VG15-A98-059-00 GTX 760
VIDEO CARD

Here is the make, size, and model for Time Crisis 5 monitor.

Manufacturer : Changhong
Model : LT55BN93
Size : 55inch

TV10-18630-00 $28.80 TOP LAMP WITH HARDWARE

for gun strain relief cable

E04-01 LINK ERROR means disconnection of two ES3.It mainly happens due to defectives in LAN Cable or PC Board.

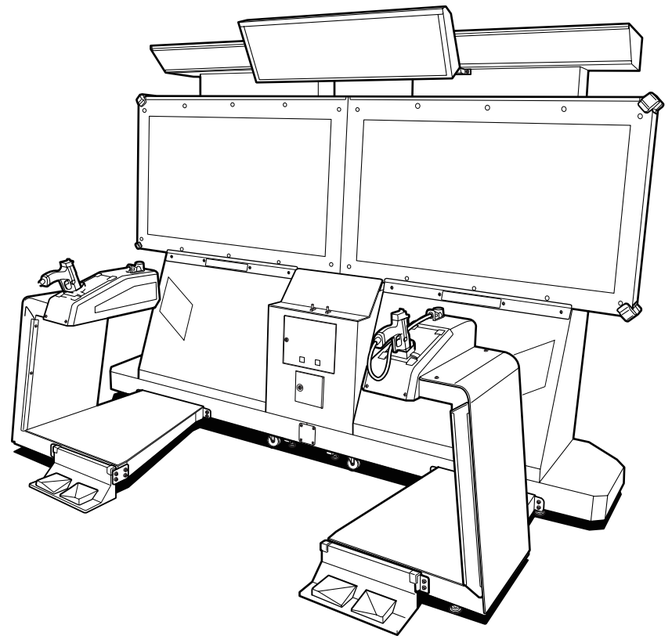
Time Crisis 5 (US specifications) OPERATION MANUAL First Edition BANDAI NAMCO Games Inc.

Part No. 737-354
First Edition Published in February 2015

BANDAI NAMCO Games Inc.

2737003100

BANDAI NAMCO Games



Time Crisis 5
(US specifications)

OPERATION MANUAL

The actual product may differ slightly from the illustrations in this manual.

⚠WARNING

- To ensure safe operation of the products, be sure to read this Operation Manual before use.
- Keep this operation manual, along with the projector operation manual in a safe place where is can be quickly accessed whenever needed.

The specifications of the machine and the contents of this operation manual are subject to change without prior notice due to product improvements.

Introduction

Thank you very much for purchasing Time Crisis 5 (referred to as "the machine" in this Operation Manual).

This Operation Manual describes:

- How to safely install, operate, move, transport, maintain and dispose of the machine.
- How to make full use of the machine's functions and operate it correctly.
- How to ensure the safety of players and bystanders.

Contact for machine and machine repair inquiries

- For inquiries regarding the machine or machine repairs, contact your distributor.

BANDAI NAMCO Games manages and identifies the chemical substances contained in our products through our green procurement standard. The machine described in this manual is environmentally friendly and designed to reduce power usage (through the use of power-saving materials), save resources (cabinets designed to increase transport efficiency and reduce packaging materials), and be easily recycled (designed to be disassembled easily).
More information on eco amusement can be found on our official website.

(Authorized in September 2014)

1. Safety Precautions – Be sure to read to ensure safe operation –

Instructions to the Owner

If you delegate the work of installing, moving, transporting, operating, maintaining or disposing of the machine to other people, ensure that these people read the relevant sections of this Operation Manual carefully before starting work, and observe the corresponding precautions.

1-1 Levels of Risk

The safety and property damage precautions on the machine labels and in this Operation Manual are classified according to their risk level, as follows.

⚠WARNING : Failure to avoid these risks may result in serious injury or death

⚠CAUTION : Failure to avoid these risks may result in light injury or damage to other property

Notes about functionality that are not related to safety are indicated by the following symbol.

NOTICE : Information about product functions or protection

1-2 Definition of "Technician"

This Operation Manual is designed for arcade personnel. However, the sections marked "Must be performed by a technician" in the Table of Contents are written for technicians. These must be performed by technicians only.

A **technician** is a person involved in the design, manufacture, inspection, maintenance or service at an amusement device manufacturer, or a person involved routinely in the maintenance or management (such as repair) of amusement devices who has specialist knowledge of electricity, electronics or mechanical engineering equivalent to or higher than a technical high school graduate.

1-3 Critical Safety Precautions

⚠WARNING

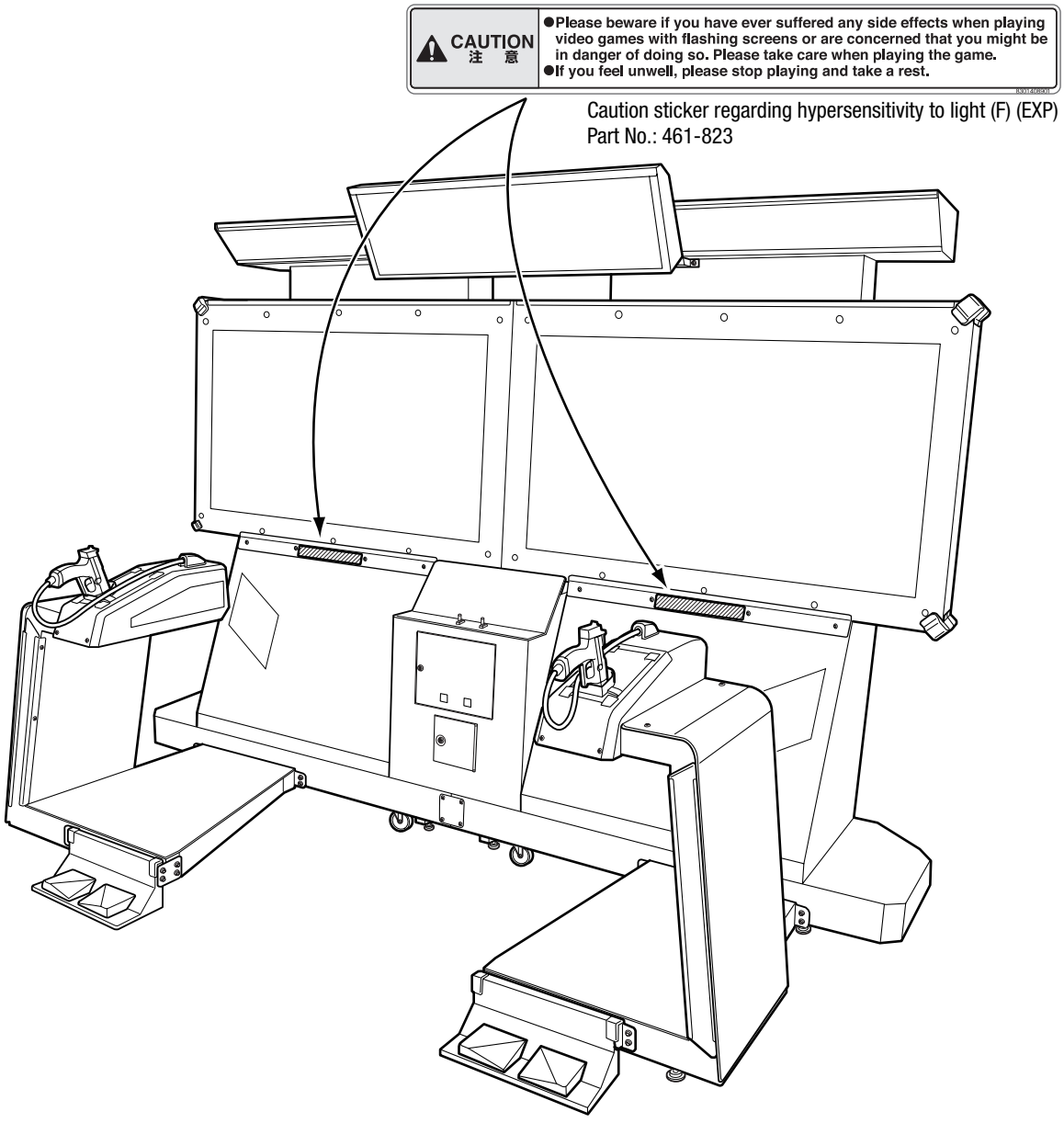
- Should an abnormality occur, turn off the power switch immediately to stop operations. Then, be sure to disconnect the power cord plug from the outlet.
  Operating the machine while the abnormality persists may result in fire or accident.
- Dust accumulating on the power cord plug may result in fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in fire or burns.
- Damage to the power cord may result in fire, electric shock or electrical leakage. Be sure to observe the following.
  - Keep the power cord away from heaters.
  - Do not twist the power cord.
  - Do not forcibly bend the power cord.
  - Do not alter the power cord.
  - Do not bundle the power cord.
  - Do not pull the power cord. (Always unplug by holding the plug and not the power cord.)
  - Do not place objects on the power cord.
  - Do not allow the power cord to be caught between the machine and other devices or the wall.
  - Do not do anything else that might damage the power cord.
- Do not expose the power cord and power cord plug to water. Doing so may result in electric shock or electrical leakage.
- Do not touch the power cord plug with wet hands. Doing so may result in electric shock.
- The maximum current consumption of 9 A is the machine's power capacity. To prevent fire and electric shock, use indoor wiring that conforms to these power supply specifications.
- Operate the machine using a power supply voltage in the range of 110 to 130 VAC. Using a voltage outside this range may result in fire or electric shock. To ensure that the machine operates in optimum conditions, try to maintain the power supply at 120 VAC.
- In order to ensure this machine is used safely, be sure to perform the pre-operation inspection (P-34 "7-4 Pre-operation Inspection") and service (P-84 "8B. Service") described in this Operation Manual.
  Omitting these inspections or service may result in an accident.
- Use the consumables and service parts (including screws) that are specified by BANDAI NAMCO Games Inc. To order parts, contact your distributor.
- Do not modify the machine without permission. Do not perform any operations that are not described in this Operation Manual. Modifying the machine may create unforeseen hazards.
- The machine has been manufactured according to Japanese specifications and thus it does not comply with standards used outside of Japan. It must only be used in Japan. Using it outside of Japan may lead to unforeseen hazards.
- If you decide to transfer the ownership of this machine, be sure to provide this Operation Manual with the machine.

1-4 Machine Warning Labels

⚠WARNING

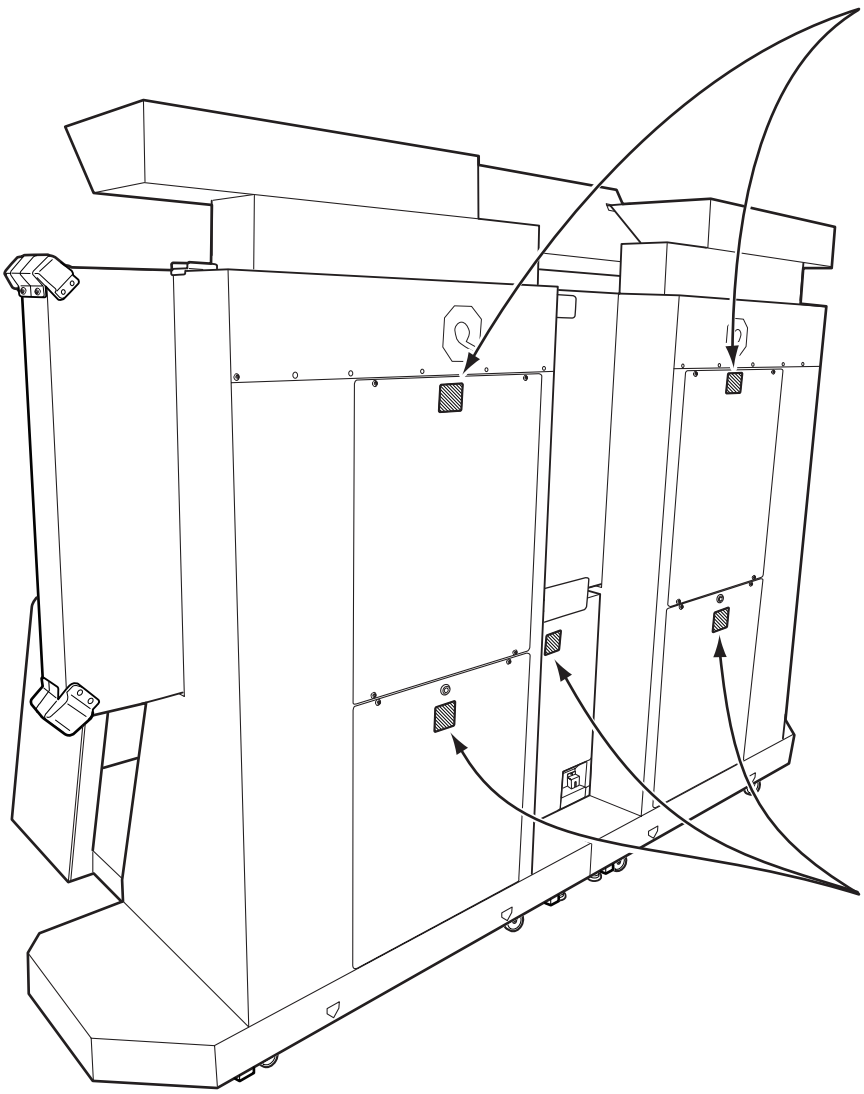
- The warning labels attached to the machine contain important information to ensure safety. Be sure to observe the following.
  - In order to ensure that the warning labels attached to the machine are always clearly visible, install the machine in an appropriate location with ample illumination and keep the labels clean at all times. Also make sure that the labels are not hidden by other machines or objects.
  - Do not remove or alter the warning labels.
  - If a warning label becomes excessively dirty or damaged, replace it with a new one. To order warning labels, contact your distributor.

Front



Caution sticker regarding hypersensitivity to light (F) (EXP)
Part No.: 461-823

Back



WARNING
警 告

To avoid an electrical shock and/or injury, be sure that the power is turned off before opening the service door.
Only qualified personnel should attempt to service the game.

Warning sticker Service B (EXP)
Part No.: 461-539

WARNING
警 告

To avoid an electrical shock and/or injury, be sure that the power is turned off before opening the service door.
Only qualified personnel should attempt to service the game.

Warning sticker Service B (EXP)
Part No.: 461-539

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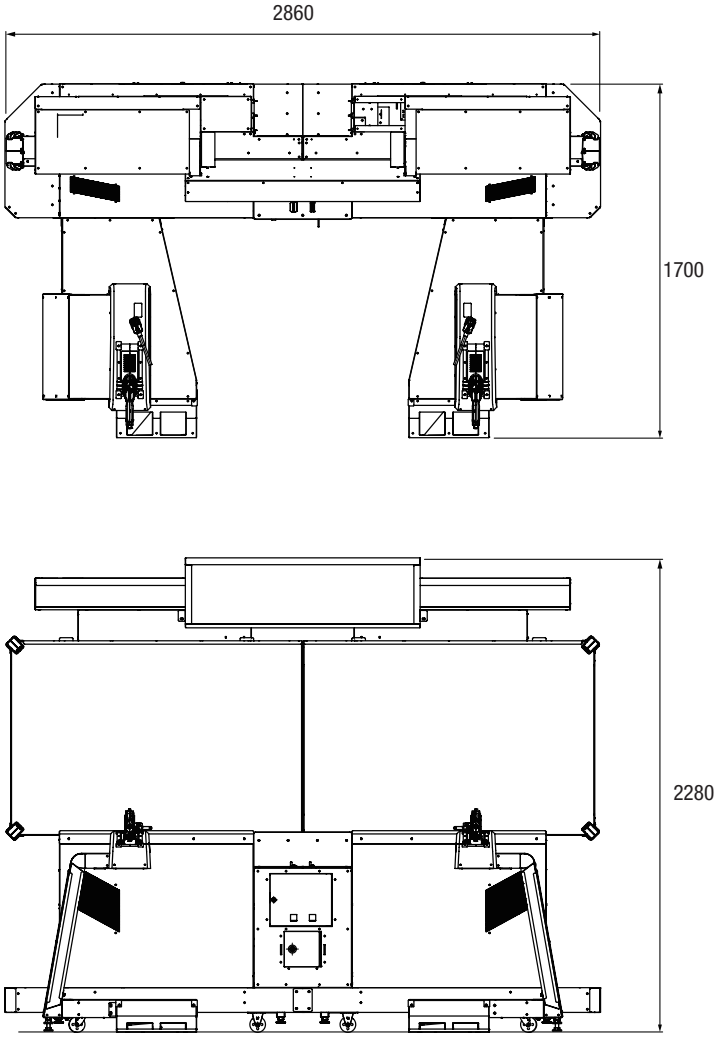
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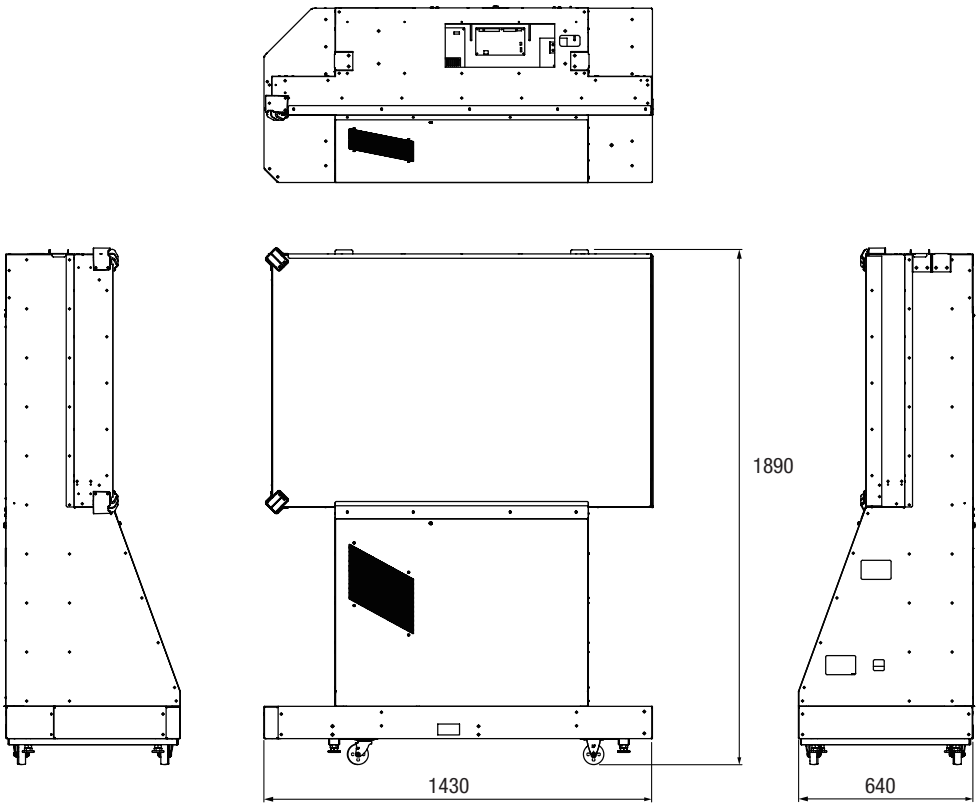
2. Specifications

(1) Rated power supply	AC 120 ±10 V
(2) Rated power consumption	1080 W
(3) Maximum current consumption	9 A
(4) Coin box capacity	Approximately 3000 coins.
(5) Display unit	55" LCD monitor x 2
(6) Dimensions	
[1] When installed	Width (W) 2,860 x Depth (D) 1,700 x Height (H) 2,280 [mm]

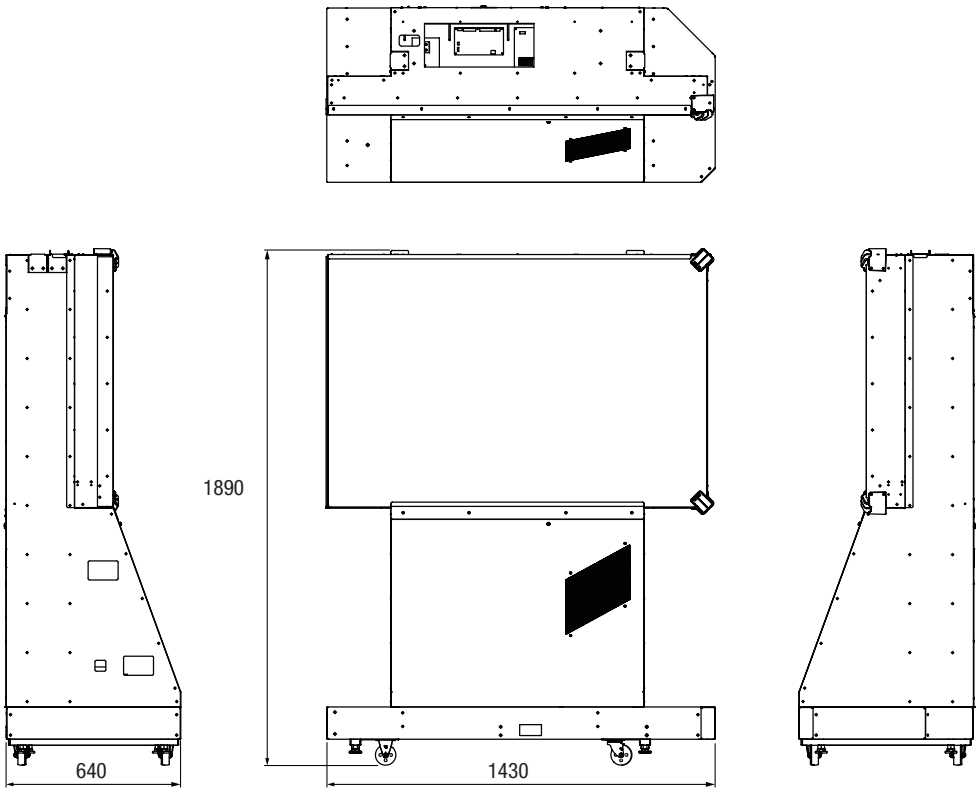


[2] When disassembled

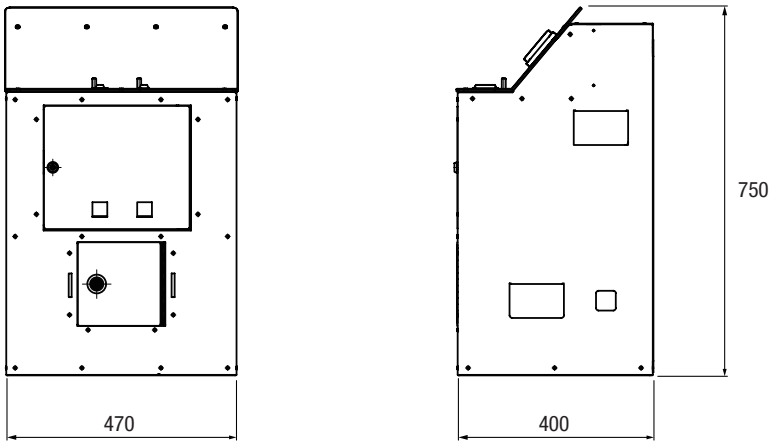
Monitor tower (L) assembly Width (W) 1,430 x Depth (D) 640 x Height (H) 1,890 [mm]



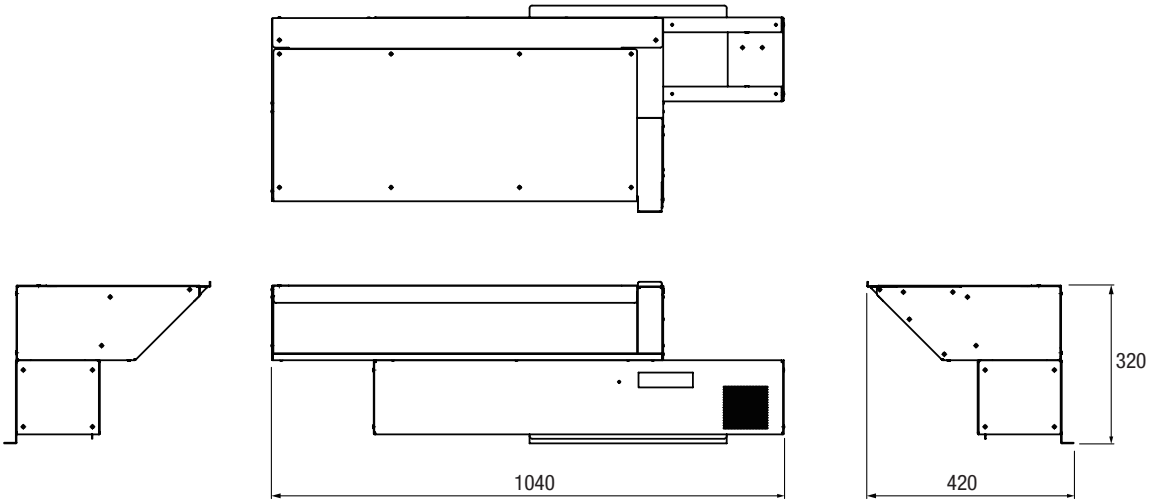
Monitor tower (R) assembly Width (W) 1,430 x Depth (D) 640 x Height (H) 1,890 [mm]



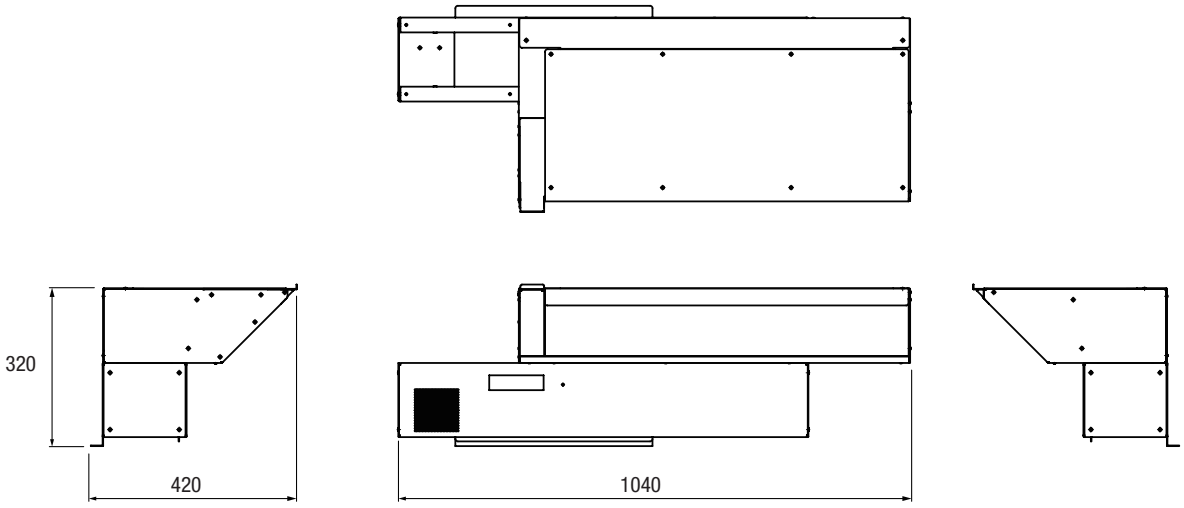
Coin box assembly Width (W) 470 x Depth (D) 400 x Height (H) 750 [mm]



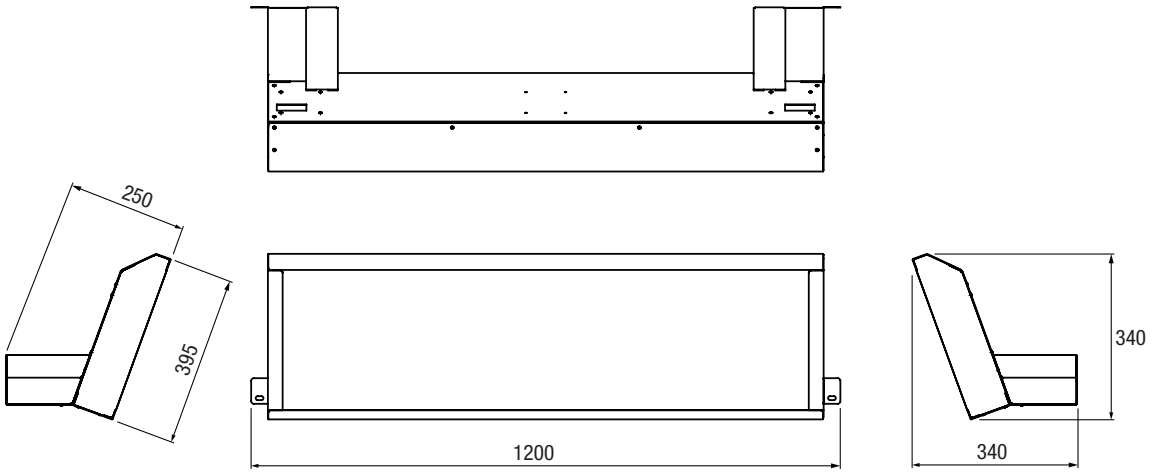
Signboard (L) assembly Width (W) 1,040 x Depth (D) 420 x Height (H) 320 [mm]



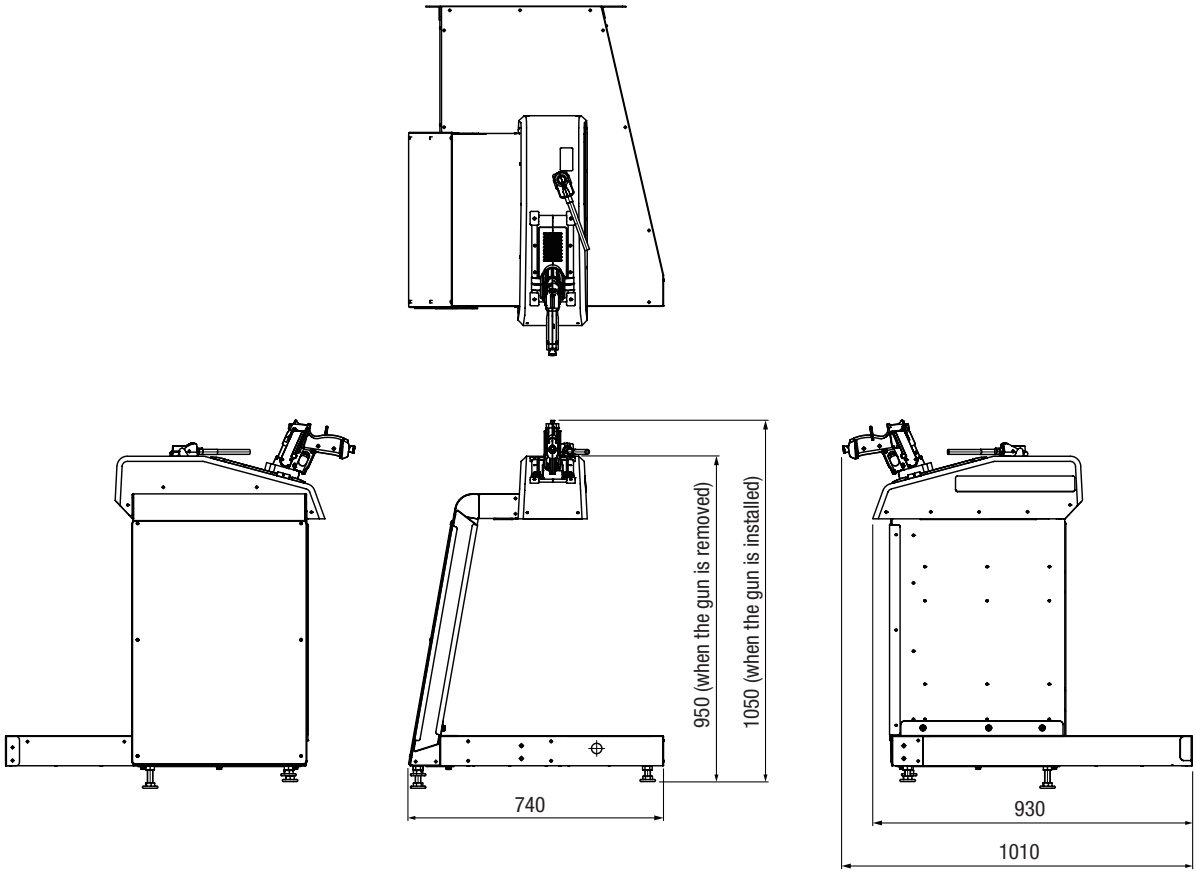
Signboard (R) assembly Width (W) 1,040 x Depth (D) 420 x Height (H) 320 [mm]



Signboard (C) assembly Width (W) 1,200 x Depth (D) 340 x Height (H) 340 [mm]

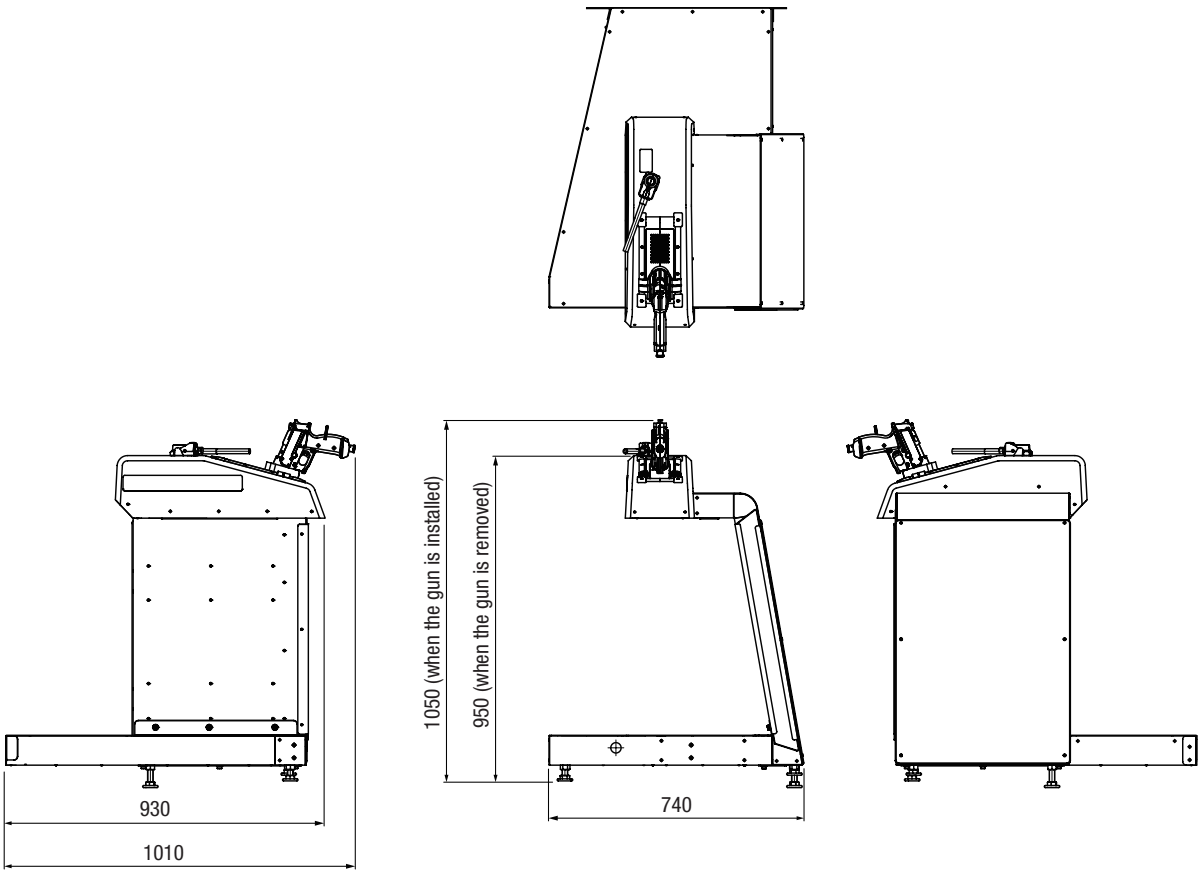


Gun tower (L) assembly Width (W) 740 x Depth (D) 930 x Height (H) 950 [mm]
(When the gun is removed)
Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm]
(When the gun is inserted)



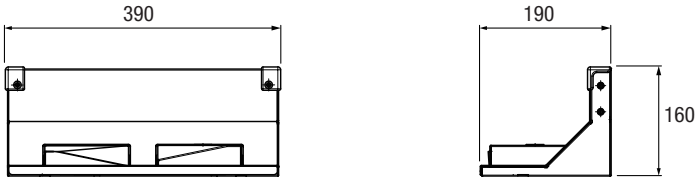
Gun tower (R) assembly

Width (W) 740 x Depth (D) 930 x Height (H) 950 [mm]
(When the gun is removed)
Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm]
(When the gun is inserted)



Pedal assembly

Width (W) 390 x Depth (D) 190 x Height (H) 160 [mm]



(7) Weight

[1] When installed 550 kg

[2] When disassembled

Monitor tower (L) assembly	170 kg
Monitor tower (R) assembly	170 kg
Coin box assembly	40 kg
Signboard (L) assembly	18 kg
Signboard (R) assembly	18 kg
Signboard (C) assembly	16 kg
Gun tower (L) assembly	55 kg
Gun tower (R) assembly	55 kg
Pedal assembly	6 kg x 2

3. Package Contents

The following items (9 packages) are included when this machine is shipped.

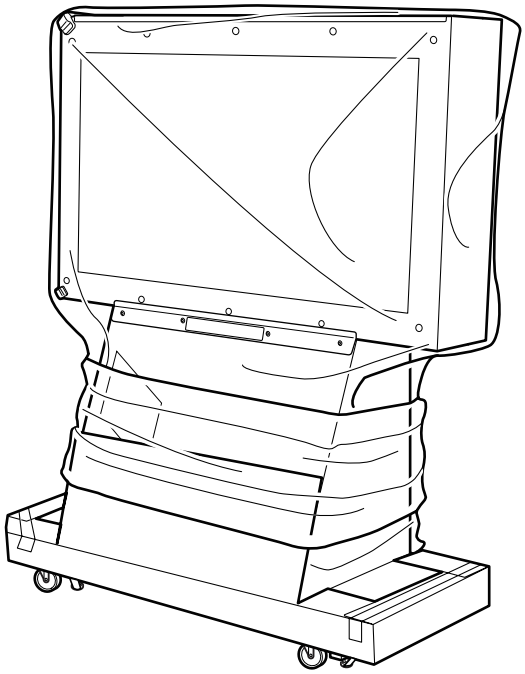
NOTICE

- Make sure that all the items below are contained in the product packages.
- If any items are missing, contact your distributor.

Monitor tower (L) assembly (Package No. 1/8)

Weight: 170 kg

Width (W) 1,430 x Depth (D) 660 x Height (H) 1,890 [mm]



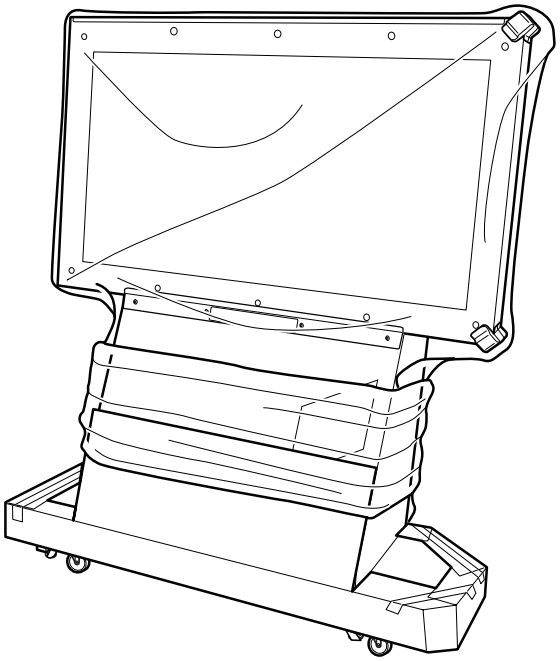
Monitor tower (L) assembly

No.	Name	Specifications	Qty.
1	Monitor tower (L) assembly	See illustration above	1
2	Service key		2

Monitor tower (R) assembly (Package No. 2/8)

Weight: 170 kg

Width (W) 1,430 x Depth (D) 660 x Height (H) 1,890 [mm]]



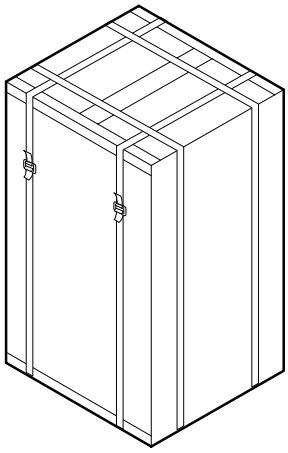
Monitor tower (R) assembly

No.	Name	Specifications	Qty.
1	Monitor tower (R) assembly	See illustration above	1
2	Service key		2

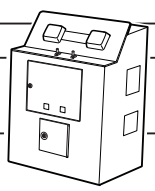
Coin box assembly (Package No. 3/8)

Weight: 40 kg

Width (W) 430 x Depth (D) 500 x Height (H) 840 [mm]



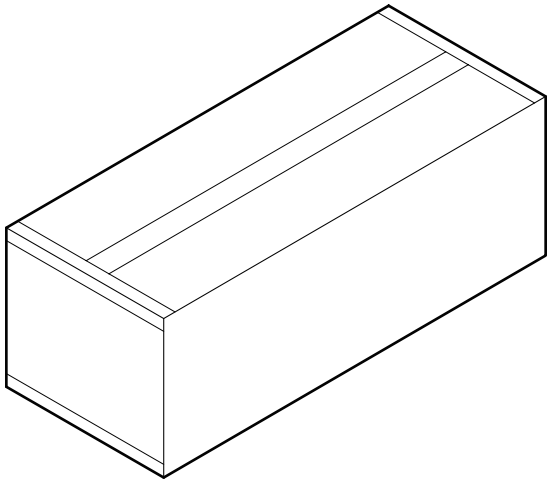
Coin box assembly

No.	Name	Specifications	Qty.
1	Coin box assembly		1
2	Service key		2
3	Cashbox key		1

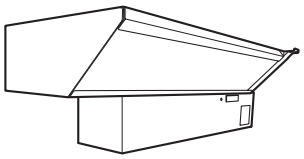
Signboard (L) assembly (Package No. 4/8)

Weight: 22 kg

Width (W) 1,120 x Depth (D) 520 x Height (H) 430 [mm]



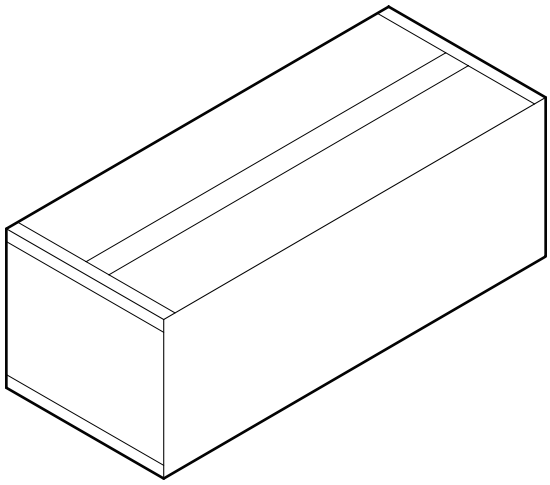
Signboard (L) assembly

No.	Name	Specifications	Qty.
1	Signboard (L) assembly		1

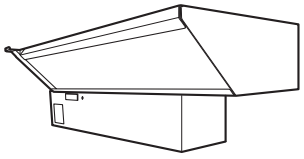
Signboard (R) assembly (Package No. 5/8)

Weight: 22 kg

Width (W) 1,120 x Depth (D) 520 x Height (H) 430 [mm]



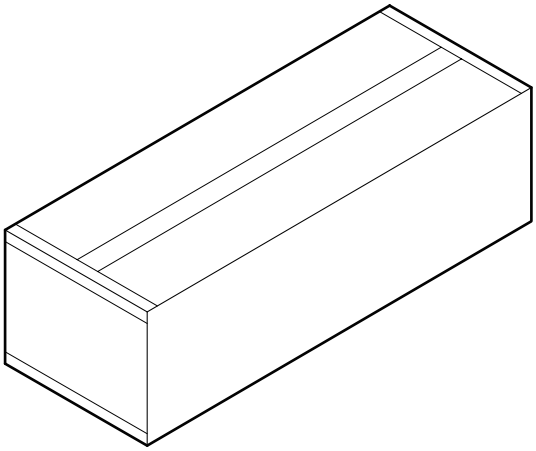
Signboard (R) assembly

No.	Name	Specifications	Qty.
1	Signboard (R) assembly		1

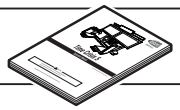
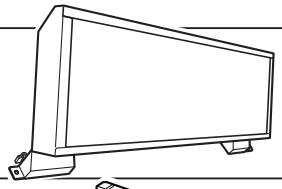
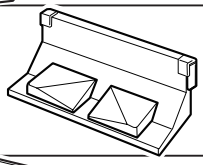
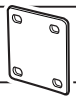
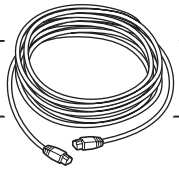
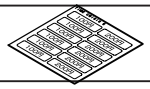
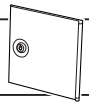
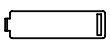
Signboard (C) assembly (Package No. 6/8)

Weight: 32 kg

Width (W) 1,280 x Depth (D) 480 x Height (H) 360 [mm]



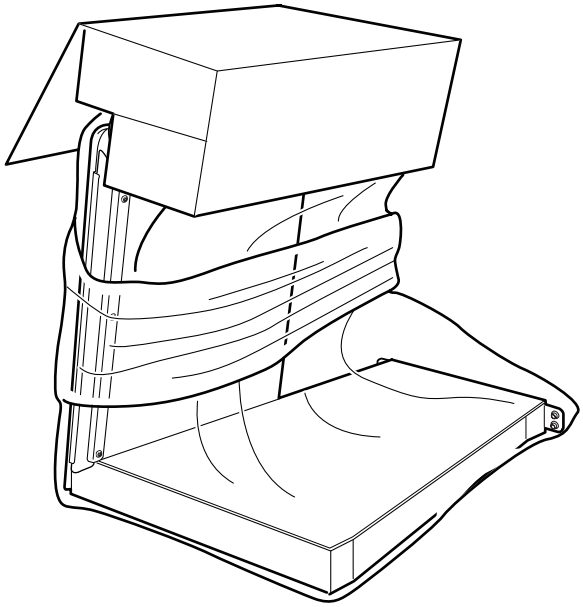
Signboard (C) assembly

No.	Name	Specifications	Qty.
1	Operation Manual (This manual)		1
2	Signboard (C) assembly		1
3	Pedal assembly		2
4	Tower joint A		2
5	Tower joint B		1
6	LAN cable		1
7	Price sticker (EXP)		1
8	Pedal joint (A)		2
9	Pedal joint (B)		2
10	Flange socket bolt (M6 x 12)		3
11	Torx bolt (black) (M5 x 12)		2
12	USB dongle		2
13	Coin door		1
14	Coin cover		1

Gun tower (L) assembly (Package No. 7/8)

Weight: 55 kg

Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm]



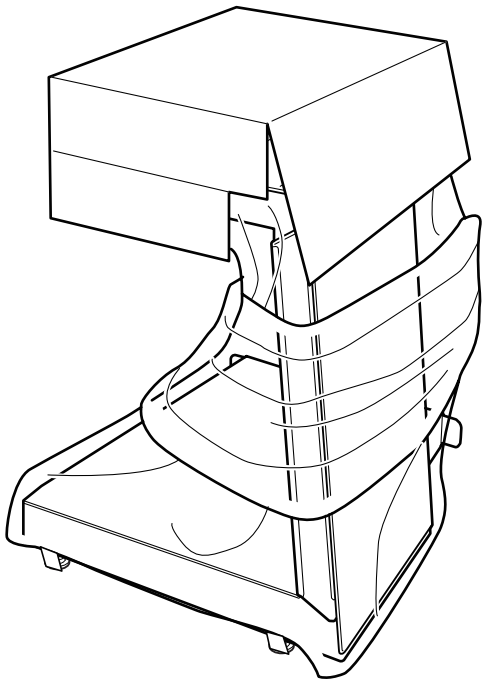
Gun tower (L) assembly

No.	Name	Specifications	Qty.
1	Gun tower (L) assembly	See illustration above	1

Gun tower (R) assembly (Package No. 8/8)

Weight: 55 kg

Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm]

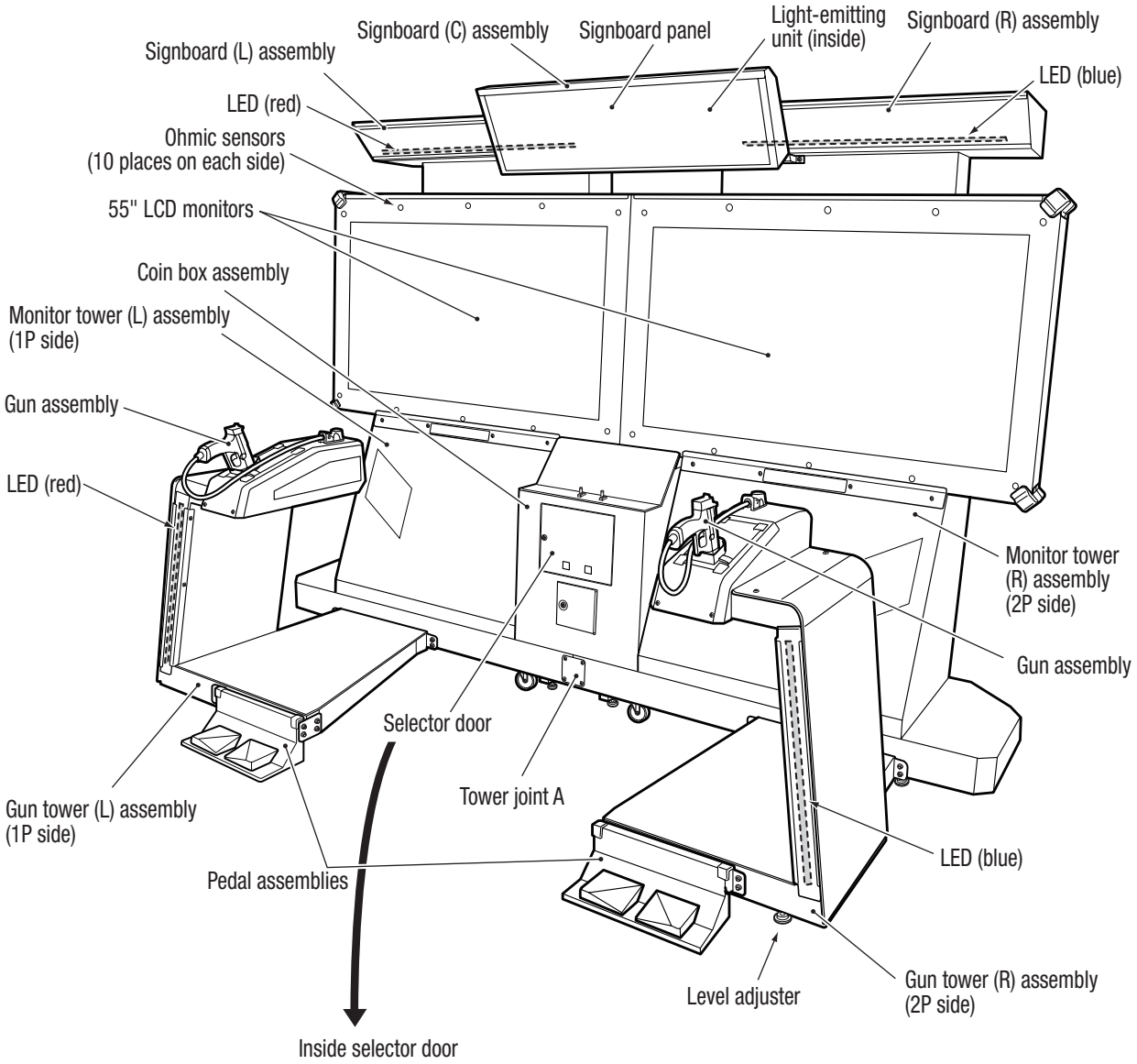


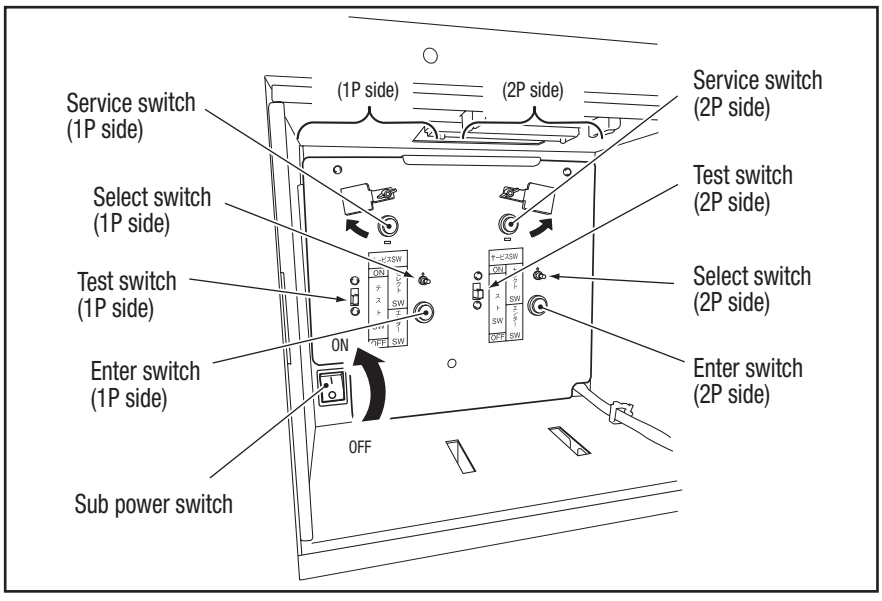
Gun tower (R) assembly

No.	Name	Specifications	Qty.
1	Gun tower (R) assembly	See illustration above	1

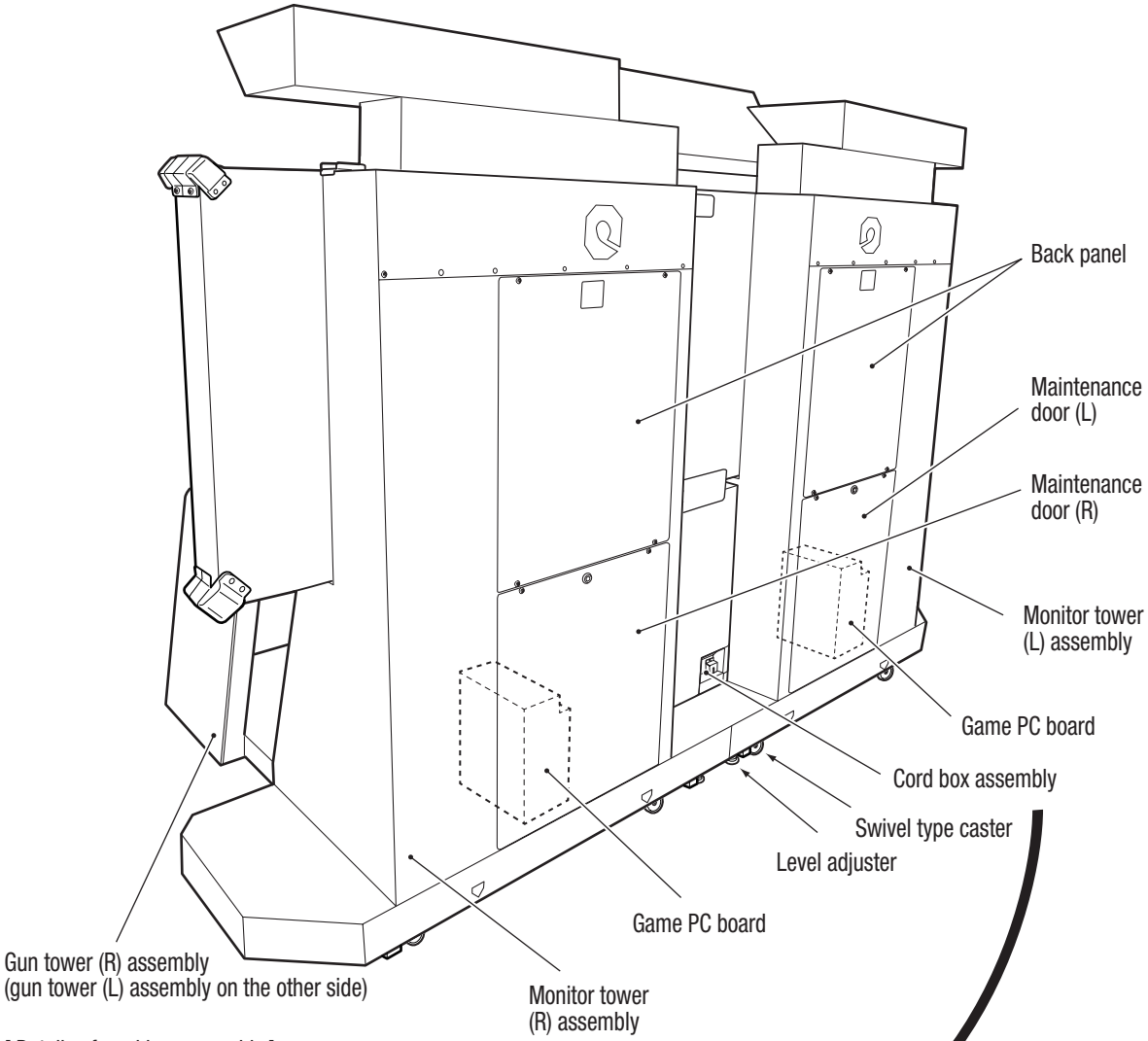
4. Overall Structure (Part Names)

Front

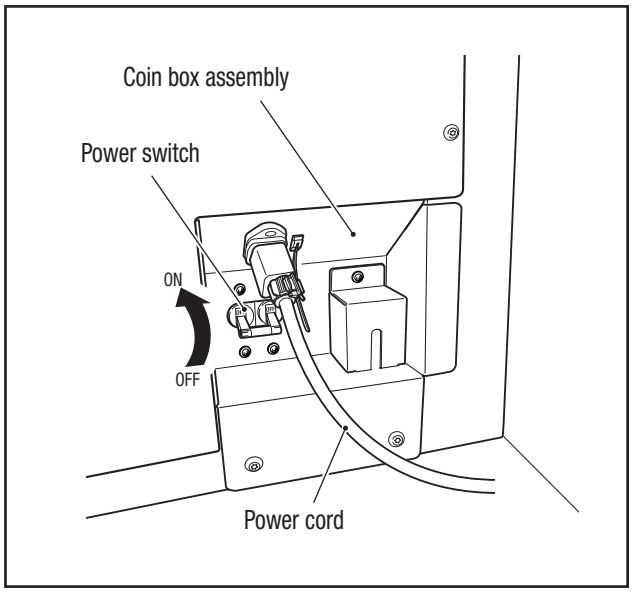




Back



[Details of cord box assembly]



5. Delivery and Installation Conditions

⚠WARNING

- Install the machine according to the instructions in this Operation Manual. Failure to follow these instructions may result in fire, electric shock, injury or malfunction.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in fire or burns.
- Be sure to install the ground wire. Failure to install the ground wire may result in electric shock in the event of electrical leakage. (See P-79 "8A-6 Connecting the Power Cord and Ground".)
- Install the machine securely by using the level adjusters. Unstable machine installation may result in accident or injury. (See P-77 "8A-4 Level Adjuster Adjustment".)

5-1 Installation Conditions

5-1-1 Locations Where the Machine Should Not Be Installed

⚠WARNING

- This machine is designed for indoor use. Never install the machine outdoors or in the following locations.
  - A location exposed to direct sunlight
  - A location exposed to rain or water leaks
  - A damp location
  - A dusty location
  - A location close to heaters
  - A hot location
  - An extremely cold location
  - A location exposed to condensation caused by temperature differences
  - A location that obstructs an emergency exit or fire extinguishing equipment
  - An unstable location or a location exposed to vibration

NOTICE

- Do not install the machine in the following locations. Doing so may cause the sensor to fail to detect the position of the gun assembly.
  - A location where the gun assembly or screen surface is exposed directly to sunlight, the rays of spotlights, or other intense light sources.
  - A location where there is a large contrast between light and dark due to a blinking bright light source.

  (See P-46 "7-7-4 Gun Test".)

5-1-2 Play Zone when the Machine Is in Operation

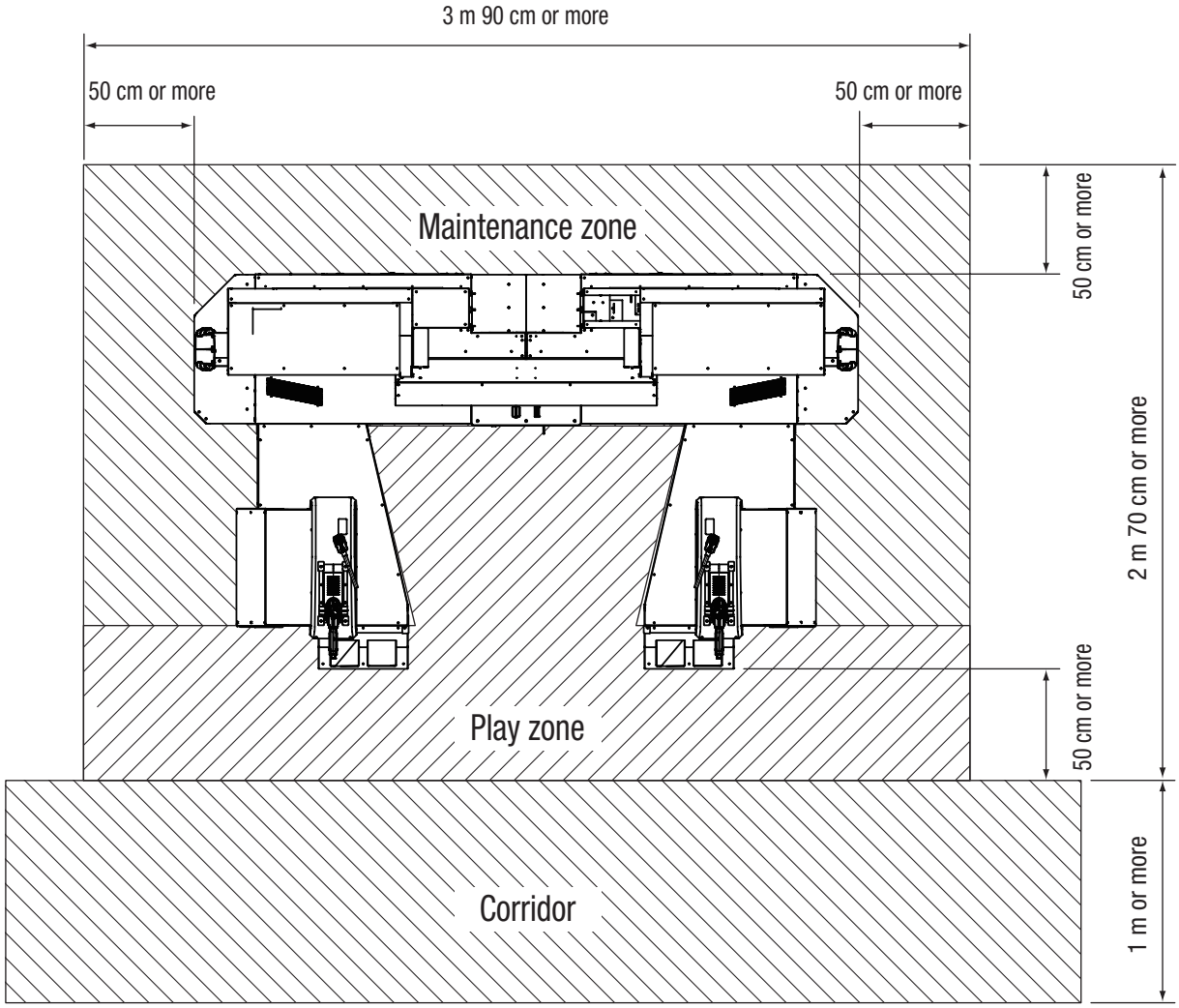
⚠CAUTION

● Provide a play zone as shown below around the machine so that players do not make contact with bystanders or passersby.

NOTICE

● A floor-to-ceiling height of 2 m 40 cm or more is required.

● Provide a space of at least 50 cm between the back of the machine and the wall or another machine so that the power switch can be reached to be turned on or off, and the back panel can be removed to enable servicing.



5-2 Required Dimensions for the Delivery Route (Such as Doors and Corridors)

The delivery route must have some extra space over and above the height and width of the machine.
The sizes of the machine when it is shipped are as follows.
Check that the packages can be carried into the intended location based on these dimensions as a reference.

- Monitor tower (L) assembly
  Width (W) 1,430 x Depth (D) 640 x Height (H) 1,890 [mm], Weight 170 kg
- Monitor tower (R) assembly
  Width (W) 1,430 x Depth (D) 640 x Height (H) 1,890 [mm], Weight 170 kg
- Coin box assembly
  Width (W) 470 x Depth (D) 400 x Height (H) 750 [mm], Weight 40 kg
- Signboard (L) assembly
  Width (W) 1,040 x Depth (D) 420 x Height (H) 320 [mm], Weight 18 kg
- Signboard (R) assembly
  Width (W) 1,040 x Depth (D) 420 x Height (H) 320 [mm], Weight 18 kg
- Signboard (C) assembly
  Width (W) 1,200 x Depth (D) 340 x Height (H) 340 [mm], Weight 15 kg
- Gun tower (L) assembly
  Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm], Weight 52 kg
- Gun tower (R) assembly
  Width (W) 740 x Depth (D) 1,010 x Height (H) 1,050 [mm], Weight 52 kg
- Pedal assembly
  Width (W) 390 x Depth (D) 190 x Height (H) 155 [mm], Weight 6 kg

* Once the machine has been carried into the intended location, continue with P-63 "8A. Installation and Assembly".

6. Moving and Transportation

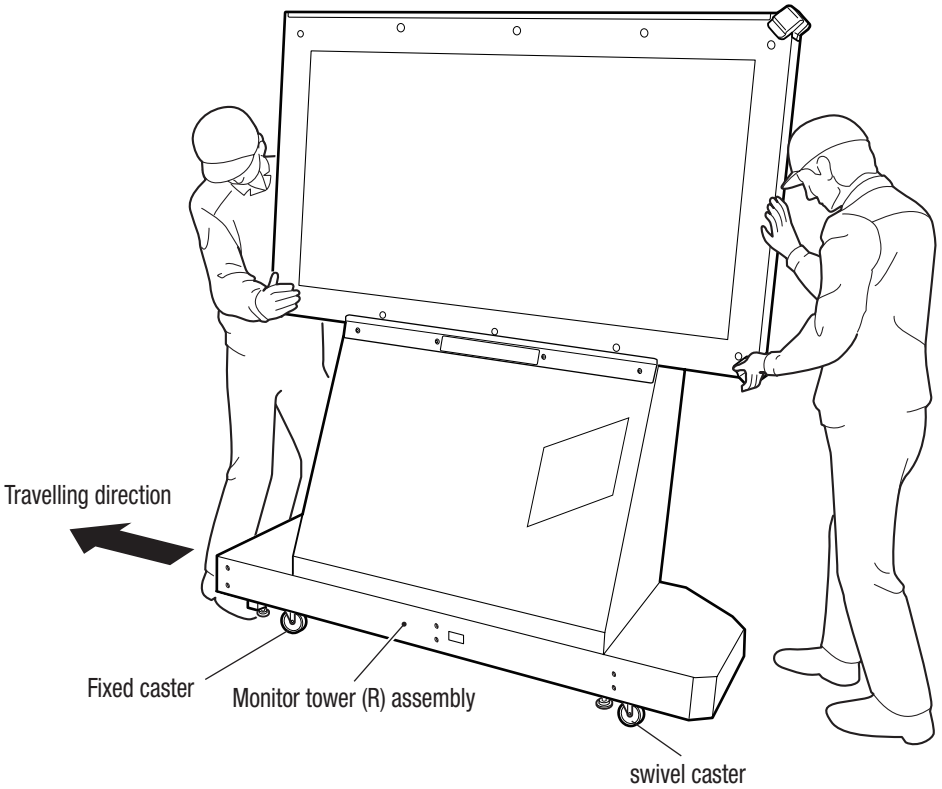
⚠WARNING

- This machine cannot be moved while it is installed. Attempting to move or transport the machine without disassembling it may result in an accident. Move or transport the machine according to the instructions in this Operation Manual.
- Do not leave the machine on a slope. Otherwise, it may tip over or cause an accident.

6-1 Moving (Within the Same Floor)

NOTICE

- When moving the machine, disassemble it into the monitor tower (L) and (R) assemblies, coin box assembly, signboard (L), (R), and (C) assemblies, gun tower (L) and (R) assemblies, and pedal assemblies.
- Even when only moving the machine a short distance, be sure to raise the level adjusters of the monitor tower (L) and (R) assemblies, and gun tower (L) and (R) assemblies to their highest level. (See P-77 "8A-4 Level Adjuster Adjustment".)
- The overall height of the monitor tower (L) and (R) assemblies is approximately 1,890 mm. Note the height of doors.
- Move the machine carefully to avoid damaging it.
- Do not subject the machine to impact when moving it down from an elevated position.
- When moving the machine using the casters, do not forcibly push it over bumps.
- Exercise care not to allow the gun assembly to drop.
- Exercise care not to allow the gun assembly tube to get caught and pulled.

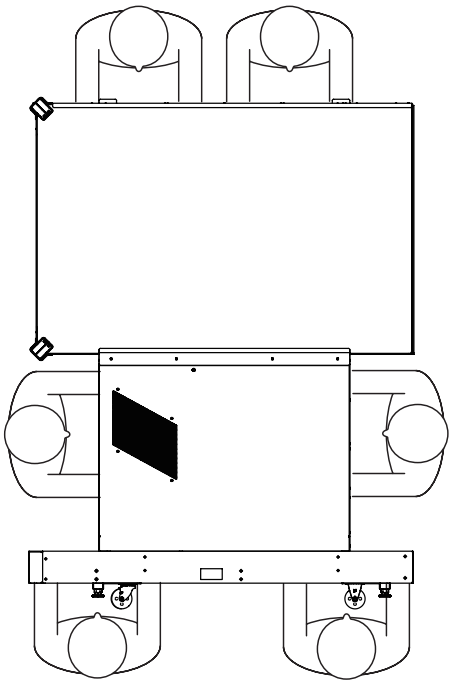


6-2 Transportation

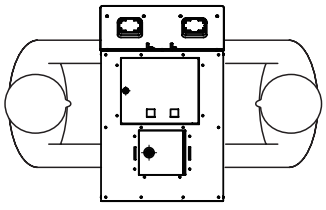
6-2-1 Manual Transportation (Such as Carrying on Stairs)

⚠WARNING

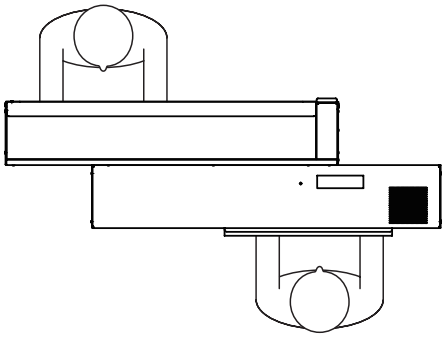
- When moving the machine, disassemble it into the monitor tower (L) and (R) assemblies, coin box assembly, signboard (L), (R), and (C) assemblies, gun tower (L) and (R) assemblies, and pedal assemblies.
- Attempting to manually transport the machine without disassembling it may result in an accident or injury.
- When manually transporting the machine, be sure to disassemble it into the monitor tower (L) and (R) assemblies, coin box assembly, signboard (L), (R), and (C) assemblies, gun tower (L) and (R) assemblies, and pedal assemblies. Attempting to manually transport the machine without disassembling it may result in an accident or injury. (See P-26 "5-2 Required Dimensions for the Delivery Route (Such as Doors and Corridors)" and P-63 "8A. Installation and Assembly".)
- When manually transporting the machine, be sure to secure the gun assembly to the control assembly using tapes or straps to prevent the gun assembly from dropping, or remove the gun assembly to transport it separately. If the gun assembly drops, it may result in an accident or injury.
- When transporting the machine manually, be sure to use the following number of people. Overburdening yourself may result in accident or injury.
  - Monitor tower (L) and (R) assemblies (170 kg/each): 6 or more people



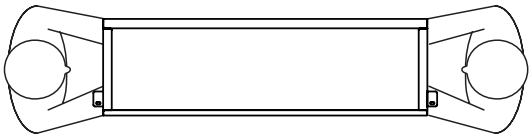
  - Coin box assembly (40 kg): 2 or more people



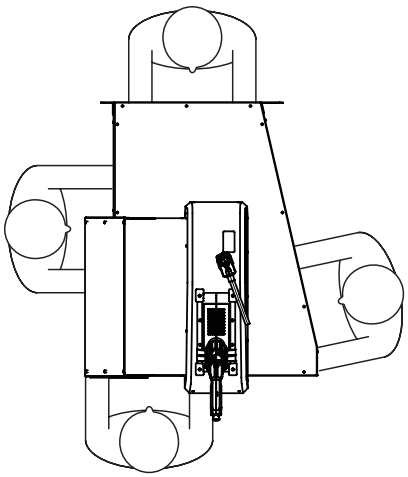
- Signboard (L) and (R) assemblies (18 kg/each): 2 or more people



- Signboard (C) assembly (15 kg): 2 or more people



- Gun tower (L) and (R) assemblies (55 kg): 4 or more people



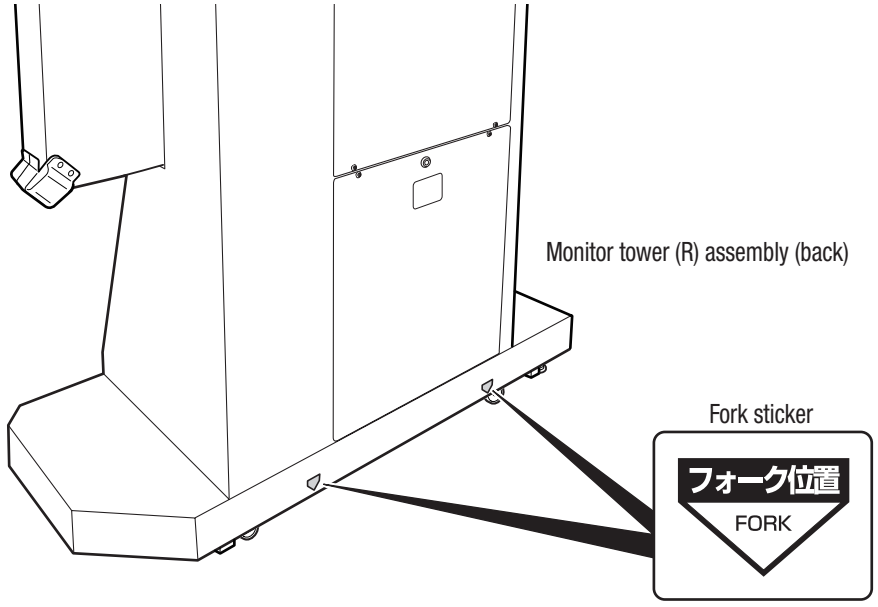
NOTICE

- Do not subject the machine to impact when moving it down from an elevated position.
- Move the machine carefully to avoid damaging it.
- Be sure to raise the level adjusters of the monitor tower (L) and (R) assemblies, and gun tower (L) and (R) assemblies to their highest level. (See P-77 "8A-4 Level Adjuster Adjustment".)
- Exercise care not to allow the gun assembly to drop.
- Exercise care not to allow the gun assembly tube to get caught and pulled.

6-2-2 Loading to and Unloading from a Vehicle

⚠WARNING

- When moving the machine, disassemble it into the monitor tower (L) and (R) assemblies, coin box assembly, signboard (L), (R), and (C) assemblies, gun tower (L) and (R) assemblies, and pedal assemblies. An attempt to manually transport the machine without disassembling it may result in an accident or injury. (See P-63 "8A. Installation and Assembly".)
- When manually transporting the machine, be sure to disassemble it into the monitor tower (L) and (R) assemblies, coin box assembly, signboard (L), (R), and (C) assemblies, gun tower (L) and (R) assemblies, and pedal assemblies. Attempting to manually transport the machine without disassembling it may result in an accident or injury. (See P-26 "5-2 Required Dimensions for the Delivery Route (Such as Doors and Corridors)" and P-63 "8A. Installation and Assembly".)
  When manually transporting the machine to load it into or from a vehicle, follow the instructions in P-28 "6-2-1 Manual Transportation (Such as Carrying on Stairs)".
- When using a forklift to transport the monitor tower (L) and (R) assemblies, observe the following. Failure to observe the following may result in an accident, such as the machine tipping over.
  - Be sure to insert the forks into the specified positions.
  - Make sure that the machine is balanced properly during transportation.
- The gun tower (L) and (R) assemblies are not to designed to be transported by a forklift. If they are transported by a forklift, the forklift may tip over or cause an accident. Do not use a forklift when moving or transporting them.



NOTICE

- Do not subject the machine to impact when moving it down from an elevated position.
- Move the machine carefully to avoid damaging it.
- Be sure to raise the level adjusters of the monitor tower (L) and (R) assemblies, and gun tower (L) and (R) assemblies to their highest level. (See P-77 "8A-4 Level Adjuster Adjustment".)
- Exercise care not to allow the gun assembly to drop.
- Exercise care not to allow the gun assembly tube to get caught and pulled.

6-2-3 Transportation Using a Vehicle

⚠WARNING

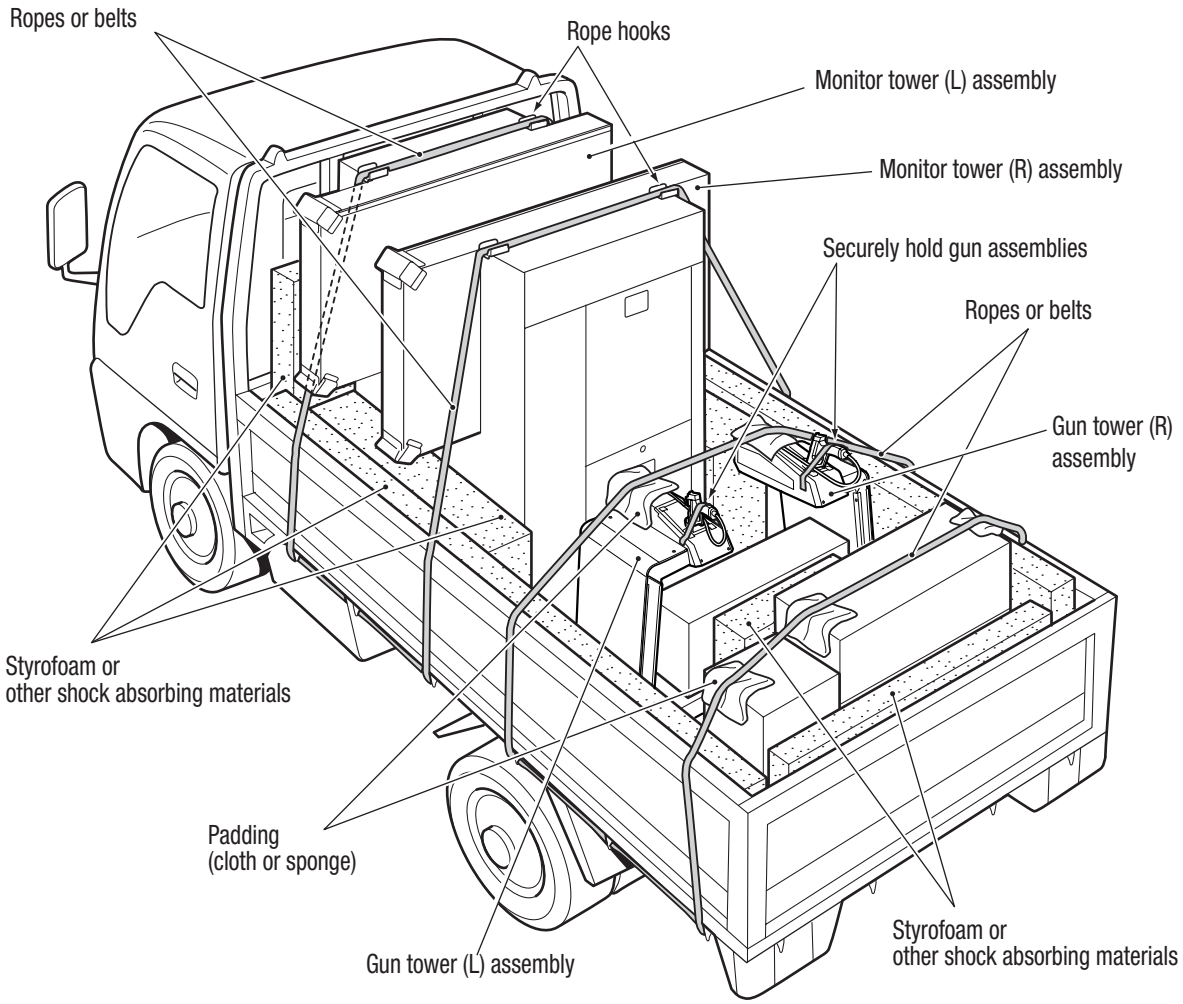
● When transporting the machine on a vehicle, secure the machine firmly so that it does not move during transportation. Failure to secure the machine may result in an accident.

NOTICE

● Do not subject the machine to impact when moving it down from an elevated position.

● When securing the machine with a rope, observe the following.
- Be sure to secure the machine with ropes in the positions shown in the figure below.
- Place Styrofoam or other shock absorbing materials between the machine and the truck bed to protect the machine surfaces.

● When transporting the machine, be sure to secure the gun assembly to the gun tower assembly using tapes or straps to prevent the gun assembly from dropping, and do not remove the gun assembly.



7. Operation

⚠WARNING

- Should an abnormality occur, turn off the power switch immediately to stop operations. Then, be sure to disconnect the power cord plug from the outlet. Operating the machine while the abnormality persists may result in fire or accident.
- Dust accumulating on the power cord plug may result in fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in fire or burns.
- Before operating the machine, be sure to check that installation has been performed according to the instructions and specified procedures in this Operation Manual (see P-24 "5. Delivery and Installation Conditions"). Failure to install the machine normally may result in fire, electric shock, injury or malfunction.
- The warning labels attached to the machine contain important information to ensure safety. Be sure to observe the following.
- In order to ensure that the warning labels attached to the machine are always clearly visible, install the machine in an appropriate location with ample illumination and keep the labels clean at all times. Also make sure that the labels are not hidden by other machines or objects.
- Do not remove or alter the warning labels.
- If a warning label becomes excessively dirty or damaged, replace it with a new one. To order warning labels, contact your distributor.
- In order to ensure safe use of the machine, be sure to perform the pre-operation inspection (P-34 "7-4 Pre-operation Inspection") and service (P-84 "8B. Service") described in this Operation Manual.
- Omitting these inspections or service may result in an accident.

7-1 People Who Should Not Play the Game

⚠WARNING

- In order to ensure the safety of players, be careful not to let people play under the following conditions. Failure to do so may result in an accident.
  - People who are sensitive to light such as strobe lights
  - People whose behavior is against what is described on the warning labels on this machine
  - People who are sensitive to light such as strobe lights
  - People whose behavior is against what is described on the warning labels on this machine

7-2 Safety Precautions for Playing

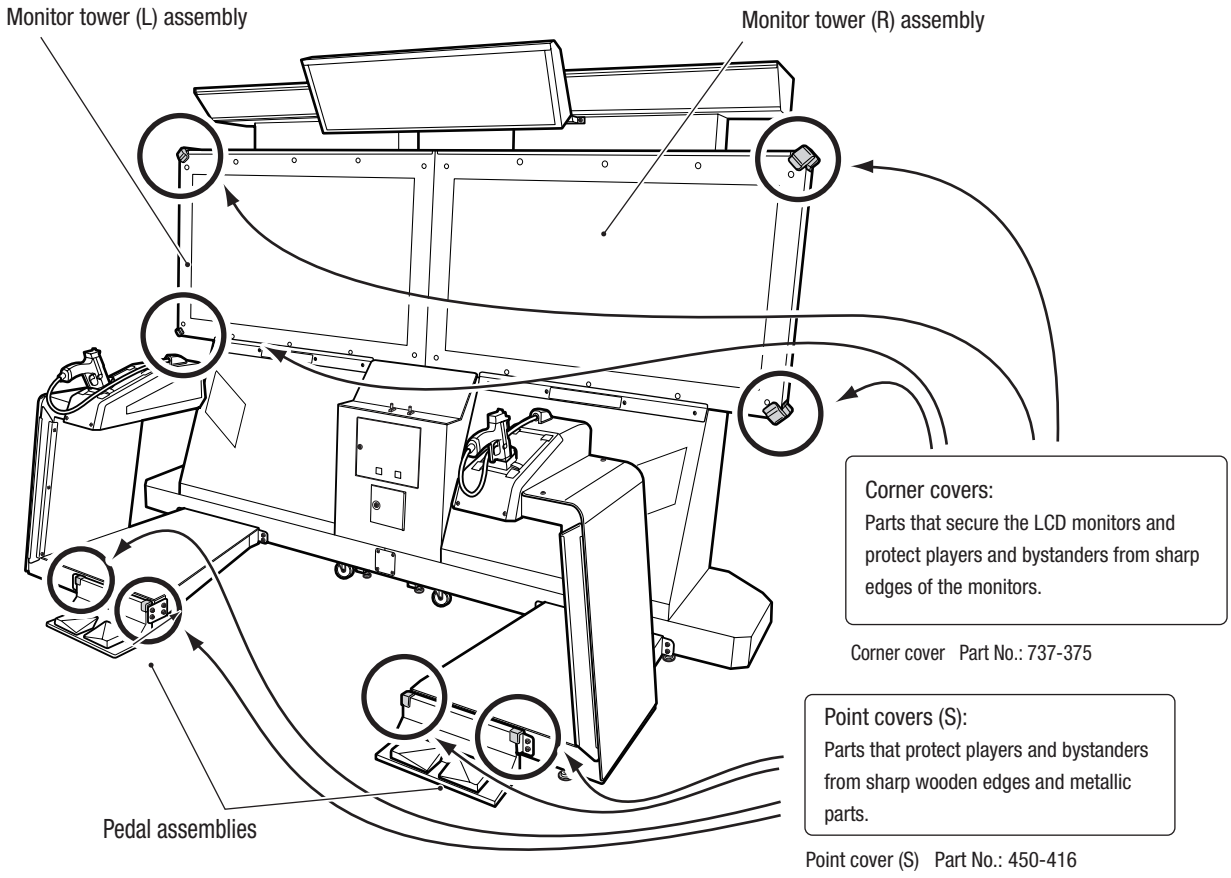
⚠CAUTION

- Should the machine be installed in a location where small children can play, prepare a footstool that can be used safely. If a small child stands on the machine, an accident or injury may be caused.
- If players start feeling ill because of the game images or light stimulation, they must stop playing and take a break immediately.
- In rare cases, stimulation by lights or video images may cause the player to have a seizure or lose consciousness. If this happens, advise the player to seek immediate medical assistance. In particular, if the player is younger than elementary school age, be sure to let the guardian watch.

7-3 Explanation of Parts That Are Critical for Safety of Players and Bystanders

⚠WARNING

- The machine is equipped with parts that are critical for safety of players and bystanders. Operating the machine with damaged, broken, deteriorated, or incorrectly installed parts that are critical for the safety of players and bystanders may cause an injury to players and/or bystanders. If any abnormalities are found, replace the part promptly. To order parts, contact your distributor.



Corner covers:
Parts that secure the LCD monitors and protect players and bystanders from sharp edges of the monitors.

Corner cover Part No.: 737-375

Point covers (S):
Parts that protect players and bystanders from sharp wooden edges and metallic parts.

Point cover (S) Part No.: 450-416

7-4 Pre-operation Inspection

7-4-1 Safety Inspection (Before Power On)

Check the points below before starting machine operations.
If there are any abnormalities, resolve them by referring to P-85 "8B-2 Troubleshooting".

⚠WARNING

- Before operating the machine, check the following points. This is required to prevent accident or injury.
- Do not operate this machine when any part is damaged, broken, or deteriorated, or when this machine is not correctly installed. Doing so may cause injury to the players and the people around them. If any abnormalities are found, replace the affected parts immediately. To order parts, contact your distributor.

(1) Are all warning labels legible?
(See P-5 "1-4 Machine Warning Labels".)
(2) Is the specified play zone provided? (See P-25 "5-1-2 Play Zone when the Machine Is in Operation".)
(3) Are all level adjusters adjusted correctly so that the machine is stable?
(Front assembly and gun tower (L) and (R) assemblies)
(See P-77 "8A-4 Level Adjuster Adjustment".)
(4) Is the power cord and the LAN cable laid out safely so that players and other customers will not trip over it?
(5) Are both ends of the gun assembly tube secured? Is the tube free of damage?
(6) Checking screws on each part for looseness
Check screws on the following parts for looseness. Fully retighten any loose screws.

- Fixing screws used to connect the monitor tower (L) and (R) assemblies
- Fixing screws used to connect the coin box assembly to the monitor tower (L) and (R) assemblies
- Fixing screws used to connect the gun tower (L) and (R) assemblies respectively to the monitor tower (L) and (R) assemblies
- Fixing screws used to connect the pedal assemblies to the gun tower (L) and (R) assemblies (The pedal assemblies must be grounded.)
- Fixing screws used to connect the signboard (L) and (R) assemblies respectively to the monitor tower (L) and (R) assemblies
- Fixing screws used to secure the signboard (C) assembly
- Fixing screws used to secure the gun assembly
- Fixing screws used to secure the corner cover
- Fixing screws used to secure the point cover (S)

7-4-2 Safety Inspection (After Power On)

Inspect the following points after turning on the power switch. If you discover an abnormality, turn off the power switch immediately to stop operations. Then, disconnect the power cord plug from the outlet and contact your distributor.

(1) Is any part of the power cord or plug abnormally hot?
(2) Does touching the machine give a tingling electric shock?
(3) Are there any burning smells, abnormal noises or vibrations?
(4) Are there any other abnormalities or malfunctions?

7-4-3 Function Inspection (After Power On)

Turn the power switch on, and check the following items. (See P-39 "7-6-1 Turning the Power Switch ON".)

(1) Check the audio. (Is sound being emitted from each speaker?) (See P-54 "7-7-7 Sound Test".)
(2) Check the LED modules on the signboard (L) and (R) assemblies. (Do the LED modules light up?)
(3) Check the light-emitting unit. (Does the light-emitting unit light up?)
(4) Check the tower and floor LEDs. (Do the LED modules light up?)
(5) Check the images on the LCD monitor. (See P-53 "7-7-6 Monitor Test".)

To inspect the following points, press the Service switch and play the game.
(See P-41 "7-6-2 Adjustment Switches".)

(6) Check the operation of the gun assembly.
* If the gun sight is not aligned correctly, adjust the gun sight. (See P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)
(7) Check the operation of the pedal assemblies.
(8) Check all switch operations. (See P-49 "7-7-5 Input/Output Test of Switches (I/O TEST)".)

NOTICE

- Do not install the machine in the following locations. Doing so may cause the sensor to fail to detect the position of the gun assembly.
  - A location where the gun assembly or monitor surface is exposed directly to sunlight, the rays of spotlights, or other intense light sources.
  - A location where there is a large contrast between light and dark due to a blinking bright light source.
- Install the pedal assemblies correctly so that they are not floating above the floor.

7-5 Playing the Game

This section explains the game rules and how to operate the machine.

7-5-1 Outline of the Game

This is a gun game machine that has a single-player mode and a two-player mode where the player can fire bullets from the gun controller to beat enemies.

7-5-2 How to Operate the Gun Controller

Pulling the gun trigger fires a bullet.
In the scene where weapons can be switched, the player can switch weapons by pressing the gun controller button.
Weapons are switched in the order of handgun, machine gun, shotgun, and grenade.
Only a limited number of bullets are available for weapons other than the handgun. If there are no bullets left in the weapon, the weapon will not be able to be selected during the weapon switch operation and cannot be used.
If a "Skip using the gun button" message appears during a demonstration or any other scenes, the scene can be skipped by pressing the gun controller button. In games other than the gun game, the gun controller is used to make and enter selections. The gun sight indicates the selected position, and pulling the gun trigger enters the selection.

7-5-3 How to Operate the Pedal

By releasing the pedal, the player can hide behind an object and load bullets into the handgun simultaneously. The attack can be started by pressing down on the pedal.
The player can use the right and left pedals to move and change the position in which they hide behind an object, or to start attacking.

7-5-4 Game Rules

(1) If the player is shot by an enemy, or if the time limit is reached, the player loses one "life".

(2) A higher score indicates a higher skill level of the player. A higher score can be acquired by making the clear time faster, attaining more serial hits and additional hits, and increasing the hit probability.

(3) When certain types of enemies are shot, they may drop an item.
When the player picks the item up, it will enable them to load bullets into a weapon other than the handgun.

(4) Certain events may occur as the game progresses.
If the player fails in the event, they will lose either half or one "life".

- Move event
  The danger can be avoided by using the right or left pedal for the specified direction.
- Crisis event
  The player should aim at the center of the marker on the enemy and shoot. If the center of the marker is hit, the player gets a "Bull's eye" score, which is higher than the score obtained from a normal hit.

(5) A special weapon may be used as the game progresses. The player cannot switch weapons while using the special weapon.

7-5-5 Types and Features of Weapons

(1) Handgun

It is also the upper limit. These bullets can be loaded to the upper limit as many times as the player wants.

Both the attack power and the rapid fire performance are at the normal level.

(2) Machine gun

Bullets can be fired continuously by pulling and holding the trigger. Although the attack power is low, the rapid fire performance is extremely high. Accordingly, it is wise to use this weapon in scenes where many enemies appear.

(3) Shotgun

The attack power is high, but the rapid fire performance is low. Accordingly, it is wise to use this weapon against an enemy who has endurance.

(4) Grenade

The attack power is high and the effective range is wide, but the number of bullets is extremely small. Accordingly, it is wise to use this weapon in a clutch situation.

(5) Automatic gun

This is one of the special weapons. It cannot be used in normal scenes.

Bullets can be fired continuously by pulling and holding the trigger.

An unlimited number of bullets are available.

(6) Rocket launcher

This is the other special weapon. It cannot be used in normal scenes.

Explosive missiles can be fired continuously by pulling and holding the trigger.

An unlimited number of bullets are available.

7-5-6 Explanation of the Game System

(1) When the player inserts the coins while the Attract screen is displayed and the credits required to start the game have been obtained, the display changes to the mode select screen.
If the credit requirements have already been satisfied, the display can be changed to the mode select screen by pressing down on the right or left pedal.
The player can enter a hidden command (insert coins while pulling the gun trigger, or press down on the pedal while pulling the gun trigger) at that point to calibrate the gun sight of the controller before starting the game.

(2) In the mode select screen, shoot single-player mode or two-player mode to select. If two-player mode is selected, the partner waiting screen appears for a certain period of time as the game waits for a second player to start playing.

(3) If the hidden command has been entered, the gun sight calibration screen appears after the mode is selected.
If the hidden command has not been entered, this screen is skipped. Aim at the target displayed in the screen and pull the gun trigger. If the target is hit, the next target appears. Pull the trigger in the same manner. Calibration is completed when five targets are shot successfully. Move the gun controller to check the movement of the gun sight, and shoot OK to apply the change. The gun sight calibration is only valid for the game played at this time. The gun sight can be calibrated during the remaining game time. When there is no remaining time left, the gun sight cannot be calibrated.

7-5-7 Participation of a Player in the Middle of the Game, and Game Over

(1) Coins are accepted at any time while the game is being played.

(2) If two-player mode is selected, and a player plays the game using one cabinet of the machine, another player can participate in the game by using the other cabinet.
If single-player mode is selected, no other players can participate in the game.

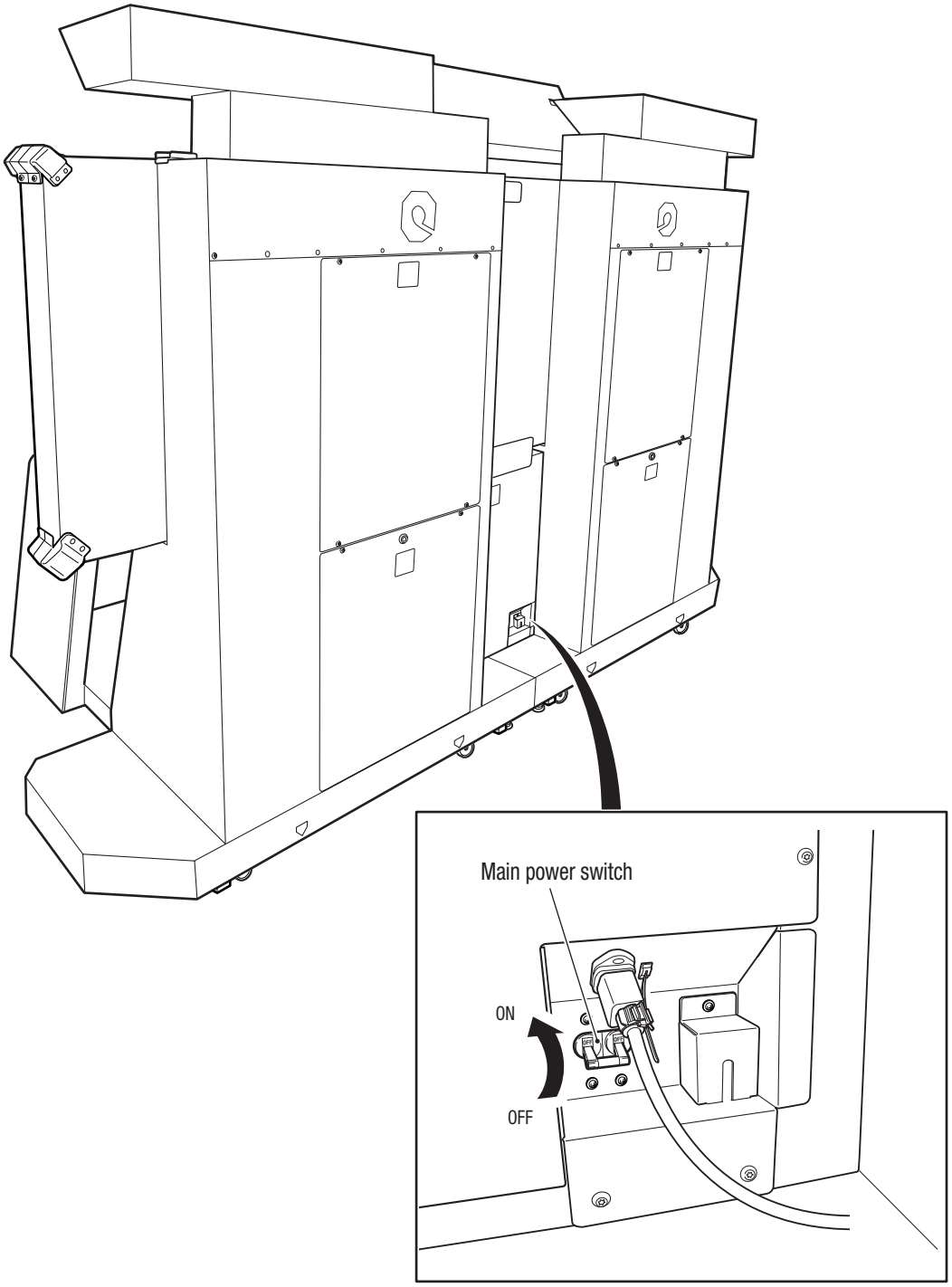
(3) Insert credits into the cabinet with which the other player wants to play the game, and select two-player mode to accept additional participation in the middle of a game.
When participation of a new player is allowed during a game, the game with the additional player will start immediately.

(4) The game is over when the remaining number of "lives" drops to 0. The continue screen appears.

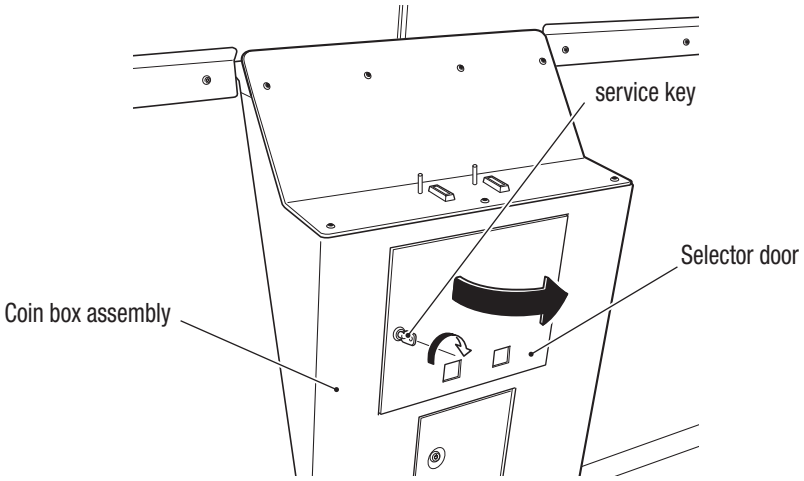
7-6 Power Switch and Adjustment Switches

7-6-1 Turning the Power Switch ON

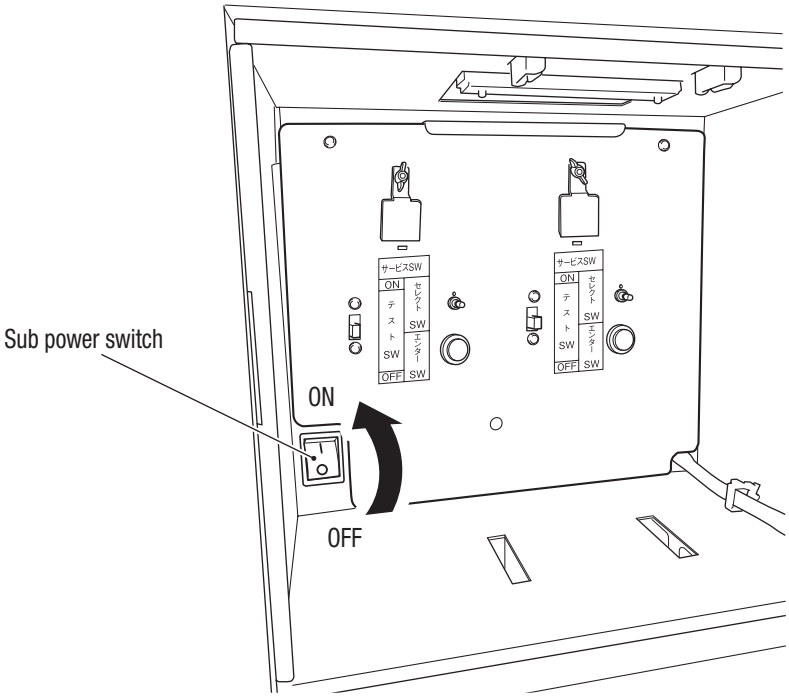
1 Turn on the main power switch located in the cord box on the back of the coin box assembly.



2 Open the selector door on the coin box assembly using the service key.



3 Turn on the sub power switch.

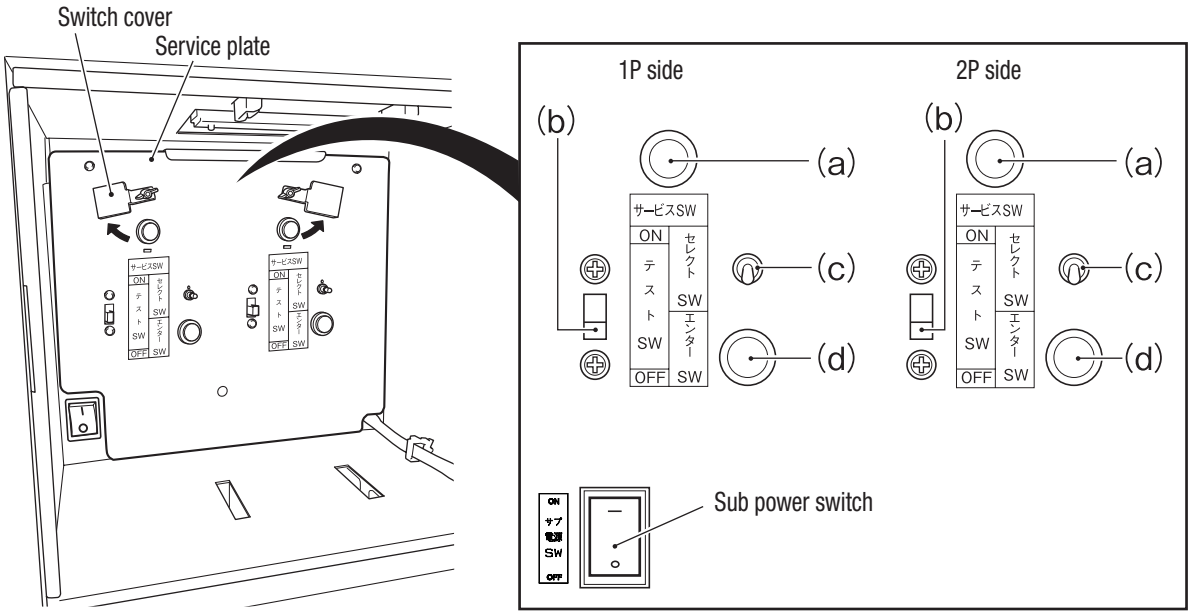


4 Close the selector door.

7-6-2 Adjustment Switches

1 Open the selector door on the coin box assembly using the service key.

2 Open the selector door to find the service plate. Adjustment switches for 1P are on the left of the service plate, and those for 2P are on the right.



(a) Service switch (red)

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

(b) Test switch

Set this switch to ON to enter Test mode.
In the test mode, game costs can be switched and each part can be tested.
(See P-42 "7-7 Test Mode".)

(c) Select switch

In test mode, flipping this switch up or down enables items to be selected.

(d) Enter switch (green)

After selecting an item using the Select switch, press this switch to enter and execute the selected item.

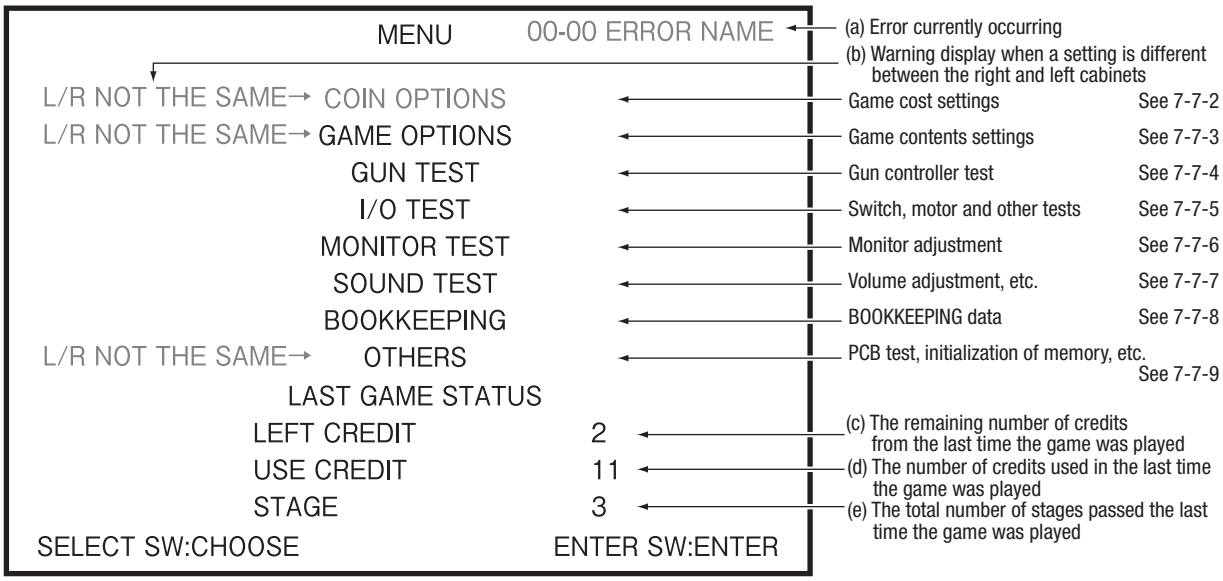
NOTICE

● Operate the switches slowly and accurately.
Do not operate them in haste. Otherwise, they may not be activated.

7-7 Test Mode

7-7-1 Description of the Main Menu Screen (MENU)

1 Open the selector door on the coin box assembly, and set the Test switch to ON.
The MENU screen appears. (See P-41 "7-6-2 Adjustment Switches".)



MENU screen

2 Flip the Select switch up or down to select the item.
The selected item blinks.

3 Press the Enter switch to enter the selected item.

4 After completing the adjustments, select EXIT and press the Enter switch.
The display returns to the MENU screen.

5 After finishing all the adjustments, set the Test switch to OFF.
The display returns to the game screen.

(a) Error currently occurring

The error currently occurring is shown on the upper right of the screen. See ERROR LOG for details described later in this document.

(b) Warning display when a setting is different between the right and left cabinets

A caution message appears when a setting in the following table is different between the right and left cabinets. If this occurs, check the setting again.

Item	Description
COIN OPTIONS	GAME COST
	CONTINUE COST
	FREE PLAY
GAME OPTIONS	PLAYER'S LIFE
	DIFFICULTY
	HIT-COLOR
OTHERS	LANGUAGE
	ATTRACT CUT
	MAINTENANCE TIME SETTING

(c) The remaining number of credits the last time the game was played

Displays the number of credits remaining from the last time the game was played.
If the game is being played before the Test mode is entered, the last play refers to that game play itself. If the Attract screen appears, the last play refers to the game play before the display moved to the Attract screen.

(d) The number of credits used the last time the game was played

Displays the number of credits used the last time the game was played.

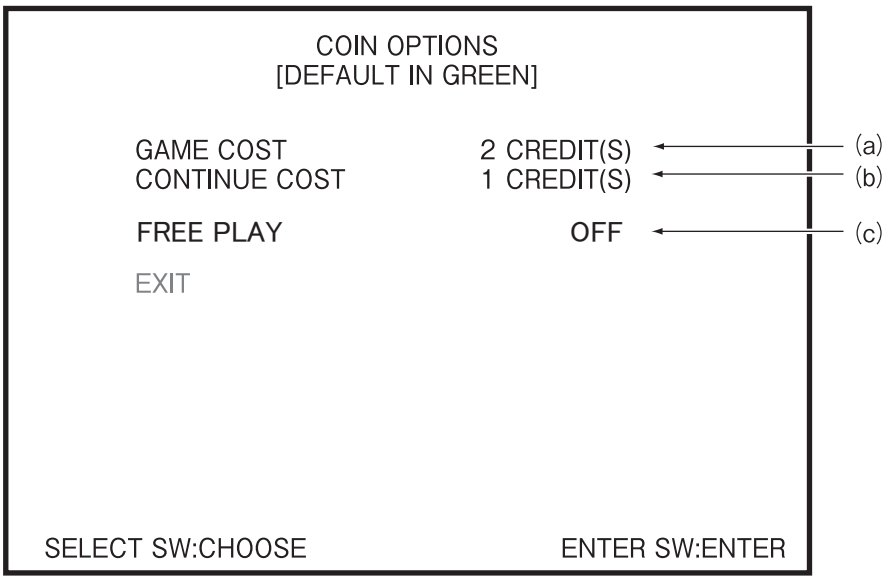
(e) The total number of stages passed the last time the game was played

Displays the total number of stages passed the last time the game was played.

7-7-2 Game Cost Settings (COIN OPTIONS)

This screen is used to set the game cost.

1 In the MENU screen, select COIN OPTIONS and press the Enter switch.
The COIN OPTIONS screen appears.



COIN OPTIONS screen

Item	Description	Setting	Initial value
(a) GAME COST	Sets the number of credits required for game play.	1–19	2
(b) CONTINUE COST	Sets the number of credits required to continue.*1	1–19	1
(C) FREE PLAY	Switches FREE PLAY ON/OFF. *2	ON OFF	OFF

* The initial setting values appear in green characters, and other settings appear in yellow.

2 Flip the Select switch up or down to select an item.

3 Press the Enter switch to enter the selected item.

4 After entering the selection, flip the Select switch up or down to change the setting.

5 After changing the setting, press the Enter switch to return to the item selection screen.

6 Select EXIT and press the Enter switch to return to the MENU screen.

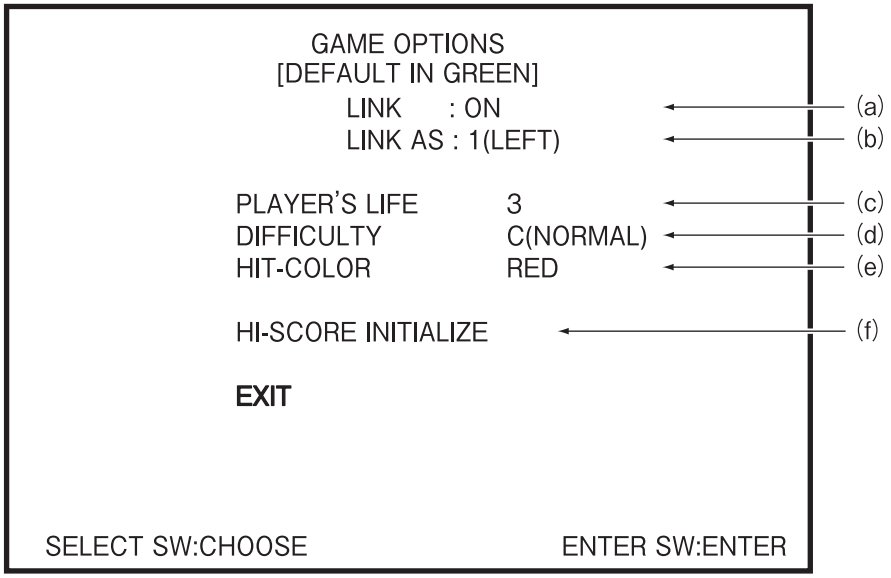
*1: The CONTINUE COST cannot be set to a value exceeding the GAME COST setting.
If GAME COST is set to a value smaller than the CONTINUE COST setting, the CONTINUE COST is automatically set to the same value as GAME COST.

*2: When "FREE PLAY" is ON, "GAME COST" and "CONTINUE COST" are grayed out and cannot be selected.

7-7-3 Game Contents Settings (GAME OPTIONS)

This screen is used to set the game contents.

1 In the MENU screen, select GAME OPTIONS and press the Enter switch.
The GAME OPTIONS screen appears.



GAME OPTIONS screen

Item	Description	Setting	Initial value
(a) LINK	Communication status between the cabinets	ON OFF NG	–
(b) LINK AS	CPU ID status	1. (LEFT) 2. (RIGHT)	–
(c) PLAYER'S LIFE	Player's "life" when the game starts	1–9	3
(d) DIFFICULTY	Game difficulty	A(VERYEASY) B(EASY) C(NORMAL) D(HARD) E(VERYHARD)	C(NORMAL)
(e) HIT-COLOR	Player's damage effect	RED GREEN	RED
(f) HI-SCORE INITIALIZE	Initializes the high score.		

* The initial setting values appear in green characters, and other settings appear in yellow.
* There are exceptions. For LINK, ON appears in green, OFF in white, and NG in red.
For HIT-COLOR, GREEN appears in green, and RED in red.

2 Select an item using the Select switch.

3 Press the Enter switch to enter the selected item.

4 After entering the selection, flip the Select switch up or down to change the item setting.

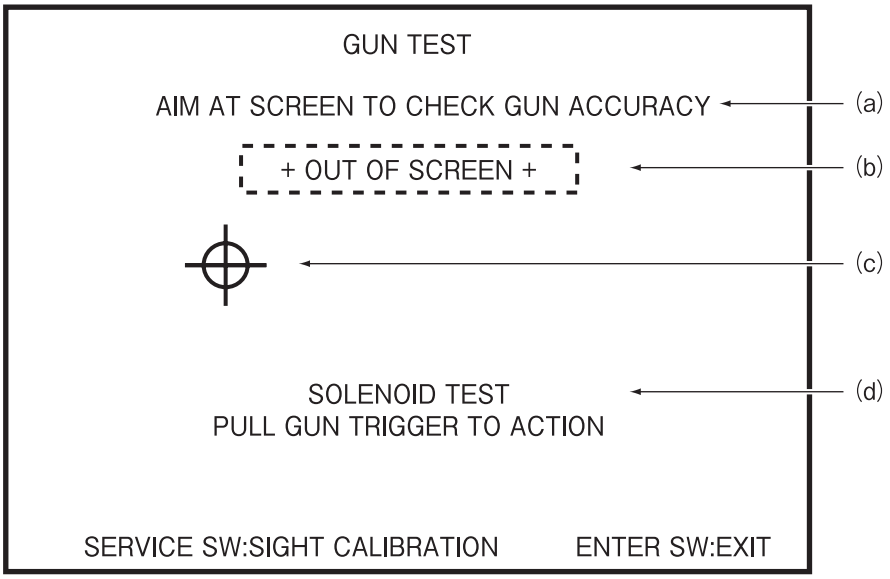
5 After changing the item setting, press the Enter switch to return to the item selection screen.

6 Select EXIT and press the Enter switch to return to the MENU screen.

7-7-4 Gun Test

This screen is used to check the vibration function and the gun sight of the gun assembly, and to calibrate the gun sight.

1 In the MENU screen, select GUN TEST and press the Enter switch.
The GUN TEST screen appears.



GUN TEST screen

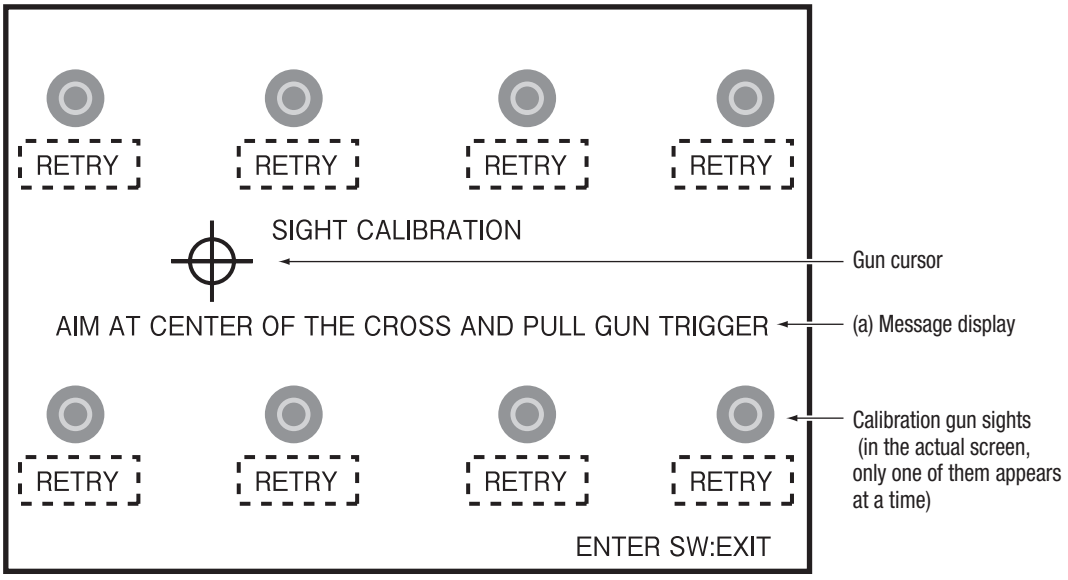
Item	Description
(a) AIM AT SCREEN TO CHECK GUN ACCURACY	Displays a gun test message.
(b) + OUT OF SCREEN +	When the gun cursor goes outside of the screen perimeter, the Out of Screen message appears at (b).
(c)	Displays the gun cursor.
(d) SOLENOID TEST PULL GUN TRIGGER TO ACTION	Displays a solenoid test message.

2 Press the Service switch to display the SIGHT CALIBRATION screen.

(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)

This screen is used to calibrate the gun sight of the gun assembly.

1 Press the Service switch in the GUN TEST screen to display the SIGHT CALIBRATION screen.



SIGHT CALIBRATION screen

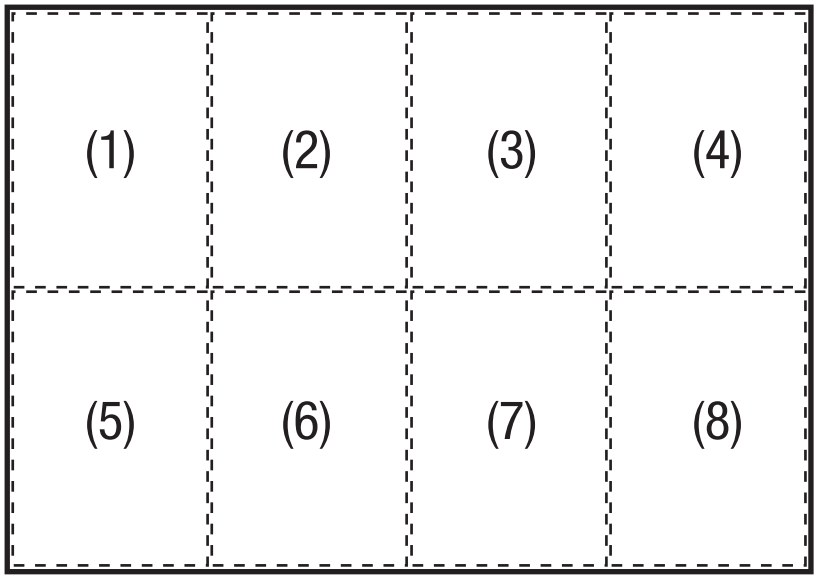
2 The gun controller is calibrated by shooting eight calibration gun targets in order from the upper left to upper right (four positions), and from the lower left to lower right (four positions).
Move the gun cursor to aim at the indicated calibration gun target and pull the trigger.
When the shot position is further away than a designated distance from each gun target, OUT OF AREA appears.
When you shoot outside the screen or a position a certain distance away from each gun target, RETRY appears and an error beep sounds. If this occurs, you cannot move to the next gun targets.

3 Press the Enter switch to discard the calibrating data and return to the GUN TEST screen.

4 Set the Test switch to OFF during calibration to discard the calibrating data and return to the game.

5 When all of the eight calibration gun targets are shot, FINISHED appears at (a) and the gun controller calibration data is saved, after which the display returns to the GUN TEST screen.

■ The following pattern diagram shows the allowable range of each calibration gun target.
If you pull the trigger outside the allowable range, RETRY appears.
For example, if you pull the trigger outside the (1) area when the calibration in (1) is indicated, RETRY appears.



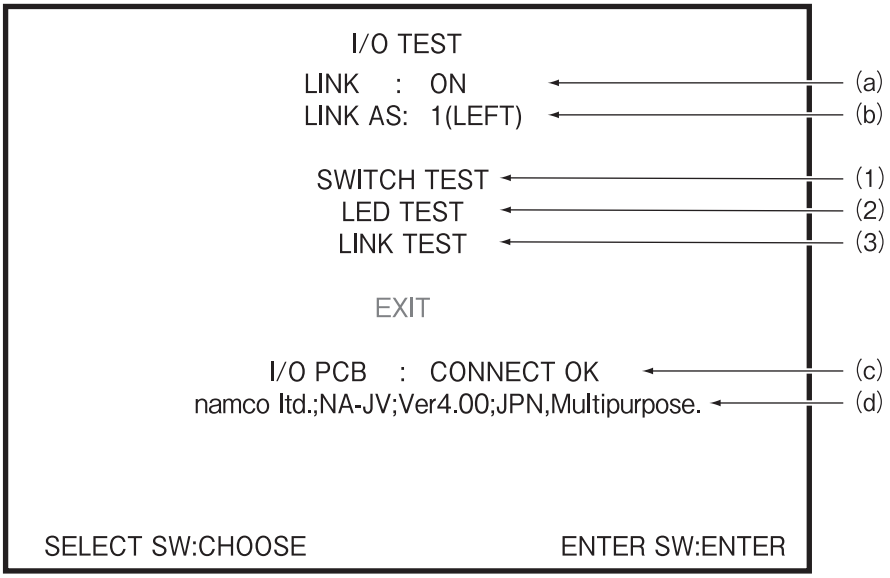
The allowable range of each calibration gun target

- Adjust the gun sight while standing in the center in front of the screen.
- To align the gun target, hold the gun assembly straight without any inclination.

7-7-5 Input/Output Test of Switches (I/O TEST)

This screen is used to test each switch and control for input/output.

1 In the MENU screen, select I/O TEST using the Select switch and press the Enter switch. The I/O TEST screen appears.



I/O TEST screen

Item	Description	Setting
(a) LINK	Displays the communication status between the cabinets.	ON OFF NG
(b) LINK AS	Displays the CPU ID status.	1(LEFT) 2. (RIGHT)
(1) SWITCH TEST	Tests switch inputs. See P-50 "(1) SWITCH TEST".	
(2) LED TEST	Tests LEDs. See P-51 "(2) LED TEST".	
(3) LINK TEST	Tests link between the cabinets. See P-52 "(3) LINK TEST".	
(c) I/O PCB	Displays the PCB CHECK status. In a normal state, CONNECT OK appears in green. In an abnormal state, CONNECT NG! appears in red.	
(d)	Displays the transmitted data without modification.	

2 Select an item using the Select switch. The selected item blinks.

3 Press the Enter switch to enter the selected item.

4 After entering the selection, flip the Select switch up or down to change the item setting.

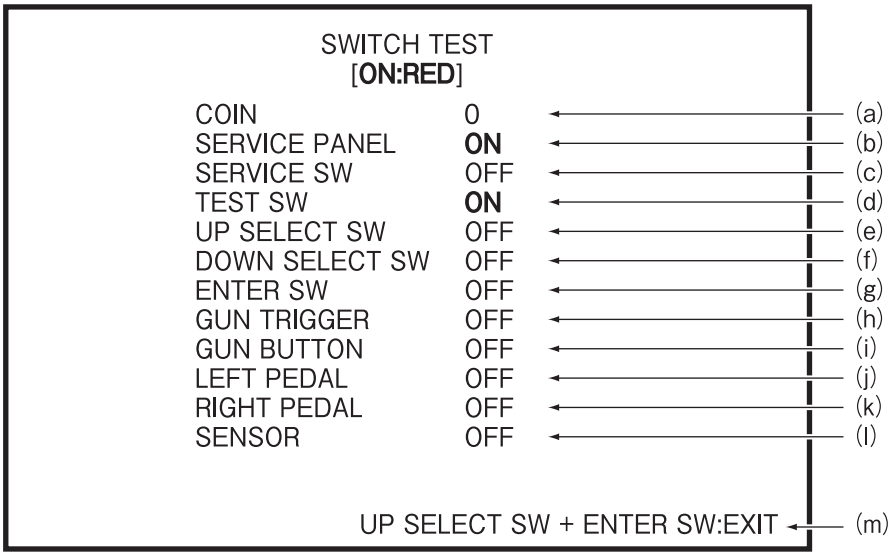
5 After changing the setting, press the Enter switch to return to the item selection screen.

6 Select EXIT and press the Enter switch to return to the MENU screen.

(1) SWITCH TEST

This screen is used to test each switch and control.

1 In the I/O TEST screen, select SWITCH TEST using the Select switch and press the Enter switch.
The SWITCH TEST screen appears.



SWITCH TEST screen

Item	Description
(a) COIN	Adds "1" each time a coin is inserted. When the count exceeds 999 it returns to 0. Coin counter is also activated.
(b) SERVICE SW	Displays ON while the Service switch is held down.
(c) TEST SW	Displays ON while the Test switch is turned ON. When this screen is accessed in Test mode, (d) TEST SW is automatically turned ON.
(d) UP SELECT SW	Displays ON while the Select switch is flipped up.
(e) DOWN SELECT SW	Displays ON while the Select switch is flipped down.
(f) ENTER SW	Displays ON while the Enter switch is held down.
(g) GUN TRIGGER	Displays ON while the Gun trigger is pulled.
(h) GUN BUTTON	Displays ON while the gun button is held down.
(i) LEFT PEDAL	Displays ON while the left pedal is pressed down.
(j) RIGHT PEDAL	Displays ON while the right pedal is pressed down.
(k) SENSOR	Displays OFF while the gun sensor is pointing outside the screen, or ON when the gun is detected.

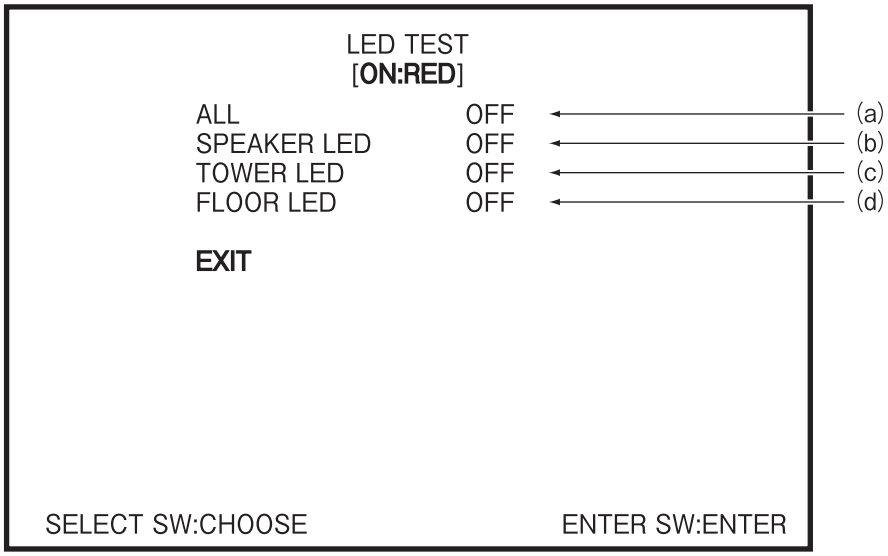
2 The display is changed when you operate each switch.

3 Hold the Select switch flipped up and press the Enter switch to return to the I/O TEST screen.

(2) LED TEST

This screen is used to test whether light is emitted from LEDs.

1 In the I/O TEST screen, select LED TEST using the Select switch and press the Enter switch. The LED TEST screen appears.



LED TEST screen

Item	Description
(a) ALL	Turn this ON to light up all LEDs.
(b) SPEAKER LED	Turn this ON to light up the speaker LED.
(c) TOWER LED	Turn this ON to light up the tower LED.

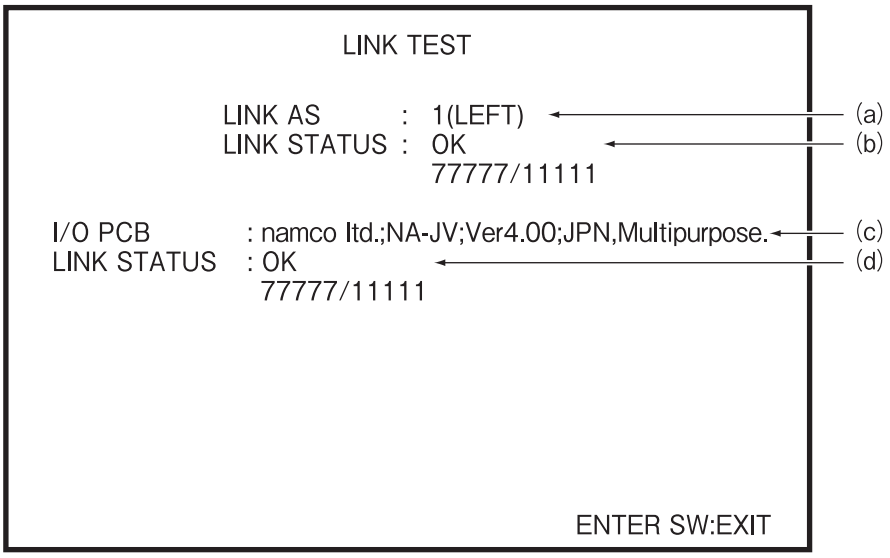
2 Select an item using the Select switch and press the Enter switch to toggle ON/OFF the LED. Press the Enter switch once to turn the LED ON, and press it again to turn the LED OFF.

3 Select EXIT and press the Enter switch to return to the I/O TEST screen.

(3) LINK TEST

This screen is used to confirm the status of communication between the cabinets and between the I/O PCBs.

1 In the I/O TEST screen, select LINK TEST using the Select switch and press the Enter switch. The LINK TEST screen appears.



LINK TEST screen

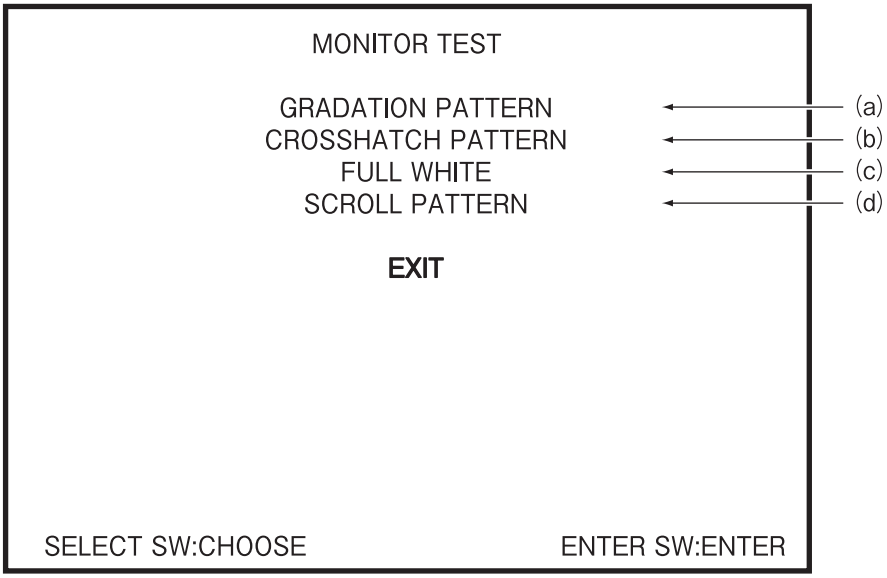
Item	Description
(a) LINK AS	Displays the CPU ID status.
(b) LINK STATUS	Displays the communication status between the cabinets.
	Displays the number of communication successes and failures.
(c) I/O PCB	Displays the transmitted data without modification.
(d) LINK STATUS	Displays the PCB CHECK status.
	Displays the number of communication successes and failures.

2 Press the Enter switch to return to the I/O TEST screen.

7-7-6 Monitor Test

This screen is used to test the monitor for display.

1 In the MENU screen, select MONITOR TEST using the Select switch and press the Enter switch to display the MONITOR TEST screen.



MONITOR TEST screen

2 Flip the Select switch up or down to select an item.

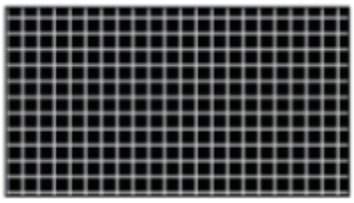
3 Select item (a), (b), (c), or (d) and press the Enter switch to display the pattern screen of the selected item.
Press the Enter switch again to return to the MONITOR TEST screen.

4 Select EXIT and press the Enter switch to return to the MENU screen.

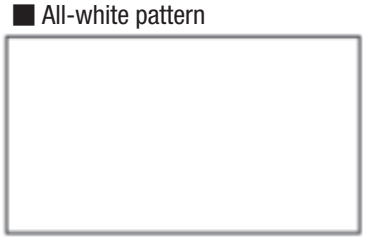
■ Gradation pattern



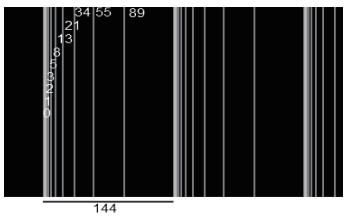
■ Crosshatch pattern



■ All-white pattern



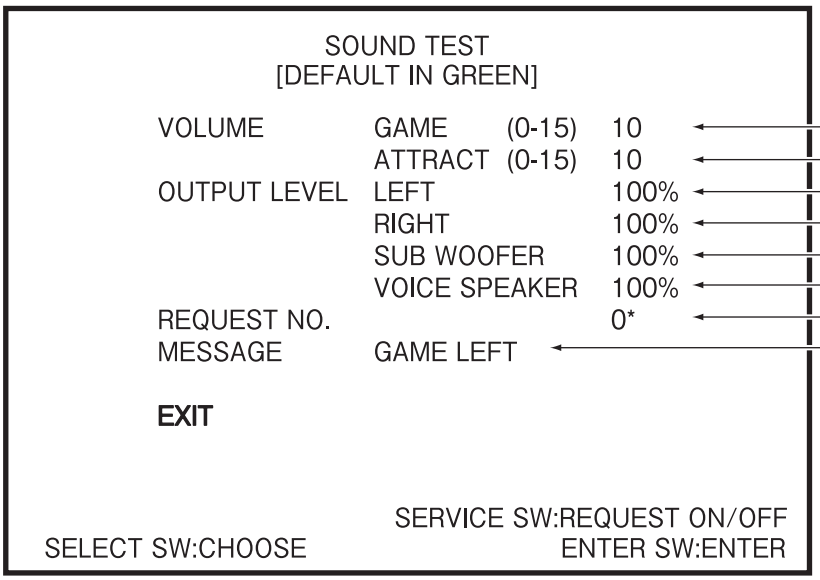
■ Scroll pattern



7-7-7 Sound Test

This screen is used to adjust sound volumes and request a track number.

1 In the MENU screen, select SOUND TEST using the Select switch and press the Enter switch to display the SOUND TEST screen.



SOUND TEST screen

Item		Description	Setting	Initial value
VOLUME	(a) GAME	Master volume during game play	0–15	10
	(b) ATTRACT	Master volume in Attract mode	0–15	10
(c) REQUEST NO.		Track number	0–17	0
(d) MESSAGE		Displays message (Volume currently activated)	GAME, ATTRACT	–
		Displays message (Speaker activated)	LEFT, RIGHT, SUB WOOFER, VOICE SPEAKER	–

2 Flip the Select switch up or down to select an item. The selected item blinks.

3 Press the Enter switch to enter the selected item.

4 After entering the selection, flip the Select switch up or down to change the setting.

5 After changing the setting, press the Enter switch to return to the item selection screen.

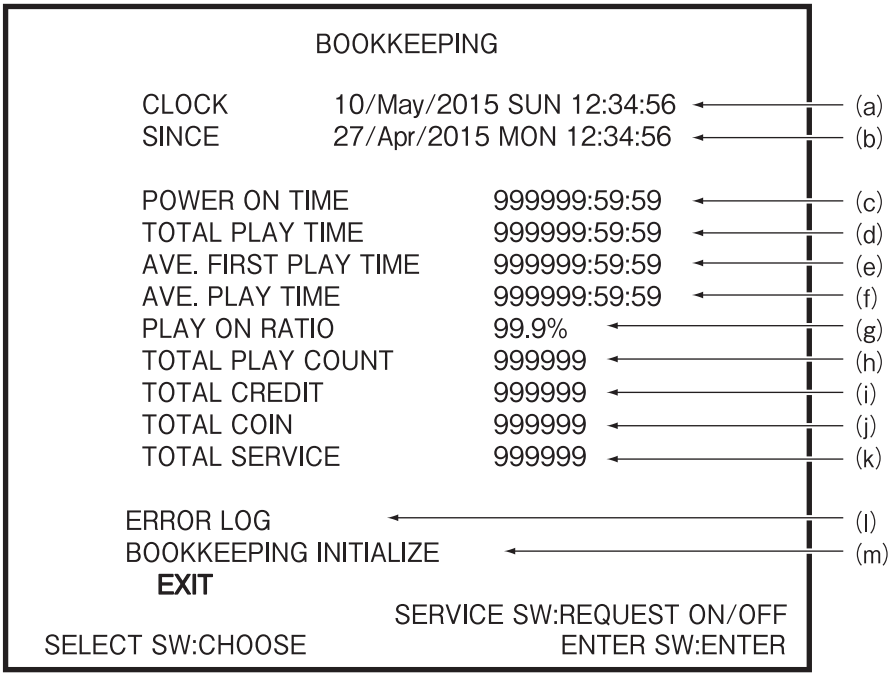
6 Press the Service switch to play the sound of the number specified for (g). Press the Service switch again to stop the playing sound. A sound plays for up to 10 seconds.
If item (b) is selected, the sound is played at the volume level specified for (b). Otherwise, it is played at the volume level specified for (a).

7 Select EXIT and press the Enter switch to return to the MENU screen.

7-7-8 Displaying Game Data (BOOKKEEPING)

This screen displays the operating time, play count and other game-related data.

1 In the MENU screen, select BOOKKEEPING using the Select switch and press the Enter switch to display the BOOKKEEPING screen.



BOOKKEEPING screen

Item	Description
(a) CLOCK	Displays the current clock time.
(b) SINCE	Displays the clock time when the bookkeeping was initialized.
(c) POWER ON TIME	Displays the cumulative total power-on time in real time.
(d) TOTAL PLAY TIME	Displays the cumulative total time that the cabinet has been occupied.
(e) AVE. FIRST PLAY TIME	Displays the average game play time of players' first games.
(f) AVE. PLAY TIME	Displays the average game play time throughout all games.
(g) PLAY ON RATIO	Displays the machine availability (ratio of the time that the cabinet has been occupied to the power-on time).
(h) TOTAL PLAY COUNT	Displays the cumulative total count of games played.
(i) TOTAL COIN	Displays the cumulative total number of coins inserted.
(j) TOTAL SERVICE	Displays the cumulative total count of service credits inserted.
(k) ERROR LOG	Displays the error log.
(l) BOOKKEEPING INITIALIZE	Initializes the bookkeeping.

2 Flip the Select switch up or down to select an item. The selected item blinks.

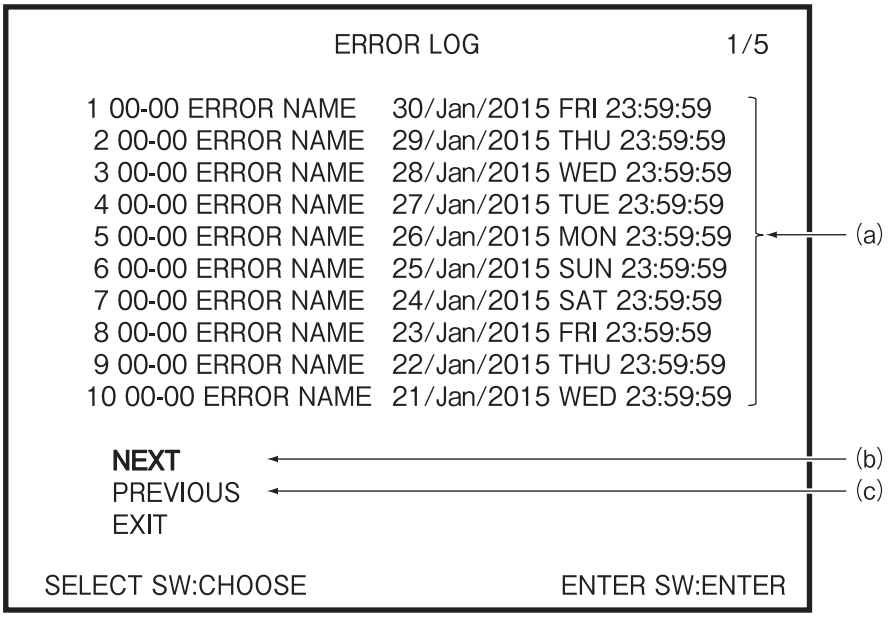
3 Press the Enter switch to enter the selected item.
If you select and enter (m) BOOKKEEPING INITIALIZE, BOOKKEEPING INITIALIZE? appears and you are prompted to select NO or YES. Select YES to display COMPLETE! after initialization is completed and to return to the screen before items are selected.

4 Select EXIT and press the Enter switch to return to the MENU screen.

(1) ERROR LOG

This screen is used to check the error history.

1 In the BOOKKEEPING screen, select ERROR LOG using the Select switch and press the Enter switch to display the ERROR LOG screen.



ERROR LOG screen

Item	Description
(a) Error log display	Displays error log messages up to the present time.
(b) NEXT	Proceeds to the next page. (This item is hidden when page 5 appears.)
(c) PREVIOUS	Returns to the previous page. (This item is hidden when page 1 appears.)

2 Flip the Select switch up or down to select an item. The selected item blinks.
Up to 50 of the most recent errors along with the date and time of occurrence can be viewed with 10 errors per page.
The most recent error appears at the top of ERROR LOG (1/5), and the oldest error appears at the bottom of ERROR LOG (5/5).

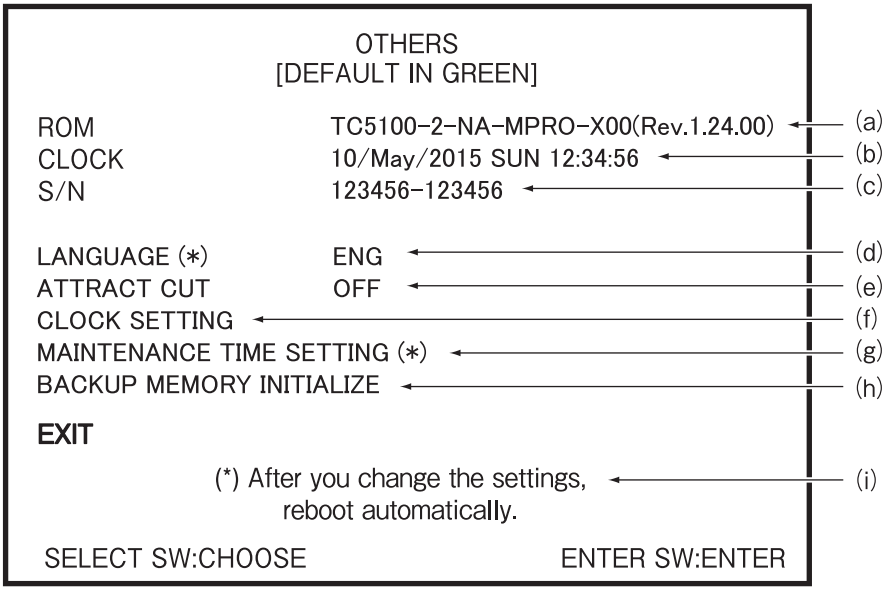
3 Press the Enter switch to enter the selected item.

4 Select EXIT and press the Enter switch to return to the BOOKKEEPING screen.

7-7-9 Other Options (OTHERS)

This screen is used to initialize various settings.

1 In the MENU screen, select OTHERS using the Select switch and press the Enter switch to display the OTHERS screen.



OTHERS screen

Item	Description	Setting	Initial value
(a) ROM	Displays the version and revision number of the program on the disc.	-	-
(b) CLOCK	Displays the current clock time.	-	-
(c) S/N	Displays the software serial number.	-	-
(d) LANGUAGE	Displays the language setting.	ENG ITA SPA RUS POR IND KOR THA	ENG
(e) ATTRACT CUT	Sets the attract cut.	ON OFF	OFF
(f) CLOCK SETTING	Checks the set time, changes the time zone, and sets the summer time of the built-in clock.	-	-
(g) MAINTENANCE TIME SETTING	Sets the auto reboot time.	-	-
(h) BACKUP MEMORY INITIALIZE	Initializes the settings, and clears the bookkeeping and other records.		
(i) (*)	If you change the setting of an item that has this mark, the machine will automatically reboot.	-	-

* The initial setting values appear in green characters, and other settings appear in yellow.

2 Flip the Select switch up or down to select an item. The selected item blinks.

3 Press the Enter switch to enter the selected item.

4 After entering the selection, flip the Select switch up or down to change the setting.
If you select and enter (h) BACKUP MEMORY INITIALIZE, BACKUP MEMORY INITIALIZE? appears, and you are prompted to select NO or YES.
Select YES to display COMPLETE! after initialization is completed and to return to the screen before items are selected.

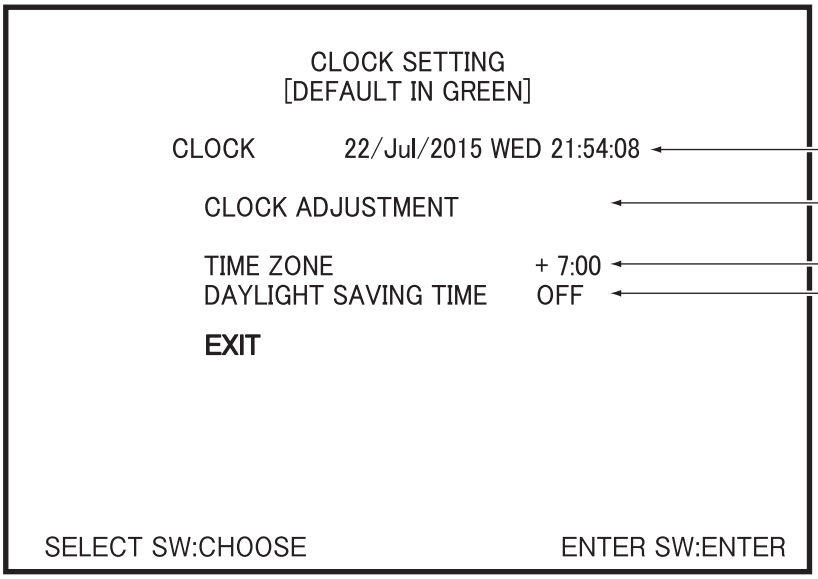
5 After changing the setting, press the Enter switch to return to the item selection screen.

6 Select EXIT and press the Enter switch to return to the MENU screen.

(1) CLOCK SETTING

This screen is used to set the time.
For the offline version, the base time can be changed on the "CLOCK ADJUSTMENT" screen.

1 Select "CLOCK SETTING" on the "OTHERS" screen, and press the enter switch. The "CLOCK SETTING" screen is displayed.



CLOCK SETTING screen

Item	Description	Initial value
(a) CLOCK	The current time is displayed.	-
(b) CLOCK ADJUSTMENT	Sets the current time. This is only displayed for the offline version.	-
(c) TIME ZONE	Sets the TIME ZONE. Select a time offset between -14:00 and +14:00.	0:00
(d) DAYLIGHT SAVING TIME	Sets DAYLIGHT SAVING TIME. Select OFF, +0:30 or +1:00. OFF	OFF

2 Tilt the select switch up or down to select an item to change. The selected item flashes.

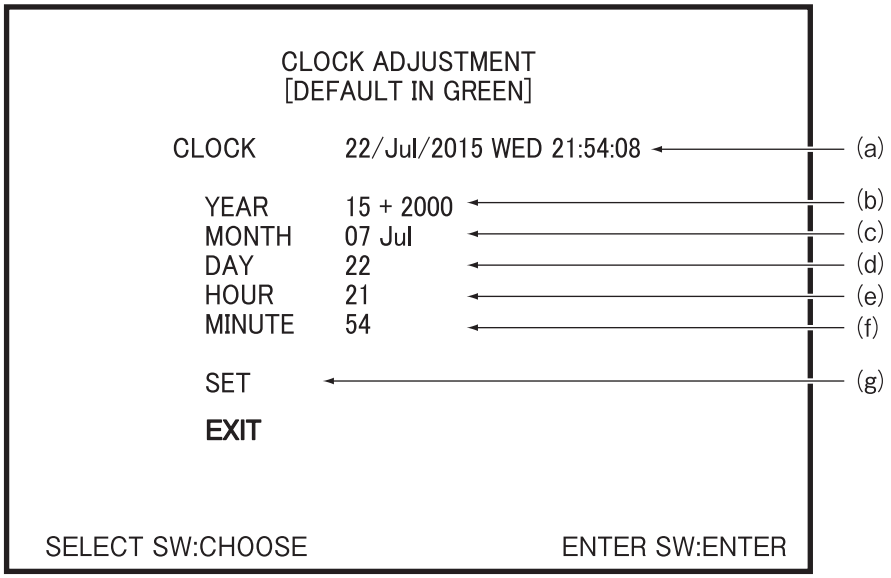
3 Press the enter switch to confirm the selection.

4 Select "EXIT" and press the enter switch to return to the "OTHERS" screen.

(2) CLOCK ADJUSTMENT

This screen is used to set the time.
This is only displayed for the offline version.

1 Select "CLOCK ADJUSTMENT" on the "CLOCK SETTING" screen, and press the enter switch.
The "CLOCK ADJUSTMENT" screen is displayed.



CLOCK ADJUSTMENT screen

Item	Description	Initial value
(a) CLOCK	The set time is displayed.	The set time of the internal clock.
(b) YEAR	Sets the year. Select a number between 00 and 99.	-
(c) MONTH	Sets the month. Select a month between 01 Jan and 12 Dec.	-
(d) DAY	Sets the date. Select a number between 01 and 31.	-
(e) HOUR	Sets the hour. Select a number between 00 and 23.	-
(f) MINUTE	Sets the minute. Select a number between 00 and 59.	-
(g) SET	Confirms the set time.	-

2 Tilt the select switch up or down to select an item to change.
The selected item flashes.

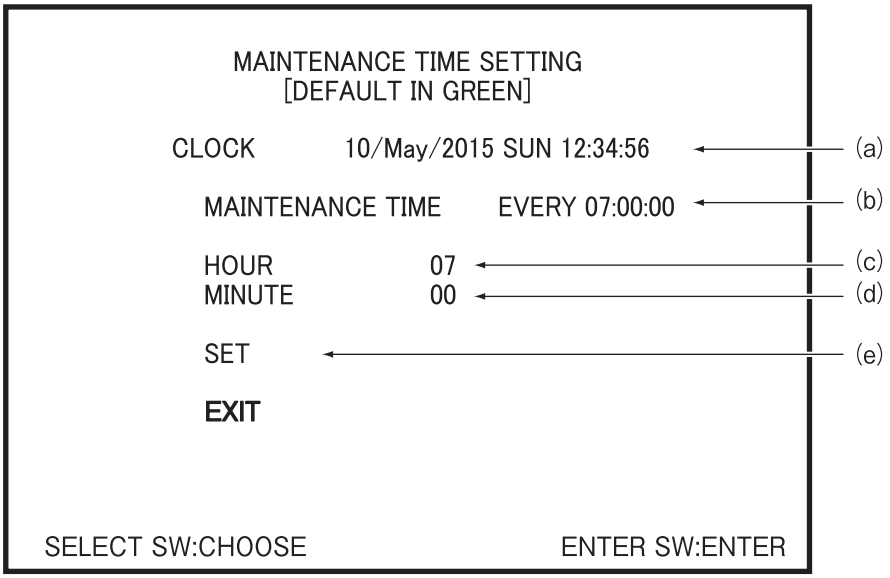
3 Press the enter switch to confirm the selection.

4 Select "EXIT" and press the enter switch to return to the "CLOCK SETTING" screen.

(3) MAINTENANCE TIME SETTING

This screen configures the MAINTENANCE TIME settings.
The system is restarted at the preset time to prevent defects by long-term continuous operation.
When settings are changed, the system is automatically restarted after turning off the test mode.

1 Select “MAINTENANCE TIME SETTING” on the “OTHERS” screen, and press the enter switch.
The “MAINTENANCE TIME SETTING” screen is displayed.



CLOCK ADJUSTMENT screen

Item	Description	Initial value
(a) CLOCK	Displays the current time.	-
(b) MAINTENANCE TIME	Displays the MAINTENANCE TIME currently set.	07:00:00
(c) HOUR	Sets the hour. Select a number between 00 and 23.	07
(d) MINUTE	Sets the minute. Select a number between 00 and 59.	00
(e) SET	Confirms the set time.	-

2 Tilt the select switch up and down to select an item to change. The selected item flashes.

3 Press the enter switch to fix the selection.

4 Select “EXIT” and press the enter switch to return to the “OTHERS” screen.

7-8 Maintenance Time

When you operate the machine continuously for 24 hours or more, the system must be cleared to alleviate the load on the game PC board.
The machine automatically reboots at the time set in MAINTENANCE TIME to clear the system.

* The system will not reboot during game play.
  It will reboot when the game is finished and the Attract screen reappears.

7-9 Cleaning

NOTICE

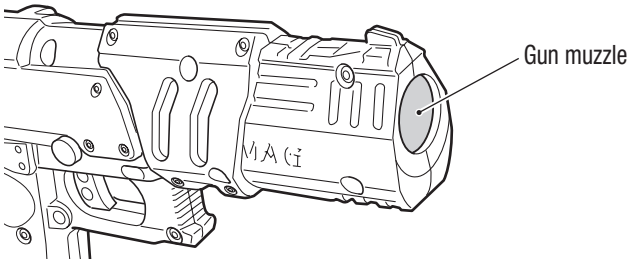
- Do not use thinner, benzene, gasoline, alcohol, or other organic solvents. Doing so may degrade the materials.

Wipe away any dirt using a dry soft cloth.
f the machine surface becomes extremely dirty, first wipe away the dirt using a soft cloth dampened with a neutral detergent, rub with a cloth moistened with a small amount of water, then wipe dry using a dry soft cloth.

7-9-1 Cleaning the Gun Assembly

NOTICE

- Clean the gun muzzle of the gun assembly every day to maintain the accuracy of the gun assembly. Wipe away dirt on the gun muzzle using a clean soft cloth.
- Do not use detergents or chemicals.
- Be very careful not to damage the gun muzzle.



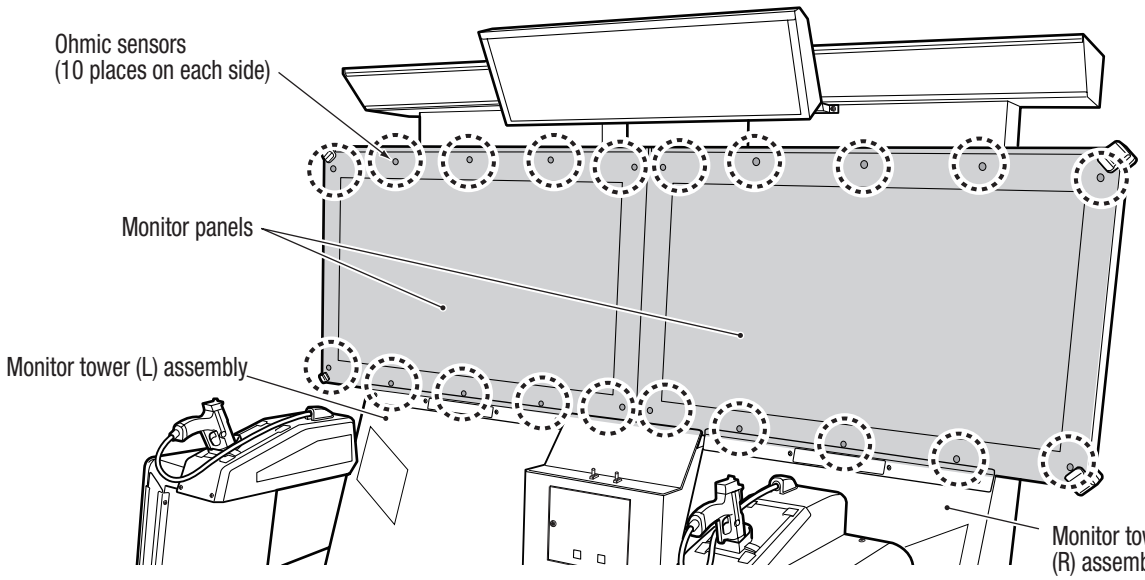
7-9-2 Cleaning the Monitor Panel

NOTICE

- Clean the ohmic sensor parts on the monitor panel (10 places on each side) every day to maintain the accuracy of the gun assembly. Wipe the monitor panel using a soft cloth. Any scratches on the monitor panel may pose a problem in terms of detecting the gun assembly.

1 Put a soft cloth in cold or lukewarm water (at 40°C or less), squeeze it tightly, and wipe the monitor panel lightly.

2 If the dirt cannot be removed with cold or lukewarm water, use a neutral detergent diluted with water (2–3 %).

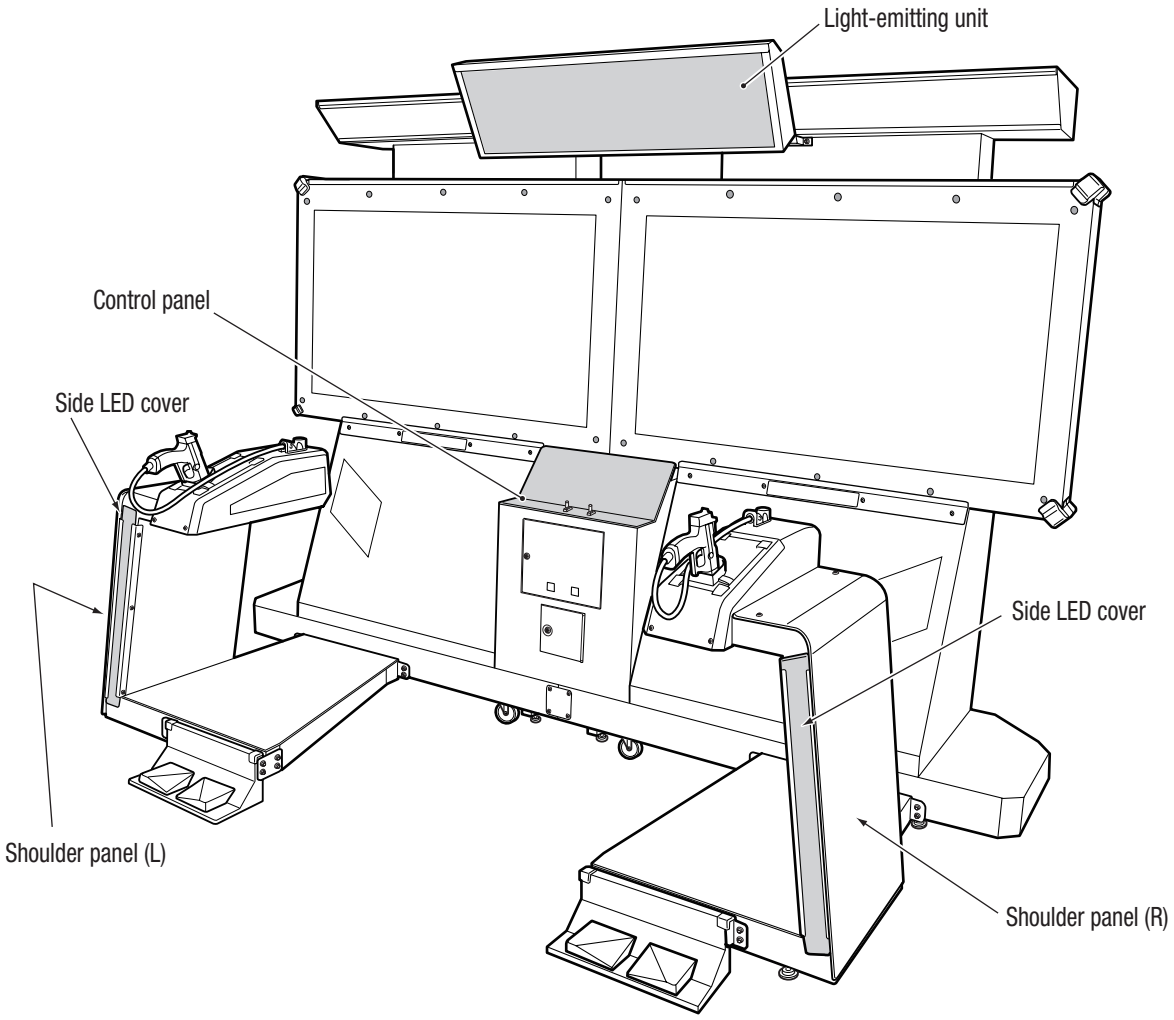


7-9-3 Cleaning the Acrylic Part

NOTICE

- Do not use thinner, benzene, gasoline, alcohol, or other organic solvents. Doing so may degrade the materials.

1. Wipe away the dirt using a cloth moistened with neutral detergent or water and squeezed tightly.
2. Wipe using a dry cloth so that no detergent or moisture remains.



8. Technician's Manual – Must be performed by a technician –

8A. Installation and Assembly

8A-1 Assembly Preparation

8A-1-1 Number of Technicians and Work Time

■ **Number of technicians**

Installation and assembly must be performed by two or more technicians.

■ **Work time**

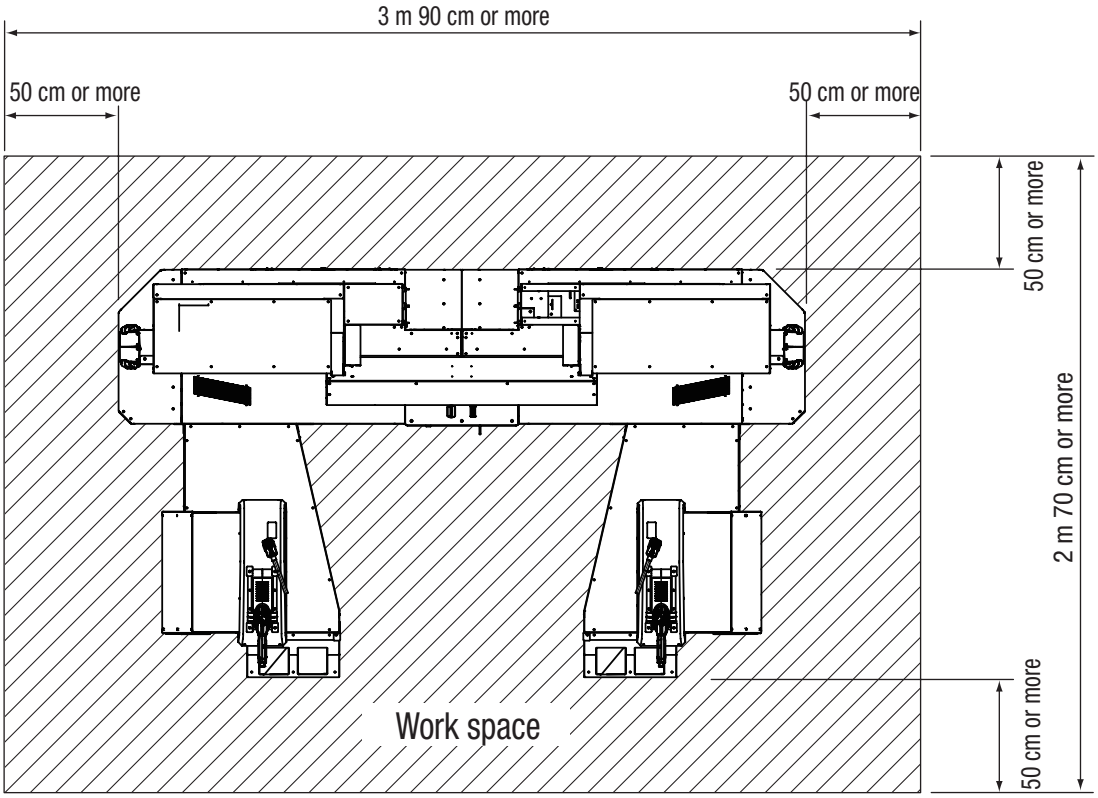
The amount of work time required for two workers (technicians) to install and assemble the machine is approximately 120 minutes.

8A-1-2 Workflow

[1] 8A-2	Assembling the Front Assembly	See 8A-2.
[2] 8A-3	Assembling the Rear Assembly	See 8A-3.
[3] 8A-4	Level Adjuster Adjustment	See 8A-4.
[4] 8A-5	Inserting the USB Dongle	See 8A-5.
[5] 8A-6	Connecting the Power Cord and Ground	See 8A-6.
[6] 8A-7	Post-Installation Checks	See 8A-7.
[7] 8A-8	Turning the Power Switch On	See 8A-8.
[8] 8A-9	Confirmation after Power On	See 8A-9.
[9] 8A-10	Gun Assembly Adjustment	See 8A-10.

8A-1-3 Space Required during Installation

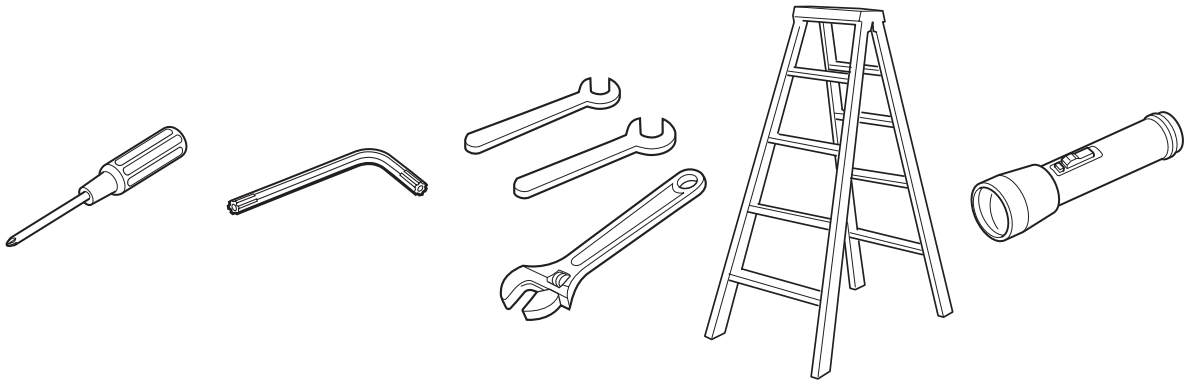
Be sure that a space of at least 2 m 40 cm exists between the floor and the ceiling, and that a space of 50 to 100 cm or more exists around the machine for installation work, as shown in the figure below.



8A-1-4 Tools Required

Prepare the following tools to install and assemble the machine.

- Torx wrench (T25) (supplied item)
- Allen key (width across flats 5 mm)
- Wrench (width across flats 22 mm) or adjustable wrench
- Footstool or stepladder (two)



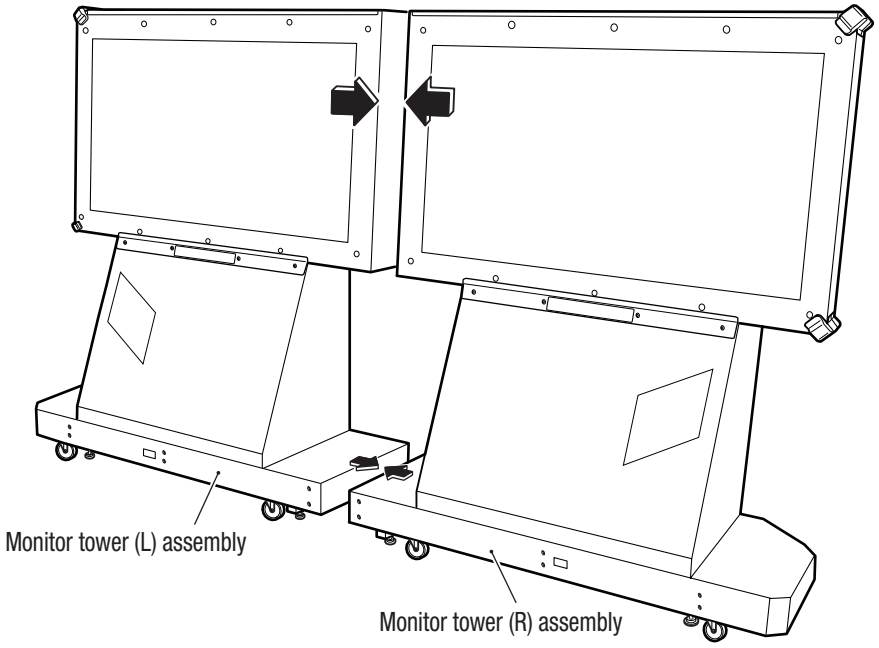
8A-2 Assembling the Front Assembly

The front assembly refers to an assembly in which monitor tower (L) and (R) assemblies, the coin box assembly, and the signboard assembly are all connected together.

⚠WARNING

● Assembling the front assembly requires work to be carried out while standing at an elevated location. Prepare an appropriate footstool and exercise care during working. Working in an unnatural body posture may result in injury or machine damage.

1 Put the monitor tower (L) and (R) assemblies close together side by side so that there is no gap at the top or bottom.

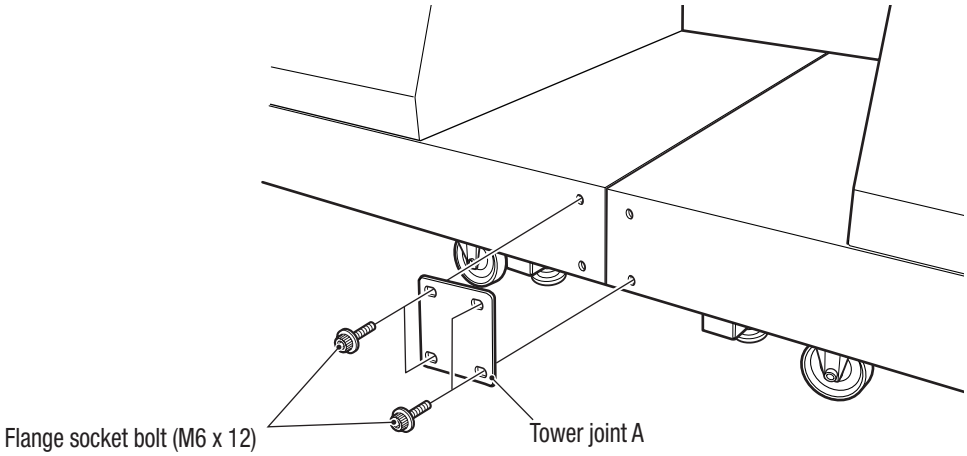


2 While holding the monitor tower (L) and (R) assemblies close together, adjust the level adjusters so that there is no gap between the base and monitor portions. (See P-77 "8A-4 Level Adjuster Adjustment")

NOTICE

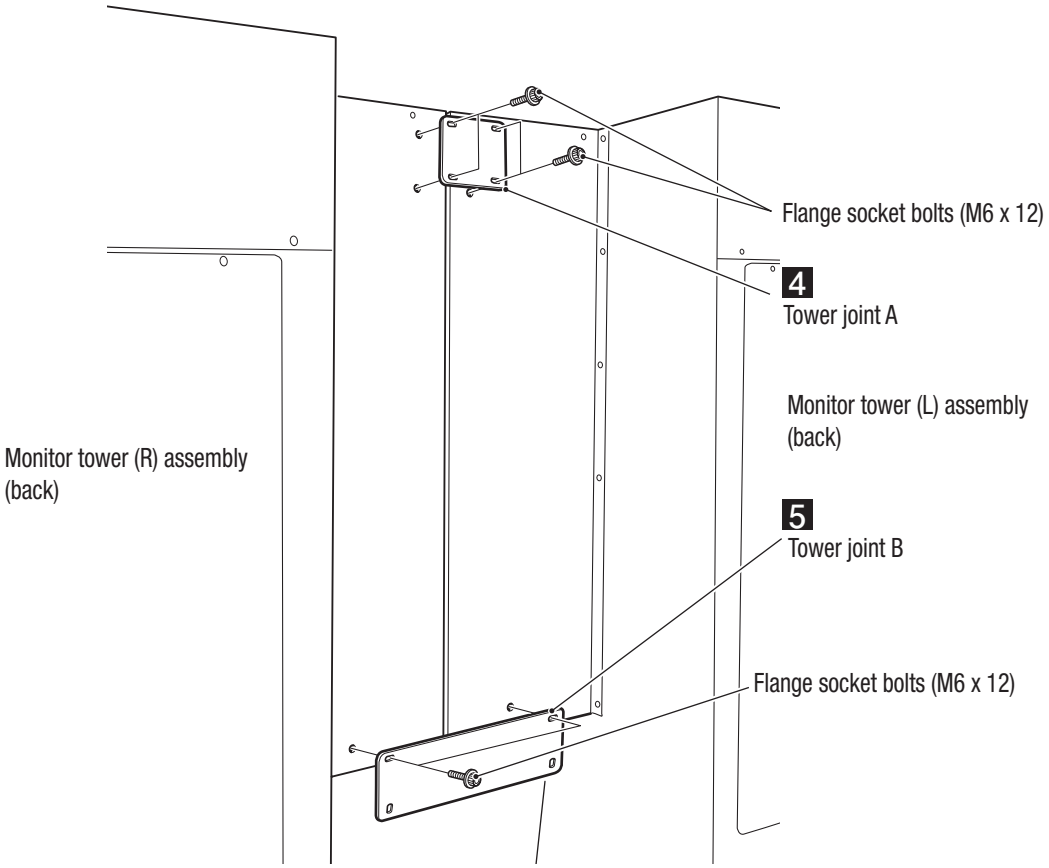
● Adjust the level adjusters to make the monitor tower (L) assembly flush with the monitor tower (R) assembly.

3 Attach tower joint A to the front side of the assemblies using four flange socket bolts (M6 x 12) to connect them together.

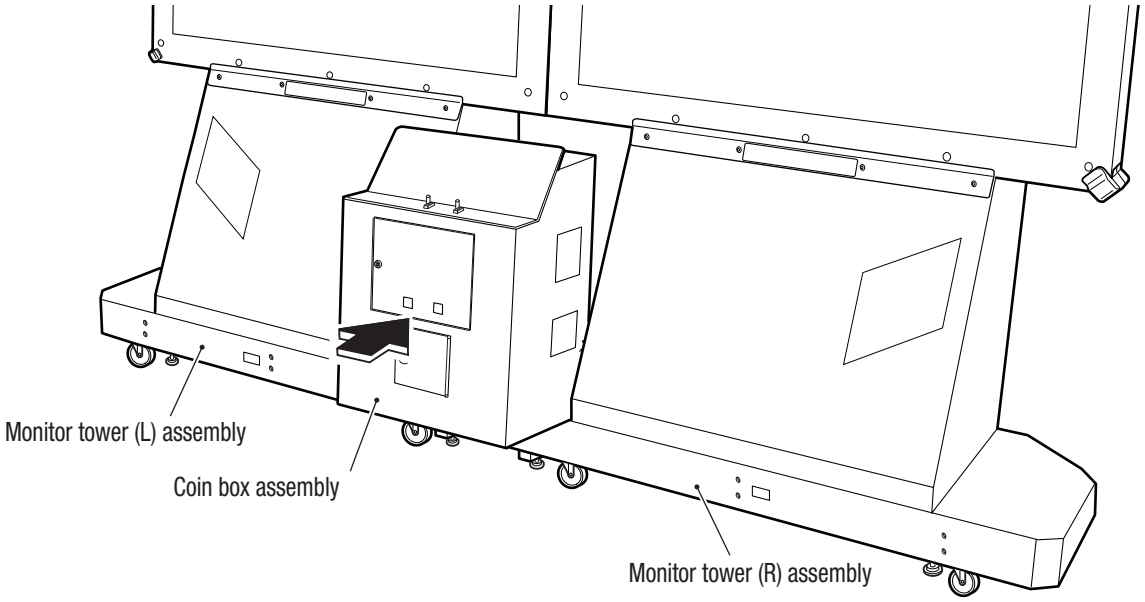


4 Attach tower joint A to the top rear side of the monitor tower (L) and (R) assemblies using four flange socket bolts (M6 x 12) to connect them together.

5 Attach tower joint B using two flange socket bolts (M6 x 30) so that it protrudes at the bottom end.

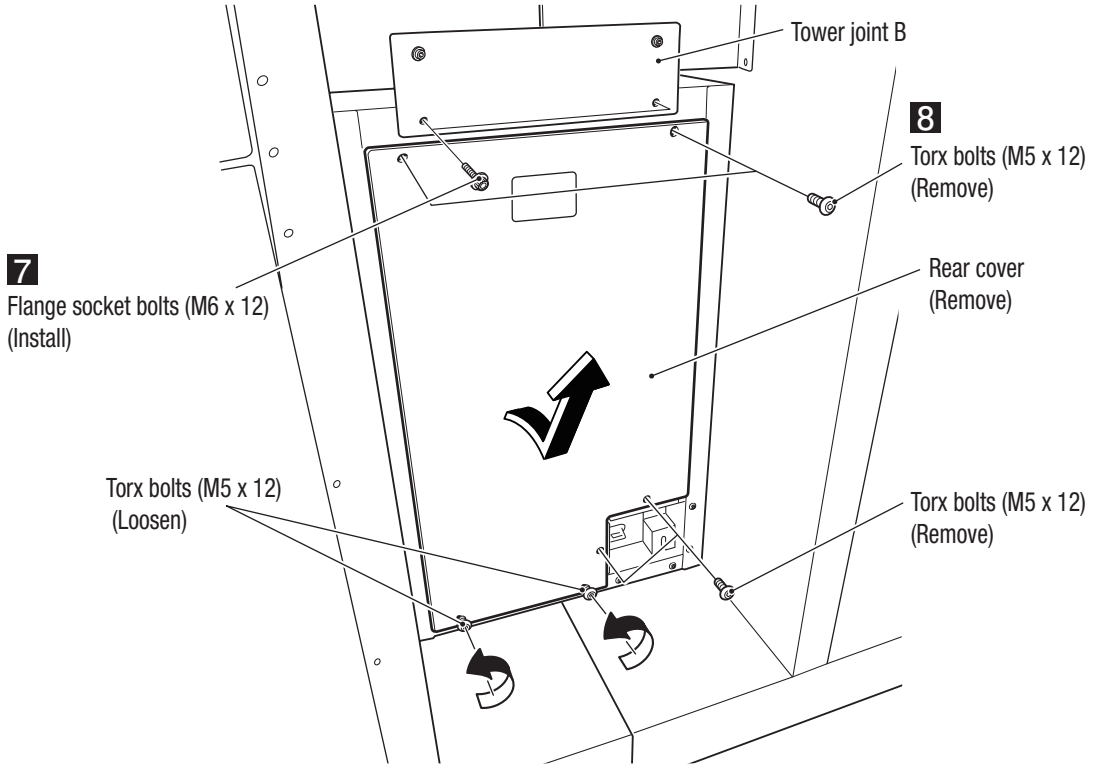


6 Put the coin box assembly into the space between the monitor tower (L) and (R) assemblies from the front.

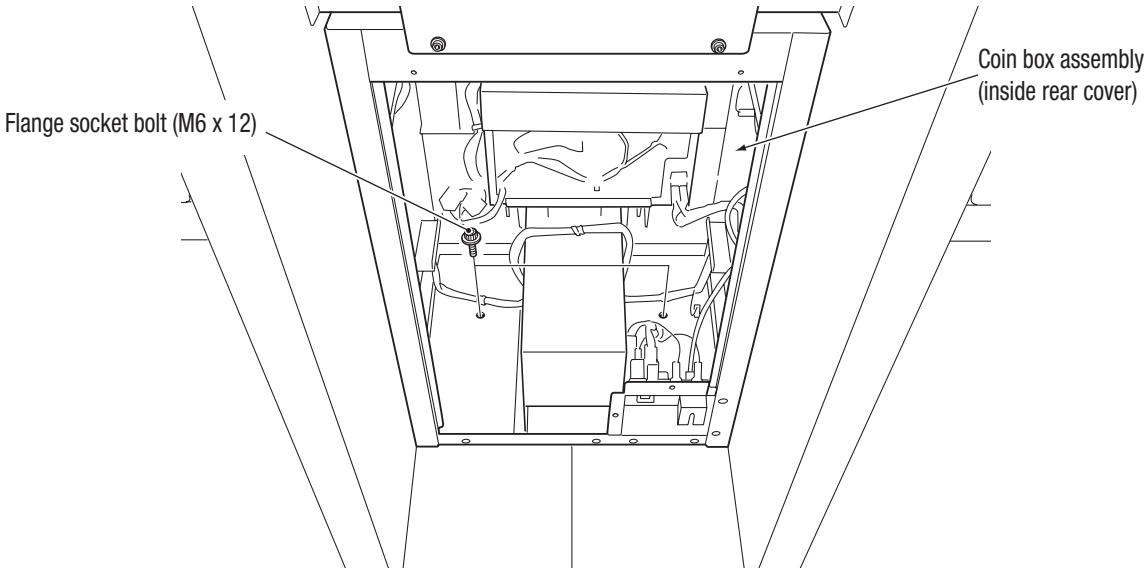


7 Attach tower joint B that has been attached in step **5** to the rear side of the coin box assembly using two flange socket bolts (M6 x 12).

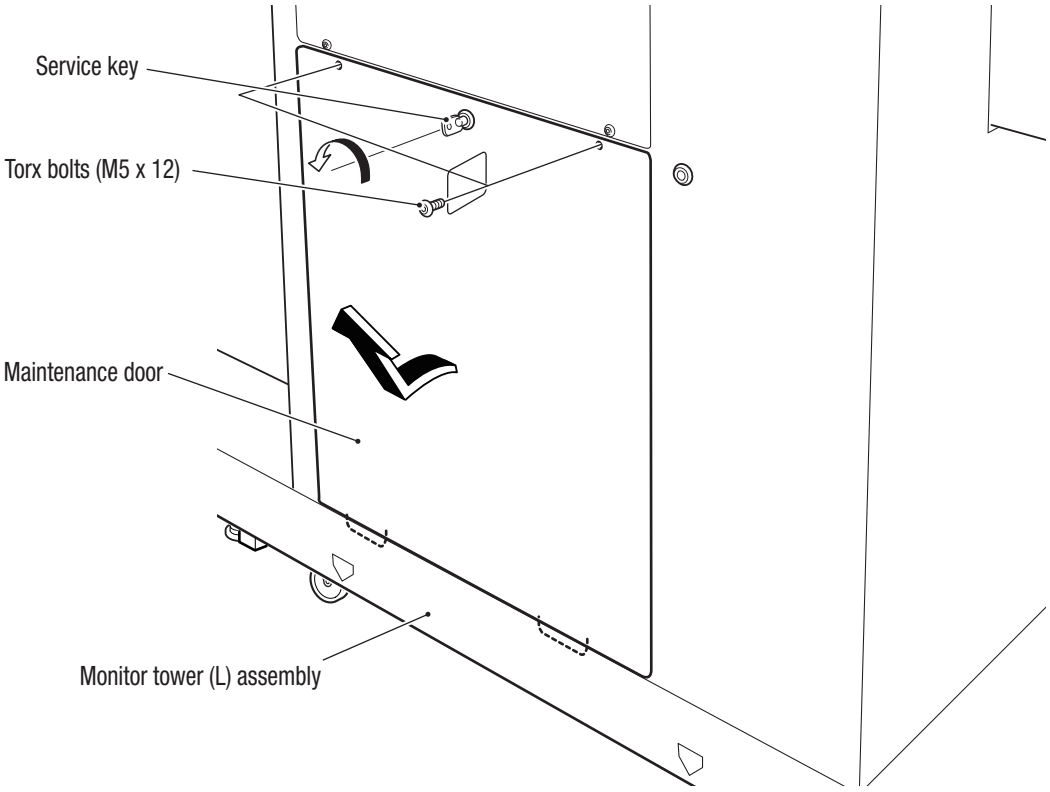
8 Remove the four Torx bolts (M5 x 12) from the coin box assembly rear cover and loosen the two Torx bolts to remove the cover.



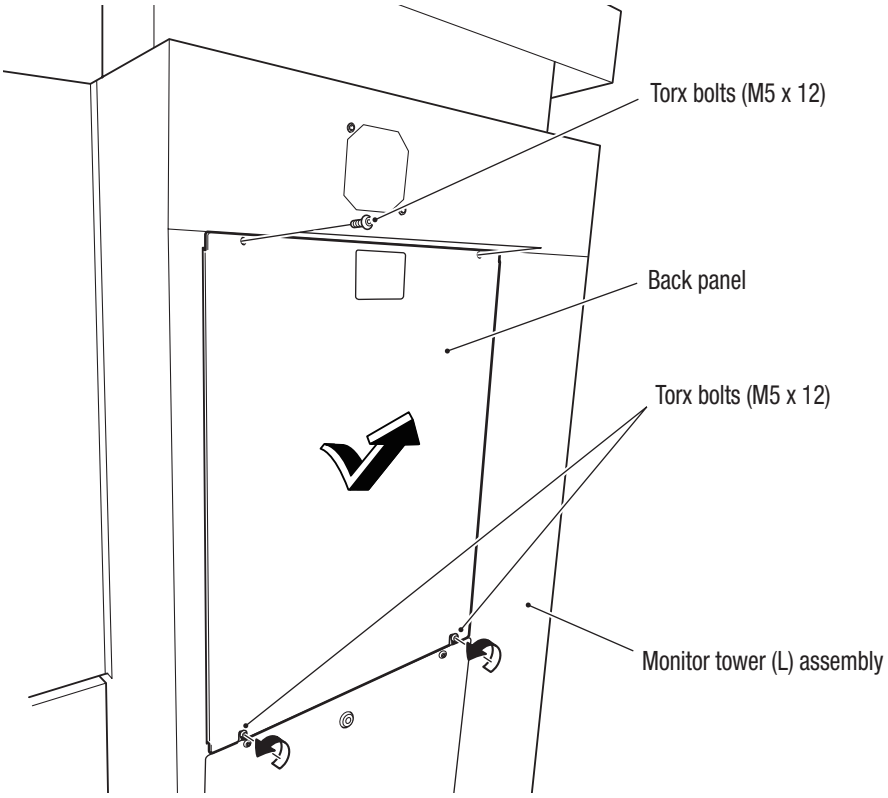
9 Use two flange socket bolts (M6 x 12) to secure the bottom surface of the coin box assembly.



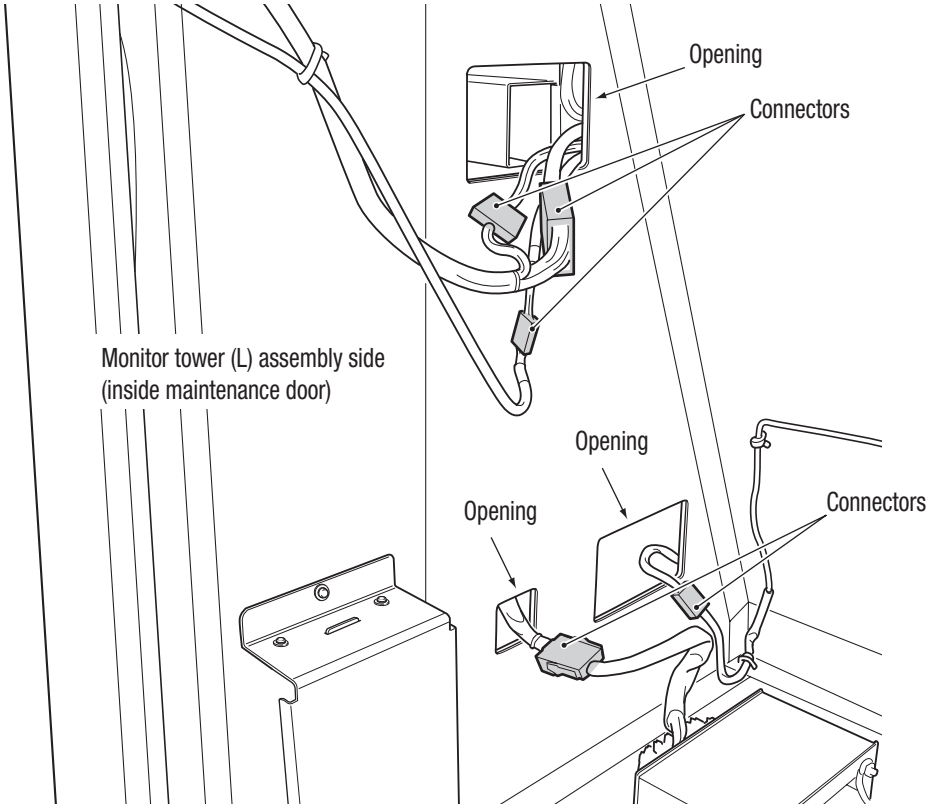
10 Remove the two Torx bolts (M5 x 12). Use the service key to unlock and remove the maintenance door from the monitor tower (L) assembly. Repeat the same procedure to remove the maintenance door from the monitor tower (R) assembly.



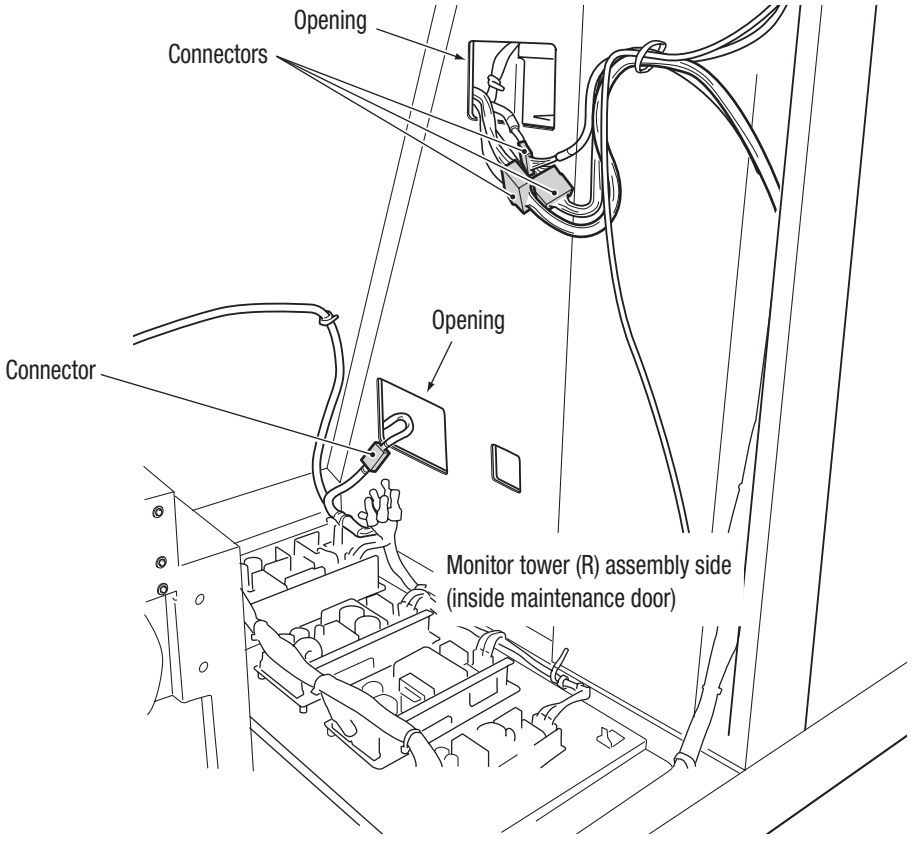
11 Remove the two Torx bolts (M5 x 12) from the rear side of the monitor tower (L) assembly and loosen the two Torx bolts to remove the back panel.



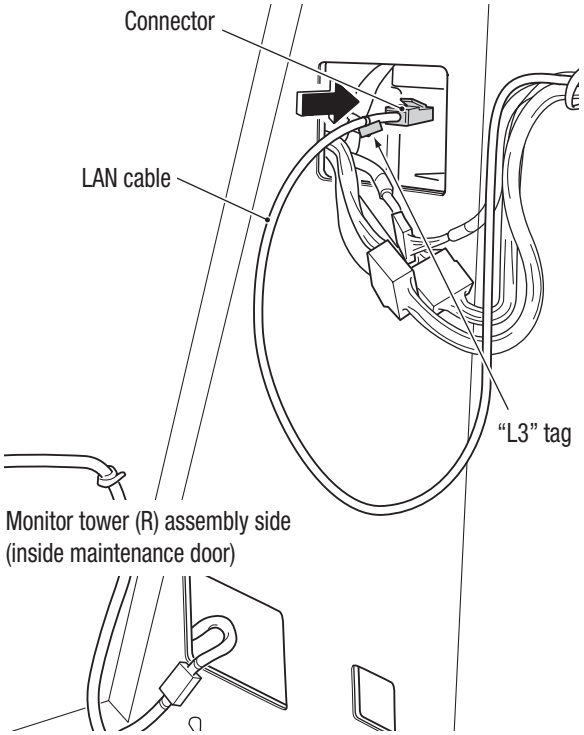
12 Pull the harnesses from the coin box assembly in the monitor tower (L) assembly through the openings shown in the figure below and connect the five connectors.



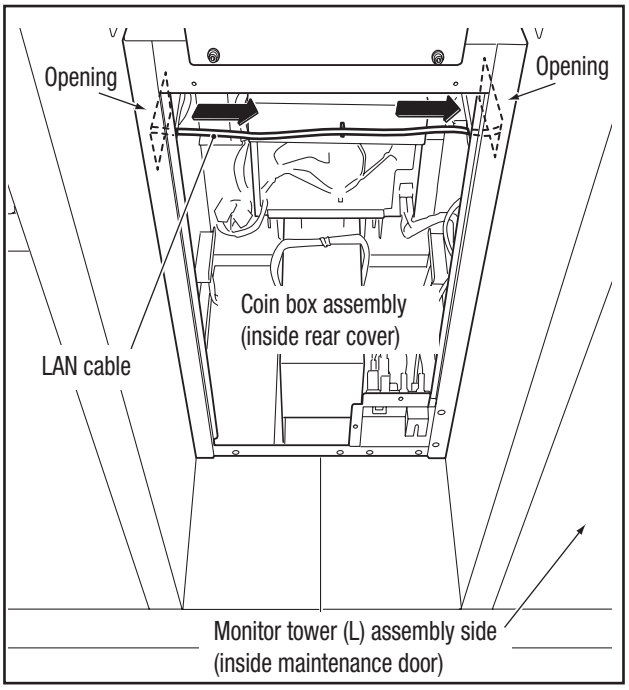
13 Pull the harnesses from the coin box assembly into the monitor tower (R) assembly through the openings shown in the figure below and connect the four connectors.



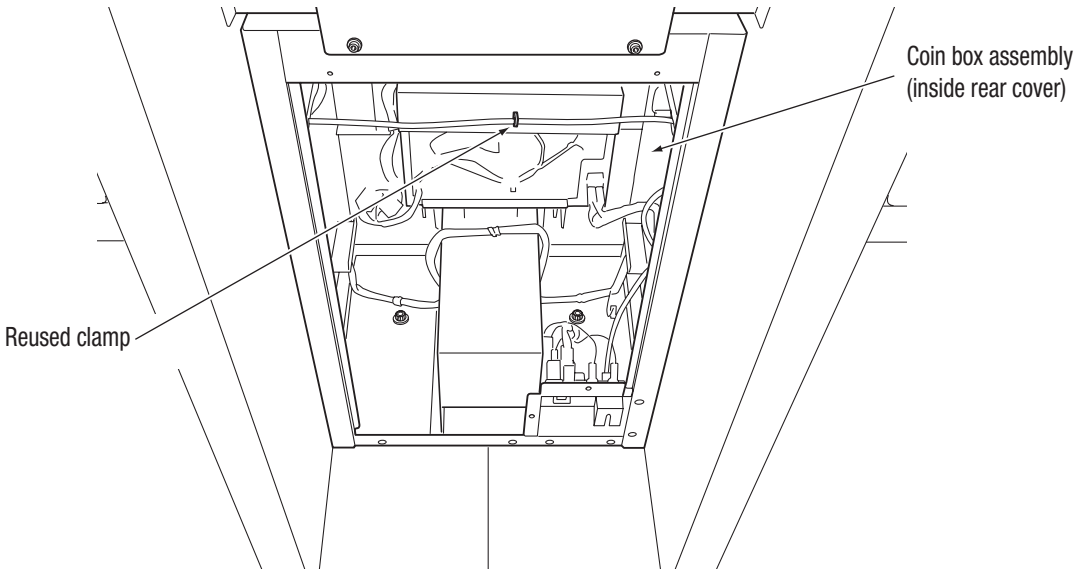
14 Pull the LAN cable from the monitor tower (R) assembly into the monitor tower (L) assembly through the coin box assembly.



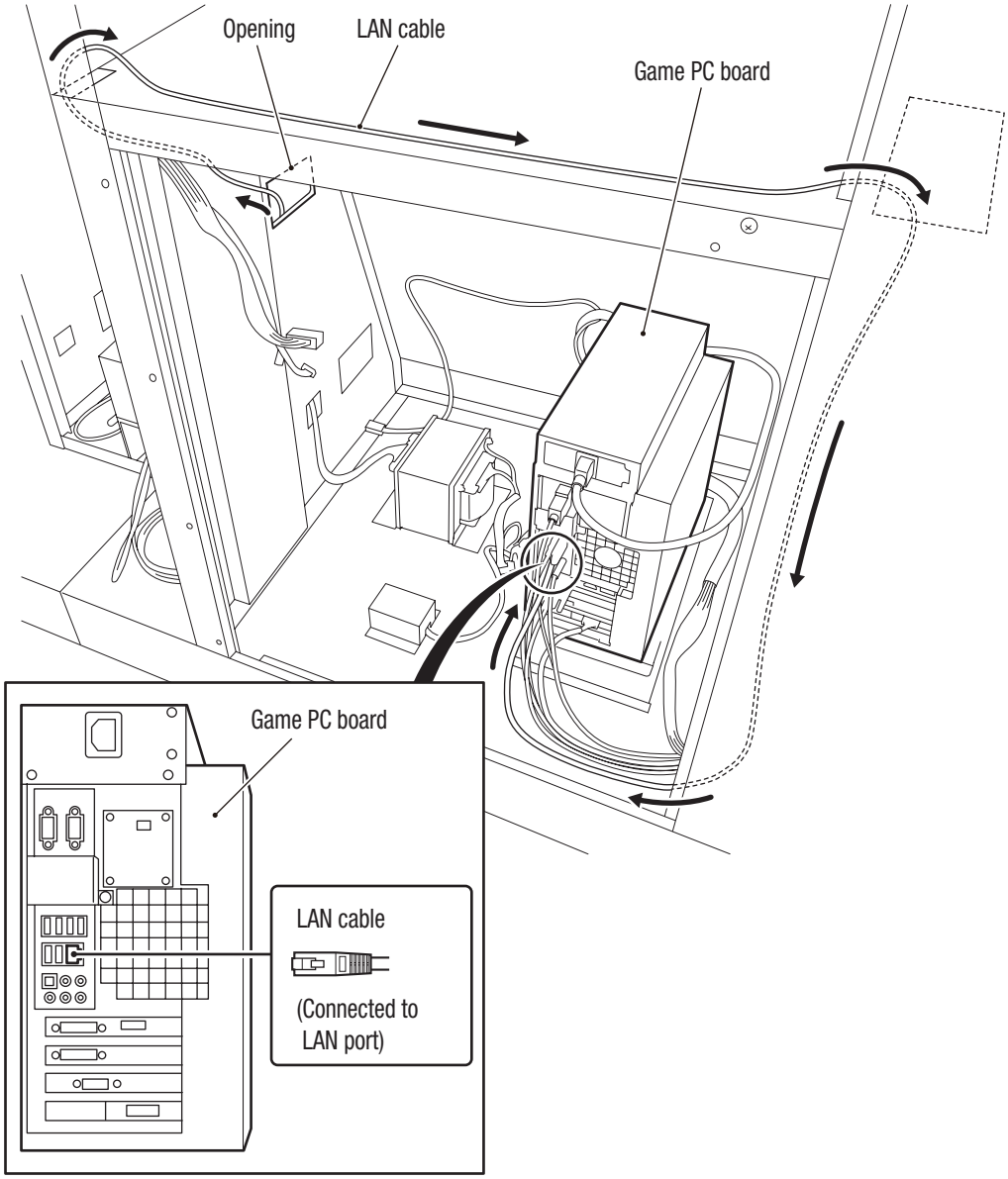
[Rear view]



15 Secure the LAN cable (slot L3), which has been connected from the monitor tower (R), using reused clamps found inside the coin box and the monitor tower (R) assembly.



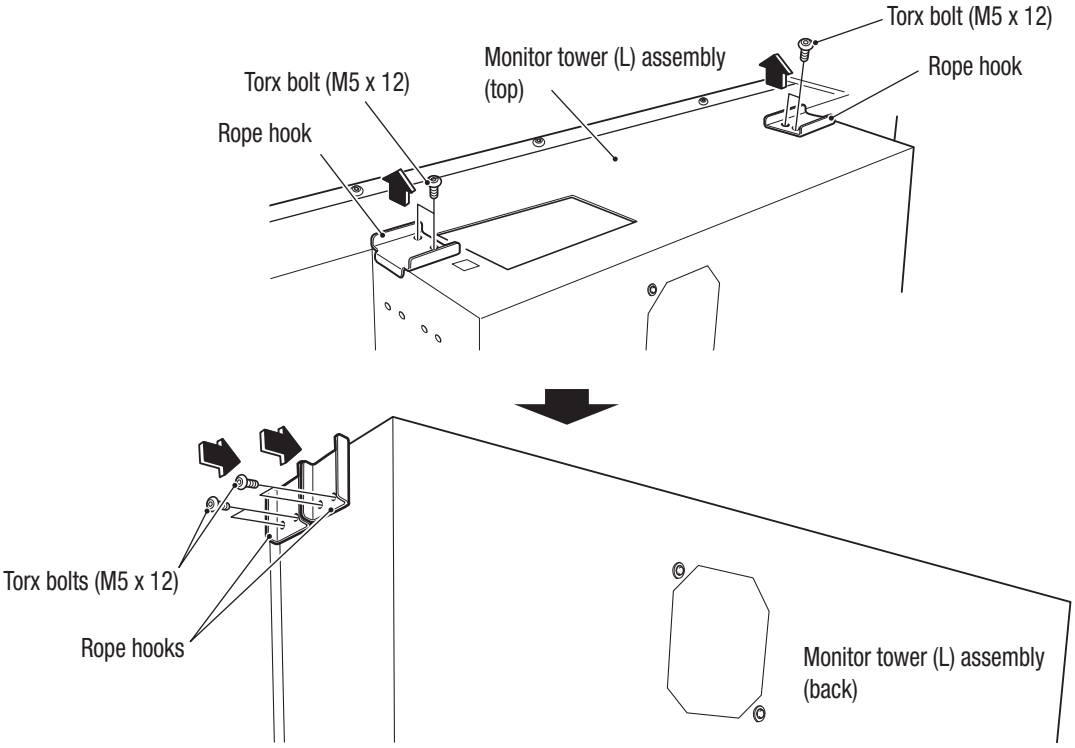
16 Pull the LAN cable, which has been pulled into the monitor tower (L) assembly in step 14, into the back panel side through the upper window and insert it into the LAN port of the game PC board.



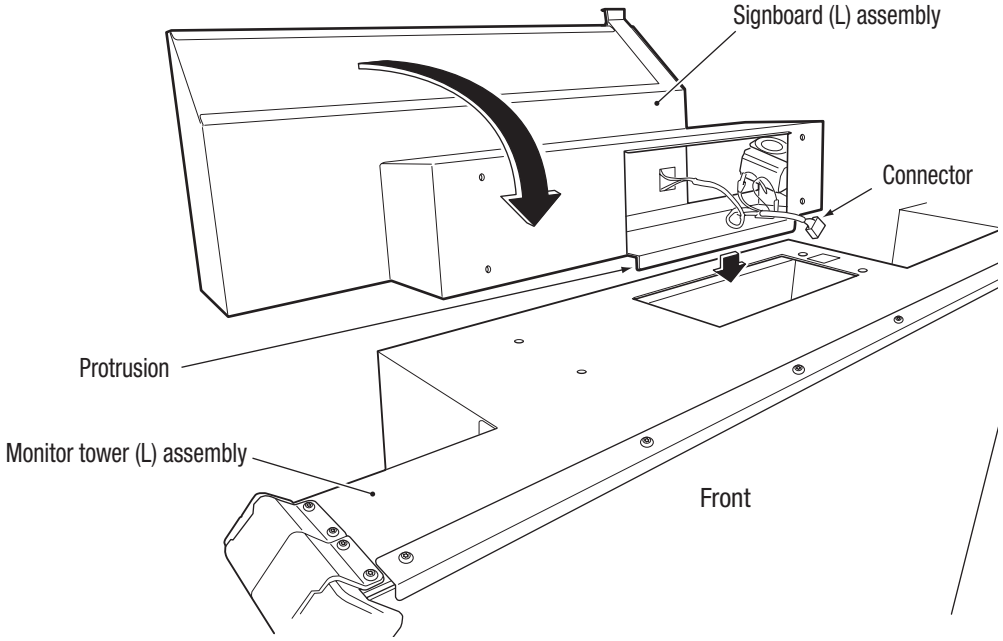
17 Attach the rear cover to the coin box assembly.

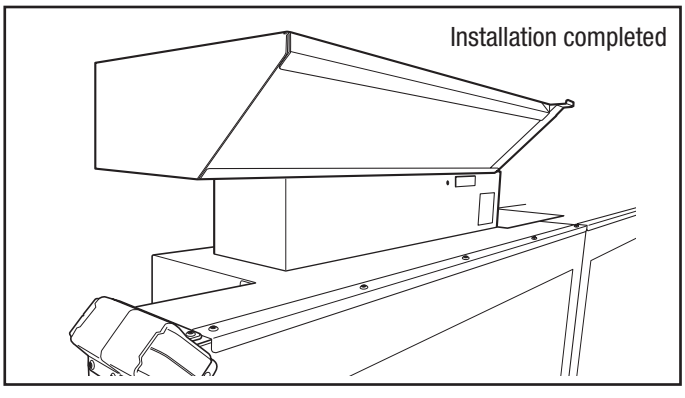
18 Attach the maintenance door to each of the monitor tower (L) and (R) assemblies.

19 Remove the two rope hooks from the monitor tower (L) assembly by removing the two Torx bolts (M5 x 12). Attach the removed hooks to the rear inner side face of the assembly. Repeat the procedure for the rope hooks on the monitor tower (R) assembly.



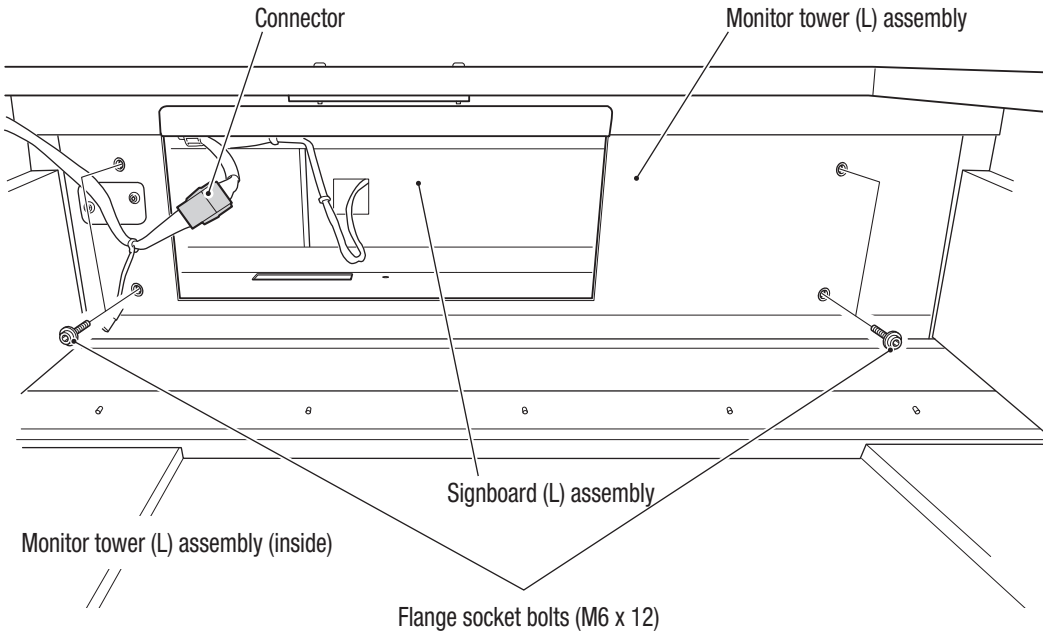
20 Put the signboard (L) assembly on the rear side of the monitor tower (L) assembly by inserting its protrusion into the opening. When doing so, exercise care not to let the connector get caught in it.





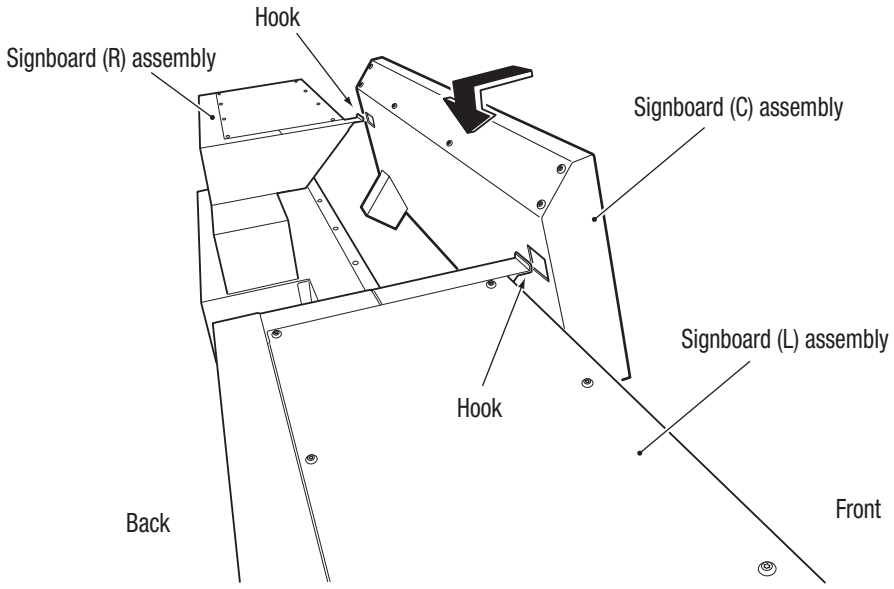
21 Secure the signboard (L) assembly using four flange socket bolts (M6 x 12) inside the monitor tower (L) assembly at the top, and connect the connector.

[View from the bottom looking up at the top surface inside the monitor tower (L) assembly]

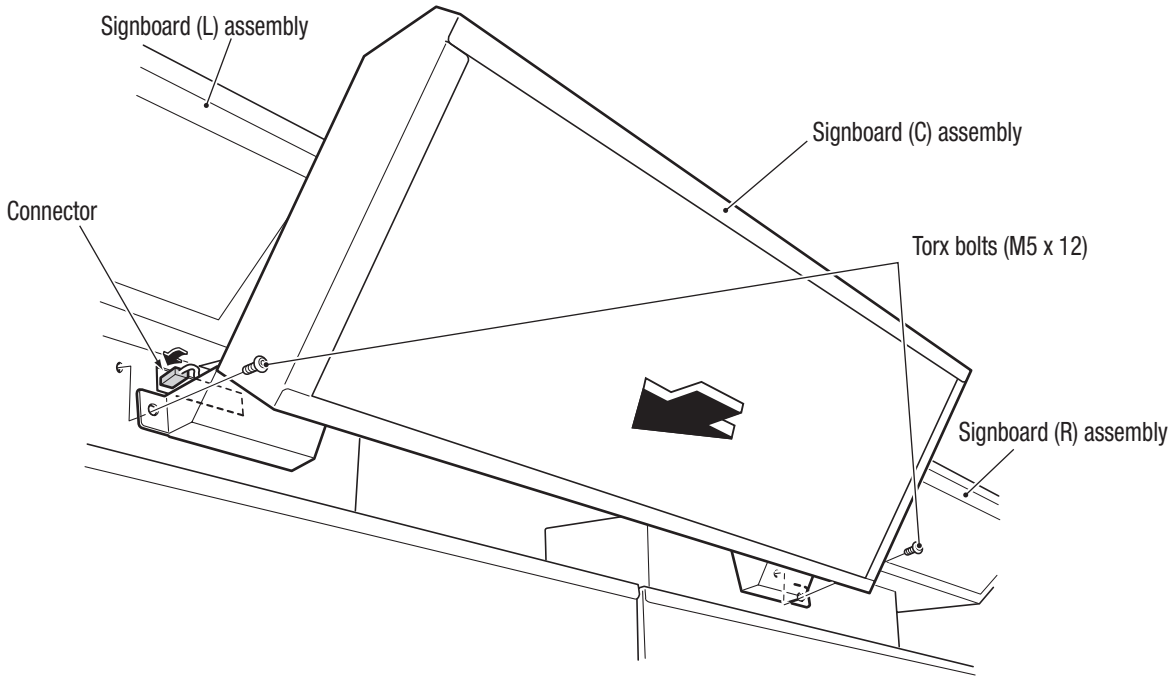


22 Repeat steps **20** through **21** to attach the signboard (R) assembly to the top of the monitor tower (R) assembly.

23 Hang the signboard (C) assembly on the hooks of the signboard (L) and (R) assemblies on the front side of the front assembly.
At this time, make sure that the signboard (C) assembly is fully inserted into the hooks on both the left and right sides.

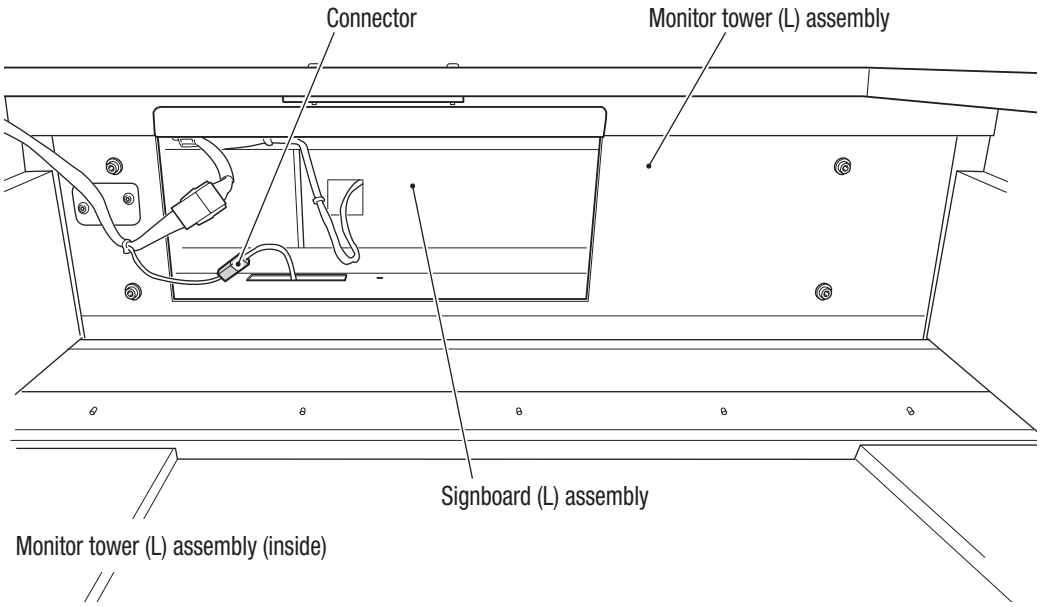


24 Press the lower side of the signboard (C) assembly against the signboard (L) assembly by using the upper side of the signboard (L) assembly as a fulcrum, and push the connector into the signboard (L) assembly. Secure the signboard (C) assembly to the signboard (L) and (R) assemblies using two Torx bolts (M5 x 12).



25 Take the connector, which has been inserted into the signboard (L) assembly in **24**, pull it inside the monitor tower (L) assembly at the top, and then connect it.

[View from the bottom looking up at the top surface inside the monitor tower (L) assembly]

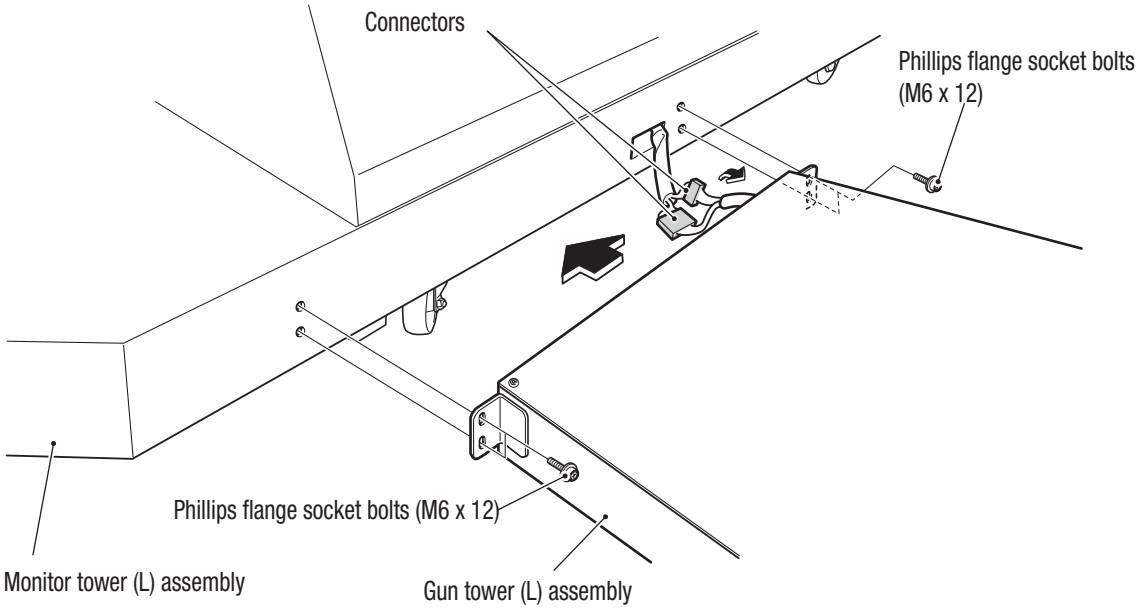


26 Attach the maintenance doors and back panels to the monitor tower (L) and (R) assemblies by reversing the procedures in steps **10** and **11**.

8A-3 Assembling the Gun Tower Assembly

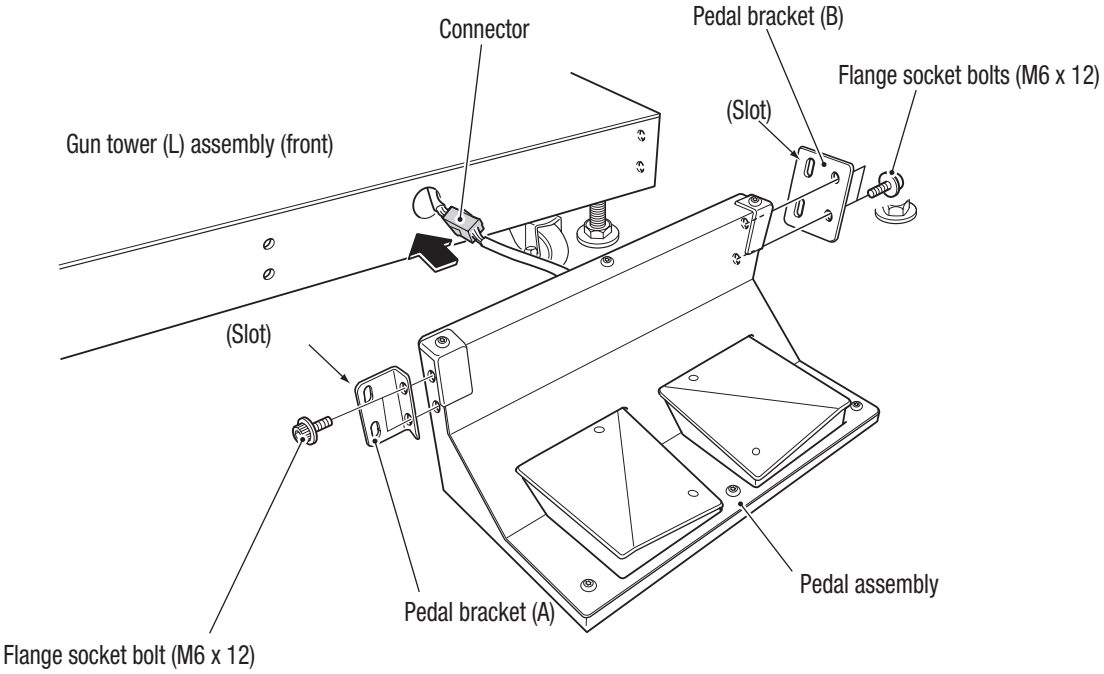
1 Move the gun tower (L) assembly close to the front side of the monitor tower (L) assembly and connect the two connectors. Push the two connectors into the gun tower (L) assembly, and fix them together while exercising care not to pinch the harness.

2 Use four Phillips flange socket bolts (M6 x 12) to temporarily secure the gun tower (L) assembly. (These bolts are fully tightened after level adjuster adjustment.)

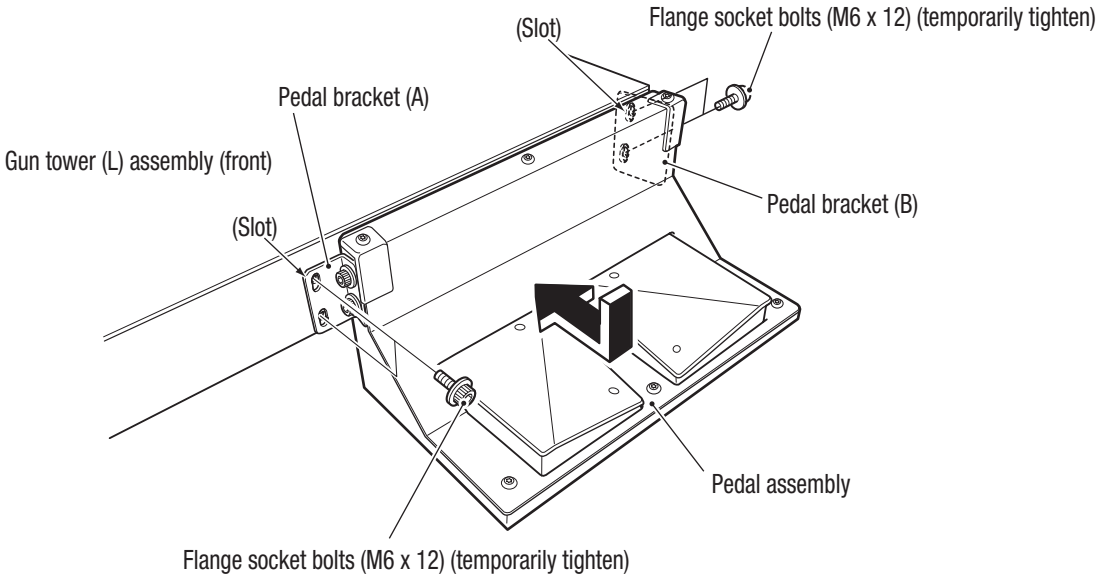


3 Attach the pedal brackets (A) and (B) to the pedal assembly using four flange socket bolts (M6 x 12) as shown in the figure. Ensure that the orientation and positioning of the pedal brackets (A) and (B) are correct.

4 Connect the connector and store it into the gun tower (L) assembly.



5 Use four flange sockets (M6 x 12) to temporarily secure the pedal assembly to the gun tower (L). When doing so, be sure to press the pedal assembly against the floor so that it is not lifted off the floor. (These bolts are fully tightened after level adjuster adjustment.)

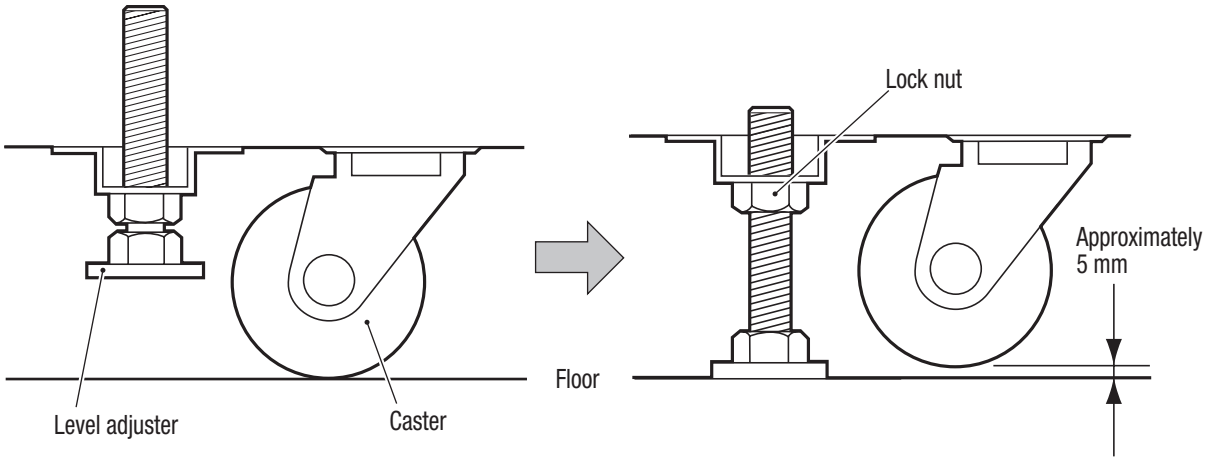


6 Repeat the procedure to attach the pedal brackets (A) and (B), the pedal assembly, and the gun tower (R) assembly to the monitor tower (R) assembly.

7 Adjust the height of the gun tower (L) and (R) assemblies using the level adjusters, and tighten the screws that have been tightened temporarily in steps 2 and 5. (See P-77 "8A-4 Level Adjuster Adjustment".)

8A-4 Level Adjuster Adjustment

1 Lower the level adjusters until the casters are at a height of approximately 5 mm from the floor (to such a degree that allows them to freely rotate).



8A-5 Inserting the USB Dongle

*This section explains how to remove and install the USB dongle on the 1P side (L side). Repeat the same procedure performed for the 1P side (L side) to remove and install the USB dongle on the 2P side (R side).

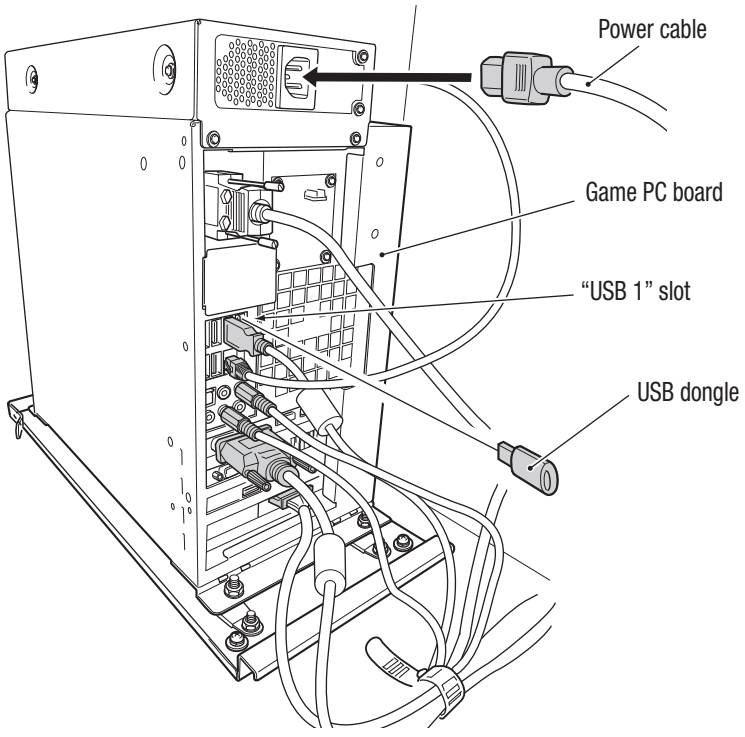
⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

- The supplied USB dongles are designed for this machine only. Do not use them for a machine other than the specified game machine.
- Do not insert any USB dongles other than those designed for this machine. Doing so may result in mechanical malfunction.
- Be sure to turn off the main power switches before inserting the USB dongles.
- Be sure to install one USB dongle to each game PC board.

1. Check that the power switch is turned off. (See P-39 "7-6-1 Turning the Power Switch ON".)
2. Remove the maintenance door. (See P-65 "8A-2 Assembling the Front Assembly".)
3. Insert the USB dongle, which is provided separately, into USB slot "USB 1" located near the center of the game PC board.



4. Insert the power cable into the game PC board.
5. Attach the maintenance door.
6. Repeat the procedure on the 2P side (R side).

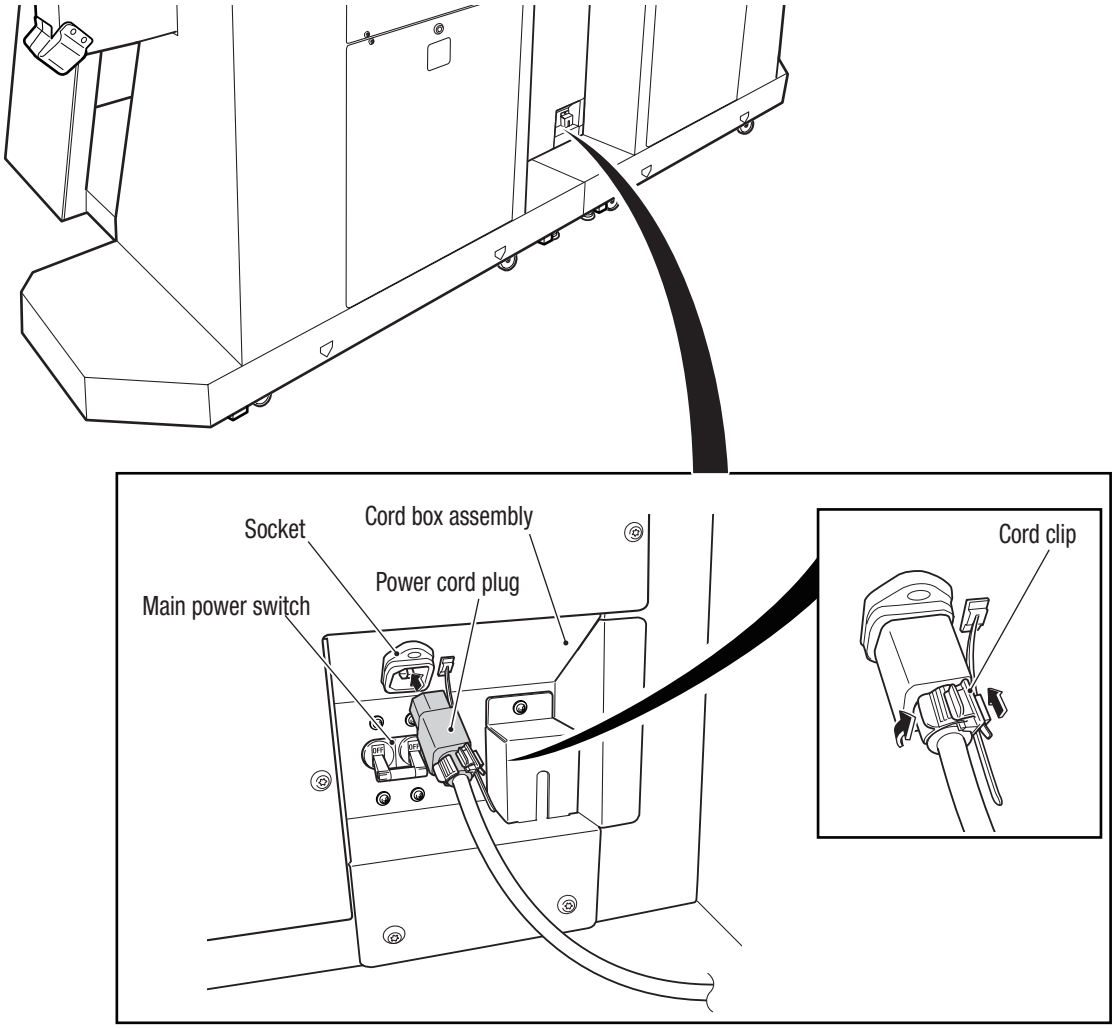
8A-6 Connecting the Power Cord and Ground

⚠CAUTION

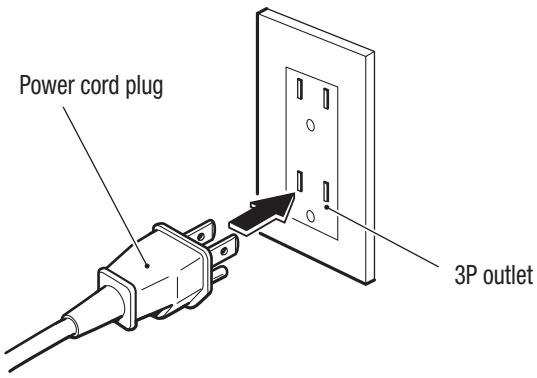
● Provide adequate lighting if carrying out work in dimly lit locations such as the inside of the machine.

1 Plug the supplied power cord into the socket.

2 Use a cord clip to secure the plug.



3 Insert the power cord plug into an outlet.

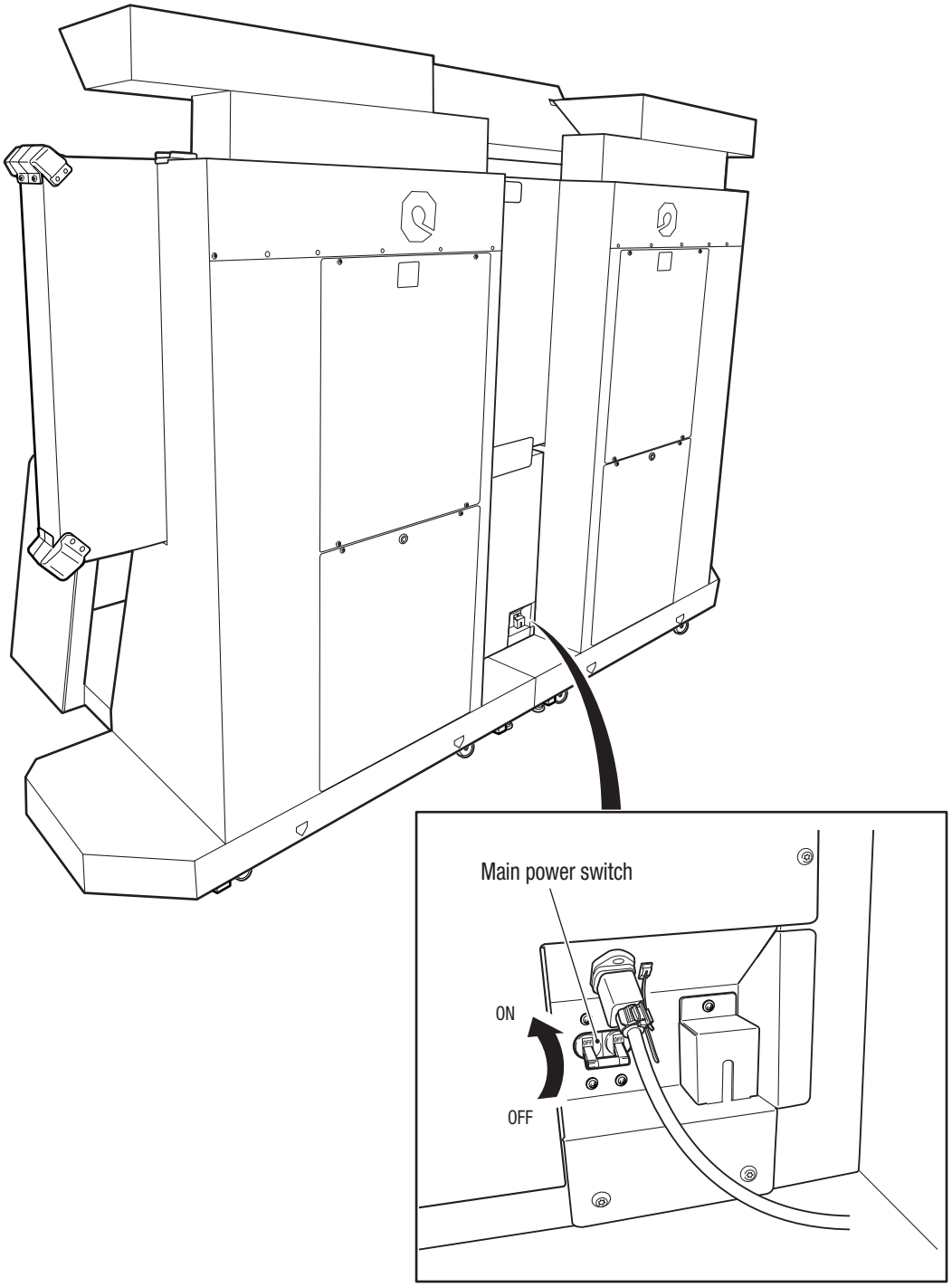


8A-7 Post-Installation Checks

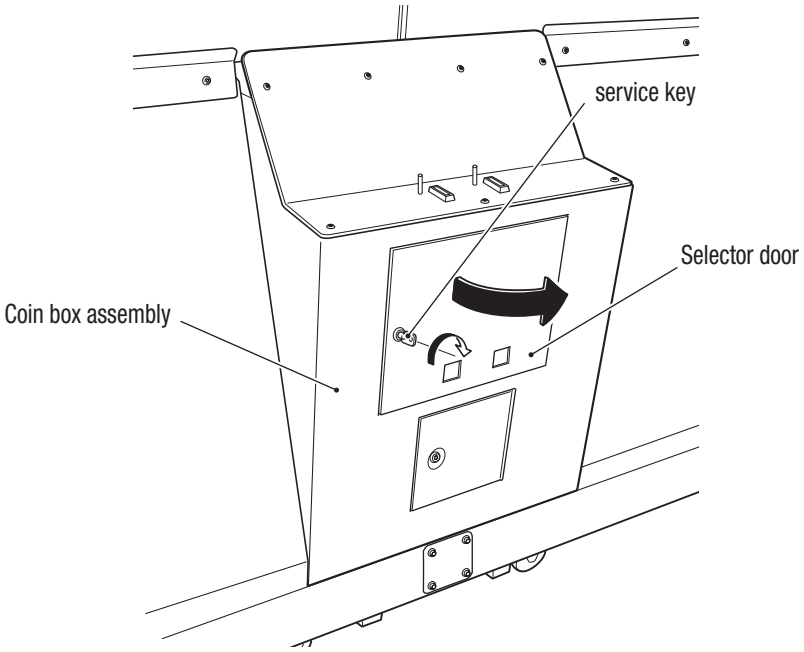
When you have finished all installation procedures, perform the inspections described in P-34 "7-4-1 Safety Inspection (Before Power On)".

8A-8 Turning the Power Switch On

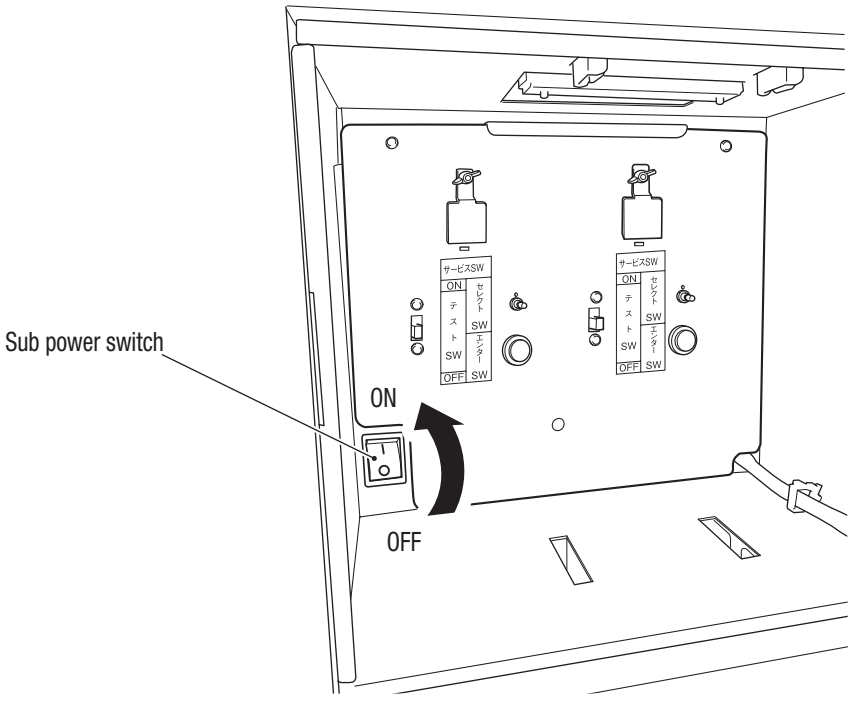
1 Turn on the main power switch located in the cord box on the back of the coin box assembly.



2 Open the selector door on the coin box assembly using the service key.



3 Turn on the sub power switch.



4 Close the selector door.

8A-9 Confirmation after Power On

When you have finished all installation procedures, perform the pre-operation inspection described in P-35 "7-4-2 Safety Inspection (After Power On)" and P-35 "7-4-3 Function Inspection (After Power On)".
Set the game cost, volume level, and other parameters as desired. (See P-41 "7-6-2 Adjustment Switches" and P-42 "7-7 Test Mode".)

8A-10 Gun Assembly Adjustment

Check the operation of the gun assembly and gun sight calibration. (See P-46 "7-7-4 Gun Test".)

8B. Service

⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others, be sure to turn off the power switch before starting service work (such as repairs, replacement, or correcting of malfunctions).

8B-1 Inspection and Service

⚠WARNING

- Perform periodic service. Failure to perform service may result in an accident.
- Perform the pre-operation inspection every day. This is necessary to prevent accidents.
  (See P-34 "7-4 Pre-operation Inspection".)

8B-1-1 Points for Inspection

Periodically check the following inspection points for any abnormalities.

(1) Check that all warning labels are legible.
(See P-5 "1-4 Machine Warning Labels".)
(2) Check that the specified play zone is provided.
(See P-25 "5-1-2 Play Zone when the Machine Is in Operation".)
(3) Check that all level adjusters are secured.
(See P-77 "8A-4 Level Adjuster Adjustment".)
(4) Ensure that all power cord plugs are securely fastened.
(See P-79 "8A-6 Connecting the Power Cord and Ground".)
(5) Check the power cord plugs for dust.
(6) Check the power cord for cracks or dirt on the power cord covering. If there are any abnormalities on the power cord, be sure to replace it.
(7) Checking screws on each part for looseness
Check screws on the following parts for looseness. Fully retighten any loose screws.

- Fixing screws used to connect the monitor tower (L) and (R) assemblies
  (See P-65 "8A-2 Assembling the Front Assembly".)
- Fixing screws used to secure the signboard (L), (R), and (C) assemblies
  (See P-65 "8A-2 Assembling the Front Assembly".)
- Fixing screws used to connect the front assembly and gun tower (L) assembly, and the front assembly and gun tower (R) assembly
  (See P-75 "8A-3 Assembling the Gun Tower Assembly".)
- Fixing screws used to secure the pedal assembly
  (See P-75 "8A-3 Assembling the Gun Tower Assembly".)
- Fixing screws used to secure the corner cover
- Fixing screws used to secure the point cover (S)

8B-2 Troubleshooting

⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.
- For a problem in which the descriptions in P-91 "8B-3 Error Displays" or P-85 "8B-2 Troubleshooting" cannot be applied, or if corrective action(s) taken do not result in an improvement, turn off the power switch immediately to stop machine operations, then contact your distributor. Continuing to operate the machine may cause an accident.

NOTICE

- INever test the PC board for continuity inspection, using a tester or other devices. We will repair it.
- The internal voltage of the tester may damage the IC.
- When requesting repairs (or placing an order for parts), fill out the "Repair Request Form" (or the "Parts Order Form") provided at the end of the manual, and fax it to your distributor in advance. Copy the form for this purpose.
- When sending parts for repair, pack them carefully. When sending a game PC board, wrap it in a sponge or bubble wrap and place it in a corrugated cardboard box to protect it against external impact.
- Be sure to attach the "Repair Request Form" to parts being sent for repairs.

8B-2-1 Overall

Symptom	Cause	Solution	Reference section
· The machine does not start.	· The USB dongle is not inserted correctly.	· Correctly insert the USB dongle.	P-78
	· A connector is disconnected.	· Connect the connector.	P-65–80
	· The game PC board is malfunctioning.	· Contact your distributor.	–
· Operation is not stable or the machine operates incorrectly.	· The power supply voltage is outside the range of 110 to 130 VAC.	· Disconnect any high-capacity devices (such as an air conditioner or large machines) from the same line to obtain the specified power supply voltage.	–

Symptom	Cause	Solution	Reference section
· The power turns off during operation.	· The circuit protector in the power switch activated and turned off the power switch. *The circuit protector is designed to turn off the power switch when an abnormal current flows.	· Turn on the power switch again. If the circuit protector is activated frequently, there is a mechanical abnormality. Contact your distributor.	–

8B-2-2 Monitor Tower (L) and (R) Assemblies

Symptom	Cause	Solution	Reference section
· The monitor does not display images.	· The connector between the monitor and the game PC board is disconnected.	· Open the back panel and connect the connector.	P-109
	· The monitor is malfunctioning.	· Replace the monitor.	P-109
	· The game PC board is malfunctioning.	· Replace the game PC board.	P-93
· There is no sound coming from the speakers.	· The volume level is set too low.	· Set the appropriate volume.	P-54
	· A connector is disconnected.	· Connect the connector.	P-71
	· The AMP PC board is malfunctioning.	· Replace the AMP PC board.	P-101
	· The game PC board is malfunctioning.	· Replace the game PC board.	P-93

8B-2-3 Coin Box Assembly

Symptom	Cause	Solution	Reference section
· The game does not start when a coin is inserted.	· A connector is disconnected.	· Connect the connector.	–
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The switching regulator (12 V) is malfunctioning.	· Replace the switching regulator (12 V).	P-99
	· The coin selector is malfunctioning.	· Replace the coin selector.	P-112
	· The installation site is on an incline.	· Place the machine on a level surface.	P-24

8B-2-4 Signboard (L), (R), and (C) Assemblies

Symptom	Cause	Solution	Reference section
· The tape LED does not light up.	· The tape LED is out.	· Replace the tape LED.	P-113
	· A connector is disconnected.	· Connect the connector securely.	P-113
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The switching regulator (12 V) is malfunctioning.	· Replace the switching regulator (12 V).	P-99
· There is no sound coming from the speakers.	· The volume level is set too low.	· Adjust the volume setting.	P-54
	· A connector is disconnected.	· Connect the connector securely.	P-65
	· The AMP PC board is malfunctioning.	· Connect the connector securely.	P-101
· The light-emitting unit does not light up.	· The light-emitting unit is out.	· Replace the light-emitting unit.	P-115
	· A connector is disconnected.	· Connect the connector securely.	P-115
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The switching regulator (12 V) is malfunctioning.	· Replace the switching regulator (12 V).	P-99

8B-2-5 Gun Tower (L) and (R) Assemblies

Symptom	Cause	Solution	Reference section
· The side LED does not light up.	· The tape LED is out.	· Replace the tape LED.	P-120
	· A connector is disconnected.	· Connect the connector securely.	P-120
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The switching regulator (12 V) is malfunctioning.	· Replace the switching regulator (12 V).	P-99

8B-2-6 Gun Assembly

Symptom	Cause	Solution	Reference section
· Bullets do not correctly hit their targets.	· The gun sight is not aligned correctly.	· Adjust the gun sight.	P-47
	· The gun muzzle is dirty.	· Clean it.	P-61
	· The filter is dirty.	· Clean it.	P-62
	· The muzzle is too close to the screen.	· Instruct players to play the game while maintaining a distance of 60 cm or more between the screen and the muzzle.	–
	· There is an adjacent machine that uses the same detection system.	· Keep a distance of 1 m or more between the cabinets.	P-47
	· A connector is disconnected.	· Connect the connector.	P-122
	· The LED board is malfunctioning.	· Replace the LED board.	P-117
	· The sensor unit is malfunctioning.	· Replace the sensor unit.	P-124
	· The CPU board is malfunctioning.	· Replace the CPU board.	P-119
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The gun harness 2 is malfunctioning.	· Replace the gun harness 2.	P-126
· The trigger does not function.	· A connector is disconnected.	· Connect the connector.	P-130
	· A micro switch is broken.	· Replace the micro switch.	P-130
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The gun harness 2 is malfunctioning.	· Replace the gun harness 2.	P-126
· The gun does not vibrate.	· A connector is disconnected.	· Connect the connector.	P-127
	· The vibration unit is malfunctioning.	· Replace the vibration unit.	P-127
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103
	· The gun drive PC board is malfunctioning.	· Replace the gun drive PC board.	P-119

8B-2-7 Pedal assembly

Symptom	Cause	Solution	Reference section
· A pedal does not function.	· A connector is disconnected.	· Connect the connector.	P-134
	· A photosensor is malfunctioning.	· Replace the photosensor.	P-134
	· The USIO (T) PC board is malfunctioning.	· Replace the USIO (T) PC board.	P-103

8B-3 Error Displays

When this machine detects an error a start-up or during game play, an error screen is displayed and operations stop. Refer to the error code table below to identify the cause of the error and resolve it. If a screen not shown in the error code table is displayed, or the error message is displayed again after performing the appropriate solution, there may be some other cause. If this is the case, contact your distributor.

(1) Other hardware-related errors

Error code	Error message	Main cause	Remedy	Reference section
01-01	COIN ERROR 1	· A coin selector malfunction.	· Replace the coin selector.	P-112
		· The USIO (T) PC board malfunction.	· Replace the USIO (T) PC board.	P-103
01-02	COIN ERROR 2	· There is an abnormality in the Service switch	· Contact your distributor.	–
		· The USIO (T) PC board malfunction.	· Replace the USIO (T) PC board.	P-103
01-03	COIN ERROR 3	· The coin counter is malfunctioning.	· Contact your distributor.	–
		· The USIO (T) PC board malfunction.	· Replace the USIO (T) PC board.	P-103
03-01	I/O PCB ERROR	· A connector is disconnected. The USIO (T) PC board malfunction.	· Check the USIO (T) PC board connection. · Replace the USIO (T) PC board.	P-103
03-02	FIRMWARE ERROR			
06-01	GUN CONTROLLER ERROR	· A connector is disconnected. A gun controller malfunction.	· Check the gun controller connection. · Replace the gun controller.	P-122
19-10	USB DONGLE ERROR 1	· The USB dongle is not inserted.	· Insert the USB dongle for the machine. Then, turn the power switch off and back on. If the same error recurs, contact your distributor.	–
19-11	USB DONGLE ERROR 2	· A USB dongle for another model is inserted.		
19-12	USB DONGLE ERROR 3	· Two or more USB dongles are inserted.		
20-01	VERSION UP ERROR 1	· Version update failed.	· Turn the power off and perform the update again.	P-39, P-81
21-01	CLOCK ERROR	· The time is not set correctly.	· Set the time correctly.	P-58

8B-4 Removing, Installing, and Replacing Each Part

8B-4-1 Monitor Tower (L) and (R) Assemblies

(1) Removing and installing the maintenance doors

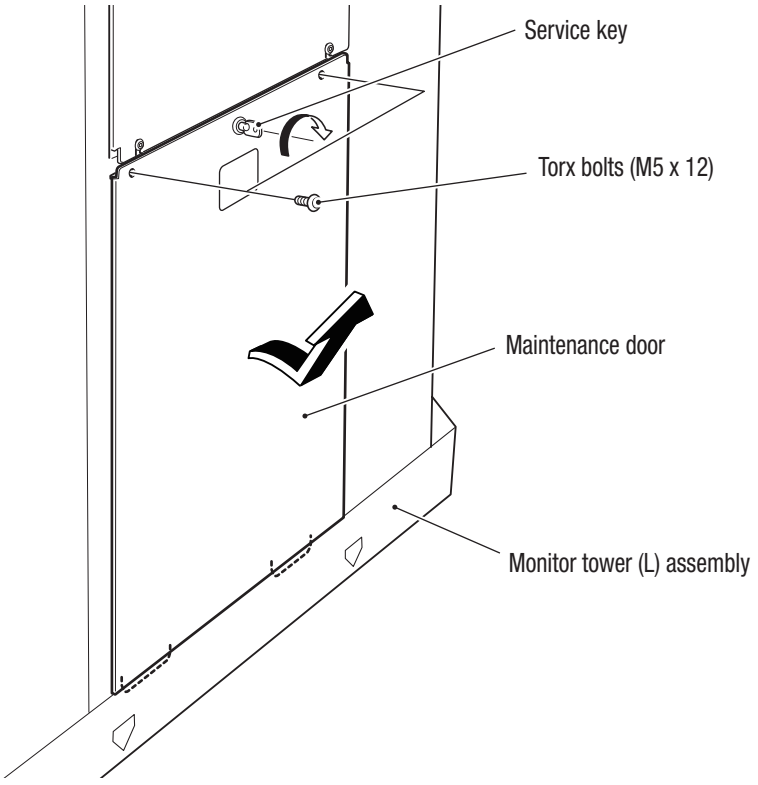
*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the two Torx bolts (M5 x 12). Use the service key to unlock and remove the maintenance door from the monitor tower (L) assembly.



3 To install, perform the procedure in reverse.

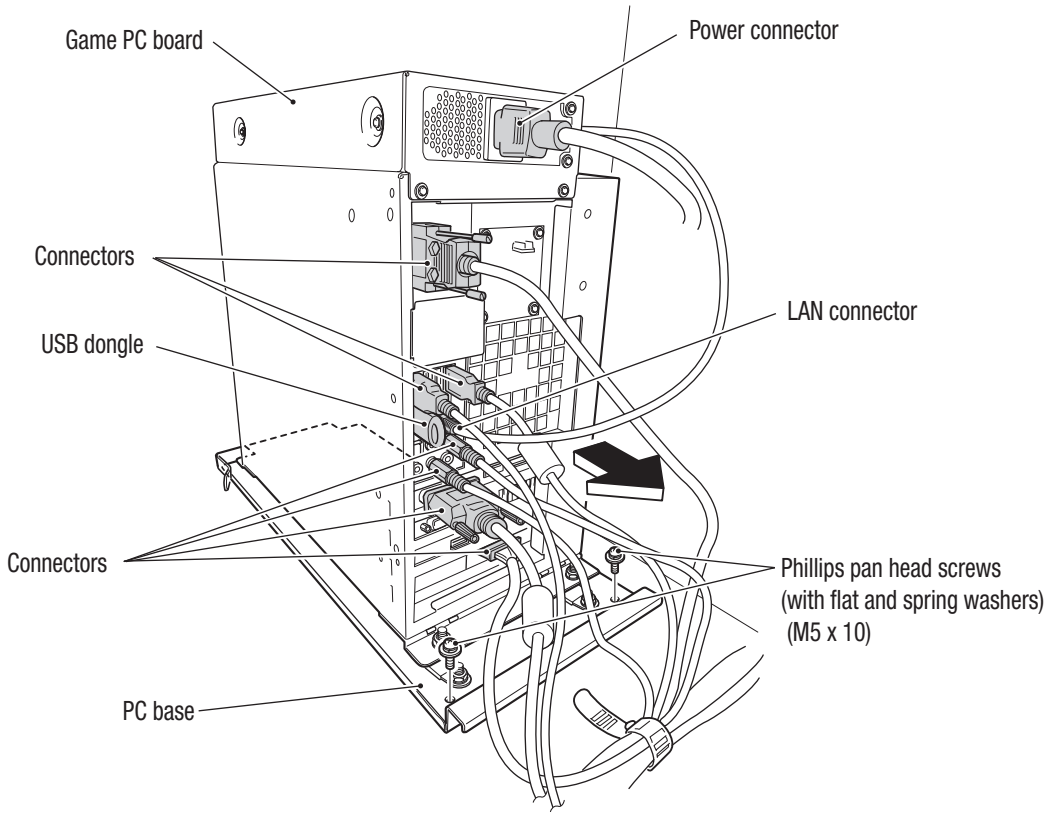
(2) Replacing the game PC board

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

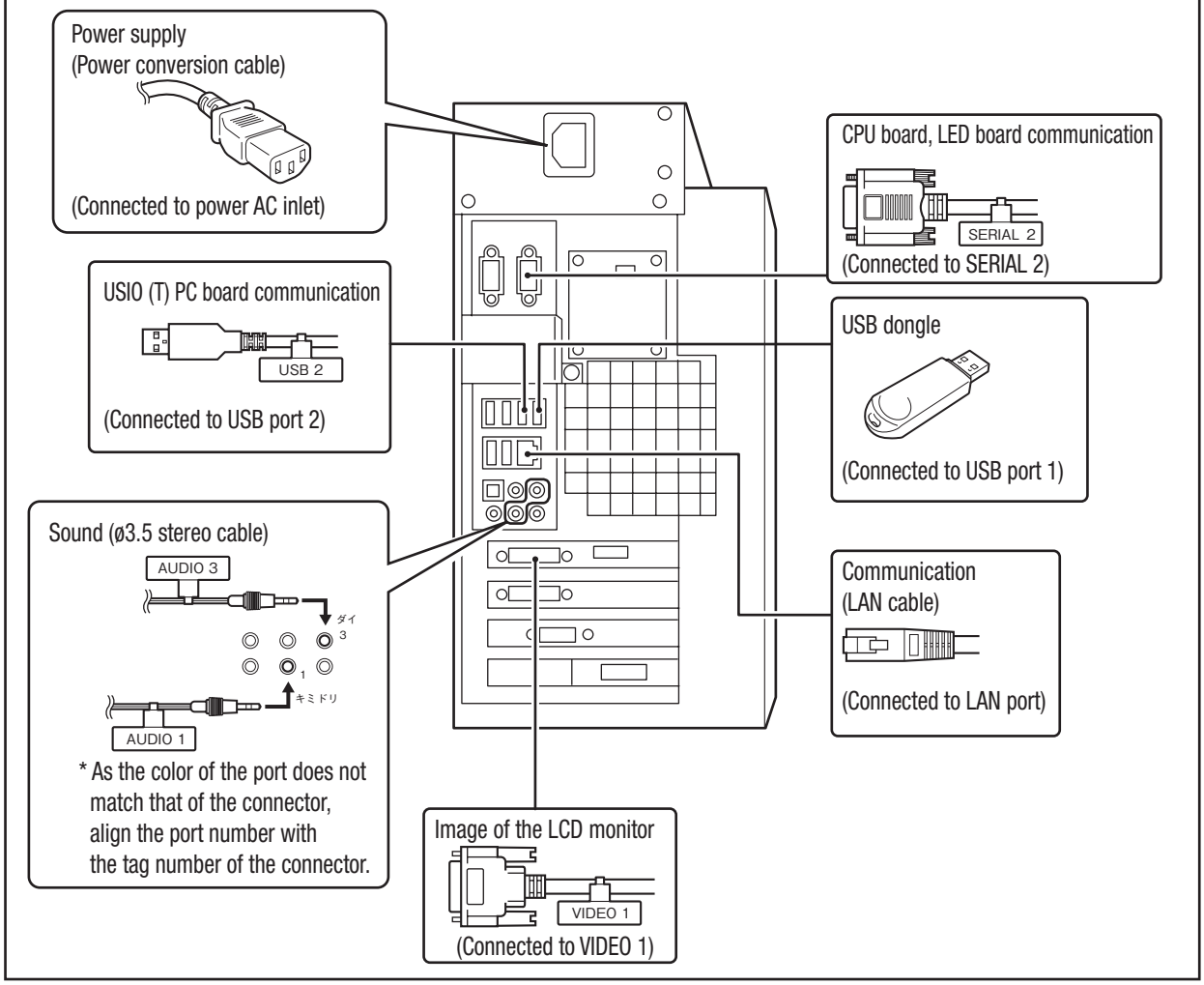
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

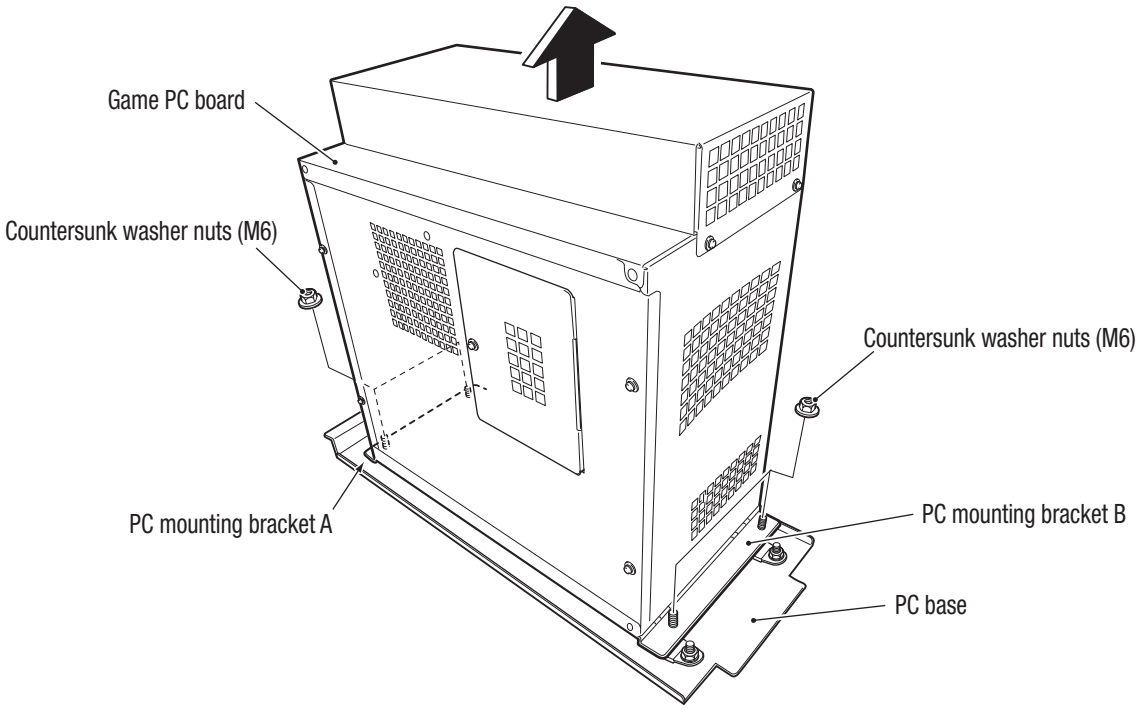
1. Turn off the power switch.
   (See P-81 "8A-8 Turning the Power Switch On".)
2. Remove the maintenance door.
   (See P-92 "(1) Removing and installing the maintenance doors".)
3. Remove the seven connectors, power connector, USB dongle, and LAN connector.
4. Remove the two Phillips pan head screws (with flat and spring washers) (M5 x 10) and pull out the game PC board together with the PC base.



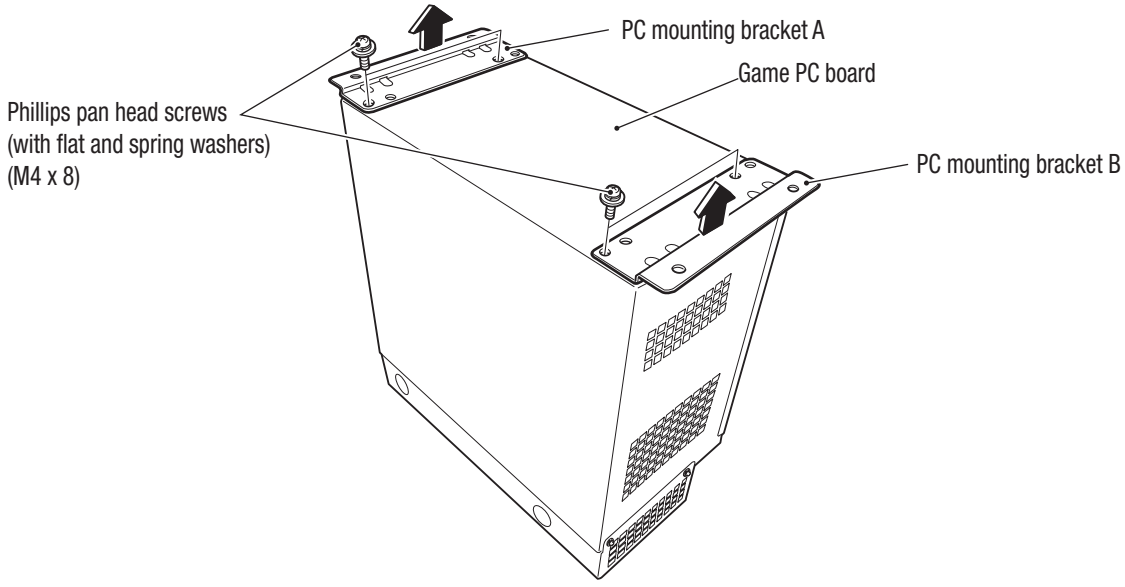
Connection information of the game PC board



5 Remove the four countersunk washer nuts (M6) and remove the game PC board.



6 Turn the game PC board upside down. Remove the four Phillips pan head screws (with flat and spring washers) (M4 x 8) and remove the PC mounting brackets A and B.



7 To install, perform the procedure in reverse.

NOTICE

- When installing, connect the connectors in accordance with the harness tags.
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- After replacing, be sure to check the operations and settings. (See P-42 "7-7 Test Mode".)

(3) Replacing the hard disk

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

NOTICE

- This must be performed by a technician.
- Take antistatic measures during installation. Static electricity causes the machine to malfunction or be damaged.
- Never use a tester or other devices to perform a continuity inspection. The internal voltage of the tester may damage the ICs in the game PC board, which may cause them to function incorrectly.

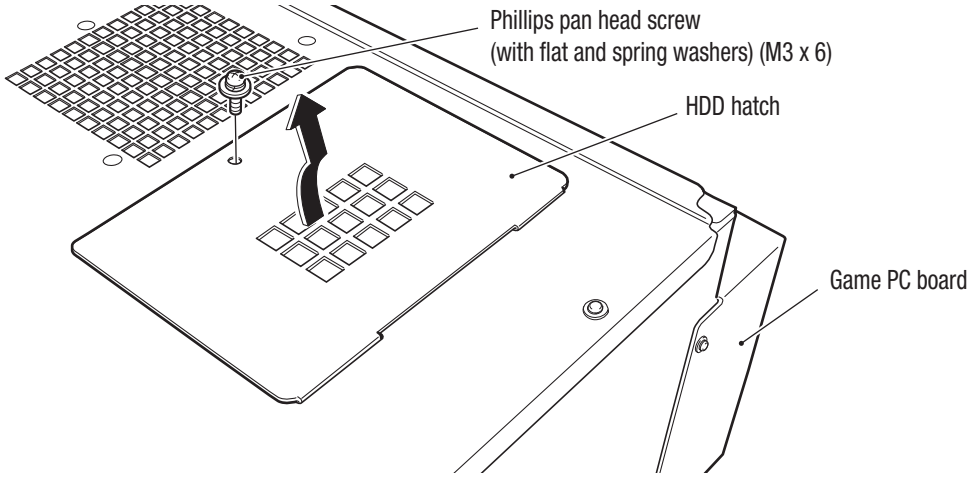
⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

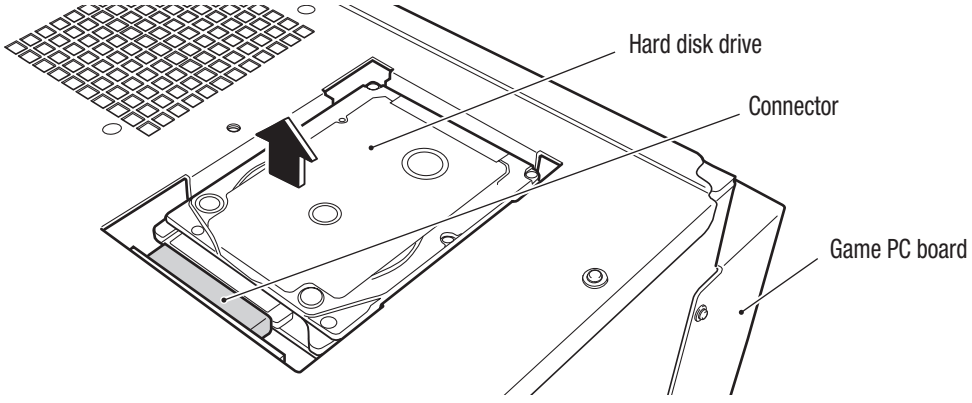
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the game PC board.
(See P-93 "(2) Replacing the game PC board".)

3 Turn the game PC board on its side, remove the Phillips pan head screw (with flat and spring washers) (M3 x 6) and remove the HDD hatch.
* Be sure not to lose the removed HDD hatch and to reinstall it after replacing the HDD.



4 Disconnect the connector and replace the hard disk.



5 To install, perform the procedure in reverse.

(4) Removing and installing the regulator base

⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

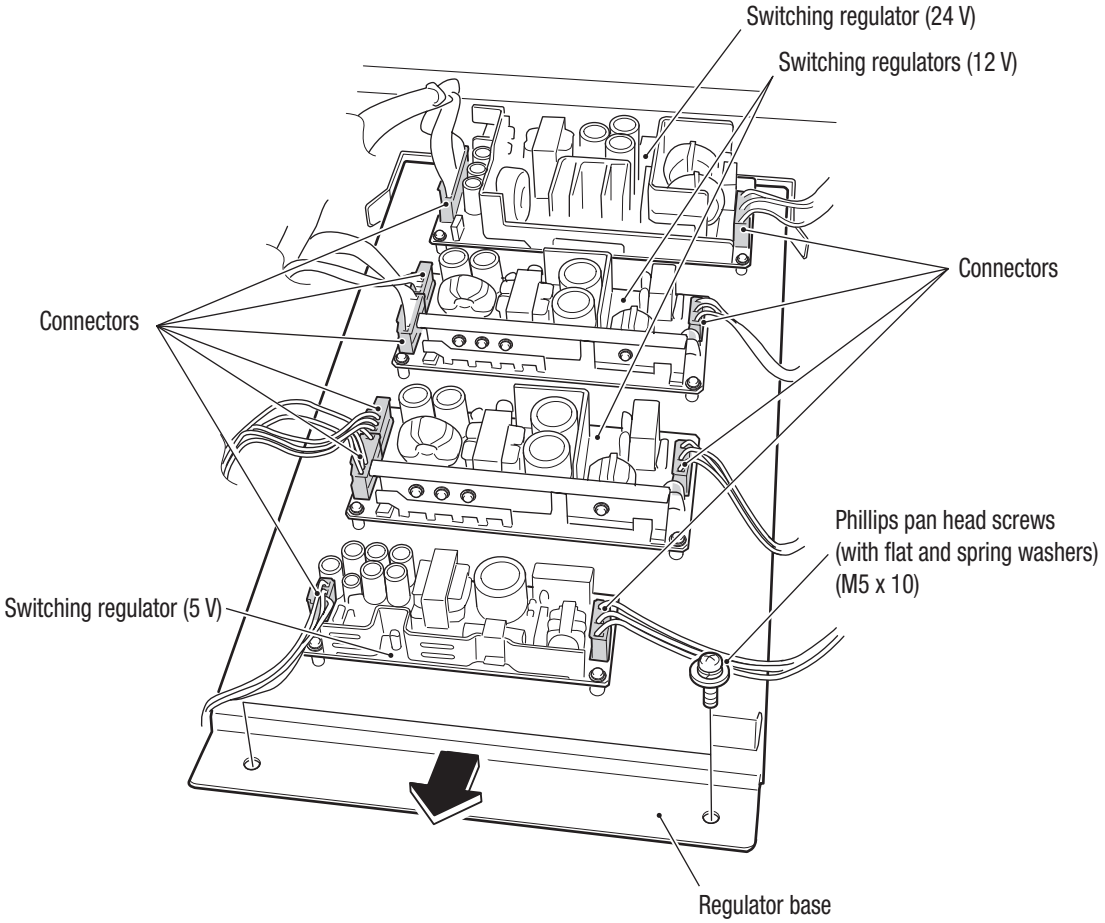
NOTICE

● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the maintenance door from the monitor tower (R) assembly.
(See P-92 "(1) Removing and installing the maintenance doors".)

3 Disconnect the 10 connectors, remove the two Phillips pan head screws (with flat and spring washers) (M5 x 10) and pull out the regulator base.



4 To install, perform the procedure in reverse.

NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.
● When removing, be careful not to damage the PC board and other parts.

(5) Replacing the switching regulator (5 V)

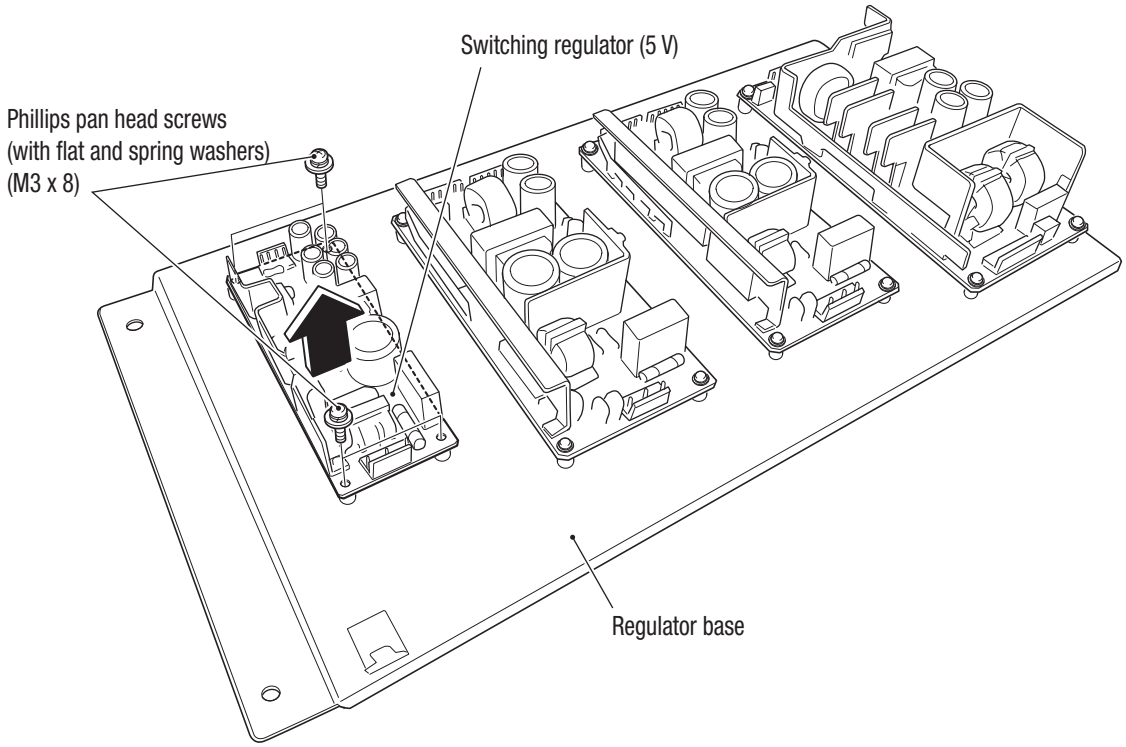
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1. Turn off the power switch.
   (See P-81 "8A-8 Turning the Power Switch On".)
2. Remove the regulator base.
   (See P-97 "(4) Removing and installing the regulator base".)
3. Remove the four Phillips pan head screws (with flat and spring washers) (M3 x 8) and replace the switching regulator (5 V).
4. To install, perform the procedure in reverse.



NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.
● When removing, be careful not to damage the PC board and other parts.

(6) Replacing the switching regulators (12 V)

Two switching regulators (12 V) are used.

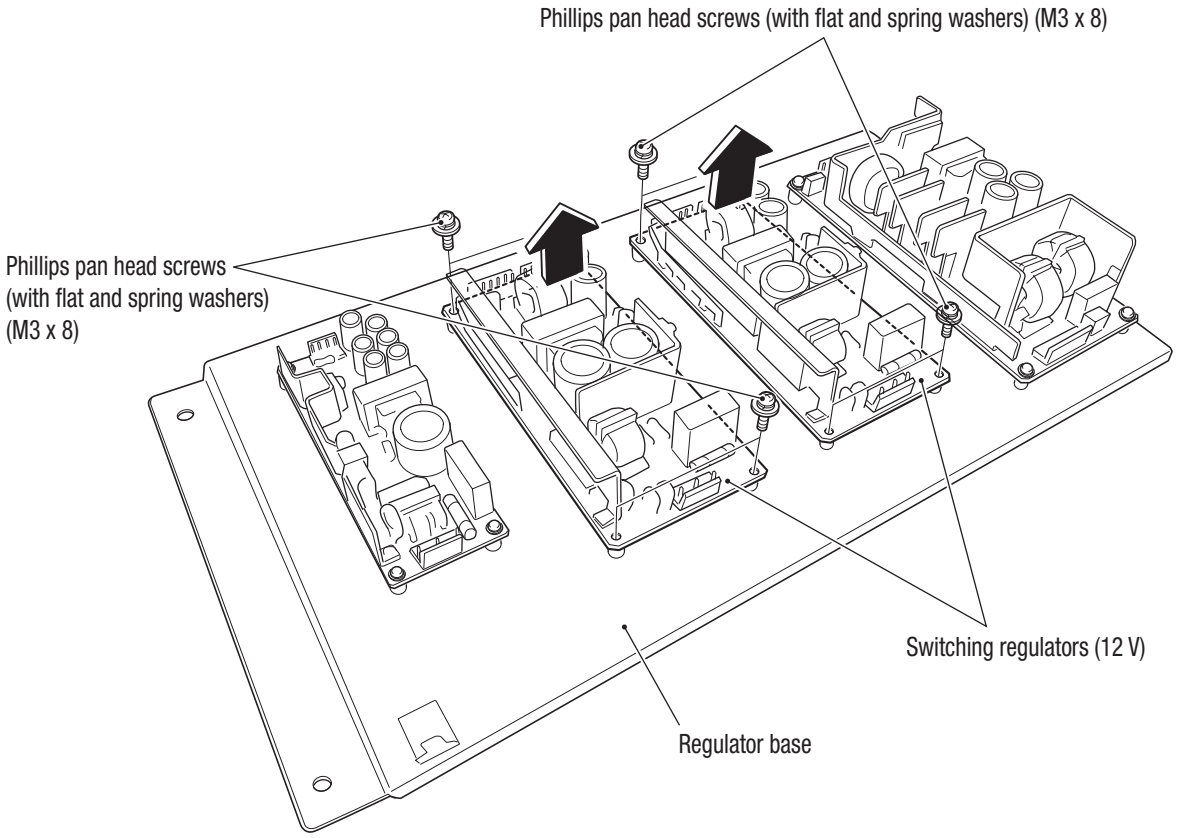
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1. Turn off the power switch.
   (See P-81 "8A-8 Turning the Power Switch On".)
2. Remove the regulator base.
   (See P-97 "(4) Removing and installing the regulator base".)
3. Remove the four Phillips pan head screws (with flat and spring washers) (M3 x 8) and replace the switching regulator (12V).
4. To install, perform the procedure in reverse.



NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.
● When removing, be careful not to damage the PC board and other parts.

(7) Replacing the switching regulator (24 V)

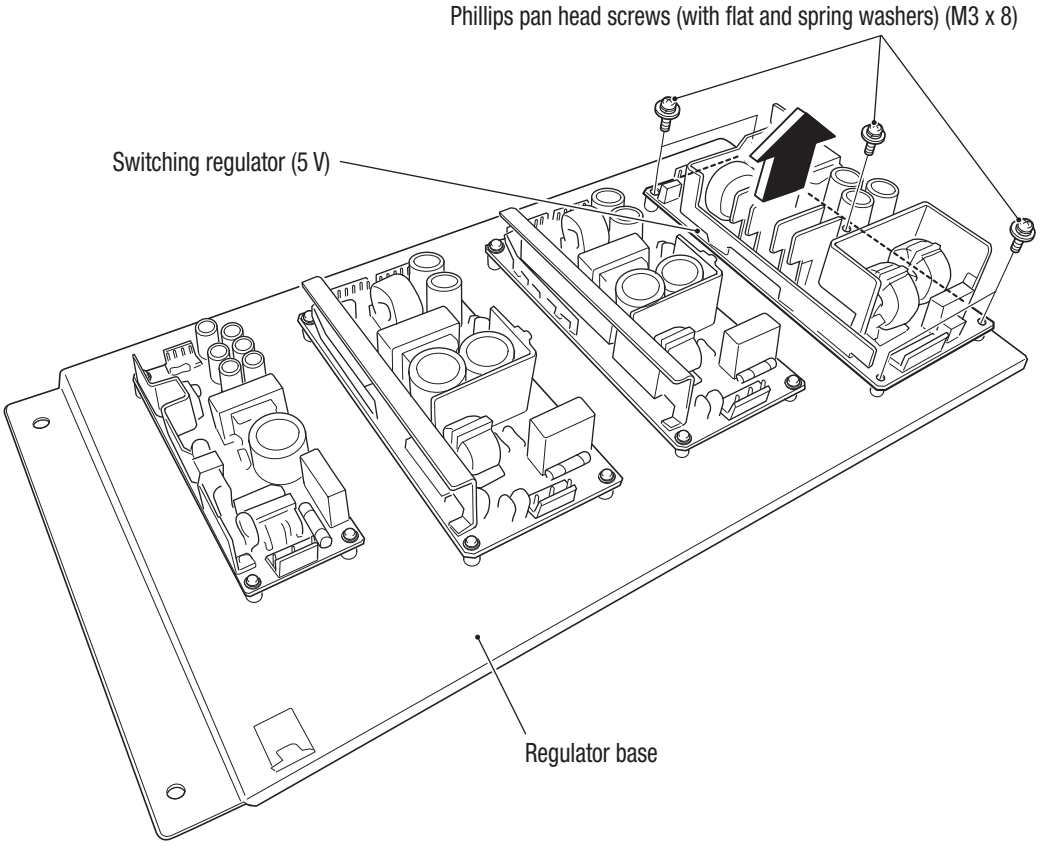
⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

- PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1. Turn off the power switch.
   (See P-81 "8A-8 Turning the Power Switch On".)
2. Remove the regulator base.
   (See P-97 "(4) Removing and installing the regulator base".)
3. Remove the five Phillips pan head screws (with flat and spring washers) (M3 x 8) and replace the switching regulator (24 V).
4. To install, perform the procedure in reverse.



NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- When removing, be careful not to damage the PC board and other parts.

(8) Replacing the AMP PC board

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

⚠WARNING

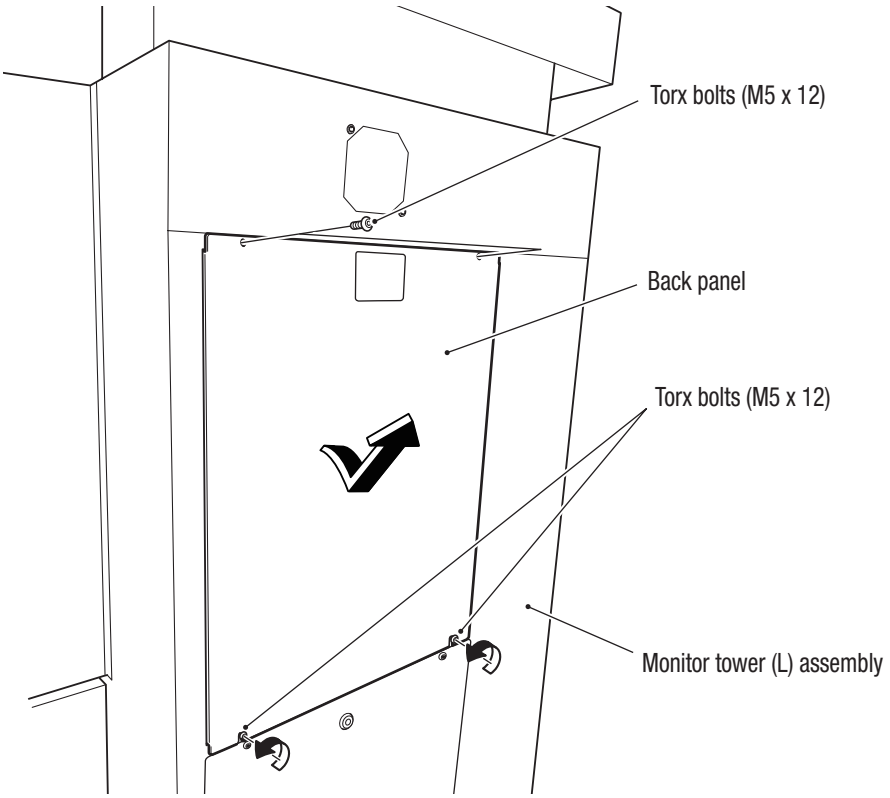
● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

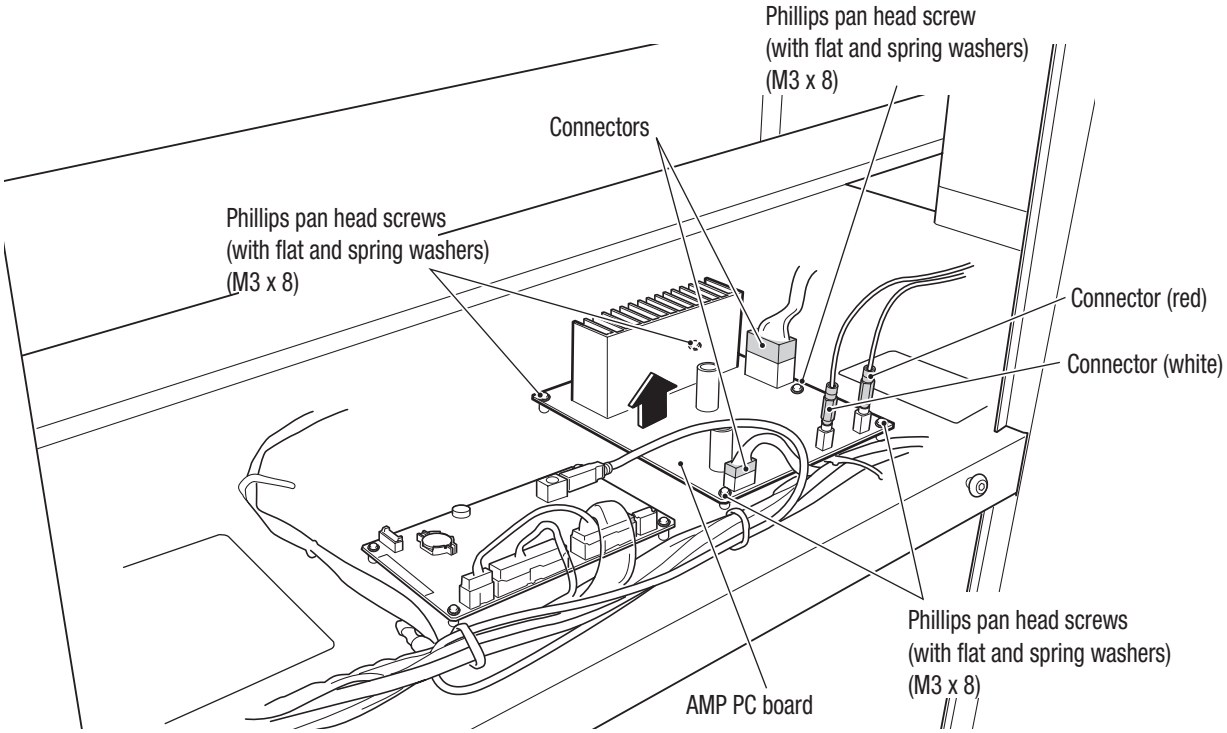
● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the two Torx bolts (M5 x 12) from the rear side of the monitor tower (L) assembly and loosen the two Torx bolts to remove the back panel.



3 Disconnect the four connectors, remove the five Phillips pan head screws (with flat and spring washers) (M3 x 8), and remove the AMP PC board.



4 To install, perform the procedure in reverse.

NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- When removing, be careful not to damage the PC board and other parts.

(9) Replacing the USIO (T) PC board

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

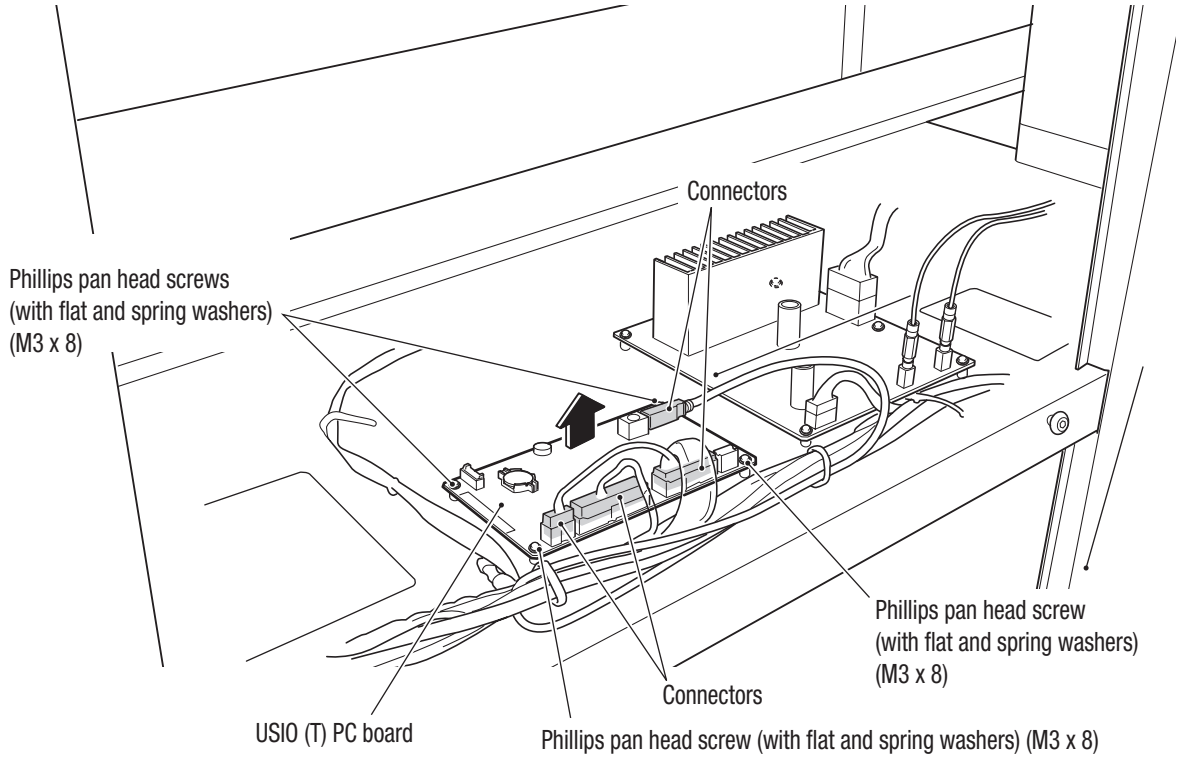
NOTICE

● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the back panel from the rear side of the monitor tower (L) assembly.
(See step 2 in P-101 "(8) Replacing the AMP PC board".)

3 Disconnect the four connectors, remove the four Phillips pan head screws (with flat and spring washers) (M3 x 8), and remove the USIO (T) PC board.



4 To install, perform the procedure in reverse.

NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.
● When removing, be careful not to damage the PC board and other parts.

(10) Replacing the monitor glass

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

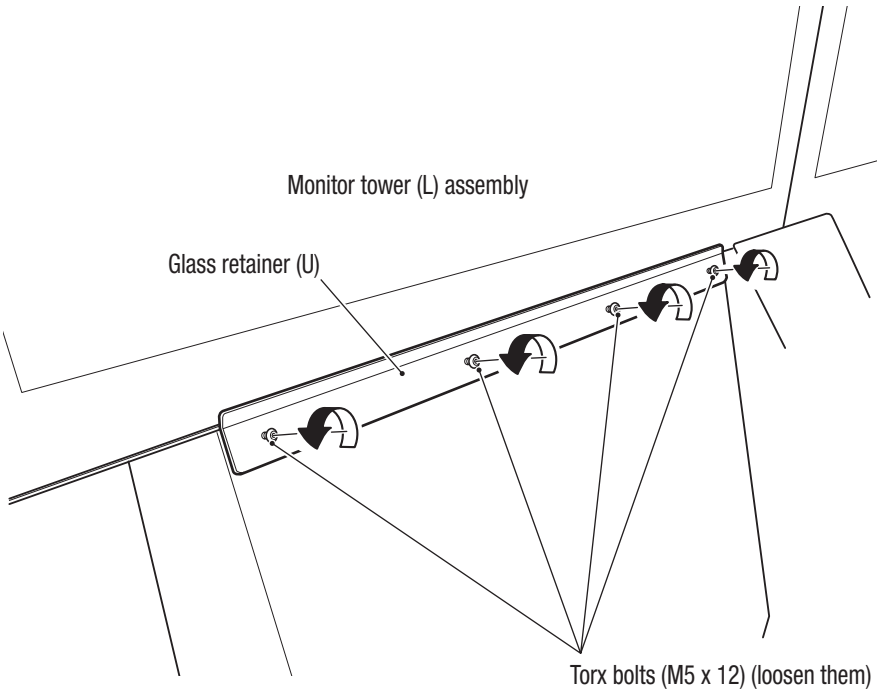
⚠WARNING

- Replacing the monitor glass requires a technician to stand at an elevated location. Prepare an appropriate footstool and exercise care when working. Working in an unnatural body posture may result in injury or machine damage.
- Replacement of monitor glass must be performed by two or more people.
- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

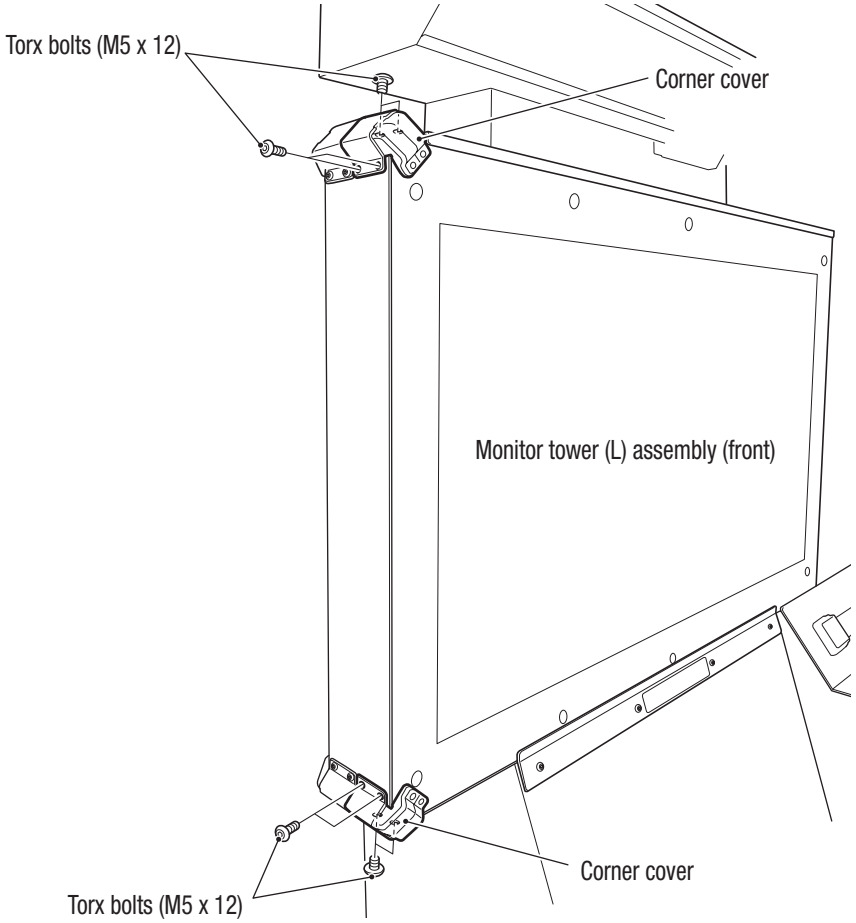
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Loosen the four Torx bolts (M5 x 12) securing the glass retainer (U).

NOTICE
- Do not remove the Torx bolts.

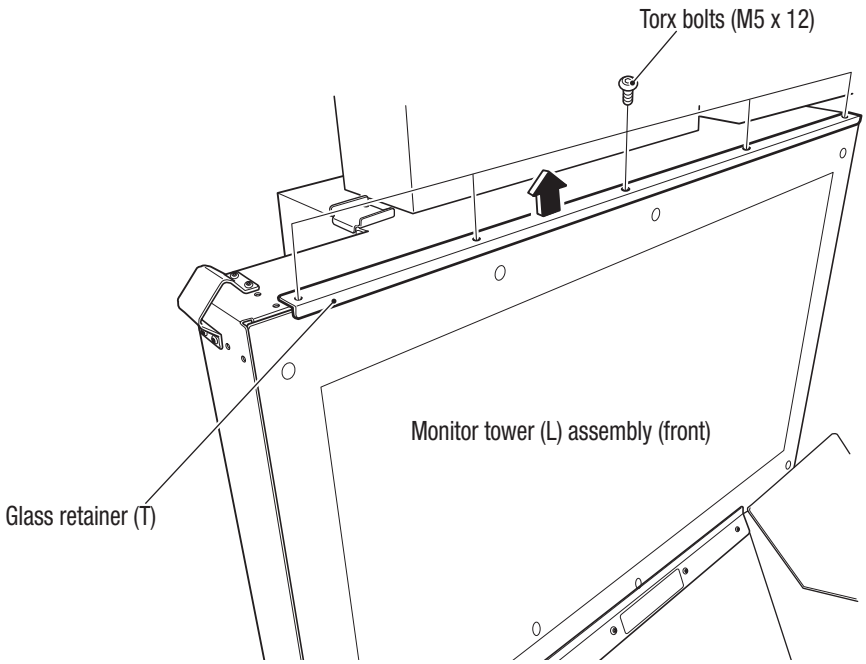


3 Remove the four Torx bolts (M5 x 12) from the two corner covers on the front side of the monitor tower (L) assembly and remove the monitor edge covers.



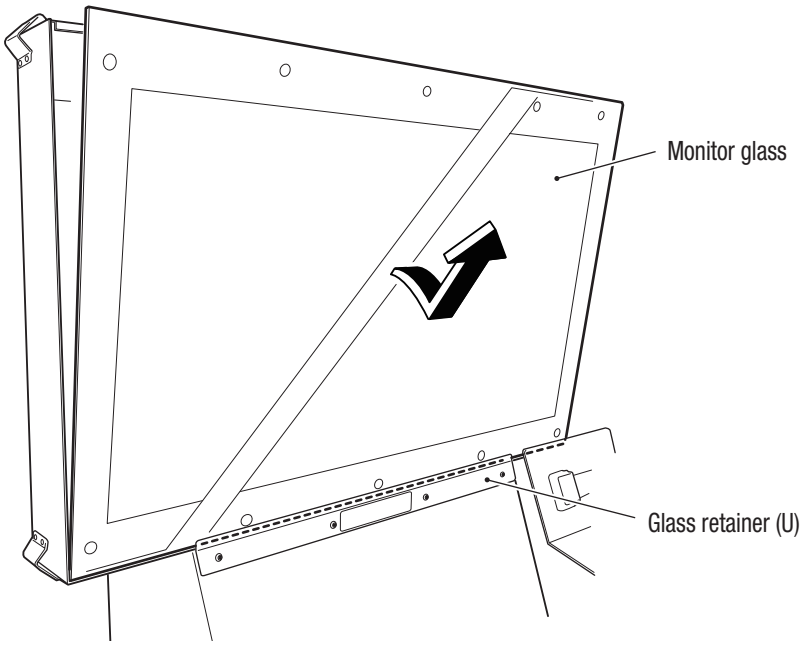
4 Remove the five Torx bolts (M5 x 12) and remove the glass retainer (T)

NOTICE ● When removing the glass retainer (T), be sure to hold the glass.



5 Pull the monitor glass toward you to remove and replace it.

NOTICE ● Be sure to handle the monitor glass with care.



6 To install, perform the procedure in reverse.

(11) Replacing ohmic sensors

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

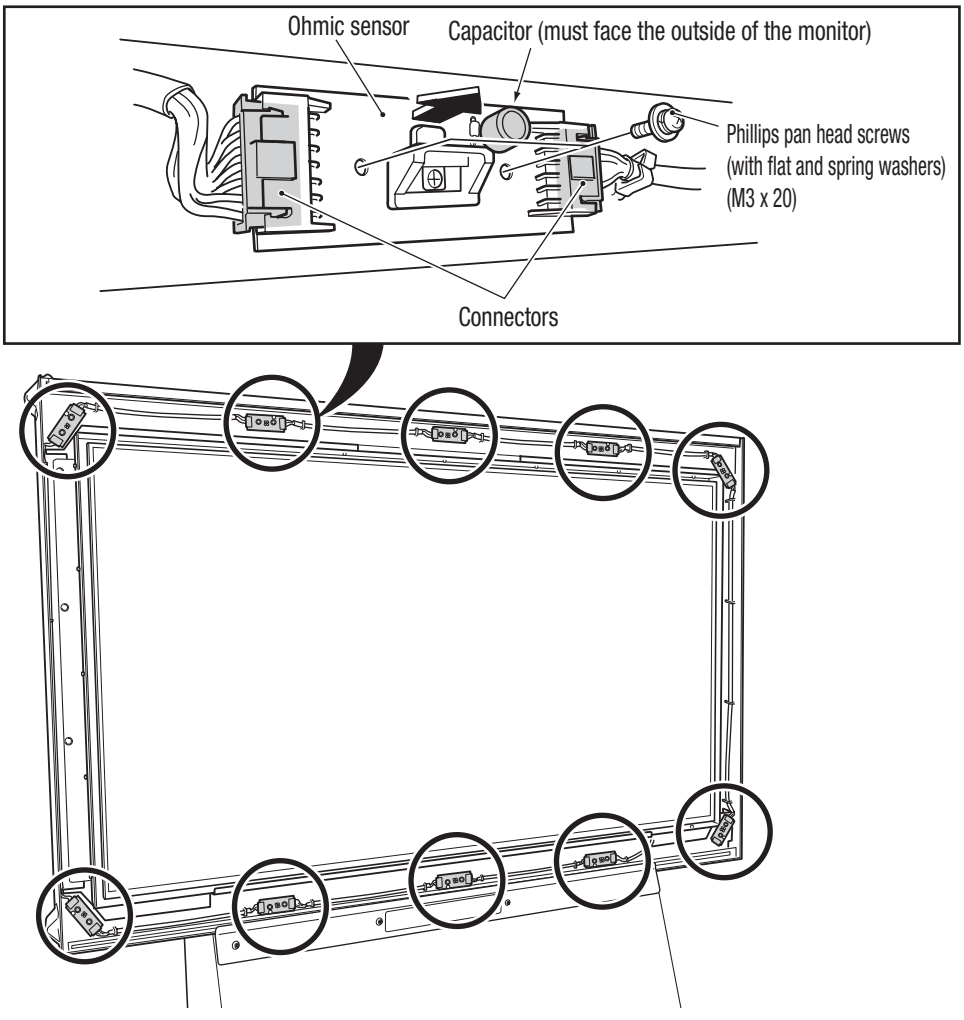
NOTICE

● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

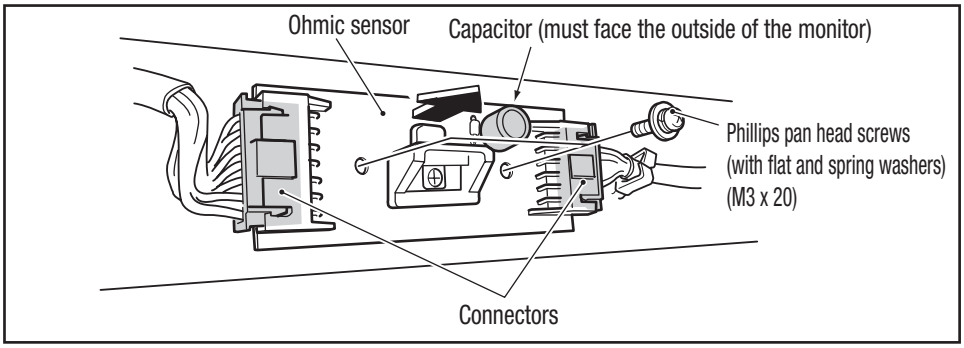
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the monitor glass.
(See P-104 "(10) Replacing the monitor glass".)

3 Disconnect the two connectors from the ohmic sensor to be replaced, remove the two Phillips pan head screws (with flat and spring washers) (M3 x 20) and remove the ohmic sensor.



4 Ensure that the positioning of the ohmic sensor is correct. Try to install the ohmic sensor so that its capacitor faces the outside of the monitor.



5 To install, perform the procedure in reverse.

NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- When removing, be careful not to damage the PC board and other parts.

(12) Replacing the LCD monitor

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

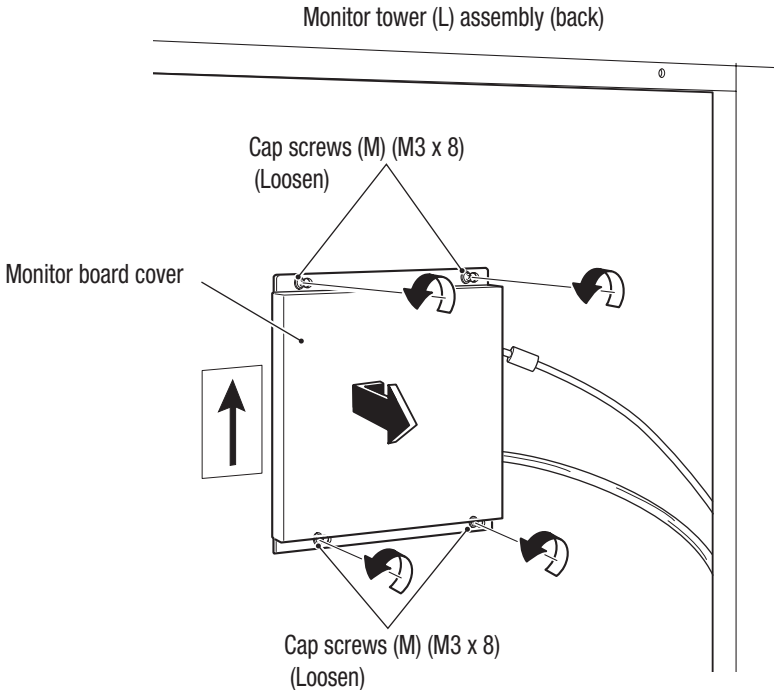
⚠WARNING

- The LCD monitor weighs approximately 28 kg. To prevent accidents, it should be replaced by two or more people in a large work area.
- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

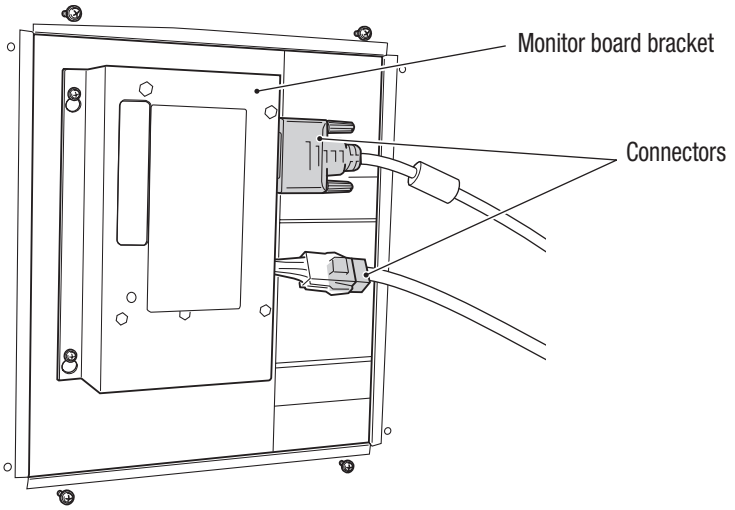
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the back panel from the rear side of the monitor tower (L) assembly.
(See step **2** in P-101 "(8) Replacing the AMP PC board".)

3 Loosen the four cap screws (M) (M2 x 8) and remove the monitor board cover.

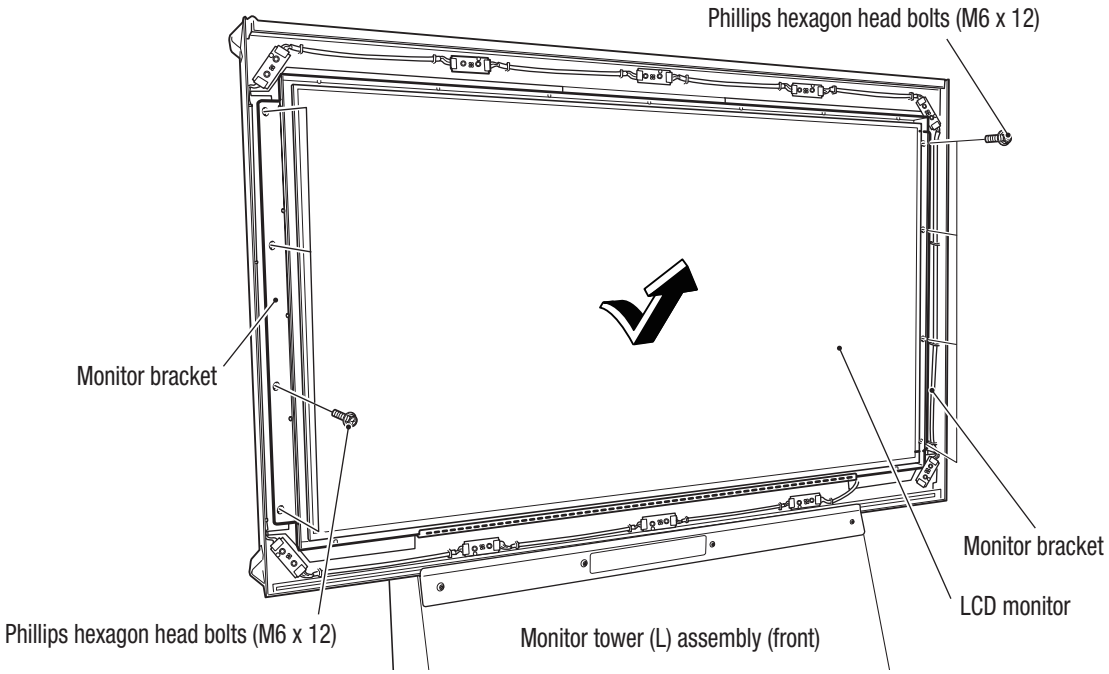


4 Disconnect the two connectors.

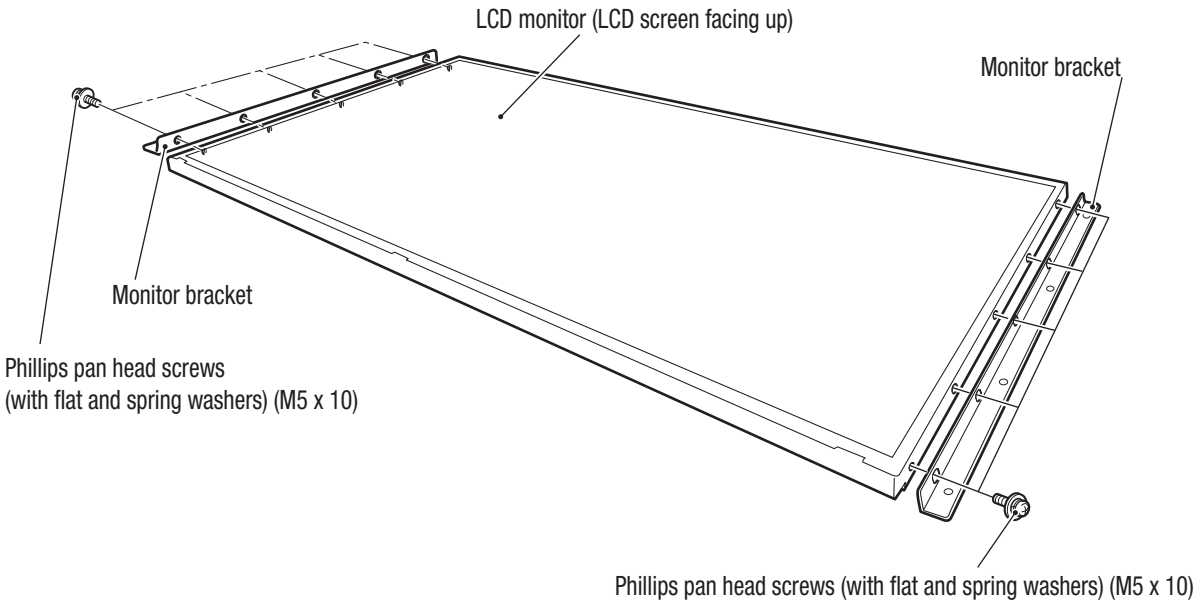


5 Remove the monitor glass.
(See P-104 "(10) Replacing the monitor glass".)

6 Remove the eight Phillips hexagon head bolts (M6 x 12) and remove the LCD monitor together with its brackets.



7 Remove the five Phillips pan head screws (with flat and spring washers) (M5 x 10) from each of the monitor brackets and replace the LCD monitor.
* Be sure to face the LCD screen up.



8 To install, perform the procedure in reverse.

NOTICE
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

8B-4-2 Coin Box Assembly

(1) Replacing the coin selector

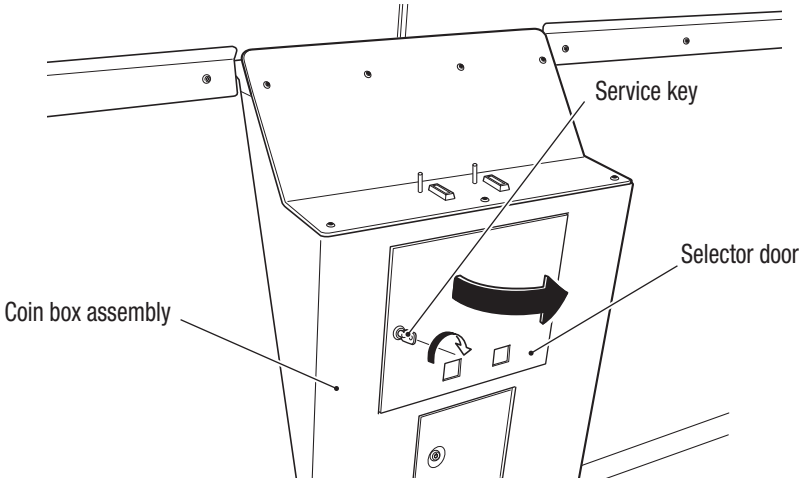
Two coin selectors are used.

⚠WARNING

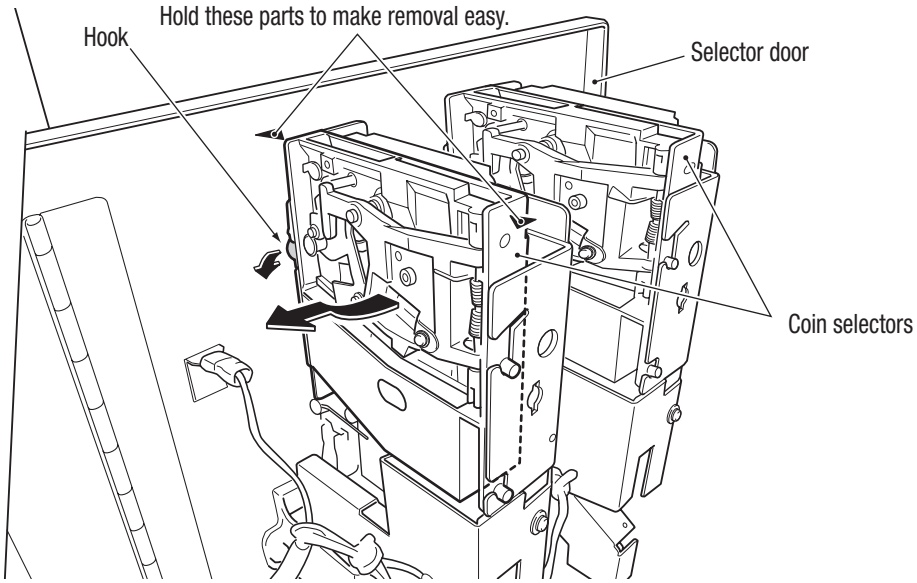
● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch. (See P-81 "8A-8 Turning the Power Switch On".)

2 Open the selector door on the coin box assembly using the service key. The coin selector is placed inside the selector door.



3 While removing the hook of the coin selector to be replaced, raise the coin selector up before pulling it towards you to replace the coin selector.



4 To install, perform the procedure in reverse.

8B-4-3 Signboard Assembly

*This section explains the procedure applicable to the monitor tower (L) assembly. Repeat the procedure for the monitor tower (R) assembly.

(1) Replacing the tape LED

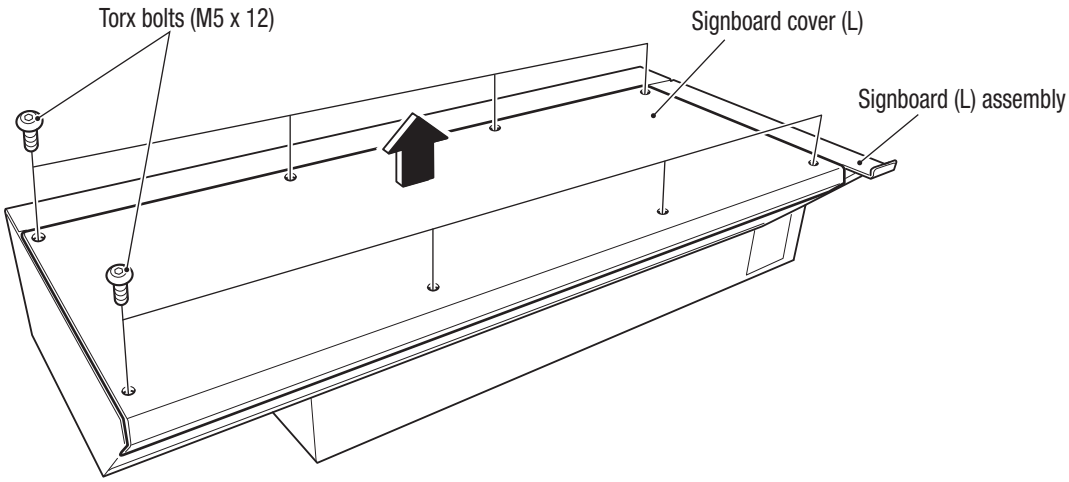
⚠WARNING

- Replacing the speaker LED requires standing at an elevated height. Prepare an appropriate footstool and exercise care when working. Working in an unnatural body posture may result in injury or machine damage.
- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

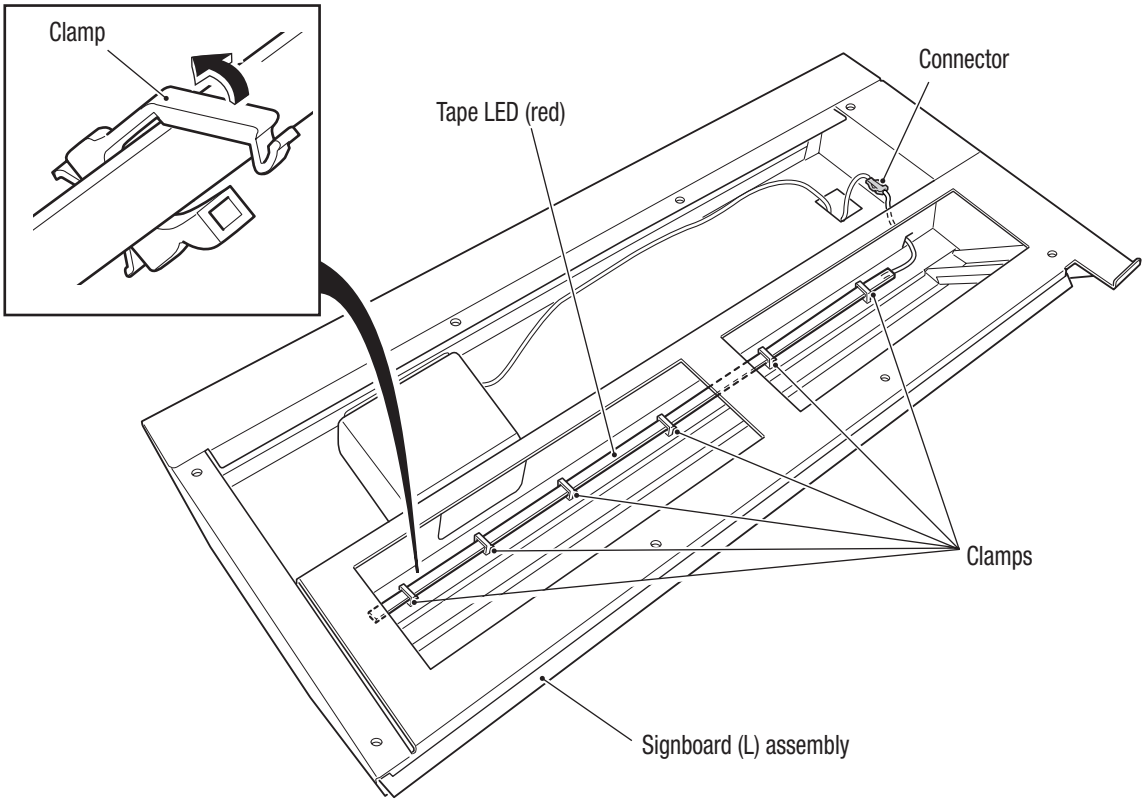
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the signboard (L) assembly.
(See 20 through 22 in P-65 "8A-2 Assembling the Front Assembly".)

3 Remove the eight Torx bolts (M5 x 12) and remove the signboard cover (L).



4 Disconnect the connector, open the six clamps, then remove and replace the tape LED (red).



5 To install, perform the procedure in reverse.

NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- The color of the LED is red on the L side and blue on the R side.

(2) Replacing the light-emitting unit

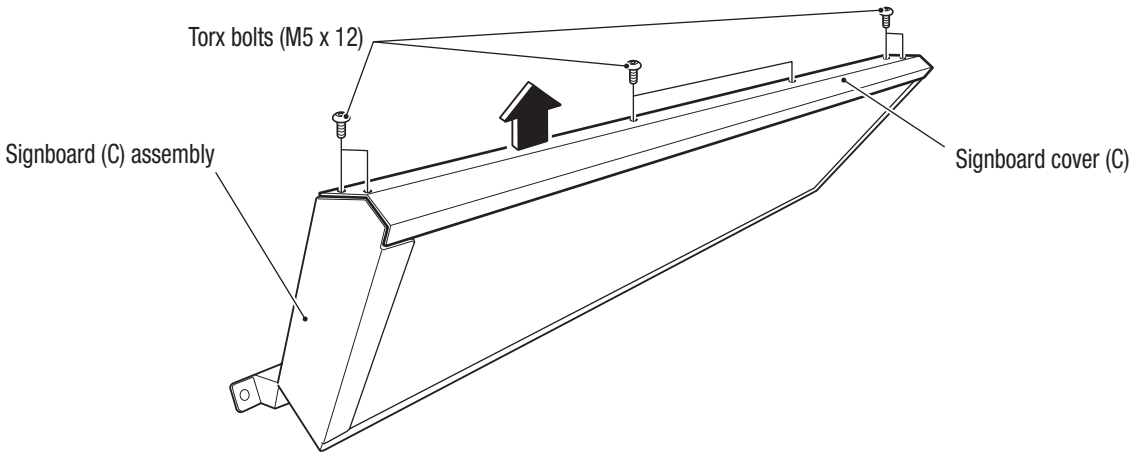
⚠WARNING

- Replacing the light-emitting unit requires standing at an elevated height. Prepare an appropriate footstool and exercise care when working. Working in an unnatural body posture may result in injury or machine damage.
- Replacement of light-emitting unit must be performed by two or more people.
- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

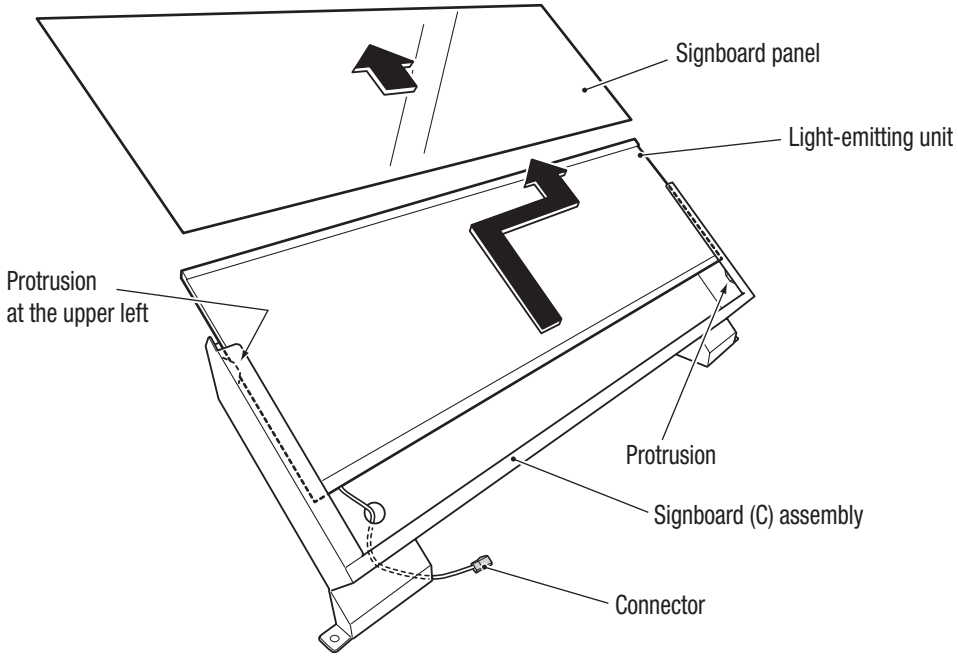
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the signboard (C) assembly.
(See 23 through 25 in P-65 "8A-2 Assembling the Front Assembly".)

3 Remove the six Torx bolts (M5 x 12) and remove the signboard cover (C).



4 Pull out the signboard panel and pull the light-emitting unit halfway (to the middle point). Then, pull out the connector through the hole while sliding the light-emitting unit to the right side, avoiding the protrusion on the upper left section.



5 To install, perform the procedure in reverse.

8B-4-4 Gun Tower (L) and (R) Assemblies

(1) Replacing the CPU board

*This section explains the procedure applicable to the gun tower (L) assembly. Repeat the procedure for the gun tower (R) assembly.

⚠WARNING

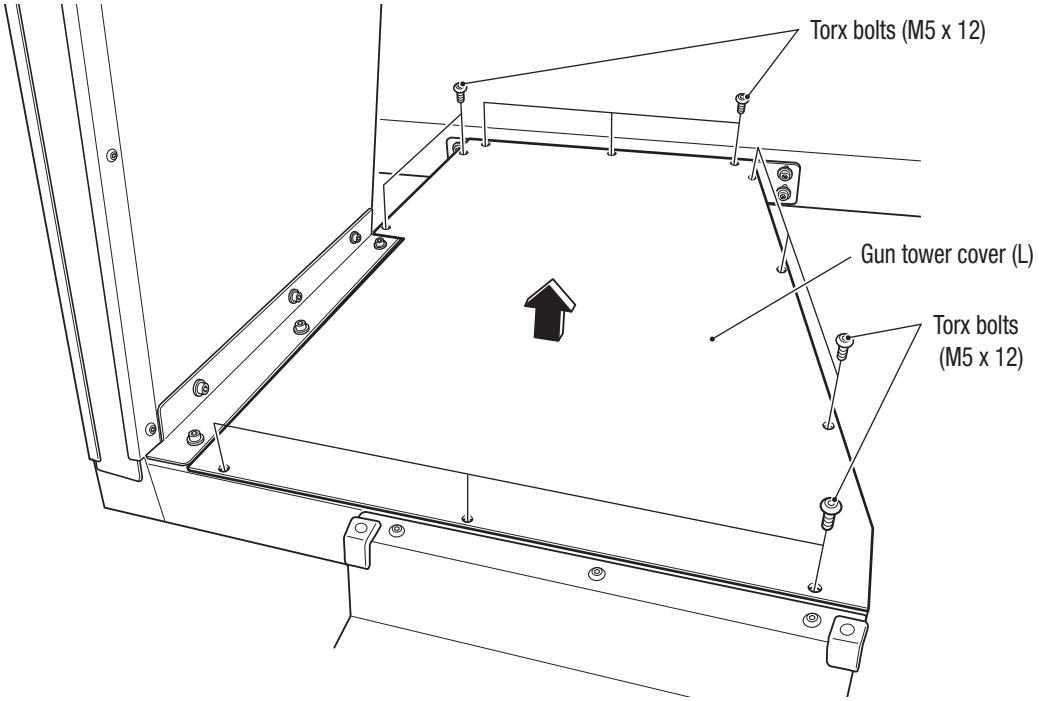
● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE

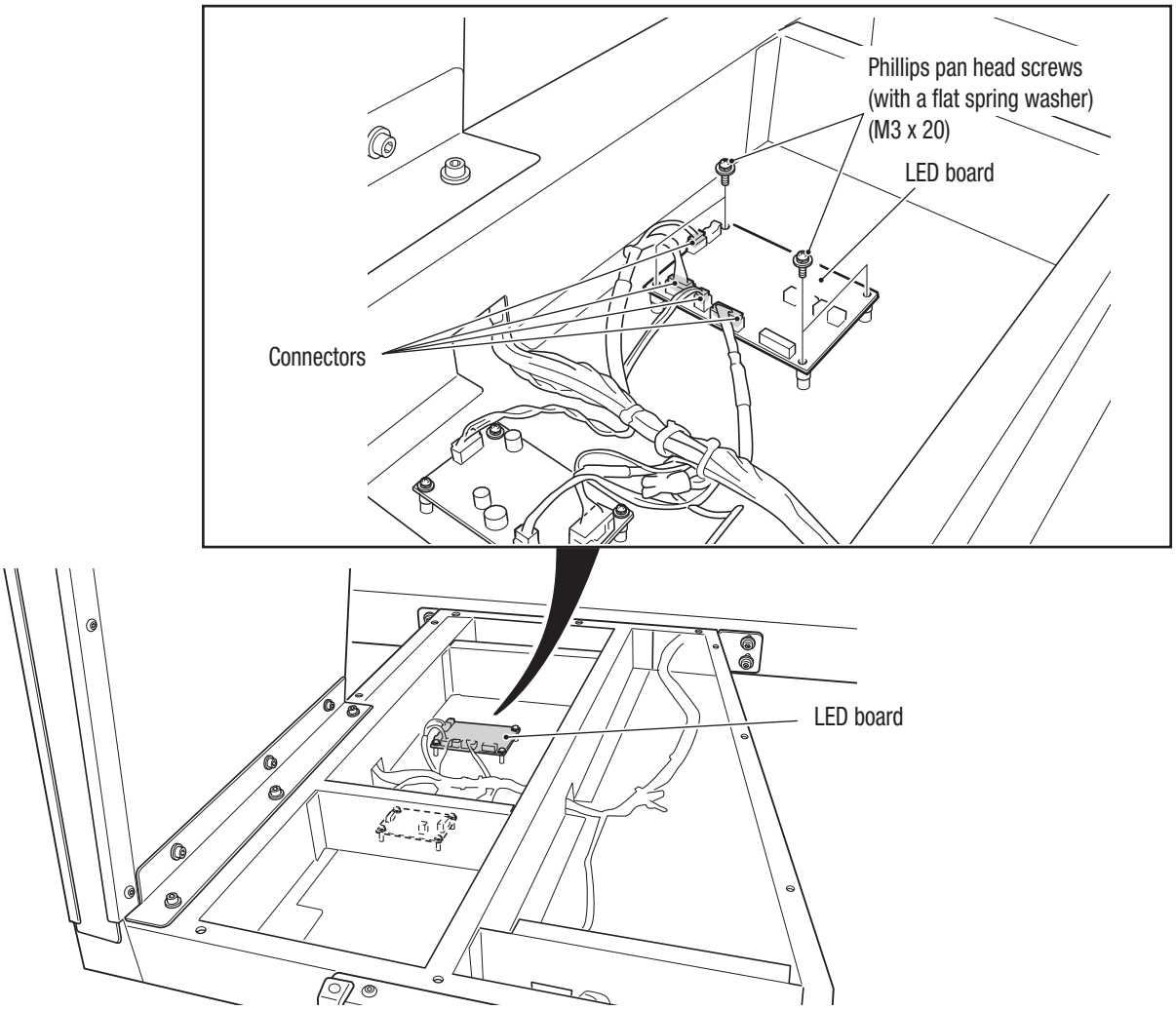
● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the 11 Torx bolts (M5 x 12) and remove the gun tower cover (L).



3 Disconnect the four connectors, remove the four Phillips pan head screws (with flat and spring washers) (M3 x 20), and replace the CPU board.



4 To install, perform the procedure in reverse.

NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

(2) Replacing the gun drive PC board

*This section explains the procedure applicable to the gun tower (L) assembly. Repeat the procedure for the gun tower (R) assembly.

⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

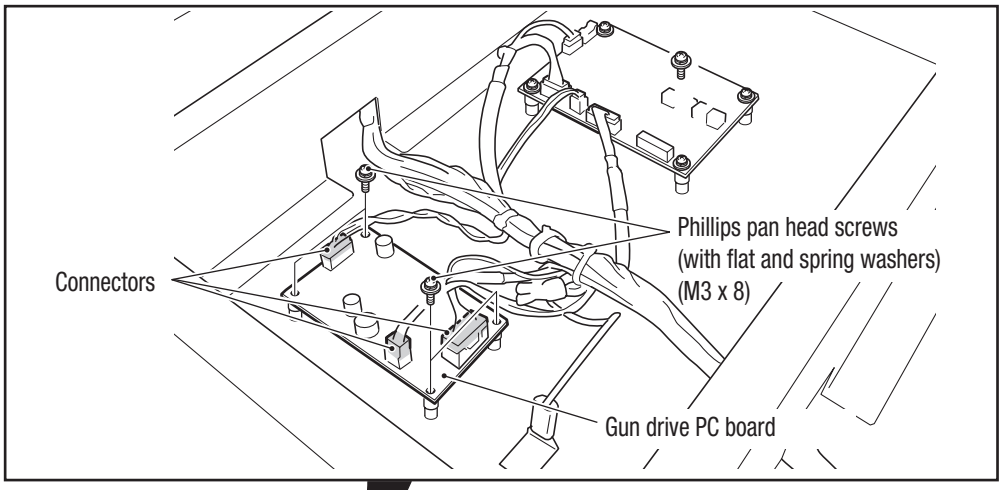
NOTICE

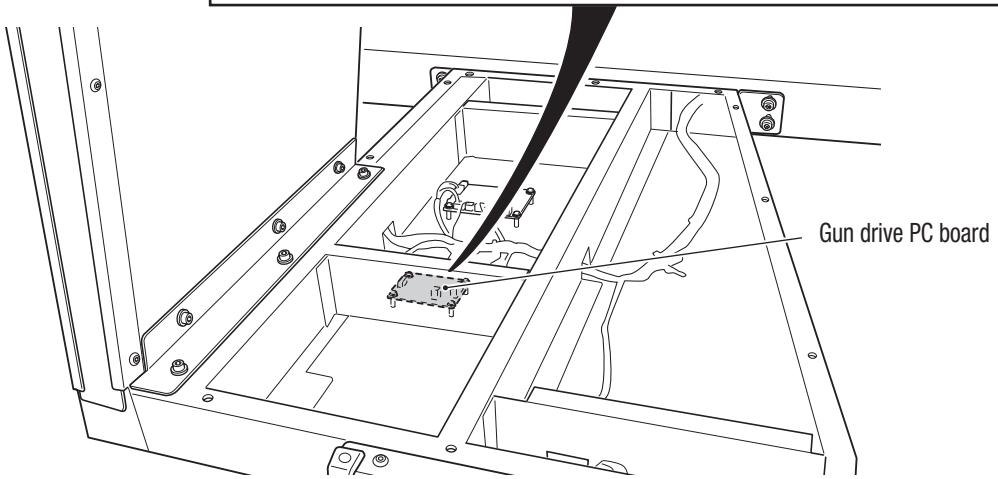
● PC boards are vulnerable to static electricity. If a person handles a PC board while charged with static electricity, the parts on the PC board may be damaged. Before handling a PC board, discharge the static electricity from your body by touching the surface of grounded metal.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the 11 Torx bolts (M5 x 12) and remove the gun tower cover (L).
(See 2 in P-117 "(1) Replacing the CPU board".)

3 Disconnect the four connectors, remove the four Phillips pan head screws (with flat and spring washers) (M3 x 8), and replace the gun drive PC board.





4 To install, perform the procedure in reverse.

NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.

(3) Replacing the tape LED

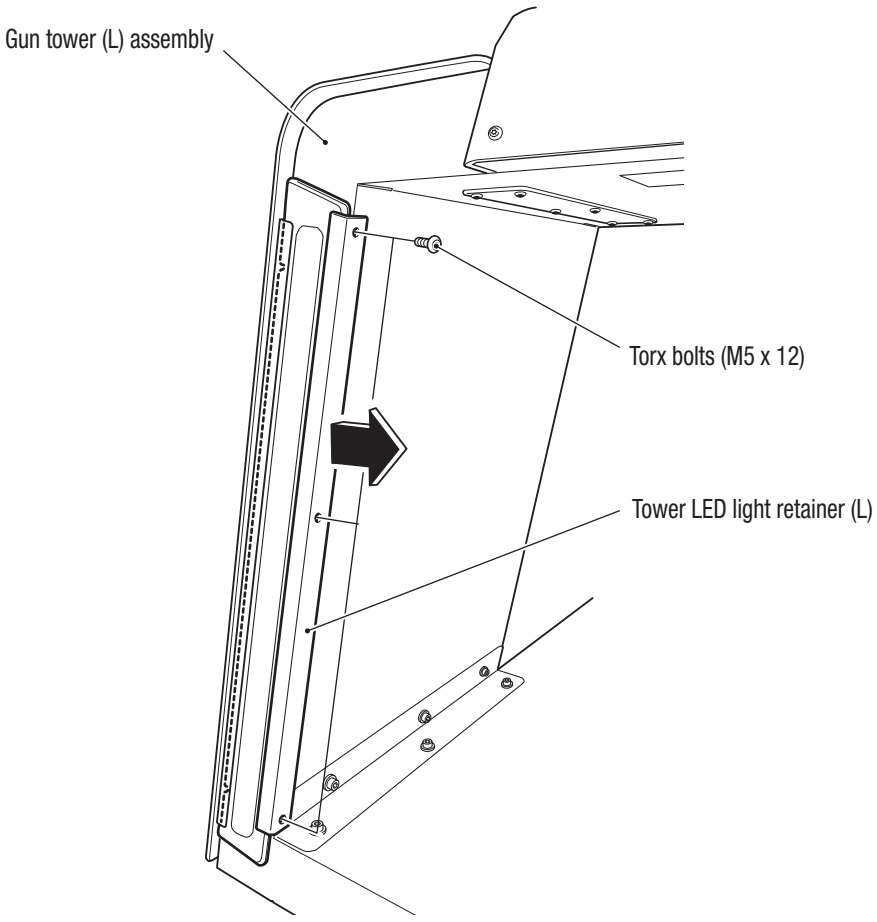
*This section explains the procedure applicable to the gun tower (L) assembly. Repeat the procedure for the gun tower (R) assembly.

⚠WARNING

- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

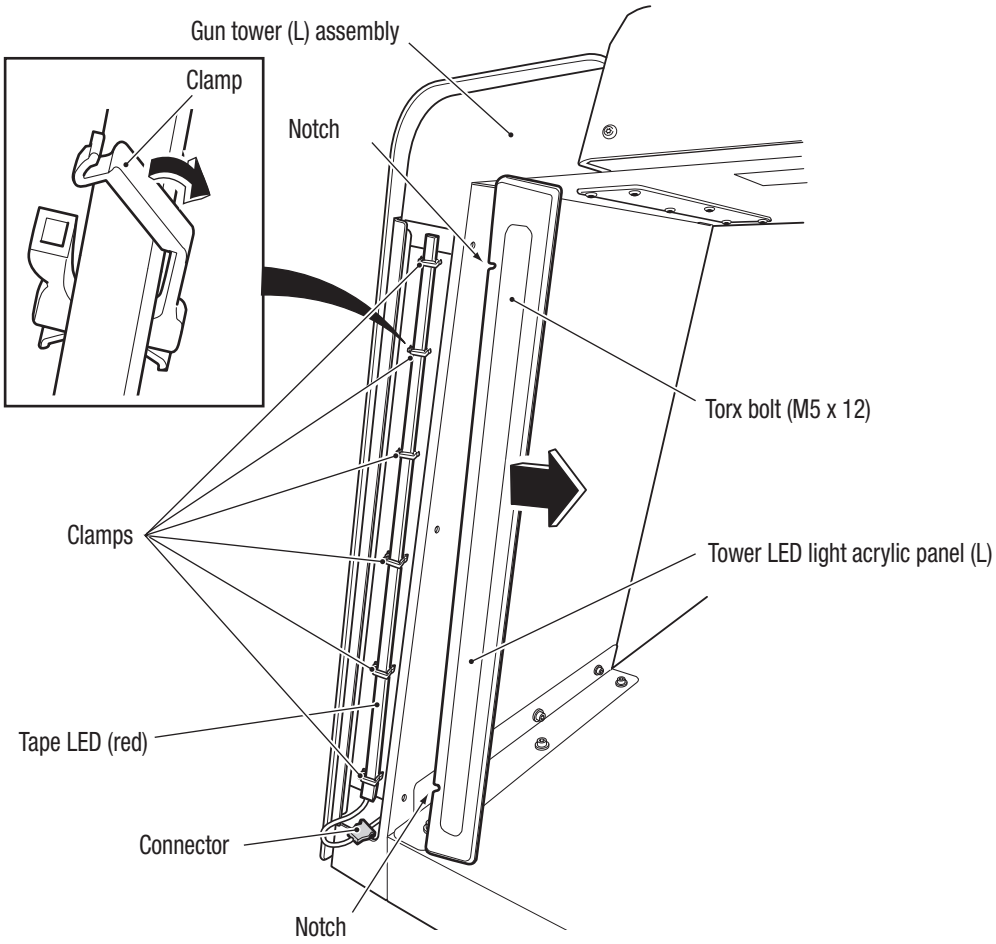
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the three Torx bolts (M5 x 12) and remove the side LED retainer.



3 Remove the LED cover.

4 Disconnect the connector, open the six clamps, then remove and replace the tape LED (red).



5 To install, perform the procedure in reverse.

NOTICE

- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.
- The color of the LED is red on the L side and blue on the R side.

8B-4-5 Gun Assembly

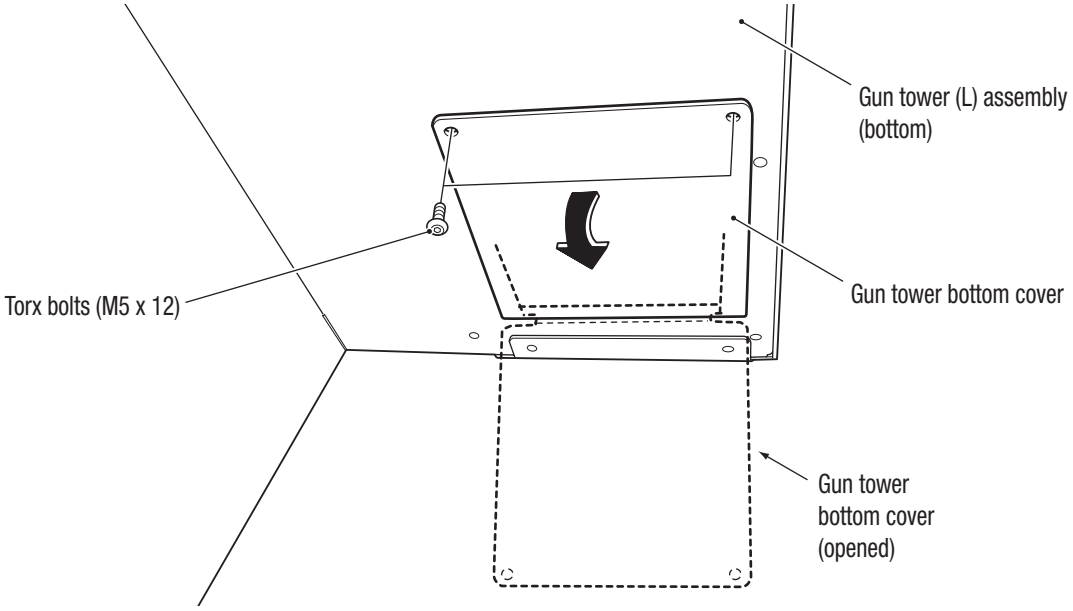
(1) Replacing the gun assembly

⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

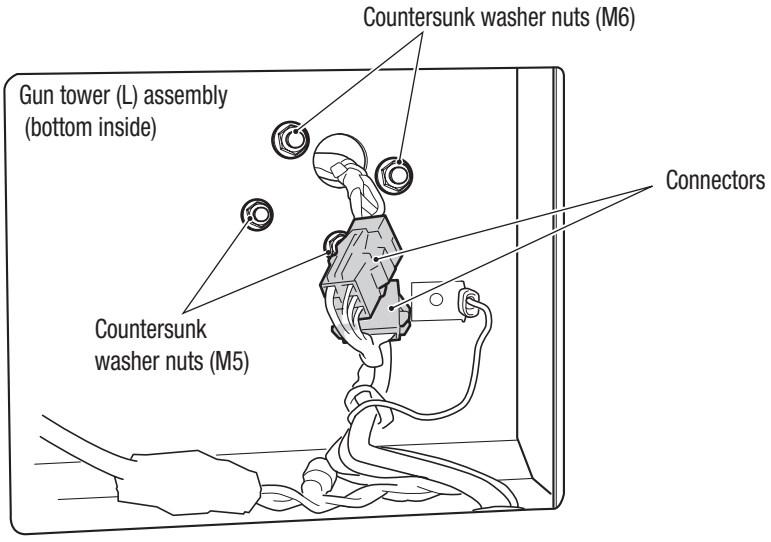
1 Turn off the power switch. (See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the two Torx bolts (M5 x 12) from the bottom of the gun tower (L) assembly and open the gun tower bottom cover.

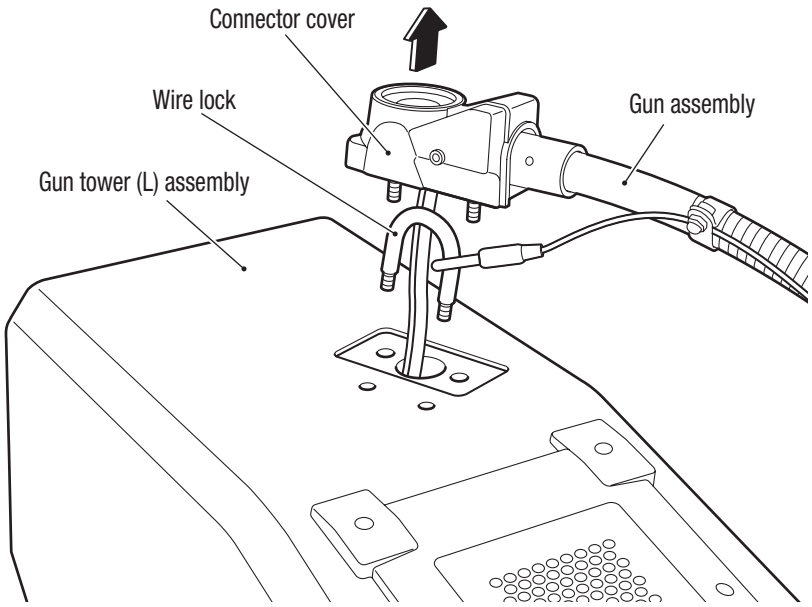


3 Disconnect the two connectors and remove the two countersunk washer nuts (M5) and the two countersunk washer nuts (M6).

[View from the bottom looking up]



4 Pull up the connector cover and wire bracket and remove the gun assembly.



5 To install, perform the procedure in reverse.

6 After replacing the gun assembly, be sure to check the operations. (See P-49 "7-7-5 Input/ Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE
- When installing it, be sure to securely lock the connectors.
- When installing it, take care not to allow the connectors and harnesses to get caught.

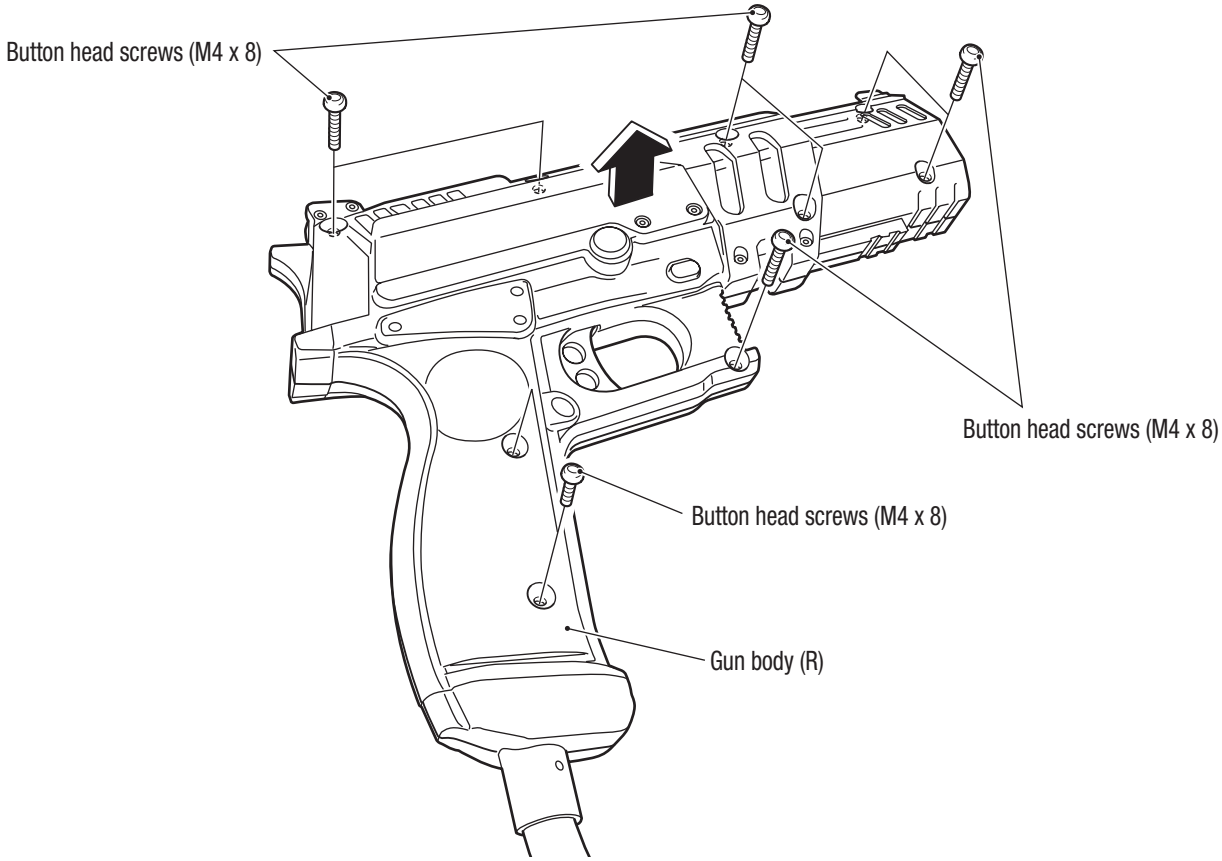
(2) Replacing the sensor unit

⚠WARNING

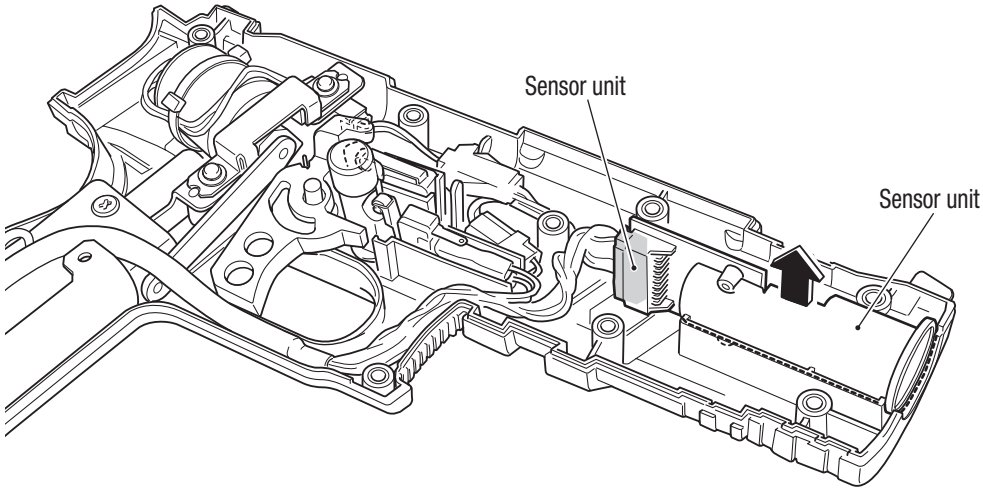
● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the nine button head screws (M4 x 8) and remove the gun body (R).



3 Disconnect the connector and replace the sensor unit.



4 To install, perform the procedure in reverse.

5 After replacing the sensor unit, be sure to check the operations. (See P-49 "7-7-5 Input/Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

(3) Replacing the gun harness 2

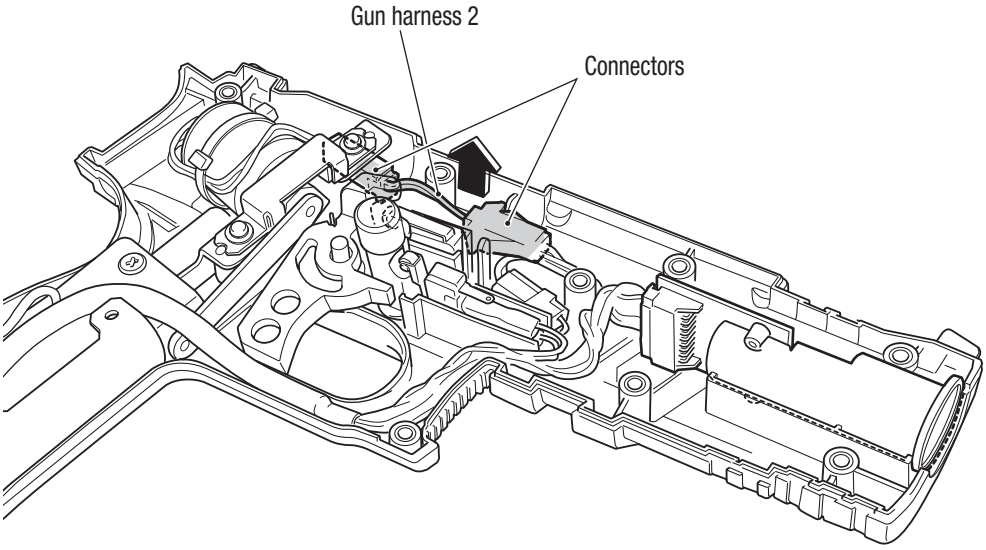
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the gun body (R).
(See **2** in P-124 "(2) Replacing the sensor unit".)

3 Disconnect the two connectors and replace the gun harness 2.



4 To install, perform the procedure in reverse.

5 After replacing the gun harness 2, be sure to check the operations. (See P-49 "7-7-5 Input/ Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE

● When installing, be sure to securely lock the connectors.
● When installing, take care not to allow the connectors and harnesses to get caught.

(4) Replacing the rotary solenoid

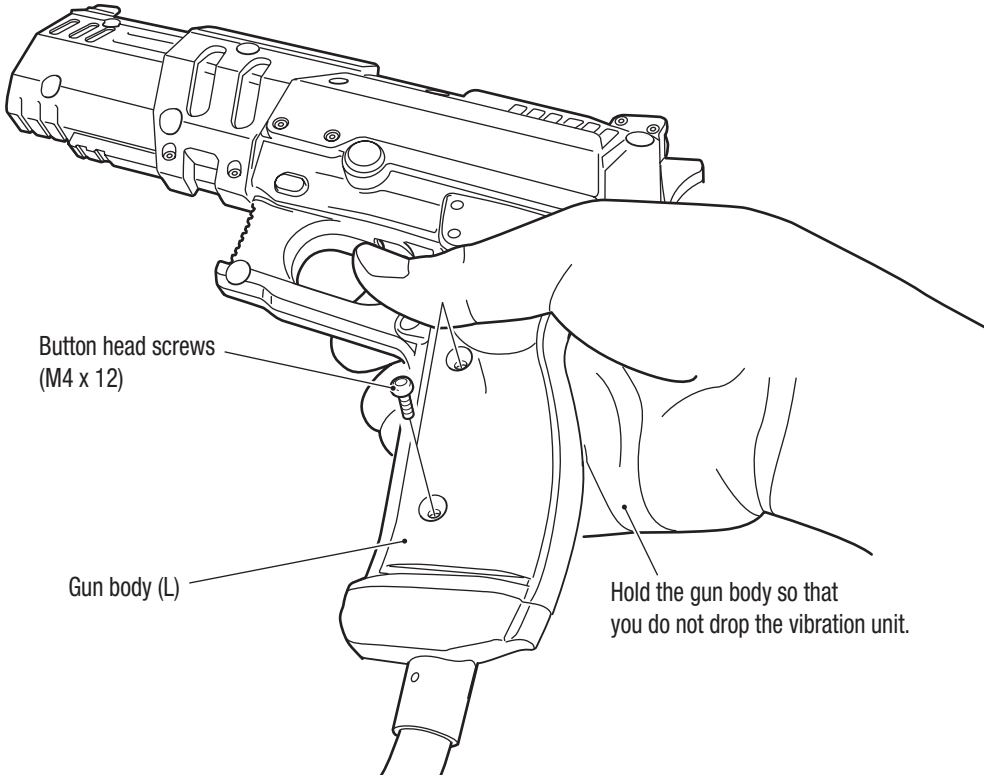
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the gun body (R).
(See **2** in P-124 "(2) Replacing the sensor unit".)

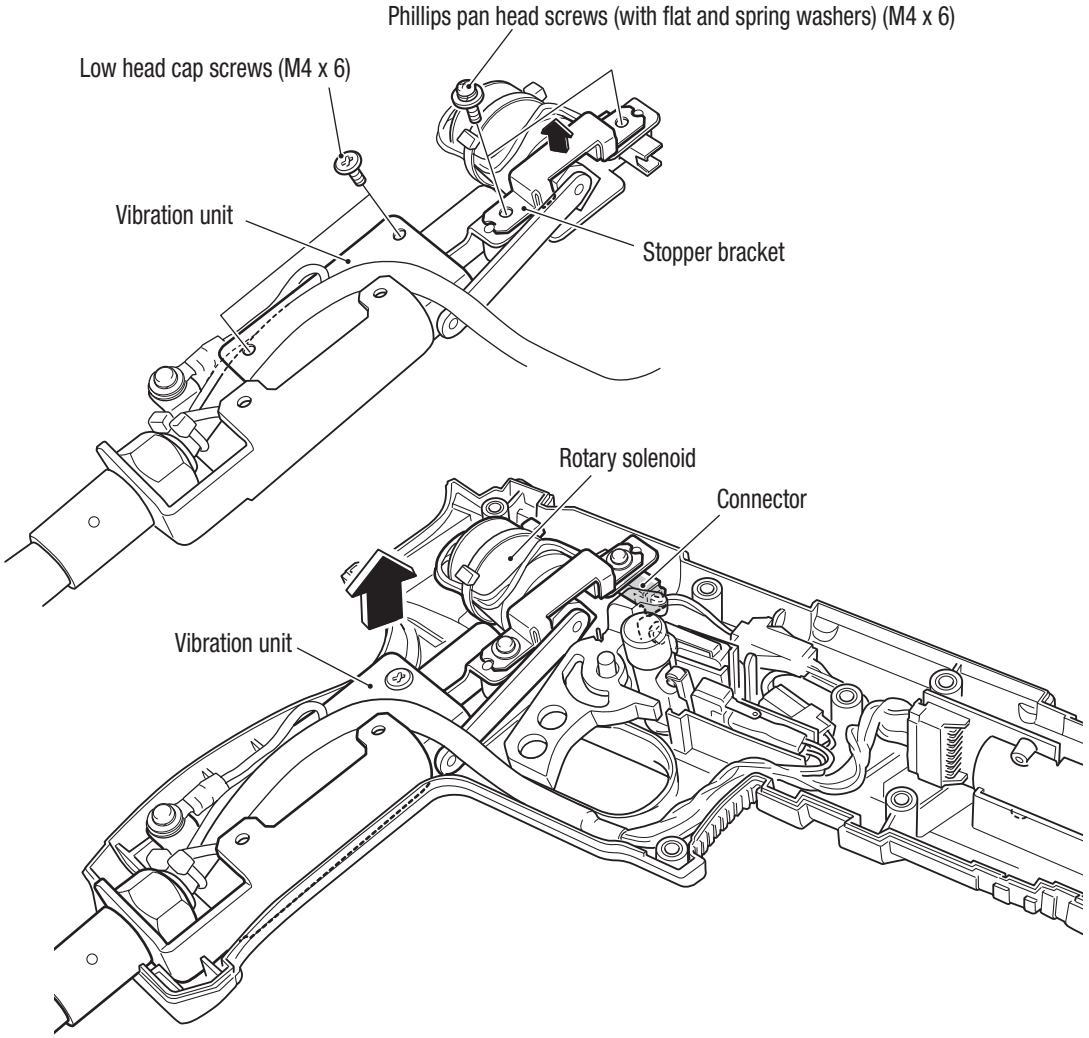
3 Turn the gun body over while holding it so as not to drop the parts such as the vibration unit, and remove the two button head screws (M4 x 12).



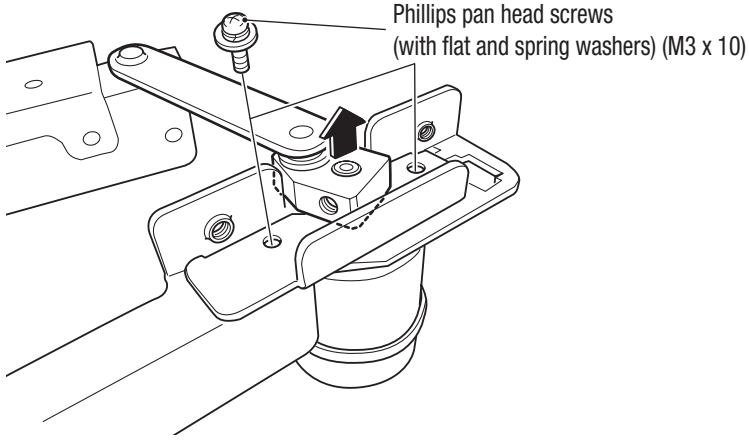
4 Point the gun to the right, disconnect the connector, and remove the vibration unit.

5 Remove the two Phillips pan head screws (with flat and spring washers) (M4 x 6) and remove the stopper bracket.

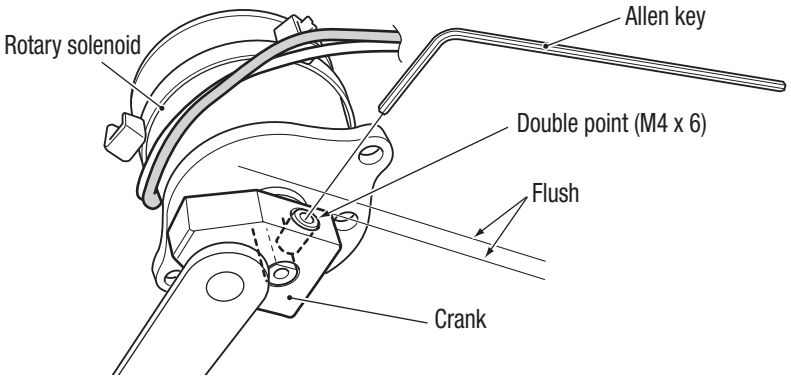
6 Remove the two low head cap screws (M4 x 6) and disassemble the vibration unit.



7 Remove the two Phillips pan head screws (with flat and spring washers) (M3 x 10) and remove the bracket.



8 Loosen the double point (M4 x 6), remove the crank, and replace the rotary solenoid.

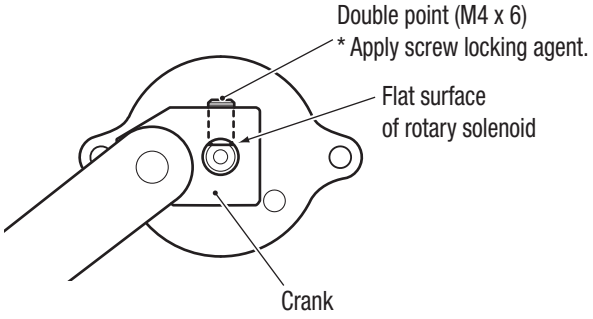


9 To install, perform the procedure in reverse.

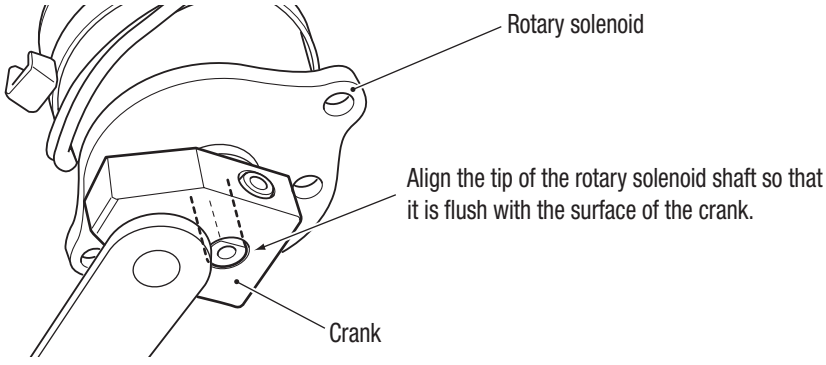
10 After replacing the rotary solenoid, be sure to check the operations. (See P-49 "7-7-5 Input/ Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE

- When installing the rotary solenoid, align the flat surface of the rotary solenoid shaft with the position of the double point.



- When installing, align the tip of the rotary solenoid shaft so that it is flush with the surface of the crank.



- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

(5) Replacing the micro switch

⚠WARNING

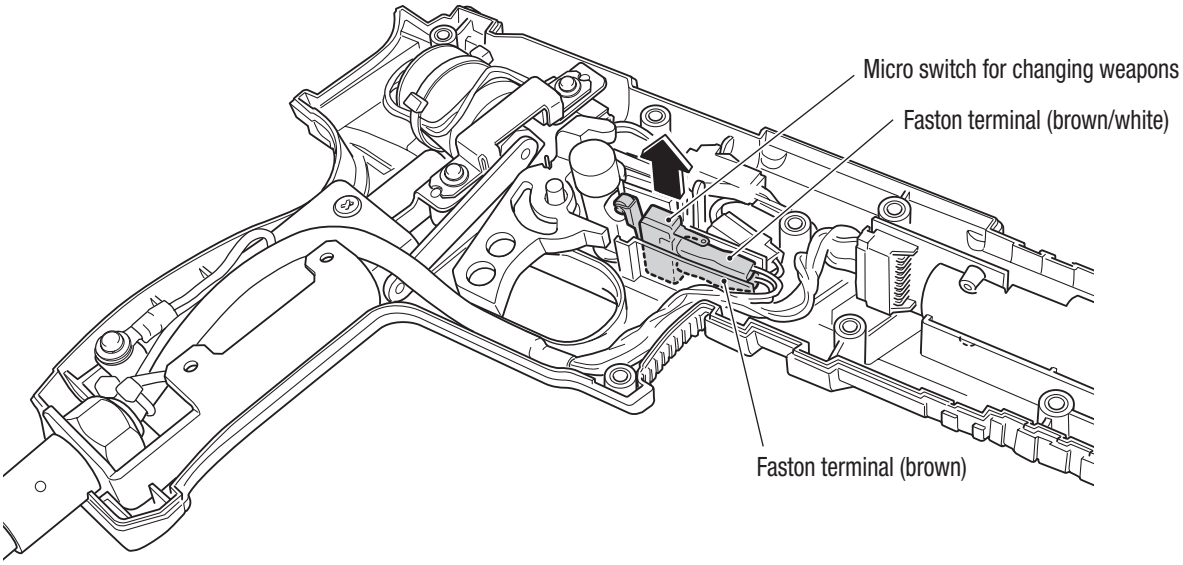
● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

■ Replacing the micro switch for changing weapons

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the gun body (R).
(See 2 in P-124 "(2) Replacing the sensor unit".)

3 Disconnect the two Faston terminals and replace the micro switch.



4 To install, perform the procedure in reverse.

5 After replacing the micro switch, be sure to check the operations. (See P-49 "7-7-5 Input/ Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE
● Be sure to fully insert the Faston terminals.
● When installing, take care not to allow the harness to get caught.

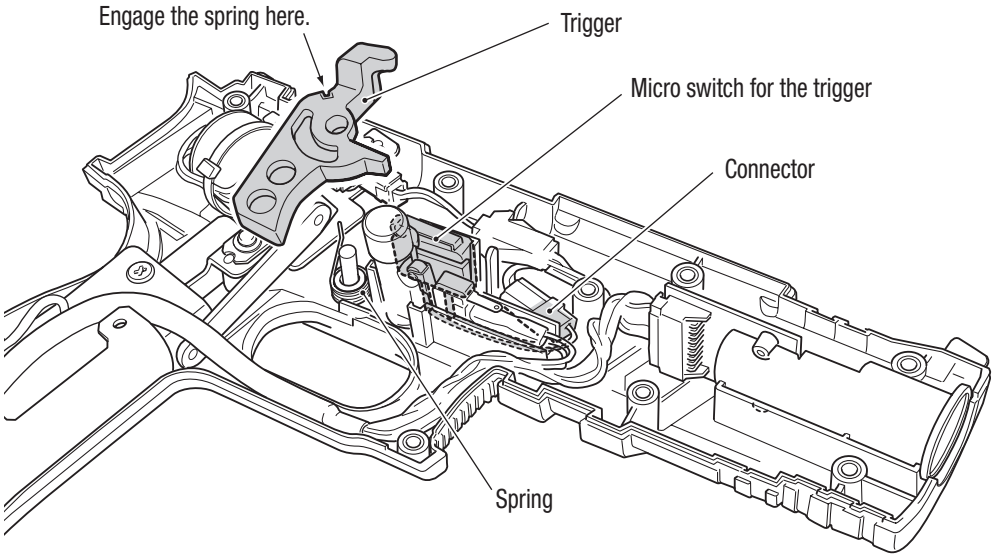
■ Replacing the micro switch for the trigger

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the gun body (R).
(See 2 in P-124 "(2) Replacing the sensor unit".)

3 Remove the spring and remove the trigger.

4 Disconnect the connector to remove and replace the micro switch for the trigger.



5 To install, perform the procedure in reverse.

6 After replacing the micro switch, be sure to check the operations. (See P-49 "7-7-5 Input/Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE
- Be sure to engage the spring with the trigger.
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

(6) Replacing the gun tube

⚠WARNING

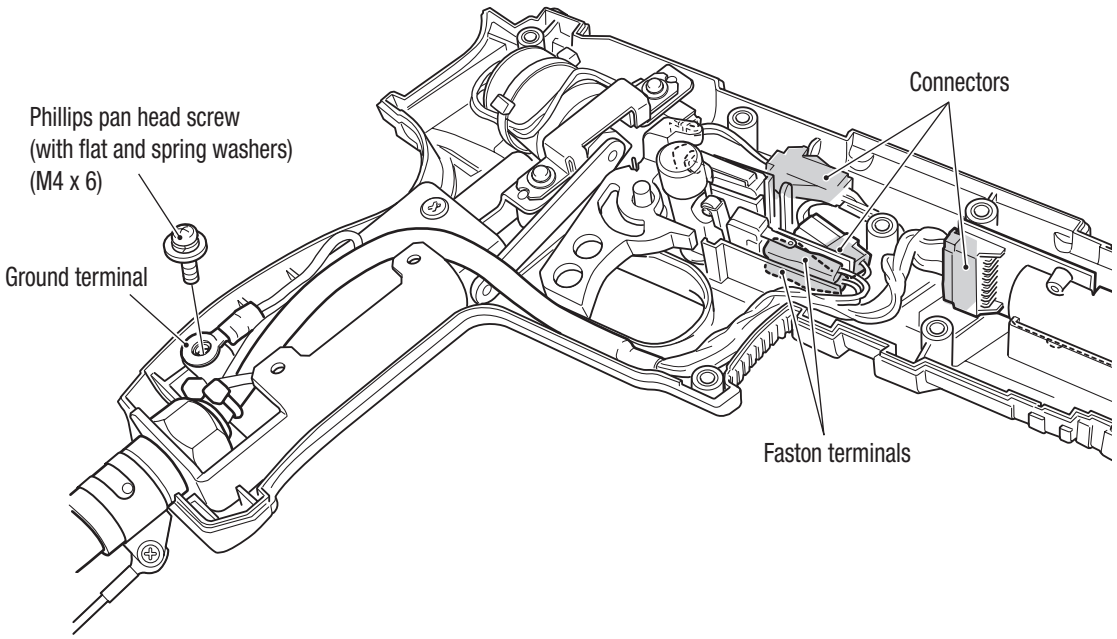
- In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the gun assembly.
(See P-122 "(1) Replacing the gun assembly".)

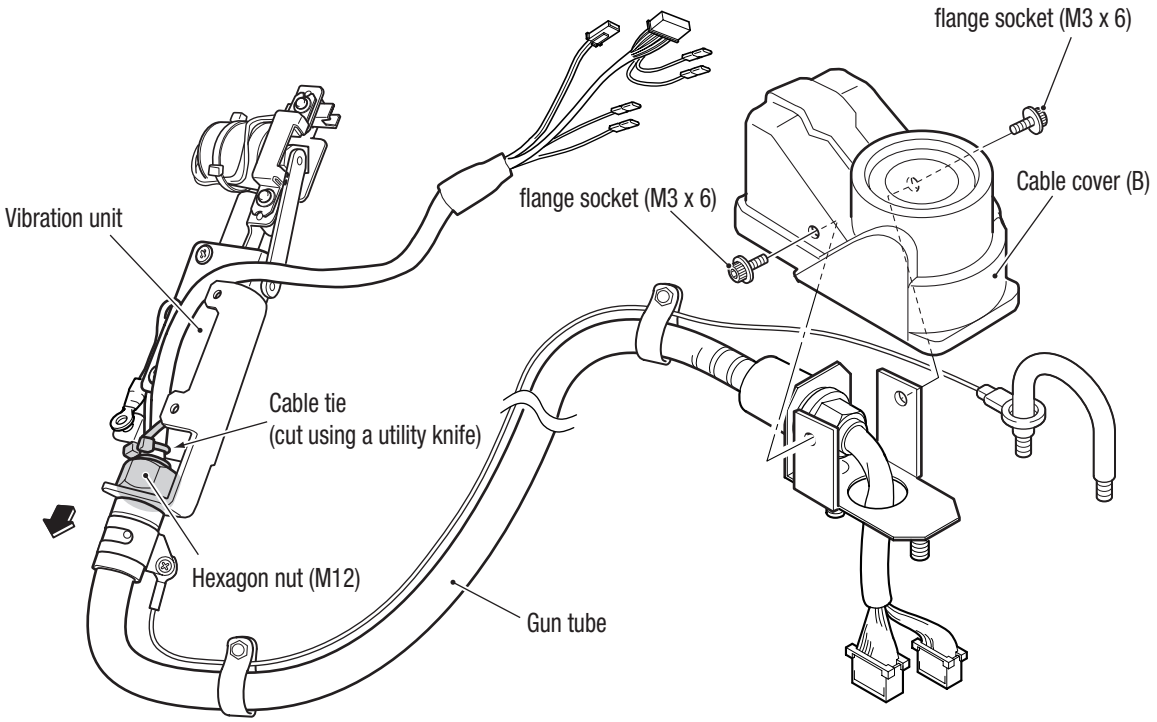
3 Remove the gun body (R) and pull out the vibration unit.
(See **4** in P-127 "(4) Replacing the rotary solenoid".)

4 Disconnect the three connectors and two Faston terminals, remove the Phillips pan head screw (with flat and spring washers) (M4 x 6), and disconnect the ground terminal.



5 Cut one cable tie using a utility knife. Remove the hexagon nut (M12) and remove the gun tube from the vibration unit.

6 Remove the two flange socket (M3 x 6) and remove the cable cover (B).



7 To install, perform the procedure in reverse.

8 After replacing the gun tube, be sure to check the operations. (See P-49 "7-7-5 Input/Output Test of Switches (I/O TEST)", P-47 "(1) SIGHT CALIBRATION (Gun Sight Calibration Screen)".)

NOTICE
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

8B-4-6 Pedal Assembly

(1) Replacing the photosensor

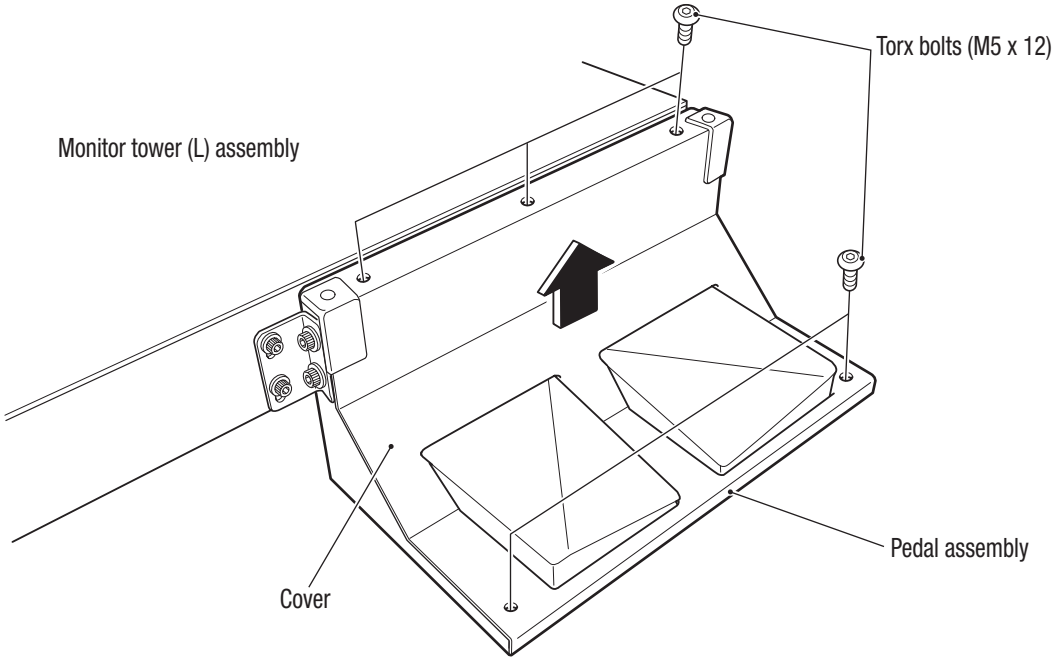
⚠WARNING

● In order to avoid electric shock, accident or injury to yourself or others as well as damage to the electronic circuits, be sure to turn off the power switch before starting this task.

NOTICE ● To avoid damage to the electronic circuits, be sure to check the orientation and shape of the connector before connecting it.

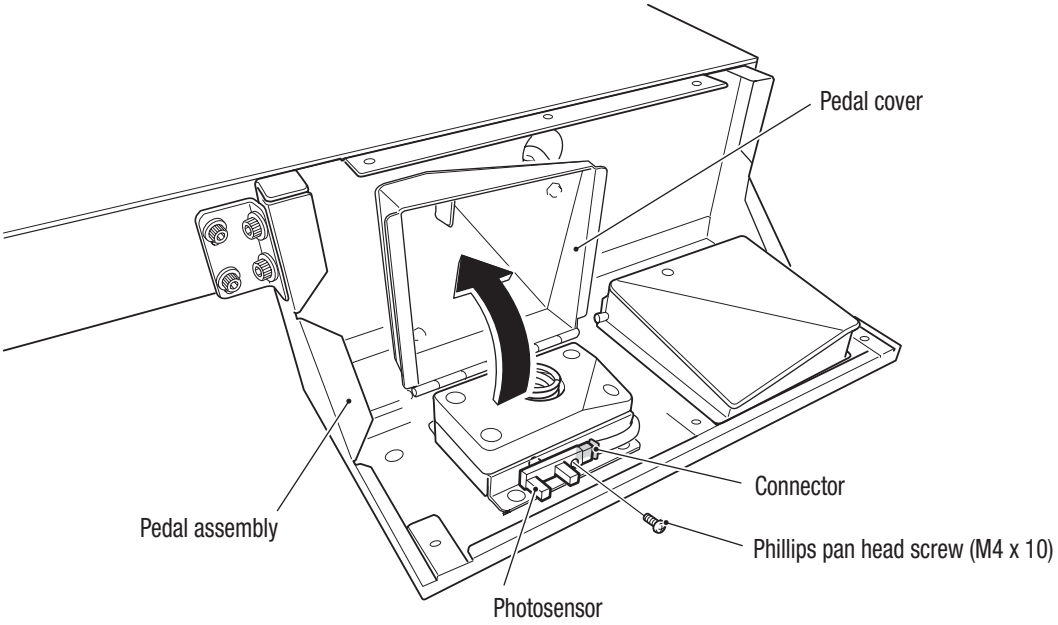
1 Turn off the power switch.
(See P-81 "8A-8 Turning the Power Switch On".)

2 Remove the five Torx bolts (M5 x 12) and remove the cover.



3 Raise the pedal cover on the photosensor to be replaced.

4 Disconnect the connector, remove the Phillips pan head screw (M4 x 10), and replace the photosensor.



5 Repeat the procedure to replace the photosensor on the other side.

6 To install, perform the procedure in reverse.

7 After replacing the photosensor, be sure to check the operations. (See P-49 "7-7-5 Input/ Output Test of Switches (I/O TEST)".)

NOTICE
- When installing, be sure to securely lock the connectors.
- When installing, take care not to allow the connectors and harnesses to get caught.

9. Disposal

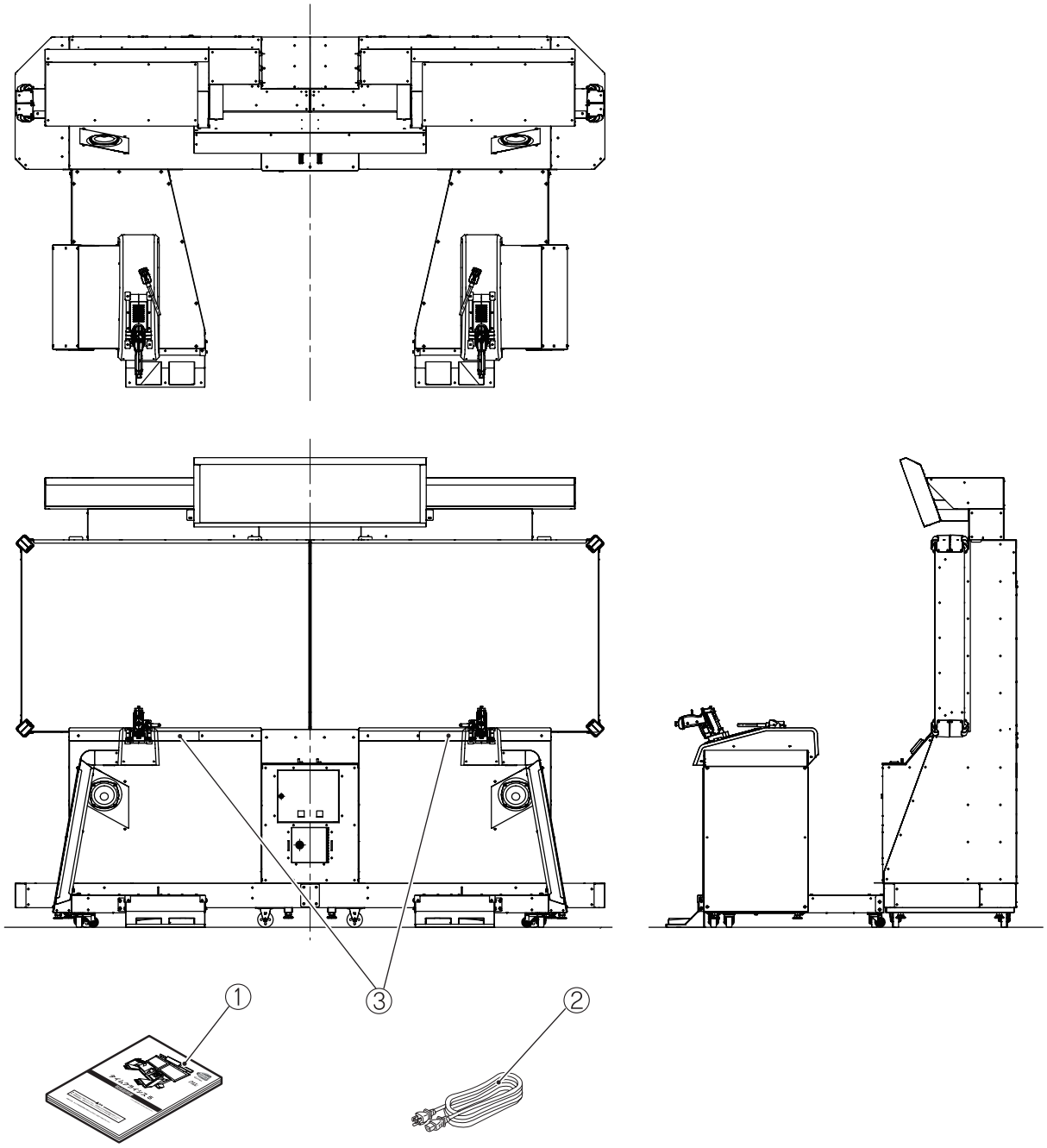
⚠WARNING

- When disposing of this machine, follow the applicable regulations for collection, transportation and disposal.
- When entrusting the collection, transportation and disposal of this machine to someone else, be sure to entrust the work to specialists in each field.

The software used in this machine is protected by copyright laws.
It is prohibited to copy, adapt, distribute publicly, or use the software for purposes other than the operation of this machine.
Infringement of the copyright laws may subject persons to criminal penalties.
Do not use the recording media containing the software in a machine other than the specified game machine.
Doing so may cause the machine to malfunction.

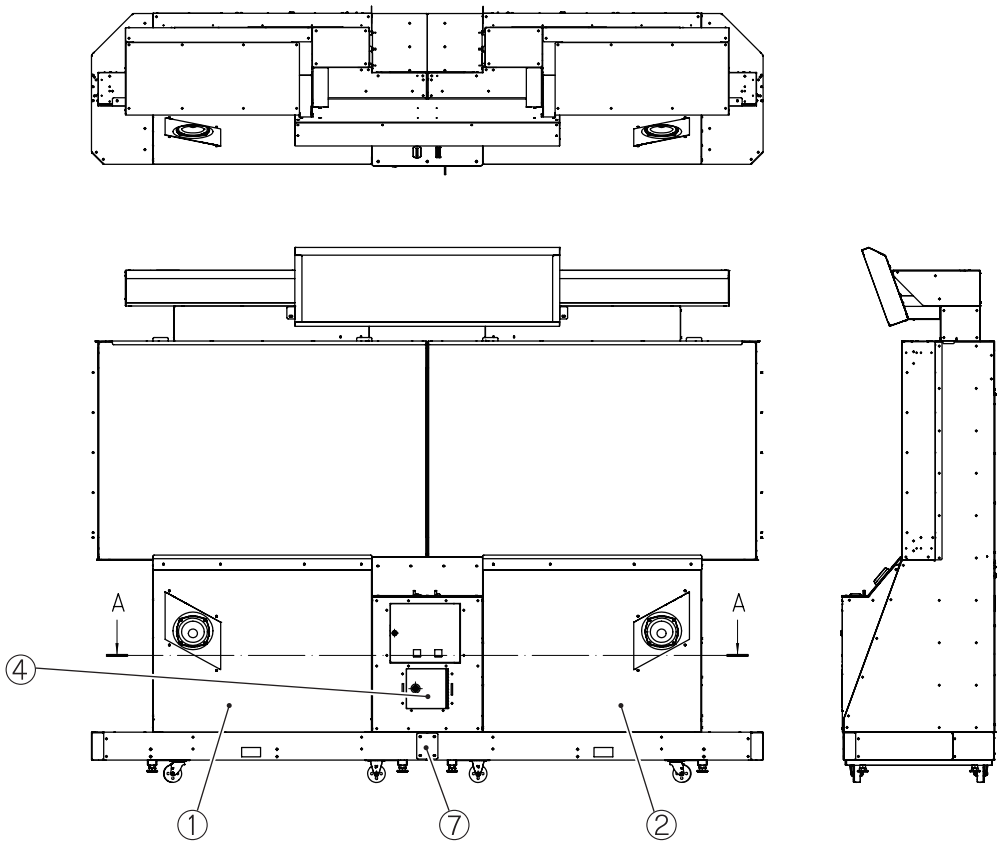
10. Parts List

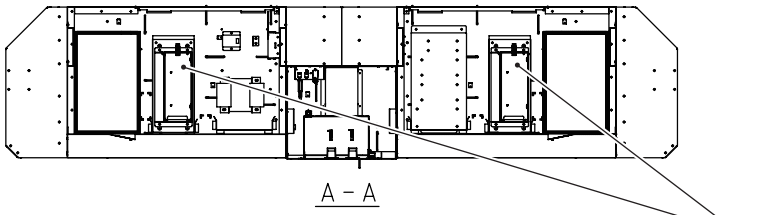
10-1 Overall

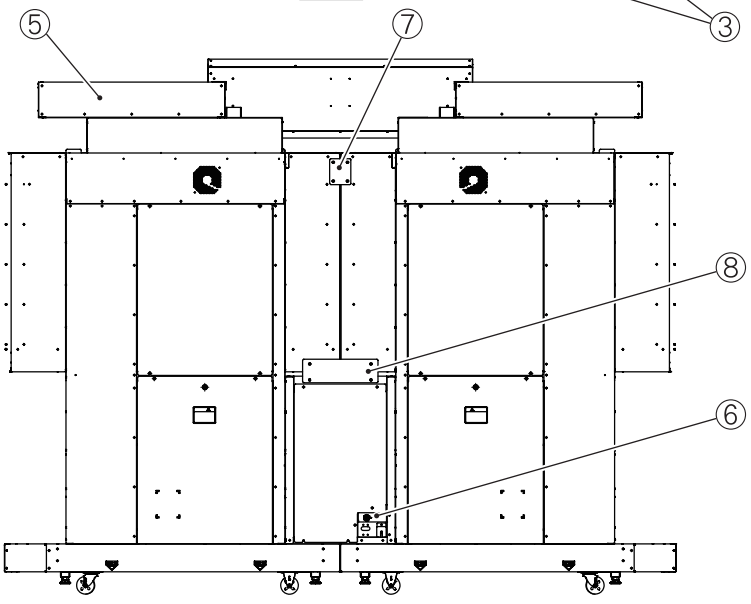


No.	Name	Qty.	Type or Rating	No.
1	Operation Manual (US)	1	This manual	737-354
2	Power cord	1	3 m	007-972
3	Caution sticker regarding hypersensitivity to light (EXP)	1		461-823
4				
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10-2 Front Assembly

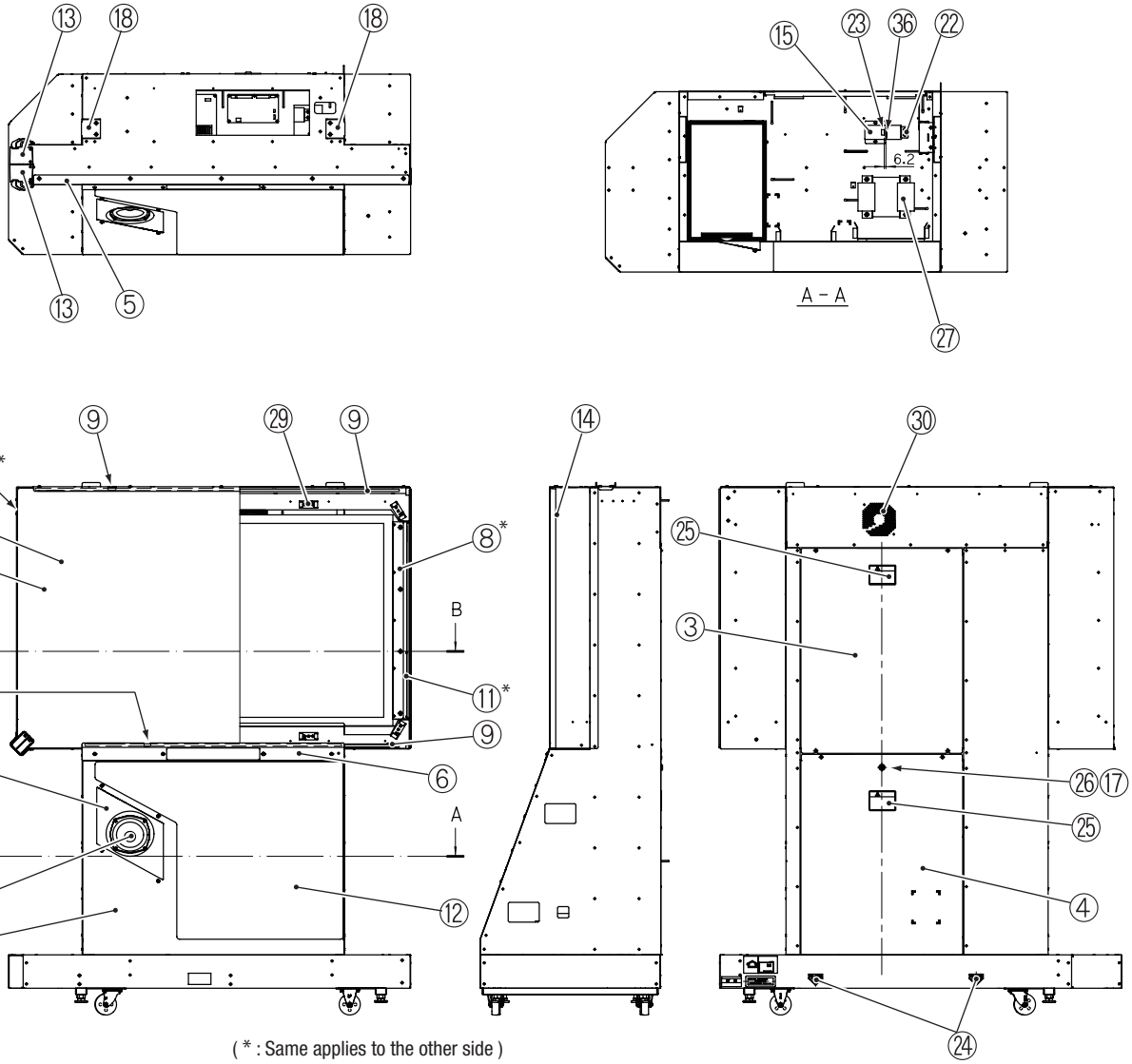




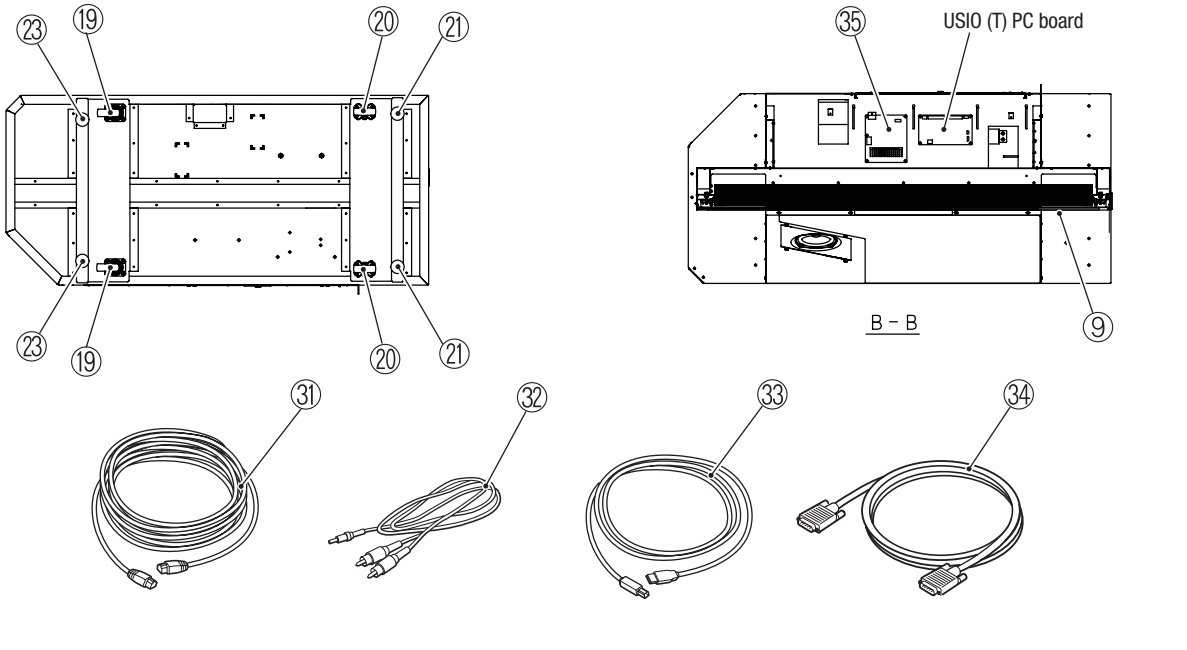


No.	Name	Qty.	Type or Rating	No.
1	Monitor tower (L) assembly	1	P-142 "10-3 Monitor Tower (L) Assembly"	-
2	Monitor tower (R) assembly	1	P-144 "10-4 Monitor Tower (R) Assembly"	-
3	ES3 (X) assembly	2	P-146 "10-5 ES3X Assembly"	-
4	Coin box assembly	1	P-150 "10-6 Coin Box Assembly 2/2"	-
5	Signboard assembly	1	P-152 "10-7 Signboard Assembly"	-
6	Cord box assembly	1	P-154 "10-8 Cord Box Assembly"	-
7	Tower joint A	2		737-359
8	Tower joint B	1		737-360
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10-3 Monitor Tower (L) Assembly



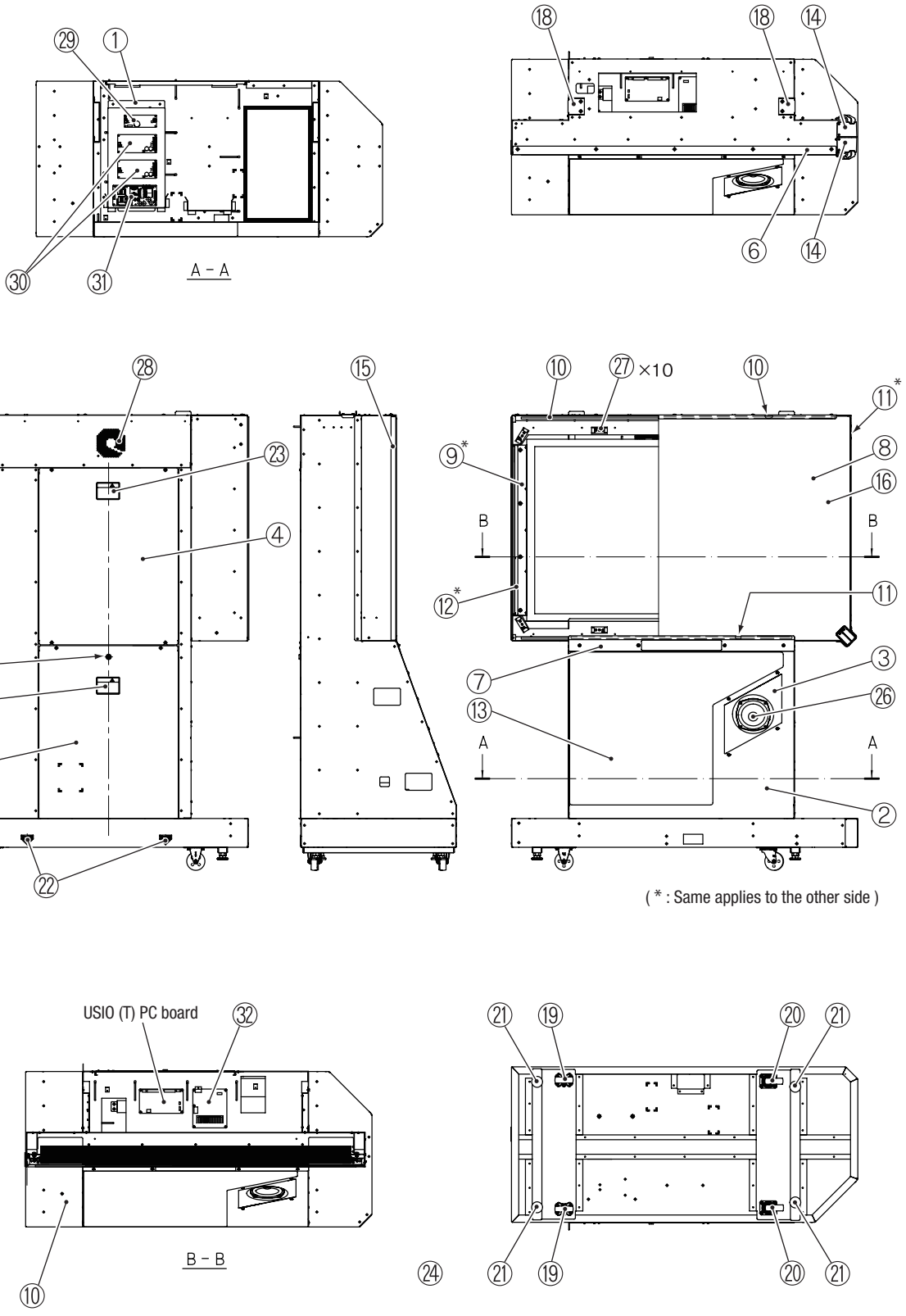
(* : Same applies to the other side)



No.	Name	Qty.	Type or Rating	No.
1	Monitor tower base (L)	1		737-361
2	Woofer box (L)	1		737-362
3	Back panel	1		737-363
4	Maintenance door	1		737-364
5	Glass retainer (T)	1		737-365
6	Glass retainer (U)	1		737-366
7	Monitor glass	1		737-367
8	Monitor side BK	2		737-368
9	Glass cushion (A)	4		737-369
10	Glass cushion (B)	3		737-370
11	Glass cushion (C)	2		737-371
12	Front decal (L)	1		737-374
13	Corner cover	4		737-375
14	Monitor cushion	1		737-376
15	AC outlet cover	1		737-377
16	Monitor decal (L)	1		737-378
17	Clasp (Z)	1		729-245
18	Rope hook (F)	2		450-417
19	Caster (swivel type)	2	STC-75NM	102-199
20	Caster (fixed type)	2	STC-75NM	102-201
21	Leveling bolt	1	KYW16-100-6B	102-064
22	AC adapter holder	1		734-827
23	AC outlet sticker	1		734-842
24	Fork sticker PH	2		461-678
25	Warning sticker Service (B) PH (EXP)	2		461-539
26	Coin lock	1	F750-DS8 (random number)	101-175
27	Transformer	1	S133V693PV	004-737
28	Speaker	1	T (140-6) FL-C-PF	006-205
29	LED board	10		308-052
30	Fan	1	PAAD2A225BM-Y369	005-516
31	LAN cable	1	BIZ-LAN-S5eUTP-2700	011-187
32	Stereo cable	2	BIZ-3.5S-3.5S-1500	011-146
33	USB cable	1	BIZ-USB-AB-MM-2000-C	007-976
34	DVI cable	1	BIZ-DVID-S-MM-2400-C	011-188
35	S3.1 CH AMP PC board	1		307-068
36	AC outlet	1	RU-02-98	011-189
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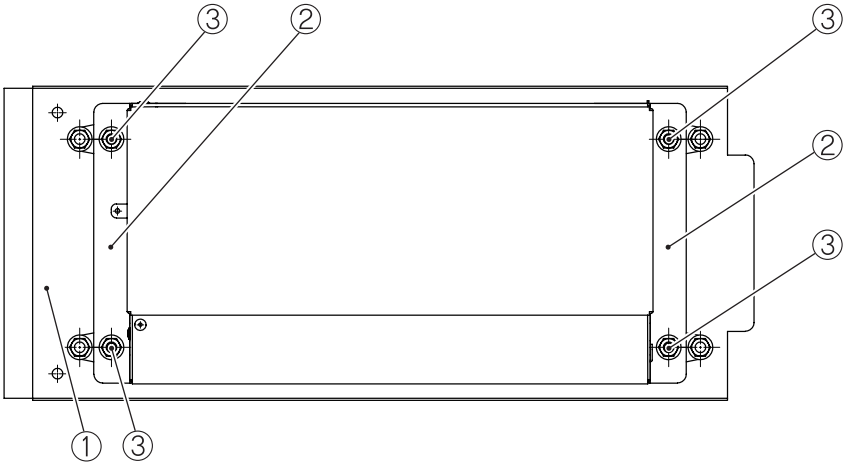
TV15-308-052-00
LED EMITTER

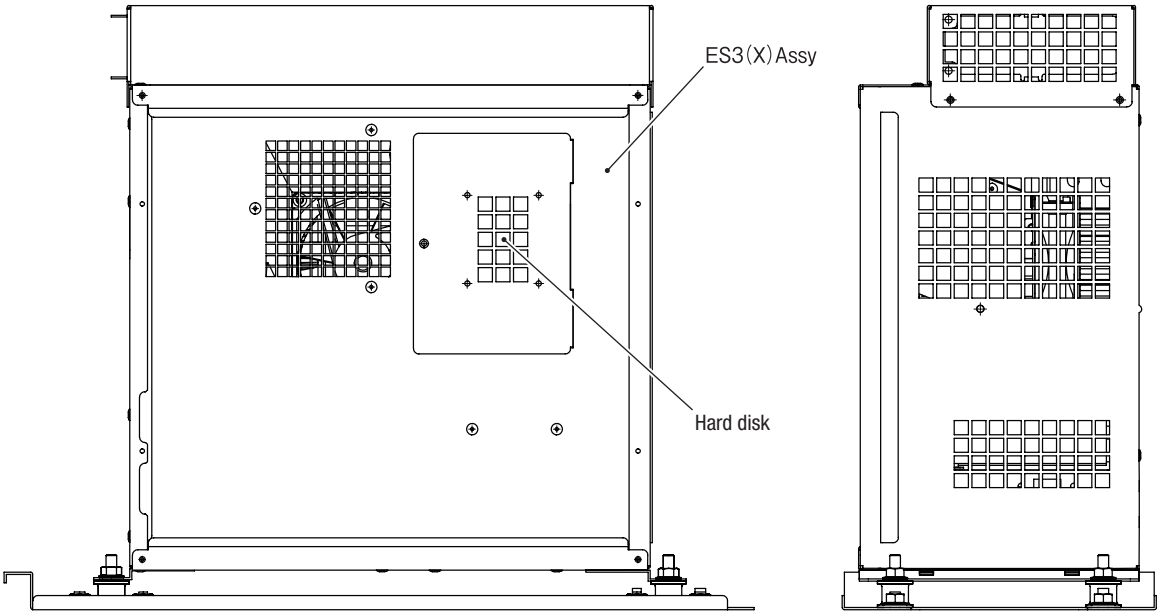
10-4 Monitor Tower (R) Assembly



No.	Name	Qty.	Type or Rating	No.
1	Power PCB base	1		737-380
2	Monitor tower base (R)	1		737-381
3	Woofer box (R)	1		737-382
4	Back panel	1		737-363
5	Maintenance door (R)	1		737-383
6	Glass retainer (T)	1		737-365
7	Glass retainer (U)	1		737-366
8	Monitor glass	1		737-367
9	Monitor side BK	2		737-368
10	Glass cushion (A)	4		737-369
11	Glass cushion (B)	3		737-371
12	Glass cushion (C)	2		737-370
13	Front decal (R)	1		737-384
14	Corner cover	4		737-375
15	Monitor cushion	1		737-376
16	Monitor decal (R)	1		737-385
17	Clasp (Z)	1		729-245
18	Rope hook (F)	2		450-417
19	Caster (fixed type)	2	SKC-75NM	102-201
20	Caster (swivel type)	2	STC-75NM	102-199
21	Leveling bolt	4	KYW16-100-6B	102-064
22	Fork sticker PH	2		461-678
23	Warning ST service (B) PH (EXP)	2		461-539
24	Caution ST regarding hypersensitivity to light (f) (EXP)	1		461-823
25	Coin lock	1	F750-DS8 (random number)	101-175
26	Speaker	1	T (140-6) FL-C-PF	006-205
27	LED board	10		308-052
28	Fan	1	PAAD2A225BM-Y369	005-516
29	Switching regulator 5 V	1	VS30C-5	009-174
30	Switching regulator 12 V	2	VS150E-12	009-231
31	Switching regulator 24 V	1	ZWS240BP-24	009-287
32	S3.1 CH AMP PC board	1		307-068
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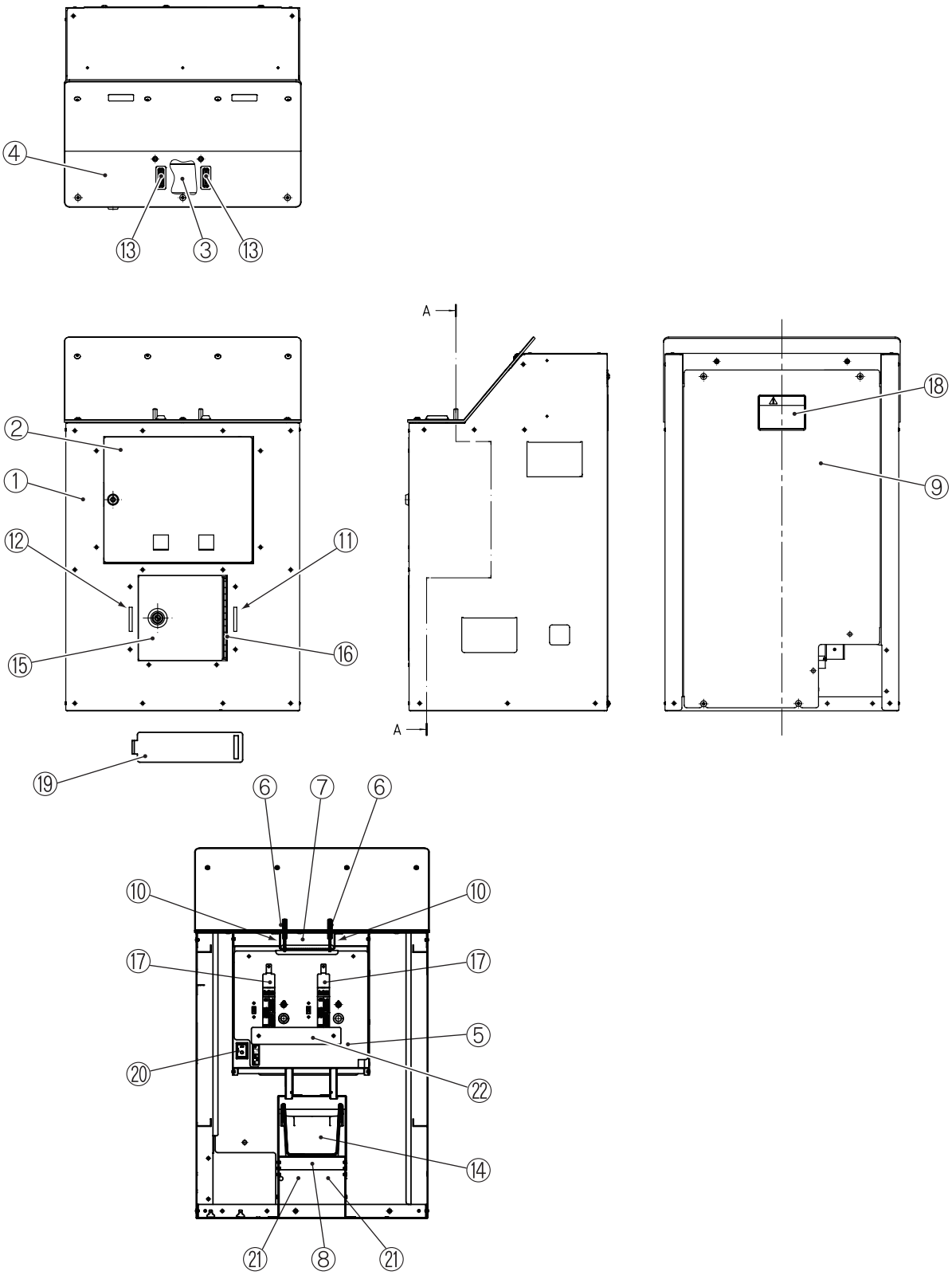
10-5 ES3X Assembly





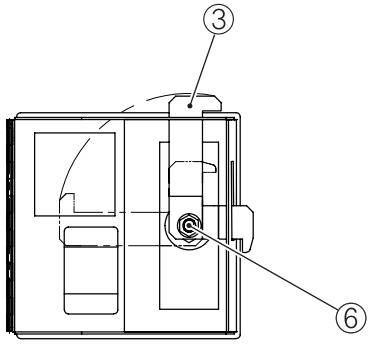
No.	Name	Qty.	Type or Rating	No.
1	Rack base	1		737-387
2	Rack support BK	2		737-388
3	Anti-vibration rubber sleeve	4	KB-20	106-181
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10-6 Coin Box Assembly 1/2

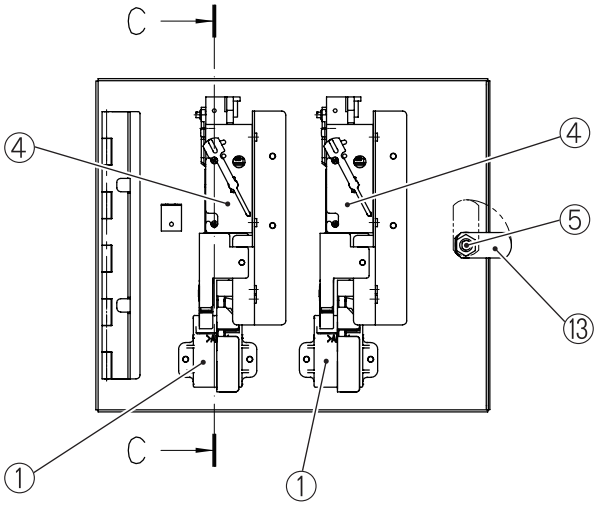


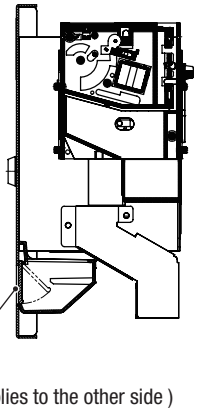
No.	Name	Qty.	Type or Rating	No.
1	Coin box base	1		737-390
2	Service door	1		737-391
3	Coin rail	1		737-392
4	Control panel (EXP)	1		737-393
5	Service panel (BNAA)	1		737-408
6	Return lever	2		737-395
7	Return lever bracket	1		737-399
8	Coin counter bracket	1		737-400
9	Back board C	1		737-401
10	Cancel spring	2		737-402
11	Security bar bracket (R)	1		737-403
12	Security bar bracket (L)	1		737-404
13	Coin Plate	2		737-409
14	Cashbox	1		718-446
15	Coin door	1		726-057
16	Coin door hinge	1		726-081
17	Service switch cover	2		737-405
18	Warning sticker Service (B) PH (EXP)	1		461-677
19	Security bar	1		737-410
20	Sub power switch	1		000-914
21	Coin counter	2		003-065
22	Service panel CV (BNAA)	1		—
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10-6 Coin Box Assembly 2/2

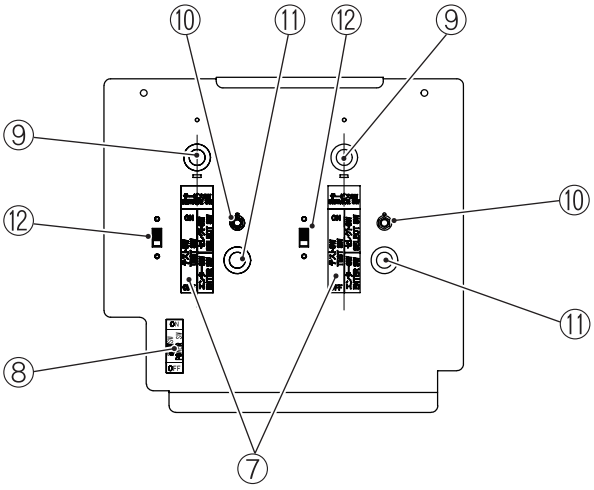


Coin door





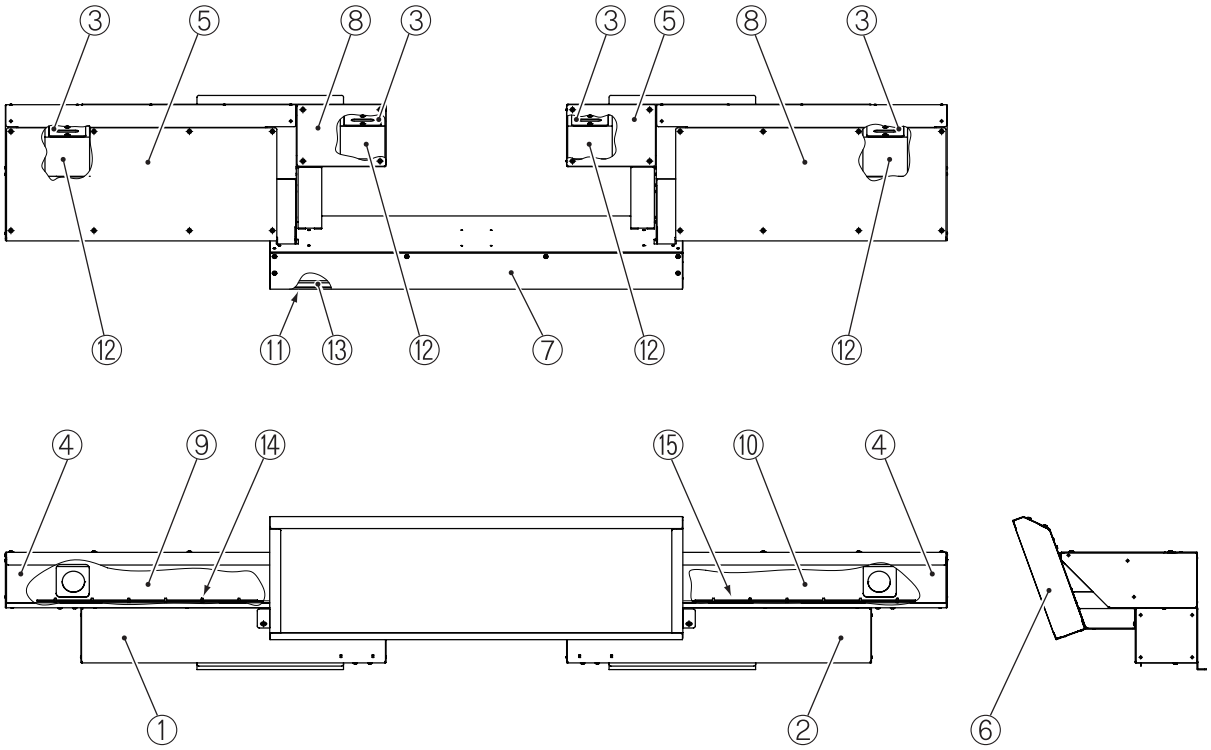
(Same applies to the other side)



Service plate

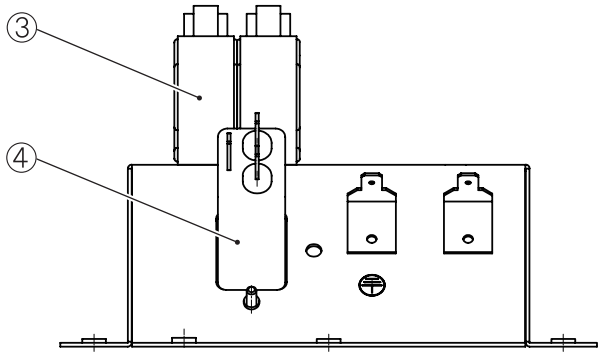
No.	Name	Qty.	Type or Rating	No.
1	Coin return opening (B)	2		412-518
2	Coin return cover (P)	2		412-250
3	Stopper plate	1		726-070
4	Channel bracket	2	CB-81MB	100-145
5	Coin lock	1	F750-DS8 (Random number)	101-175
6	Cam lock	1	N92-L10	101-142
7	Service sticker M (B)	2	5542-PB08BNR-0	461-722
8	Power sticker	1		461-752
9	Push switching (red)	2		008-839
10	Toggle switch	2		000-866
11	Push switching (green)	2	5542-PB08BNG-0	000-840
12	Slide switch	2	5540-VS011201A2-0	000-865
13	B Belo	1	t2.3 M7	101-240
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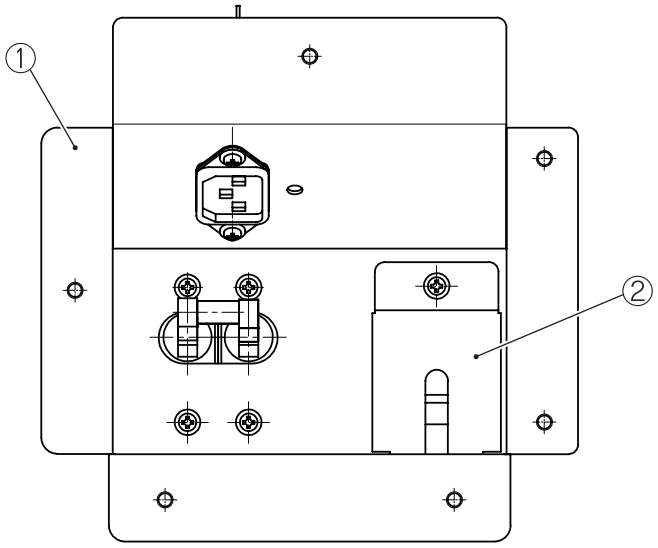
10-7 Signboard Assembly

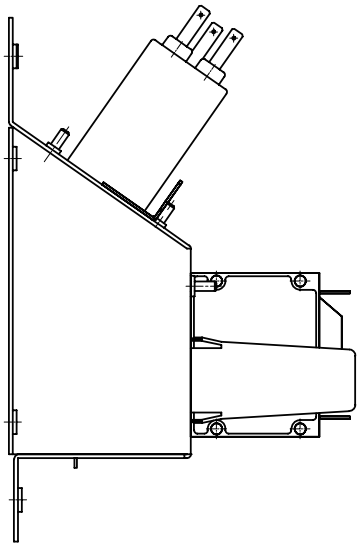


No.	Name	Qty.	Type or Rating	No.
1	Signboard base (L)	1		737-420
2	Signboard base (R)	1		737-421
3	Speaker bracket	4		737-422
4	Signboard front cover	2		737-423
5	Signboard top cover	2		737-424
6	Signboard base (C)	1		737-425
7	LED retainer	1		737-426
8	Speaker cover	2		737-427
9	Speaker decal (L)	1		737-428
10	Speaker decal (R)	1		737-429
11	Sign panel (EXP)	1		737-439
12	Speaker	4		006-206
13	Light-emitting unit	1		002-733
14	Tape LED (red)	1		002-732
15	Tape LED (blue)	1		002-734
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10-8 Cord Box Assembly

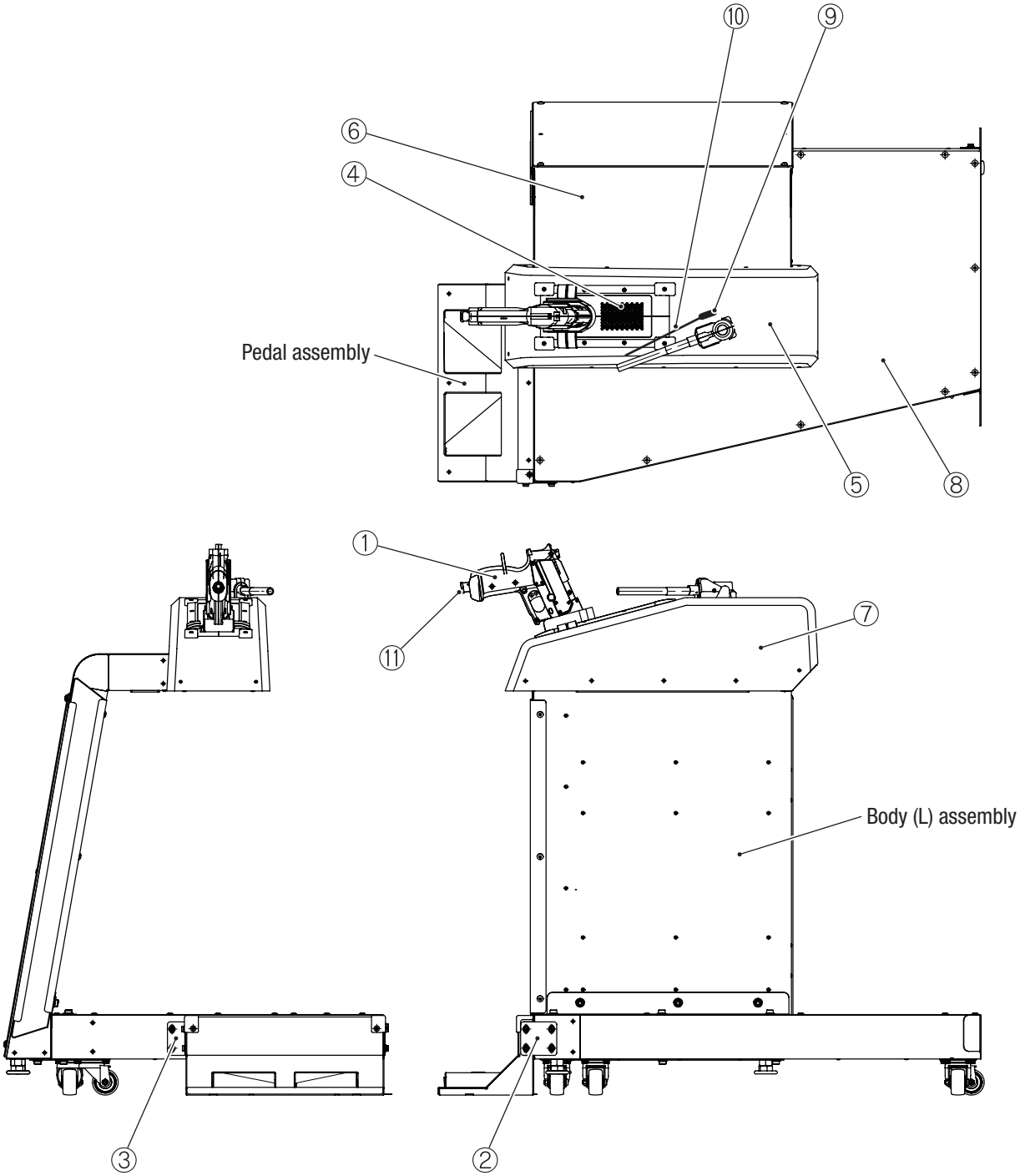






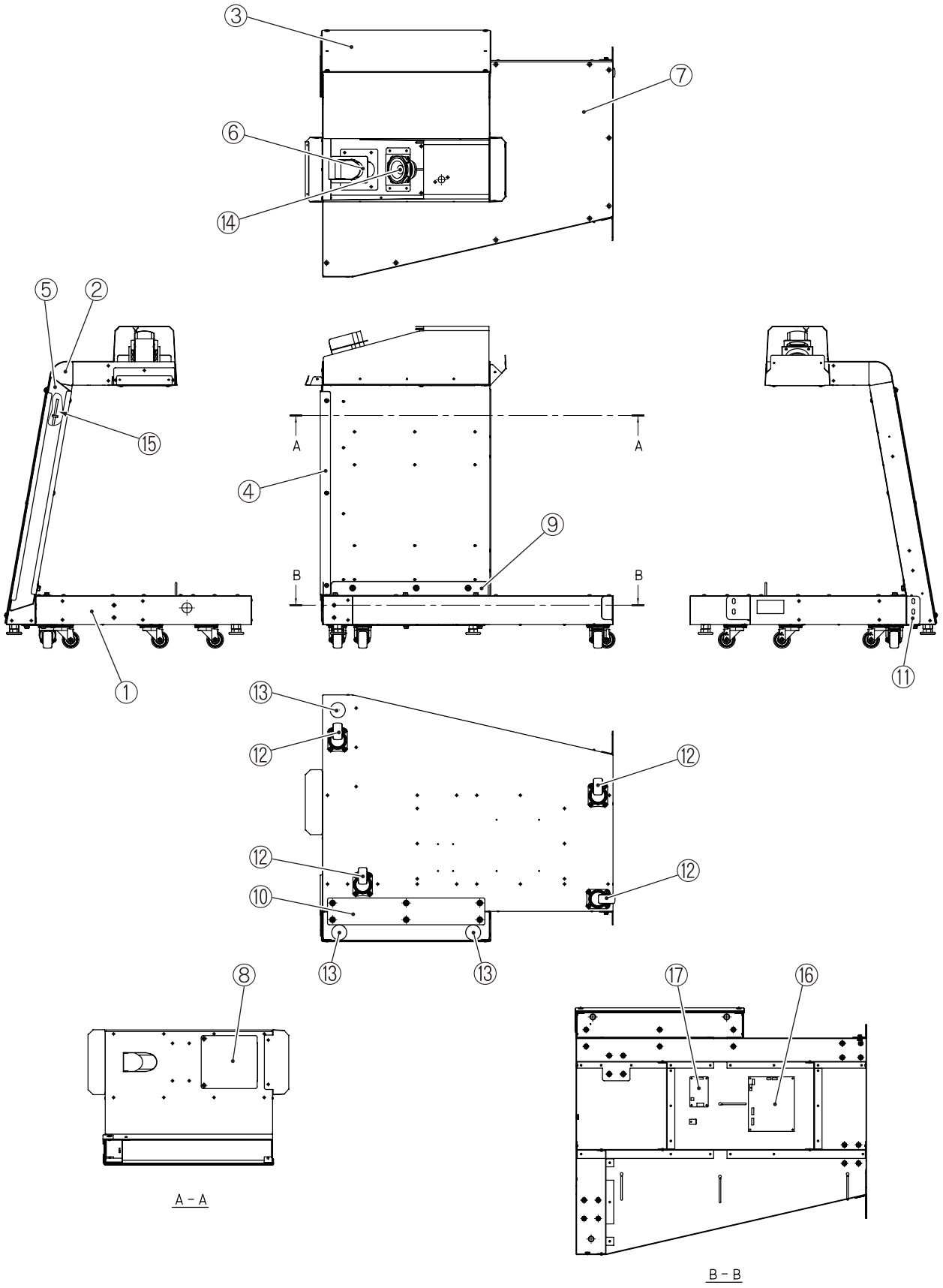
No.	Name	Qty.	Type or Rating	No.
1	Cord box	1		737-431
2	LAN cover	1		736-635
3	Circuit protector	1		000-915
4	Noise filter	1		011-192
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10-9 Gun Tower (L) Assembly 1/2



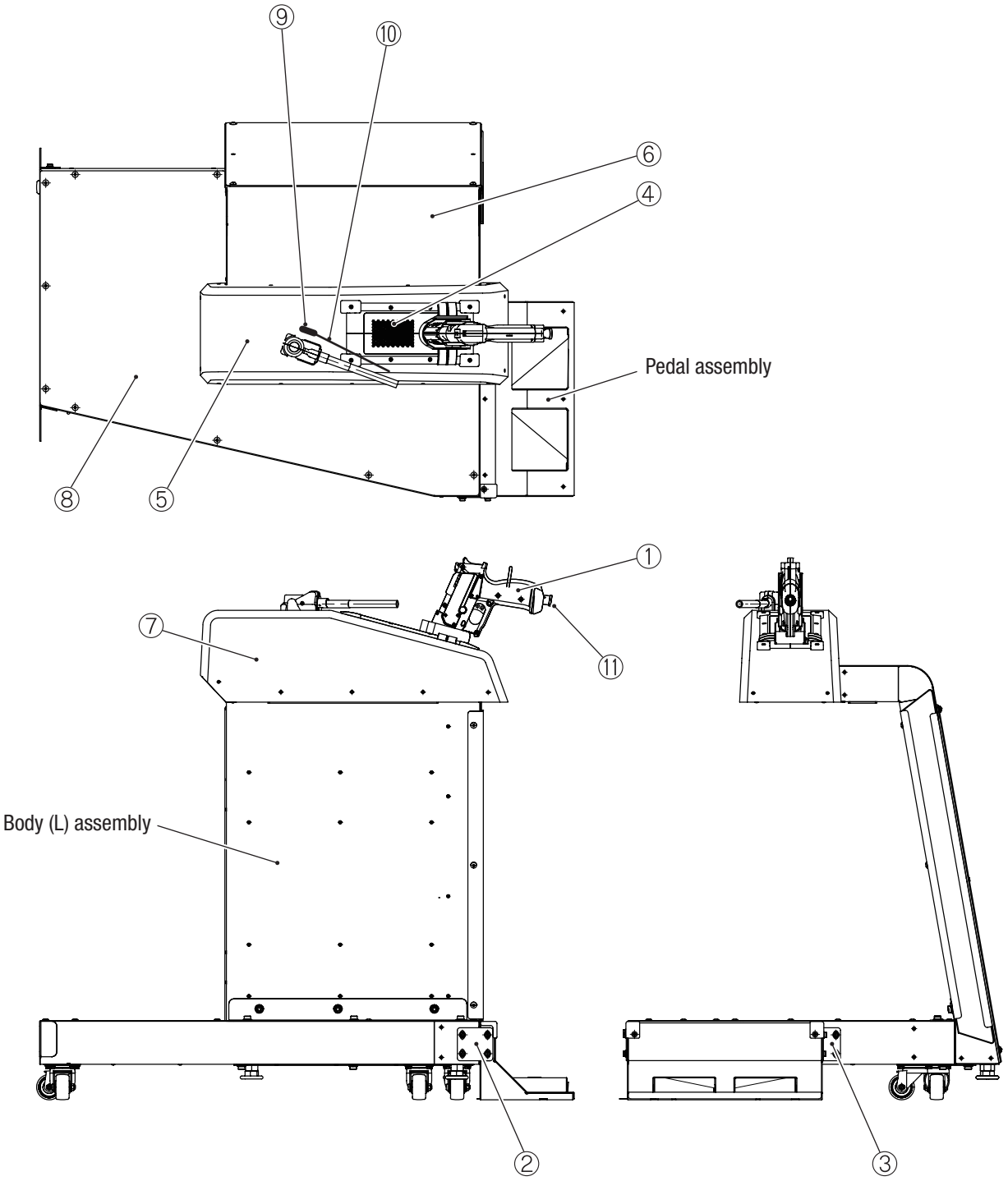
No.	Name	Qty.	Type or Rating	No.
1	Gun assembly	1	See 10-13 Gun Assembly	
2	Pedal joint (A)	1		737-432
3	Pedal joint (B)	1		737-433
4	Stand cover (A)	1		737-434
5	Stand cover EXP (L)	1		737-440
6	Instruction decal (L) (EXP)	1		737-441
7	Marking decal (L)	1		737-437
8	Base decal (L)	1		737-438
9	Wire bracket	1		736-979
10	Wire	1		737-443
11	Chain bracket	1		737-442
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10-9 Gun Tower (L) Assembly 2/2



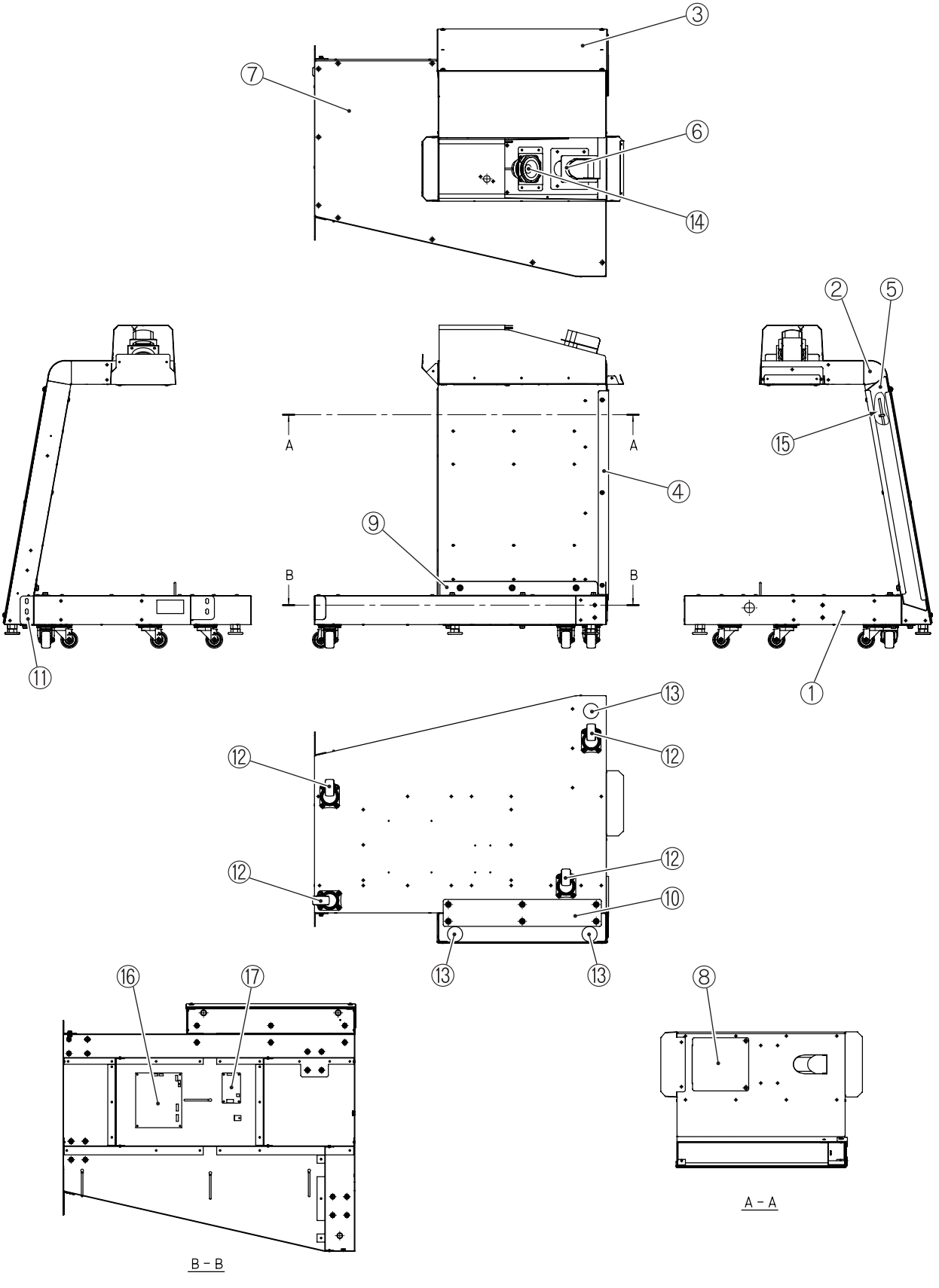
No.	Name	Qty.	Type or Rating	No.
1	Gun tower base (L)	1		737-444
2	Gun tower (L)	1		737-445
3	Side panel (L)	1		737-446
4	Side LED retainer	1		737-447
5	LED cover	1		737-448
6	Gun holder BK	1		737-449
7	Tower cover (L)	1		737-450
8	Bottom cover	1		737-451
9	Tower joint T (L)	1		737-452
10	Tower joint U	1		737-453
11	Tower joint L	1		737-454
12	Caster (swivel type)	4	420S-N50 102-051	102-051
13	Leveling bolt	3	KYW16-75-6B	102-045
14	Speaker	1		006-207
15	Tape LED (red)	1		002-732
16	CPU board	1		308-083
17	Gun drive PC board	1		307-071
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10-10 Gun Tower (R) Assembly 1/2



No.	Name	Qty.	Type or Rating	No.
1	Gun assembly	1	See 10-13 Gun Assembly	
2	Pedal joint (A)	1		737-432
3	Pedal joint (B)	1		737-433
4	Stand cover (A)	1		737-434
5	Stand cover EXP (R)	1		737-442
6	Instruction decal (R) (EXP)	1		737-443
7	Marking decal (R)	1		737-487
8	Base decal (R)	1		737-488
9	Wire bracket	1		736-979
10	Wire	1		737-443
11	Chain bracket	1		737-442
12				
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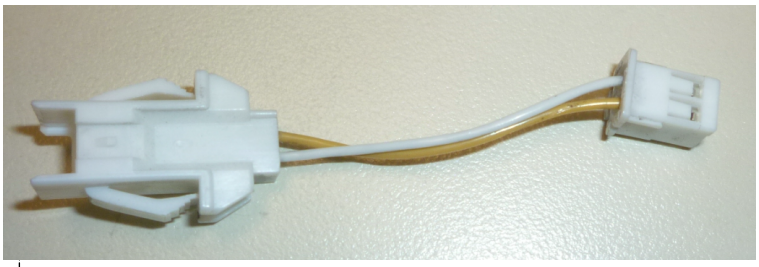
10-10 Gun Tower (R) Assembly 2/2

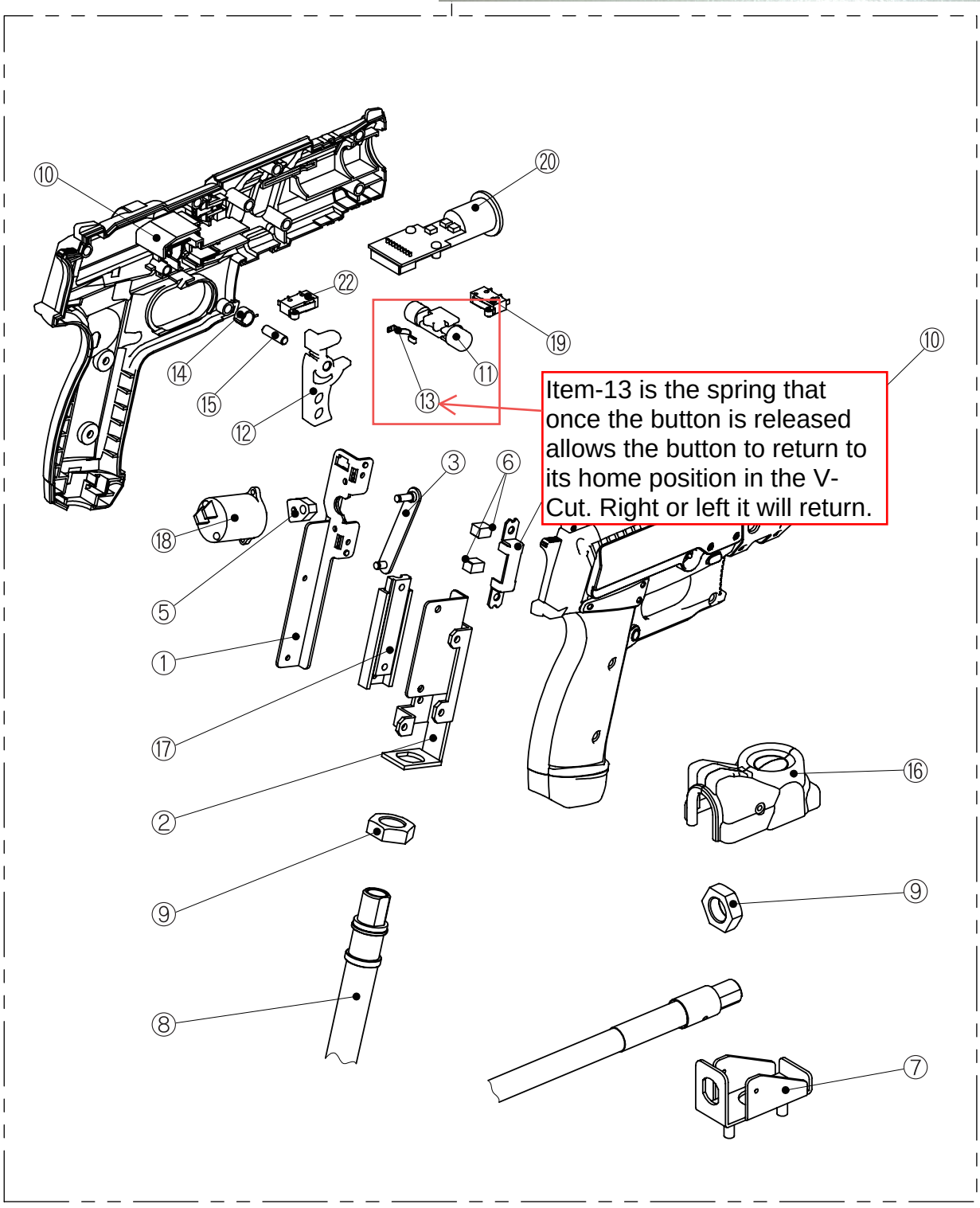


No.	Name	Qty.	Type or Rating	No.
1	Gun tower base (R)	1		737-491
2	Gun tower (R)	1		737-492
3	Side panel (R)	1		737-493
4	Side LED retainer	1		737-447
5	LED cover	1		737-448
6	Gun holder BK	1		737-449
7	Tower cover (R)	1		737-494
8	Bottom cover	1		737-451
9	Tower joint T (R)	1		737-495
10	Tower joint U	1		737-453
11	Tower joint R	1		737-496
12	Caster (swivel type)	4	420S-N50	102-051
13	Leveling bolt	3	KYW16-75-6B	102-045
14	Speaker	1		006-207
15	Tape LED (blue)	1		002-734
16	CPU board	1		308-083
17	Gun drive PC board	1		307-071
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Wire harness 2

10-11 Gun Assembly

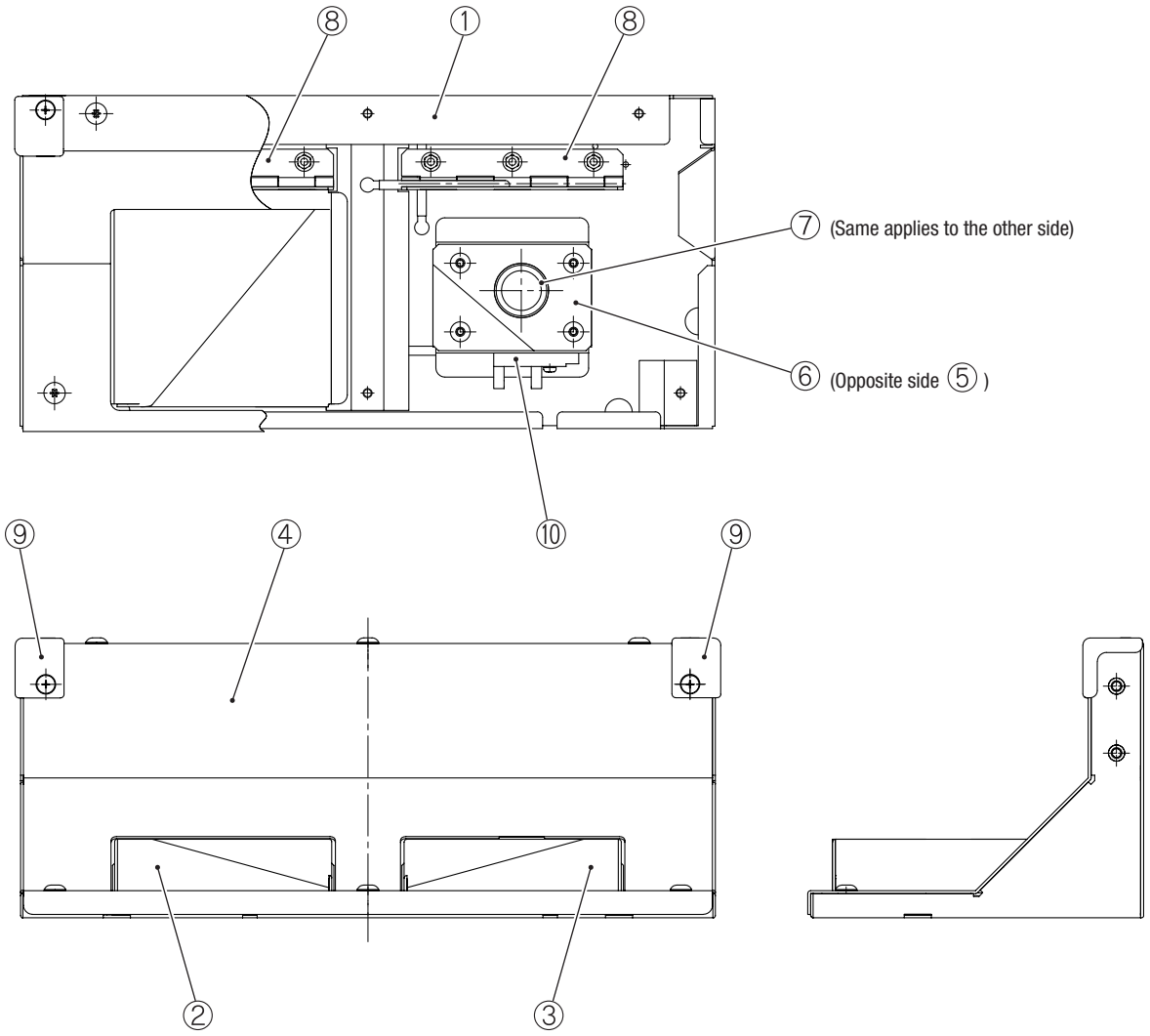




No.	Name	Qty.	Type or Rating	No.
1	Slide base	1		737-455
2	Slide holder	1		737-456
3	Link	1		737-457
4	Stopper BK	1		737-458
5	Crank	1		737-459
6	Stopper rubber	2		737-460
7	Gun tube bracket	1		737-461
8	Gun tube (Gun harnes)	1		737-462
9	Tube nut	2		737-463
10	Gun body	1	(L) (R) set	737-464
11	Gun switch	1		737-465
12	Gun trigger	1		737-466
13	Switch spring	1		737-467
14	Trigger spring	1		737-468
15	Parallel pin	1	5X18(A)	107-203
16	Cable cover (B)	1		736-476
17	Slide rail	1	AR2-60 (ball 2 x 10 pcs)	107-166
18	Rotary solenoid	1	RSR14/10-CAB0-BNG	004-773
19	Micro switch	2	SS-01GL2T	000-666
20	Ground wire	1		308-177
21	Gun assembly	1		737-469
22	Micro switch	1	SS-01GL2	000-916
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Light rec bd tv05-308-177

10-12 Pedal Assembly



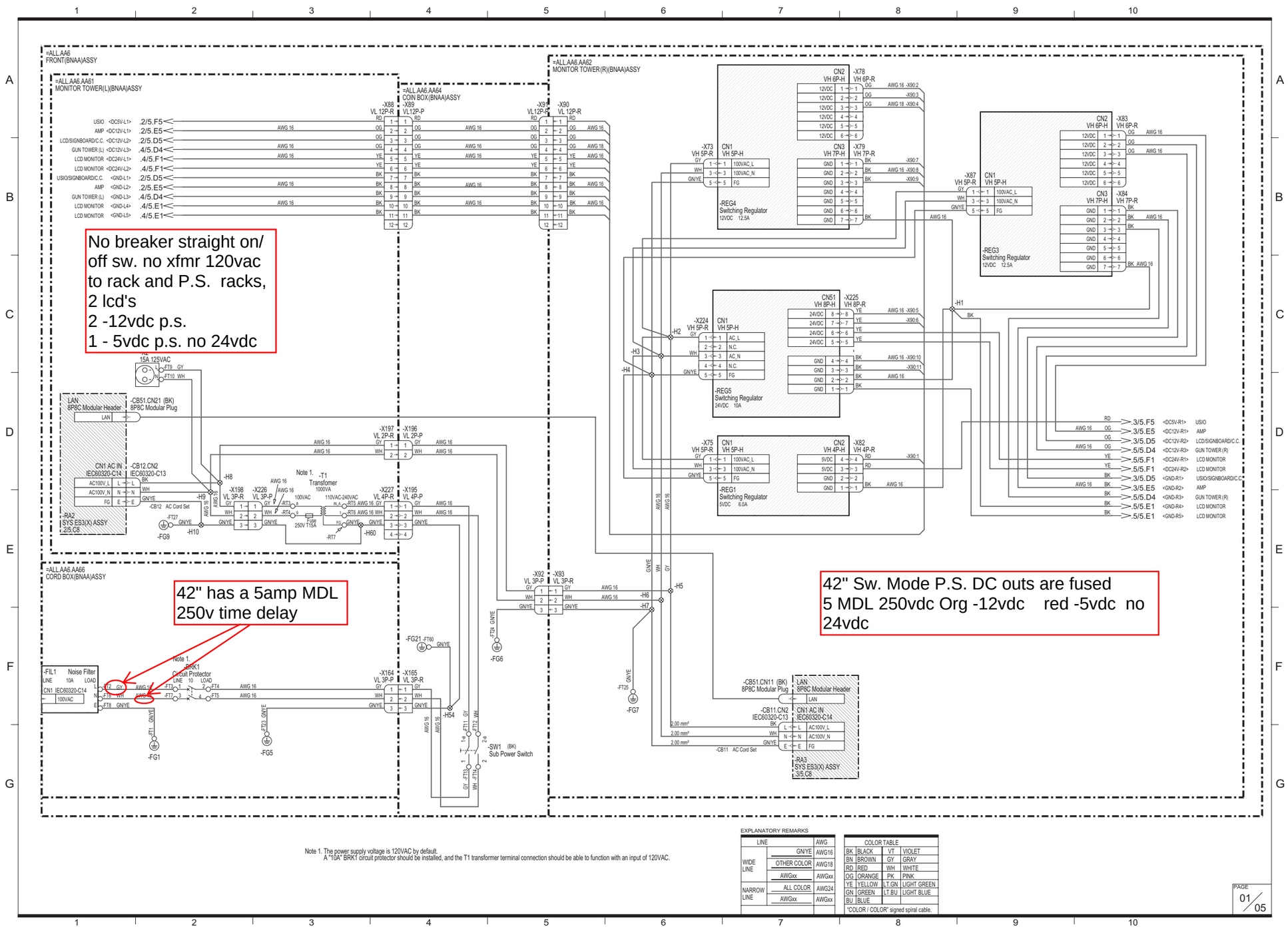
No.	Name	Qty.	Type or Rating	No.
1	Pedal base	1		737-475
2	Pedal (L)	1		737-476
3	Pedal (R)	1		737-477
4	Pedal cover C	1		737-478
5	Stopper (L)	1		737-479
6	Stopper (R)	1		737-480
7	Spring A	2		737-481
8	Hinge	2		737-482
9	Point cover (S)	2		450-416
10	Photo interrupter	2	KI1249-AALF	000-632
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VG79-11619-00 Optic

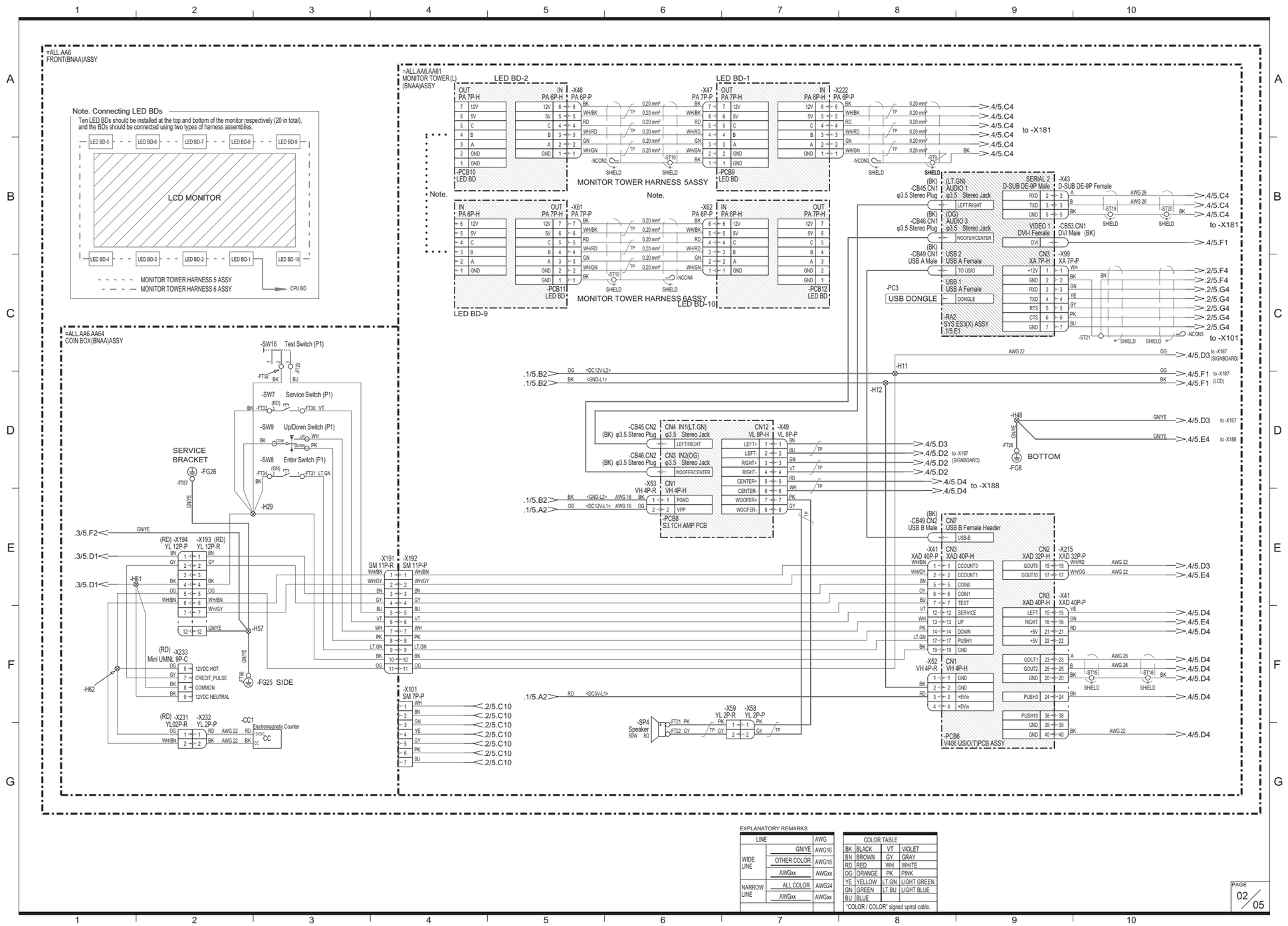
MEMO

11. Wiring Diagram

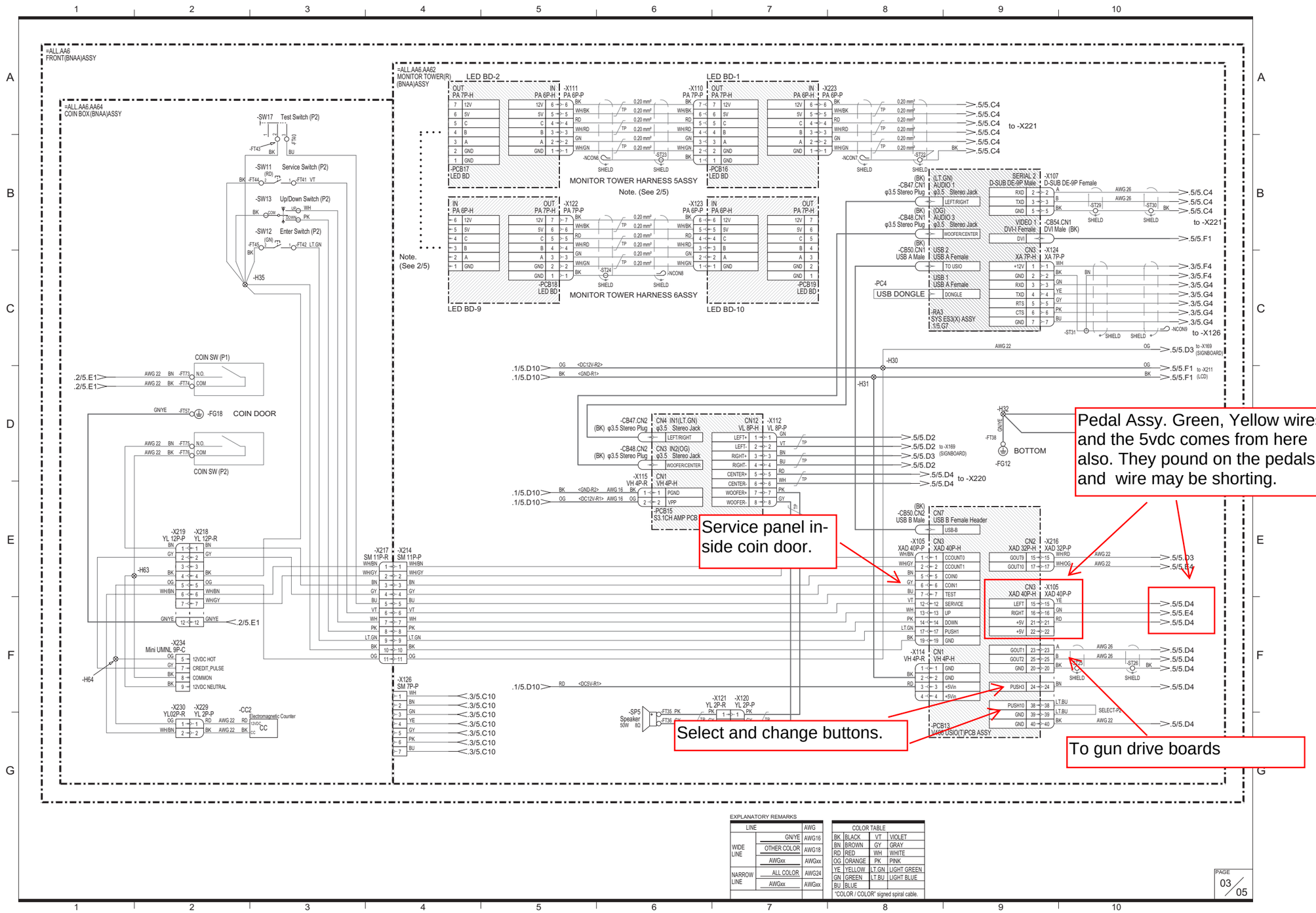
11-1 1/5



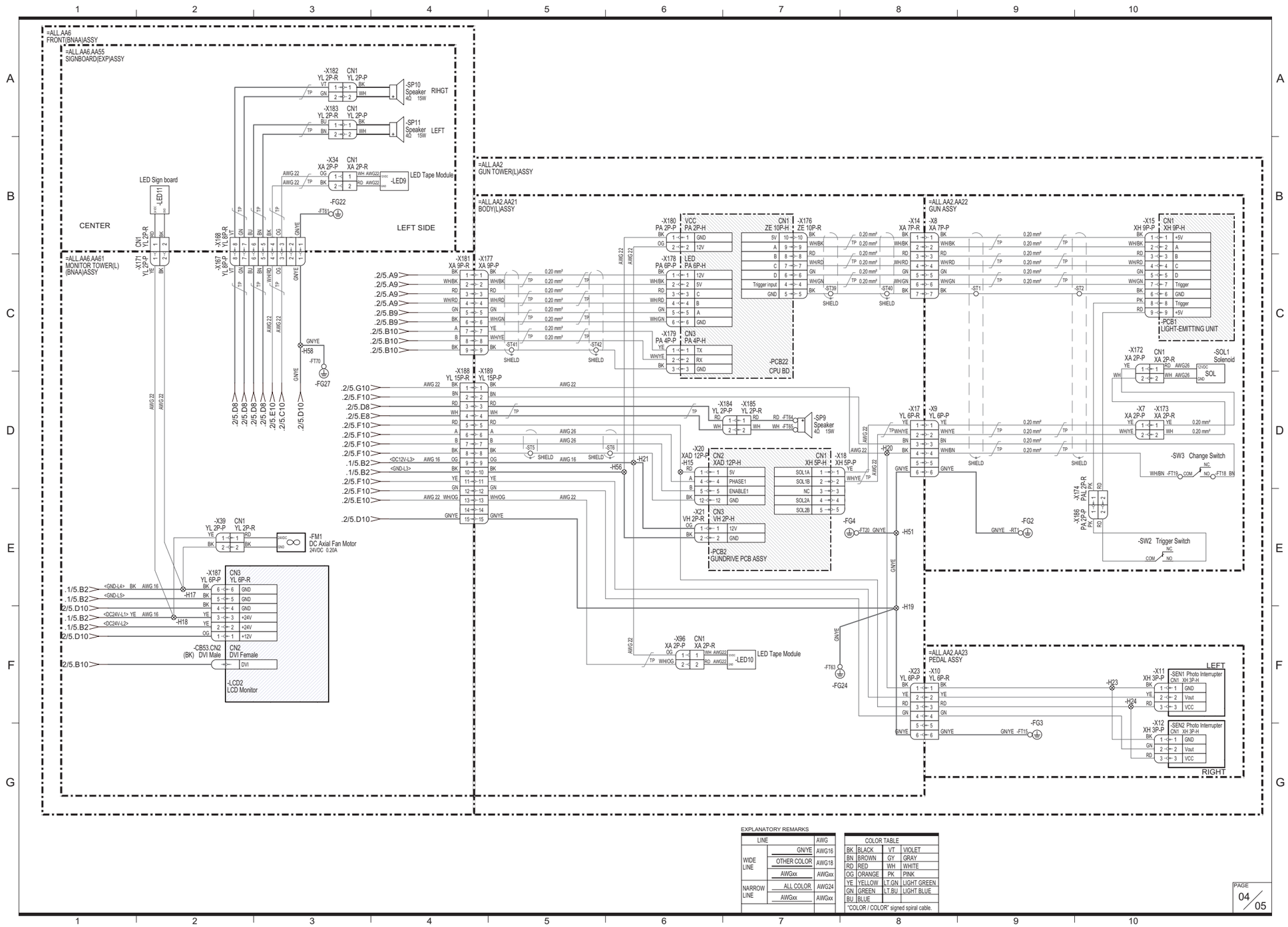
11-2 2/5


=ALL.AA6
FRONT(BNAA)ASSY
Note. Connecting LED BDs
Ten LED BDs should be installed at the top and bottom of the monitor respectively (20 in total), and the BDs should be connected using two types of harness assemblies.
LED BD-5
LED BD-6
LED BD-7
LED BD-8
LED BD-9
LCD MONITOR
LED BD-4
LED BD-3
LED BD-2
LED BD-1
LED BD-10
MONITOR TOWER HARNESS 5 ASSY
MONITOR TOWER HARNESS 6 ASSY
CPU BD
=ALL.AA6.AA61
MONITOR TOWER(L)
(BNAA)ASSY
LED BD-2
LED BD-1
-X48
-X47
-X222
-PCB10
LED BD
-PCB9
LED BD
MONITOR TOWER HARNESS 5ASSY
Note.
-X61
-X62
-PCB11
LED BD
-PCB12
LED BD
MONITOR TOWER HARNESS 6ASSY
LED BD-9
LED BD-10
to -X181
=ALL.AA6.AA64
COIN BOX(BNAA)ASSY
-SW16 Test Switch (P1)
-SW7 Service Switch (P1)
-SW9 Up/Down Switch (P1)
-SW8 Enter Switch (P1)
SERVICE BRACKET
-FG26
-H29
-H61
-H62
-H57
-FG25 SIDE
-X233
-X231
-X232
-CC1
Electromagnetic Counter
-X191
-X192
-X101
-SP4
Speaker
50W 8Ω
-X59
-X58
-CB45.CN2
-CB46.CN2
-X49
-X53
-PCB8
S3.1CH AMP PCB
-CB45.CN1
AUDIO 1
-CB46.CN1
AUDIO 3
-CB49.CN1
USB A Male
USB 2
USB 1
-PC3
USB DONGLE
-RA2
SYS ES3(X) ASSY
-X43
-CB53.CN1
DVI Male (BK)
-X99
-X101
-H11
-H12
-H48
BOTTOM
-FG8
-X41
-X52
-CB49.CN2
USB B Male
CN7
USB B Female Header
-PCB6
V406 USIO(T)PCB ASSY
to -X188
to -X187 (LCD)
to -X167 (SIGNBOARD)
EXPLANATORY REMARKS
COLOR TABLE
'COLOR / COLOR' signed spiral cable.
PAGE 02/05

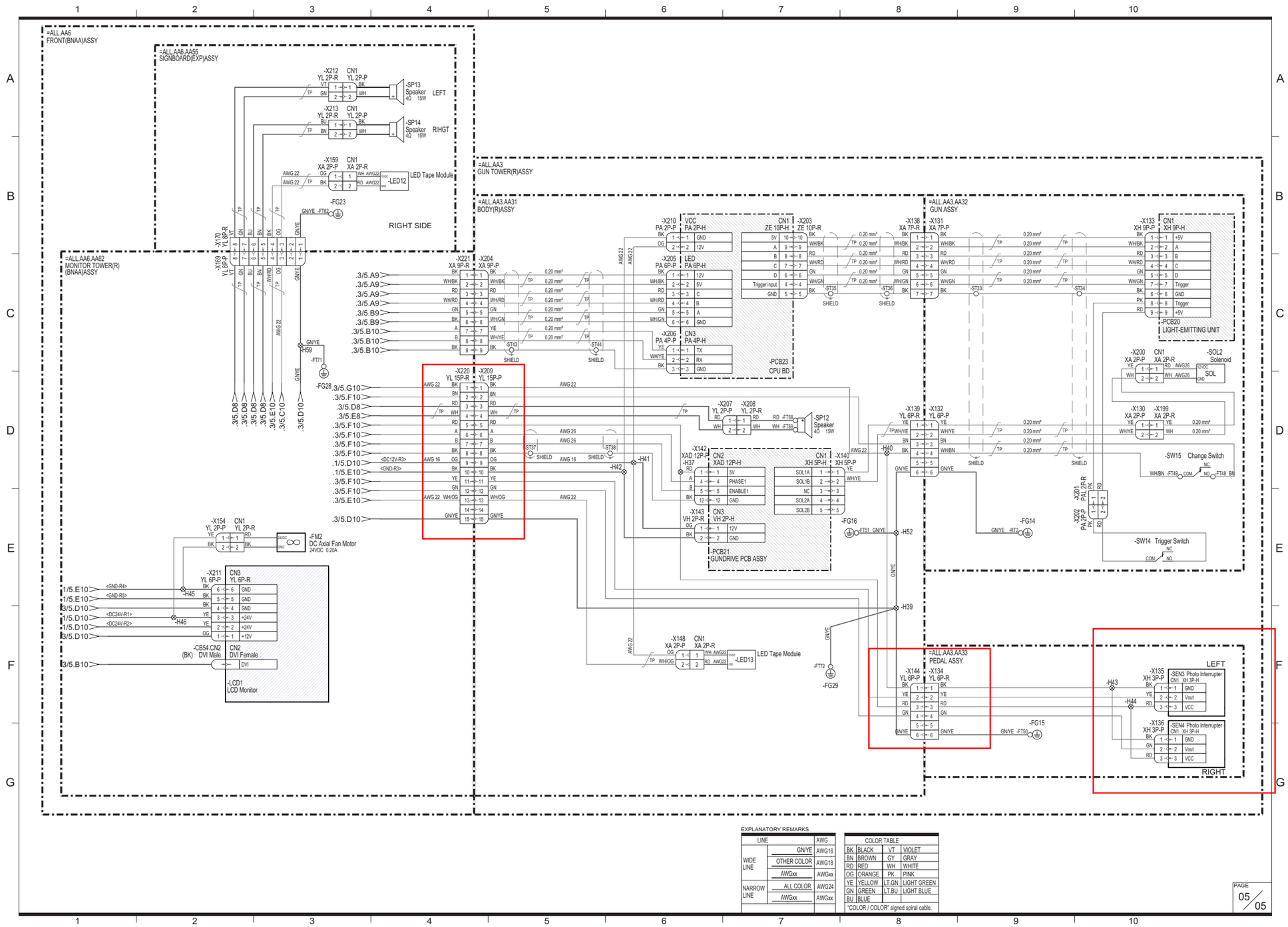
11-3 3/5


=ALL.AA6
FRONT(BNAA)ASSY
=ALL.AA6.AA64
COIN BOX(BNAA)ASSY
=ALL.AA6.AA62
MONITOR TOWER(R)
(BNAA)ASSY
LED BD-2
LED BD-1
LED BD-9
LED BD-10
MONITOR TOWER HARNESS 5ASSY
MONITOR TOWER HARNESS 6ASSY
Note. (See 2/5)
-SW17 Test Switch (P2)
-SW11 Service Switch (P2)
-SW13 Up/Down Switch (P2)
-SW12 Enter Switch (P2)
-H35
COIN SW (P1)
COIN SW (P2)
-FG18 COIN DOOR
-H63
-H64
-X234 Mini UMNL 9P-C
12VDC HOT
CREDIT_PULSE
COMMON
12VDC NEUTRAL
-X230 YL02P-R
-X229 YL 2P-P
-CC2 Electromagnetic Counter
-X219 YL 12P-P
-X218 YL 12P-R
-X217 SM 11P-R
-X214 SM 11P-P
-X126 SM 7P-P
-X111 PA 6P-P
-X110 PA 7P-P
-X223 PA 6P-P
-X122 PA 7P-P
-X123 PA 6P-P
-PCB17 LED BD
-PCB16 LED BD
-PCB18 LED BD
-PCB19 LED BD
to -X221
to -X126
-CB47.CN1 AUDIO 1 φ3.5 Stereo Jack
-CB48.CN1 AUDIO 3 φ3.5 Stereo Jack
-CB50.CN1 USB A Male
-PC4 USB DONGLE
-RA3 SYS ES3(X) ASSY
-X107 D-SUB DE-9P Female
-CB54.CN1 DVI Male (BK)
-X124 XA 7P-H
-H30
-H31
-H32
-FG12 BOTTOM
to -X169 (SIGNBOARD)
to -X211 (LCD)
-CB47.CN2 CN4 IN1(LT.GN) φ3.5 Stereo Jack
-CB48.CN2 CN3 IN2(OG) φ3.5 Stereo Jack
-X115 VH 4P-H
-X112 VL 8P-H
CN1 VH 4P-H
-PCB15 S3.1CH AMP PCB
to -X220
-CB50.CN2 CN7 USB B Female Header
-X105 XAD 40P-P
-X114 VH 4P-H
-X216 XAD 32P-H
-PCB13 V3/S USIO(T)PCB ASSY
-SP5 Speaker 50W 8Ω
-X121 YL 2P-R
-X120 YL 2P-P
Service panel inside coin door.
Select and change buttons.
Pedal Assy. Green, Yellow wires and the 5vdc comes from here also. They pound on the pedals and wire may be shorting.
To gun drive boards
EXPLANATORY REMARKS
LINE
WIDE LINE
NARROW LINE
GN/YE
OTHER COLOR
AWGxx
ALL COLOR
AWG
AWG16
AWG18
AWG24
COLOR TABLE
BK BLACK
BN BROWN
RD RED
OG ORANGE
YE YELLOW
GN GREEN
BU BLUE
VT VIOLET
GY GRAY
WH WHITE
PK PINK
LT.GN LIGHT GREEN
LT.BU LIGHT BLUE
'COLOR / COLOR' signed spiral cable.
PAGE 03/05

11-4 4/5


=ALL.AA6
FRONT(BNAA)ASSY
=ALL.AA6.AA55
SIGNBOARD(EXP)ASSY
CENTER
LEFT SIDE
LED Sign board
-LED11
-X182 YL 2P-R
CN1 YL 2P-P
-SP10 Speaker 4Ω 15W RIHGT
-X183 YL 2P-R
CN1 YL 2P-P
-SP11 Speaker 4Ω 15W LEFT
-X34 XA 2P-P
CN1 XA 2P-R
-LED9 LED Tape Module
-FG22
-FT61
-X171 YL 2P-P
CN1 YL 2P-R
-X167 YL 8P-P
-X168 YL 8P-R
=ALL.AA6.AA61
MONITOR TOWER(L)
(BNAA)ASSY
-H58
-FT70
-FG27
=ALL.AA2
GUN TOWER(L)ASSY
=ALL.AA2.AA21
BODY(L)ASSY
-X180 PA 2P-P
VCC PA 2P-H
-X178 PA 6P-P
LED PA 6P-H
-X179 PA 4P-P
CN3 PA 4P-H
CN1 ZE 10P-H
-X176 ZE 10P-R
-PCB22
CPU BD
-X181 XA 9P-P
-X177 XA 9P-R
-X188 YL 15P-P
-X189 YL 15P-R
-X184 YL 2P-P
-X185 YL 2P-R
-SP9 Speaker 4Ω 15W
-X20 XAD 12P-P
CN2 XAD 12P-H
-X21 VH 2P-R
CN3 VH 2P-H
CN1 XH 5P-H
-X18 XH 5P-P
-PCB2
GUNDRIVE PCB ASSY
-FG4
-FT20 GN/YE
-H51
-H19
-FG24
-X96 XA 2P-P
CN1 XA 2P-R
-LED10 LED Tape Module
=ALL.AA2.AA22
GUN ASSY
-X14 XA 7P-R
-X8 XA 7P-P
-X15 XH 9P-P
CN1 XH 9P-H
-PCB1
LIGHT-EMITTING UNIT
-X172 XA 2P-P
CN1 XA 2P-R
-SOL1 Solenoid
SOL
-X7 XA 2P-P
-X173 XA 2P-R
-X17 YL 6P-P
-X9 YL 6P-P
-H20
-SW3 Change Switch
-FG2
-X174 PAL 2P-R
-X185 PA 2P-P
-SW2 Trigger Switch
=ALL.AA2.AA23
PEDAL ASSY
-X23 YL 6P-P
-X10 YL 6P-R
-H23
-H24
-X11 XH 3P-P
LEFT
-SEN1 Photo Interrupter
CN1 XH 3P-H
-X12 XH 3P-P
-SEN2 Photo Interrupter
RIGHT
-FG3
-FT15
-FM1 DC Axial Fan Motor 24VDC 0.20A
-X39 YL 2P-P
CN1 YL 2P-R
-X187 YL 6P-P
CN3 YL 6P-R
-H17
-H18
-CB53.CN2 (BK) DVI Male
CN2 DVI Female
-LCD2 LCD Monitor
EXPLANATORY REMARKS
LINE
AWG
WIDE LINE
GN/YE AWG16
OTHER COLOR AWG18
AWGxx AWGxx
NARROW LINE
ALL COLOR AWG24
AWGxx AWGxx
COLOR TABLE
BK BLACK
BN BROWN
RD RED
OG ORANGE
YE YELLOW
GN GREEN
BU BLUE
VT VIOLET
GY GRAY
WH WHITE
PK PINK
LT.GN LIGHT GREEN
LT.BU LIGHT BLUE
"COLOR / COLOR" signed spiral cable.
PAGE 04/05

11-5 5/5


=ALL AA6
FRONT(BNAA)ASSY
=ALL AA6.AA55
SIGNBOARD(EXP)ASSY
-SP13 Speaker 4Ω 15W LEFT
-SP14 Speaker 4Ω 15W RIHGT
-LED12 LED Tape Module
RIGHT SIDE
=ALL AA3
GUN TOWER(R)ASSY
=ALL AA3.AA31
BODY(R)ASSY
=ALL AA3.AA32
GUN ASSY
=ALL AA6.AA62
MONITOR TOWER(R)
(BNAA)ASSY
-PCB23 CPU BD.
-PCB20 LIGHT-EMITTING UNIT
-SOL2 Solenoid
-SW15 Change Switch
-SW14 Trigger Switch
-FM2 DC Axial Fan Motor 24VDC 0.20A
-LCD1 LCD Monitor
-LED13 LED Tape Module
-PCB21 GUNDRIVE PCB ASSY
=ALL AA3.AA33
PEDAL ASSY
LEFT
RIGHT
-SEN3 Photo Interrupter
-SEN4 Photo Interrupter
EXPLANATORY REMARKS
COLOR TABLE
"COLOR / COLOR" signed spiral cable.
PAGE 05/05

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libogg

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pcre

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