



LET'S GO JUNGLE! - LOST ON THE ISLAND OF SPICE

OWNER'S MANUAL

420-6988-01



OWNER'S MANUAL



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.

TABLE OF CONTENTS

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

TABLE OF CONTENTS	i
INTRODUCTION	iii
1 HANDLING PRECAUTIONS	1
2 PRECAUTIONS REGARDING INSTALLATION LOCATION	5
2-1 LIMITATIONS OF USAGE	6
2-2 OPERATION AREA	7
3 PRECAUTIONS REGARDING PRODUCT OPERATION	8
3-1 BEFORE OPERATION	8
3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)	10
4 PART DESCRIPTIONS	12
5 ACCESSORIES	13
6 ASSEMBLY AND INSTALLATION	15
7 PRECAUTIONS WHEN MOVING THE MACHINE	46
7-1 MOVING THE MACHINE	46
7-2 SEPARATING THE MAIN CABINET	48
8 GAME DESCRIPTION	54
9 EXPLANATION OF TEST AND DATA DISPLAY	57
9-1 PUSH SWITCH AND COIN METER	59
9-2 SYSTEM TEST MODE	60
9-3 GAME TEST MODE	61
10 PROJECTOR	72
10-1 CLEANING THE SCREEN	73

11	CONTROL UNIT	74
	11-1 HOW TO REMOVE CONTROL UNIT	75
	11-2 ADJUSTING OR CHANGING THE X AXIS VOLUME	78
	11-3 ADJUSTING OR CHANGING THE Y AXIS VOLUME	83
	11-4 REPLACING THE TRIGGER SWITCH.....	89
	11-5 GREASING	92
	11-6 ADJUSTMENT OF VIBRATION NOISE	94
12	COIN SELECTOR & CREDIT SETTINGS	96
13	REPLACING THE FLUORESCENT LAMPS	101
14	PERIODIC INSPECTION	104
15	TROUBLESHOOTING	106
16	GAME BOARD	109
	16-1 HOW TO REMOVE GAME BOARD	110
	16-2 COMPOSITION OF THE GAME BOARD	113
17	DESIGN RELATED PARTS	114
18	PARTS LIST	115
19	WIRE COLOR CODE TABLE	157
20	WIRING DIAGRAM	159

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.

STOP IMPORTANT

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

Installation space	1,532 mm (60.3 in.) [Width] x 2,765 mm (108.9 in.) [Depth]
Height:	2,195 mm (86.4 in.)
Weight:	587.5 kg (1,295.2 lbs.)
Power, maximum current:	520 W, (AC 230 V, 50 Hz Area)
Monitor:	55 SONY BRAVIAType Projector

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

Definition of 'Site Maintenance Personnel or Other Qualified Individuals' **WARNING**

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.

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

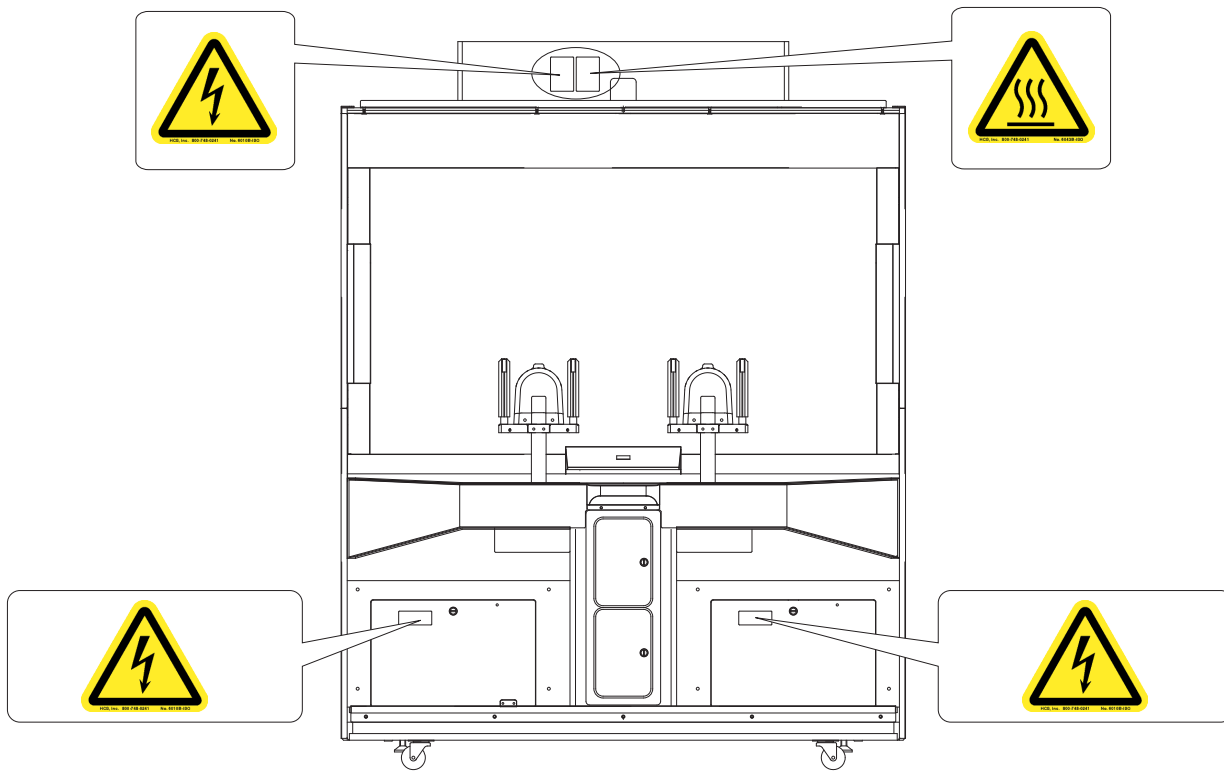
This SEGA product has stickers attached describing the product manufacture No. (Serial No.) and Electrical Specifications. It also has a Sticker describing where to contact for repair and for purchasing parts.

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

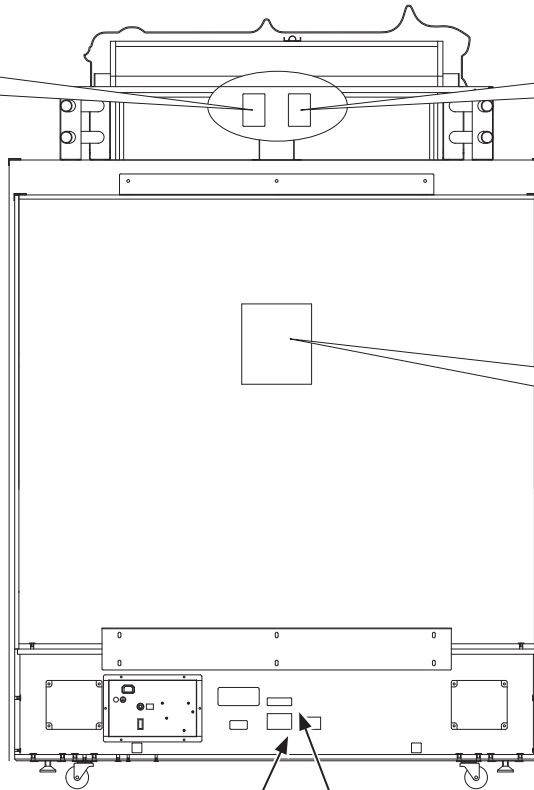
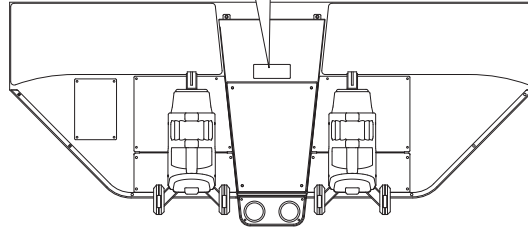
This SEGA product has warning displays on stickers, labels and/or printed instructions adhered/attached to or incorporated in the places where a potentially hazardous situation could arise. The warning displays are intended for accident prevention for customers and for avoiding hazardous situations relating 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.



440-CS00186-EG

CAUTION
 • If you or your child might have experienced a convulsive attack, loss of consciousness, etc. due to light stimulus or TV games, or might be feared to experience such symptoms, be very careful of using the machine.
 • If you feel sick while playing the game, immediately discontinue use and take a rest.



WARNING

Do not push from the front or back to avoid the projector falling down. When moving the projector, be sure to push it from the side. If the floor is slanted, or has steps, use 2 or more persons for safety. When the projector equipped with the leg adjuster is grounded, after installation, ensure that all the 4 leg adjusters are lowered to make contact with the floor.

Electrical Specifications Display

Serial No. Display

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.
- Places near water or spray from water such as a Jet Wash or Swimming Pool.

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.

Electricity Consumption:

MAX. 520w @ 230VAC-240VAC

2-2 OPERATION AREA

⚠ WARNING

- For the operation of this machine, secure a minimum area of 2.94 m (W) x 3.96 m (D). 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 1.24 m in width and 1.98 m in height.

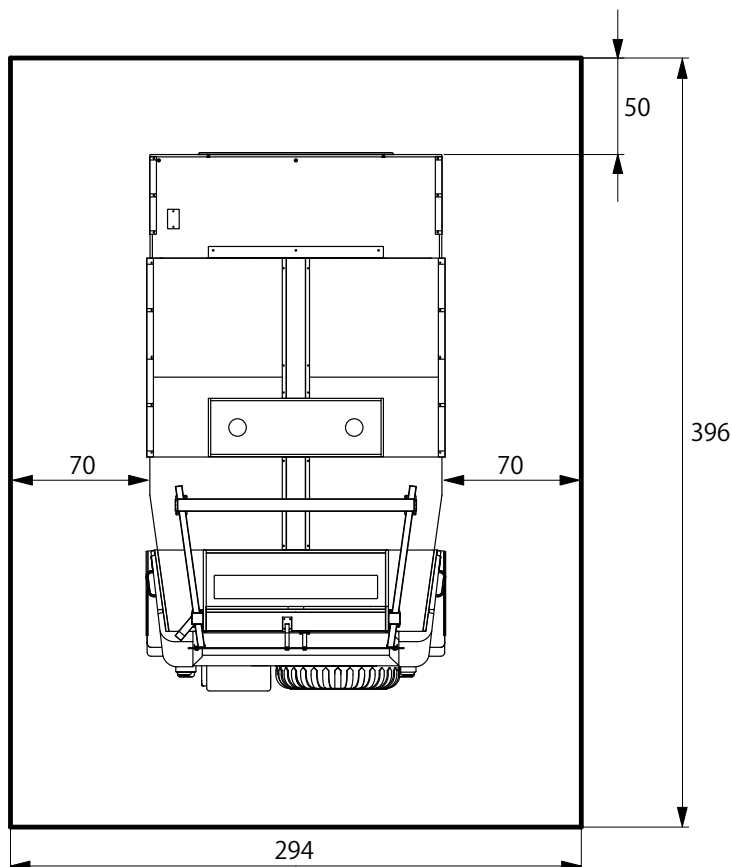


FIG. 2 Installation and operation area (cm)

3 PRECAUTIONS REGARDING PRODUCT OPERATION

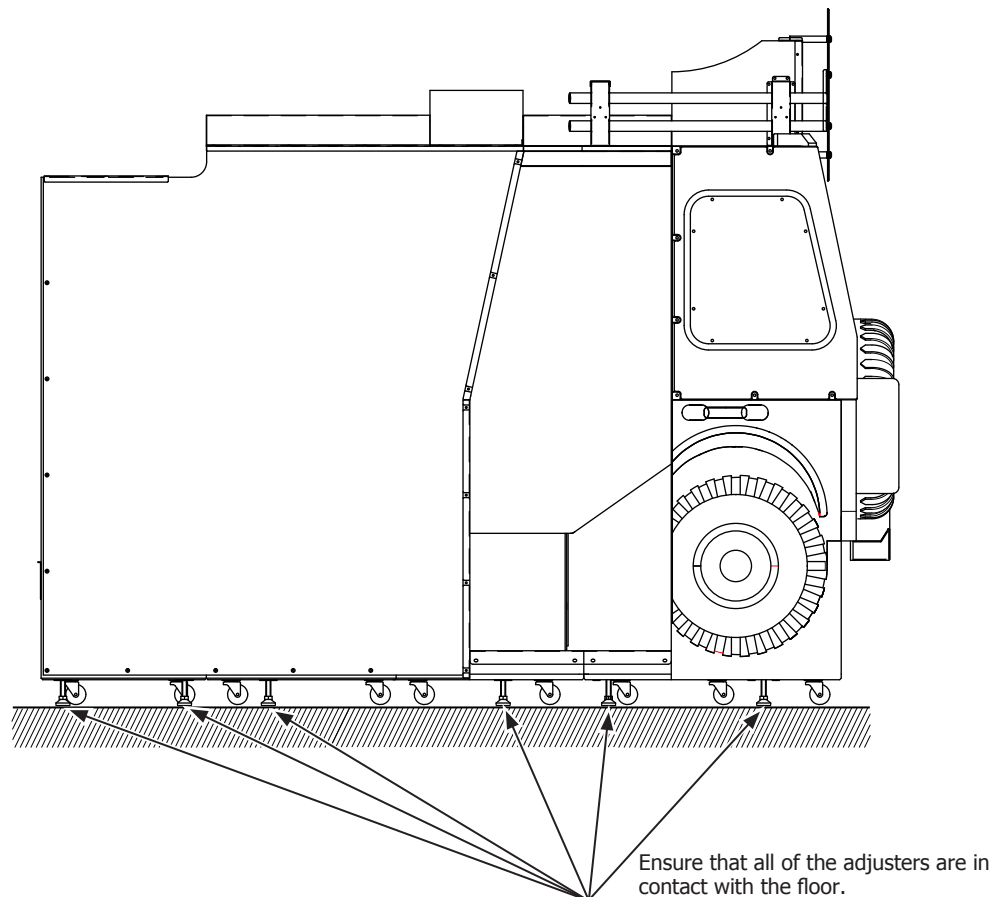
To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

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

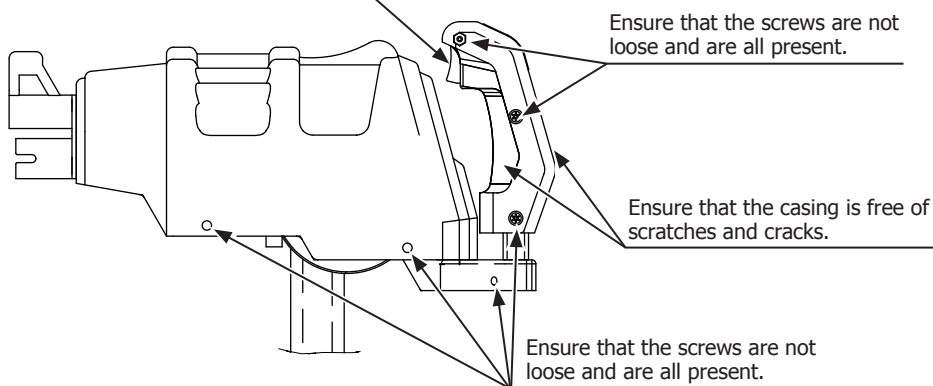
- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step ladder.
- When using a stepladder 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.]

⚠ 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.

Ensure that the trigger is functioning properly.



- 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.

STOP IMPORTANT

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.

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.

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

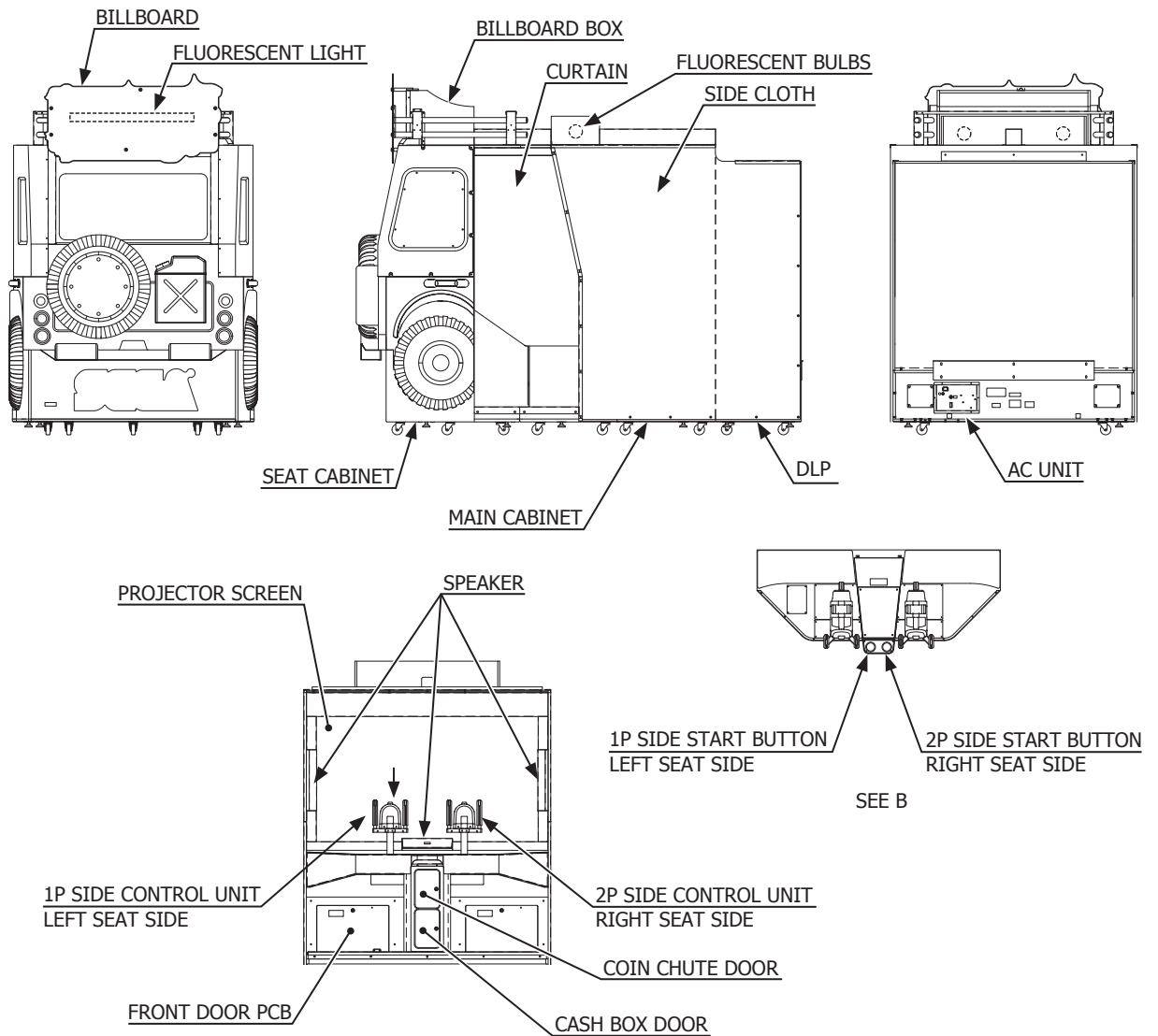


FIG. 4 Name of Each Part

- In this product, the DLP cabinet housing the 62 inch projector is termed the “DLP.”
- Facing the projector screen, the left side is the 1P seat and the right side is the 2P seat.

TABLE 4 Major Measurements of Each Unit Upon Purchase

	(Width x Depth x Height)	(Weight)
Main Cabinet	1,532 mm × 1,237 mm × 1,980 mm	234.5 kg
Seat Cabinet	1,532 mm × 1,016 mm × 1,800 mm	149 kg
DLP	1,500 mm × 533 mm × 1,705 mm	150 kg
Billboard	1,240 mm × 834 mm × 355 mm	29.5 kg

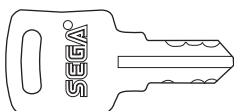
5 ACCESSORIES

Confirm that the accessories listed in the table below are present when setting up the product. Accessories marked “Spare” in the note column are consumable items but included as spares.

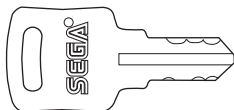
TABLE 5a

OWNER'S MANUAL 420-6988-01UK (1) This manual	LINDBERGH SERVICE MANUAL 420-6921-01UK (1) Description of mounted Game Board
--	--

MASTER KEY
220-5575UK (2)
For opening/closing the doors
(Packaged with this manual, in the box
supplied with the product)

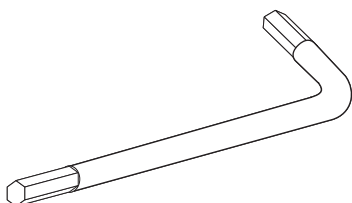


KEY
(2)
For the cashbox door
(Located inside the coin chute
door at time of shipment)

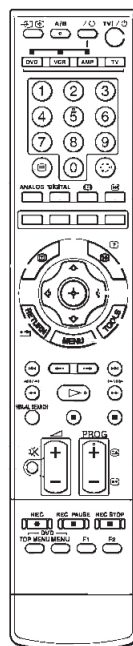


WRENCH FOR TAMPERPROOF
SCREWS (M4)
540-0006-01 (1)
Tool, see chapter 11

WRENCH FOR TAMPERPROOF
SCREWS (M5)
540-0007-01 (1)
Tool, see chapter 11

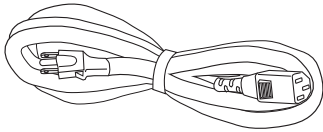
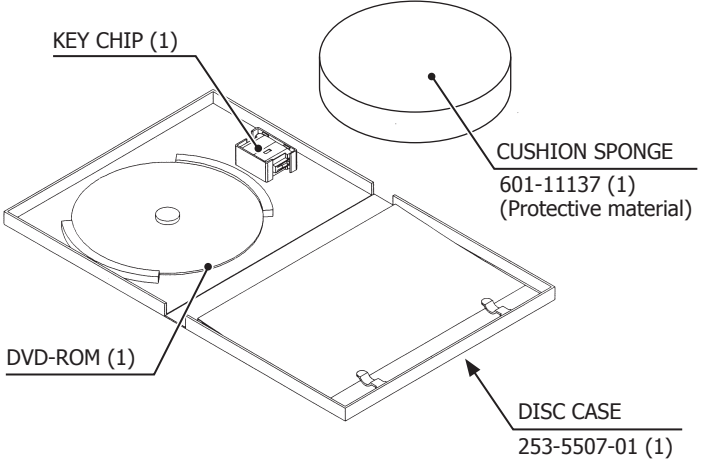


REMOTE CONTROL FOR
SONY PROJECTOR
See SONY BRAVIA service
manual for instructions.



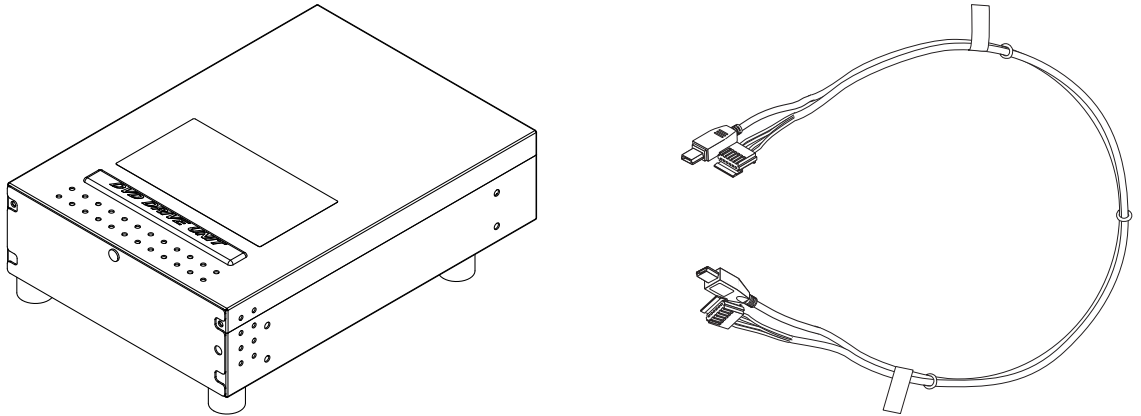
The parts listed in Table 5b must always be attached when using the product. They are attached while assembling and installing the product.

TABLE 5b

<p>POWER CABLE 600-6729-01 (1) <Taiwan> 600-6619-02 (1) <Singapore, Malaysia> 600-6618-01 (1) <Others> For installation, see chapter 6</p>	<p>STICKER 840-0012D-02 443-40012D-02 (1) Board number stickers, see chapter 6 [11]</p>	<p>844-0012D-02</p>
	<p>DVD SOFTWARE KIT (1) Software media, see chapter 6 [13]</p>	
<p>To order the DVD-ROM by itself, use the following part number: 610-0726-0011 (DVD SOFT LGJ).</p>		

DVD DRIVE and DVD wire are sold separately but they are required for installing the product's software. If they were not provided when the product was delivered, consult with the point of purchase, or arrange to obtain the following kit numbers. The DVD DRIVE and DVD wire that are accessories to "The House of the Dead 4" can also be used with this product.

TABLE 5c XKT-1515-01: DVD DRIVE KIT FOR LBG ENG

<p>SERVICE MANUAL 420-6923-01 (1)</p>	<p>DVD WIRE (Fitted) 605-0094 (1) For software installation, see chapter 6 [11]</p>
<p>DVD DRIVE (Optional) 610-0719-01-91 (1) For software installation, see chapter 6 [11]</p>	

6 ASSEMBLY AND INSTALLATION

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. \varnothing 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.

 **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.

 **IMPORTANT**

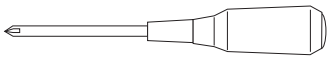
- Be very careful when handling the projector screen. The screen can be damaged easily and cannot be repaired once damaged. Such damage can only be repaired by completely replacing the screen.
- Be careful not to damage parts surfaces. In some cases, if such surfaces are damaged, the part must be replaced;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

The assembly of this product is performed in the following 14 steps.

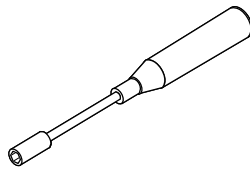
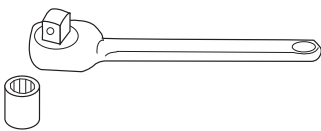
- 1 CONNECTION OF THE DLP AND MAIN CABINET
- 2 ATTACHING THE SIDE CLOTH
- 3 ATTACHING THE TOP BOARD
- 4 ATTACHING THE BILLBOARD BOX
- 5 CONNECTION OF THE SEAT CABINET
- 6 ATTACHING HARNESS COVER S
- 7 ATTACHING THE BILLBOARD
- 8 ATTACHING THE CURTAIN
- 9 INSTALLATION OF THE FLUORESCENT BULBS
- 10 FIXATION TO INSTALLATION SITE
- 11 CONNECTING THE DVD DRIVE (PREPARATION FOR INSTALLATION)
- 12 CONNECTION OF POWER AND GROUND
- 13 ENGAGEMENT OF POWER SUPPLY (SOFTWARE INSTALLATION)
- 14 CONFIRMATION OF ASSEMBLY

Tools Required for Assembly Operation

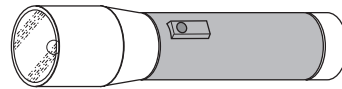
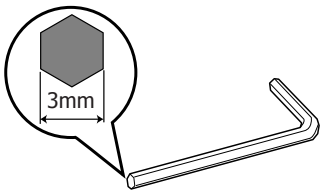
- Philips screwdriver (for M4, M6 screws)



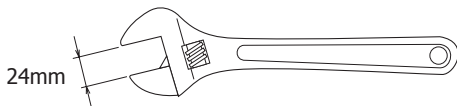
- A 7, 10 millimeter socket wrench or hexagonal screwdriver (for M4, M6 hexagon bolts and nuts)



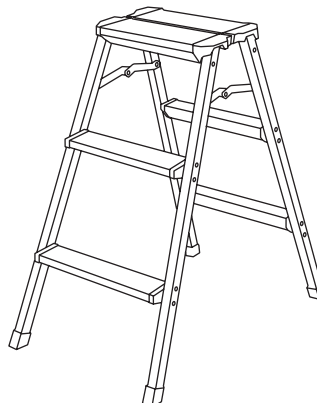
- A 3 millimeter hexagonal bar wrench or screwdriver
- Flashlight or other supplementary lighting



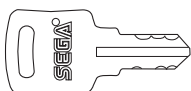
- A 24 millimeter spanner (Adjustable spanner)



- Stepladder



- Master key (accessory)



1 CONNECTION OF THE DLP AND MAIN CABINET

In this product the cabinet that contains both the DLP cabinet and projector is simply called the “DLP.”

- 1** Move the DLP and the Main Cabinet close together.
Perform the connection of the wires between the two cabinets.
Leave a gap of approx 20 cm.

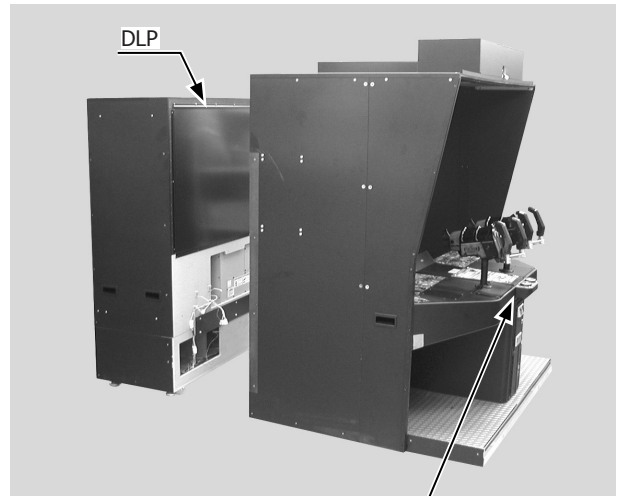
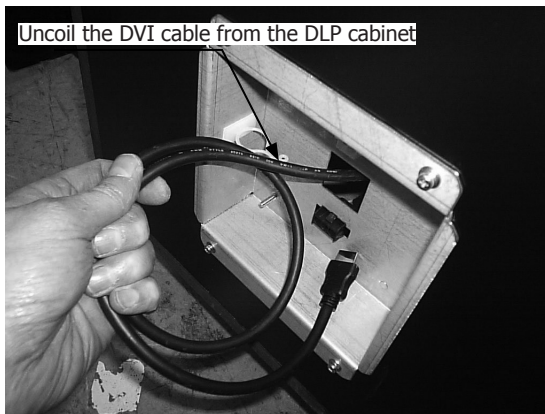


FIG. 6-1a

MAIN CABINET

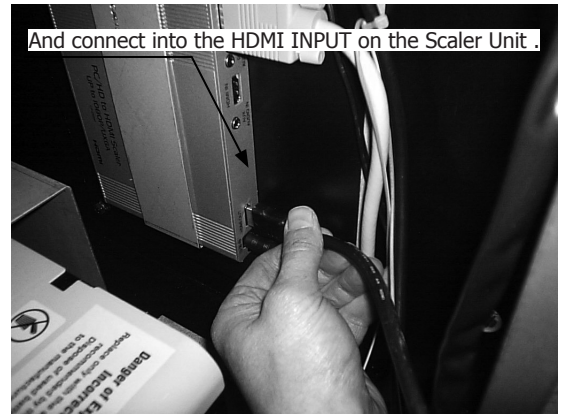
- 2** Connect the DVI cable from the DLP cabinet to the MAIN cabinet.

For the DLP cabinet. Uncoil the DVI/HDMI cable from the recess in the bottom left hand corner of the DLP cabinet. Feed the cable into the MAIN cabinet and connect it into the HDMI OUTPUT on the Scaler Unit.



Uncoil the DVI cable from the DLP cabinet

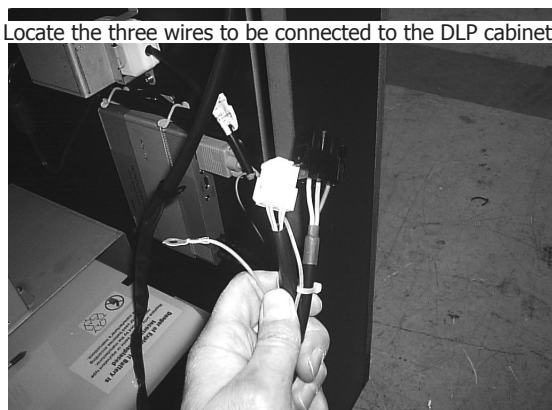
FIG. 6-1ba For DLP cabinet



And connect into the HDMI INPUT on the Scaler Unit .

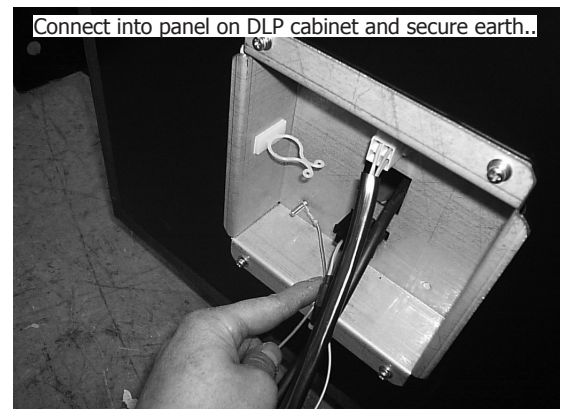
FIG. 6-1bb For MAIN cabinet

- 3** Connect the three cables from the MAIN cabinet to the DLP cabinet.



Locate the three wires to be connected to the DLP cabinet.

FIG. 6-1ca



Connect into panel on DLP cabinet and secure earth..

FIG. 6-1cb

4 Coil any excess harness and secure to either cabinet using the cable routers fitted..

5 Fit the DLP and Main Cabinet together.
Take care not to trap your hands, fingers, or any of the wires.

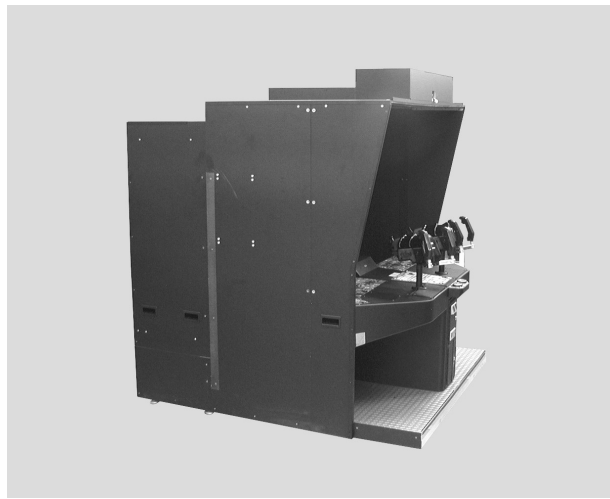


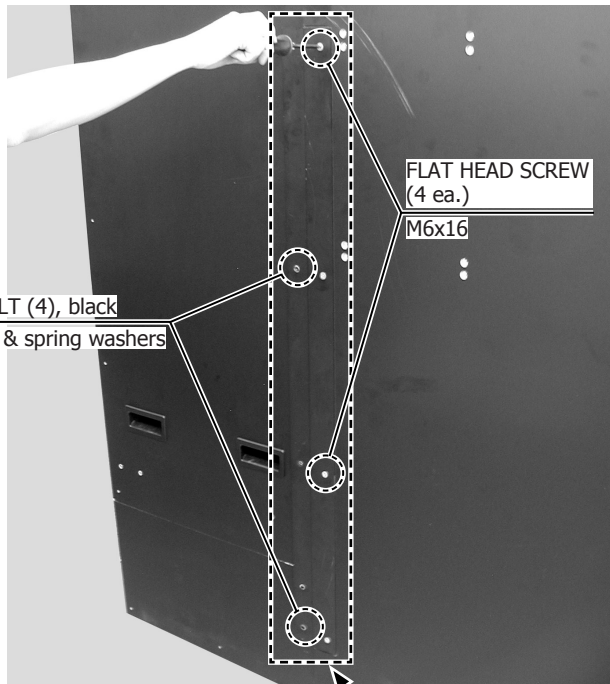
FIG. 6-1e

6 Attach the DLP joint sides to the connecting sections on the left and right sides of the cabinet. Fix each in place with four hexagon bolts and four flat head screws. The bolts have flat and spring washers attached. Use the hexagon bolts on the DLP side and the flat head screws on the Main Cabinet side. The two DLP joint sides are identical and each can be used on either side.



DLP JOINT SIDE

HEXAGON BOLT (4), black
M6x16, w/flat & spring washers



FLAT HEAD SCREW
(4 ea.)
M6x16

FIG. 6-1f

DLP JOINT SIDE

- 7 Attach the DLP joint upper to the connecting section on the cabinet roof. Fix it with three hexagon bolts on the DLP side. The bolts have flat and spring washers attached.

HEXAGON BOLT (3), black
M6x20, w/flat & spring washers

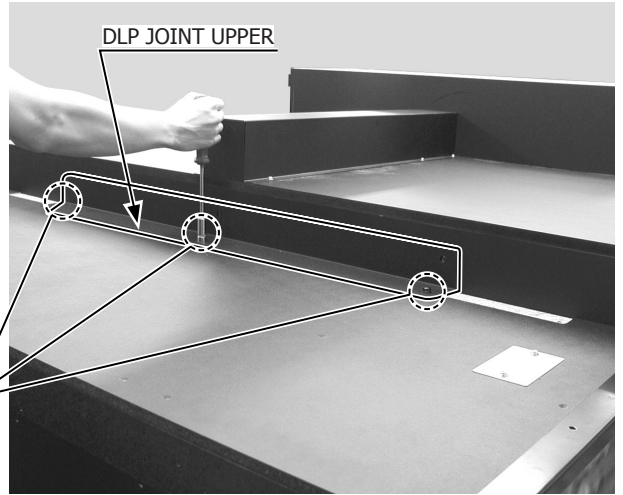


FIG. 6-1g



DLP JOINT UPPER

- 8 Fix the DLP joint upper to the Main Cabinet using three hexagon bolts. The bolts have flat and spring washers attached.

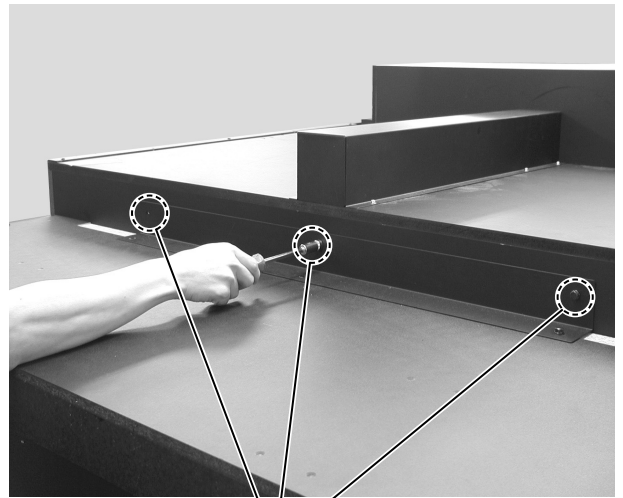


FIG. 6-1h

HEXAGON BOLT (3), black
M6x20, w/flat & spring washers

2 ATTACHING THE SIDE CLOTH

Attach the side cloth to both sides of the DLP and Main Cabinet. The Side Cloth is more than 1.7 m tall and 1.5 m across. At least two people must work together to perform this operation. The Side Cloth for the left and right sides are different. Before attachment, make sure you have the correct Side Cloth for that side.

- 1 Remove the parts attached to the top edge of the sides of the DLP and Main Cabinet. Remove the truss screws fixing them in place. The parts removed can be replaced on either side.

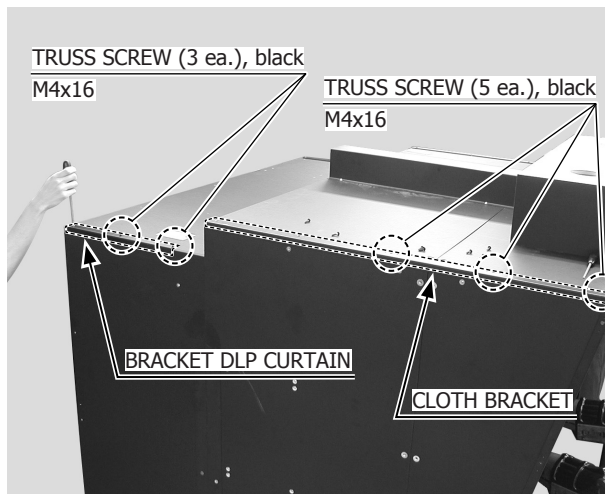


FIG. 6-2a

- 2 Remove the parts attached to the side edge of the sides of the Main Cabinet. Remove the truss screws fixing them in place. The top cloth brackets are different for the left and right sides.

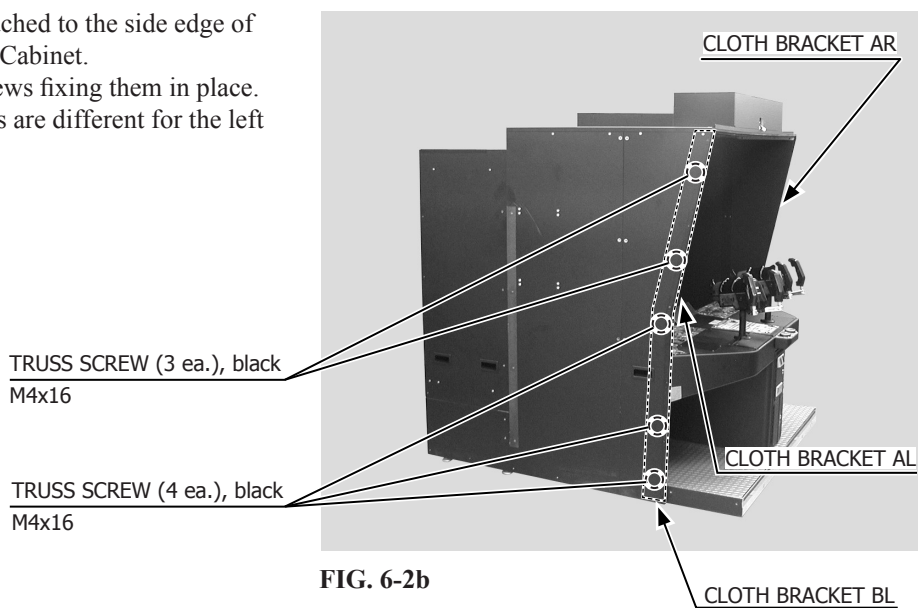


FIG. 6-2b

- 3 Attach the Side Cloth using the parts removed in the above steps.
The truss screws fixing each part will continue to be used. Pass them through the eyelets in the edge of the Side Cloth.



FIG. 6-2c



FIG. 6-2d

- 4 Use truss screws to fix the Side Cloth in place through the eyelets in the DLP back and lower sides of the Side Cloth.
- 5 Attach Side Cloth R in the same fashion on the other side.

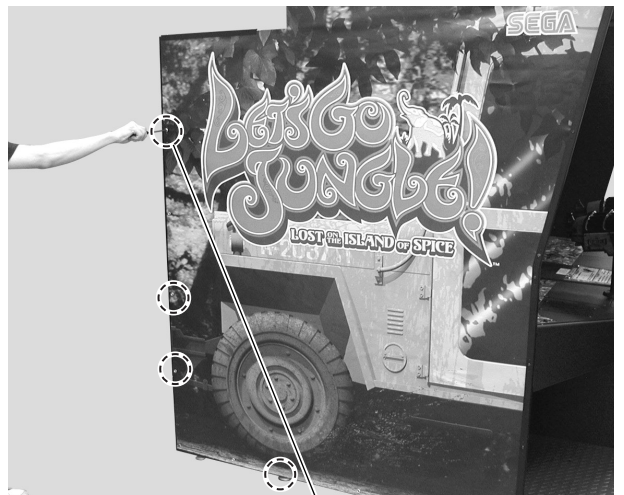


FIG. 6-2e

TRUSS SCREW (9 ea.), black
M4x16

3 ATTACHING THE TOP BOARD

Attach the top board to 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.

- 1 Insert the top board under the Seat Cabinets ceiling plate.
There is a plate metal bracket side on the upper right and left sides inside the Seat Cabinet. Insert the top board riding on these bracket sides, keeping it level.
The top board has wires attached to it, so be careful not to damage them.



FIG. 6-3a

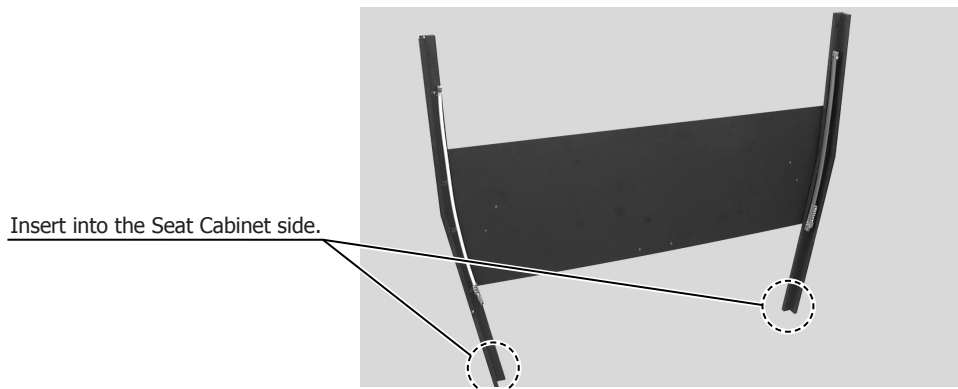


FIG. 6-3b Top Board

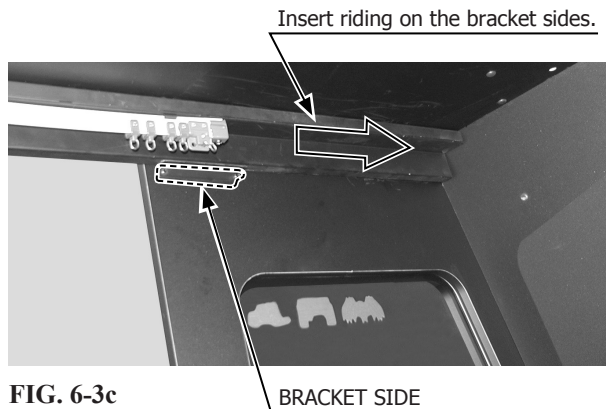


FIG. 6-3c

- 2 Make sure the top board has not been inserted lopsided.
- 3 Fix the top board in place with four hexagon bolts from the above the Seat Cabinet ceiling plate.
The bolts have flat and spring washers attached. Place all four bolts in loosely at first to make sure they can all be inserted, then tighten them all equally and fix the top board in place.

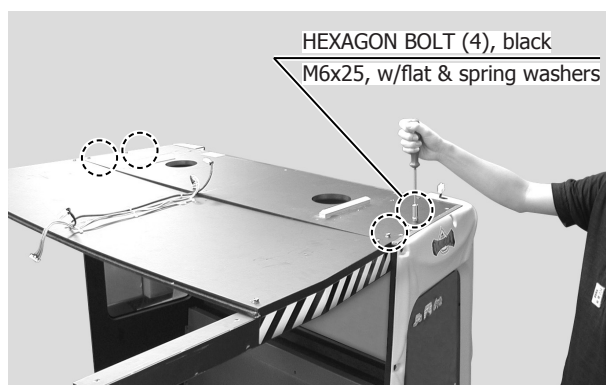


FIG. 6-3d

4 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.

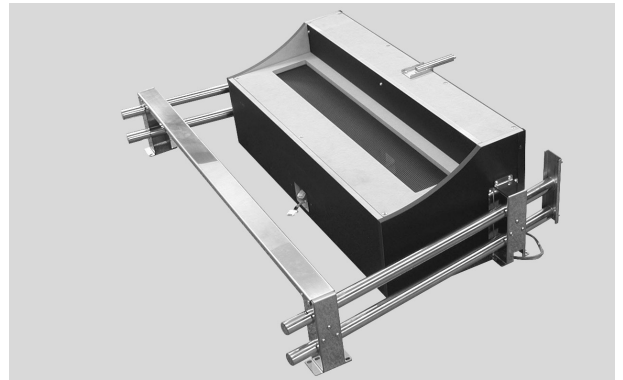


FIG. 6-4a Billboard Box

1 At least two people must lift the billboard box and place it on top of the Seat Cabinet. There are guide plates on the left and right sides on the Seat Cabinet ceiling plate. Place the billboard box's wooden plate FL box between the guide plates.

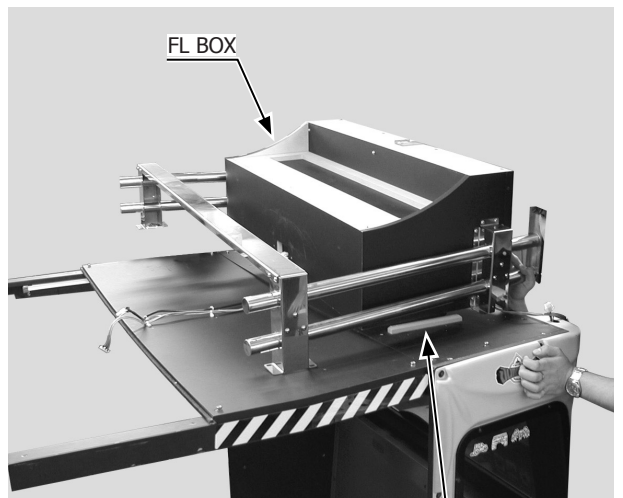


FIG. 6-4b

GUIDE PLATES

2 A total of twelve truss screws are used to fix the billboard box in place. Make sure that all of the screw holes are aligned correctly.

3 Starting inside the Seat Cabinet, fix the billboard box in place using a total of six truss screws. Place all six in loosely at first to make sure they can all be inserted, then tighten them all.

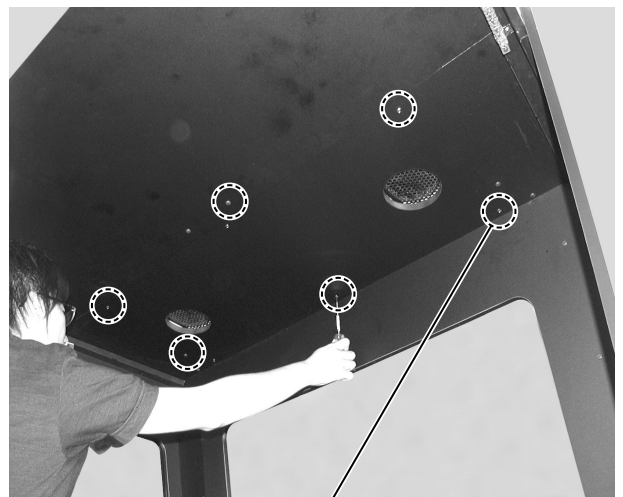


FIG. 6-4c

**TRUSS SCREW (6 ea.), black
M4x30**

4 Fix the piping pillar bases in four places with truss screws.

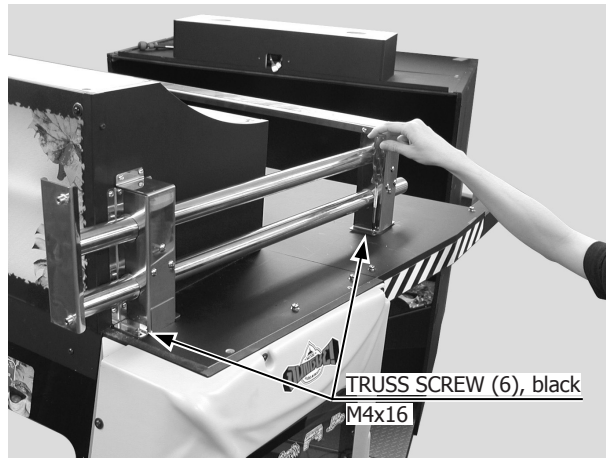


FIG. 6-4d



FIG. 6-4e

5 Connect the two top board wire connectors with the two connectors inside the FL box.

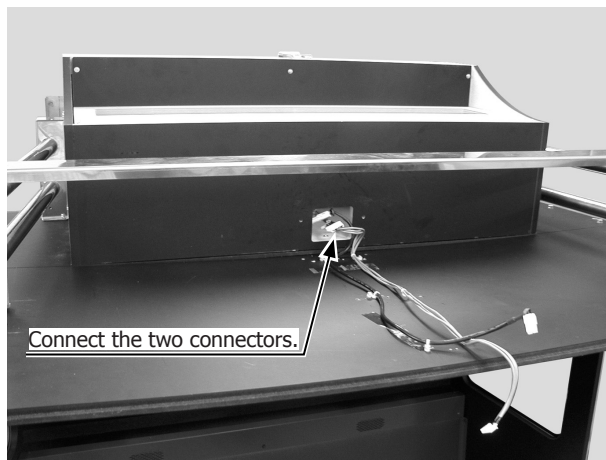


FIG. 6-4f

6 Attach the rear harness cover to the top of the top board. Fix it in place with six screws. The screws have flat and spring washers attached. Take care not to trap or damage any of the wires.

The rear harness cover has eight screw holes. The remaining two will be used after the Main Cabinet and Seat Cabinet have been combined.

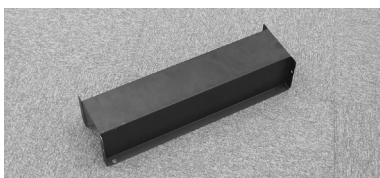


FIG. 6-4h Rear Harness Cover



FIG. 6-4g

5 CONNECTION OF THE SEAT CABINET

The following operation cannot be performed if the workspace is not flat and level. Move to such a location before beginning the operation.

- 1** Move the Seat Cabinet close to the Main Cabinet, inserting the joint pipes on the left and right of the top board into the inside Main Cabinet. Place the two levels with each other and with an approx. 10 cm gap between them.

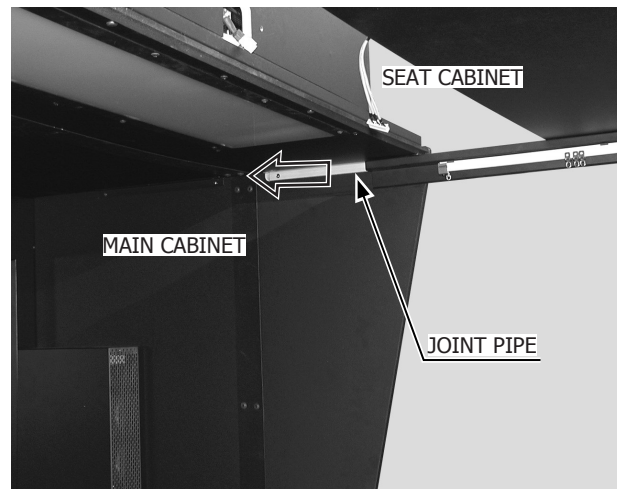


FIG. 6-5a

- 2** Connect the two wire connectors from the top board to the two connectors on the Main Cabinet.

- 3** Move the Seat Cabinet up against the Center Cabinet. Be careful not to damage the wire between the connectors.

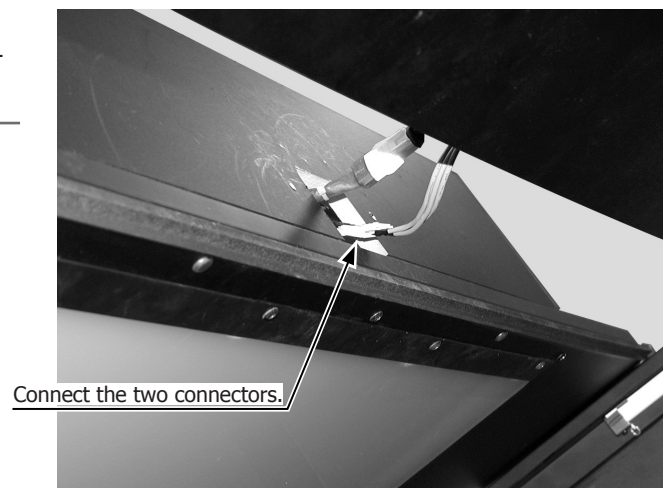


FIG. 6-5b

- 4** Pass four hexagon bolts through from the top of the Main Cabinet ceiling plate and fix the left and right joint pipes on the top board in place. The bolts have flat and spring washers attached.

- 5** Fix the rear harness cover to the Main Cabinet using two screws. The screws have flat and spring washers attached.

HEXAGON BOLT (4), black
M6x30, w/flat & spring washers,
large flat washer used

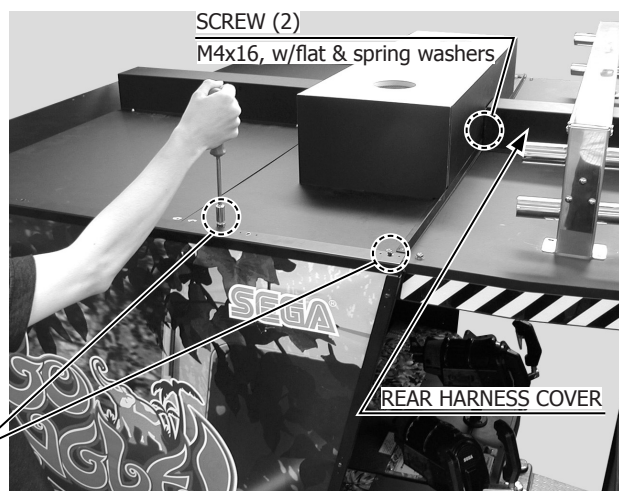


FIG. 6-5c

- 6** Attach the mat brackets on the left and right sides where the Main Cabinet and Seat Cabinet floors join and fix them in place using four hexagon bolts. The bolts have flat and spring washers attached. The mat brackets are different for the left and right sides.

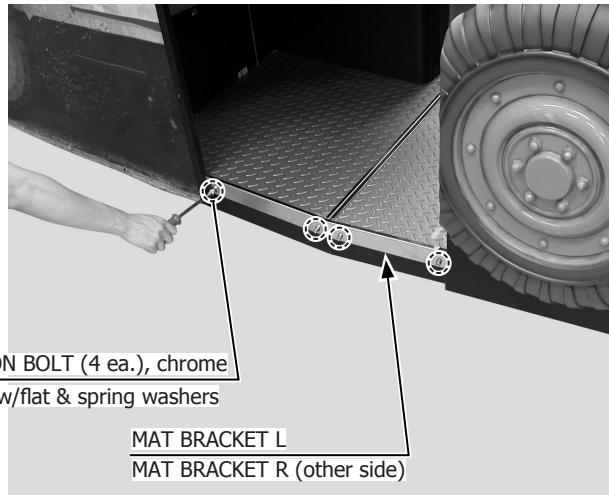


FIG. 6-5d

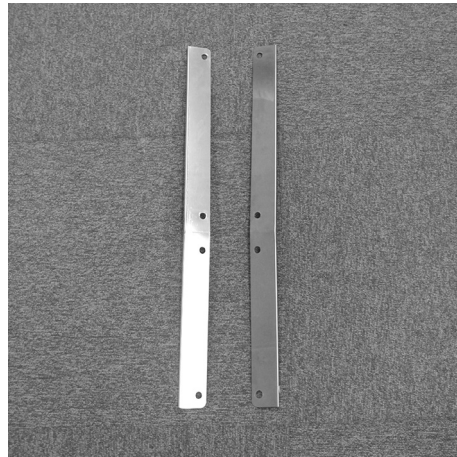


FIG. 6-5e MAT BRACKETS

6 ATTACHING HARNESS COVER S

- 1** There is a wire connector, found on the left side when facing the projector screen of the billboard. Connect it with the connector on the Seat Cabinet side

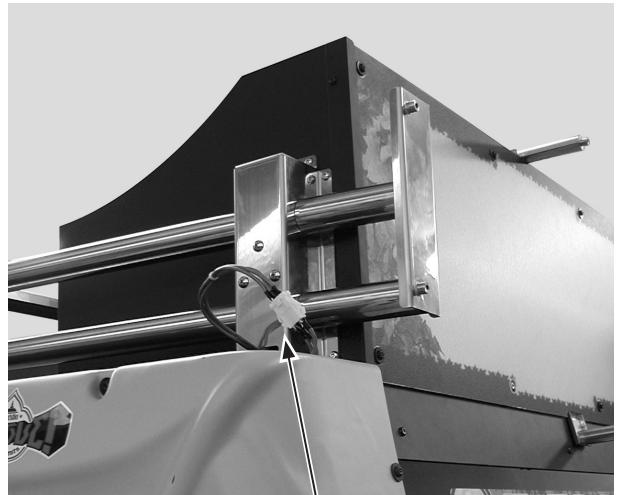


FIG. 6-6a

Connect the single connector.

- 2** Store the wire from the connector connected in step 1 inside the Seat Cabinet. Be careful not to damage the wire.

- 3** Fix the harness cover S in place on the left side of the billboard using two truss screws. Be careful not to pinch or trap the wire.



FIG. 6-6b Harness Cover S

TRUSS SCREW (2), chrome
M4x8

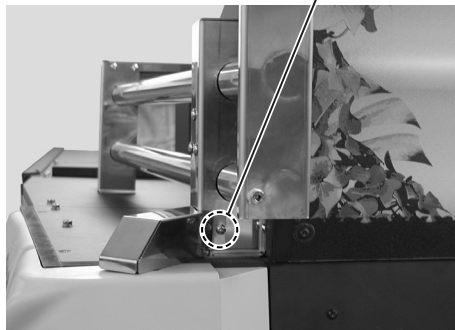


FIG. 6-6d

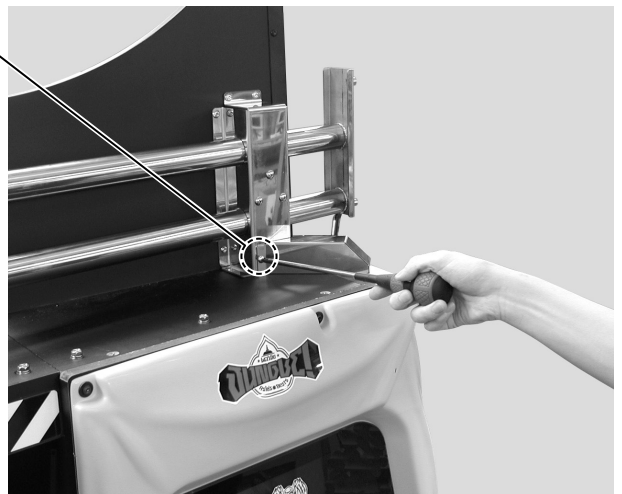


FIG. 6-6c

7 ATTACHING THE BILLBOARD

The rubber washers, metal washers and low-head hexagon hole screws are parts created specifically for this product. If you lose them, they can be ordered from the “contact address” in this manual or your supplier.



FIG. 6-7a Billboard

- 1 The billboard box has six shafts for attaching the billboard.
Place a rubber washer onto each of these attachment shafts.

RUBBER WASHER
SGS-1703



FIG. 6-7c

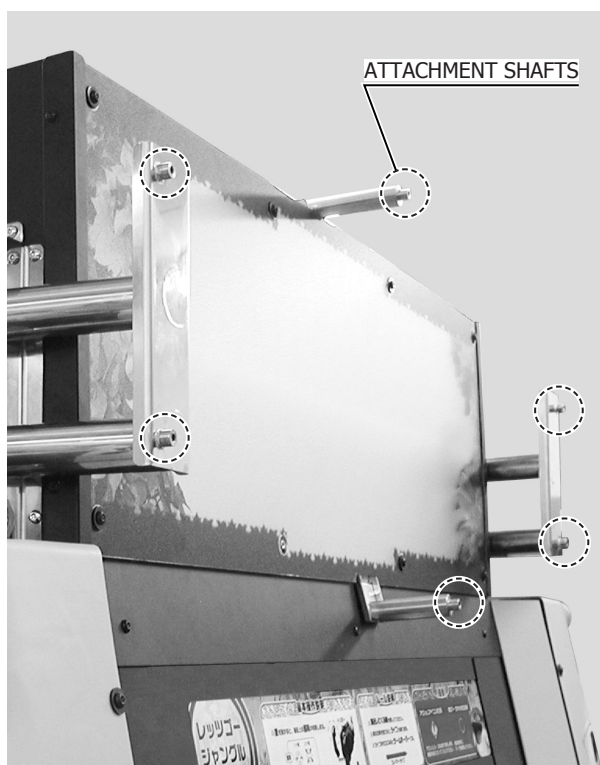


FIG. 6-7b

- 2 Pass the attachment shafts through the attachment holes in the billboard and attach the billboard.
If it is difficult to make the attachment, loosen the screws on the billboard box.



FIG. 6-7d

- 3 Pass a rubber washer and then a metal washer along each attachment shaft.

METAL WASHER, gold
SGS-1705



FIG. 6-7e

- 4 Fix the billboard in place by capping each attachment shaft with a low-head hexagon hole screw.
Use a 3 mm hexagon bar wrench or screwdriver. Do not tighten them too tight.



FIG. 6-7f

LOW-HEAD HEXAGON HOLE SCREW, gold
SGS-1706

8 ATTACHING THE CURTAIN (Optional)

Attach the curtain. The curtain for the left side and right side is different. Hang the curtains so that the printed side is on the outside and diagonal cut along the bottom is toward the seats.

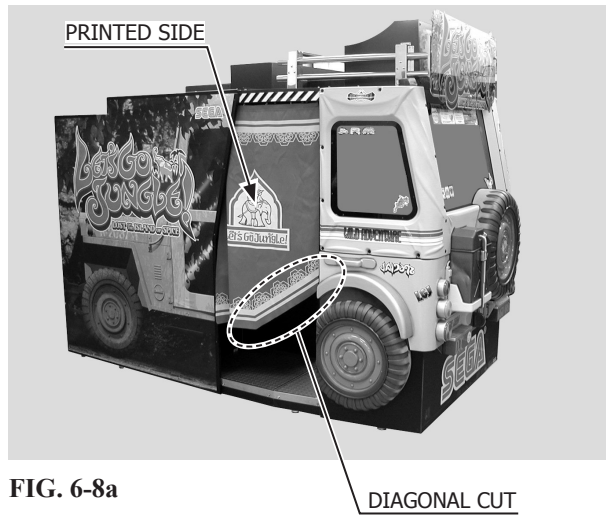


FIG. 6-8a

- 1 There are six plastic rings along the top of the curtain. Hang the ring on the edge that will be closest to the screen from the fixed hook on the curtain rail.



FIG. 6-8b

- 2 Hang the other rings from the sliders on the curtain rail. Open the ring, pass it through the ring on the slider, and then reconnect the concave / convex parts on the open ring. Hang each ring onto a slider.

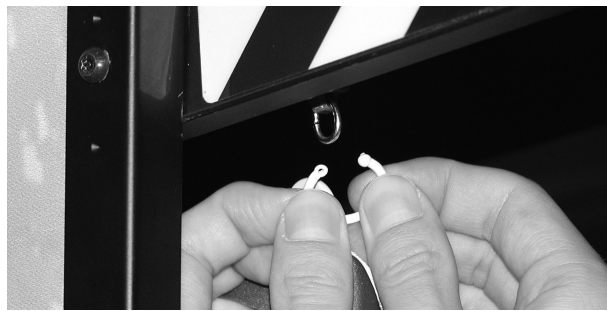


FIG. 6-8c

- 3 Check to ensure that the curtain opens and closes smoothly.



FIG. 6-8d

9 INSTALLATION OF THE FLUORESCENT BULBS

In order to reduce the risk of damage during transit, the fluorescent bulbs are not installed in the cabinet.

Two fluorescent bulbs need to be installed. The operation on the Main Cabinet ceiling will be performed from below. This runs the risk of dropping and losing screws and other parts, to be extra careful when performing the operation.



FIG. 6-9a Fluorescent Bulb

- 1** Remove the acrylic bracket that holds the lamp acrylic on the Main Cabinet ceiling in place. There are two acrylic brackets, but only one needs to be removed in order to remove the lamp acrylic. Remove the four truss screws. Once the screws are removed, the part will come free and fall. Support it to prevent damage or injury.

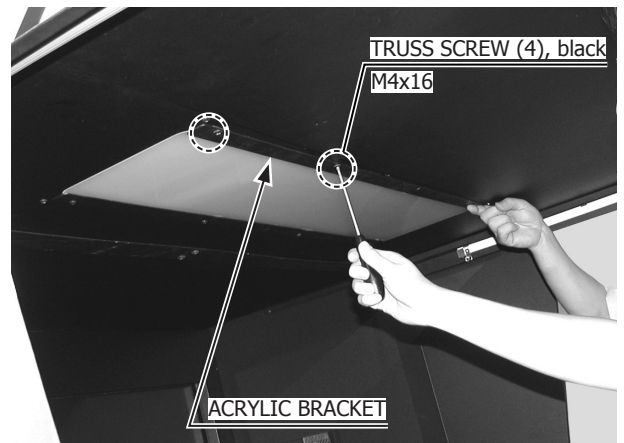


FIG. 6-9b

- 2** Remove the acrylic bracket and lamp acrylic.

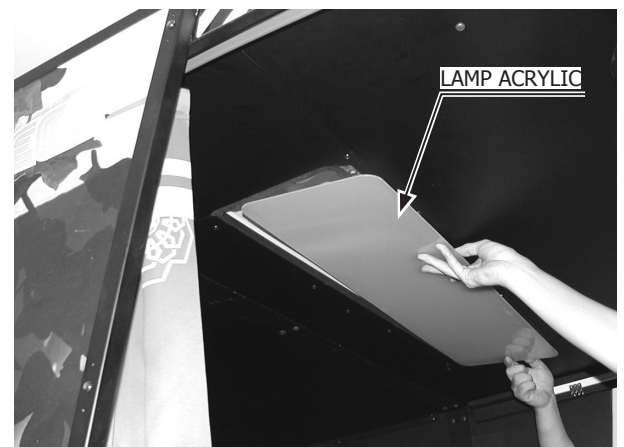


FIG. 6-9c

- 3** Install the fluorescent bulbs in the lamp sockets.

- 4** Replace the lamp acrylic and acrylic bracket.

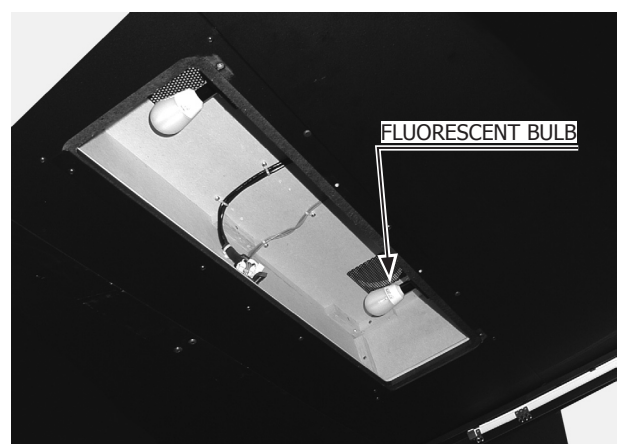


FIG. 6-9d

10 FIXATION TO INSTALLATION SITE

⚠ 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 (Fig. 6-10a). 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.

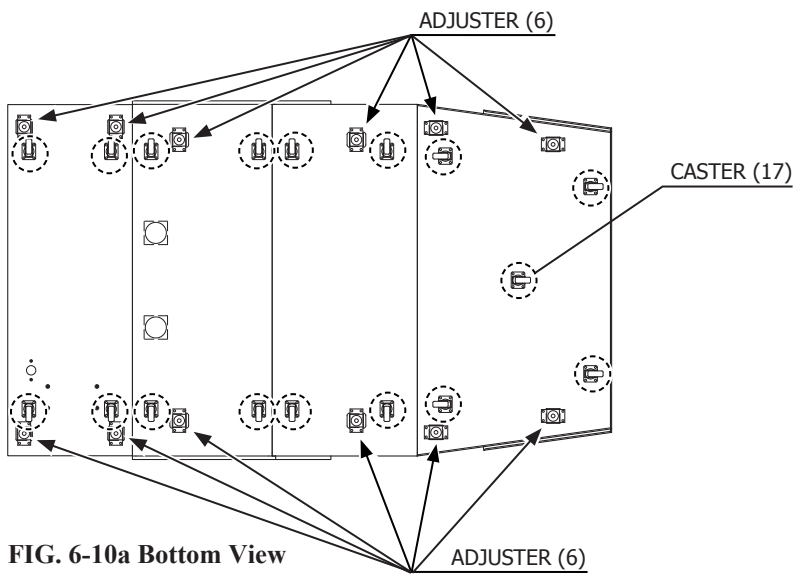


FIG. 6-10a Bottom View

- 1 Move the product to the installation site. If the product is to be installed near a wall, secure enough passage-way 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.
- 2 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.
- 3 After setting, turn adjuster nuts upwards to tighten them and secure adjuster heights.

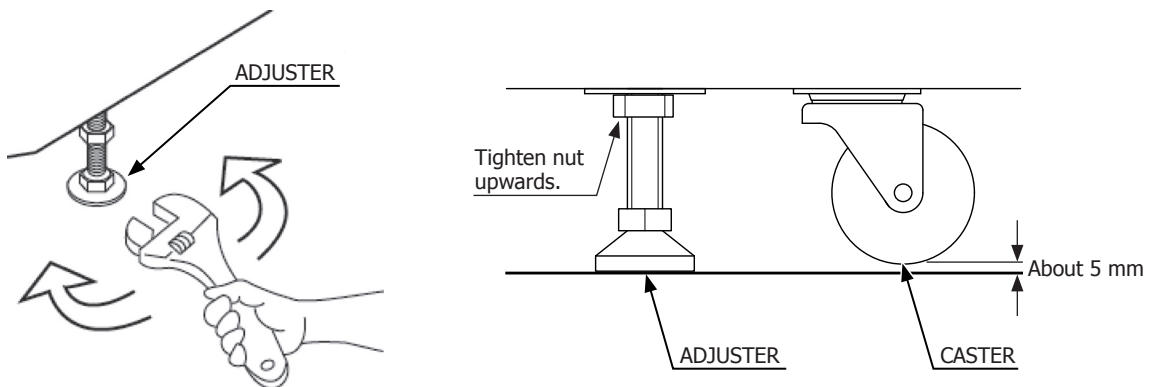


FIG. 6-10b Aligning the Adjusters

Views are reduced to 1/100. Use them for reference in installation site layout.

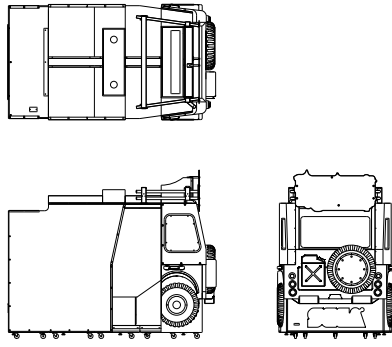


FIG. 6-10c Three Surface Views

You must secure a 50cm ventilation space between the back of the DLP and the wall.

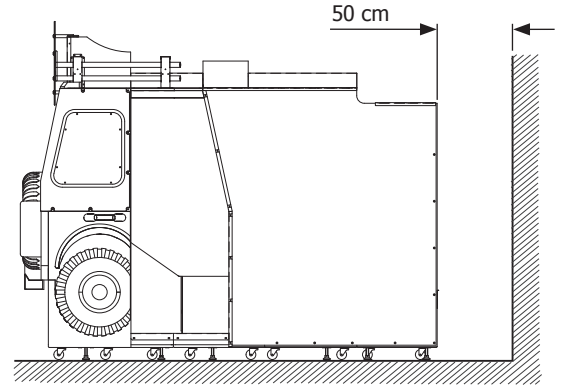


FIG. 6-10d Ventilation Space

11 CONNECTING THE DVD DRIVE (PREPARATION FOR INSTALLATION)

PLEASE NOTE THAT THIS PRODUCT IS DESPATCHED WITH SOFTWARE PRE-INSTALLED

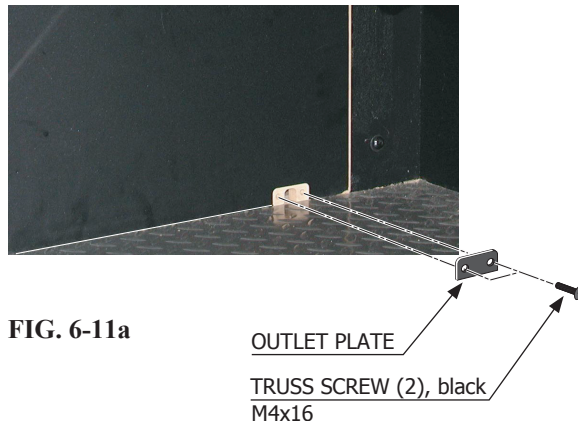
WARNING

- When connecting the DVD wire connector, check the orientation carefully and connect securely. The connector must be connected in the proper direction. If it is connected in the wrong direction or indiscriminately at an incline so that a load is applied, the connector or its terminal pins could break, causing a short circuit or fire.
- Be careful not to damage the DVD wire by getting it caught between objects, etc. Doing so may cause a short circuit or fire.
- Connect the DVD DRIVE to the LINDBERGH before connecting the power. Adhere strictly to the proper sequence in performing work. Failing to do so may cause electrical shock or short circuit.

You will need the supplied DVD software kit, board number sticker, and the separately sold DVD DRIVE and DVD wire. To prepare for software installation, you will need to connect the LINDBERGH and DVD DRIVE inside the cabinet using the DVD wire.

The LINDBERGH is the orange colored plate metal case found inside the front door PCB on the left side when facing the projector screen.

- 1 Remove the outlet plate on the bottom right of the front door PCB. Remove the two truss screws.



- 2 Remove the anti-release screw used to prevent removal of the front door PCB.

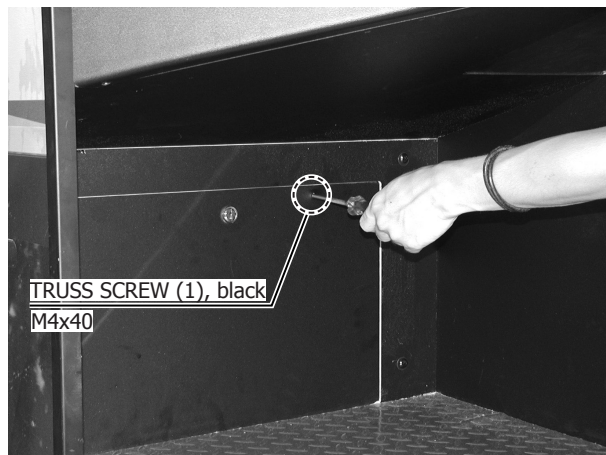


FIG. 6-11b

- 3 Use the master key to unlock the front door PCB and remove it.



FIG. 6-11c

- 4 Affix the board number sticker above the sticker at the upper left of the LINDBERGH that reads: "844-0001D-***".

BOARD NUMBER STICKER

KEY CHIP



FIG. 6-11d

- 5 Remove the key chip from the DVD kit case and insert it into the LINDBERGH. Make sure it is inserted in the proper direction.

- 6 Connect the two connectors on the DVD wire that have the "LINDBERGH" tag on them to the LINDBERGH. The LINDBERGH has four USB connectors. You can use any two connectors.

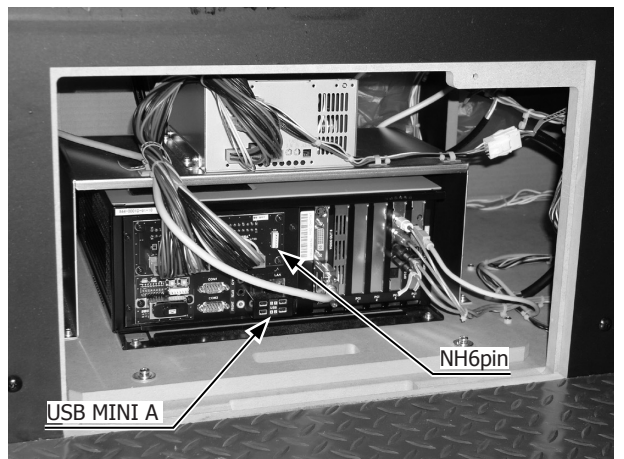


FIG. 6-11e

- 7** On the side of the DVD wire with the “DVD” tag, there are two connectors. Connect them to the DVD DRIVE.

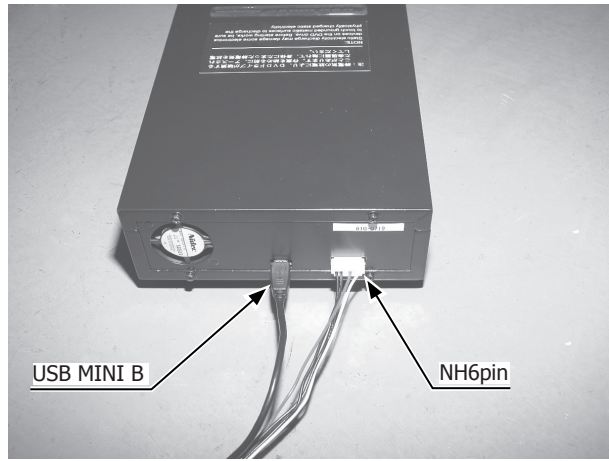


FIG. 6-11f

- 8** Pass the DVD wire through the space from which you removed the outlet plate, reattach the front door PCB and lock it. Be careful not to trap the DVD wire.

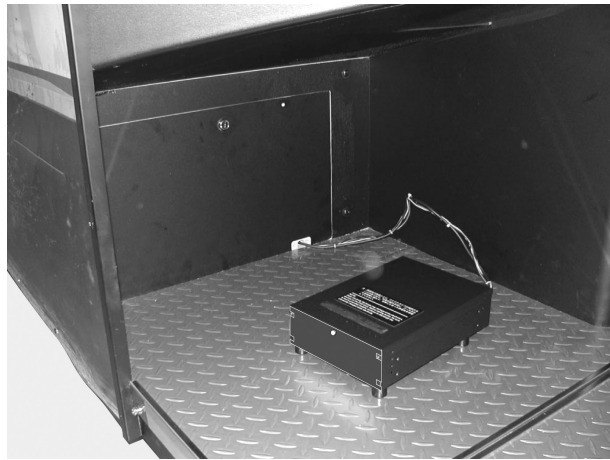


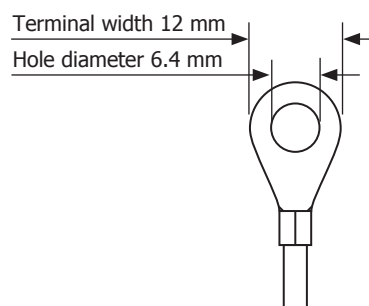
FIG. 6-11g

12 CONNECTION OF POWER AND GROUND

(Only applies where an intergral earth is not present in the mains/power lead.)

⚠ 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.



STOP IMPORTANT

If grounding has been established with the ground wire inside the power cord, do not perform grounding with the AC unit ground terminal. Conversely, if the AC unit ground terminal has been used for grounding, do not establish ground with the ground wire in the power cord. Otherwise there could be faulty or erroneous operations.

The AC unit is on the lower back of the DLP. This AC unit contains the following.

- Main switch
- Inlet for power cable connection
- Ground terminal
- Circuit protector

The accessory power cord has a ground wire inside it.

Connect the power cord to the AC unit then insert the power cord plug into a “power outlet with ground terminal.” If there is no “power outlet with ground terminal,” be sure to establish ground by some other means; for example, by connecting the AC unit ground terminal to a ground wire with a ground mechanism prepared separately. If you use a conversion adapter sold on the market to supply power, connect the ground wire terminal of the adapter to a “securely grounded ground terminal.” <For Taiwan>

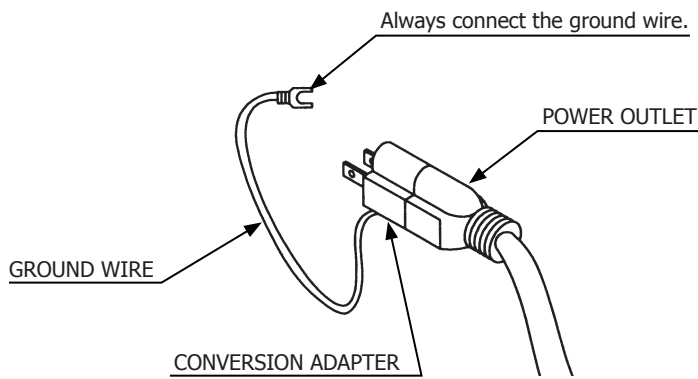


FIG. 6-12a <For Taiwan>

1 Confirm that the main switch is at OFF.

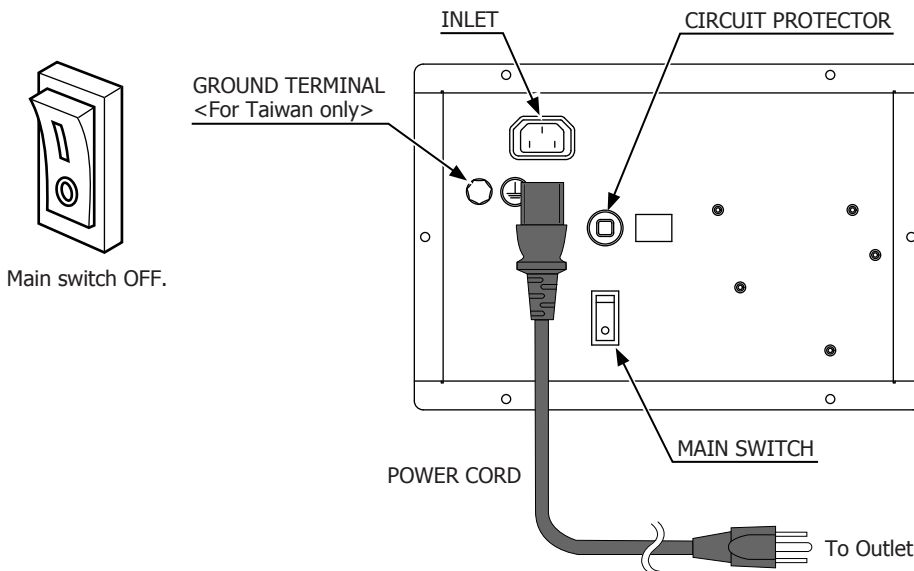


FIG. 6-12b AC Unit

2 Fully insert the power cord connector on the side opposite the power plug into the AC unit inlet.

3 Fully insert the power cord plug into the outlet.

4 When using a ground wire made available separately, connect one end of the wire to the AC unit ground terminal and the opposite end to an indoor ground terminal. The AC unit ground terminal is a bolt-and-nut combination. Remove the nut and pass the bolt through the ground terminal, then secure the nut to the bolt. <For Taiwan>

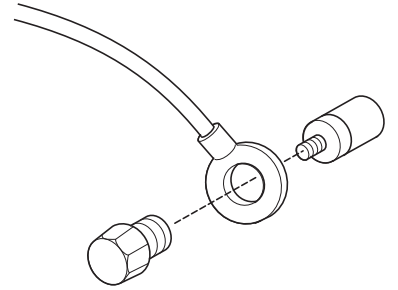


FIG. 6-12c

5 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 and have it protected. <For Taiwan>

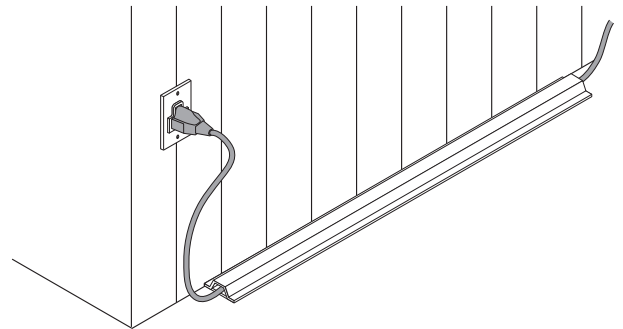


FIG. 6-12d

WARNING

- Be careful not to damage the DVD wire by getting it caught between objects, etc. Doing so may cause a short circuit or fire.
- The following explanation assumes that the product has been assembled properly as explained above. If there is an error or if the product operates in a manner other than as indicated below, cut off the power supply immediately. Failure to do so may result in a fire or electrical shock.
- If you look directly at the laser beam in the DVD DRIVE, you could suffer vision impairment. Do not look inside the DVD DRIVE.

STOP IMPORTANT

- The software is not installed on the game board (LINDBERGH) when the power supply is engaged, so the “Error 22” message is not a malfunction. However, if there is another error display, or if there is no video output at all, there might have been an error in product assembly, wiring connections might be faulty, or the LINDBERGH might not be functioning properly.
- After the power supply is engaged, wait for “Error 22” message to be displayed. If the product is indiscriminately operated in any way beforehand, there could be unexpected problems or malfunctions, as well as damage to parts.
- Once “Error 22” is displayed, set the DVD-ROM in the DVD DRIVE and re-engage the power supply. Installation takes place.
- After the power supply is engaged, the DVD DRIVE tray will not come out for about 30 seconds even if you press the switch. This is due to DVD DRIVE initialization.
- The DVD DRIVE tray can come out or return only while the power supply is engaged. The tray cannot be opened or closed while the power is off.
- Even after the software has been installed, store the DVD software kit, DVD DRIVE and DVD wire in a secure location.
- If for any reason installation cannot be completed, an error is displayed. Refer to the service manual and take corrective action.

Prepare the supplied DVD software kit and the separately sold DVD DRIVE and DVD wire. (See Chapter 5.)

- 1 Before supplying the power, you must make sure the DVD wire is not pinched or trapped.
- 2 Turn the main switch of the AC unit to ON and engage the power supply.
- 3 The LINDBERGH start-up screen appears. Wait for at least one minute. The error state is established. Check to be sure it is “Error 22.” If it is “Error 22,” proceed to the next operation. If it is not “Error 22,” refer to the LINDBERGH Service Manual and take corrective action.

- 4** Take out 1 urea (plastic head) screw and remove the DVD DRIVE case lid.

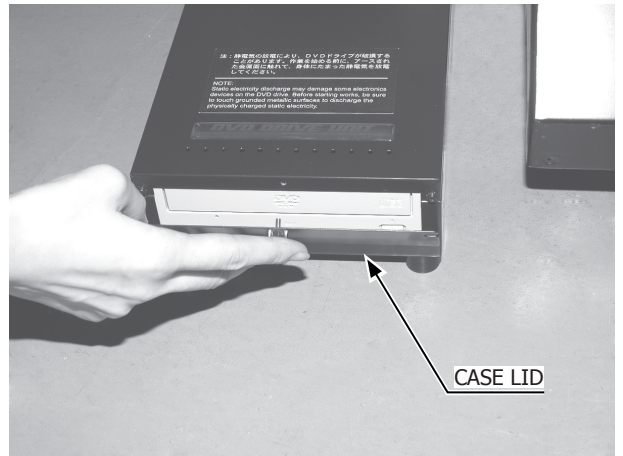


FIG. 6-13a

- 5** Press the DVD DRIVE switch and the DVD DRIVE tray will come out. Set the DVD from the DVD software kit into the tray. Always have the labeled side facing upward.

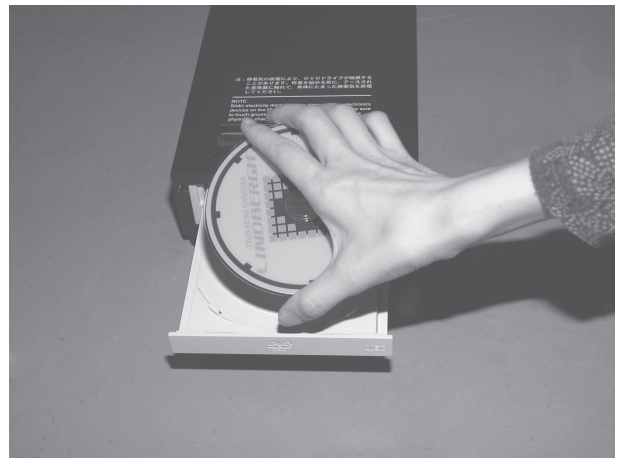


FIG. 6-13b

- 6** Press the DVD DRIVE switch. The tray goes back into the drive.
- 7** Re-engage the power. Turn the main switch to OFF once, wait for at least one minute, then turn the switch back to ON.
- 8** Software is installed automatically from the DVD to the LINDBERGH. In some cases, it may take about 5 minutes to install software to the LINDBERGH.
- 9** Initialization is completed when the Attract Mode screen appears.
- 10** Press the DVD DRIVE switch so that the tray comes out. Remove the DVD.
- 11** Press the DVD DRIVE switch so that the tray goes back into the unit. If the power is cut off, the tray will not move.
- 12** Set the main switch to OFF.
- 13** Remove the DVD wire from the DVD DRIVE.

14 Attach the DVD DRIVE case lid and fasten it with 1 urea screw.

15 Unlock and remove front door PCB.

16 Remove the DVD wire from the LINDBERGH. Leave the key chip inserted.

17 Attach the outlet plate to front door PCB. Fasten with 2 truss screws.

18 Attach and lock front door PCB.

19 Store the DVD DRIVE, DVD wire and DVD software kit in a location free of dust and cigarette smoke.

Process for Turning on the Power

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.

14 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].

1 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.

4 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.)

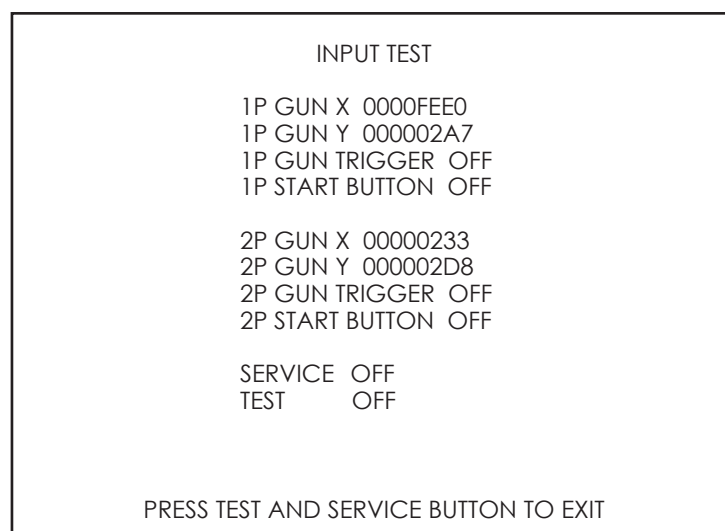


FIG. 6-14a INPUT TEST Screen

6 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.)

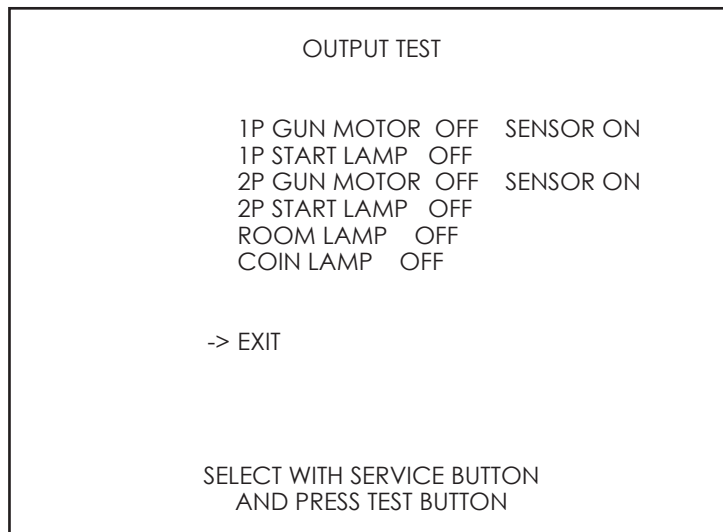


FIG. 6-14b OUTPUT TEST Screen

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.)

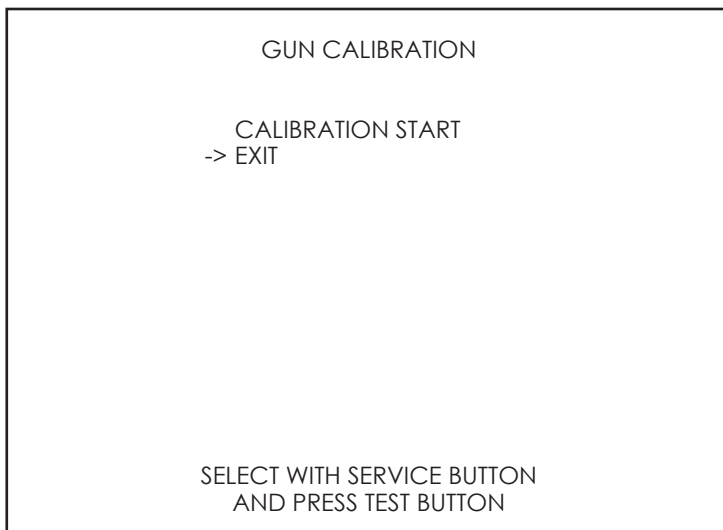


FIG. 6-14c GUN CALIBRATION Screen

Conduct the aforesaid tests when performing routine tests each month.

7 PRECAUTIONS WHEN MOVING THE MACHINE

7-1 MOVING THE MACHINE

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 adjusters 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.

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 unreparable 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.

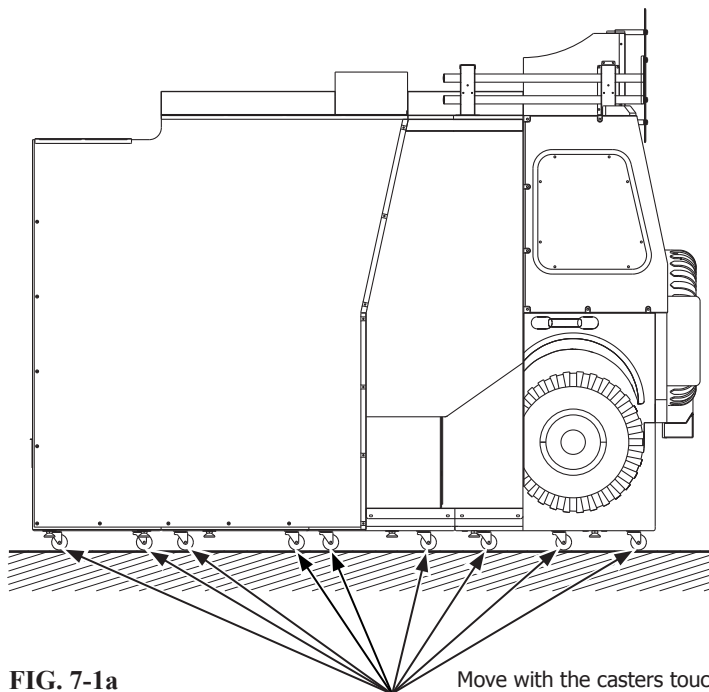


FIG. 7-1a

Move with the casters touching the floor.

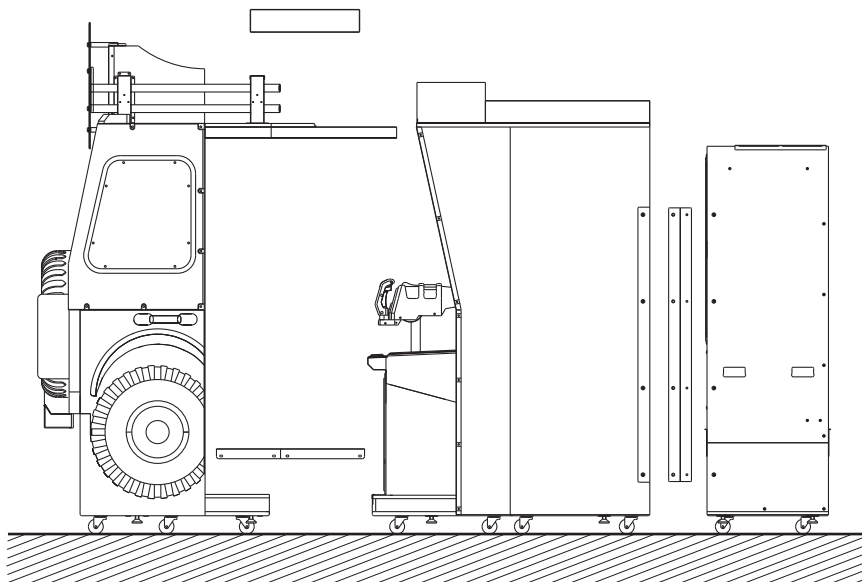


FIG. 7-1b

Separate components when moving over a sloped or stepped area.

7-2 SEPARATING THE MAIN CABINET

⚠ 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.

⚠ 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.

STOP IMPORTANT

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 Front Cabinet and Rear Cabinet.

When the Front Cabinet and Rear Cabinet are separated, take due care during all moving operations. Hold the bottom surface as much as possible and move the component slowly.



FIG. 7-2a MAIN CABINET

The measurements of each component when separated are as follows.

	(Width × Depth × Height)
FRONT CABINET:	1,532 mm × 612 mm × 1,800 mm
REAR CABINET:	1,532 mm × 640 mm × 1,980 mm



FIG. 7-2b FRONT CABINET



FIG. 7-2c REAR CABINET

- 1 Remove the left and right Main Cabinet ceiling panel cloth brackets. Undo the five truss screws.

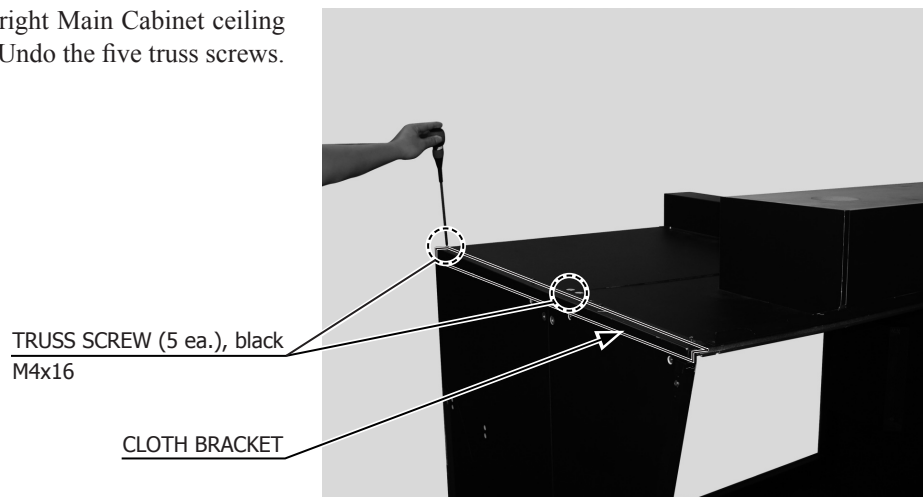


FIG. 7-2d

- 2 Remove the front harness cover from the Main Cabinet ceiling panel. Remove the six screws. The screws have flat & spring washers attached to them.

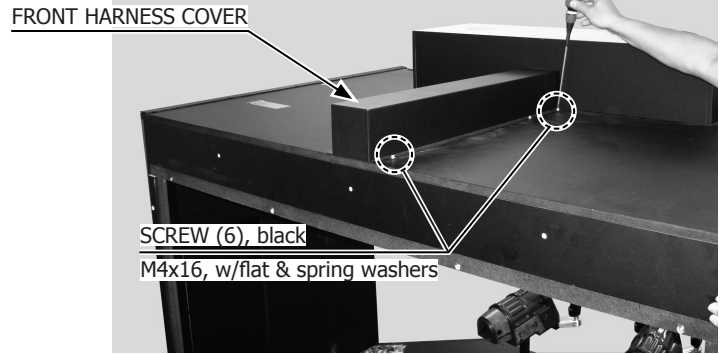


FIG. 7-2e

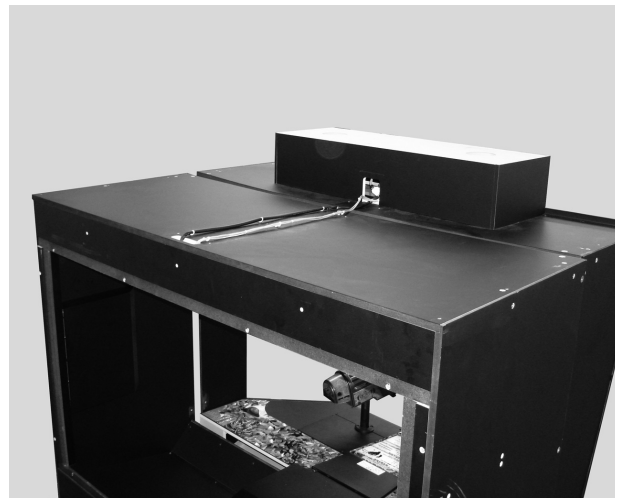


FIG. 7-2f

- 3 Disconnect the two connectors in the box on the Main Cabinet ceiling panel.

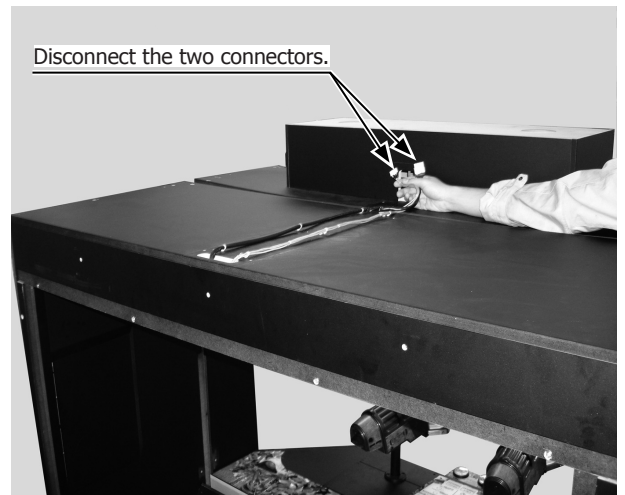


FIG. 7-2g

- 4** Disconnect the connectors between the Front Cabinet and the Rear Cabinet. Only disconnect the connectors shown in the pictures below. Facing the inside of the Front Cabinet, disconnect the two connectors on the left and on the right, and one center connector.

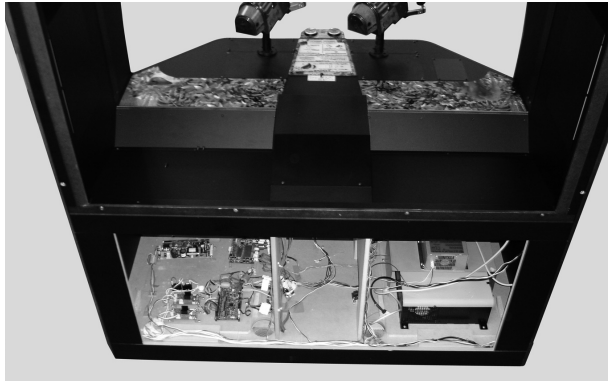


FIG. 7-2h

Disconnect the two connectors.

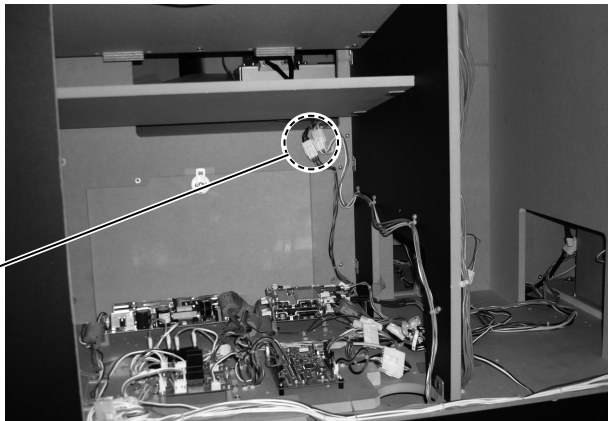


FIG. 7-2i

Disconnect the connector.

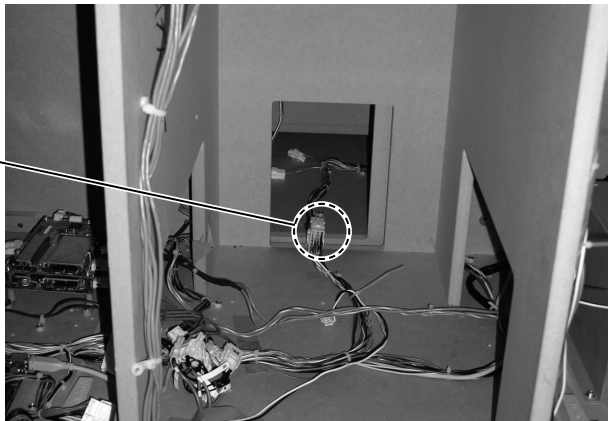


FIG. 7-2j

Disconnect the two connectors.

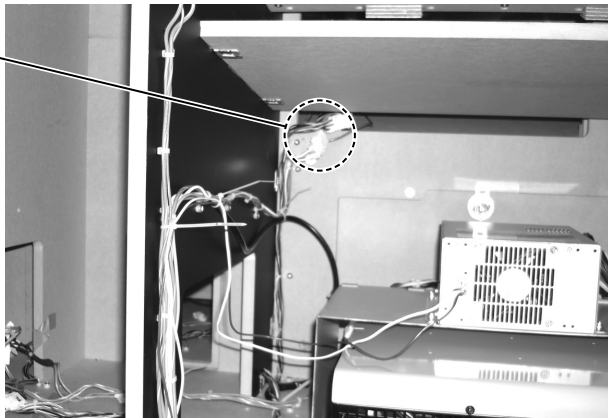
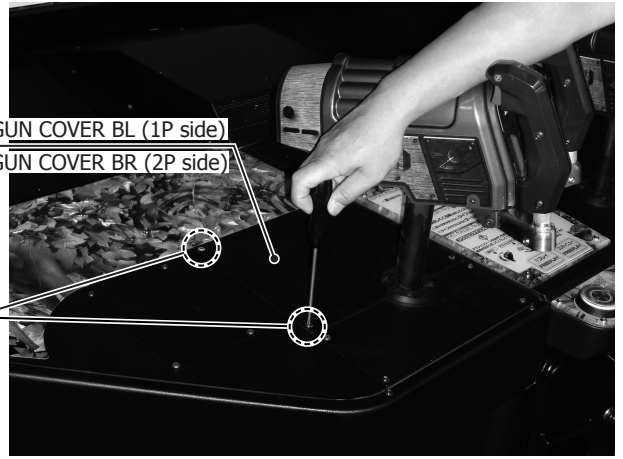


FIG. 7-2k

- 5** Remove the Gun Cover BL, BR at the base of the left/right Control Units (inner part). Remove the four tamperproof screws.



TAMPERPROOF SCREW (4 ea.), black
M4x16

FIG. 7-2l

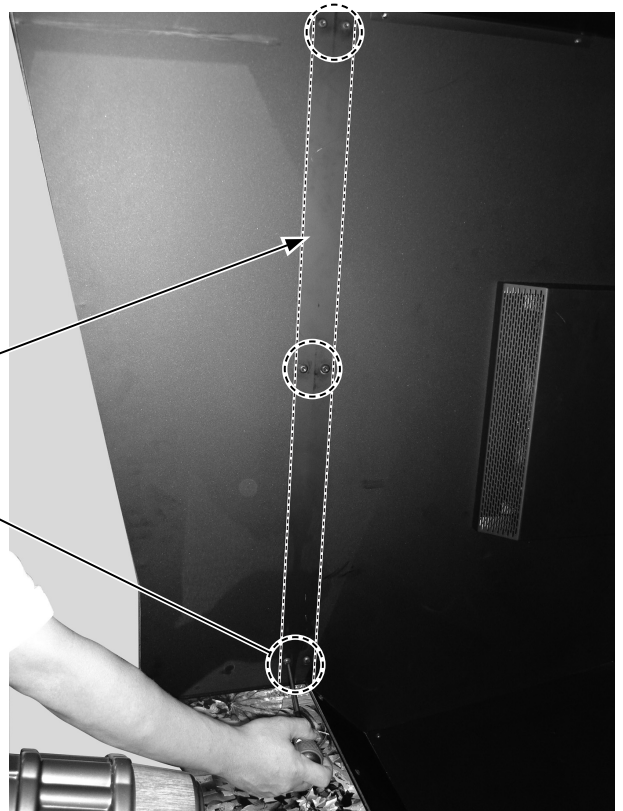
- 6** Remove the fixed earth terminal on the left/right Control Units. Remove the hexagon nut. The hexagon nut is flat with spring washers.



HEXAGON NUT (1 ea.)
M4, flat & spring washers used

FIG. 7-2m

- 7** Remove the two cabinet joint plates connecting the Front Cabinet and Rear Cabinet. They are located on the left and right inside of the Main Cabinet. Remove the six truss screws.



CABINET JOINT PLATE

TRUSS SCREW (6 ea.), black
M6x16

FIG. 7-2n

- 8 Remove cabinet joint plate L from the inside of the Main Cabinet roof. Remove the eight truss screws. Once the screws are removed, the cabinet joint plate L will fall. Have one person support the plate while a second person removes the screws.

TRUSS SCREW (8), black
M6x16

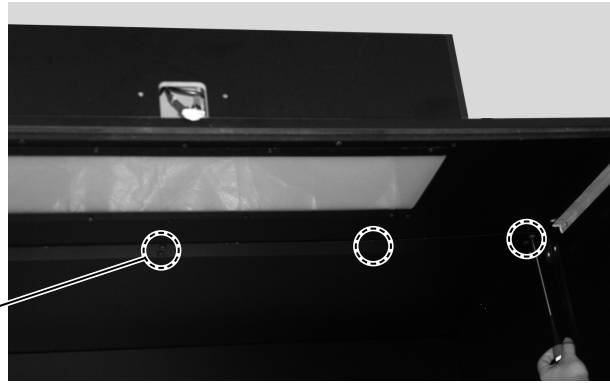


FIG. 7-2o

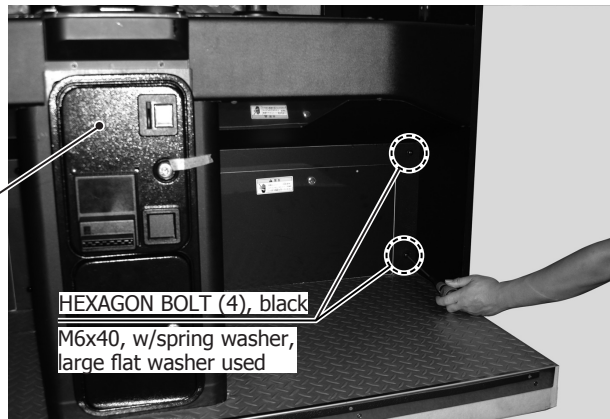
CABINET JOINT PLATE L



FIG. 7-2p

- 9 Remove the four hexagon bolts from the left and right front doors of the coin chute door.

COIN CHUTE DOOR



HEXAGON BOLT (4), black
M6x40, w/spring washer,
large flat washer used

FIG. 7-2q

- 10 Separate the Front Cabinet and Rear Cabinet.



FIG. 7-2r

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.



FIG. 8a

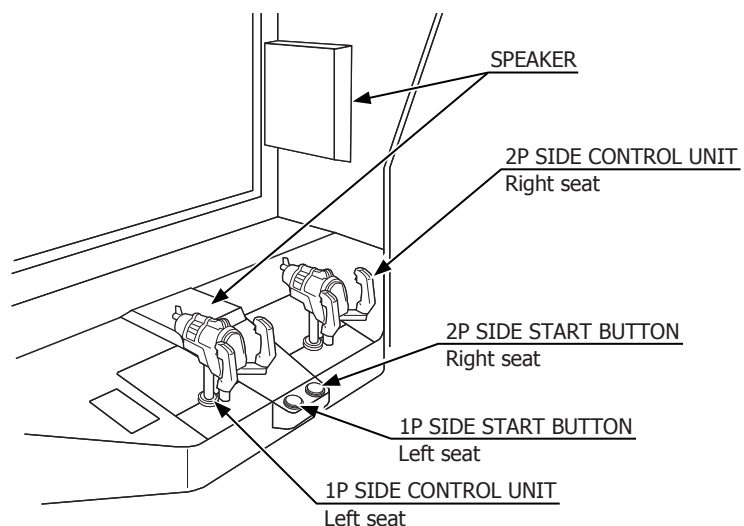


FIG. 8b

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

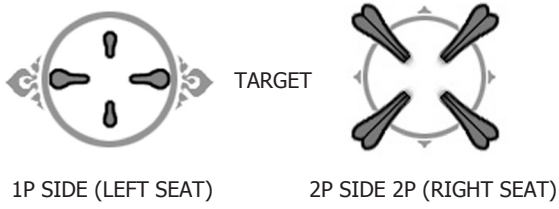


FIG. 8c Targets

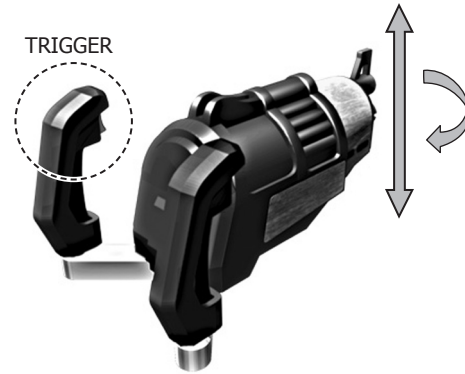


FIG. 8d Control Unit

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.

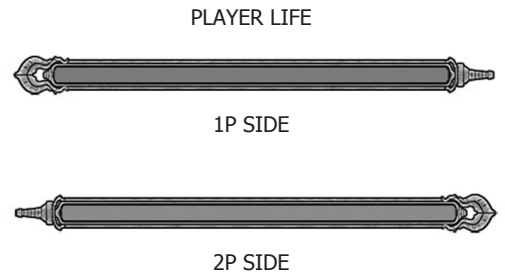
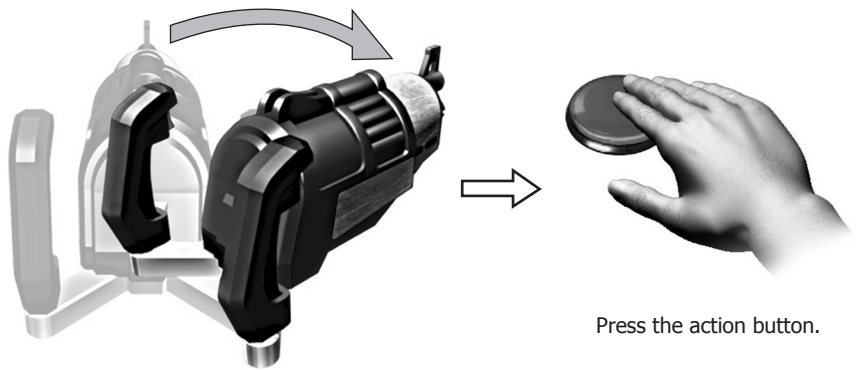


FIG. 8e

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



Move the control unit to the right.

FIG. 8g

Sometimes a mark will appear on a large enemy or something that can be destroyed.



FIG. 8h Mark



FIG. 8i Mark Changes

The mark changes color as time passes. Shoot at the mark and destroy it within the time limit.

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.

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.

NOTE: "S/M" in the table denotes LINDBERGH service manual, which is provided separately.

TABLE 9

ITEMS	DESCRIPTION	REFERENCE SECTIONS
Game machine installation	1. Confirm that the information display screen appears in normal fashion.	"S/M" Chapter 4
	2. Investigate each input device on the input test screen.	"S/M" Chapter 4, 9-3a, 9-3c
	3. Investigate each output device on the output test screen.	"S/M" Chapter 4, 9-3b
Periodic maintenance	1. Check settings.	"S/M" Chapter 4, 9-3d
	2. Test each input device on the input test screen.	"S/M" Chapter 4, 9-3a, 9-3c
	3. Test each output device on the output test screen.	"S/M" Chapter 4, 9-3b
Control problem	1. Investigate each input device on the input test screen.	"S/M" Chapter 4, 9-3a, 9-3c
	2. Adjust or replace each input device.	Chapter 11
	3. If the problem persists, examine the mechanical components of each input device.	Chapter 11
Monitor problem	On the monitor adjustment check screen, check to be sure the monitor has been adjusted properly.	"S/M" Chapter 4, Chapter 10
IC board problem	1. Information display screen	"S/M" Chapter 4
	2. Speaker test	"S/M" Chapter 4
Data Check	Check data on game play times, histograms, etc., and adjust the level of difficulty.	9-3e

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.

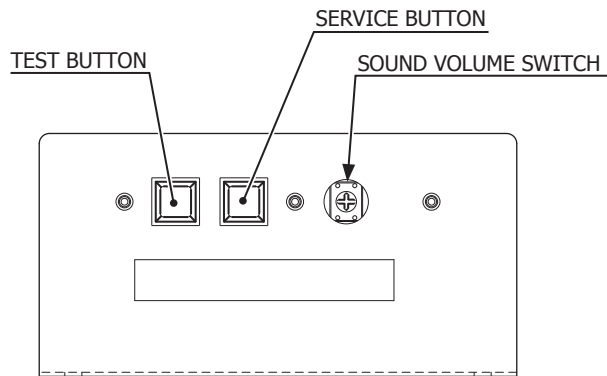


FIG. 9-1a Push Switch

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.

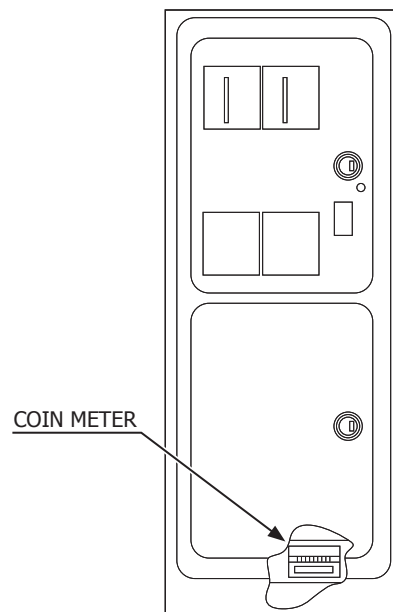


FIG. 9-1b Coin Meter

9-2 SYSTEM TEST MODE

STOP IMPORTANT

- 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.

- 1 When the TEST Button is pressed, the system test mode menu screen (SYSTEM TEST MENU) appears.
- 2 Use the SERVICE Button to move the cursor to the desired test item.
- 3 Press the TEST Button to confirm selection of the item.
- 4 When testing and checking are completed, select EXIT and press the TEST Button. The SYSTEM TEST MENU screen reappears.
- 5 When all tests are completed, select EXIT and press the TEST Button. The game screen reappears.

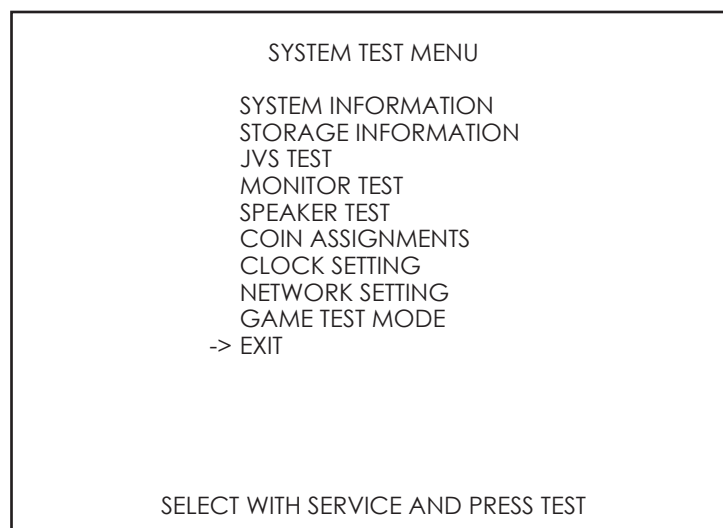


FIG. 9-2 SYSTEM TEST MENU Screen

9-3 GAME TEST MODE

STOP IMPORTANT

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.

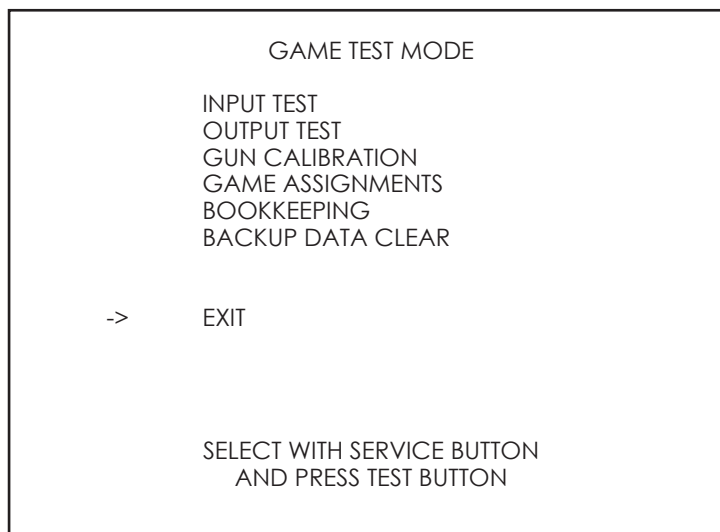


FIG. 9-3a GAME TEST MODE MENU Screen

- 1 Press the SERVICE Button to highlight the desired menu item with the cursor.
- 2 Press the TEST Button to perform the selected item. To learn how to proceed after executing the selected item, read the item's explanation.
- 3 When test or setting is completed, take steps to have the game test mode menu screen reappear. The steps involved vary with the item.
- 4 Select EXIT and press the TEST Button. The system test mode menu screen reappears.
- 5 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.

9-3a INPUT TEST

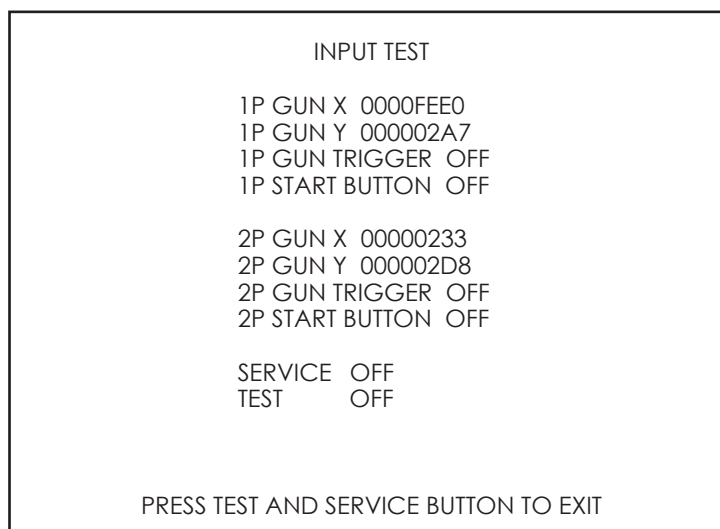


FIG. 9-3a01 INPUT TEST Screen

The condition of each input device can be checked. Periodically check the condition of each input device on this screen.

<Operation>

- 1** 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.
- 3** 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.
- 4** 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

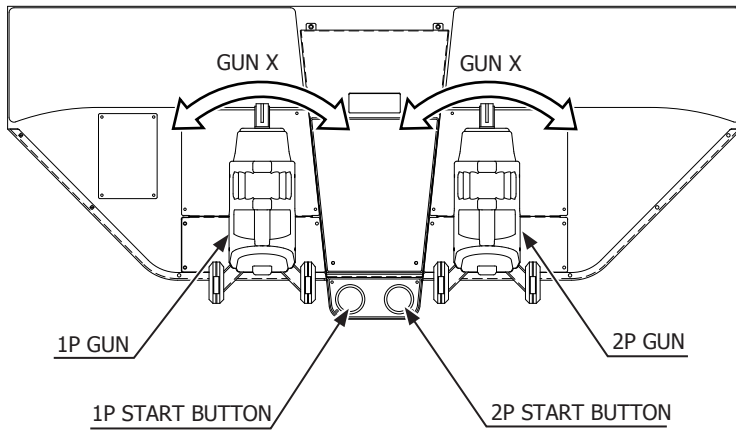
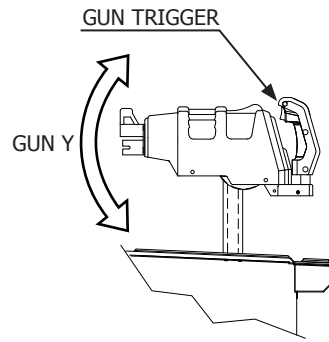


FIG. 9-3a02 Input Device



9-3b OUTPUT TEST

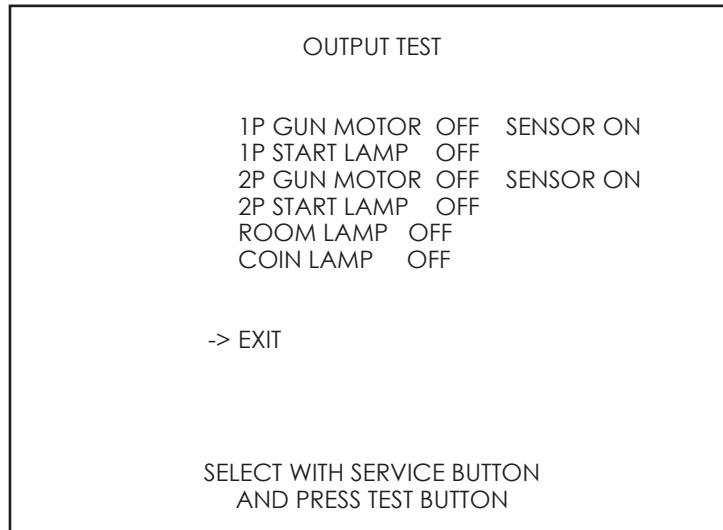


FIG. 9-3b OUTPUT TEST Screen

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>

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

- 2** 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.

- 3** Press the SERVICE Button and move the cursor to EXIT.

- 4** 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

STOP IMPORTANT

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

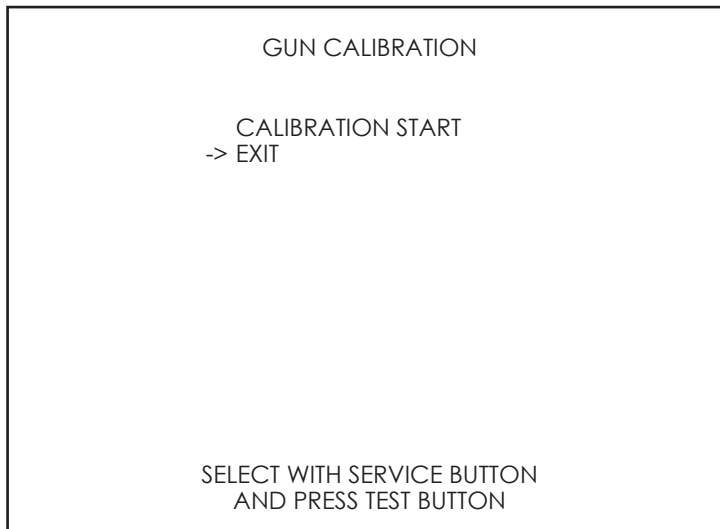


FIG. 9-3c01 GUN CALIBRATION Screen

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>

- 1 Press the SERVICE Button and move the cursor to the item you want to select.
- 2 Move the cursor to CALIBRATION START and press the TEST Button to adjust the calibration.
- 3 Move the cursor to EXIT and press the TEST Button, the calibration screen exits and the game test mode menu screen reappears.

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.

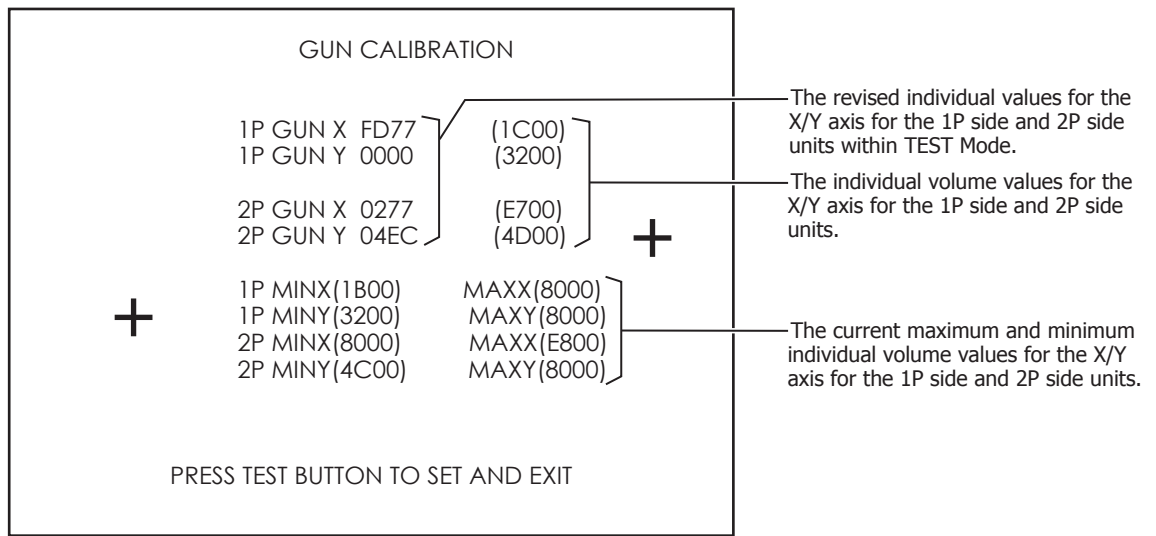


FIG. 9-3c02 Calibration Screen

<Operation>

- 1 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.
- 2 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.

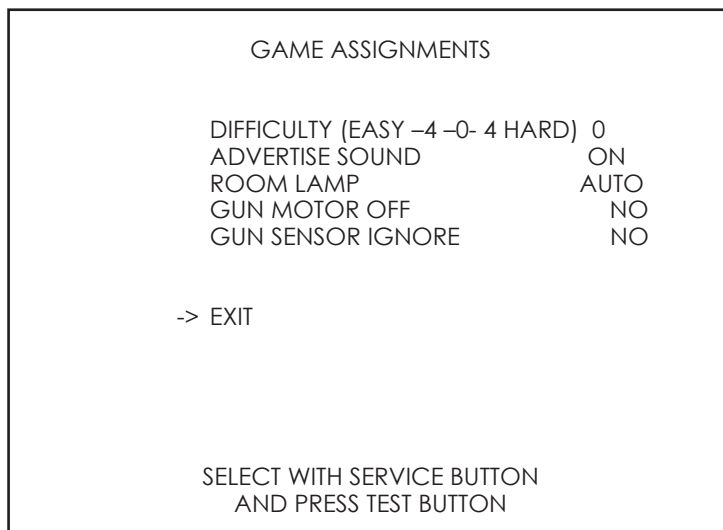


FIG. 9-3d GAME ASSIGNMENTS Screen

The various game settings are established.

<Operation>

- 1 Press the SERVICE Button, move the cursor to the item whose setting is to be changed and select the item.
- 2 When the TEST Button is pressed, the preset value of the selected item changes.
- 3 Press the SERVICE Button and move the cursor to EXIT.
- 4 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 abnormality, the motor will stop. The motor will not operate while the power is left on.
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	0	
COIN2	0	
COIN3	0	
COIN4	0	
TOTAL COINS	0	
COIN CREDITS	0	
SERVICE CREDITS	0	
TOTAL CREDITS	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.

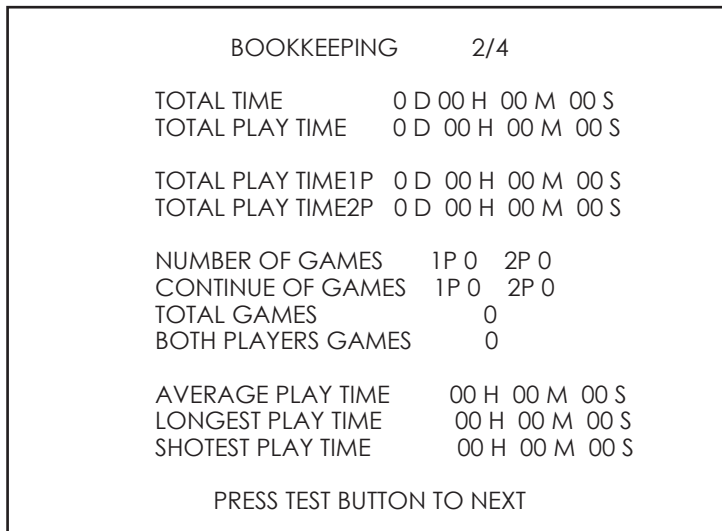


FIG. 9-3e02 BOOKKEEPING Screen (2/4)

<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.

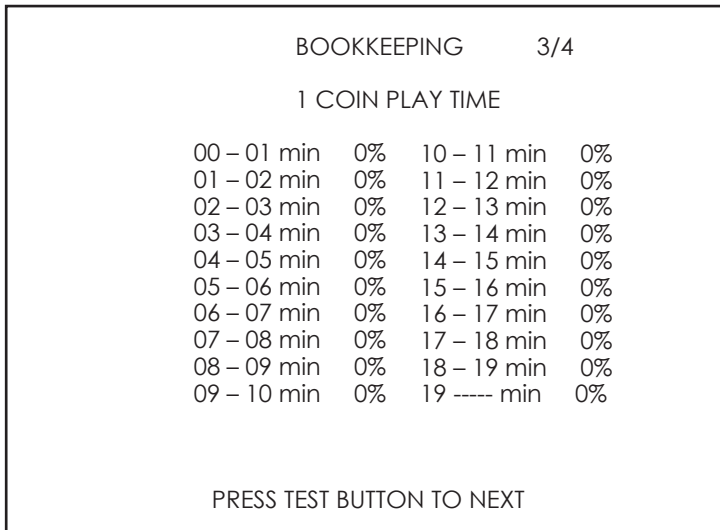


FIG. 9-3e03 BOOKKEEPING Screen (3/4)

<Menu Explanation>

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

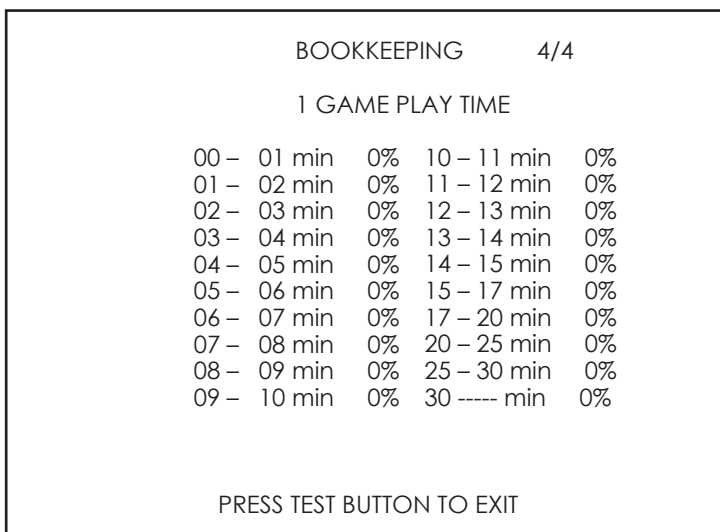


FIG. 9-3e04 BOOKKEEPING Screen (4/4)

<Menu Explanation>

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

9-3f BACKUP DATA CLEAR

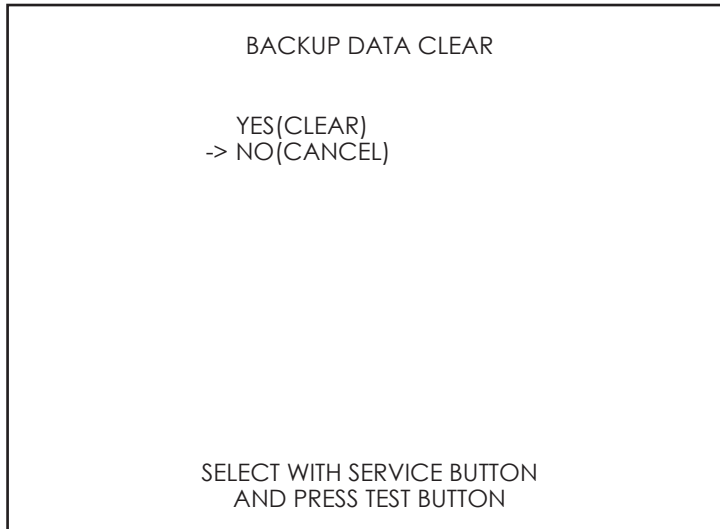


FIG. 9-3f BACKUP DATA CLEAR Screen

- 1** Press the SERVICE Button and move the cursor to the item you want to select.
- 2** 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.
- 3** 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 PROJECTOR

CAUTION

The projector is adjusted prior to leaving the factory. Avoid any unnecessary adjustment.

IMPORTANT

- If the adjustment method in this manual does not resolve the problem contact the customer service number in this manual or your supplier.
- “Snow” on the screen/changes in brightness for a short period are due to the high pressure mercury lamp in the projector. This is not a defect and does not need repairs.
- There is no way of knowing when the lamp is going to cease to function. Once it ceases to function, the projector will be unable to display anything and the product cannot be used. Have a spare lamp ready at all times.
- Do not stick tape, stickers or anything else onto the screen. Any kind of adhesive may damage the surface of the screen.

When referring to the PROJECTOR, please use the SONY BRAVIA service manual supplied separately.

10-1 CLEANING THE SCREEN

CAUTION

- Since the Projector screen is susceptible to damage, pay careful attention to its handling. When cleaning, refrain from using water or volatile chemicals.
- Do not climb onto the control panel. This could lead to injuries, such as bumping your head.
- When reaching across the control panel to clean the screen there is a risk of hurting your shoulder or arm. Use a mop with a non-feathery, soft, dry cloth mop head and wipe the surface of the screen.

When the screen surface becomes dirty with dust, etc., clean it by using a soft cloth such as gauze. When water, and volatile chemicals such as benzene, thinner, etc., spill on the screen surface, it may be subject to damage, therefore, do not use them.

Also, since the surfaces are susceptible to damage, refrain from rubbing them with a hard material or using a duster. If the screen is especially dirty, call in a professional cleaner.

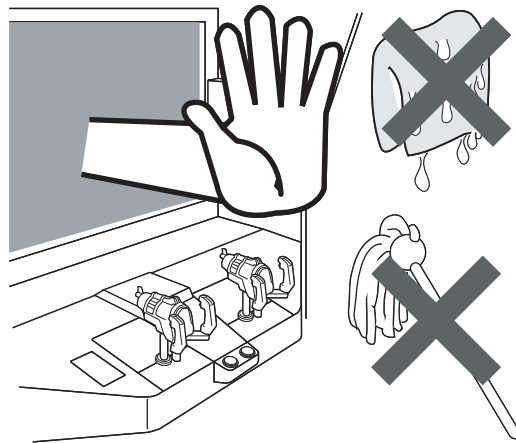


FIG. 10-1

11 CONTROL UNIT

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.

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.

11-1 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

1 Turn off the power.

2 Remove the Gun Covers in front and behind the Control Unit base. Remove the four tamperproof screws. The diagram is of the 1P side, meaning the front Gun Cover is AL and the back cover BL. On the 2P side, the front Gun Cover is AR and the back Gun Cover BR.



FIG. 11-1a

GUN COVER AL (1P SIDE)
GUN COVER AR (2P SIDE)

GUN COVER BL (1P SIDE)
GUN COVER BR (2P SIDE)

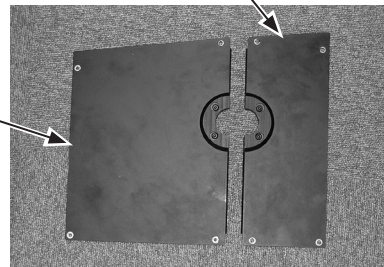


FIG. 11-1b



FIG. 11-1c

3 Disconnect the two connectors.

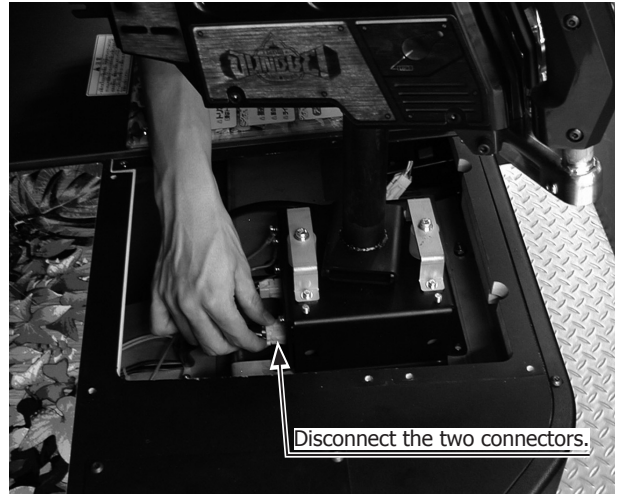


FIG. 11-1d

4 Remove the upper earth terminal holder. Remove the single hexagon nut. The hexagon nut uses flat and spring washers. Do not remove the lower earth terminal.

HEXAGON NUT (1)
M4, flat & spring washers used

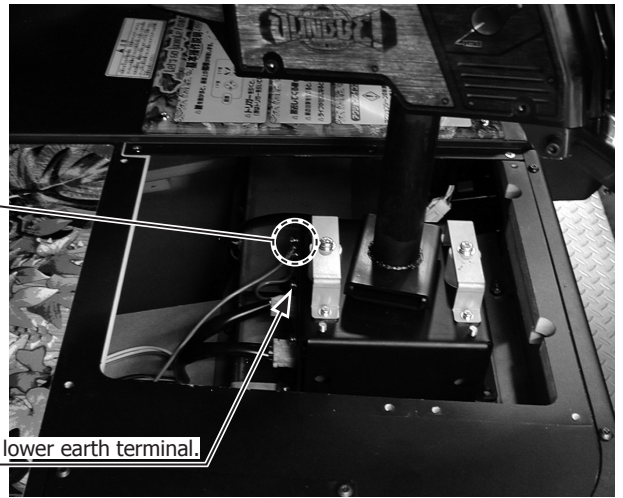


FIG. 11-1e

5 Remove the eight hexagon bolts holding the Control Unit in place.



FIG. 11-1f

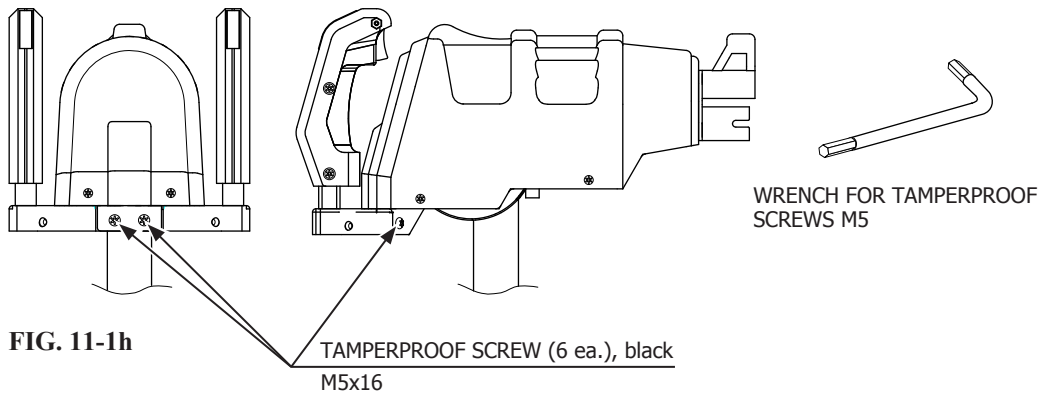
- 6** Lift the Control Unit directly upward and remove it.



FIG. 11-1g

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.



11-2 ADJUSTING OR CHANGING THE X AXIS VOLUME

STOP IMPORTANT

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

- 1 Turn off the power and remove the Control Unit (see 11-1).
- 2 Invert the Control Unit and place it upside down. Make sure you do not damage the surface of the Control Unit.
- 3 Loosen the two screws fixing the volume bracket lower and separate the gear engagement.

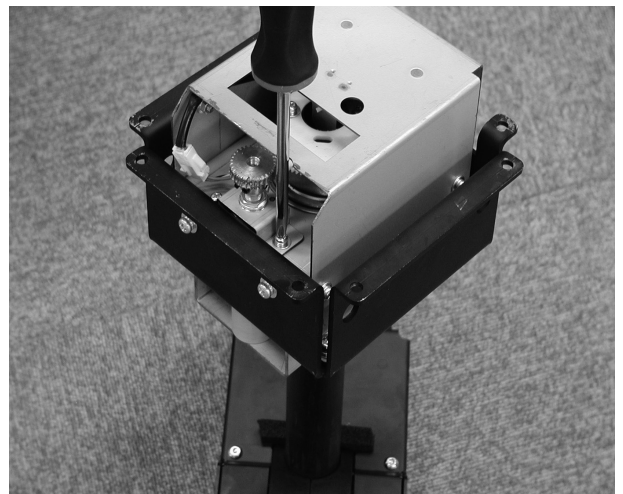


FIG. 11-2a

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

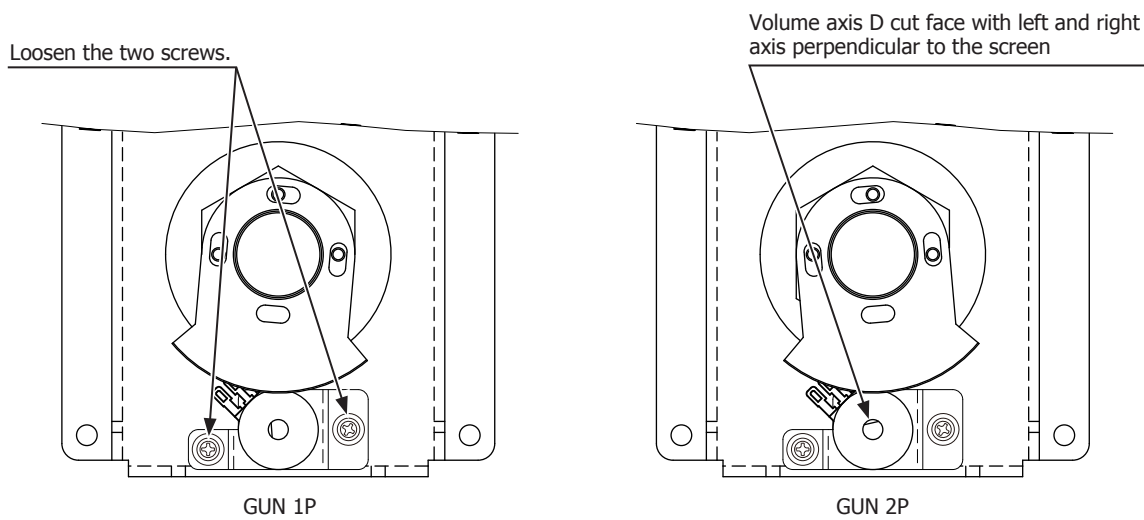


FIG. 11-2b X Axis (Left and Right) Volume

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

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

-
- 1** Loosen the two screws fixing the volume bracket lower and separate the gear engagement.
-
- 2** Looking at the bottom of the Control Unit from the top, turn it as far anti-clockwise as possible and hold it there.
-
- 3** Turn the volume axis as far as it will go clockwise and then reengage the gears.

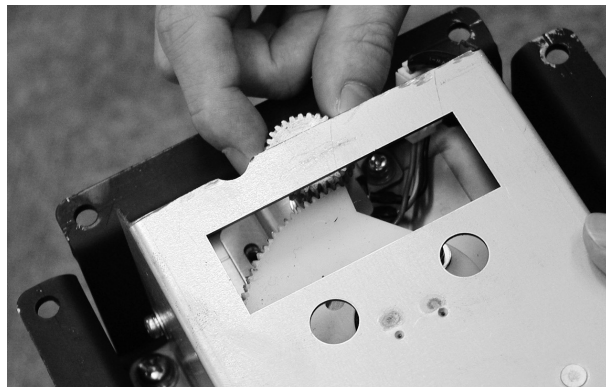
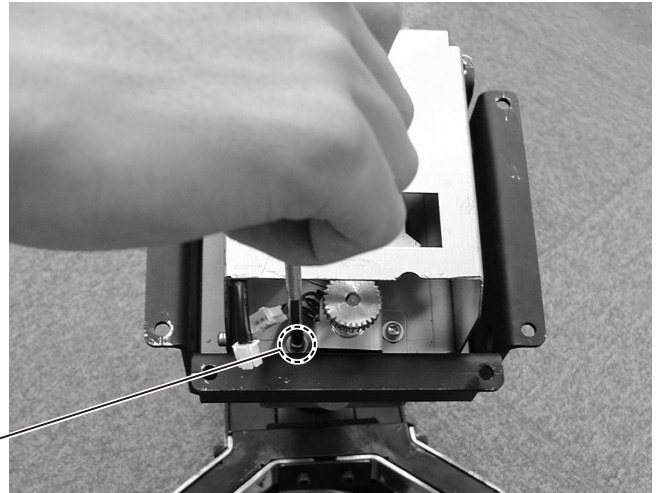


FIG. 11-2c

-
- 4** From this engagement, engage the gears on the volume axis at a half turn anti-clockwise and tighten the previously loosened screws.

Exchange

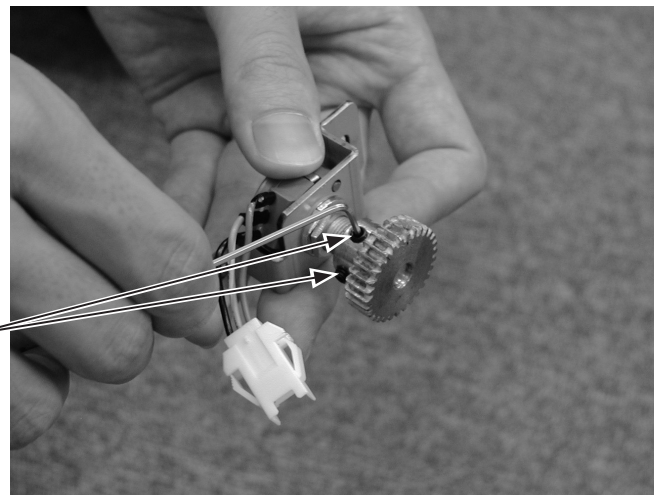
- 1 Turn off the power and remove the Control Unit. (See 11-1).
- 2 Invert the Control Unit and place it upside down. Make sure you do not damage the surface of the Control Unit.
- 3 Disconnect the one connector on the wire coming from the volume.
- 4 Remove the two screws fixing the volume bracket lower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



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

FIG. 11-2d

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



HEXAGON SOCKET SCREW (2)
M4x8

FIG. 11-2e

-
- 7** 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.

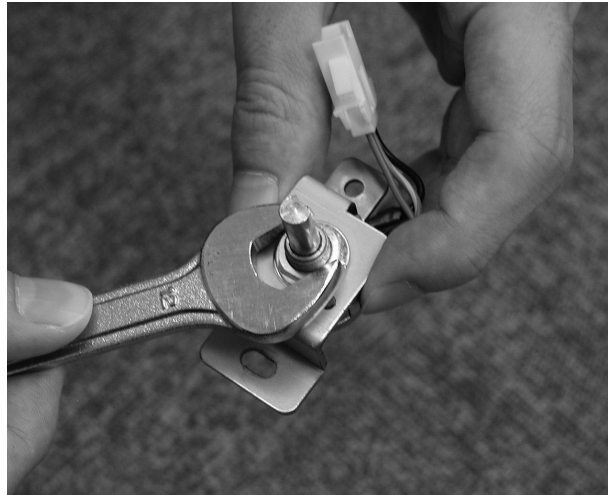


FIG. 11-2f

-
- 8** 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.

-
- 9** 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.

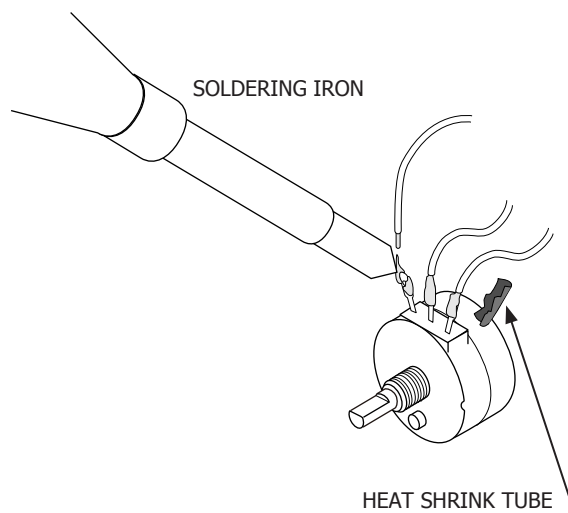


FIG. 11-2g

-
- 10** If the lead wire on the end of the wire terminal is less than five millimeters, use wire strippers or cutters to peel back the covering.

-
- 11** Pass the wire through each of the heat shrink tubes.

-
- 12** Solder the wire terminal to the replacement volume. Use the wiring diagram to make sure you don't solder in the wrong place.

-
- 13** Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area.

-
- 14** Attach the gears and bracket to the volume.

-
- 15** 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. 11-2b).
Note that the directions are different for 1P side and 2P side.

16 Fix the bracket in place with the two screws.

17 Connect the connector.

18 Reattach the Control Unit to the cabinet.

19 Turn on the power and use the calibration screen to alter the volume values.

11-3 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)
- A 7 millimeter spanner or hexagonal screwdriver or socket wrench
- A 1.5 millimeter hexagonal bar wrench or screwdriver
- An 11-12 millimeter spanner
- Nippers
- Cutters
- Wire Stripper
- Soldering iron
- Industrial dryer

Adjustment

1 Turn off the power and remove the Control Unit. (See 11-1).

2 Remove the muzzle. Insert the tool into the gun barrel and remove the two tamperproof screws.

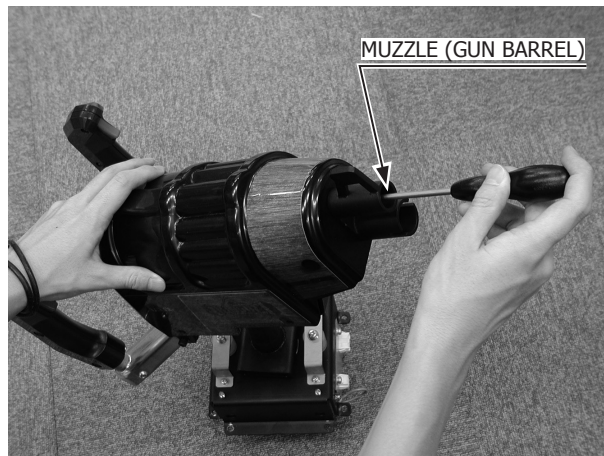


FIG. 11-3a

TAMPERPROOF SCREW (2), black
M4x8

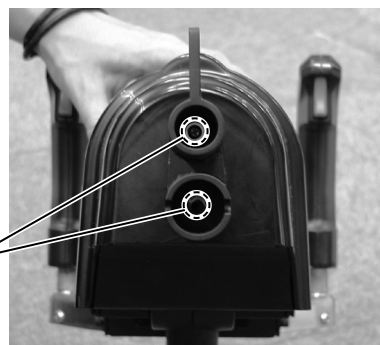


FIG. 11-3b

- 3 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.

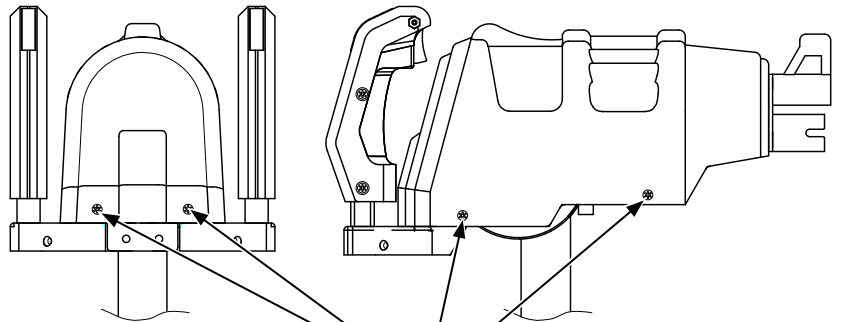


FIG. 11-3c

TAMPERPROOF SCREW (total 6), black M4x8

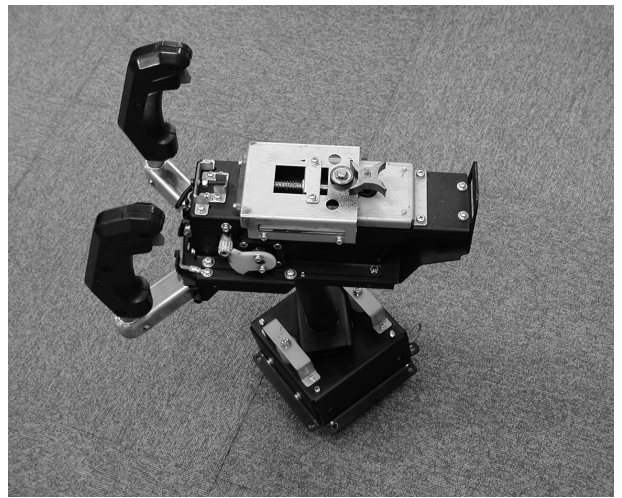


FIG. 11-3d

- 4 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.

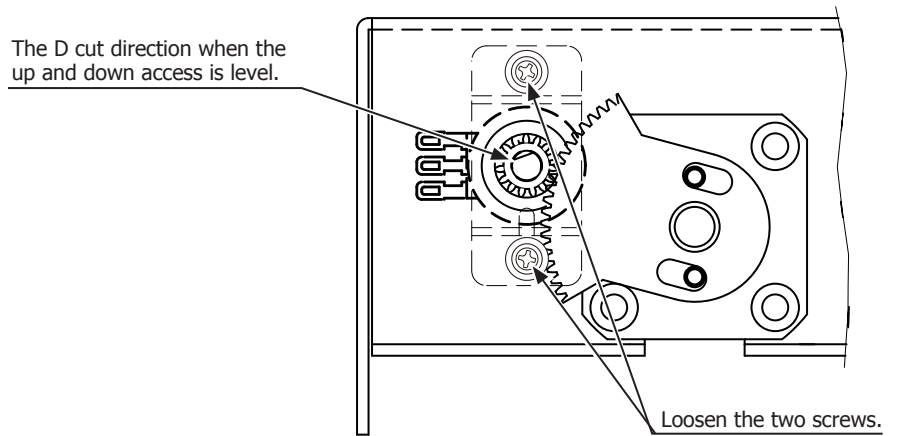


FIG. 11-3e Y Axis (up and down) Volume

5 Tighten the two previously loosened screws.

6 Move the Control Unit up and down and make sure that the gears are moving smoothly.

7 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.

1 Loosen the two screws fixing the volume bracket lower and separate the gear engagement.

2 Point the Control Unit down as far as it will go.

3 Turn the volume axis as far clockwise as it will go and engage the gears.

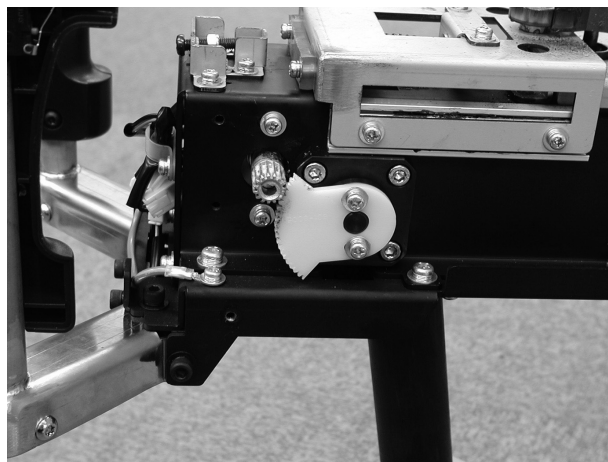


FIG. 11-3f

4 From this engagement, engage the gears on the volume axis at a half turn anti-clockwise and tighten the previously loosened screws.

Exchanging

1 Turn off the power and remove the Control Unit. (See 11-1).

2 Remove the muzzle and the Gun Cover.

3 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

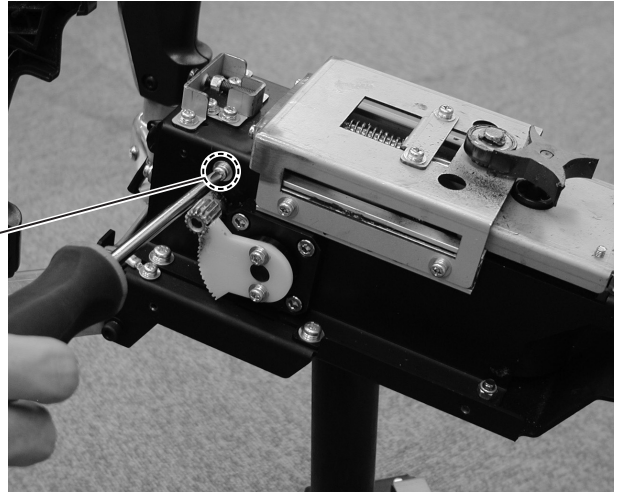


FIG. 11-3g

4 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

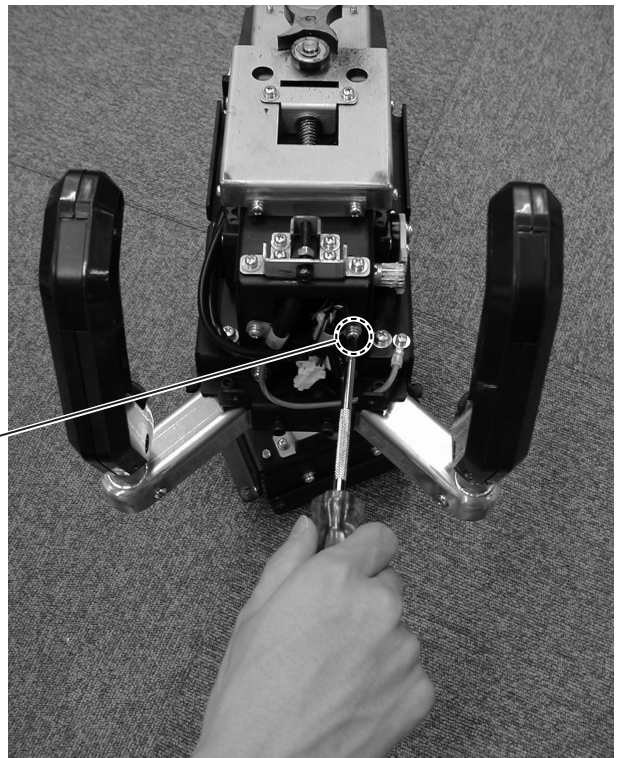


FIG. 11-3h

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

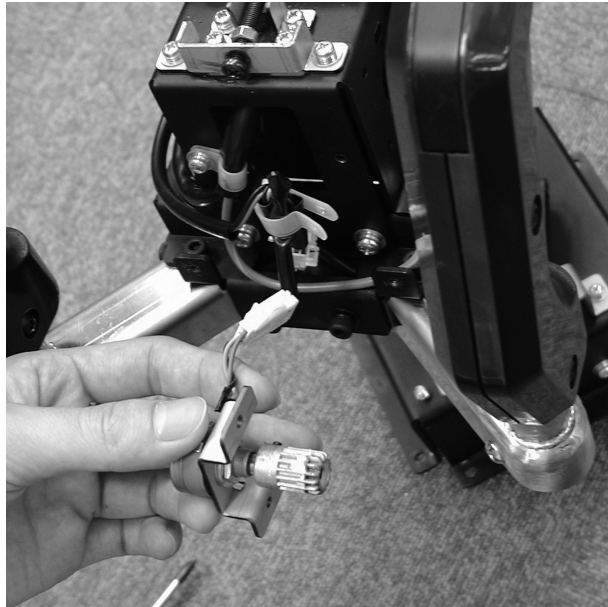


FIG. 11-3i

- 6** Disconnect the one connector.

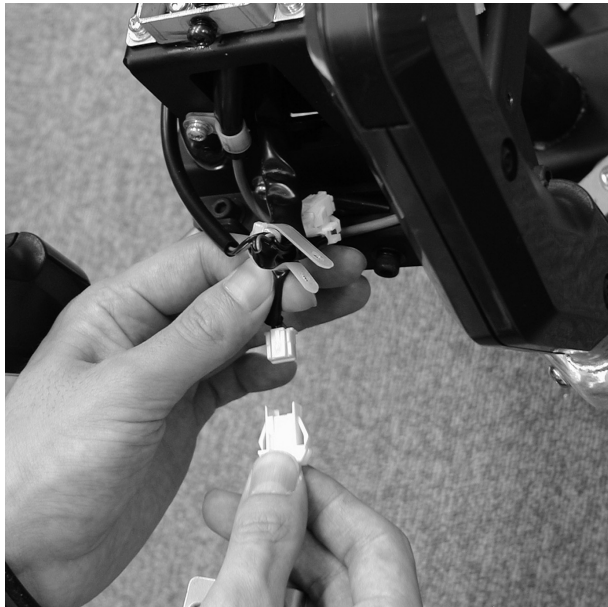


FIG. 11-3j

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

HEXAGON SOCKET SCREW (2)
M3x4

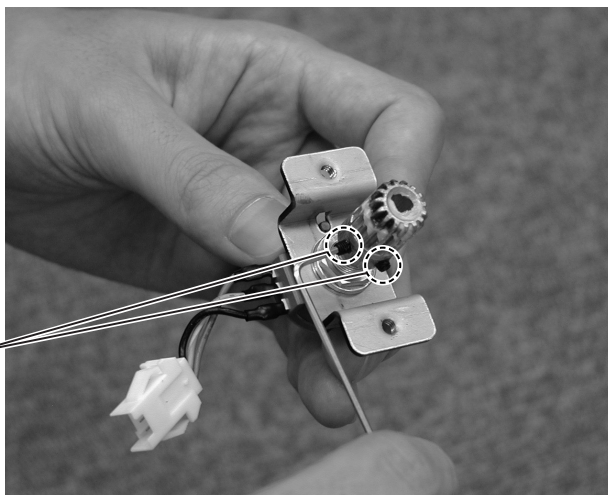


FIG. 11-3k

-
- 8** 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.
-
- 9** 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.
-
- 10** 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.
-
- 11** If the lead wire on the end of the wire terminal is less than five millimeters use wire strippers or cutters to peel back the covering.
-
- 12** Pass the wire through each of the heat shrink tubes.
-
- 13** Solder the wire terminal to the replacement volume. Use the wiring diagram to make sure you don't solder in the wrong place.
-
- 14** Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area.
-
- 15** Attach the gears and bracket to the volume.
-
- 16** Connect the connector.
-
- 17** 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).
-
- 18** Fix the bracket in place with the two screws.
-
- 19** Reattach the Gun Cover and the muzzle.
-
- 20** Reattach the Control Unit to the cabinet.
-
- 21** Turn on the power and use the calibration screen to alter the volume values.

11-4 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 11-1).

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. 11-4a

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



FIG. 11-4b

- 4** 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. 11-4c

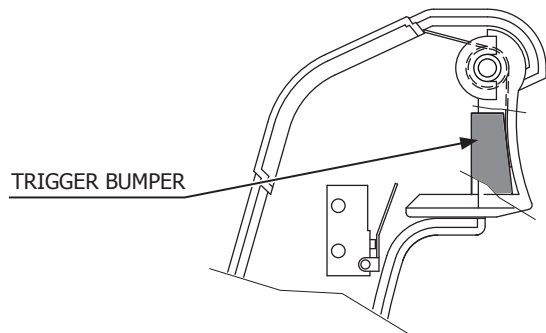


FIG. 11-4d

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

MIRCOSWITCH
601-11823



FIG. 11-4e

- 6** 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.
- 7** Use the soldering iron to remove the wire soldered to the microswitch terminal.
- 8** Pass the wire through each of the heat shrink tubes.
- 9** 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.

10 Use the industrial dryer to apply heat and attach the heat shrink tubing to the soldered area.

11 Insert the microswitch into the left grip and attach it.

12 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.

13 Reattach the Control Unit to the cabinet.

14 Turn on the power and use the input test screen in GAME TEST Mode to check the operation of the trigger.

11-5 GREASING

STOP IMPORTANT

- 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 11-1 & 11-2.)

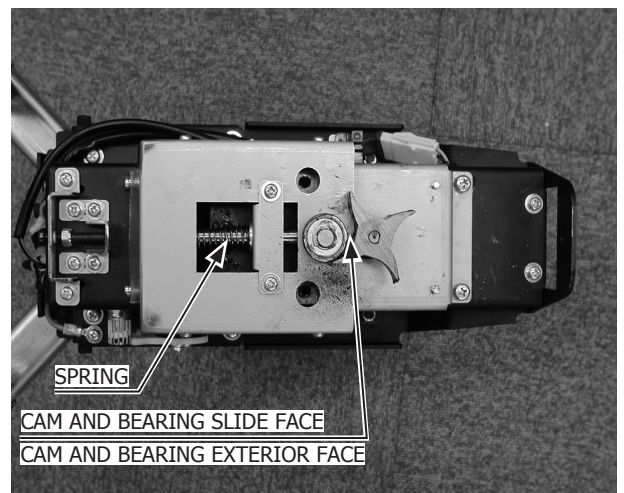


FIG. 11-5a

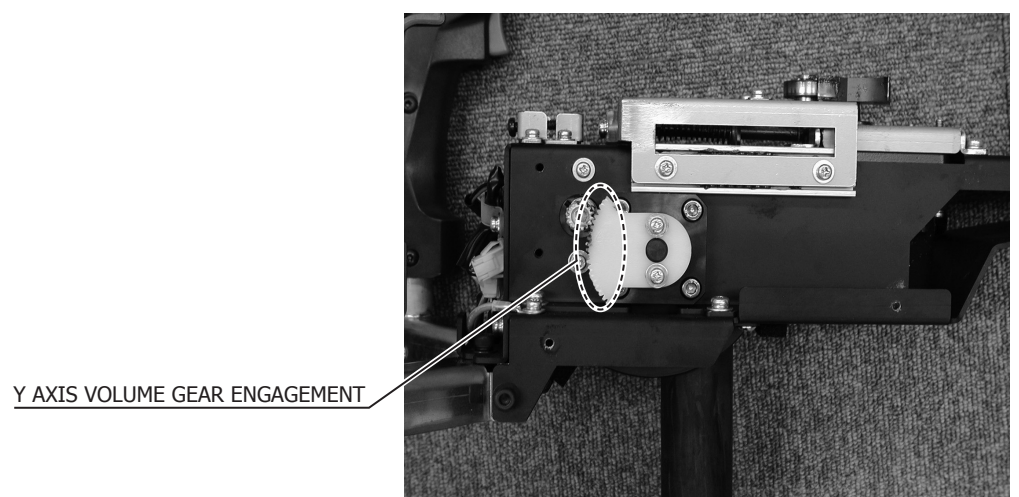


FIG. 11-5b

X AXIS VOLUME GEAR ENGAGEMENT

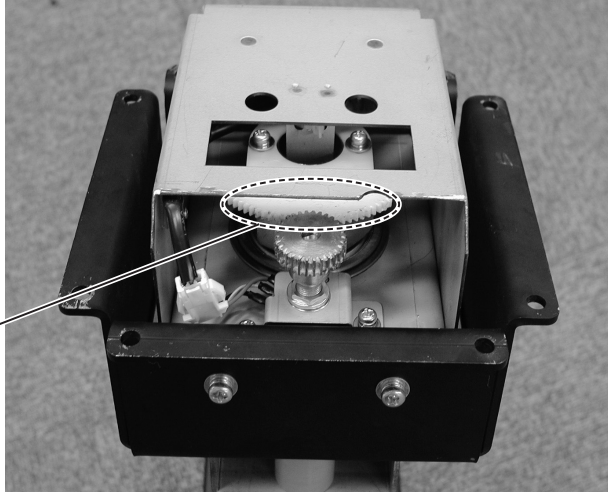


FIG. 11-5c

SLIDE RAIL SLIDE PART

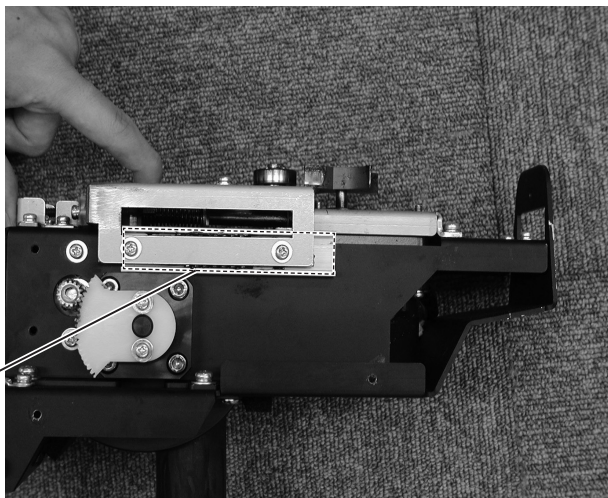


FIG. 11-5d

11-6 ADJUSTMENT OF VIBRATION NOISE

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

- 1 Turn off the power and remove the Control Unit. (See 11-1.)
- 2 Remove the muzzle and Gun Cover. (See 11-2.)
- 3 Loosen the four screws holding the vibration pack stopper (hereafter “stopper”) in place.

SCREW (4)
M4x8, w/flat & spring washers

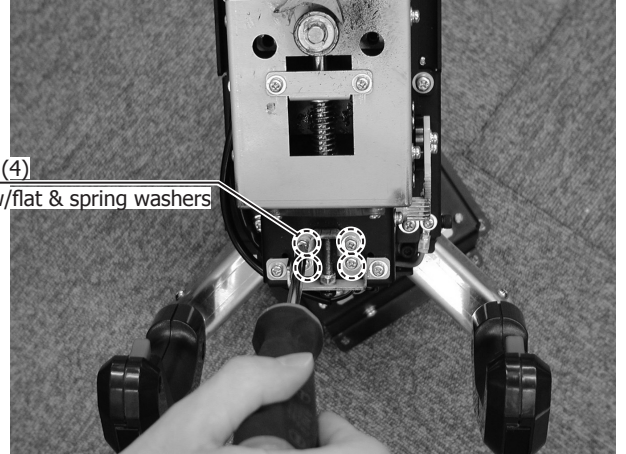


FIG. 11-6a

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

SCREW (1)
M5x35, w/flat & spring washers

U-NUT (1)
M5

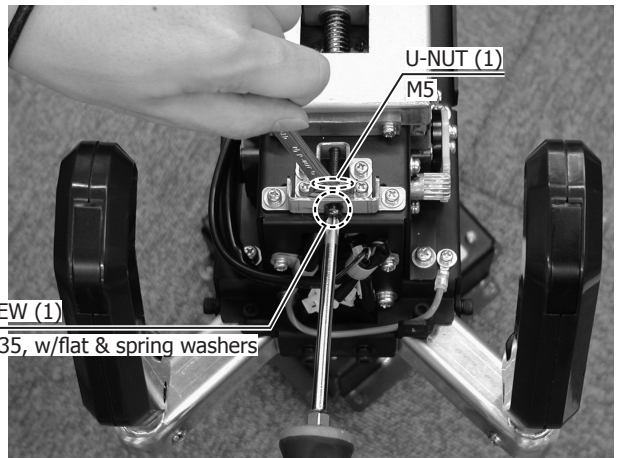


FIG. 11-6b

- 5 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 step 4 of this process.

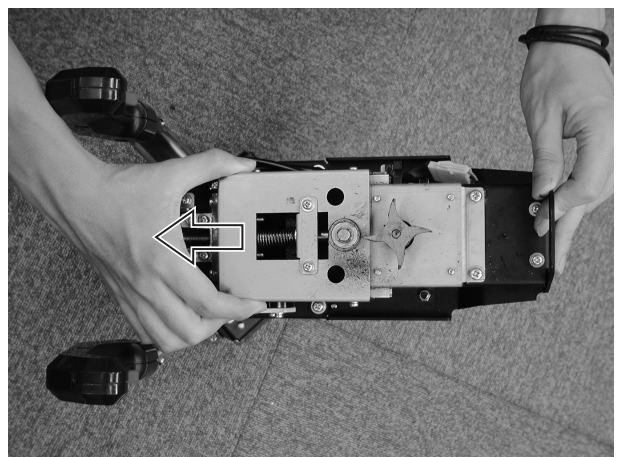


FIG. 11-6c

6 Tighten the four screws fixed the stopper in place.

7 Fix the screw and tighten the U nut.

12 COIN SELECTOR

Handling the Coin Jam

If the coin is not rejected when the REJECT button is pressed, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector correctly functions.

Cleaning the Coin Selector

STOP IMPORTANT

- Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- Never apply machine oil, etc. to the Coin Selector.
- After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the selector correctly functions.

The Coin Selector should be cleaned once every 3 months.
When cleaning, follow the procedure below:

- 1 Turn the power for the machine OFF. Open the coin chute door.
- 2 Remove the Coin Selector from the coin chute door.
- 3 Open the gate and dust off by using a soft brush (made of wool, etc.).

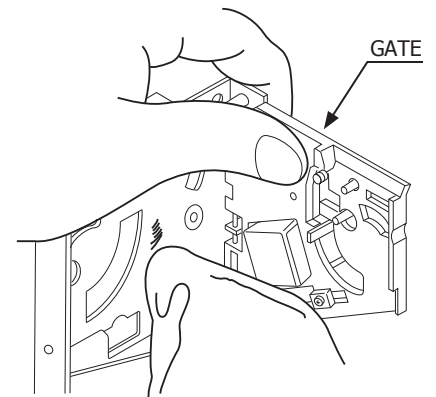


FIG. 12a

4 Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.

5 Remove the CRADLE.
When removing the retaining ring (E ring), be very careful so as not to bend the rotary shaft.

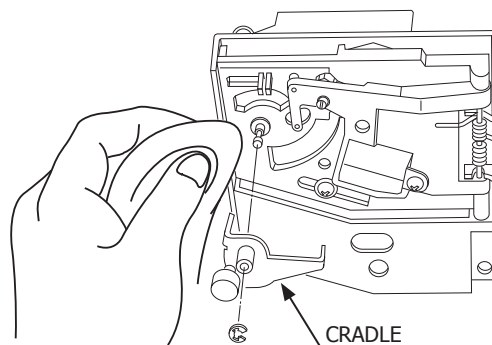


FIG. 12b

6 Remove stain from the rotary shaft and shaft receiving portions by wiping off with a soft cloth, etc.

7 After wiping off as per previous step, further apply a dry cloth, etc. to cause the Coin Selector to dry completely.

Coin Insertion Test

Once every month, when performing the Coin SW Test, simultaneously check the following:

- Does the Coin Meter count satisfactorily?
- Does the coin drop into the cashbox correctly?
- Is the coin rejected when inserted while keeping the REJECT Button pressed down?

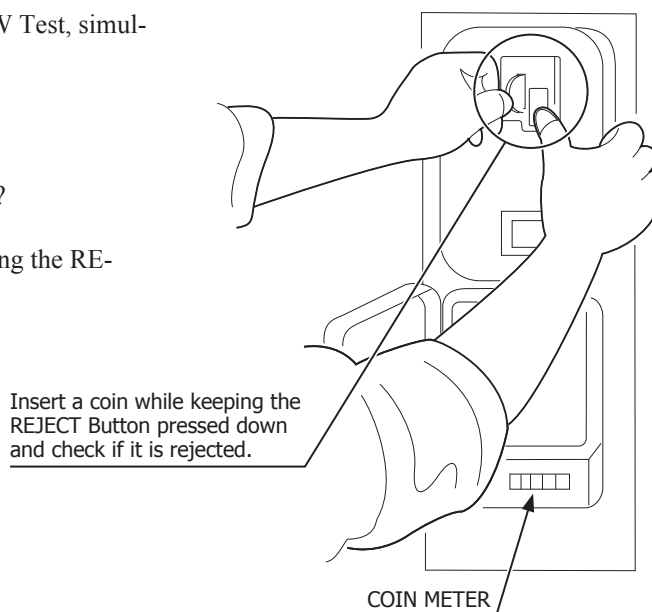


FIG. 12c

1.3. PRICE OF PLAY SETTINGS EURO

Price	Bonus	D/L Switch 1				
		1	2	3	4	5
1 10¢	50¢ = 5 plays	OFF	OFF	OFF	OFF	OFF
2 10¢	50¢ = 6 plays @ 8.33p per play	ON	OFF	OFF	OFF	OFF
3 20¢	50¢ = 2.5 plays	OFF	ON	OFF	OFF	OFF
4 20¢	50¢ = 3 plays @ 16.66¢ per play	ON	ON	OFF	OFF	OFF
5 30¢	50¢ = 1.66 plays	OFF	OFF	ON	OFF	OFF
6 30¢	50¢ = 1.66 plays	ON	OFF	ON	OFF	OFF
7 30¢	50¢ = 2 plays @ 25¢ per play	OFF	ON	ON	OFF	OFF
8 30¢	50¢ = 2 plays @ 25¢ per play	ON	ON	ON	OFF	OFF
9 40¢	50¢ = 1.25 plays	OFF	OFF	OFF	ON	OFF
10 40¢	50¢ = 1.25 plays	ON	OFF	OFF	ON	OFF
11 50¢	50¢ = 1 play	OFF	ON	OFF	ON	OFF
12 50¢	50¢ = 1 play	ON	ON	OFF	ON	OFF
13 50¢	50¢ = 1 play	OFF	OFF	ON	ON	OFF
14 60¢	50¢ = 0.83 play	ON	OFF	ON	ON	OFF
15 60¢	50¢ = 0.83 play	OFF	ON	ON	ON	OFF
16 80¢	50¢ = 0.62 play	ON	ON	ON	ON	OFF
17 80¢	€1 = 1.25 plays	OFF	OFF	OFF	OFF	ON
18 €1	2x50¢ = 1 play	ON	OFF	OFF	OFF	ON
19 €1	2x50¢ = 1 play	OFF	ON	OFF	OFF	ON
20 €1	2x50¢ = 1 play	ON	ON	OFF	OFF	ON
21 €1.50	3x50¢ = 1 play	OFF	OFF	ON	OFF	ON
22 €1.50	3x 50¢ = 1 play	ON	OFF	ON	OFF	ON
23 €2	4x 50¢ = 1 play	OFF	ON	ON	OFF	ON
24 €2	4x 50¢ = 1 play	ON	ON	ON	OFF	ON
25 €3	6x50¢ = 1 play	OFF	OFF	OFF	ON	ON
26 €3	6x50¢ = 1 play	ON	OFF	OFF	ON	ON
27 €5	€1 = 0.2 play	OFF	ON	OFF	ON	ON
28 €5	€1 = 0.2 play	ON	ON	OFF	ON	ON
29 €7.50	€5 = 0.66 play	OFF	OFF	ON	ON	ON
30 €7.50	€5 = 0.66 play	ON	OFF	ON	ON	ON
31 €10	€10 = 1 play	OFF	ON	ON	ON	ON
32	Free Play	ON	ON	ON	ON	ON

12a CREDIT BOARD SETTINGS

1.1. VTS CREDIT BOARD OPTION SETTINGS

Country	Setting	Switch 3 Setting						Coin Board Mode Settings Switch 3											
		SW1	SW2	SW3	SW4	SW5	SW6	Coin Validator Programming						C-120/SR3 Only					
		COIN1	COIN2	COIN3	COIN4	COIN5	COIN6	COIN7	COIN8	COIN9	COIN10	COIN11	COIN12						
UK	Coin Controls	OFF	OFF	OFF	OFF		€1	50p new	20p	10p	-	50p old	-	-					
UK	C220 Parallel	ON	OFF	OFF	OFF		€1	50p new	20p	10p	-	50p old	-	€2					
UK	Coin Controls	ON	OFF	OFF	OFF		€1	50p new	20p	10p	-	€2	-	50p old					
UK	C220 Binary	OFF	ON	OFF	OFF		€1	50p new	20p	10p	-	€2	-	50p old					
UK	Coin Controls	ON	ON	OFF	OFF		€1	50p new	20p	10p	-	€2	-	50p old					
UK	SR3 Parallel	ON	ON	OFF	OFF		€1	50p new	20p	10p	-	€2	-	50p old					
UK	Coin Controls	OFF	OFF	ON	OFF		€2	€1	50p new	20p	10p	-	-	50p old					
Euro	SR3 Parallel	ON	OFF	ON	OFF		€2	€1	50p new	20p	10p	-	-	50p old					
UK	Mars ME/MS 111 Parallel	ON	OFF	ON	OFF		€1	€2	20p	10p	50p new	50p old							
UK	NRI Parallel	OFF	ON	ON	OFF		10p	20p	50p	€1	€2	-	-						
Belgium	Parallel	ON	ON	ON	OFF		-	50BFR	20BFR	5BFR									
Holland	Parallel	OFF	OFF	OFF	ON		-	5NLG	2.5NLG	1NLG									
Austria	SR3 Parallel	ON	OFF	OFF	ON		20Sch	10Sch	5Sch	1Sch									
Spain	Coin Controls	OFF	ON	OFF	ON		500Pta	200Pta	100Pta	50Pta	25Pta	200Pt old	50Pta old	25Pta old					
Spain	C220 Binary	ON	ON	OFF	ON		500Pta	200Pta	100Pta	50Pta	25Pta	200Pt old	50Pta old	25Pta old					
Spain	SR3/NRI Parallel	ON	ON	OFF	ON		500Pta	200Pta	100Pta	50Pta	25Pta	200Pt old	50Pta old	25Pta old					
Spain	Coin Controls	OFF	OFF	ON	ON		100Pta	50Pta new	-	25Pta new	-	50Pta old	-	25Pta old					
Spain	C220 Parallel	ON	OFF	ON	ON		100Pta	50Pta new	-	25Pta new	-	50Pta old	-	25Pta old					
Portugal	Parallel	ON	OFF	ON	ON		200ES	100ES	50ES	-	-	-	-	-					
Euro	TBA	ON	OFF	ON	ON		€1	50¢	50ES	-	-	-	-	-					
							TBA												
							TBA												
	Channels						ON	OFF	Direct Mode										
							ON	ON	2 channel Mode										

Note: These switch settings are under constant review and may change due to world currency updates.

- Set SW 1 according to the option settings found in the relevant Price of Play Settings Table on the following pages.
- For Germany (DM), France (Fr) & Switzerland (SFr), use the appropriate existing setting shown above (from another country) that matches the coin ratios programmed into your coin mech.
- Set SW 3 on the VTS /Excoel board as shown in the table above corresponding to the country required.

Please Note
The credit board automatically sets the validator for parallel and binary operation through an output on pin 8 of the 17 way pinstrip. For the feature to work it is necessary for the validator interconnecting cable to include a wire at this position

12a CREDIT BOARD SETTINGS

1.2. PRICE OF PLAY SETTINGS UK

	Price	Bonus					DL Switch 1				
							1	2	3	4	5
1	10p	50p = 5 plays	£1 = 10 plays	£2 = 20 plays	£2 = 24 plays @ 8.33p per play	OFF	OFF	OFF	OFF	OFF	
2	10p	50p = 6 plays @ 8.33p per play	£1 = 12 plays @ 8.33p per play	£2 = 24 plays @ 8.33p per play	£2 = 24 plays @ 8.33p per play	ON	OFF	OFF	OFF	OFF	
3	20p	50p = 2.5 plays	£1 = 5 plays	£2 = 10 plays	£2 = 10 plays	OFF	ON	OFF	OFF	OFF	
4	20p	50p = 3 plays @ 16.66p per play	£1 = 6 plays @ 16.66p per play	£2 = 12 plays @ 16.66p per play	£2 = 12 plays @ 16.66p per play	ON	ON	OFF	OFF	OFF	
5	30p	50p = 1.66 plays	£1 = 3.33 plays	£2 = 6.66 plays	£2 = 6.66 plays	OFF	OFF	ON	OFF	OFF	
6	30p	50p = 1.66 plays	£1 = 4 plays @ 25p per play	£2 = 8 plays @ 25p per play	£2 = 8 plays @ 25p per play	ON	OFF	ON	OFF	OFF	
7	30p	50p = 2 plays @ 25p per play	£1 = 4 plays @ 25p per play	£2 = 8 plays @ 25p per play	£2 = 8 plays @ 25p per play	OFF	ON	ON	OFF	OFF	
8	30p	50p = 2 plays @ 25p per play	£1 = 3 plays @ 33.33p per play	£2 = 6 plays @ 33.33p per play	£2 = 6 plays @ 33.33p per play	ON	ON	ON	OFF	OFF	
9	40p	50p = 1.25 plays	£1 = 2.5 plays	£2 = 5 plays	£2 = 5 plays	OFF	OFF	OFF	ON	OFF	
10	40p	50p = 1.25 plays	£1 = 3 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play	ON	OFF	OFF	ON	OFF	
11	50p	50p = 1 play	£1 = 2 plays	£2 = 4 plays	£2 = 4 plays	OFF	ON	OFF	ON	OFF	
12	50p	50p = 1 play	£1 = 3 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play	ON	ON	OFF	ON	OFF	
13	50p	50p = 1 play	£1 = 2 plays	£2 = 5 plays @ 40p per play	£2 = 5 plays @ 40p per play	OFF	OFF	ON	ON	OFF	
14	60p	50p = 0.83 play	£1 = 1.66 plays	£2 = 3.33 plays	£2 = 3.33 plays	ON	OFF	ON	ON	OFF	
15	60p	50p = 0.83 play	£1 = 2 plays @ 50p per play	£2 = 4 plays @ 50p per play	£2 = 4 plays @ 50p per play	OFF	ON	ON	ON	OFF	
16	80p	50p = 0.62 play	£1 = 1.25 plays	£2 = 2.5 plays	£2 = 2.5 plays	ON	ON	ON	ON	OFF	
17	80p	£1 = 1.25 plays	£1.50 = 2 plays @ 75p per play	£2 = 2.5 plays	£2 = 2.5 plays	OFF	OFF	OFF	OFF	ON	
18	£1	2x50p = 1 play	£1 = 1 play	£2 = 2 plays	£2 = 2 plays	ON	OFF	OFF	OFF	ON	
19	£1	2x50p = 1 play	£1 = 1 play	£2 = 3 plays @ 66.6p per play	£2 = 3 plays @ 66.6p per play	OFF	ON	OFF	OFF	ON	
20	£1	2x50p = 1 play	£2 = 2 plays	£4 = 5 plays @ 80p per play	£4 = 5 plays @ 80p per play	ON	ON	OFF	OFF	ON	
21	£1.50	3x50p = 1 play	£1 = 0.66 plays	£3 = 2 plays	£3 = 2 plays	OFF	OFF	ON	OFF	ON	
22	£1.50	3x 50p = 1 play	£1 = 0.66 plays	£2 = 2 plays @ £1 per play	£2 = 2 plays @ £1 per play	ON	OFF	ON	OFF	ON	
23	£2	4x 50p = 1 play	£1 = 0.5 play	£2 = 1 play	£2 = 1 play	OFF	ON	ON	OFF	ON	
24	£2	4x 50p = 1 play	£1 = 0.5 play	£5 = 3 plays @ £1.66 per play	£5 = 3 plays @ £1.66 per play	ON	ON	ON	OFF	ON	
25	£3	6x50p = 1 play	£1.50 = 0.5 play	£3 = 1 play	£3 = 1 play	OFF	OFF	OFF	ON	ON	
26	£3	6x50p = 1 play	£1.50 = 0.5 play	£5 = 2 plays @ £2.50 per play	£5 = 2 plays @ £2.50 per play	ON	OFF	OFF	ON	ON	
27	£5	£1 = 0.2 play	£5 = 1 play	£10 = 2 plays	£10 = 2 plays	OFF	ON	OFF	ON	ON	
28	£5	£1 = 0.2 play	£5 = 1 play	£10 = 3 plays @ £3.33p per play	£10 = 3 plays @ £3.33p per play	ON	ON	OFF	ON	ON	
29	£7.50	£5 = 0.66 play	£10 = 1.33 plays	£15 = 2 plays	£15 = 2 plays	OFF	OFF	ON	ON	ON	
30	£7.50	£5 = 0.66 play	£10 = 1.33 plays	£10 = 2 plays @ £5 per play	£10 = 2 plays @ £5 per play	ON	OFF	ON	ON	ON	
31	£10	£10 = 1 play	£20 = 2 play	£30 = 3 play	£30 = 3 play	OFF	ON	ON	ON	ON	
32			Free Play			ON	ON	ON	ON	ON	

13 REPLACING THE FLUORESCENT LAMPS

⚠ 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.
- You may get burned by a hot fluorescent lamp or other lamps. Pay full attention to the lamps when performing the work.
- There is the danger of short circuits or smoke generation due to deterioration of insulation in lighting fixtures resulting from age deterioration. Check for anomalies such as the following: Does it smell like something is burning? Is there socket discoloration? Are any lamps being replaced frequently? Do lamps not go on properly?

⚠ CAUTION

- Be careful when handling the plastic parts. Failure to observe this may cause injury or damage due to fragments, etc.
- To perform the operation safely and accurately you must use a safe, steady footstool or step. Working without this may lead to a fall and possible injury.
- When performing the fluorescent lamp exchange, 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.



FIG. 13

Replacing the Billboard Box Florescent Lamp

- 1 Turn off the power.
- 2 Use a stool or steps when working on the top of the cabinet. Remove the six screws from the top of the billboard box.

SCREW (6)
M4x35, w/flat & spring washers

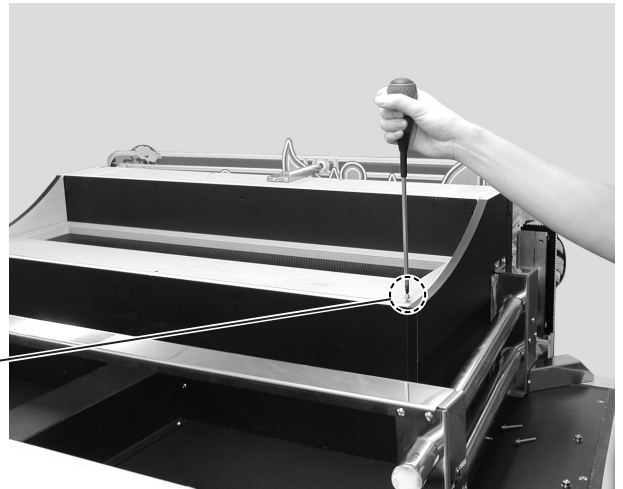


FIG. 13a

- 3 Remove the FL box door from the top of the billboard box.

FL BOX DOOR

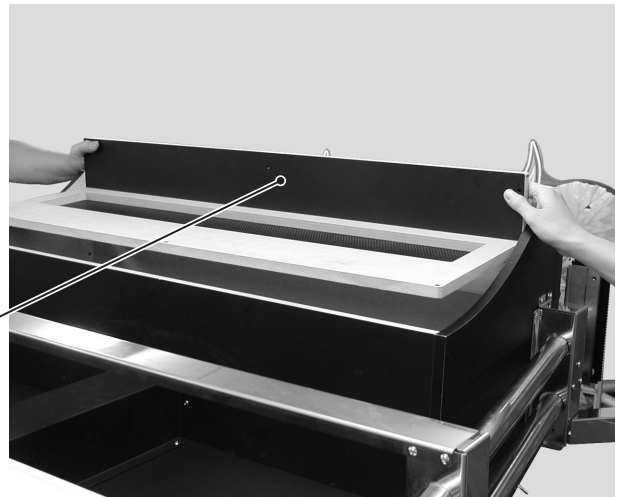


FIG. 13b

- 4 Change the florescent lamp.

FLORESCENT LAMP 32W
390-5251-32-01

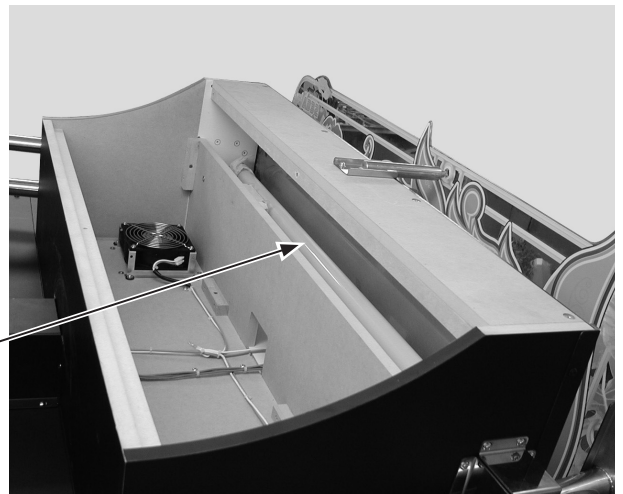


FIG. 13c

Replacing the Fluorescent Bulbs

1 Turn off the power.

2 Support the lamp acrylic bracket on the side you want to change and remove the four truss screws.
Remove the supported lamp acrylic bracket.

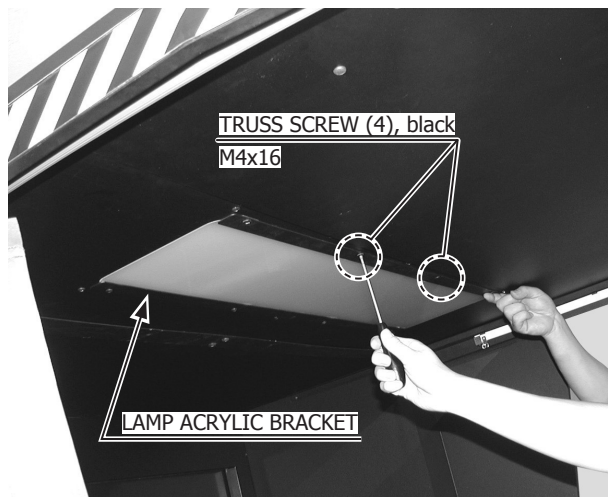


FIG. 13d

3 Remove the lamp acrylic.



FIG. 13e

4 Replace the fluorescent bulb.

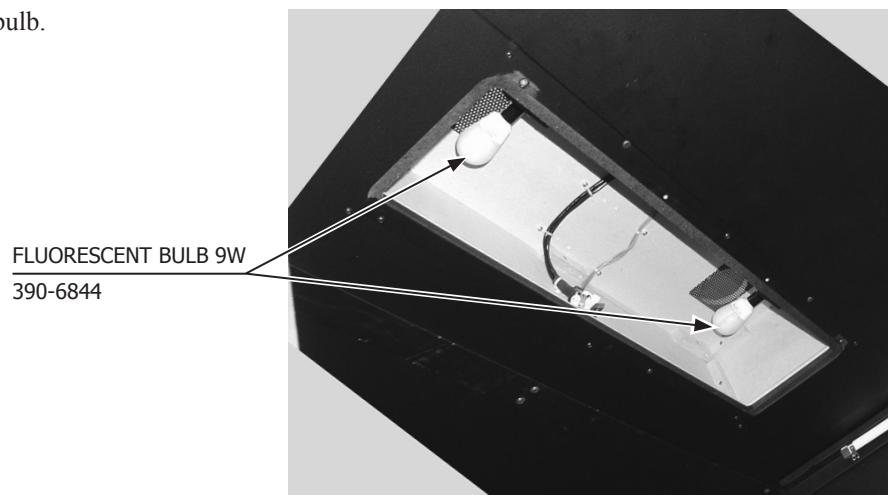


FIG. 13f

14 PERIODIC INSPECTION

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.

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.

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 14 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	10-1
	Check screen adjustment	1 month	6 [14], 10-2, 10-3
	Exchange of lamp unit	When message is displayed	10-4, 10-5
CONTROL UNIT	Cleaning	As appropriate	Chapter 3
	Inspection of volume	1 month	9-3a
	Greasing	3 months	11-5
COIN SELECTOR	Inspection of coin switch	1 month	Service manual, Chapter 4
	Coin insertion test	1 month	Chapter 12
	Coin Selector cleaning	3 months	Chapter 12
GAME BOARD	Individual tests	1 month	Service manual, Chapter 4
	Check of settings	1 month	9-3d
FLUORESCENT LAMP & LAMPS	Inspection of lighting fixtures	As appropriate	Chapter 13
ELECTRICAL/ELECTRONIC PARTS	Inspection	As appropriate	See above.
POWER CABLE	Inspection, Cleaning	1 year	See above.
CABINET INTERIOR	Cleaning	1 year	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.

15 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.

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 15 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. (See chapter 10.)
The projector does not project an image.	The projector lamp is dead.	Replace the lamp. (See SONY 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 11-2 & 11-3.) 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 11-4.) Microswitch: 601-6729-01
	The volume gears are not properly engaging.	Adjust the engagement. (See 11-2 & 11-3.)
	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 11-5.)
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 11-6.)
The fluorescent lights don't come on.	The fluorescent light is dead.	Exchange the fluorescent light. (See chapter 13.)
The lights in the cabinet don't come on.	The fluorescent bulbs are dead.	Exchange the fluorescent bulbs. (See chapter 13.)

CIRCUIT PROTECTOR

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

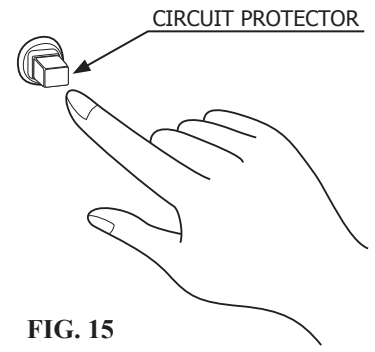


FIG. 15

16 GAME BOARD

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.

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.

STOP IMPORTANT

- 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 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.

16-1 HOW TO REMOVE GAME BOARD

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.

1 Turn off the power.

2 Remove the anti-release screw.

TRUSS SCREW (1), black
M4x40

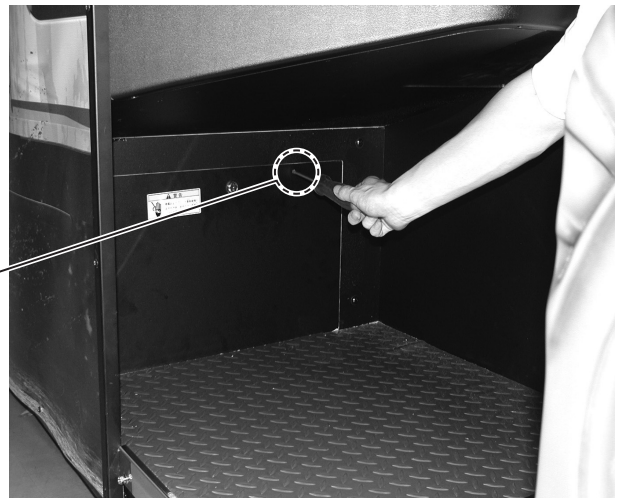


FIG. 16-1a

3 Unlock with the master key and remove the front door PCB.



FIG. 16-1b

4 Disconnect all of the connectors connected to the LINDBERGH.



FIG. 16-1c

5 Remove the cord clamp.

Remove the cord clamp.



FIG. 16-1d

6 Remove the two screws.

SCREW (2)
M5x35, w/flat & spring washers, large flat washer used

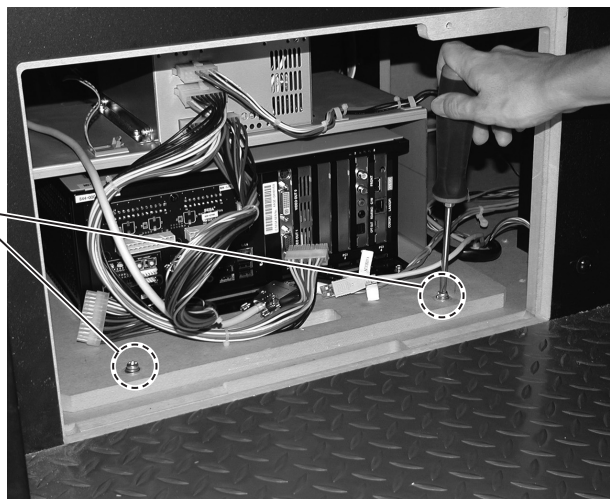


FIG. 16-1e

7 Pull the PCB Board (wooden tray) halfway out.
Be careful not to pull or trap any wires.

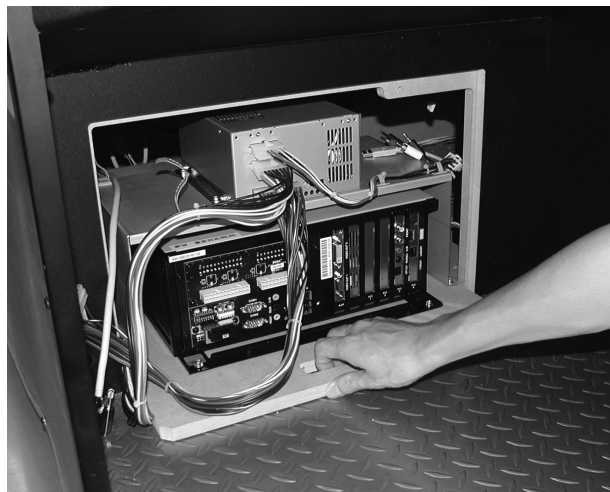


FIG. 16-1f

- 8 Remove the connector on the back of the LIND-BERGH.

Disconnect the connector.

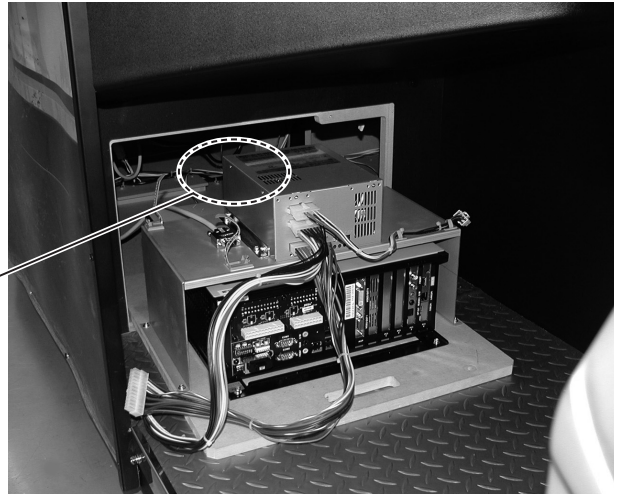


FIG. 16-1g

- 9 Remove the PCB board totally from the cabinet and place it on a flat, level surface.

- 10 Remove the 4 screws.

SCREW (4)
M4x16, w/flat & spring washers

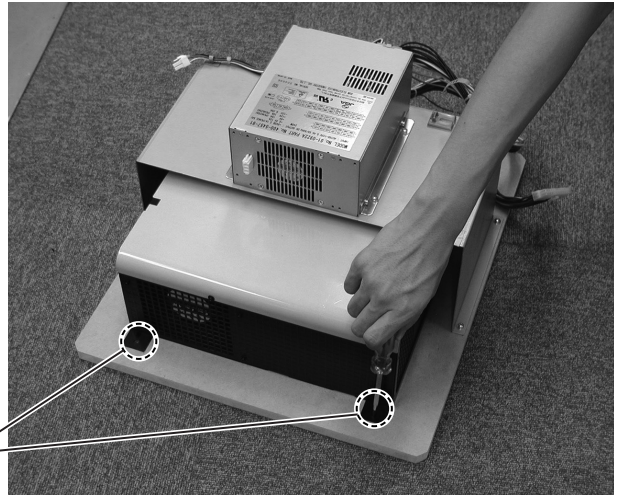


FIG. 16-1h

16-2 COMPOSITION OF THE GAME BOARD

STOP IMPORTANT

- 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)

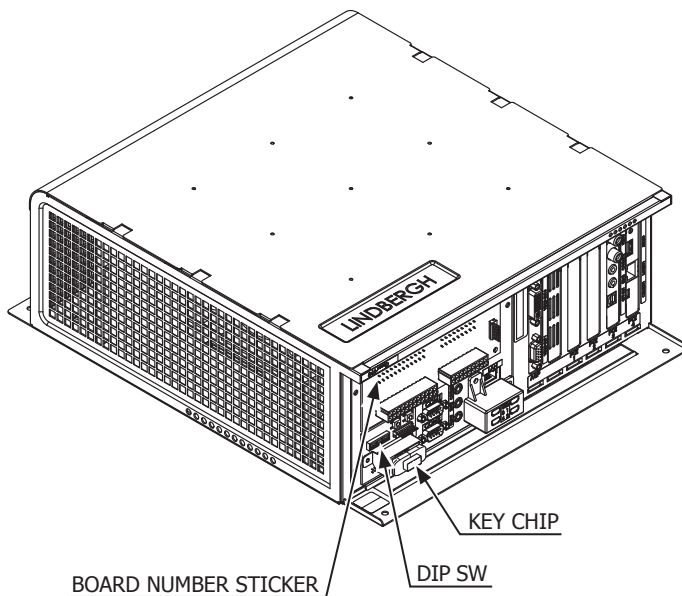


FIG. 16-2a

DIP SW SETTING

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

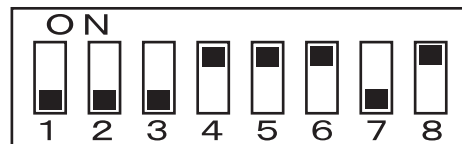


FIG. 16-2b

17 DESIGN RELATED PARTS

For the warning display stickers, refer to Section 1.

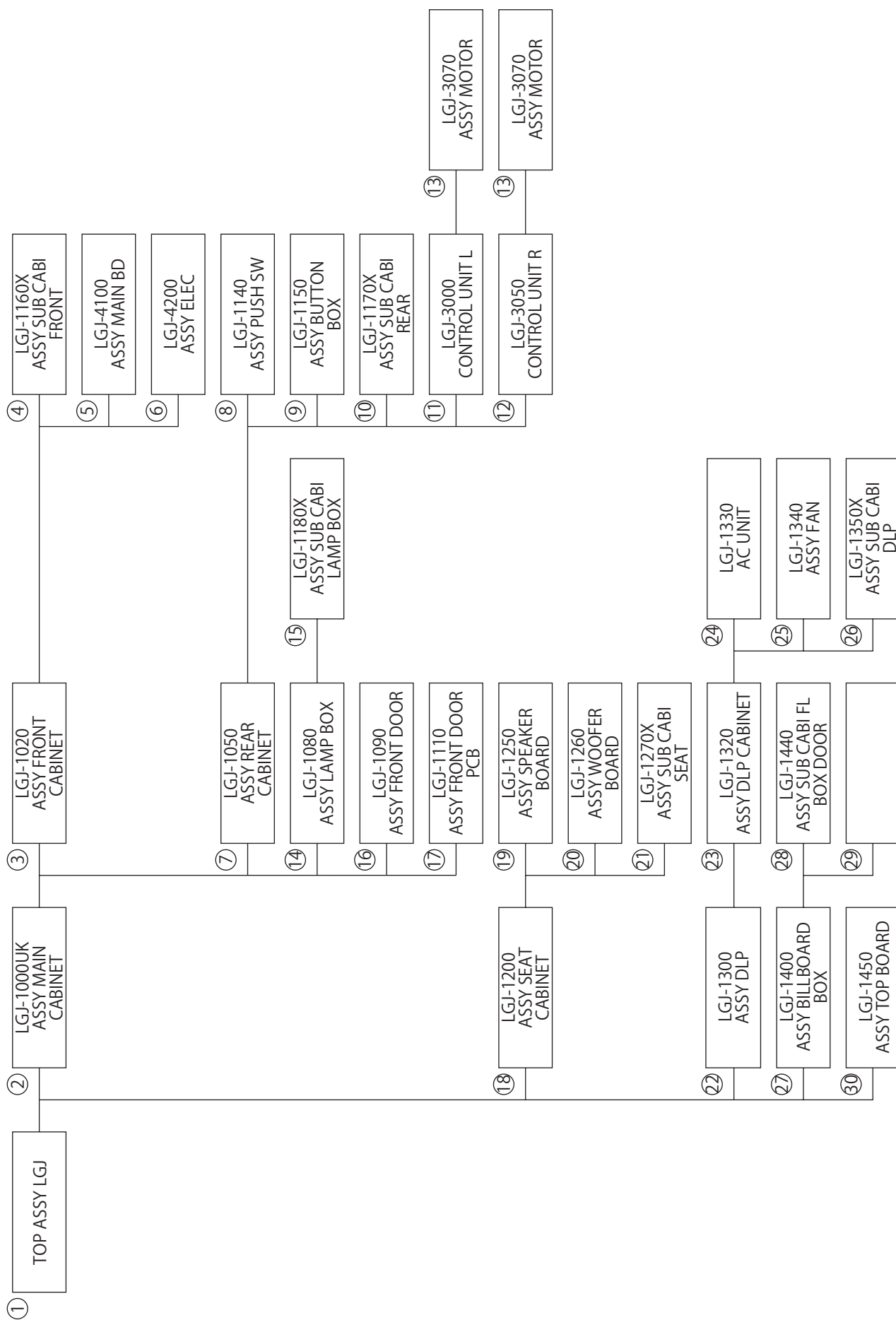
<EXTERIOR>



<INTERIOR>

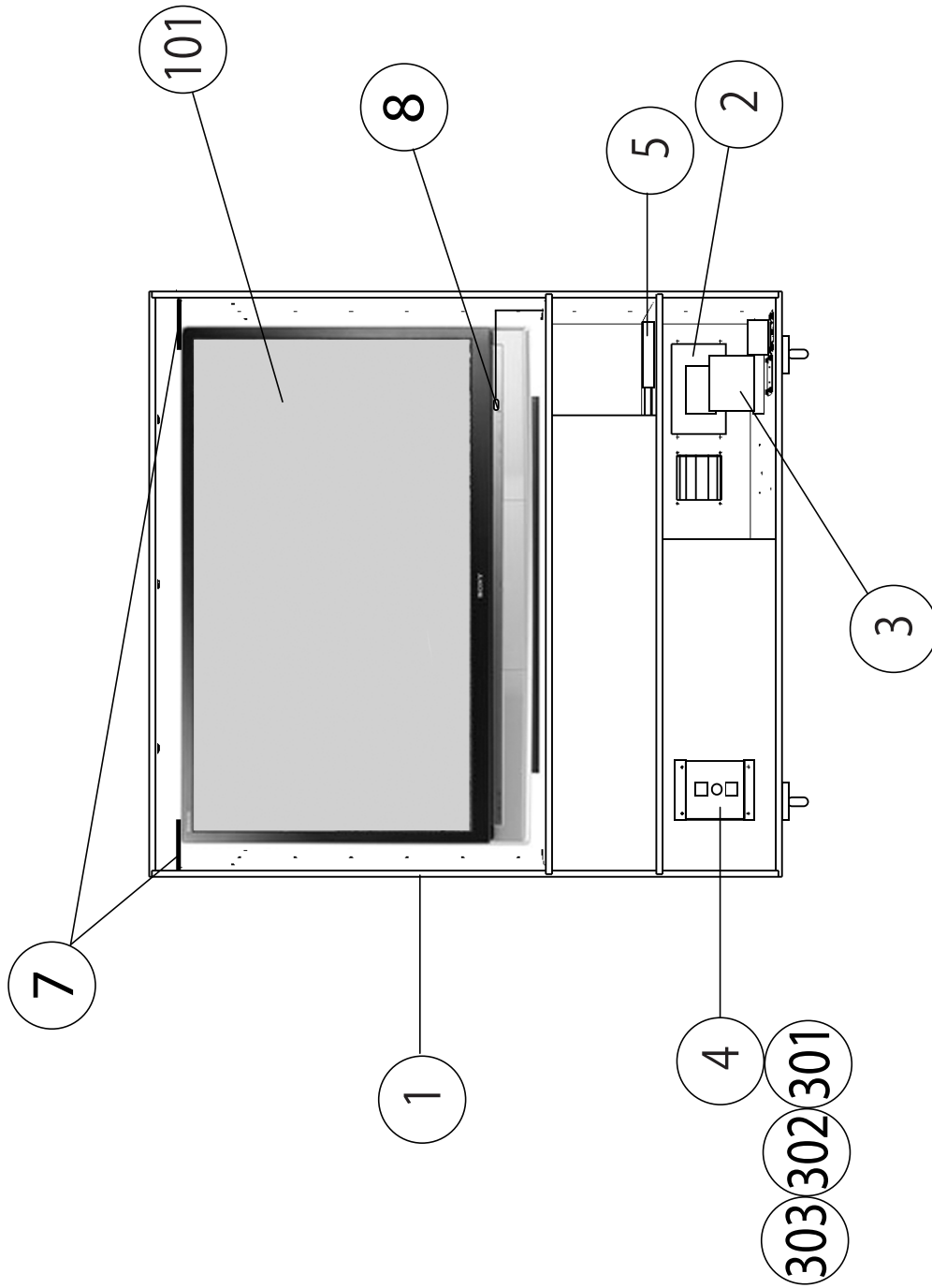


18 PARTS LIST



① TOP ASSY LGJ

(D-1/2)



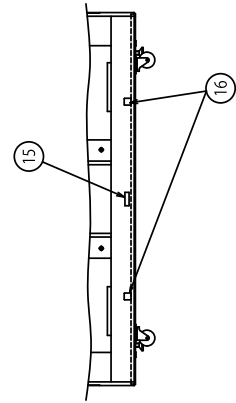
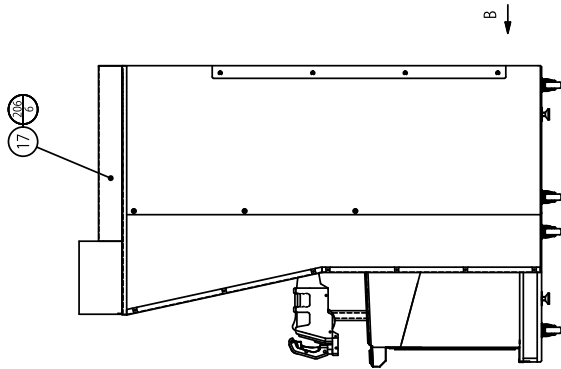
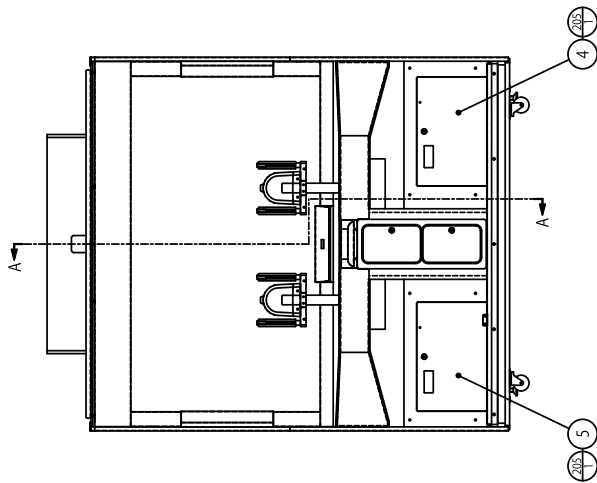
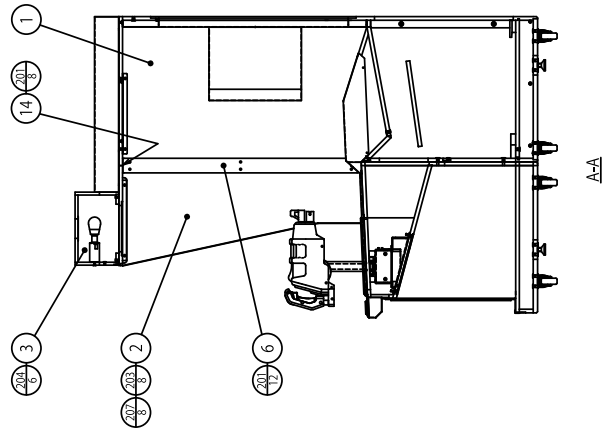
1 TOP ASSY LGJ

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1000UK	ASSY MAIN CABINET	
2	LGJ-1200UK	ASSY SEAT CABINET	
3	LGJ-1300UK	ASSY DLP	
4	LGJ-1400UK	ASSY BILLBOARD BOX	
5	LGJ-1450UK	ASSY TOP BOARD	
6	LGJ-0001UK	DLP JOINT UPPER	
7	LGJ-0002UK	DLP JOINT SIDE	
8	LGJ-0004UK	MAT BRACKET L	
9	LGJ-0005UK	MAT BRACKET R	
10	LGJ-0006UK	REAR HARNESS COVER	
11	LGJ-0007UK	HARNESS COVER S	
16	421-7988-91UK	STICKER SERIAL NUMBER UK	
20	LGJ-1007XUK	SIDE CLOTH L	
21	LGJ-1008XUK	SIDE CLOTH R	
22	LGJ-1454UK	ENTRANCE TOP L	
23	LGJ-1455UK	ENTRANCE TOP R	
28	LGJ-1002XUK	CLOTH BRACKET	
29	LGJ-1003UK	CLOTH BRACKET AL	
30	LGJ-1004UK	CLOTH BRACKET AR	
31	LGJ-1005UK	CLOTH BRACKET BL	
32	LGJ-1302XUK	BRKT DLP CURTAIN	
201	030-000620-WB	HEX BLT W/FS BLK M6 × 20	
202	000-F00616	M SCR FH M6 × 16	
203	030-000620-WC	HEX BLT W/FS CRM M6 × 20	
204	000-P00416-W	M SCR PH W/FS M4 × 16	
205	000-T00408-0C	M SCR TH CRM M4 × 8	
206	000-T00430-0B	M SCR TH BLK M4 × 30	
207	030-000630-SB	HEX BLT BLK W/S M6 × 30	
208	000-T00416-0B	M SCR TH BLK M4 × 16	
209	068-652016-0B	FLT WSHR BLK 6.5-20 × 1.6	
401	420-6988UK	OWNERS MANUAL LGJ DX ENG	
402	420-6921-01	SERVICE MANUAL LBG ENG	
406	600-6729-01	AC CABLE CONNECT TYPE 15A W/E	
406	600-6619-02	AC CABLE CONNECT TYPE FOR UK	
407	540-0006-01	WRENCH M4 TMP SCR	
408	540-0007-01	WRENCH M5 TMP SCR	

② ASSY MAIN CABINET (LGJ-1000)

(D-1/2)



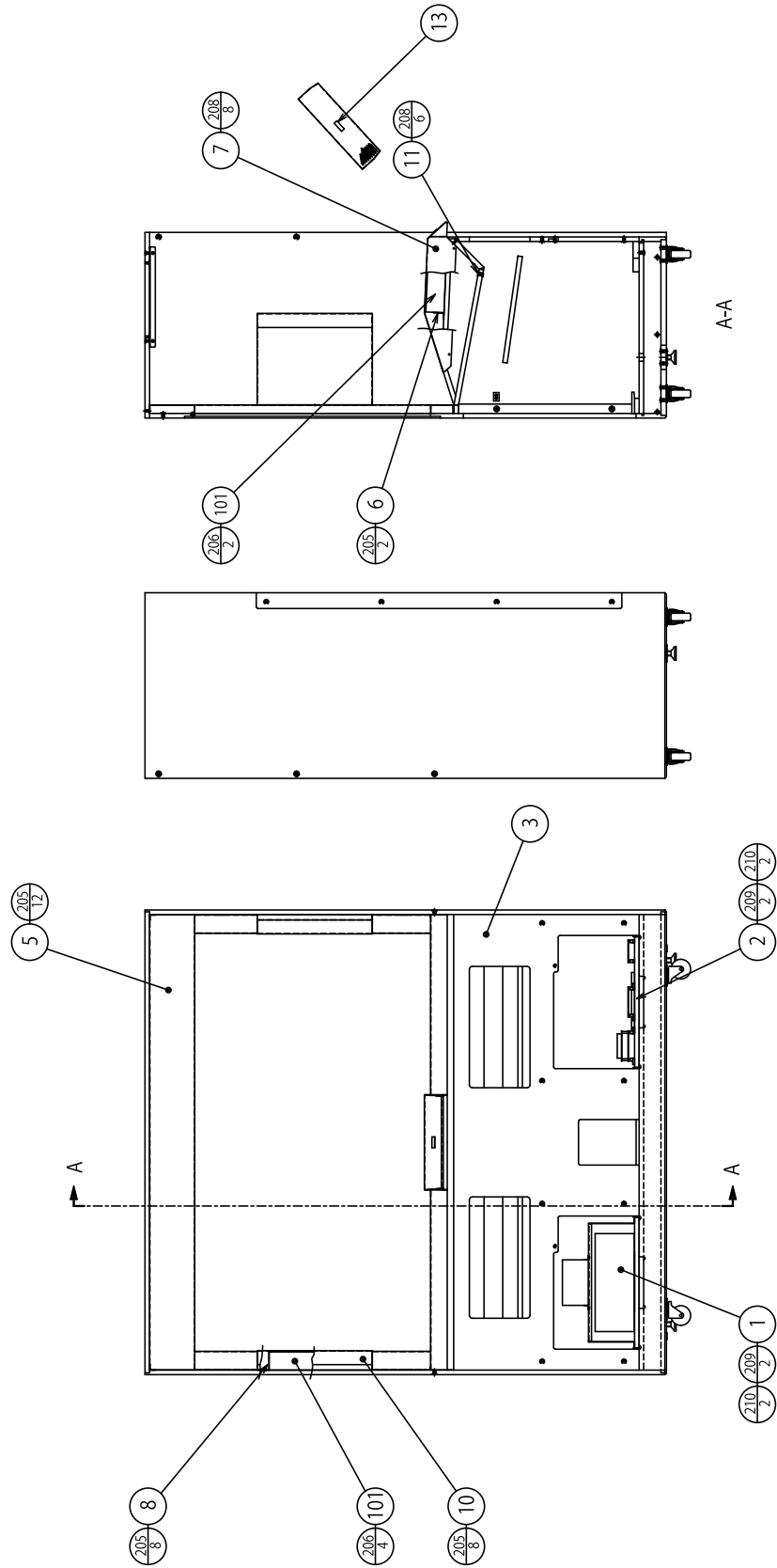
② ASSY MAIN CABINET (LGJ-1000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1020UK	ASSY FRONT CABINET	
2	LGJ-1050UK	ASSY REAR CABINET	
3	LGJ-1080UK	ASSY LAMP BOX	
4	LGJ-1090UK	ASSY FRONT DOOR	
5	LGJ-1110UK	ASSY FRONT DOOR PCB	
6	LGJ-1001UK	CABINET JOINT PLATE	
14	LGJ-1011UK	CABINET JOINT PLATE L	
16	421-7020UK	STICKER CAUTION FORK	
17	LGJ-1031UK	FRONT HARNESS COVER	
201	000-T00616-0B	M SCR TH BLK M6 × 16	
203	030-000640-SB	HEX BLT W/S BLK M6 × 40	
204	000-T00430-0B	M SCR TH BLK M4 × 30	
205	000-T00440-0B	M SCR TH BLK M4 × 40	
206	000-P00416-W	M SCR PH W/FS M4 × 16	
207	068-652016-0B	FLT WSHR BLK 6.5-20 × 1.6	
208	050-H00400	HEX NUT M4	
209	060-F00400	FLT WSHR M4	
210	060-S00400	SPR WSHR M4	

3 ASSY FRONT CABINET (LGJ-1020)

(D-1/2)

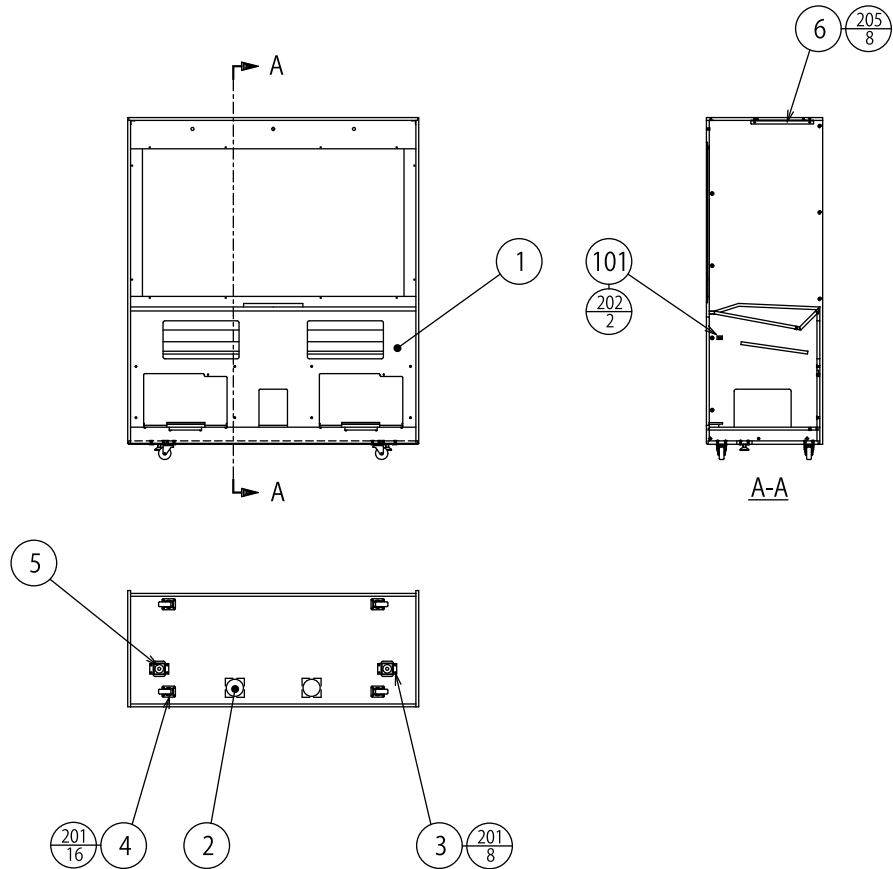


3 ASSY FRONT CABINET (LGJ-1020)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-4100UK	ASSY MAIN BD	
2	LGJ-4200UK	ASSY ELEC	
3	LGJ-1160UK	ASSY SUB CABI FRONT	
5	LGJ-1023UK	MONITOR FRAME	
6	LGJ-1024UK	FRONT SPEAKER BRACKET	
7	LGJ-1026UK	FRONT SPEAKER COVER	
8	LGJ-1027UK	SIDE SPEAKER BRACKET	
10	LGJ-1029UK	SIDE SPEAKER COVER	
11	LGJ-1030UK	DRAIN BRACKET	
13	423-0355	EMBLEM SEGA	
14	LGJ-1035UK	SCREEN COVER	
15	LGJ-1032UK	RED FILTER PLATE	
101	130-5156-02	SPEAKER BOX 8OHM 20W VA1 YL	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	000-P00510-W	M SCR PH W/FS M5 × 10	
208	000-T00416-0B	M SCR TH BLK M4 × 16	
209	000-P00535-W	M SCR PH W/FS M5 × 35	
210	068-552016	FLT WSHR 5.5-20 × 1.6	
211	050-H00400	HEX NUT M4	
212	060-F00400	FLT WSHR M4	
213	060-S00400	SPR WSHR M4	

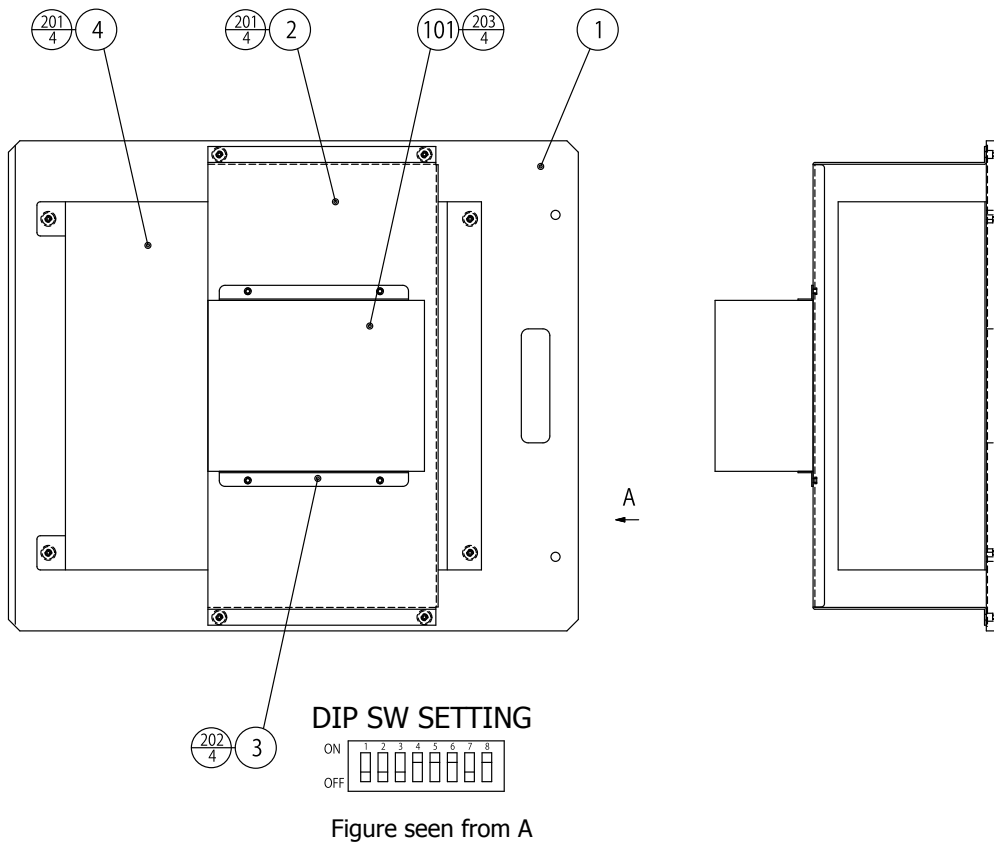
④ ASSY SUB CABI DLP(LGJ-1350UK)



Use the Tucker stop. (8 places; both sides)

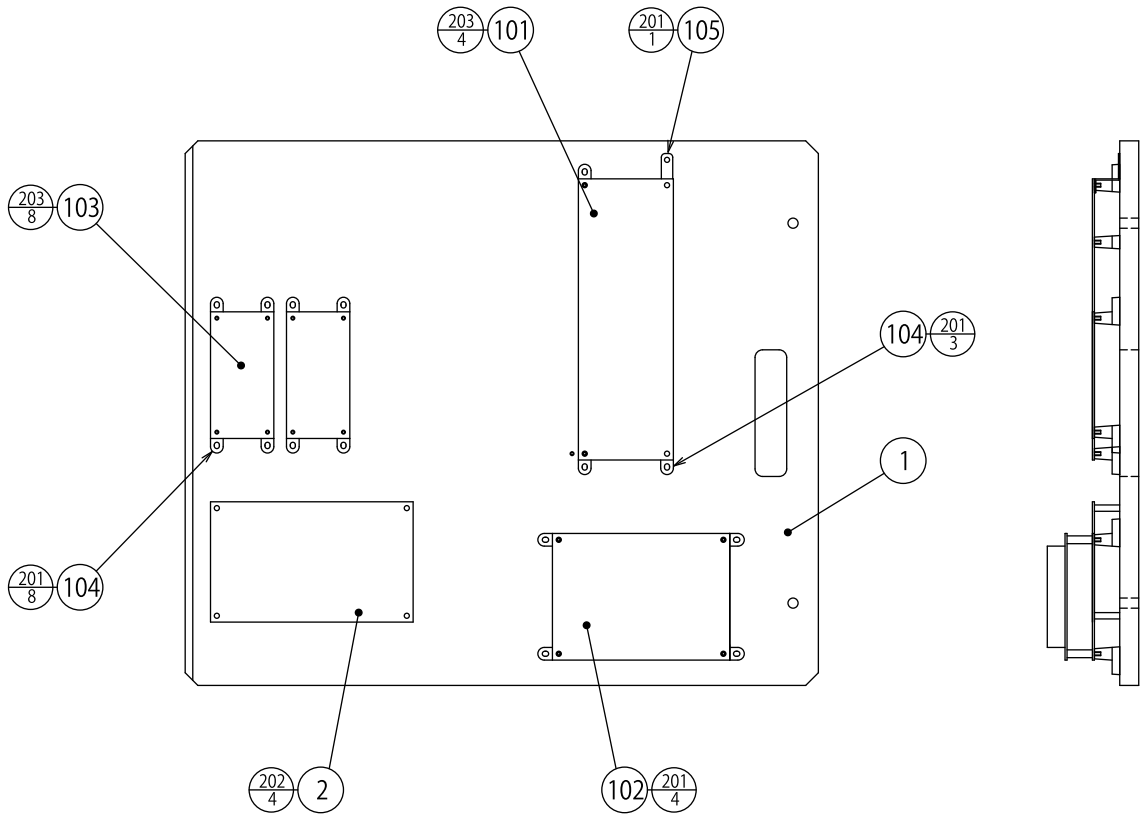
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1351UK	CABINET DLP	
3	LGJ-1163UK	ADJUSTER BRACKET	
4	MA1019	CASTER 75	
5	601-5699UK13-01	LEG ADJUSTER M16X130 1L/NUT	

5 ASSY MAIN BD (LGJ-4100UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-4101XUK	PCB BOARD	<Taiwan, Hong Kong, Singapore, Korea>
2	LGJ-4102UK	SWITCHING BRACKET	
3	HDF-4202UK	BRKT PWR SPLY	
4	844-0001D-91-12	ASSY CASE LBG L 1GB 7800 EXP	
101	400-5457-91UK	SW REGU ATX/JVS	
201	000-P00416-W	M SCR PH W/FS M4 × 16	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-P00308-W	M SCR PH W/FS M3 × 8	
301	LGJ-60001UK	WH DC POWER	
302	600-7360-0500	WH LBG PWR 24P P TO P 0500MM	
303	600-7361-0500	WH LBG PWR 18P P TO P 0500MM	

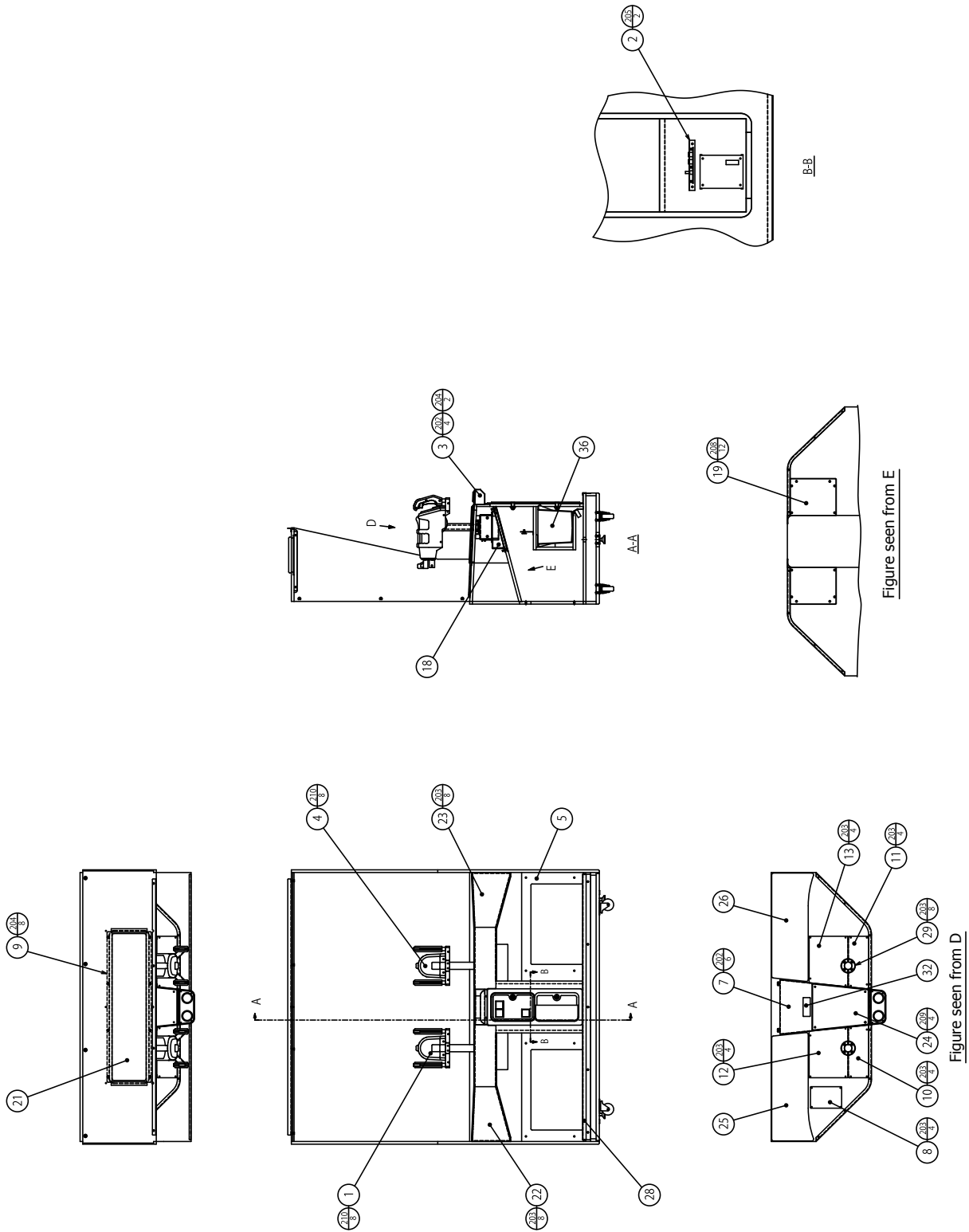
⑥ ASSY ELEC (LGJ-4200)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-4201UK	SWITCHING BOARD	
2	837-14505	I/O CONTROL BD FOR JVS	
101	400-5421-15024W	SW REGU LCA150S-24-XJCM	
102	838-14515-A03	SOUND AMP ANALOG IN W/EXP BD	
103	838-14630	SSR BD G3MB-202P X2	
104	280-6681	L-LOCK LT-320PCG	
105	HDF-4102UK	SW REGU BRKT	
201	011-T03516	TAP SCR TH 3.5 × 16	
202	011-P00320	TAP SCR PH 3 × 20	
203	000-P00308-W	M SCR PH W/FS M3 × 8	
207	011-F00312	TAP SCR #1 FH 3 × 12	
301	LGJ-60002UK	WH AMP POWER	
302	LGJ-60003UK	WH PCB BOARD DC	
303	LGJ-60023UK	WH PCB BOARD AC	

7 ASSY REAR CABINET (LGJ-1050)

(D-1/2)

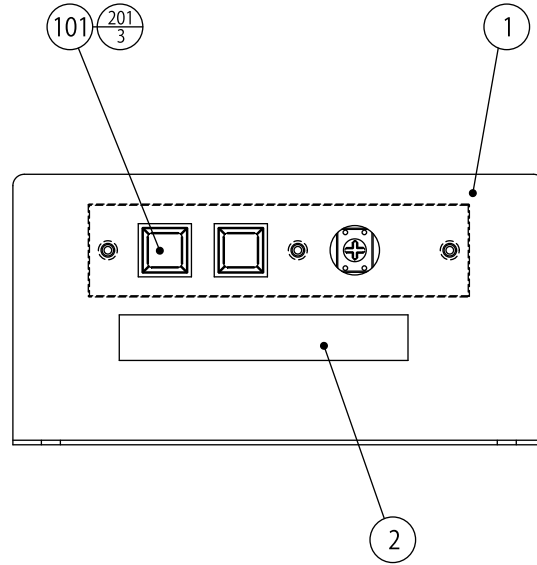


⑦ ASSY REAR CABINET (LGJ-1050UK)

(D-2/2)

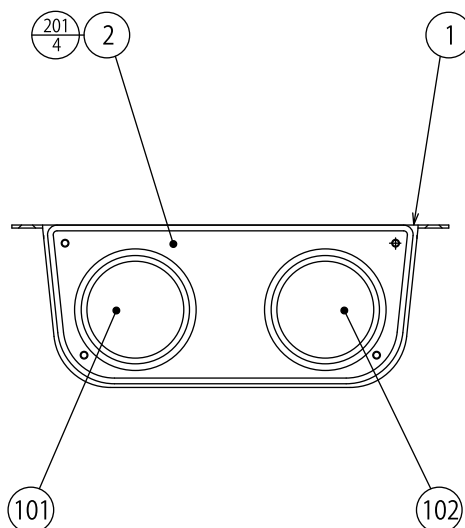
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-3000	ASSY GUN L	
2	LGJ-1140UK	ASSY PUSH SW	
3	LGJ-1150UK	ASSY BUTTON BOX	
4	LGJ-3050	ASSY GUN R	
5	LGJ-1170UK	ASSY SUB CABI REAR	
7	LGJ-1053UK	CONTROL PANEL BASE	
8	LGJ-1054UK	EDY COVER	
9	LGJ-1055UK	LAMP ACRYLIC BRACKET	
10	LGJ-1056UK	GUN COVER AL	
11	LGJ-1057UK	GUN COVER AR	
12	LGJ-1058UK	GUN COVER BL	
13	LGJ-1059UK	GUN COVER BR	
18	LGJ-1064XUK	GUN UNIT BASE	
19	LGJ-1065UK	GUN UNIT BASE PLATE	
21	LGJ-1068UK	LAMP ACRYLIC	
22	LGJ-1009	CABINET COVER L	
23	LGJ-1010	CABINET COVER R	
24	LGJ-1069-AUK	DESIGN PLATE INSTRUCTION COV	
25	LGJ-1070XUK	CTL PNL STICKER L	
26	LGJ-1071XUK	CTL PNL STICKER R	
29	LGJ-1074	GUNSHAFT GUIDE	
32	440-CS0186UK	STICKER C EPILEPSY 40 ENG	
36	PP1087	CASH BOX	
202	000-F00416	M SCR FH M4 × 16	
203	008-T00416-0B	TMP PRF SCR TH BLK M4 × 16	
204	000-T00416-0B	M SCR TH BLK M4 × 16	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
208	050-U00600	U NUT M6	
209	008-T00408-0C	TMP PRF SCR TH CRM M4 × 8	
210	030-000610-W	HEX BLT W/FS M6 × 10	

8 ASSY PUSH SW (LGJ-1140)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1141X	BRKT SERVICE SW	
2	421-12043	STICKER SW PANEL	
101	838-14548-02	SW & C 1KOHM VOL BD	
201	000-P00308-W	M SCR PH W/FS M3 × 8	

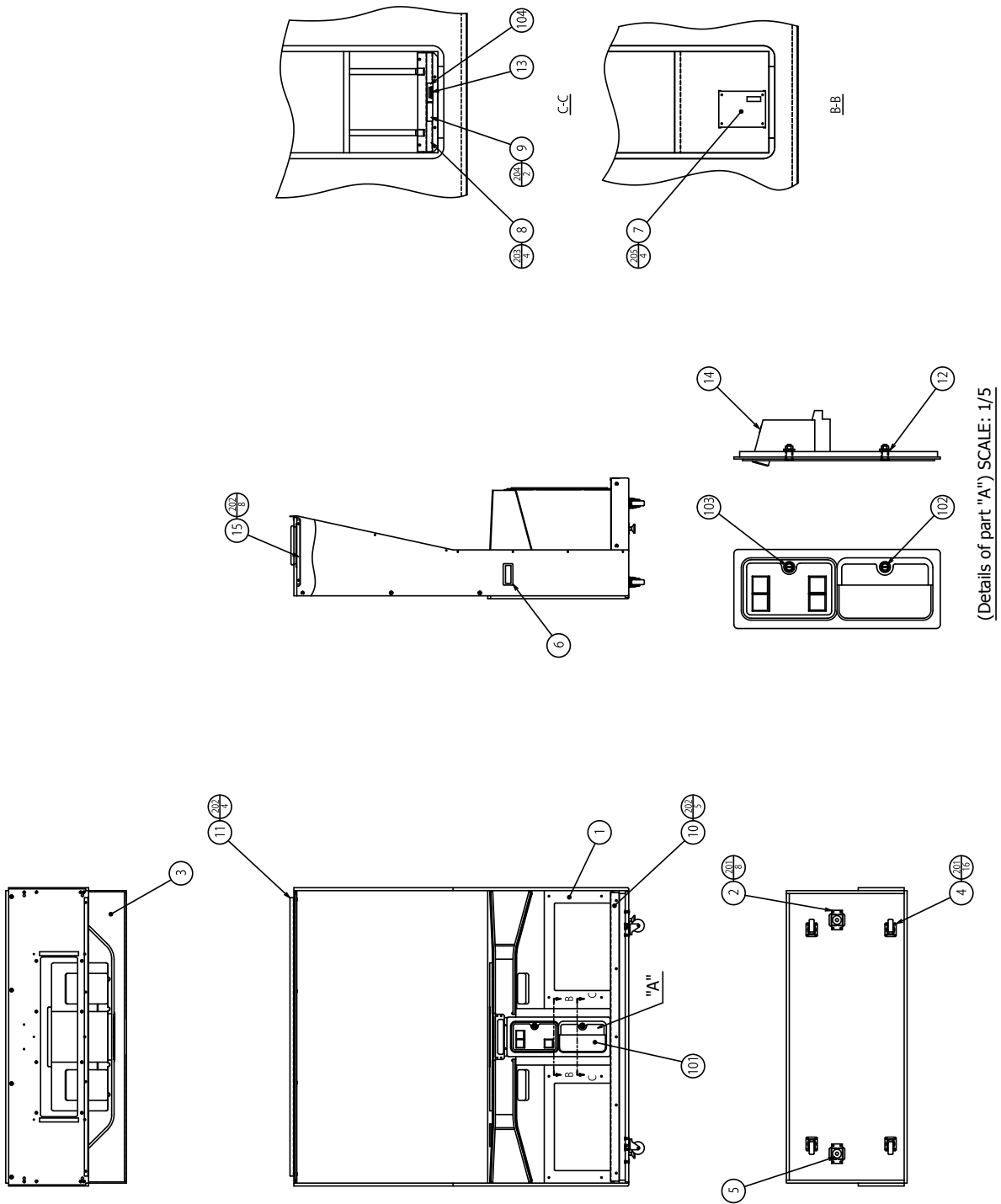
9 ASSY BUTTON BOX (LGJ-1150UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1151UK	PUSH BUTTON BOX	
2	LGJ-1152UK	DESIGN PLATE BUTTON EXP	
101	509-6131-AUK	LEGEND LGJ 1P S'POINT CPB	
102	509-6131-BUK	LEGEND LGJ 2P S'POINT CPB	
103	509-6131UK	BUTTON 12V 1.2W S'POINT CPB	
201	008-T00408-0C	TMP PRF SCR TH CRM M4 × 8	
301	LGJ-60009UK	WH BUTTON	

10 ASSY SUB CABI REAR (LGJ-1170XUK)

(D-1/2)

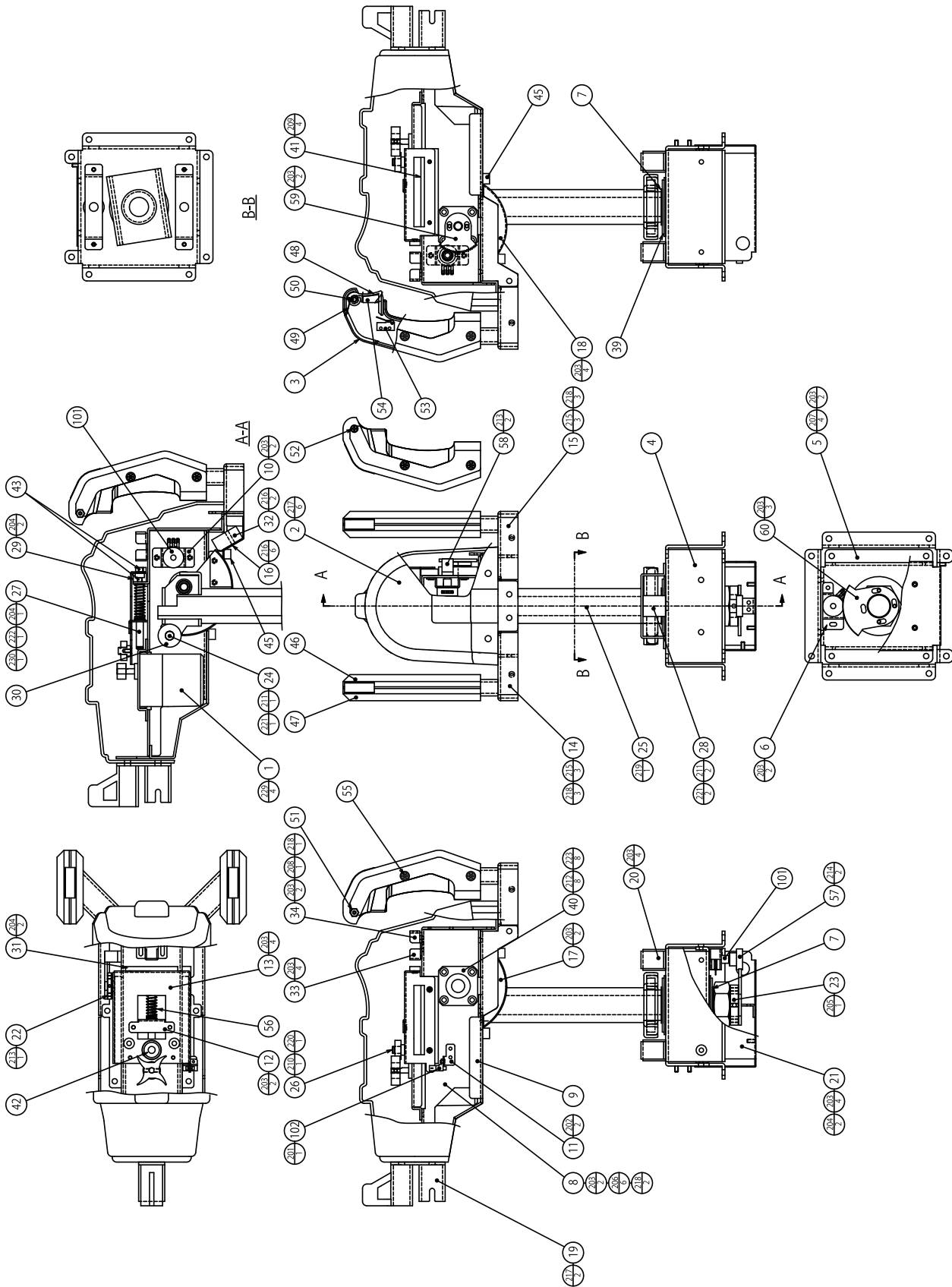


10 ASSY SUB CABI REAR (LGJ-1170XUK)**(D-2/2)**

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1171XUK	REAR CABINET	
2	LGJ-1163UK	ADJUSTER BRACKET	
4	MA1019	CASTER 75	
5	601-5699UK13-01	LEG ADJUSTER M16X130 1L/NUT	
8	LGJ-1061UK	COUNTER BRACKET	
10	LGJ-1063UK	MAT BRACKET	
11	LGJ-1066UK	REAR CABINET REINFORCEMENT	
12	DP-1167UK	TNG LKG	
15	LGJ-1052UK	CABINET SUPPORT BRACKET R	
16	DUT-0302UK	COIN PATH PLATE	
101	220-5374-01	DOOR DFMD W/FR&LOCK C120 UNIV	
102	220-5725-05B	DOOR SINGLE MINI H.SECURITY BLK	
103	220-5574-110UK	LOCK-KEY DIFFERS-11MM W/O CAM	
104	220-5643UK	COIN COUNTER SMALL 12V	
108	EP1380	CREDIT BD EXCEL	
201	030-000830-S	HEX BLT W/S M8 × 30	
202	000-F00416	M SCR FH M4 × 16	
203	000-P00416-W	M SCR PH W/FS M4 × 16	
204	000-P00408-W	M SCR PH W/FS M4 × 8	
205	000-P00316-W	M SCR PH W/FS M3 × 16	
206	011-F00312	TAP SCR FH 3 × 12	
207	011-T03516	TAP SCR TH 3.5 × 16	
301	LGJ-60008UK	WH CONPANE	
303	LGJ-60016UK	WH TO GUN DC	
304	LGJ-60027UK	WH TO GUN AC	

11 CONTROL UNIT L (LGJ-3000)

(D-1/3)



11 CONTROL UNIT L (LGJ-3000)**(D-2/3)**

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-3070	ASSY MOTOR	
2	LGJ-3001	GUN COVER	
3	LGJ-3002X	GRIP COVER	
4	LGJ-3003	GUN BASE	
5	LGJ-3004	BEARING BRACKET	
6	LGJ-3005	VOLUME BRACKET LOWER	
7	LGJ-3006	MAIN SHAFT WASHER	
8	LGJ-3007	GUN MAIN FRAME	
9	LGJ-3008X	GUN UNDER FRAME	
10	LGJ-3009	VOLUME BRACKET UPPER	
11	LGJ-3010	GUN SENSOR BRACKET	
12	LGJ-3011	SPRING STOPPER	
13	LGJ-3012	VIBRATION PACK	
14	LGJ-3013	GRIP BASE L	
15	LGJ-3014	GRIP BASE R	
16	LGJ-3015X	GUN BACK COVER	
17	LGJ-3016	FINGER GUARD L	
18	LGJ-3017	FINGER GUARD R	
19	LGJ-3018	MUZZLE	
20	LGJ-3019	GUN STOPPER BRACKET	
21	LGJ-3020	LOWER GEAR COVER	
22	LGJ-3021	GEAR BOSS UPPER	
23	LGJ-3022	GEAR BOSS LOWER	
24	LGJ-3023	CUSHION SHAFT	
25	LGJ-3051	MAIN SHAFT B	
26	LGJ-3025	BEARING SHAFT	
27	LGJ-3026X	SPRING GUIDE SHAFT	
28	LGJ-3027	GUN CUSHION LOWER	
29	LGJ-3028	INNER VIBRATION CUSHION	
30	LGJ-3029	GUN CUSHION UPPER	
31	LGJ-3030	OUTER VIBRATION CUSHION	
32	LGJ-3032	GUN WEIGHT	
33	LGJ-3033	VIBRATION PACK STOPPER	
34	LGJ-3034	VIBRATION PACK BALANCER	
39	100-5489	BEARING 6007ZZNR	
40	100-5490	BEARING HOLDER BGSRB6902ZZ	
41	100-5491	SLIDE RAIL SAR210	
42	100-5018	BEARING BALL 8	
43	250-5709	STEEL SPACER CF-405ZE	
45	LGJ-3035X	GUN SPONGE	
46	601-11816	RIGHT GRIP (HAPP95-1293-00)	
47	601-11817	LEFT GRIP (HAPP95-1294-00)	
48	601-11818	TRIGGER RED(HAPP95-1295-00)	
49	601-11819	TORSION SPRING(HAPP95-1297-00)	
50	601-11820	SPACER SLEEVE(HAPP95-1315-00)	
51	601-11821	NUT .336(HAPP43-1124-00)	
52	601-11822	SCREW #8-32*1(HAPP43-0378-00)	
53	601-11823	TRIGGERSW ASSY(HAPP95-0028-00)	
54	601-11824	TRIGGER BUMPER(HAPP96-0110-00)	
55	601-11825	SCREW10-32*3/8(HAPP96-2516-00)	
56	125-5234	SPRING WR12-60	
57	601-6555	GEAR Z=30 M=0.75	
58	601-7944	GEAR 15	
59	601-6005	ADJUST GEAR	
60	601-6450	GEAR 110	
101	220-5753	VOL CONT B-5K OHM (TOCOS)	
102	370-5299	PHOTO INTERRUPTER KI1233-AALF	
103	310-5029-D10	SUMITUBE F D 10MM	
104	310-5029-B20	SUMITUBE F B 20MM	
105	280-5124-03	NYLON CLAMP NK03	

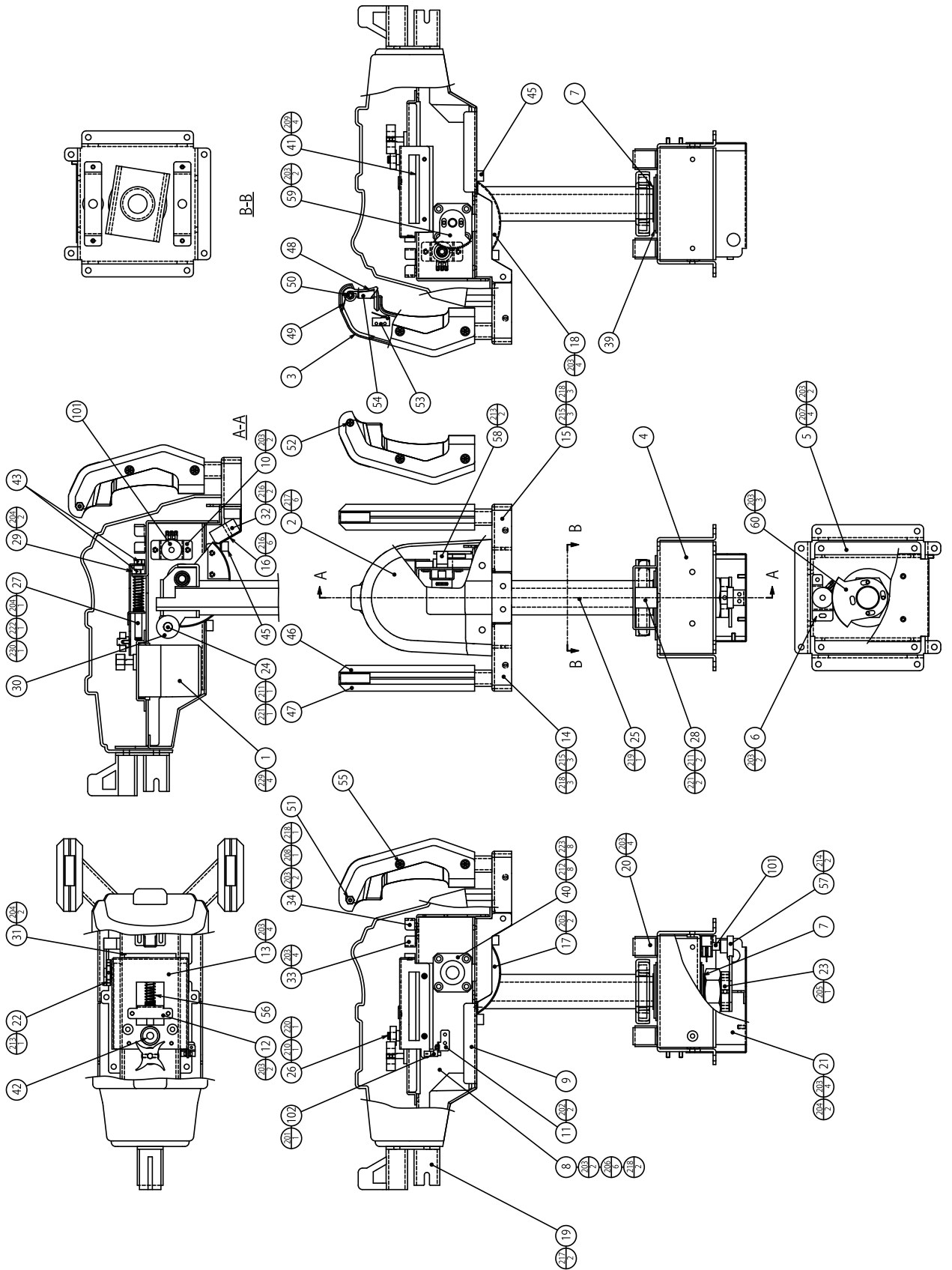
11 CONTROL UNIT L (LGJ-3000)**(D-3/3)**

ITEM NO.	PART NO.	DESCRIPTION	NOTE
106	280-5124-05	NYLON CLAMP NK05	
107	280-5124-07	NYLON CLAMP NK07	
108	280-6623-1.5M-0	PLASTIC TIE BELT PLT-1.5M	
201	FAS-000163	M SCR PH W/SMALL FS M3 × 14	
202	000-P00308-W	M SCR PH W/FS M3 × 8	
203	000-P00408-W	M SCR PH W/FS M4 × 8	
204	000-P00410-W	M SCR PH W/FS M4 × 10	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	000-P00510-W	M SCR PH W/FS M5 × 10	
207	000-P00612-W	M SCR PH W/FS M6 × 12	
208	000-T00530-0B	M SCR TH BLK M5 × 30	
209	000-F00308	M SCR FH M3 × 8	
210	000-T00408-0C	M SCR TH CRM M4 × 8	
211	030-000610	HEX BLT M6 × 10	
212	020-000510-0Z	HEX SKT H CAP SCR BLK 0Z M5 × 10	
213	028-A00304-P	SET SCR HEX SKT CUP P M3 × 4	
214	028-A00408-P	SET SCR HEX SKT CUP P M4 × 8	
215	008-T00516-0B	TMP PRF SCR TH BLK M5 × 16	
216	008-T00408-0C	TMP PRF SCR TH CRM M4 × 8	
217	008-T00408-0B	TMP PRF SCR TH BLK M4 × 8	
218	050-U00500	U NUT M5	
219	FAS-500058	HEX NUT H=18 M30	
220	065-E00600	E RING 6MM	
221	060-F00600	FLT WSHR M6	
222	069-0077	FLT WSHR SMALL 8.5-16 × 1.2	
223	060-S00500	SPR WSHR M5	
224	050-H00400	HEX NUT M4	
225	060-F00400	FLT WSHR M4	
226	060-S00400	SPR WSHR M4	
227	050-F00400	FLG NUT M4	
228	000-P00408	M SCR PH M4 × 8	
229	000-P00510-S	M SCR PH W/S M5 × 10	
230	065-E00500	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	

12 CONTROL UNIT R (LGJ-3050)

(D-1/3)

18 PARTS LIST



12 CONTROL UNIT R (LGJ-3050)**(D-2/3)**

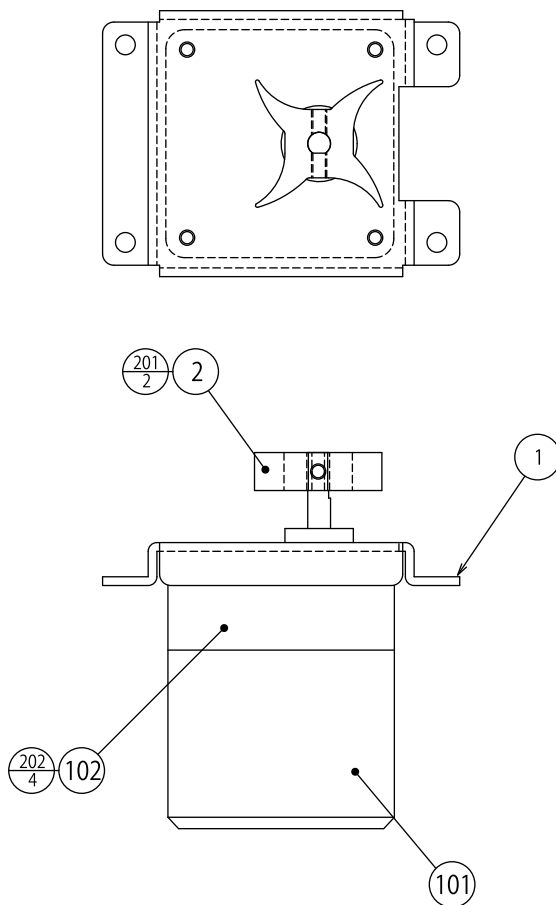
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-3070	ASSY MOTOR	
2	LGJ-3001	GUN COVER	
3	LGJ-3002X	GRIP COVER	
4	LGJ-3003	GUN BASE	
5	LGJ-3004	BEARING BRACKET	
6	LGJ-3005	VOLUME BRACKET LOWER	
7	LGJ-3006	MAIN SHAFT WASHER	
8	LGJ-3007	GUN MAIN FRAME	
9	LGJ-3008X	GUN UNDER FRAME	
10	LGJ-3009	VOLUME BRACKET UPPER	
11	LGJ-3010	GUN SENSOR BRACKET	
12	LGJ-3011	SPRING STOPPER	
13	LGJ-3012	VIBRATION PACK	
14	LGJ-3013	GRIP BASE L	
15	LGJ-3014	GRIP BASE R	
16	LGJ-3015X	GUN BACK COVER	
17	LGJ-3016	FINGER GUARD L	
18	LGJ-3017	FINGER GUARD R	
19	LGJ-3018	MUZZLE	
20	LGJ-3019	GUN STOPPER BRACKET	
21	LGJ-3020	LOWER GEAR COVER	
22	LGJ-3021	GEAR BOSS UPPER	
23	LGJ-3022	GEAR BOSS LOWER	
24	LGJ-3023	CUSHION SHAFT	
25	LGJ-3024	MAIN SHAFT A	
26	LGJ-3025	BEARING SHAFT	
27	LGJ-3026X	SPRING GUIDE SHAFT	
28	LGJ-3027	GUN CUSHION LOWER	
29	LGJ-3028	INNER VIBRATION CUSHION	
30	LGJ-3029	GUN CUSHION UPPER	
31	LGJ-3030	OUTER VIBRATION CUSHION	
32	LGJ-3032	GUN WEIGHT	
33	LGJ-3033	VIBRATION PACK STOPPER	
34	LGJ-3034	VIBRATION PACK BALANCER	
39	100-5489	BEARING 6007ZZNR	
40	100-5490	BEARING HOLDER BGSRB6902ZZ	
41	100-5491	SLIDE RAIL SAR210	
42	100-5018	BEARING BALL 8	
43	250-5709	STEEL SPACER CF-405ZE	
45	LGJ-3035X	GUN SPONGE	
46	601-11816	RIGHT GRIP (HAPP95-1293-00)	
47	601-11817	LEFT GRIP (HAPP95-1294-00)	
48	601-11818	TRIGGER RED(HAPP95-1295-00)	
49	601-11819	TORSION SPRING(HAPP95-1297-00)	
50	601-11820	SPACER SLEEVE(HAPP95-1315-00)	
51	601-11821	NUT .336(HAPP43-1124-00)	
52	601-11822	SCREW #8-32*1(HAPP43-0378-00)	
53	601-11823	TRIGGERSW ASSY(HAPP95-0028-00)	
54	601-11824	TRIGGER BUMPER(HAPP96-0110-00)	
55	601-11825	SCREW10-32*3/8(HAPP96-2516-00)	
56	125-5234	SPRING WR12-60	
57	601-6555	GEAR Z=30 M=0.75	
58	601-7944	GEAR 15	
59	601-6005	ADJUST GEAR	
60	601-6450	GEAR 110	
101	220-5753	VOL CONT B-5K OHM (TOCOS)	
102	370-5299	PHOTO INTERRUPTER KI1233-AALF	
103	310-5029-D10	SUMITUBE F D 10MM	
104	310-5029-B20	SUMITUBE F B 20MM	
105	280-5124-03	NYLON CLAMP NK03	

12 CONTROL UNIT R (LGJ-3050)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
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	FAS-000163	M SCR PH W/SMALL FS M3 × 14	
202	000-P00308-W	M SCR PH W/FS M3 × 8	
203	000-P00408-W	M SCR PH W/FS M4 × 8	
204	000-P00410-W	M SCR PH W/FS M4 × 10	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	000-P00510-W	M SCR PH W/FS M5 × 10	
207	000-P00612-W	M SCR PH W/FS M6 × 12	
208	000-T00530-0B	M SCR TH BLK M5 × 30	
209	000-F00308	M SCR FH M3 × 8	
210	000-T00408-0C	M SCR TH CRM M4 × 8	
211	030-000610	HEX BLT M6 × 10	
212	020-000510-0Z	HEX SKT H CAP SCR BLK 0Z M5 × 10	
213	028-A00304-P	SET SCR HEX SKT CUP P M3 × 4	
214	028-A00408-P	SET SCR HEX SKT CUP P M4 × 8	
215	008-T00516-0B	TMP PRF SCR TH BLK M5 × 16	
216	008-T00408-0C	TMP PRF SCR TH CRM M4 × 8	
217	008-T00408-0B	TMP PRF SCR TH BLK M4 × 8	
218	050-U00500	U NUT M5	
219	FAS-500058	HEX NUT H=18 M30	
220	065-E00600	E RING 6MM	
221	060-F00600	FLT WSHR M6	
222	069-0077	FLT WSHR SMALL 8.5-16 × 1.2	
223	060-S00500	SPR WSHR M5	
224	050-H00400	HEX NUT M4	
225	060-F00400	FLT WSHR M4	
226	060-S00400	SPR WSHR M4	
227	050-F00400	FLG NUT M4	
228	000-P00408	M SCR PH M4 × 8	
229	000-P00510-S	M SCR PH W/S M5 × 10	
230	065-E00500	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	

13 ASSY MOTOR (LGJ-3070)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-3071	MOTOR BRACKET	
2	LGJ-3072	MOTOR CAM	
101	350-5812	AC MOTOR RH6P3N	
102	350-5813	GEAR HEAD 6H5N-1	
201	028-A00408-P	SET SCR HEX SKT CUP P M4 × 8	
202	000-P00440-SB	M SCR PH W/S BLK M4 × 40	

14 ASSY LAMP BOX (LGJ-1080UK)

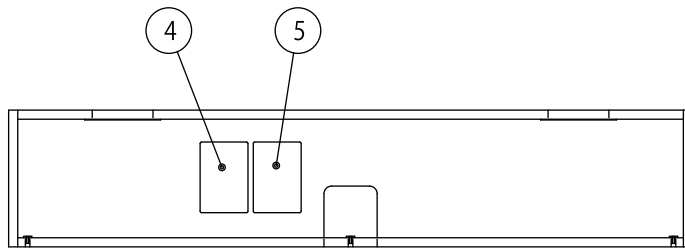
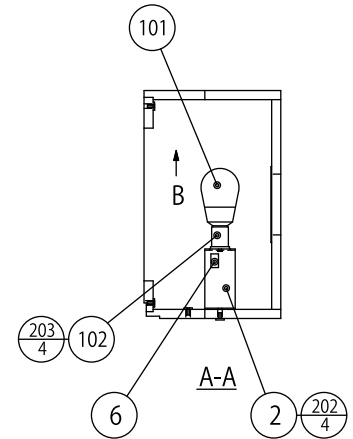
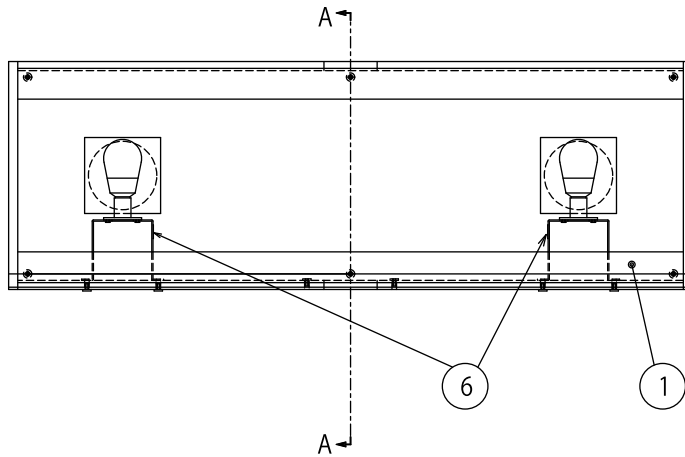
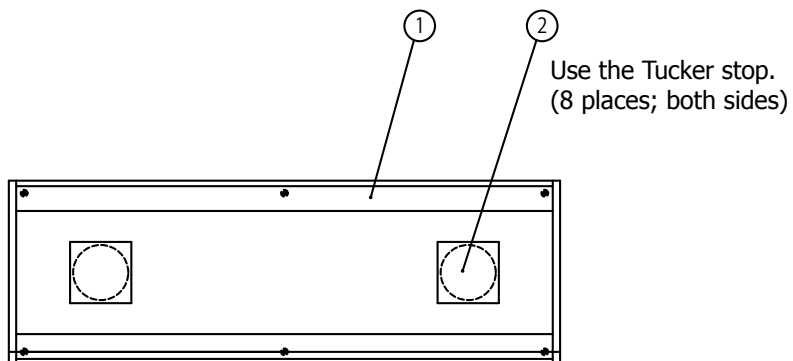


Figure seen from B



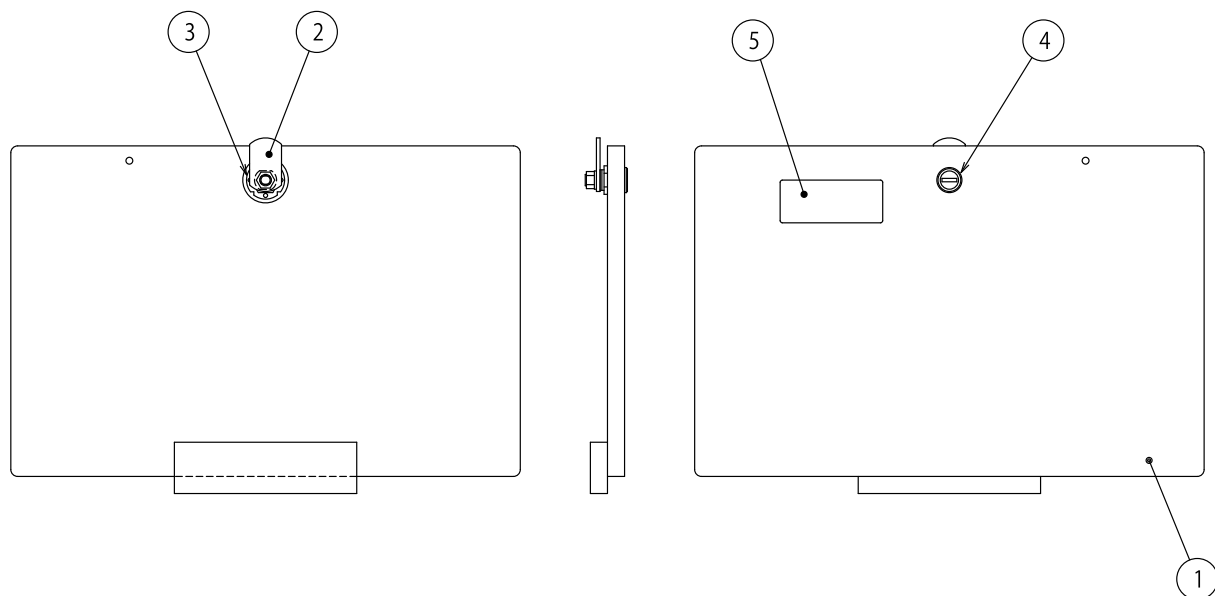
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1180XUK	ASSY SUB CABI LAMP BOX	
2	LGJ-1082UK	LAMP BRACKET	
4	LB1104	STICKER CAUTION HOT SURFACE	
6	421-7501-74	STICKER LAMP 110V 25W	
101	390-0110-25BUK	BULB 110V 25W BAYONET	
102	214-0277UK	LAMP SOCKET ES	
202	000-P00416-W	M SCR PH W/FS M4 × 16	
203	000-P00408-W	M SCR PH W/FS M4 × 8	

15 ASSY SUB CABI LAMP BOX (LGJ-1180XUK)



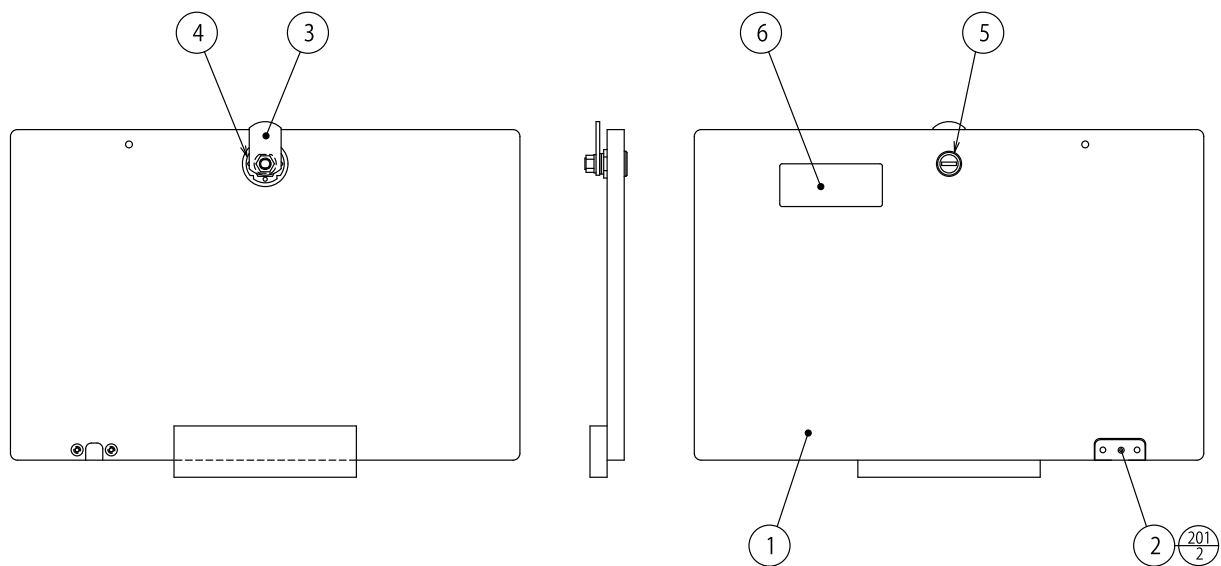
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1181XUK	LAMP BOX	
201	011-F00312	TAP SCR #1 FH 3 × 12	
301	LGJ-60011UK	WH LAMP BOX DC	
302	LGJ-60024UK	WH LAMP BOX AC	

16 ASSY FRONT DOOR (LGJ-1090UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1091XUK	FRONT DOOR	
2	DP-1167UK	TNG LKG	
3	117-0062	PLATE LOCK RETAINER	
4	220-5575UK	LOCK (J9117) KEY2LIKE 22M	
5	LB1102	STICKER DANGEROUS VOLTAGE	

17 ASSY FRONT DOOR PCB (LGJ-1110UK)

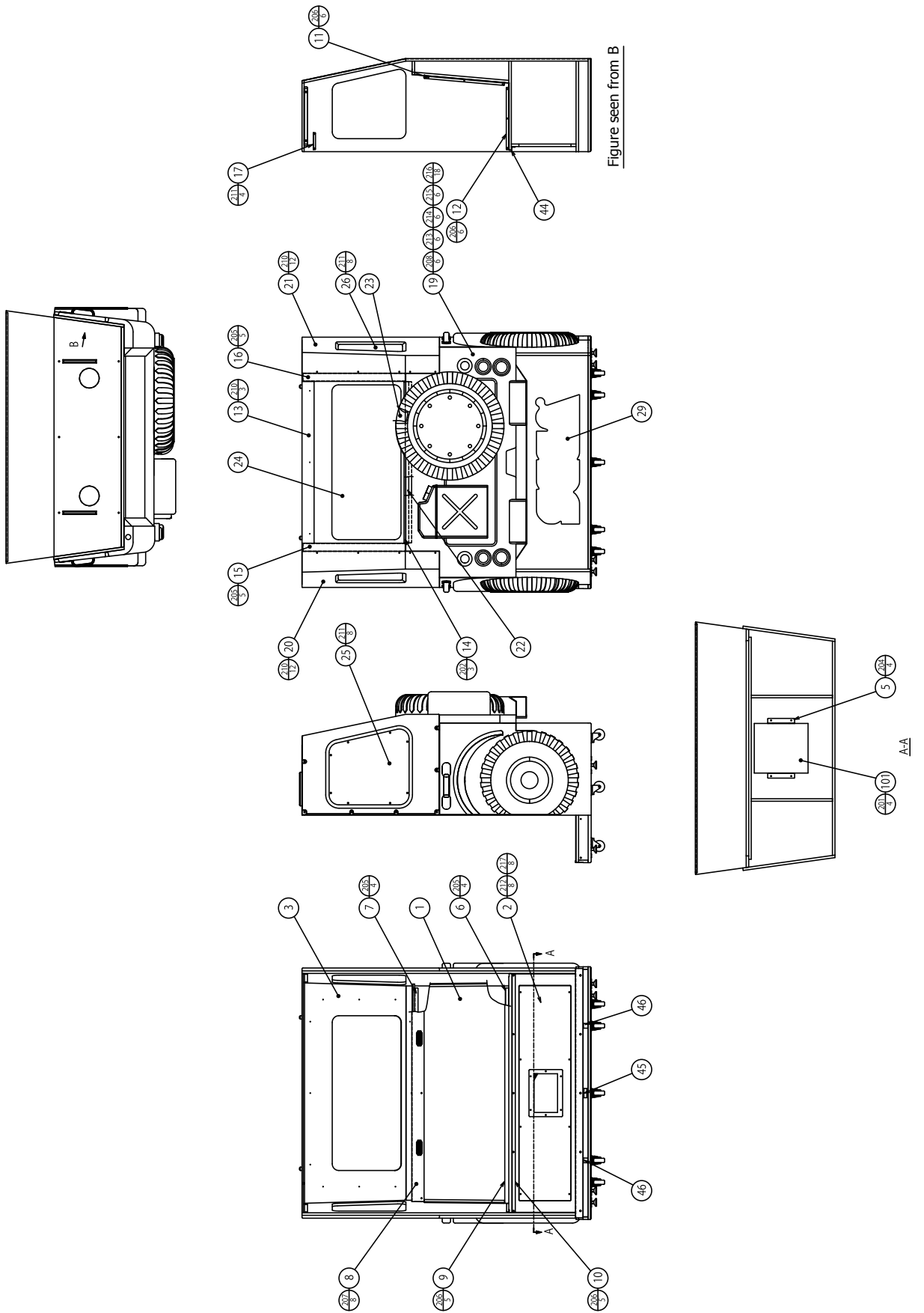


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1111XUK	FRONT DOOR PCB	
2	LGJ-1112UK	OUTLET PLATE	
3	DP-1167UK	TNG LKG	
4	117-0062	PLATE LOCK RETAINER	
5	220-5575UK	LOCK (J9117) KEY2LIKE 22MM	
6	LB1102	STICKER DANGEROUS VOLTAGE	
201	000-T00416-0B	M SCR TH BLK M4 × 16	

18 ASSY SEAT CABINET (LGJ-1200)

(D-1/2)

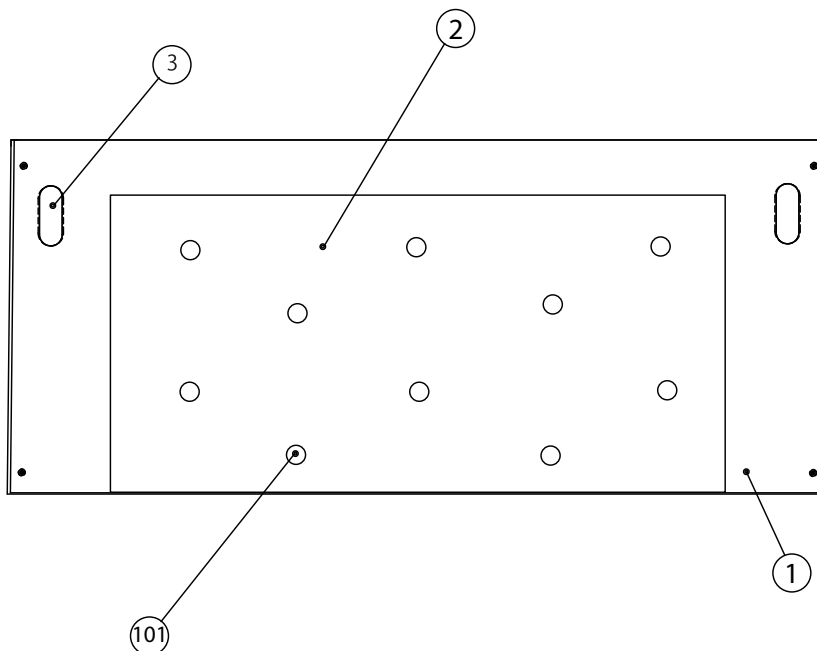
18 PARTS LIST



18 ASSY SEAT CABINET (LGJ-1200)**(D-2/2)**

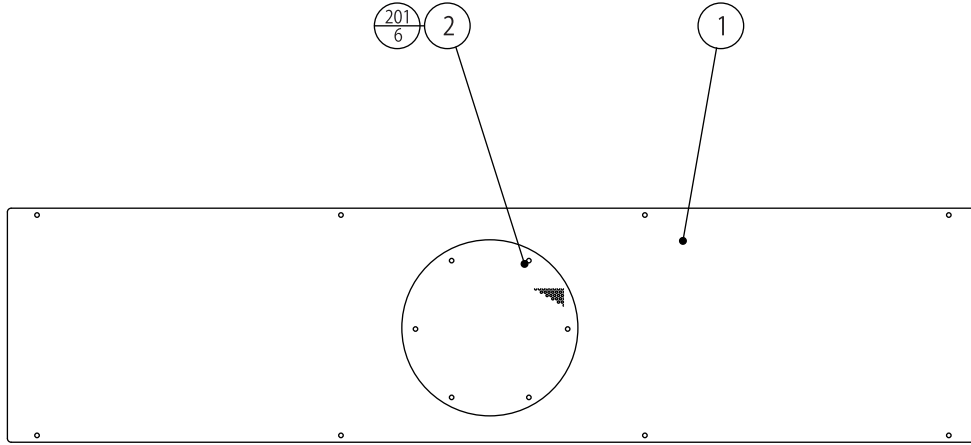
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1250UK	ASSY SPEAKER BOARD	
2	LGJ-1261UK	WOOFER BOARD	
3	LGJ-1270UK	ASSY SUB CABI SEAT	
13	LGJ-1210UK	REAR ACRYLIC BRACKET UPPER	
14	LGJ-1211UK	REAR ACRYLIC BRACKET LOWER	
15	LGJ-1212UK	FRP BRACKET L	
16	LGJ-1213UK	FRP BRACKET R	
17	LGJ-1214UK	PIPE STAY	
20	LGJ-1104	COVER SIDE WINDOW L	
21	LGJ-1105	COVER SIDE WINDOW R	
24	LGJ-1217UK	REAR WINDOW EXP	
25	LGJ-1218UK	SIDE WINDOW L	
26	LGJ-1219UK	SIDE WINDOW R	
29	LGJ-1222UK	SEGA STICKER	
30	LGJ-1103-AUK	JEEP MOULD REAR	
32	LGJ-1226UK	TAIL LAMP S	
33	LGJ-1227UK	TAIL LAMP M	
34	LGJ-1228UK	TAIL LAMP L	
35	LGJ-1229UK	STICKER ELEPHANT	
36	LGJ-1230UK	KER	
44	LGJ-1237X	LEATHER SHEET	
46	421-11416	STICKER CAUTION FORK	
101	130-5196-03	WOOFER 4OHM 80W W/NET ROHS	
201	011-T00416	TAP SCR TH 4 × 16	
202	000-F00412	M SCR FH M4 × 12	
204	000-P00425-W	M SCR PH W/FS M4 × 25	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	008-T00416-0B	TMP PRF SCR TH BLK M4 × 16	
207	008-T00420-0B	TMP PRF SCR TH BLK M4 × 20	
208	FAS-290040	HEX SKT SCR BH BLK M8 × 25	
210	000-T00412-0B	M SCR TH BLK M4 × 12	
211	000-T00416-0B	M SCR TH BLK M4 × 16	
212	000-T00430-0B	M SCR TH BLK M4 × 30	
213	050-000800	HEX NUT M8	
214	030-000835-S	HEX BLT W/S M8 × 35	
215	060-S00800	SPR WSHR M8	
216	068-852216-0B	FLT WSHR BLK 8.5-22 × 1.6	
217	068-441616-0B	FLT WSHR BLK 4.4-16 × 1.6	

19 ASSY SPEAKER BOARD (LGJ-1250UK)



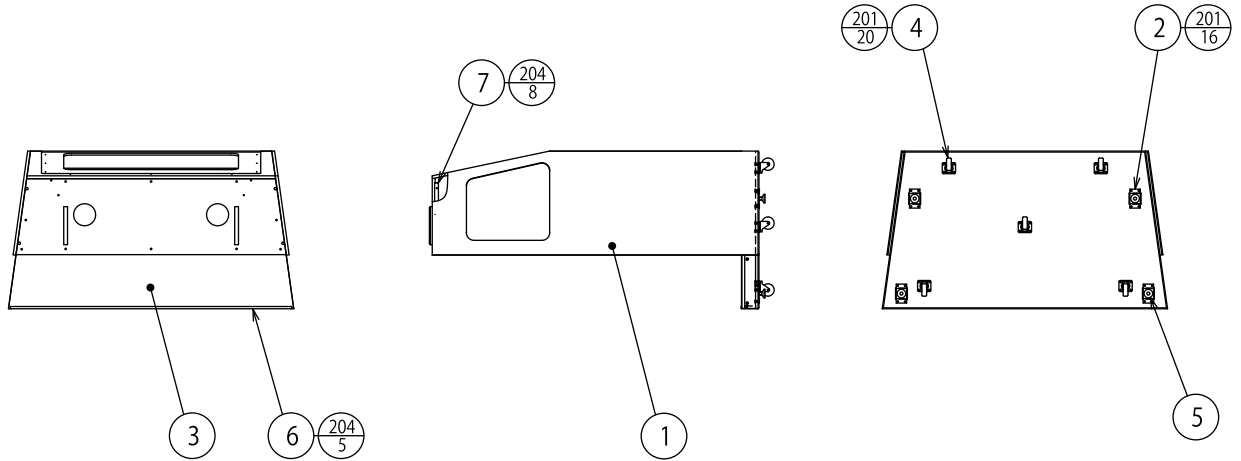
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1251XUK	SEAT BOARD	
2	RTS-3011UK	SEAT CUSHION	
3	UNKNOWN	SPEAKER GRILL	
101	280-K05245-W7	DRIVE FASTENER	
102	130-365-564UK	SPKR 15W 40OHM XF (NOT SHOWN)	
301	LGJ-60015UK	WH SPEAKER BOARD (NOTSHOWN)	

20 ASSY WOOFER BOARD (LGJ-1260UK)



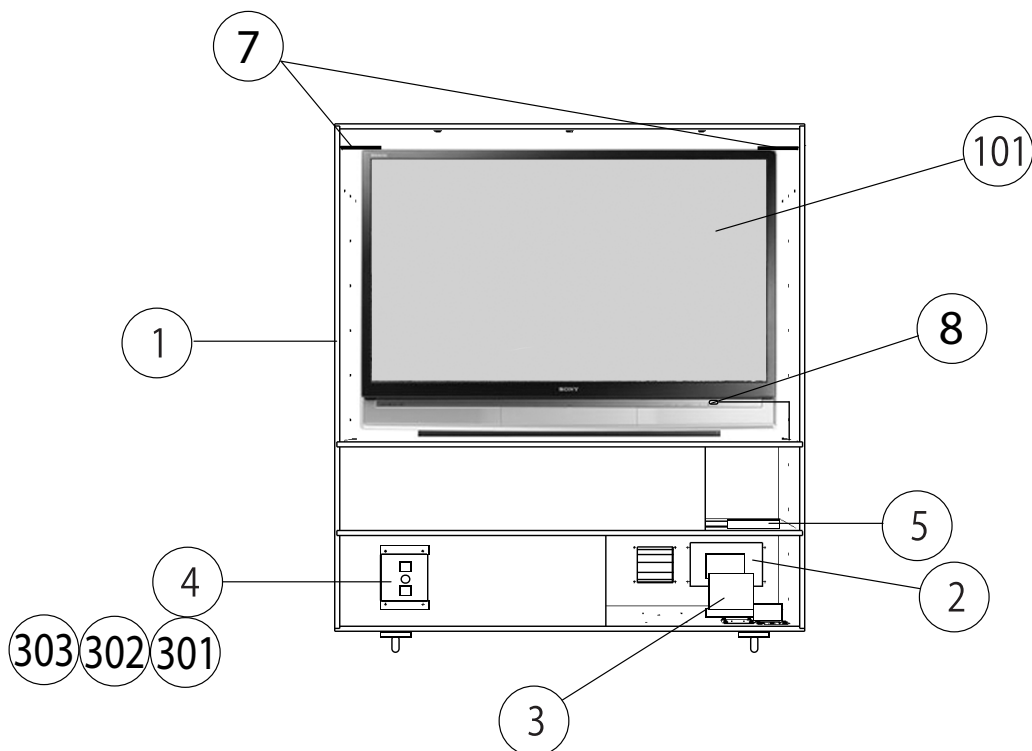
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1261UK	WOOFER BOARD	
2	LGJ-1262UK	WOOFER COVER	
3	130-004-0100W	WOOFER 4 OHM 100W	
201	008-T00440-OB	M4X40 MSCR TH SEC BLK	

21 ASSY SUB CABI SEAT (LGJ-1270UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1271XUK	SEAT CABINET	
2	LGJ-1163UK	ADJUSTER BRACKET	
3	LGJ-1272UK	FLOOR MAT REAR	
4	MA1019	CASTER G-65N	
5	601-5699UK13-01	LEG ADJUSTER TM-258-6TOCHIGIYA	
6	LGJ-1063UK	MAT BRACKET	
7	LGJ-1052UK	CABINET SUPPORT BRACKET R	
201	030-000830-S	HEX BLT W/S M8 × 30	
202	011-T03516	TAP SCR TH 3.5 × 16	
203	011-T03512	TAP SCR TH 3.5 × 12	
204	000-F00416	M SCR FH M4 × 16	
301	LGJ-60014UK	WH TO SEAT SPEAKER	

22 ASSY DLP (LGJ-1300UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1320UK	ASSY DLP CABINET	
2	LGJ-1330UK	ASSY AC BKT	
3	LGJ-1360UK	ASST XFMR	
4	LGJ-1353UK	CONNECTOR BRKT	
5	838-0001UK	I/R PCB	
7	LGJ-1357&8UK	BRKT L&R DLP	
8	RND-60031	CA-IR-EYE	
101	200-6055-SNY	DISPLAY 55" SONT BRAVIA	

23 ASSY DLP CABINET (LGJ-1320)

NO DRAWING AT TIME OF PRINT

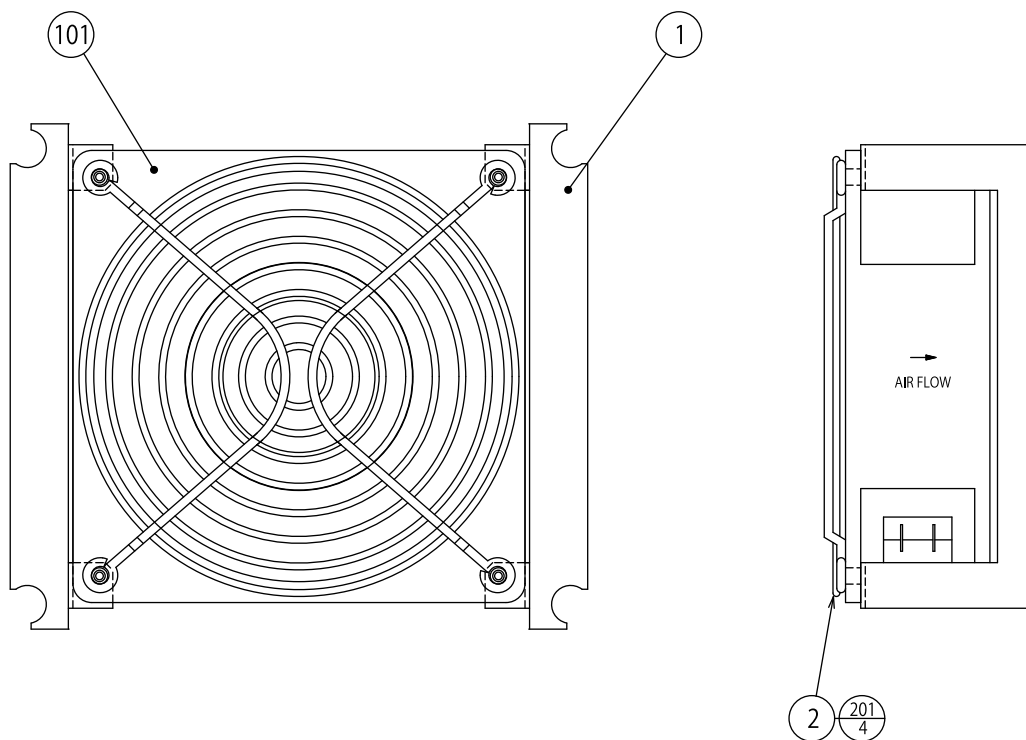
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1340UK	ASSY FAN	
2	LGJ-1163UK	ADJUSTER BKT	
3	MA1019	CASTER 75	
4	601-5699UK13-01	LEG ADJUSTER M16X130	
5	253-5460-01	AIR VENT BLACK	
301	LGJ-60021UK	WH DLP CABI	
302	LGJ-60038UK	WH DLP POWER	
303	LGJ-60040UK	WH I/R POWER	
304	600-7010-0300UK	CA HDMI 300CM	

24 AC UNIT (LGJ-1330)

NO DRAWING AT TIME OF PRINT

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HDF-0661UK	BRKT AC HDF	
2	LB1126-5-250	FUSE LABEL 5 AMP 250	
3	LB1131	LABEL ON/OFF	
101	EP1382	FILTER SCHFFNER FN682-10/06	
102	EP1387	IEC INLET & SW	
103	514-5078-5000	FUSE 5X20 CERAMMIC SB 5A	
108	310-5029-D508	HEAT SHRINK SLEEVING	
201	000-T00425-0B	M4X25 MSCR TH BLK	
202	000-P00312-W	M3X12 MSCR PAN W/FS PAS	
203	050-F00400	M4 NUT FLG SER PAS	
301	ABX-600174UK	WH AC BRKT	

25 ASSY FAN (LGJ-1340UK)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5340-01	FAN BRKT LONG	
2	601-8543	FAN GUARD	
101	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
201	000-P00312-W	M SCR PH W/FS M3 × 12	

26 ASSY SUB CABI DLP (LGJ-1350UK)

NO DRAWING AT TIME OF PRINT

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1351UK	CABINET DLP	
2	LGJ-1163	ADJUSTER BRACKET	
3	601-11838-91	CASTER G-65N	
4	601-11839	LEG ADJUSTER TM-258-6TOCHIGIYA	
201	030-000830-S	HEX BLT W/S M8 × 30	
202	011-T03516	TAP SCR TH 3.5 × 16	
301	LGJ-60021X	WH AC DLP	
302	LGJ-60035	WH AC JP	

27 ASSY BILLBOARD BOX (LGJ-1400UK)

(D-1/2)

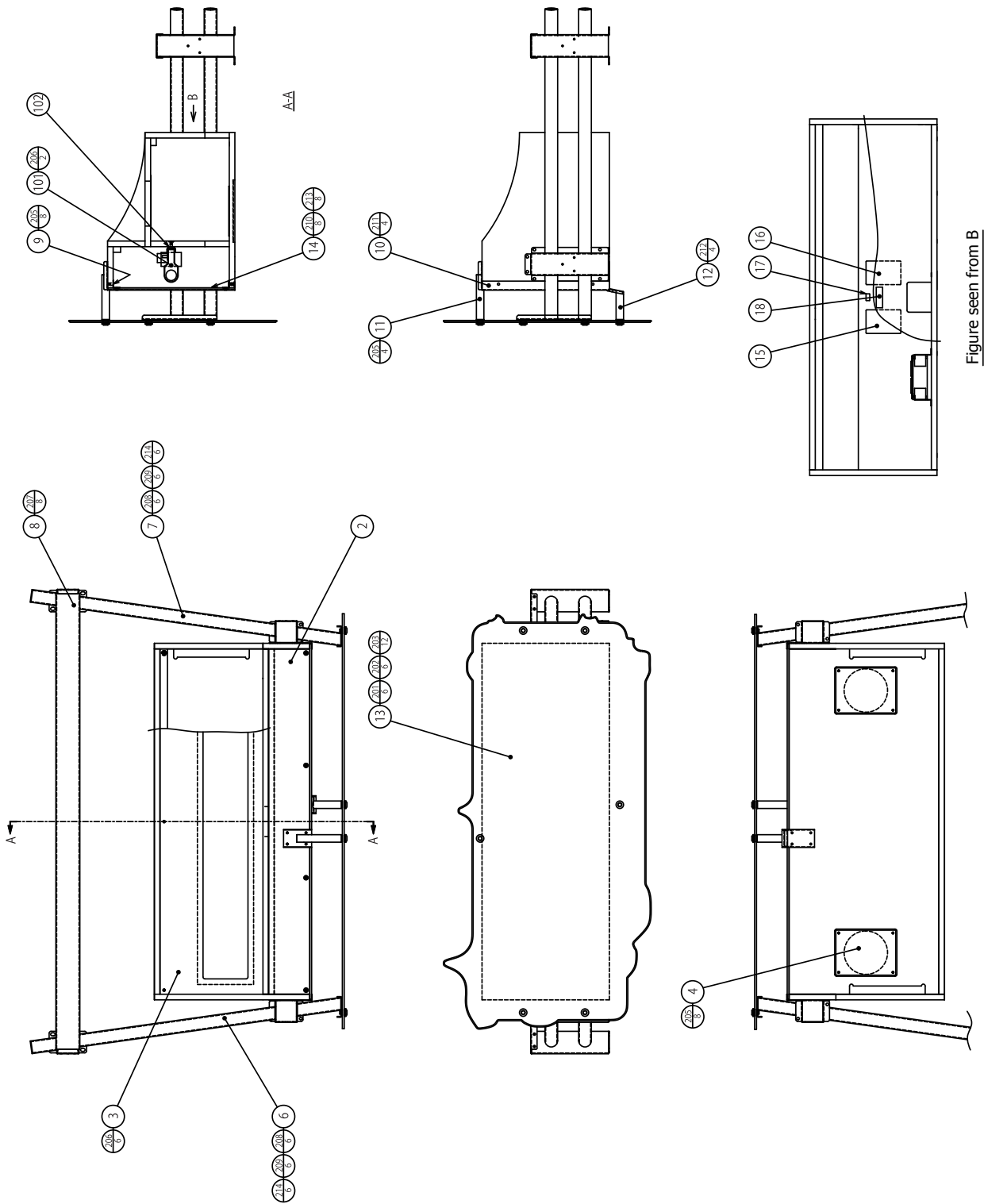
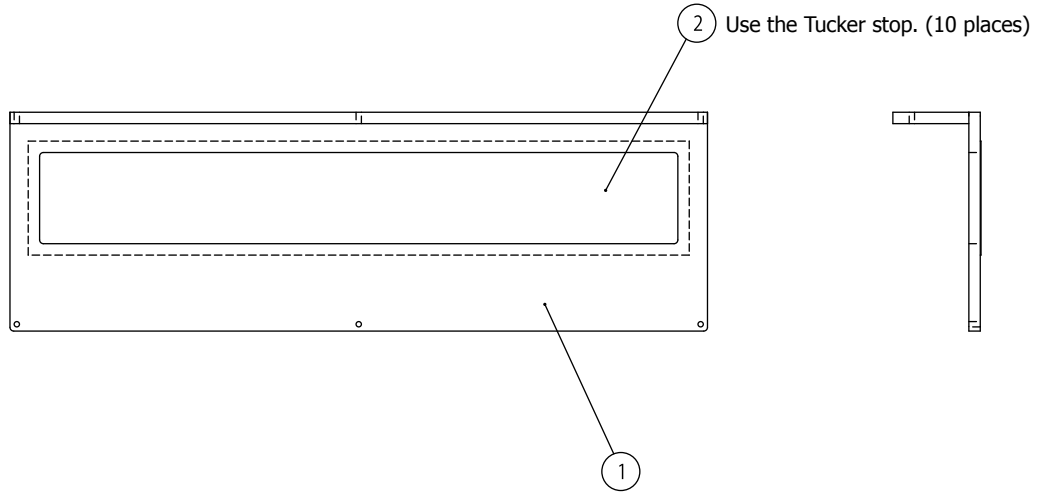


Figure seen from B

27 ASSY ASSY BILLBOARD BOX (LGJ-1400UK)**(D-2/2)**

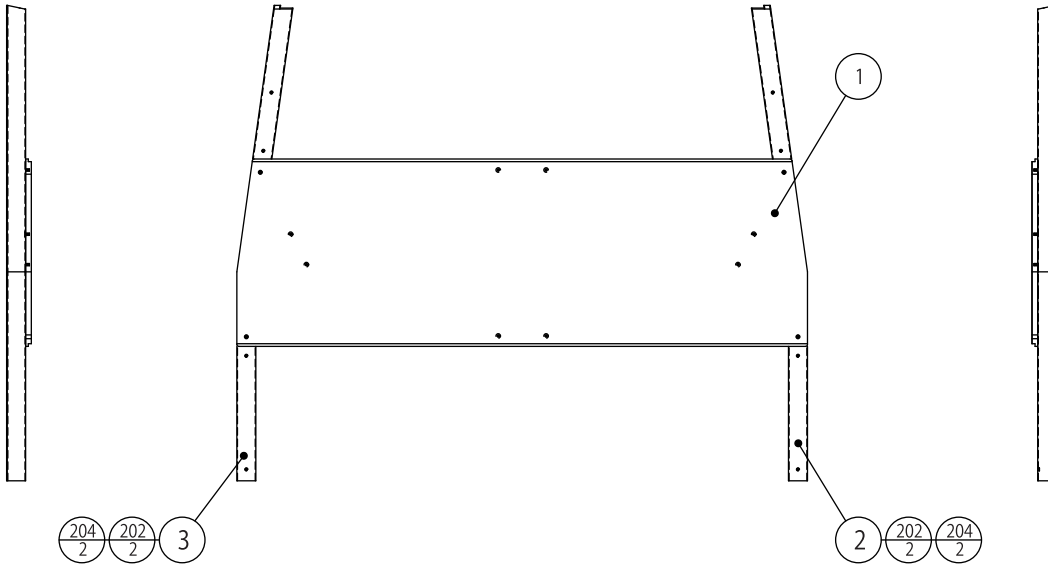
ITEM NO.	PART NO.	DESCRIPTION	NOTE
2	LGJ-1401X	FL BOX	
3	LGJ-1441XUK	FL BOX DOOR	
4	LGJ-1403UK	SEAT AIR DUCT S	
6	LGJ-1405UK	CARRIER L	
7	LGJ-1406UK	CARRIER R	
8	LGJ-1407UK	CAREER SUPPORT BRACKET	
9	LGJ-1408UK	REAR BILLBOARD BRACKET	
10	LGJ-1409UK	REAR BILLBOARD SUPPORT	
11	LGJ-1410UK	BRKT BILLBOARD UPPER	
12	LGJ-1411UK	BRKT BILLBOARD UNDER	
13	LGJ-1412	DESIGN BILLBOARD FRONT	
14	LGJ-1413UK	DESIGN BILLBOARD BACK EXP	
16	LB1104	STICKER W HIGH TEMP ENG	
17	421-7501-18	STICKER FL32W	
101	390-5695-40-DUK	FL TUBE 40W 600L 1.5" DIA	
102	390-5695-40-CUK	FL TRAY 110V 40W (T12)	
201	SGS-1705	WASHER CTF	
202	SGS-1706	LOW HEAD CAP	
203	SGS-1703	WASHER RUBBER	
204	011-T03516	TAP SCR TH 3.5 × 16	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	000-P00435-W	M SCR PH W/FS M4 × 35	
207	000-T00408-0C	M SCR TH CRM M4 × 8	
208	000-T00416-0C	M SCR TH CRM M4 × 16	
209	000-T00508-0C	M SCR TH CRM M5 × 8	
210	000-T00408-0B	M SCR TH BLK M4 × 8	
211	000-T00416-0B	M SCR TH BLK M4 × 16	
212	000-F00416	M SCR FH M4 × 16	
213	068-441616-0B	FLT WSHR BLK 4.4-16 × 1.6	
214	068-552016-0C	FLT WSHR CRM 5.5-20 × 1.6	
301	LGJ-60013UK	WH BILLBOARD DC	
302	LGJ-60026UK	WH BILLBOARD AC	
303	LGJ-60041UK	WH FL UNIT	

28 ASSY SUB CABI FL BOX DOOR (LGJ-1440)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1441X	FL BOX DOOR	
2	LGJ-1442	SEAT AIR DUCT L	

30 ASSY TOP BOARD (LGJ-1450)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	LGJ-1451X	JOINT BOARD	
2	LGJ-1452	JOINT PIPE L	
3	LGJ-1453	JOINT PIPE R	
8	LGJ-1458	CURTAIN PARTS	
201	011-T03516	TAP SCR TH 3.5 × 16	
202	030-000630-SB	HEX BLT BLK W/S M6 × 30	
203	000-T00408-0B	M SCR TH BLK M4 × 8	
204	068-652016-0B	FLT WSHR BLK 6.5-20 × 16	
301	LGJ-60012	WH TOP BOARD DC	
302	LGJ-60025	WH TOP BOARD AC	

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

IEC INLET & SW
EP1387

LGJ-1330UK
ASSY AC UNIT

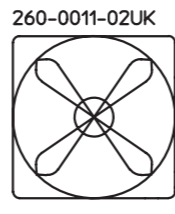
NOISE FILTER
EP 1382

43K
ABX-60017UK
M4
EARTH STUD

560-LBGH-01VUK
XFMR 220-240V
100V 8A

838-14551-02UK
AC CONNECTOR BRD

400-015-005-02
240VAC - 5VDC PSU

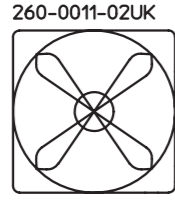
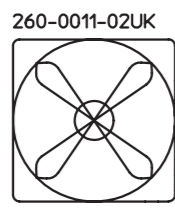


260-0011-02UK

LGJ-60021UK
LGJ-60036UK

100VAC
DLP ASSY PANEL
MNT BRKT
LGJ-60022UK

PART No 896-0001UK
IR EMITTER BOARD



LGJ-60036UK

LGJ-60036UK

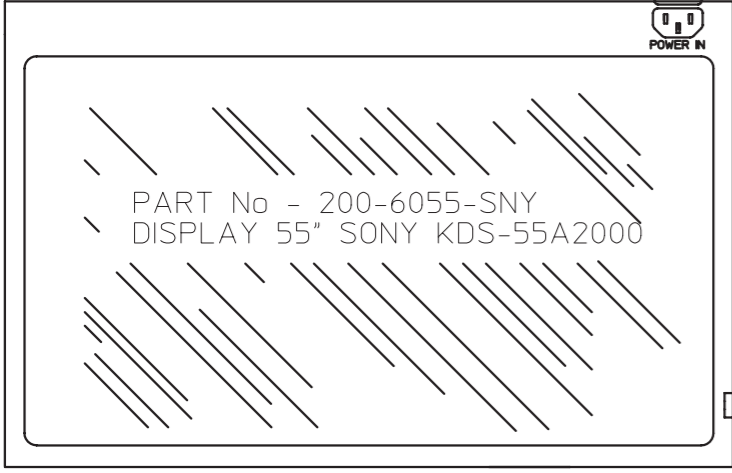
LGJ-60038UK

240VAC
DLP ASSY PANEL
MNT BRKT

400-5457-91
SW REGU ATX/JVS

LGJ-60001UK

IR EMITTER



PART No - 200-6055-SNY
DISPLAY 55" SONY KDS-55A2000

HUB
PSU

602-0001-01UK
RESOLUTION
SCALER

600-7009-1800UK

D-SUB15P
RGB
VIDEO OUT1

844-0001D-91-12
ASSY CASE LBG L 1GB 7800

FRONT R
RCA RED

FRONT L
RCA WHITE

3.5MM ST JK
CENTRE/WOOFER
GREEN

3.5MM ST JK
REAR R & L
BLACK

LGJ-60005UK

1	RED	8	BLACK	E	LIGHT GREEN
2	BLUE	9	GREY		
3	YELLOW	A	PINK	U	AWG 16 UL1015
4	GREEN	B	SKY BLUE	K	AWG 18 UL1015
5	WHITE	C	BROWN	L	AWG 20 UL1007
7	ORANGE	D	PURPLE		AWG 22 UL1007

COLOUR CODE	WIRE TYPE
-------------	-----------

DRAWN	CHKD	TOPE LEVEL No
CW		LGJ-0000UK
29/10/06		

SEGA	SEGA AMUSEMENTS EUROPE, LTD.	THIS DRAWING WILL IN NO WAY BE COPIED. TO BE RETURNED ON DEMAND.
LETS GO JUNGLE		ORIGINAL SIZE A3
DESCRIPTION		1/4
PART NO.		

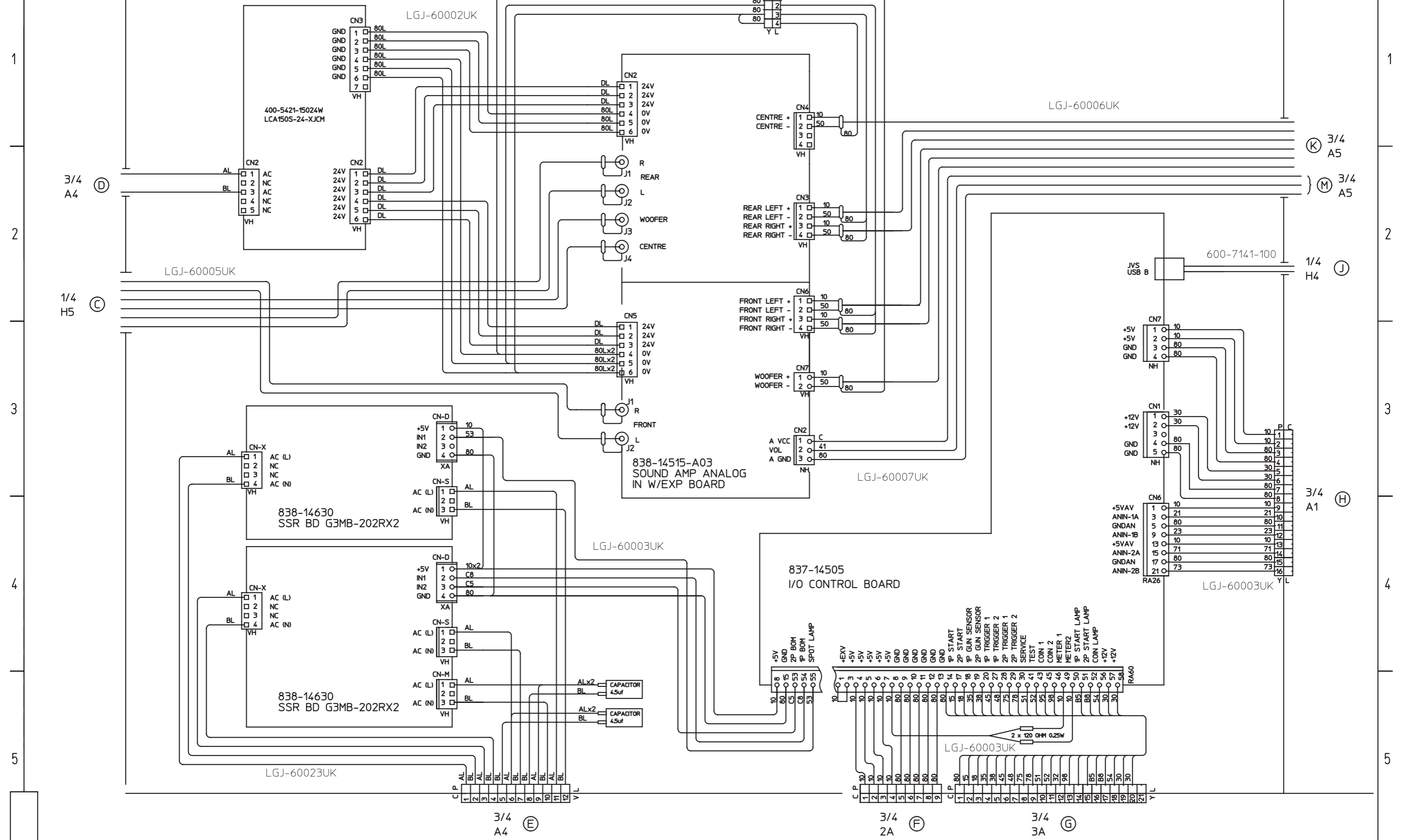
(A) 3/4
C5
(R) 3/4
D5

(B) 3/4
B1

(J) 2/4
H2

(C) 2/4
A2

A | B | C | D | E | F | G | H



1	RED	8	BLACK	E	LIGHT GREEN				
2	BLUE	9	GREY						
3	YELLOW	A	PINK			U	AWG 16	UL1015	
4	GREEN	B	SKY BLUE			K	AWG 18	UL1015	
5	WHITE	C	BROWN			L	AWG 20	UL1007	
7	ORANGE	D	PURPLE				AWG 22	UL1007	

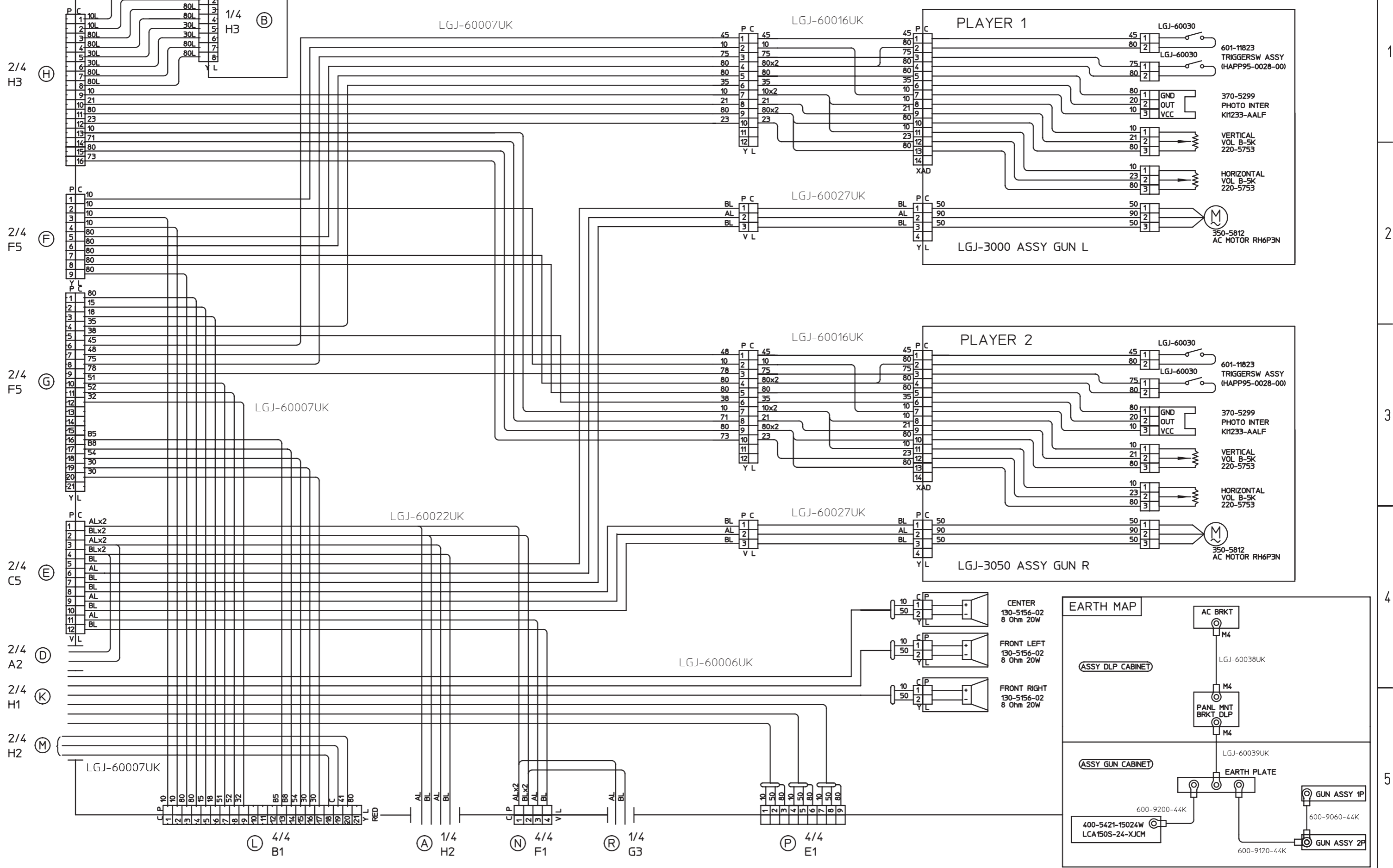
ALTERATIONS

COLOUR CODE

WIRE TYPE

DRAWN	CHKD	TOPE LEVEL No	LGJ-0000UK
CW			
29/10/06			

	SEGA AMUSEMENTS EUROPE, LTD.	THIS DRAWING WILL IN NO WAY BE COPIED, TO BE RETURNED ON DEMAND.	ORIGINAL SIZE A3
	LET'S GO JUNGLE		2/4
	DESCRIPTION		PART NO.



1 RED	8 BLACK	E LIGHT GREEN	
2 BLUE	9 GREY		
3 YELLOW	A PINK		U AWG 16 UL1015
4 GREEN	B SKY BLUE		K AWG 18 UL1015
5 WHITE	C BROWN		L AWG 20 UL1007
7 ORANGE	D PURPLE		AWG 22 UL1007

DRAWN	CHKD	TOPE LEVEL No
CW		LGJ-0000UK
29/10/06		

SEGA SEGA AMUSEMENTS EUROPE, LTD. THIS DRAWING WILL IN NO WAY BE COPIED, TO BE RETURNED ON DEMAND. ORIGINAL SIZE A3

LETS GO JUNGLE

DESCRIPTION

PART NO.

1
2
3
4
5

1
2
3
4
5

2/4 H3 (H)

2/4 F5 (F)

2/4 G5 (G)

2/4 C5 (E)

2/4 A2 (D)

2/4 H1 (K)

2/4 H2 (M)

(L) 4/4 B1

(A) 1/4 H2

(N) 4/4 F1

(R) 1/4 G3

(P) 4/4 E1

ALTERATIONS

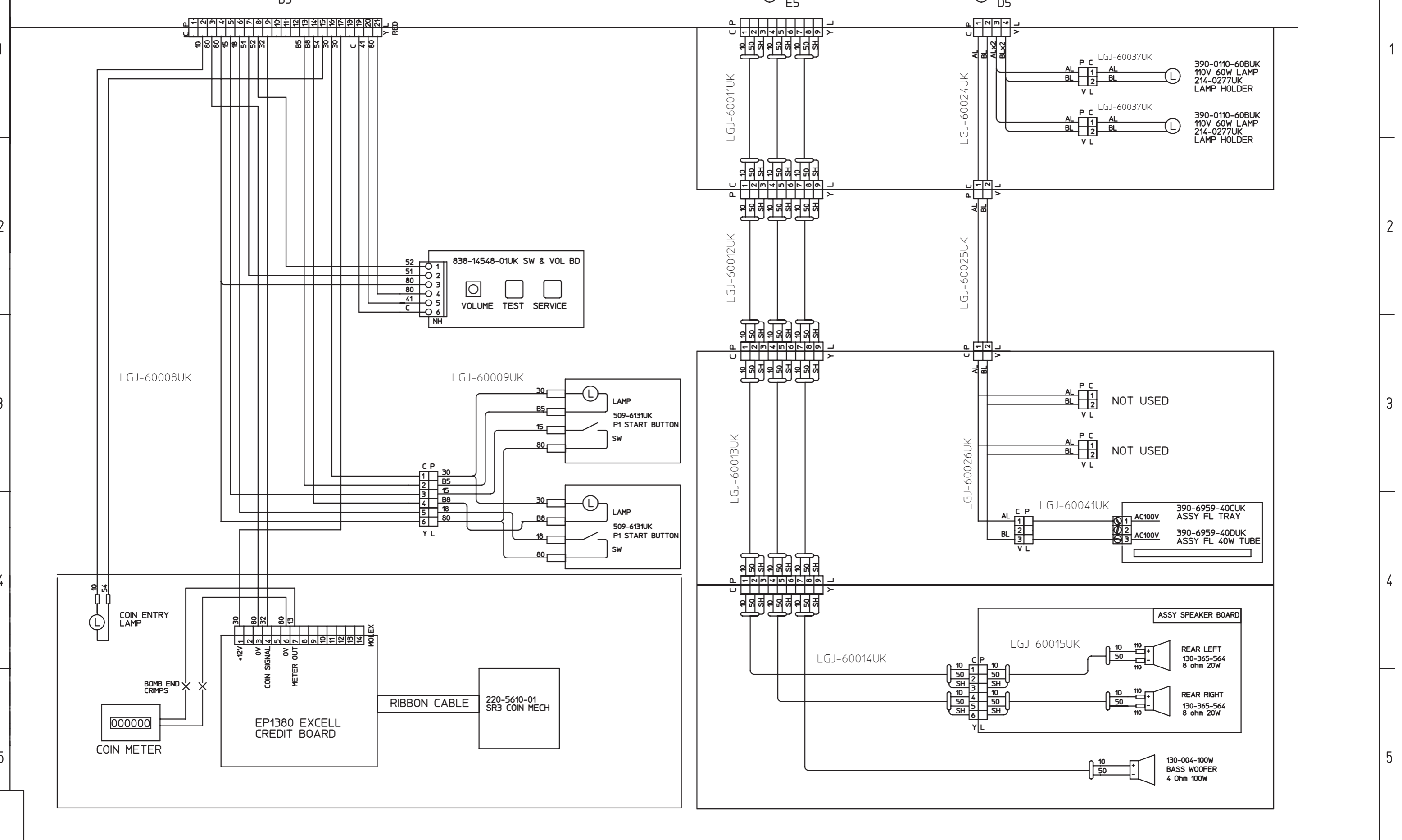
COLOUR CODE

WIRE TYPE

DESCRIPTION

PART NO.

A | B | C | D | E | F | G | H



1	RED	8	BLACK	E	LIGHT GREEN				
2	BLUE	9	GREY						
3	YELLOW	A	PINK			U	AWG 16	UL1015	
4	GREEN	B	SKY BLUE			K	AWG 18	UL1015	
5	WHITE	C	BROWN			L	AWG 20	UL1007	
7	ORANGE	D	PURPLE				AWG 22	UL1007	
					COLOUR CODE			WIRE TYPE	

DRAWN	CHKD	TOPE LEVEL No
CW		LGJ-0000UK
29/10/06		

	SEGA AMUSEMENTS EUROPE, LTD.	THIS DRAWING WILL IN NO WAY BE COPIED. TO BE RETURNED ON DEMAND.	ORIGINAL SIZE
	LET'S GO JUNGLE		A3
DESCRIPTION			PART NO.

4/4

A	B	C	D	E	F	G	H
ALTERATIONS							