

SERVICE MANUAL





(NOTE: Photos show items with optional accessories attached.)

IMPORTANT

- Before using this product, read this manual carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it near the product or in a convenient place for easy reference when necessary.



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AWARNING

In order to manage this product, there must be fire-fighting facilities and evacuation space as prescribed by related laws and by local government ordinances in the district where the product has been installed, so that countermeasures can be taken if there is an accident, fire or earthquake. There are cases, depending on the environment or district where a structure has been installed, in which inspection by a fire station or other public institution is required. Consult with your local fire department before installing the product.

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

To maintain safety:

To ensure the safe operation of this product, be sure to read the following before usage. The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning displays and cautions, handle the product appropriately. Be sure to keep this manual close to the product or in a convenient place for future reference.

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



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



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



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

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



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



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

(The step may be omitted for products in which a power cord with earth is used.)

O Perform work in accordance with the instructions herein stated.

Instructions for work are explained by paying attention to the aspect of accident prevention. Failing to perform work as per the instructions can cause accidents. In the case where only those who have technical expertise should perform the work to avoid hazardous situation, the instructions herein state that the site maintenance personnel should perform such work.

- O Be sure to turn off the power before working on the machine.
 - To prevent an electric shock, be sure to turn off the power before carrying out any work that requires direct contact with the interior of the product. If the work is to be performed in the power-on status, the Instruction Manual herein always states to that effect.
- O Be sure to ground the Earth Terminal.
 - (This is not required in the case where a power cord with earth is used.)
 This product is equipped with the Earth Terminal. When installing the product, connect the Earth Terminal to the "accurately grounded indoor earth terminal" by using an earth wire.
 Unless the product is grounded appropriately, the user can be subject to an electric shock.
 After performing repair, etc. for the control equipment, ensure that the Earth Wire is firmly connected to the control equipment.
- O Ensure that the Power Supply used is equipped with an Earth Leakage Breaker. This product does not incorporate the Earth Leakage Breaker. Using a power supply which is not equipped with the Earth Leakage Breaker can cause a fire when earth leakage occurs.
- O Be sure to use fuses which meet the specified rating. (Only for the machines which use fuses.)

Using fuses exceeding the specified rating can cause a fire and an electric shock.

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

The parts of the product include warning labels for safety, covers for personal protection, etc. It is very hazardous to operate the product by removing parts and/or modifying the circuits. Should doors, lids and protective parts be damaged or lost, refrain from operating the product, and contact where the product was purchased from or the office herein stated. SEGA shall not be held responsible for any accidents, compensation for damage to a third party, resulting from the specifications not designated by SEGA.

O Ensure that the product meets the requirements of appropriate Electrical Specifications.

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

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

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

 When handling the monitor, be very careful. (Applies only to the product with a monitor.)

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

Be sure to adjust the monitor/projector properly.
 (Applies only to the product with a monitor/projector.)

Do not operate the product leaving on-screen flickering or blurring as it is. Using the product with the monitor/projector not properly adjusted may cause dizziness or a headache to an operator, a player, or the customers.

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

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

*Descriptions herein contained may be subject to improvement changes without notice.

* The contents described herein are fully prepared with due care. However, should any question arise or errors be found, please contact SEGA.

INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION

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

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

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INTRODUCTION

This manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electro-mechanicals, servicing control, spare parts, etc. for the product, "LET'S GO JUNGLE! SPECIAL."

This manual is intended for the owners, personnel and managers in charge of operation of the product. Operate the product after carefully reading and sufficiently understanding the instructions.

In the unlikely event that the product does not function correctly, DO NOT allow anyone other than a technician to touch the internal system. Turn off the power to the machine, making sure to unplug the electrical cord from the outlet, and contact the office listed below or the point of purchase for this product.

Use of this product is unlikely to cause physical injuries or damage to property. However, points that require special attention are indicated by bold text, the word "IMPORTANT" and the symbol below.



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

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Definition of 'Site Maintenance Personnel or Other Qualified Individuals'

AWARNING

Procedures not described in this manual or marked as 'to be carried out by site maintenance personnel or other qualified professionals' should not be carried out by personnel without the necessary skill or technology. Work carried out by unqualified persons may cause serious accidents, including electrocution.

Parts replacement, maintenance inspections and troubleshooting should be carried out by site maintenance personnel or other qualified professionals. This manual includes directions for potentially dangerous procedures which should only be carried out by professionals with the appropriate specialized knowledge.

The site maintenance personnel or other qualified professionals mentioned in this manual are defined as follows:

Site maintenance personnel:

Individuals with experience in maintaining amusement equipment, vending machines, etc., working under the supervision of the owner/operator of this product to maintain machines within amusement facilities or similar premises by carrying out everyday procedures such as assembly, maintenance inspections, and replacement of units/expendable parts.

Activities to be carried out by site maintenance personnel:

Amusement equipment/vending machine assembly, maintenance inspection and replacement of units/expendable parts.

Other qualified professionals:

Persons employed by amusement equipment manufacturers, or involved in design, production, testing or maintenance of amusement equipment. The individual should have either graduated from technical school or hold similar qualifications in electrical/electronics/mechanical engineering.

Activities to be carried out by other qualified professionals:

Amusement equipment/vending machine assembly, repair/adjustment of electrical/electronic/mechanical parts.

AWARNING

To operate this product, there must always be an attendant on site. To prevent accidents and take immediate countermeasures if there is an accident, fire or earthquake, always have an attendant on duty while operating the product. The customers play inside the cabinet. The seat rotates. Have an attendant do the following: assist the customer in entering and leaving, confirm that safety measures have been taken, explain precautionary points to prevent accidents and watch the customers playing. In addition, prepare a system for quick countermeasures in the event of accident, fire or earthquake.

1 OPERATION METHOD

1-1 PRECAUTIONS REGARDING PRODUCT OPERATION

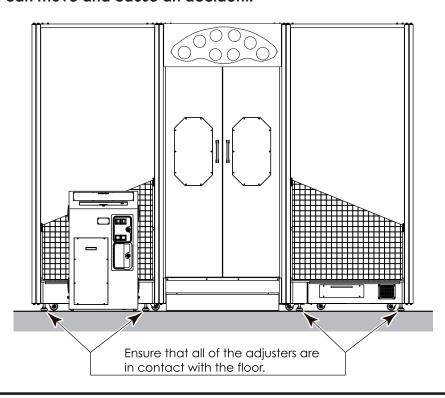
To ensure safe operation of this product, strictly observe the following precautions.

AWARNING

- There must be an attendant on duty when this product is being operated.
 Players play inside the cabinet. In addition, the ride (seat) rotates. The attendant shall do the following and work to guarantee safe operation at all times.
 - Open/close door.
 - Usher players inside the cabinet to the seat.
 - Explain precautionary points to prevent accidents.
 - Raise and lower armrest.
 - Check seatbelt.
 - Select motion mode (ROTATE or STILL).
 - Start game.
 - Observe cabinet interior during game play.
 - Usher players out of cabinet when game is over.
 - Make sure that nothing has been forgotten and left behind.
 - Inspect seat and Control Unit (Gun).
 - Stop game in the event of an accident.
 - Assist players in evacuating if there is a fire or earthquake.

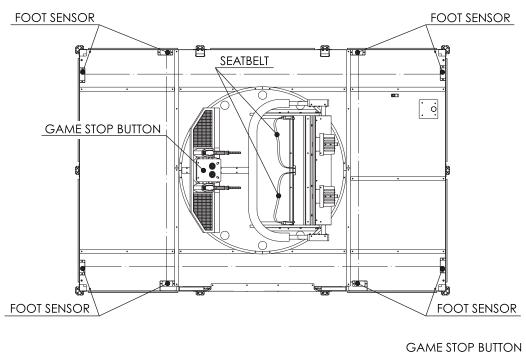
In order to avoid accidents, check the following before starting the operation:

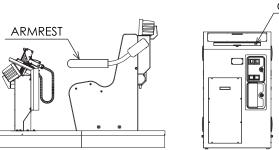
• Check if all of the adjusters are in contact with the surface. If they are not, the cabinet can move and cause an accident.



AWARNING

- Conduct a trial run before operation and confirm that the following safety parts work properly. Each safety part is a vital component for preventing accidents.
 Any abnormality in a safety part can cause an accident.
 - Armrest
 - Foot sensor
 - Seatbelt
 - Player GAME STOP Button
 - Control tower GAME STOP Button
 - Door sensor





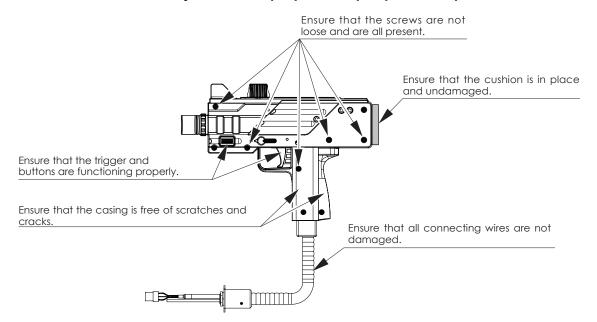
- Make sure that nothing has been put in the evacuation space set aside at the time of installation. If anything occupies this space, it can obstruct evacuation in the event of an accident, fire or earthquake.
- Make sure that the door opens and closes easily. If the door does not open easily, it can obstruct evacuation.
- For safety, players whose bodily features inhibit proper functioning of the seatbelt or armrest must only be allowed to play in STILL Mode (without ride rotation). To ensure safety and prevent needless trouble, always display the stickers that announce restrictions in use.

AWARNING

- Stickers or warning labels are posted to prevent accidents. Players, however, cannot read these labels because of the cabinet structure. Upon ushering players to the seat, the attendant should pay special attention to the step, explain safety measures including how to use the seatbelt before the game starts and take other measures to prevent accidents.
- Be sure to perform appropriate adjustment of the monitor (projector). For operation of this machine, do not leave monitor's flickering or deviation as is. Failure to observe this can have a bad influence upon the players' or the customers' physical conditions.
- It is suggested to ensure a space allowing the players who feel sick while playing the game to take a rest.
- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step ladder.
- To avoid electric shock, check to see if door & cover parts are damaged or omitted.
- To avoid electric shock, short circuit and/or parts damage, do not put the following items on or in the periphery of the product.
 [Flower vases, flowerpots, cups, water tanks, cosmetics, and receptacles/ containers/vessels containing chemicals and water.]

ACAUTION

- To avoid injury, be sure to provide sufficient space by considering the crowd situation at the installation location. Insufficient installation space can cause customers to bump into each other, causing trouble.
- Every day when cleaning the Control Unit (Gun), inspect the gun and make sure that there are no scratches or cracks in the surface, and that the fastening screws are not loose. If the game is played with scratches, cracks or loose screws, it can cause injuries to the player or to people nearby.



- Inspect for the following items during a trial run. If there is any type of error, use
 the Test Mode, etc., to resolve the problem. If you continue use with an error, it
 can cause an accident or irreparable parts damage.
 - Does the ride (seat) rotate smoothly at initial operation? (See Section 7 of the Owner's Manual.)
 - Does the Control Unit (Gun) aim properly?
 - Are there any errors with the reaction mechanism of the gun?
 - Are there any misalignments to the screen image?
 - Are there any errors with the compressor?
 - Does the drain discharge drainage properly?

STOP

IMPORTANT

- Players directly hold the controller with their bare hands so it is recommended that wet towels (paper towels) be provided.
- Be sure to clean the cabinet interior and Control Unit (Gun) at appropriate times.
- Set aside a container or space for storing customer baggage, etc. To prevent accidents and protect parts, take steps to prohibit players from carrying umbrellas or other raingear, or juice or other drinks, into the cabinet.
- Turn off ambient lighting so that projector images can be easily seen during the game.

1-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

AWARNING

- For safety reasons, do not allow any of the following people to play the game.
 - Those who have high blood pressure or a heart problem.
 - Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
 - Those who have neck or spinal cord problems.
 - Intoxicated persons.
 - Pregnant women.
 - Those who are not in good health.
 - Those who do not follow the attendant's instructions.
 - Those who cannot grasp the Control Unit (Gun) securely because of immobility in fingers, hands or arms.
 - Persons who disregard the product's warning displays.

The game cannot be played while sitting in a wheelchair.

- The following people must be allowed to play only in STILL Mode (without ride rotation). Otherwise there might be an accident. To avoid needless trouble, always explain these matters to the player before starting the game.
 - Persons susceptible to motion sickness.
 - Those who require supporting devices, etc., to walk.
 - Those who cannot bend their knees because of illness, etc.
 - Those who have fractures or other bone abnormalities anywhere in the body.
- Even players who have never been adversely affected by light stimulus might experience dizziness or headache depending on their physical condition when playing the game. Small children are especially likely to experience these symptoms. Caution guardians of small children to keep watch on their children during play.
- Instruct those who feel sick during play to have a medical examination.
- To avoid injury from falls and electric shocks due to spilled drinks, instruct the player not to place heavy items or drinks on the product.
- To avoid electric shocks and short circuits, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.
- To avoid falls and resulting injury, stop the customer from leaning against or climbing on the product, etc.
- Warn players not to wrap the Control Unit (Gun) wire around their wrists or neck. Otherwise there could be a serious accident.
- This product has a capacity of two people. Make sure that there are never any more than two people riding the machine. Otherwise the safety devices might not function properly and there could be accident such as a tumble or fall.

AWARNING

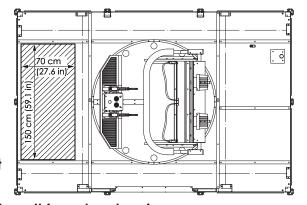
- Entering the cabinet with a wet umbrella or wet shoes is strictly forbidden. There
 are electrical parts and wiring underneath the cabinet floor. If these become
 wet, this can cause an electric shock or short circuit. Be especially careful in
 managing the product on rainy days.
- The attendant should always remain near the product during operating so he or she can respond quickly to accidents, fire or earthquake. The attendant must also constantly observe the interior of the cabinet.
- Do not put drinks or heavy objects on the ride or seat. The player could be accidentally hit by an object due to the ride rotation. Spilt fluids can cause an electric shock or short circuit and they can also cause the player to slip and fall.
- The armrest should be raised and lowered only by the attendant. To insure safety, make sure that the seatbelt is never unfastened and the armrest is never raised during play.
- Explain that, for the sake of safety, the following people must be allowed to play only in STILL Mode (without ride rotation). Otherwise the safety devices might not function properly and there could be accident such as a tumble or fall.
 - Those who are less than 110 cm (43.3 in) in height.
 - Those who range from 110 to 130 cm (43.3 to 51.2 in) in height but are not accompanied by a guardian.
 - Those who weigh 150 kg (331 lb) or more.
 Those from 110 to 130 cm (43.3 to 51.2 in) in height who are with a guardian must play in MILD Mode in which movement of the ride is restricted.
- Someone might try to insert such things as an umbrella through the fence or place foreign objects inside the cabinet. Stop such activity, as it could cause an accident.
- Have players remove scarves, long necklaces, etc. Such items could get caught in the armrest or rotating ride and cause strangulation or some other kind of accident.
- Whenever the attendant leaves the control tower, he or she should lock the control panel lid. If someone were to mishandle the panel, it could cause a very serious accident.
- Have players remove any candy, gum, etc., from their mouths beforehand.
 Such items could get caught in the throat while playing.

ACAUTION

- Immediately stop such violent acts as hitting and kicking the product. Such
 violent acts can cause parts damage or cause the cabinet to fall over, resulting
 in injury.
- Instruct players to hold the Control Unit (Gun) securely while playing. If the gun is dropped, it could cause injury to the player.
- Items such as large finger rings can cause injury to the fingers while playing.
 Instruct players to remove all accessories that could cause an accident before playing.
- Instruct players that a single Control Unit (Gun) is never to be held by two or more people during play. Otherwise there could be dangerous contact or a collision.
- Explain that the GAME STOP Button can be pressed to stop play whenever the player feels ill.
- Explain that the attendant will stop the game if he or she judges that a situation is dangerous.
- Do not allow other customers to open the door during play. Otherwise there could be accidents or conflicts between customers.
- Inside the cabinet there is a step leading to the ride. Instruct players to watch their step when entering or leaving.
- Do not allow players to extend their hands or feet out from the ride during play. Otherwise there could be bruises, sprains or other accidental injuries.
- Warn players not to position their faces near the control unit. The control unit's "recoil" can cause injury.

(STOP) IMPORTANT

• Explain that if handbags or other items are placed under the ride, the foot sensor will stop ride rotation. Have customers put their handbags, etc. at a location outside the range of the foot sensor on the front screen side, that is within an area 150 cm (59.1 in) in width, 70 cm (27.6 in) in length and 50 cm (19.7 in) in height under the front screen.



Make sure that customers do not forget anything when leaving.

1-3 OPERATION PROCEDURES

Following is an explanation of general operation procedures to be carried out by the attendant. Such things as product installation environment or presentation method can vary, depending on the installation site. Understand that the following are common operation procedures.

Start Standby (Reception, Guidance)

- Explain play restrictions to players and make sure they are understood. Explain very carefully to players of short stature and very large body size that they must play in a mode in which the ride does not rotate.
- **9** Check the number of players and arrange them into groups.
- In the case of coin operation, the attendant accepts coins and inserts them. For ticket operation, a ticket or card is accepted.

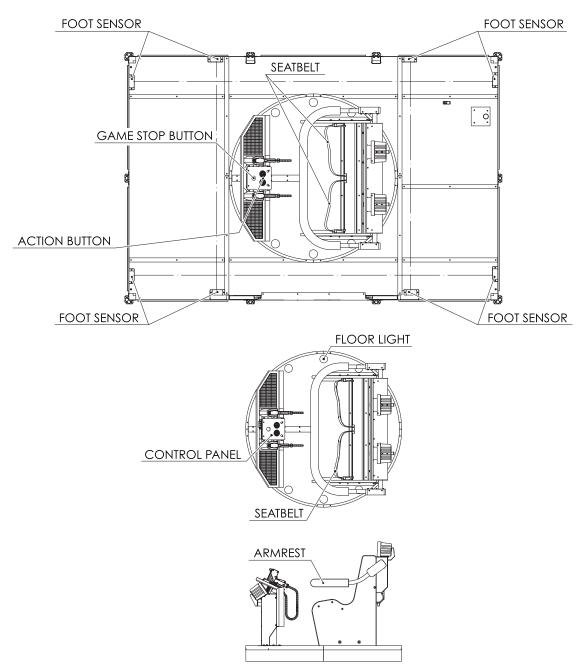


[Coin Operation]

If coins are inserted while the customer welcome screen is displayed, the number of credits is shown on the screen. When there are enough credits that a game can be started, the spot light in the cabinet and the ride floor light glow and the start standby screen appears.

[Ticket Operation]

If the door is opened or closed, or if the foot sensor reacts, while the customer welcome screen is displayed, the spot light in the cabinet and the ride floor light glow and the start standby screen appears.



1-3 FIG. 02

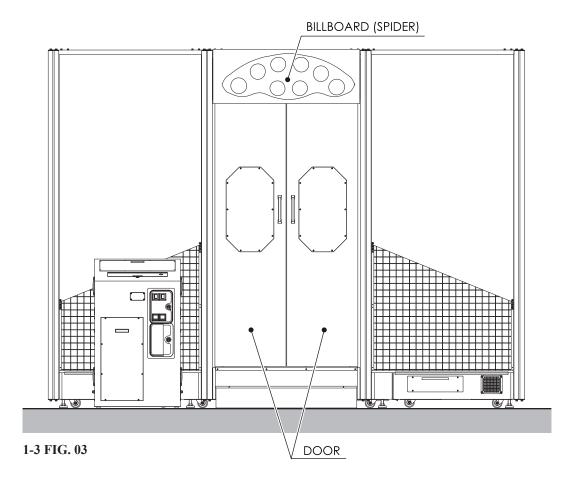
On Cancellation of Start Standby

- If the start standby screen continues for 3 minutes, and there are no changes detected by the door sensor, foot sensor, or the seatbelt and armrest sensors in that time, it is judged that no one is inside the cabinet and the spot light and floor light go out.
- 2 Under this condition, if the GAME STOP Button of the ride is not pressed for at least 2 seconds, no further game progress can be made.
- If the GAME STOP Button is pressed for 2 seconds or longer, the cabinet spot light and ride floor light glow and the start standby screen reappears.

Game Start Preparation

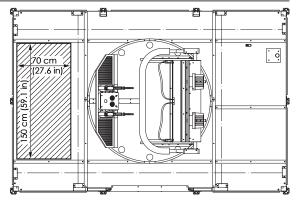
Confirm that the unit is at customer welcome or start standby condition. At the customer welcome or start standby condition, the billboard (spider) is light blue.

If the door is closed, look through the door window and confirm that no one is inside.



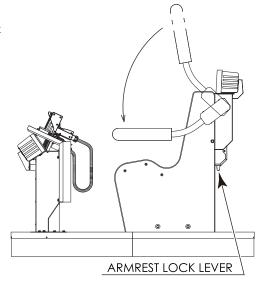
- 2 Usher the customers into the cabinet and have them take a seat. Warn the customers to watch their step as the cabinet is dark inside and there is a step.
- Have customers put their handbags, etc. at a location outside the range of the foot sensor on the front screen side, that is within an area 150 cm (59.1 in) in width, 70 cm (27.6 in) in length and 50 cm (19.7 in) in height under the front screen.

If a customer has anything on their person that might get caught while the ride is rotating (e.g. muffler, sunglasses not being worn), have him/her remove it.



1-3 FIG. 04

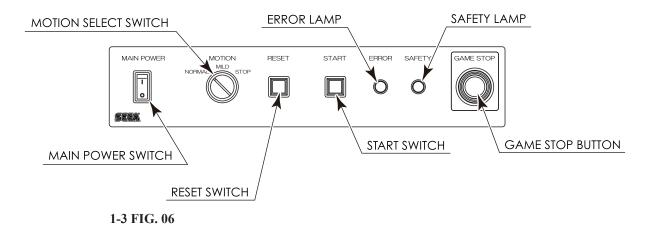
- If there is only one customer, direct him/her to sit on the right side facing the screen in the area farthest from the door. Have him/her sit on the far side from the door to ensure safety. If the player must be attended by a guardian, also have the player sit on the far side from the door.
- After the customer has been seated, press the ACTION Button. Precautions in game play are shown on the screen. You cannot proceed until this screen's explanations are finished.
- Explain about the seatbelt and armrest.
- Have the customers fasten the seatbelt, and then confirm that the seatbelt is locked and that its length is adjusted properly.
- If there is only one customer, lock the other seatbelt.
- Dower the armrest. The attendant should lower the armrest while warning the customers to be careful. When the armrest lock lever on the back of the seat has been raised up, the armrest can be locked. It is not always necessary to lock the armrest.



1-3 FIG. 05

- 10 Press the ACTION Button once again. An explanation of precautions is given on the screen. You cannot proceed until this screen's explanations are finished.
- Give an explanation of each button and the Control Unit (Gun). Instruct players to hold the control unit firmly in both hands. Be careful not to position their faces near the control unit.
- **1** Explain precautionary items and emergency procedures.
- **13** Make sure that there are no objects obstructing the foot sensor.
- **14** Leave the cabinet and shut the door securely.

With the motion select switch on the control tower, select NORMAL, MILD or STOP.



NORMAL Mode (NORMAL):

Mode in which the ride turns around and play takes place on both front and rear screen.

MILD Mode (MILD):

Mode in which the ride turns up to 45 degrees right or left and play takes place on the front screen.

STILL Mode (STOP):

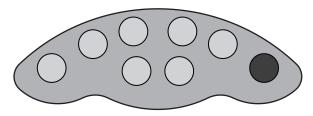
Mode in which the ride remains stationary and play takes place on the front screen.

- If there are no problems for any of the safety sensors, the safety lamp on the control tower changes from blinking to glowing and the start switch blinks.
- **Q** When the start switch is pressed, the start switch changes from blinking to glowing and the game starts.

Game In Progress

1

Listen carefully and look through the door window to confirm that the customers are playing safely. The state of progress (percentage of remaining life) can be judged by the color of the billboard.



1-3 FIG. 07

[In Operation]

Color	State of progress	
Light blue	Customer welcome	
Light blue, blinking with light out for 1 second	In start standby	
Green	Game explanation	
Game Start		
Green	Life 100~91%	
↓ ↓		
Yellow green	Life 90~71%	
↓		
Yellow	Life 70~61%	
Oranga	Life 60~21%	
Orange	Life 60~2176	
↓ Red	Life 20~1%	
Game Over	Ene 29 170	
Red, light blue blinking	Results display	
Blue	Game Over Display	

[Other Than Normal Operations]

Green, blinking	Initialization, rectifying game stop condition	
Yellow, blinking	Ride stops during game	
Red, blinking	Game stop	
Purple, blinking	Error occurrence	

- While playing game in NORMAL or MILD Mode, if the foot sensor responds or the armrest has been raised, ride operation stops and "The ride has been stopped." appears on the screen. The safety lamp on the control tower blinks at this time and billboard blinks yellow.
- If obstruction activating the foot sensor is removed and the armrest is lowered, the ride starts to operate again. The safety lamp changes from blinking to glowing and the billboard returns to a game play color.
- If the armrest is raised and the customer does not lower it, the game progresses with the ride stopped.
- Check the customers' condition and, if necessary, stop the game.
- When the ride remains stopped until the game is over, the screen gives instructions on how to leave the cabinet, and then displays the following: "The ride was stopped prematurely, and will return to its default position. Once confirming that there are no obstacles in the way and that the room is secure, please lower the armrest, buckle the seatbelts, and press the INITIALIZE button."
- **7** Execute the steps given below for "Game Stop Countermeasures".

Game Over

- When the game is over, the start switch on the control tower goes out and the billboard blinks red and light blue.
- When "Game Over" appears on the screen, the billboard becomes blue. The attendant should open the door and enter the cabinet. "Game Over" is displayed continuously for 30 seconds, but this can be aborted by pressing the ACTION Button.
- Ask the player to return the Control Unit (Gun) to the holder.
- The attendant, after raising the armrest, should ask the players to unfasten their seatbelts.
- Have customers leave the cabinet. Warn them to watch their step, guide them to their belongings, and then usher them out.
- Check to be sure that customers have not dropped or forgotten anything.
- **7** Even if there is only one player, always unfasten the seatbelt on the empty seat. Unless both seatbelts are opened after each play session, the next game cannot be started.
- In the case of coin operation, if enough credits for game start are already inserted, the game start standby screen for the next game appears. If there are not enough credits for game start, the customer welcome screen appears and, two minutes after the foot sensor responds, the spot light in the cabinet and the ride floor light both go out.

For ticket operation, the customer welcome screen appears and, two minutes after, the spot light in the cabinet and the ride floor light both go out.

Leave the door open so preparations can be made for the next game.

Game Stop Countermeasures

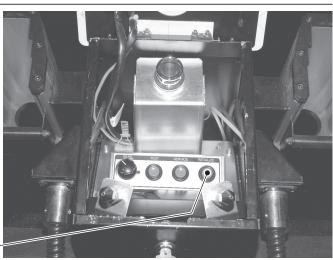
[NORMAL Mode, MILD Mode]

- When the following operations are performed during game play, the game stop screen appears, ride rotation and Control Unit (Gun) reaction and blowing both stop. The spot light in the cabinet and ride floor light glow and the GAME STOP Button on the ride blinks. The billboard blinks red.
 - The GAME STOP Button on the control tower is pressed.
 - The GAME STOP Button on the ride is pressed.
 - The door is opened.
 - A seatbelt is unfastened.
- **2** Check customers' condition.
- After raising the armrest, unfasten the seatbelts and have customers leave the cabinet.
- Inspect cabinet interior for abnormalities.
- **5** Lower armrest and lock both seatbelts.
- Unlock and open the ride control panel.



1-3 FIG. 08

When the INITIALIZE Button is pressed, the ride floor light changes from glowing to blinking.



INITIALIZE BUTTON

1-3 FIG. 09

- When the armrest is lowered, seatbelts are locked and foot sensor is not obstructed, the reset switch on the control tower blinks. "Press the RESET button to return the ride to its default position. Do not touch the ride until all movement has stopped." appears on the screen.
- Make sure that no one is inside the cabinet.
- When the reset switch on the control tower is pressed, the ride rotates, and game stop rectifying operation begins. The reset switch changes from blinking to glowing and the GAME STOP Button goes out.
- If, during rectifying operation, the armrest is raised, if a seatbelt is unfastened, or the foot sensor is obstructed, the operation stops. It also stops if the GAME STOP Button on the ride or control tower is pressed. The door sensor function stops at this time so that the status of rectifying operation can be checked.
- 12 If, during rectifying operation, the operation is stopped, rectifying operation can be started again by pressing the INITIALIZE Button again and then pressing the reset switch.
- 13 When the ride rotates to front position, the customer welcome screen appears and game stop rectifying operation is completed.

[STILL Mode (STOP)]

- If the GAME STOP Button on the control tower or the ride is pressed during game play, the game stop screen appears and Control Unit (Gun) reaction and blowing stop. The spot light in the cabinet and the ride floor light glow and the ride GAME STOP Button blinks. The billboard blinks red.
- **2** Check customer status.
- **3** If, after raising the armrest, a seatbelt is fastened, unfasten it and have the customer leave.
- Lower the armrest and lock both seatbelts.
- Unlock and open the ride control panel. When you press the INITIALIZE Button, the ride floor light changes from glowing to blinking.
- When the armrest is lowered, seatbelts are locked and foot sensor is not obstructed, the reset switch on the control tower blinks. "Press the RESET button to return the ride to its default position. Do not touch the ride until all movement has stopped." appears on the screen.
- When the reset switch on the control tower is pressed, the reset switch and the GAME STOP Button go out, the customer welcome screen appears. Game stop rectifying operation is now completed.

2 GAME CONTENT

Procedures Up To Game Start

[Coin Operation]

When a coin is inserted, the number of credits displayed at the bottom of the screen increases. When enough coins for one game have been inserted, the message at the bottom of the screen changes from "INSERT COIN(S)" to "PRESS START BUTTON".

In one session, credits are counted up to 9. If a coin is inserted after 9 credits have been counted, more credits are not counted for this display and the coin is not returned. Instead, the number of coins inserted is counted and shown on data display or coin meter.

- With credits for one game, a game can be played by either one player or by two players simultaneously. If there is only one player, have him/her sit in the seat on the right side of the ride.
- When there are enough credits to start a game, the game start standby screen appears. First, an explanation is given of the objective of the game.
- When the attendant presses the ACTION
 Button on the ride, the screen changes and an
 explanation of precautions during game play
 is displayed.

While the story and explanation of precautions are displayed on screen, press the P1 ACTION Button while holding down the P2 ACTION Button to select audio output ON/OFF.



2 FIG. 01 GAME START STANDBY screen

- After exiting the game start standby screen, the attendant must check that the seatbelts are fastened and the armrests are lowered before withdrawing from the area and closing the door.
- The attendant must then confirm that the safety lamp on the control tower is lit. If the safety lamp is blinking, this indicates one or more of the sensors have detected a problem. The game cannot be started in such a case. (This excludes times when the motion select switch is set to STILL mode (STOP).)
- When the START Button is blinking, press it to begin the game. Once the stage title appears, the game begins.



2 FIG. 02 STAGE TITLE screen

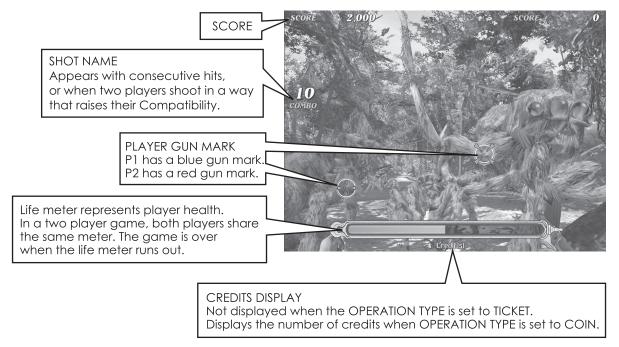
[Ticket operation]

- The game can be played by one player or by two players simultaneously. If there is only one player, have him/her sit on the seat to the right of the ride to play.
- After a player gets on the ride, the game start standby screen appears. First, the objective of the game is explained.
- When the attendant presses the ACTION Button installed in the ride, the screen changes and precautions during game play are explained on the screen.

 While the story and explanation of precautions are displayed on screen, press the P1 ACTION Button while holding down the P2 ACTION Button to select audio output ON/OFF.
- After exiting the game start standby screen, the attendant must check that the seatbelts are fastened and the armrests are lowered before withdrawing from the area and closing the door.
- The attendant must then confirm that the safety lamp on the control tower is lit. If the safety lamp is blinking, this indicates one or more of the sensors have detected a problem. The game cannot be started in such a case. (This excludes times when the motion select switch is set to STILL mode (STOP).)
- When the START Button is blinking, press it to begin the game. Once the stage title appears, the game begins.

Game explanation

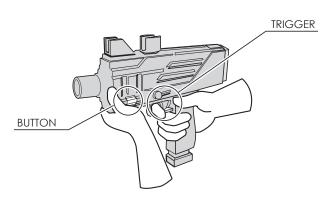
The gun mark for the player on the left side (P1) appears in blue, while the gun mark for the player on the right side (P2) appears in red. The gun mark is displayed when the muzzle of the Control Unit (Gun) is pointed at the screen. The life meter represents player health. When two players are playing simultaneously, both players will share the same meter.



2 FIG. 03 GAME screen

Control Unit (Gun)

Pull the trigger on the Control Unit (Gun) to fire. In this game, a player does not run out of ammunition. Continue pulling the trigger to keep firing. The button on the side of the Control Unit (Gun) has the same function as the trigger.



2 FIG. 04 Control Unit (Gun) Controls

Action Events

Action events occur during each stage. An Action Icon appears on the screen right before the action event starts.



2 FIG. 05 ACTION ICON screen

There are three kinds of action events: Rapid, Speed, and Skill.

For each action event, the outcome is either success or failure. Failing results in player damage.

Rapid: In this action event, players must repeatedly press the ACTION Button a certain amount of times or

more within the time limit.

Speed: In this action event, players must quickly press the button displayed on-screen within the time limit.

Skill: In this action event, players must press the button to stop the arm of the clock within a designated area.

Generally, failing in an action event does not result in "Game Over". However, if players fail in the final action event of Stage 1 and their life is reduced to zero, it results in "Game Over".

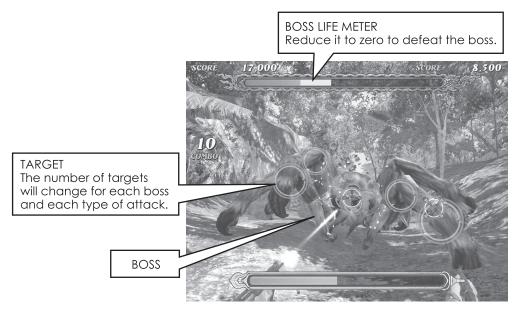
If players fail in the final action event of Stage 3 (final stage), failure will not result in damage and the game will proceed to the ending sequence.

Bosses

A boss awaits players at the end of each stage. A different boss appears for each stage. To defeat the boss, players need to reduce its life meter to zero.

Right before each boss attacks, targets appear. If players destroy a certain amount of targets within the time limit, damage animation will be triggered, canceling its attack.

If the required number of targets is not destroyed within the time limit, the boss attacks and inflicts damage to players.

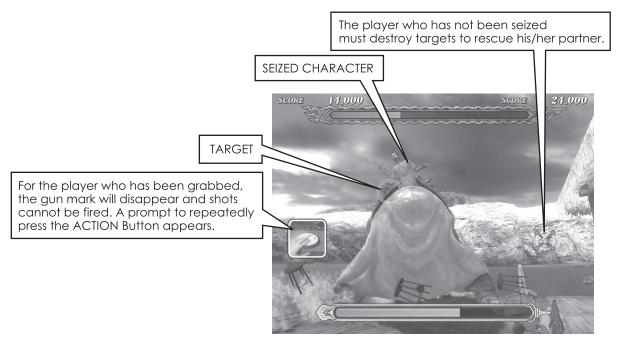


2 FIG. 06 BOSS BATTLE screen

During boss battles, the boss may grab hold of one of the players (occurs only in two-player mode). Targets will continue to appear if this happens.

The player who has been seized will then be shown on the game screen. That player is unable to fire any shots and his/her gun mark disappears. By pressing the ACTION Button repeatedly, the targets can be expanded.

The player who has not been seized can rescue the other player by destroying all the targets within the time limit. If all the targets have not been destroyed, the players will take damage.



2 FIG. 07 BOSS BATTLE screen

Game Over

It's "Game Over" when players run out of life, or if players clear the game and proceed to the ending sequence.

Hints for playing the game

Know your enemy!

There are enemies that you can avoid without actually defeating them. There are also those who pause between attacks. Rather than aggressively pursuing the enemy, the effective strategy is to avoid their attacks.

Quickly react to action events!

There is always a prompt before an action event starts. Focus your attention on the button. Regardless of the type of action event, the button is the only control used.

Instead of aiming at the targets on the boss, just fire!

The targets on the boss sometimes change position dramatically due to the boss's movement. Instead of aiming carefully, just shoot within a certain area. Sometimes this will make it easier to defend against the boss's attack.

Increase Compatibility!

Try to achieve the same rank as your partner when clearing action events. Shooting the same enemy or target at the same time also raises Compatibility.

3 TEST MODE

AWARNING

- When performing a test in which the ride rotates, make sure that everyone other than the person on the ride leaves the cabinet. If the ride should move, it could cause a very serious accident.
- In performing test in which compressed air is blown out, do not bring your eye close to where the air is being blown out. You could be blinded.
- Do not touch any parts that are not specified in these directions. Touching unspecified locations may lead to electric shock or cause short circuits.

ACAUTION

- When operating in TEST Mode, have a flashlight, etc., on hand. During TEST
 Mode, the lamp inside the cabinet is extinguished, except for certain tests.
 Light from outside cannot easily reach inside the cabinet. Because the cabinet interior is dark, you could stumble and fall or make an operational error.
- While the ride is rotating, it is strictly forbidden to raise the armrest, unfasten the seatbelt, or cause the foot sensor to activate. Emergency stops can lead to accidents. To restore game play, game stop rectifying action is required.
- Be careful not to trap your fingers when closing the control panel.



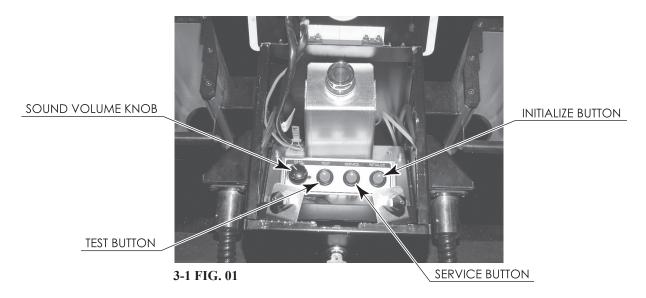
STOP IMPORTANT

- When the ride has stopped in the front position, if the player does not face directly toward the front screen, the TEST Mode cannot be entered into.
- When communication between game mode and control board has not yet been checked completely, there are some items (e.g., switches, devices) that cannot be tested with TEST Mode input test or output test. Reset the power supply.
- Changes in the setting of GAME ASSIGNMENTS do not become effective until the game TEST Mode has finished.
- When the ride will rotate with ride operation test or aim adjustment, etc., check the following before proceeding.
 - All obstacles obstructing the foot sensor have been removed.
 - Seatbelts are fastened.
 - Armrest has been lowered.
- If there is a stop for some reason while the ride is rotating, game stop rectifying action is required. If the game stop rectifying operation is not completed properly, the game cannot be restored.
- Adjust the sound to the optimum volume, taking into consideration the environmental requirements of the installation location.
- If coin meter circuitry is removed, the game can no longer be played.

3-1 SWITCH UNIT

The TEST Mode is performed by manipulating the ride switch unit.

When the ride rotates, do the following for safety: sit in seat, fasten seatbelt and lower armrest. Unlock and open the ride control panel to find the switch unit.



SOUND VOLUME KNOB (SOUND VOLUME):

This is the sound volume adjustment knob. Sound volume increases as the knob is turned clockwise.

TEST BUTTON (TEST):

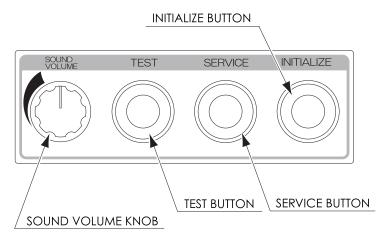
To enter TEST Mode. In TEST Mode, this button is used to confirm or execute commands.

SERVICE BUTTON (SERVICE):

Makes it possible to enter credits when servicing the game without inserting coins for the coin meter. In TEST Mode, this button is used to select options.

INITIALIZE BUTTON (INITIALIZE):

Used for rectifying operation when the game has stopped.



3-1 FIG. 02

3-2 SYSTEM TEST MODE

STOP IMPORTANT

- In SYSTEM TEST Mode, the settings reset by the user are recorded when the TEST Mode completes after EXIT from the SYSTEM TEST MENU. If the power is disengaged beforehand, changes to settings will be lost.
- Use with settings as prescribed. If used with a setting other than as prescribed, faulty operations or malfunctions could occur.

In SYSTEM TEST Mode, the main activities are confirmation of LINDBERGH information and operations, and establishing the settings for coin/credit operations. In addition, a screen is shown for checking screen adjustment. For details, read the LINDBERGH Service Manual provided separately. Use this product with the following settings. If the setting is other than prescribed, an error message might be displayed or some other irregular action might occur.

• COIN ASSIGNMENTS

- COIN CHUTE TYPE: COMMON
- SERVICE TYPE (Service Button Type): COMMON

• NETWORK SETTING

- NETWORK TYPE: MAIN

- MAIN NETWORK: SETTING NOT REQUIRED

- When the TEST Button is pressed, the SYSTEM TEST Mode's SYSTEM TEST MENU screen appears.
- **7** Press the SERVICE Button and move the cursor to select an item.
- **?** Press the TEST Button to execute the item.
- When testing or checking, etc. is completed, select EXIT and press the TEST Button. The SYSTEM TEST MENU screen reappears.
- When all tests are completed, select EXIT and press the TEST Button. The game screen reappears.

SYSTEM TEST MENU

SYSTEM INFORMATION STORAGE INFORMATION JVS TEST MONITOR TEST SPEAKER TEST COIN ASSIGNMENTS CLOCK SETTING NETWORK SETTING GAME TEST MODE

-> EXIT

SELECT WITH SERVICE AND PRESS TEST

3-2 FIG. 01 SYSTEM TEST MENU screen

3-3 GAME TEST MODE

At the SYSTEM TEST MENU screen, select GAME TEST MODE and press the TEST Button. The GAME TEST MODE screen appears.

GAME TEST MODE

INPUT TEST
OUTPUT TEST
GAME ASSIGNMENTS
RIDE TURN TEST
GUN CALIBRATION SETTING
CONTROL BD INFORMATION
BOOKKEEPING
BACKUP DATA CLEAR

-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

3-3 FIG. 01 GAME TEST MODE screen

9 For each following item, a test or setting is implemented, or data is displayed.

INPUT TEST: Tests each input device used for game.

OUTPUT TEST: Tests each output device used for game.

GAME ASSIGNMENTS: Adjusts all game settings. RIDE TURN TEST: Tests ride operation.

GUN CALIBRATION SETTING: Adjusts aim settings for Control Unit (Gun).

CONTROL BD INFORMATION: Displays control board information.
BOOKKEEPING: Displays all recorded game data.
BACKUP DATA CLEAR: Erases all types of game records.

- ? Press the SERVICE Button and move the cursor to select an item.
- Press the TEST Button to execute the item. The test or setting screen of the selected item appears.
- The test or setting adjustment, etc., is performed.
- When testing or setting adjustment, etc. is completed, select EXIT and press the TEST Button, etc. to have the GAME TEST MODE screen reappear.
- 7 On the GAME TEST MODE screen, select EXIT and press the TEST Button. The SYSTEM TEST MENU screen reappears.
- On the SYSTEM TEST MENU screen, select EXIT and press the TEST Button. The game screen reappears.

3-4 INPUT TEST

Test of each input device is performed.

Periodically check the status of each input device on this screen.

However, if the TEST Button is pressed and you move to TEST Mode before communication between the LINDBERGH and the control board is performed properly, there may be cases in which items are generated that cannot be confirmed on the INPUT TEST screen. In such cases, OFF, etc., is displayed in gray. Reset the power supply.

1

On the GAME TEST MODE screen, select INPUT TEST and press the TEST Button. The INPUT TEST screen appears.

INPUT TEST				
GUN TRIGGER GUN BUTTON GUN X GUN Y GUN SCREEN IN ACTION BUTTON SEAT BELT SENSOR	PLAYER1 OFF OFF 00 00 OUT OFF LOCK	PLAYER2 OFF OFF 00 00 OUT OFF LOCK		
ARMREST SENSOR GAME STOP(RIDE) GAME STOP(TOWER) MOTION SELECT SW START BUTTON RESET BUTTON FOOT SENSOR FRONT FOOT SENSOR REAR FOOT SENSOR LEFT FOOT SENSOR RIGHT DOOR SENSOR LEFT DOOR SENSOR RIGHT INITIALIZE SERVICE TEST		OOWN DFF DFF DFF DFF DFF DFF DFF DFF DFF DF		
PRESS TEST AND SERVICE BUTTON TO EXIT				

3-4 FIG. 01 INPUT TEST screen

Manipulate each switch, etc., to check screen display.

GUN TRIGGER: ON when the trigger of each player's Control Unit (Gun) is pulled.
GUN BUTTON: ON when each player's Control Unit (Gun) button is pressed.

GUN X: Displays the aim position of each player's Control Unit (Gun) in X direction.
GUN Y: Displays the aim position of each player's Control Unit (Gun) in Y direction.

GUN SCREEN IN: IN when the aim of each player's Control Unit (Gun) is inside the screen. OUT when

the aim is outside the screen.

ACTION BUTTON: ON when the ride ACTION Button is pressed.

SEAT BELT SENSOR: UNLOCK when the ride seatbelts are unfastened. LOCK when the seatbelts are

fastened.

ARMREST SENSOR: UP when the ride armrest is lifted. DOWN when the armrest is lowered.

GAME STOP (RIDE): ON when the ride GAME STOP Button is pressed.

GAME STOP (TOWER): ON when the tower GAME STOP Button is pressed.

MOTION SELECT SW: Shown as NORMAL, MILD, or STOP when the tower motion select switch is changed.

START BUTTON: ON when the tower START Button is pressed.

RESET BUTTON: ON when the tower reset switch is pressed.

FOOT SENSOR FRONT: ON when the foot sensor front reacts.

FOOT SENSOR REAR: ON when the foot sensor rear reacts.

FOOT SENSOR LEFT: ON when the foot sensor left reacts.

FOOT SENSOR RIGHT: ON when the foot sensor right reacts.

DOOR SENSOR LEFT: OPEN when the left side door is opened; CLOSE when this door is closed.

(Normally sensors change together since left and right doors are connected.)

DOOR SENSOR RIGHT: OPEN when the right side door is opened; CLOSE when this door is closed.

(Normally sensors change together since left and right doors are connected.)

INITIALIZE: ON when the ride INITIALIZE Button is pressed.

SERVICE: ON when the SERVICE Button is pressed.

TEST: ON when the TEST Button is pressed.

When all checks are completed, press the TEST Button and the SERVICE Button simultaneously. The GAME TEST MODE screen reappears.

3-5 OUTPUT TEST

Test of each output device is performed.

Periodically check the status of each output device on this screen.

However, if the TEST Button is pressed and you move to TEST Mode before communication between the LINDBERGH and the control board is performed properly, there may be cases in which items are generated that cannot be confirmed on the OUTPUT TEST screen. In such cases, OFF, etc., is displayed in gray. The item itself cannot be selected. Reset the power supply.

1

On the GAME TEST MODE screen, select OUTPUT TEST and press the TEST Button. The OUTPUT TEST screen appears.

OUTPUT TEST	
GUN REACTION P1 GUN REACTION P2 BLOW FRONT P1 BLOW FRONT P2 BLOW REAR P1 BLOW REAR P2 GAME STOP LAMP START LAMP RESET LAMP ERROR LAMP SAFETY LAMP FLOOR LAMP SPOT LAMP BILLBOARD	OFF
-> EXIT	
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	

3-5 FIG. 01 OUTPUT TEST screen

Press the SERVICE Button and move the cursor to select the item (output device).

When the TEST Button is pressed, the display to the item's right changes and the output device operates. Confirm that the output device behaves in compliance with manipulations.

GUN REACTION P1:

Goes ON when GUN REACTION P1 is selected and the TEST Button is pressed. The player 1 Control Unit (Gun) vibrates. Goes OFF when the TEST Button is pressed again.

GUN REACTION P2:

Goes ON when GUN REACTION P2 is selected and the TEST Button is pressed. The player 2 Control Unit (Gun) vibrates. Goes OFF when the TEST Button is pressed again.

BLOW FRONT P1:

Goes ON when BLOW FRONT P1 is selected and the TEST Button is pressed. Air is blown out from the front side blow port on player 1 side attached to the ride. Goes OFF when the TEST Button is pressed again.

BLOW FRONT P2:

Goes ON when BLOW FRONT P2 is selected and the TEST Button is pressed. Air is blown out from the front side blow port on player 2 side attached to the ride. Goes OFF when the TEST Button is pressed again.

BLOW REAR P1:

Goes ON when BLOW REAR P1 is selected and the TEST Button is pressed. Air is blown out from the rear side blow port on player 1 side attached to the ride. Goes OFF when the TEST Button is pressed again.

BLOW REAR P2:

Goes ON when BLOW REAR P2 is selected and the TEST Button is pressed. Air is blown out from the rear side blow port on player 2 side attached to the ride. Goes OFF when the TEST Button is pressed again.

GAME STOP LAMP:

Goes ON when GAME STOP LAMP is selected and the TEST Button is pressed. The ride game stop lamp lights up. Goes OFF when the TEST Button is pressed again.

START LAMP:

Goes ON when START LAMP is selected and the TEST Button is pressed. The tower START Button lights up. Goes OFF when the TEST Button is pressed again.

RESET LAMP:

Goes ON when RESET LAMP is selected and the TEST Button is pressed. The tower reset switch lights up. Goes OFF when the TEST Button is pressed again.

ERROR LAMP:

Goes ON when ERROR LAMP is selected and the TEST Button is pressed. The tower error lamp lights up. Goes OFF when the TEST Button is pressed again.

SAFETY LAMP:

Goes ON when SAFETY LAMP is selected and the TEST Button is pressed. The tower safety lamp lights up. Goes OFF when the TEST Button is pressed again.

FLOOR LAMP:

Goes ON when FLOOR LAMP is selected and the TEST Button is pressed. The ride floor light lights up. Goes OFF when the TEST Button is pressed again.

SPOT LAMP:

Goes ON when SPOT LAMP is selected and the TEST Button is pressed. The two halogen lamps on the right and left of the projector light up. Goes OFF when the TEST Button is pressed again.

BILLBOARD:

Turns RED when BILLBOARD is selected and the TEST Button is pressed. Changes from GREEN to BLUE if the TEST Button is pressed again. The color of the billboard on the door changes to match the color displayed. Goes OFF when the TEST Button is pressed again after it has turned BLUE.



When all checks are completed, select EXIT and press the TEST Button. The GAME TEST MODE screen reappears.

3-6 GAME ASSIGNMENTS

All settings such as level of game difficulty are adjusted.

Setting changes do not become effective until EXIT has been selected on the GAME TEST MODE screen. After a setting has been changed, be sure to always exit the GAME TEST Mode.

1

On the GAME TEST MODE screen, select GAME ASSIGNMENTS and press the TEST Button. The GAME ASSIGNMENTS screen appears.

GAME ASSIGNMENTS

OPERATION TYPE
DIFFICULTY(EASY -4-0-4 HARD)
ADDITIONAL LIFE
THEME SETTING
ADVERTISE SOUND
TICKET
O
NORMAL

-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

3-6 FIG. 01 GAME ASSIGNMENTS screen

9 Press the SERVICE Button and move the cursor to select an item.

When the TEST Button is pressed, the display to the item's right changes and the setting, itself, changes.

OPERATION TYPE:

Select whether the game will operate by ticket or by coin.

If TICKET is selected, the setting allows for the game to take place in Free Play status with no coin display, regardless of the setting of COIN ASSIGNMENTS on the SYSTEM TEST MENU.

If COIN is selected, the game setting calls for coin insertion.

GAME DIFFICULTY:

Select from 9 settings: from -4 (low difficulty) to 4 (high difficulty). Standard setting is 0.

ADDITIONAL LIFE:

Increases initial player life. Increases can be set at ten different levels. At the most, it is possible to double the standard amount of life (+100%). The increase will be reflected in the player life meter displayed during the game.

THEME SETTING:

A theme can be selected. There are four different themes: NORMAL, VALENTINE'S DAY, HALLOWEEN, and HAPPY HOLIDAYS. When anything other than NORMAL is selected, the background and the music for the cabinet explanations, the Compatibility comments, and the "Game Over" background screen will change based on the theme. In addition, the players are awarded a Compatibility bonus.

ADVERTISE SOUND:

ON or OFF can be selected for audio output for welcome screen.

4

When all setting adjustments are completed, select EXIT and press the TEST Button. The GAME TEST MODE screen reappears.

3-7 RIDE TURN TEST



Unless the following conditions are met, the ride will not rotate even in TEST Mode.

- There are no obstacles blocking the foot sensor.
- Seatbelts are locked.
- The armrest is lowered.

Confirm that the ride operates properly.

Periodically check the status of the ride on this screen.

In ride turn test, the ride is moved and checked, so the test screen appears both on the front and rear screen.

1

On the GAME TEST MODE screen, select RIDE TURN TEST and press the TEST Button. The RIDE TURN TEST screen appears.

RIDE TURN TEST CLOCKWISE	OFF
COUNTERCLOCKWISE	OFF
-> EXIT	
FRONT POSITION SENSOR REAR POSITION SENSOR CCW LIMIT SENSOR CW LIMIT SENSOR MOTOR POWER	ON OFF OFF OFF
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	

3-7 FIG. 01 RIDE TURN TEST screen

Press the SERVICE Button, move the cursor to select CLOCKWISE or COUNTERCLOCKWISE, and then press the TEST Button to test your selection. The items from FRONT POSITION SENSOR and below are all for checking the ride status. If the CCW LIMIT SENSOR and the CW LIMIT SENSOR are working properly, they do not go ON.

Each item is explained below.

CLOCKWISE:

The ride turns to the right. ON is displayed while the ride is in operation and OFF appears when operation stops. When the TEST Button is pressed, the ride moves by each of the following stages one at a time, depending upon its status: front left 45 degrees -> front 0 degrees -> front right 45 degrees -> rear left 135 degrees -> rear 180 degrees -> rear right 225 degrees. However, at rear right 225 degrees, there is no response even if the TEST Button is pressed.

COUNTERCLOCKWISE:

The ride turns to the left. ON is displayed while the ride is in operation and OFF appears when operation stops. When the TEST Button is pressed, the ride moves by each of the following stages one at a time, depending upon its status: rear right 225 degrees -> rear 180 degrees -> rear left 135 degrees -> front right 45 degrees -> front 0 degrees -> front left 45 degrees. However, at front left 45 degrees, there is no response even if the TEST Button is pressed.

Regardless of the cursor position on the screen, similar manipulations can be made as when CLOCKWISE or COUNTERCLOCKWISE is selected by using the P1 or P2 Control Unit (Gun).

NOTES:

- When CLOCKWISE and COUNTERCLOCKWISE is at OFF and the ride is not running, RIDE STOP is displayed if there is any response from a safety device (foot sensor, armrest sensor, seatbelt sensor) and the ride cannot be moved. To move the ride again, resolve what triggered the safety device and set to OFF.
- When CLOCKWISE or COUNTERCLOCKWISE is at ON and the ride is running, RIDE STOPPED is displayed if the ride has been stopped because of a response from a safety device (foot sensor, armrest sensor, seatbelt sensor).

Under this condition, the ride turn test cannot be performed. Take the following steps to restore the ride to normal condition.

Press the SERVICE Button, move the cursor and press the TEST Button. Select and choose the following: EXIT -> GAME TEST MODE -> SYSTEM TEST MENU. Then return to the game. After resolving what triggered the safety device, press the INITIALIZE Button. Check that the surroundings are safe and press the tower reset switch. Now the ride can be moved and returned to its proper position.

CLOCKWISE:

Chosen and operated by pulling the trigger of the P2 Control Unit (Gun).

COUNTERCLOCKWISE:

Chosen and operated by pulling the trigger of the P1 Control Unit (Gun).

FRONT POSITION SENSOR:

Goes ON while the ride is facing front at 0 degrees.

REAR POSITION SENSOR:

Goes ON while the ride is facing rear at 180 degrees.

CCW LIMIT SENSOR:

Goes ON when the ride moves beyond front left at 45 degrees. Stays OFF when the ride runs normally.

CW LIMIT SENSOR

Goes ON when the ride moves beyond rear right at 225 degrees. Stays OFF when the ride runs normally.

MOTOR POWER:

Checks the ride motor. Goes ON under normal conditions. Goes OFF when the emergency stop switch is activated and no power is being supplied to the servo driver.



When all checks are completed, select EXIT and press the TEST Button. The GAME TEST MODE screen reappears.

3-8 GUN CALIBRATION SETTING



Unless the following conditions are met, the ride will not rotate even in TEST Mode.

- There are no obstacles blocking the foot sensor.
- Seatbelts are locked.
- The armrest is lowered.

Aim settings for Control Unit (Gun) are adjusted.

Aim settings are adjusted not only for the front screen but also for the rear screen.

On the GAME TEST MODE screen, select GUN CALIBRATION SETTING and press the TEST Button. The GUN CALIBRATION SETTING screen appears.

GUN CALIBRATION SETTING

GUN MARK CHECK PLAYER1 GUN ADJUSTMENT PLAYER2 GUN ADJUSTMENT

TURN TO REAR POSITION OFF
FOOT SENSOR OFF
ARMREST SENSOR DOWN
SEATBELT SENSOR LOCK

-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

3-8 FIG. 01 GUN CALIBRATION SETTING screen

2 Press the SERVICE Button and move the cursor to select an item, then press the TEST Button to test the item.

2 Each item is explained below.

GUN MARK CHECK:

This item is for checking Control Unit (Gun) mark position. Player 1 and player 2 are checked simultaneously.

PLAYER1 GUN ADJUSTMENT:

This item is for adjusting the aim of the player 1 Control Unit (Gun) by firing it.

PLAYER2 GUN ADJUSTMENT:

This item is for adjusting the aim of the player 2 Control Unit (Gun) by firing it.

TURN TO REAR POSITION:

Turns the ride so that aim settings for Control Unit (Gun) can be adjusted for the rear screen. Goes ON while the ride is rotating and goes OFF when the ride stops.



If you want to set aim for the rear screen, select TURN TO REAR POSITION and press the TEST Button to execute it. The ride turns 180 degrees to the rear. At the same time, the GUN CALIBRATION SETTING screen appears on the rear screen, and TURN TO REAR POSITION changes to TURN TO FRONT POSITION. Also, EXIT can no longer be selected.



After aim has been set for the rear screen, select TURN TO FRONT POSITION and press the TEST Button to execute. The ride turns 180 degrees, returning to its original position.

NOTES:

- When TURN TO REAR POSITION or TURN TO FRONT POSITION is at OFF and the ride is not running, RIDE STOP is displayed if there is any response from a safety device (foot sensor, armrest sensor, seatbelt sensor) and the ride cannot be moved. To move the ride again, resolve what triggered the safety device and set to OFF.
- When TURN TO REAR POSITION or TURN TO FRONT POSITION is at ON and the ride is running, RIDE STOPPED is displayed if the ride has been stopped because of a response from a safety device (foot sensor, armrest sensor, seatbelt sensor). Under this condition, the ride cannot be moved. Take the following steps to restore the ride to normal condition.

When TURN TO REAR POSITION has been selected but the ride stops moving because of a safety device, select TURN TO FRONT POSITION displayed on the rear screen. After display has moved to the front screen, press the SERVICE Button and select with the cursor, then press the TEST Button. Select and choose the following: EXIT -> GAME TEST MODE -> SYSTEM TEST MENU. Then return to the game screen. Press the INITIALIZE Button. Check that the surroundings are safe and press the tower reset switch. Now the ride can be moved and returned to its proper position.

When TURN TO FRONT POSITION has been selected but the ride stops moving because of a safety device, press the SERVICE Button and select with the cursor, then press the TEST Button. Select and choose the following: EXIT -> GAME TEST MODE -> SYSTEM TEST MENU. Then return to the game. Press the INITIALIZE Button. Check that the surroundings are safe and press the tower reset switch. Now the ride can be moved and returned to its proper position.



When all setting adjustments are completed, select EXIT and press the TEST Button. The GAME TEST MODE screen reappears.

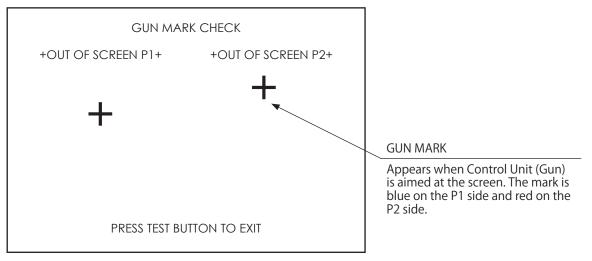
3-8-1 GUN MARK CHECK

This screen is for checking aim of Control Unit (Gun). This also applies for the rear screen.

1

On the GUN CALIBRATION SETTING screen, select GUN MARK CHECK and press the TEST Button. The GUN MARK CHECK screen appears.

If the gun mark is recognized as being outside the screen, "OUT OF SCREEN" is displayed.



3-8-1 FIG. 01 GUN MARK CHECK screen

- **2** Gun mark appears when Control Unit (Gun) is aimed at the screen. This screen is used to confirm that calibration is correct.
- When all checks are completed, press the TEST Button. The GUN CALIBRATION SETTING screen reappears.

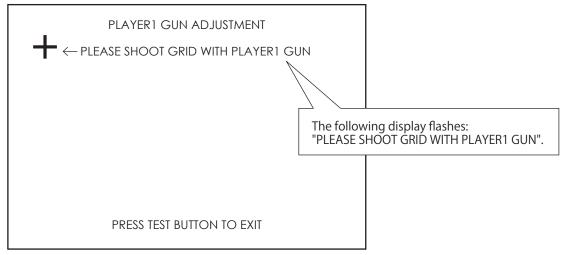
3-8-2 PLAYER1 GUN ADJUSTMENT

On this screen, set and correct aim for the player 1 Control Unit (Gun).

The same applies for player 2's Control Unit (Gun). Follow the same procedure for correcting gun mark position on the rear screen.

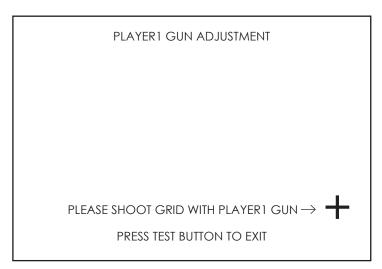
- On the GUN CALIBRATION SETTING screen, select PLAYER1 GUN ADJUSTMENT and press the TEST Button. The PLAYER1 GUN ADJUSTMENT screen appears.
- 2 Set Control Unit (Gun) aim as directed on the screen. Aim at the grid on the upper left of the screen and shoot. The grid at upper left disappears and a similar grid appears at lower right.

 If the TEST Button is pressed, the setting adjustment is aborted and the GUN CALIBRATION SETTING screen reappears.



3-8-2 FIG. 01 PLAYER1 GUN ADJUSTMENT screen

Aim at the grid on the lower right of the screen and shoot. The grid at lower right disappears and a similar grid appears in the center.



3-8-2 FIG. 02 PLAYER1 GUN ADJUSTMENT screen



PLAYER1 GUN ADJUSTMENT



PLEASE SHOOT GRID WITH PLAYER 1 GUN

PRESS TEST BUTTON TO EXIT

3-8-2 FIG. 03 PLAYER1 GUN ADJUSTMENT screen

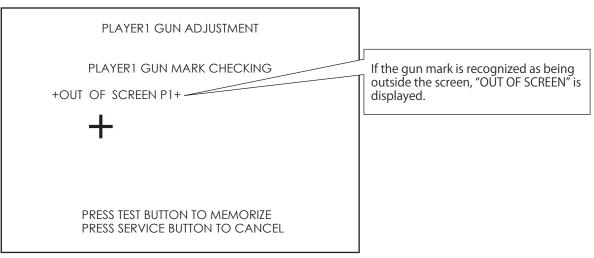
5 "NOW CALCULATING" is displayed at the center. The next screen appears automatically.

PLAYER1 GUN ADJUSTMENT

NOW CALCULATING

3-8-2 FIG. 04 PLAYER1 GUN ADJUSTMENT screen

The gun mark appears when the Control Unit (Gun) is aimed at the screen. Confirm that the Control Unit (Gun) can be aimed properly from end to end within the frame. If the calibration is correct, press the TEST Button to record the setting. If the calibration is not correct, press the SERVICE Button. The setting is not recorded and the GUN CALIBRATION SETTING screen reappears.



3-8-2 FIG. 05 PLAYER1 GUN ADJUSTMENT screen

Refer to the following procedures when adjusting the aim.

- Line up the convex upper part at the tip of the Control Unit (Gun) so that it lines up with the horizontal line of the "+" mark on the screen.
- Line up the centers of the tops of the convex upper parts with the center of the "+" and shoot.
 - When the TEST Button is pressed, "COMPLETED" appears on the screen and the GUN CALIBRATION SETTING screen appears automatically.



3-8-2 FIG. 06 PLAYER1 GUN ADJUSTMENT screen

3-9 CONTROL BD INFORMATION

Information on each control board program version is displayed.

On the GAME TEST MODE screen, select CONTROL BD INFORMATION and press the TEST Button. The CONTROL BD INFORMATION screen appears.

CONTROL BD INFORMATION			
2ND BOOT USB LOADER APPLICATION	VERSION ×.×× ×.×× ×.××	SUM ×× ×× ××	
PRESS TEST BUTTON TO EXIT			

3-9 FIG. 01 CONTROL BD INFORMATION screen

The following is a description of each item.

2ND BOOT: Shows the version of the control board's 2nd Boot and its checksum.

USB LOADER: Shows the version of the control board's USB Loader and its checksum.

APPLICATION: Shows the version of the control board's application and its checksum.

Press the TEST Button to return to the GAME TEST MODE screen.

3-10 BOOKKEEPING



Play time for a game stopped by a physical action, such as the unfastening of a seatbelt, opening of a door, or pressing of the GAME STOP Button, will not be counted by this product.

Each game record can be viewed.

On the GAME TEST MODE screen, select BOOKKEEPING and press the TEST Button.

The BOOKKEEPING screen appears.

The BOOKKEEPING screen is comprised of three pages. The next page appears each time the TEST Button is pressed. If the TEST Button is pressed while the third page is being shown, the GAME TEST MODE screen reappears.

	BOOKKEEPING	1/3	
	COIN 1 COIN 2 TOTAL COINS	0 0 0	
	COIN CREDITS SERVICE CREDITS TOTAL CREDITS	0 0 0	
PRESS TEST BUTTON TO NEXT			

3-10 FIG. 01 BOOKKEEPING 1/3 screen

COIN 1: Number of coins inserted in coin chute 1.

COIN 2: Number of coins inserted in coin chute 2.

TOTAL COINS: Total number of coins inserted in coin chutes.

COIN CREDITS: Number of credits for coins inserted.

SERVICE CREDITS: Number of credits entered with the SERVICE Button.

TOTAL CREDITS: Total number of all credits.

BOOKKEEPING	2/3	
NUMBER OF GAMES NUMBER OF STOPPED GAMES TOTAL TIME PLAY TIME AVERAGE PLAY TIME LONGEST PLAY TIME SHORTEST PLAY TIME	0 0 00D 00H 00M 00S 00D 00H 00M 00S 00M 00S 00M 00S	
PRESS TEST BUTTON TO NEXT		

3-10 FIG. 02 BOOKKEEPING 2/3 screen

NUMBER OF GAMES:

Total number of games played. (Counted as 1 game when P1 plays alone or P1 plays together with P2.)

NUMBER OF STOPPED GAMES:

Number of games stopped by a physical action, such as the unfastening of a seatbelt, opening of a door, or pressing of the GAME STOP Button, which occurred while the game was in progress.

TOTAL TIME:

Amount of time the unit has been in operation.

PLAY TIME:

Amount of time game has been played. (Counted as 1 play period whether P1 plays alone or plays together with P2.)

AVERAGE PLAY TIME:

Average play time for one game. (Counted as 1 play period whether P1 plays alone or plays together with P2.)

LONGEST PLAY TIME:

Longest play time for one game. (Counted as 1 play period whether P1 plays alone or plays together with P2.)

SHORTEST PLAY TIME:

Shortest play time for one game. (Counted as 1 play period whether P1 plays alone or plays together with P2.)

This displays play times on a scale from 0M00S to 11M59S based on 30-second intervals. All play times ten minutes or over are included in the item OVER 12M00S. Whether P1 plays alone or plays together with P2, it is counted as one play period.

BOOKKEEPING	G 3/3	
GAME HISTOGRAM		
00M 00S - 00M 29S 0 (0.0%) 00M 30S - 00M 59S 0 (0.0%) 01M 00S - 01M 29S 0 (0.0%) 01M 30S - 01M 59S 0 (0.0%) 02M 00S - 02M 29S 0 (0.0%) 02M 30S - 02M 59S 0 (0.0%) 03M 00S - 03M 29S 0 (0.0%) 03M 30S - 03M 59S 0 (0.0%) 04M 00S - 04M 29S 0 (0.0%) 04M 30S - 04M 59S 0 (0.0%) 05M 00S - 05M 29S 0 (0.0%) 05M 30S - 05M 59S 0 (0.0%)	06M 00S - 06M 29S 0 (0.0%) 06M 30S - 06M 59S 0 (0.0%) 07M 00S - 07M 29S 0 (0.0%) 07M 30S - 07M 59S 0 (0.0%) 08M 00S - 08M 29S 0 (0.0%) 08M 30S - 08M 59S 0 (0.0%) 09M 00S - 09M 29S 0 (0.0%) 09M 30S - 09M 59S 0 (0.0%) 10M 00S - 10M 29S 0 (0.0%) 10M 30S - 10M 59S 0 (0.0%) 11M 30S - 11M 59S 0 (0.0%) 0VER 12M 00S 0 (0.0%)	
PRESS TEST BUTTON TO EXIT		

3-11 BACKUP DATA CLEAR

All game records (bookkeeping information) can be cleared.

On the GAME TEST MODE screen, select BACKUP DATA CLEAR and press the TEST Button. The BACKUP DATA CLEAR screen appears.

Select item to either clear data or to cancel the function, and then confirm with the TEST Button.

YES (CLEAR): All game records are cleared. After clearing, "COMPLETED" is displayed.

NO (CANCEL): All game records are not cleared.

BACKUP DATA CLEAR

YES(CLEAR)
-> NO (CANCEL)

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

3-11 FIG. 01 BACKUP DATA CLEAR screen

When YES (CLEAR) has been selected and the TEST Button pressed, all data is cleared. Then "COMPLETED" is displayed and the GAME TEST MODE screen reappears automatically.

BACKUP DATA CLEAR

COMPLETED

3-11 FIG. 02 BACK UP DATA CLEAR screen

1

Move the cursor to NO (CANCEL) and press the TEST Button to return to the GAME TEST MODE screen without clearing the data.

4 ERROR DISPLAY

AWARNING

- If there is an error display, search out the cause immediately and take corrective action. If the product is operated while the error is ignored, there could be an accident. There could also be permanent damage to parts, etc.
- If an error is displayed, have the site maintenance personnel or other qualified individuals resolve it. If someone without specialized or technical knowledge attempts to rectify the problem, electric shock, short circuits or fire may result. If there is no site maintenance personnel or other qualified individuals available, turn the power off immediately, and contact your retailer or the office listed in this manual.
- If a problem not described in this manual and the LINDBERGH Service Manual
 occurs, or the resolution to a problem described in this manual is not effective,
 do not make further attempts to resolve the problem yourself. Immediately turn
 off the power and contact your retailer or the office listed in this manual. Any
 unguided attempts to solve such problems may lead to a serious accident.
- If countermeasures given in this manual have been taken and there are still no improvements, contact the point of purchase or the office indicated in these instructions.

STOP IMPORTANT

- If there is a control board-related error (Error 201~210), the error lamp on the control tower blinks. To restore normal operation, first remove the cause of the error, and then engage the power again.
- Before engaging the power again, wait at least 5 minutes. If power is engaged before the projector lamp has cooled down, the lamp might not light up. This might also cause the lamp to deteriorate rapidly. If possible, wait for about 30 minutes to engage power again so the projector lamp has cooled down adequately and the lamp will not suffer any deterioration.

To respond to various problems, error messages appear on the screen whenever an error has occurred. If an error message is displayed, the game cannot be played.

Errors are grouped into the following two categories.

Error 01~52:

These are errors on the LINDBERGH. For details, read the LINDBERGH Service Manual.

Error 201~211:

These are errors occurring with the product itself.

Error 201~210 are displayed on the screen when the corresponding error has occurred.

Error 211 is displayed when the screen moves back from SYSTEM TEST Mode to the game screen.

Error 201~211 Details

Error 201 Servo error

CAUSE: Breakdown of servo driver.

Error 202 Servo error

CAUSE: Breakdown of servo driver.

Breakdown of relay for brake release.

Error 203

Power not supplied to the servo driver.

CAUSE: Triple phase power is not being supplied.

The triple phase power breaker has been activated by a momentary overload. The emergency stop switch has been activated by faulty ride operation.

Error 204

Alarm generation

CAUSE: Breakdown of servo motor or servo driver.

Triple phase power is not being supplied.

The triple phase power breaker has been activated by a momentary overload. The emergency stop switch has been activated by faulty ride operation.

Error 205 Limit error

CAUSE: Ride limit sensor has been activated.

Error 206

Position sensor error

CAUSE: Breakdown of position sensor.

Position sensor does not function normally because it is dirty.

Error 208

Ride default setting operation is stopped. (1)

CAUSE: During ride default setting operation, the GAME STOP Button was pressed, stopping the

operation.

Error 209

Communication time out

CAUSE: Communication between game board and control board has stopped.

Error 210

Ride default setting operation is stopped (2)

CAUSE: During default ride setting operation, the foot sensor activated, stopping the operation. Remove

the cause of sensor activation and restart.

Error 211

This is an error in the COIN ASSIGNMENTS setting in SYSTEM TEST Mode. COIN CHUTE TYPE and SERVICE TYPE settings should both be set at COMMON for the game. If you move to the game screen after selecting INDIVIDUAL for COIN CHUTE TYPE or SERVICE TYPE, an error message is displayed. In that case, press the TEST Button again, enter SYSTEM TEST MENU and change the setting of COIN CHUTE TYPE or SERVICE TYPE for COIN ASSIGNMENTS to COMMON.