



DEAD HEAT UNLEASHED

Operation Manual

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

⚠ WARNING

- To ensure safe operation of the machine, be sure to read this Operation Manual before use.
- Keep this Operation Manual in a safe place for quick access whenever needed.

Introduction

Thank you very much for purchasing DEAD HEAT UNLEASHED (referred to as the “machine” in this 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

The copyrights, trademarks and other rights used by the machine are noted at the end of this Operation Manual.


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


Instructions to the Owner

If you delegate the work for installing, operating, moving, transporting, maintaining or disposing 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 linked to safety are indicated with the following symbol.

 : 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.

Technician: 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 and 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 a fire or accident.
- Sections of the LCD monitor remain at a high temperature and high voltage even after the power switch is turned off.
To avoid electric shock or burns, be careful not to accidentally touch these sections.
- Dust accumulating on the power cord plug may cause a fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and cause a fire or burns.
- Damage to the power cord may result in a 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. It may result in electric shock or electrical leakage.
- Do not touch the power cord plug with wet hands. It may result in electric shock.
- The power capacity of the machine is AC 120 V (or AC 230 V), 3.2 A. To prevent fire and electric shock, use interior wiring that conforms to these power supply specifications.
- Use a power supply voltage range of AC 110 V to 130 V (or AC 230 V). Using a voltage outside this range may result in a fire or electric shock. However, to ensure that the machine operates in the optimum condition, keep the voltage at AC 120 V (or AC 230 V) as much as possible.
- To ensure safe use of the machine, be sure to perform the pre-operation inspection (see “7-2 Pre-operation Inspection” on page 18) and service (see “8B. Service” on page 50) 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 our company. 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.
- 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 contain important information for ensuring safety. Be sure to observe the following.
 - 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. Make sure that the labels are not hidden by other game 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.

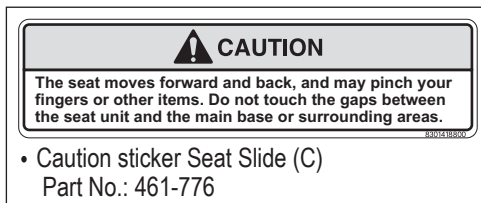
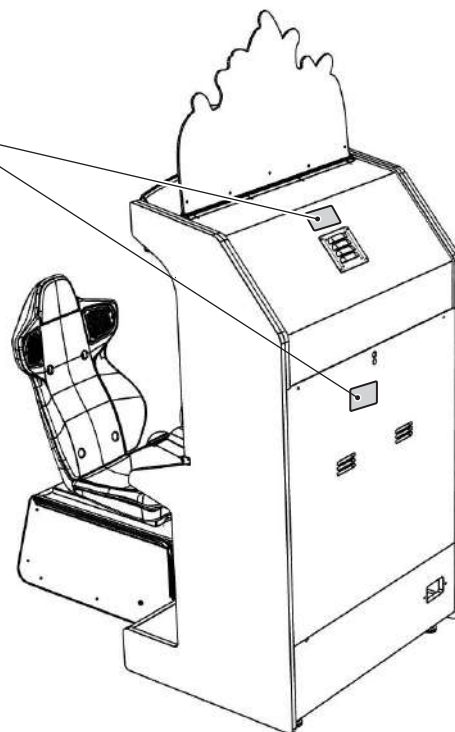


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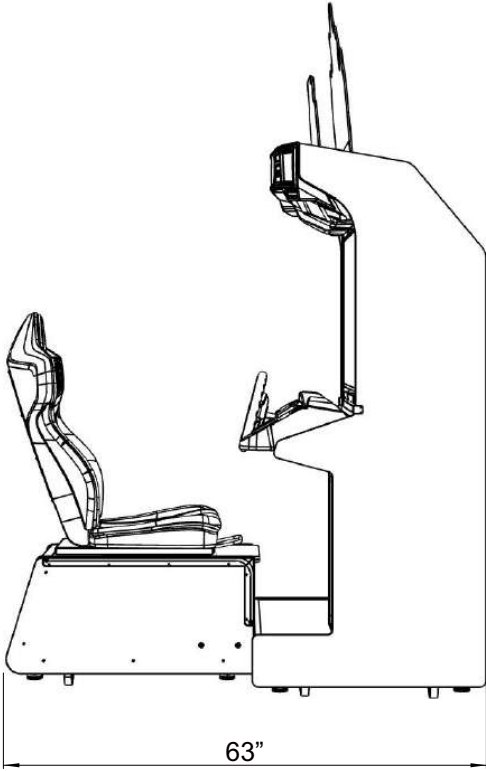
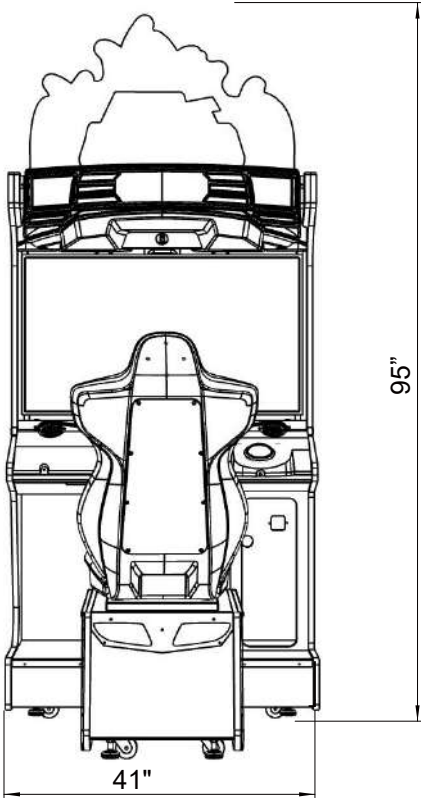
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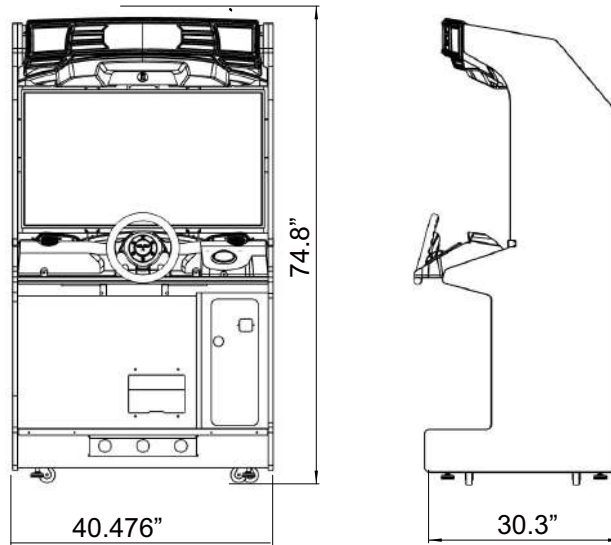
2. Specifications

- (1) Rated power supply AC 120 ± 10 V (50/60 Hz)/230 V ± 10 V (50/60 Hz)
- (2) Rated power consumption 600 W
- (3) Maximum consumption current 4.75 A/2.4 A
- (4) Monitor LCD monitor (43-inch)
- (5) Dimensions when installed Width (W) 41" × depth (D) 63" × height (H) 95"



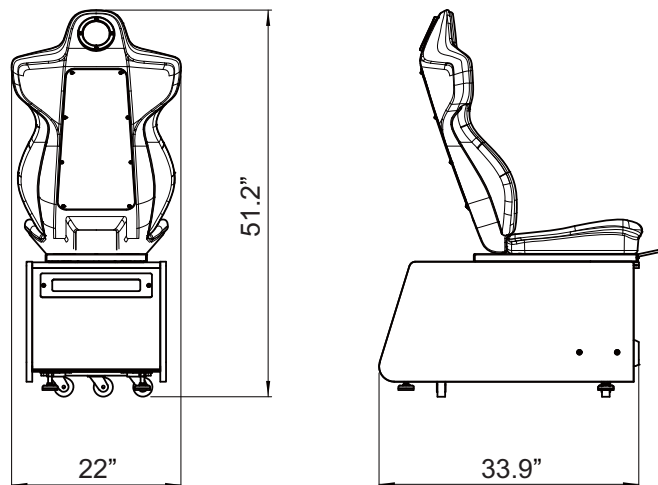
Front assembly

Width (W) 40.476" × depth (D) 30.3" × height (H) 74.8"



Seat assembly

Width (W) 22" × depth (D) 33.9" × height (H) 51.2"



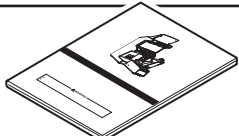



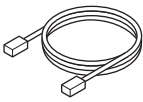
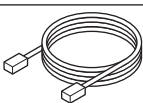
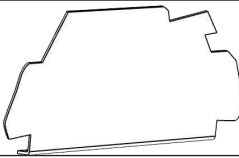
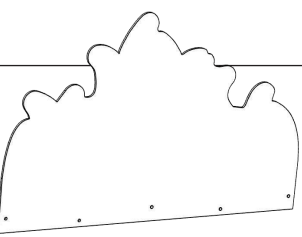

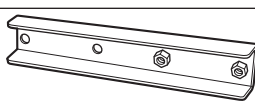




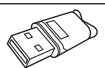

(6) Weight

① When installed	Approx. 506 lb	230 kg.
② When disassembled		
Front assembly	Approx. 402.6 lb	183 kg.
Seat assembly	Approx. 96.8 lb	44 kg.
Signboard assembly	Approx. 6.6 lb	3 kg.

3. Package Contents

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

● Supplied Item List

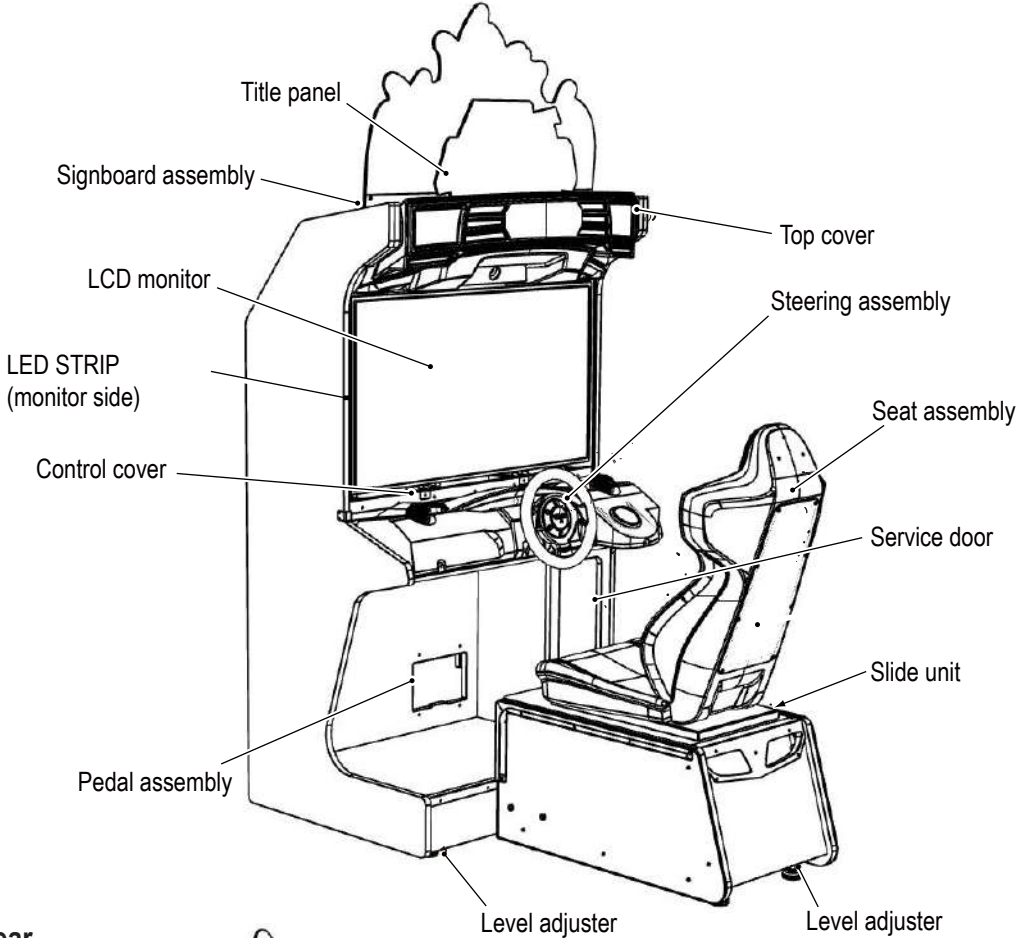
No.	Name	Specification	Qty.
1	Operation Manual	(this manual) 	1
2	Service key (FRONT)		2
3	Service key (BACK)		2
4	Cashbox key		2
5	Communication cable	1 m 	1*2
6	Communication cable	5 m 	1
7	Marquee Front		1
8	Marquee Back		1
9	Torx bolt	M5 x 16 	8
10	Connection bracket		2
11	Button head bolt (black)	M8 x 30 	8
12	Flat washer	ø9 x 30 x 2.3 	4
13	Torx wrench	M5-T25 	1
14	Torx wrench	M8-T40 	1
15	USB dongle		1
16	Power cord		1

*1 Keep any unused contents routers in a safe place to avoid losing them.

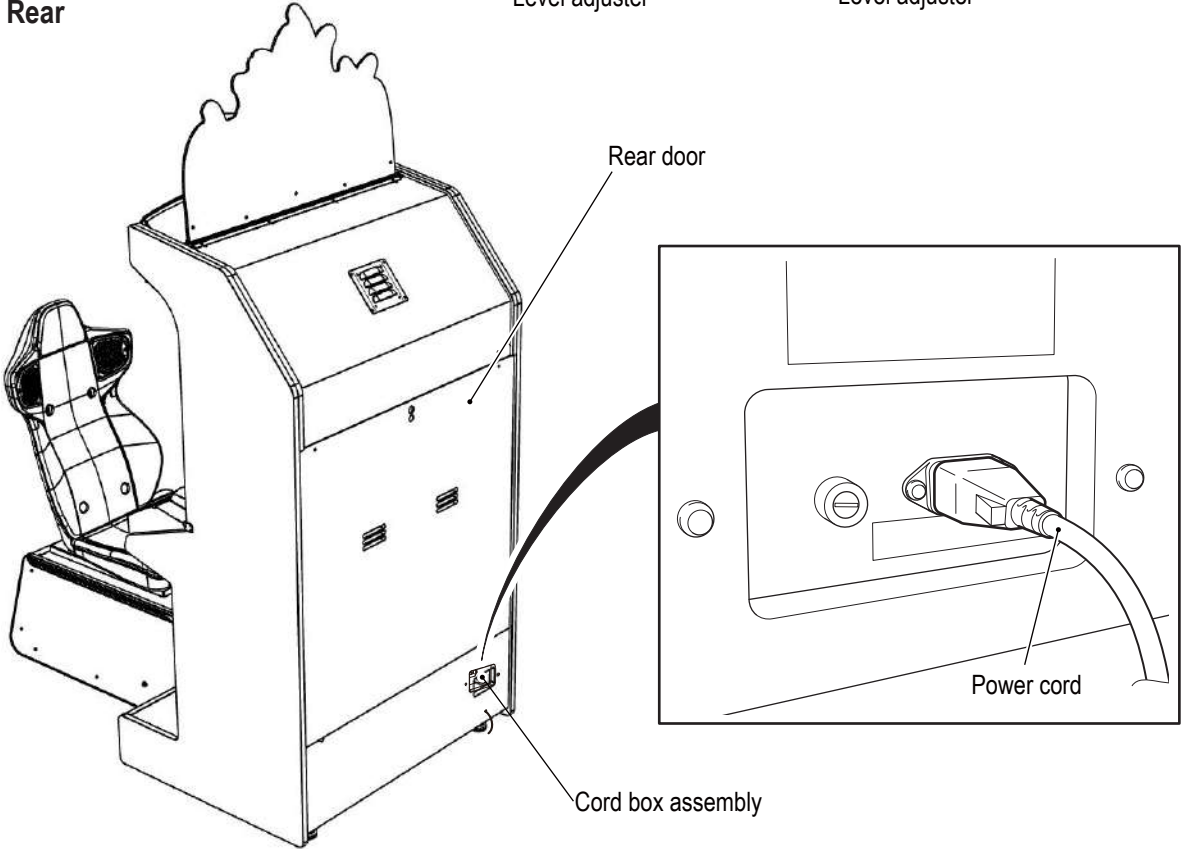
*2 The quantity noted in the table above is the quantity per 2 ~ 4 machines.

4. Overall Structure (Part Names)

Front



Rear



5. Delivery and Installation Conditions

WARNING

- Install the machine according to the instructions in this Operation Manual. If you do not follow these instructions, it may result in a fire, electric shock, injury or malfunction.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and cause a 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 “8A-2-3 Connecting the Power Cord and Ground” on page 66.)
- Install the machine securely by using the level adjusters. Unstable machine installation may result in an accident or injury. (See “8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment” on page 40)

5-1 Installation Conditions

5-1-1 Installation Locations to Avoid

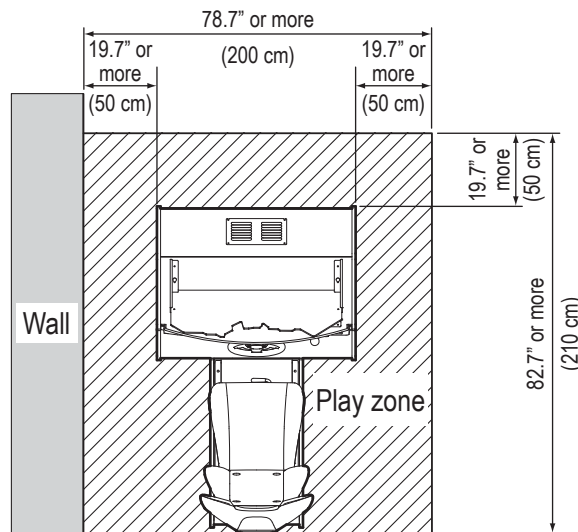
WARNING

- The machine is designed for indoor use. Never install the machine outside 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

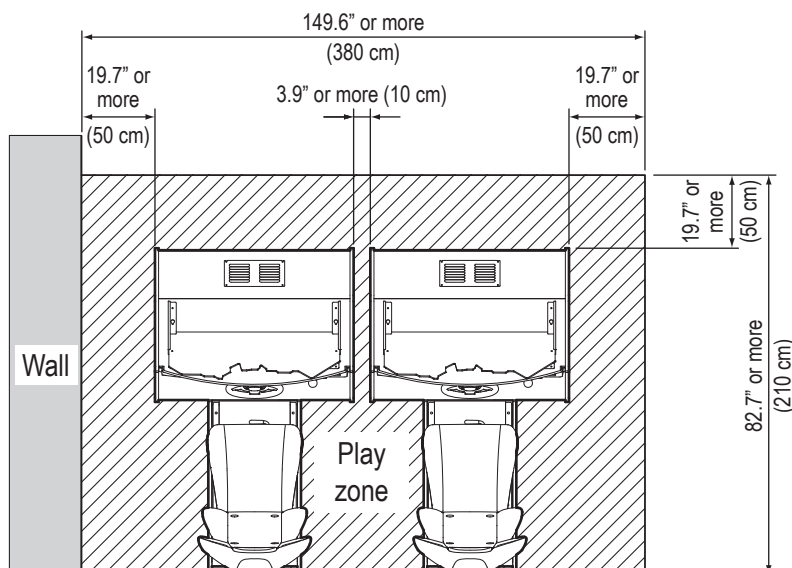
5-1-2 Play Zone for the Installed Machine

⚠ CAUTION

- Create a play zone around the machine so that the player does not make contact with bystanders or passersby.
- Keep 19.7" (50 cm) or more between the rear of the machine and the wall or other machines to enable the rear door to be removed for service.
- The room height must be 94.5" (240 cm) or more from the floor to the ceiling.



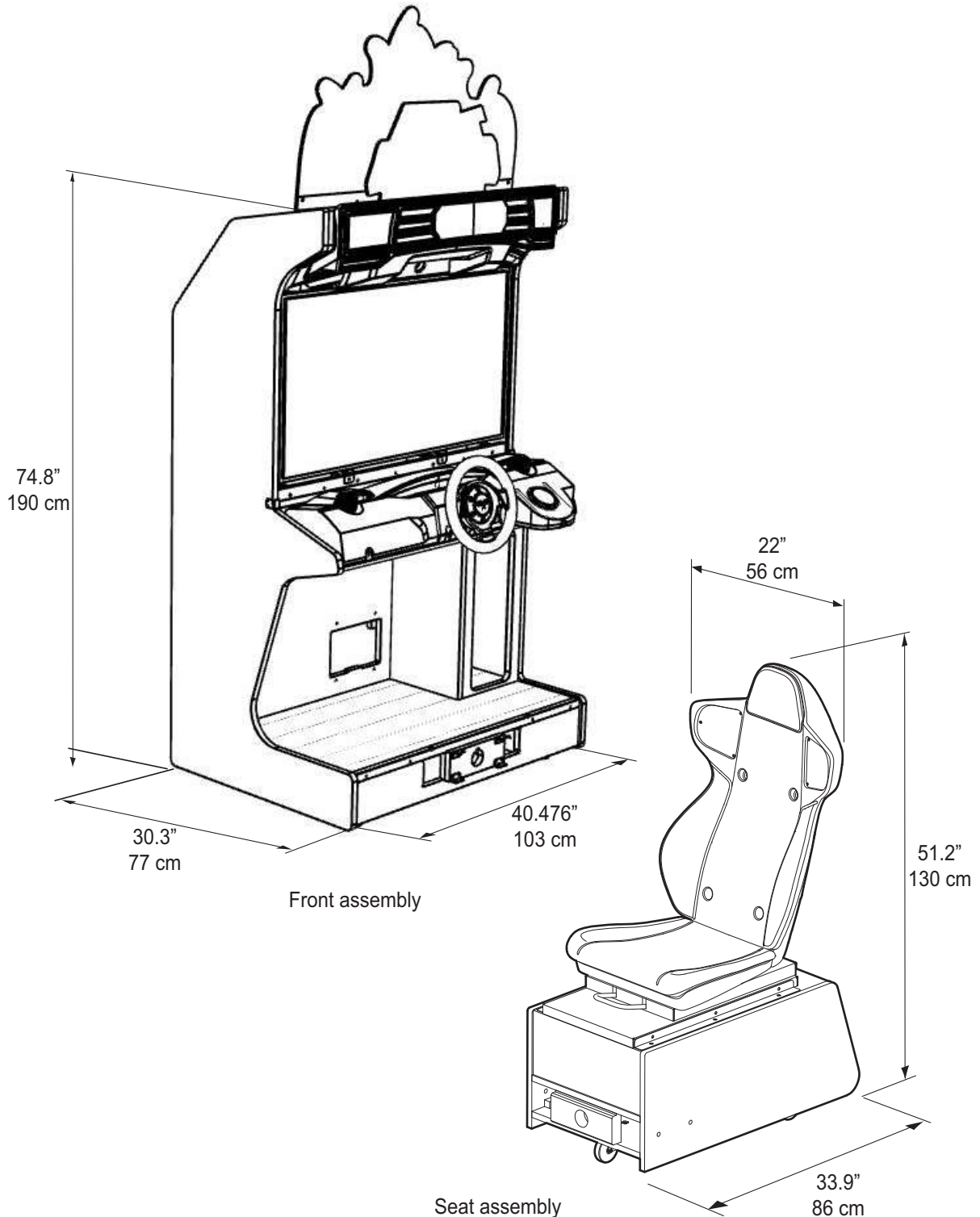
- When installing two or more machines, keep a gap of 3.9" (10 cm) or more between the machines.
Example: Installing two machines



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

The machine is disassembled at the time of shipment. The sizes of the main parts are as follows.

- Front assembly Width (W) 40.476" (103 cm.) (x depth (D) 30.3" (77cm.) x height (H) 74.8" (190 cm.) Weight 402.6 lb 183 Kg.
- Seat assembly Width (W) 22"(56 cm.) x depth (D) 33.9"(86 cm.) x height (H) 51.2"(130cm) Height 96.8 lb 44 kg



6. Moving and Transporting

WARNING

- Do not leave the machine on a slope. It may fall over or cause an accident.

6-1 Moving (On the Same Floor)

WARNING

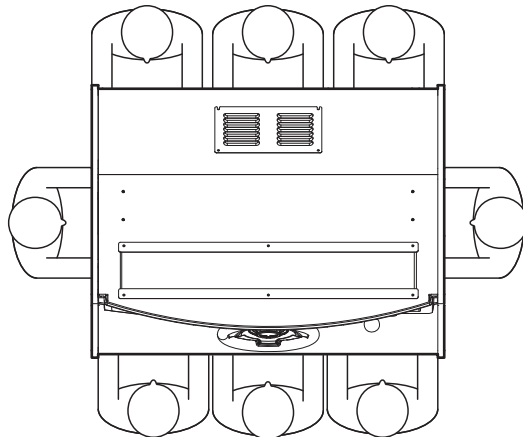
- When moving the machine on the same floor, first separate the front assembly from the seat assembly.
Failure to do this may result in floor damage, or the machine may block your view and result in a collision or other accident.
(See “8A-1 Assembly” on page 38.)
 - **6** (See in “8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment” on page 40.)
- Move the machine carefully to avoid damaging it.
- The plastic areas are weak. Do not exert strong amounts of force on them.
- Even when moving the machine only a short distance, be sure to raise the level adjusters to their highest level.
(See “8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment” on page 40.)
- Be sure to turn the power off before performing these operations.
- Handle the power cord carefully. (See “8A-2-3 Connecting the Power Cord and Ground” on page 47.)

6-2 Transporting

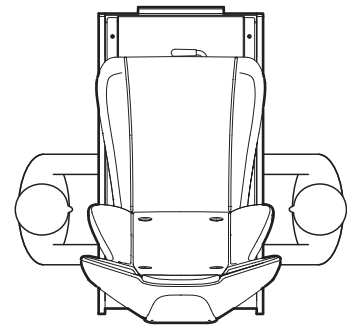
6-2-1 Transporting Manually (Such as Carrying on Stairs)

WARNING

- Before transporting the machine manually, be sure to separate the front assembly, seat assembly and signboard assembly, and raise all the level adjusters to their highest level. (See “8A-1 Assembly” on page 38.) Transporting the machine (such as carrying it on stairs) while it is fully assembled may result in an accident.
- When transporting the machine manually, be sure to use the following number of people. Overburdening yourself may result in an accident or injury!
 - Front assembly (approx. 402.6 lb 183 kg): 8 people or more
 - Seat assembly (approx. 96.8 lb 44 kg): 2 people or more



Front assembly



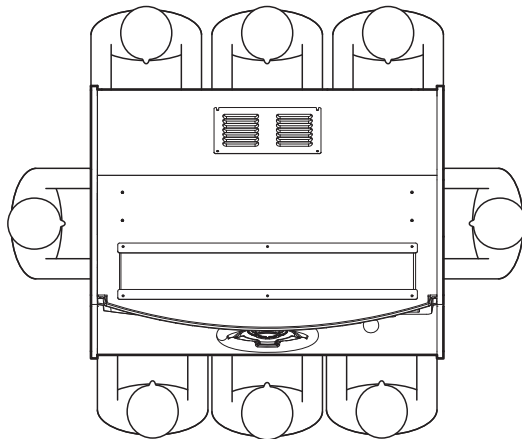
Seat assembly

- Do not subject the machine to impact while lowering it.

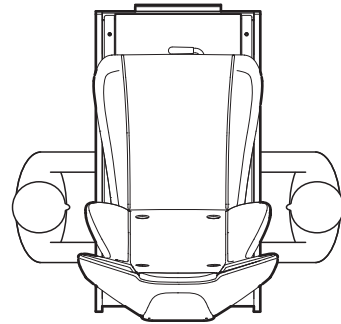
6-2-2 Transporting on a Vehicle

WARNING

- Before transporting the machine on a vehicle, be sure to separate the front assembly, seat assembly and signboard assembly, and raise all the level adjusters to their highest level.
Transporting the machine while it is fully assembled may result in an accident.
- When using a fork lift to transport the machine, observe the following. Failure to observe the following instruction may result in an accident, such as the machine falling over.
 - Make sure that the machine is balanced properly during transportation.
- When transporting the machine manually, be sure to use the following number of people. Overburdening yourself may result in an accident or injury!
 - Front assembly (approx. 402.6 lb 183 kg) : 8 people or more
 - Seat assembly (approx. 96.8 lb 44 kg) : 2 people or more



Front assembly



Seat assembly

- Do not subject the machine to impact while lowering it.

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 a fire or accident.
- Dust accumulating on the power cord plug may cause a fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and cause a fire or burns.
- Before operating the machine, be sure to check that installation has been performed according to the instructions and specified procedures (5. Delivery and Installation Conditions, page 11) in this Operation Manual. Failure to install the machine correctly may result in a fire, electric shock, injury or malfunction.
- The warning labels contain important information for ensuring safety. Be sure to observe the following.
 - 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. Make sure that the labels are not hidden by other game 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.
- To ensure safe use of the machine, be sure to perform the pre-operation inspection (see “7-2 Pre-operation Inspection” on page 17) and service (see “8B. Service” on page 50) described in this Operation Manual. Omitting these inspections or service may result in an accident.

7-1 Safety Precautions for Playing

CAUTION

- If players start feeling ill because of the game images or light stimulation, they must stop playing 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 consult a doctor as soon as possible. When pre-school children play, instruct their parents or guardians to observe them.

7-2 Pre-operation Inspection

Check the items below before starting machine operations.

If there is an abnormality, resolve it by referring to “8B-2 Troubleshooting” on page 51.

7-2-1 Safety Inspection (Before Power On)

WARNING

- Before operating the machine, perform “7-2-1 Safety Inspection (Before Power On)” on page 17.
This is required to prevent accidents or injuries.
- Before operating the machine, check “5-1-1 Installation Locations to Avoid” on page 11. This is required to prevent accidents or injuries.
- Operating the machine while parts are broken, damaged or deteriorated, or while the installation is defective, may result in an injury to the player or a bystander. If you discover an abnormality, replace the affected part immediately. To order parts, contact your distributor.

- (1) Are all warning labels in place? (See “1-4 Machine Warning Labels” on page 3.)
- (2) Are all warning labels legible? (See “1-4 Machine Warning Labels” on page 3.)
- (3) Are all level adjusters adjusted properly? (See “8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment” on page 40.)
- !G Is the specified play zone provided? (See “5-1-2 Play Zone for the Installed Machine” on page 11.)
- (5) Are the power cord and communication cables laid out safely so they will not cause players or other customers to trip over them?
- !6 Is the power cord securely connected to the outlet and the cord box assembly on the bottom of the machine rear? (See “8A-2-3 Connecting the Power Cord and Ground” on page 47.)
- (7) Is the power cord plug free from dust? (See “8A-2-3 Connecting the Power Cord and Ground” on page 47.)
- (8) Are molded parts such as the seat assembly free from damage?

Inspect the following items 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.

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

7-2-2 Function Inspection (After Power On)

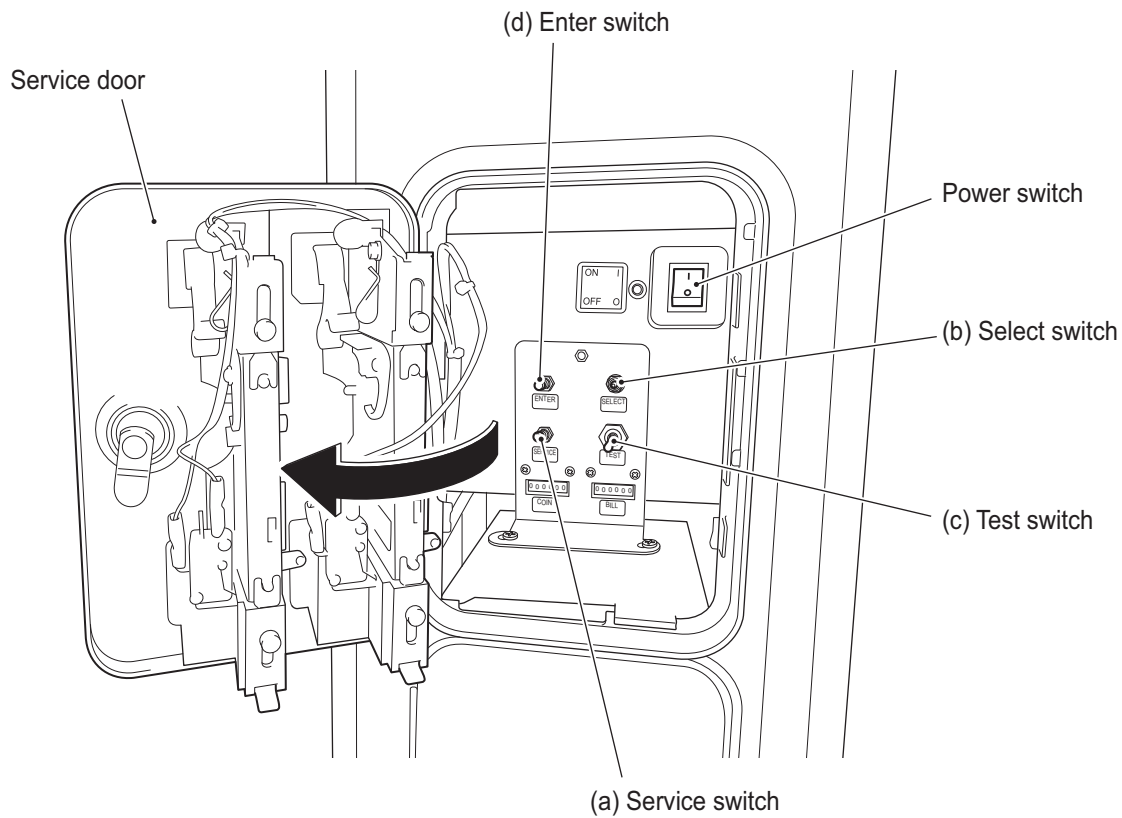
Check the following items in Test mode. (See “7-4-2 Adjustment Switches” on page 21.)

- (1) Check the lamps. (Do the fluorescent lamp and Ultraheat button light up?)
(See “7-6-4 (b) LAMP TEST” on page 32.)
- (2) Check the button operation.
(See “7-6-4 (a) SWITCH TEST” on page 30.)
- (3) Check the steering operation.
(See “7-6-4 (a) SWITCH TEST” on page 30.)
- (4) Check the pedal operation.
(See “7-6-4 (a) SWITCH TEST” on page 30.)
- (5) Check the displayed images. (Does the monitor operate properly?)
(See “7-6-5 Screen Adjustment (MONITOR TEST)” on page 33.)
- (6) Check the audio. (Is sound produced by each speaker?)
(See “7-6-6 Volume Adjustment (SOUND TEST)” on page 34.)

7-4 Explanation of the Power Switch and Adjustment Switches

7-4-1 Power Switch Position and Turning the Power Switch On

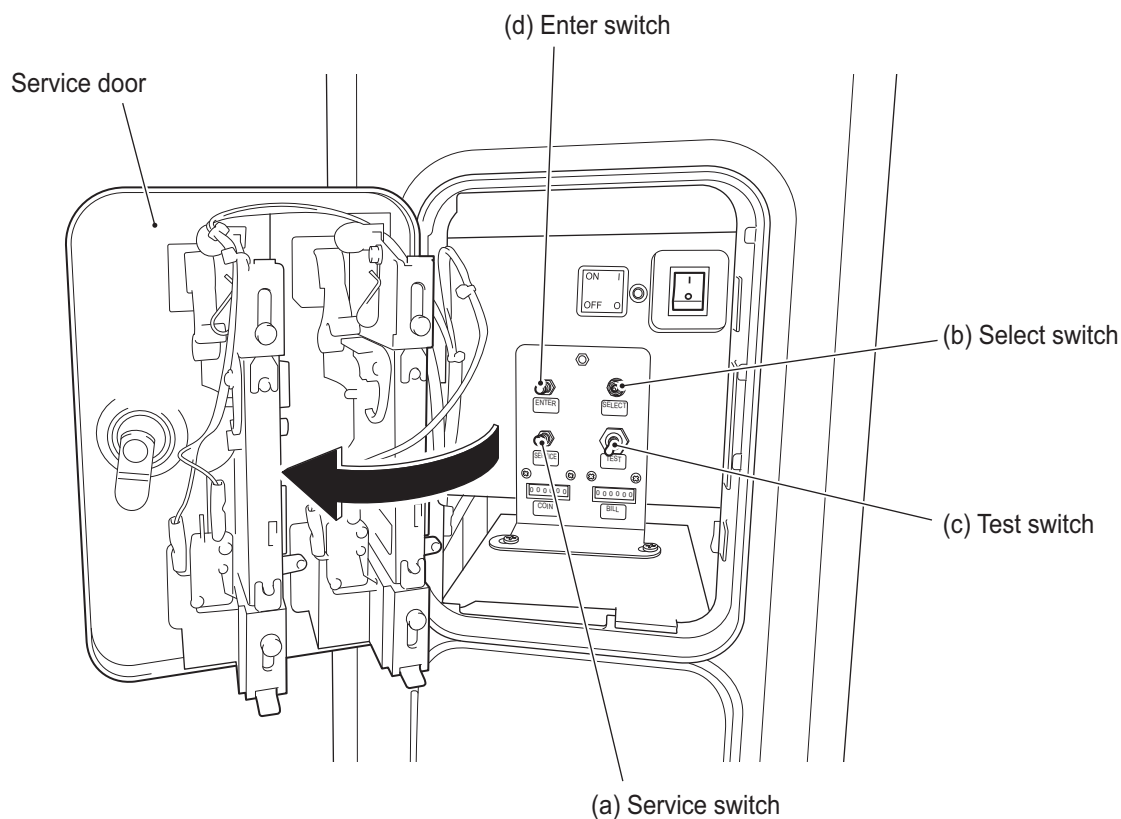
- 1 Turn on the power switch of the machine.



- Do not turn the power switch on and off repeatedly, because it may cause a machine malfunction.

7-4-2 Adjustment Switches

Open the service door for access to the adjustment switches.



(a) Service switch (red)

Press this button to increase the coin count without operating the coin counter.

(b) Select switch

In Test mode, flip this switch up or down to select an item or setting (value).

(c) Test switch

Turn this switch on to activate Test mode.

Test mode is used to test the monitor and other parts.

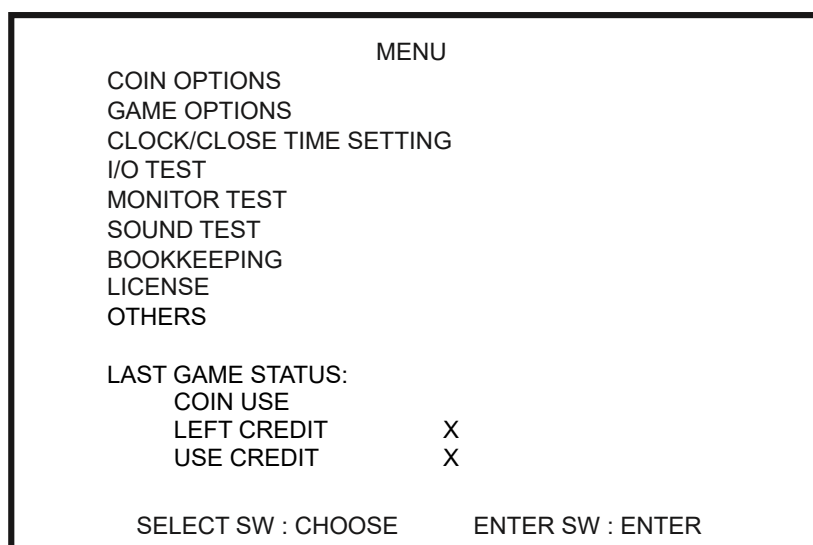
(d) Enter switch (red)

After selecting an item or setting (value) with the select switch, press this button to enter or execute the selection.

7-5 Test Mode

7-5-1 Description of the MENU Screen

- 1** Unlock the service door with the supplied key and set the test switch to on. The MENU screen appears on the monitor.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** When the selection is entered, the screen changes to the detailed information for the selected item.



MENU screen

Item	Description	Reference
COIN OPTIONS	Setting for the game cost, etc.	See 7-5-2
GAME OPTIONS	Game contents settings.	See 7-5-3
CLOCK/CLOSE TIME SETTING	Setting for date and time and shop closing time	See 7-5-4
I/O TEST	Test for the switches, lamps, etc.	See 7-5-5
MONITOR TEST	Test for the monitor.	See 7-5-6
SOUND TEST	Volume adjustment, etc.	See 7-5-7
BOOKKEEPING	This screen displays various game related data.	See 7-5-8
LICENSE	The licenses related to the game.	See 7-5-9
OTHERS	Settings for the language, etc.	See 7-5-10

- 5** After completing all the settings, set the test switch to off.

- **Before entering Test mode, make sure that any games being played on other machines that are connected by communication have finished. Otherwise, the game being played may be affected.**

7-5-2 COIN OPTIONS

This screen is used to set the cost of each game.

- 1** In the MENU screen, select COIN OPTIONS and press the enter button. The COIN OPTIONS screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** After entering the selection, use the select switch to change the item setting.

COIN OPTIONS [DEFAULT IN GREEN]	
GAME COST	1 CREDIT(S)
GAME FEE: NOMAL MODE	1 CREDIT(S)
GAME FEE: BONUS CREDIT MODE	2 CREDIT(S)
FREE PLAY	OFF
EXIT	
SELECT SW : CHOOSE ENTER SW : ENTER	

COIN OPTIONS screen

Item	Description	Default
GAME COST	Setting for the number of coins required for a game Setting range: 1 to 19	1
GAME FEE: NOMAL MODE	Set to the same value as the game cost	--
GAME FEE: BONUS CREDIT MODE	Set to twice the game cost	--
FREE PLAY	Free play setting OFF: Normal coin operation ON: Free play operation	OFF

- 5** After changing the setting, press the enter button to return to the item selection.
- 6** Select EXIT and press the enter button to return to the MENU screen.

7-5-3 GAME OPTIONS

This screen is used to set the communication.

- 1** In the MENU screen, select GAME OPTIONS and press the enter button. The GAME OPTIONS screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** After entering the selection, use the select switch to change the item setting.

GAME OPTIONS [DEFAULT IN GREEN]	
LINKED	※
PCB ID	※
TOTAL MACHINES	※
RESISTANCE / STEERING POWER	ON
CAMERA	ON
BONUS CREDIT MODE: ※ CREDITS = 3 races	ON
BONUS CREDIT MODE WAIT TIME	10
EXIT	
SELECT SW : CHOOSE ENTER SW : ENTER	

GAME OPTIONS screen

Item	Description	Default
LINKED=	Communication status display	
PCB ID	Sets the ID of the PCB. Setting range: 1 to 4	1
TOTAL MACHINES	Sets the number of machines to connect by communication. Setting range: 1 to 4	1
RESISTANCE / STEERING POWER	Enables or disables the steering wheel feedback (reactive force) feature.	ON
CAMERA	Enables or disables use of the camera.	ON
BONUS CREDIT MODE	Enables or disables "BONUS CREDIT MODE".	ON
BONUS CREDIT MODE WAIT TIME	Time until automatically returns to normal mode after switching to "BONUS CREDIT MODE".	10

- 5** After changing the setting, press the enter button to return to the item selection.
- 6** Select EXIT and press the enter button to return to the MENU screen.

 **CAUTION**

- **When connecting an additional machine to machines that are already communicating and in operation, first be sure to initialize the data of the additional machine by performing PROFILE INITIALIZE in Test mode. Otherwise, when you connect the additional machine to the machines that are in operation, the player data of the machines in operation may be deleted. The deleted data cannot be restored.**
- **If you cannot activate communication for racing with other machines despite adjusting the various settings, turn off the power to all the machines, and then turn them all on again at the same time.**

7-5-4 CLOCK/CLOSE TIME SETTING

This screen is used to set Setting for date and time and shop closing time.

30 minutes before the set closing time, an indication that "the store will be closing soon" will be displayed during the attract loop.

- 1** In the MENU screen, select CLOCK/CLOSE TIME SETTING and press the enter button. The CLOCK/CLOSE TIME SETTING screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** After entering the selection, use the select switch to change the item setting.

CLOCK/CLOSE TIME SETTING	
[DEFAULT IN GREEN]	
CURRENT TIME	2022/01/01 FRI 10:00
CHANGE TO SET	2022/01/01 FRI 10:00
DAYLIGHT SAVING TIME /SUMMER TIME	OFF
CLOSE TIME SETTING SCHEDULE TYPE	OFF
EXIT	
SELECT SW : CHOOSE	ENTER SW : ENTER

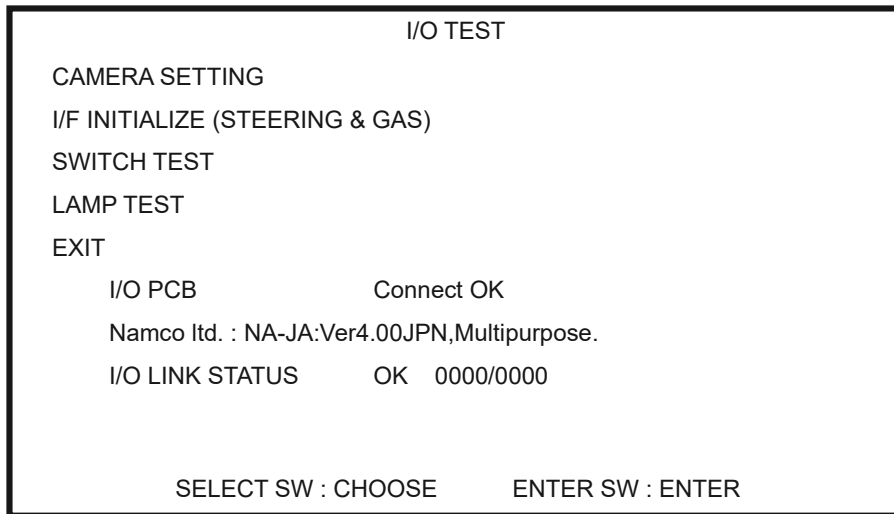
CLOCK/CLOSE TIME SETTING screen

- 5** After changing the setting, press the enter button to return to the item selection.
- 6** Select EXIT and press the enter button to return to the MENU screen.

7-5-5 I/O TEST

This screen is used to test switches and other components.

- 1** In the MENU screen, select I/O TEST and press the enter button.
The I/O TEST screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** When the selection is entered, the screen changes to the detailed information for the selected item.



I/O TEST screen

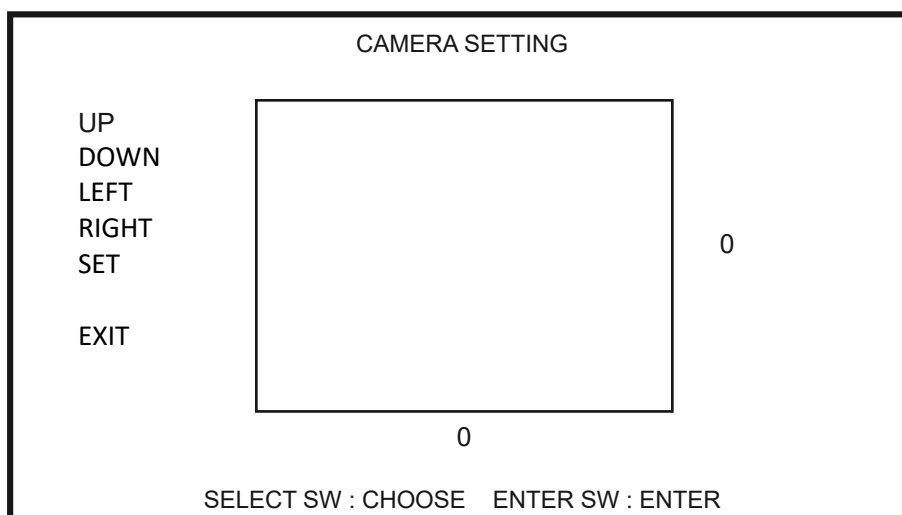
Item	Description
CAMERA SETTING	Adjusts the shooting position of the camera.
I/F INITIALIZE (STEERING & GAS)	Initializes the control parts (steering wheel, accelerator).
SWITCH TEST	Tests the various switches.
LAMP TEST	Tests the lamps.
I/O PCB	Checks the operating status of the NA-JV PC board (I/O PCB).

- 5** After completing all the settings, select EXIT and press the enter button to return to the MENU screen.

(a) CAMERA SETTING

This screen is used to adjust the shooting position of the camera.

- 1** In the I/O TEST screen, select CAMERA SETTING and press the enter button. The CAMERA SETTING screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** When the enter button is pressed, the values changes in accordance with the item, which changes the camera shooting position little by little.

**CAMERA SETTING screen**

- 4** To save the changes, select SET and press the enter button.

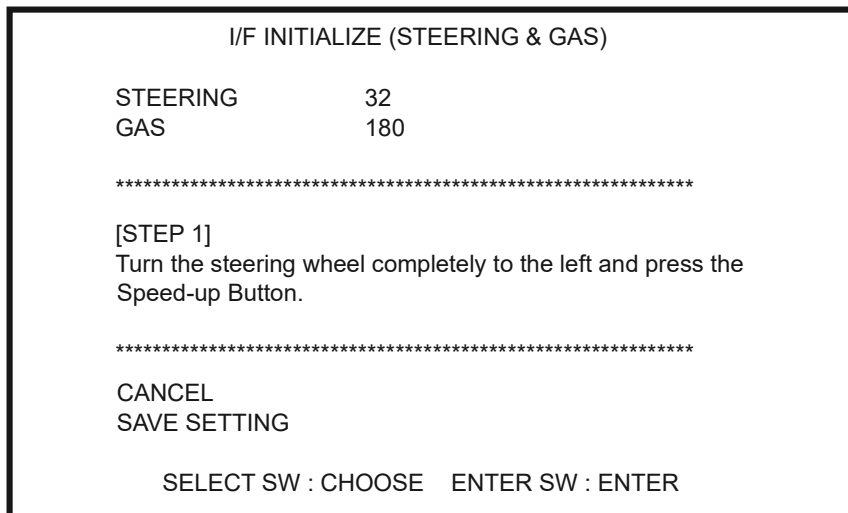
(b) I/F INITIALIZE (STEERING & GAS)

This screen is used to initialize the control parts (steering wheel, accelerator).

- 1** In the I/O TEST screen, select I/F INITIALIZE (STEERING & GAS) and press the enter button.
The I/F INITIALIZE (STEERING & GAS) screen appears.

- 2** Perform STEP 1 to STEP 6 below to initialize.

- STEP 1 : Turn the steering wheel completely to the left and press the Speed-up Button.
- STEP 2 : Turn the steering wheel completely to the right and press the Speed-up Button.
- STEP 3 : Center the wheel and press the Speed-up Button.
- STEP 4 : Press the right pedal all the way in and press the Speed-up Button.
- STEP 5 : Release the right pedal and press the Speed-up Button.
- STEP 6 : Initialization complete. Select "SAVE SETTING" and to finish.



I/F INITIALIZE (STEERING & GAS) screen

- 3** Select CANCEL to return to I/O TEST without saving the setting.
Select SAVE SETTING to save the setting and proceed to SWITCH TEST.

(c) SWITCH TEST

This screen is used to test the various switches.

- 1** In the I/O TEST screen, select SWITCH TEST and press the enter button.
The SWITCH TEST screen appears.
- 2** When the switches are turned ON, the entered items change.

SWITCH TEST			
[ON: RED]			
COIN	0		
SERVICE	OFF		
TEST	ON		
SELECT(UP/DOWN)	OFF/OFF		
ENTER	OFF		
STEERING	+500	RIGHT	OK
GAS	+1000	ON	
BRAKE	OFF		
SPEED-UP	OFF		

UP SELECT SW + ENTER SE : EXIT

SWITCH TEST screen

Item	Description
COIN	The count is increased by 1 each time the switch is set to ON. 0 to 999 (Returns to 0 after 99.)
SERVICE	OFF : Normal ON (red text) : While pressed
TEST	ON (red text) : Normal
SELECT(UP/DOWN)	UP : While flipped up DOWN : While flipped down
ENTER	OFF : Normal ON (red text) : While pressed
STEERING *1	The value changes in the + direction when turned to the right and in the – direction when turned to the left. Normal if +500 RIGHT OK is displayed when fully turned to the right and –500 LEFT OK is displayed when fully turned to the left.
GAS *1	The value changes when the accelerator pedal is depressed. Normal if +1000 OK is displayed when the pedal is fully depressed.
BRAKE	OFF : Normal ON (red text) : While fully depressed
SPEED-UP	OFF : Normal ON (red text) : While pressed

*1: Caution: If OK is not displayed in *1, perform 7-5-5 (b) I/F INITIALIZE (STEERING & GAS).

- 3** While the select switch is flipped up, press the enter button to return to the I/O TEST screen.

(d) LAMP TEST

This screen is used to test the lamps.

- 1** In the I/O TEST screen, select LAMP TEST and press the enter button. The LAMP TEST screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection, and switch between ON and OFF with the select switch. While ON is displayed, the lamp that corresponds to the item blinks.
- 4** Press the enter button to return to the item selection.

LAMP TEST	
[ON: RED]	
SPEED-UP	OFF
ULTIMATE HEAT	
CABINET SIDE	PATTERN1
SEAT BOX SIDE	
UNLEASHED LOGO	ON
HEADLIGHT	OFF
SEAT BACK	RED
SEAT BOX BACK	OFF
EXIT	
SELECT SW : CHOOSE ENTER SW : ENTER	

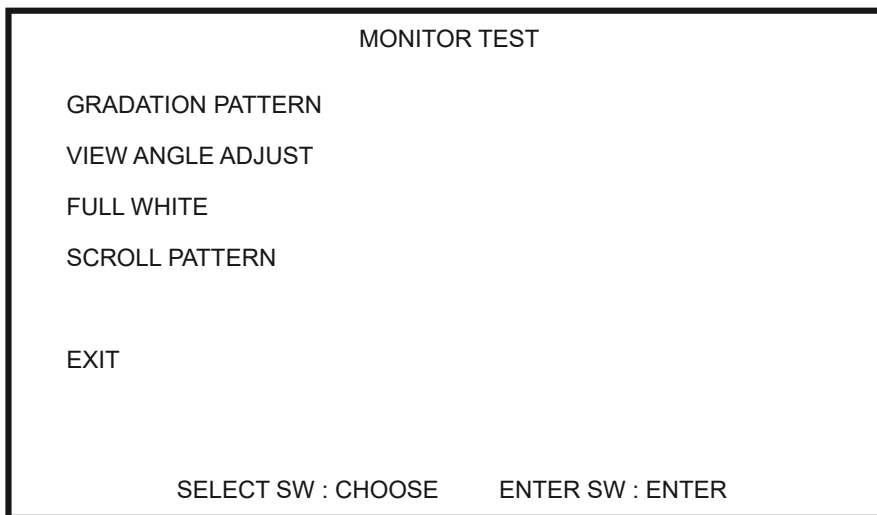
LAMP TEST screen

- 5** Select EXIT and press the enter button to return to the I/O TEST screen.

7-5-6 MONITOR TEST

This screen is used for various monitor adjustments.

- 1** In the MENU screen, select MONITOR TEST and press the enter button.
The MONITOR TEST screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button on an item to display its pattern.



MONITOR TEST screen

Item	Description
GRADATION PATTERN	Displays a gradation pattern. (16 levels)
VIEW ANGLE ADJUST	Displays a pattern for checking screen positions.
FULL WHITE	Displays the whole screen in white.
SCROLL PATTERN	Displays a screen scrolling test pattern.

- 4** Press the enter switch again to return to the MONITOR TEST screen.
- 5** Select EXIT and press the enter button to return to the MENU screen.

7-5-7 SOUND TEST

This screen is used to perform volume adjustment, stereo checks and other settings.

- 1** In the MENU screen, select SOUND TEST and press the enter button. The SOUND TEST screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** After entering the selection, use the select switch to change the item setting.

SOUND TEST [DEFAULT IN GREEN]	
VOLUME GAME (0~15)	10
VOLUME ATTRACT (0~15)	7
REQUEST SING NO.	0
LR TEST SPEAKER	--
EXIT	
SELECT SW : CHOOSE ENTER SW : ENTER	

SOUND TEST screen

Item	Description	Default
VOLUME GAME	Volume setting for Game mode. Setting range: 0 (min.) to 15 (max.) Flip up the select switch to increase the value. Flip down the select switch to decrease the value.	10
VOLUME ATTRACT	Volume setting for Attract mode. Setting range: 0 (min.) to 15 (max.) Flip up the select switch to increase the value. Flip down the select switch to decrease the value.	7
REQUEST SONG NO. *1	0: No sound 1: Stereo test 2: Sample song for Select screen. Sound is played at the "VOLUME GAME". 3: Sample song for Racing song in New York. Sound is played at the "VOLUME GAME".	0

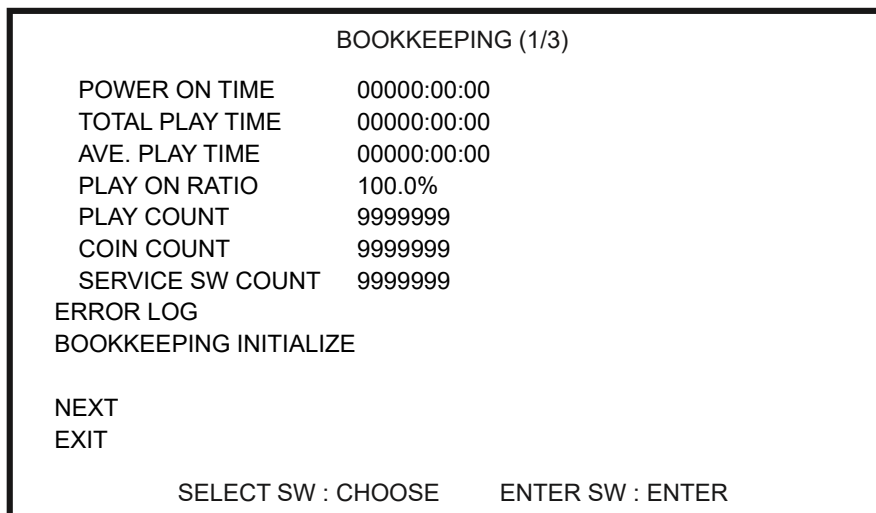
*1: While the requested sound is played, "XX" is displayed on the right of the two-digit number.

- 5** After changing the setting, press the enter button to return to the item selection.
- 6** Select EXIT and press the enter button to return to the MENU screen.

7-5-8 BOOKKEEPING

This screen displays various game related data.

- 1** In the MENU screen, select BOOKKEEPING and press the enter button. The BOOKKEEPING screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.



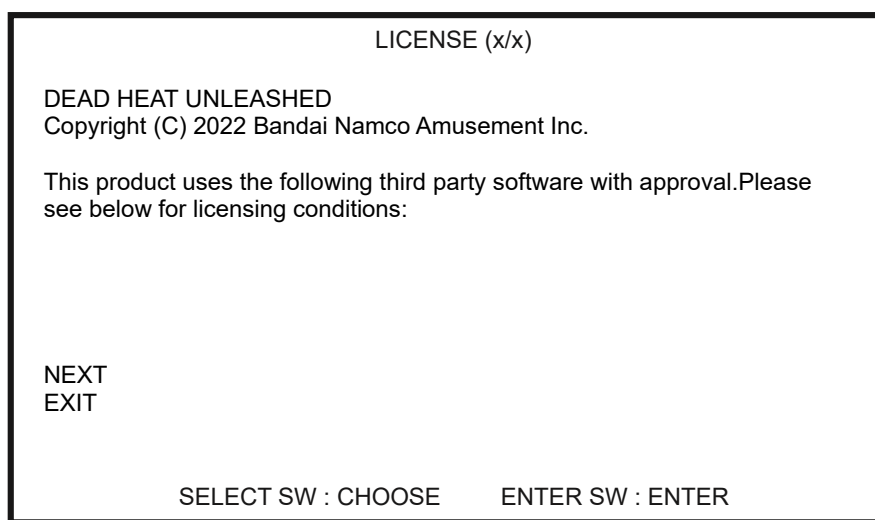
BOOKKEEPING screen

- 4** Select EXIT and press the enter button to return to the MENU screen.

7-5-9 LICENSE

This screen displays the licenses related to the game.

- 1** In the MENU screen, select LICENSE and press the enter button. The LICENSE screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.
- 4** When the selection is entered, the screen changes to the detailed information for the selected item.



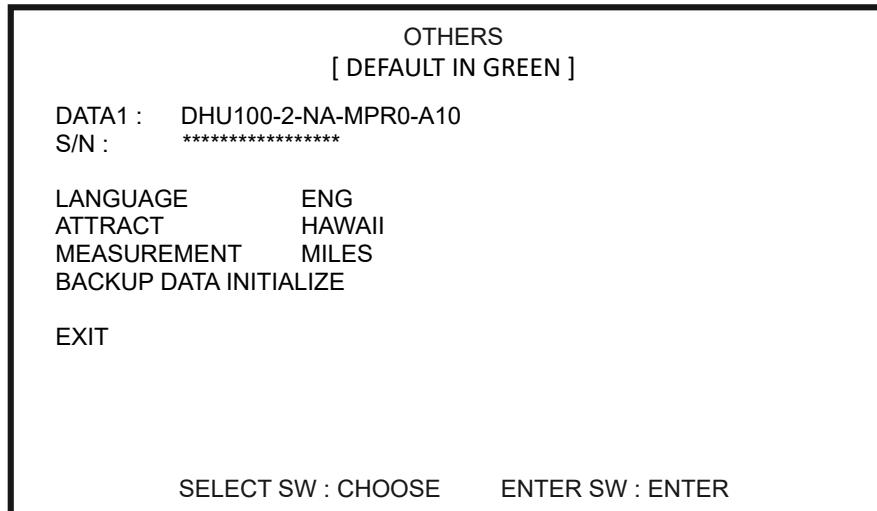
LICENSE screen

- 5** Select EXIT and press the enter button to return to the MENU screen

7-5-10 OTHERS

This screen is used for resetting, etc. of settings.

- 1** In the MENU screen, select OTHERS and press the enter button. The OTHERS screen appears.
- 2** Flip the select switch up or down to select an item. The selected item blinks.
- 3** Press the enter button to enter the selection.



OTHERS screen

- 4** Select EXIT and press the enter button to return to the MENU screen.

8A. Installation and Assembly

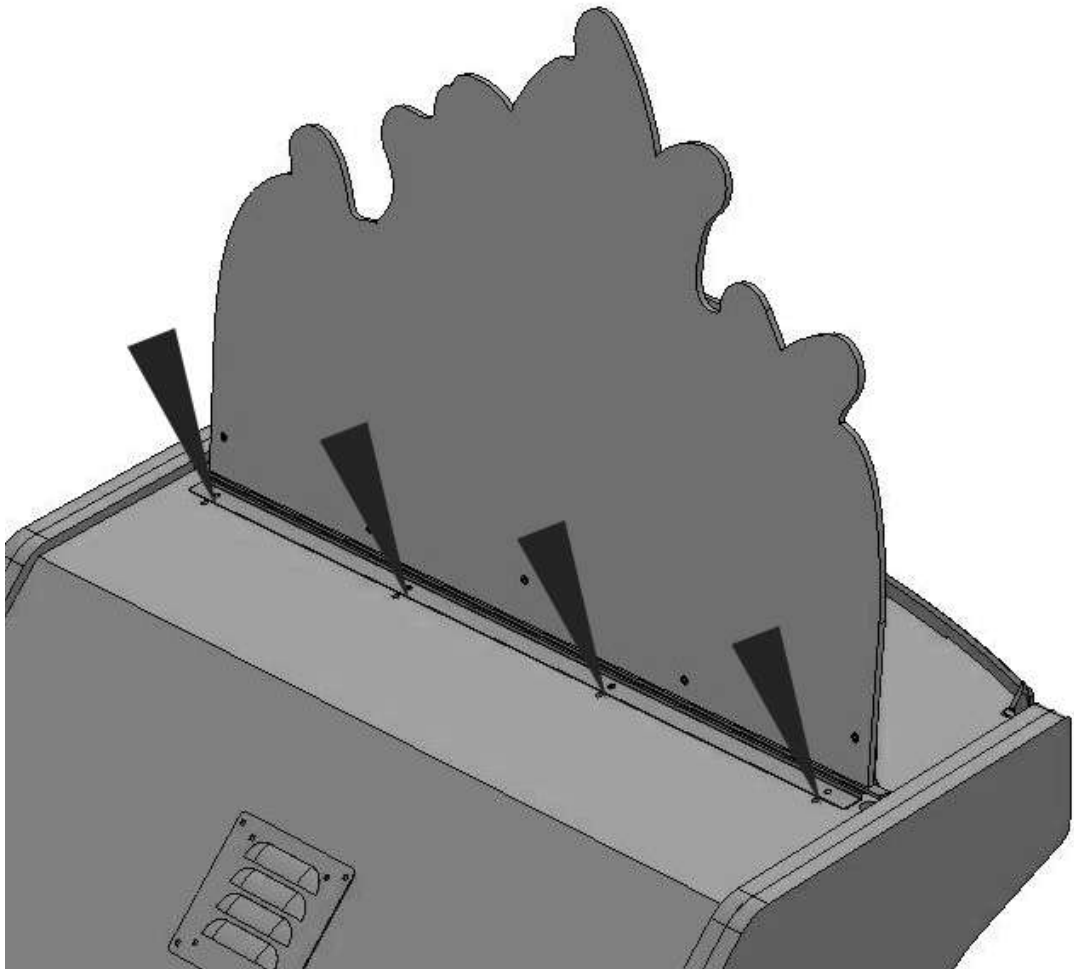
8A-1. Assembly

8A-1-1 Installing the Signboard Assembly

WARNING

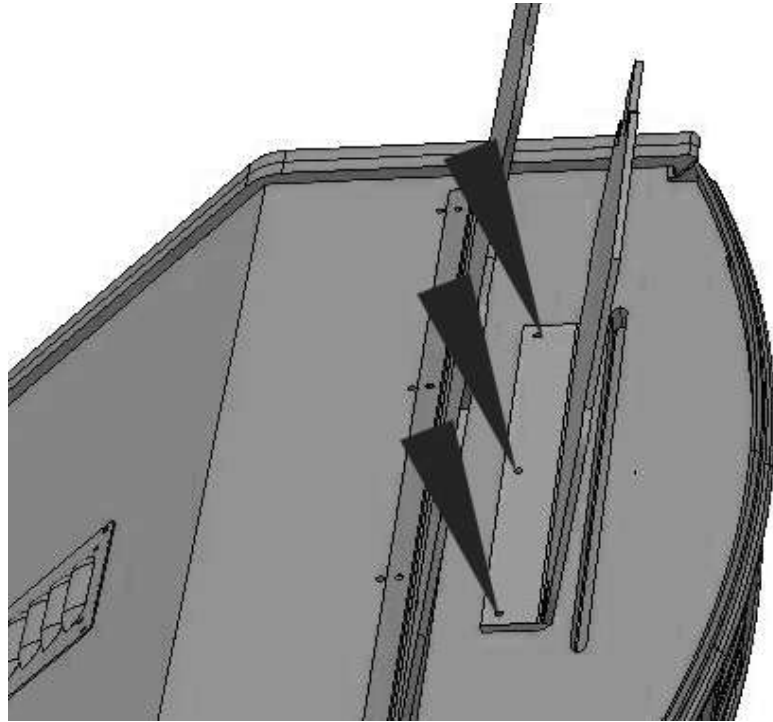
- The signboard assembly is installed while standing in a high location. Use a stool or similar platform. Working in an unnatural body posture may cause injury or machine damage.

- 1** On the top of the rear driver cabinet assembly find the rear signboard holes and connect the rear signboard assembly to the rear signboard holes using 4 (M5 x 16) bolts and connect the LED power line at the end of the sign assembly.



— Must be performed by a technician —

- 2 Next take the front signboard assembly and connect it to the cabinet using 4 (M5 x 16) bolts)

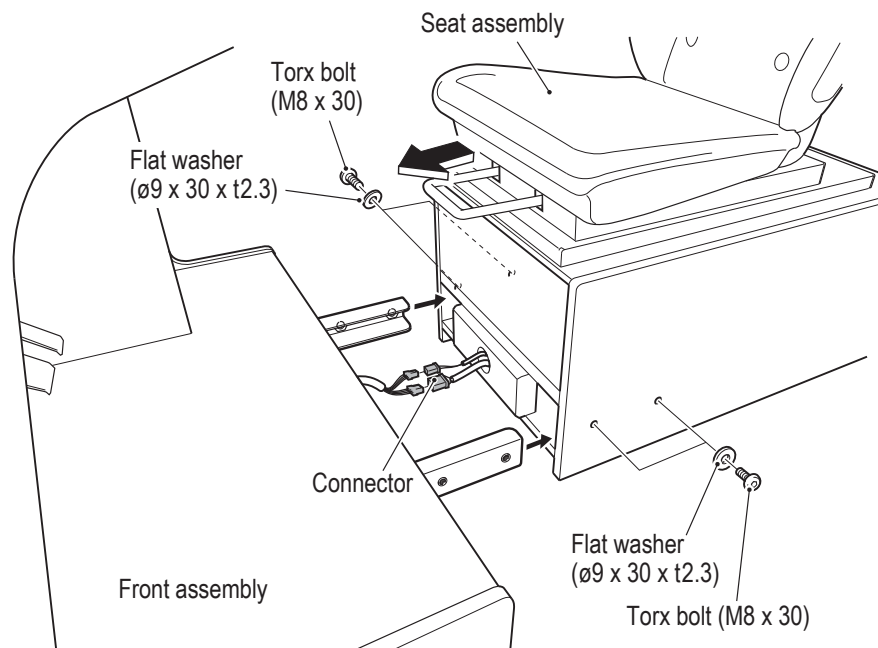
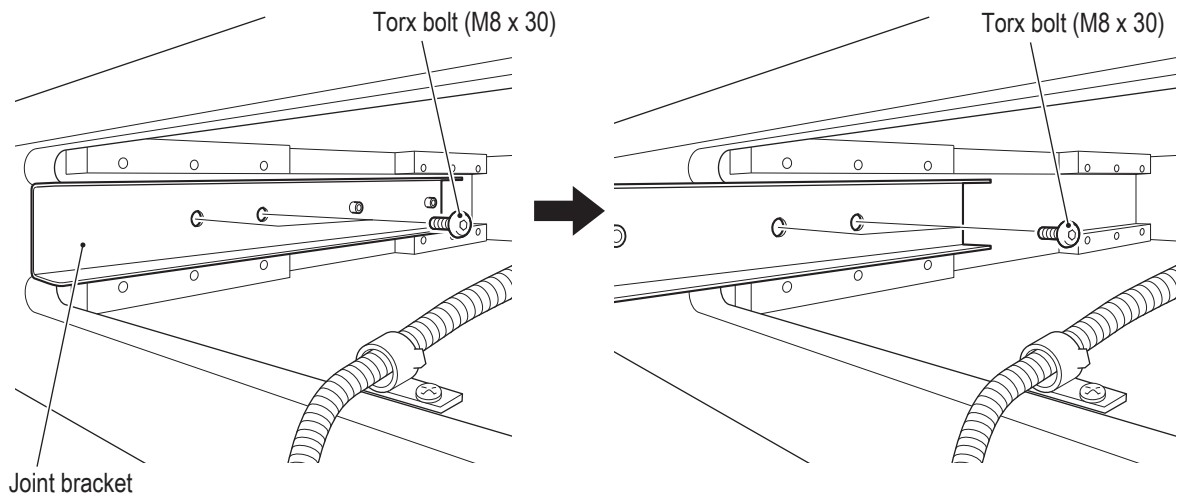


- 4 To remove, perform the procedure in reverse.

— Must be performed by a technician —

8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment

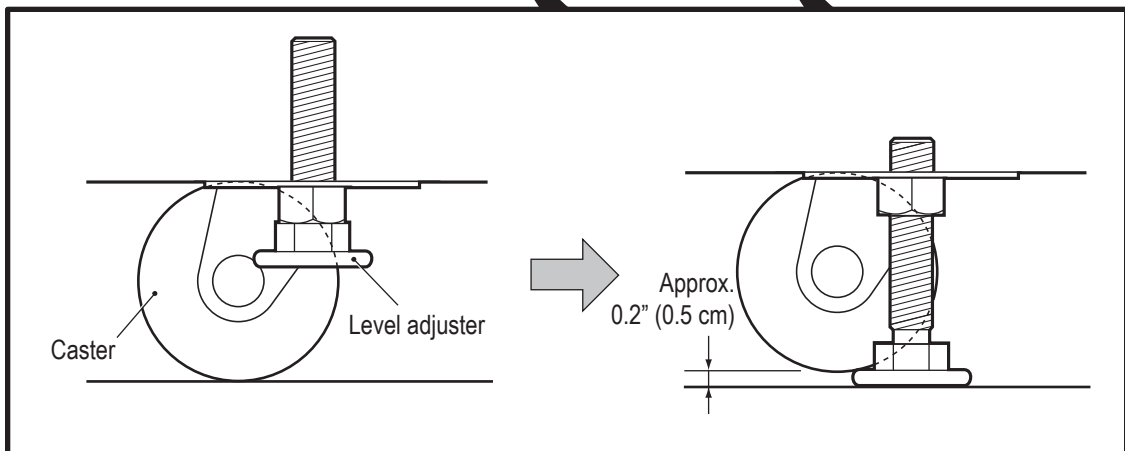
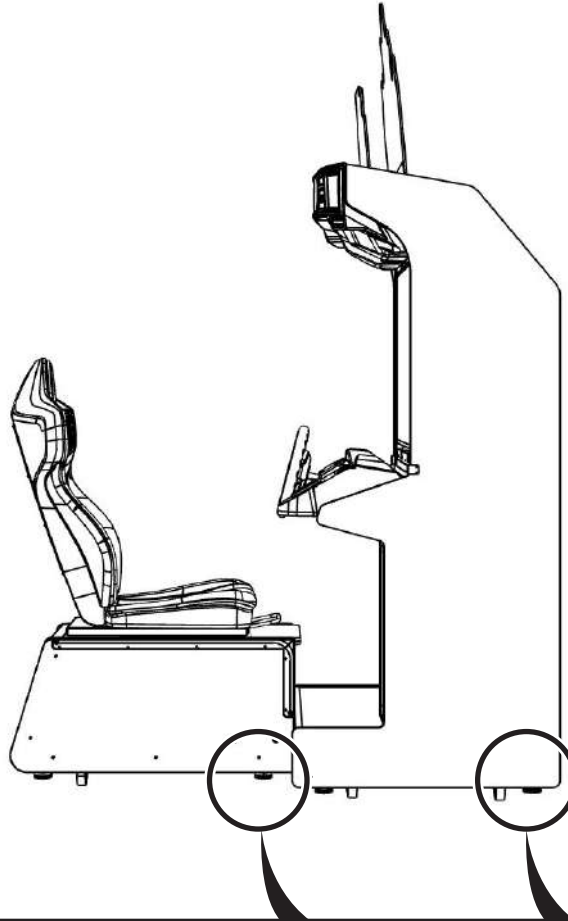
- 1 The joint brackets for the seat are shipped inside the front assembly as shown in the figure on the left. Loosen the bolt retaining the bracket, remove the bracket and rotate it so the narrow slot is facing forward (away from the seat) as shown in the figure on the right. Then tighten the bolt and add a second bolt from the spare parts kit as shown. For ease of installation, the bolts (M8 x 30 torx bolt) may be installed by hand leaving a gap slightly larger than thickness of the bracket and then the bracket can be installed by placing the large holes of the bracket over the bolts and then sliding the bracket as shown toward the player. Once in place tighten using a ratchet wrench.



- 2 Place the seat assembly near the front assembly, and pull out two connectors from inside the front assembly.
- 3 Pull out two connectors from inside the seat assembly, and connect them to the connector from step 2.

— Must be performed by a technician —

- 4** Insert the joint bracket into the seat assembly. While connecting these parts, be careful not to pinch the connectors or harness.
- 5** From the side surfaces of the seat assembly, fasten the seat assembly to the front assembly with two flat washers ($\varnothing 9 \times 30 \times t2.3$) on each side (four in total) and two torx bolts (M8 X 30) on each side (four in total).
- 6** Lower the level adjusters until the casters are at a height of approx. 0.2" (0.5 cm) from the floor. (Two on the front assembly and two on the seat assembly; four in total.)



— Must be performed by a technician —

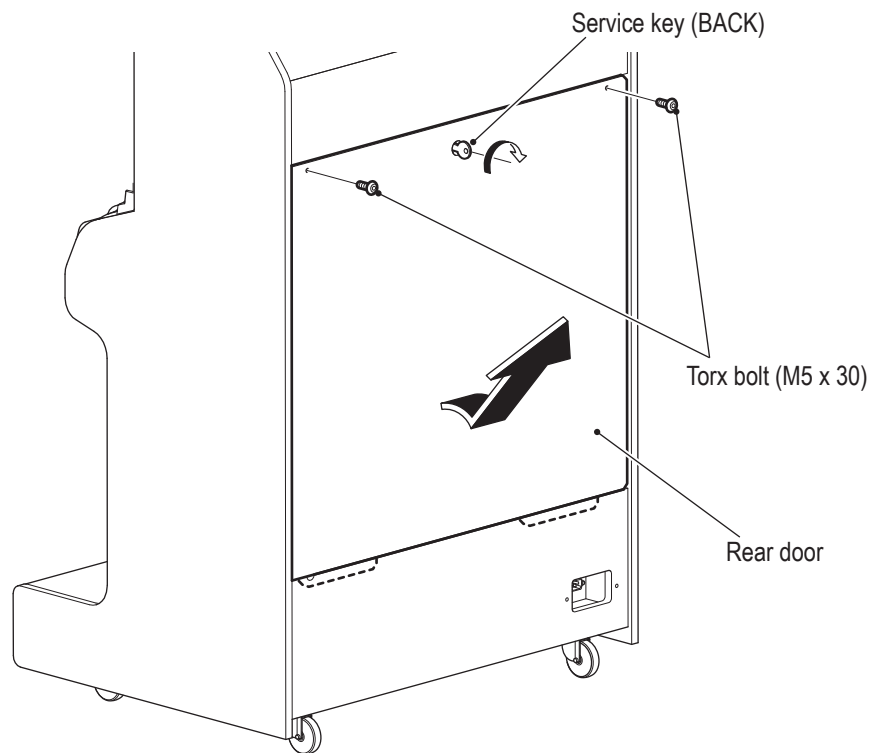
8A-1-3 Inserting the USB Dongle

WARNING

- To avoid electric shock accident or injury to yourself or others as well as damage to the electronic circuitry, be sure to turn off the power switch before starting this task.
- ~~The USB dongle is for use exclusively with this machine. Do not use it with other equipment. Do not insert other USB dongles into this machine. Doing so may cause the machine to malfunction.~~

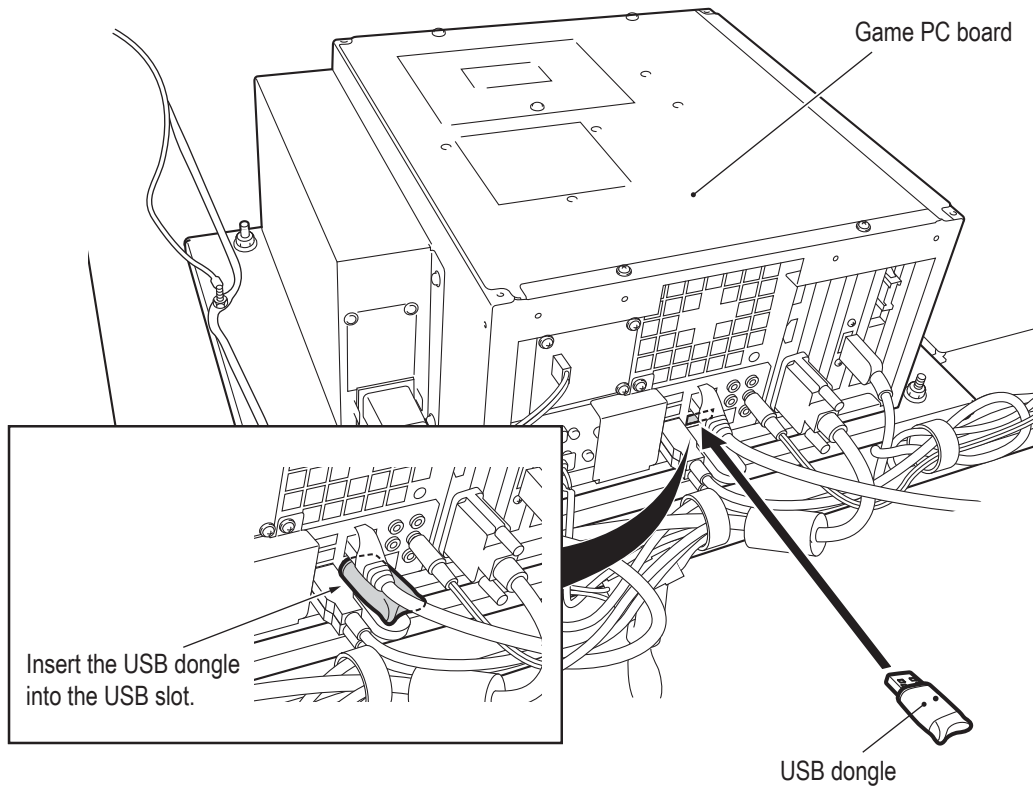
- Be sure to turn off the power switch before inserting the USB dongle.

- 1** Remove the rear door.

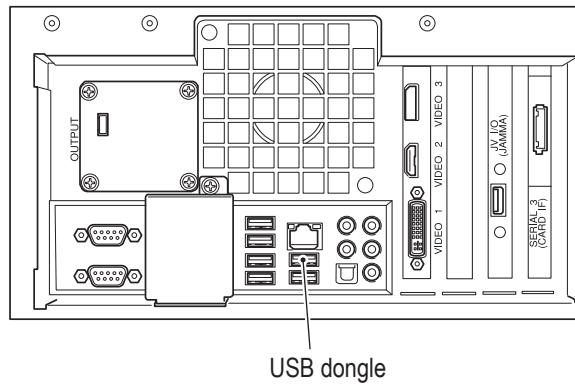


— Must be performed by a technician —

- 2 Insert the USB dongle into the USB slot of the game PC board (see the figure below).



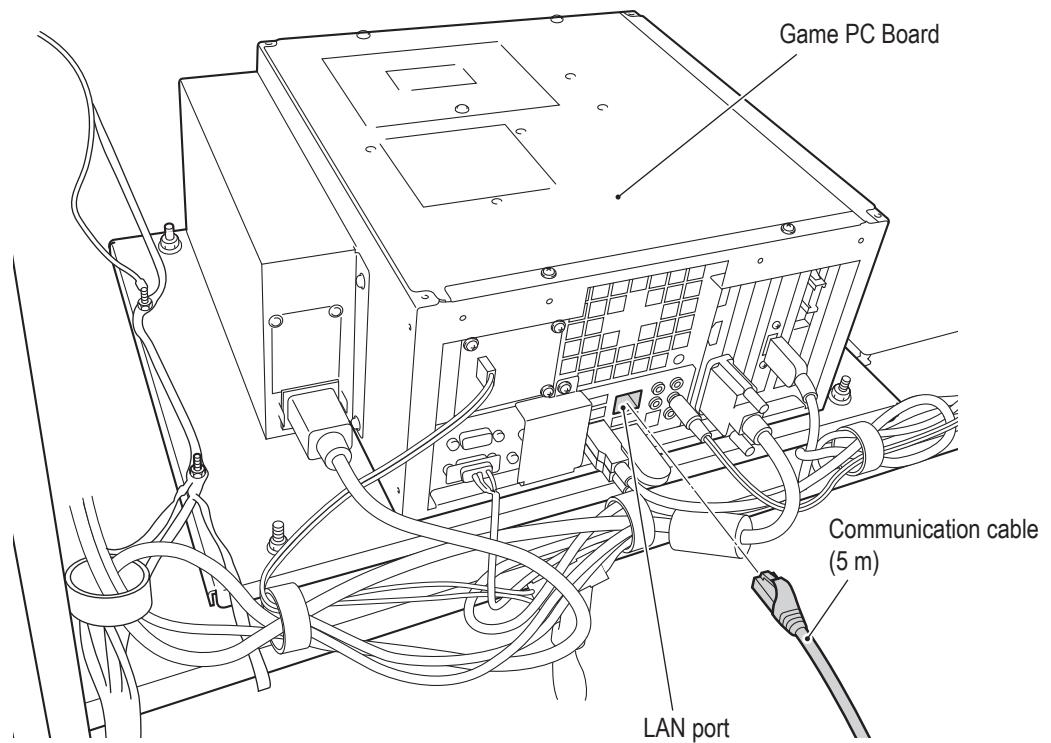
[USB dongle connection location diagram]



— Must be performed by a technician —

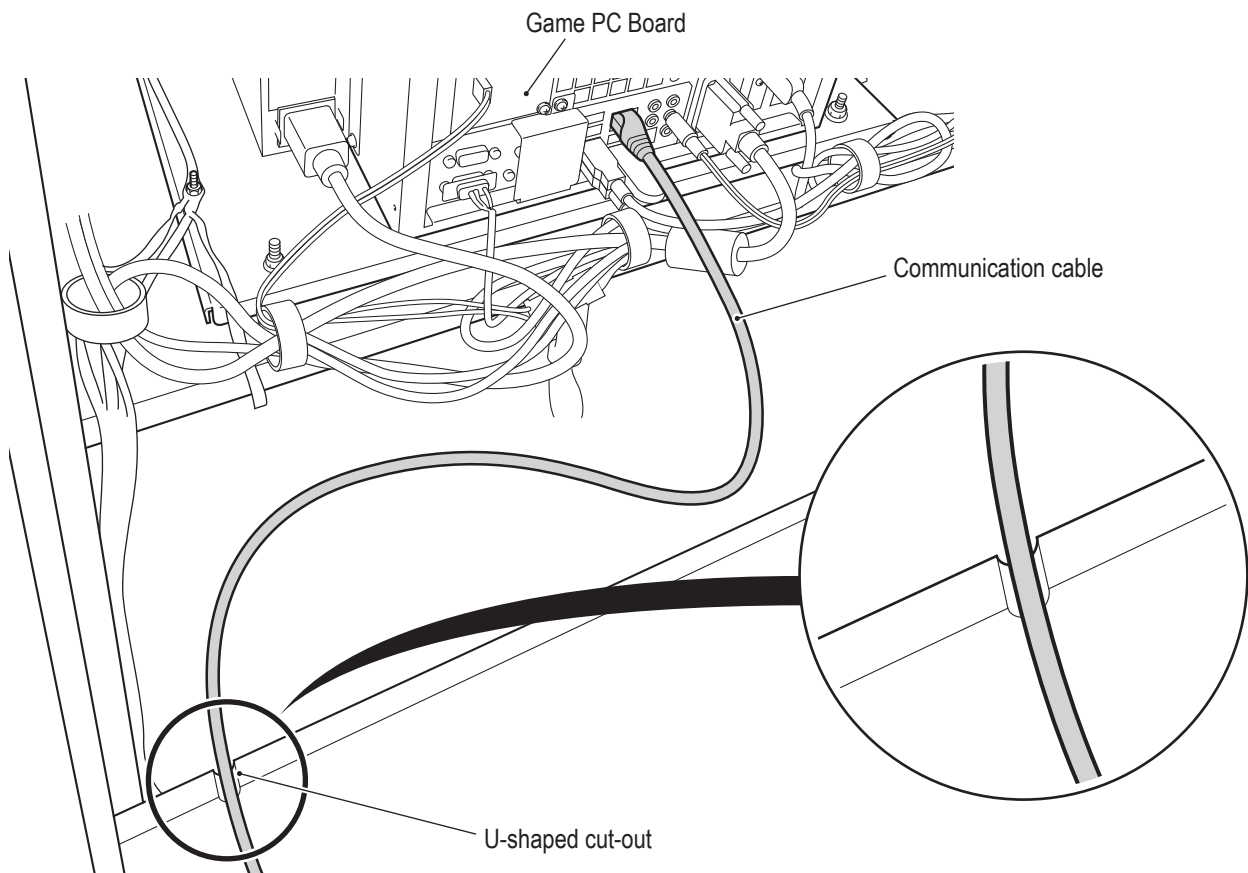
8A-2-2 Connection Method

- 1** Turn off the power switch. (See “8A-2-4 Power Switch Position and Turning the Power Switch On” on page 48.)
- 2** Remove the rear door.
- 3** Connect the communication cable (5 m) to the LAN port of the Game PC Board.



— Must be performed by a technician —

- 4 Position the communication cable (5 m) in the U-shaped cut-out on the lower panel, and return the rear door to its original position.



— Must be performed by a technician —

- Check the shape of the communication cable connectors and insert them with the proper alignment.
- Insert the communication cable connectors firmly. If a connector becomes loose, communication will not operate properly.
- Clamp the harnesses and communication cables with sufficient leeway so that they are not stretched and there is no excessive force applied.

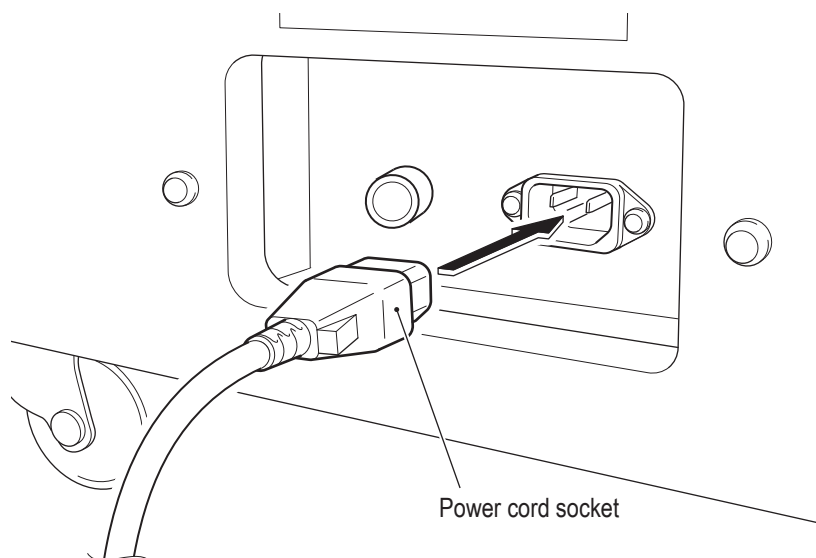
— Must be performed by a technician —

8A-2-3 Connecting the Power Cord and Ground

WARNING

- Be sure to install the ground wire using one of the methods below. Failure to install the ground wire may result in electric shock. Connect the ground using a 3P plug.

- 1** Insert the socket side of the power cord into the power input of the cord box assembly on the bottom of the front assembly rear panel.

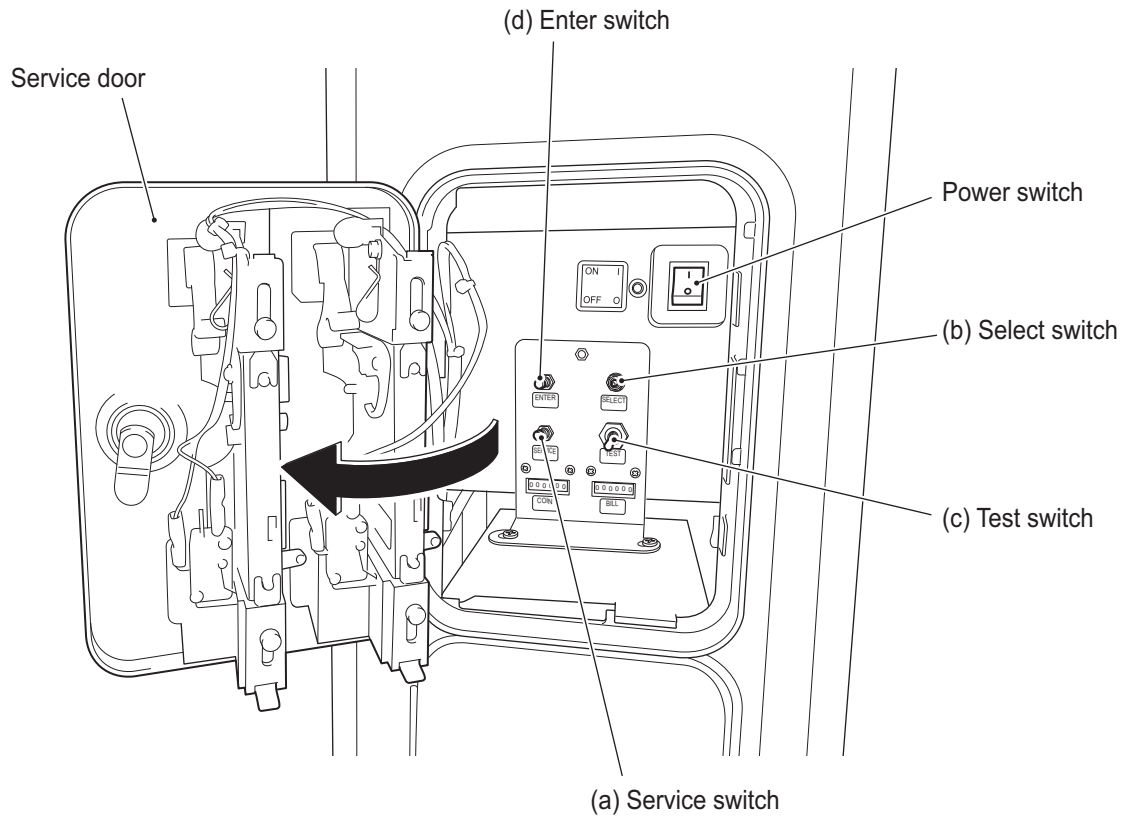


- 2** Insert the power plug of the power cord into the outlet.

— Must be performed by a technician —

8A-2-4 Power Switch Position and Turning the Power Switch On

- 1 Turn on the power switch of the machine.

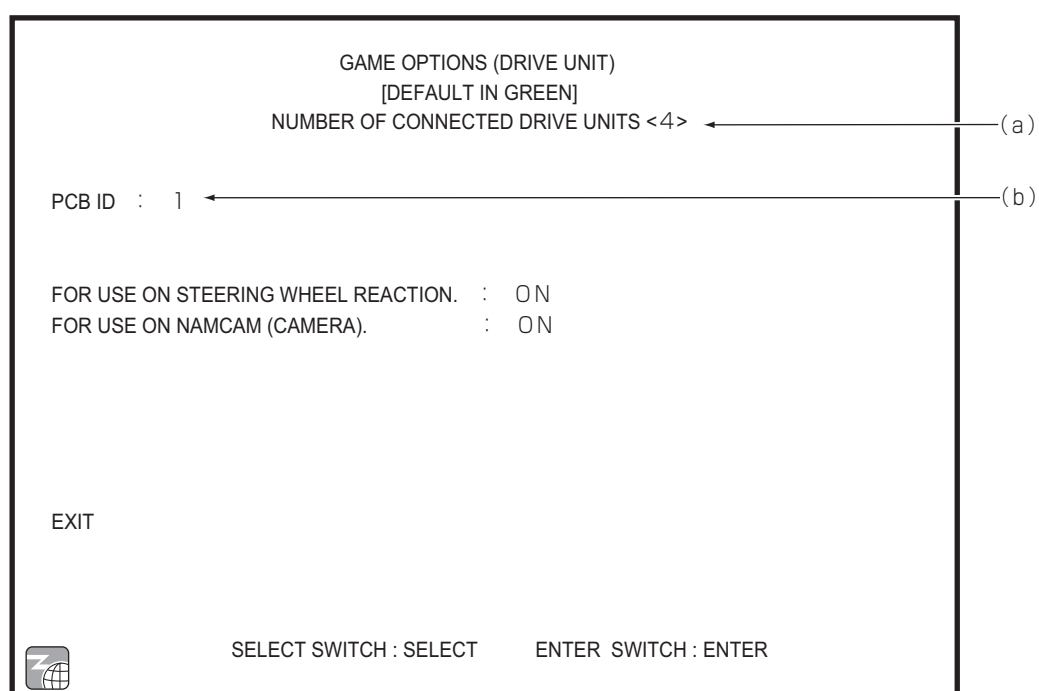


— Must be performed by a technician —

8A-3. Setting the PCB ID

When connecting two to four machines for communication-linked VS Race game play, make the following setting.

- 1** Use the supplied service key (FRONT) to open the service door.
- 2** When the Test switch is set to ON, the MENU screen appears on the monitor. (See “7-4-2 Adjustment Switches” on page 27.)
- 3** Flip the Select switch up or down to select GAME OPTIONS and press the Enter switch to display the GAME OPTIONS screen.



GAME OPTIONS screen

- 4** Check that (a) NUMBER OF CONNECTED DRIVE UNITS matches the number of actually connected Driver Cabinets with the power turned on.
- 5** Set (b) PCB ID to “1,” “2,” “3” and “4” in order from the leftmost Cabinet.
* When more than one Driver Cabinet has the same PCB ID, an error message appears.
- 6** Set the Test switch to OFF and close the service door

8B. Service

WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, be sure to turn off the power switch before performing service work (such as repairs or correcting malfunctions).

8B-1 Inspections and Service

WARNING

- Perform periodic service. Failure to perform service may result in an accident.
- Perform the inspections every day before starting operations. These are required to prevent accidents.
(See “7-2 Pre-operation Inspection” on page 17.)

8B-1-1 Inspection Items

After performing “7-2 Pre-operation Inspection” on page 17, check the following items periodically for any abnormalities.

(1) Level Adjuster Inspection

1. Check that the level adjusters are fixed securely. (See “8A-1-2 Connecting the Front Assembly to the Seat Assembly and Level Adjuster Adjustment” on page 40.)

(2) Power Cord Plug Inspection

1. Check that the power cord is firmly inserted into the machine’s cord box and the power outlet.
2. Clean any dust or other dirt from the connection parts.
3. Check for cracks or dirt on the power cord covering. If there is any abnormality on the power cord, be sure to replace it.

(3) Screw Looseness Inspection

Check the following parts for looseness. Fully retighten any loose parts.

1. Cap bolts (M6 x 30) for fastening the steering assembly
(See “8B-4-1 (5) Replacing the Steering Assembly” on page 58.)
2. Torx bolts (M5 x 25) for fastening the pedal assembly
(See “8B-4-3 (1) Removing and Installing the Pedal Assembly” on page 69.)

— Must be performed by a technician —

8B-2 Troubleshooting

WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
- If the problem is not described in “8B-2 Troubleshooting” or the problem persists despite taking the appropriate action, turn off the power switch immediately to stop operations and contact your distributor. Continuing operations may result in an accident.

- If a malfunction occurs, first make sure that all the connectors are connected securely.
- Repair of the PC boards will be performed by your distributor, so never perform a continuity check of a board with a tester or any other tool. The IC may be damaged by the internal voltage of the tester.
- To order repairs or parts, contact your distributor.
- When sending parts for repair, be sure to pack them properly. Particularly when sending the Game PC Board, wrap the part in sponge or air bubble wrapping before packing it in a cardboard box. Make sure that the box is not exposed to outside pressure.

8B-2-1 General

Symptom	Cause	Action	Reference
• The machine does not start.	• A connector is disconnected.	• Insert the connector securely(	Page 61
	• A Game PC Board malfunction.	• Replace the Game PC Board. Contact your distributor(
• Operation is not stable or the machine operates incorrectly(	• The power supply voltage is not in the range of AC 110 V to 130 V(	• Disconnect a high-capacity device (such as an air conditioner or large machine) from the same line to reduce the voltage to the specified power supply voltage.	
• The power turns off during operation.	• The circuit protector has operated to turn the power switch off. * The circuit protector turns off the current when an abnormal current occurs.	• Turn on the power switch again. If the circuit protector operates frequently, there is a mechanical abnormality. Contact your distributor(	Page 61
• Resetting is performed during startup.	• The internal battery of the Game PC Board has run out.	• Replace the Game PC Board. Contact your distributor(
	• A Game PC Board malfunction.		

8B-2-2 Front Assembly

Symptom	Cause	Action	Reference
• Sound is not output from the speakers.	• The volume setting is low(	• Reset the volume.	Page 34
	• A connector or Faston terminal is disconnected.	• Insert the connector or Faston terminal securely.	Page 66
	• An amp PC board malfunction.	• Replace the amp PC board.	Page 66
• The monitor screen does not operate.	• A connector is disconnected.	• Insert the connector securely(
	• A monitor malfunction.	• Replace the monitor(
• The title panel LEDs do not turn on.	• A connector is disconnected.	• Insert the connector securely(
	• A LED malfunction.	• Replace the LED	
• The Ultimate Heat Button does not function.	• A connector is disconnected.	• Insert the connector securely(	Page 57
	• A switch malfunction.	• Replace the switch.	Page 57
	• A disconnection in the harness.	• Connect the location of the disconnection.	Page 57
• The lamp of the Ultimate Heat button does not turn on.	• A connector is disconnected.	• Insert the connector securely(	Page 57
	• The lamp has burned out.	• Replace the lamp.	Page 57
	• A disconnection in the harness.	• Connect the location of the disconnection.	
• The top LEDs do not turn on.	• A connector is disconnected.	• Insert the connector securely(
	• LED Board Malfunction	• Replace the LED Board.	
• The monitor side LEDs do not	• A connector is disconnected.	• Insert the connector securely(
	• LED Strip Malfunction	• Replace the LED Strip.	

8B-2-3 Steering Assembly

Symptom	Cause	Action	Reference
• The steering does not function.	• The volume has not been initialized.	• Perform initialization.	Page 30
	• A connector is disconnected.	• Insert the connector securely(	Page 58
	• A steering assembly malfunction.	• Replace the steering. Contact your distributor(	Page 58
	• The fuse (5A) has burned out. * The fuse blows when an abnormal current occurs.	• Replace the fuse. If the fuse blows frequently, there is a mechanical abnormality. Contact your distributor(	Page 58

— Must be performed by a technician —

8B-2-4 Pedal Assembly

Symptom	Cause	Action	Reference
• The accelerator or brake does not function.	• The volume has not been initialized.	• Perform initialization.	Page 30
	• A connector is disconnected.	• Insert the connector securely(	Page 69
	• A pedal assembly malfunction.	• Replace the pedal assembly. Contact your distributor(	Page 69

— Must be performed by a technician —

8B-3 Error Displays

Error code	Error message	Error description	Cause	Action
1-1	COIN ERROR 1	COIN MECHANISM FAILURE	A coin micro switch malfunction	Replace the coin micro switch. Contact your distributor.
			A NA-JV (M) PC board malfunction.	Replace the NA-JV (M) PC board.
1-2	COIN ERROR 2	COIN MECHANISM FAILURE	An abnormality in the Service switch.	Contact your distributor.
			A NA-JV (M) PC board malfunction.	Replace the NA-JV (M) PC board.
3-1	I/O PCB ERROR 1	CHECK I/O BOARD CONNECTION	A connector is disconnected.	Check the connection between NA-JV(M) and the board.
3-2	I/O PCB ERROR 2	I/O BOARD FAILURE	A NA-JV (M) PC board malfunction.	Replace the NA-JV (M) PC board.
8-1	CAMERA CONNECTION ERROR	CAMERA ERROR	A connector is disconnected.	Check the NamCam (camera) connection.
8-2	CAMERA CAPTURE ERROR	CAMERA ERROR	A NamCam (camera) malfunction.	Replace the NamCam (camera).
19-1	SYSTEM ERROR	(No texts)		Insert the correct USB dongle for the machine. Then, turn the power off and then on again. If the same error repeats, contact your distributor.
19-11	DONGLE ERROR 1	2 OR MORE USB DONGLES ARE PLUGGED IN.		Insert only the correct USB dongle for the machine.
19-21	SYSTEM ERROR	(No texts)		Insert the correct USB dongle for the machine. Then, turn the power off and then on again. If the same error repeats, contact your distributor.
19-22	SYSTEM ERROR	(No texts)		
19-23	SYSTEM ERROR	(No texts)		
19-24	SYSTEM ERROR	(No texts)		
19-25	SYSTEM ERROR	(No texts)		
22-1	STR PCB OVERRUN ERROR	STR PCB connection data error	An abnormality in the STR4 (M) PC board communication data.	Replace the STR4 (M) PC board.
22-2	STR PCB FRAMING ERROR	STR PCB connection data error		
22-3	STR PCB PARITY ERROR	STR PCB connection data error		
22-4	STR PCB RAM ERROR	STR PCB RAM check error	An abnormality in the STR4 (M) PC board memory.	Replace the STR4 (M) PC board.
22-5	STEERING VOLUME DAMAGE ERROR	STEERING VOLUME DEVICE ERROR	The steering assembly potentiometer is damaged.	Replace the potentiometer. Contact your distributor.
22-6	STR PCB OVER CURRENT ERROR	STR PCB overload	An overcurrent flowed to the STR4 (M) PC board.	Replace the STR4 (M) PC board.
22-7	STEERING VOLUME CONNECTION ERROR	STEERING VOLUME CONNECTION ERROR	The steering assembly potentiometer is not connected.	Check the potentiometer connection.
22-8	STEERING VOLUME OVER SPEED ERROR	STEERING VOLUME DEVICE ERROR	The steering assembly potentiometer is damaged.	Replace the potentiometer. Contact your distributor.
22-9	MOTOR CURRENT ERROR	POSSIBLE DAMAGE TO MOTOR.	An abnormality in the motor current.	Replace the motor. Contact your distributor.
22-10	MOTOR CURRENT SENSOR ERROR	POSSIBLE DAMAGE TO MOTOR.		
22-11	MOTOR POWER ON ERROR	POSSIBLE MOTOR OR MOTOR POWER SUPPLY FAILURE.	An abnormality in the motor or the power supply.	Replace the motor. Contact your distributor.
22-12	STR PCB LINK ERROR	STR PCB connection error	Communication with the STR4 (M) PC board is not possible. The steering assembly potentiometer is not connected. The steering assembly potentiometer is damaged.	Check the STR4 (M) PC board connection. Check the potentiometer connection. Replace the potentiometer. Contact your distributor.
24-1	DUPLICATE PCB ID ERROR	THAT PCB ID IS ALREADY IN USE.	The set PCB ID is already in use by another driver cabinet.	Set the PCB ID so that there is no duplication.
24-2	BONUS CREDIT MODE ERROR	BONUS CREDIT MODE SETTING DOES NOT MATCH.	BONUS CREDIT MODE settings do not match.	Match settings in the test mode.

— Must be performed by a technician —

8B-4 Removing and Installing Assemblies and Parts

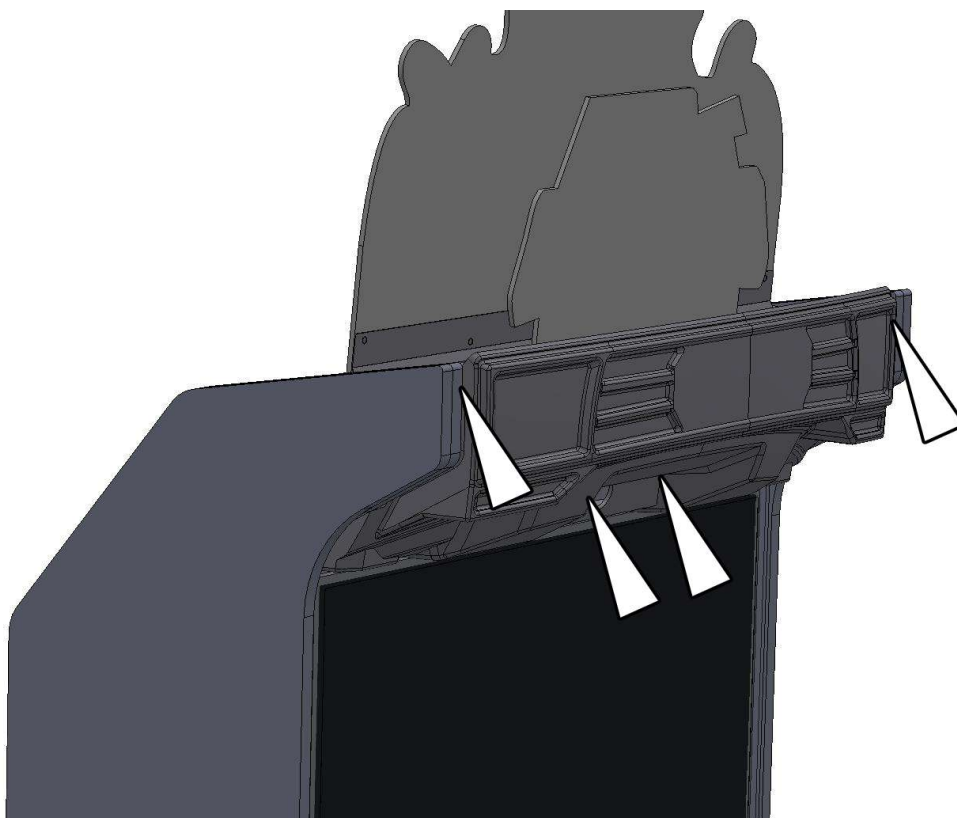
8B-4-1 Front Assembly

WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

1 Remove the four torx bolts (M5 x 25) from the front of the front assembly, and then remove the top cover(

2



3 To install, perform the procedure in reverse.

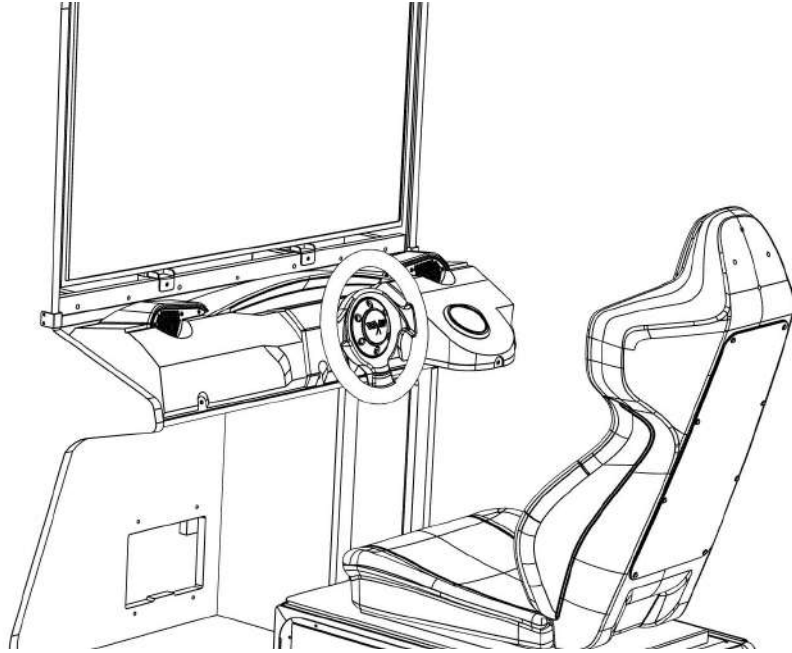
— Must be performed by a technician —

(2) Removing and Installing the Control Cover

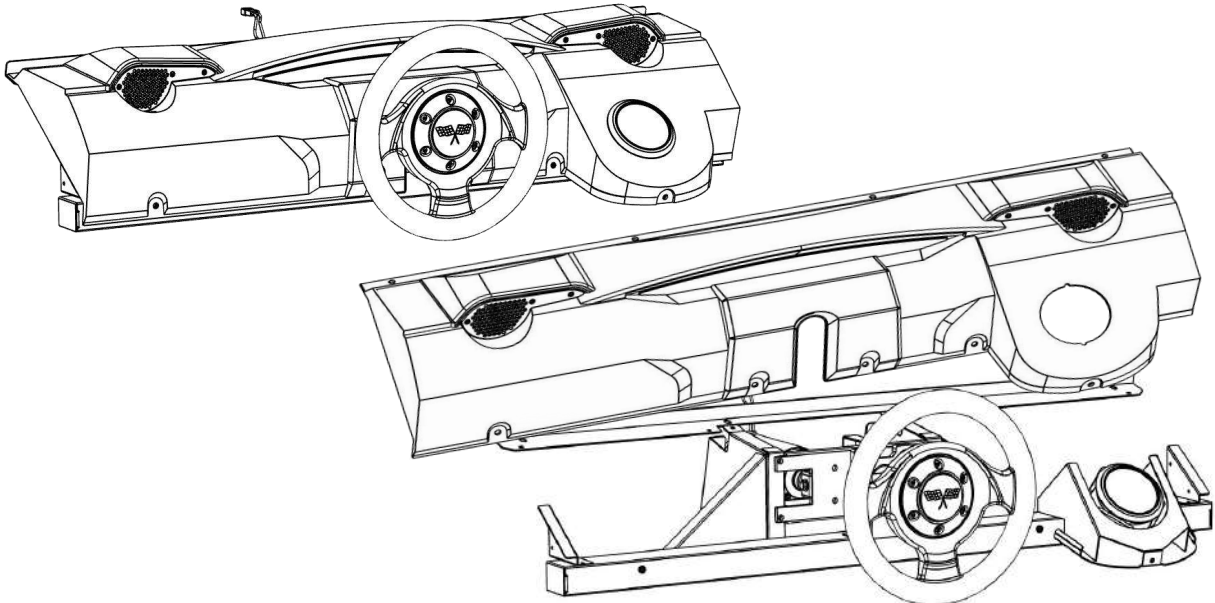
⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

- 1** Remove the two torx bolts (M5 x 25) from the front of the front assembly, and the six torx bolts (M5 x 25) from under the control cover



- 2** While lifting up the control cover, remove it towards you. On the rear, disconnect and remove the connector on the ultimate heat button.



- 3** To install, perform the procedure in reverse.

- When installing the control cover, be careful not to trap the harness.

— Must be performed by a technician —

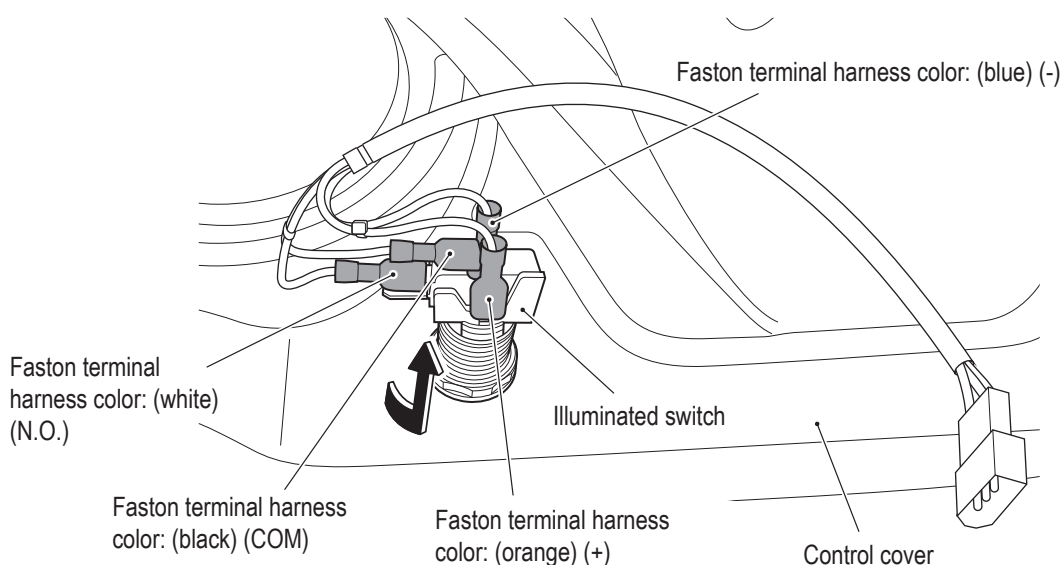
(3) Replacing the Ultimate heat Button and Lamps

The Ultimate heat button is used as an example in the following procedure.

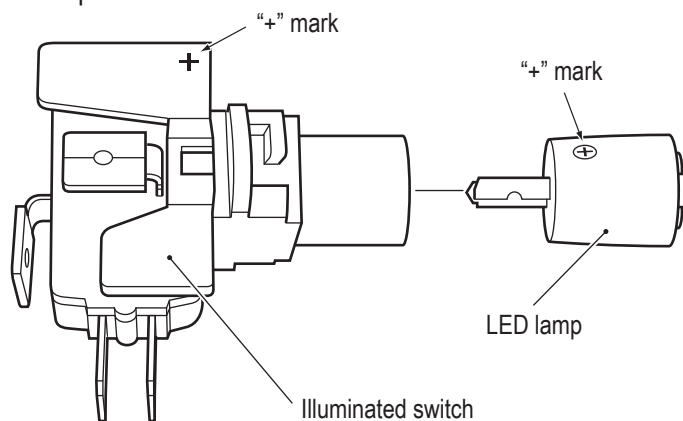
! WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

- 1** Remove the control cover. (See “8B-4-1 (2) Removing and Installing the Control Cover on page 56.)
- 2** Turn the illuminated switch to the left to unlock it, and then remove it.



- 3** Pull out the lamp.



- 4** Replace the Item button and the lamp.
- 5** To install, perform the procedure in reverse.

* The LED lamp has positive and negative polarity. Take care to position the lamp correctly during replacement.

- After completing the replacement, be sure to check the operation. (See “7-5-4 (a) SWITCH TEST” on page 30.)

— Must be performed by a technician —

(4) Replacing the Steering Assembly

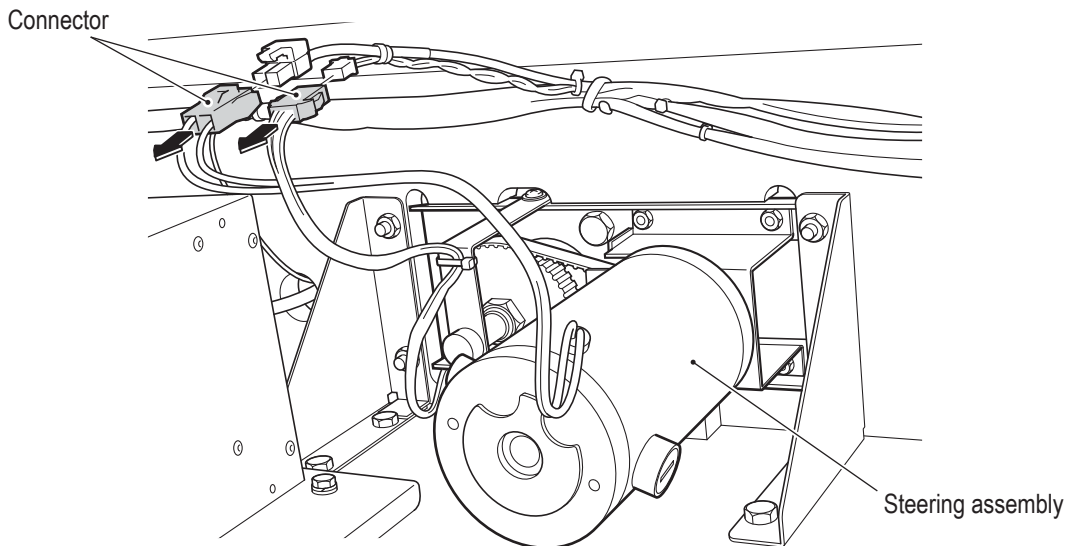
! WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

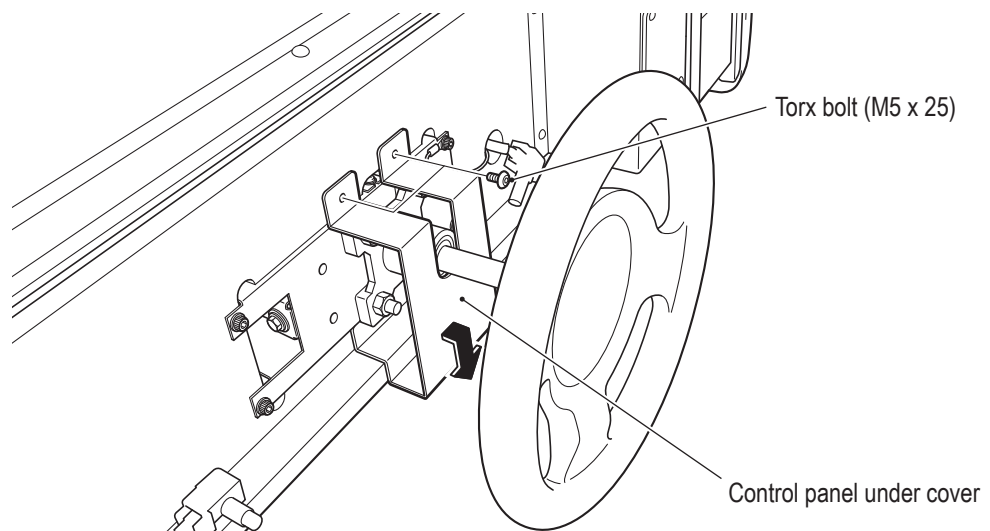
! CAUTION

- The steering assembly weighs approx. 26.5 lb (12 kg). Be very careful while working, because dropping it may cause injury!

- 1 Remove the rear door.
- 2 Remove the two connectors of the steering assembly(

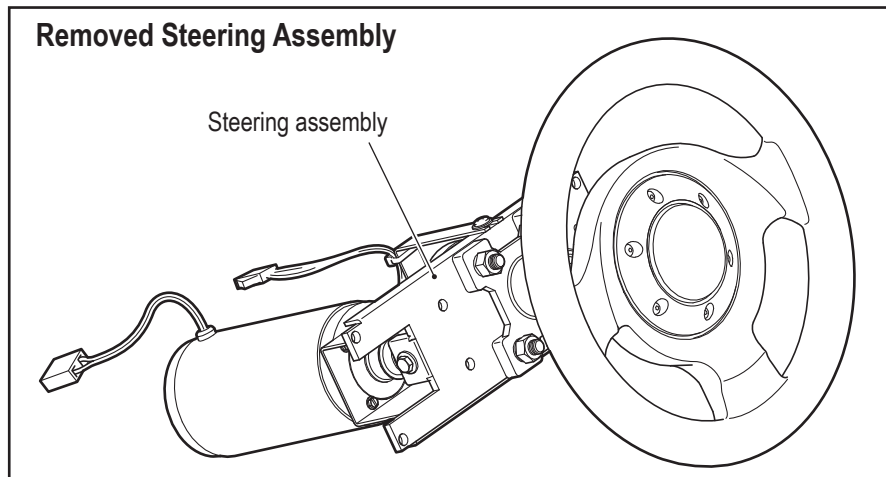
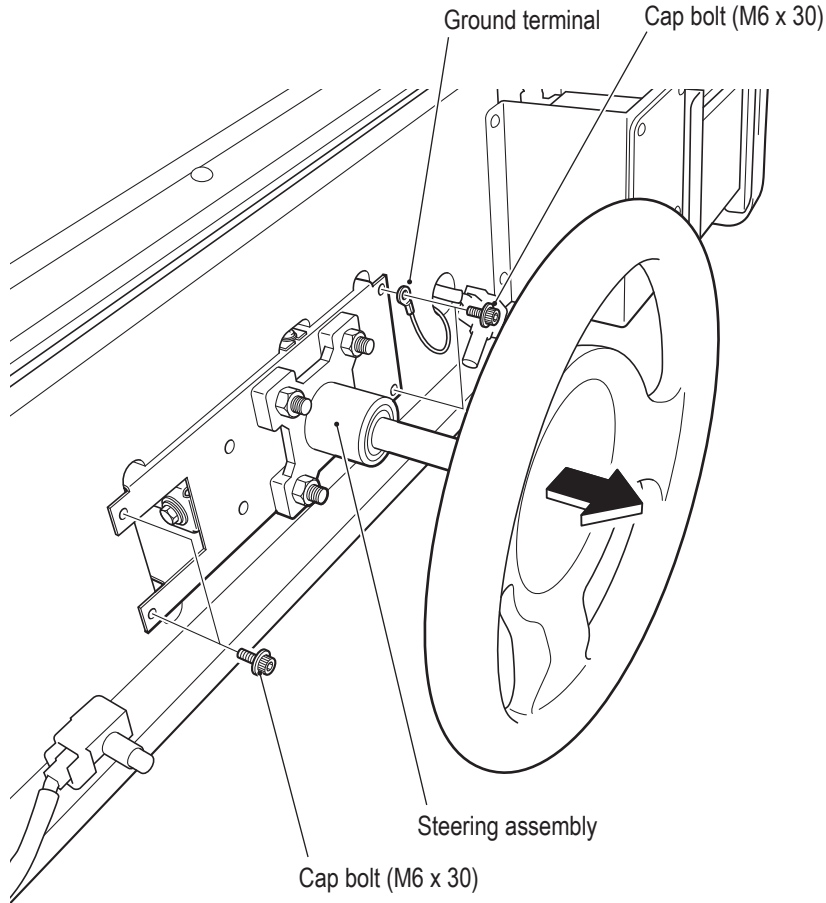


- 3 Remove the control cover. (See “8B-4-1 (2) Removing and Installing the Control Cover” on page 56.)
- 4 Remove the two torx bolts (M5 x 25), and then remove the control panel under cover(



— Must be performed by a technician —

- 5** Remove the four cap bolts (M6 x 30) and the ground terminal, then slowly pull out the steering assembly and replace it.



- 6** To install, perform the procedure in reverse.

- After completing the replacement, be sure to initialize and check the operation.

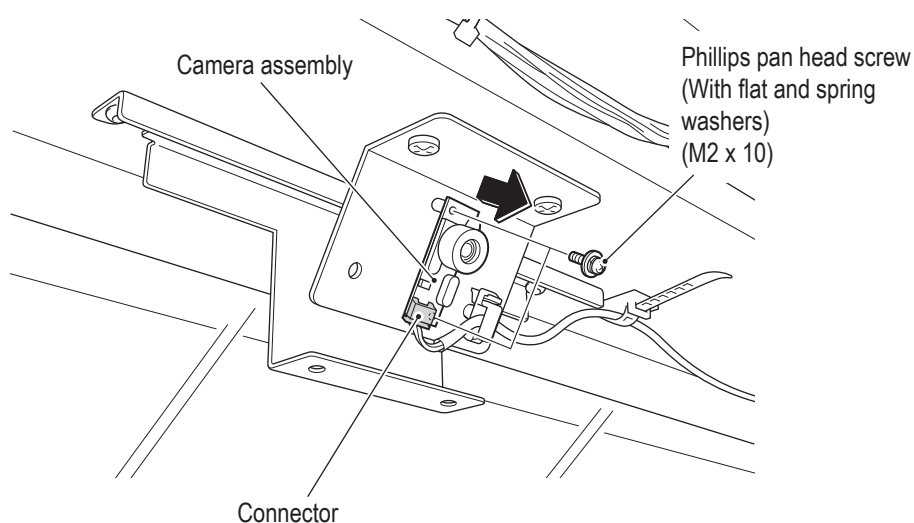
— Must be performed by a technician —

(5) Replacing the Camera

! WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

- 1** Remove the top cover
- 2** Disconnect the connector, remove the two Phillips pan head screws (with flat and spring washers) (M2 x 10), and remove the camera assembly(



- 3** To install, perform the procedure in reverse.

- After completing the replacement, be sure to check the operation.
(See “7-4-6 (c) NAMCAM (CAMERA) TEST” on page 28.)

— Must be performed by a technician —

8B-4-2 Front Assembly Rear Side

(1) Replacing the Game PC Board

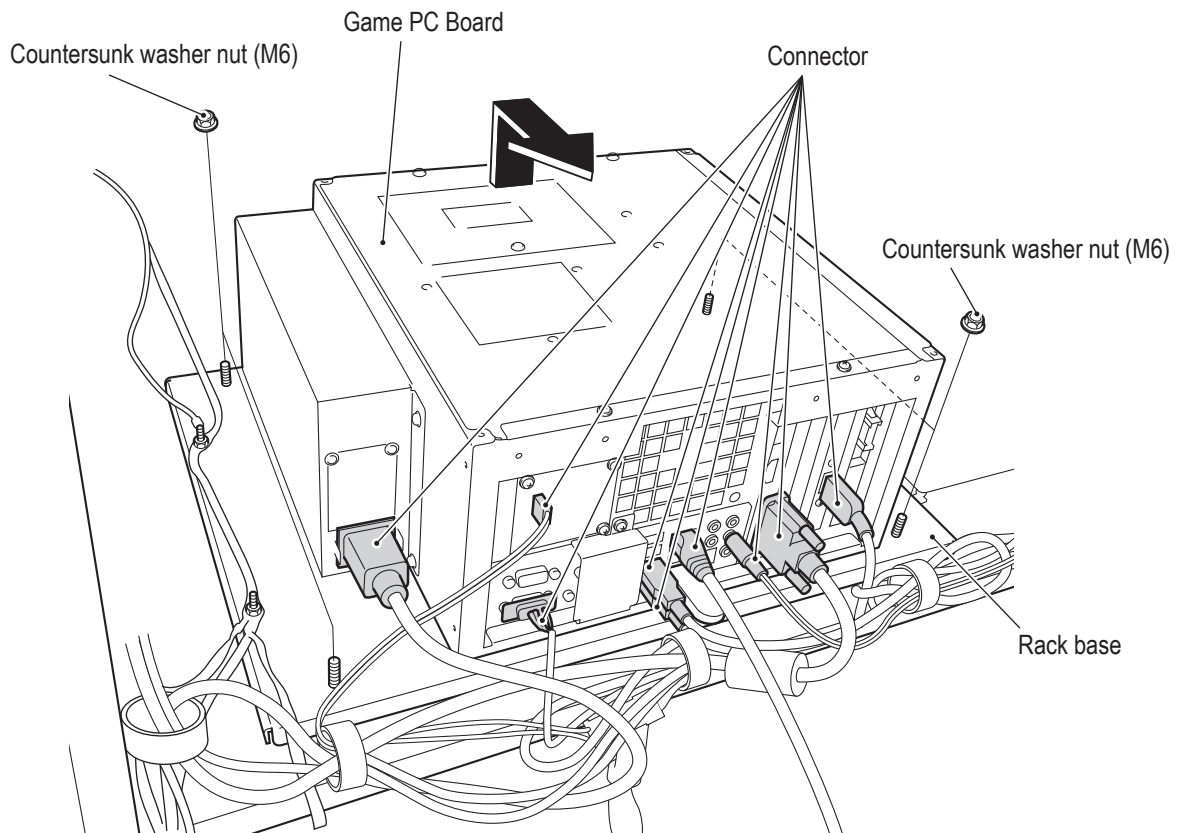
⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

⚠ CAUTION

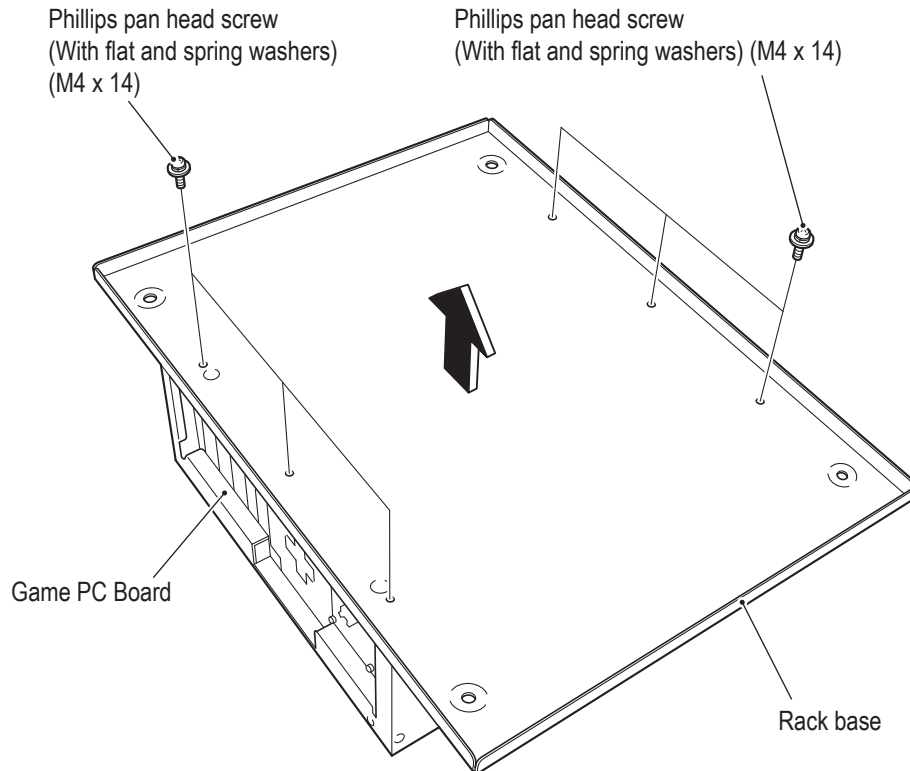
- The Game PC Board weighs approx. 17.6 lb (8 kg). Be very careful while working, because dropping it may cause injury!

- 1** Remove the rear door.
- 2** Disconnect the nine connectors, remove the four countersunk washer nuts (M6), and remove the Game PC Board together with the rack base.



— Must be performed by a technician —

- 3 Remove the six Phillips pan head screws (with flat and spring washers) (M4 x 14), remove the rack base and replace the Game PC Board.

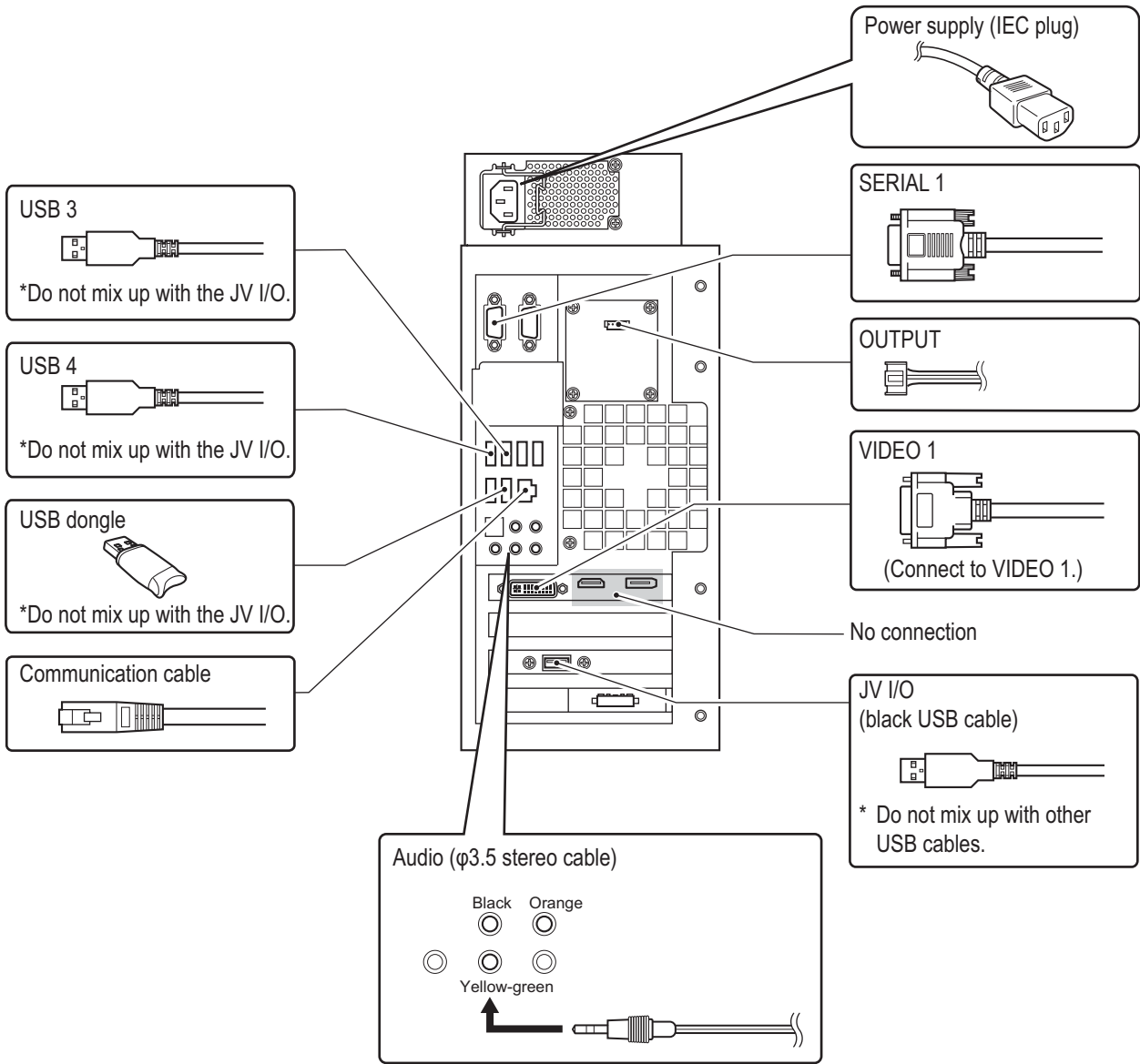


- 4 To install, perform the procedure in reverse.

- When sending a part for repair (Game PC Board), wrap it in sponge or bubble wrap before packing it in a cardboard box. Make sure that the box is not exposed to outside pressure.
- After completing the replacement, be sure to check the operation and initialize. (See “7-6 Test Mode” on page 22.)

— Must be performed by a technician —

- When installing, follow the indications on the game PC board, and connect the connectors correctly.



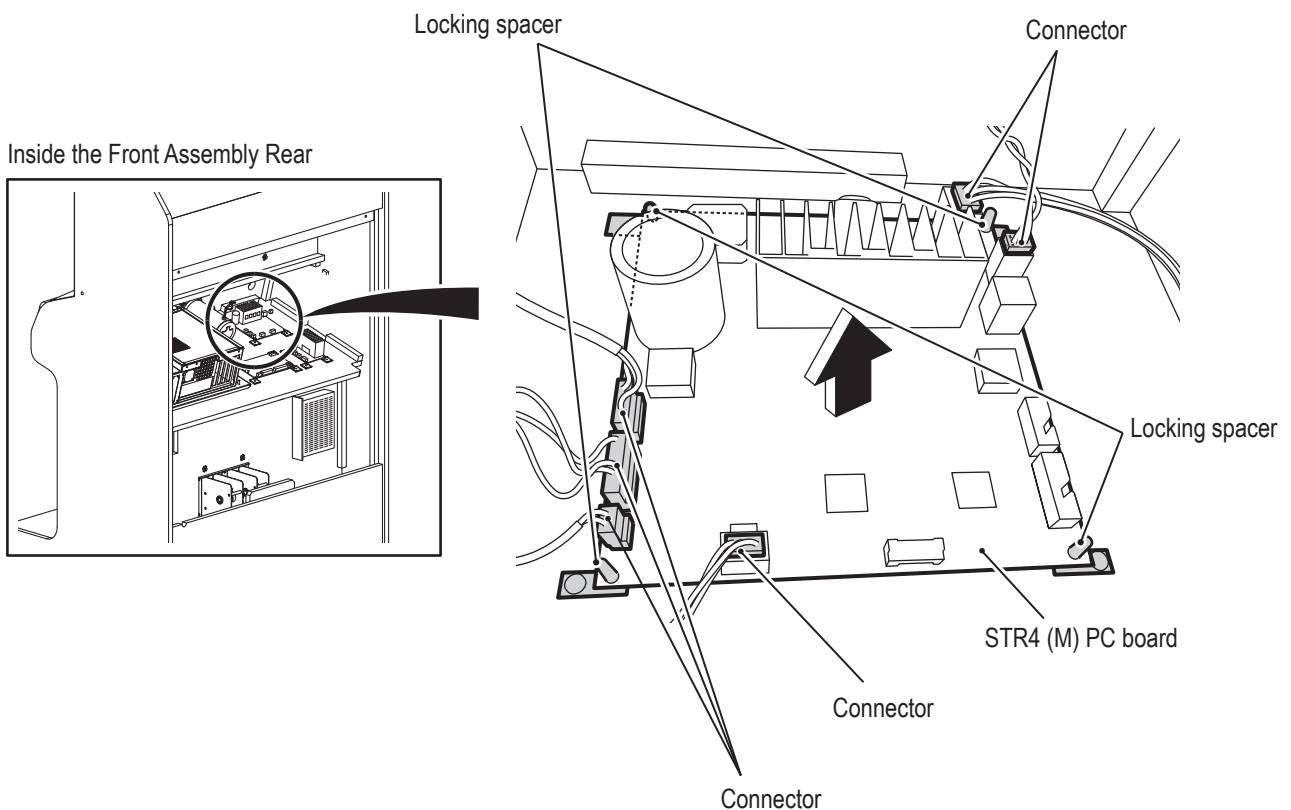
— Must be performed by a technician —

(2) Replacing the STR4 (M) PC Board

⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
- To avoid damaging the electronic circuits, make sure that the connector direction is correct when connecting the connectors.
- The PC board is sensitive 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 the PC board, discharge the static electricity from your body; for example, by touching the surface of grounded metal.

- 1** Remove the rear door.
- 2** Disconnect the six connectors, remove the STR4 (M) PC board from the locking spacers, and replace it.



- 3** To install, perform the procedure in reverse.
 - After completing the replacement, be sure to check the operation and initialize.

— Must be performed by a technician —

(3) Replacing the USIO PC Board

 **WARNING**

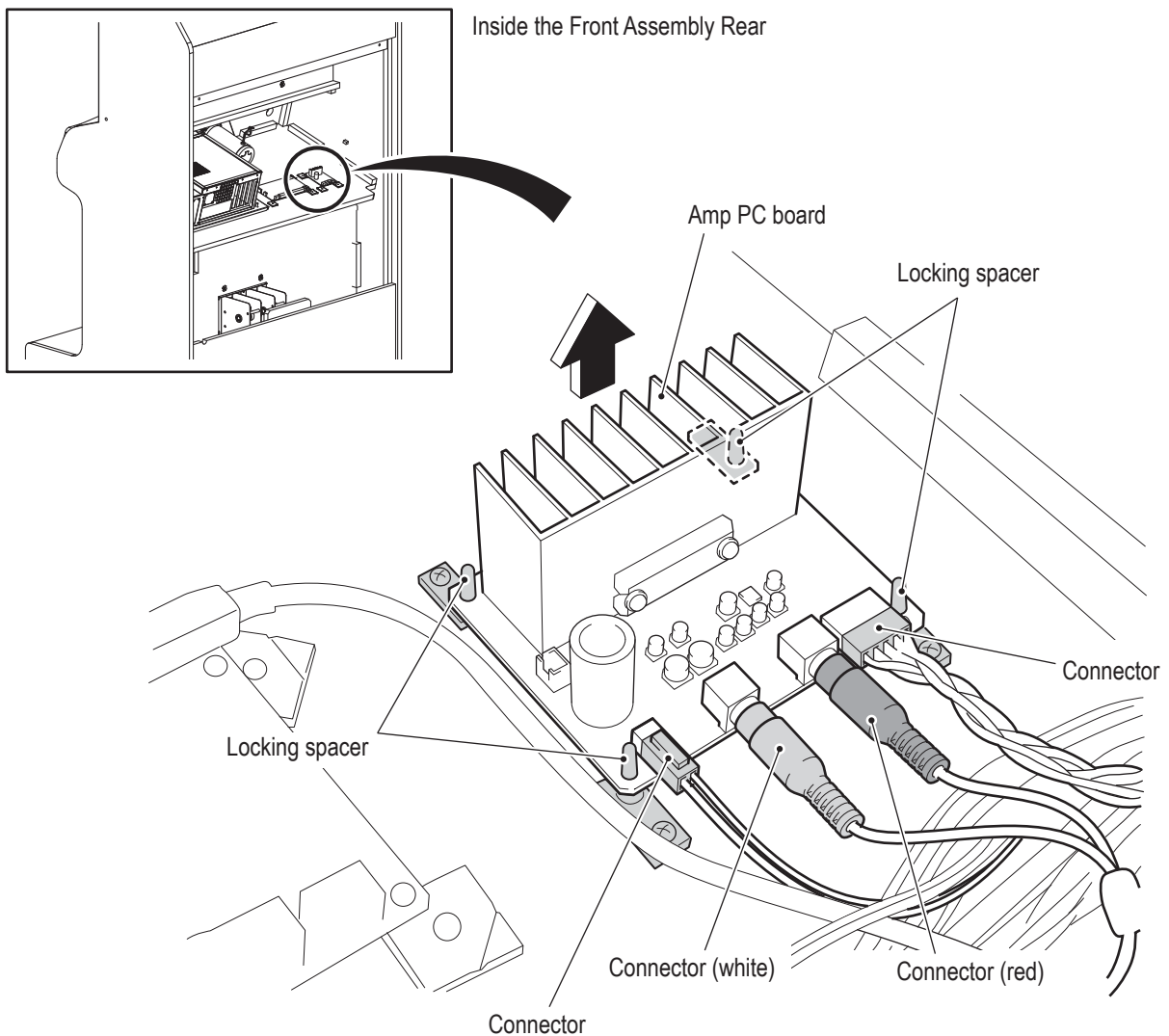
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
 - To avoid damaging the electronic circuits, make sure that the connector direction is correct when connecting the connectors.
 - The PC board is sensitive 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 the PC board, discharge the static electricity from your body; for example, by touching the surface of grounded metal.
- 1** Remove the rear door.
 - 2** Disconnect the four connectors, remove the USIO PC board from the locking spacers, and replace it.
 - 3** To install, perform the procedure in reverse.

(4) Replacing the Amp PC Board

⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
- To avoid damaging the electronic circuits, make sure that the connector direction is correct when connecting the connectors.
- The PC board is sensitive 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 the PC board, discharge the static electricity from your body; for example, by touching the surface of grounded metal.

- 1** Remove the rear door.
- 2** Disconnect the four connectors, remove the amp PC board from the locking spacers, and replace it.



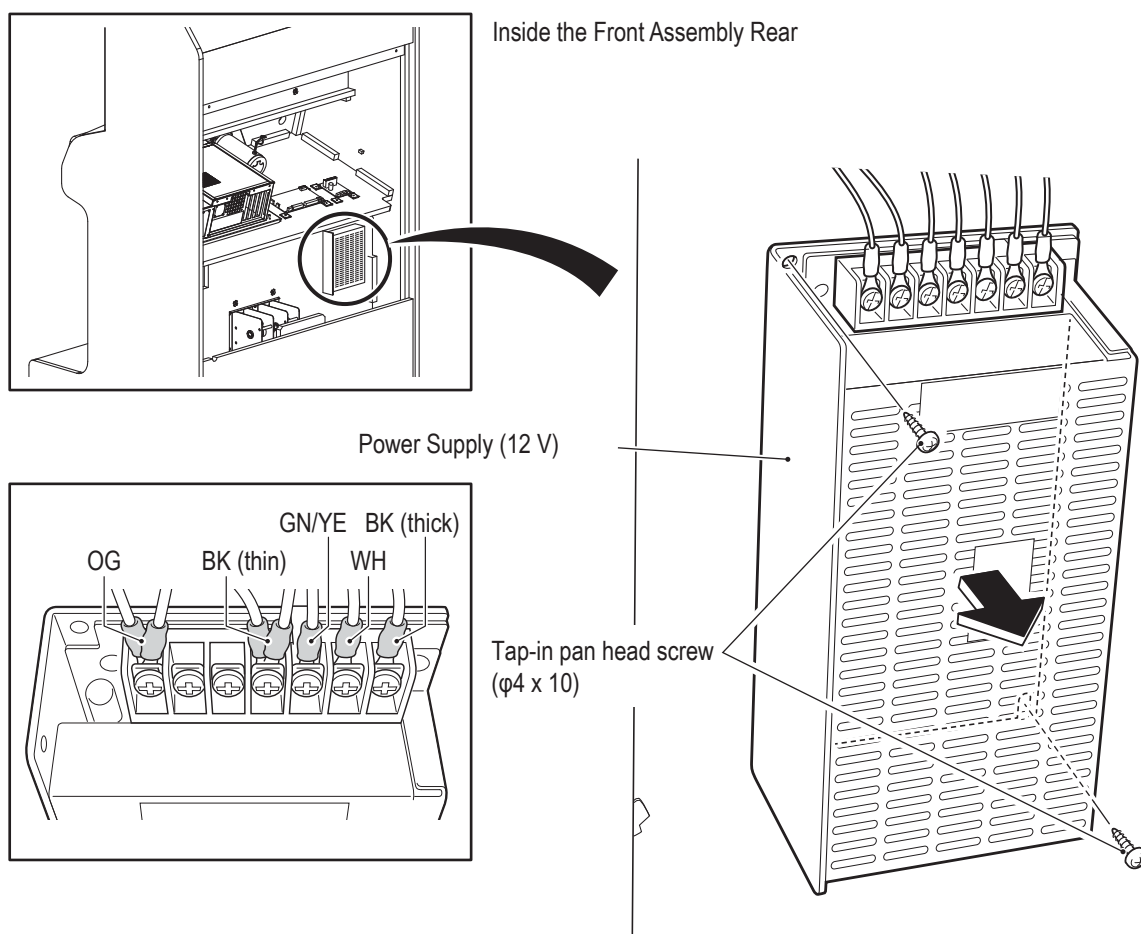
- 3** To install, perform the procedure in reverse.

— Must be performed by a technician —

(5) Replacing the Power Supply (12 V)

⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
 - To avoid damaging the electronic circuits, make sure that the connector direction is correct when connecting the connectors.
 - The PC board is 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 the PC board, discharge the static electricity from your body; for example, by touching the surface of grounded metal.
- 1** Turn off the power switch. (See “8A-2-4 Power Switch Position and Turning the Power Ewitch On” on page 48)
 - 2** Remove the rear door.
 - 3** Remove the eight screws, disconnect the ring terminals from the regulator, remove the two Phillips pan head screws (with flat and spring washers M4 x 12), and replace the switching regulator (12 V).



- 4** To install, perform the procedure in reverse. Refer to the figure above for the ring terminal connection locations.
- When connecting the ring terminals, check the harness colors and contact conditions carefully to avoid damaging the electronic circuits.

— Must be performed by a technician —

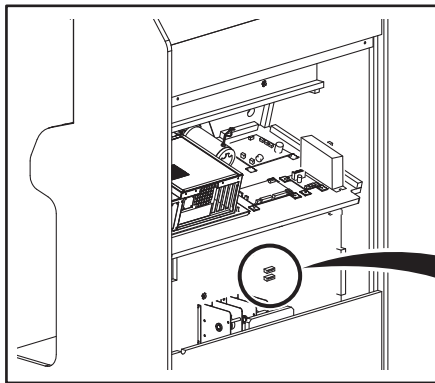
(6) Replacing the Fuse

⚠ WARNING

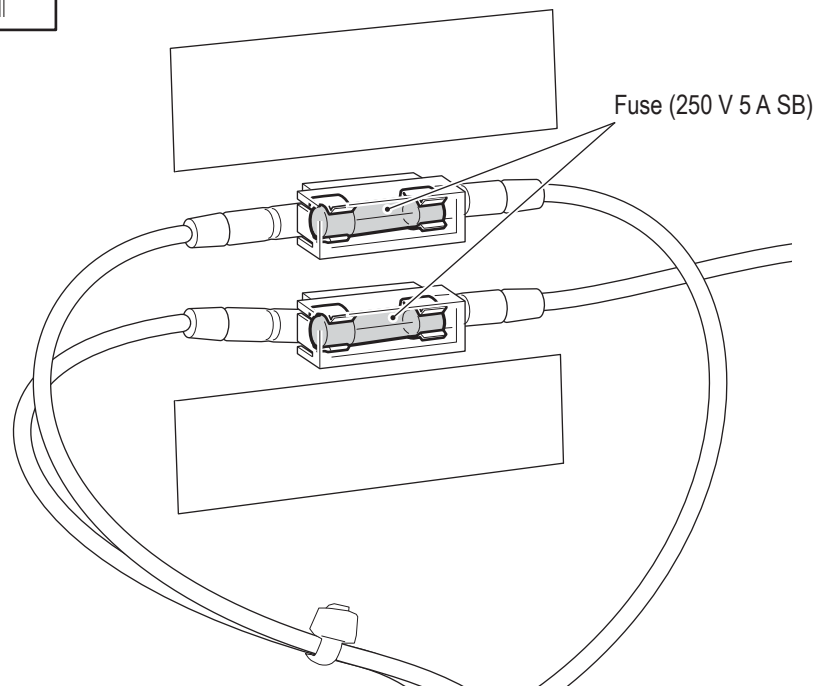
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
- Never use a fuse other than the specified fuse (250 V 5 A), because it may cause a fire. A fuse is required to prevent a fire or accident. To order a fuse, contact your distributor.

1 Remove the rear door.

2 Replace the fuse (5 A SB).



Inside the Front Assembly Rear



3 To install, perform the procedure in reverse.

— Must be performed by a technician —

8B-4-3 Pedal Assembly

(1) Removing and Installing the Pedal Assembly

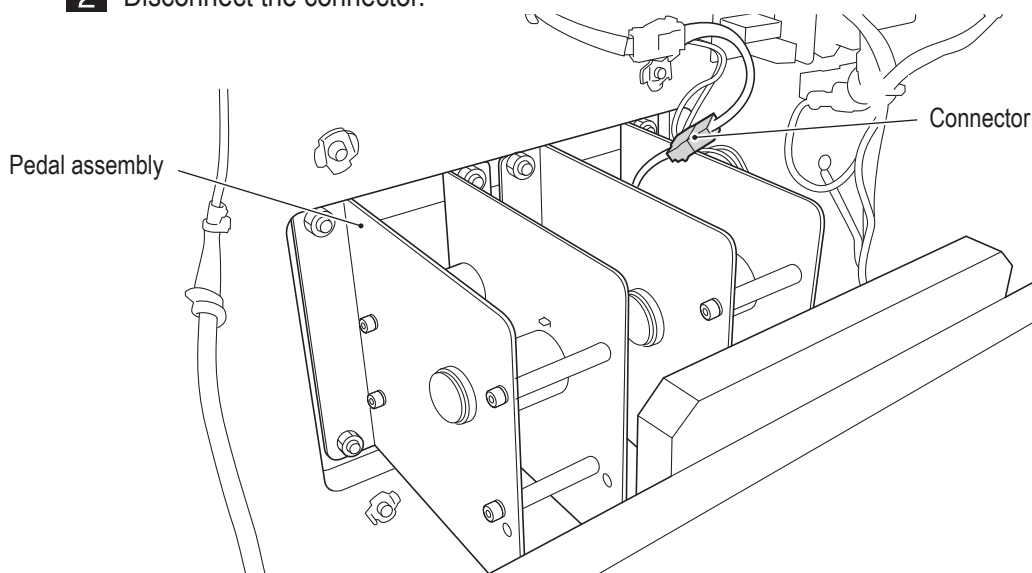
⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.

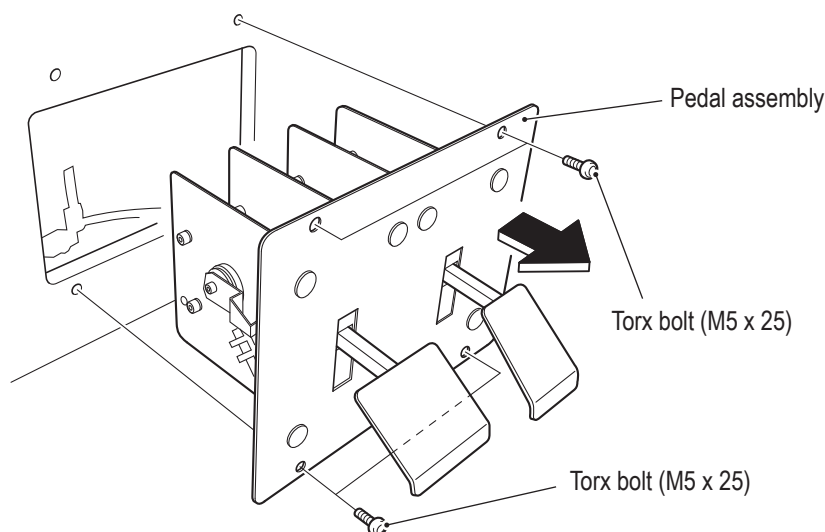
⚠ CAUTION

- The pedal assembly weighs approx. 8.8 lb. Be very careful while working, because dropping it may cause an injury!

- 1 Remove the rear door
- 2 Disconnect the connector.



- 3 Remove the four torx bolts (M5 x 25), and then slowly remove the pedal assembly(



- 4 To install, perform the procedure in reverse.
 - After completing the replacement, be sure to check the operation and initialize.

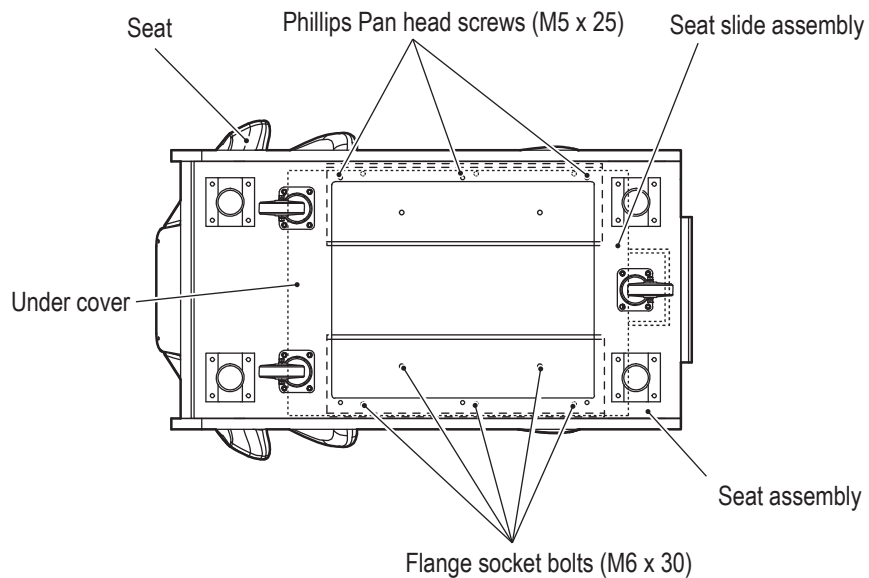
8B-4-4 Seat Assembly

(1) Replacing the Slide Unit

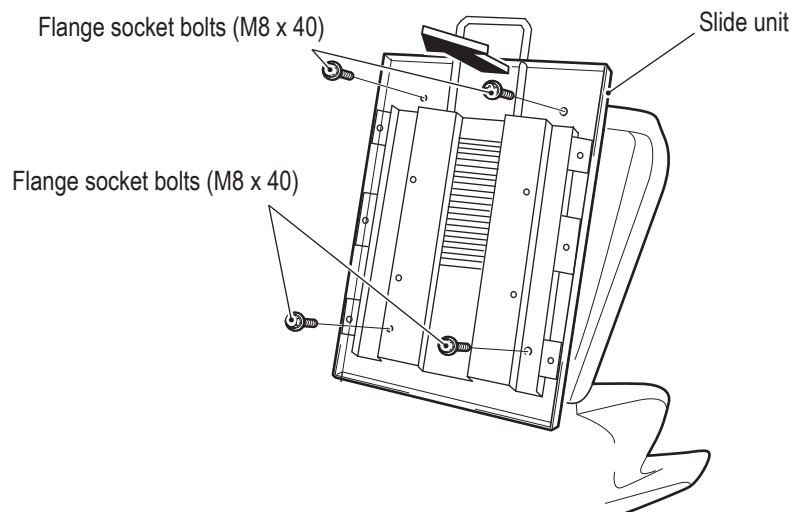
⚠ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the power switch before starting work.
- The slide unit and seat weigh approx. 33.1 lb. When laying down and removing the slide unit and seat, there is a danger of trapping your hands or an object. Make sure there is no one in the surrounding area.

- 1** Remove the six Phillips pan head screws (M5 x 25), remove the under cover. Then remove the 10 flange socket bolts (M6 x 30) to remove the seat slide assembly.



- 2** Remove the four flange socket bolts (M8 x 40), and replace the slide unit.



- 3** To install, perform the procedure in reverse.

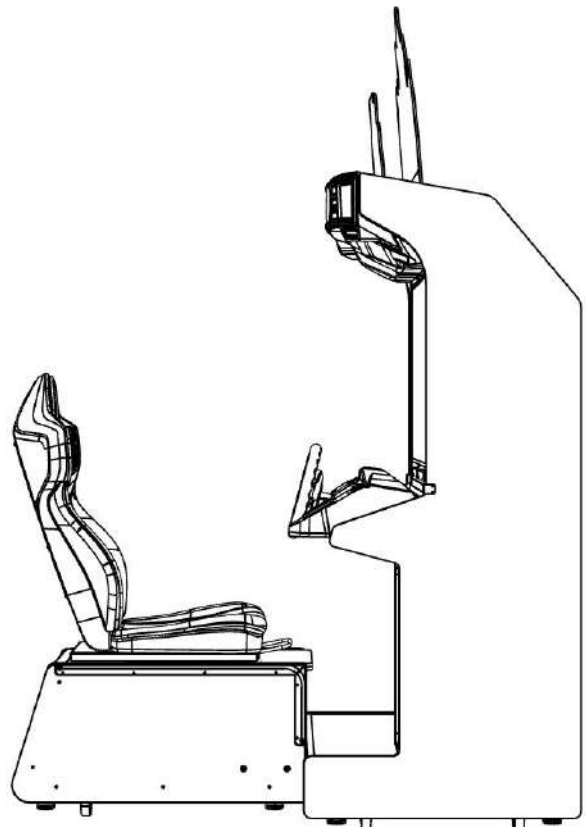
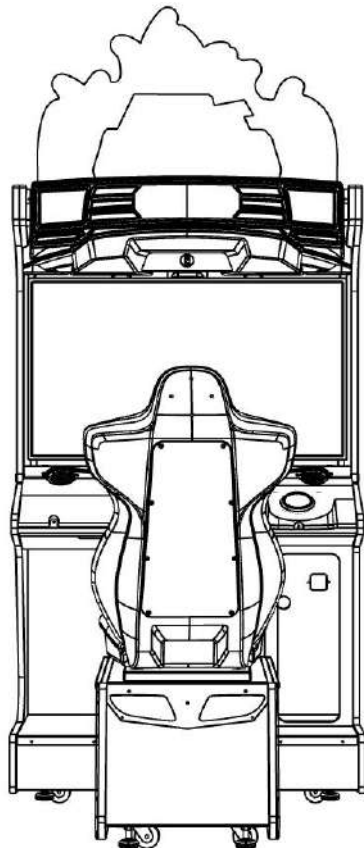
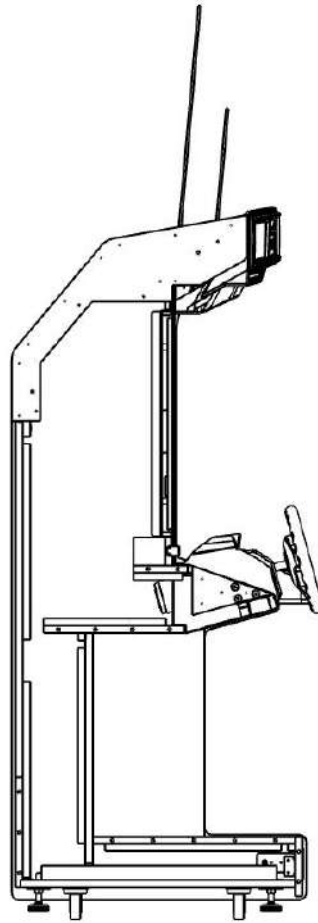
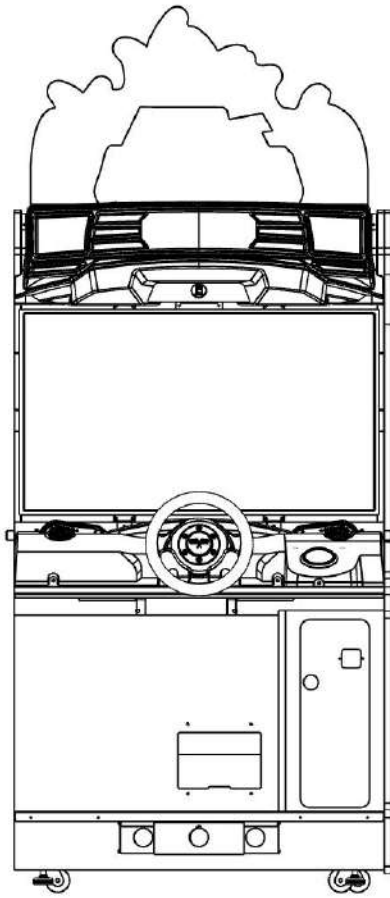
9. Disposal

WARNING

- When disposing of the machine, follow the applicable regulations for collection, transportation and disposal.
- When delegating the collection, transportation and disposal of the machine, be sure to delegate to specialists in each field.

10. Parts List

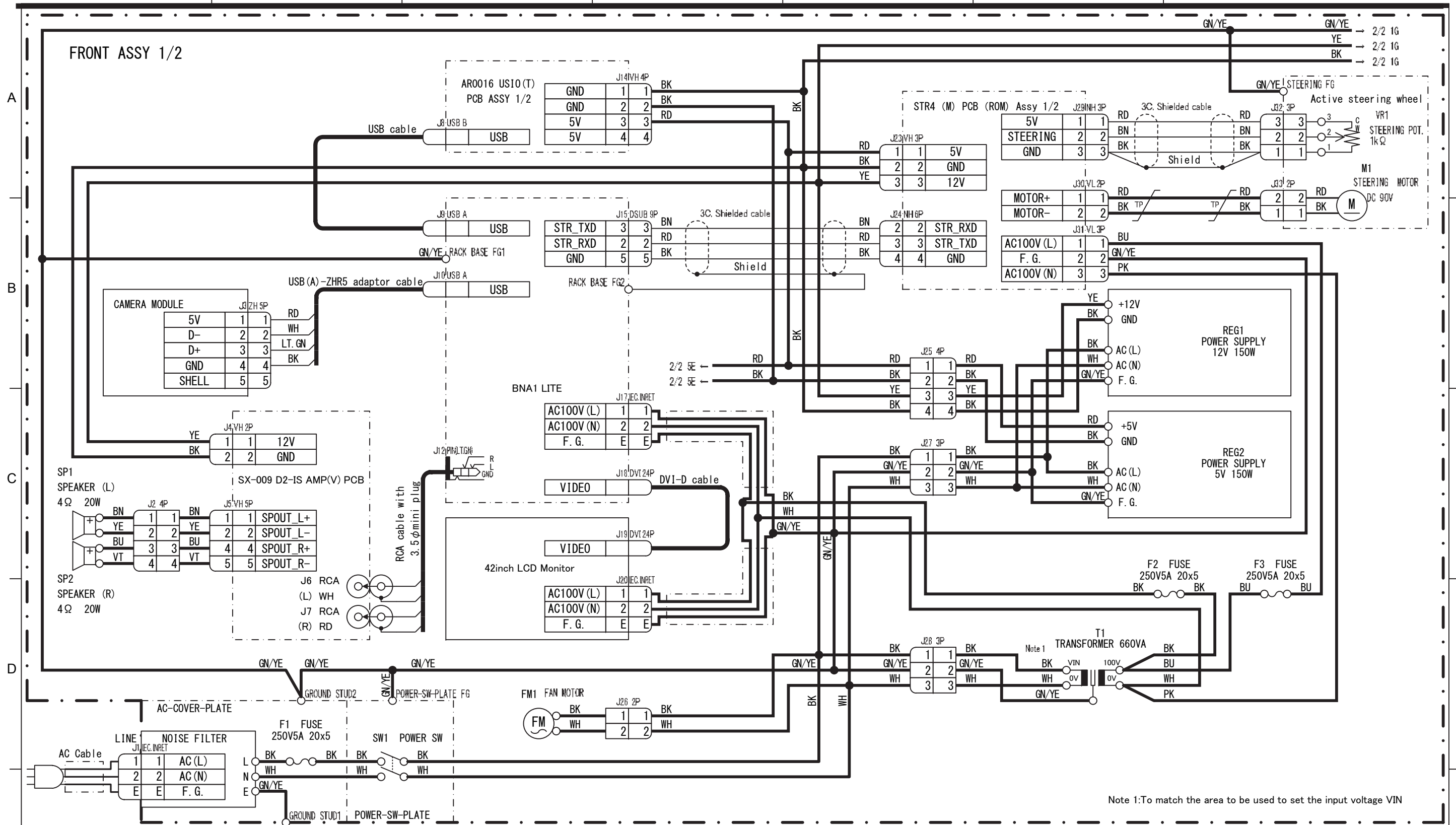
10-1



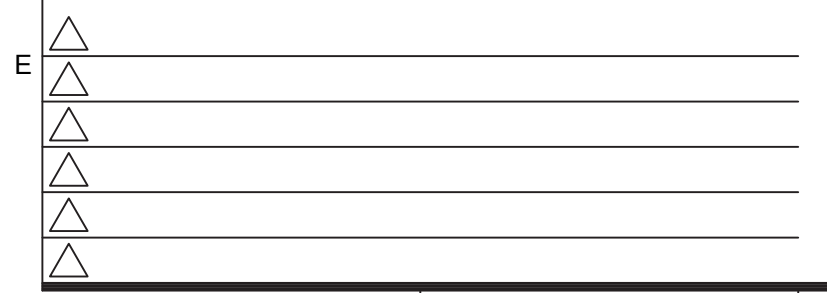
10. Parts List

Description	Qty.	Type or Rating	Part No.
Camera Kit	1		DU03-20232-00
CLC (DHU) Kit	1		DU03-20233-00
D2-IS (V) Kit	1		DU03-20234-00
MAIN KIT / MAIN RACK	1		DU03-20235-00
STR4 (M) PCB	1		DU03-20236-00
USIO KIT	1		DU03-20237-00
DHU Complete Harness	1		DU05-20295-00
Decal, Control Panel Ultimate Heat Instruct	1		DU40-20270-00
Seat back Acrylic Cover	1		DU40-20271-00
Decal, Seat Box Back	1		DU40-20272-00
Door key	1		VG26-13198-00
Cabinet Side Right Decal	1		DU40-20273-00
Cabinet Side Left Decal	1		DU40-20273-01
Camera Cover	1		DU40-20274-00
Center Dash Control Panel Insert	1		DU40-20275-00
Control Panel Left Decal (Oil / Gas)	1		DU40-20276-00
Control Panel Right Decal (Dash Icons)	1		DU40-20277-00
Ultimate Heat Button Decal	1		DU40-20278-00
Overhead "DHU" Decal	1		DU40-20279-00
Header Hex Pattern (L)	1		DU40-20280-00
Header Hex Pattern (R)	1		DU40-20280-01
Seat Back Acrylic License Plate Emblem	1		DU40-20281-00
Acrylic Flame Marquee	1		DU40-20282-00
Acrylic Logo Marquee	1		DU40-20283-00
Seat Side Acrylic Flame (L)	1		DU40-20290-00
Seat Side Acrylic Flame (R)	1		DU40-20291-00
Deadheat Unleashed Game Manual	1		DU45-20231-00
Marquee Dot Controlled Tape LED	5		DU57-20242-00
Pixel Material (L)	1		DU90-20284-00
Pixel Material (R)	1		DU90-20285-00
Marquee Plastic Header	1		DU90-20286-00
Regular Prismatic Plastic Seat Box	1		DU90-20287-00
Seat Back Plastic Insert	1		DU90-20288-00
Control Panel Cover	1		DU90-20289-00
Camera Bracket	1		M310-18361-00
Seat Cushion	1		M390-16355-00
Seat Back (M) Exp	1		M390-16356-01
Steering Assy with soft hoop & Chkrd flag	1		R580-09704-02
Seat Slide Assy	1		VG05-13709-00
Pedal Assy, MK3	1		VG05-13755-02

11. Wiring Diagram



Note 1: To match the area to be used to set the input voltage VIN

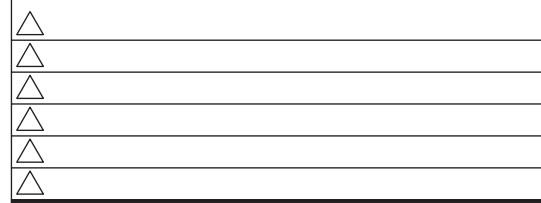
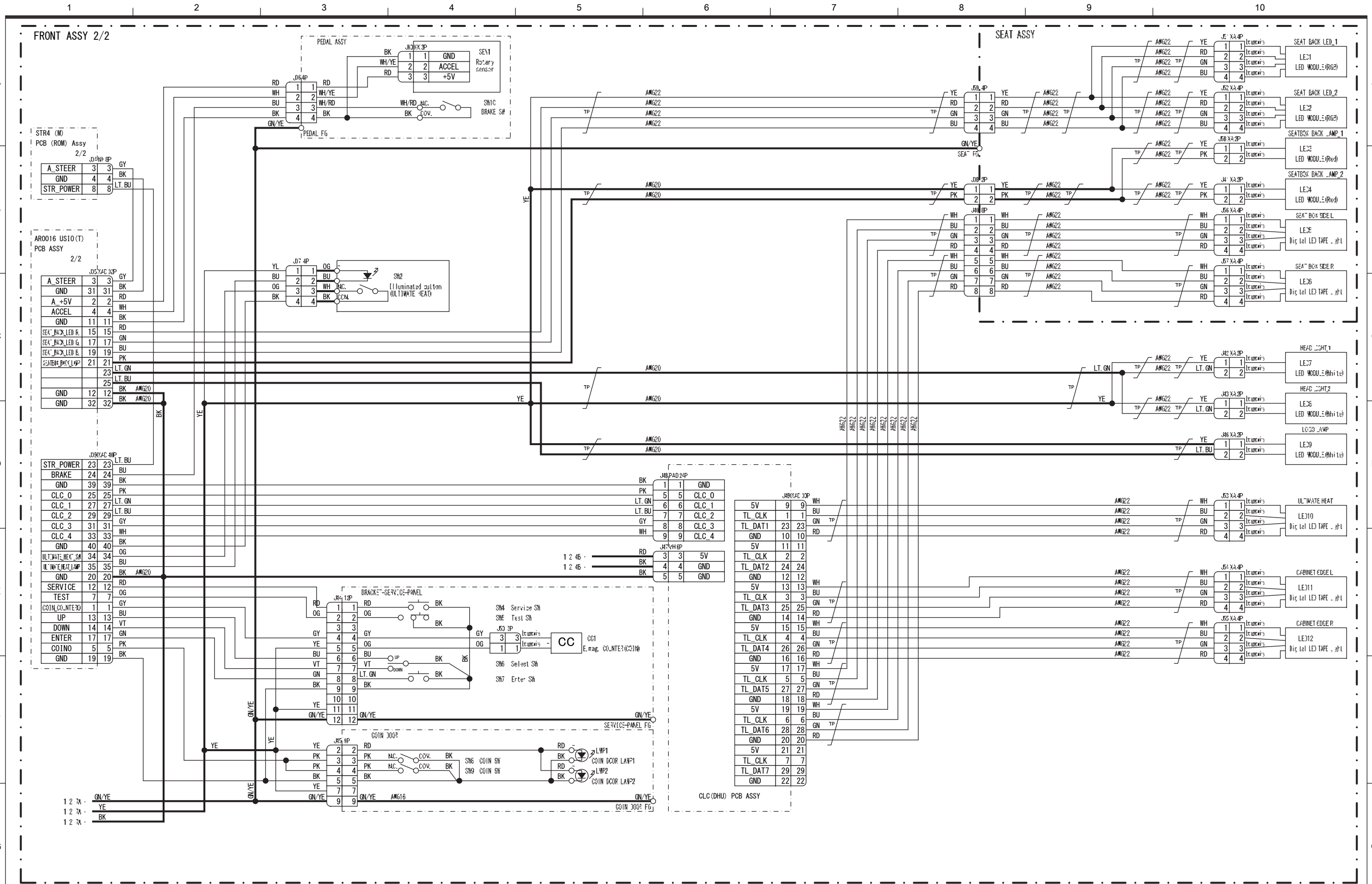


EXPLANATORY REMARKS	
LINE	AWG
GN/YE	AWG16
OTHER COLOR	AWG18
AWGxx	AWGxx
ALL COLOR	AWG24
AWGxx	AWGxx

COLOR TABLE			
BK	BLACK	VT	VIOLET
BN	BROWN	GY	GRAY
RD	RED	WH	WHITE
OG	ORANGE	PK	PINK
YE	YELLOW	LT.GN	LIGHT GREEN
GN	GREEN	LT.BU	LIGHT BLUE
BU	BLUE		

COLOR / COLOR means either
 · base color / spiral line color
 · base color / stripe line color

ENVIRONMENTAL STANDARD 「グリーン調達基準」に適合すること			
DRAWN	Munekata Fumio	2022.05.23	DEVELOPMENT CODE
CHECKED	??	2015.11.10	WV0311
CHECKED		2015.11.10	SPEC SD
APPROVED		2015.11.10	LEVEL P2
ASSY NAME		Dead Heat UNLEASHED	
DRAWING TYPE		接続図	
DRAWING NUMBER		REV	PAGE
BANDAI NAMCO Amusement Inc.		B	1/2
DH2_9101			



EXPLANATORY REMARKS

LINE	AWG
GN/YE	AWG16
OTHER COLOR	AWG18
AWGxx	AWGxx
ALL COLOR	AWG24
AWGxx	AWGxx

COLOR	VT	VIOLET
BK	BLACK	GRAY
BN	BROWN	WHITE
RD	RED	WHITE
OG	ORANGE	PINK
YE	YELLOW	LIGHT GREEN
GN	GREEN	LIGHT BLUE
LT	LT. GN	LIGHT BLUE

BU BLUE
 COLOR / COLOR means either
 -base color / spiral line color
 -base color / stripe line color

ENVIRONMENTAL STANDARD 「グリーン調達基準」に適合すること

DRAWN	Munekata Fumio	2022.05.23	DEVELOPMENT CODE	SPEC	LEVEL
CHECKED	??	2015.11.10	WV0311	SD	P2
CHECKED		2015.11.10	Dead Heat UNLEASHED		
APPROVED		2015.11.10	DRAWING TYPE 接続図		
BANDAI NAMCO Amusement Inc.			DRAWING NUMBER	REV	PAGE
			DH2_9101	B	2/2

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