

OWNER'S MANUAL





62" DX CABINET



32"STD CABINET

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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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! - LOST ON THE ISLAND OF SPICE."

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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SPECIFICATIONS

Width and Depth $62"DX = 60.5"[W] \times 109"[D] / 32"STD = 33"[W] \times 44.5"[D]$

Height: 62"DX = 86.4" / 32"STD = 87"

Weight: 62"DX = 1,498 lbs. / 32"STD = 382 lbs

Power, maximum current: Input 120VAC, 60Hz. >> 62"DX = 6.3 A / 32"STD = 4.5 A Monitor: 62"DX = 62 inch DLP Projector / 32"STD = 32"LCD Display

NOTE: The contents herein described are subject to change without notice.

Definition of 'Site Maintenance Personnel or Other Qualified Individuals'



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.

1 HANDLING PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.

Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine.

A WARNING

- Before performing work, be sure to turn the power off. Performing the work without turning the power off can
 cause an electric shock or short circuit. In the case work should be performed in the status of power on, this
 manual always states to that effect.
- To avoid an electric shock or short circuit, do not plug in or unplug quickly.
- To avoid an electric shock, do not plug in or unplug with a wet hand.
- Do not expose power cords or earth wires on the surface, (floor, passage, etc.). If exposed, the power cords
 and earth wires are susceptible to damage. Damaged cords and wires can cause an electric shock or short
 circuit.
- To avoid causing a fire or an electric shock, do not put things on or damage the power cords.
- When or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or an electric shock.
- In case the power cord is damaged, ask for a replacement through where the product was purchased from
 or the office herein stated. Using the cord as is damaged can cause fire, an electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting the specified rating. Using fuses exceeding the specified rating can cause a fire
 or an electric shock.
- Be sure that connections such as IC BD are made properly. Insufficient insertion can cause an electric shock.
- Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.
 - Failure to observe this may cause a fire or an electric shock. Non-compliance with this instruction can have a bad influence upon physical conditions of the players or the onlookers, or result in injury during play.
 - SEGA shall not be held responsible for damage, compensation for damage to a third party, caused by specification changes not designated by SEGA.
- Do not perform any work or change parts not listed in this manual. Doing so may lead to an accident. If you
 need to perform any work not listed in this manual, request work from the office indicated in this manual or
 the point of purchase, or inquires for details.
- Be sure to perform periodic maintenance inspections herein stated.

(STOP) IMPORTANT

- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- The projector is employed for this machine. The projector's screen is susceptible to damage, therefore, be very careful when cleaning the screen. For details, refer to the section "Projector."
- Static electricity from your body may damage some electronics devices on the IC board. Before handling the IC board, touch a grounded metallic surface so that the static electricity can be discharged.
- Some parts are not designed and manufactured specifically for this game machine.
 The manufacturers may discontinue, or change the specifications of such general-purpose parts. If this is the case, SEGA cannot repair or replace a failed game machine whether or not a warranty period has expired.

CONCERNING THE STICKER DISPLAY

This SEGA product has stickers attached describing the product manufacture No. (Serial No.) and Electrical Specifications. It also has a Sticker describing where to contact for repair and for purchasing parts.

When inquiring about or asking for repairs, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial Number indicates the product register. Identical machines could have different parts depending on the date of production. Also, improvements and modifications might have been made after the publication of this manual. In order to ensure you order the correct parts, mention the Serial No. when contacting the applicable places.

CONCERNING WARNING DISPLAYS

This SEGA product has warning displays on stickers, labels and/or printed instructions adhered/attached to or incorporated in the places where a potentially hazardous situation could arise. The warning displays are intended for accident prevention for customers and for avoiding hazardous situations relating to maintenance and servicing work. Some portions of the cabinet contain high voltage and may cause accidents if touched. When performing maintenance, be very careful of the warning displays. It is especially important that any complex repair and replacement work not mentioned herein should be performed by those technical personnel who have knowledge of electricity and technical expertise.

In order to prevent accidents, caution any customer ignoring the warnings to cease and desist immediately.

2 PRECAUTIONS REGARDING INSTALLATION LOCATION

WARNING

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

- Places subject to rain or water leakage, or places subject to high humidity in the proximity of an indoor swimming pool and/or shower, etc.
- Places subject to direct sunlight, or places subject to high temperatures in the proximity of heating units, etc.
- Places filled with inflammable gas or vicinity of highly inflammable/volatile chemicals or hazardous matter.
- Dusty places.
- Sloped surfaces.
- Places subject to any type of violent impact.
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- The operating (ambient) temperature range is not from 5°C to 30°C.

2-1 LIMITATIONS OF USAGE

WARNING

- Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage, and frequency requirements. A plate describing Electrical Specifications is attached to the product. Non-compliance with the Electrical Specifications can cause a fire and electric shock.
- This product requires a breaker and earth mechanism as part of the location facilities. Using the product without these can cause a fire and electric shock.
- Ensure that the indoor wiring for the power supply is rated at 15 A or higher (AC single phase 100 V ~ 120 V area), and 7 A or higher (AC 220 V ~ 240 V area). Non-compliance with the Electrical Specifications can cause a fire and electric shock.
- Be sure to use an independent power supply equipped with an earth leakage breaker. Using a power supply without an earth leakage breaker can cause an outbreak of fire if a power surge occurs.
- Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.
- When using an extension cord, ensure that the cord is rated at 15 A or higher (AC 100 V ~ 120 V area) and 7
 A or higher (AC 220 V ~ 240 V area). Using a cord rated lower than the specified rating can cause a fire and
 electric shock.

2-2 OPERATION AREA

A WARNING

- For the operation of this machine, secure a minimum area of 116"(W) x 156"(D) for 62"DX, 81"(W) x 103"(D) for 32"UR. If the machine rolls during play it could lead to serious injury, especially if anyone is hit on the head. You must secure the space specified in this document.
- Be sure to provide sufficient space specified in this manual. Do not allow objects to block the ventilation ports. It can cause generation of heat and a fire.
- SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.
- If the machine does not fit through the entryway to the installation location, do not disassemble it without first
 consulting the instructions. If the machine still does not fit through the entryway after following the procedures
 in this manual, contact your retailer or the office listed in this manual.

STOP) IMPORTANT

To install this product, the entrance must be at least 48.8" in width and 78" in height.

3 PRECAUTIONS REGARDING PRODUCT OPERATION

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

3-1 BEFORE OPERATION

WARNING

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

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

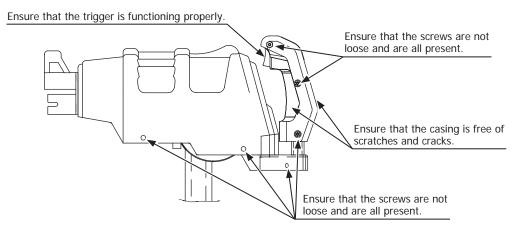
WARNING

- 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.
- When using a stepladder or stool while working, do not hold onto the billboard carrier (the round pipe section). Holding or hanging off this may bend it out of shape or damage it, and could lead to a fall or an accident.
- 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.]

A CAUTION

- 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.



When you clean the cabinet each day, always make sure that there is nothing placed on the seats and that
they are not damp or wet. The construction of this product may allow for willful misconduct by players.

3



To ensure customers enjoy playing the game, clean the Control Unit regularly. If there is any dirt buildup, the trigger may not return properly after being pulled.

3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

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

WARNING

- For safety reasons, do not allow any of the following people to play the game.
 - Those who require supporting devices, etc., to walk.
 - 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.
 - Persons susceptible to motion sickness.
 - Persons who disregard the product's warning displays.
- 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.
- To avoid electric shock and short circuit, do not allow customers to unplug the power plug without a justifiable reason.

A CAUTION

- Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or falling down, resulting in injury due to fragments and falling down.
- Two or more players must never be allowed to play using a single Control Unit. Playing in such a way could lead to physical injuries.
- When entering or exiting the machine, players may trip over the base. Be sure to warn players who do not appear to be exercising proper caution.

STOP) IMPORTANT

The interior of the cabinet is hard to see from the outside which may lead to willful misconduct by players or accidents going unnoticed. When the game is not in use, check the interior at regular intervals and make sure that nothing has been forgotten or placed on the seats.

4 PART DESCRIPTIONS

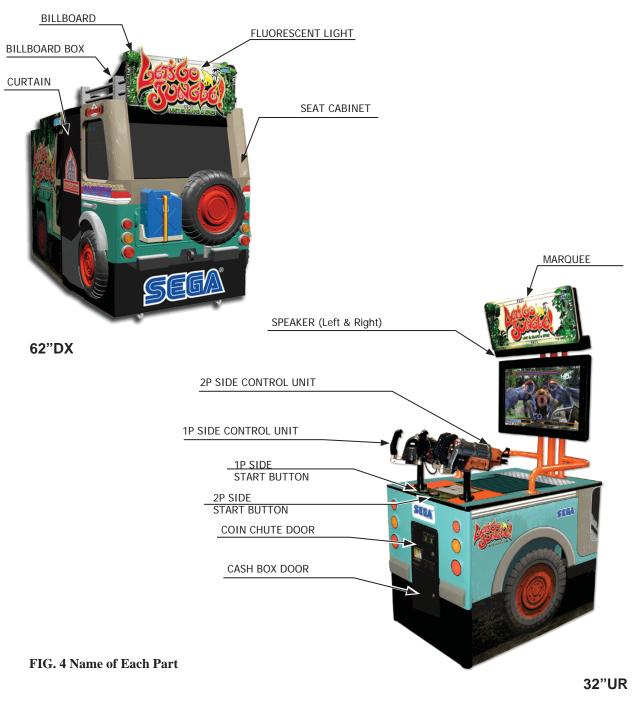


TABLE 4 Major Measurements of Each Unit Upon Purchase = 62"DX

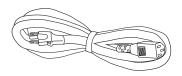
62"DX cabinet	Width x Depth x Height	
Cabinet A (Monitor)	61" x 20 3/4" x 71"	
Cabinet B (Speaker)	61" × 24 1/4" × 71"	
Cabinet C (Control)	61" × 31 1/2"" × 71"	
Cabinet D (Seat Assy)	61" × 30" × 71"	
Billboard (Assy)	49" × 33" × 14"	

5 ACCESSORIES

MANUAL LET'S GO JUNGLE: 532-30-300 (1) > This manual

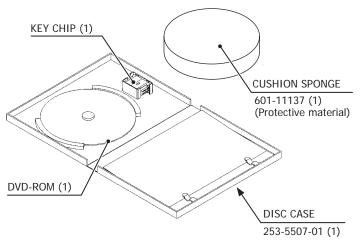
REMOTE CONTROLER & MANUAL FOR TOSHIBA 62"DLP MONITOR > 62"DX only

UNIVERSAL POWER CORD 8FT 99-00-017



DVD SOFTWARE KIT (1)

NOTE: We already installed software in CPU. Key Chip also already in CUP mounted. Please keep DVD Disk for future uses.



To order the DVD-ROM by itself, use the following part number: 610-0726-0011 (DVD SOFT LGJ BOTH 32"STD AND 62"DX)

6 ASSEMBLY AND INSTALLATION

A WARNING

- Perform assembly work by following the procedure herein stated. Failure to comply with the instructions can cause electric shock.
- Perform assembling as per this manual. Since this is a complex machine, incorrect assembling can cause an
 electric shock, machine damage and/or improper functioning as per specified performance.
- When assembling, more than one person is required. Depending on the assembly work, there are some cases in which working by one person alone can cause personal injury or parts damage.
- Ensure that connectors are properly connected. Improper connections can cause electric shock.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a
 risk of fire.
- This work should be carried out by site maintenance personnel or other qualified professionals. Work performed by non-technical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation. If no one with proper technological expertise is available, request service from the office indicated in this document or the point of purchase so as to ensure safety.
- Provide sufficient space so that assembling can be performed. Performing work in places with narrow space
 or low ceiling may cause an accident and assembly work to be difficult.
- To perform work safely and avoid serious accident such as the cabinet falling down, do not perform work in places where step-like grade differences, a ditch, or slope exist.
- Do not leave power cords or ground wires exposed in areas of heavy foot traffic. Doing so may cause them to become damaged, possibly resulting in electric shock and/or short circuits. When laying wiring across the floor, always use safety covers to protect the wires. (Wiring diameter: power cable - approx. φ 8)
- Have a flashlight or another supplementary lighting unit available while working. With indoor lighting alone, the
 cabinet interior may be too dark. Working without proper lighting can lead to accidents. It also hinders proper
 work performance.
- The cabinet has ventilation ports. Be sure not to block them. If they are blocked, heat can build up, leading
 to fire. This can also accelerate wearing of parts and malfunctions.
- Secure ample ventilation space around the cabinet. If heat builds up, there could be accidents associated with heat or smoke generation.
- Do not unnecessarily push the projector. This could cause the unit to tip over.
- This product does not use any connectors other than those connected to and used by the game board when
 it leaves the factory. Do not needlessly connect wires to unused connectors. This could lead to overheating,
 generation of smoke and burn related injuries.

A CAUTION

- Handle molded parts with care. Excessive weight or pressure may cause them to break and the broken pieces may cause injury.
- To perform the operation safely and accurately you must use a safe, steady footstool or stepladder. Working without this may lead to a fall and possible injury.
- When connecting the connectors on the DVD wire, you must carefully check the tags on the wire to find the
 correct connector. Even when you have the correct connector, you must pay careful attention to the direction and angle of insertion. Attempting to forcefully connect the incorrect connector or connecting a connector at the wrong angle or facing may damage the connector and could lead to overheating and burn
 related injuries.
- When attaching or removing doors or lids, be careful that your hand or finger does not get caught in anything.

STOP) IMPORTANT

- Be very careful when handling the projector screen. The screen can be damaged easily and cannot be repaired once damaged. Such damage can only be repaired by completely replacing the screen.
- Be careful not to damage parts surfaces. In some cases, if such surfaces are damaged, the part must be replaced; it cannot be reinforced or repaired.

The assembly of 62"DX is performed in the following 6 steps.

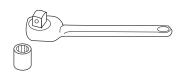
- 1 CONNECTION OF THE CABINET
- 2 ATTACHING THE BILLBOARD BOX
- 3 ATTACHING THE BILLBOARD
- 4 FIXATION TO INSTALLATION SITE\
- 5 CONNECTION OF POWER AND GROUND
- 6 CONFIRMATION OF ASSEMBLY

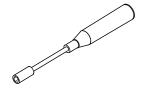
Tools Required for Assembly Operation

- Philips screwdriver (for Phillips screws)

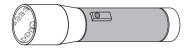


- A 7, Socket wrench or hexagonal screwdriver (for US standard bolts and nuts)

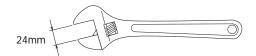




- Flashlight or other supplementary lighting



- A 24 millimeter spanner (Adjustable spanner)



- Tamper screw wrench (T-25)



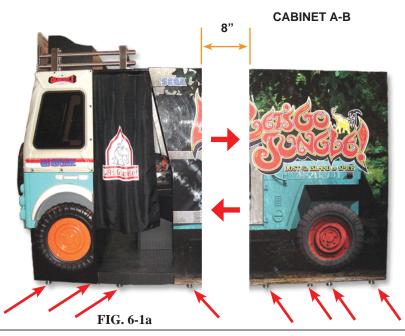


CONNECTION OF THE CABINET

Move the Cabinet A-B and C-D Cabinet close together. Perform the connection of the wires between the two cabinets. Leave a gap of approx 8". Please Line up top of cabinets by adjusting Leg Leveler before joint.

NOTE:

PLEASE LINE TOP OF CABIETS UP BY **ADJUSTING LEG LEVELERS BEFORE** JOINT CABINETS. **WE RECCOMEND 3 OR MORE PERSONS** TO ASSEMBLE.



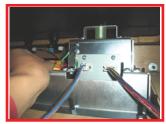
Connect the following harness

A) Gun Assy 1P & 2P (Gun harness and Earth wire fdor each assy)

- B) Con Door harness w/Earth wire.
- C) F.L.Lamp and Speaker harness (Top of cabinet)

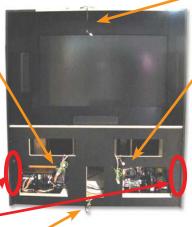
Then remove 4 sets of Washer and screws

Harness, 1P Gun Assy w/earth wire

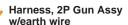


Please tight Earth wire to Base bracket of 1P Gun Assy in cabinet C.

CABINET A-B



Harness, F.L.Lamp and Speaker





Please tight Earth wire to Base bracket of 2P Gun Assy in cabinet C.

NOTE:

PLEASE REMOVE 4 WASHERS & 4 SCREWS (T25) FROM HERE. THAT **ARE USED FOR JOINTING** OF CABINET A-B & C-D.

Harness, Coin Door



Please tight Earth wire with screw of coin door frame in cabinet C.

FIG. 6-1b

Joint Cabinet A-B and C-D. (Remove 5 of Phillips screws from ROOF SUPPORT BRACKET before joint.)
After joint top part then tihgt 2 eanch of Left and Right screws (T-25) & washers up on bottom under control panel. (FIG. 6-1b)

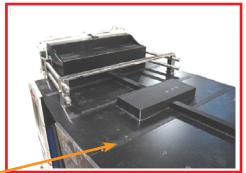


FIG. 6-1c

FIG. 6-1d





Use 4 Washers and 4 screws that already removed from Cabinet A-B to joint Cabinet A-B and C-D. Refer picture. (2 sets for Left and Right)

ROOF SUPPORT BRACKET

(Use same 4 phillips screws that already mounted on this bracket to joint cabinets)

4

Use 6 of #16 Wood screws (Black) to mount CABINET JOINT PLATE both Left and Right to support joint of Cabinet A-B and C-D.





FIG. 6-1e

2 ATTACHING THE BILLBOARD BOX

The billboard box is attached to the top of the Seat Cabinet. This operation must be performed by at least two people. As two or more people will be working together, take extra care not to trap your fingers or hands.

- Remove the DESIGN BILLBOARD BACK with removing 8 screws & washers off.
- Mount the Lower bracket (ANGLED SIGN HOLDER LGJ) on bottom of Marquee box with using 4 screws (8-32, 1 1/4" long, Phillips)



DESIGN BILLBOARD BACK





Use 8-32, 1 1/2" long Phillips screws (4) to mount it.

523-50-120

ANGLED SIGN HOLDER LGJ (BOTTOM)



Re-mount the DESIGN BILLBOARD BACK with using 8 screws & washers. There should be approx. 1/4" space created from bottom edge of Marquee Box and bottom edge of the DESIGN BILLBOARD BACK when you re-mounting it.



Bottom side of Marquee box

1/4" space here.

Mount the Upper bracket (SIGN HOLDER LGJ) on top of the marquee box with 4 screws. (8-32, 1 1/2" long Phillips)



SIGN HOLDER LGJ (TOP)

Use 8-32, 1 1/2" long Phillips screws (4) to

mount it.

Top side of Marquee box

Align Marquee box on top of Seat Cabinet. Use 4 of screws and Wahsers (1/4-20, 1 1/2" long, T-25 screw) to fix above marquee box



from inside of Roof.

NOTE: Take 3 screws off to remove Plastic Trim (Black), if cabinet has it.



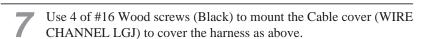
Align Marquee box.



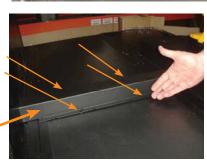
1/4-20, 1 1/2" long T-25 screws (4)

Connect 2 connectors coming out of the Marquee box to the connectors from other side (F.L.Lamp = Roof Lamp Metal box)

NOTE: Some cabinet may have issue that short harnesss coimg out from Roof Lamp ob and Marquee box and could not connect them because sort. if so, please open Roof Lamp or Marquu Box then cut cable tight to loose harness.

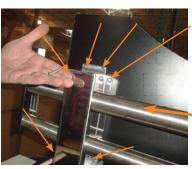


#16 Wood screws, Black (4)



523-50-129 WIRE CHANNEL LGJ

Mount the TUBE ASSY L and R on both side of marquee box. (Use 12 of 10-24, 1" long, Phillips) Then mount CONNERCTOR BRACE LGJ between back of Tube Assy Left and Right. (Use 8 of 8-32, 3/4" long, Phillips screws.)



10-24, 1" long, Phillips screws (6 pcs of Left & Right = Total 12 pcs)

Tube Assy (Left & Right)

FIG. 6-2a

523-50-119 CONNECTOR BRACE LGJ

Use total 8 of 8-32,3/4" long, Phillips crews (4 pcs of Left & Right)

Use total 6 of #16 Wood screws (Black) to mount Marquee box with Tube Assy.



FIG. 6-2be





Use #16 Wood screws, Black (3 pcs of Left & Right = Total 6 pcs)

FIG. 6-2c

3 ATTACHING THE BILLBOARD

The billboard box has six shafts for attaching the billboard. Place a Disk washer (6) onto each of these attachment shafts. Fix the billboard in place by capping each attachment shaft with screw. Do not tighten them too tight.

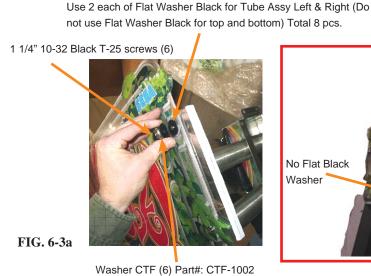




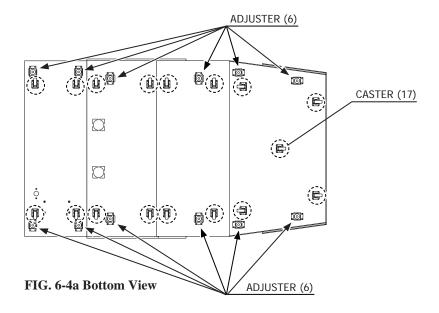
FIG. 6-3b

A WARNING

Make sure that all the adjusters contact the floor. Otherwise the cabinet could move, causing an accident.

The product comes with casters attached at 17 locations and adjusters at 12 locations.

When the installation site has been determined, have the adjusters come in direct contact with the floor. Establish a gap of about 5 mm between the floor and the casters and adjust the unit so that it will remain level.



- Move the product to the installation site. If the product is to be installed near a wall, secure enough passageway space for players to access the seat. You must also secure a 50 cm space between the back wall and the back of the cabinet for ventilation.
- Bring the adjusters into direct contact with the floor. Use a wrench to align the height of the adjusters until the cabinet is perfectly level.
- After setting, turn adjuster nuts upwards to tighten them and secure adjuster heights.

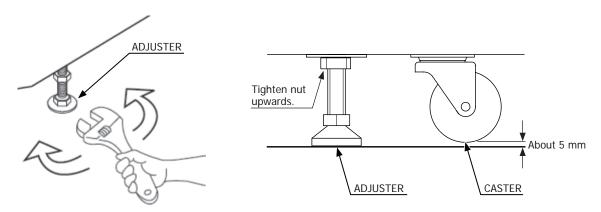
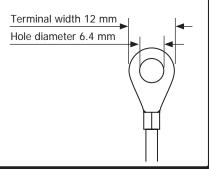


FIG. 6-4b Aligning the Adjusters

5 CONNECTION OF POWER AND GROUND

A WARNING

- Use the power supply equipped with an earth leakage breaker. Use of power supply without such a breaker
 could result in fire if there is a current leakage.
- Have available a securely grounded indoor ground terminal. Without proper grounding, customers could be electrocuted and product operations might not always be stable.
- Do not expose the power cord or ground wire. If these are exposed, customers could stumble over them, for instance, and easily damage them. Additionally, if these lines are damaged, there could be a risk of electrical shock or short circuit. Set these lines at locations where they will not interfere with customer traffic, or attach covers to them.
- After laying out the power cord on the floor, be sure to always protect it. If the power cord is left exposed, it can easily be damaged, resulting in electrical shock.
- When using the product's AC unit ground terminal, use ground wire with a circular terminal as shown in the illustration, and establish ground securely. Avoid indiscriminant grounding operations such as use of wire with only its sheath peeled off.



- Confirm that the main switch is at OFF. Fully insert the power cord connector on the side opposite the power plug into the AC unit inlet.
- Pully insert the power cord plug into the outlet. The power cord is laid out indoors. Protect the power cord by attaching wire cover to it.

 If ground will be established with a ground wire made available separately, lay out the ground wire indoors

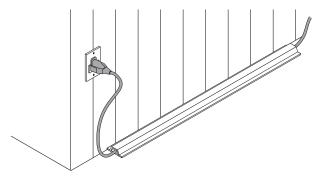


FIG. 6-5a

Process for Turning on the Power

and have it protected. <For Taiwan>

Set the main switch of the AC unit to ON and engage the power.

When you turn on the power, the one billboard fluorescent light and two fluorescent bulbs on the ceiling of the Main Cabinet will come on.

After the LINDBERGH start up screen is displayed on the projector screen, the Advertise (Attract) Mode will start. During Attract Mode, demo footage and how to play the game will be displayed on the screen.

Sound will be emitted from the left and right speakers inside the Main Cabinet and the speaker in the center of the control panel.

If the unit is set for no sound during Attract Mode, there is no sound output.

If there are enough credits to enable play, the start button flashes. It goes out if there are no credits during Attract Mode.

Even when the power source has been cut off, credit count and ranking data are kept stored in the product. However, fractional coin counts (inserted coins that do not amount to one credit) and bonus adder counts are not kept.

6 CONFIRMATION OF ASSEMBLY

Use test mode to confirm that assembly is proper, and that the LINDBERGH, connecting boards, and input/output devices are normal.

Perform the following tests in test mode.

For tests (1) to (4), refer to the LINDBERGH Service Manual. For tests (5) to (7), see [9-3 Game Test Mode].

Information
When "SYS"

Information Display Screen

When "SYSTEM INFORMATION," "STORAGE INFORMATION," or "JVS TEST" has been selected on the system test mode menu, system information, game information and information on JVS I/O board connected to LINDBERGH are displayed.

If each category of information is displayed without anomalies, the LINDBERGH is normal.

2

JVS Input Test Screen

When "INPUT TEST" has been selected on the JVS test screen, data input to the JVS I/O board is displayed. On the product, this is the screen for the testing coin switch.

Insert a coin. If the display to the side of the switch changes, the switch and wiring connections are normal.

3

Monitor Test Screen

When "MONITOR TEST" has been selected on the system test mode menu, the screen for checking projector (monitor) adjustment status appears.

Projector adjustment is completed when the product is shipped from the factory, but you should observe the test screen to determine whether further adjustment is necessary. Refer to Chapter 10 and adjust the projector if necessary.



Speaker Test Screen

When "SPEAKER TEST" has been selected on the system test mode menu, the screen for checking speaker sound output appears.

To confirm that audio output is normal, have test sound output from the game unit's speaker.

5

Input Test

When "INPUT TEST" has been selected on the game test mode menu, the screen for testing input device appears. Test operate the input device by pressing each switch. If the display on the side of each input device changes to "ON" and numerical values change smoothly in accordance with each operation, the input device and its wiring connections are normal. (See 9-3a.)

INPUT TEST

1P GUN X 0000FEE0 1P GUN Y 000002A7 1P GUN TRIGGER OFF 1P START BUTTON OFF

2P GUN X 00000233 2P GUN Y 000002D8 2P GUN TRIGGER OFF 2P START BUTTON OFF

SERVICE OFF TEST OFF

PRESS TEST AND SERVICE BUTTON TO EXIT

FIG. 6-6a INPUT TEST Screen



Output Test

When "OUTPUT TEST" has been selected on the game test mode menu, the screen for testing lamps and other output devices appears.

If each output device operates properly, the output device and its wiring connections are normal. (See 9-3b.)

OUTPUT TEST

1P GUN MOTOR OFF
1P START LAMP OFF
2P GUN MOTOR OFF
2P START LAMP OFF
ROOM LAMP OFF
COIN LAMP OFF

-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 6-6b OUTPUT TEST Screen

7

Calibration

Confirm that the operability of control unit do not present any hindrances to play. Calibration is adjusted when the product is shipped from the factory but it might need to be adjusted again because of vibrations during transport, etc.

If such things as operability are not satisfactory, select "GUN CALIBRATION" on the game test mode menu and check and adjust settings. (See 9-3c.)

GUN CALIBRATION

CALIBRATION START -> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 6-6c GUN CALIBRATION Screen

Conduct the aforesaid tests when performing routine tests each month.

7 PRECAUTIONS WHEN MOVING THE MACHINE

7-1 MOVING THE MACHINE

A WARNING

- Always disconnect the power cable before moving the product. If it is moved with the power cable connected, the cable could be damaged, causing fire or electric shock.
- To move the unit over the floor, pull in the adjustors and have the casters contact the floor. While moving the unit, be careful that the casters do not roll over the power cord or the ground wire. If cord or wire is damaged, there could be electrical shocks and/or short circuits.
- When crossing a sloped or stepped area, disconnect the DLP, Main Cabinet and Seat Cabinet. If you tilt them while connected together, the connection points may be damaged and personnel could be injured.
- When lifting the cabinet up steps, you must hold it by the designated handles or by the bottom surface. Lifting
 it by any other area may lead to damage or disfiguration to that part or surrounding parts due to the weight
 of the cabinet and could also lead to injury of personnel.
- When tilting the cabinet to move it across a sloped or stepped area, always use at least two people. Attempting such an operation alone can lead to accident or injury.
- When moving the components separately, take care concerning the direction you push the DLP and Seat Cabinet in. These elements may fall over, causing damage or an accident.

A CAUTION

- When moving the components do not push any of the plastic elements or shaped parts. Do not use them to
 pull the components along either. This may damage the parts or the surrounding parts and this could lead to
 accidents or injury.
- After dividing the components to move them, do not use the Control Units in the Main Cabinet to push or pull
 the cabinet. This may damage or disfigure these parts and lead to malfunctions or injury.
- When moving the separated components, the Top Board on the Seat Cabinet ceiling protrudes out. Be careful not to bang your head on it while working.
- If you move the cabinet with the Side Cloth attached, do not push or pull the Side Cloth. This may damage
 the Side Cloth, injure your hand or cause the cabinet to tip over.

STOP) IMPORTANT

- When moving the cabinet, do not hold, push or pull the Control Units. This may disfigure or damage them.
- If you need to move components through a narrow or low door and the only way to get the separated components through is to turn them on their side, or if a separation method other than those described in this manual is required, either make a request to the office listed in this document or the place of purchase to perform the operation or contact them regarding how to perform it. Carelessly turning the components onto their side or separating them in ways other than those depicted in this manual may lead to unrepairable damage.
- Do not press the projector screen. The screen can be easily damaged and cannot be repaired if it is, meaning complete replacement will be necessary.

7-2 SEPARATING THE MAIN CABINET (62"DX)

WARNING

- Do not carelessly separate the components of the Main Cabinet. This may lead to accidents during maintenance and electric shocks or short circuits during operation.
- After separation of the Main Cabinet, the individual Front Cabinet and Rear Cabinet are not sufficiently strong.
 Take care which places you push or pull. Do not turn the components onto their sides. This may lead to disfigurement or damage and could cause accidents during maintenance. It could even lead to unrepairable damage.

A CAUTION

- To work safely and precisely prepare a steady, safety stool or ladder to stand on. Climbing onto the cabinet
 or hanging down from it can lead to accidents.
- Perform the separation operation with at least two people. Performing the operation alone could lead to an
 accident.



If the only way to get the separated components into a desired location is to turn them onto their side, or if a separation method other than those described in this manual is required, contact the office listed in this document or the place of purchase. Turning the components onto their side may disfigure or misalign the cabinet and could lead to unrepairable damage.

If the entranceway is narrow, follow the process detailed below to separate the Cabinet A-B and Cabinet C-D.





8 GAME DESCRIPTION

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

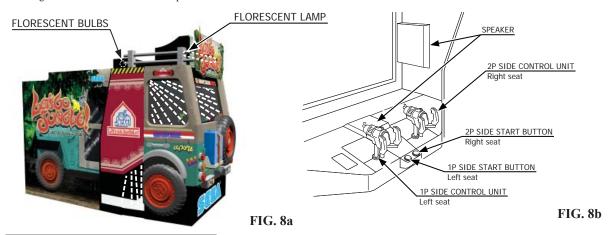
The florescent light in the billboard and the lights inside the main cabinet (two florescent bulbs) should be on at all times while power is being supplied. However, you may select for the lights inside the main cabinet to turn off during play from the Test Mode.

During Attract (standby) Mode, demo footage and details on how to play the game will be displayed on the screen.

Sound output comes from the left and right speakers inside the main cabinet and from the central speaker inside the control panel. Sound output during Attract Mode can be turned off from the Test Mode.

The two start buttons, one on the left and one on the right, can light up. They will light up when enough credits have been inserted to allow play. After the start button is pressed to start the game, the light in the button will turn off. After pressing the start button, use the control unit next to it to play the game. The start button then becomes the action button during the game and will light up when it has to be used.

The game requires two players to cooperate to escape from the jungle, using a combination of the control unit and the action button to defeat the attacking animals and obstacles in their path.



Using the Control Unit

Use the control unit to aim at targets and fire. Moving the control unit will move the target sight on the screen. The blue target is the 1P side and red target is the 2P side.

by little trigger to fire bullets on the screen and also the control unit reacts by internal motor. You have unlimited ammunition.

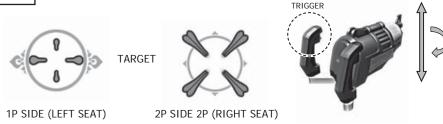


FIG. 8c Targets

FIG. 8d Control Unit

Game Rules

Once the game starts, the life for the player(s) will be displayed. The 1P side is blue and the 2P side is red.

- Use the control unit to aim and fire at the oncoming enemies.
- Being hit by enemy attacks will reduce your life.
- It is game over when your life reaches zero.

During the game, a player will have to perform various actions. When an action needs to be performed, the action icon will appear on the screen. The action icon indicates the start of an action.

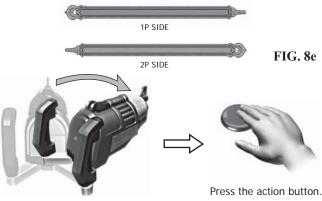
Then follow the onscreen instructions.



FIG. 8f Action Icon

FIG. 8g

Sometimes a mark will appear on a large enemy or something that can be destroyed. The mark changes color as time passes. Shoot at the mark and destroy it within the time limit.



PLAYER LIFE

Move the control unit to the right.



FIG. 8h Mark

FIG. 8i Mark Changes

9 EXPLANATION OF TEST AND DATA DISPLAY

WARNING

Do not touch any parts that are not specified in these directions. Touching unspecified locations may lead to electric shock or cause short circuits.

A CAUTION

- Be careful that your finger or hand does not get caught when opening/closing the coin chute door.
- Operating the TEST Button and SERVICE Button during Test Mode may be slightly uncomfortable, due to the
 position of the buttons in relation to the cabinet seats. Take care not to hurt your shoulder or back, or scratch
 or catch yourself on any parts of the cabinet.

(STOP) IMPORTANT

- When you enter the Test Mode, fractional coin and bonus adder data is erased.
- Adjust the sound to the optimum volume, taking into consideration the environmental requirements of the installation location.
- Removing the Coin Meter circuitry renders the game inoperable.
- Have a flashlight on hand and operate in Test Mode very carefully. The cabinet interior is dark and narrow and you could easily make mistakes in operation.

Perform tests and data checks periodically by manipulating the TEST Button and SERVICE Button in the cabinet. Follow the instructions in this chapter to conduct checks when the game machine is first installed, when money is being collected, or when the game machine does not operate properly. Shown below are the tests and screens to be used for different problems. This product uses a LINDBERGH game board and a DVD DRIVE. In the system, a different game can be played by putting a different DVD ROM in the DVD DRIVE. For this reason, the product's Test Mode consists of two modes: a System Test Mode for systems in which coin settings, for instance, are made for products that use the same system, and a Game Test Mode for setting of difficulty level, etc., and for input/output test of operational units used exclusively with this product.

9-1 PUSH SWITCH AND COIN METER

Push Switch

In Test Mode, the push switch in the coin chute door is operated. Unlock and open the coin chute door. Inside is the push switch.

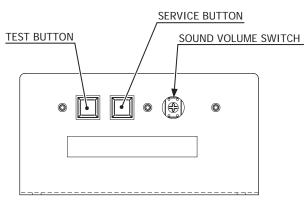


FIG. 9-1a Push Switch

TEST Button (TEST):

Establishes Test Mode. Becomes the button to confirm selections in Test Mode.

SERVICE Button (SERVICE):

Makes it possible to enter credits for service without increasing the coin meter. Becomes the button to select items in Test Mode.

Sound Volume Switch (SP.VOL):

Adjust the volume of the main cabinet left and right speakers, the control panel central speaker, the seat cabinet left and right speakers and all of the woofers at once. You cannot independently adjust the output of each speaker and woofer cannot be adjusted independently.

Coin Meter

After using a special-purpose key to unlock the cashbox door, the coin meter can be found at the bottom of the cashbox.

9-2 SYSTEM TEST MODE



- The details of changes to Test Mode settings are saved when you exit from Test Mode by selecting EXIT from the system test mode menu. Be careful because if the power is turned off before that point, changes to the settings will be lost.
- Use with the specified settings. If settings other than those specified are used, inappropriate operations or malfunction may occur.

In the system test mode, the main activities include checking LINDBERGH information and actions and the setting of coin/credit. Also, a screen appears for checking screen adjustments. For details, see the LINDBERGH service manual, which is provided separately.

Use the following settings with this product. If the settings are not as specified, error messages might appear and operations might not be normal.

• 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 menu screen (SYSTEM TEST MENU) appears. Use the SERVICE Button to move the cursor to the desired test item. Press the TEST Button to confirm selection of the item.

When testing and checking are 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

FIG. 9-2 SYSTEM TEST MENU Screen

9-3 GAME TEST MODE



To change settings in the game test mode, simply making changes on the setting screen will not be effective. Complete the Test Mode in normal fashion.

Highlight GAME TEST Mode on the system test mode menu, and press the TEST Button to enter the game test mode.

Once you enter the game test mode, the game test mode menu will be displayed.

- Press the SERVICE Button to highlight the desired menu item with the cursor. Press the TEST Button to perform the selected item. To learn how to proceed after executing the selected item, read the item's explanation.
- When test or setting is completed, take steps to have the game test mode menu screen reappear.

 The steps involved vary with the item.
- 3 Select EXIT and press the TEST Button. The system test mode menu screen reappears. On the system test mode menu screen, select EXIT and press the TEST Button. The game screen reappears

<Item Explanation>

9-3a INPUT TEST: Perform an input test.

9-3b OUTPUT TEST: Perform an output test.

9-3c GUN CALIBRATION: Perform calibration.

9-3d GAME ASSIGNMENTS: Set up game settings. 9-3e BOOKKEEPING: View bookkeeping records.

9-3f BACKUP DATA CLEAR: Clear data.

EXIT: Return to system test mode menu.

GAME TEST MODE

INPUT TEST OUTPUT TEST GUN CALIBRATION GAME ASSIGNMENTS BOOKKEEPING BACKUP DATA CLEAR

· EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9-3a GAME TEST MODE MENU Screen

9-3a INPUT TEST

INPUT TEST

1P GUN X 0000FEE0 1P GUN Y 000002A7 1P GUN TRIGGER OFF 1P START BUTTON OFF

2P GUN X 00000233 2P GUN Y 000002D8 2P GUN TRIGGER OFF 2P START BUTTON OFF

SERVICE OFF TEST OFF

PRESS TEST AND SERVICE BUTTON TO EXIT

FIG. 9-3a01 INPUT TEST Screen

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

<Operation>

Manipulate the control unit (Gun) and confirm that the input value on the right side of the item changes smoothly in response to manipulation.

2 Manipulate the trigger and the start button and check the display on the right side of the item. The display is normal if it shows ON when trigger or button is pressed and OFF when trigger or button is released.

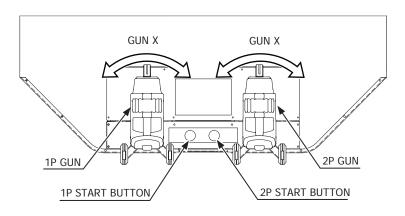
Use the TEST Button and SERVICE Button and check the values shown on the right of each category. Operation is normal if it shows ON when pressed and OFF when released.

When the SERVICE Button and TEST Button are pressed simultaneously, the game test mode menu screen reappears.

<Menu Explanation>

GUN X: Control unit left/right input value
GUN Y: Control unit up/down input value

GUN TRIGGER: Gun trigger
START BUTTON: Start button
SERVICE: SERVICE Button
TEST: TEST Button



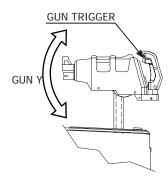


FIG. 9-3a02 Input Device

9-3b OUTPUT TEST

OUTPUT TEST

1P GUN MOTOR OFF
1P START LAMP OFF
2P GUN MOTOR OFF
2P START LAMP OFF
ROOM LAMP OFF
COIN LAMP OFF

-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9-3b OUTPUT TEST Screen

The condition of each output device can be checked. Periodically check the condition of each output device on this screen. Conditions are normal if each device operates and yields output as indicated below.

<Operation>

Press the SERVICE Button and move the cursor to the item (output device) you want to test.

Whenever the TEST Button is pressed, the display on the right side of the item goes from OFF to ON and the selected output device operates. Confirm that the device operates normally.

Press the SERVICE Button and move the cursor to EXIT. When the TEST Button is pressed, the game test mode menu screen reappears.

<Menu Explanation>

GUN MOTOR: When ON the motor will operate and the controller will vibrate, when OFF it will stop.

SENSOR: Will continue to switch between ON and OFF when the motor is in operation.

START LAMP: Start lamp will turn on when ON and off when OFF.

ROOM LAMP: Main cabinet ceiling florescent lamp will turn on when ON and off when OFF.

COIN LAMP: Coin insert slot lamp will turn on when ON and off when OFF.

EXIT: Game Test Menu screen reappears.

9-3c GUN CALIBRATION



Calibration is relevant to operability. Manipulate and adjust the control unit with appropriate force. Do not make adjustments with excessive force.

Change the volume input values of the control unit. After changing the volume, use this screen to adjust and check it.

You must adjust the sight for 1P side and 2P side separately.

<Operation>

Press the SERVICE Button and move the cursor to the item you want to select. Move the cursor to CALIBRATION START and press the TEST Button to adjust the calibration.

2 Move the cursor to EXIT and press the TEST Button, the calibration screen exits and the game test mode menu screen reappears.

GUN CALIBRATION

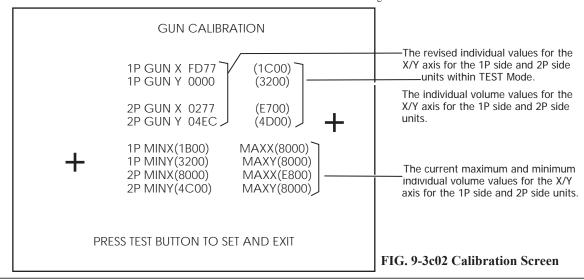
CALIBRATION START
-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9-3c01 GUN CALIBRATION Screen

Perform individual calibration of the control units for the 1P side and 2P side.

The current maximum and minimum individual volume values will be reset when entering the Gun Calibration Screen.



- Slowly move the control unit you wish to adjust all the way up, down, left and right. Repeat this numerous times and the values will set automatically.
- Press the TEST Button and the calibration settings will be altered to reflect all changes made before returning to the GAME TEST Mode screen.

9-3d GAME ASSIGNMENTS

(STOP) IMPORTANT

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

GAME ASSIGNMENTS

DIFFICULTY (EASY –4 –0- 4 HARD) 0
ADVERTISE SOUND ON
ROOM LAMP AUTO
GUN MOTOR OFF NO
GUN SENSOR IGNORE NO
CABINET TYPE THEATER

CABINET THE THEATE

-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON FIG. 9-3d GAME ASSIGNMENTS Screen

- Press the SERVICE Button, move the cursor to the item whose setting is to be changed and select the item. When the TEST Button is pressed, the preset value of the selected item changes.
- Press the SERVICE Button and move the cursor to EXIT. When the TEST Button is pressed, the game setting screen exits and the game test mode menu screen reappears.

<Menu Explanation>

DIFFICULTY: Set the Game Difficulty. Select from 9 settings: from -4 (low difficulty) to 4 (high difficulty).

ADVERTISE SOUND: Turn sound during the Attract (standby) mode ON or OFF.

ROOM LAMP: Light settings for lights inside main cabinet.

ON:Always on. AUTO: On during Attract Mode and all other times aside from during game play.

GUN MOTOR OFF: Motor operation settings for the control unit (gun).

YES: Motor will not operate. NO: Motor operates and control unit will vibrate.

GUN SENSOR IGNORE: Motor sensor operation settings.

YES: Motor sensor will not operate. NO: Motor sensor operates. If the motor sensor detects an abnormal

ity, the motor will stop. The motor will not operate while the power is left on. Set the type of cabinet. THEATER: 62"DX cabinet. STANDARD: 32"UR

CABINET TYPE: Set the type of cabinet. THEATER: 62"DX c
EXIT: Return to the Game Test Menu screen.

9-3e BOOKKEEPING

Displays bookkeeping information across 4 screens.

When the TEST Button is pressed, proceed to the next screen. When the TEST Button is pressed while the (4/4) screen is displayed, the game test mode menu screen reappears.

BOOKKEEPING	1/4				
COIN1 COIN2 COIN3 COIN4 TOTAL COINS	0 0 0 0	0			
COIN CREDITS SERVICE CREDITS TOTAL CREDITS	0 0 0				
PRESS TEST BUTTON TO NEXT					

FIG. 9-3e01 BOOKKEEPING Screen (1/4)

<Menu Explanation>

COIN 1/COIN 2/COIN 3/COIN 4: Number of coins inserted in each coin slot.

TOTAL COINS: Total number of coins.

COIN CREDITS: Number of credits awarded from inserting coins.

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

TOTAL CREDITS: Total of COIN CREDITS and SERVICE CREDITS.

BOOKKEEPING 2/4	
TOTAL TIME 0 D 00 H 00 M 00 S TOTAL PLAY TIME 0 D 00 H 00 M 00 S	
TOTAL PLAY TIME1P 0 D 00 H 00 M 00 S TOTAL PLAY TIME2P 0 D 00 H 00 M 00 S	
NUMBER OF GAMES 1P 0 2P 0 CONTINUE OF GAMES 1P 0 2P 0 TOTAL GAMES 0 BOTH PLAYERS GAMES 0	
AVERAGE PLAY TIME 00 H 00 M 00 S LONGEST PLAY TIME 00 H 00 M 00 S SHOTEST PLAY TIME 00 H 00 M 00 S	
PRESS TEST BUTTON TO NEXT	

FIG. 9-3e02 BOOKKEEPING Screen (2/4)

<Menu Explanation>

TOTAL TIME: Total number of hours the power has been supplied.

(Time power has been supplied, but not including TEST Mode.)

TOTAL PLAY TIME: Total play time.

TOTAL PLAY TIME 1P: Total play time on the 1P side.

TOTAL PLAY TIME 2P: Total play time on the 2P side.

NUMBER OF GAMES: Total number of plays on the 1P side and on the 2P side.

CONTINUE OF GAMES: Total number of continues on the 1P side and on the 2P side.

TOTAL GAMES: Total number of plays.

BOTH PLAYERS GAMES: Total number of two player games.

AVERAGE PLAY TIME: Average play time.

LONGEST PLAY TIME: Longest play time.

SHORTEST PLAY TIME: Shortest play time.

```
BOOKKEEPING
    1 COIN PLAY TIME
00 – 01 min
            0%
                  10 – 11 min
01 – 02 min
            0%
                  11 – 12 min
02 – 03 min
            0%
                  12 – 13 min
                               0%
03 – 04 min
            0%
                  13 – 14 min
                               0%
04 – 05 min
            0%
                  14 – 15 min
05 – 06 min
                  15 – 16 min
            0%
                               0%
06 – 07 min
                  16 – 17 min
            0%
                  17 – 18 min
07 – 08 min
            0%
08 – 09 min
            0%
                  18 – 19 min
                               0%
09 – 10 min
            0%
                  19 ---- min
 PRESS TEST BUTTON TO NEXT
```

FIG. 9-3e03 BOOKKEEPING Screen (3/4)

<Menu Explanation>

1 COIN PLAY TIME: Distribution of playtime on 1 coin (until continue or game over).

BOOKKE 1 GAME	EEPING 4/4 PLAY TIME					
	0% 12 – 13 min 0%					
PRESS TEST BUTTON TO EXIT						

FIG. 9-3e04 BOOKKEEPING Screen (4/4)

<Menu Explanation>

1 GAME PLAY TIME: Distribution of playtime for 1 full game (from start until game over).

9-3f BACKUP DATA CLEAR

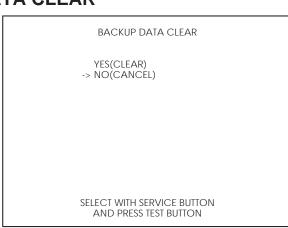


FIG. 9-3f BACKUP DATA CLEAR Screen

- Press the SERVICE Button and move the cursor to the item you want to select.
- To clear data, move the cursor to YES (CLEAR) and then press the TEST Button. When the data has been cleared, the message "COMPLETED" will be displayed and return to the game test mode menu screen automatically.
- Move the cursor to NO (CANCEL) and press the TEST Button to return to the game test mode menu screen without clearing the data.

10 CONTROL UNIT

A WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a
 risk of fire.
- Do not touch any parts that are not specified in these directions. Touching unspecified locations may lead to electric shock or cause short circuits.
- This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause a severe accident such as an electric shock.
- Exercise due caution in performing soldering procedures. If soldering iron is handled carelessly, there could be fires or burns.
- Proceed very carefully when heating thermal contraction tube. Careless operations can result in fires or burns.

A CAUTION

- When fastening plastic parts, be careful not to tighten screws and nuts excessively. Otherwise parts may be damaged, resulting in injuries from fragments, etc.
- Be careful not to get hand or finger caught when removing or attaching the parts.
- Disconnection and connection of connectors will be performed within the narrow cabinet space. Take due
 care not to scratch or otherwise injure yourself.
- Take care when carrying the removed Control Units. Such heavy lifting carries a risk of injury to back or shoulders.

STOP) IMPORTANT

- After the volume has been replaced, be sure to set the volume value on the test mode calibration screen and the input test screen and check variations in the volume value.
- After adjusting or replacing a microswitch, always check ON/OFF of the switch on the input test screen of the test mode.
- Handle parts inside the Control Unit very carefully. Be especially careful to avoid damage, deformation or loss of these parts. If any one of these parts is lost or defective, it can result in damages and/or faulty operations.

If the operability of the Control Unit is unsatisfactory, or if settings on the test mode calibration screen are ineffective, the problem could be a defective mechanism, displacement of the position where volume or microswitch has been fastened, or malfunctioning of volume or microswitch. Carry out the following procedure to replace Control Unit or microswitch. Also be sure to grease the mechanical components of the Control Unit once every 3 months.

10-1 HOW TO REMOVE CONTROL UNIT

When changing the volume or microswitches in the Control Unit you must first remove the Control Unit. Performing these operations with the Control Unit still attached is difficult and may damage parts or wires.

The following tools are needed for the following procedure.

- Phillips head screwdriver (for M6)
- Wrench or screwdriver for tamperproof screws (for M4)
- A 7 millimeter spanner, hexagonal screwdriver, or socket wrench

Turn off the power.

2 Remove Tamper screws to take off the CONTROL PANEL PLATE REAR and FRONT.

523-50-133

CONTROL PANEL PLATE REAR LGJ

523-50-134

CONTROL PANEL PLATE FRONT LGJ

FIG. 10-1a

Disconnect the two connectors then remove Earth wire from Gun Assy bottom.

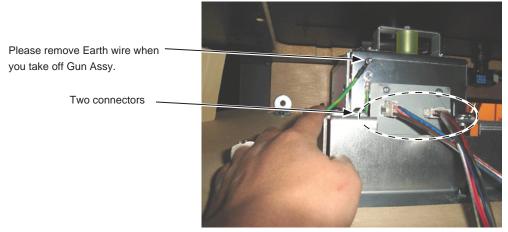
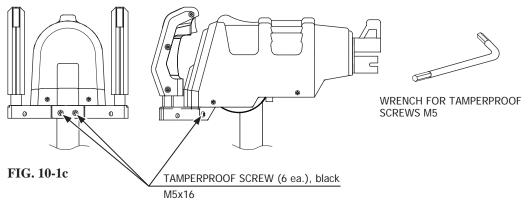


FIG. 10-1b

The Supplied Wrench

The supplied wrench for tamperproof screws M5 is used for the screws on the grip base. Use it to tighten these screws if they are loose or when changing the grip base.



10-2 ADJUSTING OR CHANGING THE X AXIS VOLUME



The volume axis directions when the Control Units are pointed directly at the screen are different.

The X (left and right) axis volume is on the bottom of the Control Unit.

If the X axis volume does not seem to be working properly and the TEST Mode calibration screen has no effect, the cause is likely to be a problem with or damage to the gears of the X axis volume.

When replacing the volume, you will need a replacement volume and three heat shrink tubes (product number: 310-5029-D20). You will also need the following tools and some solder.

- Phillips head screwdriver (for M4, M6)
- Wrench or screwdriver for tamperproof screws (for M4)
- A 7 millimeter spanner, hexagonal screwdriver, or socket wrench
- A 2 millimeter hexagonal bar wrench or screwdriver
- An 11-12 millimeter spanner
- Nippers
- Cutters
- Wire stripper
- Soldering iron
- Industrial dryer

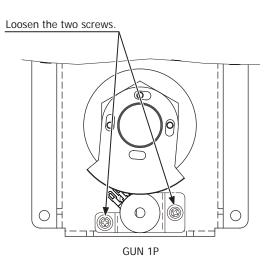
Adjustment

- Turn off the power and remove the Control Unit (see 10-1). Invert the Control Unit and place it upside down. Make sure you do not damage the surface of the Control Unit.
- 2 Loosen the two screws fixing the volume bracket lower and separate the gear engagement.



FIG. 10-2a

With the Control Unit's left and right axis perpendicular to the screen, engage the D cut face of the volume axis so that is matches the diagram below.



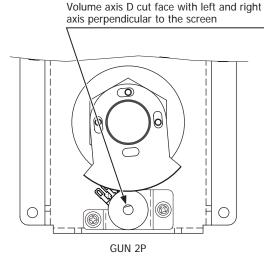
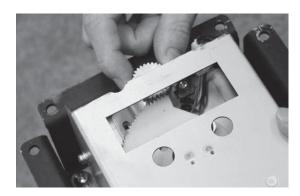


FIG. 10-2b X Axis (Left and Right) Volume

Tighten the two previously loosened screws. Move the Control Unit left and right and check that the gears move smoothly. Reattach the Control Unit, then turn on the power and adjust the volume value on the calibration screen.

- Loosen the two screws fixing the volume bracket lower and separate the gear engagement. Looking at the bottom of the Control Unit from the top, turn it as far anti-clockwise as possible and hold it there.
- Turn the volume axis as far as it will go clockwise and then reengage the gears.
- From this engagement, engage the gears on the volume axis at a half turn anti-clockwise and tighten the previously loosened

FIG. 10-2c

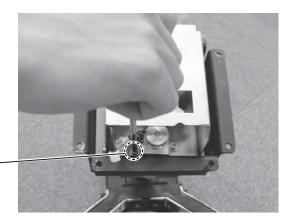


Exchange

- Turn off the power and remove the Control Unit. (See 11-1). Invert the Control Unit and place it upside down. Make sure you do not damage the surface of the Control Unit.
- Disconnect the one connector on the wire coming from the volume. Remove the two screws fixing the volume bracket lower in place. The screws have flat and spring washers attached. These two screws will be used with the replacement part.

M4x8, w/flat & spring washers SCREW (2)

FIG. 10-2d



Remove the volume along with the entire volume bracket lower from the Control Unit. Loosen the two hexagon socket screws and remove the gears. The gears will be used with the replacement part.

HEXAGON SOCKET SCREW (2)

M4x8

WIRE COLOR OF POT.

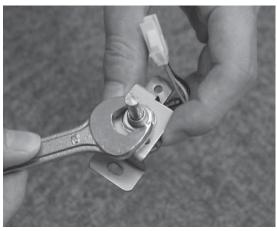
1 = RED2 = BK/W3 = BK



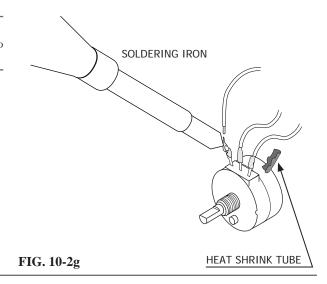
FIG. 10-2e

Remove the hexagon nuts attaching the volume bracket lower to the volume and remove it from the bracket. The bracket will be used with the replacement part.





- The wire attached to the volume will be used with the replacement part. Remove the old heat shrink tubing attached to the wire using the nippers or cutters.
- Use the soldering iron to melt the solder and remove the wire from the old volume. You must take the utmost care when using the soldering iron.



- If the lead wire on the end of the wire terminal is less than five millimeters, use wire strippers or cutters to peal back the covering. Pass the wire through each of the heat shrink tubes. Solder the wire terminal to the replacement volume.
- Use the wiring diagram to make sure you don't solder in the wrong place. Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area. Attach the gears and bracket to the volume.
- As in the above adjustment method, with the Control Unit's left and right axis perpendicular to the screen, engage the gears with the D cut face of the volume axis in the direction shown in the diagram and attach it to the Control Unit. (See FIG. 10-2b).

 Note that the directions are different for 1P side and 2P side.
- Fix the bracket in place with the two screws. Connect the connector. Reattach the Control Unit to the cabinet. Turn on the power and use the calibration screen to alter the volume values.

10-3 ADJUSTING OR CHANGING THE Y AXIS VOLUME

The Y (up and down) axis volume is inside the Control Unit on the side.

If the Y axis volume does not seem to be working properly and the TEST Mode calibration screen has no effect, the cause is likely to be a problem with or damage to the gears of the Y axis volume.

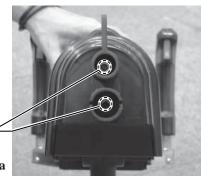
When replacing the volume, you will need a replacement volume and three heat shrink tubes (product number: 310-5029-D20). You will also need the following tools and some solder.

- Phillips head screwdriver (for M4, M6), Wrench or screwdriver for tamperproof screws (for M4), 7 millimeter spanner or hexagonal screwdriver or socket wrench, 1.5 millimeter hexagonal bar wrench or screwdriver, 11-12 millimeter spanner, Wire cutter, Knife, Wire Stripper, Soldering iron, Industrial dryer

FIG. 10-3b

Adjustment

- Turn off the power and remove the Control Unit. (See 10-1).
- **9** Remove the muzzle. Insert the tool into the gun barrel and remove the two tamperproof screws.



MUZZLE (GUN BARREL)

TAMPERPROOF SCREW (2), black

M4x8

FIG. 10-3a

Remove the Gun Cover.
Remove the six tamperproof screws.
With the Control Unit pointing at the screen, the Y axis volume is located on the right side.

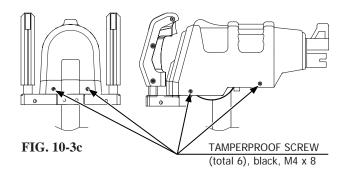




FIG. 10-3d

Loosen the two screws holding the volume bracket upper and adjust the gear engagement.

With the Control Unit level, engage the D cut face of the volume axis in the direction shown in the diagram.

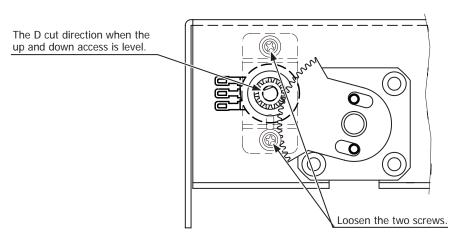


FIG. 10-3e Y Axis (up and down) Volume

Tighten the two previously loosened screws. Move the Control Unit up and down and make sure that the gears are moving smoothly. After reattaching the Control Unit turn on the power and use the calibration screen to adjust the volume values.

You can also adjust the gear engagement in the following way.

- Loosen the two screws fixing the volume bracket lower and separate the gear engagement. Point the Control Unit down as far as it will go. Turn the volume axis as far clockwise as it will go and engage the gears.
- 2 From this engagement, engage the gears on the volume axis at a half turn anti-clockwise and tighten the previously loosened screws

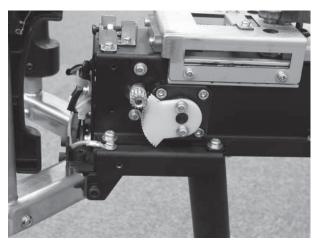
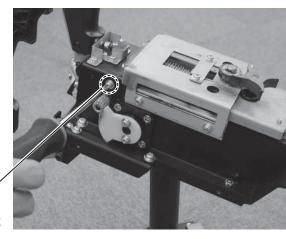


FIG. 10-3f

Exchanging

- Turn off the power and remove the Control Unit. (See 11-1). Remove the muzzle and the Gun Cover.
- Remove the two screws fixing the volume bracket upper in place. The screws have flat and spring washers attached. These screws will be used with the replacement volume.

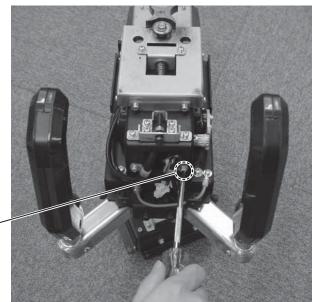


SCREW (2)

M4x8, w/flat & spring washers

FIG. 10-3g

Remove the volume wire restraint and free the wires. Remove the single screw holding the restraint in place.



SCREW (1)

M4x8, w/flat & spring washers



Remove the volume from the Control Unit with the volume bracket upper still attached. Be careful as a connector is attached.

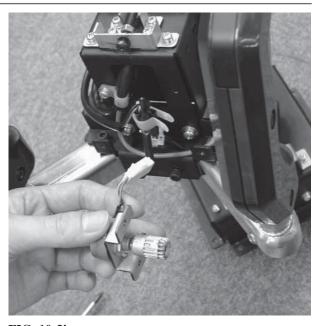


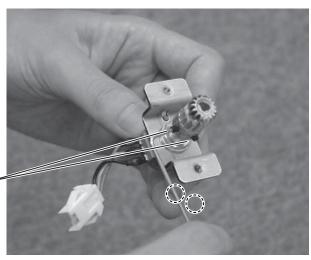
FIG. 10-3i

Disconnect the one connector.



FIG. 10-3j

Loosen the two hexagon socket screws fixing the gears in place and remove the gears. The gears will be used in the replacement volume.



WIRE COLOR OF POT. 1 = RED 2 = BK/W 3 = BK



HEXAGON SOCKET SCREW (2) M3x4

FIG. 10-3k

- Remove the hexagon nuts attaching the volume bracket upper to the volume and remove it from the bracket. The bracket will be used with the replacement part.
- The wire attached to the volume will be used with the replacement part. Remove the old heat shrink tubing attached to the wire using the nippers or cutters.
- Use the soldering iron to melt the solder and remove the wire from the old volume. You must take the utmost care when using the soldering iron.
- 1 If the lead wire on the end of the wire terminal is less than five millimeters use wire strippers or cutters to peal back the covering.
- Pass the wire through each of the heat shrink tubes. Solder the wire terminal to the replacement volume. Use the wiring diagram to make sure you don't solder in the wrong place.
- Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area. Attach the gears and bracket to the volume. Connect the connector.
- As in the above adjustment method, with the Control Unit level, engage the gears with the D cut face of the volume axis in the direction shown in the diagram and attach it to the Control Unit. (See FIG. 11-3e).
- 14 Fix the bracket in place with the two screws. Reattach the Gun Cover and the muzzle Reattach the Control Unit to the cabinet. Turn on the power and use the calibration screen to alter the volume values.

10-4 REPLACING THE TRIGGER SWITCH

If the trigger does not seem to be working properly, it is likely a fault with the microswitch inside the Control Unit's grip or there is foreign matter or dirt on the trigger. Remove the Control Unit when exchanging the microswitch or when disassembling and cleaning individual parts. When replacing the microswitch, you will need a replacement microswitch and two heat shrink tubes (product number: 310-5029-B20). You will also need the following tools and some solder.

- Phillips head screwdriver (for M4, M6)
- Wrench or screwdriver for tamperproof screws (for M4)
- A 7 millimeter spanner or hexagonal screwdriver or socket wrench.
- Nippers
- Cutters
- Soldering iron
- Industrial dryer

The microswitch slots into the left hand part of the grip, the left grip. During this operation you will remove and replace the right hand part of the grip, the right grip.

The screws and nuts fixing the grip in place are treated as part of this product. If you lose them they can be reordered using their respective product numbers.

1

Turn off the power and remove the Control Unit (See 10-1).

2

Disassemble the grip with the microswitch inside it. The top screw on the right grip uses a hexagon nut. Use a Phillips head screwdriver (for M4 screw).



FIG. 10-4a

Remove the two tamperproof screws holding the right grip in place. Use a wrench or screwdriver for tamperproof screws (for M4).

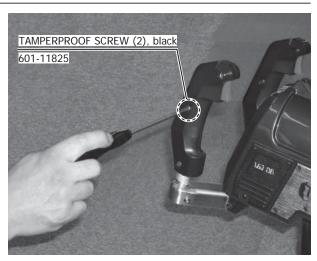


FIG. 10-4b

Remove the right grip. Be careful when removing the grip as the pieces inside may come free.

When disassembling and cleaning individual parts, be careful of the direction you attach the trigger bumper. Attaching it in the wrong direction may lead to a malfunction in the operation of the trigger.

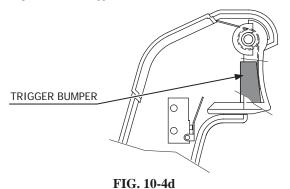




FIG. 10-4c

The microswitch is slotted into the left grip. Remove it gently, being careful not to damage the wires.



FIG. 10-4e

- The wire attached to the microswitch will be used with the replacement microswitch. Remove the old heat shrink tubing attached to the wire using the nippers or cutters.
- Use the soldering iron to remove the wire soldered to the microswitch terminal. Pass the wire through each of the heat shrink tubes.
- Solder the wire to the terminal on the replacement microswitch. Use the wiring diagram to make sure you don't solder in the wrong place.
- Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area. Insert the microswitch into the left grip and attach it.
- Reattach the right grip, taking care not to pinch the wire. Replace the two tamperproof screws, screw and nut to fix it in place. Be careful not to tighten the screws too tightly.
- Reattach the Control Unit to the cabinet. Turn on the power and use the input test screen in GAME TEST Mode to check the operation of the trigger.

10-5 GREASING



- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply grease to locations other than as specified. Doing so may create a risk of operational problems and deterioration of parts.
- The designated periods for greasing serve only as a guide. Whenever there are squeaks or other anomalies, apply grease at designated locations.

Once every three months, grease the cam slide part, springs, gear engagement and the sliding part of the slide rail.

For all parts aside from the slide part of the slide rail, use Grease Mate (product number: 090-0066).

For the slide part of the slide rail, use Sumico Lubricant (Ltd.) Mori LG Grease NO. 2 (product number: 090-0290).

In order to grease the gear engagement for the X and Y axis volumes, you must cut the power, remove the Control Unit from the cabinet, and remove the muzzle and Gun Cover. (See 10-1 & 10-2.)

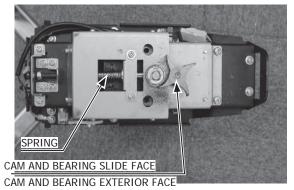
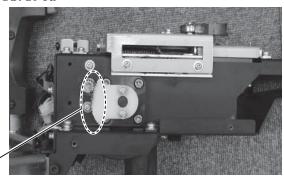
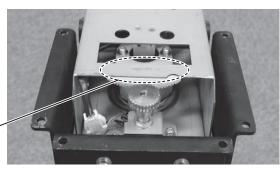


FIG. 10-5a



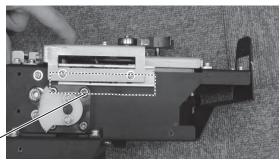
Y AXIS VOLUME GEAR ENGAGEMENT

FIG. 10-5b



X AXIS VOLUME GEAR ENGAGEMENT

FIG. 10-5c



SLIDE RAIL SLIDE PART

FIG. 10-5d

10-6 ADJUSTMENT OF VIBRATION NOISE

If the vibration is creating a lot of noise, adjust it in the following way.

- Turn off the power and remove the Control Unit. (See 10-1.) Remove the muzzle and Gun Cover. (See 10-2.)
- 2 Loosen the four screws holding the vibration pack stopper (hereafter "stopper") in place.

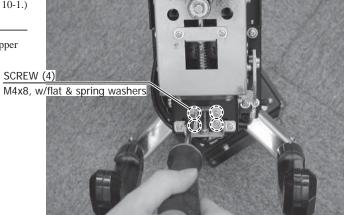


FIG. 10-6a

Use a Phillips head screwdriver and spanner to loosen the screw and U nut passing through the stopper.

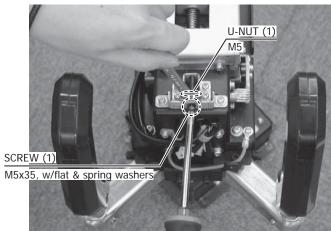


FIG. 10-6b

Slide the vibration pack toward the stopper, adjusting its fixed position as far as possible so that the tip of the cam and bearings are not touching. Tighten the screws loosened at sttep 4 of this process.

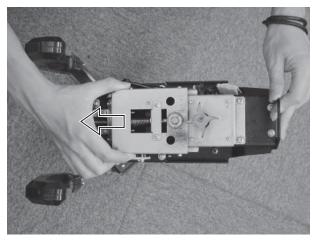


FIG. 10-6c

5

Tighten the four screws fixed the stopper in place. Fix the screw and tighten the U nut.

11

111 PERIODIC INSPECTION

A WARNING

- Once a year, check to see if power cords are damaged, the plug is securely inserted, dust is accumulated between the socket outlet and the power plug, etc. Using the product with accumulated dust in the interior may cause fire or electric shock.
- Never use a water jet, etc. to clean the inside and outside of the cabinet. If wetness occurs for any reason, do
 not use the product until it has completely dried.
- Once a year, request the office shown on this manual or the dealer from whom the product was originally purchased to perform the internal cleaning. Using the product with accumulated dust in the interior may cause fire or other accidents. Note that you are liable for the cost of cleaning the interior parts.
- There is the danger of accidents involving electrical short circuits or fire caused by factors such as the deterioration of insulation in electrical and electronic equipment over time. Check that there are no abnormalities such as odors from burning.



The interior of the cabinet is hard to see from the outside which may lead to willful misconduct by players or accidents going unnoticed. When the game is not in use, check the interior at regular intervals and make sure that nothing has been forgotten or placed on the seats.

In order to maintain the performance of this product and operate it safely, inspect the following items routinely and perform maintenance.

The player directly touches and manipulates the Control Unit with his/her hands. Clean it as necessary and provide hand towels, etc., so that players will be comfortable while playing.

The service manual referred in the table is the LINDBERGH service manual, which is provided separately.

TABLE 11 PERIODIC INSPECTION TABLE

ITEMS	DESCRIPTION	PERIOD	REFERENCE
CABINET	Confirm that adjusters contact floor	Daily	Chapter 3
	Seat check, removal of forgotten / other items	Daily	Chapter 3
PROJECTOR	Screen cleaning	Weekly	
	Check screen adjustment	1 month	6 [14]
	Exchange of lamp unit	When message is displayed	
CONTROL UNIT	Cleaning	As appropriate	Chapter 3
	Inspection of volume	1 month	9-3a
	Greasing	3 months	10-5
COIN SELECTOR	Inspection of coin switch	1 month	
	Coin insertion test	1 month	
	Coin Selector cleaning	3 months	
GAME BOARD	Individual tests	1 month	
	Check of settings	1 month	9-3d
FLUORESCENT LAMP & Inspection of lighting fixtures		As appropriate	
ELECTRICAL/ELECTRON-IC PARTS	Inspection	As appropriate	See above.
POWER CABLE	E Inspection, Cleaning		See above.
CABINET INTERIOR	CABINET INTERIOR Cleaning		See above.
CABINET SURFACES	Cleaning	As appropriate	See below.

Cleaning the Cabinet Surfaces

When the cabinet surfaces become dirty, remove stains with a soft cloth soaked in water or diluted (with water) chemical detergent and then wrung dry. To avoid damaging the finish, do not use such solvents as thinner, benzene, etc. (other than ethyl alcohol) or abrasives (bleaching agent and chemical dust-cloth).

Some general-purpose household, kitchen, and furniture cleaning products may contain strong solvents that degrade plastic parts, coatings, and print. Before using any cleaning product, read the product's cautionary notes carefully and test the product first on a small area that is not highly visible.

12 TROUBLESHOOTING

WARNING

- If an error message is displayed, have the problem looked at by a store maintenance person or a technician.
 Unless the problem is addressed by someone with specialized knowledge or skills, there could be electrical shock, short circuits or fire. If there are no store maintenance people or technicians, cut off the power immediately and contact the office shown in this manual or the dealer from whom the product was originally purchased.
- If problems other than those covered in this manual arise, or if no improvements can be noted after measures
 given in this manual have been taken, do not take measures indiscriminately. Cut off the power immediately
 and contact the office shown in this manual or the dealer from whom the product was originally purchased.
 Indiscriminate countermeasures could lead to unforeseeable accidents. They could also result in permanent
 damages.
- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a
 risk of fire.
- After the cause of circuit protector activation has been removed, have the circuit protector re-engaged. If
 the unit is used continuously as is, there could be heat generation or fire, depending on the cause of the activation.

A CAUTION

- When removing and replacing parts, take due care not to trap or pinch your fingers.
- The Control Units contain gears, cams and other moving machine parts. Take due care not to trap or pinch your fingers.

An error message indicates an error with the game board. Check the separate LINDBERGH Service Manual for more details. If a problem has occurred, first inspect the connection of the wiring connector.

TABLE 12 TROUBLESHOOTING TABLE

PROBLEMS	CAUSE	COUNTERMEASURES
When the main SW is turned ON, the machine is not activated.	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	The Circuit Protector of the AC Unit functioned due to momentary overcurrent.	After eliminating the cause of overload, have the Circuit Protector of the AC Unit restored. (See Section 6 [12], refer to the following.)
	The screen is not adjusted correctly.	Adjust the screen correctly.
The projector does not project an image.	The projector lamp is dead.	Replace the lamp. (Refer Manual of TOSHIBA 62"DLP manual)
No sound output.	Volume is not adjusted properly.	Adjust the volume. (See chapter 9.)
	Board or amp malfunction.	Check by performing a speaker test. (See 9-2.)
The Control Unit (Gun) does not target correctly.	Due to external or environmental factors the targeting is off.	Perform calibration in TEST Mode. (See 9-3c.)
	Volume damaged.	Exchange the volume. (See 10-2 & 10-3.) Volume: 220-5753
The Control Unit is not operating properly.	Microswitches damaged.	Check ON, OFF on the input test and if it is not working exchange the microswitch. (See 10-4.) Microswitch: 601-6729-01
	The volume gears are not properly engaging.	Adjust the engagement. (See 10-2 & 10-3.)
	Something is trapped or caught in the revolving or other parts.	Remove the trapped item or clean the trigger.
	Grease has deteriorated.	Apply grease to the designated grease areas. (See 10-5.)
Control Unit does not respond.	The Control Unit motor is set not to move.	Alter the TEST Mode settings. (See 9-3d.)
	Due to overload or other factors, an error has occurred with the motor, which has been sensed by the motor sensor and the motor has been stopped.	Remove the cause of the motor error.
	Motor damaged.	Exchange the motor.
The Control Unit makes a lot of noise when it vibrates.	Due to a problem with the vibration parts or wear over time, the internal parts have moved.	Adjust the position of the vibration parts. (See 10-6.)
The Marquee fluorescent lights don't come on.	The fluorescent light is dead.	Exchange the fluorescent light. Fluorescent Light: 18W
The lights in the cabinet don't come on.	The fluorescent light is dead.	Exchange the fluorescent light. Fluorescent Light: 15W



- If an error code is displayed, have a Location's Maintenance Man or Serviceman 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 store maintenance person or technician available, turn the power OFF immediately, and contact your retailer or the office listed in this manual.
- If problems other than those noted in this manual occur, or the countermeasures suggested result in no
 improvement, do not try to rectify the problem by other means. Turn the power OFF immediately, and contact your
 retailer or the office listed in this manual. Careless countermeasures can result in unexpected accidents.



If error No. 20 is generated, the power must be turned OFF and ON again in order to clear it.
 When requesting replacement or repair of the Game Board or Media Board, put the board in the special purpose packing box specified in this manual for transportation.

LINDBERGH displays error messages on the screen to indicate various problems. If an error message is displayed, the game cannot be started. In this case, refer to the following section on causes and countermeasures.

Error 01
DISPLAY
Game Program Not Found.
The key chip is not connected.

COUNTERMEASURES

Check that the key chip is connected correctly. Check that the keychip is not inserted the wrong way or that the key chip from a

different system is not inserted.

Error 02
DISPLAY Game Program Not Available.
CAUSE The key chip is not supported.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still in

place.

Error 05
DISPLAY Wrong Region.

CAUSE The game is for a foreign region.

COUNTERMEASURES Use a domestic game. Error 06

DISPLAY I/O Device Not Found.

CAUSE The LINDBERGH board's I/O board cannot be found.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still in

place.

Error 07 DISPLAY

DISPLAY Graphic Card Not Found.

CAUSE The LINDBERGH board's graphics card cannot be found.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still in

place.

Error 08 DISPLAY

Sound Card Not Found.

CAUSE The LINDBERGH board's sound card cannot be found.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still in

place.

Error 09 DISPLAY

PLAY System Memory Not Enough.

CAUSE The LINDBERGH board does not have enough memory.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still in

place.

Error 10 DISPLAY

DISPLAY Unexpected Game Program Failure.

CAUSE The game program crashed due to an unexpected error.

COUNTERMEASURES Turn the power off and then restart.

Error 11 **DISPLAY CAUSE**

JVS I/O board is not connected to main board.

(1) The I/O board is not connected.

(2) Unreliable connection between the main board and the I/O board.

COUNTERMEASURES

(1) Connect the I/O board to the main board.

Verify that the power cable is connected to I/O board.

(2) Reconnect or replace the JVS cable that connects the I/O

board to the main board.

Error 12 DISPLAY CAUSE

JVS I/O board does not fulfill the game spec. The correct I/O board is not connected.

COUNTERMEASURES

Use an I/O board that provides the proper input/output for the

game.

Error 14 **DISPLAY**

Network firmware version does not fulfill the game spec.

Required version XX.XX.

CAUSE

The firmware version installed on either the network board or the DIMM Media board is older than the required version.

COUNTERMEASURES

Use a network board or DIMM Media board with firmware that

meets or exceeds the required version.

Error 15 **DISPLAY**

Game Program Not Found. **CAUSE** The key chip is not connected. **COUNTERMEASURES**

Check that the key chip is connected correctly. Check that the key chip is not inserted the wrong way or that the key chip from

a different system is not inserted.

Error 21 **DISPLAY CAUSE**

COUNTERMEASURES

Game Program Not Found on Game Disk. There is no program image on the game disk.

Check that a game disk corresponding to the key chip is

inserted into the drive.

Error 22 **DISPLAY**

CAUSE COUNTERMEASURES Game Program Not Found on Device.

There is no game image on the game installer device.

Perform a reinstall from the game disk.

Error 24 **DISPLAY**

CAUSE

DVD Drive Not Found. The DVD drive cannot be found.

COUNTERMEASURES Connect the DVD drive.

Error 25 **DISPLAY**

CAUSE

COUNTERMEASURES

Game Disk Not Found.

The game disk cannot be found.

Insert the game disk.

Error 26 **DISPLAY**

CAUSE

COUNTERMEASURES

Storage Device Not Found.

The program installer device cannot be found.

Send the LINDBERGH board in for repair with the key chip still

in place.

Error 27 **DISPLAY**

CAUSE COUNTERMEASURES Storage Device is Not Acceptable.

The program installer device does not have enough space. Send the LINDBERGH board in for repair with the key chip still

in place.

12

Error 32 Error 28

DISPLAY This Game Disk is Not Acceptable.
CAUSE The game disk cannot be read correctly.

COUNTERMEASURES Exchange the game disk for a proper game disk. Check that the

game disk is not scratched, damaged or dirty.

Error 29

DISPLAY Cannot Control DVD Drive.

CAUSE The DVD drive cannot be controlled. COUNTERMEASURES The DVD drive may be damaged.

Error 31

DISPLAY Storage Device Not Enough.

CAUSE The program installer device does not have enough space.
COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still

in place.

Error 32

DISPLAY Installing Game Program Failed. CAUSE Transfer of the program failed.

COUNTERMEASURES Check that the DVD drive is connected correctly. Check that the

game disk is not scratched, damaged or dirty.

Error 33

DISPLAY Storage Device is Not Acceptable.

CAUSE The program installer device cannot be found.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still

in place.

Error 34

DISPLAY Storage Device Not Found.

CAUSE The program installer device cannot be found.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still

in place.

Error 35

DISPLAY Storage Device is Not Acceptable.

CAUSE The program installer device does not have enough space.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still

in place.

Error 36

DISPLAY Storage Device May be Broken.
CAUSE The program installer device is broken.

COUNTERMEASURES Send the LINDBERGH board in for repair with the key chip still

in place.

Error 37
DISPLAY
Verifying Game Program Failed.

CAUSE The program image is unverified due to the program image not

existing on the game disk or server.

COUNTERMEASURES Check that the correct game disk is inserted.

Error 41

DISPLAY Server Not Respond.

CAUSE The server is not responding. COUNTERMEASURES Check the network settings.

Set IP Address and other settings.

Check that the network cable has not been pulled out.

Error 42 DISPLAY

CAUSE The server directory is could not be reached.

Server Mount Failed

COUNTERMEASURES Check the network settings.

Set IP Address and other settings.

Check that the network cable has not been pulled out.

Error 43

DISPLAY IP Address Not Assigned.

CAUSE An IP Address could not be obtained from the DHCP server.

COUNTERMEASURES Check the network settings.
Set IP Address and other settings.

Check that the network cable has not been pulled out.

Error 44

DISPLAY Game Program Not Found on Server.

CAUSE No program image on the network server.

COUNTERMEASURES Check that the game title, place on the network server, and the

key chip correspond to each other.

Caution 51

DISPLAY Wrong Resolution Setting.

CAUSE The game does not support the current resolution settings. COUNTERMEASURES Change the DIP SW to the correct settings and restart.

Caution 52

DISPLAY Wrong Horizontal/Vertical Setting.

CAUSE The monitor horizontal/vertical settings are incorrect.
COUNTERMEASURES Change the DIP SW to the correct settings and restart.

13 GAME BOARD

A WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a fire risk.
- Do not expose the game board, etc. without a good reason. Failure to observe this can cause electric shock hazard or malfunctioning.
- Do not use this product with connectors other than those that were connected and used with the game board
 at the time of shipping. Do not carelessly connect wires to connectors that were not used at the time of shipping, as this may cause overheating, smoke or fire damage.
- When returning the game board after making repairs or replacements, make sure that there are no errors in the connection of connectors. Erroneous connections can lead to electrical shock, short circuits or fires.
- When connecting a connector, check the direction carefully. Connectors must be connected in only one direction. If indiscriminate loads are applied in making connections, the connector or its terminal fixtures could be damaged, resulting in electrical shock, short circuits or fires.

A CAUTION

- In this product, setting changes are made during the test mode. The game board need not be operated. Use
 the game board, etc. as is with the same setting made at the time of shipment so as not to cause electric
 shock and malfunctioning.
- Static electricity from your body may damage some electronics devices on the IC board. Before handling
 the IC board, touch a grounded metallic surface so that the static electricity can be discharged.



- When a game board is to be replaced, put the old game board with anomaly into a special box for replacing the game board and send it. If a special box is not available or if it has been damaged, arrange to obtain a box with the following part number/name. [601-11691/CARTON BOX LBG]

 For replacement are replacement as a second content of the part of th
- part number/name. [601-11691/CARTON BOX LBG]

 For replacement or repair, pack the game board and send it without disassembling it. Order for servicing might not be accepted if any part of the game board has been removed. If any part is removed, a service fee will be charged even if the warranty period has not yet expired.
- Do not remove the key chip from the game board before sending the board for servicing.

13-1 HOW TO REMOVE GAME BOARD (62"DX)

The game board (LINDBERGH) is inside the front door PCB to the right side when facing the projector screen. Remove the LINDBERGH together with the wooden base (PCB Board) on which it has been mounted.

Turn off the power.

Remove the screws to take off metal cover plate under Left btottom of control panel.



FIG. 13-1a

Disconnect all of the connectors connected to the LIND-BERGH.



FIG. 13-1b



Remove the 4 wood screws. (2 front, 2 back side)

Wood screws (2 front, 2 back side)

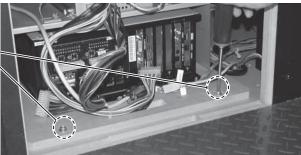


FIG. 13-1c

13-2 COMPOSITION OF THE GAME BOARD



- With the key chip inserted into it, this board serves as a special-purpose game board for the product.
- Use with the dip switches (DIP SW) on the board at the prescribed settings. If settings do not match the product, an error message will be displayed. In some cases, the game cannot be started.

ASSY CASE LBG L 1GB LGJ EXP (844-0012D-02)

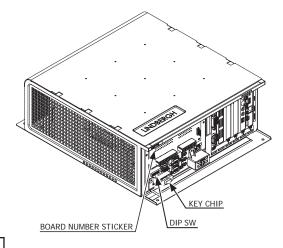


FIG. 13-2a

DIP SW SETTING

Use this product with the DIP SW settings shown in the figure below.



FIG. 13-2b

14 DESIGN RELATED PARTS

62"DX

<EXTERIOR>



<INTERIOR>



532-30-207 START BUTTON DECAL LGJ



532-30-210 INSTRUCTION LGJ



14



15 PARTS LIST





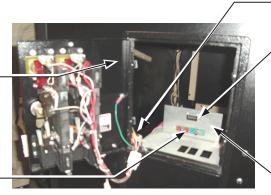


COIN DOOR, 32"STD (MID WIDTH)

99-70-103

COIN DOOR MID WIDTH 40-3000

838-14548-02 SW & C 1KOHM VOL BD



99-00-018 FERRITE CLAMP FILTER (28A2024-0A0)

99-70-160

COIN METER 5VOLT 42-0562

523-50-137

COIN COUNTER PLATE LGJ

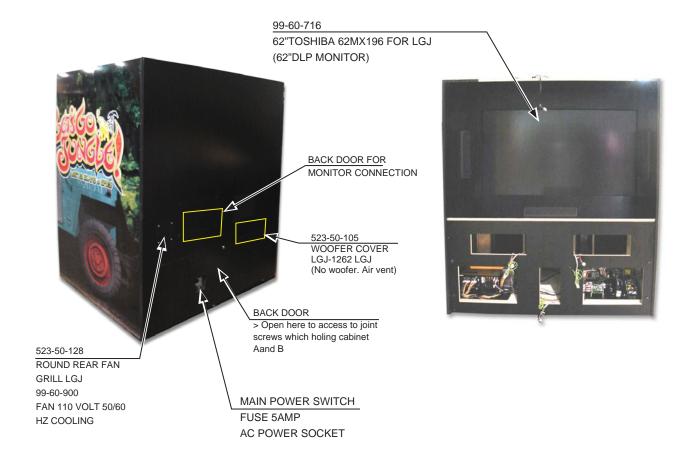
GUN BASE (UNDER GUN ASSY)



523-50-112

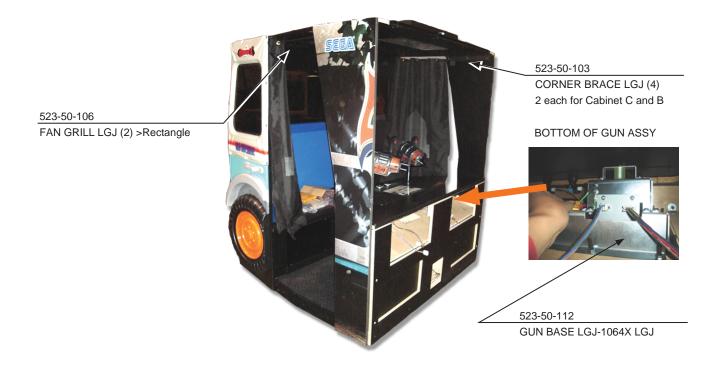
GUN BASE LGJ-1064X LGJ (Same as 62"DX)





15

CABINET C & D (Control cabinet and Seat cabinet, 62"DX)





POWER SUPPLY

62"DX

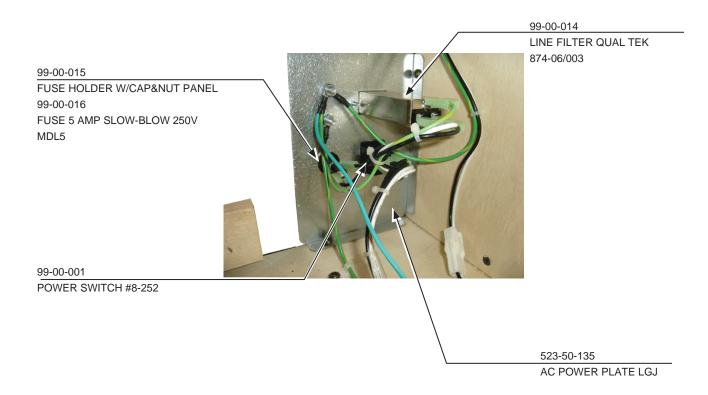


VIEW OF 62"DX

523-50-136

POWER SUPPLY HOLD DOWN LGJ

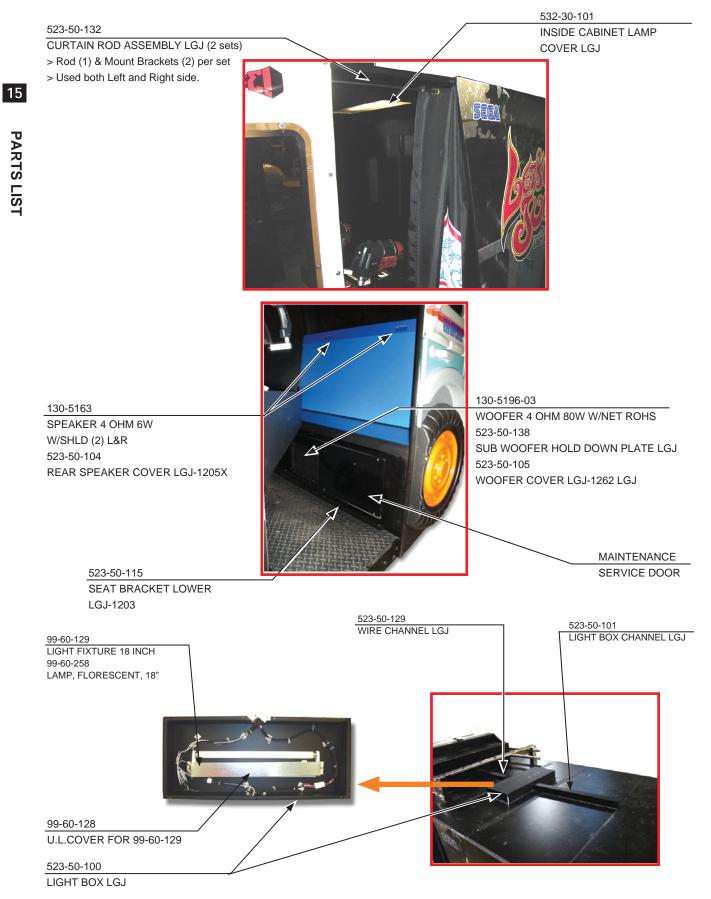
MAIN POWER SWITCH PLATE



15

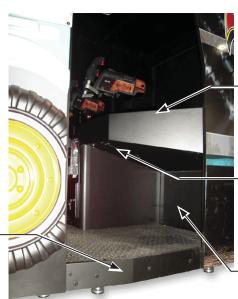
PARTS LIST

CURTAIN, BOTTOM SEAT, TOP FL LAMP BOX (62"DX)



CONTROL CABINET BOTTOM, COIN DOOR, SWITCH PALTE

62"DX ONLY



523-50-114

CABINET COVER LGJ-1010 LGJ (RIGHT) 523-50-113

CABINET COVER LGJ-1009 LGJ (LEFT)

> The other side.

523-50-127

GUN MOUNT COVER PLATE, SMALL (2) > Used on Left and Right side.

523-50-107

FOOT OUTSIDE TRIM R LGJ 523-50-108 FOOT OUTSIDE TRIM L LGJ > The other side.

523-50-126

GUN CABINET DOOR (2) > Used on Left and Right side.

99-70-160

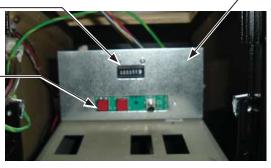
COIN METER5 VOLT 42-0562

523-50-137

COIN COUNTER PLATE LGJ

838-14548-02

SW & C 1K OHM VOL BD



32" UR & 62"DX

32" UR & 62"DX

509-6131-91-01

OBSA-60M-W-1FLED-W-12V LGJ 1P (START 1P)



509-6131-91-02

OBSA-60M-W-1FLED-W-12VC LGJ 2P (START 2P)

99-70-165

COIN DOOR 1 COIN / DOLLAR PLATE

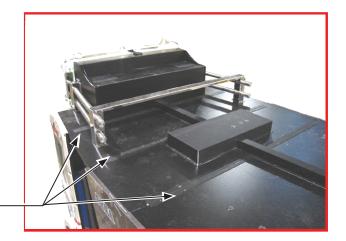
532-70-156

RUBBER FLOOR LGJ DIAMOND PLATI

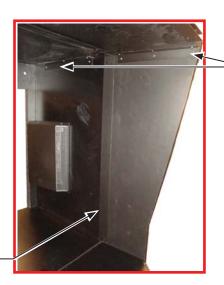
JOINT BRACKETS, SPEAKERS, CONTROL PANEL (62"DX)

15

PARTS LIST



523-50-109 ROOF SUPPORT BRACKET LGJ (3)



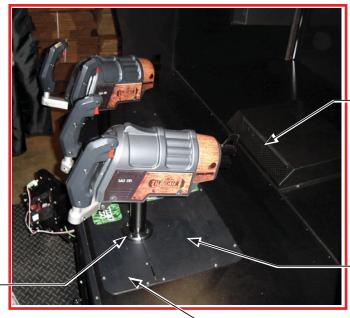
523-50-103 CORNER BRACE LGJ (4)

2 each for Cabinet C and B

523-50-102

CABINET JOINT PLATE LGJ-1001 (2)

> Joint Cabinet A-B and C-D.



130-5156-02

SPEAKER BOX 8 OHM 20W VA1 YL (3) 523-50-110

SIDE SPEAKER BRACKET LGJ-1027 (3) 523-50-111

SIDE SPEAKER COVER LGJ-1029 (3) > Front Center, Left & Right.

LGJ-1074

GUNSHAFT GUIDE (4)

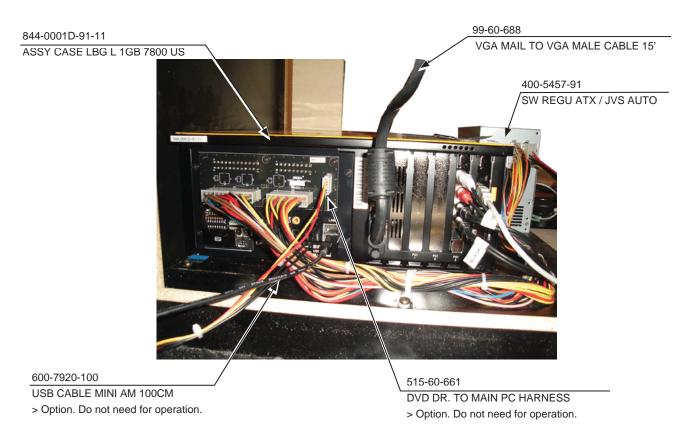
523-50-133

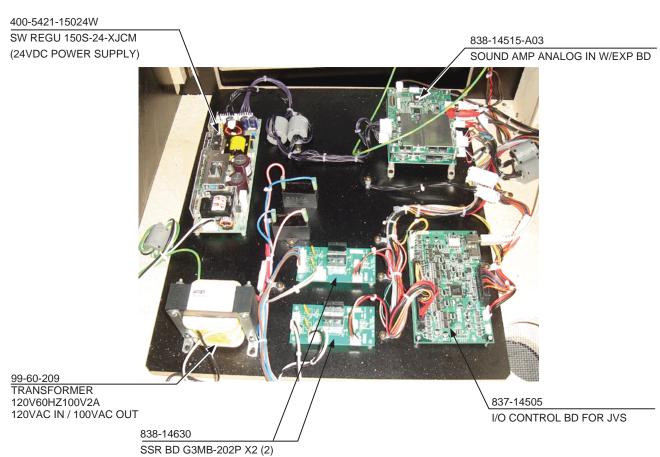
CONTROL PANEL PLATE REAR LGJ

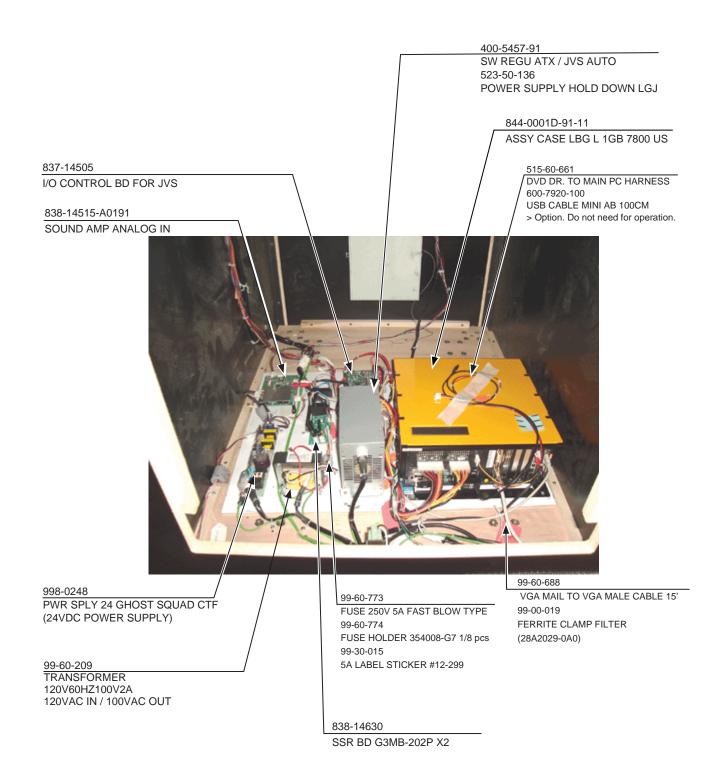
523-50-134

CONTROL PANEL PLATE FRONT LGJ

MAIN BOARD, OTHER BOARDS, ELECTRONICS PARTS (62"DX)

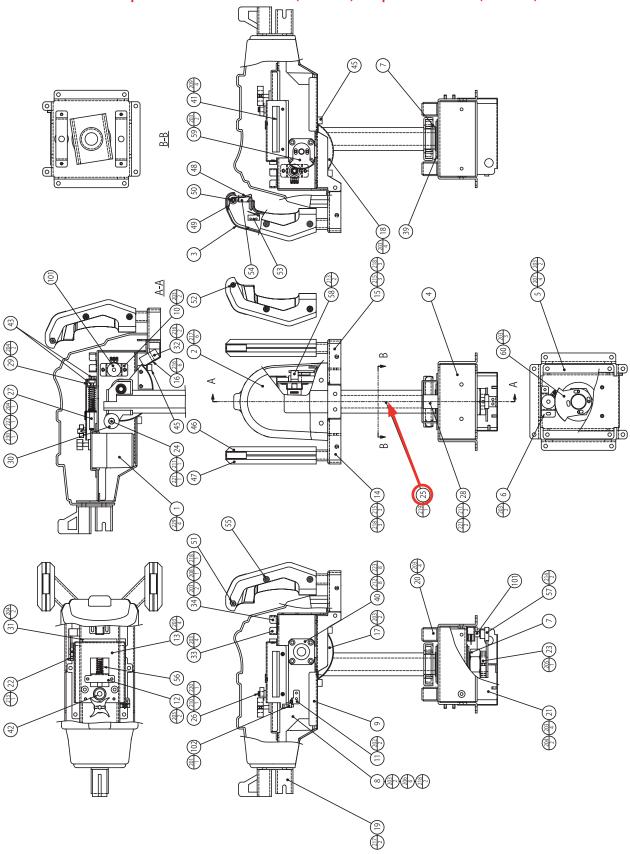






CONTROL UNIT L (LGJ-3000)

NOTE: Please refer this parts list for CONTROL UNIT R (LGJ-3050) except MAIN SHAFT A (LGJ-3024) which is #25

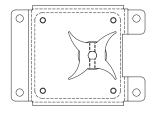


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	LGJ-3070 LGJ-3001 LGJ-3002X LGJ-3003 LGJ-3004 LGJ-3005 LGJ-3007 LGJ-3007 LGJ-3010 LGJ-3011 LGJ-3012 LGJ-3013 LGJ-3015X LGJ-3015X LGJ-3016 LGJ-3017 LGJ-3017 LGJ-3019 LGJ-3019 LGJ-3020 LGJ-3021 LGJ-3022 LGJ-3023	ASSY MOTOR GUN COVER GRIP COVER GUN BASE BEARING BRACKET VOLUME BRACKET LOWER MAIN SHAFT WASHER GUN MAIN FRAME GUN UNDER FRAME VOLUME BRACKET UPPER GUN SENSOR BRACKET SPRING STOPPER VIBRATION PACK GRIP BASE L GRIP BASE R GUN BACK COVER FINGER GUARD L FINGER GUARD R MUZZLE GUN STOPPER BRACKET LOWER GEAR COVER GEAR BOSS UPPER GEAR BOSS LOWER CUSHION SHAFT MAIN SHAFT B	
25 26 27 28 29 30 31 32 33 34 39 40 41 42 43 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	LGJ-3051 LGJ-3025 LGJ-3026X LGJ-3027 LGJ-3028 LGJ-3030 LGJ-3032 LGJ-3033 LGJ-3034 100-5489 100-5490 100-5491 100-5018 250-5709 LGJ-3035X 601-11816 601-11817 601-11818 601-11819 601-11820 601-11821 601-11822 601-11823 601-11824 601-11825 125-5234 601-6555 601-7944 601-6005 601-6450	MAIN SHAFT B >>>Used MAIN SHAFT A (LGJ-3024) For Control Unit R BEARING SHAFT SPRING GUIDE SHAFT GUN CUSHION LOWER INNER VIBRATION CUSHION GUN CUSHION UPPER OUTER VIBRATION CUSHION GUN WEIGHT VIBRATION PACK STOPPER VIBRATION PACK BALANCER BEARING 6007ZZNR BEARING HOLDER BGSRB6902ZZ SLIDE RAIL SAR210 BEARING BALL 8 STEEL SPACER CF-405ZE GUN SPONGE RIGHT GRIP (HAPP95-1293-00) LEFT GRIP (HAPP95-1294-00) TRIGGER RED(HAPP95-1295-00) TORSION SPRING(HAPP95-1297-00) SPACER SLEEVE(HAPP95-1315-00) NUT .336(HAPP43-1124-00) SCREW #8-32*1(HAPP43-0378-00) TRIGGERSW ASSY(HAPP95-0028-00) TRIGGERSW ASSY(HAPP95-00110-00) SCREW10-32*3/8(HAPP96-0110-00) SCREW10-32*3/8(HAPP96-2516-00) SPRING WR12-60 GEAR Z=30 M=0.75 GEAR 15 ADJUST GEAR	(lgj-3050)
101 102 103 104 105	220-5753 370-5299 310-5029-D10 310-5029-B20 280-5124-03	VOL CONT B-5K OHM (TOCOS) PHOTO INTERRUPTER KI1233-AALF SUMITUBE F D 10MM SUMITUBE F B 20MM NYLON CLAMP NK03	

15

ITEM NO.	PART NO.	DESCRIPTION
106	280-5124-05	NYLON CLAMP NKO5
107	280-5124-07	NYLON CLAMP NK07
108	280-6623-1.5M-0	PLASTIC TIE BELT PLT-1.5M
201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230	FAS-000163 000-P00308-W 000-P00408-W 000-P00410-W 000-P00416-W 000-P00510-W 000-F00308 000-F00308 000-T00530-OB 000-F00308 000-T00408-OC 030-000610 020-000510-OZ 028-A00304-P 028-A00304-P 028-A00408-P 008-T00516-OB 008-T00408-OC 008-T00408-OC 008-T00408-OC 008-T00400-OC FAS-500058 065-E00600 060-F00400 060-F00400 060-F00400 060-F00400 050-F00400 000-P00408 000-P00408 000-P00510-S 065-E00500	M SCR PH W/SMALL FS M3 × 14 M SCR PH W/FS M3 × 8 M SCR PH W/FS M4 × 10 M SCR PH W/FS M4 × 10 M SCR PH W/FS M4 × 16 M SCR PH W/FS M5 × 10 M SCR PH W/FS M6 × 12 M SCR TH BLK M5 × 30 M SCR FH M3 × 8 M SCR TH CRM M4 × 8 HEX BLT M6 × 10 HEX SKT H CAP SCR BLK 0Z M5 × 10 SET SCR HEX SKT CUP P M3 × 4 SET SCR HEX SKT CUP P M4 × 8 TMP PRF SCR TH BLK M5 × 16 TMP PRF SCR TH CRM M4 × 8 TMP PRF SCR TH BLK M4 × 8 U NUT M5 HEX NUT H=18 M30 E RING 6MM FLT WSHR M6 FLT WSHR M6 FLT WSHR M6 FLT WSHR M4 SPR WSHR M4 SPR WSHR M4 SCR PH M4 × 8 M SCR PH W/S M5 × 10 E RING 5MM
301	LGJ-60017	WH GUN ASSY DC
302	LGJ-60028	WH GUN ASSY AC
303	LGJ-60029	WH VOL
304	LGJ-60030	WH TRIGGER SW

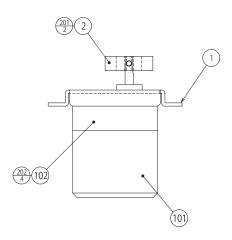
ASSY MOTOR (LGJ-3070) > For each Gun Assy



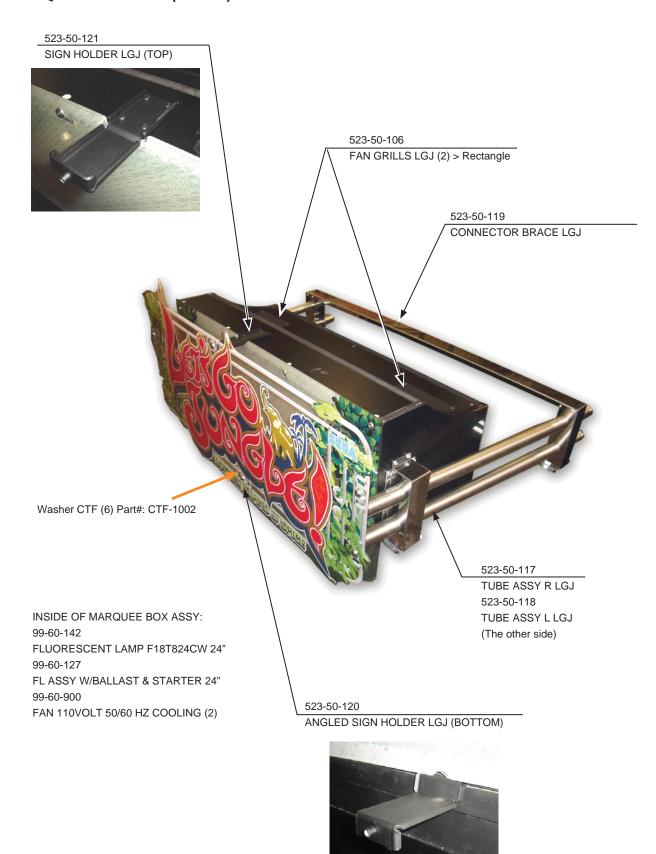
TEM NO.	PART NO.
1	LGJ-3071
2	LGJ-3072
101	350-5812
102	350-5813
201	028-A00408-P
202	000-P00440-SB

DESCRIPTION MOTOR BRACKET MOTOR CAM AC MOTOR RH6P3N GEAR HEAD 6H5N-1 SET SCR HEX SKT CUP P M4 × 8 M SCR PH W/S BLK M4 × 40

NOTE



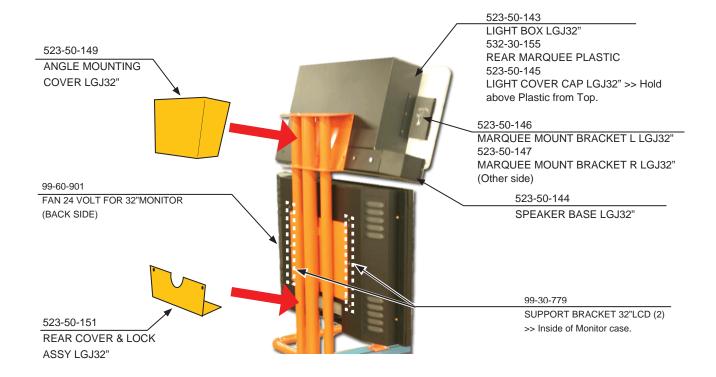
MARQUEE BOX ASSY (62"DX)



15

MARQUEE BOX ASSY, TV CASE (32"STD)





16 WIRE COLOR CODE TABLE

WARNING

The DC power wire color for this product is different from previous SEGA titles. Working from the previous wire colors will create a high risk of fire.

The color codes for the wires used in the diagrams in the following chapter are as follows.

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

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

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

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

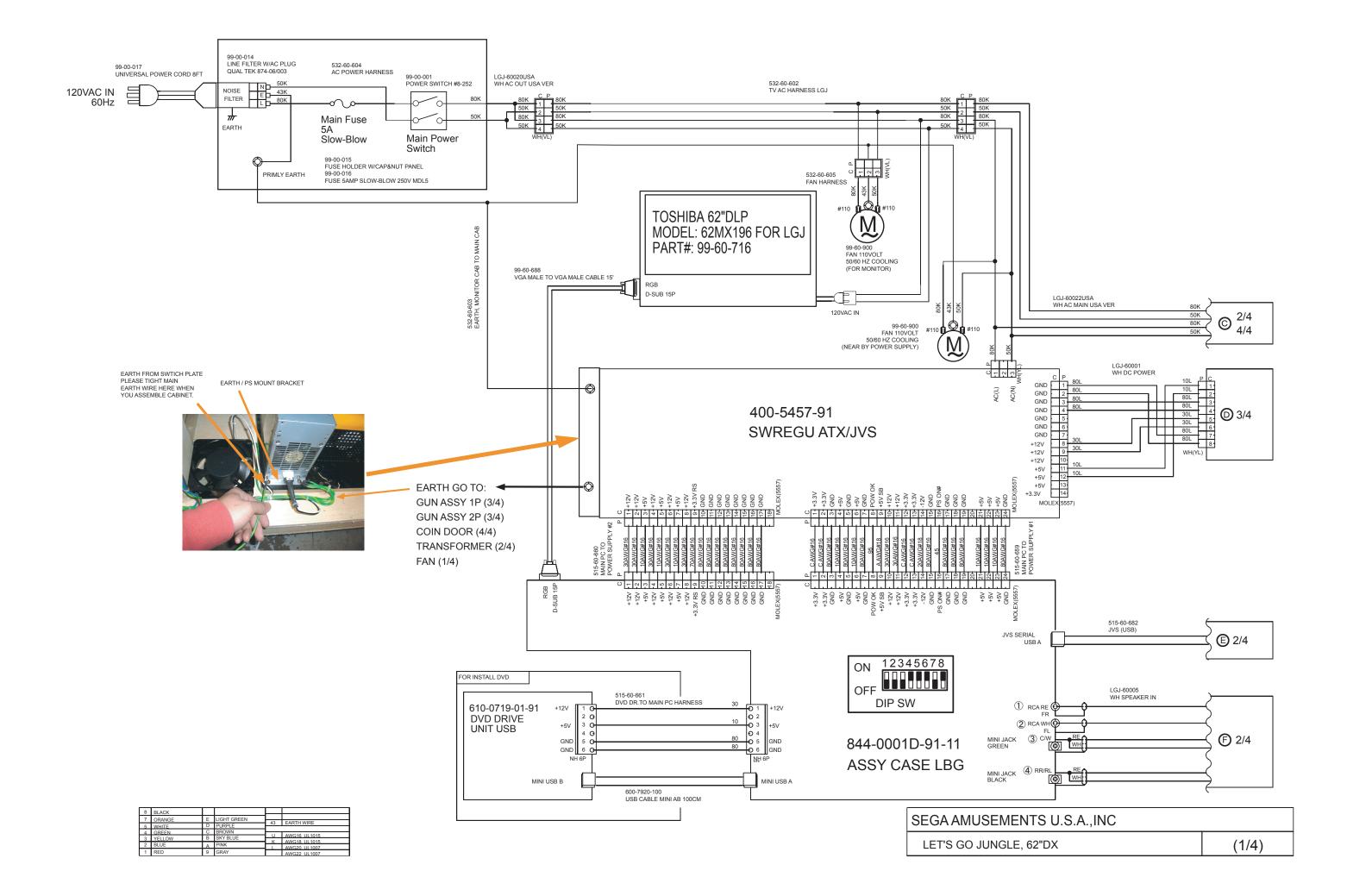
Note 1: If the right-hand side numeral is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

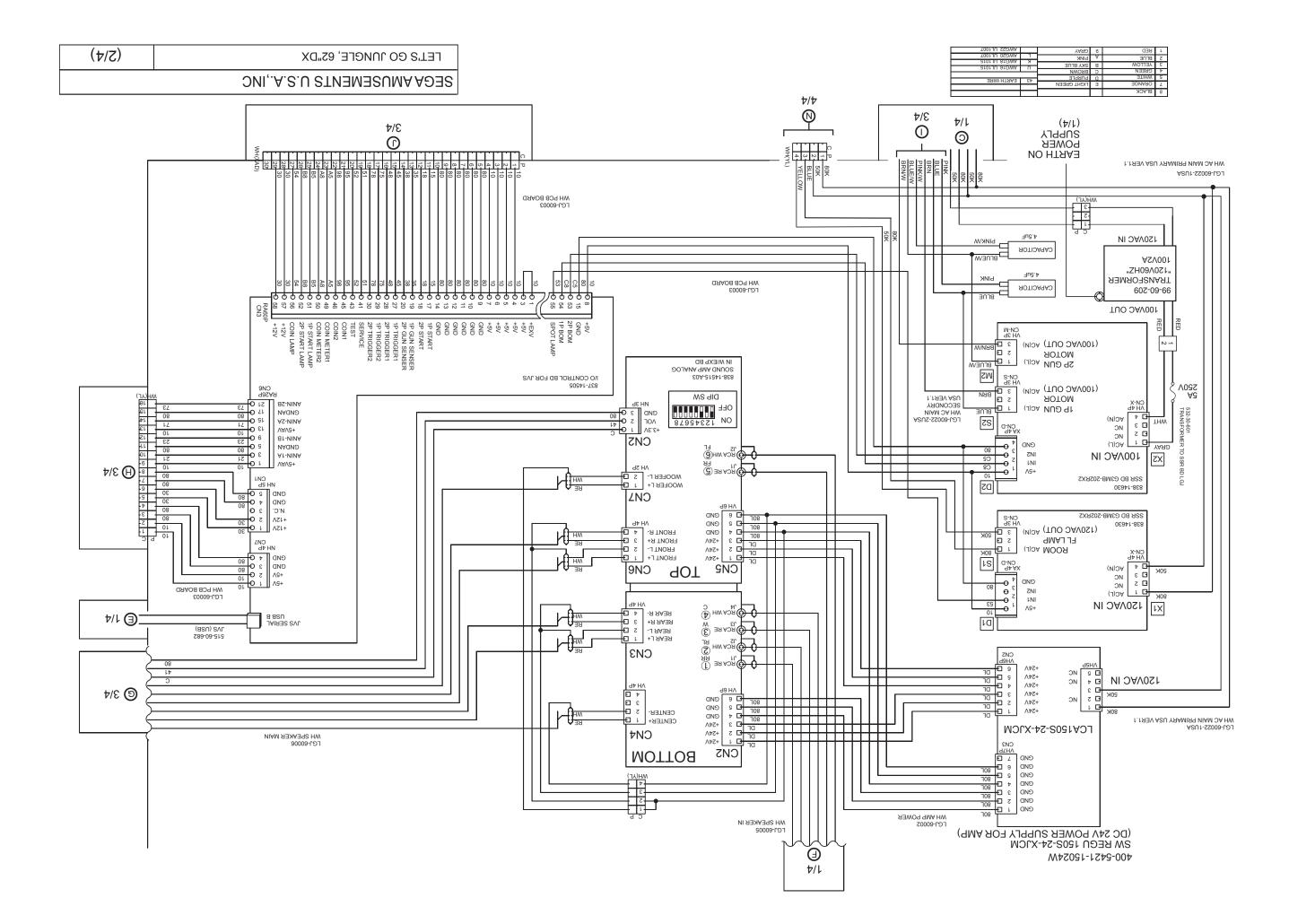
<Example> 51.....WHITE/RED

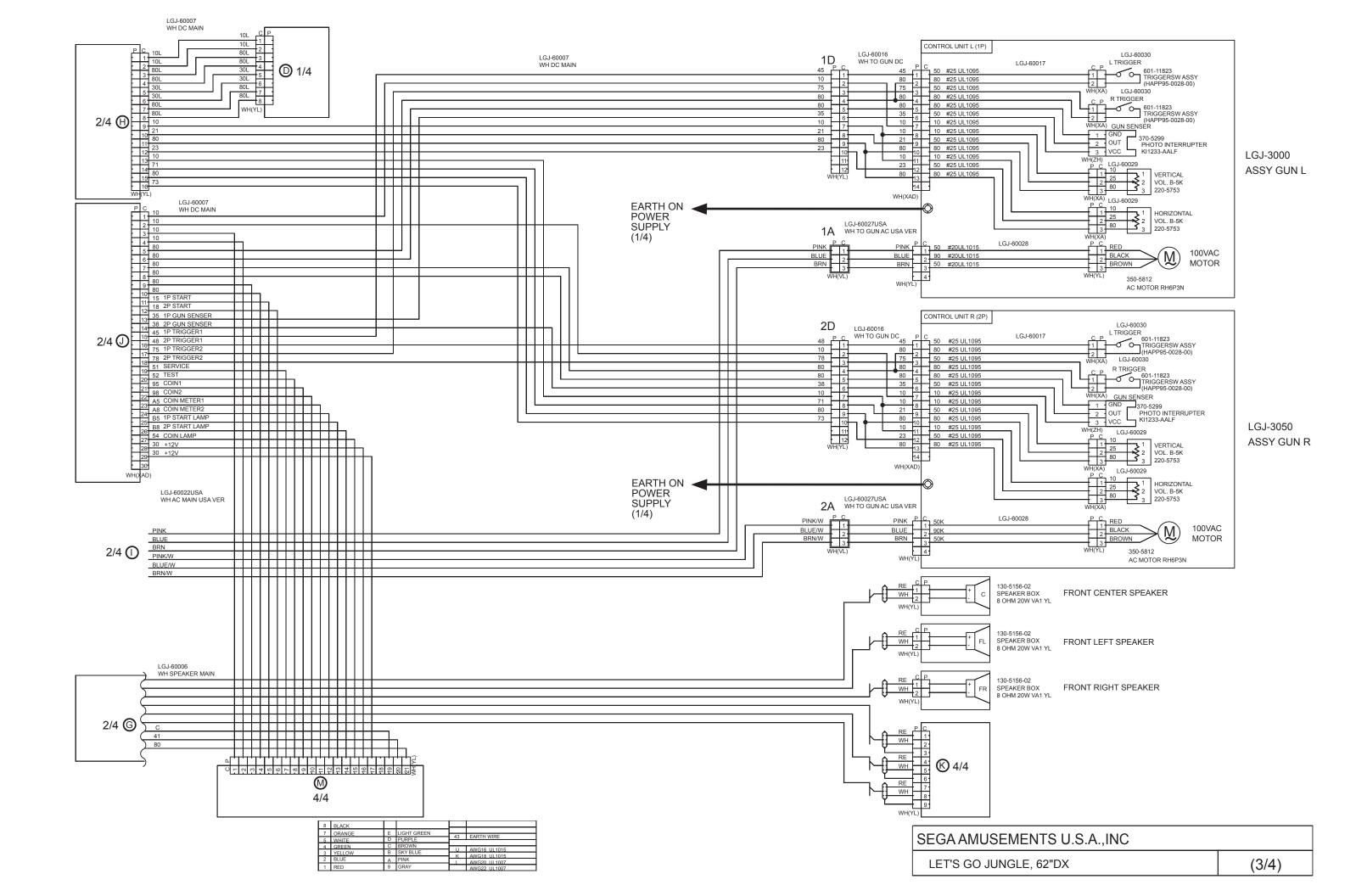


Note 2: The character following the wire color code indicates the size of the wire.

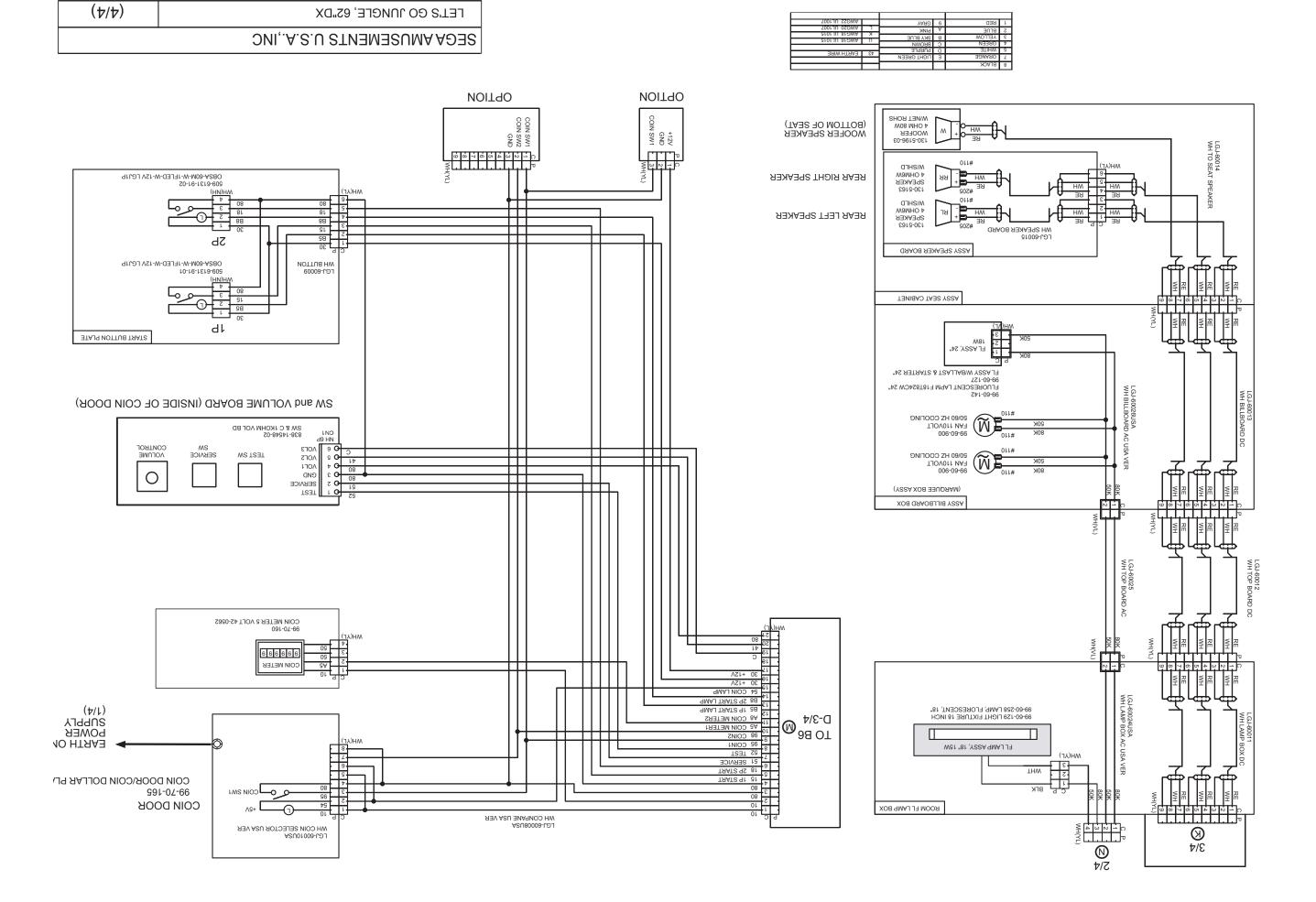
U: AWG16K: AWG18L: AWG20None: AWG22

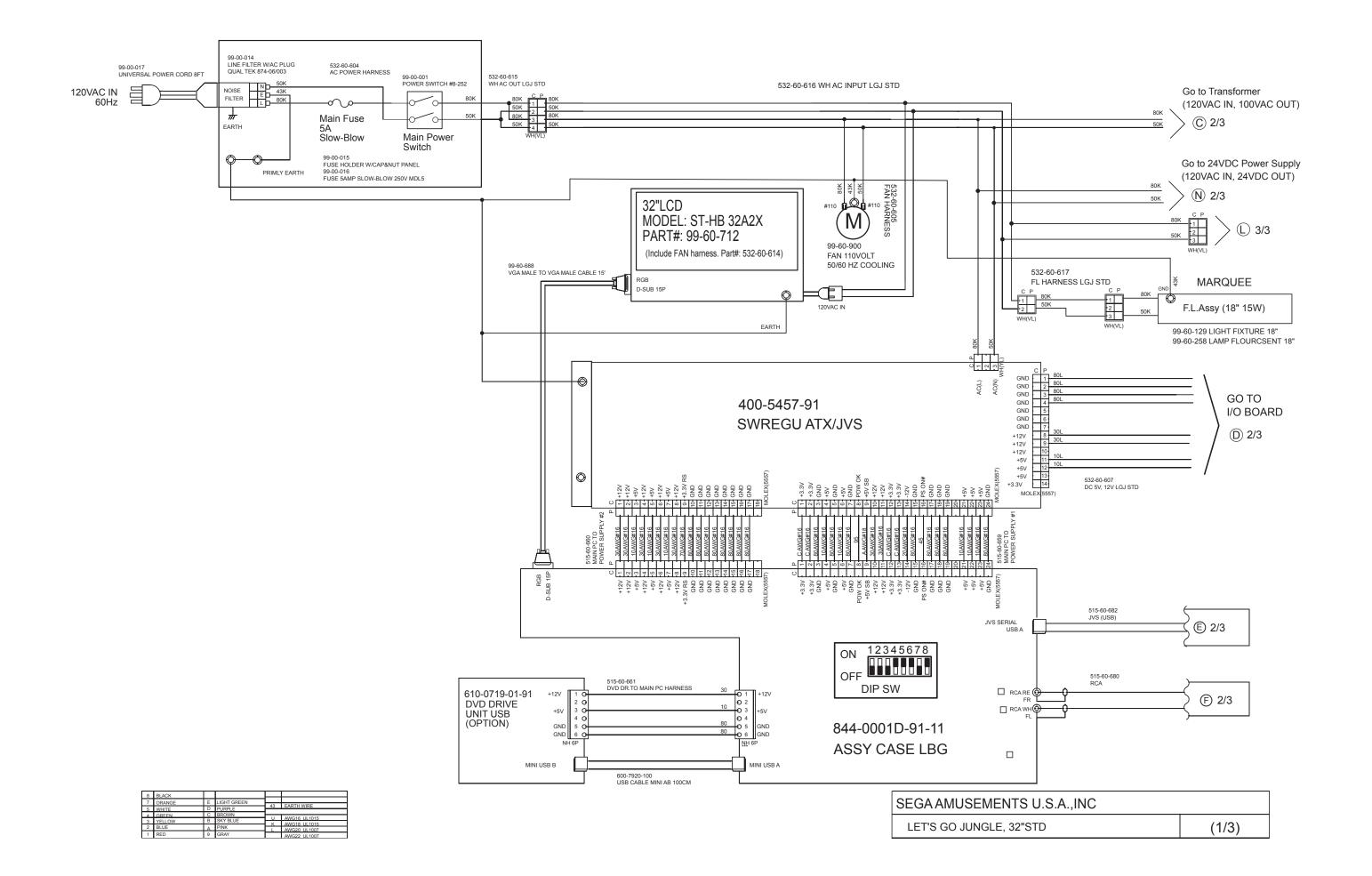


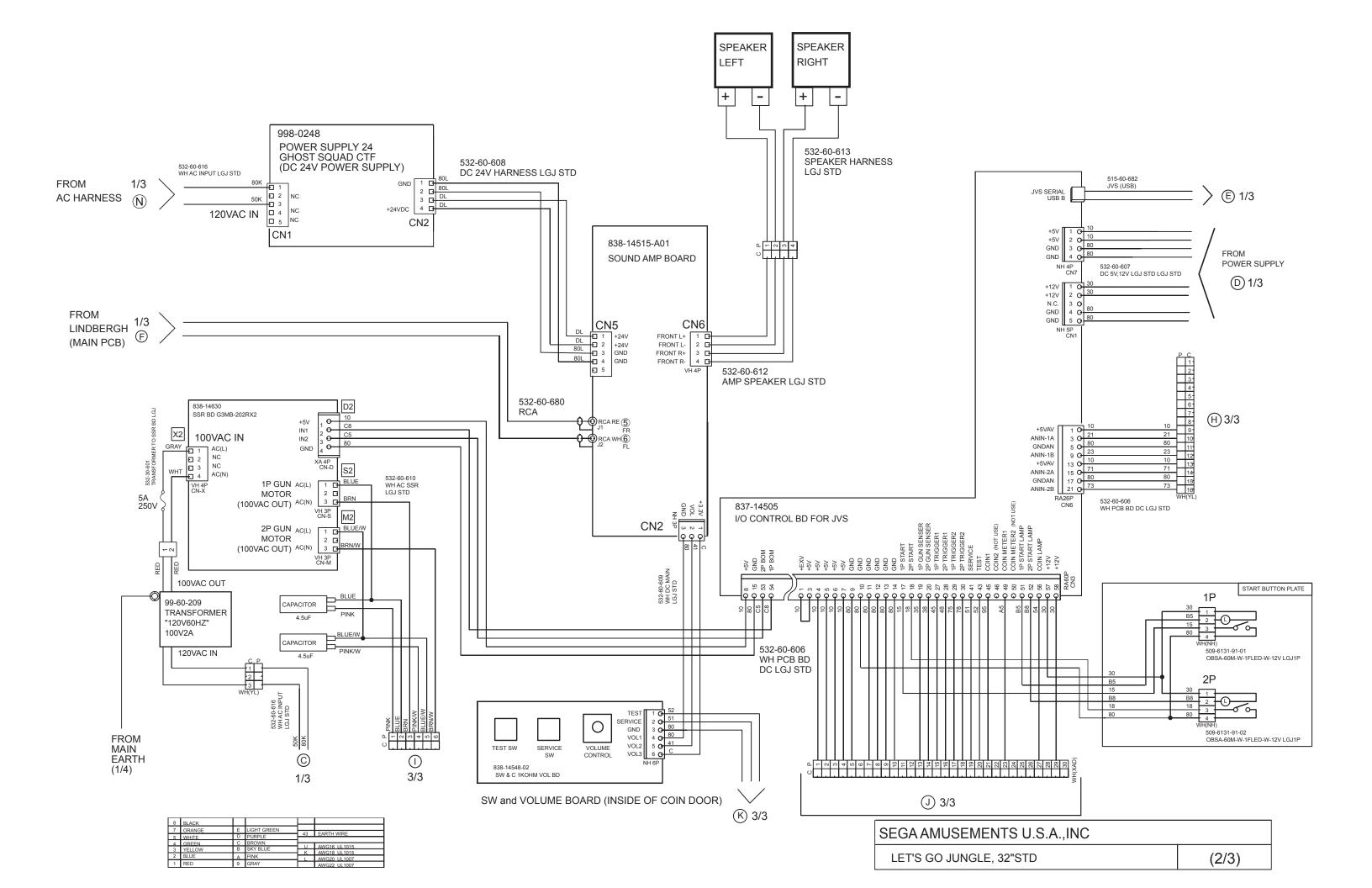


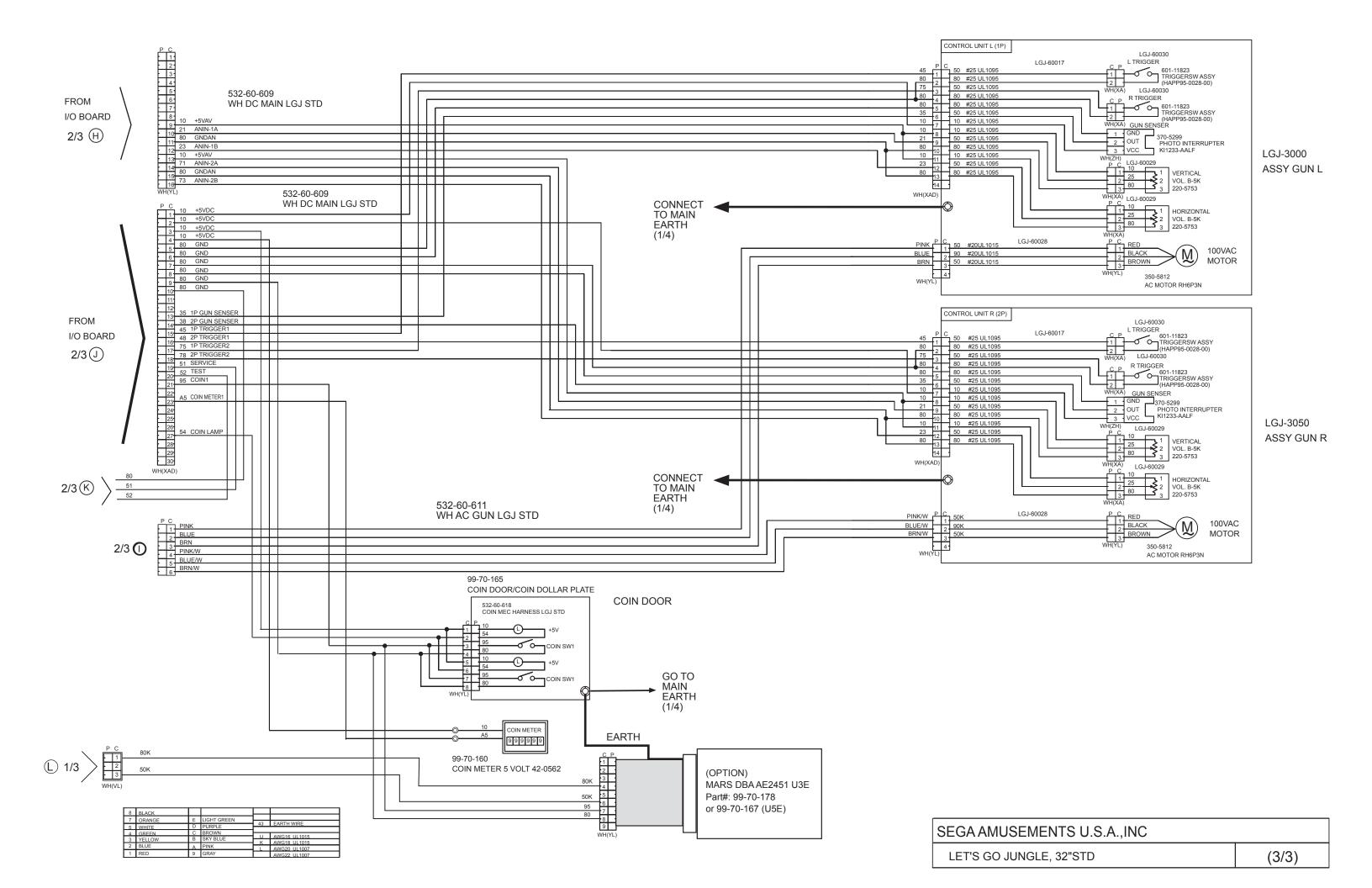












PART#: 532-30-300 1st PRINTING, JANUARY 2007 2nd PRINTING, JULY 2007



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