of the machine, be sure to conduct the pre-service check (see P. 31 "7-1 Pre-service check") and maintenance (see P. 71 "8 SERVICE"). Failure to perform the specified inspection and maintenance can result in unexpected accidents.

### NOTICE

- Do not turn off the power while the game is being played. Doing so can damage the setting data entered in the Test mode.
- When turning on the power switch, be sure to turn on the power switches of all communication-linked units within 5 minutes. Failure to do so may disallow proper communication.

The communication condition can be checked with the indication "Maximum number of communicable units: X" (X indicates the number of communicating units) that appears at the upper left corner of the title screen.
- When turning off the power switch, wait until the game play ends in all other communication-linked units. Failure to observe this can cause an adverse effect on the game being played on other units.

## 7-1 Pre-service check

Check the items described below before commencing operation.

If any problem is found, take corrective measures by referring to "8-2 Troubleshooting" on page 73.

### 7-1-1 Safety check (before power on)



- To prevent accidents and injury, be sure to check the following items before commencing operation.
- Operating the machine with damaged, broken or deteriorated parts, or with incorrectly installed parts can cause injury to players and people near the machine. If an abnormality is found, replace defective parts immediately. To order parts, contact your distributor.

- 1) Are all warning indications in place? (See P. 3 "1-4 Description of warning labels attached to the machine.")
- (2) Are the warning indications legible? (See P. 3 "1-4 Description of warning labels attached to the machine.")
- (3) Are the level adjusters adjusted properly? (See P. 18 "5-3-1 Adjusting the level adjusters.")
- (4) Is the specified play zone area provided? (See P. 14 "5-1-2 Play zone of installed machine.")
- (5) Are the power cord and communication cable routed so that they will not be pulled accidentally by customers?
- (6) Are the seat slide rails securely locked in position?

Check the following items after turning on the power switch. If an abnormality is found, turn off the power switch immediately and stop operating the machine. Then, unplug the power cord from the service outlet and contact your distributor.

- (7) Is any part of the power cord or plug abnormally hot?
- (8) Does touching the machine give a slight electric shock?
- (9) Is there a burning smell, abnormal noise or vibration?
- (10) Is there any other sign of abnormality or malfunction?

### 7-1-2 Operation check (after power on)

- (1) Check the sound. (Is sound produced by each speaker?)  
(See P. 48 "7-4-6 Sound test (SOUND TEST).")
- (2) Check the lamps. (Are the fluorescent lamp, view change switch, and intrusion selection switch illuminated?)  
(See P. 43 "7-4-4 Input/output test of switches (I/O TEST) (c) LAMP TEST.")
- (3) Check the displayed image. (Does the monitor show images properly?)  
(See P. 47 "7-4-5 Monitor test (MONITOR TEST).")



- To check the following items, press the Service switch and play the game. (See P. 37 "7-3-1 Adjustment switches.")
  - (4) Check the steering wheel operation. (Does turning of the steering wheel change the direction of the player's car? Does it provide feedback action?)
  - (5) Check the pedal operations. (Does depressing of the acceleration pedal and brake pedal varies the vehicle speed?)
  - (6) Check the shift lever operation. (Does shifting change the gears?)
  - (7) Check the switch operations. (Does pressing the view change switch change the viewpoint?) (Does pressing the intrusion selection switch change the intrusion mode?)
  - (8) Check the card reader/writer. (Does the card reader/writer reads data and dispenses cards?)
  - (9) Check the communication condition. (In the case two units are installed, can they operate in the communication-linked play mode?)

## 7-2 How to play

### CAUTION

- If people are conducting the following actions, warn them of potential danger.
  - Two people are in the seat and playing the game.
  - A person other than the player is operating the control section (steering wheel, shift lever).
- If a player becomes sick due to game images or simulation by light, have the person stop playing the game immediately and let him/her rest.
- In rare cases, stimulation by lights or video images can cause convulsions or a loss of consciousness. When pre-school children play, request their parents or guardians to observe the children.

This racing game is based on the motif adopted from a comic book story, "Wangan Midnight." The game machine offers four single-player modes — Story Mode, Player's Double Versus Game Mode, 10-Rival Elimination Mode and Time Attack Mode — and one multiple-player mode (up to 4 players) called Intruder Versus Game Mode.

By using a "tuning card," a player can save game results and vehicle tuning/dress-up data so that he/she can continue playing the game from the end of the previous game play any time.

In the Story Mode, a player competes against the characters in the comic book story. A player can tune his/her car to achieve higher performance.

In the Player's Double Versus Game Mode, a player can call out his/her double to compete in a versus game. A player can add various dress-up items to the car.

By playing games in the 10-Rival Elimination Mode, Time Attack Mode or Intruder Versus Game Mode, a player can increase the level, obtain a new title, or accumulate star.

### Outline of the game

#### ■ About tuning cards

This machine can save game play information on a magnetic card.

If a player produces a card in his/her first game play, a card containing the information of the player's car is dispensed after the game ends. In the subsequent game play, the player can insert the card into the machine to continue the game from the end of the previous game play.

The front side of the card is printed with the following information.

Driver's name:	Name entered by player at the time of card production
Card no.:	Number assigned at the time of card production
Vehicle model:	Vehicle model selected at the time of card production
Level:	Indication of level based on the game progress
Class:	Title given according to the progress of game play
Horsepower:	Horsepower rating according to the vehicle tuning
Clear:	The mark indicates the stage cleared in the Story Mode.
Mileage:	Cumulative driving distance.
Password:	Password for travel distance or for the Time Attack game can be selected and printed.

The printed information is updated according to the progress of game play.

Each card can be used for 60 times of game play. When a card reaches its 60th use, the data can be transferred to a new card by updating, so that the data can be continued to be used in subsequent game play. (The Update screen appears automatically when a card reaching its usage limit is inserted.)

#### ■ Discarded Vehicle card and 600HP card

When a card is updated after it is used 60 times, if the 20th or later episode has been cleared in the Story Mode, the card is discharged as a Discarded Vehicle card. (The updated card is dispensed after the game ends.)

A Discarded Vehicle card can be used to make two "600HP" cards of the same vehicle model in the same body color and the tuning level of "10-level power and 10-level handling."

The details of a 600HP card produced based on a Discarded Vehicle card are as follows:

- Player's name: Any name can be entered.
- Vehicle model: Same as the vehicle model in Discarded Vehicle card
- Body color: Any color can be selected.
- Tuning level: 10-level power, 10-level handling
- Stage cleared in Story Mode: Starts from the 21st episode.
- Class: Initial title given by the game machine

Other settings return to defaults.

A 600HP card can be obtained by inserting a Discarded Vehicle card when the game machine screen prompts for the insertion of a card.

After two 600HP cards are made, the Discarded Vehicle card becomes an "invalid card" and cannot be used anymore.

#### ■ Transfer of data from the previous Wangan Midnight Maximum Tune and Wangan Midnight Maximum Tune 2 cards

Tuning cards for the Wangan Midnight Maximum Tune game cannot be used. Data on a card for Wangan Midnight Maximum Tune 2 (hereafter referred to as the "last version") can be

transferred to a tuning card for this game machine and used in subsequent game play.

Data to be transferred are as follows:

- Player's name
- Vehicle model
- Transmission type
- Body color
- Results of intrusion versus games
- Mileage
- Retire setting

Data of the following items changes during the transfer, depending on conditions.

- Level
- Tuning level
- Stage cleared in Story Mode

To transfer data to a new card, insert a tuning card of the last version when the display screen of the game machine prompts for the insertion of a card.

### ■ Starting the game

- When the required number of coins are inserted and the accelerator pedal (gas pedal) is depressed, he/she can insert the card at this point. When the player has a card, he/she insert the card is inserted at this point. If the card is valid, the card data confirmation screen appears.
- If the player chooses "No card," the screen asks if the player wants to purchase a card. To purchase a card, the player must insert the required number of coins. If the player does not wish to buy a card, he/she selects "No card purchase."
- Regardless of whether a card is purchased or not, the screen proceeds to the next screen, and asks the player to select an auto maker. When the cursor is positioned on the icon of an auto maker, the screen displays the selected maker's vehicle models available for selection.
- When an auto maker is selected, the next screen asks the player to select a vehicle model. The player selects a desired vehicle model on this screen. The player can return to the previous screen for the selection of auto maker by depressing the brake pedal. The player can change the maker and model as many times as desired within the time limit.
- When a vehicle model is selected, the screen asks the player to select a body color. The desired body color is selected on this screen. The player can return to the previous screen for the selection of vehicle model by depressing the brake pedal. The player can change the maker, model and color as many times as desired within the time limit.
- After the selection of a body color, the screen prompts for the selection of transmission type. If a card is being used, the type of transmission can be changed at a later time.
- If the player has purchased a card, the screen prompts for the input of player's name. The player enters a desired name at this point.
- When the machine is set up for communication-linked game play, the screen asks for the selection of intruder mode. The player can select an intrusion mode. The intrusion mode can be changed during the play by pressing the intrusion selection button. If the other communication-linked units are being played in the "Accepting intruder" mode at this point, the screen asks if the player wishes to "intrude." If the player chooses to intrude, the player plays the intruder versus game.
- If the intruder versus mode is not activated, the screen asks for the selection of game mode. The player can select Story Mode, Ghost Versus Battle Mode, 10Out Run Mode or Time Attack Mode.

### ■ Story Mode

- In the Story Mode, a player races against characters of the Wangan Midnight comic book along the comic book story. The purpose of the game in this mode is to win all races.

- The player selects the level of the opponent first. When the level is selected, the player can choose the opponent from the characters in the selected level. The level and opponent must be selected within the time limit.
- To win a race, the player must cross the finish line before the comic book character. If the comic book character crosses the finish line first or the remaining time reaches 0 (Time Up), the player loses the race.
- The player may race against one character or against a multiple number of characters.
- A player must clear the first four episodes (4 episodes from the left) in each class to play the fifth episode (rightmost episode shown on the screen) until reaching the 20th episode. The 20th episode cannot be played until the 1st to 19th episodes are all cleared.
- From the 21st episode, a player must clear each episode before proceeding to the next.
- When the 80th episode is cleared, the ending scene plays.

#### ■ About car tuning

- In the Story Mode, when a player defeats the comic book character or meets certain conditions, the player can tune his/her car.
- A player can choose to improve either power output or handling. A player can modify the car to achieve desired performance.
- Tuning opportunities are provided 20 times before clearing the 20th episode in the Story Mode, and 13 times between the 20th episode and the 80th episode (total of 33 tuning opportunities).
- If tuning is performed in the 21st or later episode, the tuning gauge obtained in the 21st or later episode can be moved to either "Power" or "Handling" on the setting screen that appears before the race starts. This allows a player to adjust the setting to achieve desired performance.

#### ■ Players Double Versus Game Mode

- In the Players Double Versus Game Mode, a player plays against ghost a player who actually played the game.
- This mode cannot be activated without a tuning card.
- Up to 2,000 player's ghost can be stored in the machine. Player's doubles are shared by the communication-linked units (up to 4 units).
- Ghost can be called out any time by following the procedure described below.

It is possible to select the opponent from the "friends list."

Selecting the opponent to avenge: Player can select the opponent from those who defeated the player's double.

Selecting based on level: Player can specify the competence level of the opponent. "Challenging the strongest player" can be selected.

Searching based on card name: Player can search for an opponent using card name. Card number can be used as a search key.

- Since ghost is not a "ghost player" but it is a double of an actual player, the double's car can be hit during the race. Furthermore, because an actual player's driving skills and techniques are reflected in the double's racing performance, the player can enjoy tactical racing as if competing against a human racer.
- The player wins if he/she crosses the finishing line before the ghost. If the ghost crosses the finishing line before the player, the player loses. When the remaining time reaches "0," the game ends.
- When a player chooses "Challenging the strongest player," the player plays against the strongest ghost registered in the game machine. By defeating this double, the player can capture the title of "strongest player" from the double.

#### ■ About car dress-up

- By defeating ghost in the Ghost Versus Battle Mode or satisfying certain conditions, a player obtains a dress-up item.



- There are 46 dress-up levels in total, and player can select and install a desired part in each of these dress-up levels.
- The following types of dress-up parts are available for selection.  
 Aero parts set: 3 types    Wing : 3 types    Aero mirror: 1 type    Hood : 3 types  
 Wheel: 26 types    Sticker: 7 types    Neon tube: 3 types
- Dress-up parts do not affect the driving performance of the vehicle.
- When all 46 stages of dress-up are completed, parts can be changed at regular intervals, so that a player can modify the appearance of the car.

#### ■ 10 Out Run Mode

- In the 10 Out Run Mode, a player competes against rival cars that appear one after another. When a player defeats ten rivals in succession, he/she clears the stage. When a player clears the stage within a set time, it is considered as a "special clear."
- There are eight courses in total, each set with rivals ranging from 1 to 10 in level.
- The purpose of the game in the 10 Out Run Mode is to achieve a "special clear" in all courses and all levels.

#### ■ Time Attack Mode

- In the Time Attack Mode, a player races on a course alone, without any rival cars, to compete against time.
- A player can choose a course from 13 options.
- In the Time Attack Mode, a player can select either "Time attack with my car" to use his/her own car or "Time attack with official machine" (selectable only when using a card) to use a pre-tuned vehicle.
- In the "Time attack with official machine," a player uses a fully tuned racing version of the player's vehicle model. The settings of the official machine can be also adjusted.
- In the "Time attack with my car," a player uses his/her own car in a time attack race.
- In the time attack race, the clock starts as soon as the car passes the starting line. When a player crosses the finishing line within a specified time, the lap time is displayed on the result screen. If a card is used, the lap time is also recorded on the card. If a player does not reach the finishing line before the time limit, the game ends due to "time over."

#### ■ Intruder Versus Game

- During the game play in the Story Mode, Ghost Versus Battle Mode, 10 Out Run Mode or Time Attack Mode, a player can intrude into the game play from an unoccupied communication-linked unit if the intrusion mode is set to "accept intruders."
- In an intruder versus game, players compete against one another.
- To win, a player must cross the finishing line before other players.
- When the remaining time reaches "0," the game ends due to "time over." When this happens, the player in the leading position becomes the winner.
- The winning player receives stars according to the race results, and he/she can play another game. (The display returns to the game mode selection screen.)
- Whether or not the winner remains and plays another game can be selected in the Test mode.
- The players in second or following places can also receive stars according to the race results.
- When two or three players play the intruder versus game, if they all press the intrusion selection button on the course introduction screen that appears before the race starts, no more intruder is accepted. (This is convenient when a group of friends want to play the game together.)
- Direction selection panels appear before a branch point on the course. When the player in the leading position passes one of these panels, the direction specified by that panel becomes the direction of the race.



### ■ Title

- A player can obtain one of the various titles available based on the result of play in each game mode and other conditions.

### ■ Others

- The card data confirmation screen (8/9 - 9/9) enables a player to change various settings.

Transmission:

AT, MT

Retire:

No (default), Yes

(Driving in the opposite direction for more than 3 seconds forcibly terminates the game. This setting is effective in modes other than the Intruder Versus Game Mode.)

Sound level of background music: None, Low, Normal (default), High, Very High

Designation of printed password: Password printed on the tuning card can be specified.

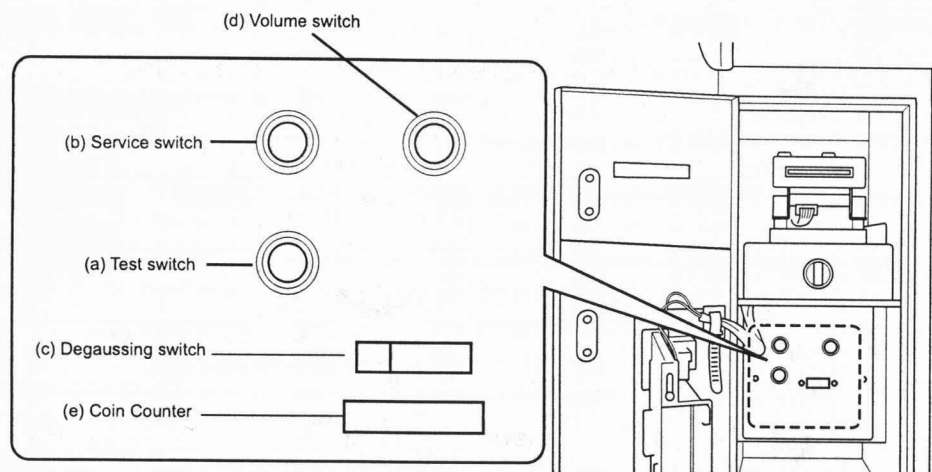
- When a card is updated after 60 game plays, a player obtains a custom body color. This allows the player to apply any body color from those he/she has to his/her car.

## 7-3 Adjustment

### 7-3-1 Adjustment switches

Open the service door to locate the adjustment switches.

The Test switch and Service switch shown above are used to perform various tasks in the Test mode.



## 7. OPERATION

	Function in Attract mode/game play	Function in Test mode
Test SW	• Activates the Test mode.	• Activates the item selected by the cursor. • Enters the selection.
Service SW	• Increases the credit count without activating the coin counter.	• Moves the cursor. • Increases the parameter value.

### (a) Test switch

Press this switch to activate the Test mode.

The Test mode is used to activate or execute the selected item.

### (b) Service switch

Press this switch to increase the credit count without activating the coin counter.

In the Test mode, this switch is used to select an item.

### (c) Degauss switch

Press this switch for degaussing when the monitor displays irregular color due to the earth magnetism at the installation location or building conditions.



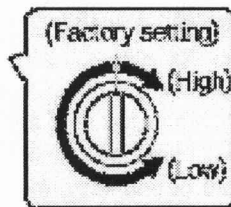
- Press the Service switch slowly and firmly. It may not operate properly if it is pressed quickly.

Sound level of background music: None, Low, Normal (default), High, Very High

## 7-3-2 Adjustment of the seat speaker sound level

The sound level of the seat speakers has been set to optimum level at the factory, but it can be readjusted according to installation conditions. For the adjustment of the overall sound level, use the Test mode. (See P. 48 "7-4-6 Sound test (SOUND SETTING).")

- 1 The seat speaker volume adjustment pot is located on the service panel located inside the coin door.



- 2 Using a Phillips screwdriver, turn the volume dial located inside and adjust the sound level.



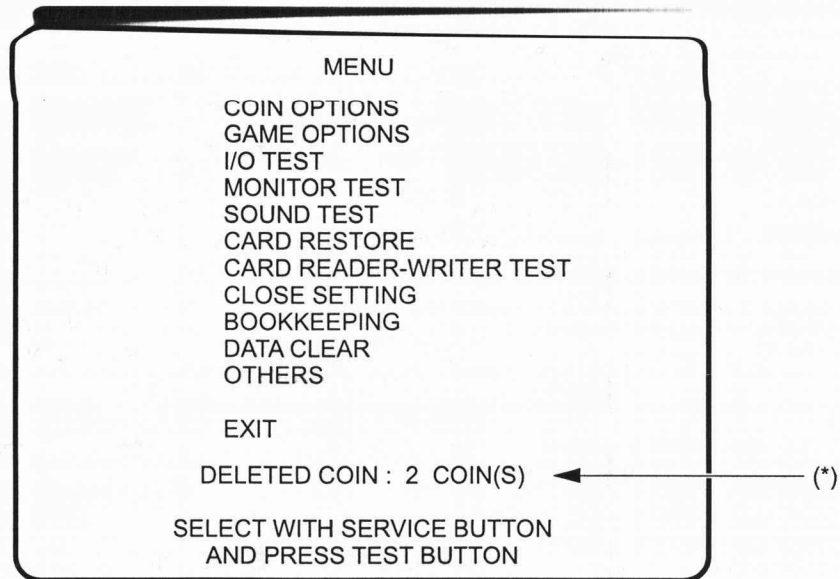
- Do not press the Phillips screwdriver onto the volume dial with excessive force. Excessive force can damage the volume dial.

- 3 After the adjustment, close and lock the coin door.

## 7-4 Test mode

### 7-4-1 Description of the MENU screen

- 1** Unlock the coin box door with the provided key, and press the Test switch.  
The SYSTEM MENU screen appears on the monitor.  
Press the Service switch and select an item.
- 2** The selected item blinks.
- 3** Press the Test switch to enter the selection.
- 4** When the selection is entered, the screen shows the applicable setting items.  
After all adjustments are completed, select "EXIT" and press the Test switch.  
The display returns to the game screen.



SYSTEM MENU screen

**\*DELETE COIN (Indication of deleted credits)**

When the Test mode is activated, the number of inserted coins (credits) will be deleted.

If there are any credits prior to the activation of the Test mode, this section indicates the credits as shown below.

DELETED COIN: X COIN(S)



#### NOTICE

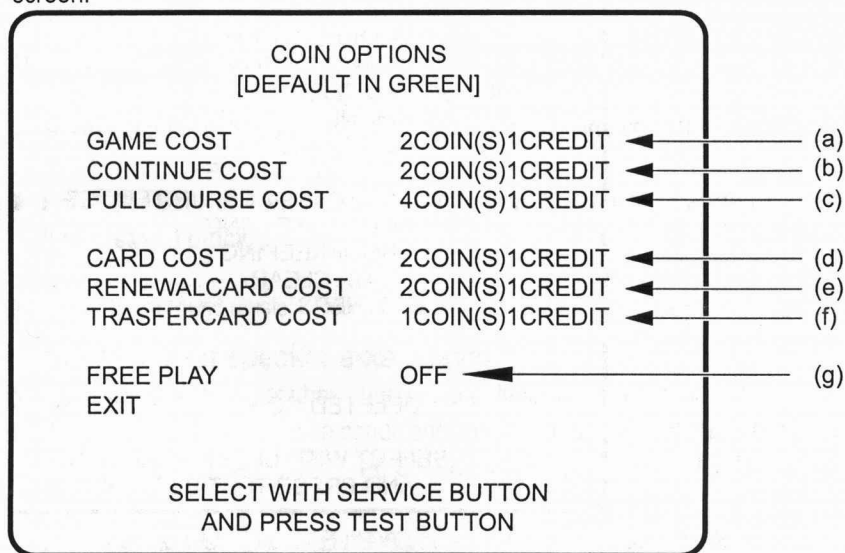
- When activating the Test mode, wait until the game play ends in all other communication-linked units. Failure to observe this can cause an adverse effect on the game being played on other units.
- When returning to the game screen, be sure to display the game screen on all communication-linked units within 5 minutes. Failure to display the game screen on all units within 5 minutes disallows proper communication.

The communication condition can be checked with the indication "Maximum number of communicable units: X" (X indicates the number of communicating units) that appears at the upper left corner of the title screen.

### 7-4-2 Setting the game pricing and free play (COIN OPTIONS)

This screen is used to enter game price settings.

- 1** When "COIN OPTIONS" is selected on the MENU screen, the following screen appears.
- 2** Press the Service switch and select an item.  
The selected item blinks.
- 3** Select a desired item and press the Test switch. This allows the change of the setting of the selected item.
- 4** Press the Service switch to change the setting as desired.  
After selecting a desired setting, press the Test switch to apply the setting.
- 5** After all adjustments have been completed, select "EXIT" to return to the MENU screen.



**SYSTEM MENU COIN OPTIONS screen**

	Item	Description	Default
(a)	GAME COST	Number of coins required to start a new game Setting range: 0 to 19	2
(b)	CONTINUE COST *1	Number of coins required for a Continue game Setting range: 0 to 19	2
(c)	FULL COURSE COST	Number of additional coins required for driving one full lap on the Metropolitan Expressway Setting range: 0 to 19	4
(d)	CARD COST	Number of coins required for the purchase of a new card (including production of a 600HP card) Setting range: 0 to 19	2
(e)	RENEWAL CARD COST	Number of coins required for updating a card Setting range: 0 to 19	2
(f)	TRASFER CARD COST	Number of coins required for transfer of data to a new card Setting range: 0 to 19	1
(g)	FREE PLAY *2	Free play setting OFF: Ordinary coin-operated game ON: Free play operation	OFF

\*1 The CONTINUE COST setting value cannot be higher than the GAME COST setting value.

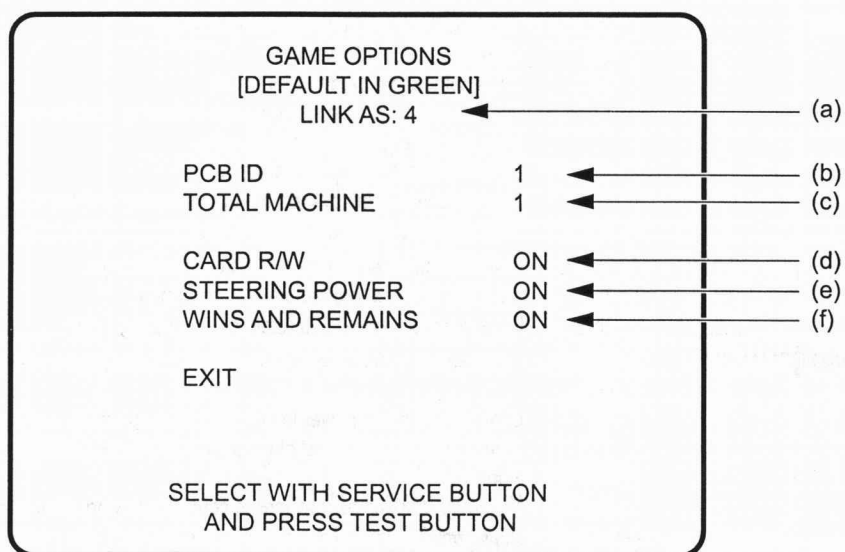
\*2 When the FREE PLAY item is enabled (ON), all other items appear in gray and cannot be selected.

When the FREE PLAY item is disabled (OFF), other items are reset to the previous settings stored in the memory.

---

**7-4-3 Setting the game options (GAME OPTIONS)**

- 1** When "GAME OPTIONS" is selected on the MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to enter the selection.
- 4** After all adjustments are completed, select "EXIT" to return to the GAME TEST MENU screen.

**GAME OPTIONS screen**



## 7. OPERATION

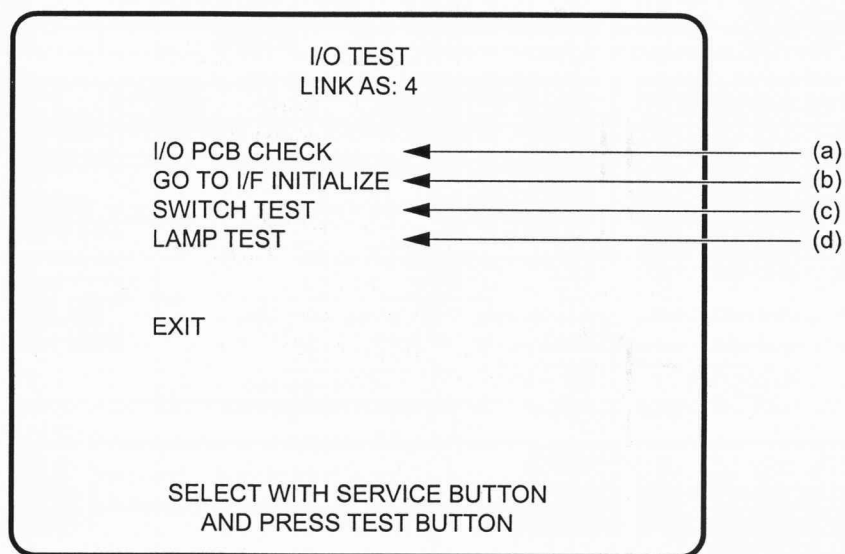
	Item	Description	Default
(a)	LINK AS: X	Indicates the communication status. LINK AS: 4 Proper communication by four units LINK AS: 3 Proper communication by three units LINK AS: 2 Proper communication by two units LINK AS: 1 Proper communication by one unit LINK: OFF Machine in standalone operation, or no communication with other units	
(b)	PCB ID	Set the ID of the PCB. Set "1," "2," "3" and "4" in the units in order from left to right as viewed from the front Setting range: 1 → 2 → 3 → 4 → 1 → ...	1
(c)	TOTAL MACHINE	Set the number of units to be connected for communication. Setting range: 1 → 2 → 3 → 4 → 1 → ...	1
(d)	CARD R/W	Enables or disables the use of the card reader/writer. ON: Uses the card reader/writer. OFF: Does not use the card reader/writer. The title screen displays a message informing that the machine does not accept a card for game play. ALL OFF: Does not use the card reader/writer. The title screen displays a message informing that the machine does not accept a card for game play.	ON
(e)	STEERING POWER	Enables or disables the steering wheel reactive force feature. ON: Provides reactive force to the steering wheel. OFF: Does not provide reactive force to the steering wheel.	ON
(f)	WINS AND REMAINS *	Enables or disables the "remaining as winner" feature for intruder versus game. ON: Enables first place player in intruder versus game to remain as a winner in the game. (First place player continues playing the game alone.) OFF: No player remains as a winner to continue playing. (Game over for all players)	ON

\* In the case the machine units are enabled for communication-linked versus game, the setting of the WINS and REMAINS (f) item entered in the unit whose PCB ID (b) is set to "1" applies to all other connected units.

---

#### 7-4-4 Input/output test of switches (I/O TEST)

- 1** When "I/O TEST" is selected on the GAME TEST MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to enter the selection.
- 4** After all adjustments have been completed, select "EXIT" to return to the GAME

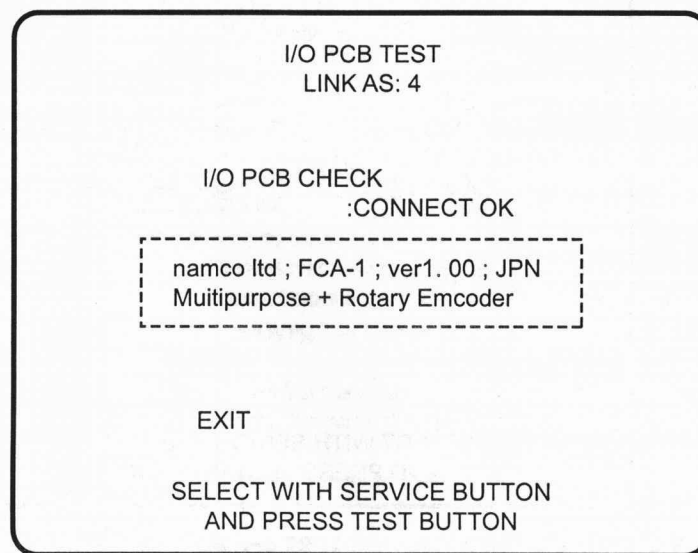


I/O TEST screen

**(a) I/O PCB TEST**

This screen is used to check the FCA PCB connection.

- 1** When "I/O PCB TEST" is selected on the I/O TEST screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to execute a check.
- 4** After all operations have been completed, select "EXIT" to return to the I/O TEST screen.



**I/O PCB TEST screen**

**(b) GO TO [I/F] INITIALIZE**

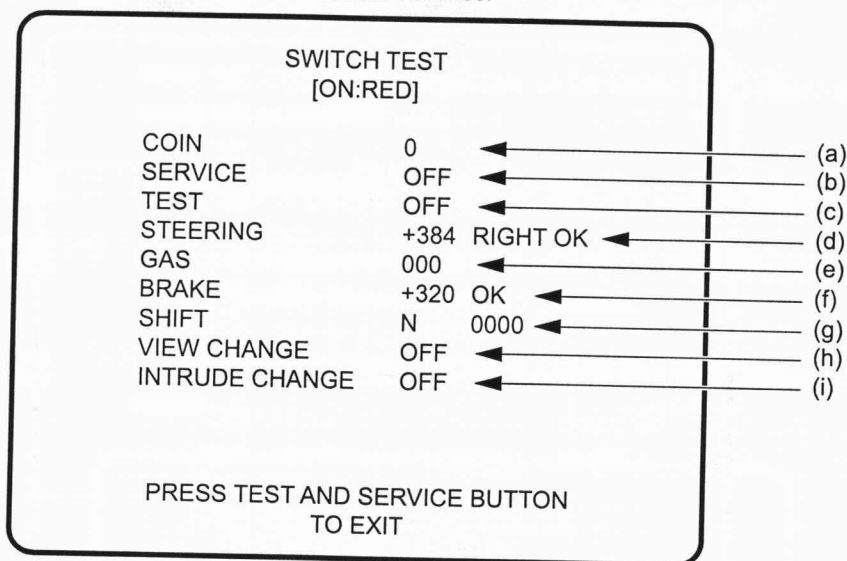
This item is used to initialize the operation section (interface).

When this item is selected, the screen for initializing the potentiometer of the steering wheel, accelerator pedal and brake pedal appears. Use this screen to execute the initialization.

(See P. 76 "7-5-1 Initializing the potentiometers.")

**(c) SWITCH TEST**

This screen is used to test the switches.

**SWITCH TEST screen**

Switches are indicated in red when they are not set to OFF.

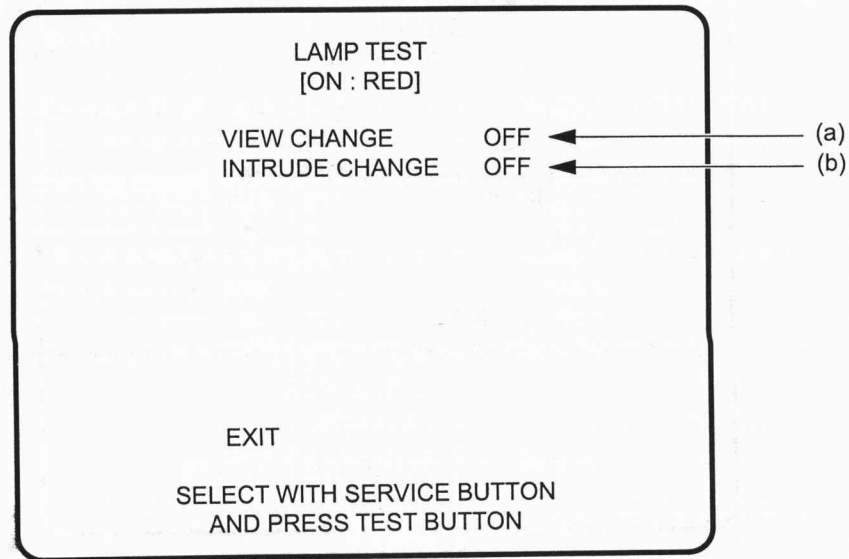
Item	Description
(a) COIN Status of coin switch	Each time sufficient coins for 1 credit are passed through the CashFlow Coin Mechanism, the counter increments by one. 0 to 999 (The counter returns to 0 after 999)
(b) SERVICE Status of service switch	OFF: Normal ON (red): Pressed in
(c) TEST Status of test switch	OFF: Normal ON (red): Pressed in
(d) STEERING Status of steering wheel	Turning the steering wheel to the right changes the numerical value in the positive direction, and turning the steering wheel to the left changes the numerical value in the negative direction. "RIGHT (LEFT) OK" (in green) appears on the screen near the right (left) limit. (* Note)
(e) GAS Status of accelerator pedal (gas pedal)	Depressing the pedal changes the numerical value in the positive direction. "OK" (in green) appears on the screen near the setting limit. (* Note)
(f) BRAKE Status of brake pedal	Depressing the pedal changes the numerical value in the positive direction. "OK" (in green) appears on the screen near the setting limit. (* Note)
(g) SHIFT Status of 6-Speed gear shift	N: Normal 1 to 6 (red): Displays a numerical value according to the shift position.
(h) VIEW CHANGE Status of view change switch	OFF: Normal ON (red): Pressed in
(i) INTRUDE CHANGE Status of intrusion selection switch	OFF: Normal ON (red): Pressed in

\* If "OK" is not displayed when the steering wheel/pedal is turned/depressed fully, it is necessary to initialize the steering or pedal. (See P. 76 "7-5-1 Initializing the potentiometers.")

■ To return to the I/O TEST screen, hold down the Service switch and press the Test switch at the same time.

(d) LAMP TEST

This screen is used to test the lamps.



LAMP TEST screen

	Item	Description
(a)	VIEW CHANGE	When "ON" is selected, the built-in lamp of the view change switch lights.
(b)	INTRUDE CHANGE	When "ON" is selected, the built-in lamp of the intrusion selection switch lights.

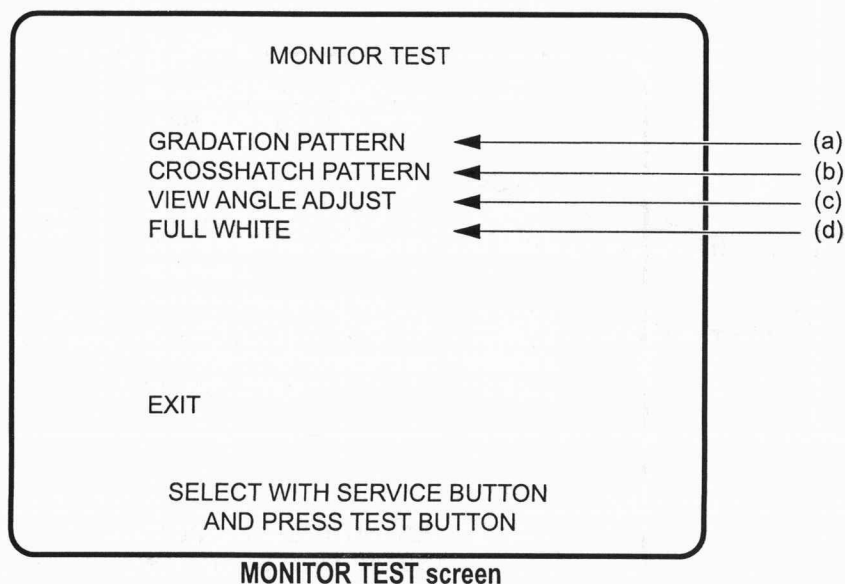
■ To return to the I/O TEST screen, select "EXIT" and apply.



### 7-4-5 Monitor test (MONITOR TEST)

This screen is used to make various monitor adjustments.

- 1** When "MONITOR TEST" is selected on the GAME TEST MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to display the pattern screen. To exit the pattern screen, press the Test switch.
- 4** After all adjustments have been completed, select "EXIT" to return to the MENU screen.

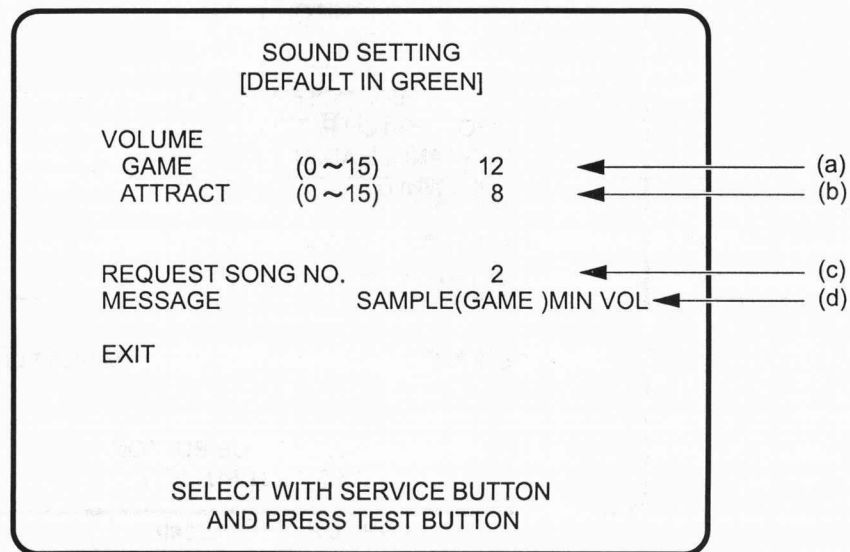


	Item	Description
(a)	GRADATION PATTERN	Displays a gradation pattern.
(b)	CROSSHATCH PATTERN	Displays a cross-hatch pattern.
(c)	VIEW ANGLE ADJUST	Displays a view angle adjustment screen.
(d)	FULL WHITE	Displays a white screen.

### 7-4-6 Sound test (SOUND SETTING)

This screen is used to adjust the sound level and conduct a stereo check.

- 1** When "SOUND SETTING" is selected on the MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to display the pattern screen. To exit the pattern screen, press the Test switch.
- 4** After all adjustments have been completed, select "EXIT" to return to the MENU screen.



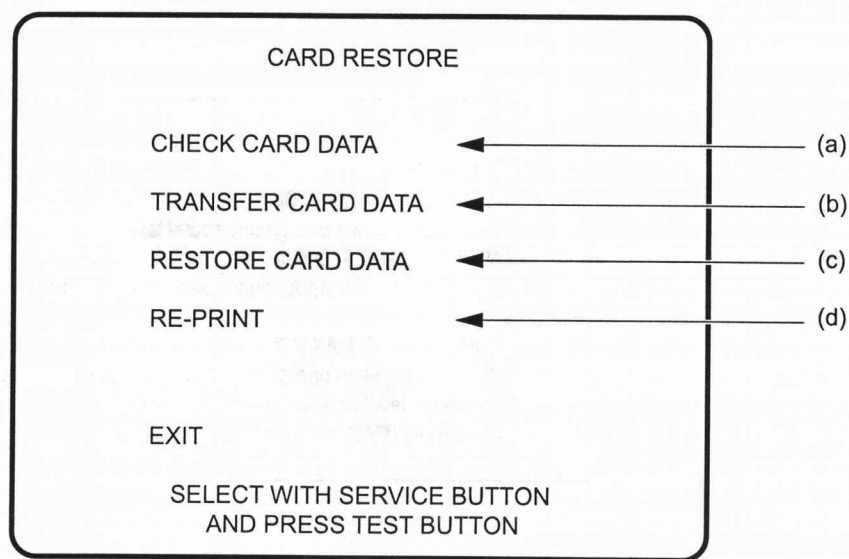
**SOUND SETTING screen**

	Item	Description	Default
(a)	VOLUME GAME	Setting of sound level in game mode Setting range: 0 (min.) to 15 (max.) Each pressing of the Service switch increments the numerical value. If the Service switch is pressed when the setting is at 15 (max.), the setting returns to 0.	12
(b)	VOLUME ATTRACT	Setting of sound level in Attract mode Setting range: 0 (min.) to 15 (max.) Each pressing of the Service switch increments the numerical value. If the Service switch is pressed when the setting is at 15 (max.), the setting returns to 0.	8
(c)	REQUEST SONG NO.	0: No sound 1: Stereo test 2: Sample music in game mode Reproduces sound at the level set for game mode 3: Sample music in Attract mode Reproduces sound at the level set for Attract mode	0
(d)	MESSAGE	Displays the name of music selected by REQUEST. 0: NO SONG 1: LEFT RIGHT LEFT + RIGHT 2: SAMPLE (GAME) MIN VOL Level of sound when background sound level in game mode set at LOW SAMPLE (GAME) STD VOL Level of sound when background sound level in game mode set at STANDARD SAMPLE (GAME) MAX VOL Level of sound when background sound level in game mode set at HIGH * The sound level increases every five seconds. 3: SAMPLE (ATTRACT)	

### 7-4-7 Card restoration (CARD RESTORE)

This screen is used mainly to restore data recorded on a card.

- 1** When "CARD RESTORE" is selected on the MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to enter the selection.
- 4** After all adjustments have been completed, select "EXIT" to return to the MENU screen.



**CARD RESTORE screen**

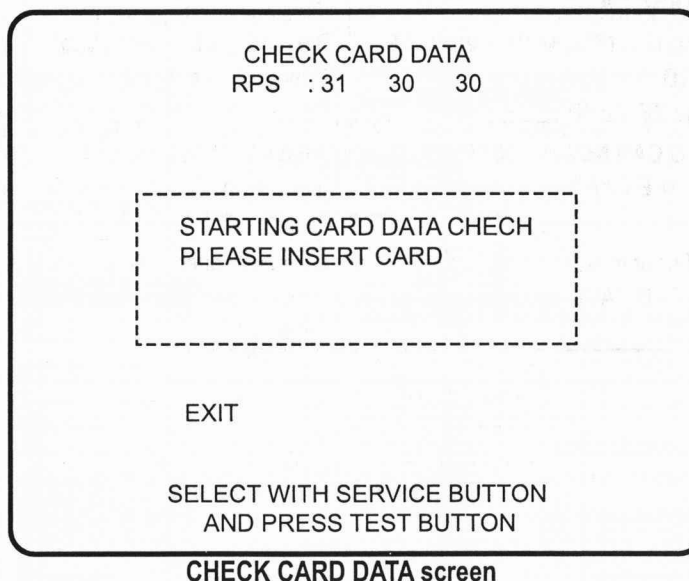
	Item	Description
(a)	CHECK CARD DATA	Checks whether the data on a card is damaged or not.
(b)	TRANSFER CARD DATA	Transfers the data on a card to a new card, and reprints all the information on the new card. Also deletes data from the old card.
(c)	RESTORE CARD DATA	Writes the data stored in the backup memory to a card, and reprints all the information on the card.
(d)	RE-PRINT	Reads the data from a card and reprints all the information on the card.

**a) Card data check (CHECK CARD DATA)**

This screen is used to check the data on a card.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

- 1** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 2** To return to the CARD RESTORE screen, select "EXIT" and press the Test switch.



The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.



- Do not open the card reader/writer while card data is being checked. Opening the card reader/writer during a card data check can cause irreversible damage to the card data to disallow data restoration.



## 7. OPERATION

Message on screen		Procedure
1	<b>STARTING CARD DATA CHECK PLEASE INSERT CARD</b>	Insert the card to be checked into the card slot. The card data check operation starts automatically.
2	<b>NOW CHECKING PLEASE WAIT A MOMENT</b>	The card data check operation is in process. Wait until the check operation is completed.
3 - 1	<b>THIS CARD IS A MAXI 3 GAME CARD PLEASE TAKE CARD</b>	The card is for this game machine. Remove the card.
3 - 2	<b>THIS CARD IS A MAXI 2 GAME CARD PLEASE TAKE CARD</b>	The card is for Wangan Midnight Maximum Tune 2, and the data is transferable. Remove the card.
3 - 3	<b>THIS CARD IS A USED GAME CARD PLEASE TAKE CARD</b>	The card is a used card and no longer valid. Remove the card.
3 - 4	<b>THIS CARD IS A DISCARDED VEHICLE DATA CARD PLEASE TAKE CARD</b>	The card is a Discarded Vehicle card and still valid. Remove the card.
3 - 5	<b>THIS CARD CAN NOT BE USED PLEASE TAKE CARD</b>	The card data is damaged, or the card is not for this game machine (including nontransferable card of old game version).
4	(Display of error message) <b>PLEASE TAKE CARD</b>	In the case of error generation, error description is displayed. Remove the card.

**(b) Card data transfer (TRANSFER CARD DATA)**

This screen is used to transfer the data on a card to a new card and also to reprint all the information on the new card. Use of this function also deletes the data from the old card and invalidates the card.

Data can be transferred from the following types of cards.

- Card used for Wangan Midnight Maximum Tune 3
- Valid Discarded Vehicle card for Wangan Midnight Maximum Tune 3

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

- 1** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 2** To return to the CARD RESTORE screen, select "EXIT" and press the Test switch.

TRANSFER CARD DATA  
RPS : 31 30 30

!!! CAUTION !!!  
ONCE DATA TRANSFER BEGINS,  
OLD CARD DATE WILL BE DELETED

STARTING CARD DATA TRANSFER  
PLEASE INSERT CARD

EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

**TRANSFER CARD DATA screen**

The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.



- Do not open the card reader/writer while card data is being checked. Opening the card reader/writer during a card data check can cause irreversible damage to the card data to disallow data restoration.

## 7. OPERATION

Message on screen		Procedure
1	<b>STARTING CARD DATA TRANSFER PLEASE INSERT CARD</b>	Insert a card from which data is to be transferred. The card data transfer operation starts automatically.
2 - 1	<b>CARD R/W CARD EMPTY PLEASE TAKE CARD</b>	There is no card in the card stacker. Remove the card.
2 - 2	<b>NOW LOADING CARD DATA PLEASE WAIT A MOMENT</b>	When the card check result indicates that the card can be used for this game machine, card data is read. The old card becomes a used card, and "USED" will be printed on the card. Wait until the data reading is completed. If the card is removed before the data reading ends, an error will be generated.
2 - 3	<b>THIS CARD CAN NOT BE USED PLEASE TAKE CARD</b>	If the card check result indicates that the card cannot be used for this game machine, the card data transfer operation will be aborted. Remove the card.
3	<b>THIS CARD LOAD COMPLETED PLEASE TAKE CARD</b>	The card data has been read successfully. Remove the card.
4	<b>NOW WRITING DATA PLEASE WAIT A MOMENT</b>	A new card is taken out of the card stacker and data is being written. Information will be also printed on the card. Wait until the data writing is completed.
5	<b>DATA TRANSFER COMPLETED PLEASE TAKE CARD</b>	The card data transfer operation has been completed. Remove the Card.
6	(Display of error message) <b>PLEASE TAKE CARD</b>	In the case of error generation, error description is displayed. Remove the card.

**(c) Card data restoration (RESTORE CARD DATA)**

This screen is used to restore card data.

The backup memory of the machine holds the data of five cards that resulted in data write failure. Be sure to use the machine in which the card data was damaged. Note that, if the required data is not saved in the backup memory, the card data cannot be restored.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

- 1** Using the Service switch, select the data of the card to be restored, and press the Test switch.
- 2** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 3** To return to the CARD RESTORE screen, select "EXIT" and press the Test switch.

RESTORE CARD DATA  
RPS : 31 30 30

BACKUP DATA 1: 2006/05/31 08:15 Kobayan BNR32  
 BACKUP DATA 2: 2006/05/24 02:05 GDB-C GDB-C  
 BACKUP DATA 3: NO DATE  
 BACKUP DATA 4: NO DATE  
 BACKUP DATA 5: NO DATE

STARTING CARD DATA RESTORE  
PLEASE INSERT CARD

EXIT

VERIFY OK 1: 2007/01/19 20:15 ★Maeda★ RSR  
 VERIFY OK 1: 2007/01/19 13:05 CE9A CT9A-8  
 VERIFY OK 1: 2007/01/19 08:15 Nagamatsu FD3S  
 VERIFY OK 1: 2007/01/19 02:05 AW20 SW20  
 BACKUP DATA 5: NO DATE

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

(a) →

(b) →

**RESTORE CARD DATA screen**

- (a) This section lists the card names and vehicle models of five cards which resulted in data write failure.
- (b) This section lists the card names and vehicle models of the most recent five cards which resulted in successful data write.



- **Do not open the card reader/writer while card data is being checked.**  
Opening the card reader/writer during a card data check can cause irreversible damage to the card data to disallow data restoration.

The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.

## 7. OPERATION

Message on screen		Procedure
2 - 1	<b>BACKUP DATA IS NOT AVAILABLE CARD DATA CAN NOT RESTORE</b>	The card data restoration operation stops when "NO DATA" is selected.
2 - 2	<b>STARTING CARD DATA RESTORE PLEASE INSERT CARD</b>	The card data restoration operation starts when backup data is available. Insert the card.
3 - 1	<b>THIS CARD CAN NOT BE WRITTEN PLEASE TAKE CARD</b>	If the card check result indicates that the card ID of the inserted card is different from the card ID of the data to be written, the above message appears and the card data restoration operation will be aborted. Remove the card.
3 - 2	<b>NOW WRITING DATA PLEASE TAKE CARD</b>	When the card check result indicates that the card ID of inserted card is the same as the card ID of the data to be written or the card is a new card, data is written to the card and information is printed on the card.
4	<b>CARD DATA RESTORE COMPLETED PLEASE TAKE CARD</b>	The card data restoration operation has been completed. Remove the card.
5	(Display of error message) <b>PLEASE TAKE CARD</b>	In the case of error generation, description error is displayed. Remove the card.

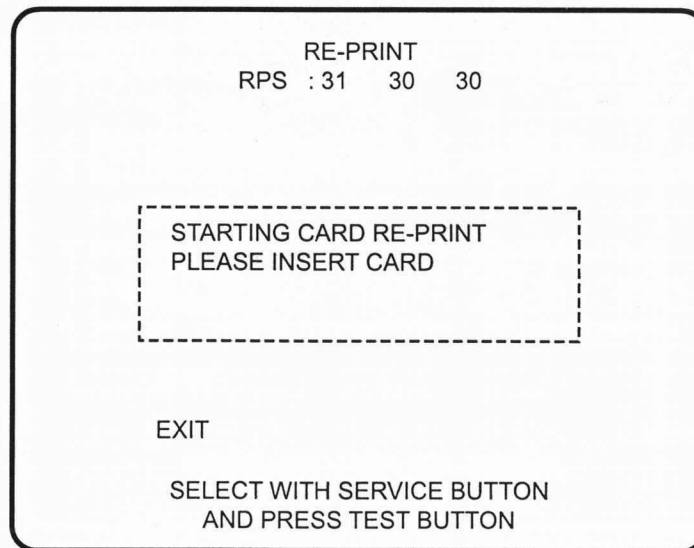
**(d) Card data reprint (RE-PRINT)**

This screen is used to reprint information on a card.

Note that information cannot be reprinted if the card data is damaged.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

- 1** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 2** To return to the CARD RESTORE screen, select "EXIT" and press the Test switch.



The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.



- Do not open the card reader/writer while card data is being checked. Opening the card reader/writer during a card data check can cause irreversible damage to the card data to disallow data restoration.

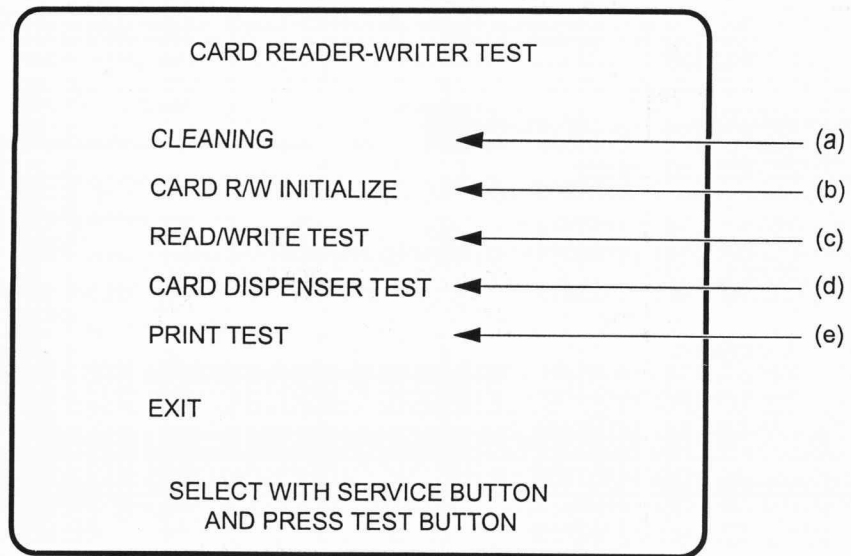


## 7. OPERATION

	Message on screen	Procedure
1	<b>STARTING CARD RE-PRINT PLEASE INSERT CARD</b>	Insert the card to be reprinted.
2 - 1	<b>THIS CARD CAN NOT BE WRITTEN PLEASE TAKE CARD</b>	If the card check result indicates that the card cannot be used for this game machine, the re-print operation will be aborted. Remove the card.
2 - 2	<b>NOW PRINTING PLEASE WAIT A MOMENT</b>	If there is no problem in the card data, printed information is deleted, then information will be reprinted according to the card data.
3	<b>CARD DATA RE-PRINT COMPLETED PLEASE TAKE CARD PLEASE CHECK CARD PRINTING</b>	The card data reprint operation has been completed. Remove the card, and make sure that information is printed correctly.
4	(Display of error message) <b>PLEASE TAKE CARD</b>	If an error occurs during reprinting, error description is displayed. Remove the card.

### 7-4-8 Card reader/writer test (CARD READER-WRITER TEST)

- 1** When "READER-WRITER TEST" is selected on the MENU screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch to enter the selection.
- 4** After all adjustments have been completed, select "EXIT" to return to the MENU screen.



**CARD READER-WRITER TEST screen**

	Item	Description
(a)	CLEANING	Cleans the card reader/writer.
(b)	CARD R/W INITIALIZE	Initializes the card reader/writer.
(c)	READ/WRITE TEST	Performs the read/write test of the card reader/writer.
(d)	CARD DISPENSER TEST	Performs the dispenser test of the card reader/writer.
(e)	PRINT TEST	Performs the print test of the card reader/writer.

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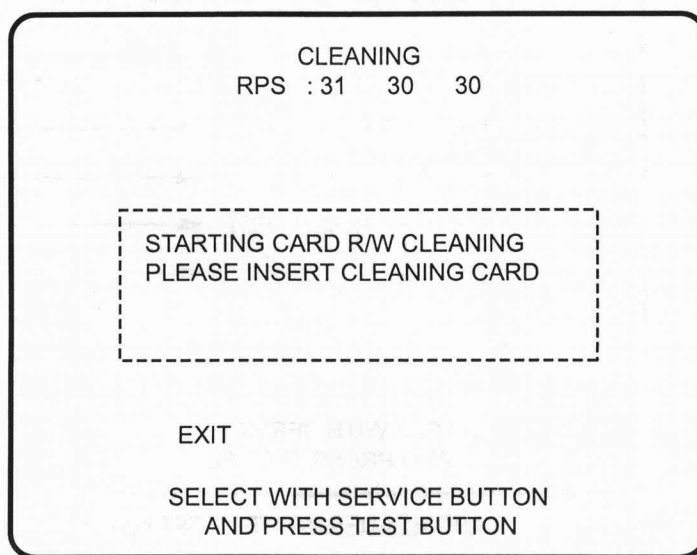
**(a) Cleaning (CLEANING)**

This screen is used to clean the heads and rollers in the card reader/writer.

Prepare a fresh cleaning card.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

- 1** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 2** To return to the CARD READER-WRITER TEST screen, select "EXIT" and press the TEST switch.



**CLEANING screen**

The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.

	Message on screen	Procedure
1	<b>STARTING CARD R/W CLEANING</b> <b>PLEASE INSERT CARD</b>	The card reader/writer cleaning operation starts automatically. Insert a fresh cleaning card.
2	<b>NOW CLEANING</b> <b>PLEASE WAIT A MOMENT</b>	The cleaning operation is in process. Wait until the cleaning operation is completed.
3	<b>CLEANING COMPLETED</b> <b>PLEASE REMOVE CLEANING CARD</b>	The cleaning operation has been completed. Remove the cleaning card.
4	(Display of error message) <b>PLEASE TAKE CARD</b>	If an error occurs during cleaning, error description is displayed. Remove the cleaning card.

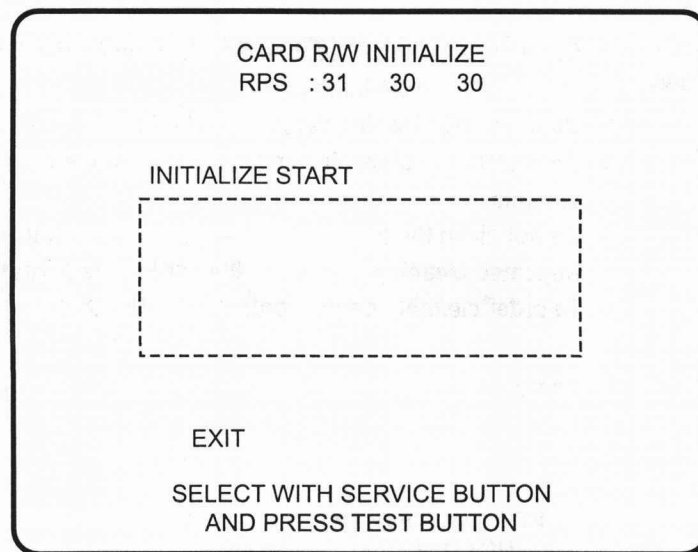


- Once the bag is opened, use the cleaning card as soon as possible.
- Do not reuse a cleaning card.
- Do not bring cleaning cards close to flames.
- Do not leave or store cleaning cards in a high-temperature place or in direct sunlight.
- Do not clean the heads immediately a second time.  
Repeated cleaning can cause the card reader/writer to generate an error.
- To order cleaning cards, contact your distributor.

**(b) Card reader/writer initialization (CARD R/W INITIALIZE)**

This screen is used to initialize the card reader/writer.

- 1** Using the Service switch, select "INITIALIZE START" and press the Test switch.
- 2** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 3** To return to the CARD READER-WRITER TEST screen, select "EXIT" and press the TEST switch.



**CARD R/W INITIALIZE screen**

The section bordered with a dotted line shows one of the messages shown below or an error message in the case of error generation.

Message on screen		Procedure
2	NOW INITIALIZING PLEASE WAIT A MOMENT	The card reader/writer initialization is in process. Wait until the initialization is completed.
3 - 1	INITIALIZATION COMPLETED	The initialization has been completed.
3 - 2	INITIALIZATION FAILED	The initialization has failed. Perform the initialization again.

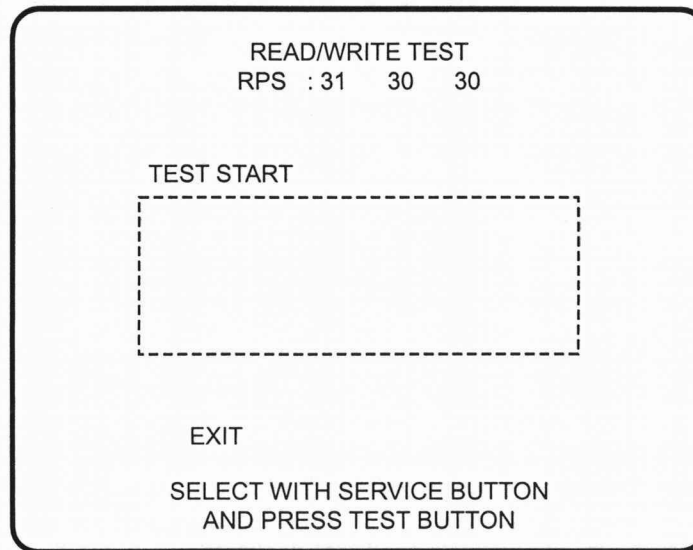
**(c) Read/write test (READ/WRITE TEST)**

This screen is used to conduct the data read and write test for the card reader/writer.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

This test uses a new card in the card stacker. The card dispensed after the test is written with dummy data. This card cannot be used to play the game.

- 1** Using the Service switch, select "TEST START" and press the Test switch.
- 2** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 3** To return to the CARD READER-WRITER TEST screen, select "EXIT" and press the TEST switch.



**READ/WRITE TEST screen**

The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.



## 7. OPERATION

Message on screen		Procedure
2 - 1	<b>STARTING CARD R/W EMPTY</b>	If there is no card in the card stacker, the test stops. Fill the card stacker with cards, and select "TEST START" again.
2 - 2	<b>STARTING CARD READ-WRITE TEST NOW EJECTING CARD</b>	The test starts. A card is taken out of the card stacker.
3	<b>NOW WRITING AND LOADING DATA PLEASE WAIT A MOMENT</b>	After dummy data is written to the card, the data is read and checked. Wait until the data check is completed.
4 - 1	<b>READ-WRITE TEST COMPLETED PLEASE TAKE CARD</b>	The read/write test has been completed successfully. Remove the card.
4 - 2	(Display of error message) <b>PLEASE TAKE CARD</b>	If an error occurs during the operation, error description is displayed. Remove the card.

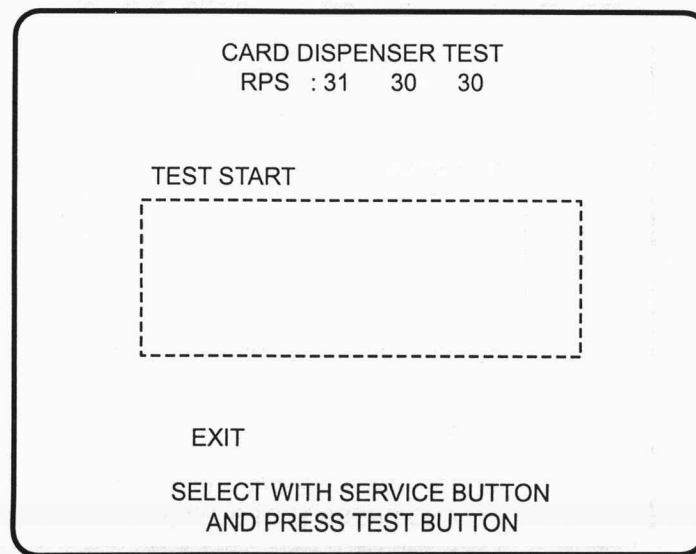
**(d) Card dispenser test (CARD DISPENSER TEST)**

This screen is used to test the card dispensing operation of the card dispenser.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

The card dispensed after the test is not written with data or printed so it can be reused.

- 1** Using the Service switch, select "TEST START" and press the Test switch.
- 2** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 3** To return to the CARD READER-WRITER TEST screen, select "EXIT" and press the TEST switch.



**CARD DISPENSER TEST screen**

The section bordered with a dotted line shows one of the messages shown below or an error message in the case of error generation.

	Message on screen	Procedure
2 - 1	<b>STARTING CARD R/W EMPTY</b>	If there is no card in the card stacker, the test stops. Fill the card stacker with cards, and select "TEST START" again.
2 - 2	<b>STARTING CARD DISPENSER TEST NOW EJECTING CARD</b>	The card dispenser test starts. A card is taken out of the card dispenser.
3	<b>CARD DISPENSER TEST COMPLETED PLEASE TAKE CARD</b>	The card dispensing test has been completed successfully. Remove the card.
4 - 1	(Display of error message) <b>PLEASE TAKE CARD</b>	If an error occurs during the operation, error description is displayed. Remove the card.

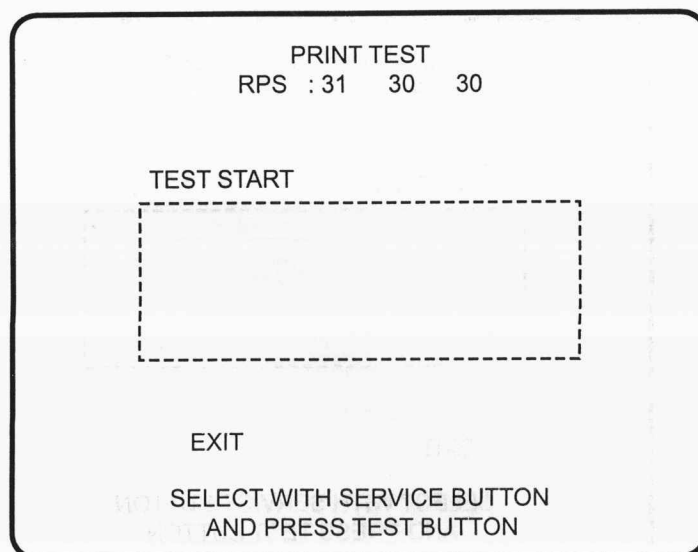
**(e) Print test (PRINT TEST)**

This screen is used to conduct the print test for the card reader/writer.

If an error occurs during the operation, refer to "8-2-8 (2) Errors related to the card reader/writer" on page 96.

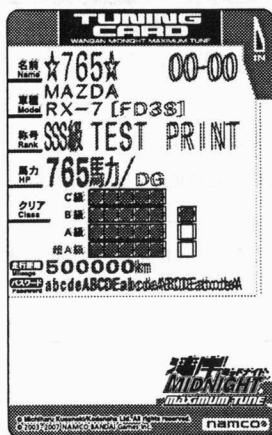
This test uses a new card in the card stacker. The card dispensed after the test is written with dummy data. This card cannot be used to play the game.

- 1** Using the Service switch, select "PRINT START" and press the Test switch.  
A message appears on the screen to inform the start of the print test.
- 2** Follow the instructions displayed on the screen.  
While the card reader/writer is operating, the display cannot be changed to another screen.
- 3** To return to the CARD RESTORE screen, select "EXIT" and press the Test switch.



**PRINT TEST screen**

The section bordered with a dotted line shows one of the messages shown on the next page or an error message in the case of error generation.



**Print sample**

- ① Name section: 765
- ② Card no.: (randomly selected)
- ③ Vehicle model: (randomly selected)
- ④ Title: (randomly selected rank) and TEST PRINT
- ⑤ Horsepower: 765 HP/DG
- ⑥ Stage cleared in Story Mode:  
All marks. Number of completed laps is randomly printed.
- ⑦ Travel distance: (Random number) km
- ⑧ Password: Randomly selected 26 characters that can be used in password

Message on screen		Procedure
2 - 1	CARD R/W CARD EMPTY	If there is no card in the card stacker, the test stops. Fill the card stacker with cards, and select "TEST START" again.
2 - 2	STARTING CARD R/W PRINT TEST NOW EJECTING CARD	The print test starts. A card is taken out of the dispenser and information is printed.
3	NOW PRINTING PLEASE WAIT A MOMENT	The printing operation is in process. Wait until the printing is completed.
4	PRINTING TEST COMPLETED PLEASE TAKE CARD	The print test has been completed successfully. Remove the card.
5	(Display of error message) PLEASE TAKE CARD	If an error occurs during the operation, error description is displayed. Remove the card.

**7-4-9 Setting the business closing time (CLOSE SETTING)**

- This screen is used to set the arcade closing time for each day of the week.
- If the power turns off while the game is being played, the card will not be discharged. According to the settings entered on this screen, the message notifying that the machine does not accept a card appears on the Attract screen for 45 minutes from 15 minutes before the set time to 30 minutes after the set time, and the machine disallows the use of a card during this period.



- If a player has been playing using a card before the close setting time, after the close setting time is reached, he/she cannot continue playing by selecting "Continue" or by winning in the versus game.

- 1** When "CLOSE SETTING" is selected on the MENU screen, the following screen appears.
- 2** Using the Service switch, select a day of the week and press the Test switch. The hours indication for that day of the week blinks. Using the Service switch, set hours (24-hour system, 1-hour step). After setting hours, press the Test switch. The minutes indication blinks. Using the Service switch, set minutes (15-minute step).
- 3** After entering all the settings, select "EXIT" to return to the GAME TEST MENU screen.

CLOSE SETTING  
[DEFAULT IN GREEN]

CLOCK	2007/07/20	FRI	12:34:56
SUN	:	OFF	
MON	:	23:00	22:45 ~ 23:30
TUE	:	23:00	22:45 ~ 23:30
WED	:	23:00	22:45 ~ 23:30
THU	:	23:00	22:45 ~ 23:30
FRI	:	0:00	23:45 ~ 0:30
SAT	:	OFF	
EXIT			

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

Time at which CLOSE SETTING becomes effective.

Set closing time

**CLOSE SETTING screen**

---

### 7-4-10 Displaying game data (BOOKKEEPING)

This screen displays various game data.

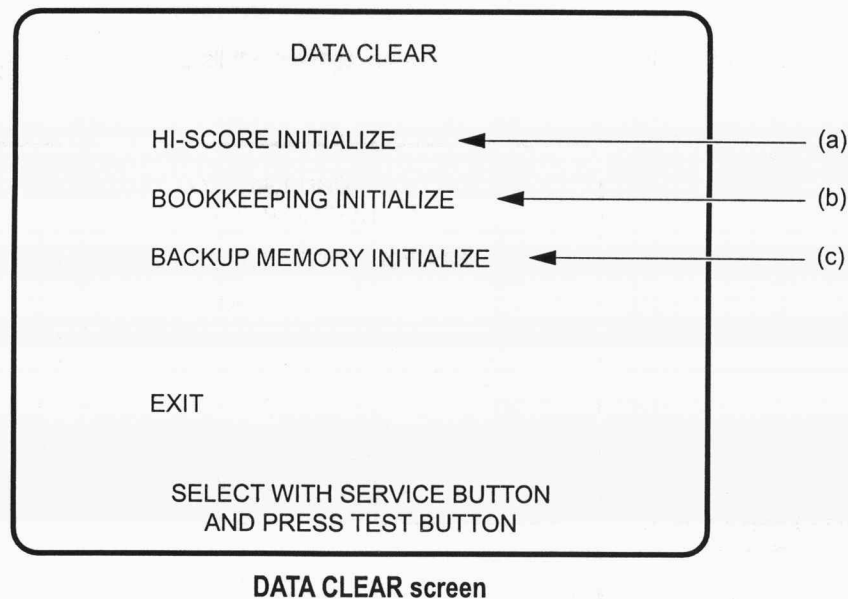
- 1** Select "BOOKKEEPING" on the MENU screen, and press the Test switch. The BOOKKEEPING screen appears.
- 2** Game data will not be erased even when the power switch is turned off. To delete data, execute "BOOKKEEPING INITIALIZE" or "BACKUP MEMORY INITIALIZE" on the DATA CLEAR screen.  
When "BOOKKEEPING INITIALIZE" is executed, only the bookkeeping data is initialized.
- 3** To return to the MENU screen, select "EXIT and press the TEST switch.



### 7-4-11 Clearing data (DATA CLEAR)

This screen is used to clear individual backup data.

- 1** When "DATA CLEAR" is selected on the MENU screen, the following screen appears.
- 2** Using the Service switch, select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch. The screen shows "NO" and YES." When "YES" is selected and the Test switch is pressed, the selected data is cleared and the default setting is restored.
- 4** After the data initialization has been completed, select "EXIT" to return to the GAME TEST MENU screen.



	Item	Description
(a)	HI-SCORE INITIALIZE	<p>Initializes the following data stored in the backup memory:</p> <ul style="list-style-type: none"> <li>• Time attack results rankings in individual unit</li> <li>• Information of leg time of the highest-score player in Time Attack game</li> </ul> <p>NO (Does not initialize) YES (Initializes)</p>
(b)	BOOKKEEPING INITIALIZE	<p>Initializes the following data stored in the backup memory:</p> <ul style="list-style-type: none"> <li>• Game play data</li> </ul> <p>NO (Does not initialize) YES (Initializes)</p>
(c)	BACKUP MEMORY INITIALIZE	<p>Initializes the above two types of data and the following data stored in the machine:</p> <ul style="list-style-type: none"> <li>• Number of card uses (for cleaning)</li> <li>• Coin Options settings</li> <li>• Game Options settings</li> <li>• I/O Initialize settings</li> <li>* Sound settings</li> <li>• Card backup data (for data restoration)</li> </ul> <p>NO (Does not initialize) YES (Initializes)</p>

## 7-4-12 Others (OTHERS)

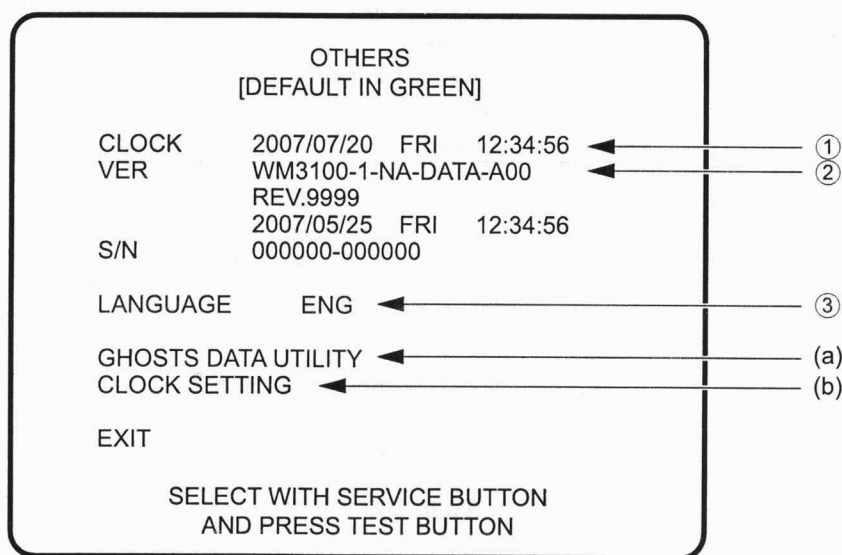
This screen displays the game software version.

When "OTHERS" is selected on the MENU screen, the following screen appears.

Press the Service switch and select an item. The selected item blinks.

Select a desired item and press the Test switch to enter the selection.

After all adjustments have been completed, select "EXIT" to return to the MENU screen.



**OTHERS screen**

	Item	Description
①	CLOCK	Displays the current time and the day of the week set in the internal clock.
②	VER	Displays the software version.
③	LANGUAGE	Sets the language.
(a)	GHOSTS DATA UTILITY	Exchanges the data of doubles in the Player's Double Versus Game Mode via USB memory stick.
(b)	CLOCK SETTING	Used to adjust the internal clock.

**(a) GHOSTS DATA UTILITY**

This screen is used to operate the drive data file for the Player's Double Versus Game Mode.

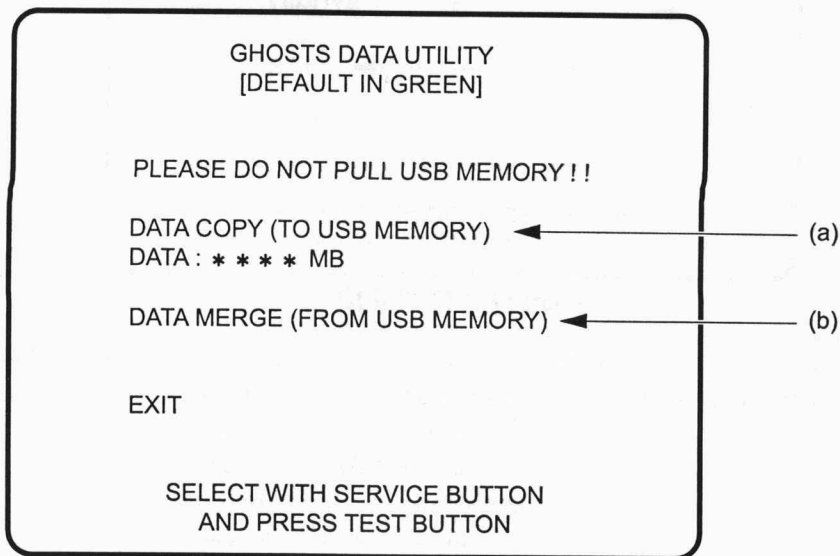
Drive data for the Player's Double Versus Game Mode can be transferred to game units not connected by communication cable or to game units installed in different locations. (up to data of 2,000 persons)

To transfer data requires a USB memory stick (sold separately) with a capacity of more than the size of the drive data to be transferred. A USB memory stick can be purchased at a personal computer store.

- 1** When "GHOSTS DATA UTILITY" is selected on the OTHERS screen, the following screen appears.
- 2** Using the Service switch, select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch. The screen shows "NO" and YES." When "YES" is selected and the Test switch is pressed, the selected item will be executed.  
The progress status is displayed during the execution of the process. When the process is being executed, other operations cannot be entered. Wait until the process is completed.
- 4** After all operations have been completed, select "EXIT" to return to the OTHERS screen.



- While drive data is being copied, do not turn off the power switch or disconnect the USB memory stick. Doing so can cause irreversible damage to the drive data.



**GHOSTS UTILITY DATA screen**

	Item	Description
(a)	DATA COPY (TO USB MEMORY) DATA: * * * * MB "**** MB" indicates the size of the drive data file stored on the HDD.	Copies the drive data file for Player's Double Versus Game Mode to a USB memory stick. NO (Does not copy data) YES (Copies data)
(b)	DATA MERGE (FROM USB MEMORY)	Merges the drive data file for Player's Double Versus Game Mode in the USB memory stick with that in the HDD. If the data exceeds the maximum allowed capacity (data of 2,000 persons), the oldest data will be deleted to accommodate new data. NO (Does not merge data) YES (Merges data)

## 7. OPERATION

If an error is generated, the operation in process will be aborted and one of the following messages will appear.

	Item	Description
(a)	USB MEMORY IS FULL	The copy destination USB memory stick is full and cannot store any more data.
(b)	USB MEMORY IS NOT FOUND	The USB port is not connected with a valid USB memory stick.
(c)	IT IS NO TO DATA IN THIS GAME	The data stored in the USB memory stick is not for this game.
(d)	AN UNKNOWN ERROR OCCURRED	An error of unknown cause has occurred.

**(b) CLOCK SETTING**

This screen is used to set the internal clock.

- 1** When "CLOCK SETTING" is selected on the OTHERS screen, the following screen appears.
- 2** Press the Service switch and select an item. The selected item blinks.
- 3** Select a desired item and press the Test switch. This allows the change of the setting of the selected item.
- 4** After all settings have been entered, select "SET" to save the settings.

After the settings have been stored, select "EXIT" to return to the OTHERS screen.

**CLOCK SETTING**  
[DEFAULT IN GREEN]

CLOCK    2006/05/31   FRI    22:50:12   ← (a)

YEAR    :    06            +2000   ← (b)

MONTH   :    12           ← (c)

DAY     :    04           ← (d)

HOURL   :    08           ← (e)

MINUTE   :    15           ← (f)

SET      ← (g)

EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

**CLOCK SETTING screen**

	Item	Description
(a)	CLOCK	Displays the current time and the day of the week set in the internal clock. (non-selectable)
(b)	YEAR	Used to set the "year" indication of the internal clock. Setting range of "year": 00 to 99
(c)	MONTH	Used to set the "month" indication of the internal clock. Setting range of "month": 01 to 12
(d)	DAY	Used to set the "date" indication of the internal clock. Setting range of "date": 01 to 31
(e)	HOURL	Used to set the "hours" indication of the internal clock. Setting range of "hours": 00 to 23
(f)	MINUTE	Used to set the "minutes" indication of the internal clock. Setting range of "minutes": 00 to 59
(g)	SET	Applies the clock settings. Enters the "year" to "minutes" setting values to the internal clock.



## 7-5 Adjustments after parts replacement (INITIALIZE)



- Be sure to perform the following initialization process after replacing the Game PC Board, Steering Assy potentiometer, or A Pedal Assy/B Pedal Assy potentiometers, or after initializing the backup data. The game will not play properly without executing the initialization.
- After initializing potentiometers, conduct the switch test (see P. 43 "7-4-4 Input/output test of switches (I/O TEST)") to make sure that "OK" is shown when the steering wheel, accelerator pedal, and brake pedal are operated.

### 7-5-1 Initializing the potentiometers

#### (1) I/F INITIALIZE

I/F INITIALIZE

STEERING	+000
GAS	000
BRAKE	000

KEEP HANDLEBAR CENTER AND  
PRESS SERVICE TO STORE THE RESULT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

#### EXAMPLE OF I/F INITIALIZE screen

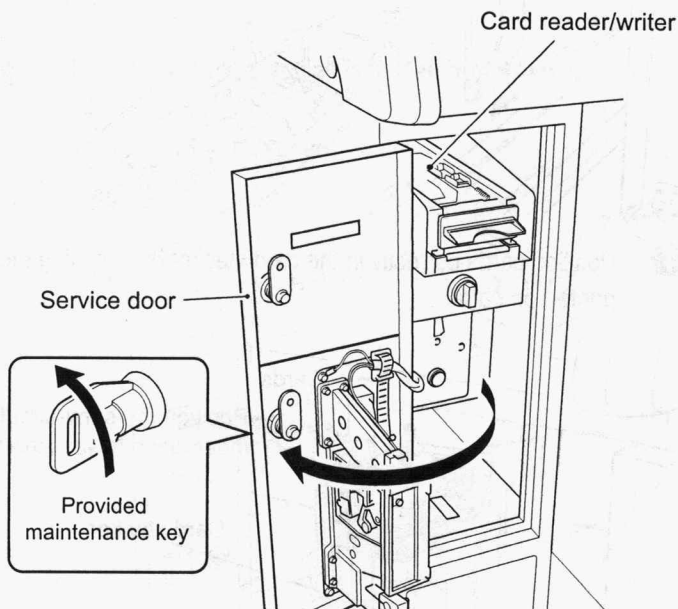
- 1** While holding down the Service switch, press the Test switch.  
(\* The I/F INITIALIZE screen can be displayed from the Test mode. See P. 43 "7-4-4 Input/output test of switches (I/O TEST).")
- 2** Set the steering wheel to the center position, release your hands from the steering wheel, and also release your feet from the accelerator and brake pedals.  
(\* Initialization will not be completed successfully if the steering wheel or accelerator/brake pedal is moved or operated.)
- 3** In this condition, press the Service switch.  
The potentiometers will be initialized.
- 4** After the initialization is completed, the screen for the switch test (see P. 43 "7-4-4 Input/output test of switches (I/O TEST)") appears. Turn the steering wheel fully to the right and then to the left, and make sure "RIGHT OK" and "LEFT OK" are displayed on the screen.
- 5** Fully depress the accelerator pedal, then the brake pedal. Make sure that "OK" is displayed each time.
- 6** While holding down the Service switch, press the Test switch to return to the I/O TEST screen.

## 7-6 Adding cards

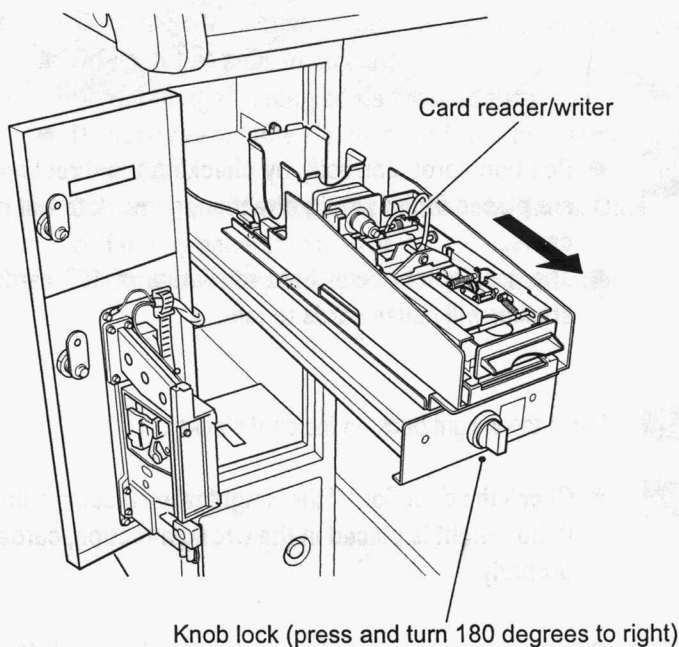


- When adding cards, make sure that the card reader/writer is not in operation.
- Do not add cards if the game is being played, or the test mode is being operated. In those modes, the card reader/writer may operate unexpectedly.

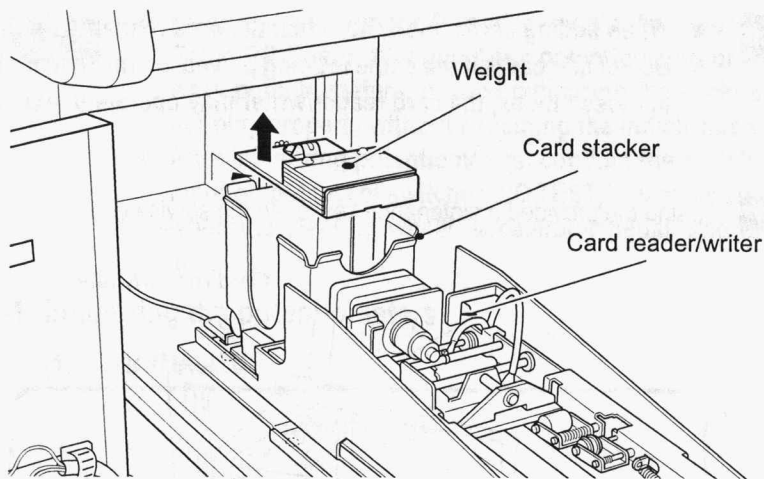
- 1** Using the provided maintenance key, open the service door.



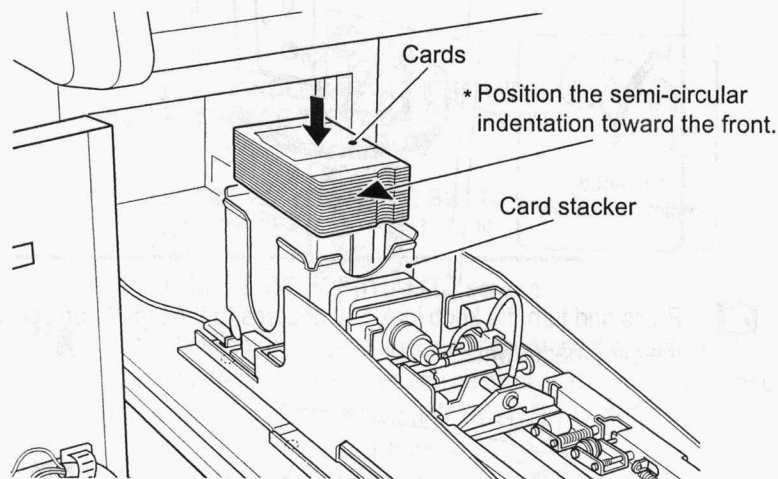
- 2** Press and turn the knob lock 180 degrees to the right to unlock, and then slowly pull out the card reader/writer.



- 3** Take out the weight from the card stacker.



- 4** Position cards correctly in the card stacker by checking the direction of the arrows printed on cards.



- Position cards correctly by checking the direction of the arrow. If cards are placed in the wrong direction, game data will not be recorded on the cards.
- The card stacker can hold maximum of 100 cards. Overfilling the card stacker will cause cards to jam.

- 5** Place the weight back on the card stacker.



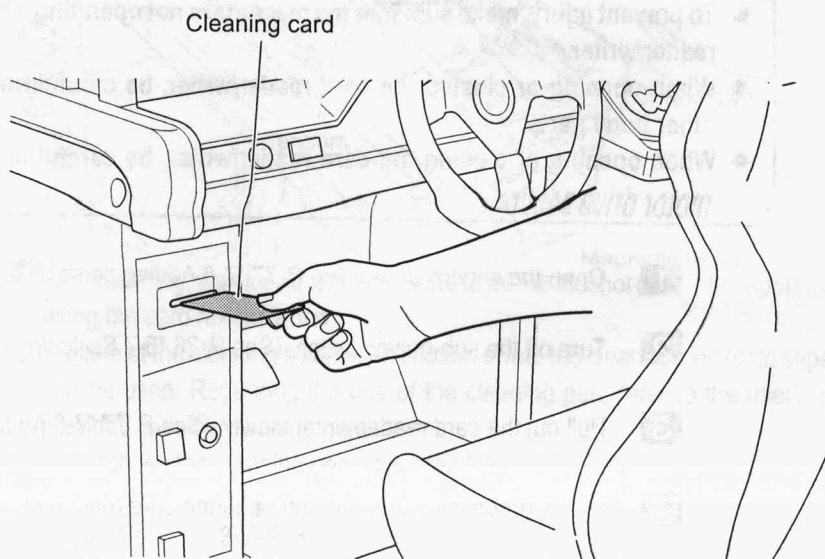
- Check the direction of the weight when placing it back on the card stacker. If the weight is placed in the wrong direction, cards will not be dispensed properly.

- 6** Push in the card reader/writer and turn the knob lock 180 degrees to the left.

## 7-7 Maintenance of card reader/writer

### 7-7-1 Cleaning the heads with cleaning card

- 1** Activate the Card Test in the Test mode. (See P. 53 "7-4-7 (a) Card data check (CHECK CARD DATA).")
- 2** Insert a cleaning card into the card slot. (See P. 60 "7-4-8 (a) Cleaning (CLEANING).")
- 3** After the automatic cleaning has been completed, take out the discharged cleaning card.



- Once the bag is opened, use the cleaning card as soon as possible.
- Do not reuse a cleaning card.
- Do not bring cleaning cards close to flames.
- Do not leave or store cleaning cards in a high-temperature place or in direct sunlight.
- Do not clean the heads two continuous times. Otherwise the card reader/writer may generate an error.
- To order cleaning cards, contact your distributor.

### 7-7-2 Cleaning the heads with cleaning solution or cleaning pen (sold separately)

If the heads are excessively dirty and do not print clearly even after they are cleaned with a cleaning card, follow the head cleaning procedure described below.

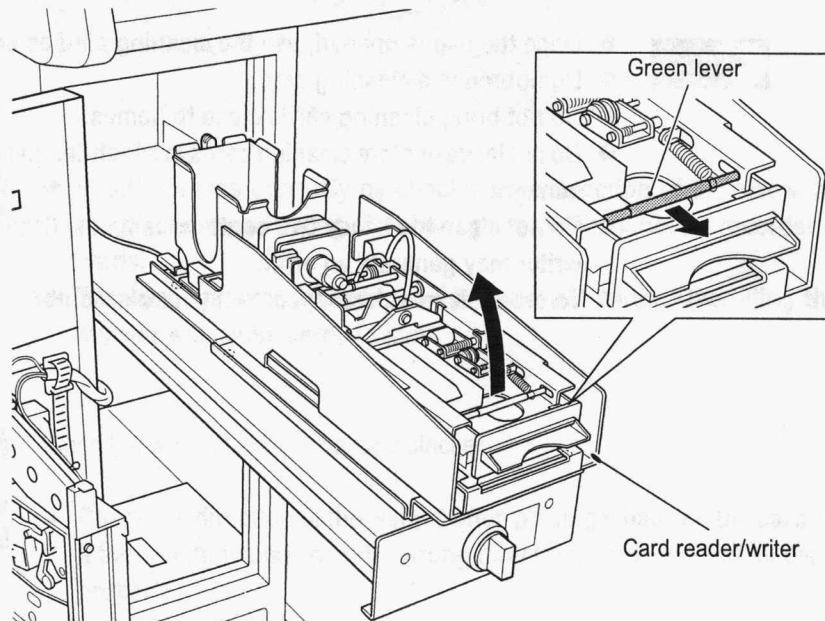
#### **! WARNING**

- The cleaning solution and cleaning pen contain alcohol. Since alcohol can cause fire, do not use the cleaning solution or cleaning pen near flames.

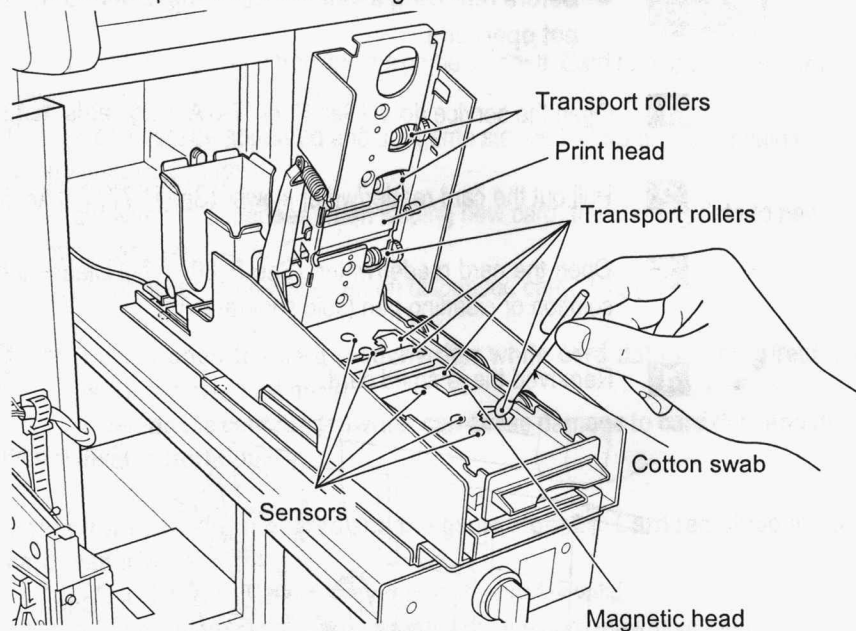
#### **! CAUTION**

- To prevent injury, make sure that the machine is not operating when opening the card reader/writer.
- When opening or closing the card reader/writer, be careful not to pinch hands or other body parts.
- When opening or closing the card reader/writer, be careful not to touch edges or motor drive section.

- 1** Open the service door. (See P. 77 "7-6 Adding cards" **1**.)
- 2** Turn off the sub-power switch. (See P. 26 "5-7 Switching on the power.")
- 3** Pull out the card reader/writer slowly. (See P. 77 "7-6 Adding cards" **2**.)
- 4** Pull the green lever forward and open the card reader/writer.



- 5** If there is dust or a foreign item, remove it. Clean the transport rollers, print head, magnetic head and sensors with a cotton swab dampened with the cleaning solution or alcohol.



After cleaning, wait for about one minute to let the alcohol content evaporate before using the card reader/writer.

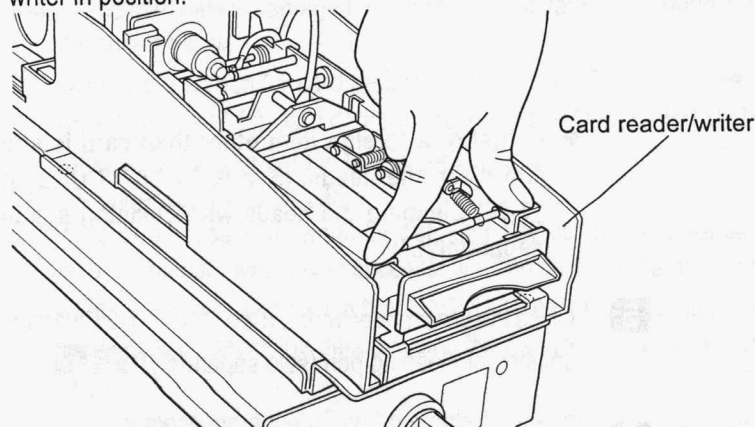
In place of the cleaning solution and cotton swab, the cleaning pen (sold separately) can be used. Regarding the use of the cleaning pen, refer to the user's manual provided with the cleaning pen.

To purchase the cleaning pen, order the following part No.

Part name	Cleaning pen
Part No.	306-916

- 6** Pull the green lever forward and close the card reader/writer.

- 7** With fingers, press the sections indicated in the diagram to lock the card reader/writer in position.



- 8** Push in the card reader/writer and turn the the knob lock 180 degrees to the left.

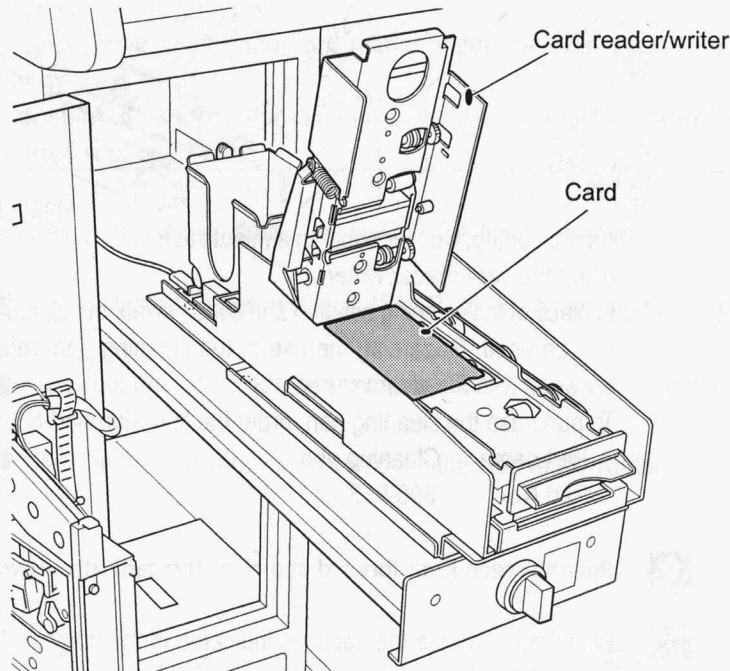


### 7-7-3 Removing jammed card



- Before removing a jammed card, make sure that the card reader/writer is not operating.

- 1** Open the service door. (See P. 77 "7-6 Adding cards" **1**.)
- 2** Pull out the card reader/writer slowly. (See P. 77 "7-6 Adding cards" **2**.)
- 3** Open the card reader/writer. (See P. 80 "7-7-2 Cleaning the heads with cleaning solution or cleaning pen (sold separately).")
- 4** Removed the jammed card.



- If dust or a foreign item other than card is stuck, remove it thoroughly and clean the heads. (See P. 79 "7-7-1 Cleaning the head.") (See P. 80 "7-7-2 Cleaning the heads with cleaning solution or cleaning pen (sold separately).")
- 5** Close the card reader/writer. (See P.80 "7-7-2 Cleaning the heads with the cleaning solution or cleaning pen (sold separately)" **5 6** .)
  - 6** Push in the card reader/writer and turn the the knob lock 180 degrees to the left.

### 7-7-4 Response to card-related problems

If a card-related error is generated, check and restore the card data by following the procedure described below.

- Card error message appeared and the game stopped. Card remained in the card reader/writer. → To (1)
- Card error message appeared and the game stopped. Card did not remain in the card reader/writer. → To (2)
- New card was not dispensed when issuing new card, transferring data to new card or updating card data. → To (3)
- Printed information is upside down on dispensed card. ? To (4)



- **Do not open the card reader/writer while card data is being restored or written in the Test mode.**  
Opening the card reader/writer can cause damage to card data and disallow data restoration.

#### (1) Card error message appeared and the game stopped. Card remained in the card reader/writer.

1. Check to see if the data stored on the card is valid.  
Even if there is no printed information, the card may have data.  
Display the screen for card data check (CHECK CARD DATA) in the Test mode.  
(See P. 51 "7-4-7 (a) Card data check (CHECK CARD DATA).")
2. Insert the card that was remaining in the card reader/writer.
- 3-a. When the card contains valid data  
→ The card can be used.  
If there is no printed information, information will be printed next time the card is used to play the game.  
To print information, follow the procedure for reprint. (See P. 57 "7-4-7 (d) Card data reprint (RE-PRINT).")
- 3-b. When the card does not contain valid data  
→ The card data is damaged. Restore the card data by following the procedure described below.
  - ① Display the screen for card restoration (CARD RESTORE) in the Test mode.  
(See P.55 "7-4-7 (c) Card data restoration (RESTORE CARD DATA).")
  - ② Make sure that the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen.  
If the card in use is shown in the "VERIFY OK" list on the lower section of the screen, the data was saved successfully. The card can be used normally.
  - ③ If the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen, select the data by using the Service switch, and press the Test switch.  
When a message appears and prompts for the insertion of a card, insert the card that was remaining in the card reader/writer.
  - ④ The backup data will be written to the card. When it is written successfully, the backup data will be deleted.

**(2) Card error message appeared and the game stopped. Card did not remain in the card reader/writer.**

- 1-a. When the message "E56 Card was removed improperly" appeared
  - The card may have been removed improperly.  
Check to see if the player received the card.
- 1-b. When the error is other than E56
  - The card dispensed from the card stacker may be jammed. Restore the card data by following the procedure described below.
  - ① Display the screen for card restoration (CARD RESTORE) in the Test mode. (See P. 55 "7-4-7 (c) Card data restoration (RESTORE CARD DATA).")
  - ② Make sure that the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen.  
If the card in use is shown in the "VERIFY OK" list on the lower section of the screen, the data was saved successfully.  
In this case, the card data cannot be restored.
  - ③ If the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen, select the data by using the Service switch, and press the Test switch.  
When a message appears and prompts for the insertion of a card, insert the card that was remaining in the card reader/writer.
  - ④ The backup data will be written to the card. When it is written successfully, the backup data will be deleted.

**(3) New card was not dispensed when issuing new card, transferring data to new card or updating card data.**

- The card dispensed from the card stacker may be jammed. Restore the card data by following the procedure described below.
- ① Display the screen for card restoration (CARD RESTORE) in the Test mode. (See P. 55 "7-4-7 (c) Card data restoration (RESTORE CARD DATA).")
- ② Make sure that the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen.  
If the card in use is shown in the "VERIFY OK" list on the lower section of the screen, the data was saved successfully.  
In this case, the card data cannot be restored.
- ③ If the card in use is shown in the "BACKUP DATA 1 - 5" list on the upper section of screen, select the data by using the Service switch, and press the Test switch.  
When a message appears and prompts for the insertion of a card, insert the card that was remaining in the card reader/writer.
- ④ The backup data will be written to the card. When it is written successfully, the backup data will be deleted.

**(4) Printed information is upside down on dispensed card. ? To (4)**

→ Cards in the card stacker are set in the opposite direction.

Take out the cards from the card stacker, check the card direction, and put back the cards in the correct direction. (See P.77 "7-6 Adding cards.")

After setting cards correctly, transfer data to a new card by following the procedure described below.

- ① Display the screen for transfer of card data (TRANSFER CARD DATA) in the Test mode. (See P. 53 "7-4-7 (b) Card data transfer (TRANSFER CARD DATA).")
- ② According to the instructions displayed on the screen, transfer the data of the card with inverted print to a new card.



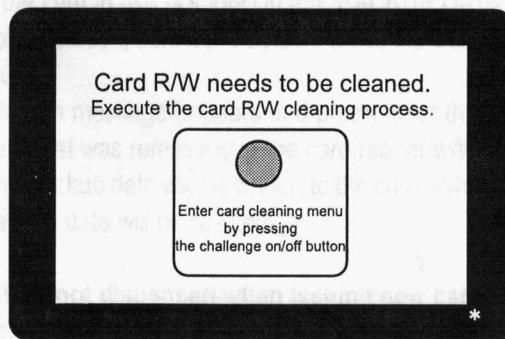
## 7-8 Self-test

The machine automatically executes a self-test immediately after the power is turned on. When the self-test finds no problem, the startup screen appears on the monitor after a short while. If there is an abnormality, an error buzzer is produced or an error message is displayed on the monitor, and the machine stops operating. (See P. 102 "8-2 Troubleshooting.")



- **Do not touch the steering wheel while the self-test is in process. If the steering wheel is moved, the machine may display an error message and stops operating.**

The heads of the card reader/writer must be cleaned once every 100 game plays. If a message appears on the monitor to notify the need for cleaning the heads, press the intrusion selection switch to activate the head cleaning operation.  
(See P. 79 "7-7 Maintenance of card reader/writer.")



## 8. SERVICE

### WARNING

- Before conducting service (troubleshooting, repair, etc.), turn off the power switch to protect the service staff and other people from electric shock, accidents and injury.
- The monitor remains hot and charged with high voltage even after the power switch is turned off. Be careful not to touch those parts accidentally to avoid electric shock and burns.
- To prevent pinching of hands or other body parts, hold the seatback securely when opening or closing the base lid.
- To prevent pinching of hands or other body parts, check to make sure that there is nobody in the area when opening or closing the base lid. The lid and seat weigh approximately 27 kg.

## 8-1 Service and inspection

### WARNING

- Conduct service regularly. Failure to do so can lead to unexpected accidents.
- Conduct a pre-service check everyday. Pre-service check is important for the prevention of accidents. (See P. 31 "7-1 Pre-service check.")

### 8-1-1 Inspection items - To be conducted by a technician only -

Check the following regularly.

#### (1) Inspection of the level adjusters

- Make sure that the machine is installed stably. (See P. 18 "5-3-1 Adjusting the level adjusters.")

#### (2) Inspection of the power cord plug

- Make sure that the power cord is connected firmly to the cord box section of the machine and the AC outlet.
- If the connecting section is covered with dust, clean.
- Check the power cord sheath for cracks and dirtiness. If there is any abnormality in the power cord, be sure to replace it with a new cord.

#### (3) Inspection of screws and bolts for tightness

Check the following screws and bolts for tightness. If they are loose, tighten them firmly.

- Steering Assy fastening bolts  
(See P. 106 "8-3-3 (1) Removing and reinstalling the Steering Assy.")
- Steering wheel C fastening bolts  
(See P. 109 "8-3-3 (3) Removing and reinstalling the steering wheel C.")
- Shift (6-Speed MT) Assy fastening bolts  
(See P. 110 "8-3-4 (1) Removing and reinstalling the Shift (6-Speed MT) Assy.")
- Others



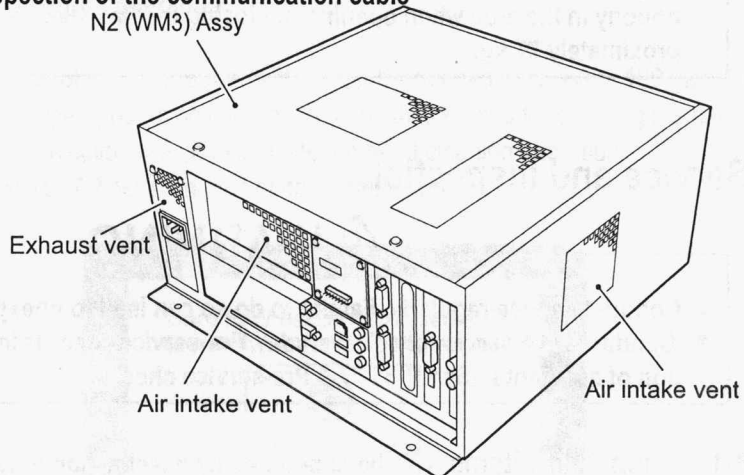
**(4) Inspection of the card reader/writer**

- Open the card reader/writer, and clean the card slot section.  
(See P. 82 "7-7-3 Removing jammed card.")
- Clean the card reader/writer heads after every 100 game plays.  
(See P. 79 "7-7-1 Cleaning the heads with cleaning card" and "7-7-2 Cleaning the heads with cleaning solution or cleaning pen (sold separately).")

**(5) Inspection of the N2 (WM3) Assy**

- If dust has accumulated near the air intake vent section of the N2 (WM3) Assy, clean.

**(6) Inspection of the communication cable**



- Check the communication cable connectors for secure connection. Also, check the cable for damage or other abnormalities.

## 8-2 Troubleshooting

### WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- If any of the symptoms described in 8-2-1 to 8-2-8 applies or if the corrective action does not result in an improvement, turn off the power immediately and stop operating the machine, then contact your distributor. Operating the machine without correcting a problem may cause a fire or accident.

### NOTICE

- In the event of a malfunction, first check to make sure that all connectors are firmly connected.
- If there is a problem in the N2 (WM3) Assy, Steering PC Board, or Amp PC Board, it will be repaired by our company. Never use a tester to conduct a continuity test. Internal voltage of a tester can damage ICs.
- When sending parts for a repair, pack them carefully. When sending the N2 (WM3) Assy, Steering PC Board, or Amp PC Board, wrap it with sponge or bubble wrap, and pack it in a corrugated cardboard box to protect against external impact.

**8-2-1 General - To be conducted by a technician only -**

- Before conducting troubleshooting, check to make sure that all connectors are firmly connected.

Symptom	Main cause	Action	Page
Machine does not start up.	The USB dongle is not inserted.	Insert the USB dongle.	115
	The connector is disconnected.	Connect the connector securely.	115
	The N2 (WM3) Assy is faulty.	Contact your distributor.	115
	The USB dongle is faulty.		
Communication-linked game cannot be played.	The communication cable is not connected.	Check the communication cable for secure connection.	21, 23
	There is an open-circuit in the communication cable.	Replace the communication cable.	21, 23
	The cross conversion kit is connected incorrectly.	Check the cross conversion kit for proper connection. * One cross conversion kit is <u>used only</u> when two units are connected for communication-linked operation.	21
	The hub is not supplied with power.	Connect power supply to the hub.	23
Machine operates unstably or generates malfunctions.	The PCB ID is incorrectly set.	Set the PCB ID correctly.	--
	The power supply voltage is not at the correct value.	Disconnect large power consuming equipment (air conditioners, large ride attractions, etc.) from the same AC power supply line to ensure that the machine receives the specified power supply voltage.	---
Power shuts off in the middle of operation.	The fuse has opened and turned the power OFF. * The fuse is designed to cut off the power supply when an abnormal current flows.	Replace the fuse Turn on the power switch again. If the fuse opens frequently, there is a problem in the machine. Contact your distributor.	--
Machine resets itself during startup process.	The internal battery of N2 (WM3) Assy has run down.	Contact your distributor.	115

**8-2-2 Monitor Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
There is no sound from the speakers.	The sound level is set too low.	Adjust the sound level.	48
	The connector or Faston terminal is disconnected.	Connect the connector or Faston terminal securely.	--
	The p-bus Amp PC Board is faulty.	Replace the p-bus Amp PC Board.	103
The monitor does not display image.	The connector is disconnected.	Connect the connector securely.	115,119
	The monitor is faulty.	Replace the monitor.	118
The fluorescent lamp does not light.	The connector is disconnected.	Connect the connector securely.	16
	The fluorescent lamp is burned out	Replace the fluorescent lamp.	97
The view change switch/intrusion selection switch does not function.	The connector is disconnected.	Connect the connector securely.	99
	The switch is faulty.	Replace the switch.	100
The built-in lamp of the view change switch/intrusion selection switch does not light.	The connector is disconnected.	Connect the connector securely.	99
	The wedge lamp is burned out.	Replace the wedge lamp.	100

**8-2-3 Lower Cab and Seat Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
There is no sound from the woofer speaker.	The sound level is set too low.	Adjust the sound level.	49
	The connector or Faston terminal is disconnected.	Connect the connector or Faston terminal securely.	103
The machine does not dispense cards.	The p-bus Amp PC Board is faulty.	Replace the p-bus Amp PC Board.	103
	There are no cards in the card dispenser.	Add cards.	77
The printed information is too light or blurry.	Card is jammed.	Remove jammed card.	82
	The card reader/writer heads are dirty.	Clean the heads of the card reader/writer.	79,80

**8-2-4 Steering Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
The steering wheel does not function.	The volume has not been initialized.	Execute the initialization.	76
	The connector is disconnected.	Connect the connector securely.	106
	The fuse is burned out.	Replace the fuse.	101
	The potentiometer is installed incorrectly.	Install the potentiometer correctly.	107
	The potentiometer is faulty.	Replace the potentiometer.	107
	The motor is faulty.	Replace the motor.	106

**8-2-5 Shift (6-Speed MT) Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
The shift lever does not function.	The connector is disconnected.	Connect the connector securely.	110
The machine does not respond to the lever motion in the right/left direction.	The photosensor is faulty.	Replace the photosensor.	111
The machine does not respond to the lever motion in the up/down direction.	The microswitch is faulty.	Replace the microswitch.	112

**8-2-6 Dual Pedal Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
The accelerator/brake pedal does not function.	The volume has not been initialized.	Execute the initialization.	76
	The connector is disconnected.	Connect the connector securely.	-
	The potentiometer is installed incorrectly.	Install the potentiometer correctly.	-
	The volume is defective.	Replace the potentiometer.	-

**8-2-7 Seat Assy - To be conducted by a technician only -**

Symptom	Main cause	Action	Page
There is no sound from the speakers.	The sound level is set too low.	Readjust the sound level.	41, 38
	The connector or Faston terminal is disconnected.	Connect the connector or Faston terminal securely.	117
	The IS Amp PC Board is faulty.	Replace the IS Amp PC Board.	117

**8-2-8 Error display****(1) Errors related to the Steering Assy**

Symptom	Main cause	Action	Page
The self-test after power <b>ON</b> results in the display of error <b>E10</b> "An error was generated in the steering wheel" on the monitor, and the machine does not start up. (There is a rotation abnormality in the motor of the Steering Assy.)	The connector is disconnected.	Connect the connector securely.	106
	The volume is defective.	Replace the volume.	107
	The fuse is burned.	Replace the fuse.	101
	The Steering PC Board is faulty.	Replace the Steering PC Board.	102
	The motor is defective.	Replace the motor.	106
The self-test after power <b>ON</b> results in the display of error <b>E11</b> "An error was generated in the steering wheel" on the monitor, and the machine does not start up. (There is a rotation abnormality in the motor of the Steering Assy.)	The potentiometer is defective.	Replace the potentiometer.	107
The self-test after power <b>ON</b> results in the display of error <b>E12</b> "An error was generated in the steering wheel" on the monitor, and the machine does not start up. (There is a rotation abnormality in the motor of the Steering Assy.)	The Steering PC Board is faulty.	Replace the Steering PC Board.	102
	The motor is defective.	Replace the motor.	106



## 8. SERVICE

Symptom	Main cause	Action	Page
The self-test after power <b>ON</b> results in the display of error <b>E20</b> "An error was generated in the steering wheel" on the monitor, and the machine does not start up. (There is a rotation abnormality in the motor of the Steering Assy.)	The connector is disconnected.	Connect the connector securely.	102
The self-test after power <b>ON</b> results in the display of error <b>E**</b> "An error was generated in the steering wheel" on the monitor, and the machine does not start up. (** indicates a number other than 10, 11, 12 or 20.)	The Steering PC Board is faulty.	Replace the Steering PC Board.	102
<b>Error E07</b> "An error was generated in the steering wheel" is displayed in the middle of game play, and the machine stops operating.	The potentiometer is defective.	Replace the potentiometer.	107
<b>Error E08</b> "An error was generated in the steering wheel" is displayed in the middle of game play, and the machine stops operating.	The Steering PC Board is faulty.	Replace the Steering PC Board.	102
<b>Error E**</b> "An error was generated in the steering wheel" is displayed in the middle of game play, and the machine does not start up. (** indicates a number other than 7 or 8.)	The Steering PC Board is faulty.	Replace the Steering PC Board.	102

## (2) Errors related to the card reader/writer

Symptom	Main cause	Action	Page
The monitor displays one of the following: error E51 "Check the card reader/writer connection," error E52 "Data could not be saved," error E53 "Card is jammed" and error E54 "Data could not be printed correctly."	The connector is disconnected.	Connect the connector securely.	105
	Card is jammed.	Remove jammed card, and check if the data is valid by using CHECK CARD DATA in the Test mode.	82
	The card reader/writer is faulty.	Contact your distributor.	83
	The N2 (WM3) Assy is faulty.	Contact your distributor.	115
The monitor displays error E56 "Card was removed improperly."	Card was removed improperly during the game.	The card data may be damaged. Check if the data is valid by using CHECK CARD DATA in the Test mode.	51
	The card reader/writer was opened during operation.		
	The card reader/writer is faulty.	Contact your distributor.	83
The monitor displays error E58 "Part of card data could not be read."	Data was damaged due to bent card or magnetism.	The card data may be damaged. Check if the data is valid by using CHECK CARD DATA in the Test mode.	51
	The card reader/writer is faulty.	Contact your distributor.	83

## 8. SERVICE

Symptom	Main cause	Action	Page
The self-test after power ON results in the display of a message <b>"The card reader/writer must be cleaned. Execute the card cleaning operation in Card Test."</b> on the monitor.	The card reader/writer needs periodic cleaning.	Clean the heads of the card reader/writer.	79, 80
The Attract screen displays a message <b>"New card cannot be issued at the present."</b>	There is no card in the card dispenser.	Add cards.	77
	Card is jammed inside the card dispenser.	Remove all the cards from the card dispenser, and place cards correctly.	82
The Attract screen displays a message <b>"Card cannot be used at the present."</b>	The closing time settings are enabled.	This does not denote a malfunction.	68
	The card reader/writer is turned Off.	Set the parameter to ON in the Test mode.	41

### (3) Other errors

Symptom	Main cause	Action	Page
The Attract screen displays "USB dongle error."	The USB dongle is not inserted.	Insert the USB dongle.	115
The Attract screen displays "USB dongle battery error."	The internal battery of N2 (WM3) Assy has run down.	Contact your distributor.	115

## 8-3 Disassembling, reassembling and replacing Assys and parts

### 8-3-1 Monitor Assy - To be conducted by a technician only -

#### (1) Replacing the fluorescent lamp/starter

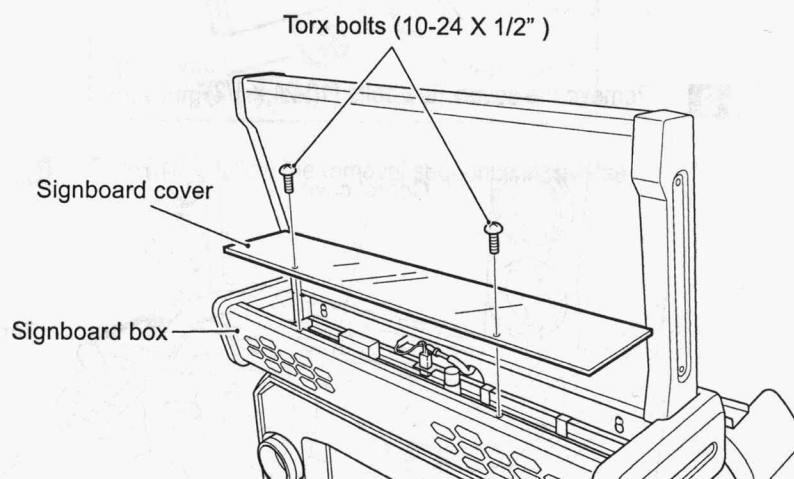
### WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

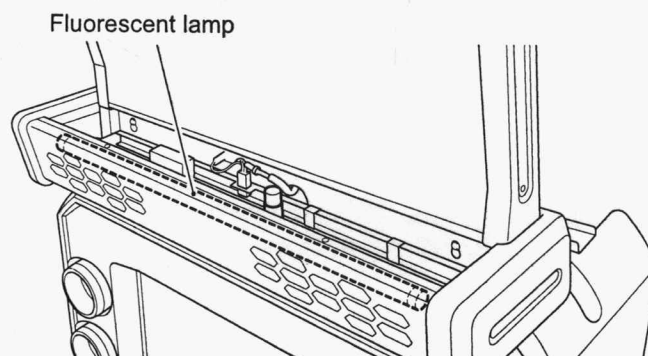
### CAUTION

- The fluorescent lamp becomes very hot. Be careful of burns when removing the fluorescent lamp.
- Exercise caution when replacing the fluorescent lamp, since the replacement work must be conducted at a height.

- 1** Remove the two Torx bolts (10-24 x 1/2"), and remove the signboard cover from the signboard box.



- 2** Replace the fluorescent lamp.

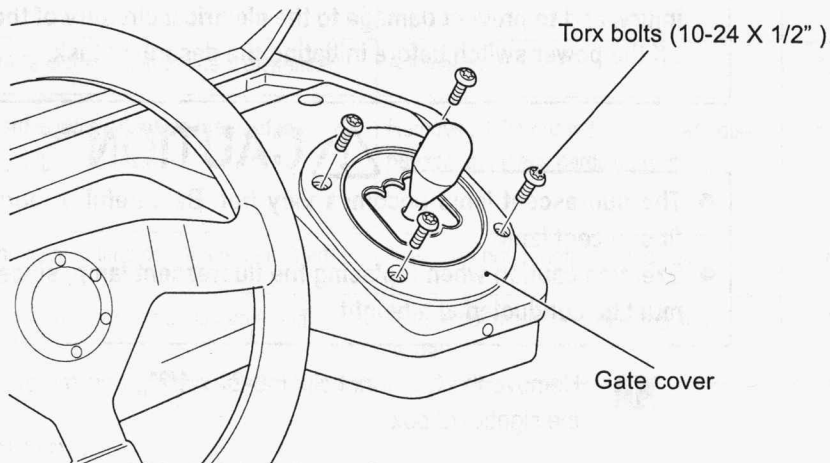


(2) Removing and reinstalling the control cover

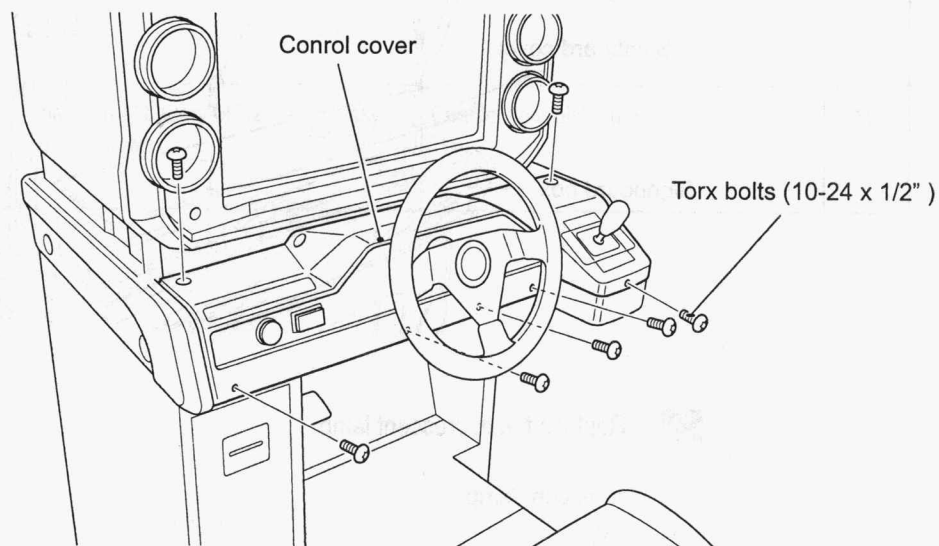
**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

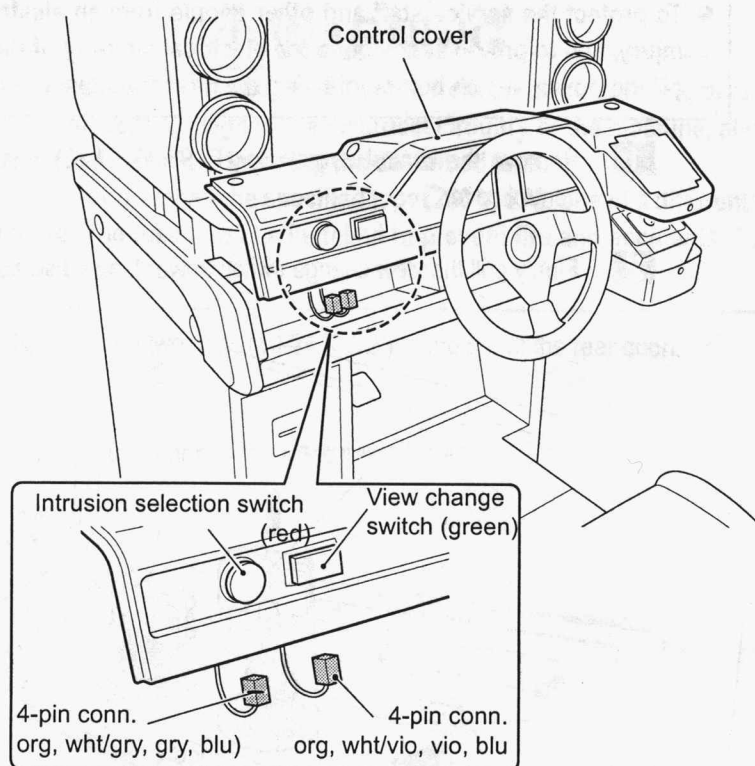
- 1** Remove the four Torx bolts (10-24 x 1/2" ), and remove the gate cover.



- 2** Remove the seven Torx bolts (10-24 x 1/2").



- 3** Disconnect the two connectors from the switches located on the back side of the control cover, and remove the control cover.



- 4** To reinstall, follow the removal sequence in reverse.

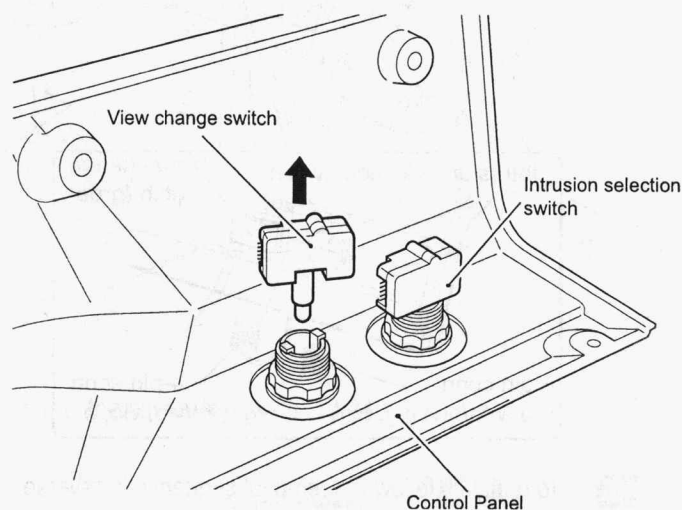


(3) Replacing the view change switch, intrusion selection switch, and lamps

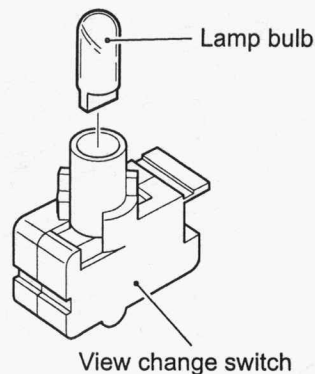
**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Firmly pull the view change switch upward, and dismount the switch.



- 3** Pull out the lamp bulb.



- 4** Replace the view change switch and lamp bulb.  
\* Follow the same procedure for the replacement of the intrusion selection switch and its lamp bulb.
- 5** To reinstall, follow the removal sequence in reverse.



- After the replacement, be sure to check the operation and settings. (See P. 45 "7-4-4 (c) SWITCH TEST.")

### 8-3-2 Lower box Assy - To be conducted by a technician only -

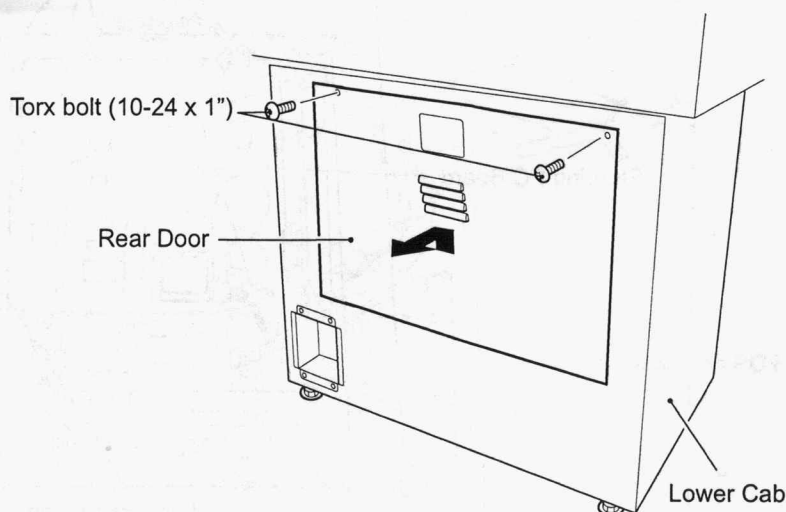
#### (1) Replacing the fuse for the Steering PC Board

## WARNING

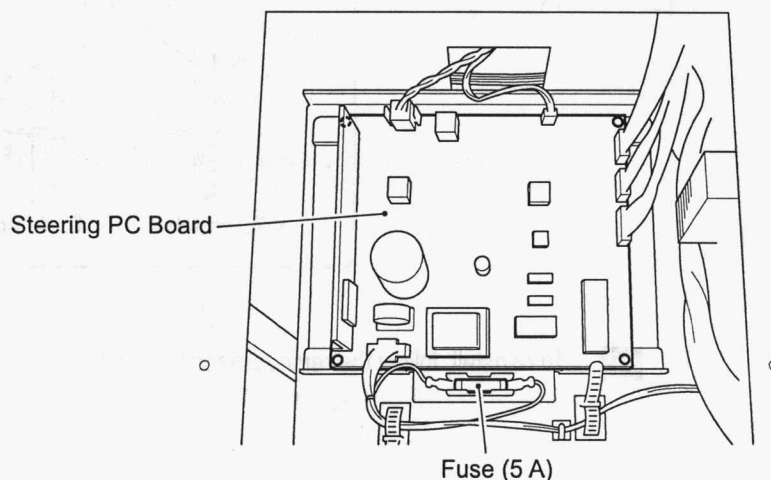
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- Never use a fuse other than the specified type (250 V, 5 A). Use of a different fuse can result in a fire. *The fuse must be installed to prevent fire and accidents. To order a fuse, contact your distributor.*

**1** Remove the two bolts (10-24 X 1/2") at the top of the rear door.

**2** Remove the rear door by lifting.



**3** Replace the fuse (5 A).



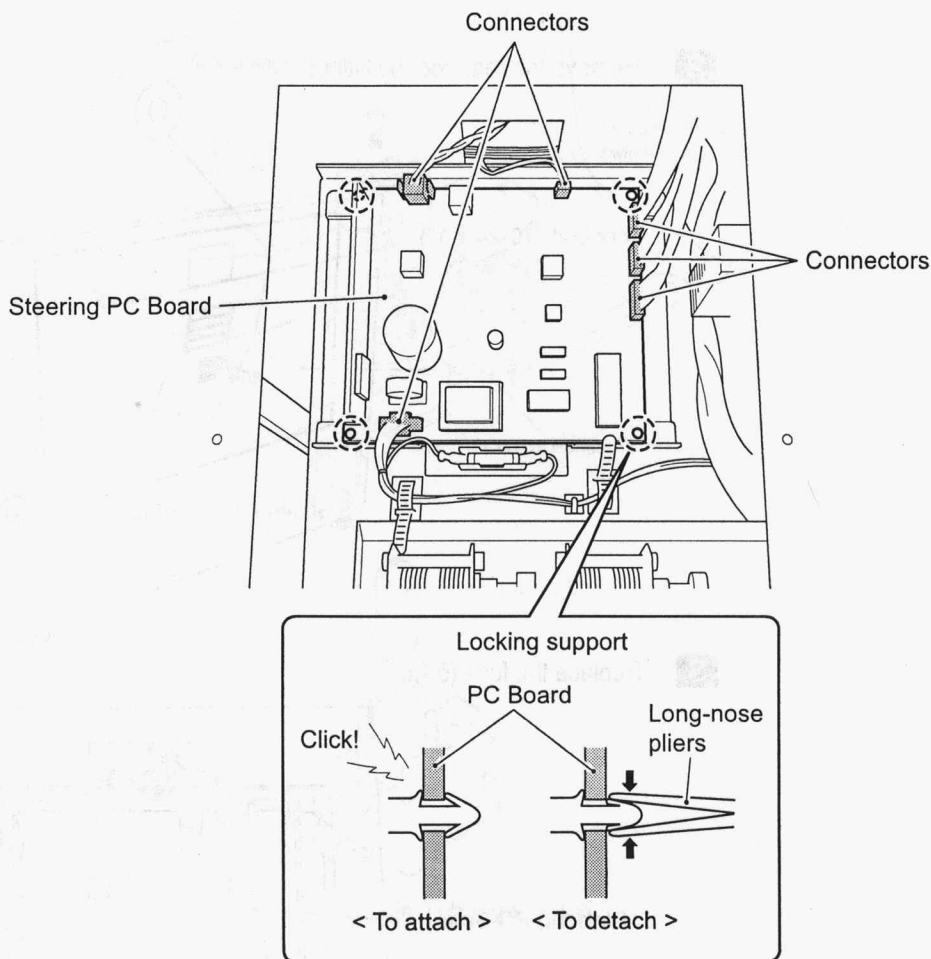
**4** To reinstall, follow the removal sequence in reverse.

(2) Replacing the Steering PC Board

# **! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the maintenance panel. (See P. 101 "8-3-2 (1) Replacing the fuse for the Steering PC Board.")
- 2** Disconnect the six connectors shown in the diagram.
- 3** Release the four locking supports, and replace the Steering PC Board.



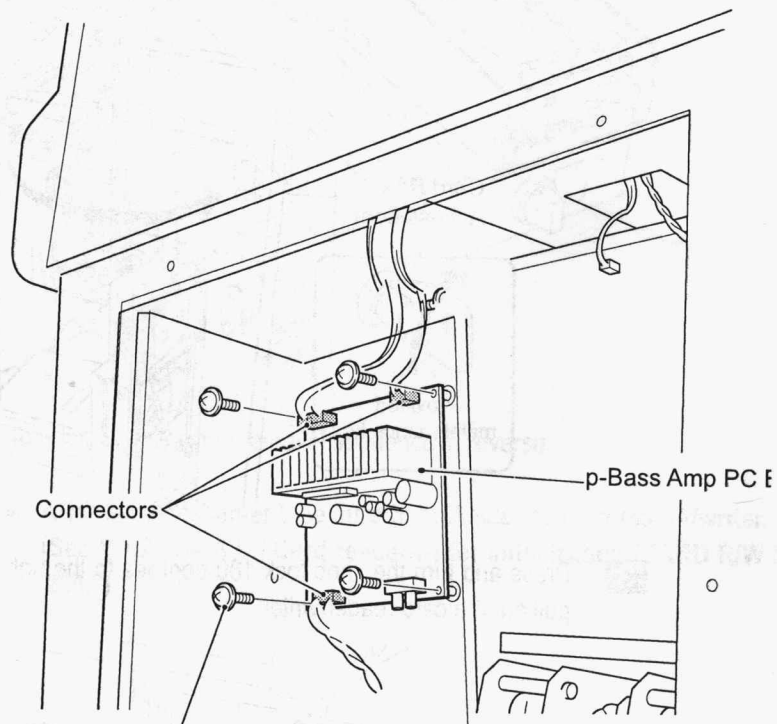
- 4** To reinstall, follow the removal sequence in reverse.

### (3) Replacing the p-bus Amp PC Board

## WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the maintenance panel. (See P. 101 "8-3-2 (1) Replacing the fuse for the Steering PC Board.")
- 2** Disconnect the three connectors shown in the diagram.
- 3** Remove the four cap screws and replace the p-Bass Amp PC Board.



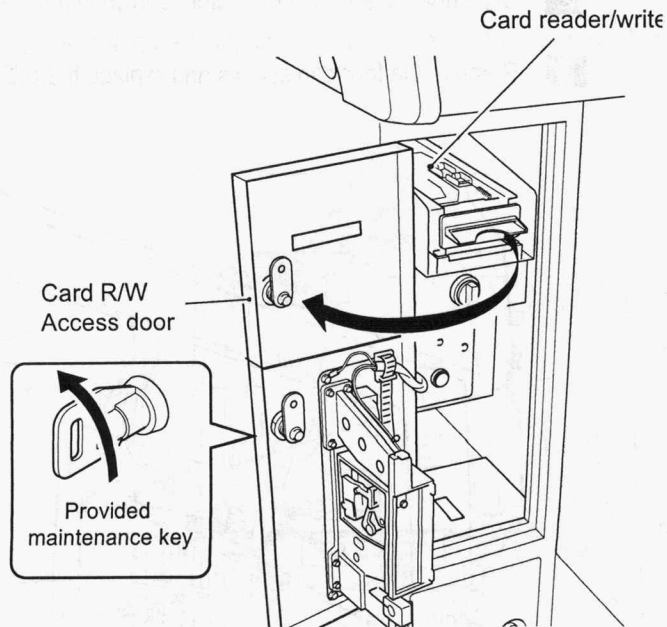
- 4** To reinstall, follow the removal sequence in reverse.

(4) Replacing the card reader/writer

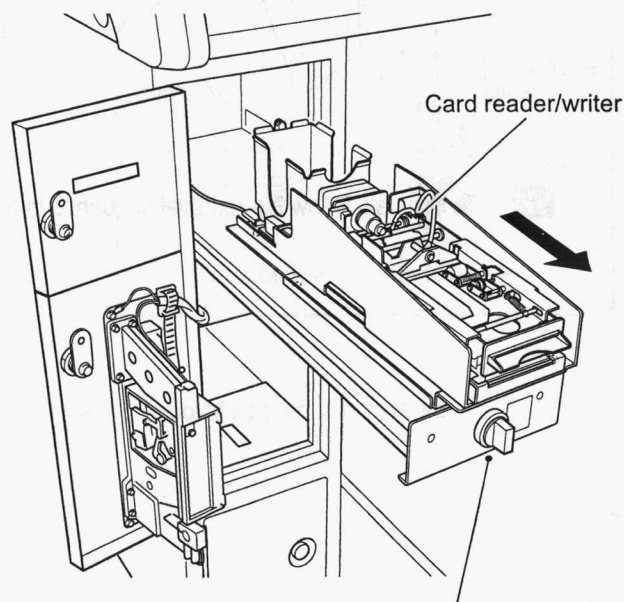
**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

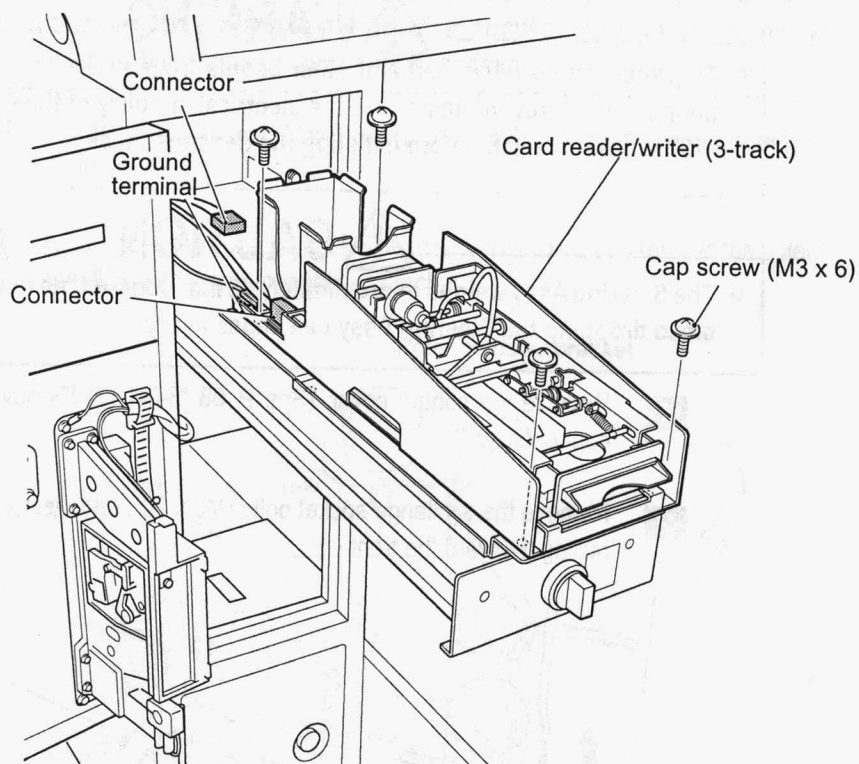
- 1** Turn off the main power switch or sub-power switch.  
(See P. 26 "5-7 Switching on the power.")
- 2** Using the provided maintenance key, unlock and open the service door.



- 3** Press and turn the knob lock 180 degrees to the right to unlock, and then slowly pull out the card reader/writer.



- 4** Disconnect the two connectors and ground lead located in the back.
- 5** Remove the four cap screws (M3 x 6), and replace the card reader/writer.



- 6** To reinstall, follow the removal sequence in reverse.



- After the replacement, be sure to initialize the card reader/writer. (See P. 62 "7-4-8 (b) Card reader/writer initialization (CARD R/W INITIALIZE).")



### 8-3-3 Steering Assy - To be conducted by a technician only -

#### (1) Removing and reinstalling the Steering Assy

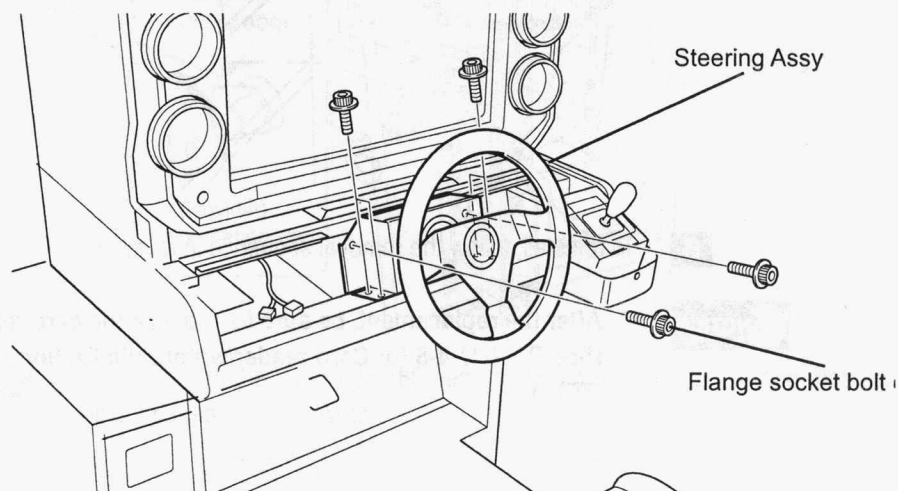
## WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

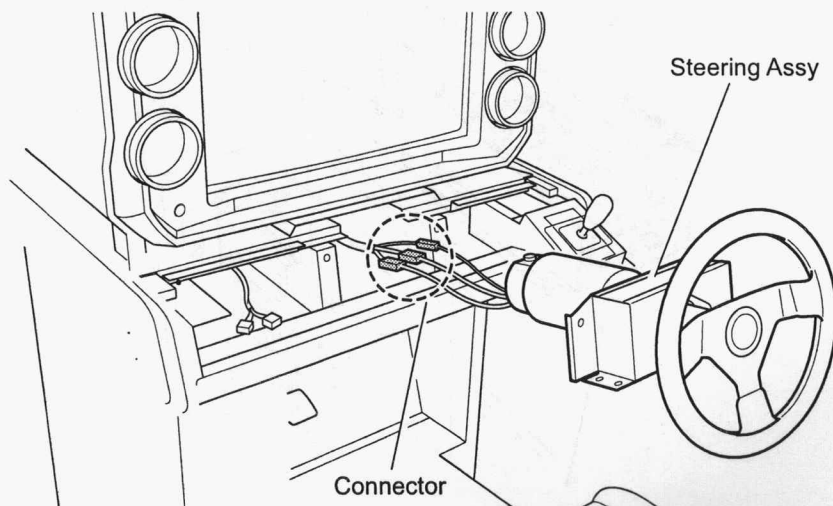
## CAUTION

- The Steering Assy weighs approximately 26 lbs. Conduct the following task carefully since dropping the Steering Assy can cause injury.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Remove the six flange socket bolts (M8 x 20), and dismount the Steering Assy by pulling it toward the front.



- 3** Disconnect the three connectors.

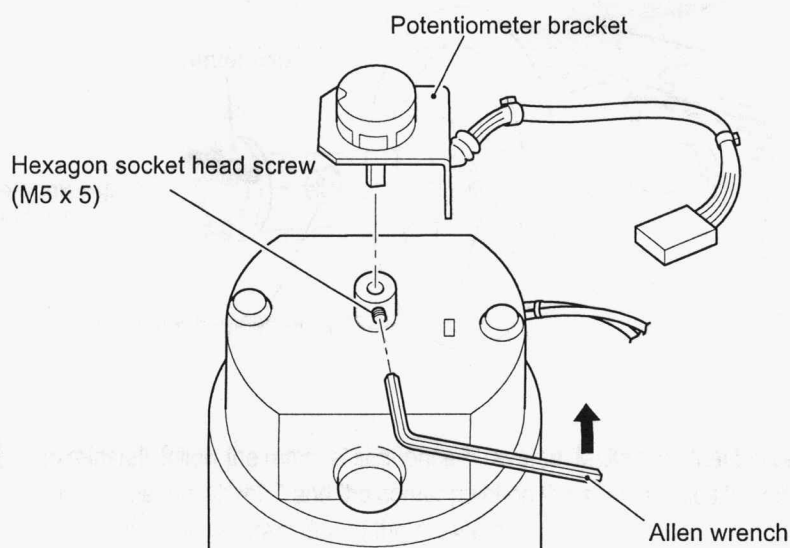


## (2) Replacing the potentiometer.

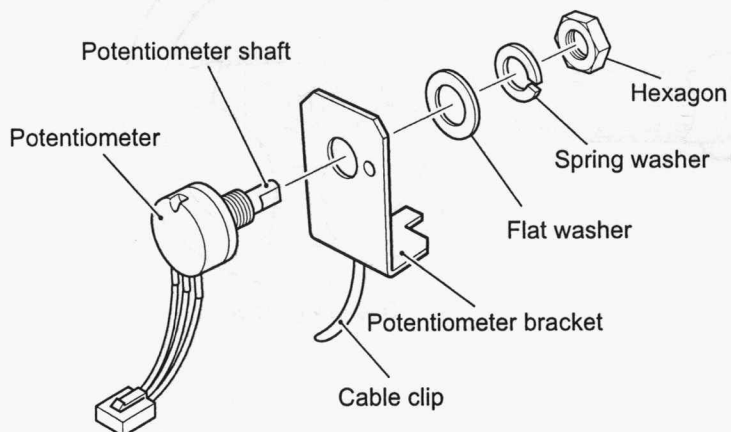
**⚠ WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the Steering Assy. (See P. 106 "8-3-3 (1) Removing and reinstalling the Steering Assy.")
- 2** Loosen the one hexagon socket head screw (M5 x 5), and remove the potentiometer together with the potentiometer bracket.



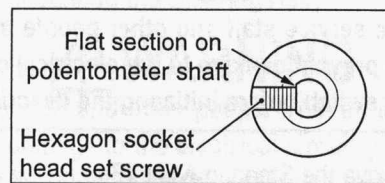
- 3** Detach the cable tie from the harness, and remove the potentiometer from the potentiometer bracket.



- 4** Replace the potentiometer.
- 5** To reinstall, follow the removal sequence in reverse.



- When replacing the potentiometer, align the flat section on the potentiometer shaft with the position of the hexagon socket head set screw.



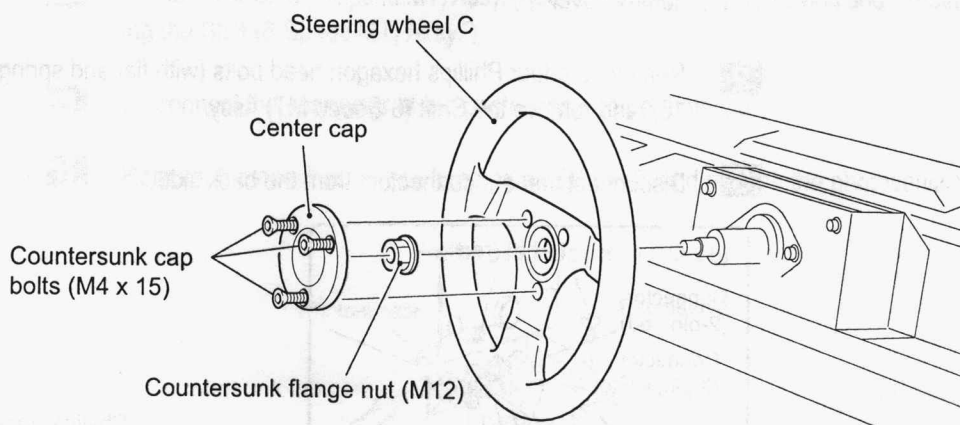
- After the replacement, be sure to execute the initialization. (See P. 76 "7-5-1 Initializing the potentiometer.")

## (3) Removing and reinstalling the steering wheel C

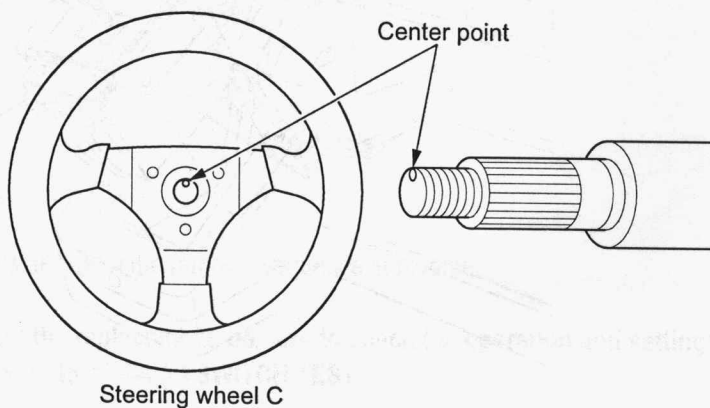
**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the three countersunk cap bolts (M4 x 15), and remove the center cap.
- 2** Remove the countersunk flange nut (M12), and remove steering wheel C.



- 3** To reinstall, follow the removal sequence in reverse. Make sure that the center point on the steering wheel C and the center point on the shaft are positioned at the top as shown in the diagram during the reassembly.



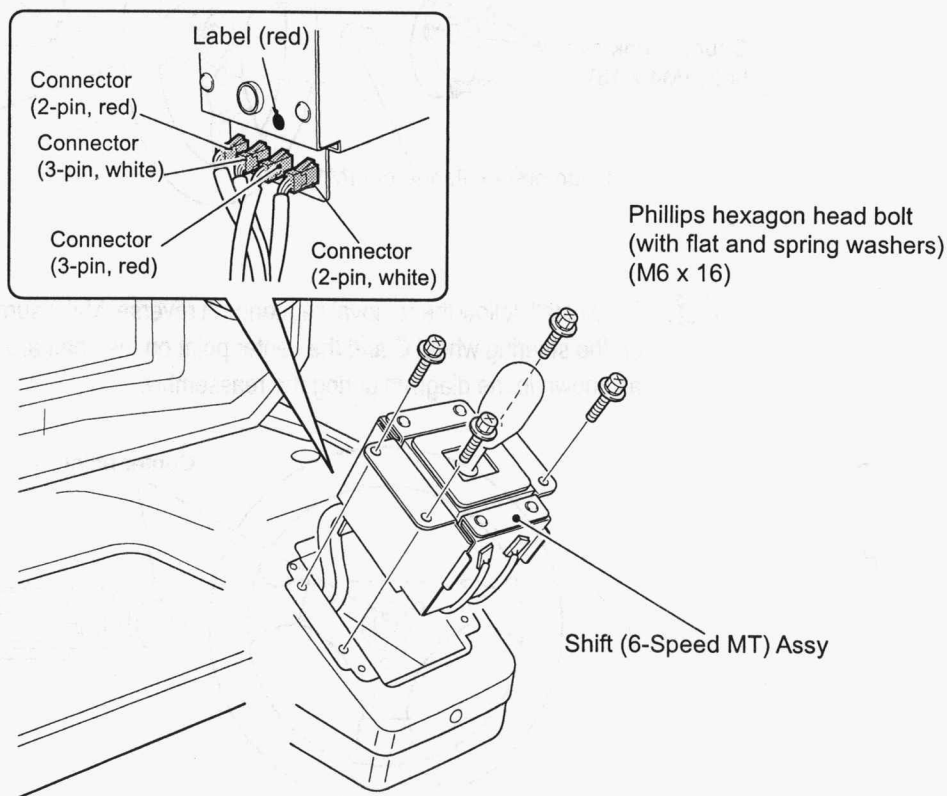
### 8-3-4 Shift (6-Speed MT) Assy - To be conducted by a technician only -

#### (1) Removing and reinstalling the Shift (6-Speed MT) Assy

## ! WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Remove the four Phillips hexagon head bolts (with flat and spring washers) (M6 x 16), and remove the Shift (6-Speed MT) Assy.
- 3** Disconnect the four connectors from the back side.



- 4** To reinstall, follow the removal sequence in reverse. Be sure to connect the connectors to the original positions by referring to the diagram.



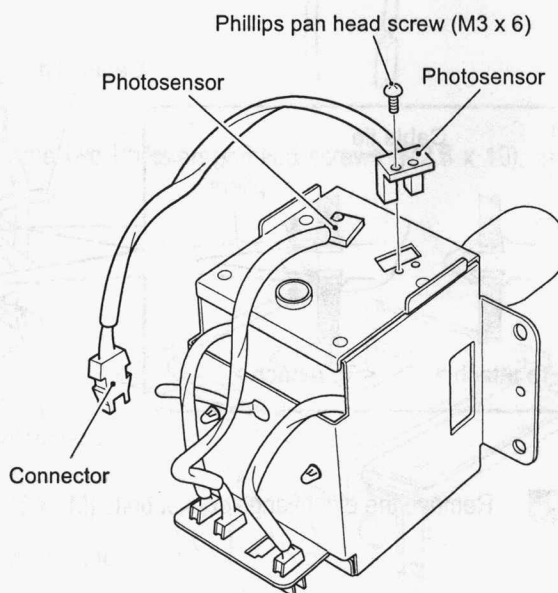
- After the replacement, be sure to check the operation and settings. (See P. 45 "7-4-4 (c) SWITCH TEST.")

## (2) Replacing the photosensor

**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Remove the Shift (6-Speed MT) Assy. (See P. 110 "8-3-4 (1) Removing and reinstalling the Shift (6-Speed MT) Assy.")
- 3** Disconnect the connector of the photosensor to be replaced.
- 4** Remove the one Phillips pan head screw (M3 x 6), and replace the photosensor.



- 5** To reinstall, follow the removal sequence in reverse.

**NOTICE**

- After the replacement, be sure to check the operation and settings. (See P. 45 "7-4-4 (c) SWITCH TEST.")

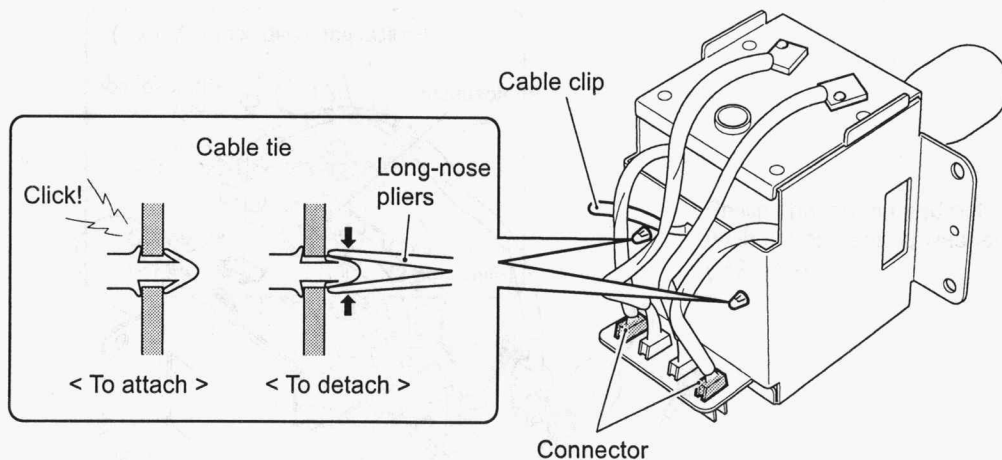


(3) Replacing the microswitch

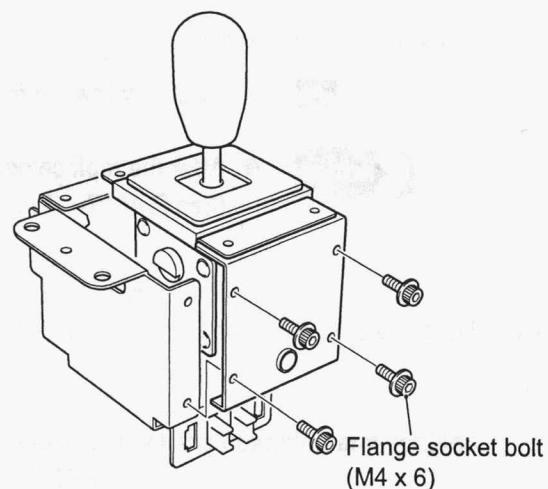
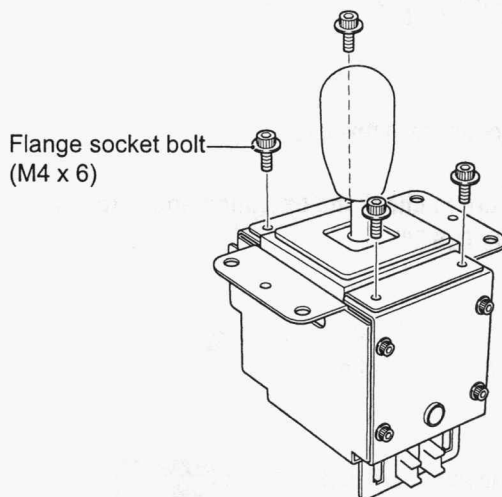
**! WARNING**

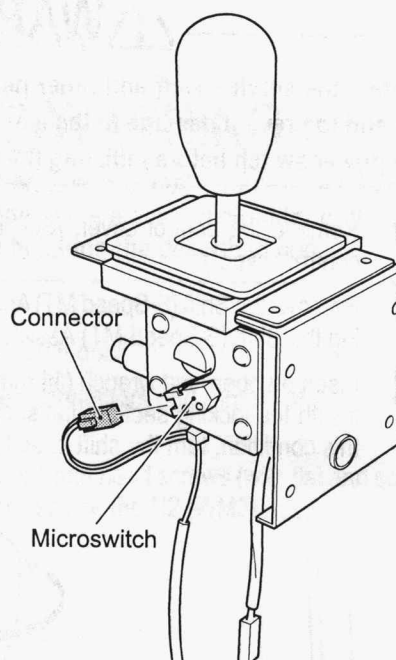
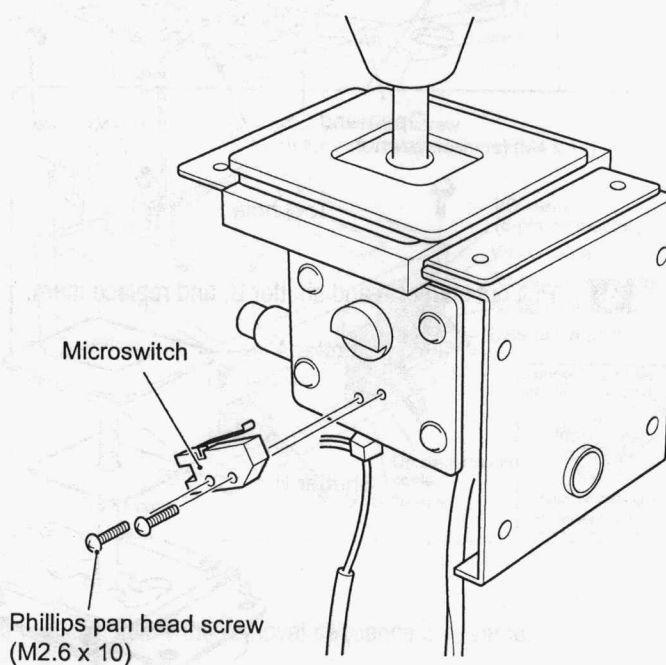
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Remove the Shift (6-Speed MT) Assy. (See P. 110 "8-3-4 (1) Removing and reinstalling the Shift (6-Speed MT) Assy.")
- 3** Disconnect the two connectors shown in the diagram.
- 4** Detach the one cable tie and release the two snap-in fasteners.



- 5** Remove the eight flange socket bolts (M4 x 6).



**6** Disconnect the connector.**7** Remove the two Phillips pan head screws (M2.6 x 10), and replace the micro-switch.**8** To reinstall, follow the removal sequence in reverse.

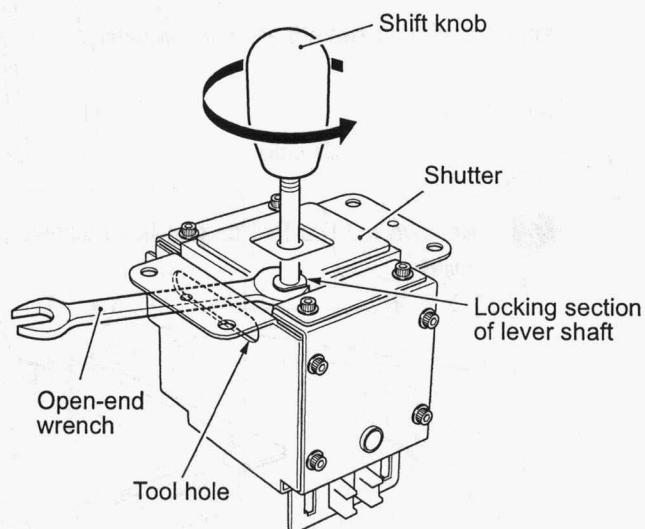
- After the replacement, be sure to check the operation and settings. (See P. 45 "7-4-4 (c) SWITCH TEST.")

## (4) Replacing the shutter

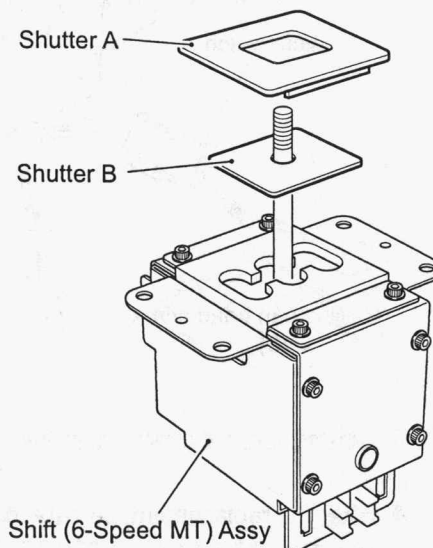
**! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2** Remove the Shift (6-Speed MT) Assy. (See P. 110 "8-3-4 (1) Removing and reinstalling the Shift (6-Speed MT) Assy.")
- 3** Insert an open-end wrench (14 mm across flats) through the tool hole, and engage it with the locking section (flat section) of the lever shaft. With the wrench held in this condition, turn the shift knob to the left to remove.



- 4** Pull out shutter A and shutter B, and replace them.



- 5** To reinstall, follow the removal sequence in reverse. Refer to the above diagram and check the direction of the shutter carefully during the reassembly.

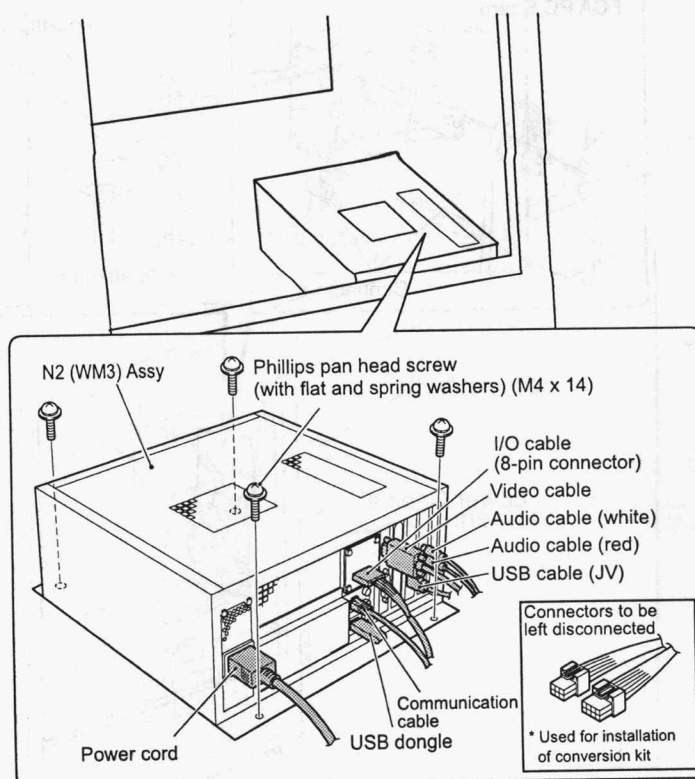
### 8-3-5 Cabinet Assy - To be conducted by a technician only -

#### (1) Replacing the N2 (WM3) Assy

## ! WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the lower cabinet door.
- 2** Disconnect the seven connectors and remove the USB dongle shown in the diagram.
- 3** Remove the four Phillips pan head screws (with flat and spring washers) (M4 x 14), and then remove and replace the N2 (WM3) Assy.



- 4** To reinstall, follow the removal sequence in reverse.

## NOTICE

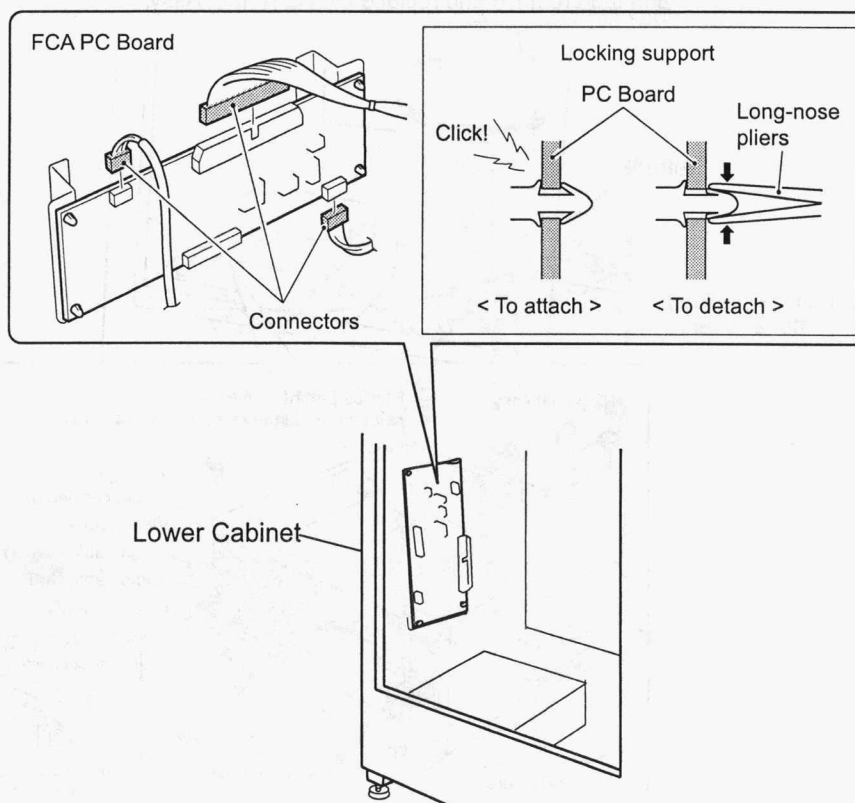
- When sending a part (N2 (WM3) Assy) for a repair, wrap it with sponge or bubble wrap, and pack it in a corrugated cardboard box to protect against impact from the outside.

## (2) Replacing the FCA FC Board

### **! WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the rear door from the lower monitor cabinet.
- 2** Disconnect the three connectors shown in the diagram.
- 3** Release the four locking supports, and replace the FCA PC Board.
- 4** To reinstall, follow the removal sequence in reverse.

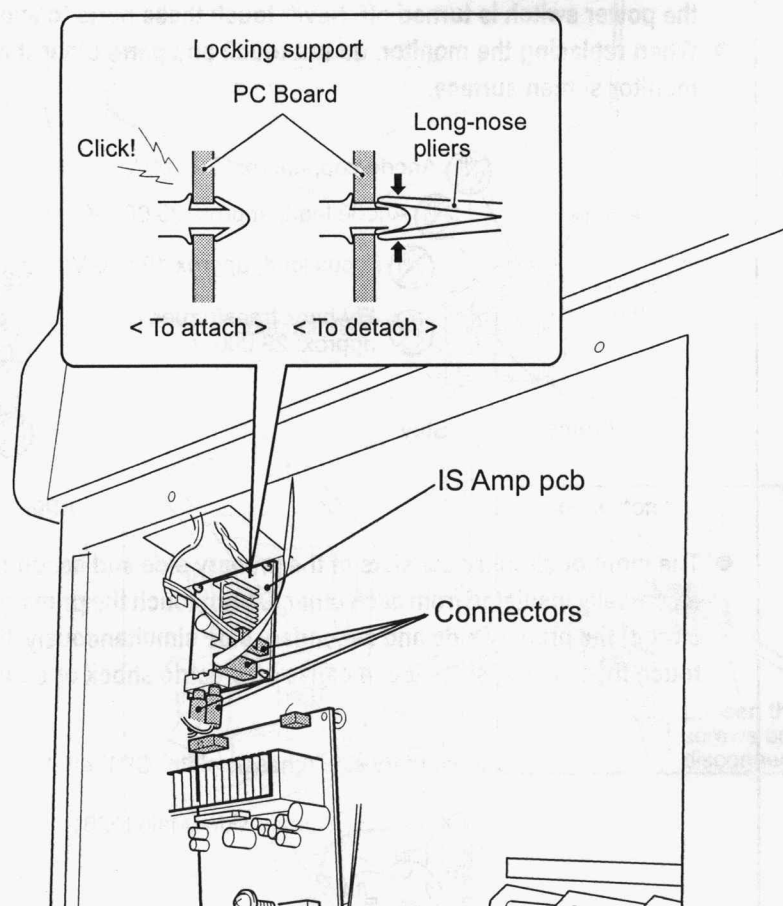


## (4) Replacing the IS Amp PC Board

**⚠ WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

- 1** Remove the rear door from the lower monitor cabinet.
- 2** Disconnect the four connectors shown in the diagram.
- 3** Release the four locking supports, and replace the IS Amp PC Board.




- 4** To reinstall, follow the removal sequence in reverse.



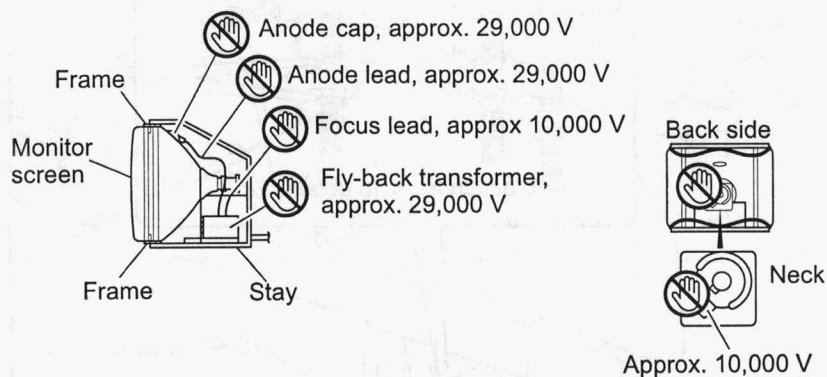
## 8-4 Replacement and adjustment of the monitor

### 8-4-1 Replacing the monitor - To be conducted by a technician only -

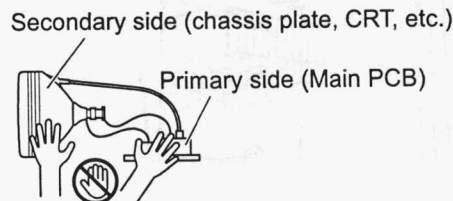
: Do not touch the part indicated with this mark.

## WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- Some internal parts of the monitor are charged with a voltage of 20,000 V or higher. To prevent an electric shock, do not touch any internal parts of the monitor.
- The anode cap, anode lead, and fly-back transformer retain high voltage even after the power switch is turned off. Never touch these parts to avoid an electric shock.
- When replacing the monitor, do not touch any parts other than the stay, frame and monitor screen surface.



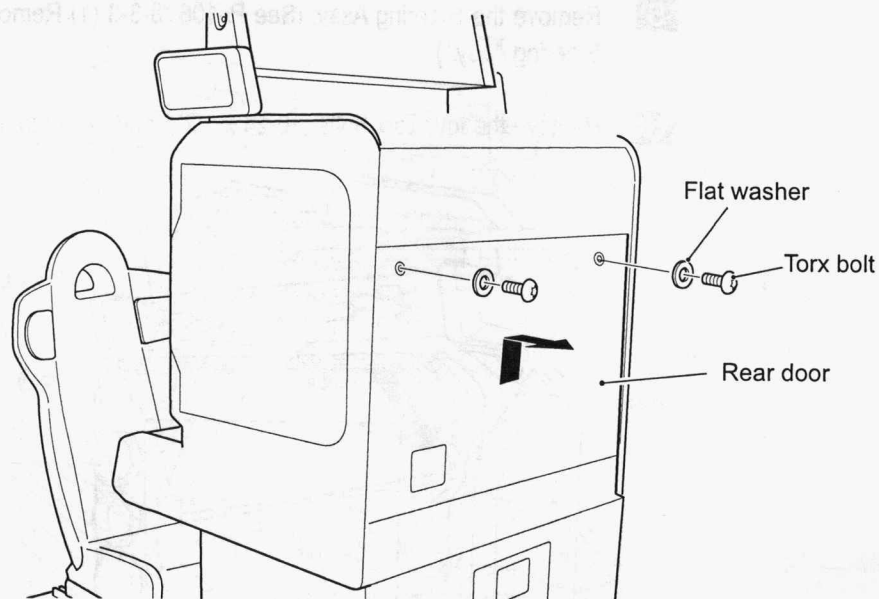
- The monitor circuitry consists of the primary side and secondary side, and they are electrically insulated from each other. Do not touch the primary side, or touch (short-circuit) the primary side and secondary side simultaneously. It is very dangerous to touch these parts, since it can cause an electric shock or equipment malfunction.



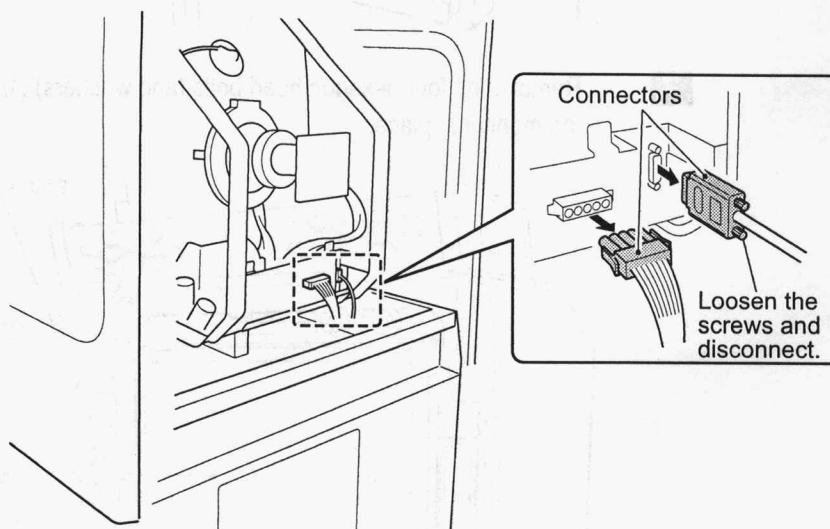
- If solder chips, paper or other foreign items enter the monitor, turn off the power switch to prevent fire and equipment malfunction, and then contact your distributor.
- If the monitor generates an abnormality, turn off the power switch immediately and contact your distributor.
- The monitor weighs approximately 90lbs. It should be handled by at least two persons.

**1** Remove the two bolts and flat washers at the top corners of the rear door.

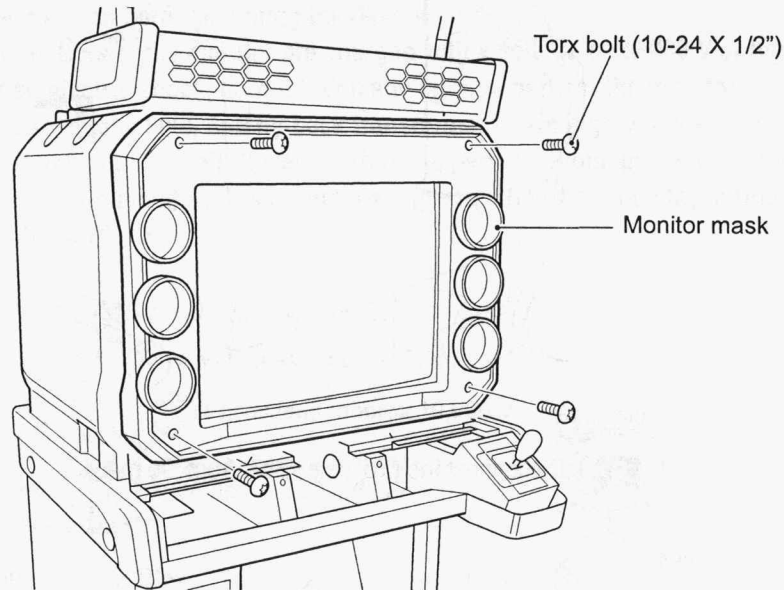
**2** Remove the rear door by lifting.



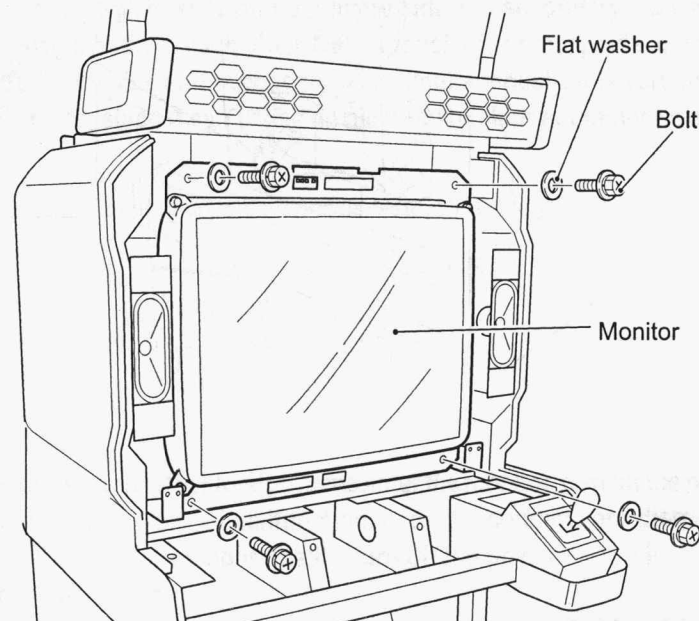
**3** Disconnect the two connectors from the monitor.



- 4** Remove the Control Cover Assy. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 5** Remove the Steering Assy. (See P. 106 "8-3-3 (1) Removing and reinstalling the Steering Assy.")
- 6** Remove the four Torx bolts (10-24 x 1/2"), and dismount the monitor mask.



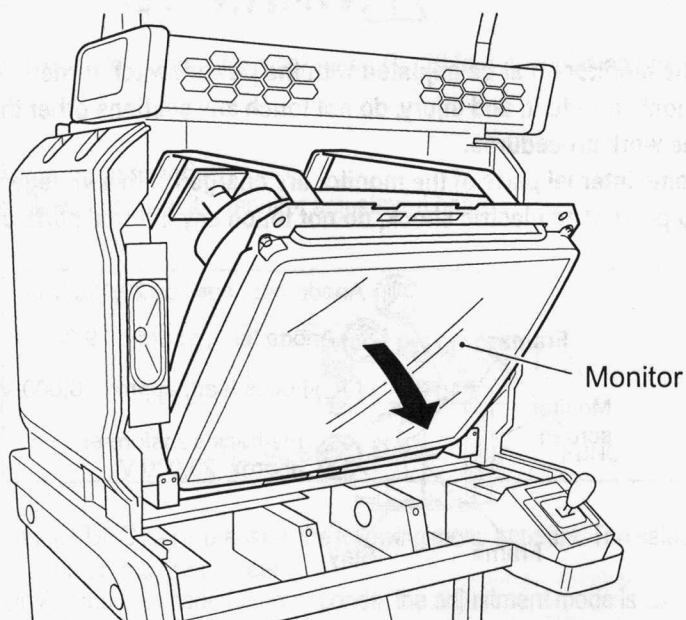
- 7** Remove the four hexagon head bolts (and washers) (1/4-20 X 1") that are holding the monitor in place.



**NOTICE**

- Do not hold the monitor by the adjustment board mounted on the frame.

- 8** Slowly tilt the monitor forward first, and then remove the monitor.



- 9** Install a new monitor.

- 10** To reinstall, follow the removal sequence in reverse.

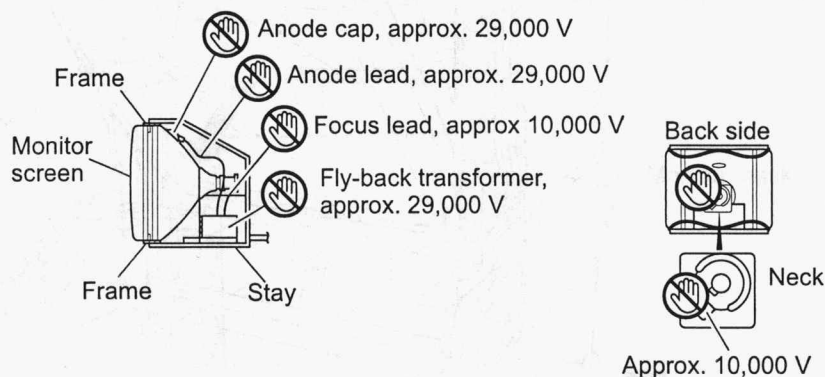
**8-4-2 Adjusting the monitor - To be conducted by a technician only -**

: Do not touch the part indicated with this mark.



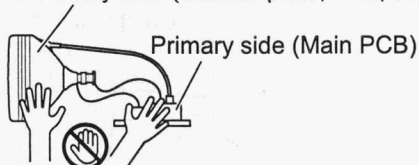
# **WARNING**

- The monitor must be adjusted with the power switch turned on. To prevent electric shock, accident, and injury, do not touch any sections other than those specified in the work procedures.
- Some internal parts of the monitor are charged with a voltage of 20,000 V or higher. To prevent an electric shock, do not touch any internal parts of the monitor.



- The monitor circuitry consists of the primary side and secondary side, and they are electrically insulated from each other. Do not touch the primary side, or touch (short-circuit) the primary side and secondary side simultaneously. It is very dangerous to touch these parts, since it can cause an electric shock or equipment malfunction.

Secondary side (chassis plate, CRT, etc.)



- If solder chips, paper or other foreign items enter the monitor, turn off the power switch to prevent fire and equipment malfunction, and then contact your distributor.
- If the monitor generates an abnormality, turn off the power switch immediately and contact your distributor.

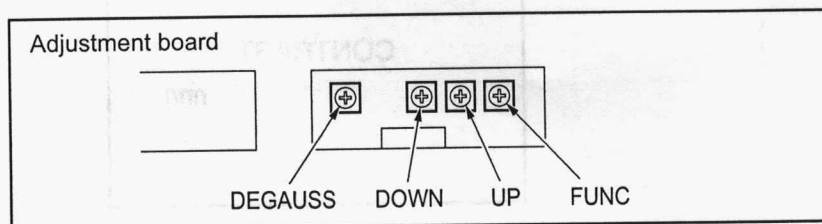


- The monitor has been adjusted to optimum condition before shipment. Normally, it does not need to be readjusted.

- 1 Remove the control cover. (See P. 98 "8-3-1 (2) Removing and reinstalling the control cover.")
- 2 Remove the monitor mask. (See P. 120 "8-4-1 Replacing the monitor.")

#### (a) Adjustment function

The following shows the monitor adjustment board.



When the FUNC key is pressed, the following menu appears. The selected item is indicated in red, and others are in green.

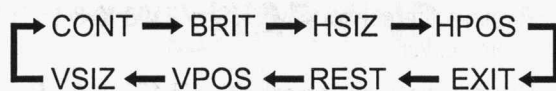
\* If no key input is made for six seconds, the adjustment mode is cancelled and the menu items disappear from the screen.

CONT	VSIZ
BRIT	VPOS
HSIZ	REST
HPOS	EXIT

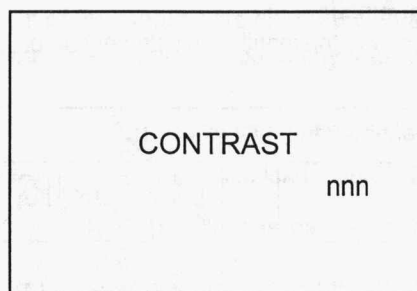
- (1) CONTRAST (CONT): Used to adjust the ratio of light areas to dark areas on the displayed image.
  - Pressing the [UP] key increases the color density of the displayed image.
  - Pressing the [DOWN] key decreases the color density of the displayed image.
- (2) BRIGHT (BRIT): Used to adjust the brightness level of the displayed image.
  - Pressing the [UP] key increases the brightness of the displayed image.
  - Pressing the [DOWN] key decreases the brightness of the displayed image.
- (3) H.SIZE (HSIZ): Horizontal size adjustment — Used to adjust the horizontal size of the displayed image.
  - Pressing the [UP] key increases the width of the displayed image in the horizontal direction.
  - Pressing the [DOWN] key decreases the width of the displayed image in the horizontal direction.
- (4) H.POSI (HPOS): Horizontal position adjustment — Used to adjust the position of the displayed image in the horizontal direction.
  - Pressing the [UP] key moves the displayed image to the left.
  - Pressing the [DOWN] key moves the displayed image to the right.
- (5) V.SIZE (VSIZ): Vertical size adjustment — Used to adjust the vertical size of the displayed image.
  - Pressing the [UP] key moves the displayed image to the left.
  - Pressing the [DOWN] key moves the displayed image to the right.
- (6) V.POSI (VPOS): Vertical position adjustment — Used to adjust the position of the displayed image in the vertical direction.
  - Pressing the [UP] key moves up the displayed image.
  - Pressing the [DOWN] key moves down the displayed image.



When the FUNC key is pressed successively, the selected item (in red) changes in the following order.



When an adjustment item (in red) is selected and the UP/DOWN key is pressed once, the following screen appears. ("nnn" indicates the current adjustment value of the selected item.)



The adjustment value can be changed by pressing the UP or DOWN key.

\* The adjustment value is automatically stored in the memory when there is no UP/DOWN key input for six seconds or the FUNC key is pressed to select the next adjustment item.

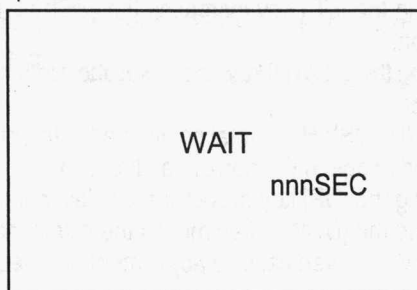
If the UP or DOWN key is pressed while the "EXIT" indication is in red, the adjustment mode is canceled.

#### RSET (Reset)

If the UP and DOWN keys are pressed simultaneously while the "RESET" indication is in red, "RSET" is displayed for three seconds and all adjustment items change back to the factory settings.

#### About the DEGAUSS key

- (1) When the DEGAUSS key is pressed, the monitor is demagnetized and "DEGAUSS" is displayed on the screen for five seconds.
- (2) If the DEGAUSS key is pressed again within five minutes from the previous degaussing operation, the following screen appears and shows the remaining time before the degaussing operation is activated.



- (3) If the FUNC key is pressed while the remaining time is indicated, the MENU screen appears to allow adjustment.
- (4) Even if the menu mode is entered as described in above step (3), the degauss standby status is effective and the degaussing operation is activated when the remaining time reaches zero.

## 9. DISCARDING THE MACHINE

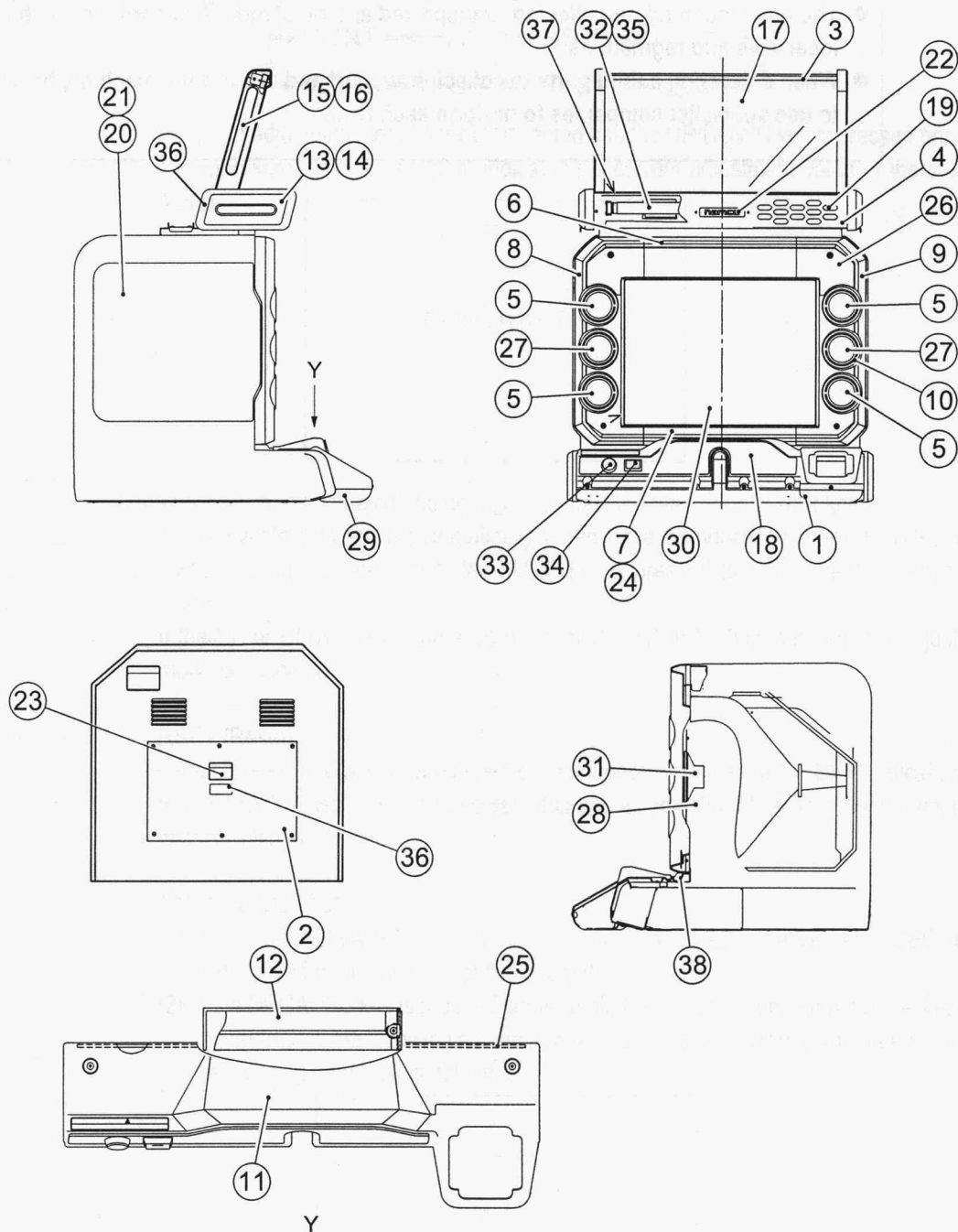


### WARNING

- The machine must be collected, transported and discarded in accordance with the local laws and regulations.
- When entrusting a third party to collect, transport and discard the machine, be sure to use specialist companies to perform each task.

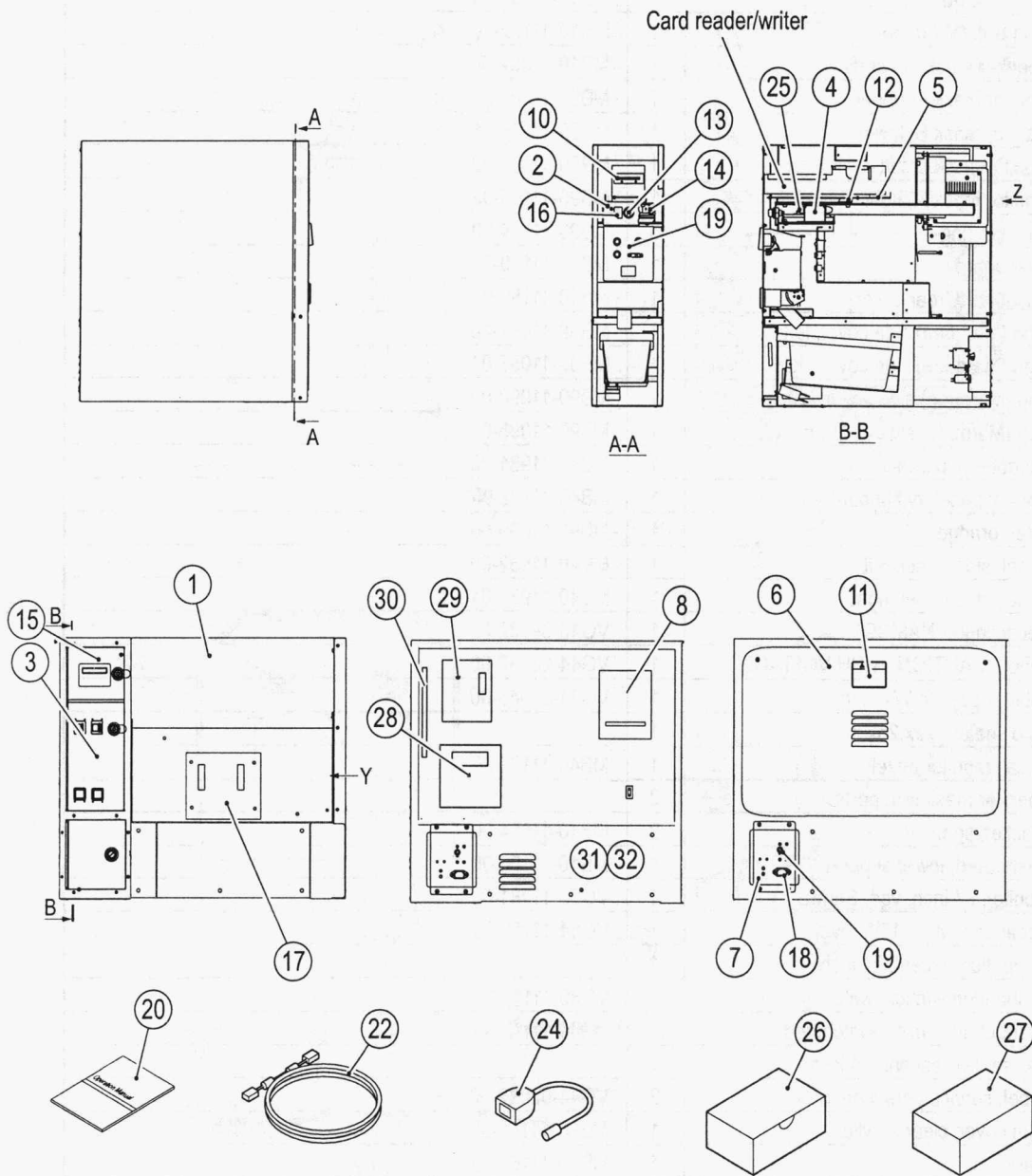
# 10. PARTS LIST

## 10-1 Monitor Assy



No.	Name	Qty	Part No.
1	Upper Cabinet	1	MB-0500-00
2	Rear door	1	MB10-11164-00
3	POP (Marquee) frame	1	MB10-11168-00
4	Sign Box (Marquee)	1	MB10-11172-00
5	Speaker mask, no perfs	4	MB10-11092-00
6	Monitor mask A, upper	1	MB90-11105-00
7	Monitor mask B, lower	1	MB90-11105-01
8	Monitor mask L, left	1	MB90-11105-02
9	Monitor mask R, right	1	MB90-11105-03
10	Speaker ring	6	MB90-11104-00
11	Dashboard	1	MB90-11120-00
12	Dashboard, rear cover	1	MB10-11159-00
13	Sign (Marquee) side cover, left	1	MB90-11097-00
14	Sign (Marquee) side cover, right	1	MB90-11097-01
15	Pop (Marquee) side cover, left	1	MB90-11098-00
16	Pop (Marquee) side cover, right	1	MB90-11098-01
17	Marquee pop panel	1	MB40-11931-00
18	Control panel, dashboard	1	MB40-11122-00
19	Filter, orange	1	MB95-11099-00
20	Decal, side panel, left	1	MB40-11932-00
21	Decal, side panel, right	1	MB40-11932-01
22	Decal, logo, "NAMCO"	1	VG40-09132-00
23	Label, "CAUTION, HIGH VOLTAGE"	1	VG44-05532-00
24	Label, Epileptic Warning	1	VG44-07943-00
25	Epto sealer, .25x.25x30 in	1	
26	Decal, monitor bezel	1	MB40-11123-00
27	Speaker mask with perfs	2	
28	Bracket, speaker	2	MB10-11154-00
29	Dashboard, lower support	1	MB10-11156-00
30	Monitor, 27 inch, vga, Sanwa	1	VG85-11981-00
31	Speaker, 6 ohm, 15W, oval	1	VG54-11156-00
32	Lamp, fluorescent, 24 inch	1	
33	Pushbutton w/microswitch, green	1	VG80-11111-01
34	Pushbutton w/microswitch, red	1	VG80-11112-00
35	Fixture, fluorescent, 24 inch	1	
36	Label, service personnel only	2	VG44-02642-00
37	Sign cover, clear acrylic	1	MB95-11142-00
38	Mask	1	MB10-11160-00

## 10-2 Lower box Assy

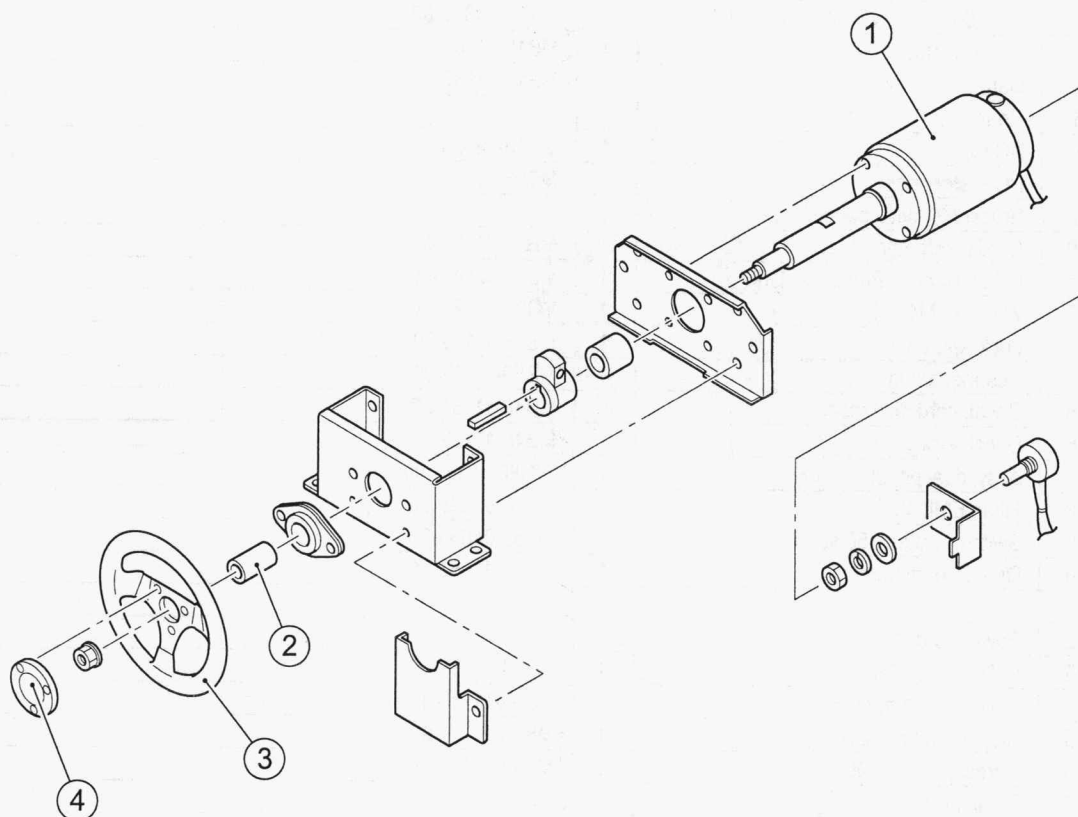


## 10. PARTS LIST

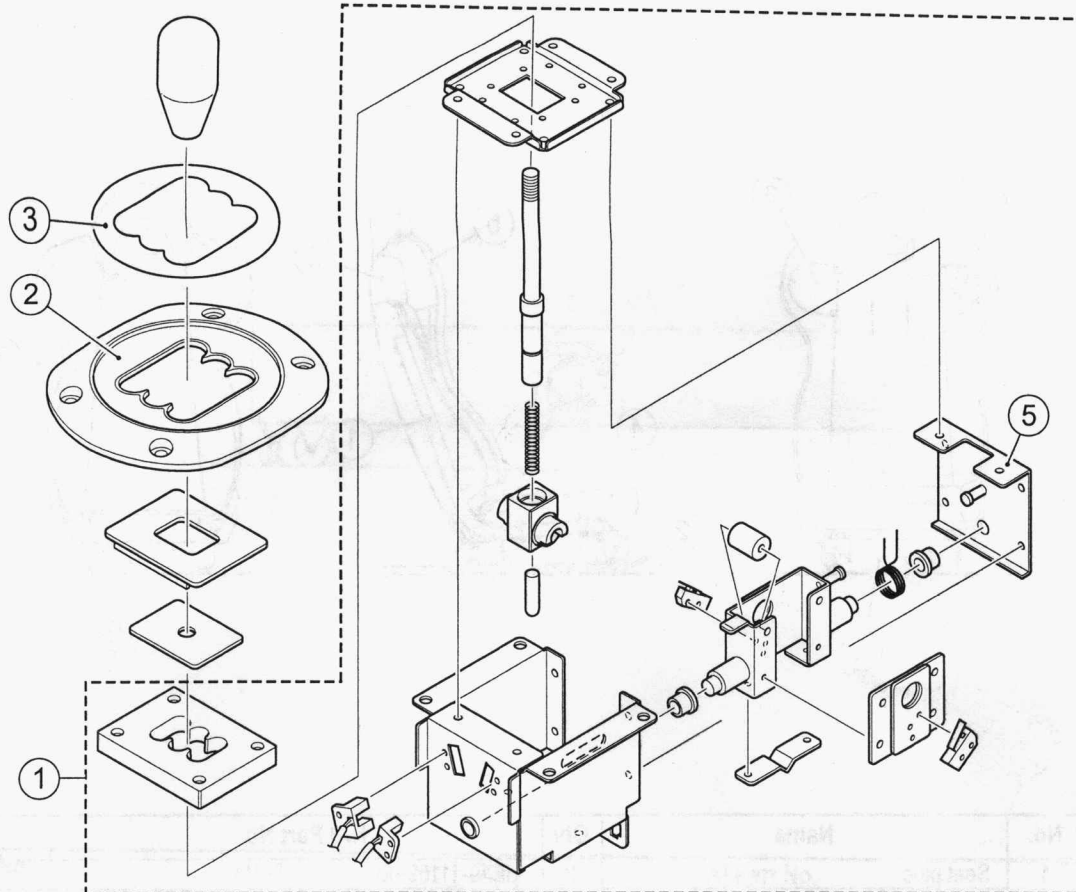
No.	Name	Qty	NAI Part No.
1	Cabinet, lower	1	MB63-11148-00
2	Slide rail	1	MB10-11165-00
3	Coin door, O/U w/dollar bill validator	1	VG83-10635-00
4	Bracket, stopper	1	MB10-11166-00
5	Card read/write base	1	MB10-11167-00
6	Rear door	1	
7	AC plate	1	VG10-09494-00
8	PCB, steering	1	MB05-11948-00
9	Bracket, service panel	1	
10	Card insert gate	1	MB90-11094-00
11	Label, Service Personnel Only	1	VG44-02642-00
12	Well nut, M4x0.7	1	VG20-00587-00
13	Lock w/knob	1	MB26-11115-00
14	Bearing, delrin	4	MB59-11116-00
15	Decal, card dispenser	1	MB40-11131-00
16	Decal, lock	1	MB40-11129-00
17	Assy, dual pedal	1	WG80-10193-00
18	Filter, EMI, 10A	1	VG78-07695-00
19	Switch, rocker, 350 series	1	VG53-04683-00
20	Operators manual	1	MB45-11953-00
21		1	
22	Power cord, 10A	1	
23	LAN cable, 15 ft, link	1	VG50-11136-15
24	LAN cable, 1 ft, internal	1	VG50-11136-01
25	Stopper, rubber CD	1	MB96-11117-00
26	Cards, pack of 100	1	MB43-11952-00
27	Cleaning card	1	MB43-11135-00
28	PCB, P bass amp	1	TI05-10632-00
29	PCB, IS amp	1	MB05-11082-00
30	PCB, FCA	1	MK05-11442-00
31	Power supply, 150W	1	VG88-11114-00
32	Power supply, 300W	1	VG88-11121-00
33	Read/ Write Card Assy.	1	MB03-11980-00



### 10-3 Steering Assy

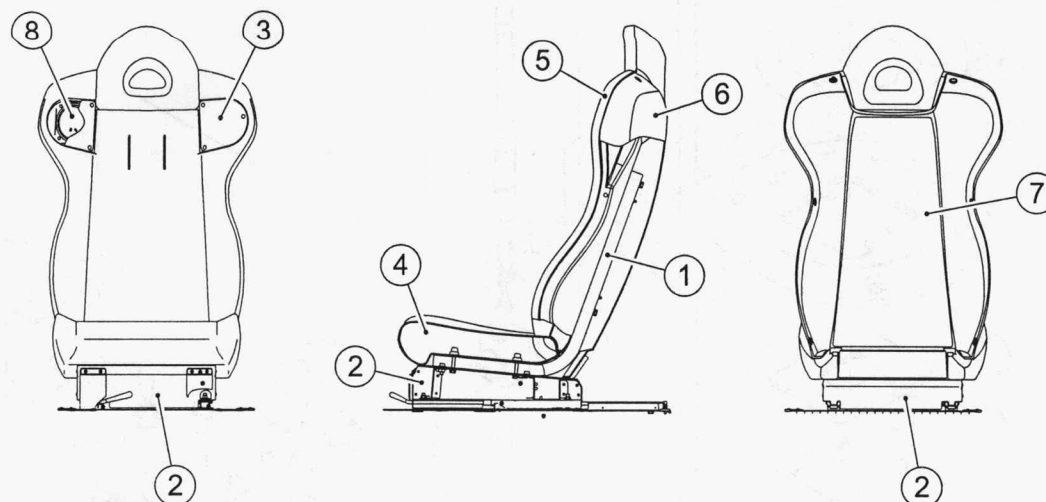


No.	Name	Qty	NAI Part No.
1	Motor assembly w/mechanism	1	MB05-11190-00
2	Spacer, collar, black	1	MB89-11193-00
3	Steering wheel	1	MB80-11191-00
4	Emblem	1	MB80-11194-00

**10-4 Shift (6-Speed MT) Assy**

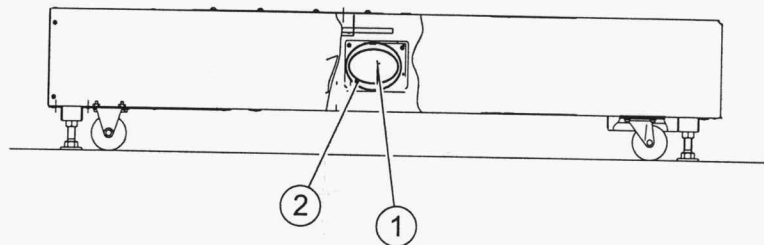
No.	Name	Qty	NAI Part No.
1	Shift assembly mechanism	1	MB05-11197-00
2	Gate cover	1	MB95-11196-00
3	Decal, shift pattern	1	MB40-11126-00

## 10-5 Seat Assy



No.	Name	Qty	NAI Part No.
1	Seat pipe	2	MB10-11169-00
2	Seat slide assembly	1	R505-09677-00
3	Speaker cover	1	MB90-11100-00
4	Seat base	1	MB90-11101-00
5	Seat back	1	MB90-11102-00
6	Seat cover	1	MB90-11103-00
7	Decal, seat back	1	MB40-11936-00
8	Speaker, 4 in, 4 ohm, 20w	2	VG54-09405-01

## 10-6 Seat Base Assy



No.	Name	Qty	NAI Part No.
1	Speaker, woofer, 5.3125", 8 ohm, 20w	1	VG54-07796-01
2	Woofer cover	1	R510-09675-00

## 11. WIRING DIAGRAMS

