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BANDAI NAMCO Games Inc.

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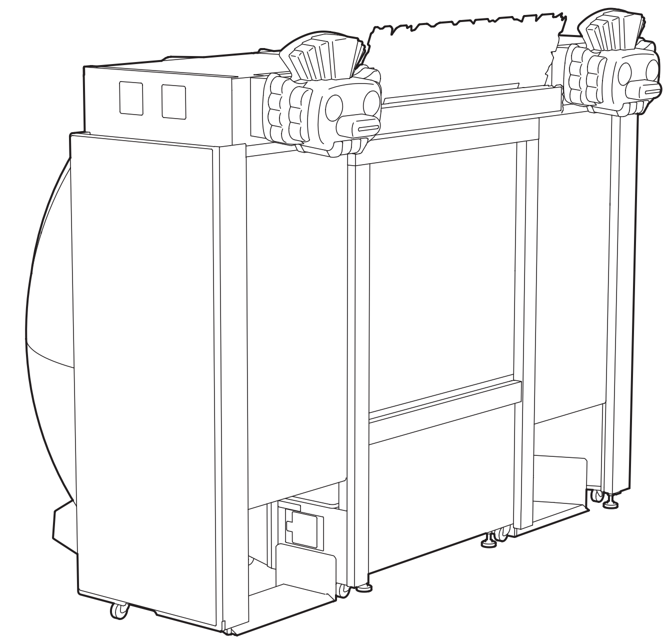
LOST LAND ADVENTURE (US and EU specifications)

Operation Manual

BANDAI NAMCO Games Inc.



LOST LAND ADVENTURE

(US and EU specifications)

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Operation Manual

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

⚠DANGER

- To ensure safe operation of this products, be sure to read this Operation Manual before use.
- Keep this Operation Manual together with the “Projector User’s Manual” in a safe place for quick access whenever needed.

The machine specifications or the information in this Operation Manual may be changed without prior notice.

Introduction

Thank you very much for purchasing LOST LAND ADVENTURE (referred to as “the machine” in this manual).

This Operation Manual describes:
- How to safely operate, install, transport, move, service 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 this machine and machine repair inquiries
- For inquiries regarding the machine or machine repairs, contact your distributor.

This Operation Manual includes the following separate volume:
Projector User’s Manual

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 outsource the work for operating, installing, moving, transporting, servicing 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

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 tasks must be performed by technicians only.

Technician: A person involved in design, manufacture, inspection or service at an amusement device manufacturer, or a person involved routinely in the service or management (such as repair) of amusement devices and who has specialist knowledge of electricity, electronics or mechanical engineering equivalent to or higher than that of 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.
- The projector unit has high-temperature/high-voltage parts after turning off the main power switch. Be careful not to touch it carelessly, as doing so may result in burns or electric shock.
- Dust accumulating on the power cord plug may result in 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 result in a 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 code
  - Do not forcibly bend the power code
  - Do not alter the power code
  - Do not bundle the power code
  - Do not pull the power code (Always unplug by holding the plug and not the power code.)
  - Do not place objects on the power code.
  - Do not allow the power cord to be caught between the machine and other device 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 supply capacity of this machine is AC 120V, maximum current consumption 6.5A for U.S. specifications and AC 230V, maximum current consumption 3.2A for EU specifications. To prevent fire and electrical shock, use indoor wiring in accordance with these power supply specifications.
- Use a power supply voltage within the range of AC 120V ± 10V for U.S. specifications and AC 230V ± 10V for EU specifications. Using a voltage outside this range may cause fire or electrical shock. Note that the use with AC 120V for U.S. specifications and AC 230V for EU specifications are recommended to ensure the machine operates under the optimal conditions.
- To ensure safe use of the machine, be sure to perform the pre-operation inspection (see “7-1 Pre-operation Inspection” on page 39) and service (see “8B. Maintenance” on page 145). 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.
- If you decide to transfer ownership of this machine, be sure to provide this Operation Manual and the Projector User’s Manual with the machine.

⚠ CAUTION

- **The projector of this machine uses a mercury lamp as the light source. The internal pressure of this lamp increases when lit. This lamp has the characteristics shown below. Be sure to fully understand these points, and handle the lamp with sufficient care.**
  - **Impact, degradation or other factors may cause the lamp to burst, emit loud noise, or reach the end of its life and no longer light up.**
  - **The time until the lamp bursts or reaches the end of its life differs according to the lamp.**
  - **Continued use past the replacement time increases the risk of the lamp bursting.**
  - **If the lamp bursts, glass shards may scatter inside the machine and exit the machine through the ventilation holes or other openings. If the lamp bursts, the tiny amount of mercury gas sealed inside the lamp may be discharged together with glass particles from the ventilation holes of the projector unit or other openings.**
  - **Check the lamp operating time occasionally with the Test mode, and prepare a new lamp when the replacement time approaches. (See “7-4-4 (5) PROJECTOR TEST” on page 59.)**
- **In case the lamp breaks...**
  - **Should the lamp, lens or other glass part break, handle any glass shards with care to avoid injury or damage, and contact your distributor.**
  - **Should the lamp burst, disconnect the power cord plug of the machine from the outlet, evacuate the room, and ventilate the room thoroughly. Then, clean the area around the machine thoroughly, and dispose of any foodstuffs that were located around the machine.**
  - **If you suspect that glass particles or mercury gas entered your eyes or that you may have breathed in these substances when the lamp burst, consult a doctor immediately.**

1-4 Machine Warning Labels

⚠WARNING

- **The warning labels attached to the machine 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 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 of the Cabinet

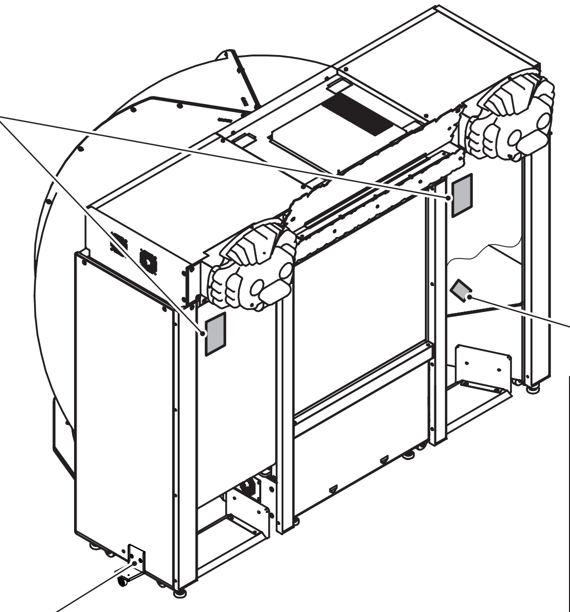
MAXIMUM CAPACITY 2 PEOPLE

⚠ CAUTION
注　意

- **Please take great care when playing this game if you have experienced or are at risk of experiencing symptoms linked to an epileptic condition (e.g. a seizure or loss of consciousness)**
- **Nausea or dizziness may occur when playing this game due to the quick visual effects displayed on a wide monitor.**
- **Cease play if you experience any discomfort or illness while playing.**
- **To avoid injury, do not swing the controller recklessly or hit it against anything. In addition, do not pull on the cable with excessive force.**
- **No more than three people may enter at once. Otherwise there is a risk of the controllers colliding and causing injury.**
- **For your safety, do not play if you are:**
  - **under the influence of alcohol**
  - **ill or injured**
  - **pregnant**
  - **suffering from or at risk of any heart condition, OR**
  - **suffering any other negative symptom**

8301520701

Caution curtain
Capacity limit (EXP)
Part No.: 461-813



⚠ 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

When installing and operating the machine
After installing the machine, please remove this part by reading the operation manual.
Otherwise, the customers may get injured or turn over.
When moving the machine
Before separating and moving the machine, please attach this part. Otherwise, the machine may be turned over.

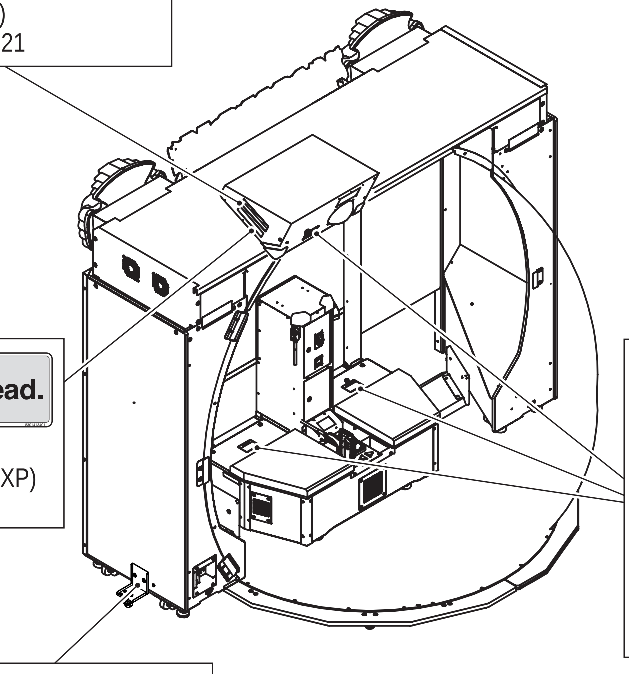
8301421101

Warning sticker
Installation and Transport B (EXP)
Part No.: 461-814

■ Inside the Cabinet

CAUTION
注　意
To avoid eye injury, do not directly look into the projector.

Caution sticker
Projector (EXP)
Part No.: 461-621



Danger overhead.

Danger sticker
Watch your head POD (EXP)
Part No.: 461-622

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.

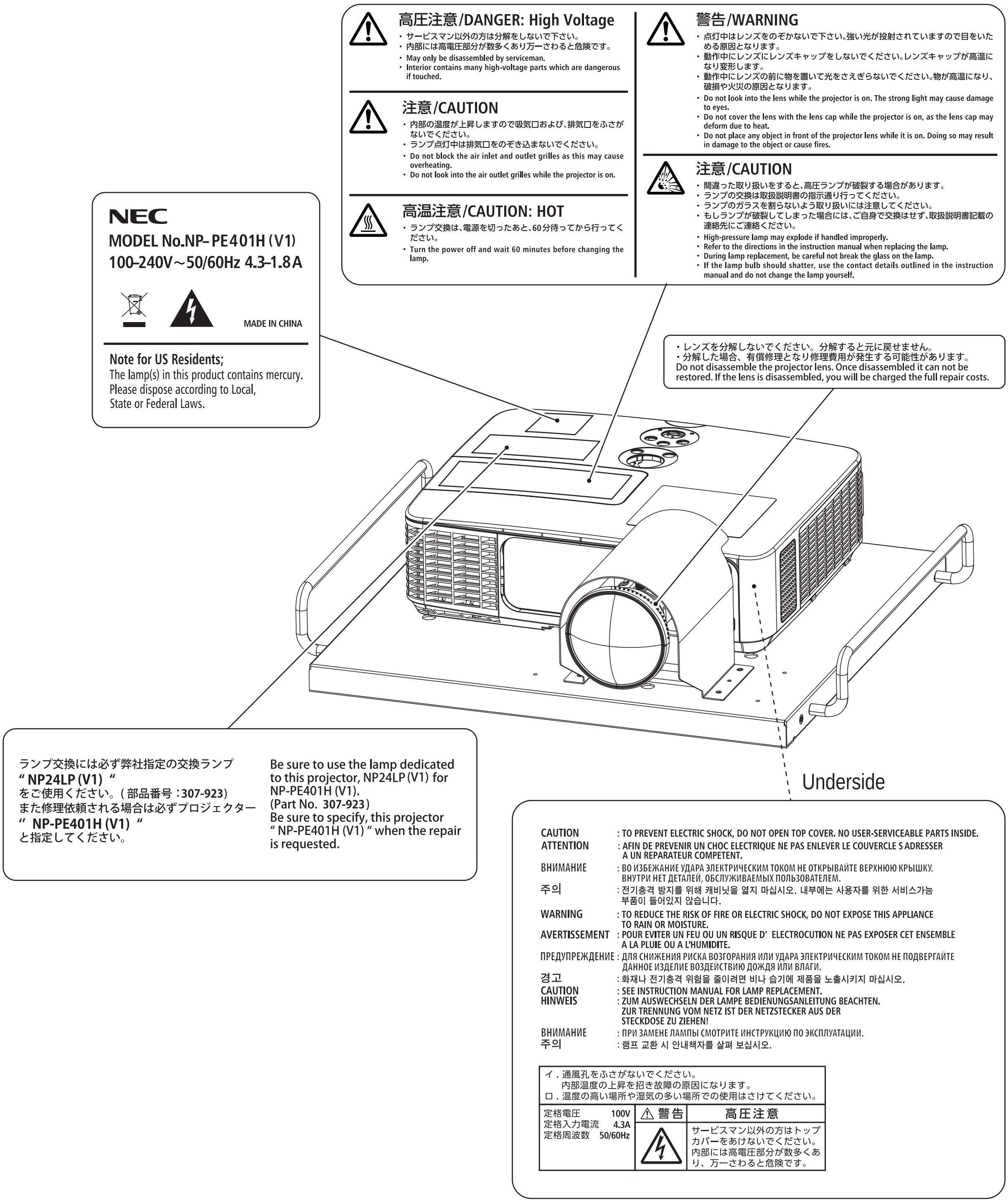
Warning sticker Service B (EXP)
Part No.: 461-539

WARNING
警　告
When installing and operating the machine
After installing the machine, please remove this part by reading the operation manual.
Otherwise, the customers may get injured or turn over.
When moving the machine
Before separating and moving the machine, please attach this part. Otherwise, the machine may be turned over.
8301421101

Warning sticker
Installation and Transport B (EXP)
Part No.: 461-814

■ Projector Unit

(NP-PE401H(V1))



高圧注意/DANGER: High Voltage

- サービスマン以外の方は分解をしないで下さい。
- 内部には高電圧部分が数多くあり万一さわると危険です。
- May only be disassembled by serviceman.
- Interior contains many high-voltage parts which are dangerous if touched.

注意/CAUTION

- 内部の温度が上昇しますので吸気口および、排気口をふさがないでください。
- ランプ点灯中は排気口をのぞき込まないでください。
- Do not block the air inlet and outlet grilles as this may cause overheating.
- Do not look into the air outlet grilles while the projector is on.

高温注意/CAUTION: HOT

- ランプ交換は、電源を切ったあと、60分待ってから行ってください。
- Turn the power off and wait 60 minutes before changing the lamp.

警告/WARNING

- 点灯中はレンズをのぞかないで下さい。強い光が投射されていますので目をいためる原因となります。
- 動作中にレンズにレンズキャップをしないでください。レンズキャップが高温になり変形します。
- 動作中にレンズの前に物を置いて光をさえぎらないでください。物が高温になり、破損や火災の原因となります。
- Do not look into the lens while the projector is on. The strong light may cause damage to eyes.
- Do not cover the lens with the lens cap while the projector is on, as the lens cap may deform due to heat.
- Do not place any object in front of the projector lens while it is on. Doing so may result in damage to the object or cause fires.

注意/CAUTION

- 間違った取り扱いをすると、高圧ランプが破裂する場合があります。
- ランプの交換は取扱説明書の指示通り行ってください。
- ランプのガラスを割らないよう取り扱いには注意してください。
- もしランプが破裂してしまった場合には、ご自身で交換はせず、取扱説明書記載の連絡先にご連絡ください。
- High-pressure lamp may explode if handled improperly.
- Refer to the directions in the instruction manual when replacing the lamp.
- During lamp replacement, be careful not break the glass on the lamp.
- If the lamp bulb should shatter, use the contact details outlined in the instruction manual and do not change the lamp yourself.

NEC
MODEL No.NP– PE401H（V1）
100–240V～50/60Hz 4.3–1.8A
MADE IN CHINA

Note for US Residents;
The lamp(s) in this product contains mercury.
Please dispose according to Local,
State or Federal Laws.

・レンズを分解しないでください。分解すると元に戻せません。
・分解した場合、有償修理となり修理費用が発生する可能性があります。
Do not disassemble the projector lens. Once disassembled it can not be restored. If the lens is disassembled, you will be charged the full repair costs.

ランプ交換には必ず弊社指定の交換ランプ
“ **NP24LP (V1)** “
をご使用ください。（ 部品番号 :**307-923**）
また修理依頼される場合は必ずプロジェクター
” **NP-PE401H (V1)** “
と指定してください。

Be sure to use the lamp dedicated to this projector, NP24LP (V1) for NP-PE401H (V1).
(Part No. **307-923**)
Be sure to specify, this projector “ NP-PE401H (V1) “ when the repair is requested.

Underside

CAUTION : TO PREVENT ELECTRIC SHOCK, DO NOT OPEN TOP COVER. NO USER-SERVICEABLE PARTS INSIDE.
ATTENTION : AFIN DE PREVENIR UN CHOC ELECTRIQUE NE PAS ENLEVER LE COUVERCLE S ADRESSER A UN REPARATEUR COMPETENT.
ВНИМАНИЕ : ВО ИЗБЕЖАНИЕ УДАРА ЭЛЕКТРИЧЕСКИМ ТОКОМ НЕ ОТКРЫВАЙТЕ ВЕРХНЮЮ КРЫШКУ. ВНУТРИ НЕТ ДЕТАЛЕЙ, ОБСЛУЖИВАЕМЫХ ПОЛЬЗОВАТЕЛЕМ.
주의 : 전기충격 방지를 위해 캐비닛을 열지 마십시오. 내부에는 사용자를 위한 서비스가능 부품이 들어있지 않습니다.
WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVERTISSEMENT : POUR EVITER UN FEU OU UN RISQUE D’ ELECTROCUTION NE PAS EXPOSER CET ENSEMBLE A LA PLUIE OU A L'HUMIDITE.
ПРЕДУПРЕЖДЕНИЕ : ДЛЯ СНИЖЕНИЯ РИСКА ВОЗГОРАНИЯ ИЛИ УДАРА ЭЛЕКТРИЧЕСКИМ ТОКОМ НЕ ПОДВЕРГАЙТЕ ДАННОЕ ИЗДЕЛИЕ ВОЗДЕЙСТВИЮ ДОЖДЯ ИЛИ ВЛАГИ.
경고 : 화재나 전기충격 위험을 줄이려면 비나 습기에 제품을 노출시키지 마십시오.
CAUTION : SEE INSTRUCTION MANUAL FOR LAMP REPLACEMENT.
HINWEIS : ZUM AUSWECHSELN DER LAMPE BEDIENUNGSANLEITUNG BEACHTEN. ZUR TRENNUNG VOM NETZ IST DER NETZSTECKER AUS DER STECKDOSE ZU ZIEHEN!
ВНИМАНИЕ : ПРИ ЗАМЕНЕ ЛАМПЫ СМОТРИТЕ ИНСТРУКЦИЮ ПО ЭКСПЛУАТАЦИИ.
주의 : 램프 교환 시 안내책자를 살펴 보십시오.

イ．通風孔をふさがないでください。
　　内部温度の上昇を招き故障の原因になります。
ロ．温度の高い場所や湿気の多い場所での使用はさけてください。

定格電圧 100V 定格入力電流 4.3A 定格周波数 50/60Hz	⚠ 警告	高圧注意
		サービスマン以外の方はトップカバーをあけないでください。内部には高電圧部分が数多くあり、万一さわると危険です。

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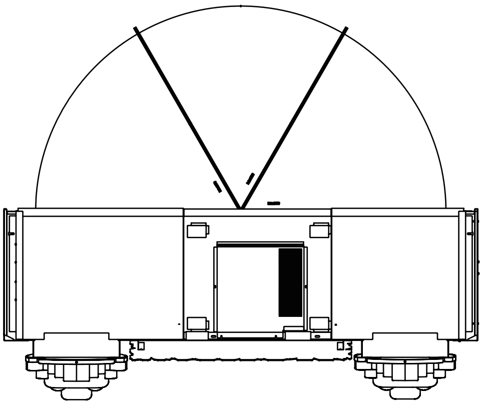
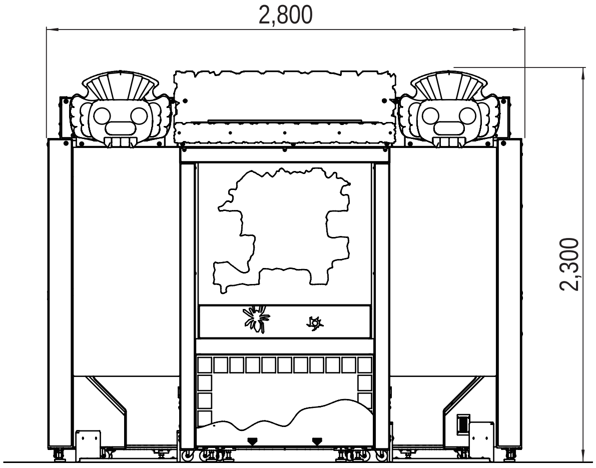
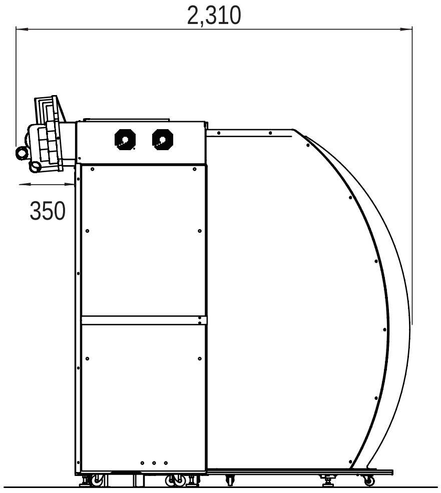
2. Specifications

(1) Power supply rate	US specification	AC 120 ±10 V
	EU specification	AC 230 ±10 V
(2) Power consumption rate	US specification	700 W
	EU specification	700 W
(3) Maximum current consumption	US specification	6.5 A
	EU specification	3.2 A
(4) Display unit	180° spherical screen + Projector with the dedicated lens	
(5) Dimensions when installed	Width (W) 2,800 x Depth (D) 2,310 x Height (H) 2,300 [mm]	
(6) Weight		
1) When installed	440 kg	
2) When disassembled		
	• Oval dome	18 kg
	• Side tower (L) assembly	50 kg
	• Side tower (R) assembly	60 kg
	• Center assembly	150 kg

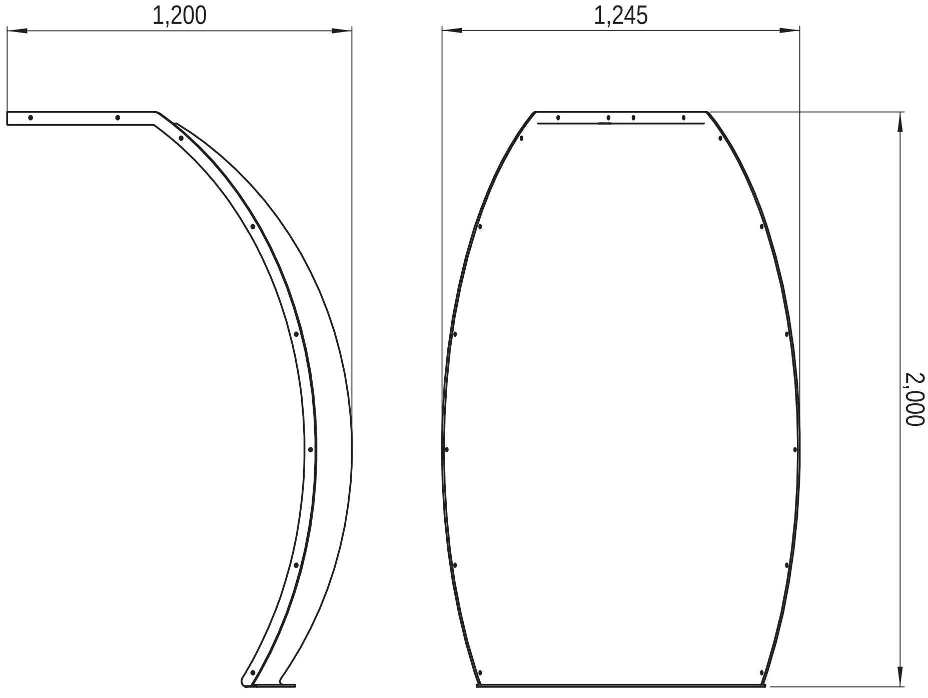




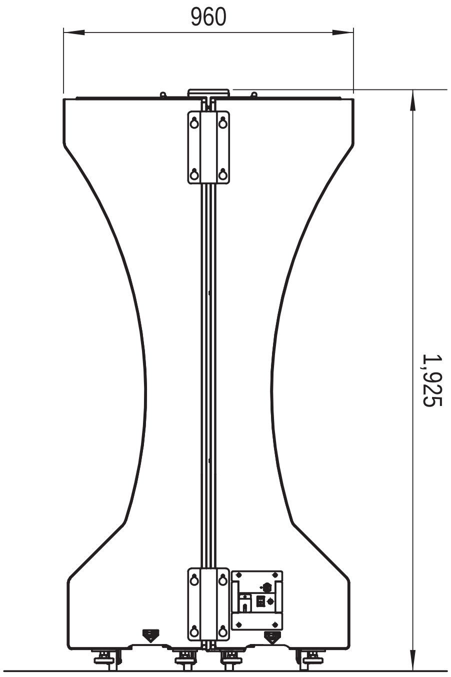


2) When disassembled

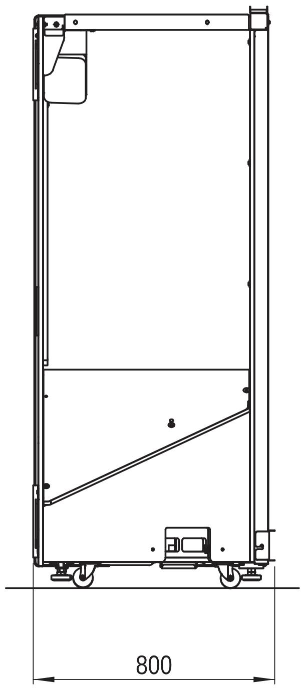
- Oval dome Width (W) 1,245 x Depth (D) 1,200 x Height (H) 2,000 [mm]



- Side tower (L) assembly, Side tower (R) assembly
  Width (W) 960 x Depth (D) 800 x Height (H) 1,925 [mm]

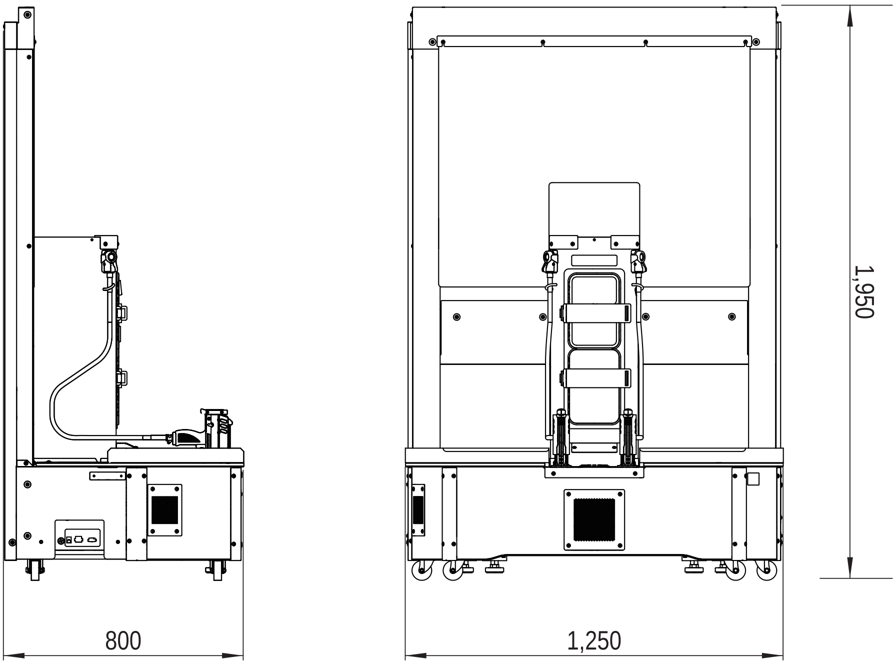


Side tower (L) assembly



Side tower (R) assembly

- Center assembly Width (W) 1,250 x Depth (D) 800 x Height (H) 1,950 [mm]



3. Package Contents

3-1 Packing List

The following items are included when this machine is shipped.

NOTICE

- **Make sure that all the items below are contained in the product package.**
- **If any items are missing, contact your distributor.**
- **Since package boxes are reused when transporting the machine, keep the boxes in a safe place.**
- **Place the projector unit in the dedicated package box for transportation.**

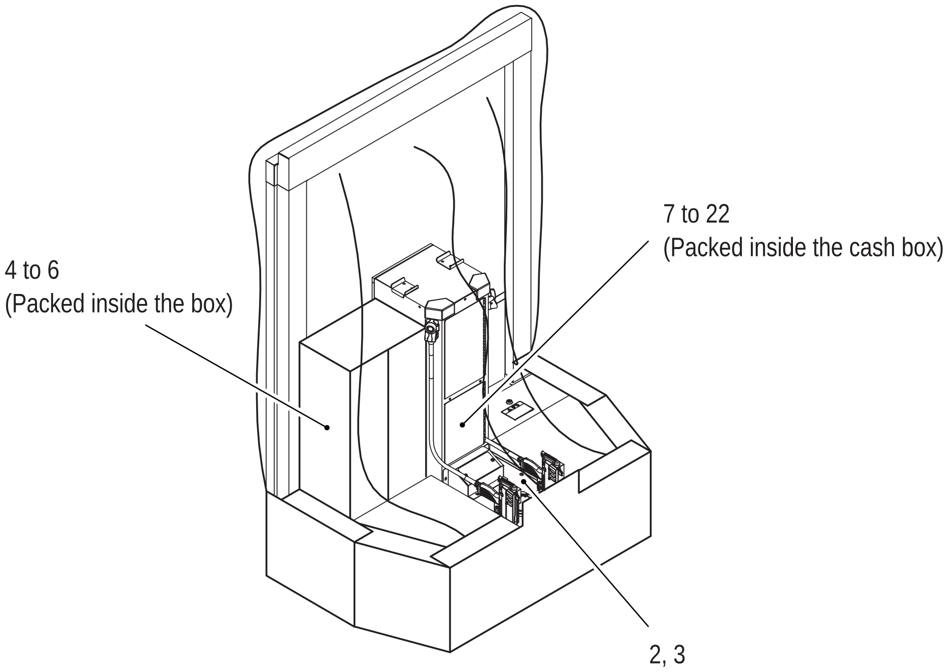
Package No.	Contents	Weight (kg)	Outside dimensions (W×D×H)	Qty.
1/13	Center assembly	150	1,250 × 800 × 1,950	1
2/13	Side tower (L) assembly Side tower (R) assembly	120	960 × 800 × 1,925	1
3/13	Roof frame D (L), Roof frame D (R), etc.	14	870 × 330 × 270	1
4/13	LEDBOX unit for signs	11	1,360 × 370 × 220	1
5/13	Tower joint base (L), Tower joint base (R), etc.	21	700 × 600 × 310	1
6/13	Roof frame A (L), Roof frame B (R), etc.	23	1,680 × 330 × 300	1
7/13	Face base (L), Face base (R)	18	950 × 750 × 410	1
8/13	Dome base (L), Dome base (R), etc.	15	1,580 × 480 × 190	1
9/13	Roof panel (L), Roof panel (R), etc.	28	1,050 × 860 × 170	1
10/13	Projector base, Center speaker	22	840 × 660 × 360	1
11/13	Oval dome	18	1,245 × 1,200 × 2,000	3
12/13	Face, etc.	14	1,445 × 465 × 395	1
13/13	Projector	13.4	600 × 600 × 285	1

* This Operation Manual is packed in 12/13.

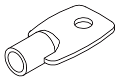
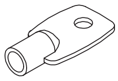
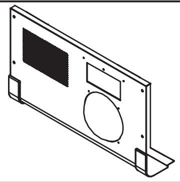
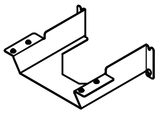
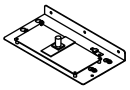
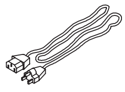
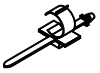
3-2 Package Details

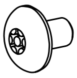
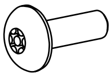
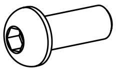
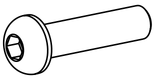
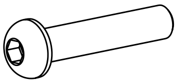
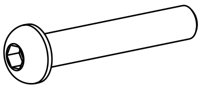
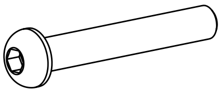
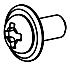
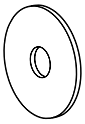
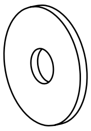
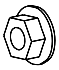
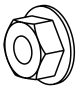
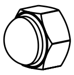
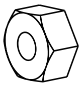
■ Package 1/13 Center assembly

Width (W) 1,250 x Depth (D) 800 x Height (H) 1,950 [mm]
Weight : 150 kg


4 to 6
(Packed inside the box)
7 to 22
(Packed inside the cash box)
2, 3

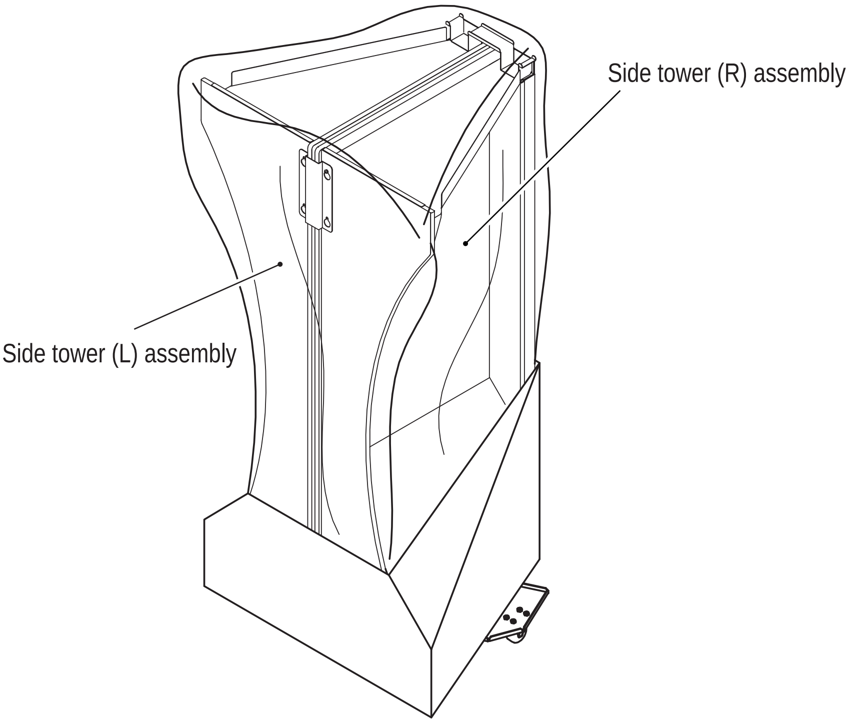
● List of contents

No.	Name	Specification	Qty.
1	Center assembly		1
2	Cash box key		2
3	Service key		2
4	Projector cover		1
5	Gun camera bracket		1
6	Gun camera PC board base (with Gun camera PC board)		1
7	Power cord (exclusive for this machine)	3m 	1
8	AC cord clamp		1

No.	Name	Specification	Qty.
9	Torx bolt (M5 x 8)		30
10	Torx bolt (M5 x 16)		12
11	Button head bolt (M6 x 16)		77
12	Button head bolt (M6 x 25)		4
13	Button head bolt (M6 x 30)		16
14	Button head bolt (M6 x 35)		12
15	Button head bolt (M6 x 40)		8
16	Cap screw (M) (M4 x 8)		8
17	Flat washer (ø5.5 x 20 x t1)		14
18	Flat washer (ø6.5 x 22 x t1.6)		119
19	Countersunk washer nut (M4)		2
20	Countersunk washer nut (M6)		2
21	Cap nut (M6)		16
22	Hexagon nut (M6)		20

■ Package 2/13 Side tower (L) assembly, Side tower (R) assembly

Width (W) 960 x Depth (D) 800 x Height (H) 1,925 [mm]
Weight : 120 kg

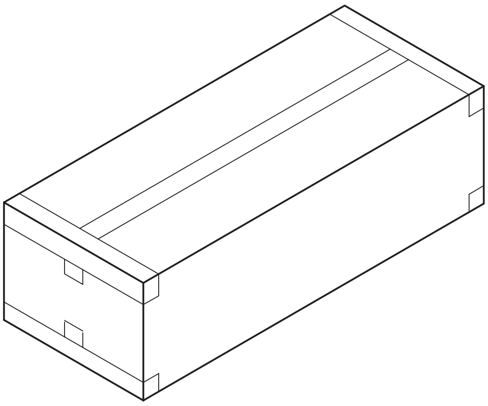

Side tower (R) assembly
Side tower (L) assembly

- List of contents

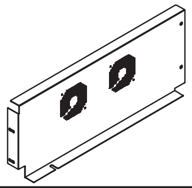
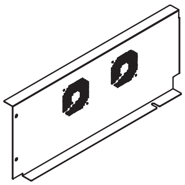
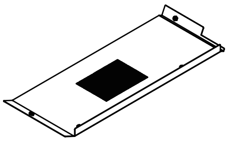
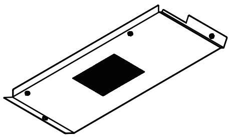
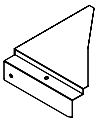
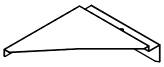
No.	Name	Specification	Qty.
1	Side tower (L) assembly		1
2	Side tower (R) assembly		1

■ Package 3/13

Width (W) 870 x Depth (D) 330 x Height (H) 270 [mm]
Weight : 14 kg

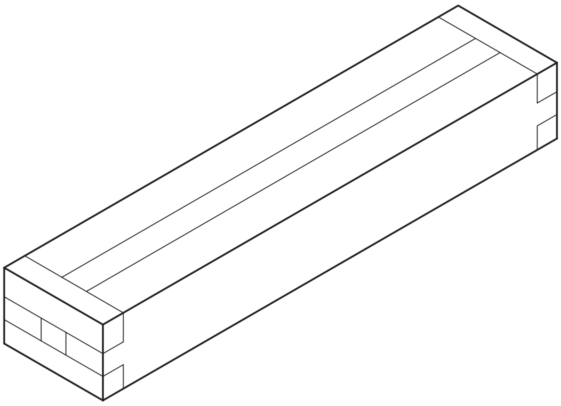


- List of contents

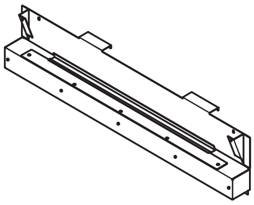
No.	Name	Specification	Qty.
1	Roof frame D (L) (with fan)		1
2	Roof frame D (R) (with fan)		1
3	Roof frame E (L)		1
4	Roof frame E (R)		1
5	Corner cover (L)		1
6	Corner cover (R)		1

■ Package 4/13

Width (W) 1,360 x Depth (D) 370 x Height (H) 220 [mm]
Weight : 11 kg

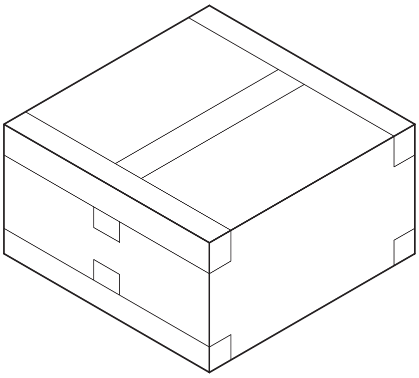


- ● List of contents

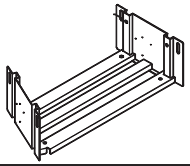
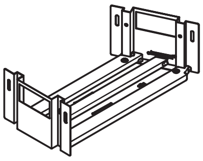
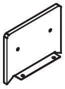
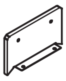
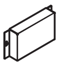
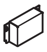
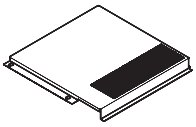
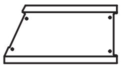
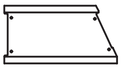
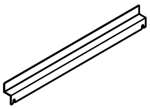
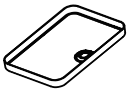
No.	Name	Specification	Qty.
1	LEDBOX unit for signs		1

Package 5/13

Width (W) 700 x Depth (D) 600 x Height (H) 310 [mm]
Weight : 21 kg

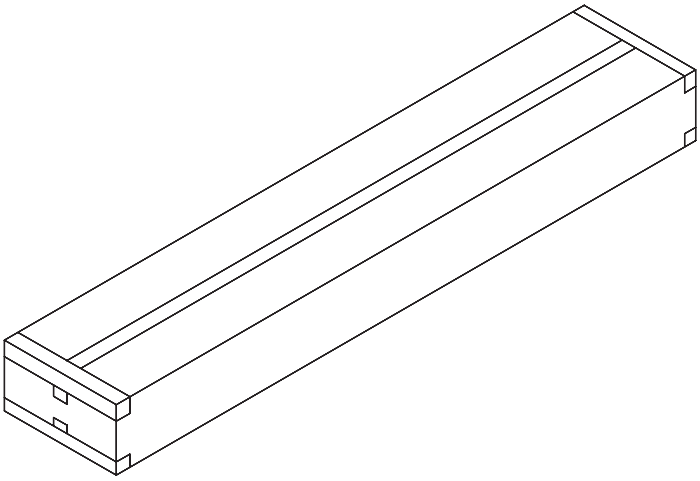


- List of contents

No.	Name	Specification	Qty.
1	Tower joint base (L)		1
2	Tower joint base (R)		1
3	Tower joint cover		2
4	Tower joint cover (S)		2
5	Harness cover (L)		1
6	Harness cover (R)		1
7	Dome holder		6
8	Roof frame C cover		1
9	Tower joint plate (L)		1
10	Tower joint plate (R)		1
11	Projector mask support(EXP)		1
12	Blank door	(US specification only) 	1

■ Package 6/13

Width (W) 1,680 x Depth (D) 330 x Height (H) 300 [mm]
Weight : 23 kg



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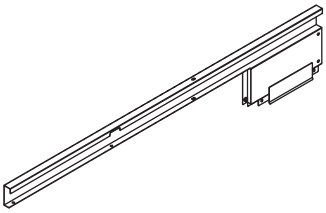
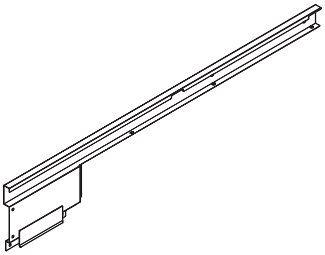
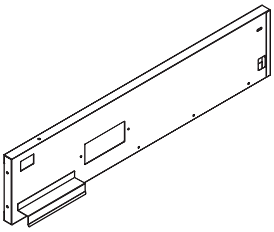
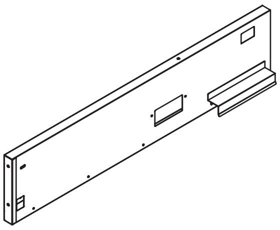
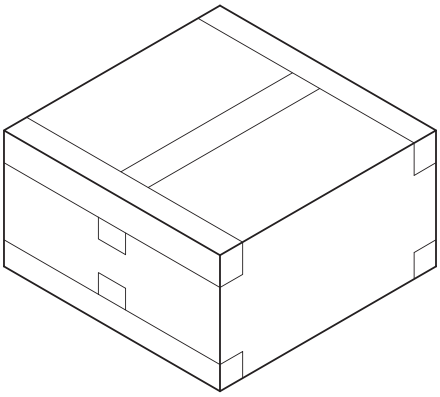
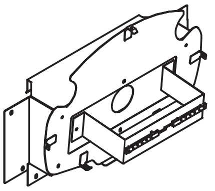
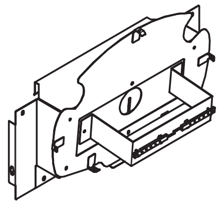
No.	Name	Specification	Qty.
1	Roof frame A (L)		1
2	Roof frame A (R)		1
3	Roof frame B (L)		1
4	Roof frame B (R)		1

■ Package 7/13

Width (W) 950 x Depth (D) 750 x Height (H) 410 [mm]
Weight : 18 kg

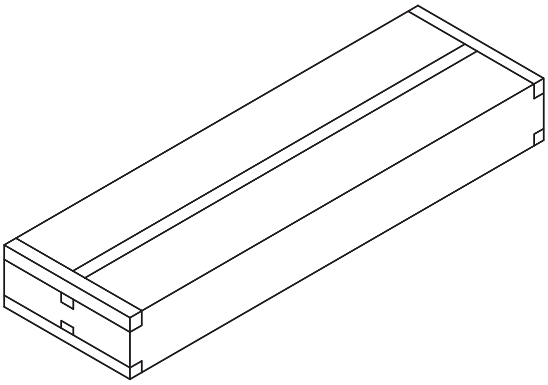


- List of contents

No.	Name	Specification	Qty.
1	Face base (L)		1
2	Face base (R)		1

■ Package 8/13

Width (W) 1,580 x Depth (D) 480 x Height (H) 190 [mm]
Weight : 15 kg



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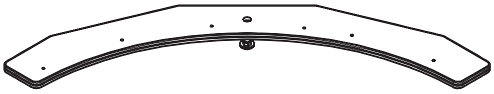
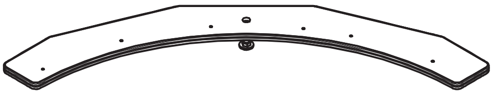
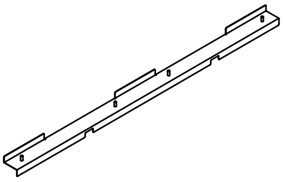
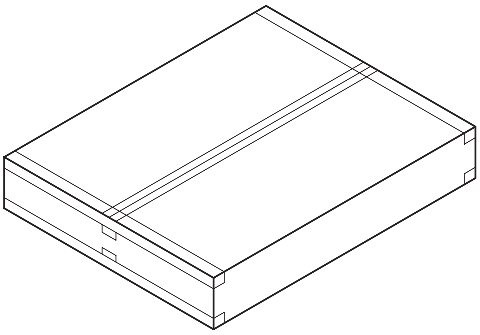
No.	Name	Specification	Qty.
1	Dome base (L)		1
2	Dome base (R)		1
3	Dome base bracket		1

Package 9/13

Width (W) 1,050 x Depth (D) 860 x Height (H) 170 [mm]
Weight : 28 kg



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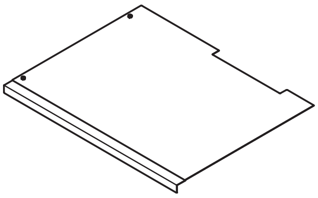
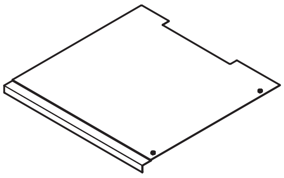
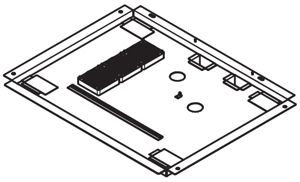
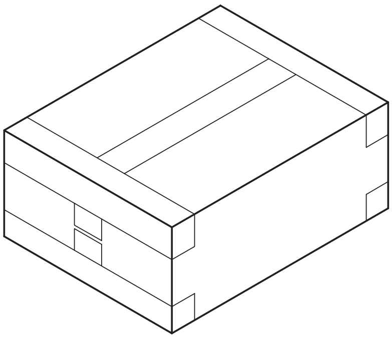
No.	Name	Specification	Qty.
1	Roof panel (L)		1
2	Roof panel (R)		1
3	Roof frame C (with fan)		1

■ Package 10/13

Width (W) 840 x Depth (D) 660 x Height (H) 360 [mm]
Weight : 22 kg



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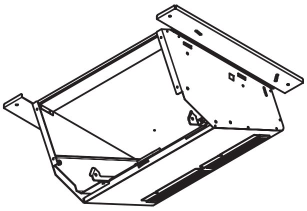
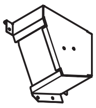
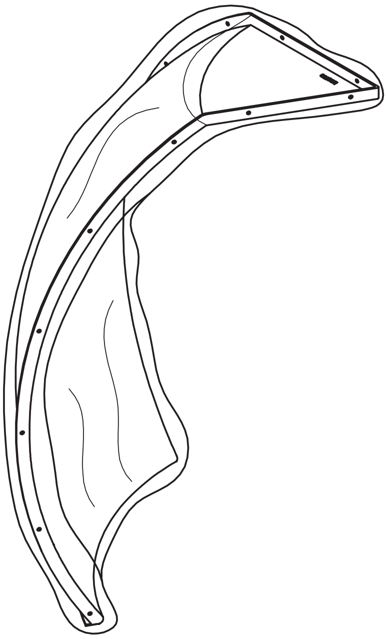
No.	Name	Specification	Qty.
1	Projector base		1
2	Center speaker		1

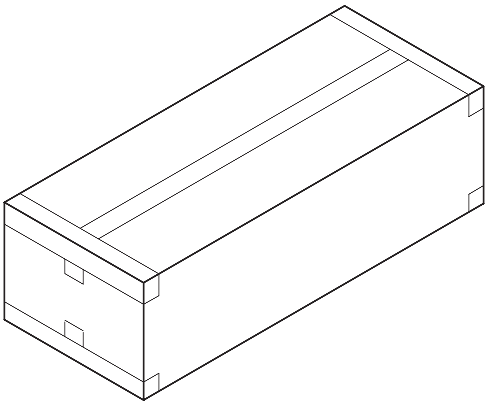
■ Package 11/13 Oval dome (3 pcs.)

Width (W) 1,245 x Depth (D) 1,200 x Height (H) 2,000 [mm]
Weight : 18 kg (1 pc.)

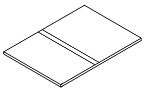
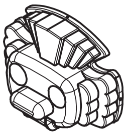
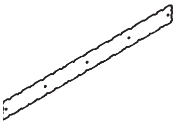
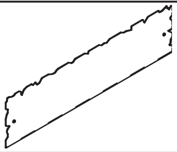
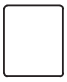
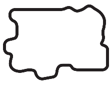
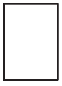
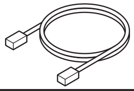
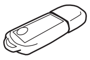


■ Package 12/13

Width (W) 1,445 x Depth (D) 465 x Height (H) 395 [mm]
Weight : 14 kg

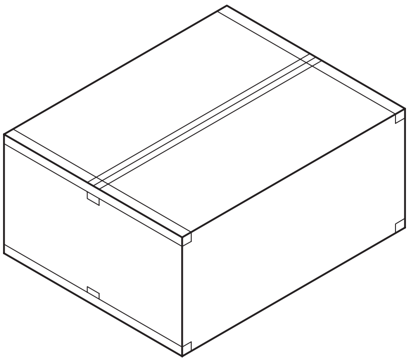


● List of contents

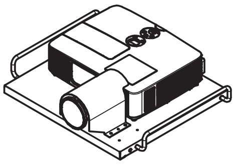
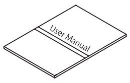
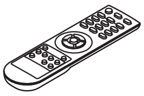
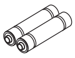
No.	Name	Specification	Qty.
1	Operation Manual (this manual)		1
2	Face		2
3	Curtain		2
4	Block panel		1
5	Sign panel(EXP)		1
6	POP (B)(EXP)		1
7	POP (C)(EXP)		1
8	POP (D)(EXP)		1
9	Poster(EXP)		1
10	LAN cable, 20 m		1
11	Inside curtain		1
12	USB dongle		1

■ Package 13/13 Projector

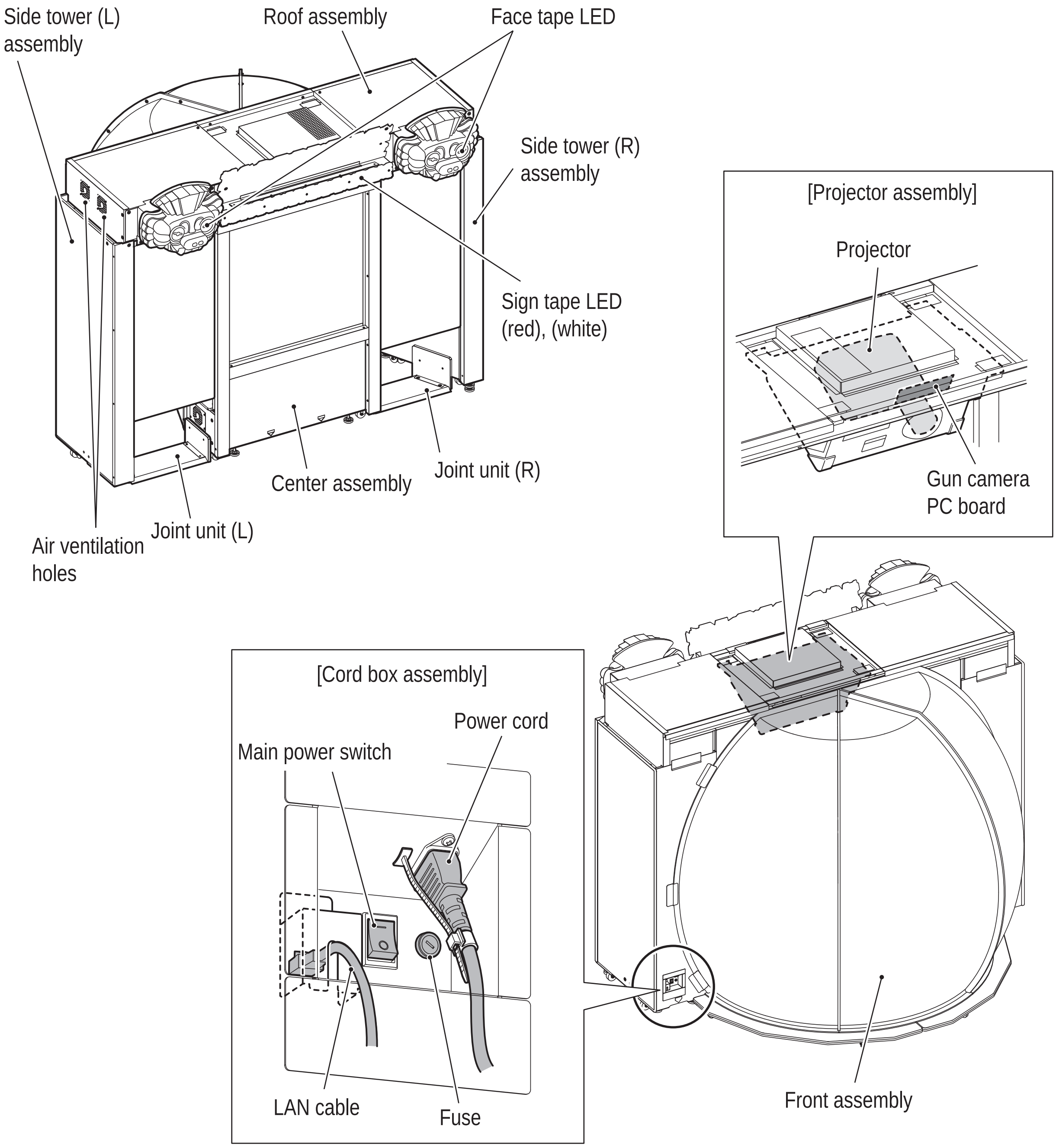
Width (W) 600 x Depth (D) 600 x Height (H) 285 [mm]
Weight : 13.4 kg

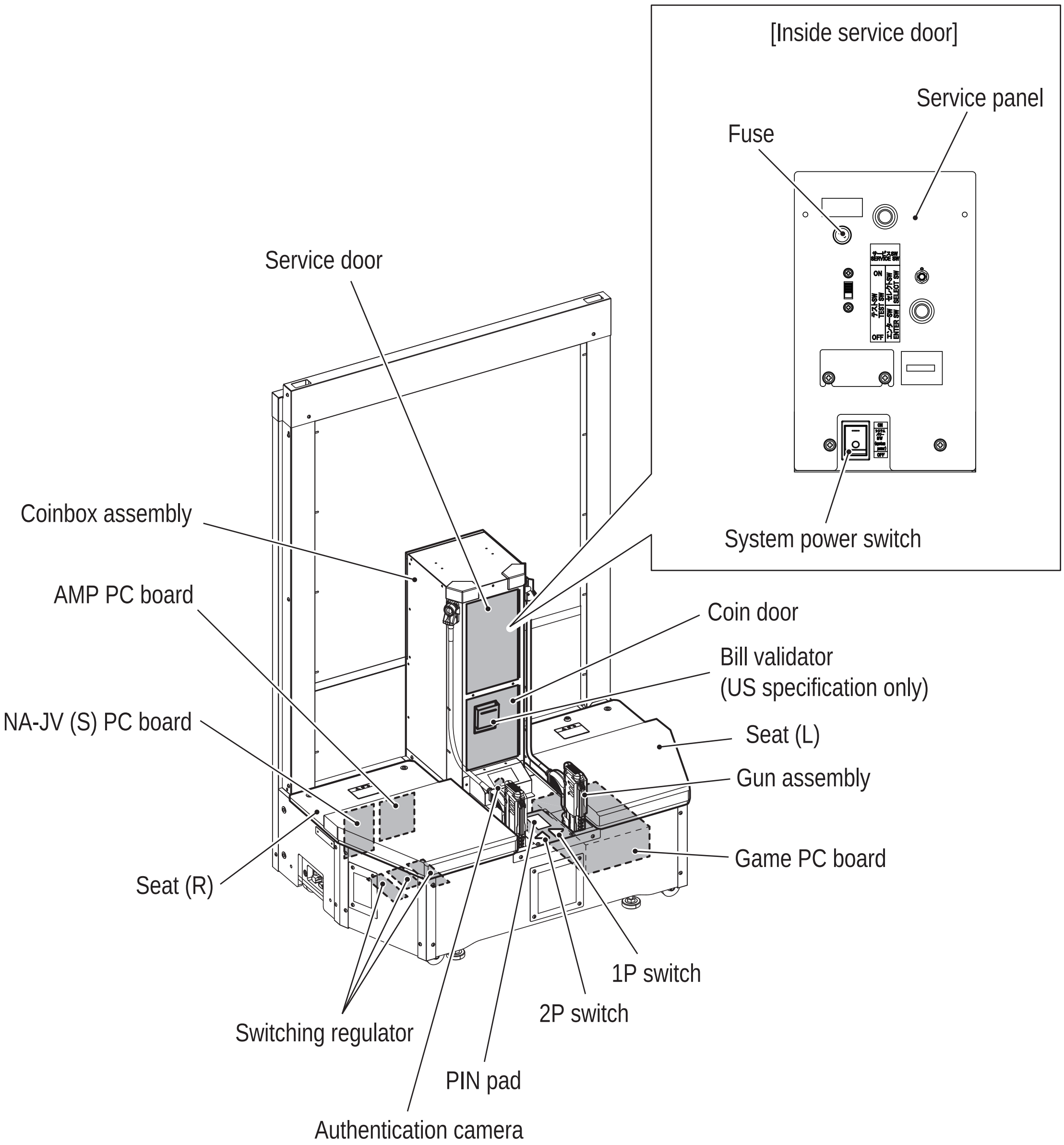


- List of contents

No.	Name	Specification	Qty.
1	Projector unit		1
2	Projector User's Manual		1
3	Remote control		1
4	Remote control battery	AAA 	2

4. Overall Configuration (Part Names)


Side tower (L) assembly
Roof assembly
Face tape LED
Side tower (R) assembly
Sign tape LED (red), (white)
Joint unit (R)
Center assembly
Joint unit (L)
Air ventilation holes
[Projector assembly]
Projector
Gun camera PC board
[Cord box assembly]
Power cord
Main power switch
LAN cable
Fuse
Front assembly


[Inside service door]
Service panel
Fuse
System power switch
Service door
Coinbox assembly
AMP PC board
NA-JV (S) PC board
Seat (R)
Switching regulator
Authentication camera
PIN pad
2P switch
1P switch
Game PC board
Gun assembly
Seat (L)
Bill validator
(US specification only)
Coin door

5. Installation and Delivery 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 "8A-14 Connecting the Power Cord and Ground Wire" on page 138).**
- **Install the machine securely by using the level adjusters. Unstable machine installation may result in an accident or injury (see "8A-12 Level Adjuster Adjustment" on page 133).**

5-1 Installation Conditions

⚠WARNING

- **Do not block the ventilation holes of the machine with any objects or a wall, etc. If the ventilation holes are blocked, the inside of the machine may become hot and result in fire or malfunction.**

5-1-1 Installation Locations to Avoid

⚠WARNING

- **The 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**
- **The machine is not suitable for installation in an area where a water jet could be used.**

This machine cannot be used at high altitude (1,500m or higher) as the cooling efficiency of the projector decreases due to thin air.

Do not install the machine in the following locations, as the screen may become difficult to see or the game may malfunction.

- Locations exposed to direct sunlight
- Locations where a spotlight shines on the screen

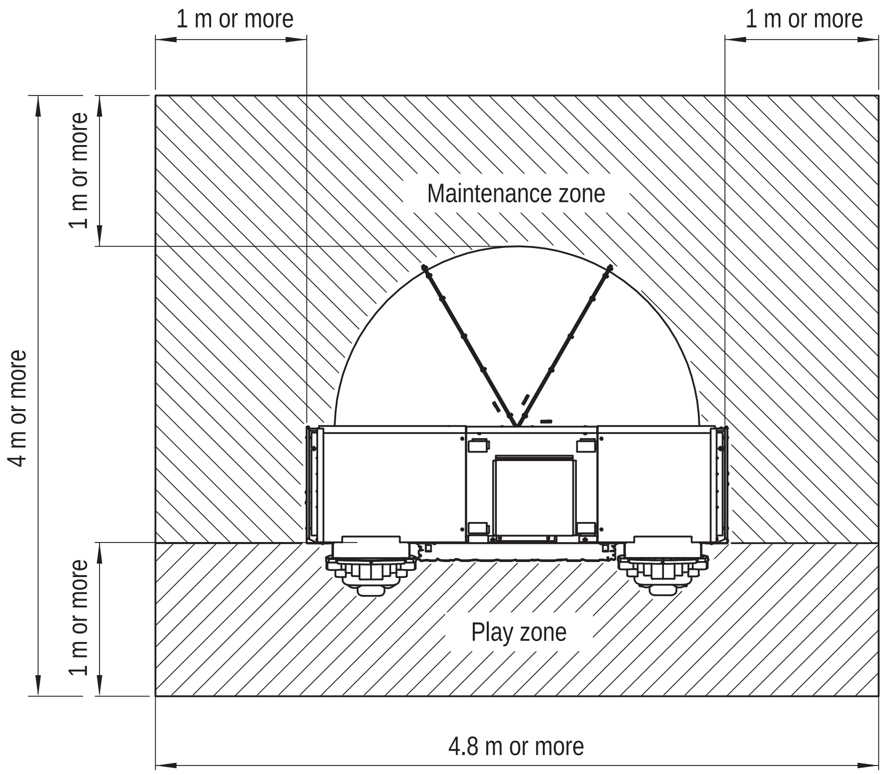
5-1-2 Play Zone during Operation

⚠WARNING

- **Create a play zone around the machine so that players leaving the machine do not bump into bystanders or passersby.**

NOTICE

- **To install this machine, provide a play zone and maintenance zone roughly as illustrated in the following figure. Be sure to preserve the play zone and maintenance zone as they are also required for maintenance purposes.**
- **A ceiling height of 2 m 50 cm or more is required.**



5-2 Dimensions Required for Delivery Route (Doors, Corridors, etc.)

The following are the minimum clearances required for delivery entrances and corridors.

- Center assembly
  1,250 (W) x 800 (D) x 1,950 (H) [mm]

- Side tower (L), (R) assembly
  960 (W) x 800 (D) x 1,925 (H) [mm]

- Oval dome
  1,000 (W) x 2,000 (D) x 1,200 (H) [mm]

Therefore, dimensions larger than the above are required for all delivery routes.

6. Moving and Transporting

⚠WARNING

- **This machine cannot be moved in the installed condition. If it is moved/transported without disassembling, an accident may occur. Be sure to move/transport this machine following the procedures instructed in this document.**
- **Do not leave the machine on a slope. It may fall over or result in an accident.**

6-1 Moving (Same Floor)

⚠WARNING

- **To move this machine, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see "8A. Installation and Assembly" on page 86).**
- **To move this machine, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly. If an assembly is moved without such parts, it may cause falling or an accident (see "8A-11 Mounting the Front and Center Assemblies" on page 129).**
- **Moving this machine should be performed by 2 or more persons. Otherwise, it may cause falling or an accident.**

NOTICE

- **Do not subject the machine to impact while lowering it.**
- **Move the machine carefully to avoid damaging it.**
- **Make sure to lift up the level adjuster to the highest position even when the travel distance is short (see "8A-12 Level Adjuster Adjustment" on page 133).**
- **Handle the LAN cable and power cable with care. Be particularly careful when disconnecting and connecting the communication cables (see "8A-14 Connecting the Power Cord and Ground Wire" on page 138 and "8A-15 Connecting the LAN Cable" on page 140).**

6-2 Transporting

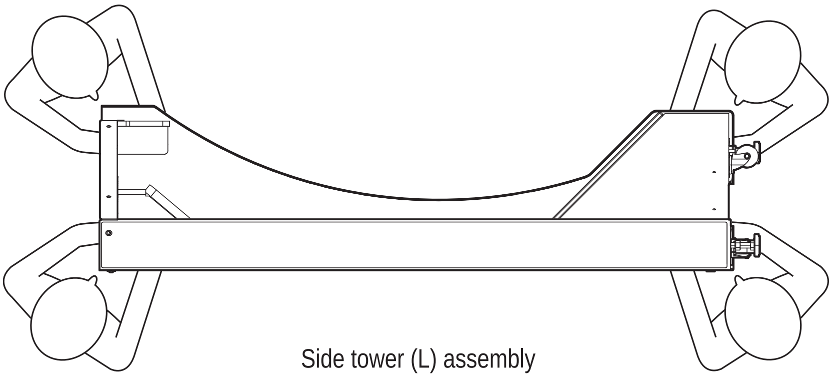
6-2-1 Transporting Manually (Stairways etc.)

⚠WARNING

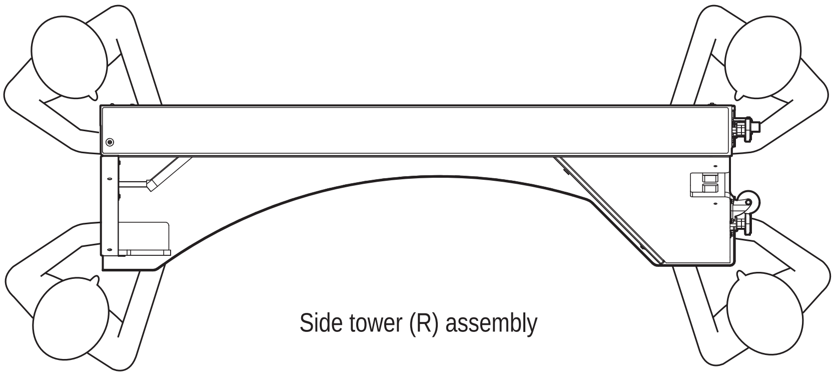
- **In case of transporting this machine by hand, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see “8A. Installation and Assembly” on page 86).**
- **In case of transporting this machine by hand, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly. If an assembly is transported without such parts, it may cause falling or an accident (see “8A-11 Mounting the Front and Center Assemblies” on page 129).**

⚠WARNING

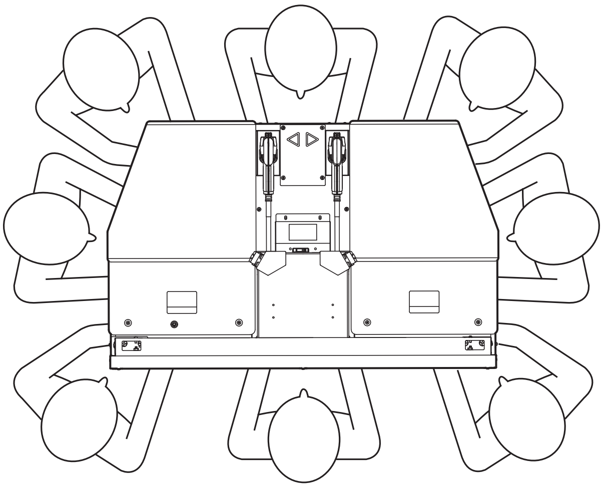
- **When transporting the machine manually, be sure to use the following number of people. Overburdening yourself may result in an accident or injury.**
  - **Side tower (L) assembly (50 kg): 4 people or more**
  - **Side tower (R) assembly (60 kg): 4 people or more**
  - **Center assembly (150 kg): 8 people or more**



Side tower (L) assembly



Side tower (R) assembly



Center assembly

NOTICE

- **Do not subject the machine to impact while lowering it.**
- **Move the machine carefully to avoid damaging it.**

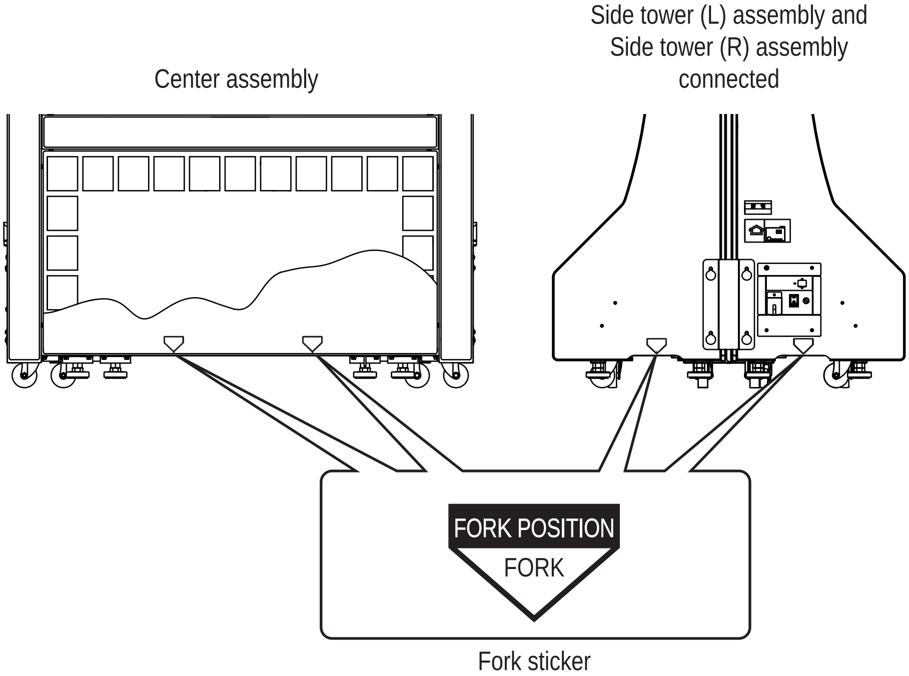
6-2-2 Loading to/Unloading from a Vehicle

⚠WARNING

- **To load or unload this machine to/from a vehicle, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see "8A. Installation and Assembly" on page 86).**
- **To load or unload this machine to/from a vehicle, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly, and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly (see "8A-11 Mounting the Front and Center Assemblies" on page 129).**
- **To load or unload this machine to/from a vehicle, connect the side tower (L) assembly and side tower (R) assembly using shipping bracket A, shipping bracket B, and shipping bracket C. If an assembly is loaded to or unloaded from a vehicle without connecting, it may cause falling or an accident (see "8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies" on page 92).**
- **When using a forklift to transport the machine, observe the following. Failure to observe the following instructions may result in an accident, such as the machine falling over.**
  - **Confirm that this machine is in the same condition as it was shipped.**
  - **Be sure to insert the fork into the specified positions.**
  - **Make sure that the machine is balanced properly during transportation.**

NOTICE

- **Do not subject the machine to impact while lowering it.**
- **Move the machine carefully to avoid damaging it.**
- **Make sure to lift up the level adjuster to the highest position (see "8A-12 Level Adjuster Adjustment" on page 133).**
- **Make sure not to inflict a shock when unloading from a forklift.**


Center assembly
Side tower (L) assembly and Side tower (R) assembly connected
FORK POSITION
FORK
Fork sticker

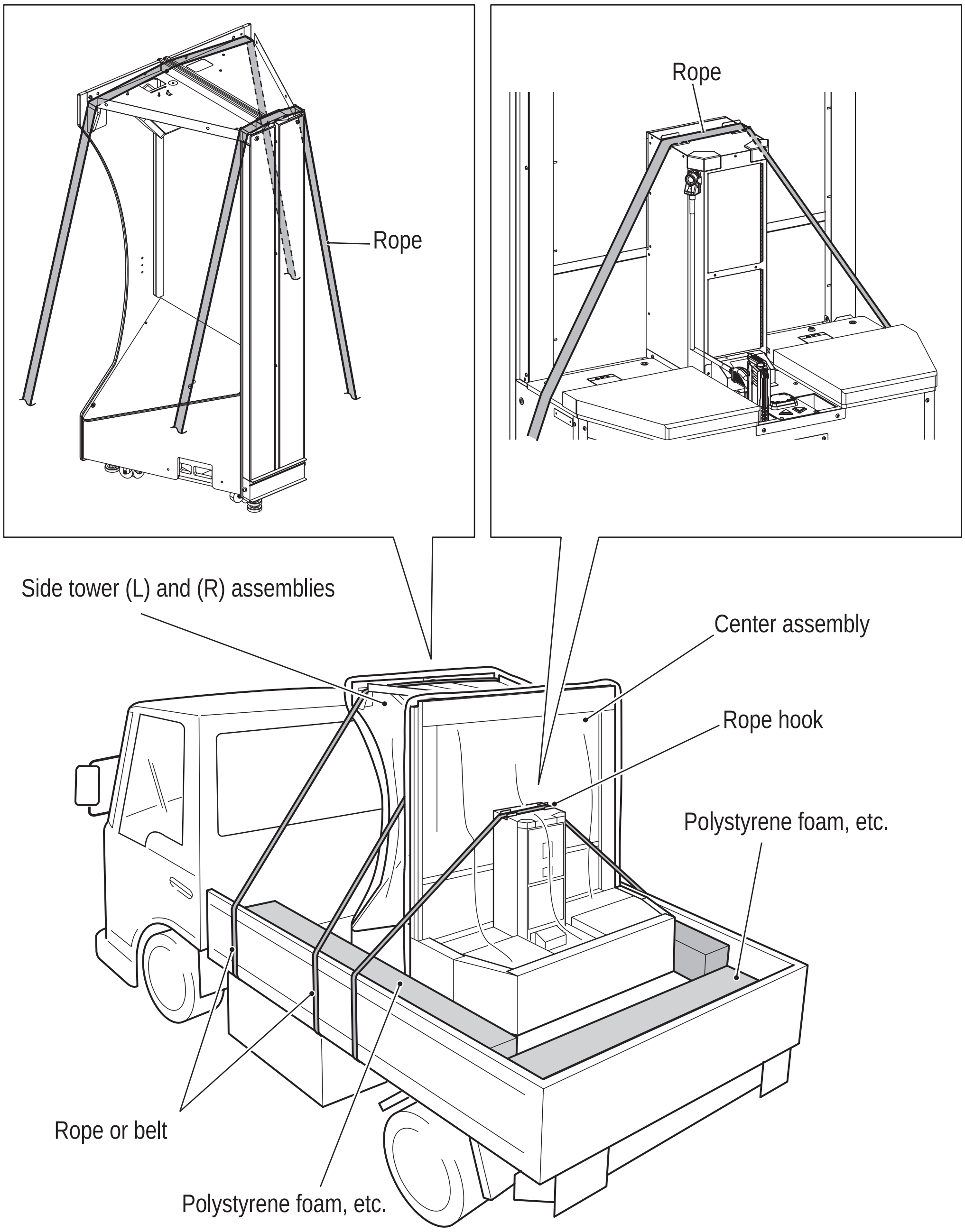
6-2-3 Transporting on a Vehicle

⚠WARNING

- **When transporting the machine on a vehicle, secure the machine firmly so that it does not move during vehicle transport. Failure to secure the machine may result in an accident.**
- **When transporting this machine by a vehicle, make sure to disassemble each Assembly (see "6-1 Moving (Same Floor)" on page 32), and connect the side tower (L) assembly and side tower (R) assembly using shipping bracket A, shipping bracket B, and shipping bracket C. If an assembly is loaded to a vehicle and transported without connecting, it may cause falling or an accident (see "8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies" on page 92).**

NOTICE

- **Do not subject the machine to impact while lowering it.**
- **Make sure to lift up the level adjuster to the highest position when transporting.**
- **Move the machine carefully to avoid damaging it.**
- **When securing the machine with a rope, observe the following.**
  - **Be sure to secure the machine with the rope or belt in the position shown in the figure on the next page.**
  - **Place blankets or other shock absorbing materials between the machine and the rope or belt to protect the machine surfaces.**
- **Since package boxes are reused when transporting the machine, keep the boxes in a safe place.**
- **Place the projector unit in the dedicated package box for transportation.**
- **Place polystyrene foam or other shock absorbing materials between the machine and the truck bed and any other equipment or items to protect the machine surfaces.**
- **When transporting the machine in rainy weather, use a vehicle with a cargo cover, a container truck, or similar vehicle to protect the machine from direct exposure to rain.**


Rope
Rope
Side tower (L) and (R) assemblies
Center assembly
Rope hook
Polystyrene foam, etc.
Rope or belt
Polystyrene foam, etc.

7. Operation

⚠WARNING

- **Should an abnormality occur, turn off the main 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 (see "5. Installation and Delivery Conditions" on page 30) in this Operation Manual.**
  Failure to install the machine correctly may result in fire, electric shock, injury or malfunction.
- **The warning labels attached to the machine contain important information for ensuring safety. Be sure to observe the following. (For the warning label locations, see "1-4 Machine Warning Labels" on page 4.)**
  - **To ensure that the warning labels 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 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 ("7-1 Pre-operation Inspection" on page 39) and service ("8B-1 Inspection and Maintenance" on page 145) described in this Operation Manual.**
- **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.**
- **Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.**

⚠CAUTION

- **In order to ensure the safety of players, be careful not to let people play under the following conditions. This is required to prevent accidents.**
  - **People under the influence of alcohol**
  - **People who are injured or ill**
  - **People who are pregnant**
  - **People with heart conditions**
  - **People with other ailments**
- **This machine is designed for two players. Make sure that three or more do not enter to prevent accidents.**
- **This machine is not intended for use by persons (including children) with reduced physical, mental or sensory capabilities, or those with lack of experience and knowledge of the machine, unless they are supervised or given instruction by a person responsible for their safety. Children should be supervised to ensure that they do not play with the machine.**

7-1 Pre-operation Inspection

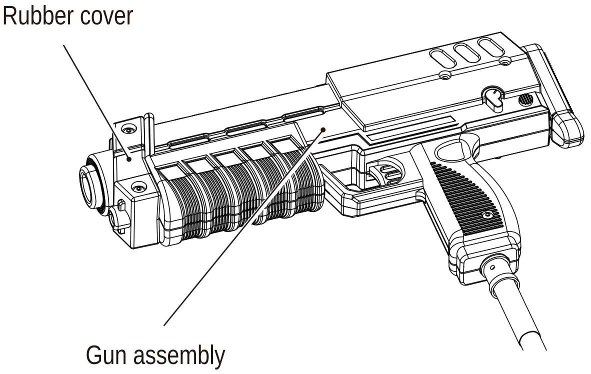
7-1-1 Safety Inspection (Before Turning on the Main Power Switch)

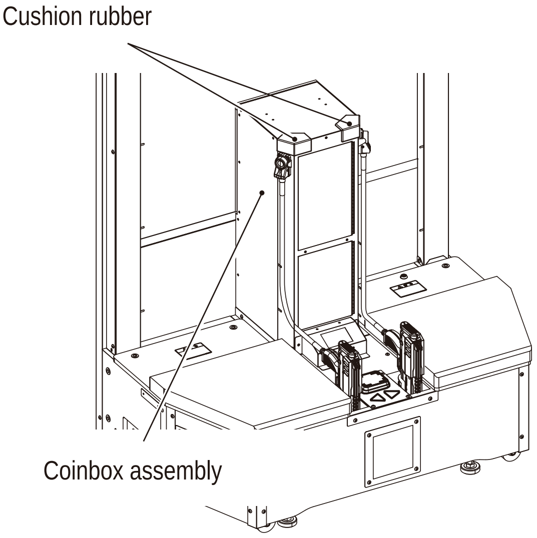
Check the items below before starting machine operations.
If there is an abnormality, resolve it by referring to “8B-2 Troubleshooting” on page 146.

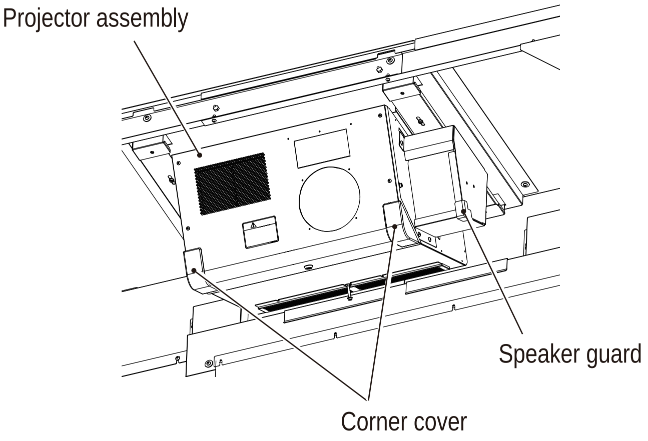
⚠WARNING

Before operating the machine, check the following locations. This is required to prevent accident or injury.

(1) Are all warning labels in place? (See “1-4 Machine Warning Labels” on page 4.)
(2) Are all warning labels legible? (See “1-4 Machine Warning Labels” on page 4.)
(3) Are all the level adjusters adjusted to prevent shaking of this machine? (See “8A-12 Level Adjuster Adjustment” on page 133.)
(4) Is the specified play zone provided? (See “5-1-2 Play Zone during Operation” on page 31.)
(5) Is the machine installed to prevent players and other customers from tripping over the power cord and LAN cable?
(6) Is the ventilation free from obstructions?
(7) Is the rubber cover of the gun assembly undamaged?
(8) Is the cushion rubber of the coinbox assembly undamaged?
(9) Is the corner cover of the projector assembly undamaged?
(10) Is the speaker guard of the projector assembly undamaged?







7-1-2 Safety Inspection (After Turning on the Main Power Switch)

After turning on the main power switch, please check the following points. If an error is identified, please turn off the power switch immediately and stop operation.
After that, pull the power supply plug from the outlet and contact the distributor.

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

7-1-3 Functional Inspection (After Turning on the Main Power Switch)

After turning on the main power switch, please check the following points. (See “7-3-1 Turning the Power Switch ON” on page 48.)

(1) Check the buttons (Is ON/OFF responsive?) and gun assembly motion. (See “7-4-4 Input / Output Test (I/O TEST)” “(1) SWITCH TEST” on page 53.)
(2) Check the sound. (Is there sound coming from each speaker?) (See “7-4-6 Sound Test (SOUND TEST)” on page 64.)
(3) Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.
(4) Check whether each LED lamp lights up. (See “7-4-4 Input / Output Test (I/O TEST)” “(7) LED TEST” on page 53).
(5) Check the image. (Is the image projected correctly from the projector?)

Check the following inspection items by pressing the service switch and actually playing the game.
(See “7-4-4 Input / Output Test (I/O TEST)” on page 53.)

(6) Check the motion of the gun assembly. (See “(2) GUN TEST” on page 55.)
(7) Check the motion of the gun assembly sight. (See “(3) GUN INITIALIZE” on page 57.)
(8) Check the motion of the gun assembly vibration. (See “(4) MOTOR TEST” on page 58.)
(9) Check the motion of switches. (See “(1) SWITCH TEST” on page 54.)

7-2 How to Play the Game

This section describes how to operate this machine and the rules of the game.

7-2-1 Game Summary

This is a mysterious adventure gun game in which one or two players simultaneously shoot bullets from the gun controllers to fight off monsters.
The gun types automatically change as the game progresses.

7-2-2 PIN Code

The PIN code entered on the PIN pad on this machine allows you to save the play results and other information.
A PIN code between 4 digits and 12 digits is acceptable.
Up to 1000 PIN codes may be stored in this machine. When the number of PIN codes exceeds 1000, the older ones will be deleted in sequence.

7-2-3 Use of PIN Codes for This Machine

Players can save the artifacts they win during the game, the stages they clear and their nicknames in the machine by entering a PIN code when the game is finished.
Also, they can always get a “bonus ticket” to give them an advantage on their next play.
Players can play a continuation of the game in the next play by means of the saved PIN code as well as the bonus ticket.

7-2-4 How to Operate the Gun Controller

The gun controllers are used as weapons during the mysterious adventure gun game.
The sight shows the shooting position of bullets, which are shot by pulling the gun trigger.
Bullets are shot one after another if the gun trigger is held down.
When not playing the mysterious adventure gun game, the gun controllers are used for selecting items or entering the selection.
The sight shows the position selected, and the selection is confirmed by pulling the gun trigger.

7-2-5 Rules of the Game

(1) INSERT CREDIT(S) while the Attraction screen is displayed to fill up the credits, and then press the Start button to start the game.

(2) Select the stage to play on “Stage Select”. Set the sight of the gun controller on the stage to play, and pull the gun trigger to select.

- Move to “PIN Code Entry” by pressing any key on the PIN pad when “Ready for PIN entry...” is displayed on the screen.
- In PIN Code Entry, a PIN code saved in this machine may be entered for use. Enter the PIN code using the keys on the PIN pad, and press the # key to confirm. If the PIN code is saved in this machine, the game data of that PIN code is displayed. Those players using the PIN code can gain an advantage by applying the effect of their bonus ticket.
- When two players are playing, a screen pops up to ask them whether PIN code is used by the left player (1P) or right player (2P) after the # key is pressed. Set the sight of the gun on the button of the player who wishes to use the PIN code, and pull the gun trigger to select.
- Set the sight on the “View Guide” button and pull the trigger to move to “Artifact Guide”.
  This screen shows the artifacts the player using the PIN code has collected in the previous plays.
- The complete rendition is displayed if certain conditions have been fulfilled when moving to Artifact Guide.
- Players with four types of “Keystones” can select Stage 5. When two players use their PIN codes, their Keystones can be added together.

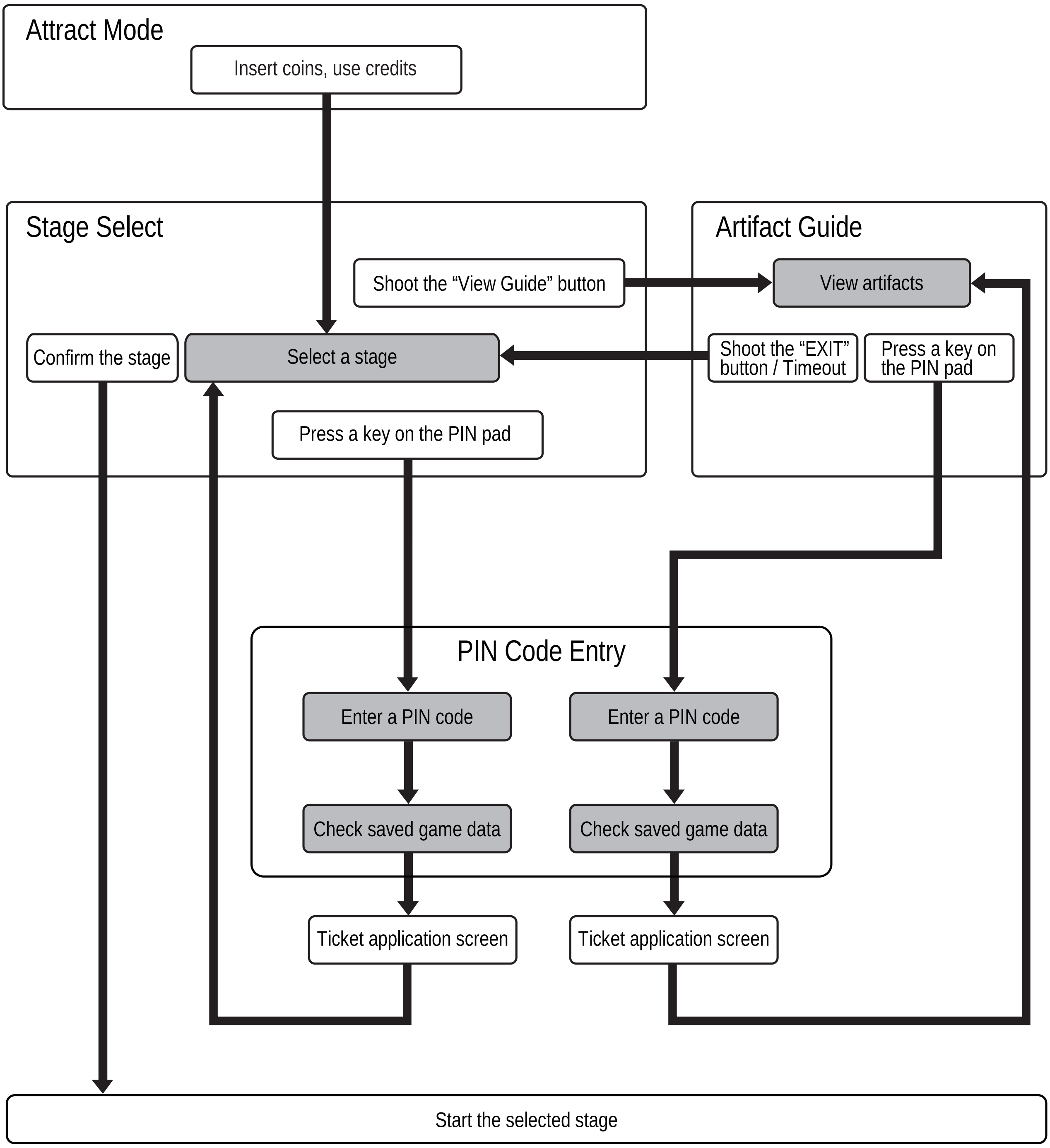
(3) The adventure of the selected stage begins. Shoot the attacking monsters to destroy them.

- Players can shoot their guns only when the sight on the screen is displayed as “○”.
  They cannot shoot their guns when the sight on the screen is shown as “×”.
- The gun types automatically change as the game progresses.
- When two players are playing the game, they can shoot the more aggressive “Combination Shot” by moving their sights closer to each other.
- The health bar is reduced if bitten by monsters or hit by bullets or torches.
- Circular target markers are sometimes indicated on the monster bodies, backgrounds and objects flying at players.
- The health bar is also reduced when the target markers are not destroyed within a given period of time. The target markers include normal markers and combined markers indicated as “Shoot Together!”. The combined markers can be destroyed only with the Combination Shot.

(4) When the health bar reaches 0, a message is displayed to ask players whether they want to continue the game. The game may be continued by filling up the credits and pressing the Start button.

- The game ends when the countdown for continuing reaches 0.
- If there are not enough NBLINE points, the message for continuation is not displayed and the game is over.

■ Game Flow


Attract Mode
Insert coins, use credits
Stage Select
Shoot the "View Guide" button
Confirm the stage
Select a stage
Press a key on the PIN pad
Artifact Guide
View artifacts
Shoot the "EXIT" button / Timeout
Press a key on the PIN pad
PIN Code Entry
Enter a PIN code
Enter a PIN code
Check saved game data
Check saved game data
Ticket application screen
Ticket application screen
Start the selected stage

(5) The stage is cleared when the stage boss is defeated.
- Players get Keystones when they clear stages.
- When PIN codes are used, the Keystones can be saved as the play result. The saving status remains unchanged if the Keystones of the stage are already saved.

(6) In the “Stage Result”, the three most expensive artifacts the player collected on the stage are announced.
- When one player is playing the game, the Play rank is announced.
- When two players are playing the game, the player who collected the more expensive artifacts is praised, and their Combination rate is announced.
- The Combination rate increases when players destroy a larger number of monsters or use the Combination Shots more frequently.

(7) The screen moves to “Stage Select” again if another stage may be played immediately after clearing the stage.
- The played stage cannot be selected again until the screen shows Game Over and returns to the Attraction screen.
- When Stage 5 is cleared, the screen automatically moves to the ending screen to end the game even if the other stages can still be played.

(8) When all the entered players finish the game, the screen moves to “Artifact Guide” so they can browse the treasures they collected during this play.

(9) When no PIN code is used, the screen moves to “New PIN Registration” and to ask players if they want to save a new PIN code.
- If “Save” is pressed, the screen moves to “PIN Code Entry”. Enter the PIN code using the keys on the PIN pad, and press the # key to confirm. If a new PIN code is saved in this machine, the screen moves to “Name Entry”. If it fails to save the PIN code, “Name Entry” is skipped.

(10) On the “Name Entry” screen, the software keyboard is displayed for the target player. Set the sight on the character to enter using the gun controller, and pull the gun trigger to enter the character.
- Set the sight on the tab to change the character types, and pull the gun trigger to change the software keyboard display and switch the character types.
- Set the sight on the Delete button or Delete All button, and pull the gun trigger to delete one entered character or all characters.
- Set the sight on the Enter button, and pull the gun trigger to enter.
- This screen is skipped if there is no player to be displayed.

(11) Draw for tickets.
- Those players using their PIN code can always win a “bonus ticket” that can give them an advantage on their next play. The ticket data can be saved in this machine.

(12) If a player not using a PIN code is listed in the high-score rank, the screen then moves to “Name Entry” to allow the player to register his/her name in “Total Ranking”.
- If a player using a PIN code is listed in the high-score rank, the nickname saved in the machine is automatically registered.

(13) The screen moves to the Game Over screen.
- When the player is listed in the high-score rank, the “Total Ranking” is displayed before returning to the Attraction screen.

7-2-6 Gun Types and Their Characteristics

(1) Machine gun

A bullet is shot by pulling the gun trigger of the gun controller (gun assembly). Bullets are shot one after another if the gun trigger is held down.

(2) Grenade launcher

Similarly to the machine gun, grenades are shot one after another if the gun trigger is held down although the burst speed is slower than that of the machine gun.
Due to the slow grenade speed, a time lapse before the grenade hits must be taken into consideration for successful shooting.

(3) Rocket launcher

Similarly to the machine gun, rockets are shot one after another if the gun trigger is held down although the burst speed is slower than that of the machine gun.
Due to the slow rocket speed, a time lapse before the bullet hits must be taken into consideration for successful shooting.

(4) Cannon

Similarly to the machine gun, round shots are shot one after another if the gun trigger is held down although the burst speed is much slower than that of the machine gun.
Due to the very slow round shot speed, a time lapse before the bullet hits must be taken into consideration for successful shooting.

7-2-7 Game Systems

(1) Combination Shot

When two players are playing the game, the sights significantly change by moving them close to each other to allow them to shoot the aggressive “Combination Shot”. The combined markers can be destroyed only by the Combination Shot, and the use of the Combination Shot facilitates destroying up monsters.

(2) Artifact collection

Players might collect artifacts if they shoot monsters or backgrounds.
There are 50 royal artifacts and 50 Jack collection artifacts, for a total of 100 artifacts.
There are five types of royal artifacts which are completed by collecting 10 fragments for each type.
When a royal artifacts is completed, an advantage is gained for the next play.
Rarity and prices are set for the Jack collection artifacts. When two players are playing the game, the player who collects the more expensive artifacts is the winner in “Stage Result”.
Some artifacts pop up only in the “rare item drop rate boost” mode.
To boost the rare item drop rate, 10 fragments of the Royal Vase must be collected to complete the Vase or a bonus ticket to boost the rate must be owned.
No more than two of the same artifacts may be owned.

(3) Puzzle solving

In the middle of a stage, a puzzle-solving event may occur.
The player can win artifacts by solving puzzles.
The more correct answers the player provides, the rarer the artifacts he/she wins.

(4) Keystones

The player always wins Keystones when he/she clears a stage.
The player can save the Keystones using a PIN code, and start the game next time owning the Keystones.
Players owning all Keystones between Stages 1 and 4 can select Stage 5. When two players are playing the game, their Keystones can be added together.

(5) Ending

When Stage 5 is cleared, the game ends.
The ending scene varies depending on the number of artifacts the player owns at the time he/she selected and entered Stage 5. The ending displays include the normal and true endings.

(6) Bonus ticket

Those players using PIN codes always win a bonus ticket at the end of the game. The ticket may be saved in the machine.
If the player uses the PIN code on the next play, the bonus ticket is always used to give an advantage.

(7) SINGLE STAGE GAME MODE

When the SINGLE STAGE GAME MODE is turned ON in the COIN OPTIONS of the test mode, the players can continue the game infinitely within the single stage selected.

- The game ends if not continued within the stage.
- If the player fills up the credits and presses the Start button for Player 1 or 2 on the Continue screen displayed when the stage is cleared, the player can continue playing a different stage.

7-2-8 Joining the Game Midway and Game Over

(1) The insertion of credits is always accepted during the game.

(2) Fill up the credits and press the Start button for Player 1 or 2 while “PRESS START BUTTON” is displayed on the bottom of the screen to let the player join the play midway without the use of a PIN code. Players cannot join the play midway while “GAME OVER” or “PLEASE WAIT” is displayed on the screen bottom.

(3) If a PIN code is entered before pressing the Start button, the player can join the play midway using the PIN code saved in the machine. The PIN Code Entry for joining the play midway is displayed on the bottom of the screen if any key on the PIN pad is pressed while “Ready for PIN entry...” is displayed on the screen.

- Enter the PIN code using the keys on the PIN pad, and press the # key to confirm. When there is a PIN code saved in the machine, “Start game with this data” is displayed and then the loaded game data is displayed.

(4) When the credits are filled up and the Start button is pressed while “Start game with this data” is displayed, the player joins the game midway using the PIN code saved in this machine. When “Start game with this data” is not displayed where the countdown for the PIN Code Entry for joining the game midway reaches 0 or the player changes the screen to the Continue screen, the player joins the game midway without using the PIN code.

(5) The game ends if the health bar reaches 0 during a stage and the player does not choose to continue.

(6) If the player uses a PIN code, his/her artifacts, Keystones and bonus tickets are automatically saved when the game ends. However, no artifacts the player has collected at the stage division point at the time the game ends are saved.

7-3 Power Switch and Adjustment Switches

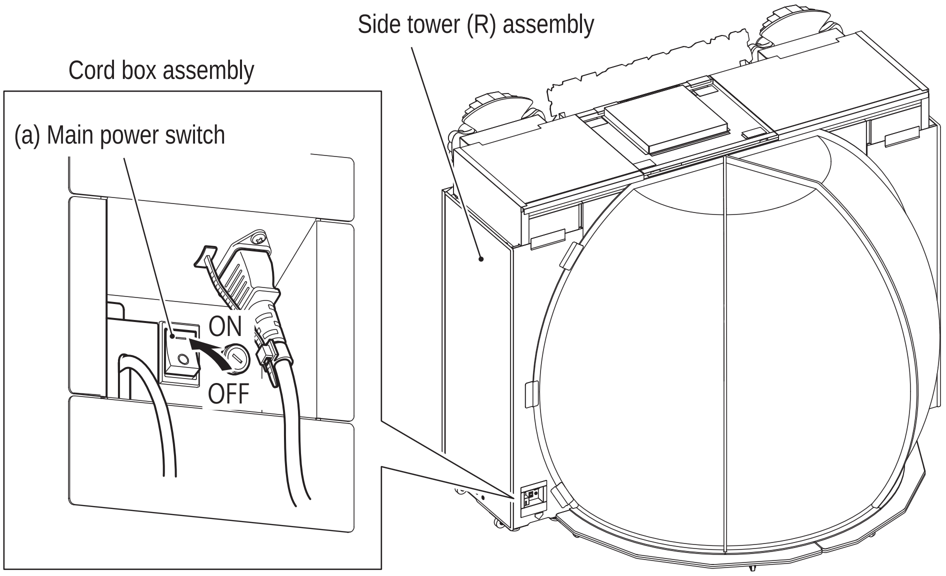
7-3-1 Turning the Power Switch ON

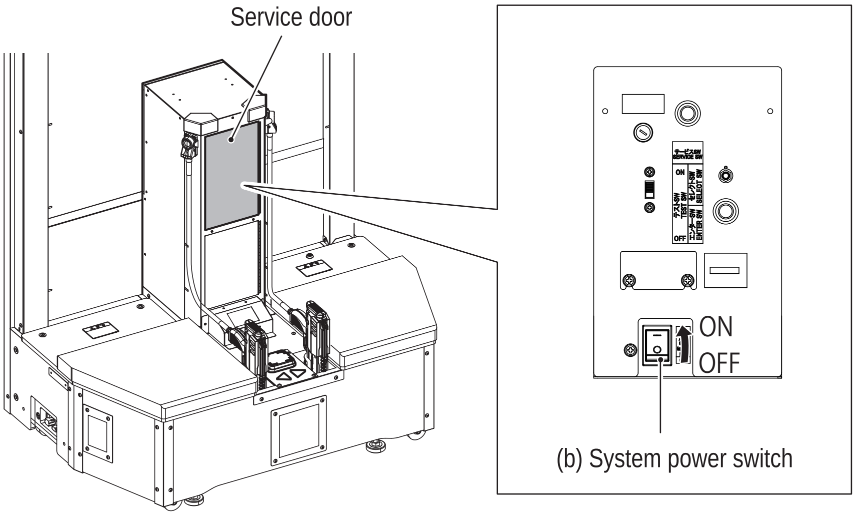
This machine has the following two types of power switches.

(a) Main power switch (in the cord box assembly)
This switch is used to turn on/off this machine.

(b) System power switch (in the service door)
This switch is used to perform forced restarting of the game PC board when an error occurs. When restarting, turn on the switch again 30 seconds or more after turning off the system power switch.

When starting this machine, please turn on both the main power switch and the system power switch.


Side tower (R) assembly
Cord box assembly
(a) Main power switch
ON
OFF

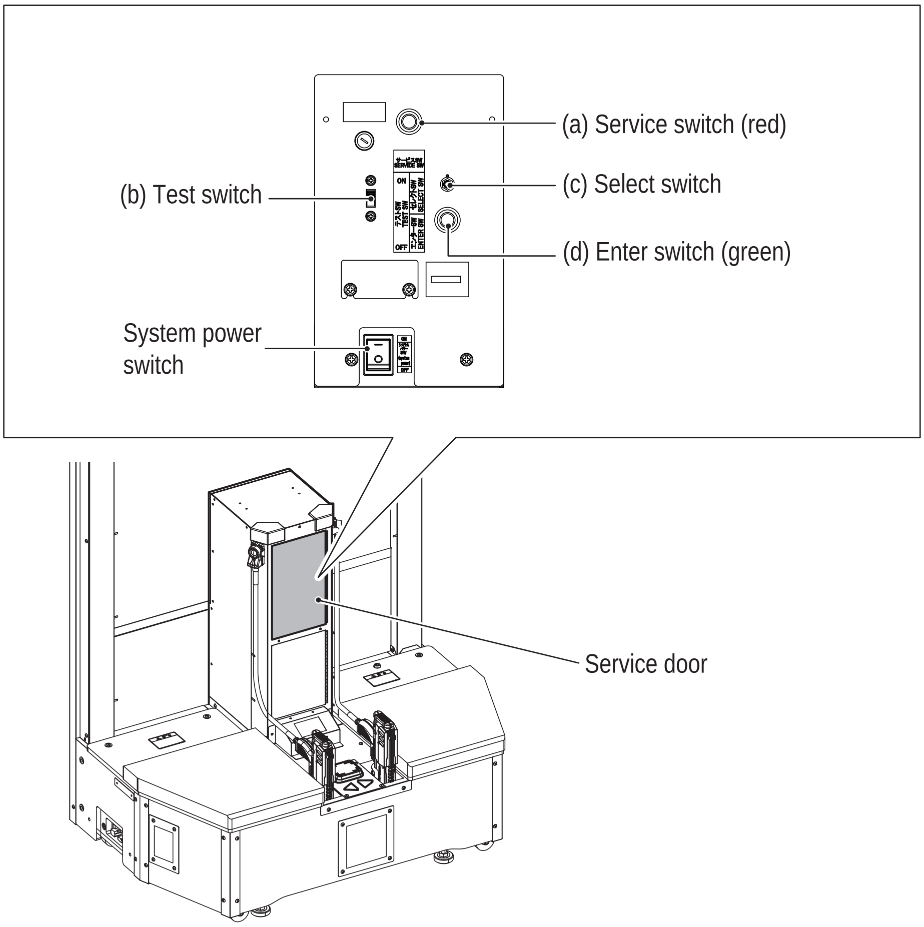

Service door
ON
OFF
(b) System power switch

NOTICE

- **After turning off the main power switch, it takes time to restart the projector and nothing may be displayed on the screen for around 10 minutes. Use the system power switch to restart the game PC board.**

7-3-2 Adjustment Switches

Open the service door inside the machine to access the adjustment switches.


(a) Service switch (red)
(b) Test switch
(c) Select switch
(d) Enter switch (green)
System power switch
Service door

(a) Service switch (red)
Press this switch with the door open to increase the number of credits without operating the coin counter. When credits are entered with the service switch, the face tape LED and sign tape LED lamps flash in red and * is displayed at CREDIT(S) on the lower part of the screen.

(b) Test switch
After turning on this switch, test mode is active to conduct the monitor test and other testing for each part (see “7-4 Test Mode” on page 50).

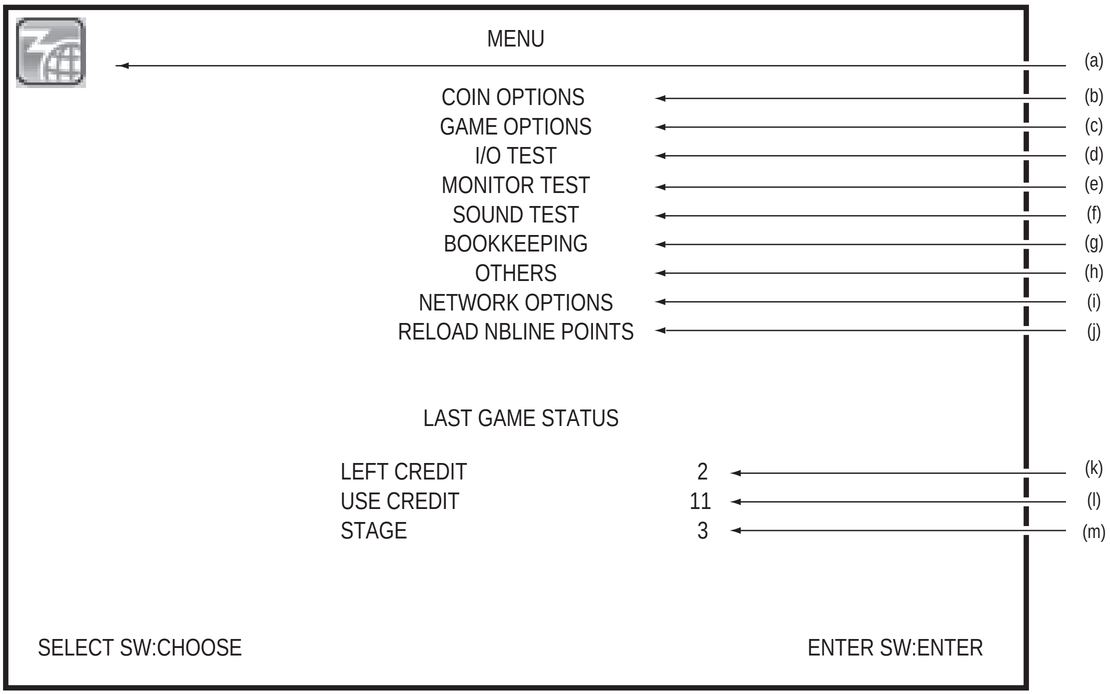
(c) Select switch
Select the items and details (numerical value) by tilting this switch up and down on the test mode.

(d) Enter switch (green)
After selecting the items and details (numerical value) with the select switch, press this switch to confirm.

7-4 Test Mode

7-4-1 About the Main Menu Screen (MENU)

1. Unlock the service door using the service key, and turn on the test switch. The “MENU” screen is displayed.
2. Tilt the select switch up and down to select an item.
   The selected item flashes.
3. Press the enter switch to confirm the selection.
   The screen displays the contents of the selected item.
4. When all adjustments have been made, turn off the test switch.
   The screen returns to the game screen.


MENU
(a)
COIN OPTIONS (b)
GAME OPTIONS (c)
I/O TEST (d)
MONITOR TEST (e)
SOUND TEST (f)
BOOKKEEPING (g)
OTHERS (h)
NETWORK OPTIONS (i)
RELOAD NBLINE POINTS (j)
LAST GAME STATUS
(k)
(l)
(m)
SELECT SW:CHOOSE
ENTER SW:ENTER

LEFT CREDIT 2
USE CREDIT 11
STAGE 3

“MENU” screen

Item		Description	Refer to
(a)	NETWORK ICON	Shows the circuit status. This is only displayed for the online version.	–
(b)	COIN OPTIONS	Sets the game fees.	Page 51
(c)	GAME OPTIONS	Sets the game details.	Page 52
(d)	I/O TEST	Conducts the I/O test on switches and equipment.	Page 53
(e)	MONITOR TEST	Adjusts the monitor.	Page 63
(f)	SOUND TEST	Adjusts sound, etc.	Page 64
(g)	BOOKKEEPING	Shows the bookkeeping data.	Page 66
(h)	OTHERS	Tests PCBs and resets the memory.	Page 68
(i)	NETWORK OPTIONS	Configures the network settings. This is only displayed for the online version.	Page 73
(j)	RELOAD NBLINE POINTS	Charges NBLINE points. This is only displayed for the online version.	Page 78
(k)	LEFT CREDIT	Shows the remaining credits of the previous play.	–
(l)	USE CREDIT	Shows the remaining credits used during the previous play.	–
(m)	STAGE	Displays the total number of stages cleared during the previous play.	–

7-4-2 Game Cost Settings (COIN OPTIONS)

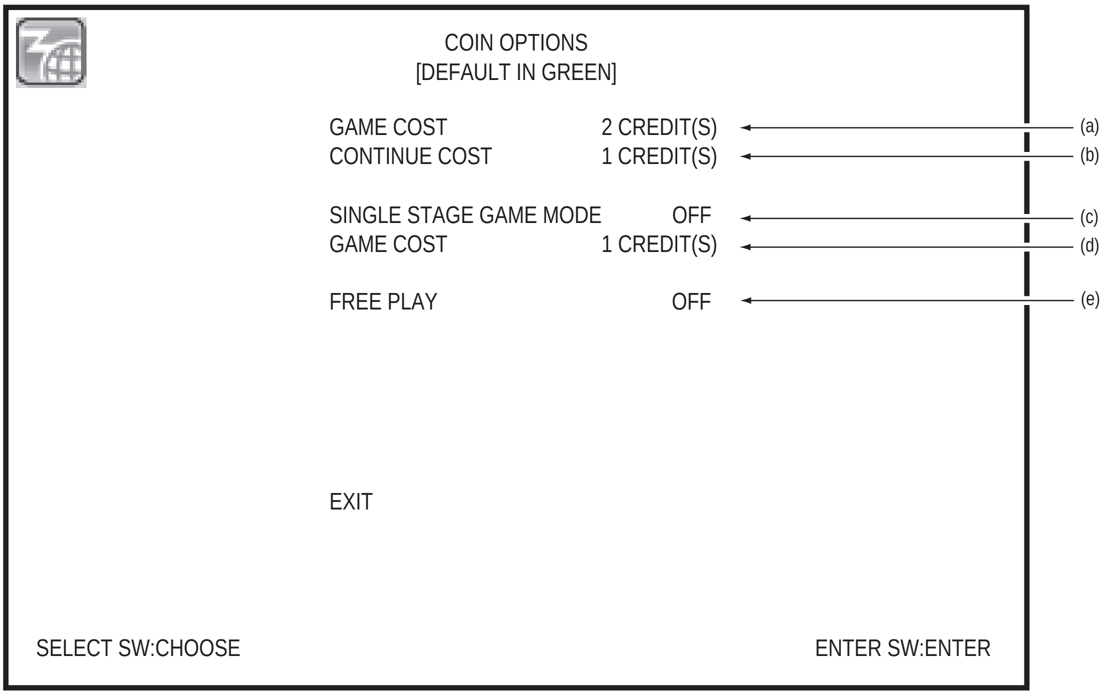
This screen changes the game fees.

1. Select “COIN OPTIONS” on the “MENU” screen, and press the enter switch.
   The “COIN OPTIONS” screen is displayed.

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

3. Press the enter switch to confirm the selection, and use the select switch to change the contents.
   After the item contents have been changed, press the enter switch to return to item selection.

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



COIN OPTIONS
[DEFAULT IN GREEN]

GAME COST 2 CREDIT(S)
CONTINUE COST 1 CREDIT(S)

SINGLE STAGE GAME MODE OFF
GAME COST 1 CREDIT(S)

FREE PLAY OFF

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

“COIN OPTIONS” screen

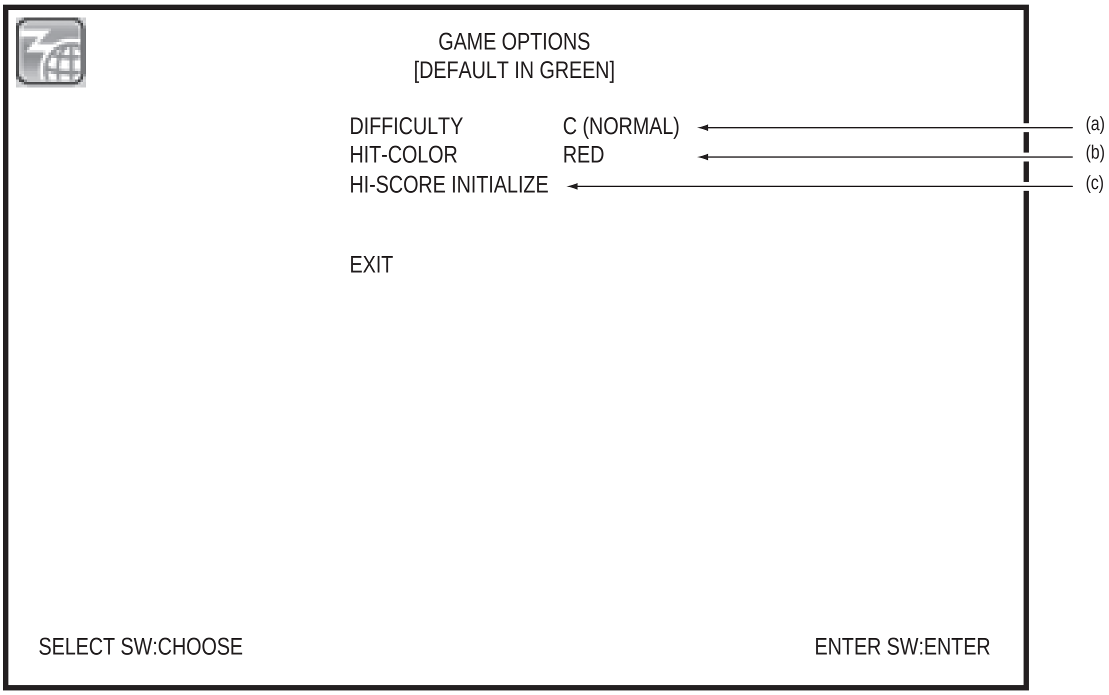
Item		Description	Default
(a)	GAME COST	Sets the number of credits required for the game. Select a number from 1 to 19.	2
(b)	CONTINUE COST	Sets the number of credits required for continuing. Select a number from 1 to 19. The number cannot be larger than GAME COST.	2
(c)	SINGLE STAGE GAME MODE	Switches ON/OFF in the SINGLE STAGE GAME MODE. When ON is selected, (a) and (b) become unavailable for selection. When OFF is selected, (d) becomes unavailable for selection.	OFF
(d)	GAME COST	Sets the number of credits required for the game in the SINGLE STAGE GAME MODE. Select a number from 1 to 19.	3
(e)	FREE PLAY	Switches FREE PLAY ON/OFF. This is only displayed for the offline version. When it is ON, items (a) to (d) cannot be selected.	OFF

*Default settings are shown in green while other setting values are in yellow.

7-4-3 Game Contents Settings (GAME OPTIONS)

This screen changes the game options.

1. Select “GAME OPTIONS” on the “MENU” screen, and press the enter switch.
   The “GAME OPTIONS” screen is displayed.
2. Tilt the select switch up and down to select an item.
   The selected item flashes.
3. Press the enter switch to confirm the selection, and use the select switch to change the contents.
   After the item contents have been changed, press the enter switch to return to item selection.
4. Select “EXIT” and press the enter switch to return to the “MENU” screen.



GAME OPTIONS
[DEFAULT IN GREEN]

DIFFICULTY C (NORMAL)
HIT-COLOR RED
HI-SCORE INITIALIZE

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

“GAME OPTIONS” screen

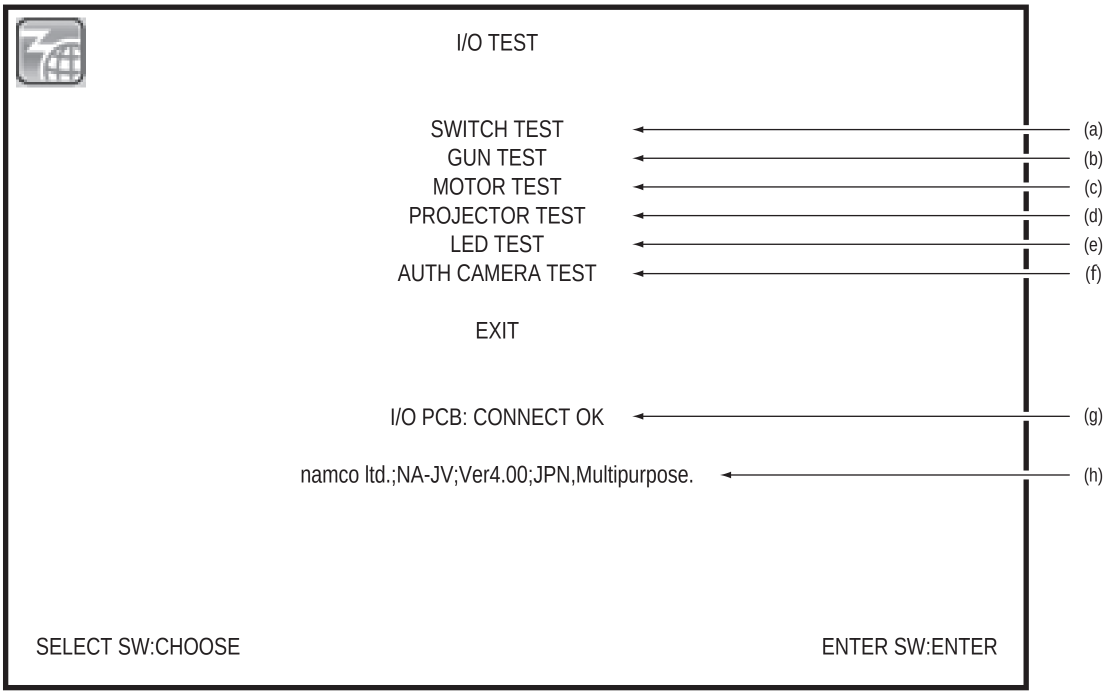
Item	Description	Default
(a) DIFFICULTY	Sets the game difficulty. The higher the difficultly setting, the more significantly the health bar is reduced and the more easily smashed when damaged. A: VERY EASY B: EASY C: NORMAL D: HARD E: VERY HARD	C
(b) HIT-COLOR	Sets the colors of the player’s damage and smashing effect of monsters (snakes and scarabs). Select RED or GREEN.	RED
(c) HI-SCORE INITIALIZE	Resets the HI-SCORE data only. When this item is selected, “HI-SCORE INITIALIZE?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.	

*Default settings are shown in green while other setting values are in yellow.

7-4-4 Input / Output Test (I/O TEST)

This screen performs the input / output tests for the switches and devices.

1. Select “I/O TEST” on the “MENU” screen and press the enter switch.
   The “I/O TEST” screen is displayed.
2. Tilt the select switch up and down and select the items to be displayed.
3. Press the enter switch to confirm the item. After confirming, the screen changes to the display of the contents of each item.
4. Select “EXIT” and press the enter switch to return to the “MENU” screen.



I/O TEST

SWITCH TEST
GUN TEST
MOTOR TEST
PROJECTOR TEST
LED TEST
AUTH CAMERA TEST

EXIT

I/O PCB: CONNECT OK

namco ltd.;NA-JV;Ver4.00;JPN,Multipurpose.

SELECT SW:CHOOSE
ENTER SW:ENTER

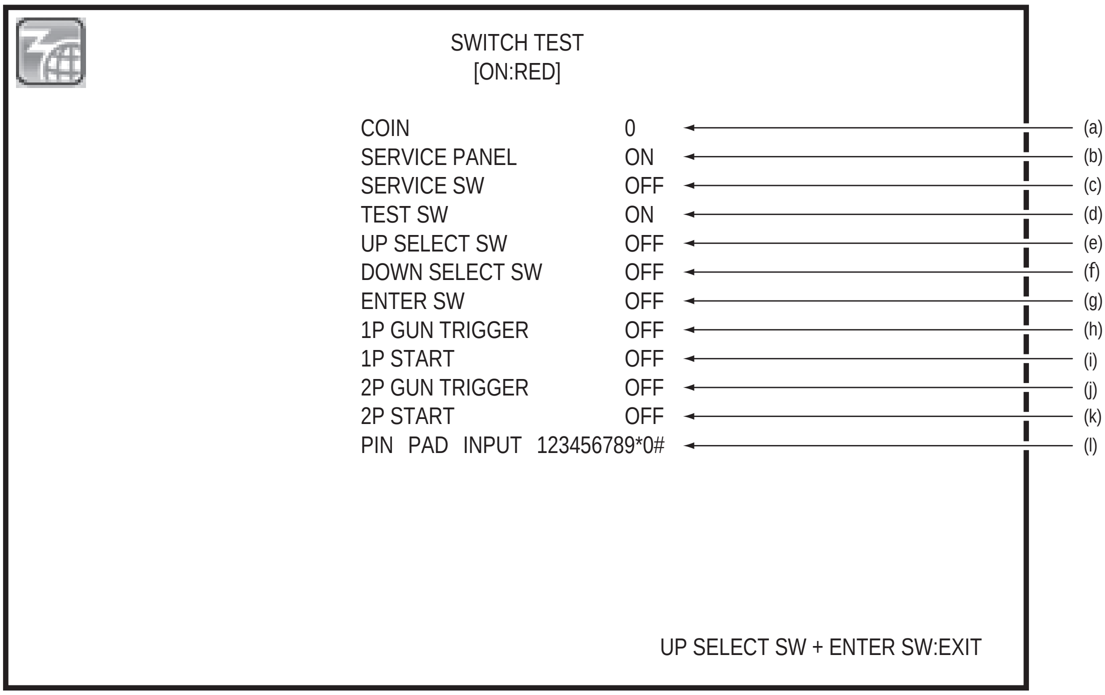
“I/O TEST” screen

Item		Description
(a)	SWITCH TEST	Performs the switch test.
(b)	GUN TEST	Adjusts the gun controller.
(c)	MOTOR TEST	Performs the motor test.
(d)	PROJECTOR TEST	Checks the projector lamp use time.
(e)	LED TEST	Performs the LED test.
(f)	AUTH CAMERA TEST	Performs the authentication camera test.
(g)	I/O PCB	PCB CHECK status is displayed. When it is normal, “CONNECT OK” is displayed. When it is abnormal, “CONNECT NG!” is displayed.
(h)	Data display	Data sent is displayed as it is.

(1) SWITCH TEST

This screen checks the input of switches.

1. Select “SWITCH TEST” on the “I/O TEST” screen, and press the enter switch.
   The “SWITCH TEST” screen is displayed.
2. The display changes when switches are input.
3. Press the enter switch while tilting the selector switch up to return to the “I/O TEST” screen.



```
                    SWITCH TEST
                     [ON:RED]

        COIN                    0
        SERVICE PANEL           ON
        SERVICE SW              OFF
        TEST SW                 ON
        UP SELECT SW            OFF
        DOWN SELECT SW          OFF
        ENTER SW                OFF
        1P GUN TRIGGER          OFF
        1P START                OFF
        2P GUN TRIGGER          OFF
        2P START                OFF
        PIN   PAD   INPUT   123456789*0#



                              UP SELECT SW + ENTER SW:EXIT
```

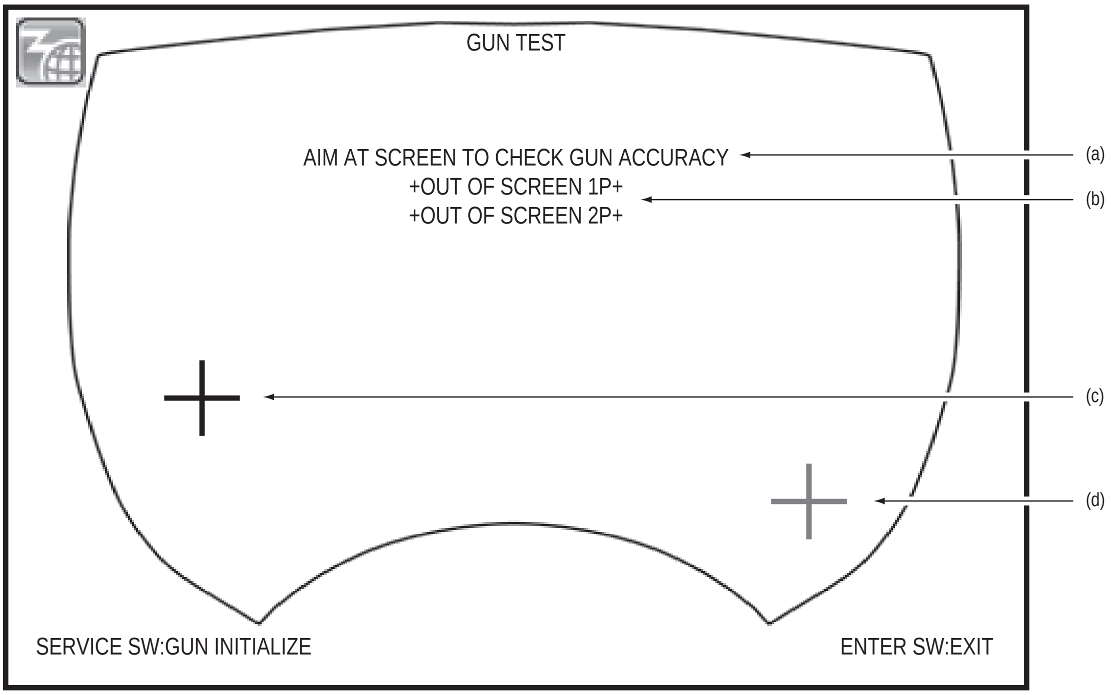
“SWITCH TEST” screen

Item		Description
(a)	COIN	When the coin switch is input, the count increases by “1”. When it exceeds “999”, the count returns to “0”. The coin counter works together with this input.
(b)	SERVICE PANEL	“ON” is displayed when the service panel door is open.
(c)	SERVICE SW	“ON” is displayed when the service switch is pressed.
(d)	TEST SW	“ON” is displayed when the test switch is ON.
(e)	UP SELECT SW	“ON” is displayed when the select switch is tilted up.
(f)	DOWN SELECT SW	“ON” is displayed when the select switch is tilted down.
(g)	ENTER SW	“ON” is displayed when the enter switch is pressed.
(h)	1P GUN TRIGGER	“ON” is displayed when the gun trigger of Player 1 is pulled.
(i)	1P START	“ON” is displayed when the Start button of Player 1 is pressed.
(j)	2P GUN TRIGGER	“ON” is displayed when the gun trigger of Player 2 is pulled.
(k)	2P START	“ON” is displayed when the Start button of Player 2 is pressed.
(l)	PIN PAD INPUT	Characters pressed on the PIN pad (0 to 9, * and #) are displayed on the screen. Up to 12 characters are displayed. The 13th and later characters are hidden from the left.

(2) GUN TEST

This screen checks the gun assembly sight and performs gun camera forced resetting.

1 Select “GUN TEST” on the “I/O TEST” screen and press the enter switch. “GUN TEST” (sight and vibration check) screen is displayed.
On this screen, the gun trigger does not react.



GUN TEST

AIM AT SCREEN TO CHECK GUN ACCURACY
+OUT OF SCREEN 1P+
+OUT OF SCREEN 2P+

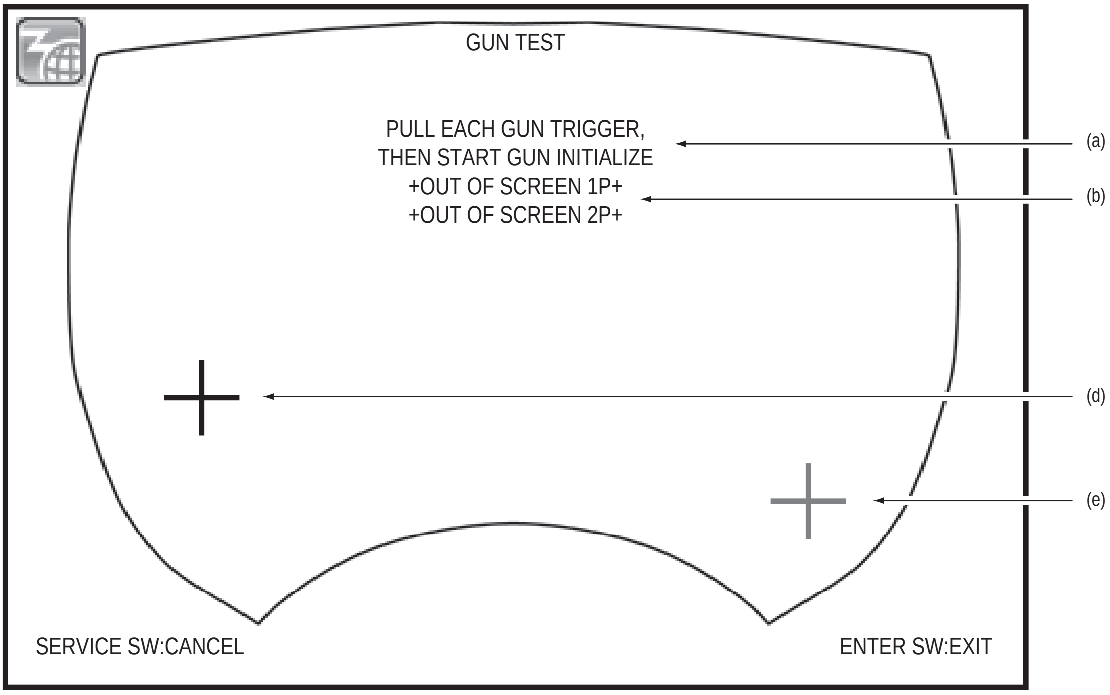
SERVICE SW:GUN INITIALIZE

ENTER SW:EXIT

“GUN TEST” (sight and vibration check) screen

Item	Description
(a) AIM AT SCREEN TO CHECK GUN ACCURACY	The gun test message is displayed.
(b) +OUT OF SCREEN 1P+ +OUT OF SCREEN 2P+	When the gun assembly sight goes out of the effective screen (within white solid line), an announcement for out of screen is displayed.
(c) 1P gun cross (pink)	The sight is displayed in pink at the point where the 1P gun assembly is aiming.
(d) 2P gun cross (blue)	The sight is displayed in blue at the point where the 2P gun assembly is aiming.

2 Press the service switch to display the “GUN TEST” (pre-calibration check) screen.



GUN TEST

PULL EACH GUN TRIGGER,
THEN START GUN INITIALIZE
+OUT OF SCREEN 1P+
+OUT OF SCREEN 2P+

SERVICE SW:CANCEL

ENTER SW:EXIT

“GUN TEST” (pre-calibration check) screen

Item	Description
(a) PULL EACH GUN TRIGGER, THEN START GUN INITIALIZE	The gun initialize message is displayed.
(b) +OUT OF SCREEN 1P+ +OUT OF SCREEN 2P+	When the gun assembly sight goes out of the effective screen (within the white solid line), an announcement for out of screen is displayed.
(c) 1P gun cross (pink)	The sight is displayed in pink at the point where the 1P gun assembly is aiming.
(d) 2P gun cross (blue)	The sight is displayed in blue at the point where the 2P gun assembly is aiming.

3 By pulling the gun trigger, the screen moves to the “GUN INITIALIZE” screen of the gun assembly which was pulled.

* If the both gun triggers are pulled at the same time, the 1P side will be prioritized.

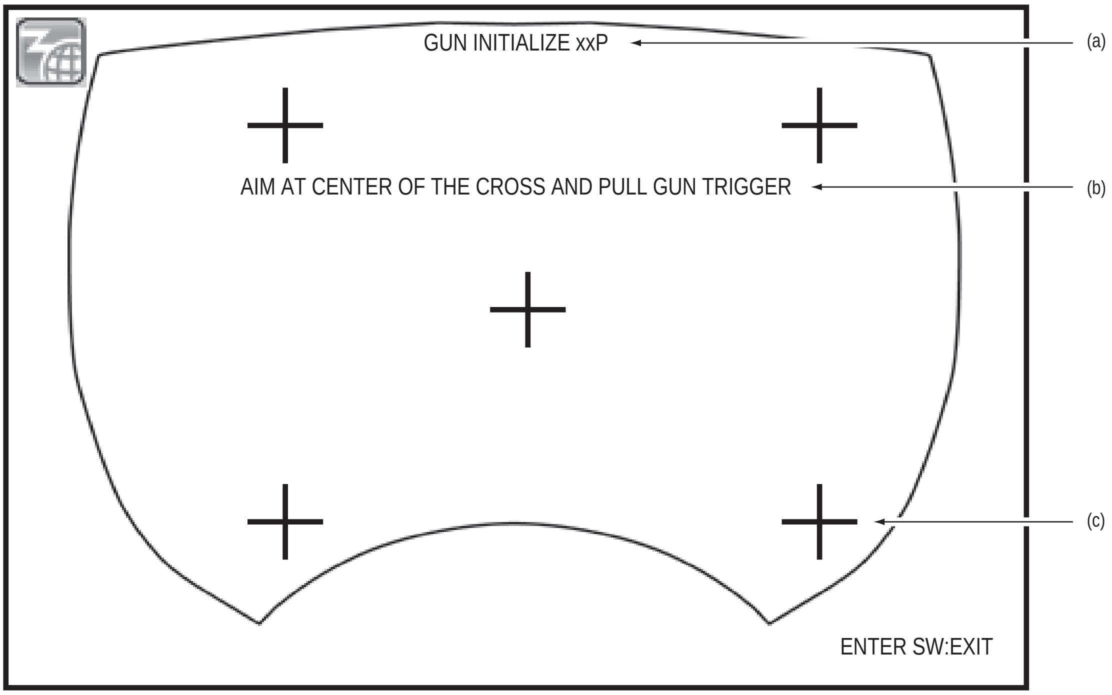
* Press the service switch to cancel and return to the GUN TEST (sight and vibration check) screen.

4 Press the enter switch to return to the “I/O TEST” screen.

(3) GUN INITIALIZE

The sight of the gun assembly on which the gun trigger was pulled is individually adjusted on the "GUN TEST" (pre-calibration check) screen.

1. According to the instructions displayed in section (b), pull the gun trigger while aiming at the displayed cross.
   - * If the gun hits out of screen or a place a certain distance away from the crosses during calibration, "RETRY" will be displayed and an error sound will be produced. It will not move to the next cross.
   - * Press the enter switch to discard the data during calibration and return to the "GUN TEST" screen.
2. After the calibration is complete, "FINISHED" is displayed. After saving the data for calibration, the screen returns to the "GUN TEST" screen.



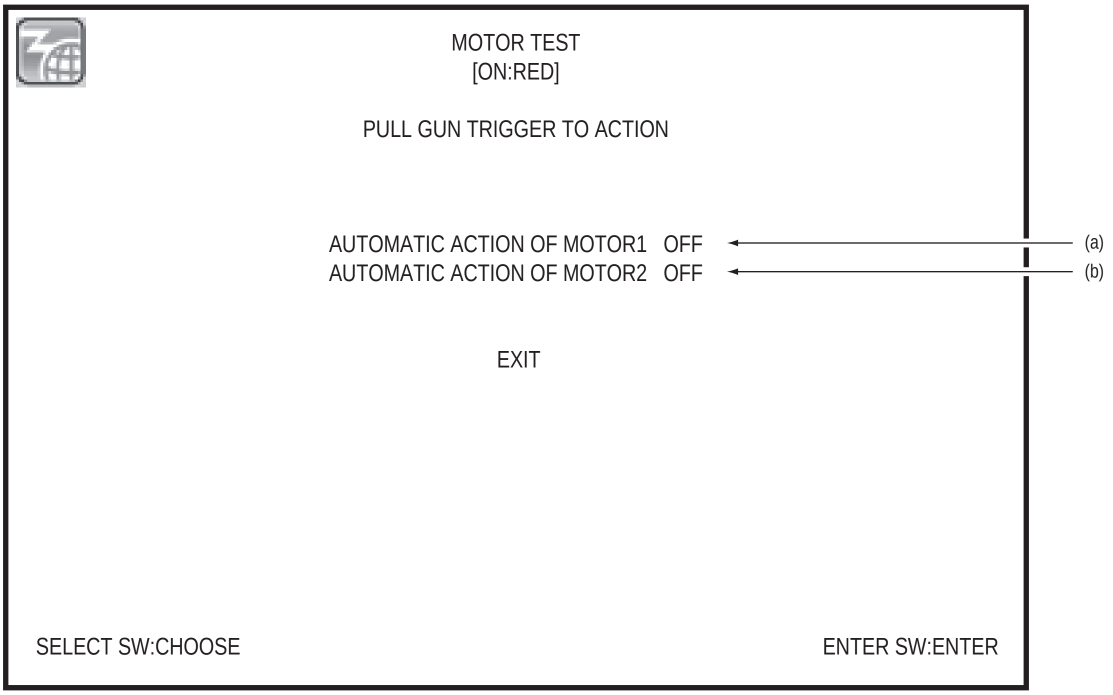
"GUN INITIALIZE" (sight calibration) screen

Item	Description
(a) GUN INITIALIZE xxP	The gun assembly being tested (1P or 2P) is displayed.
(b) Message display	The following messages are displayed. AIM AT TOP LEFT OF THE CROSS AND PULL GUN TRIGGER. AIM AT TOP RIGHT OF THE CROSS AND PULL GUN TRIGGER. AIM AT BOTTOM LEFT OF THE CROSS AND PULL GUN TRIGGER. AIM AT BOTTOM RIGHT OF THE CROSS AND PULL GUN TRIGGER. AIM AT CENTER OF THE CROSS AND PULL GUN TRIGGER. FINISHED: Adjustment is finished.
(c) (Cross marking)	The next cross to aim at is displayed. (Only one marking is actually displayed.)

(4) MOTOR TEST

This screen checks vibration motor of the gun assembly.
The motor of the gun assembly whose gun trigger was pulled continues to vibrate.

1. Select “MOTOR TEST” on the “I/O TEST” screen and press the enter switch. The “MOTOR TEST” screen is displayed.
2. Select (a) or (b) and press the enter switch. Then, the motor automatic vibration ON/OFF of the gun assembly of the 1P/2P side is switched. When it is set to ON, the motor continues to vibrate.
3. Select “EXIT” and press the enter switch to return to the “I/O TEST” screen.



MOTOR TEST
[ON:RED]

PULL GUN TRIGGER TO ACTION

AUTOMATIC ACTION OF MOTOR1 OFF
AUTOMATIC ACTION OF MOTOR2 OFF

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

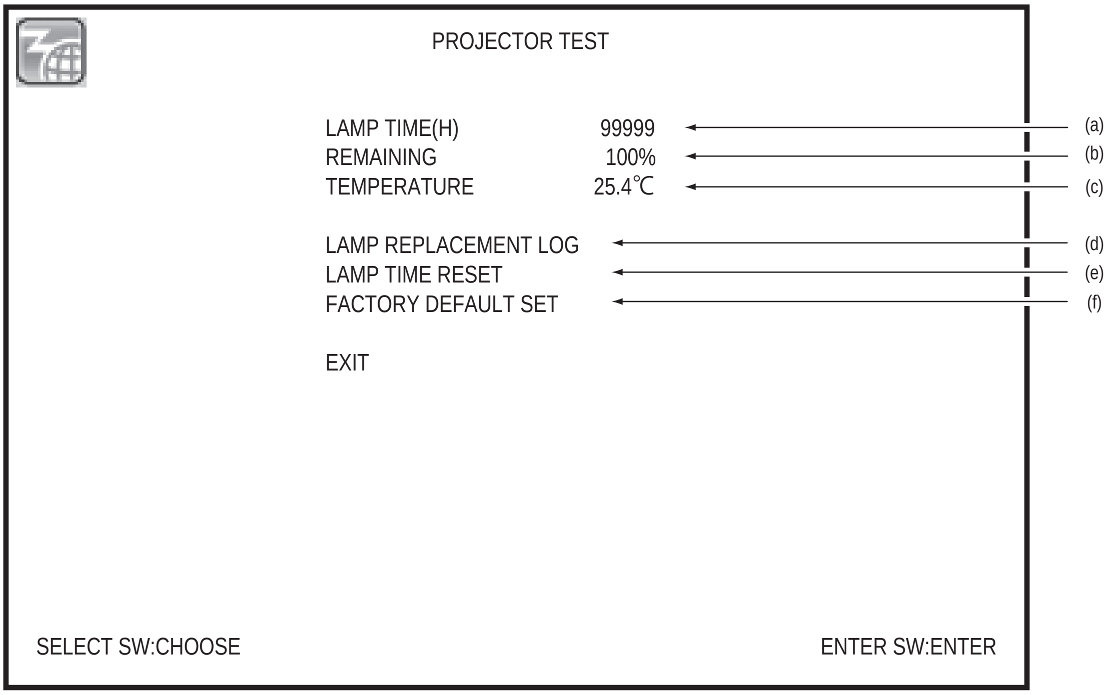
“MOTOR TEST” screen

Item	Description
(a) AUTOMATIC ACTION OF MOTOR 1	Switches between ON and OFF for the motor automatic vibration of the gun assembly on the 1P side.
(b) AUTOMATIC ACTION OF MOTOR 2	Switches between ON and OFF for the motor automatic vibration of the gun assembly on the 2P side.

(5) PROJECTOR TEST

This screen checks the projector lamp use time.

1. Select “PROJECTOR TEST” on the “I/O TEST” screen and press the enter switch.
   The “PROJECTOR TEST” screen is displayed.
2. Press the enter switch to confirm the item. After confirming, the screen changes to the display of contents of each item.
3. Select “EXIT” and press the enter switch to return to the “I/O TEST” screen.


PROJECTOR TEST

LAMP TIME(H) 99999
REMAINING 100%
TEMPERATURE 25.4℃

LAMP REPLACEMENT LOG
LAMP TIME RESET
FACTORY DEFAULT SET

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

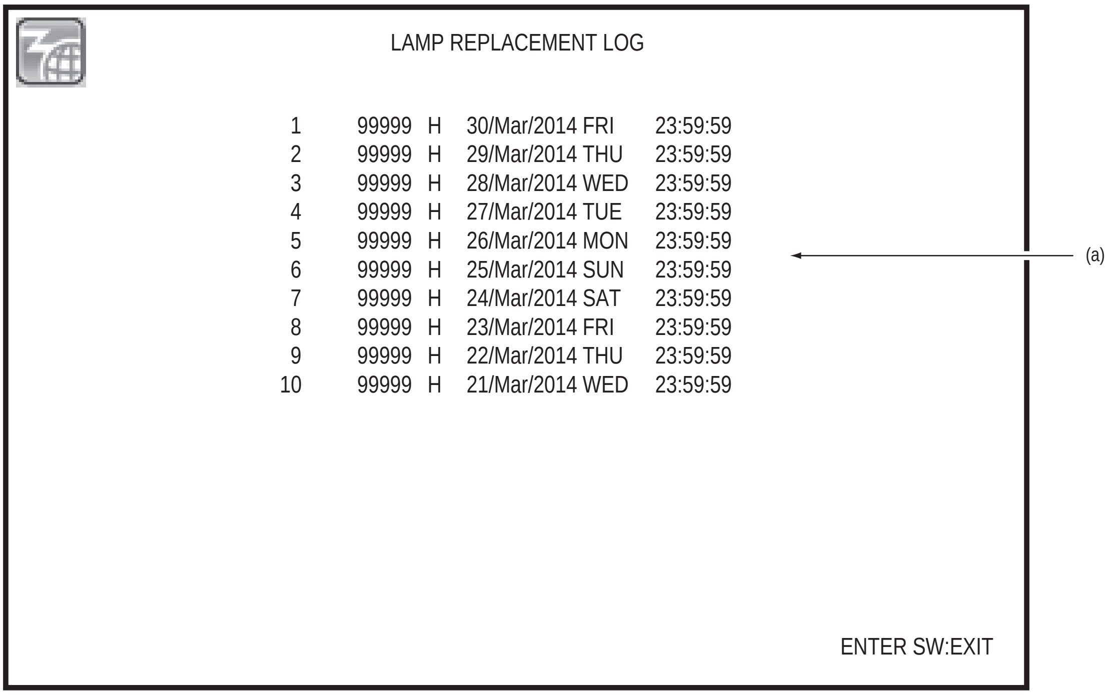
“PROJECTOR TEST” screen

Item	Description
(a) LAMP TIME (H)	The projector lamp use time is displayed. The approximate lifetime of the projector lamp is 3,300 hours in Eco mode.
(b) REMAINING	The approximate remaining time is displayed for the projector lamp use time.
(c) TEMPERATURE	Inlet (external air) temperature is displayed.
(d) LAMP REPLACEMENT LOG	The projector lamp replacement log is displayed.
(e) LAMP TIME RESET	Resets the projector lamp use time. After selecting this item, “LAMP TIME RESET?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.
(f) FACTORY DEFAULT SET	Resets to the factory default settings.

(6) LAMP REPLACEMENT LOG

This screen displays the resetting time of projector lamp use time and the projector lamp use time log.

1. Select “LAMP REPLACEMENT LOG” on the “PROJECTOR TEST” screen and press the enter switch. The “LAMP REPLACEMENT LOG” screen is displayed.
2. Press the enter switch to return to the “PROJECTOR TEST” screen.



```
LAMP REPLACEMENT LOG

 1    99999  H   30/Mar/2014 FRI    23:59:59
 2    99999  H   29/Mar/2014 THU    23:59:59
 3    99999  H   28/Mar/2014 WED    23:59:59
 4    99999  H   27/Mar/2014 TUE    23:59:59
 5    99999  H   26/Mar/2014 MON    23:59:59
 6    99999  H   25/Mar/2014 SUN    23:59:59
 7    99999  H   24/Mar/2014 SAT    23:59:59
 8    99999  H   23/Mar/2014 FRI    23:59:59
 9    99999  H   22/Mar/2014 THU    23:59:59
10    99999  H   21/Mar/2014 WED    23:59:59

ENTER SW:EXIT
```

“LAMP REPLACEMENT LOG” screen

Item	Description
(a) Log display screen	The projector lamp log for the past 10 cases is displayed in the order of “log number/ lamp use time / date / month (three English characters) / year / day (three English characters) / hour / minute / second”.

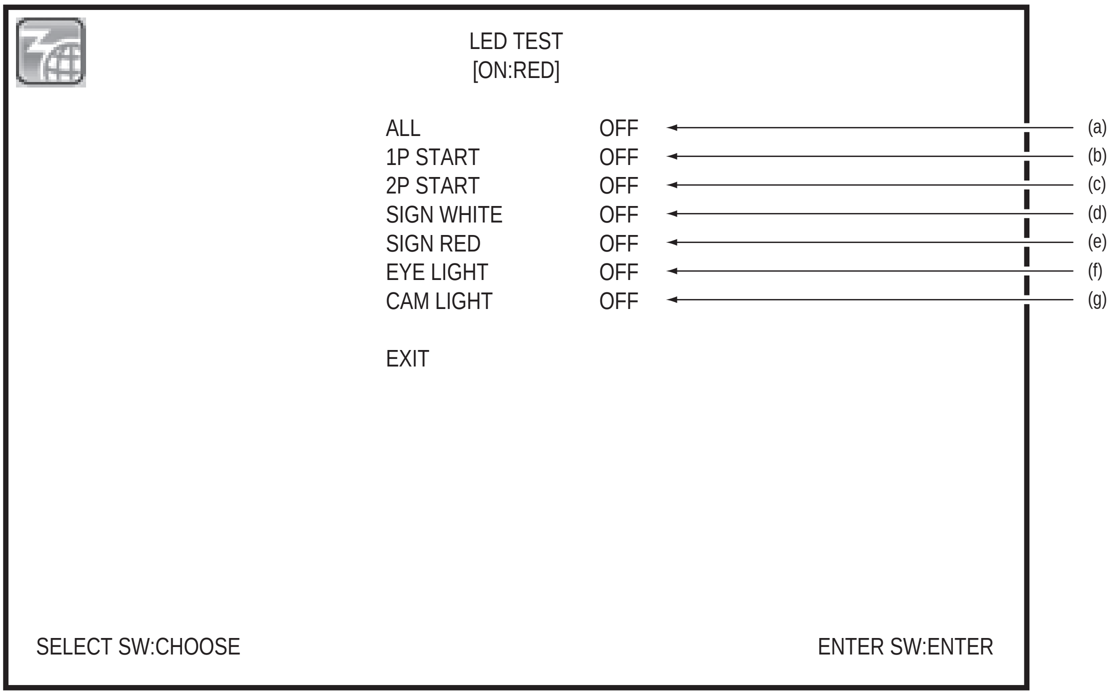
(7) LED TEST

This screen performs the LED lighting test.

1. Select “LED TEST” on the “I/O TEST” screen and press the enter switch.
   The “LED TEST” screen is displayed.

2. Tilt the select switch up and down to select the LED to be tested.
   Press the enter switch once to turn on the selected LED lamp. Press once again to turn it off.

3. Select “EXIT” and press the enter switch to return to the “I/O TEST” screen.
   After the completion of LED TEST, all the LED lamps are set to OFF.



```
                    LED TEST
                    [ON:RED]

              ALL           OFF
              1P START      OFF
              2P START      OFF
              SIGN WHITE    OFF
              SIGN RED      OFF
              EYE LIGHT     OFF
              CAM LIGHT     OFF

              EXIT

SELECT SW:CHOOSE                          ENTER SW:ENTER
```

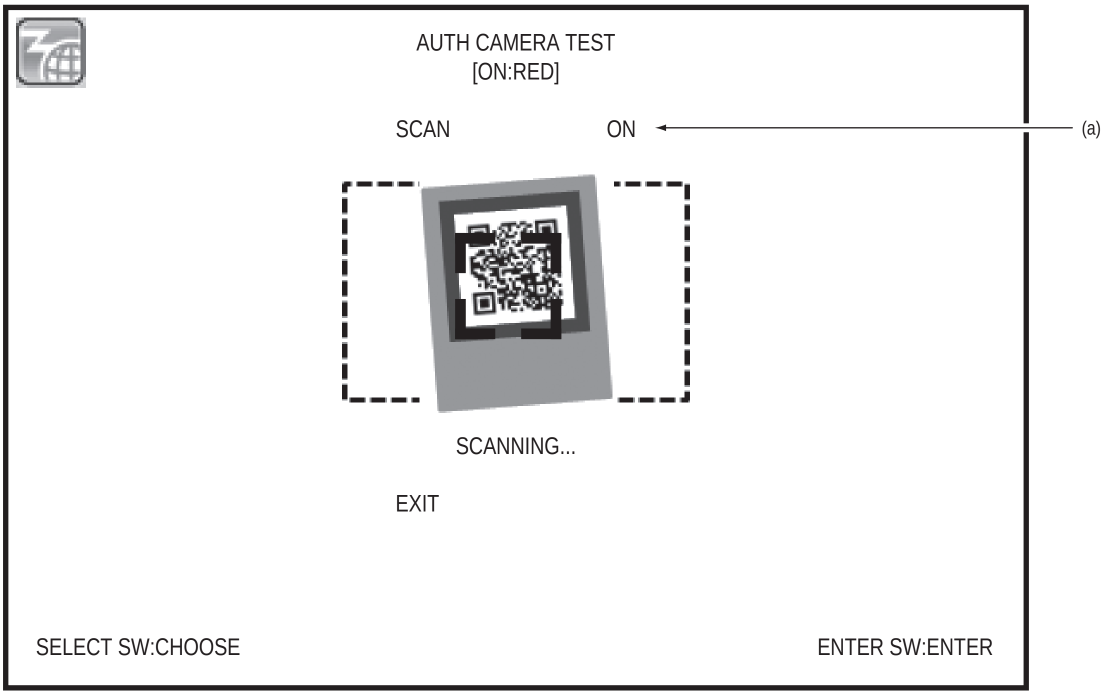
“LED TEST” screen

Item	Description
(a) ALL	Turns ON/OFF all the LED lamps.
(b) 1P START	Turns ON/OFF the LED lamp of the 1P start button.
(c) 2P START	Turns ON/OFF the LED lamp of the 2P start button.
(d) SIGN WHITE	Turns ON/OFF the sign tape LED (white) lamp.
(e) SIGN RED	Turns ON/OFF the sign tape LED (red) lamp.
(f) EYE LIGHT	Turns ON/OFF the face tape LED lamp simultaneously.
(g) CAM LIGHT	Turns ON/OFF the authentication camera white LED lamp.

(8) AUTH CAMERA TEST

This screen streams an image in the finder in the center of the screen to read a QR code.

1. Select “AUTH CAMERA TEST” on the “I/O TEST” screen and press the enter switch. The “AUTH CAMERA TEST” screen is displayed.
2. Tilt the select switch up and down and select “SCAN”. Press the enter switch.
3. Select “EXIT” and press the enter switch to return to the “MENU” screen.



AUTH CAMERA TEST
[ON:RED]

SCAN ON

SCANNING...

EXIT

SELECT SW:CHOOSE

ENTER SW:ENTER

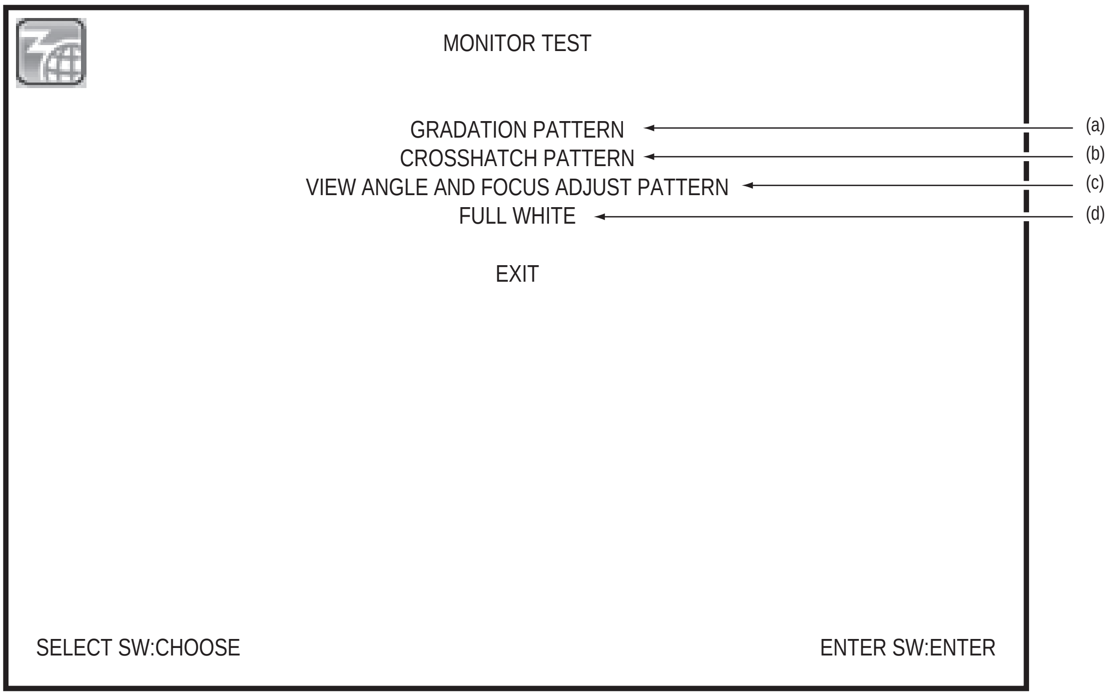
“AUTH CAMERA TEST” screen

Item	Description
(a) SCAN (ON or OFF)	After selecting “ON”, QR code reading starts. During reading, “SCANNING…” is displayed. If reading is successfully completed, the string of characters read is displayed on the screen. If there is a failure on the authentication camera upon starting of reading, “08-01 AUTH CAMERA ERROR” is displayed. Note that playing of the game is still possible with the error. It is recommended to use QR code reading of “Version 3, Error Correction Level H” to “Version 10, Error Correction Level H”. *QR codes are to the provided yourself.

7-4-5 Monitor Test (MONITOR TEST)

The screen performs the monitor (projector) test to check the color tone.

1. Select “MONITOR TEST” on the “MENU” screen and press the enter switch.
   The “MONITOR TEST” screen is displayed.
2. Tilt the select switch up and down and select the items to be displayed. The selected item flashes.
3. Press the enter switch to move to the test screen of the items.
4. Select “EXIT” and press the enter switch to return to the “MENU” screen.



MONITOR TEST

GRADATION PATTERN
CROSSHATCH PATTERN
VIEW ANGLE AND FOCUS ADJUST PATTERN
FULL WHITE

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

“MONITOR TEST” screen

Item	Description
(a) GRADATION PATTERN	Displays the gradation pattern.
(b) CROSSHATCH PATTERN	Displays the crosshatch pattern.
(c) VIEW ANGLE AND FOCUS ADJUST PATTERN	Displays the view angle and focus adjust pattern.
(d) FULL WHITE	Displays the full white pattern.

7-4-6 Sound Test (SOUND TEST)

⚠WARNING

- **Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.**

This screen performs the volume setting and stereo check.

1 Select “SOUND TEST” on the “MENU” screen and press the enter switch. The “SOUND TEST” screen is displayed.

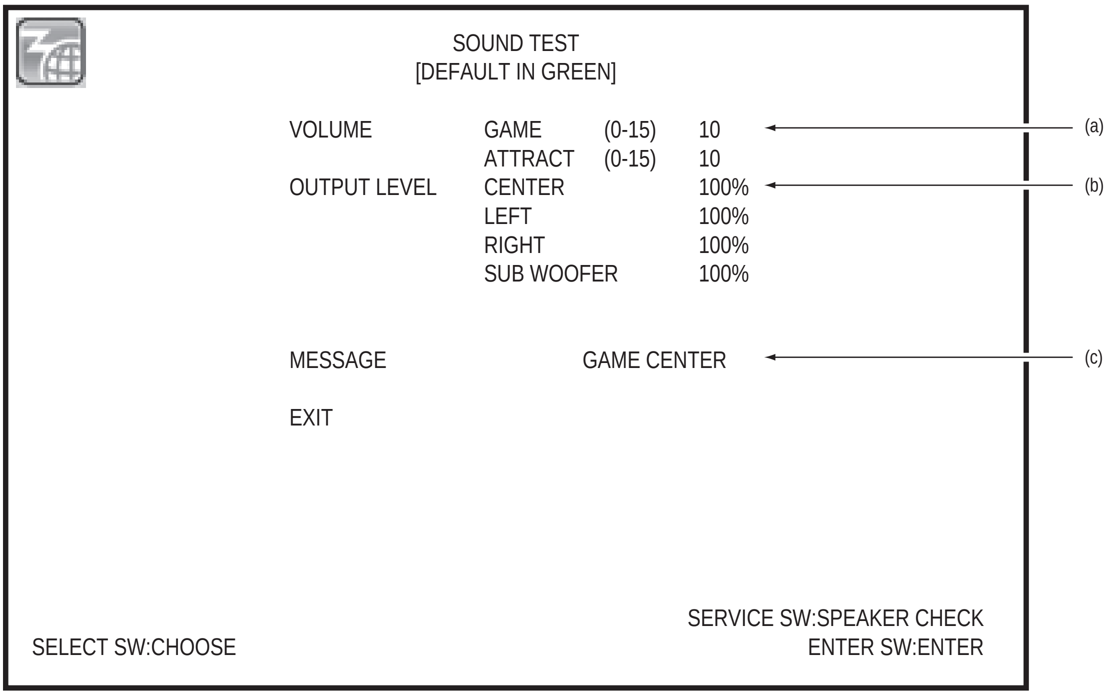
2 Tilt the select switch up and down to select the item to be changed. The selected item flashes.

3 Press the enter switch and confirm the item.
* If the service switch is pressed on the “SOUND TEST” screen, the test sound is played in the order of (CENTER – LEFT – RIGHT – SUB WOOFER) from the speaker installed in the cabinet.

4 After the item is confirmed, change the contents of the item using the select switch.

5 After changing the contents of the item, press the enter switch to return to the selection of items.

6 Select “EXIT” and press the enter switch to return to the “MENU” screen.



SOUND TEST
[DEFAULT IN GREEN]

VOLUME	GAME	(0-15)	10
	ATTRACT	(0-15)	10
OUTPUT LEVEL	CENTER		100%
	LEFT		100%
	RIGHT		100%
	SUB WOOFER		100%

MESSAGE GAME CENTER

EXIT

SERVICE SW:SPEAKER CHECK
SELECT SW:CHOOSE ENTER SW:ENTER

“SOUND TEST” screen

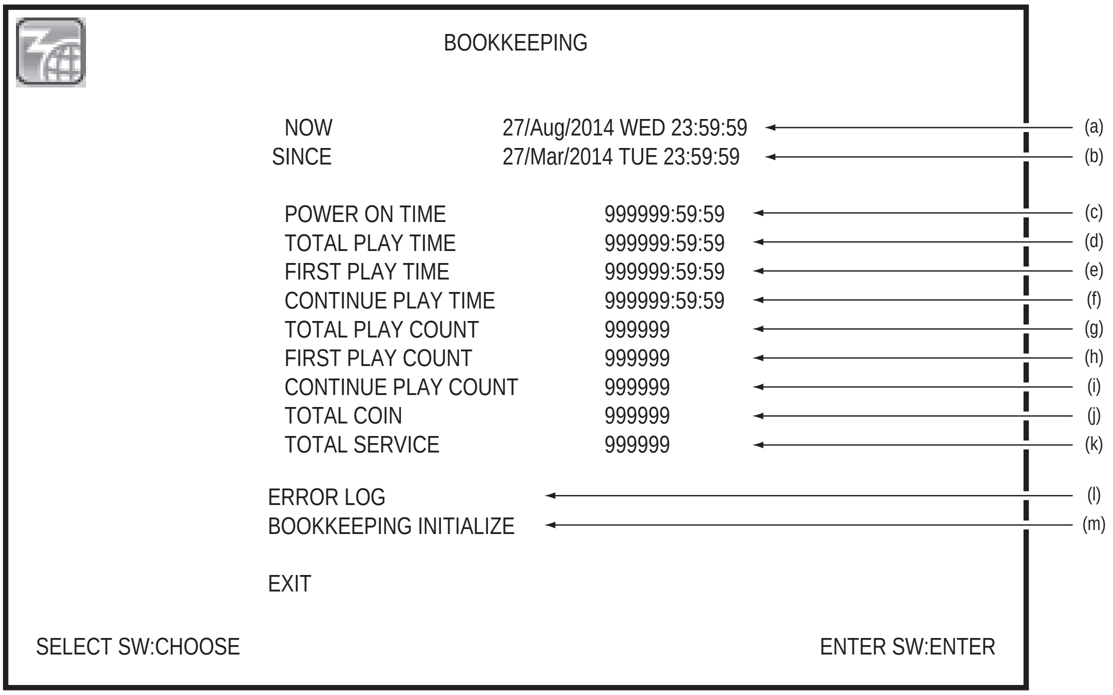
Item	Description	Default
(a) VOLUME	GAME : Adjust the master volume of the game. (Settable range: 0 to 15)	10
	ATTRACT: Adjust the master volume during attract demonstration. (Settable range: 0 to 15)	10
(b) OUTPUT LEVEL	CENTER : Adjust the center speaker volume. (Settable range: 0 to 100)	100%
	LEFT : Adjust the left speaker volume. (Settable range: 0 to 100)	100%
	RIGHT : Adjust the right speaker volume. (Settable range: 0 to 100)	100%
	SUB WOOFER: Adjust the subwoofer volume.	100%
(c) MESSAGE	Current sound volume (“GAME” or “ATTRACT”) and currently sounding speaker (“CENTER”, “LEFT”, “RIGHT” or “SUB WOOFER”) are displayed.	

*Default settings are shown in green while other setting values are in yellow.

7-4-7 Game Data Display (BOOKKEEPING)

This screen displays the operation time, play counts and other data.

1. Select "BOOKKEEPING" on the "MENU" screen and press the enter switch. The "BOOKKEEPING" screen is displayed.
2. Tilt the select switch up and down to select the item to be changed. The selected item flashes.
3. Press the enter switch and confirm the item.
4. Select "EXIT" and press the enter switch to return to the "MENU" screen.



```
                         BOOKKEEPING

           NOW        27/Aug/2014 WED 23:59:59
          SINCE       27/Mar/2014 TUE 23:59:59

           POWER ON TIME             999999:59:59
           TOTAL PLAY TIME           999999:59:59
           FIRST PLAY TIME           999999:59:59
           CONTINUE PLAY TIME        999999:59:59
           TOTAL PLAY COUNT          999999
           FIRST PLAY COUNT          999999
           CONTINUE PLAY COUNT       999999
           TOTAL COIN                999999
           TOTAL SERVICE             999999

          ERROR LOG
          BOOKKEEPING INITIALIZE

          EXIT

 SELECT SW:CHOOSE                                 ENTER SW:ENTER
```

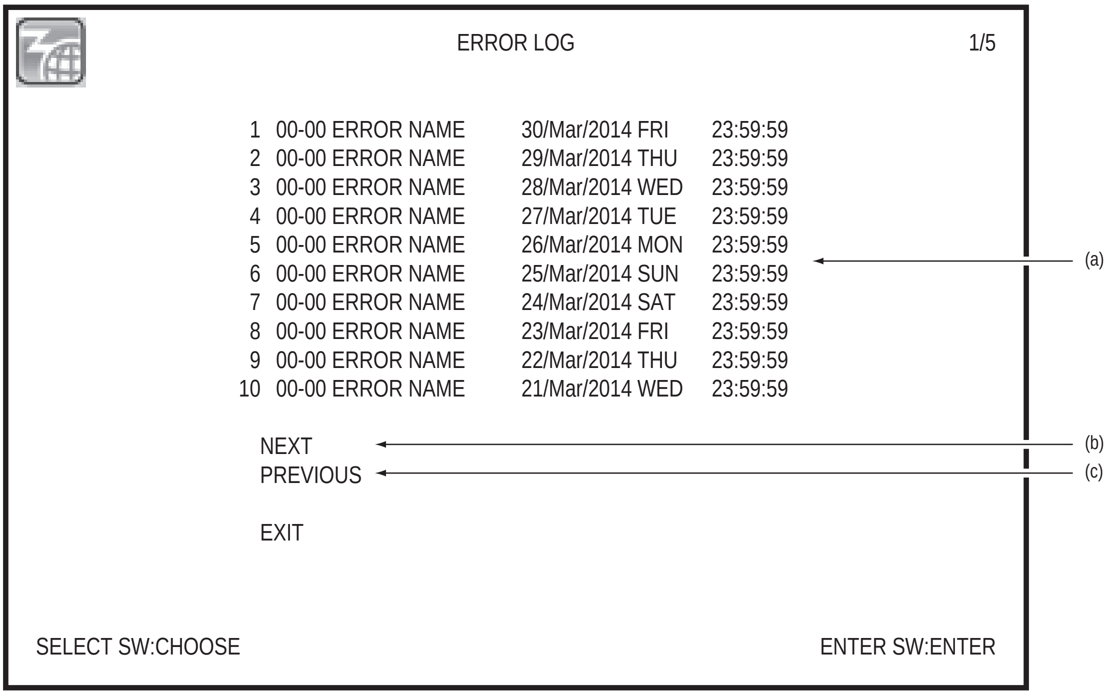
"BOOKKEEPING" screen

Item		Description
(a)	NOW	The current time is displayed.
(b)	SINCE	The time the bookkeeping was reset is displayed.
(c)	POWER ON TIME	The cumulative total of the power supply activated time is displayed in real time.
(d)	TOTAL PLAY TIME	The cumulative total of the cabinet occupation time is displayed.
(e)	FIRST PLAY TIME	The first play total time is displayed.
(f)	CONTINUE PLAY TIME	The continue play total time is displayed.
(g)	TOTAL PLAY COUNT	The cumulative total of the play counts is displayed.
(h)	FIRST PLAY COUNT	The total of first play counts is displayed.
(i)	CONTINUE PLAY COUNT	The total number of continue plays is displayed.
(j)	TOTAL COIN	The total number of coins input is displayed.
(k)	TOTAL SERVICE	The total number of service credits is displayed.
(l)	ERROR LOG	The error log is displayed.
(m)	BOOKKEEPING INITIALIZE	Resets the bookkeeping. After selecting this item, "BOOKKEEPING INITIALIZE?" is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, "COMPLETE!" is displayed after resetting and it returns to the previous screen.

(1) Error log (ERROR LOG)

This screen is used to check the history of errors occurred.

1. Select “ERROR LOG” on the “BOOKKEEPING” screen and press the enter switch. The “ERROR LOG” screen is displayed.
2. Tilt the select switch up and down to select the items. The selected item flashes.
   10 recent errors with the occurrence date and time are displayed on one page and up to 50 errors can be checked.
   The latest one is displayed on top of the “ERROR LOG (1/5)” and the oldest one is displayed on the bottom of the “ERROR LOG (5/5)”.
3. Press the enter switch and confirm the items.
4. Select “EXIT” and press the enter switch to return to the “BOOKKEEPING” screen.



```
                         ERROR LOG                          1/5

          1  00-00 ERROR NAME   30/Mar/2014 FRI   23:59:59
          2  00-00 ERROR NAME   29/Mar/2014 THU   23:59:59
          3  00-00 ERROR NAME   28/Mar/2014 WED   23:59:59
          4  00-00 ERROR NAME   27/Mar/2014 TUE   23:59:59
          5  00-00 ERROR NAME   26/Mar/2014 MON   23:59:59
          6  00-00 ERROR NAME   25/Mar/2014 SUN   23:59:59
          7  00-00 ERROR NAME   24/Mar/2014 SAT   23:59:59
          8  00-00 ERROR NAME   23/Mar/2014 FRI   23:59:59
          9  00-00 ERROR NAME   22/Mar/2014 THU   23:59:59
         10  00-00 ERROR NAME   21/Mar/2014 WED   23:59:59

           NEXT
           PREVIOUS

           EXIT

SELECT SW:CHOOSE                                  ENTER SW:ENTER
```

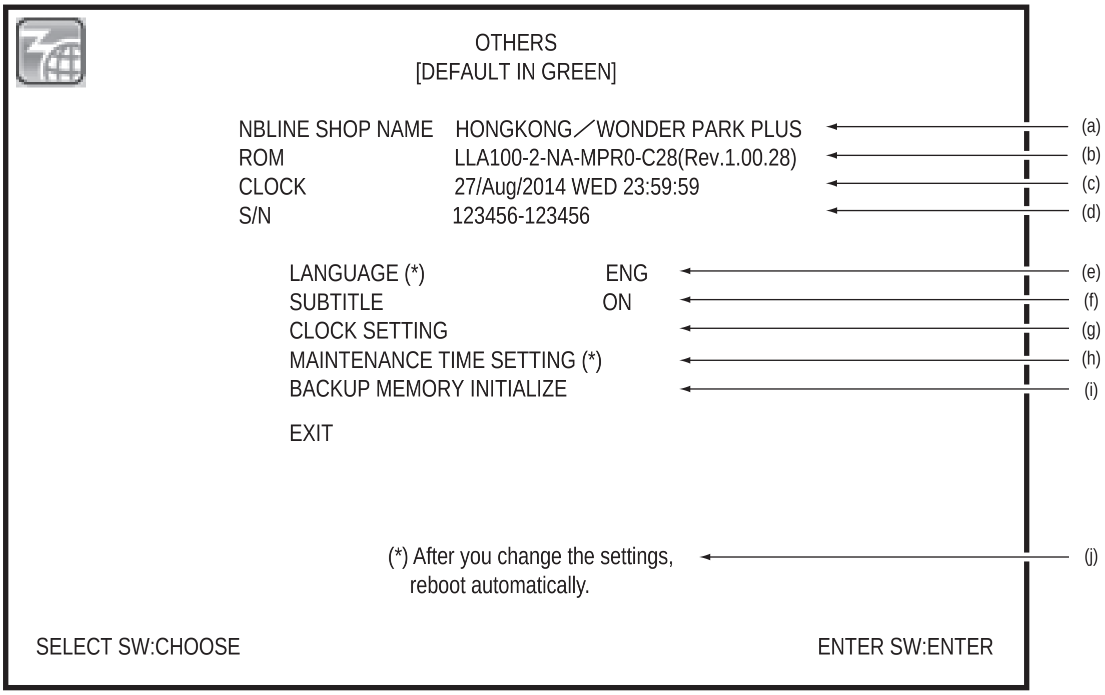
“ERROR LOG” screen

Item	Description
(a) Log display	The error log up to the present is displayed.
(b) NEXT	Move to the next page. (If the fifth page is displayed, this is not displayed.)
(c) PREVIOUS	Move to the previous page. (If the first page is displayed, this is not displayed.)

7-4-8 OTHERS

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

1. Select “OTHERS” on the “MENU” screen, and press the enter switch.
   The “OTHERS” screen is displayed.
2. Tilt the select switch up and 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 “MENU” screen.



OTHERS
[DEFAULT IN GREEN]

NBLINE SHOP NAME HONGKONG／WONDER PARK PLUS
ROM LLA100-2-NA-MPR0-C28(Rev.1.00.28)
CLOCK 27/Aug/2014 WED 23:59:59
S/N 123456-123456

LANGUAGE (*) ENG
SUBTITLE ON
CLOCK SETTING
MAINTENANCE TIME SETTING (*)
BACKUP MEMORY INITIALIZE

EXIT

(*) After you change the settings,
reboot automatically.

SELECT SW:CHOOSE
ENTER SW:ENTER

“OTHERS” screen

Item		Description	Default
(a)	NBLINE SHOP NAME	The shop name is displayed.	–
(b)	ROM	The version and revision number of the program on the disc are displayed.	–
(c)	CLOCK	The current time is displayed.	–
(d)	S/N	The software serial number is displayed.	–
(e)	LANGUAGE	The language setting is displayed.	ENG
(f)	SUBTITLE	Selects whether subtitles are required. ON: Subtitled / OFF: Not subtitled	ON
(g)	CLOCK SETTING	Sets the time, TIME ZONE, and DAYLIGHT SAVING TIME.	–
(h)	MAINTENANCE TIME SETTING	Configures the MAINTENANCE TIME setting.	–
(i)	BACKUP MEMORY INITIALIZE	Resets settings and deletes bookkeeping and other records. When this item is selected, “BACKUP MEMORY INITIALIZE?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.	–
(j)	(*)	The system is automatically restarted after the test mode if the settings of the items with this mark are changed.	–

(1) CLOCK SETTING

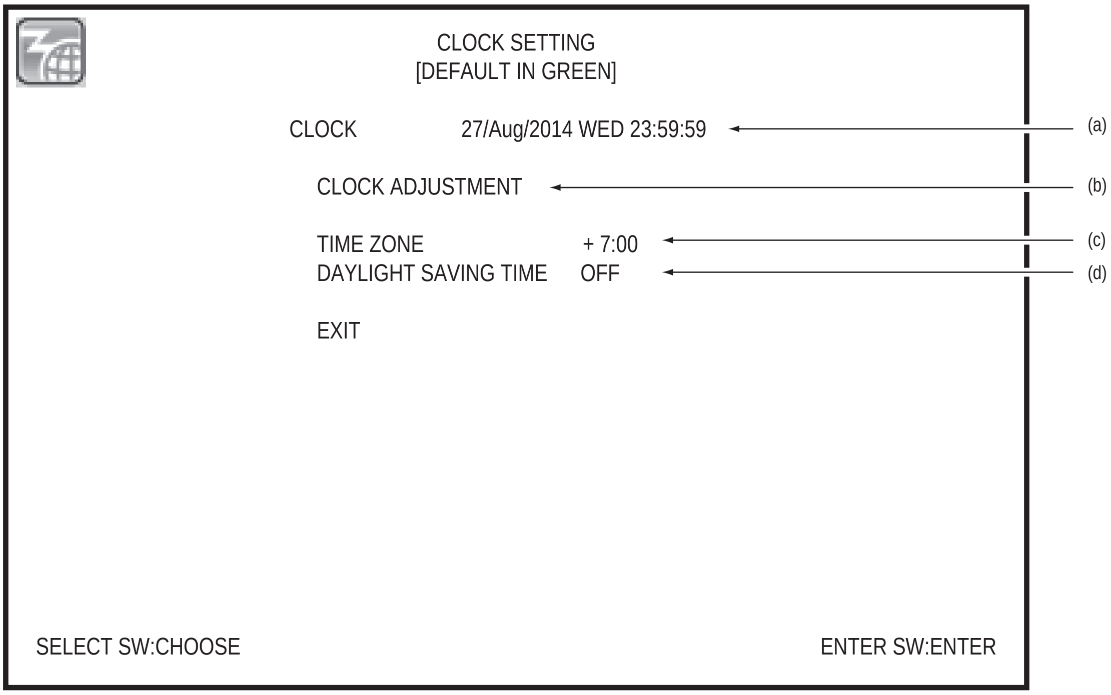
This screen is used to set the time.
For the online version, the time cannot be set as the base time (UTC +0) will be acquired from the network.
For the offline version, the base time can be changed on the "CLOCK ADJUSTMENT" screen.

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

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.



CLOCK SETTING
[DEFAULT IN GREEN]

CLOCK 27/Aug/2014 WED 23:59:59

CLOCK ADJUSTMENT

TIME ZONE + 7:00
DAYLIGHT SAVING TIME OFF

EXIT

SELECT SW:CHOOSE ENTER SW:ENTER

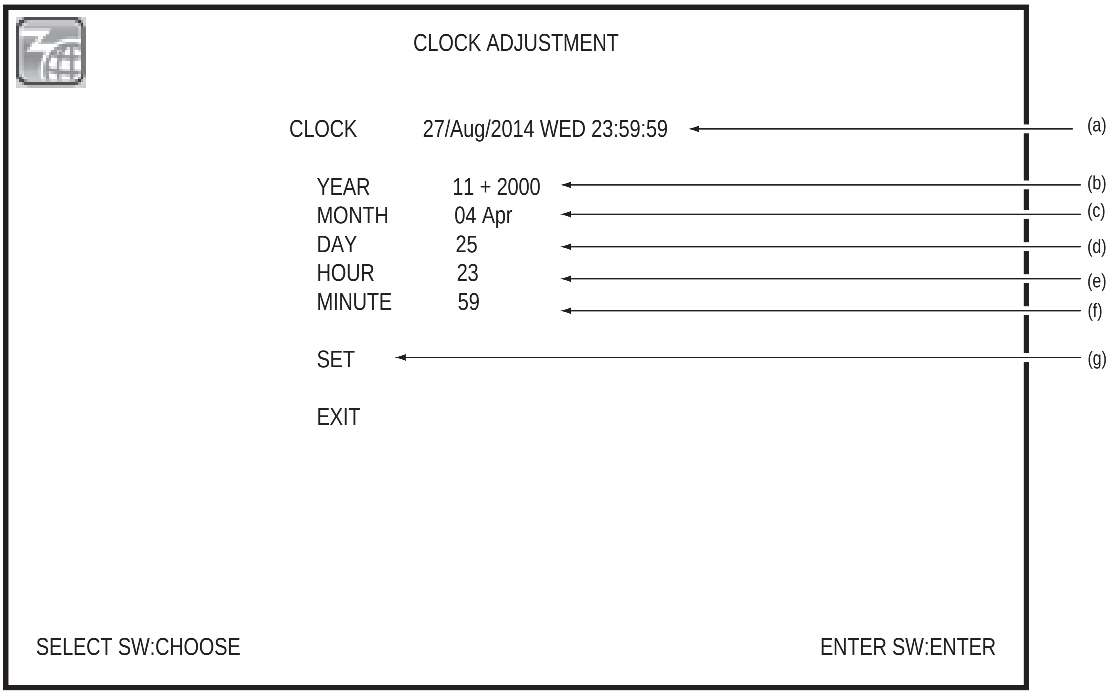
"CLOCK SETTING" screen

Item	Description	Default
(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.	OFF
(d) DAYLIGHT SAVING TIME	Sets DAYLIGHT SAVING TIME. Select OFF, +0:30 or +1:00.	OFF

(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.
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.



CLOCK ADJUSTMENT

CLOCK 27/Aug/2014 WED 23:59:59

YEAR 11 + 2000
MONTH 04 Apr
DAY 25
HOUR 23
MINUTE 59

SET

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

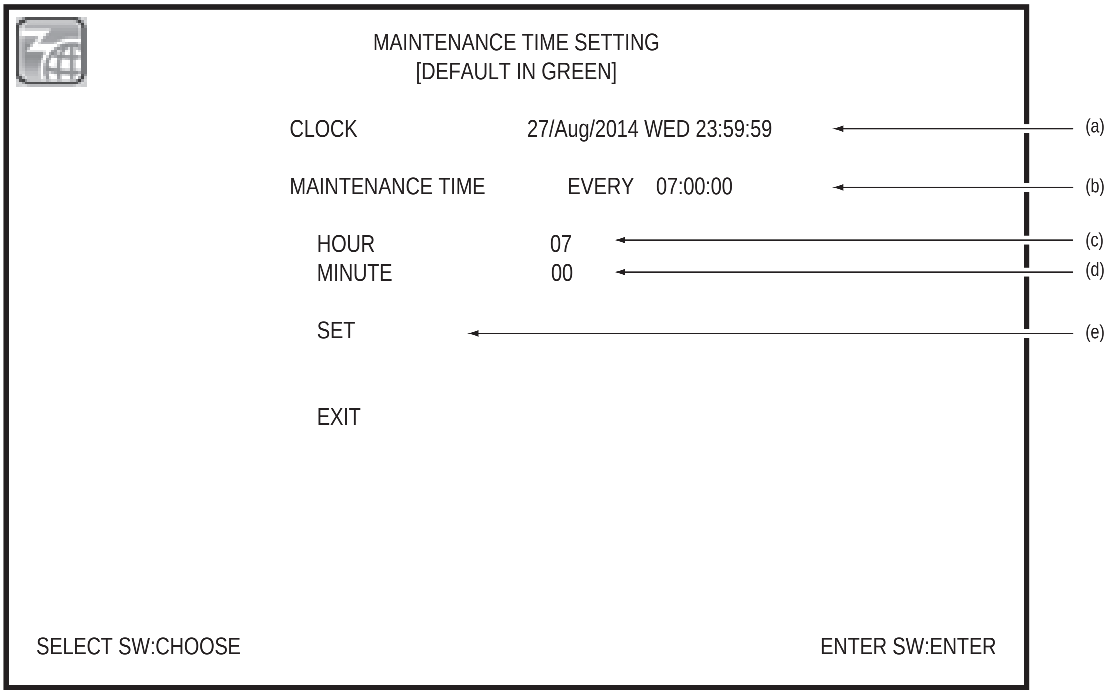
“CLOCK ADJUSTMENT” screen

Item		Description	Default
(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.	—

(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.
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.



MAINTENANCE TIME SETTING
[DEFAULT IN GREEN]

CLOCK 27/Aug/2014 WED 23:59:59

MAINTENANCE TIME EVERY 07:00:00

HOUR 07
MINUTE 00

SET

EXIT

SELECT SW:CHOOSE

ENTER SW:ENTER

“MAINTENANCE TIME SETTING” screen

Item		Description	Default
(a)	CLOCK	Displays the current time.	–
(b)	MAINTENANCE TIME	Displays the MAINTENANCE TIME currently set.	07:00:00
(c)	HOUR	Sets up the hour. Select a number between 00 and 23.	07
(d)	MINUTE	Sets up the minute. Select a number between 00 and 59.	00
(e)	SET	Fix the time setting.	–

7-4-9 Network Setting (NETWORK OPTIONS)

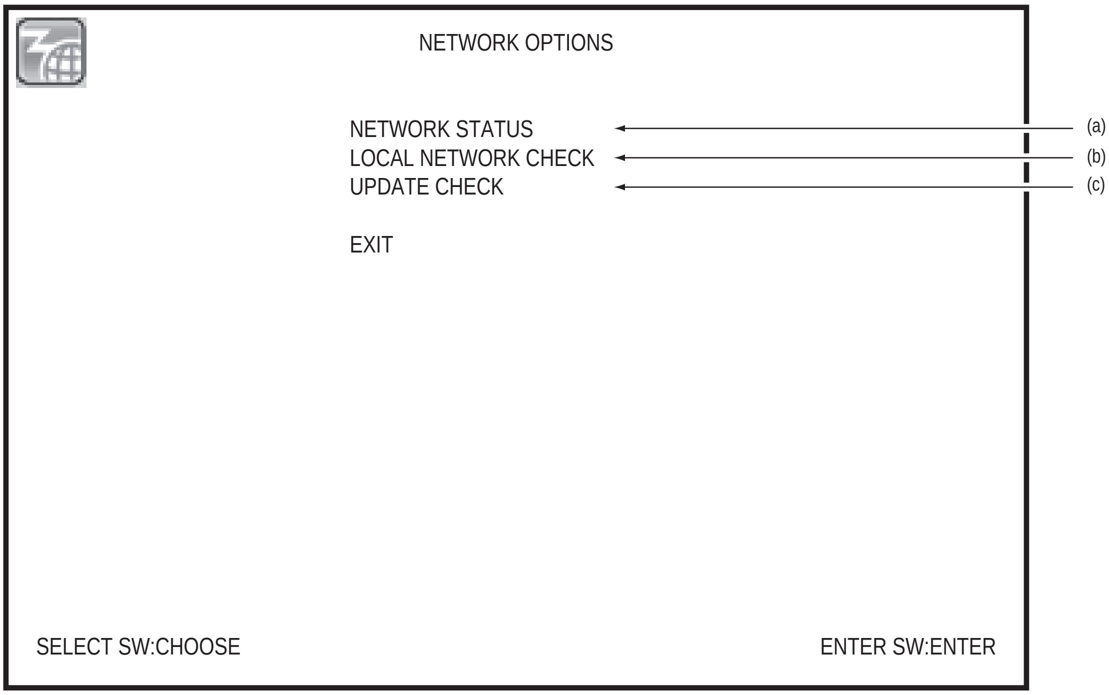
This screen checks and sets up the network.

1 Select “NETWORK OPTIONS” on the “MENU” screen, and press the enter switch.
The “NETWORK OPTIONS” screen is displayed.

2 Tilt the select switch up and down to select the item to be displayed.
The selected item flashes.

3 Press the enter switch to confirm the selection.
The screen displays the contents of the selected item.

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


NETWORK OPTIONS
NETWORK STATUS
LOCAL NETWORK CHECK
UPDATE CHECK
EXIT
SELECT SW:CHOOSE
ENTER SW:ENTER
(a)
(b)
(c)

“NETWORK OPTIONS” screen

Item	Description
(a) NETWORK STATUS	Checks the network status.
(b) LOCAL NETWORK CHECK	Checks the local network.
(c) UPDATE CHECK	Displays the update status.

(1) NETWORK STATUS

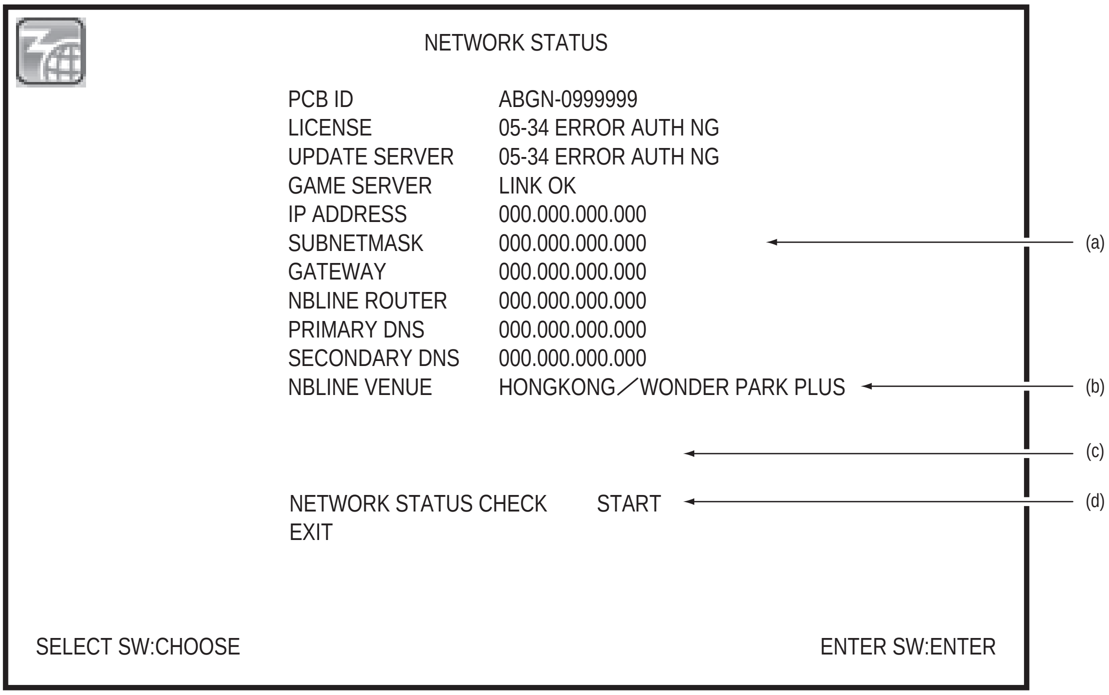
This screen checks the network status.

1 Select “NETWORK STATUS” on the “NETWORK OPTIONS” screen, and press the enter switch. The “NETWORK STATUS” screen is displayed.

2 Tilt the select switch up and down to select an item. 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 “NETWORK OPTIONS” screen.



```
                          NETWORK STATUS

        PCB ID               ABGN-0999999
        LICENSE              05-34 ERROR AUTH NG
        UPDATE SERVER        05-34 ERROR AUTH NG
        GAME SERVER          LINK OK
        IP ADDRESS           000.000.000.000
        SUBNETMASK           000.000.000.000
        GATEWAY              000.000.000.000
        NBLINE ROUTER        000.000.000.000
        PRIMARY DNS          000.000.000.000
        SECONDARY DNS        000.000.000.000
        NBLINE VENUE         HONGKONG／WONDER PARK PLUS



        NETWORK STATUS CHECK      START
        EXIT



SELECT SW:CHOOSE                                    ENTER SW:ENTER
```

“NETWORK STATUS” screen

Item		Description
(a)	Network status display	The following items are displayed: • PCB ID: Serial ID for NBLINE authentication • LICENSE: NBLINE authentication result • UPDATE SERVER: Connection status of the update server • GAME SERVER: Connection status of the game server • IP ADDRESS: IP address of the cabinet • SUBNETMASK: Setting value of the subnet mask • GATEWAY: IP address of the gateway • NBLINE ROUTER: IP address of the NBLINE router • PRIMARY DNS: IP address of the primary DNS • SECONDARY DNS: IP address of the secondary DNS
(b)	NBLINE VENUE	The shop name is displayed.
(c)	Warning message display regarding offline operation	The following message is displayed when the game is operated offline: • When operated offline [NOTICE] The network is not available now. If the offline condition lasts ○○ hours, you will be unable to start the game. (○○ indicates the time remaining for offline operation) • When offline operation is not available (When the remaining operating time reaches zero) (When the number of unsent notifications on billing information exceeds the specified number) 22-01 ERROR There is an error with the network so the game cannot start. Please check the network according to the manual.
(d)	NETWORK STATUS CHECK	Reacquires the network status.

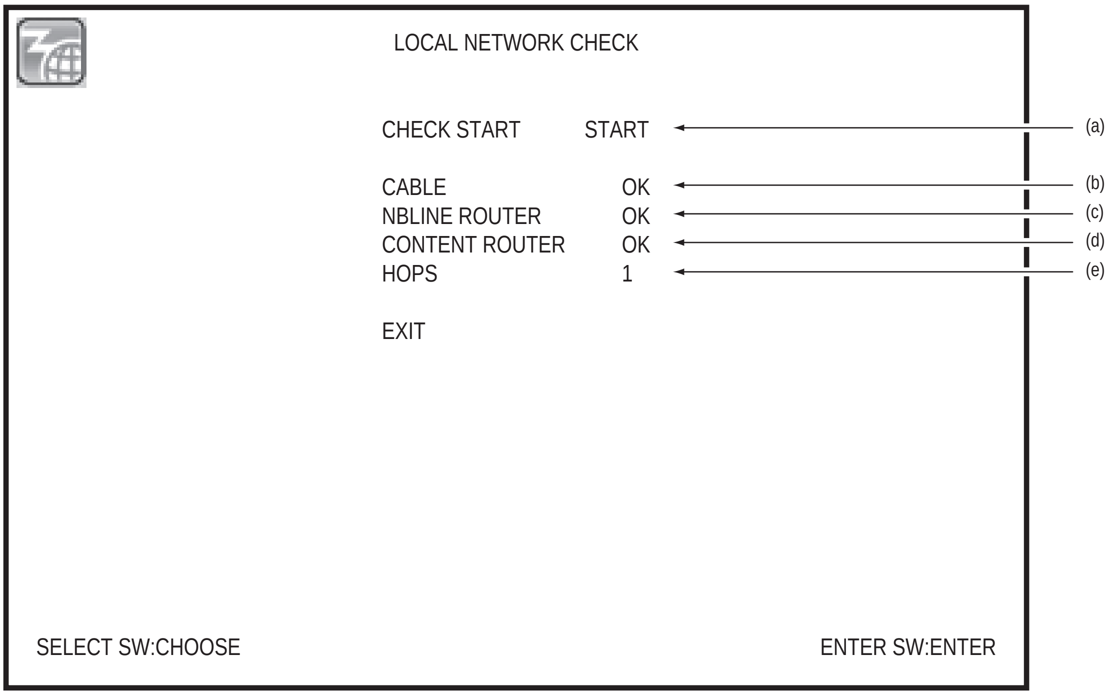
NOTICE

- **Reacquire the network status avoiding the server maintenance time as NETWORK STATUS CHECK cannot be check connection during server maintenance (see “7-5 Network” on page 79).**

(2) LOCAL NETWORK CHECK

This screen checks the local network status.

1. Select “LOCAL NETWORK CHECK” on the “NETWORK OPTIONS” screen, and press the enter switch. The “LOCAL NETWORK CHECK” screen is displayed.
2. Tilt the select switch up and down to select “CHECK START”, and press the enter switch. The local network is checked.
3. Select “EXIT” and press the enter switch to return to the “NETWORK OPTIONS” screen.



LOCAL NETWORK CHECK

CHECK START START (a)

CABLE OK (b)
NBLINE ROUTER OK (c)
CONTENT ROUTER OK (d)
HOPS 1 (e)

EXIT

SELECT SW:CHOOSE ENTER SW:ENTER

“LOCAL NETWORK CHECK” screen

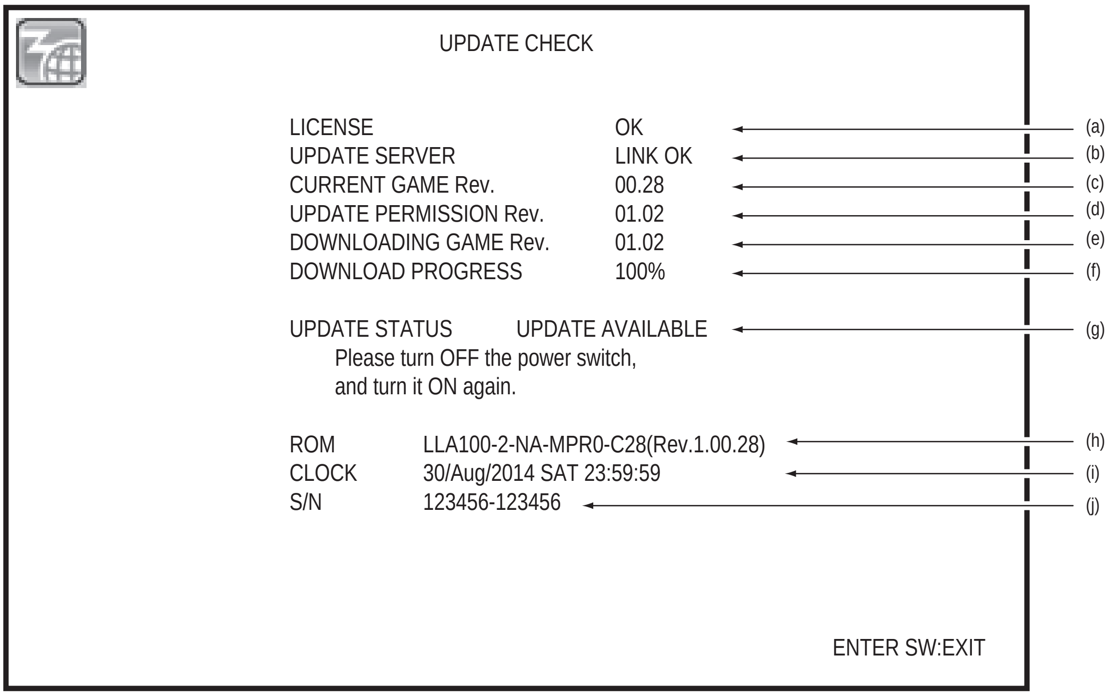
Item	Description
(a) CHECK START	Checks the communication status of the local network.
(b) CABLE	Checks whether the LAN cable is connected to the game PC board.
(c) NBLINE ROUTER	Checks whether the system can be connected to the NBLINE router.
(d) CONTENTS ROUTER	Checks whether the system can be connected to the contents router.
(e) HOPS	Checks how many routers are contained in the route to the NBLINE router. If the LAN cable is properly connected, there should be the NBLINE router and contents router, which means the HOPS should be “2”. If no contents router is used, HOPS should be “1”.

(3) UPDATE CHECK

This screen shows the update status of the game.
The update data if any is automatically downloaded during online operation. After the download of update data is complete, the software is automatically updated when turning on the main power switch.

1 Select the “UPDATE CHECK” on the “NETWORK OPTIONS” screen, and press the enter switch. The “UPDATE CHECK” screen is displayed.

2 Press the enter switch to return to the “NETWORK OPTIONS” screen.



```
                              UPDATE CHECK

          LICENSE                       OK
          UPDATE SERVER                 LINK OK
          CURRENT GAME Rev.             00.28
          UPDATE PERMISSION Rev.        01.02
          DOWNLOADING GAME Rev.         01.02
          DOWNLOAD PROGRESS             100%

          UPDATE STATUS         UPDATE AVAILABLE
              Please turn OFF the power switch,
              and turn it ON again.

          ROM          LLA100-2-NA-MPR0-C28(Rev.1.00.28)
          CLOCK        30/Aug/2014 SAT 23:59:59
          S/N          123456-123456

                                                  ENTER SW:EXIT
```

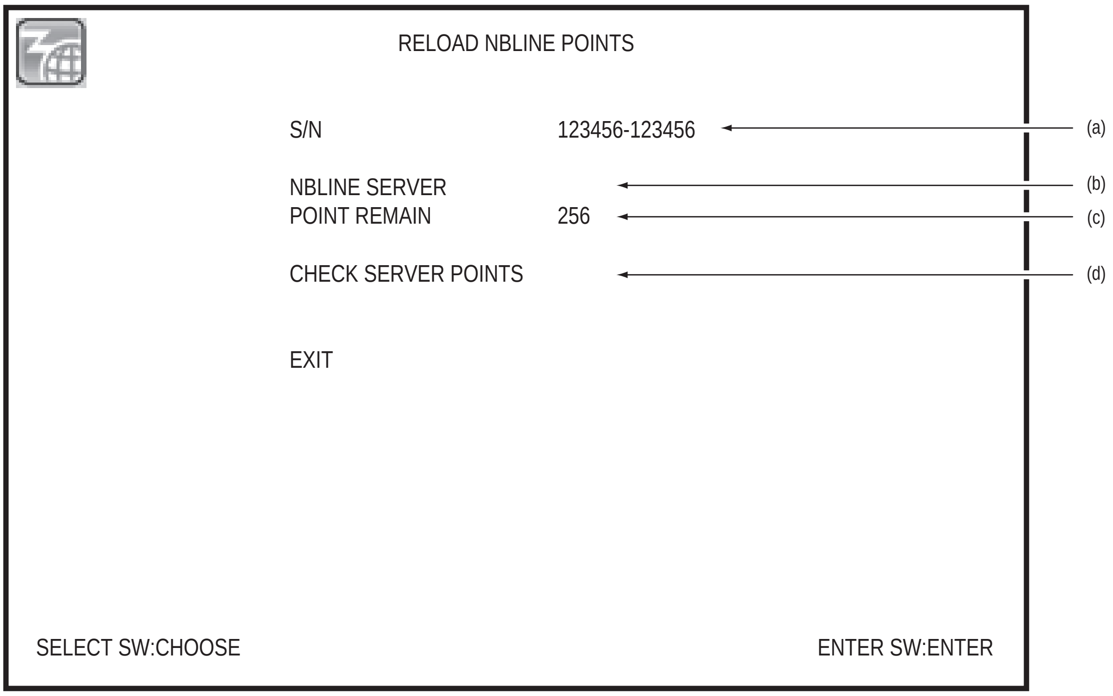
“UPDATE CHECK” screen

Item		Description
(a)	LICENSE	The NBLINE authentication result is displayed.
(b)	UPDATE SERVER	The connection status to the update server is displayed.
(c)	CURRENT GAME Rev.	The current game revision number is displayed.
(d)	UPDATE PERMISSION Rev.	The game revision number permitted for updating is displayed.
(e)	DOWNLOADING GAME Rev.	The downloading game revision number is displayed.
(f)	DOWNLOAD PROGRESS	The download status is displayed.
(g)	UPDATE STATUS	The update status is displayed. • UPDATE AVAILABLE: An update is available The game is updated when powering on the machine next time. • UPDATE NOT AVAILABLE: No update is available The update data permitted for updating is being downloaded. • UPDATE NOT REQUIRED: No update is required The software is the latest version.
(h)	ROM	The version and revision number of the program on the disc are displayed.
(i)	CLOCK	The current time is displayed.
(j)	S/N	The software serial number is displayed.

7-4-10 RELOAD NBLINE POINTS

Check the NBLINE points saved in this machine.

1. Select “RELOAD NBLINE POINTS” on the “MENU” screen and press the enter switch. The “RELOAD NBLINE POINTS” screen is displayed.
2. Tilt the select switch up and down to select “CHECK SERVER POINTS” and press the enter switch. NBLINE points are checked.
3. Press the enter switch to return to the “MENU” screen.



RELOAD NBLINE POINTS

S/N 123456-123456

NBLINE SERVER
POINT REMAIN 256

CHECK SERVER POINTS

EXIT

SELECT SW:CHOOSE
ENTER SW:ENTER

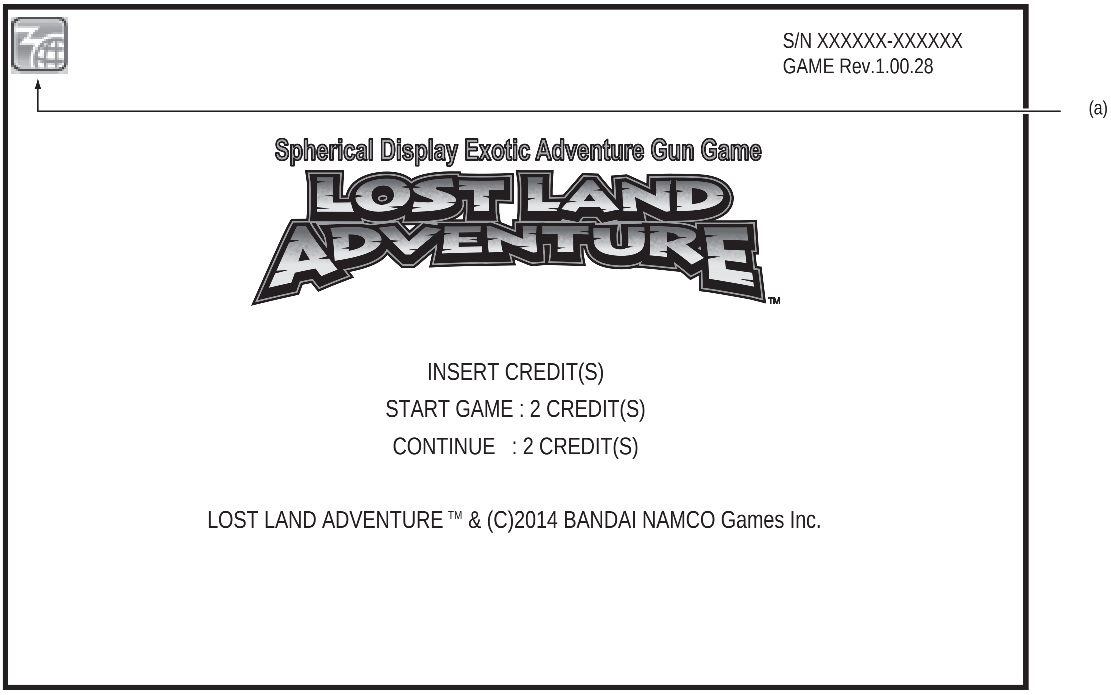
“RELOAD NBLINE POINTS” screen

Item	Description
(a) S/N	The software serial number is displayed.
(b) NBLINE SERVER	The status of connection with the NBLINE server is displayed.
(c) POINT REMAIN	NBLINE points saved in this machine are displayed.
(d) CHECK SERVER POINTS	NBLINE points are checked. If there is an NBLINE point charged on the server side, the NBLINE point will be charged to this machine. If there is an NBLINE point which has been consumed on the casing side and is not sent, the NBLINE point will be sent to the server side. If there is a network error, selection of this item is not available.

7-5 Network

7-5-1 Indication of Network Status on the Title Screen

The connection to NBLINE is displayed on the title screen.


(a)
Spherical Display Exotic Adventure Gun Game
LOST LAND ADVENTURE™

S/N XXXXXX-XXXXXX
GAME Rev.1.00.28

INSERT CREDIT(S)
START GAME : 2 CREDIT(S)
CONTINUE : 2 CREDIT(S)

LOST LAND ADVENTURE ™ & (C)2014 BANDAI NAMCO Games Inc.

Title screen

(a) Connection status to NBLINE

Online	Normally connected to NBLINE.
Offline	Not connected to NBLINE. See “8B-4 Problems Concerning the Network” on page 154 and take necessary actions for proper operation.

7-6 Maintenance Time

In order to reduce the load on the game PC board after long-term continuous use, the machine will be automatically restarted at the MAINTENANCE TIME, and the system will be cleared.

* The default MAINTENANCE TIME setting is 7:00 am.
* For changing the MAINTENANCE TIME, see "7-4-8 (3) MAINTENANCE TIME SETTING" on page 72.
* The machine will not be restarted while the game is being played.
Restart occurs when the screen returns to “Attraction” after the game.

7-7 Software Update

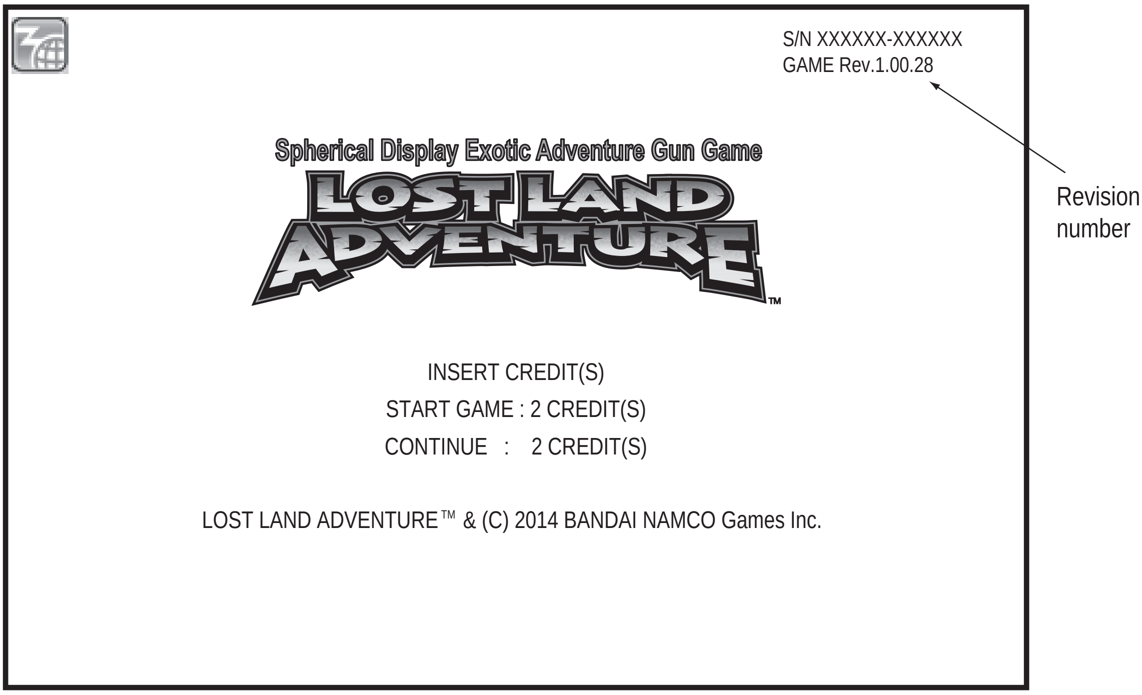
NOTICE

- **After the software update preparation starts, do not turn off the main power switch until the update has been completed and the title screen is displayed. Failure to follow this instruction may cause data corruption on the HDD.**
- **To protect the electrical circuit, turn off the main power switch and wait for 30 seconds or more before turning it on again.**
- **Early software updating is recommended to avoid inconvenience to customers who play the game.**

1 When there is software update data on the server of the network, the update data will be automatically downloaded.
The download progress status can be checked on “UPDATE CHECK” of the test mode.

2 After downloading of the update data is complete, the software update will be performed in the following cases.
- When the main power switch or the system power switch is turned off and turned on again
- When automatic rebooting is performed (See “7-6 Maintenance Time” on page 80.)

3 After the software update is complete, check the revision number of the software on the title screen.



S/N XXXXXX-XXXXXX
GAME Rev.1.00.28

INSERT CREDIT(S)
START GAME : 2 CREDIT(S)
CONTINUE : 2 CREDIT(S)

LOST LAND ADVENTURE™ & (C) 2014 BANDAI NAMCO Games Inc.

Revision number

Title screen

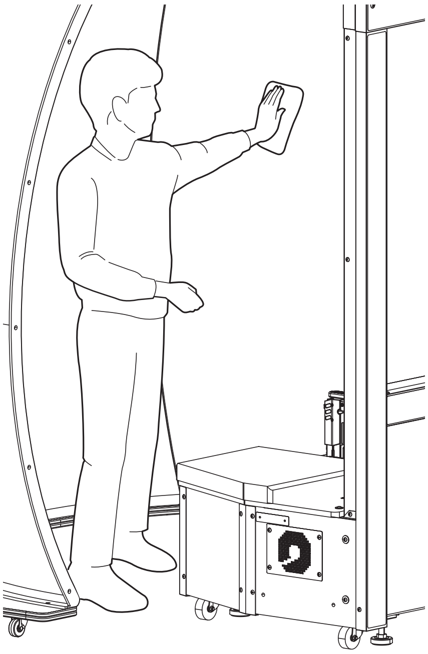
7-8 Cleaning

NOTICE

- **Please refrain from using thinner, benzene, gasoline, or other organic solvents. They may degrade the material.**

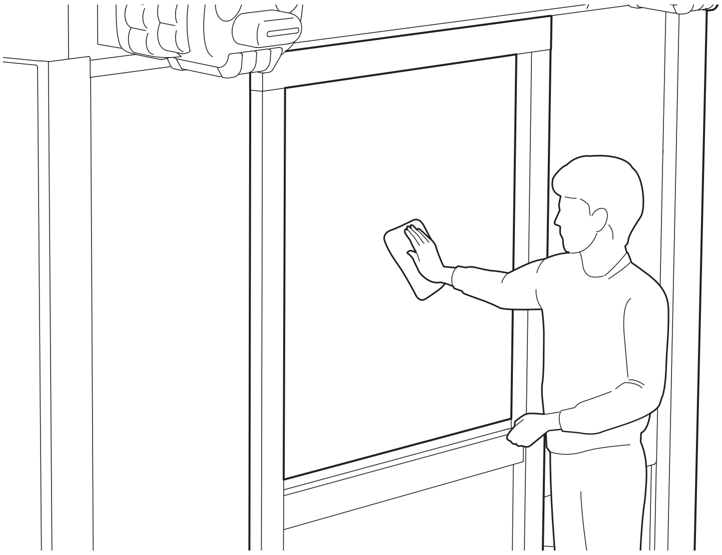
(1) Cleaning the Screen Surface

Wipe off dirt and dust on the screen surface with a damp soft cloth and then wipe with a dry soft cloth.



(2) Cleaning the Smoke Panel (EXP)

Wipe off dirt and dust on the center assembly smoke panel (EXP) with a dry soft cloth. If it is extremely dirty, wipe off the dirt with a damp cloth and then wipe with a dry soft cloth.



(3) Cleaning the Filters F and R

NOTICE

- **Please clean the filters F and R periodically about once a week. If dust and dirt build up, ventilation may not be sufficiently performed and an error may occur with the projector.**

1 Remove the filters F and R. (Refer to “8B-5-5 (5) Replacing the Filter F (projector)” on page 208.)

2 Remove the dust and dirt on the surface of the filters F and R.
Wash them with water and dry them thoroughly. Alternatively, clean with a vacuum cleaner while paying attention to avoid suction of the filter itself.
If a filter is damaged and has a tear or a prominent hole, please replace with a new filter.

3 After cleaning, perform the procedure in reverse to reattach.

(4) Cleaning the lens cover and camera cover

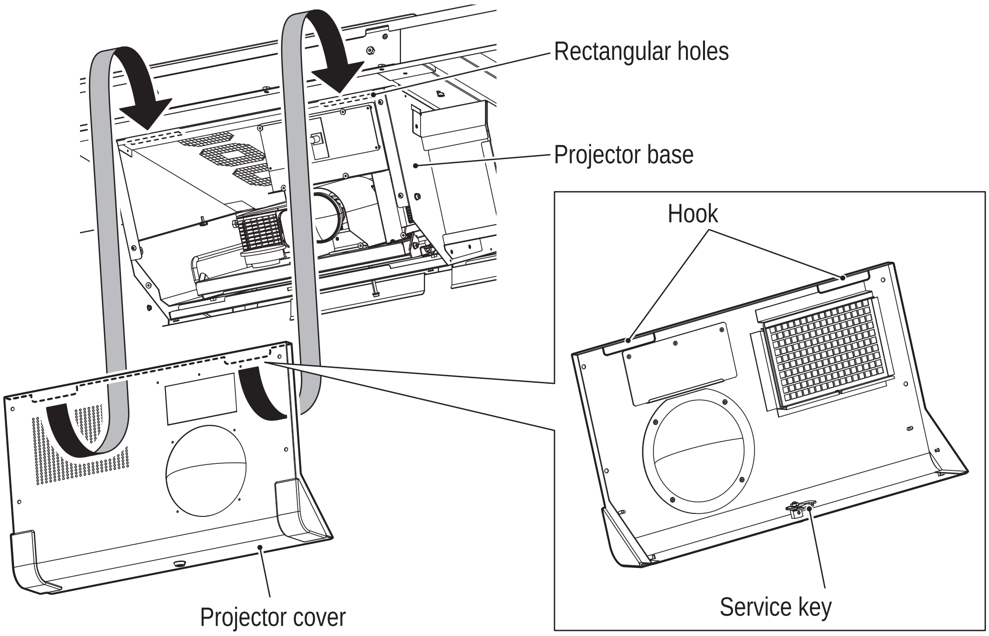
1 Remove the projector cover of the projector assembly. (Refer to “8A-5 Mounting the Projector Assembly” on page 111.)

2 Wipe off dirt and dust on both sides of the lens cover and the gun camera cover with a dry soft cloth.
If they are extremely dirty, please wipe off the dirt with a damp cloth and then wipe with a dry soft cloth.

3 After cleaning, perform the procedure in reverse to reattach.

(5) Cleaning the Projector Lens

1 Remove the projector cover of the projector assembly. (Refer to “8A-5 Mounting the Projector Assembly” on page 111.)



2 Remove the dirt on the projector lens using a commercially available wiping cloth for glasses, glasses cleaner or other cleaning kits exclusively for lenses.

3 After cleaning, perform the procedure in reverse to reattach.

NOTICE

- **Do not use neutral detergent, etc. on the lens surface. Please be sure to use a cleaner specifically for lenses (commercially available wiping cloth for glasses, glasses cleaner, etc.).**

7-9 Service Life of the Projector Lamp (Lamp Unit)

Early replacement of the projector lamp (lamp unit) is recommended to avoid inconvenience to customers who play the game.
As the projector lamp (lamp unit) are consumable parts, they do not light up or the brightness is reduced before the end of the service life. The lamp service life described below is for reference and is not guaranteed.

●Projector model number: NP-PE401H (V1)

Lamp service life: 3,300 hours
After using for approximately 100 hours after the service life, the projector will stop and the screen will be turned off. After that, operation is not possible until the projector lamp (lamp unit) have been replaced. Prior to the occurrence of this situation, be sure to replace the projector lamp (lamp unit) during the “replacement time” described below.
***When the end of the service life is reached, the machine will stop even if a customer is playing the game.**

If the remaining time before the start of the lamp alarm (the lamp use time is up to approximately 3,300 hours on the ECO mode) is zero at startup, the warning voice message, “It is time to replace the lamp soon.”, sounds continuously.
During the warning state, playing of the game is possible by setting the test mode once and ending the mode.
Turn on the test switch to shift to the test mode.

Behaviors when turning on the power switch

Status	Hours of lamp used	Behavior after starting the game	Sound guidance after starting the game
Replacement time	Approximately 100 hours passed to max. 3,300 hours	“09-01 PROJECTOR LAMP WARNING” is displayed on the screen.	WARNING voice, “It is time to replace the lamp soon.”, keeps sounding.
Operation disabled	Max. approximately 3,400 hours or over	The screen is not displayed and the 1P switch and the 2P switch flash in turn. (See “8B-3 (3) Projector Errors” on page 153.)	WARNING voice, “Please call the shop staff. Please replace the lamp, and reset the usage time.”, and buzzer sound keeps sounding.

* During the replacement time, playing of the game is possible by setting the test mode once and ending the mode. While operation is disabled, a starting error will occur and starting of the game is not possible.
Please refer to “8B-5-5 (3) Replacing the Projector Lamp (Lamp Unit)” on page 202 for the replacement method.
* In the case that multiple errors have occurred simultaneously on the projector, the voice guidance will be played for the error whose priority is the highest.

NOTICE

- **Use only lamps designated by us. If lamps other than those designated are used, the projector main unit may be broken.**

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

* Chapter 8 (page 145 to page 222) of the Operation Manual is for use by Service technicians only.
The procedures described in these pages must only be performed by qualified service personnel.

8A. Installation and Assembly

8A-1 Preparation for Assembly

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

The standard work time to complete working is four hours following delivery and unpacking.
(The standard work time is estimated when two technicians are assigned.)

8A-1-2 Workflow

The following shows the flow of assembly and installation:

- Assembling the front assembly
- Assembling the center and side tower assemblies
- Mounting the roof frame
- Mounting the projector assembly
- Mounting the face assembly
- Mounting the LEDBOX unit for signs
- Mounting the roof panel
- Mounting the curtain
- Mounting the front and center assemblies
- Adjusting the level adjusters
- Mounting the POP
- Connecting and adjusting the power supply, etc.

8A-1-3 Space Required for Installation

Secure the work space consisting of a level area of 5 m x 5 m or larger and a ceiling height of 2.5 m or higher during assembly and installation:

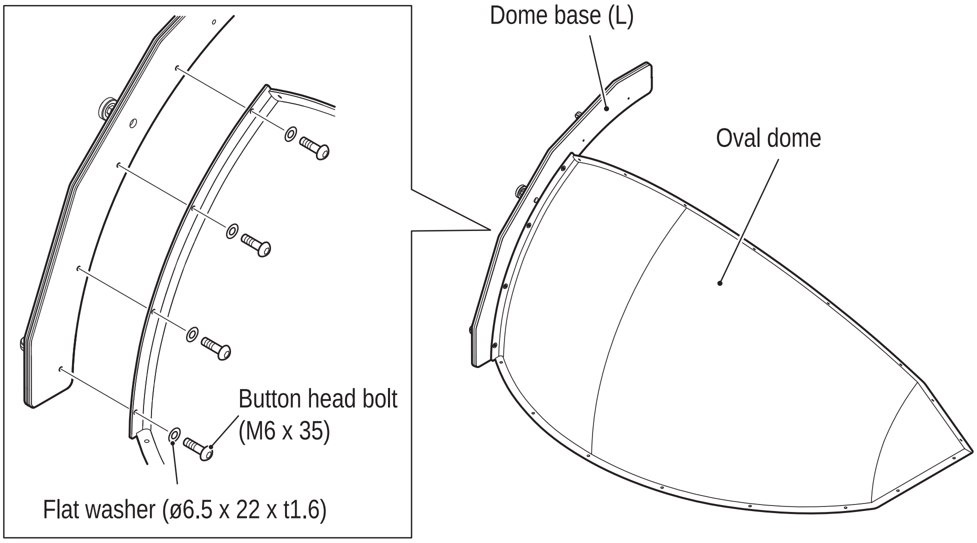
8A-1-4 Necessary Tools

The tools necessary for assembly and installation are:

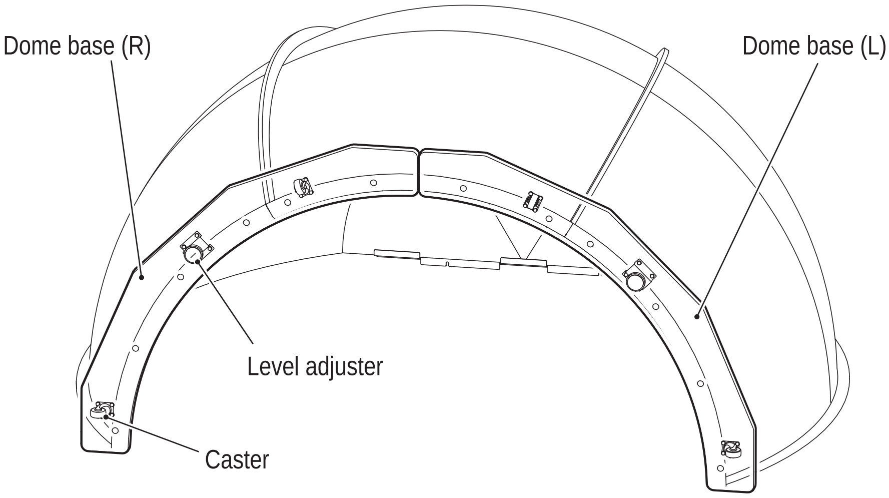
- Phillips screwdriver (No. 2)
- Hexagon wrench (opposite side: 4)
- Torx wrench (T25)
- Box wrenches (7 mm and 10 mm)
- Spanner (opposite side: 24 mm)
- Stepladder
- Gloves (e.g. work gloves)

8A-2 Assembling the Front Assembly

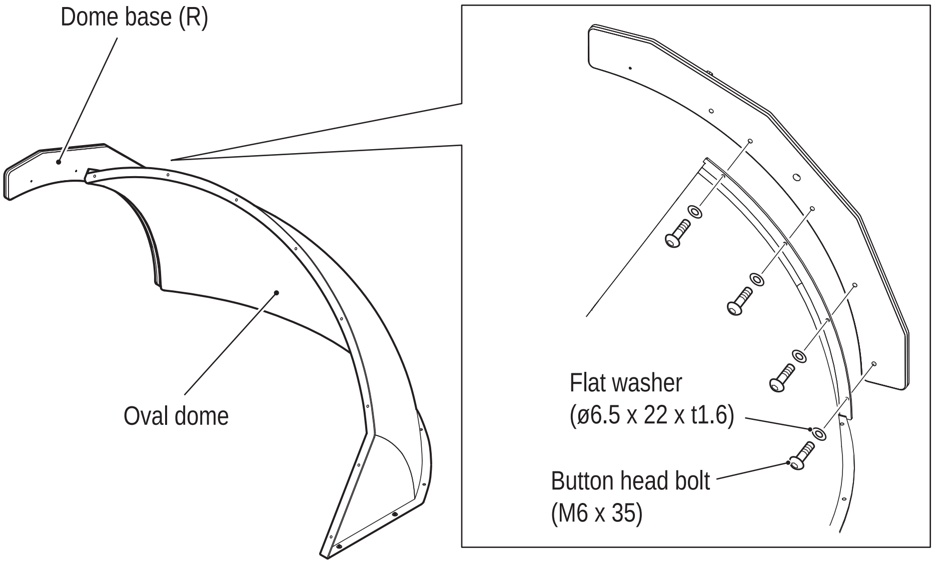
1 While the oval dome is placed on the floor as illustrated below, mount the dome base (L) to the oval dome with four button head bolts (M6 x 35) and four flat washers (ø6.5 x 22 x t1.6). This is referred to as dome (L).


Dome base (L)
Oval dome
Button head bolt (M6 x 35)
Flat washer (ø6.5 x 22 x t1.6)

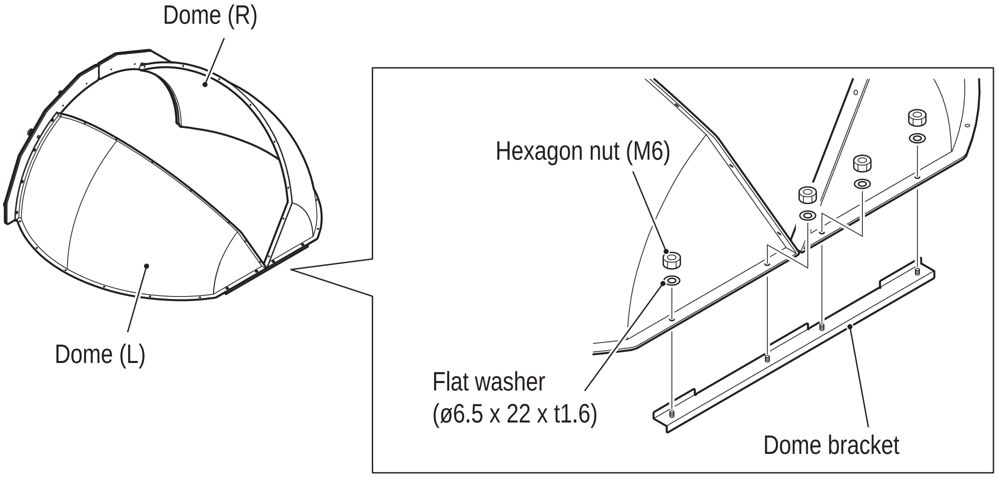
- **Refer to the figure below to prevent incorrect assembly as the dome bases (L) and (R) are similar in shape.**


Dome base (R)
Dome base (L)
Level adjuster
Caster

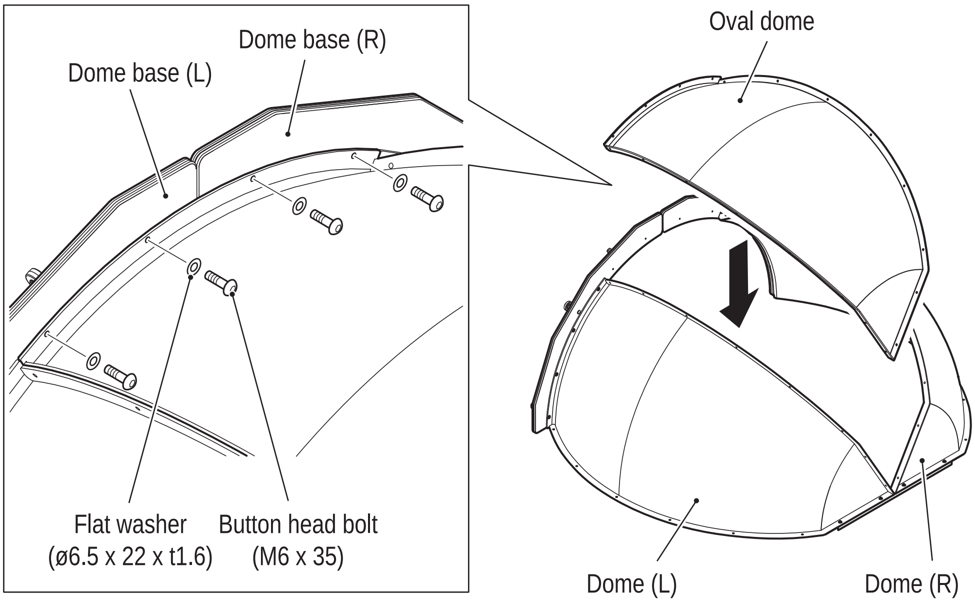
2 Mount the other oval dome to the dome base (R) following the same procedure as **1**. This is referred to as dome (R).


Dome base (R)
Oval dome
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 35)

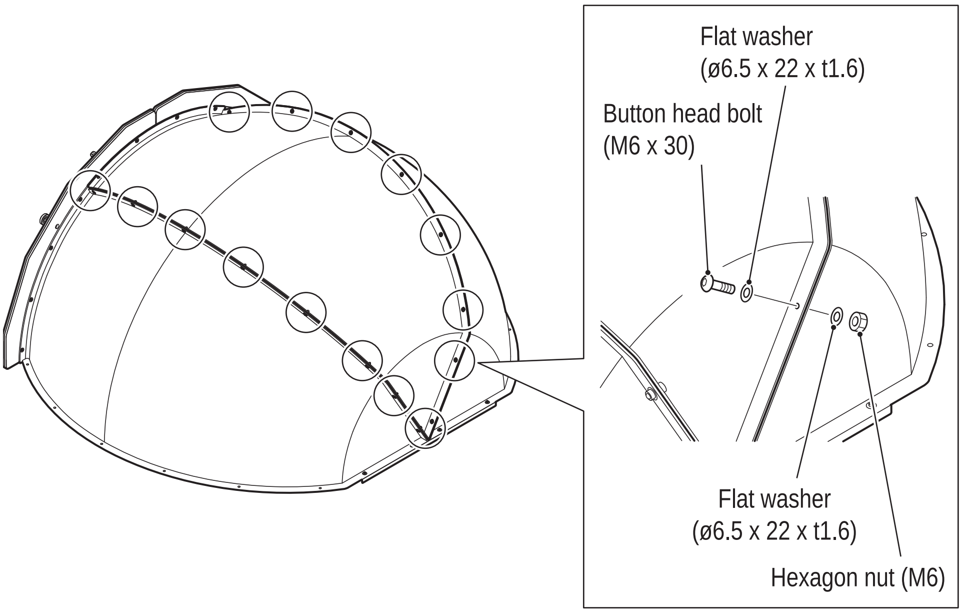
3 Connect the domes (L) and (R) with the dome bracket, and temporarily fix them with four hexagon nuts (M6) and four flat washers (ø6.5x 22 x t1.6).


Dome (R)
Dome (L)
Hexagon nut (M6)
Flat washer
(ø6.5 x 22 x t1.6)
Dome bracket

4 Place the oval dome between the domes (L) and (R), and temporarily fix it to the dome bases (L) and (R) with four button head bolts (M6 x 35) and four flat washers (ø6.5 x 22 x t1.6).


Dome base (R)
Dome base (L)
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 35)
Oval dome
Dome (L)
Dome (R)

5 Temporarily fix the three oval domes with 16 button head bolts (M6 x 30), 32 flat washers (ø6.5 x 22 x t1.6) and 16 hexagon nuts.

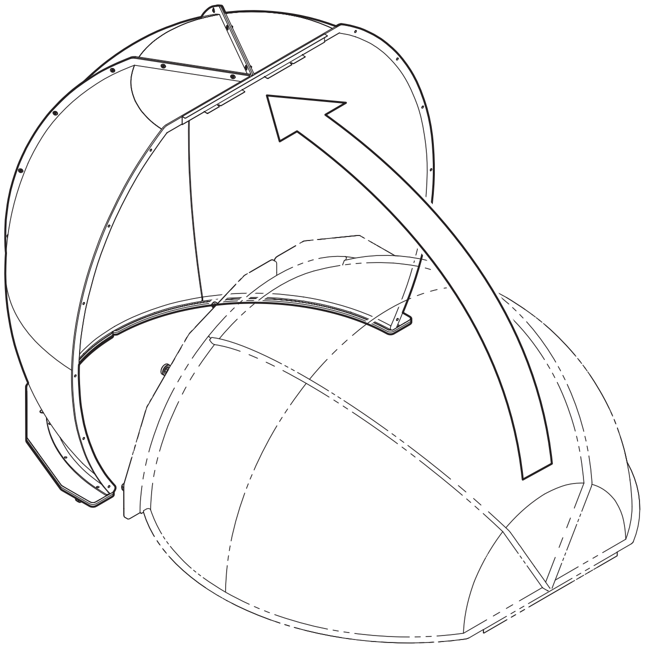

Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 30)
Flat washer
(ø6.5 x 22 x t1.6)
Hexagon nut (M6)

6 Fully tighten the screws temporarily tightened in **3** to **5** while positioning the oval domes such that the difference in the interface level of the oval domes is within around 3 mm.

7 Mount 16 box nuts (M6) to the threaded portions of the button head bolts (M6 x 30) tightened in **6**.

-Must be performed by a technician-

8 Raise the assembled dome (front assembly).



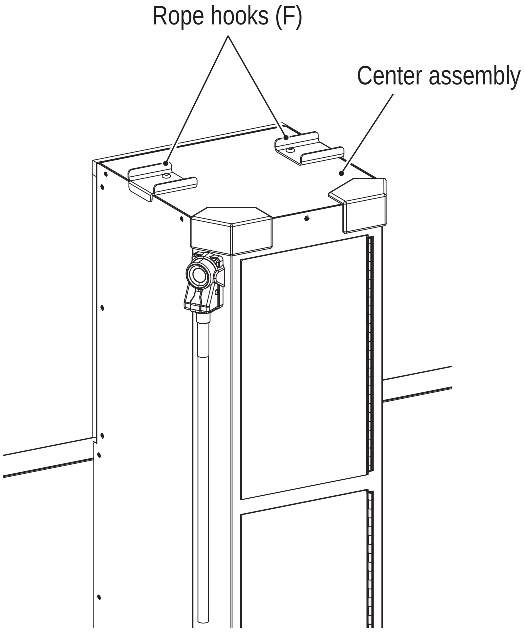
NOTICE

- **The front assembly will be fixed in “8A-11 Mounting the Front and Center Assemblies” on page 129. Keep it in a place that does not affect assembly work until then.**

8A-3 Assembling the Center, Side Tower (L) and Side Tower (R) Assemblies

8A-3-1 Removing the Rope Hooks (F) from the Center Assembly

The rope hooks (F) are mounted to the center assembly when delivered.



1. Remove the two rope hooks (F) by removing the two torx bolts (M5 x 8) each from the hooks.
2. Mount the torx bolts removed in 1 back to the original threaded holes.

NOTICE

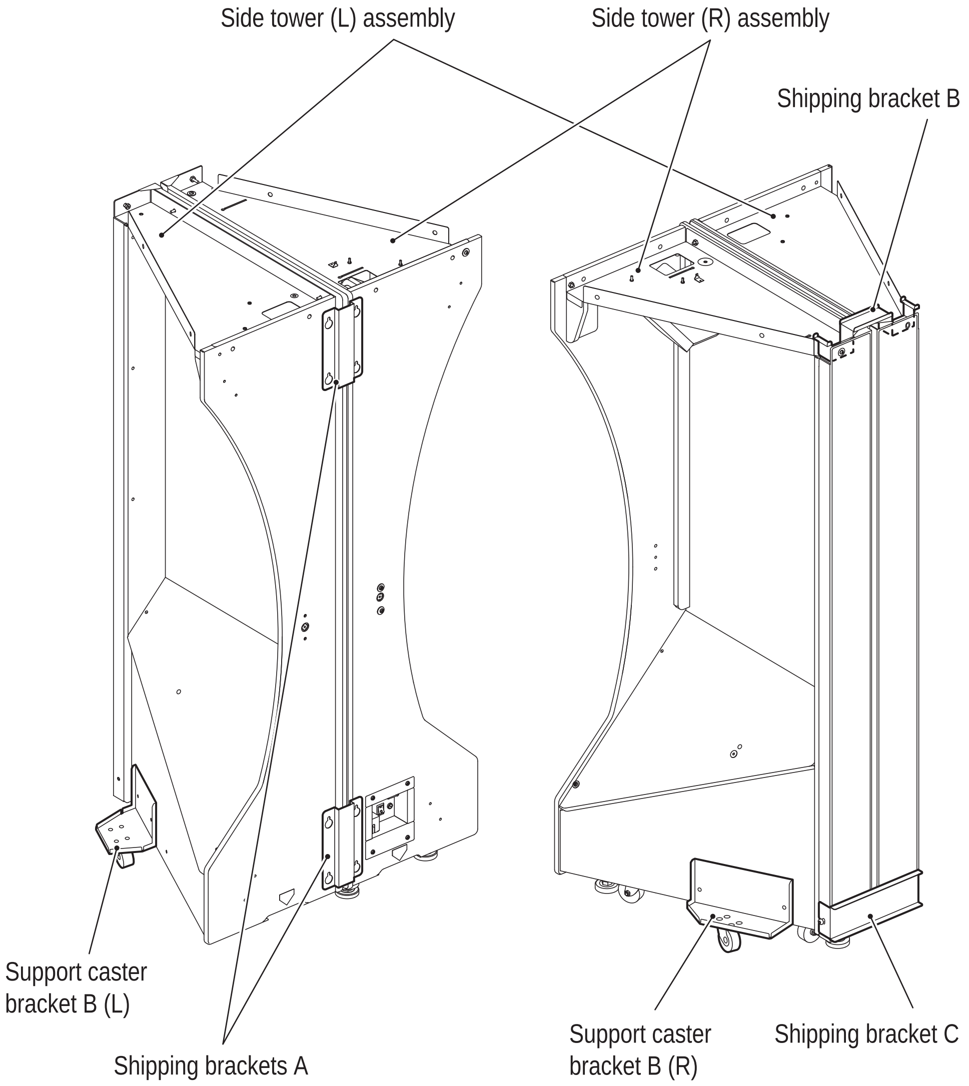
- **The removed rope hooks (F) are required when repacking the case for transferring or repairing. Therefore, be sure to keep them in a safe place.**

8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies

⚠WARNING

- **Do not remove the support caster bracket A (L) or the support caster bracket A (R), as the side tower (L) and side tower (R) assemblies could fall over, resulting in injury or machine damage.**

The side tower (L) and side tower (R) assemblies are fixed with the shipping brackets A, B and C when delivered.


Side tower (L) assembly
Side tower (R) assembly
Shipping bracket B
Support caster bracket B (L)
Shipping brackets A
Support caster bracket B (R)
Shipping bracket C

1 Loosen the eight button head bolts (M6 x 16) to remove the two shipping brackets A. Retighten the loosened screws after the shipping brackets A have been removed.

2 Remove the two button head bolts (M6 x 16), two button head bolts (M6 x 30) and four flat washers (ø6.5 x 22 x t1.6) to remove the shipping bracket B.
Do not put the four screws and two flat washers removed back into the cabinet.

3 Loosen the two button head bolts (M6 x 16) to remove the shipping bracket C.
Retighten the loosened screws after the shipping brackets C have been removed.

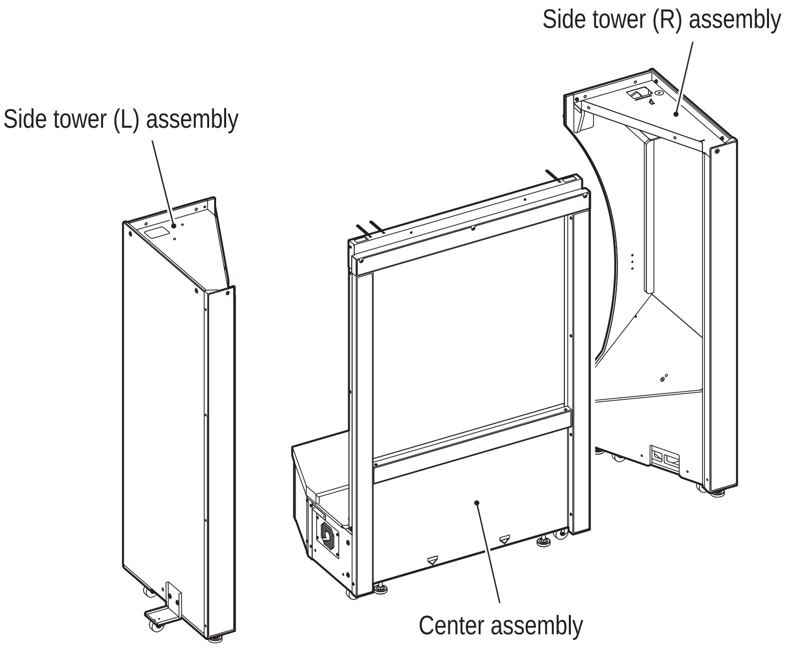
4 Remove the two button head bolts (M6 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the support caster bracket B (L).
Similarly, remove the support caster bracket B (R).
Do not put the four screws and four flat washers removed back into the cabinet.

NOTICE

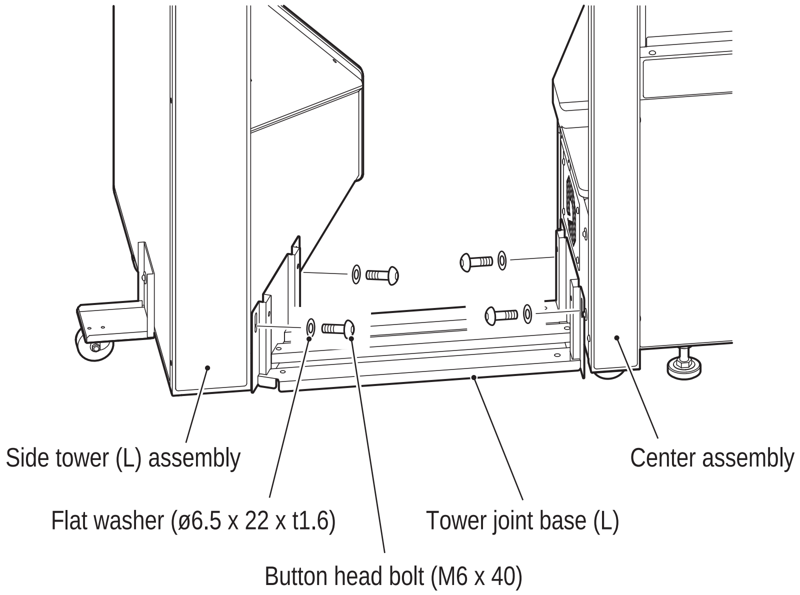
- **The removed shipping brackets are required when repacking the case for transferring or repairing. Therefore, be sure to keep them in a safe place.**

8A-3-3 Assembling the Center, Side Tower (L) and Side Tower (R) Assemblies

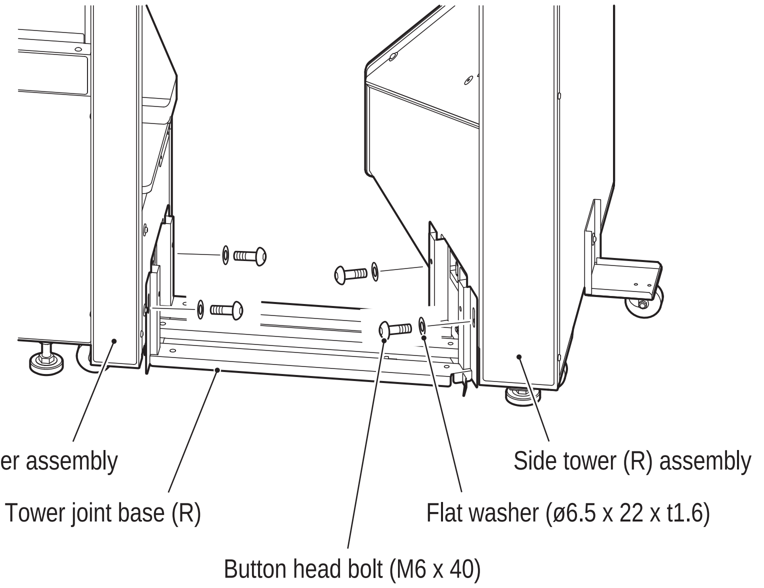
1 Temporarily place the center, side tower (L) and side tower (R) assemblies.


Side tower (R) assembly
Side tower (L) assembly
Center assembly

2 Temporarily fix the center and side tower (L) assemblies with the tower joint base (L), four button head bolts (M6 x 40) and four flat washers (ø6.5 x 22 x t1.6).


Side tower (L) assembly
Center assembly
Flat washer (ø6.5 x 22 x t1.6)
Tower joint base (L)
Button head bolt (M6 x 40)

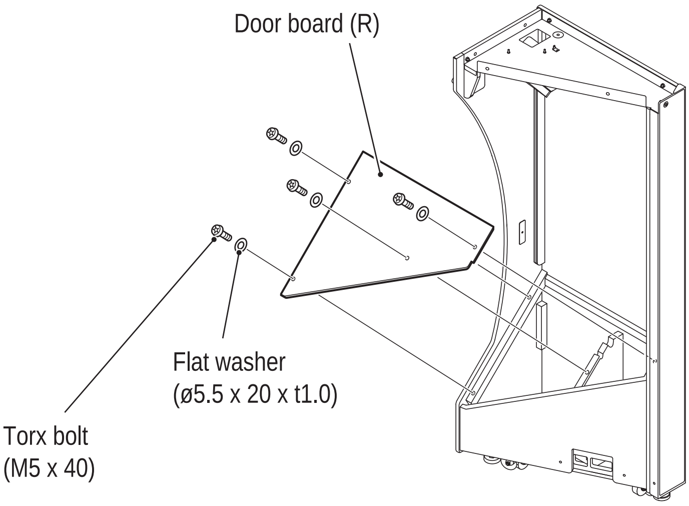
3 Similarly to Step **2**, temporarily fix the center and side tower (R) assemblies with the tower joint base (R), four button head bolts (M6 x 40) and four flat washers (ø6.5 x 22 x t1.6).


Center assembly
Side tower (R) assembly
Tower joint base (R)
Flat washer (ø6.5 x 22 x t1.6)
Button head bolt (M6 x 40)

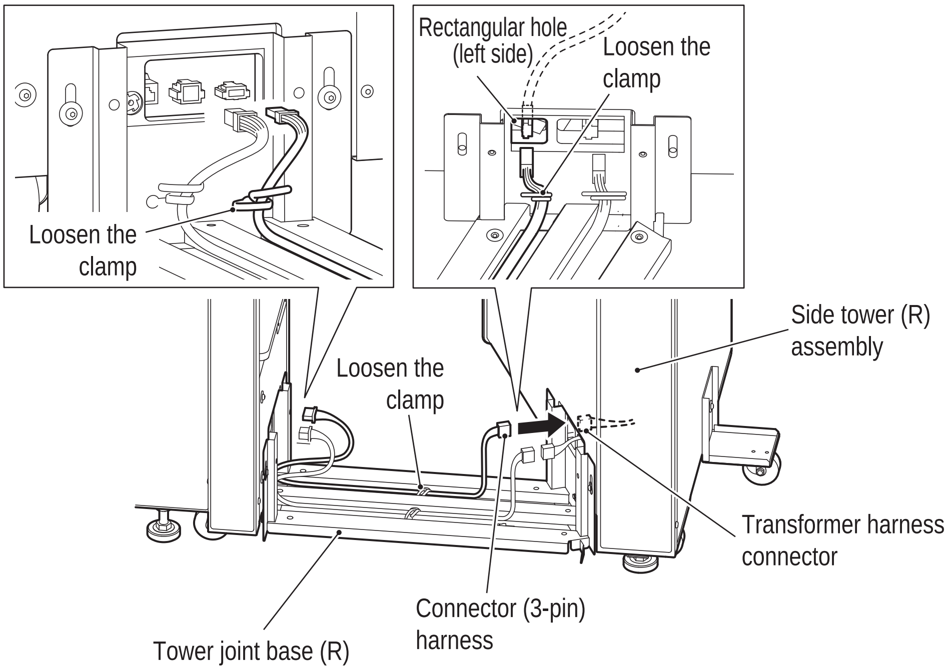
NOTICE

- **The screws temporarily tightened in 2 and 3 will be fully tightened while adjusting level adjusters after the front and center assemblies are mounted (see "8A-12 Level Adjuster Adjustment" on page 133). Take care not to tighten them too firmly.**

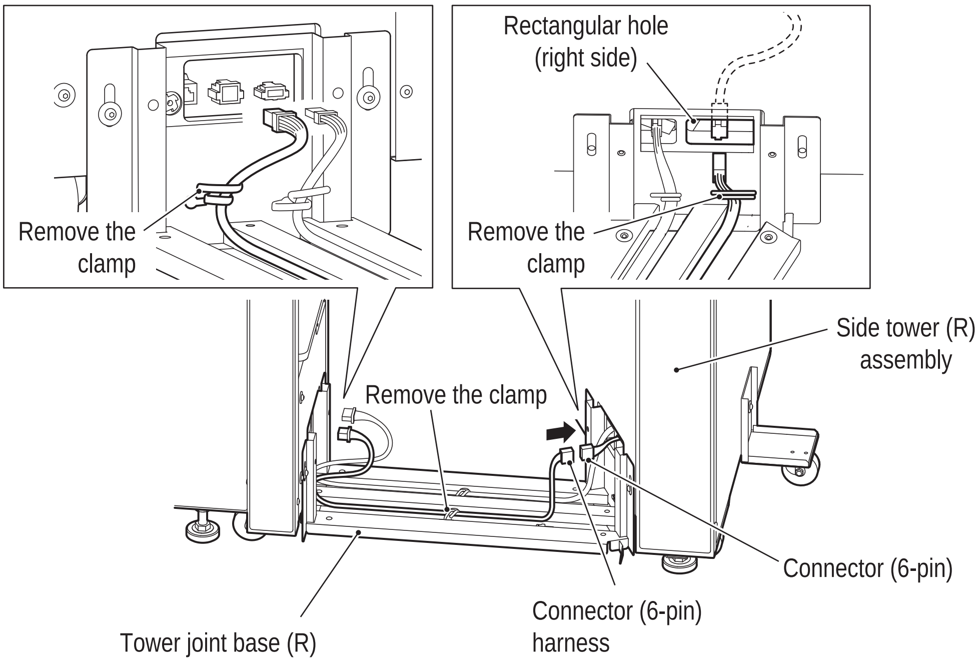
4 Remove the door board (R) by removing the four flat washers (ø5.5 x 20 x t1.0) and four torx bolts (M5 x 40).


Door board (R)
Flat washer
(ø5.5 x 20 x t1.0)
Torx bolt
(M5 x 40)

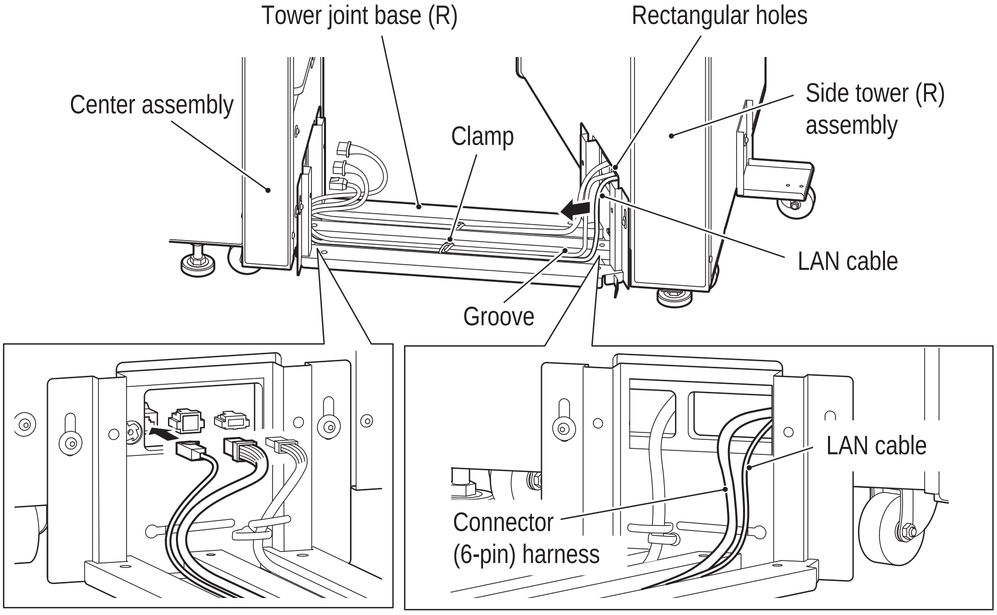
5 Pass the connector (3-pin) harness of the tower joint base (R) through the left rectangular hole of the side tower (R) assembly and connect it to the transformer harness. In so doing, loosen the three clamps used for fixing the connector (3-pin) harness.


Rectangular hole
(left side)
Loosen the clamp
Loosen the clamp
Side tower (R) assembly
Loosen the clamp
Transformer harness connector
Connector (3-pin) harness
Tower joint base (R)

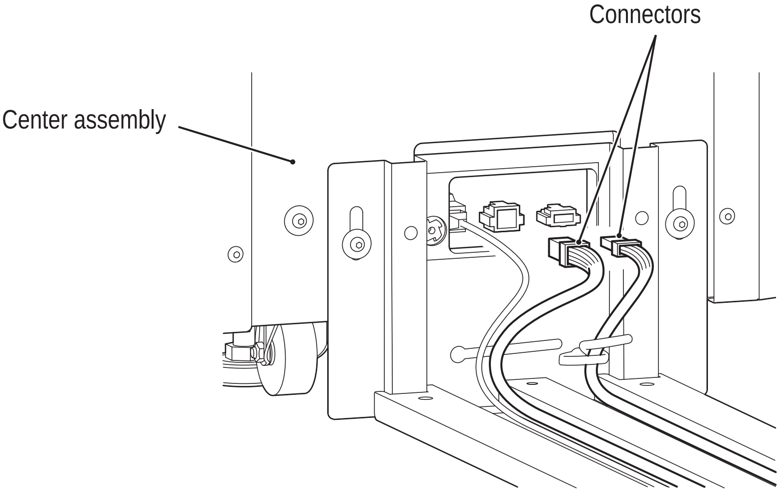
6 Pass the connector (6-pin) harness through the rectangular hole of the side tower (R) assembly and connect the connector. In so doing, remove the three clamps used for fixing the connector (6P) harness.
When connected, push the connector (6-pin) into the rectangular hole.


Rectangular hole
(right side)
Remove the clamp
Remove the clamp
Side tower (R) assembly
Remove the clamp
Connector (6-pin)
Connector (6-pin) harness
Tower joint base (R)

7 Pull out the LAN cable placed inside the side tower (R) through the rectangular hole, and connect it to the center assembly.


Tower joint base (R)
Rectangular holes
Center assembly
Side tower (R) assembly
Clamp
LAN cable
Groove
LAN cable
Connector (6-pin) harness

8 Connect the two connectors (3-pin and 6-pin) at the tower joint base (R) to the center assembly.


Connectors
Center assembly

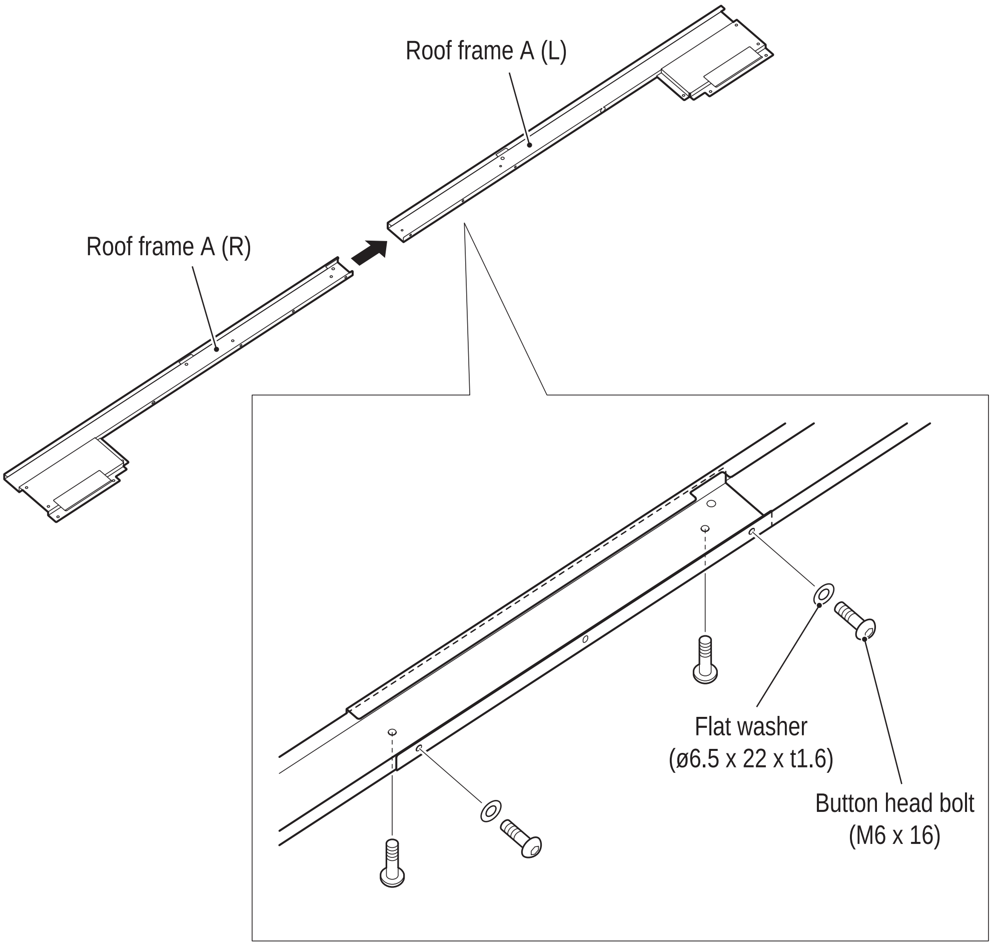
9 Mount the door board (R) removed in **4** to the case.
Harnesses will be fixed later.

8A-4 Assembling the Roof Assembly

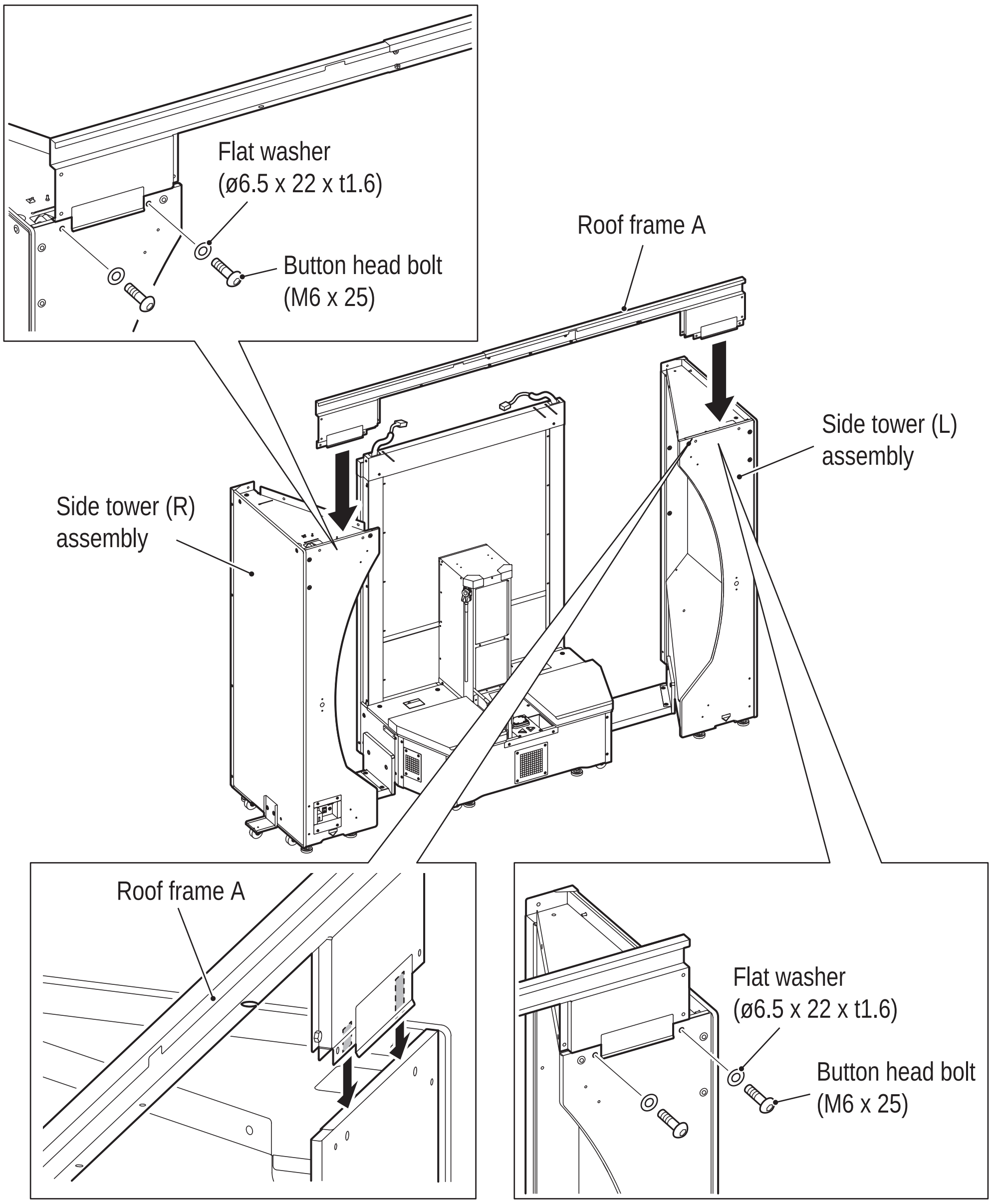
⚠WARNING

- **Mounting the roof assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**

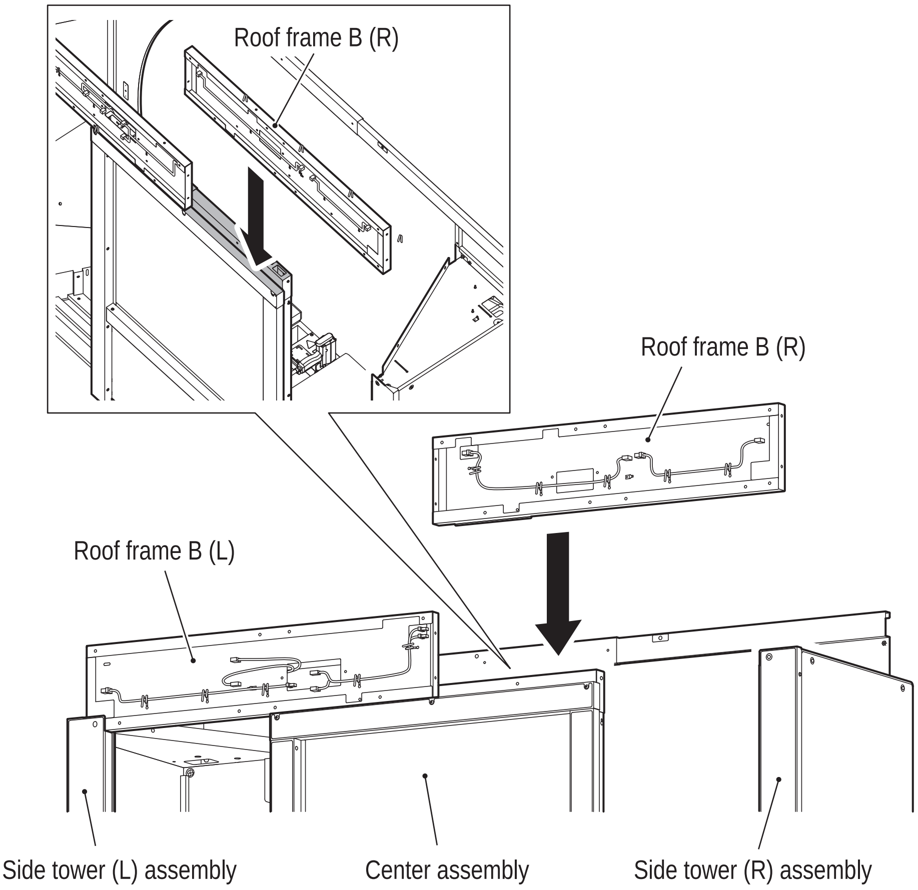
1 Insert the roof frame A (R) into the roof frame A (L), and fix them with four button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6). This is referred to as roof frame A.


Roof frame A (L)
Roof frame A (R)
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 16)

2 Insert the roof frame A into the side tower (L) and side tower (R) assemblies, and fix them with four button head bolts (M6 x 25) and four flat washers (ø6.5 x 22 x t1.6).


Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 25)
Roof frame A
Side tower (L)
assembly
Side tower (R)
assembly
Roof frame A
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 25)

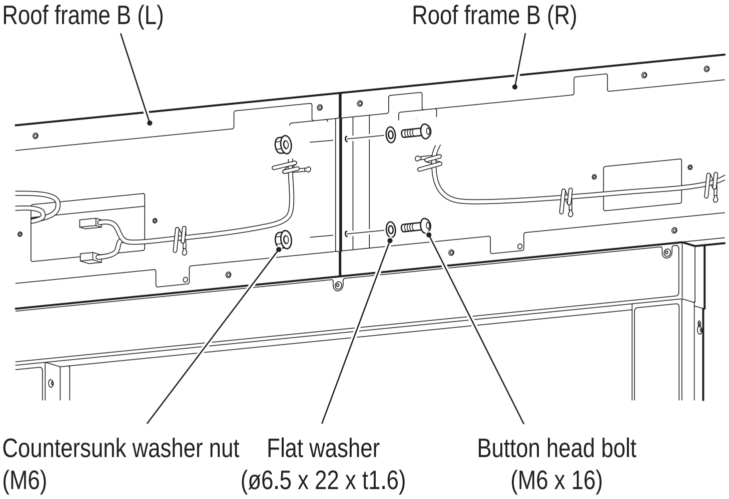
3 Place the roof frame B (L) and the roof frame B (R) on the center, side tower (L) and side tower (R) assemblies.


Roof frame B (R)
Roof frame B (R)
Roof frame B (L)
Side tower (L) assembly
Center assembly
Side tower (R) assembly

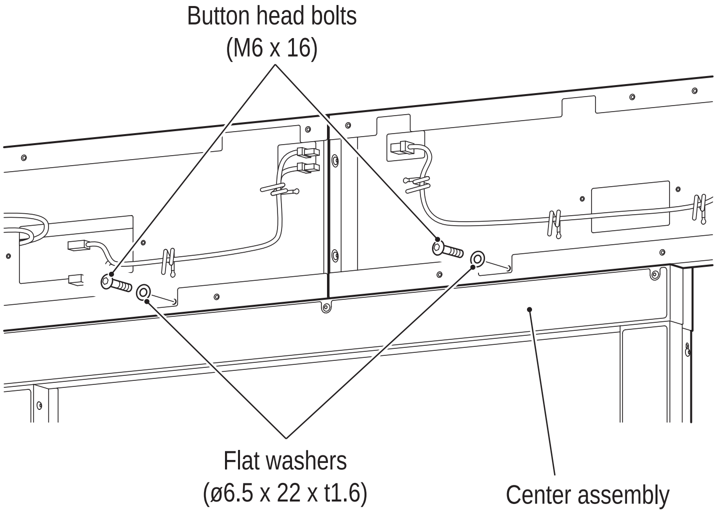
NOTICE

- **When placing the roof frame B (L) and the roof frame B (R), be careful not to pinch harnesses.**

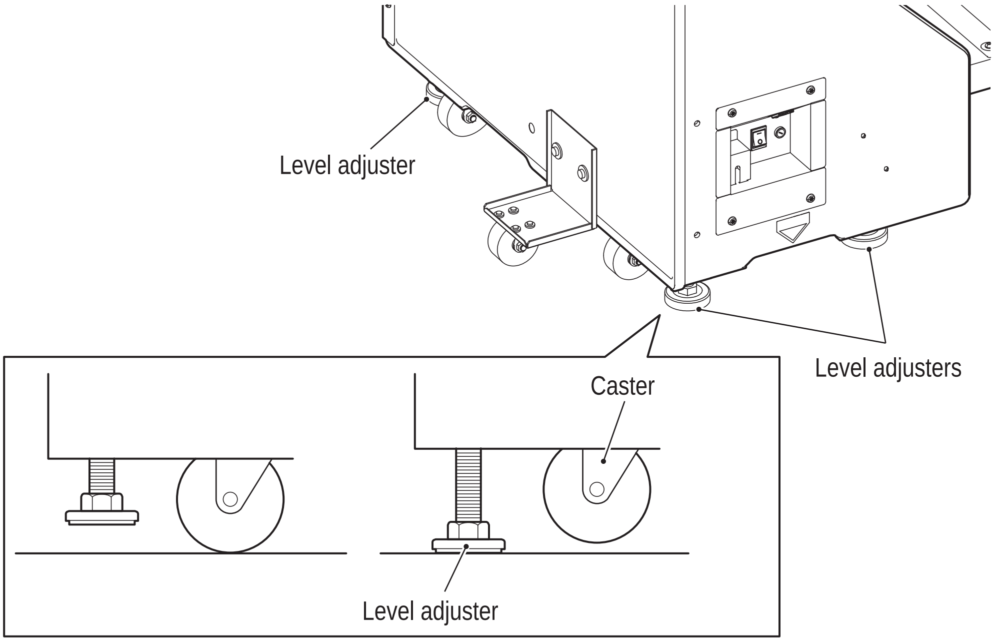
4 Connect the roof frame B (L) and the roof frame B (R) with two button head bolts (M6 x 16), two flat washers (ø6.5 x 22 x t1.6) and two countersunk washer nuts (M6).


Roof frame B (L)
Roof frame B (R)
Countersunk washer nut (M6)
Flat washer (ø6.5 x 22 x t1.6)
Button head bolt (M6 x 16)

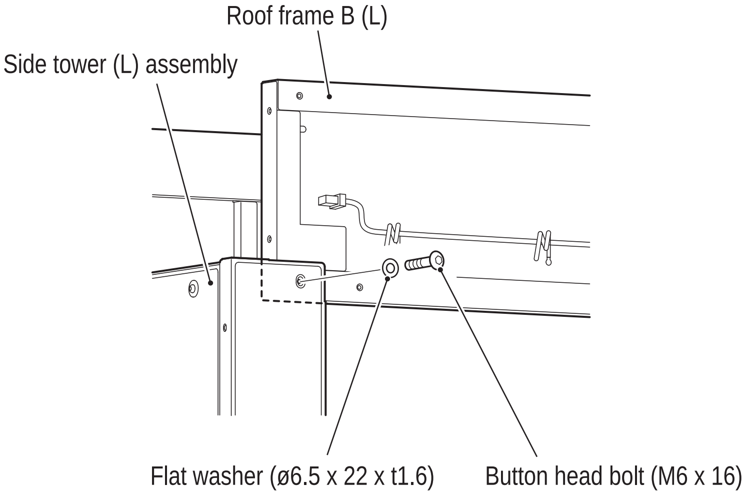
5 After connecting, fix them to the center assembly with two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6).


Button head bolts
(M6 x 16)
Flat washers
(ø6.5 x 22 x t1.6)
Center assembly

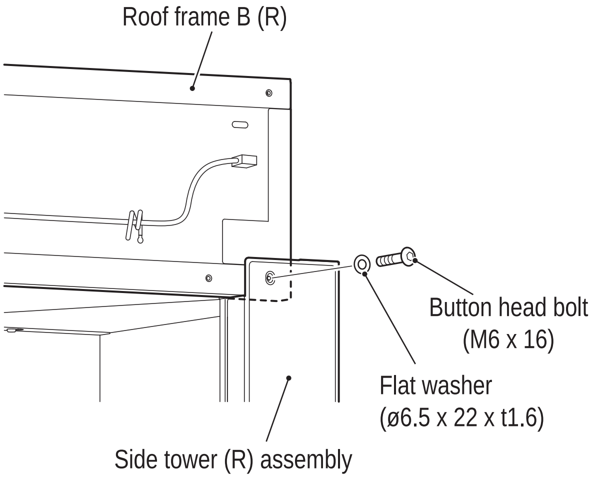
If the threaded holes on the right and left frames are misaligned, adjust them by lifting either side tower with level adjusters.


Level adjuster
Level adjusters
Caster
Level adjuster

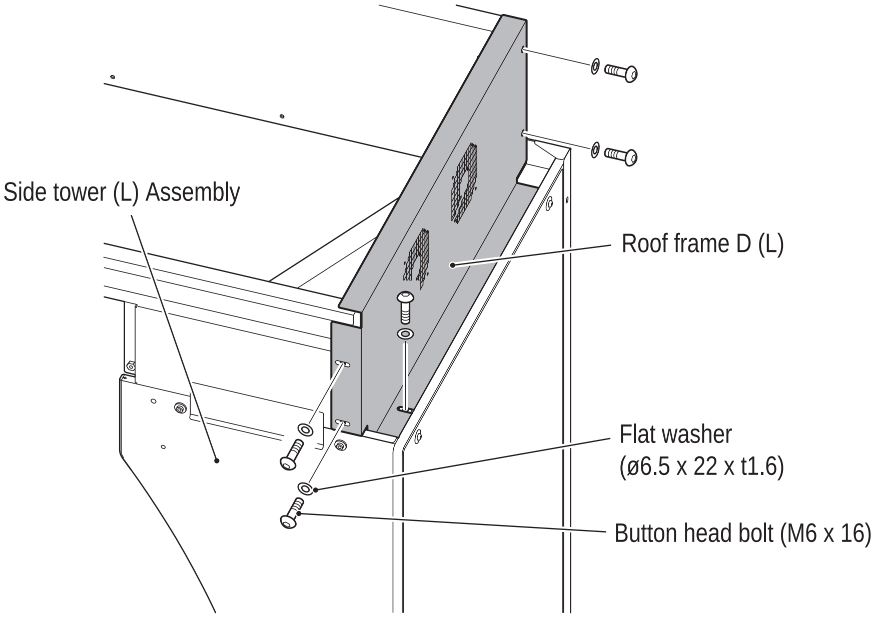
6 Mount the roof frame B (L) to the side tower (L) assembly with a button head bolt (M6 x 16) and a flat washer (ø6.5 x 22 x t1.6).


Roof frame B (L)
Side tower (L) assembly
Flat washer (ø6.5 x 22 x t1.6)
Button head bolt (M6 x 16)

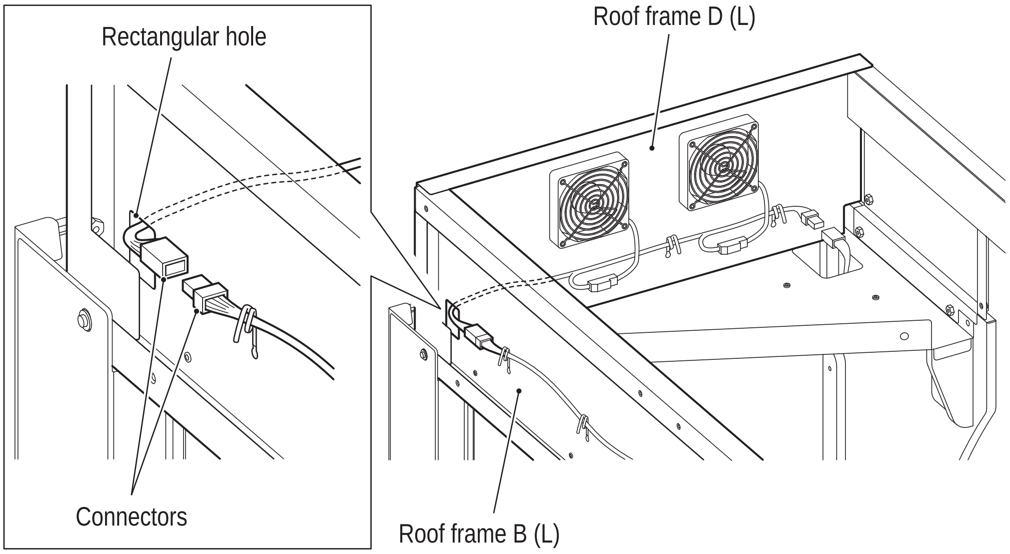
7 Similarly to Step **6**, mount the roof frame B (R) to the side tower (R) assembly.


Roof frame B (R)
Button head bolt
(M6 x 16)
Flat washer
(ø6.5 x 22 x t1.6)
Side tower (R) assembly

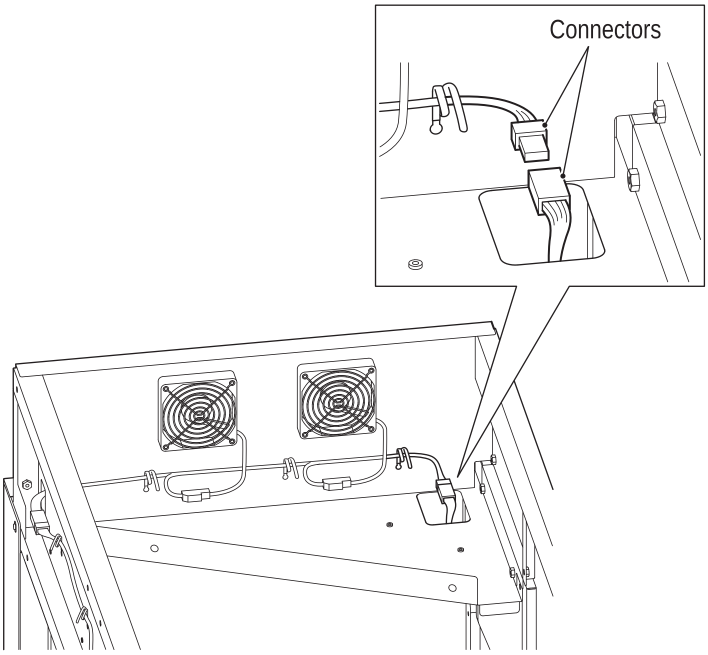
8 Place the roof frame D (L) on the side tower (L) assembly, and fix them with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).


Side tower (L) Assembly
Roof frame D (L)
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt (M6 x 16)

9 Pass the connector of the roof frame D (L) through the rectangular hole of the roof frame B (L) for connection.

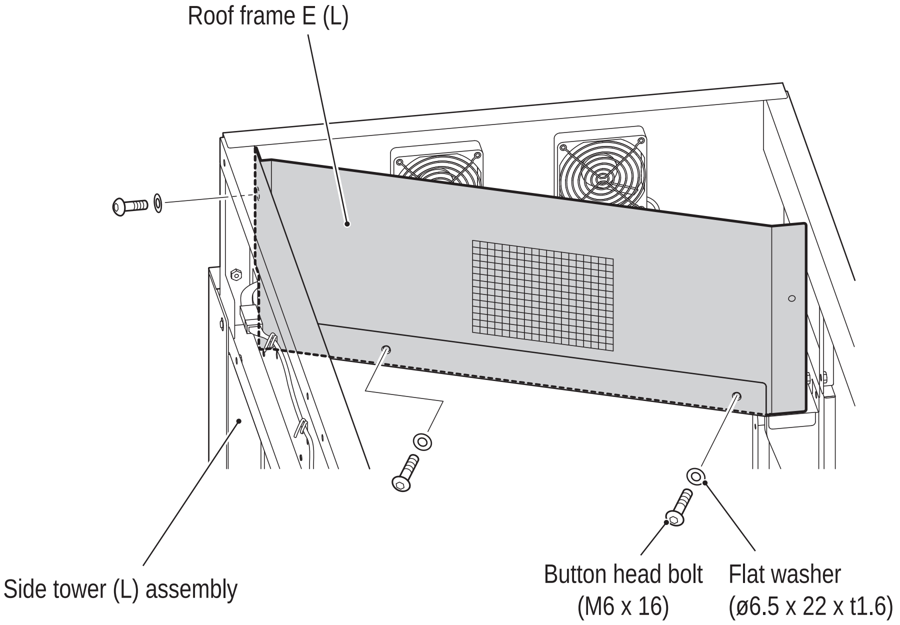

Rectangular hole
Roof frame D (L)
Connectors
Roof frame B (L)

10 Connect the internal connector.


Connectors

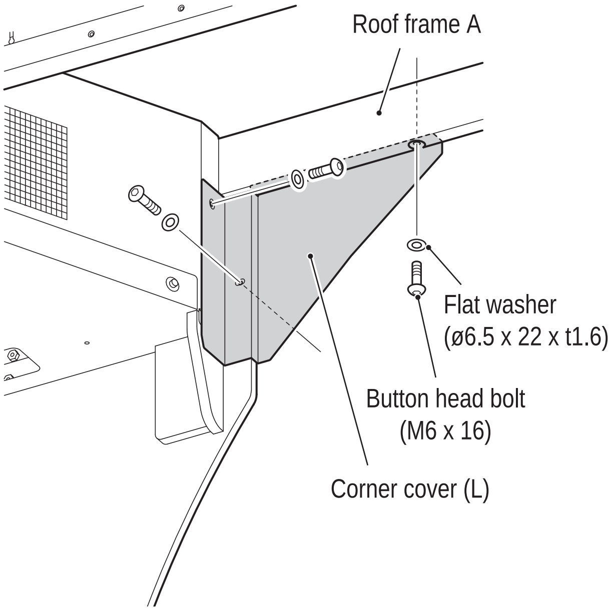
11 Following the same steps as those in **8** to **10**, mount the roof frame D (R) to the side tower (R) assembly and connect two connectors.

12 Place the roof frame E (L) on the side tower (L) assembly, and fix them with three button head bolts (M6 x 16) and three flat washers (ø6.5 x 22 x t1.6).


Roof frame E (L)
Side tower (L) assembly
Button head bolt
(M6 x 16)
Flat washer
(ø6.5 x 22 x t1.6)

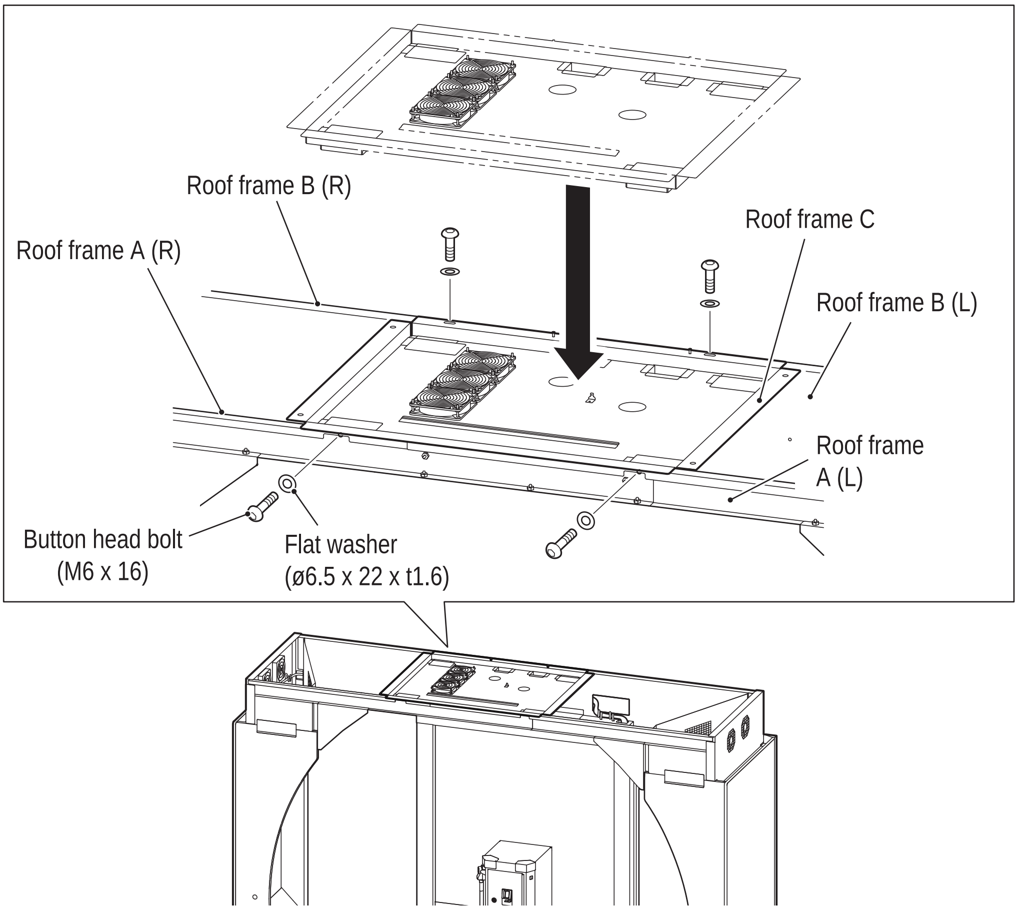
13 Similarly to Step **12**, mount the roof frame E (R) to the side tower (R) assembly.

14 Hook the corner cover (L) on the roof frame A, and fix them with three button head bolts (M6 x 16) and three flat washers (ø6.5 x 22 x t1.6).

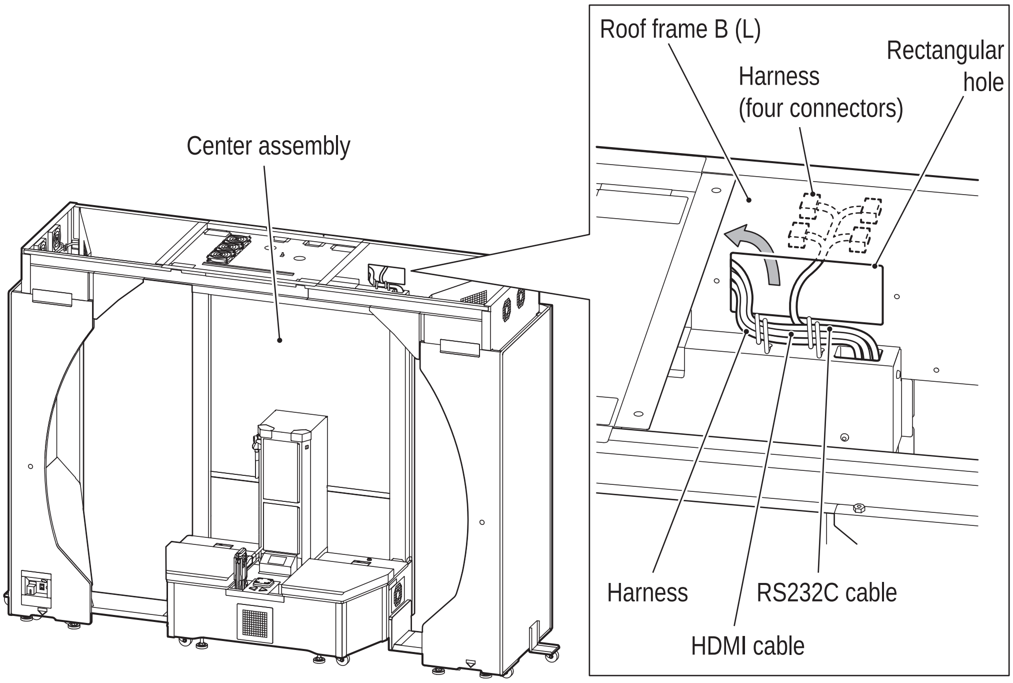

Roof frame A
Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 16)
Corner cover (L)

15 Similarly to Step **14**, mount the corner cover (R).

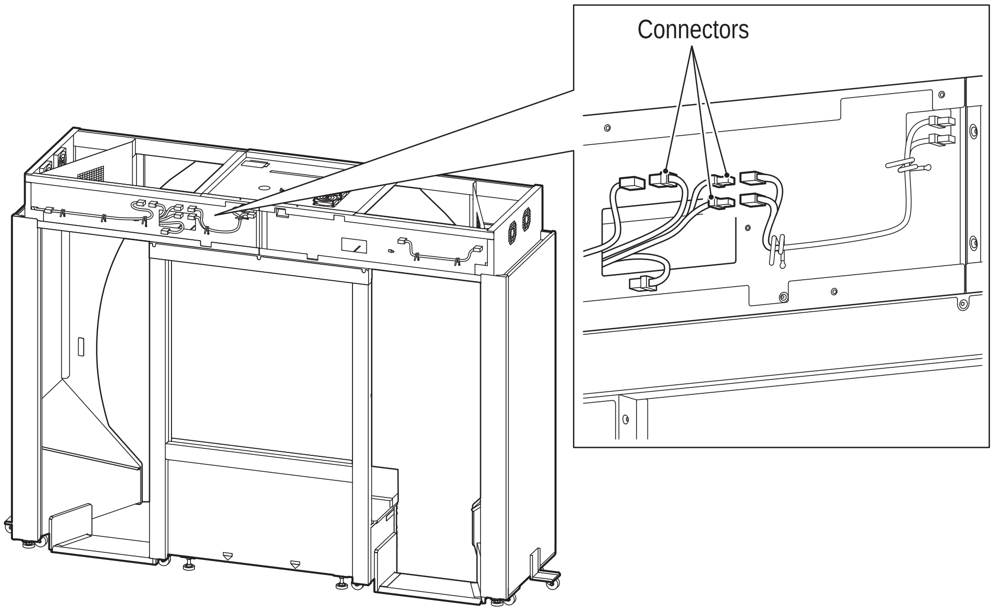
16 Place the roof frame C on the roof frames A and B, and fix them with four button head bolts (M6 x 16) and four flat washers (ø6.5 x 22 x t1.6).


Roof frame B (R)
Roof frame C
Roof frame A (R)
Roof frame B (L)
Roof frame A (L)
Button head bolt (M6 x 16)
Flat washer (ø6.5 x 22 x t1.6)

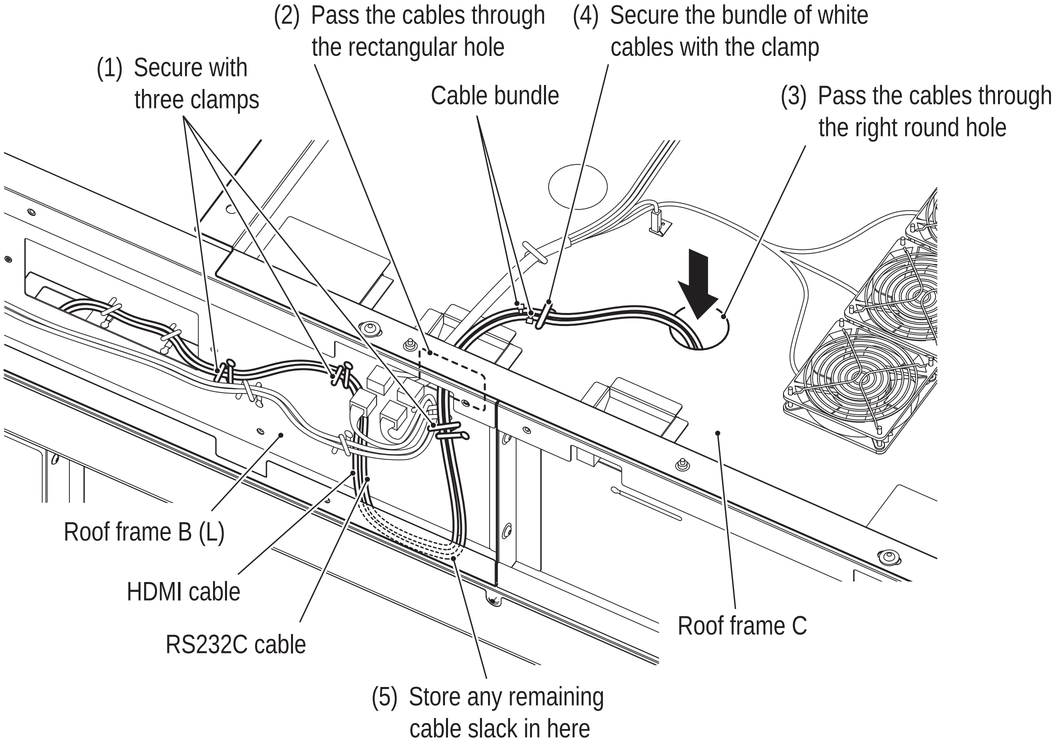
17 Pull out the center assembly harness (four connectors), HDMI cable and RS232C cable through the rectangular hole of the roof frame B (L).


Roof frame B (L)
Rectangular hole
Harness (four connectors)
Center assembly
Harness
RS232C cable
HDMI cable

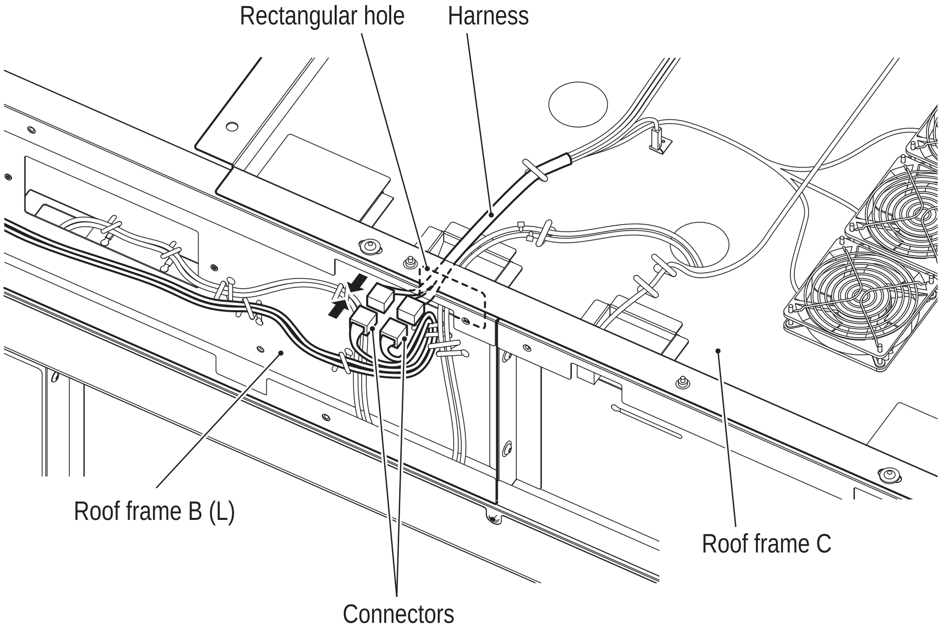
18 Connect the three connectors of the harness passed through in **17**.


Connectors

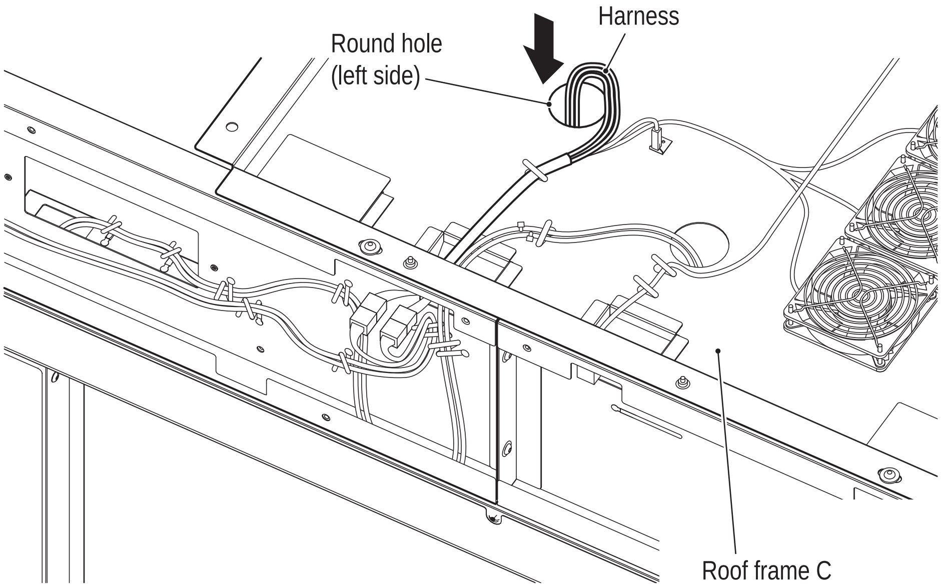
19 (1) Fix the HDMI and RS232C cables with the three clamps of the roof frame B (L), (2) pass them through the rectangular hole shown below to the roof frame C, and (3) put the cables into the right round hole of the roof frame C.
In so doing, (4) fix the bundle of white cables attached to the HDMI and RS232C cables with the clamps.
(5) Store any remaining cable slack in the roof frame B (L).


(1) Secure with three clamps
(2) Pass the cables through the rectangular hole
Cable bundle
(4) Secure the bundle of white cables with the clamp
(3) Pass the cables through the right round hole
Roof frame B (L)
HDMI cable
RS232C cable
Roof frame C
(5) Store any remaining cable slack in here

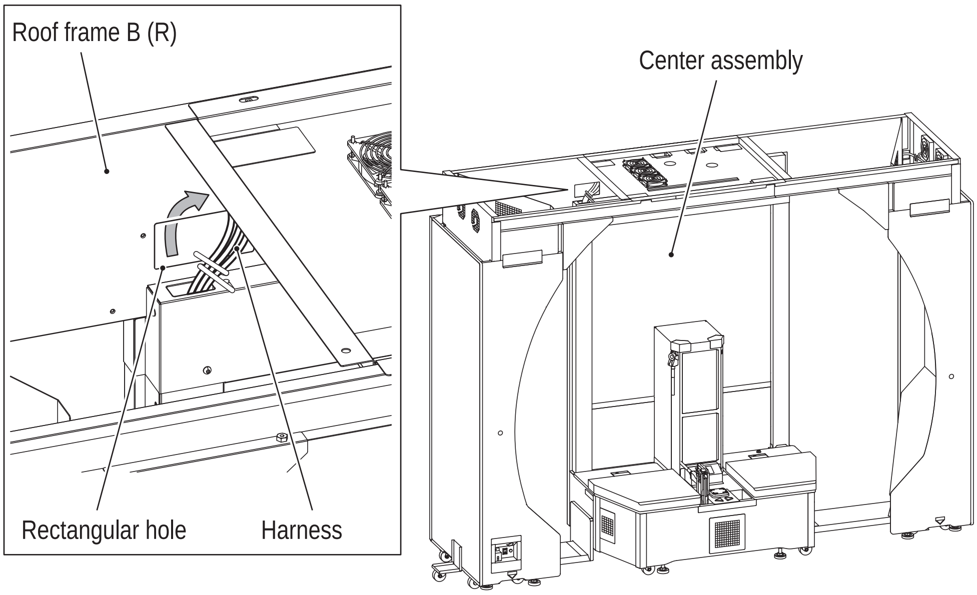
20 Pass the harness through the rectangular hole of the roof frame B (L) illustrated below from the roof frame C side, and connect the two connectors.


Rectangular hole
Harness
Roof frame B (L)
Roof frame C
Connectors

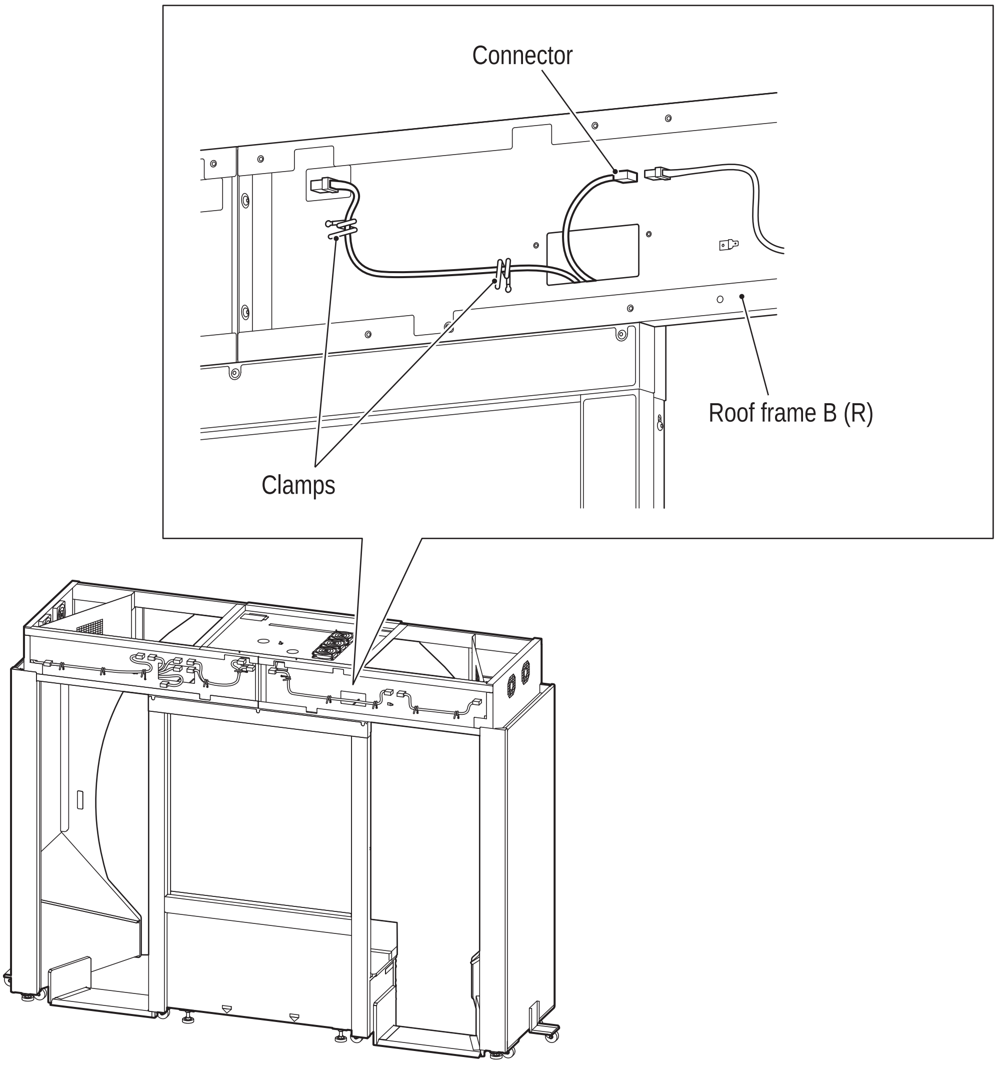
21 Put the harness connected in **20** into the left round hole of the roof frame C illustrated below.


Harness
Round hole
(left side)
Roof frame C

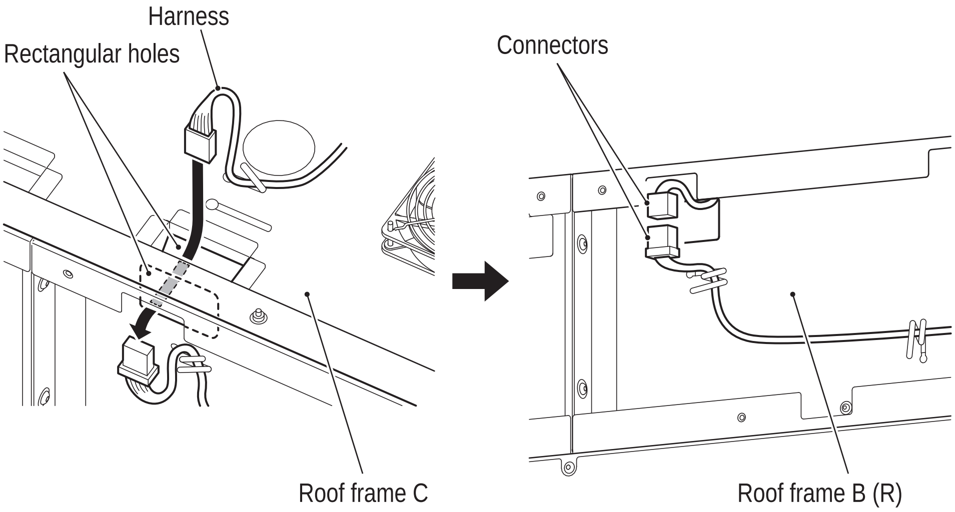
22 Pass the two harnesses of the center assembly through the rectangular hole of the roof frame B (R).


Roof frame B (R)
Center assembly
Rectangular hole
Harness

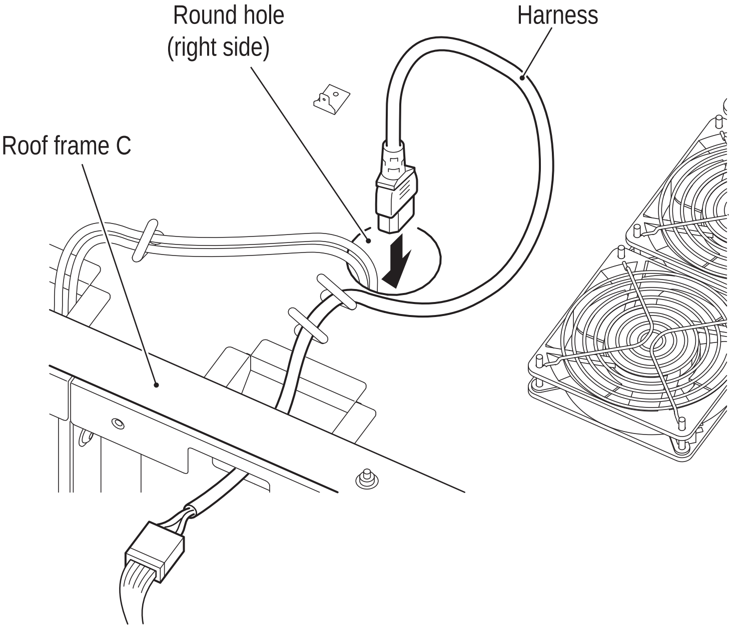
23 Connect the connector of one of the two harnesses passed through in **22**, and fix the other harness with the two clamps of the roof frame B (R).


Connector
Roof frame B (R)
Clamps

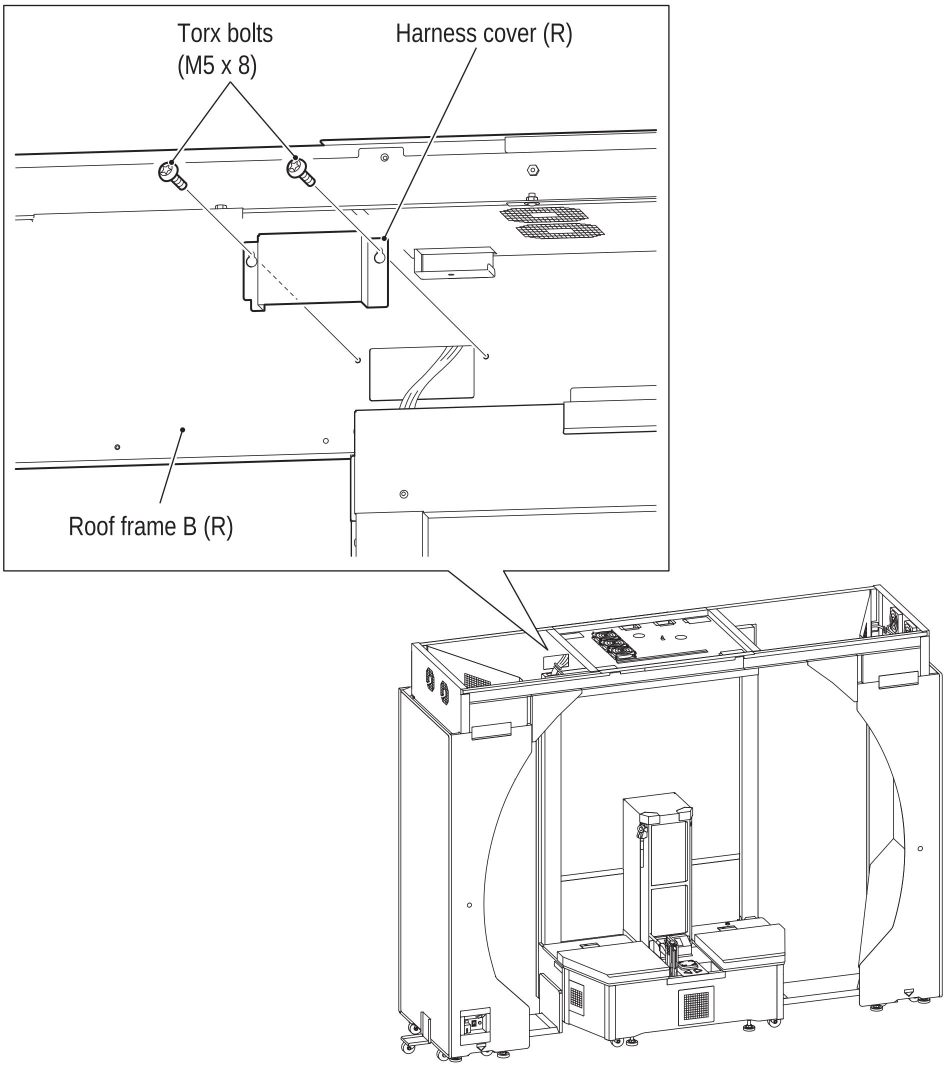
24 Pass the harness through the rectangular hole of the roof frame B (R) illustrated below from the roof frame C side, and connect the connector.


Harness
Rectangular holes
Roof frame C
Connectors
Roof frame B (R)

25 Put the harness connected in **24** into the right round hole of the roof frame C illustrated below.


Round hole
(right side)
Harness
Roof frame C

26 Mount the harness cover (R) inside the roof frame B (R) with two torx bolts (M5 x 8).

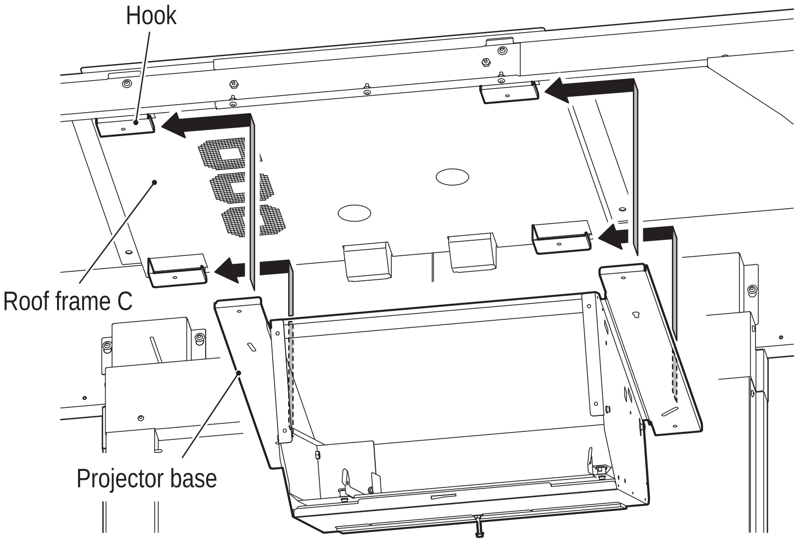

Torx bolts
(M5 x 8)
Harness cover (R)
Roof frame B (R)

8A-5 Mounting the Projector Assembly

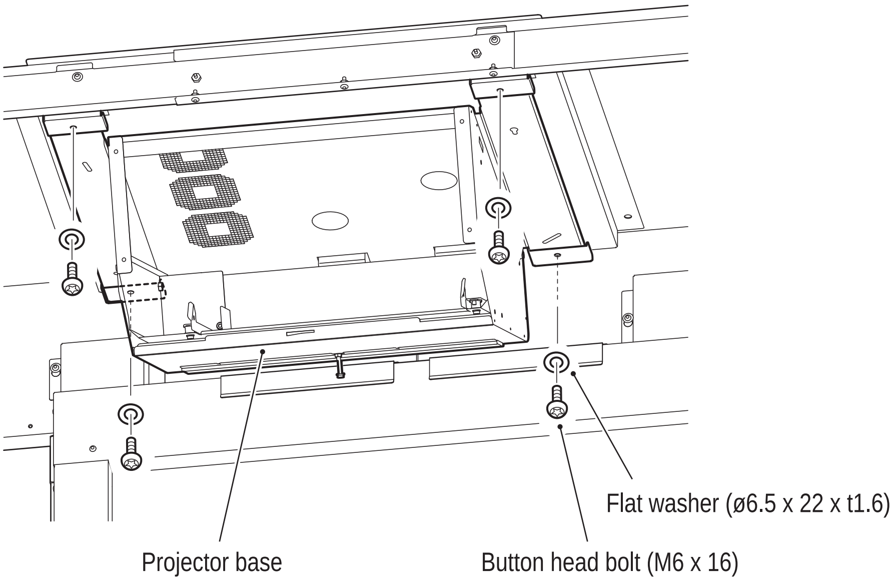
⚠WARNING

- **The projector base weighs 20 kg. Be sure to assign two or more workers to mounting the projector base to prevent accidents.**
- **Mounting the projector assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**

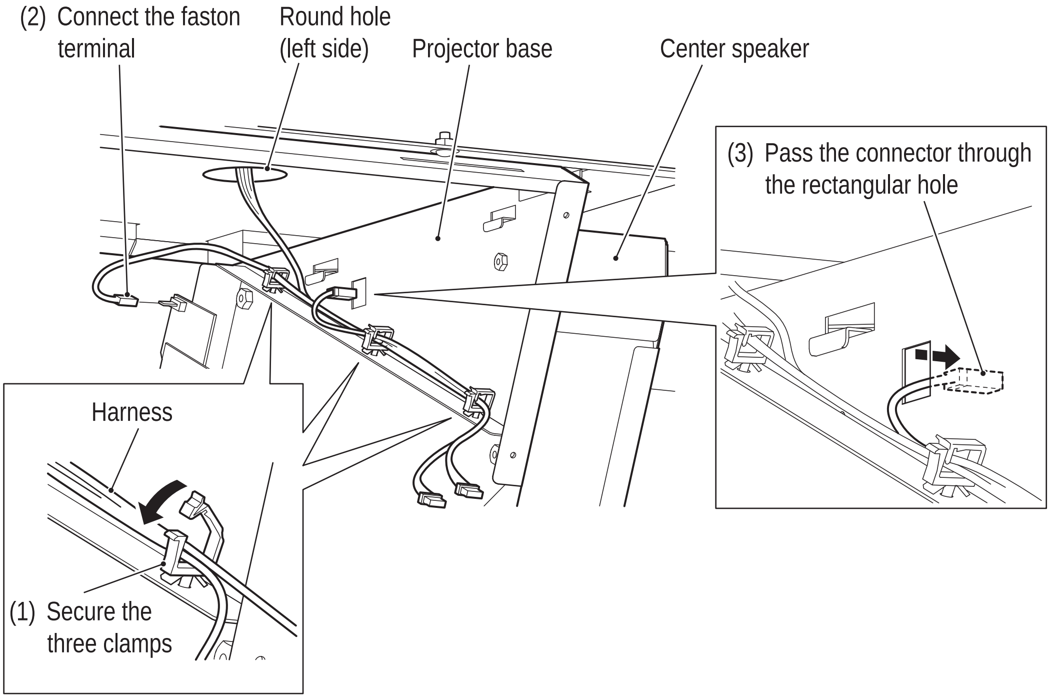
1 Lift the projector base, and place it by sliding it onto the four hooks of the roof frame C from the right side.


Hook
Roof frame C
Projector base

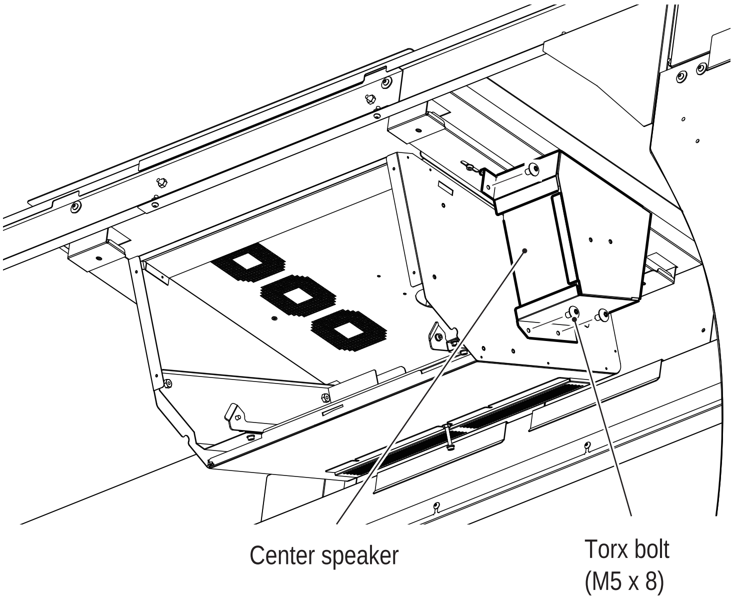
2 Fix the projector base with four button head bolts (M6 x 16) and four flat washers (ø6.5 x 22 x t1.6).


Flat washer (ø6.5 x 22 x t1.6)
Projector base
Button head bolt (M6 x 16)

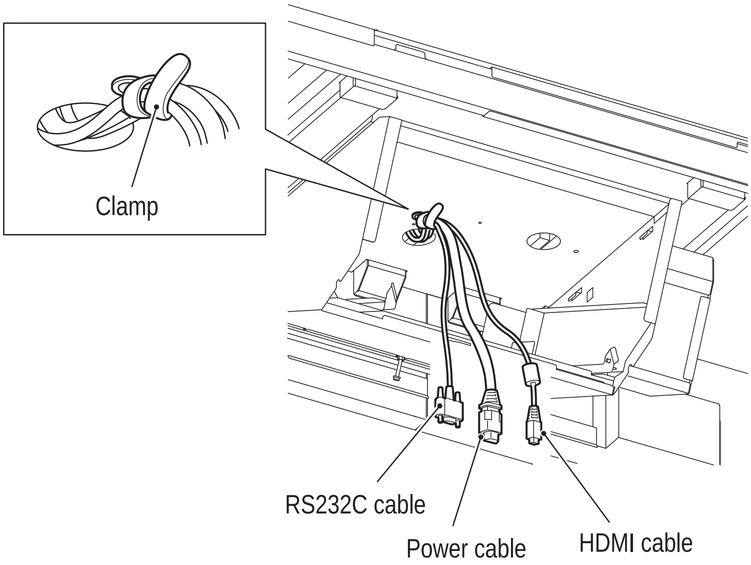
3 (1) Fix the harness passed through the left round hole of the roof frame C in **21** of the previous section (see “8A-4 Assembling the Roof Assembly” on page 98) with the three clamps of the projector base, (2) connect the faston terminal, and (3) put the connector into the right rectangular hole of the projector base.


(2) Connect the faston terminal
Round hole (left side)
Projector base
Center speaker
(3) Pass the connector through the rectangular hole
Harness
(1) Secure the three clamps

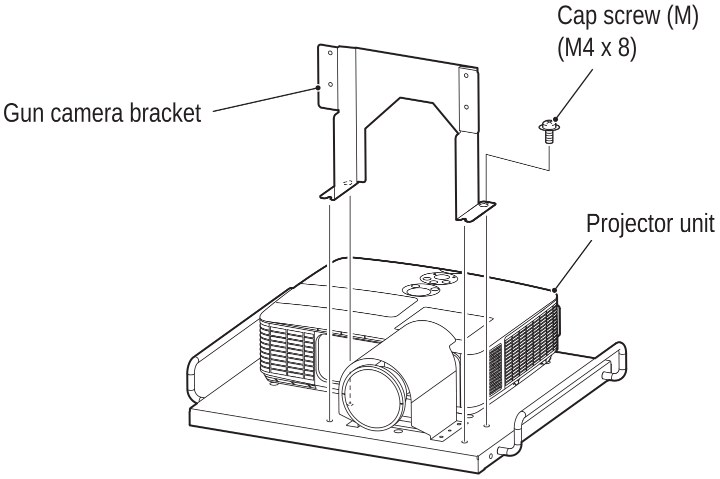
4 Connect the connector to the center speaker, hook it on the projector base, and fix with three torx bolts (M5 x 8).


Center speaker
Torx bolt (M5 x 8)

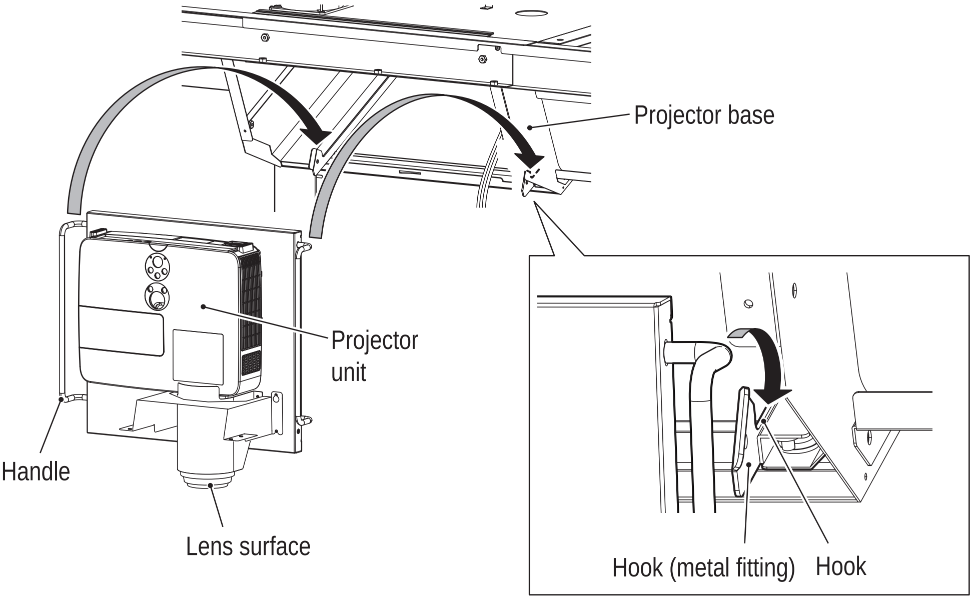
5 Fix the HDMI and RS232C cables and power cable with the clamp attached to the roof frame C.


Clamp
RS232C cable
Power cable
HDMI cable

6 Remove the projector unit from the packing box, and mount the gun camera bracket with four cap screws (M) (M4 x 8).


Cap screw (M)
(M4 x 8)
Gun camera bracket
Projector unit

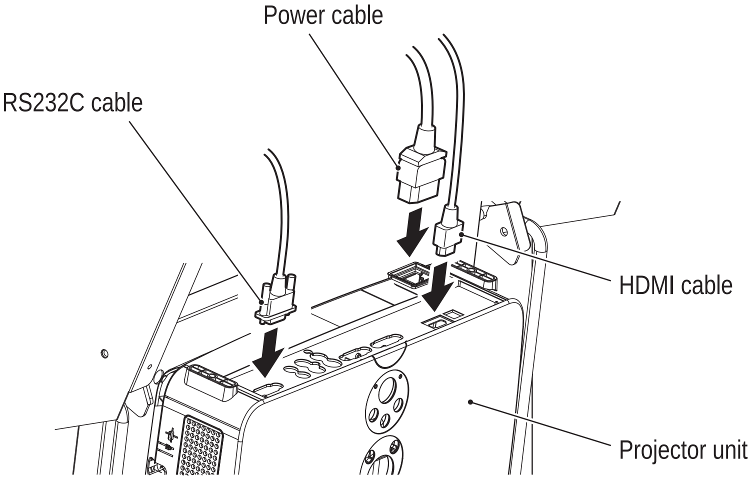
7 Hold the handle with the lens facing downward, and hook the assembly on the metal fittings on both sides of the projector base.


Projector base
Projector unit
Handle
Lens surface
Hook (metal fitting)
Hook

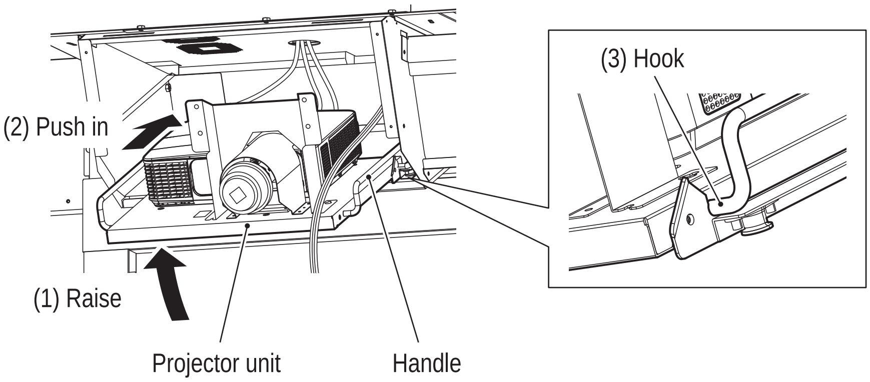
NOTICE

- **Take extra care not to hit the lens part.**

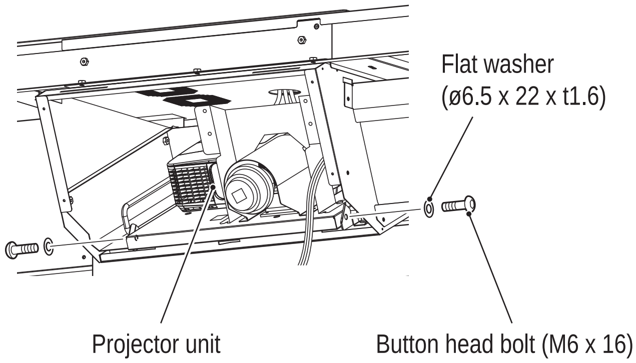
8 Connect the HDMI and RS232C cables and power cable to the projector.


Power cable
RS232C cable
HDMI cable
Projector unit

9 (1) Raise the projector unit, (2) push it into the back while preventing cables from being trapped, and (3) hook the front side of the handle on the hook to fix the projector unit.

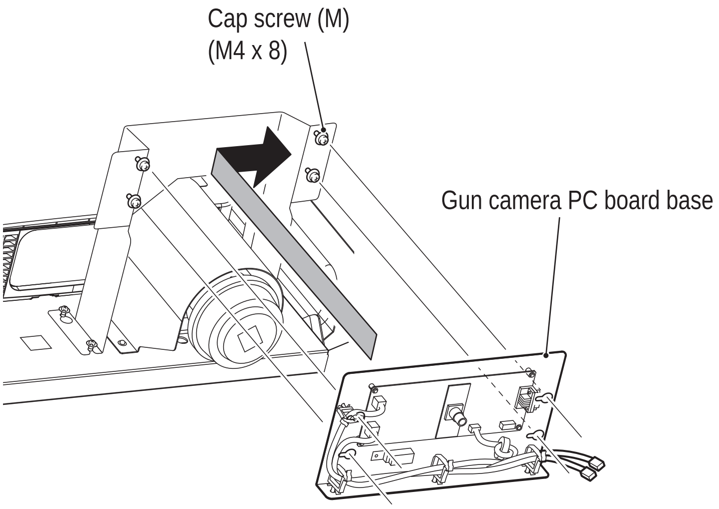

(2) Push in
(1) Raise
Projector unit
Handle
(3) Hook

10 Fix the projector unit to the metal fittings on both sides of the projector case, using two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6).


Flat washer
(ø6.5 x 22 x t1.6)
Projector unit
Button head bolt (M6 x 16)

11 Temporarily fasten the four cap screws (M) (M4 x 8) to the gun camera bracket.

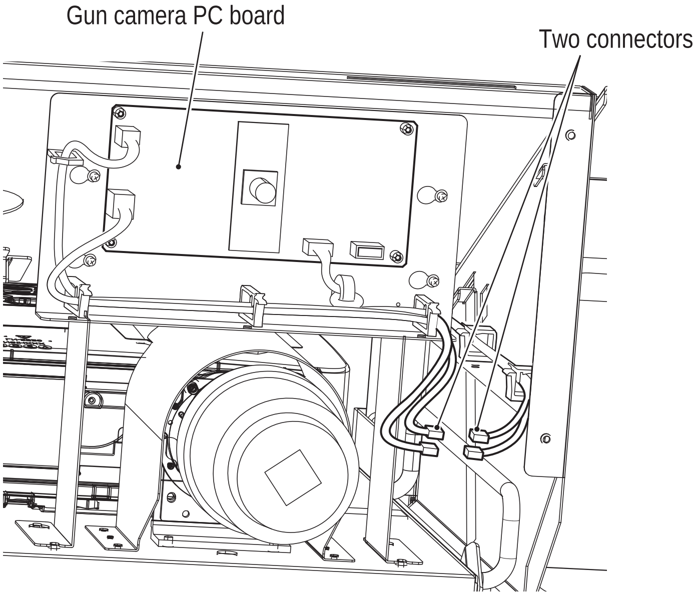
12 Hook the hook slot of the gun camera PC board base on the four cap screws (M) (M4 x 8) temporarily fastened in **11**, and fasten them to fix.


Cap screw (M)
(M4 x 8)
Gun camera PC board base

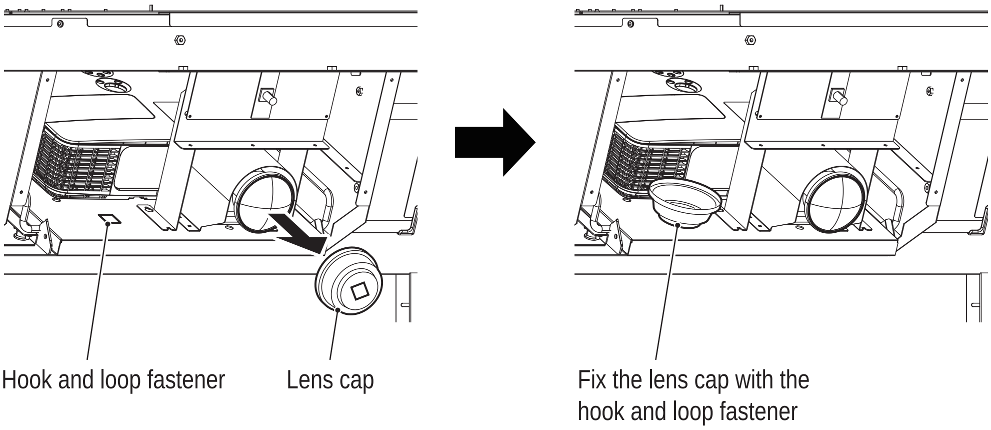
NOTICE

- **Do not touch the camera lens directly. Fingerprints or dust on the lens will disable proper sensing.**

13 Connect the two connectors of the gun camera PC board.


Gun camera PC board
Two connectors

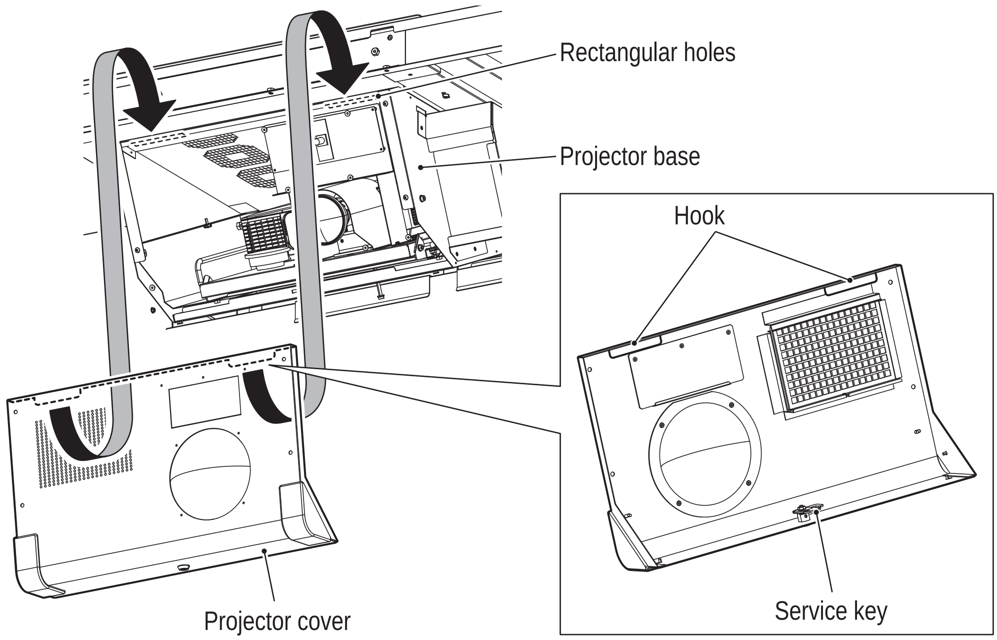
14 Remove the lens cap, and fix it at the illustrated position to prevent it from being lost. (The hook and loop fastener is attached to the lens cap.)


Hook and loop fastener
Lens cap
Fix the lens cap with the hook and loop fastener

NOTICE

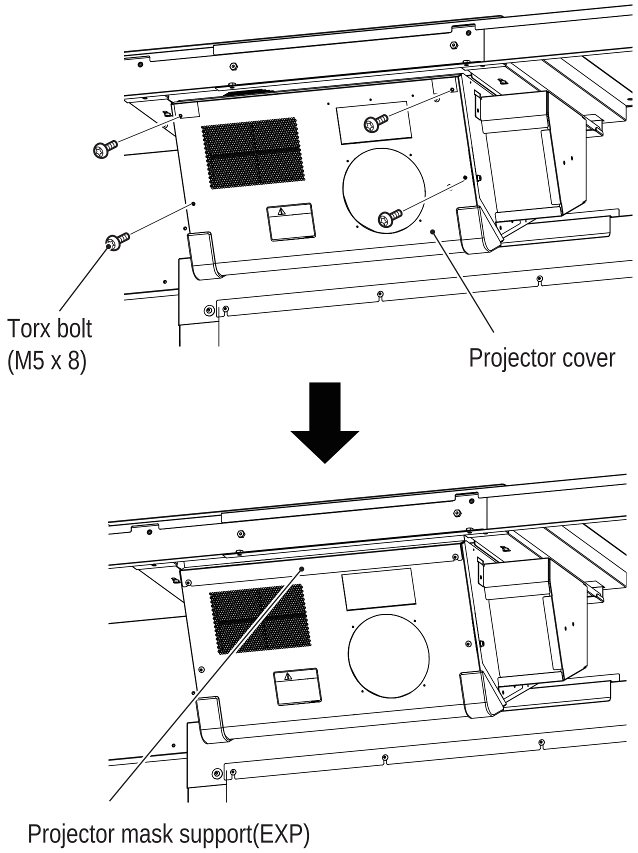
- **Do not touch the camera lens directly. Fingerprints or dust on the lens will disable proper sensing.**

15 Hook the upper hooks of the projector cover on the square holes of the projector base, and lock the projector cover with the service key.


Rectangular holes
Projector base
Hook
Projector cover
Service key

16 Temporarily fix the projector cover with four torx bolts (M5 x 16).
At this stage, leave the top two screws slightly loosened, and only fully tighten the bottom two screws.

17 Hook the projector mask support(EXP) on the two torx bolts (M5 x 16) left slightly loosened in **16**, and fully tighten the screws.


Torx bolt
(M5 x 8)
Projector cover
Projector mask support(EXP)

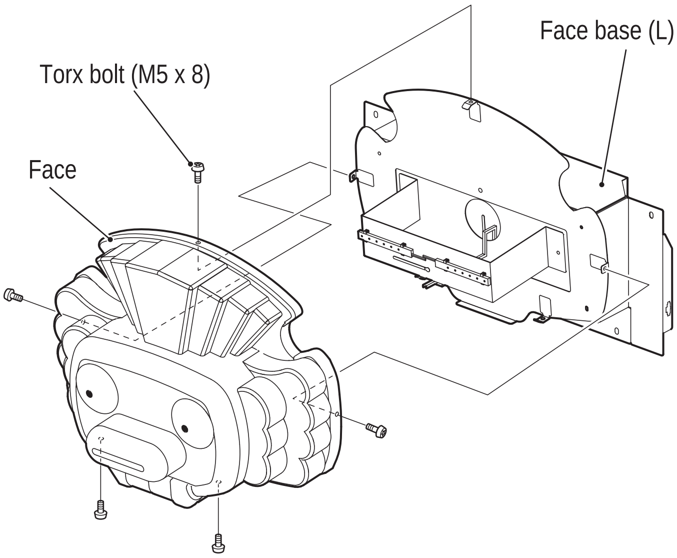
8A-6 Mounting the Face Assembly

⚠WARNING

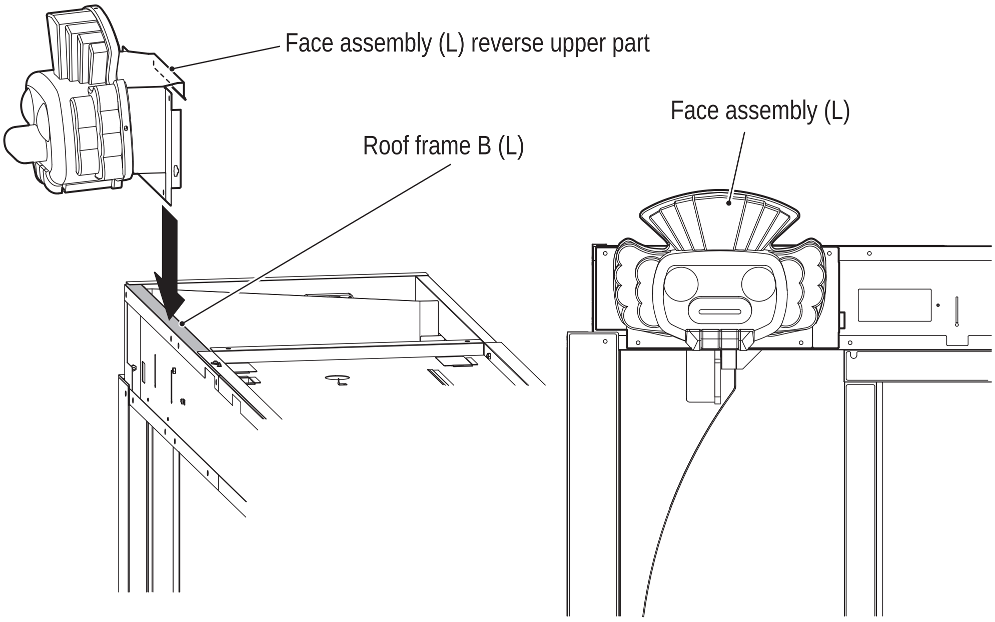
- **Mounting the face assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**

(1) Mounting the Face

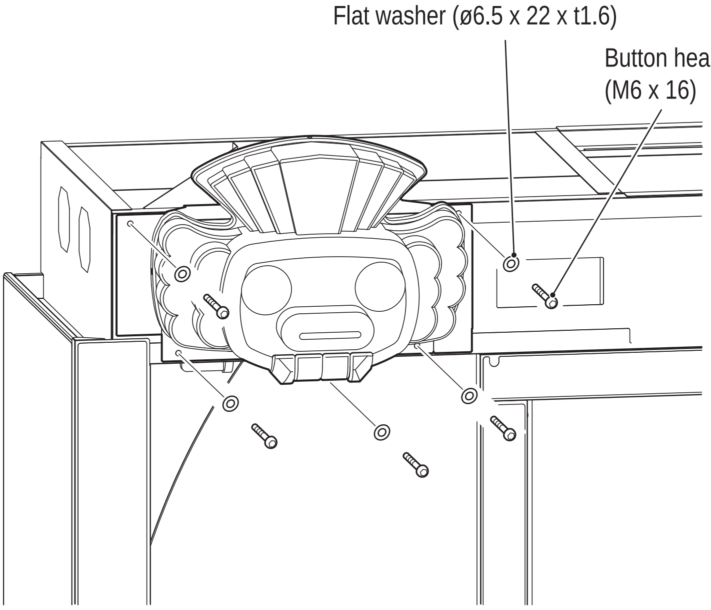
1 Put the face on the face base (L), and fix them with five torx bolts (M5 x 8) to assemble the face assembly (L).


Face base (L)
Torx bolt (M5 x 8)
Face

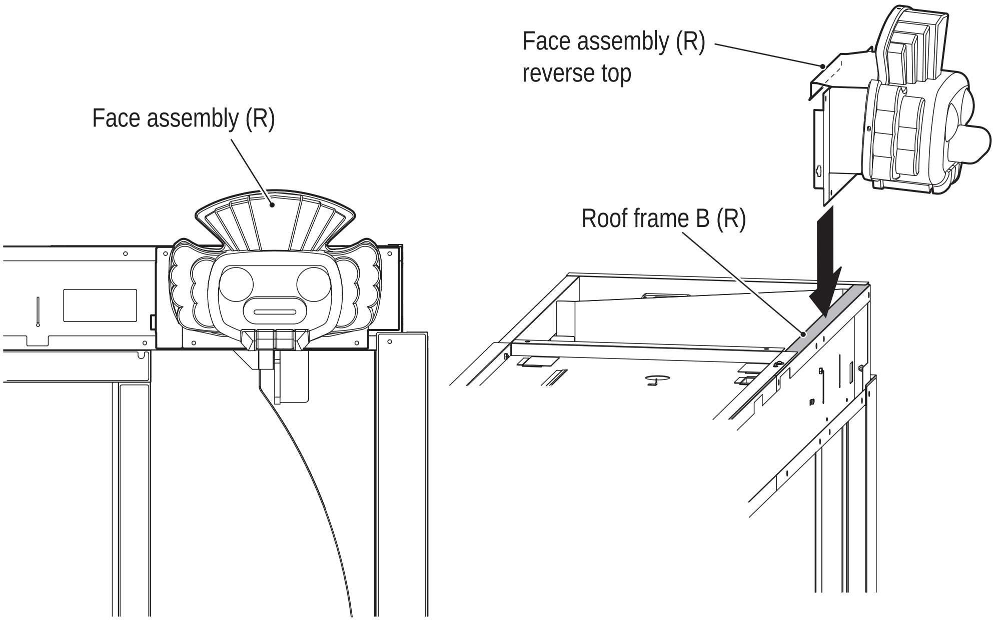
2 Hook the reverse upper part of the face assembly (L) on the roof frame B (L).


Face assembly (L) reverse upper part
Face assembly (L)
Roof frame B (L)

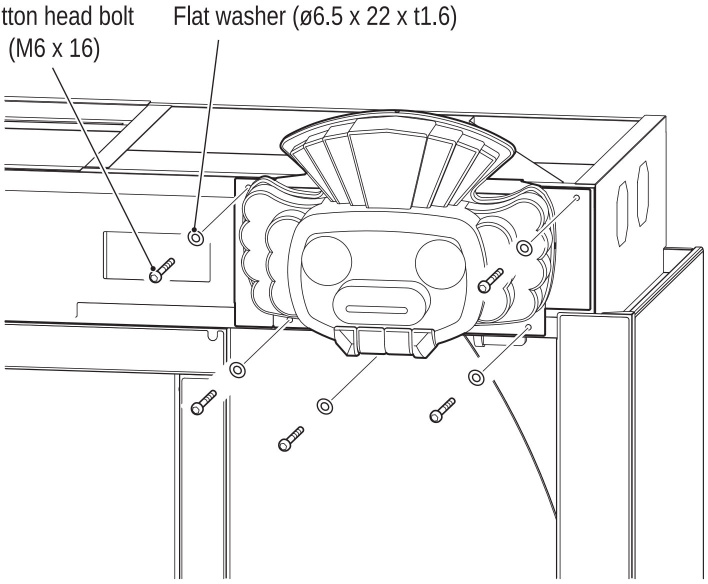
3 Fix the face assembly (L) with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).


Flat washer (ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 16)

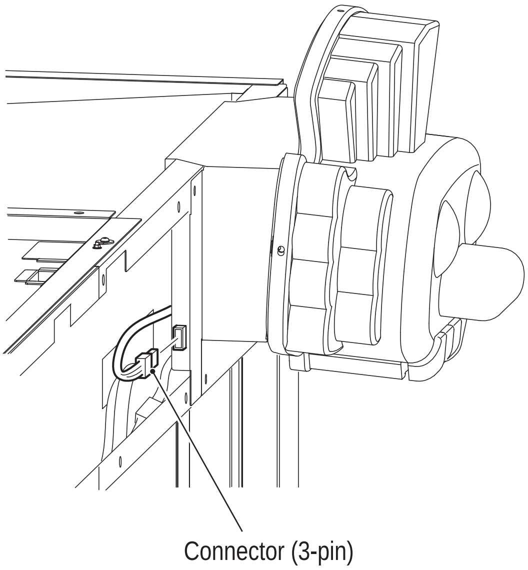
4 Similarly, mount the face assembly (R) to the roof frame B (R).


Face assembly (R)
reverse top
Face assembly (R)
Roof frame B (R)

5 Fix the face assembly (R) with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).


Button head bolt (M6 x 16)
Flat washer (ø6.5 x 22 x t1.6)

6 Connect each connector (3-pin) coming out from the right side of the face assembly (L) and the left side of the face assembly (R).

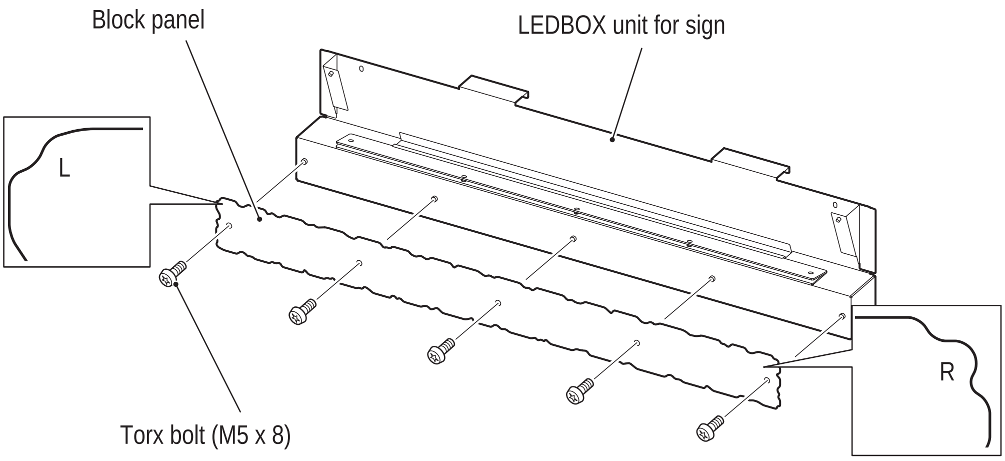

Connector (3-pin)

8A-7 Mounting the LEDBOX Unit for Signs

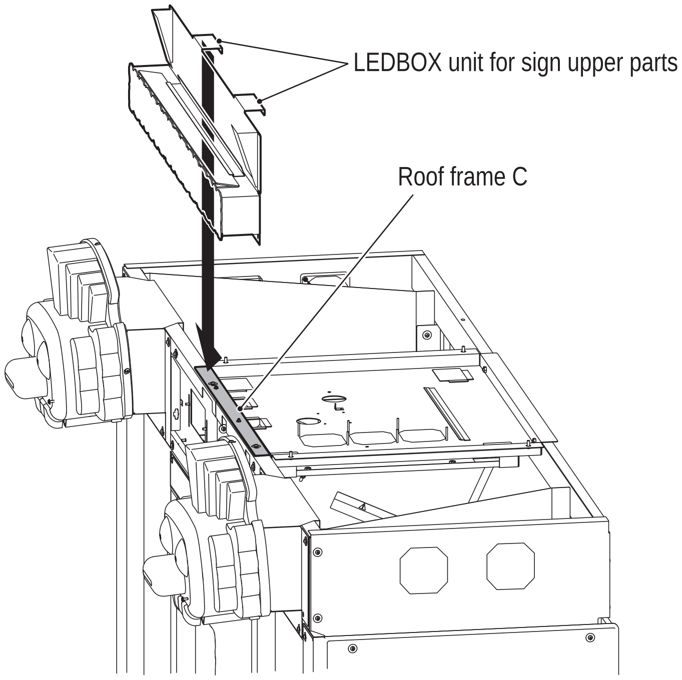
⚠WARNING

- **Mounting the LEDBOX unit for signs requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**

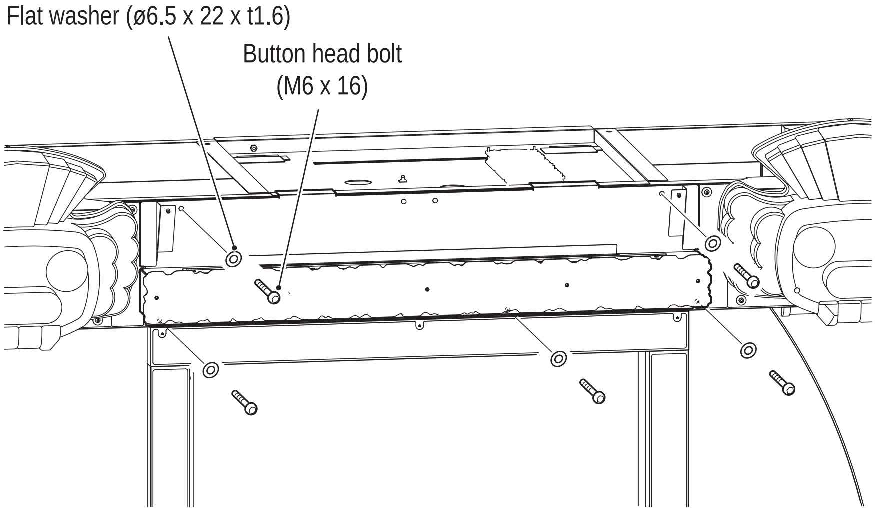
1 Mount the block panel to the LEDBOX unit for signs with five torx bolts (M5 x 8). Refer to the figure below and take care not to mount it in the wrong direction.


Block panel
LEDBOX unit for sign
L
R
Torx bolt (M5 x 8)

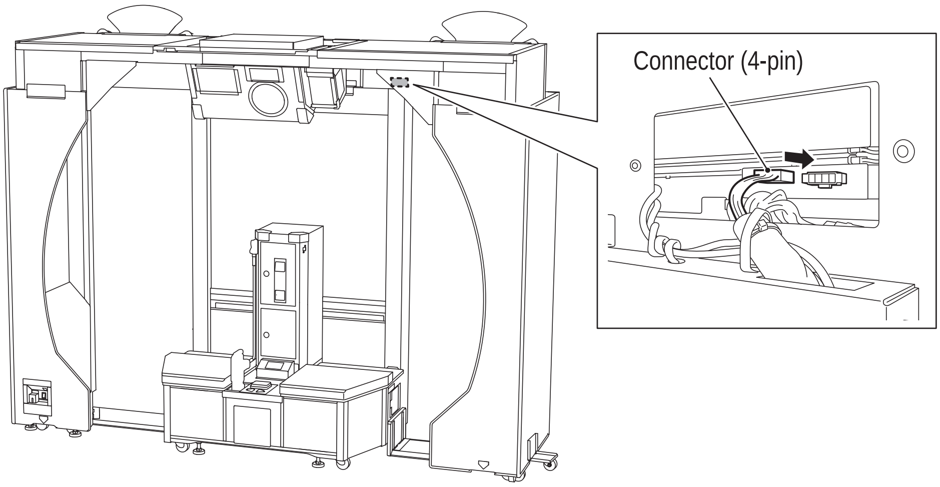
2 Hook the upper parts of the LEDBOX unit for signs on the roof frame C for temporary placement.


LEDBOX unit for sign upper parts
Roof frame C

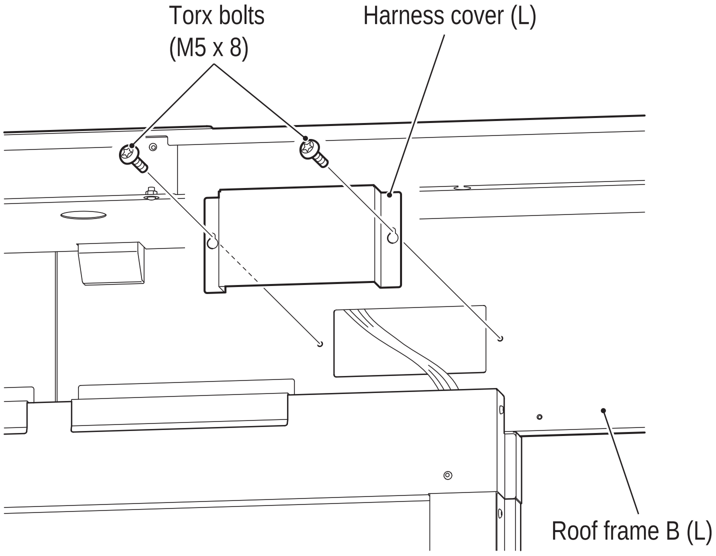
3 Fix them with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).


Flat washer (ø6.5 x 22 x t1.6)
Button head bolt (M6 x 16)

4 Connect the connector (4-pin) from the inside of the case.


Connector (4-pin)

5 Mount the harness cover (L) to the back of the roof frame B (L) with two torx bolts (M5 x 8).

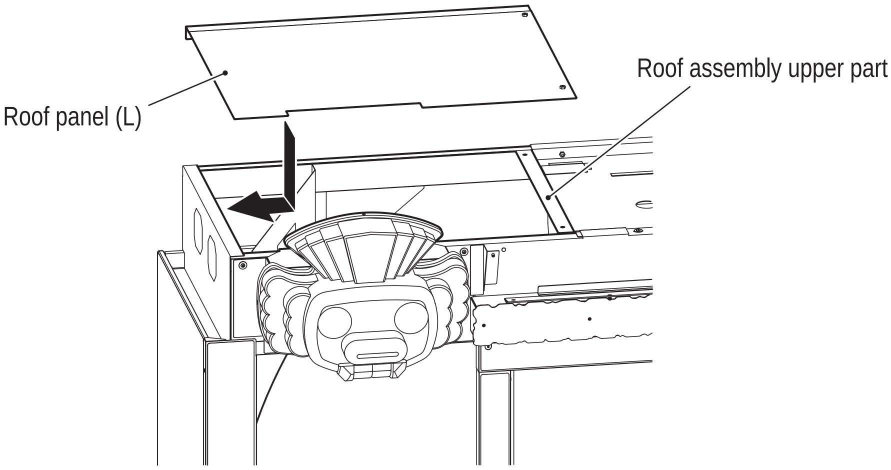

Torx bolts (M5 x 8)
Harness cover (L)
Roof frame B (L)

8A-8 Mounting the Roof Panel

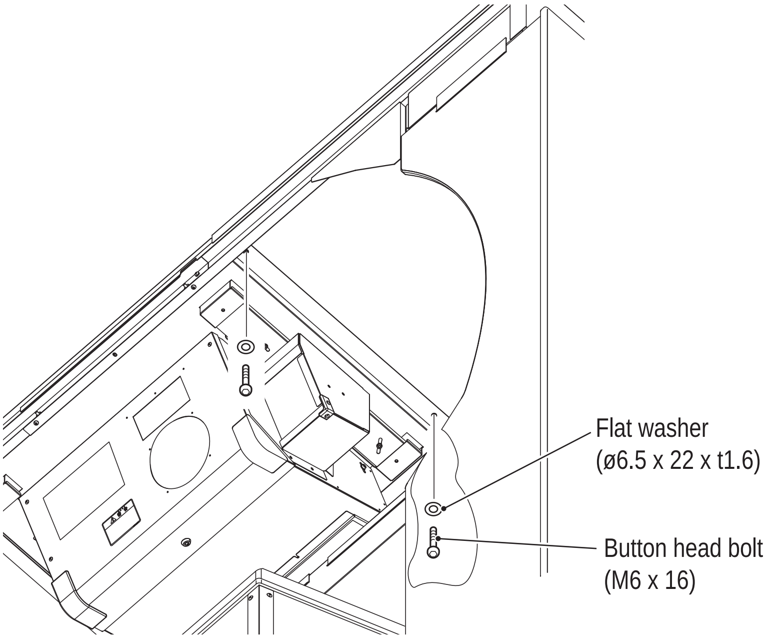
⚠WARNING

- **Mounting the roof panel requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**

1 Place the roof panel (L) on the top of the roof assembly, and slide the panel outward to insert it into the gap.

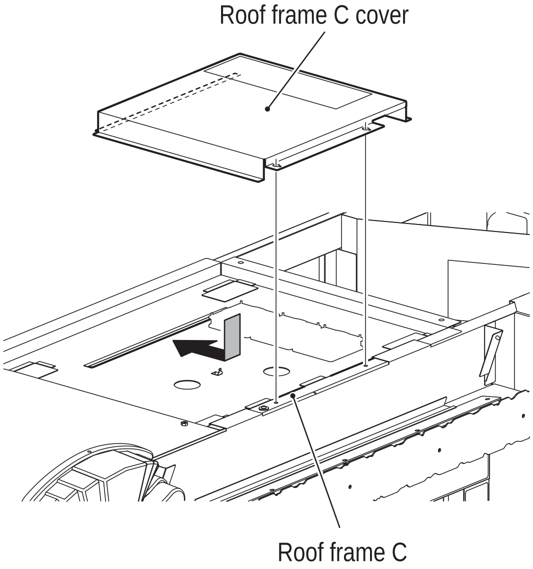

Roof panel (L)
Roof assembly upper part

2 Fix the panel with two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6) from the inside of the case.

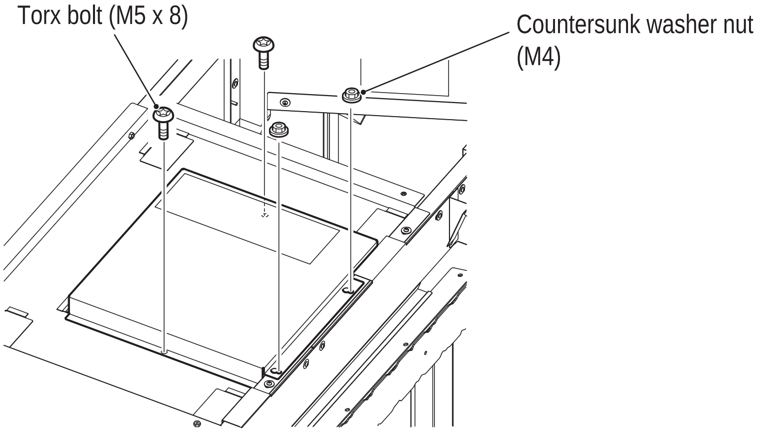

Flat washer
(ø6.5 x 22 x t1.6)
Button head bolt
(M6 x 16)

3 Similarly, mount the roof panel (R).

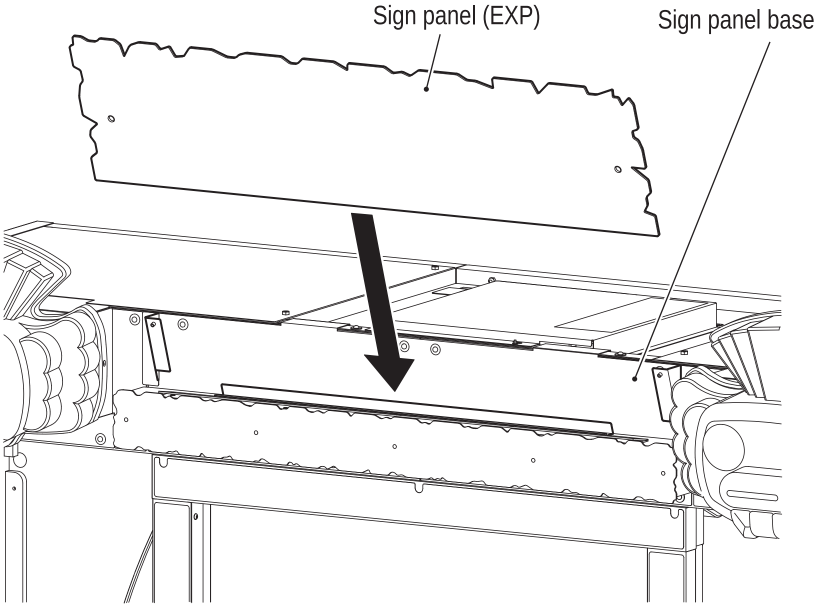
4 Place the roof frame C cover on the roof frame C, and slide the cover to insert into the gap.


Roof frame C cover
Roof frame C

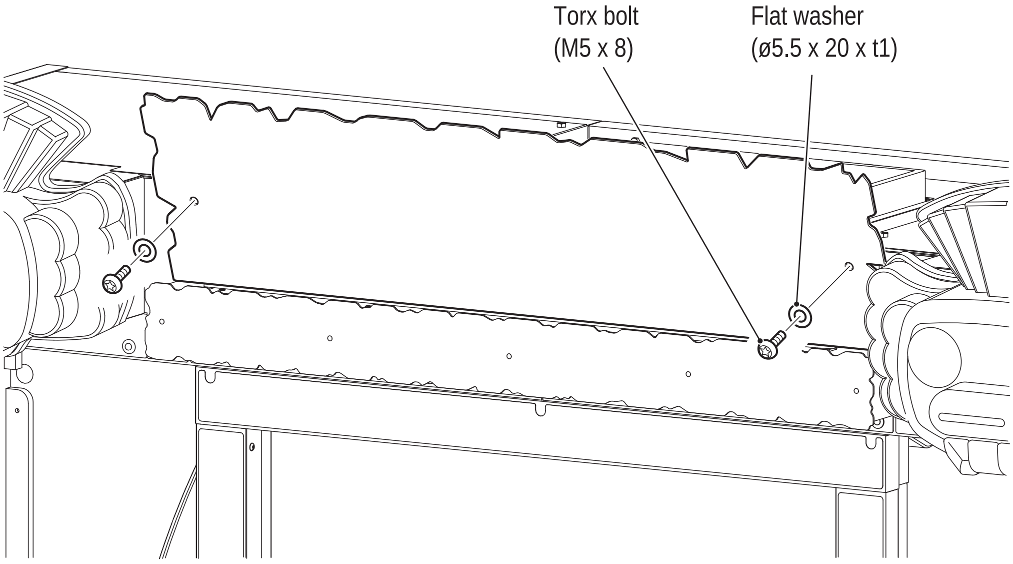
5 Fix the cover with two countersunk washer nuts (M4) and two torx bolts (M5 x 8).


Torx bolt (M5 x 8)
Countersunk washer nut (M4)

6 Insert the sign panel (EXP) into the sign panel base.


Sign panel (EXP)
Sign panel base

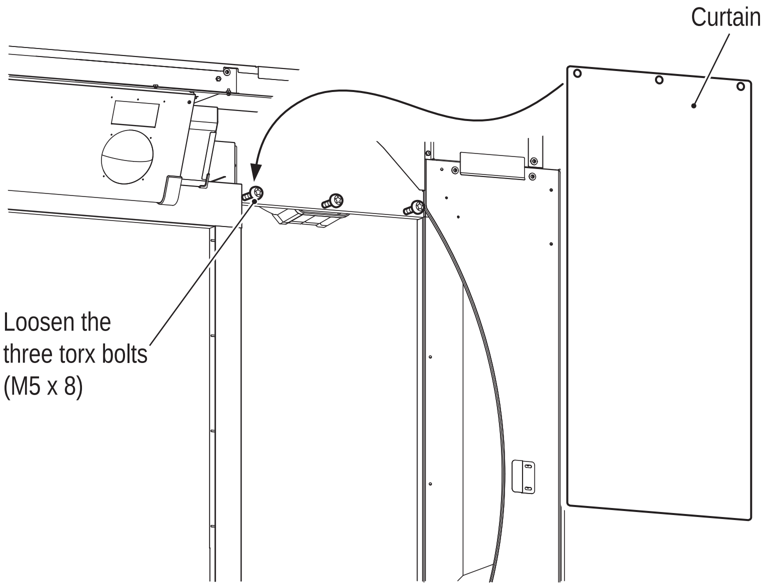
7 Fix the panel with two torx bolts (M5 x 8) and two flat washers (ø5.5 x 20 x t1).


Torx bolt
(M5 x 8)
Flat washer
(ø5.5 x 20 x t1)

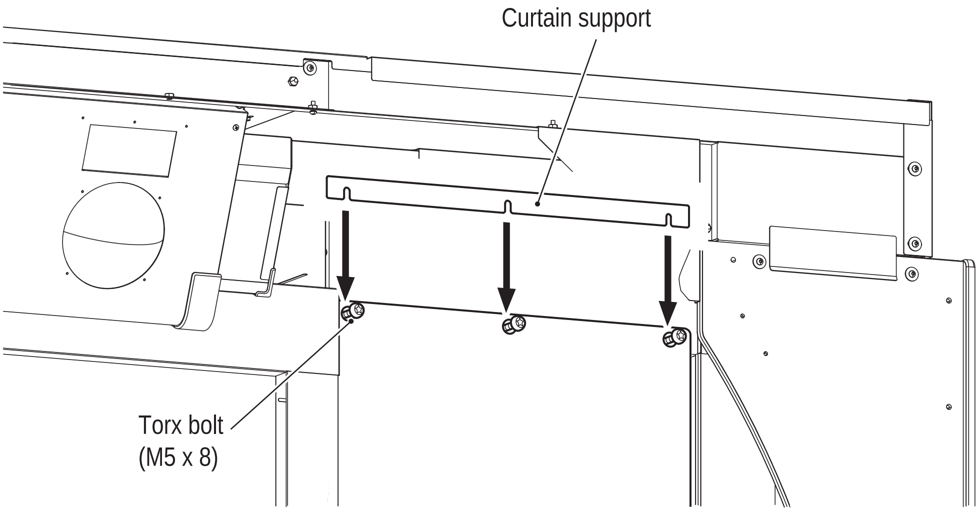
8A-9 Mounting the Curtain

1 Loosen the three torx bolts (M5 x 8) inside the roof frame B (L), and remove the curtain support.

2 Face the printing surface of the curtain outward, and hook the three round holes on the top on the torx bolts.


Curtain
Loosen the three torx bolts (M5 x 8)

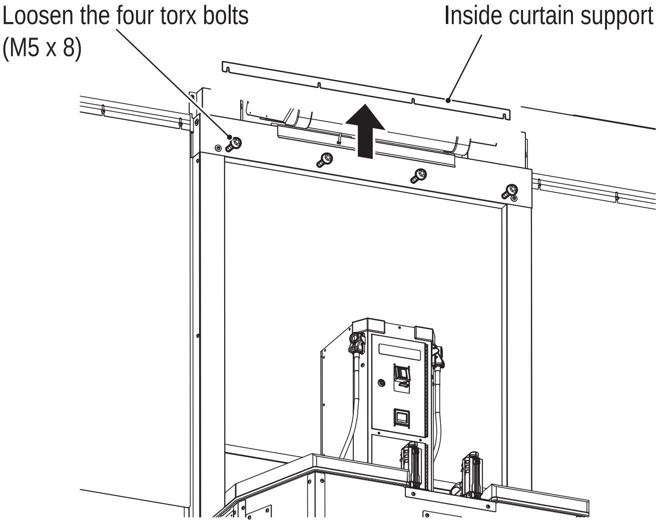
3 Place the curtain support on the top of the curtain as if the curtain is inserted into the curtain support, and refasten the three torx bolts (M5 x 8).


Curtain support
Torx bolt (M5 x 8)

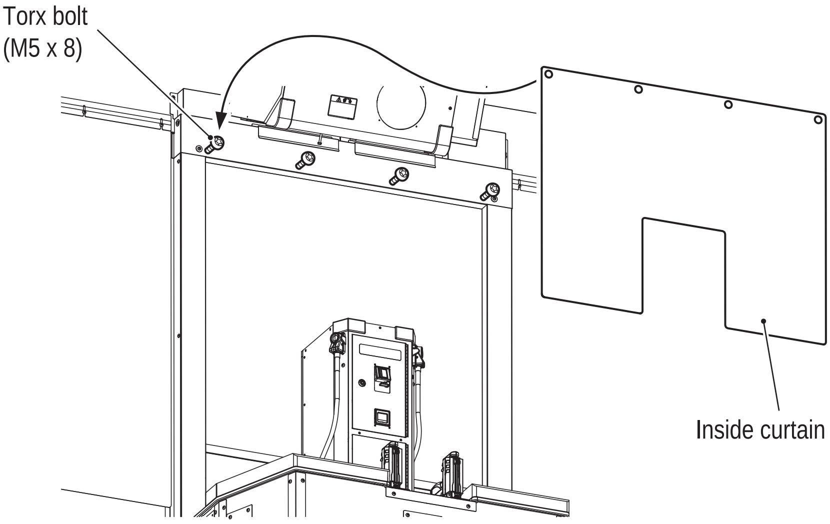
4 Similarly to Steps **1** to **3**, mount the curtain inside the roof frame B (R).

8A-10 Mounting the Inside Curtain

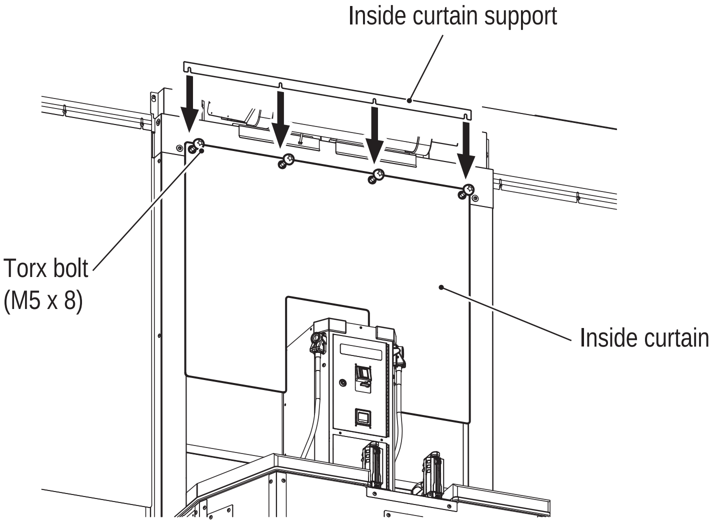
1 Loosen the four torx bolts (M5 x 8) inside the center assembly, and remove the inside curtain support.


Loosen the four torx bolts
(M5 x 8)
Inside curtain support

2 Hook the four round holes on the top of the inside curtain on the torx bolts.

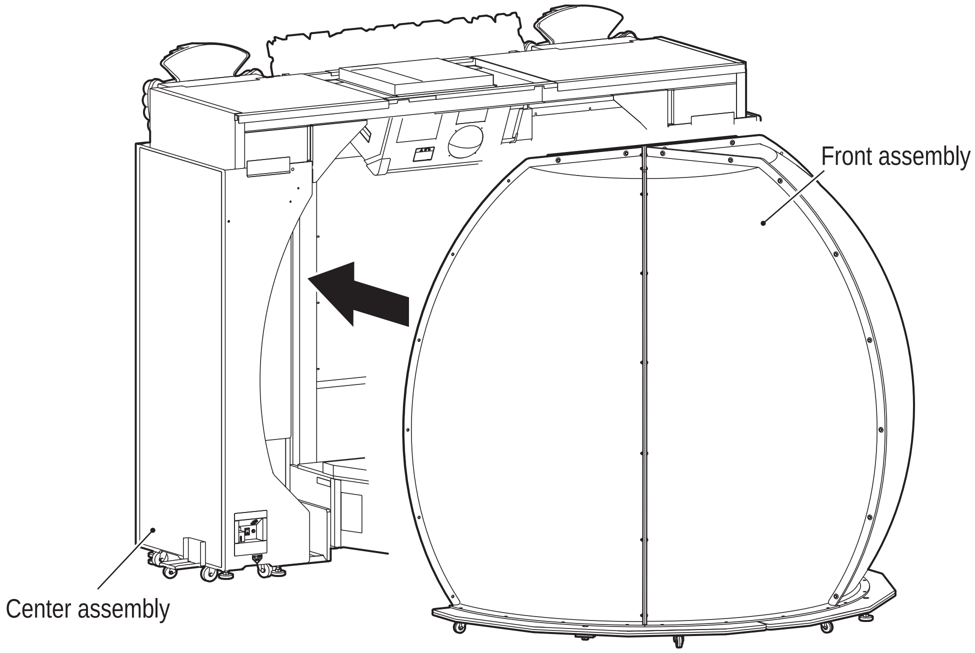

Torx bolt
(M5 x 8)
Inside curtain

3 Place the inside curtain support on the top of the inside curtain as if the inside curtain is inserted into the inside curtain support, and refasten the four torx bolts (M5 x 8).

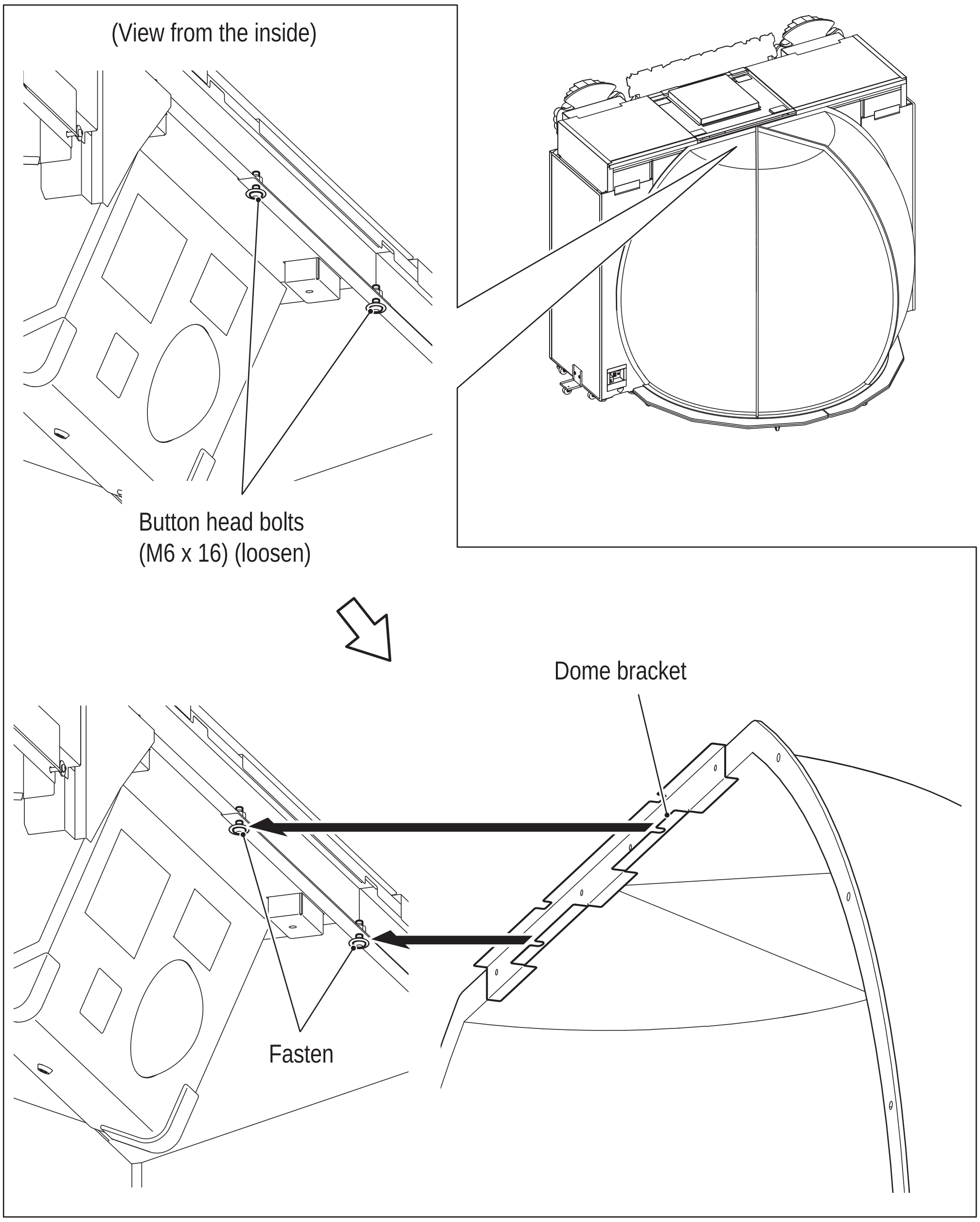

Inside curtain support
Torx bolt
(M5 x 8)
Inside curtain

8A-11 Mounting the Front and Center Assemblies

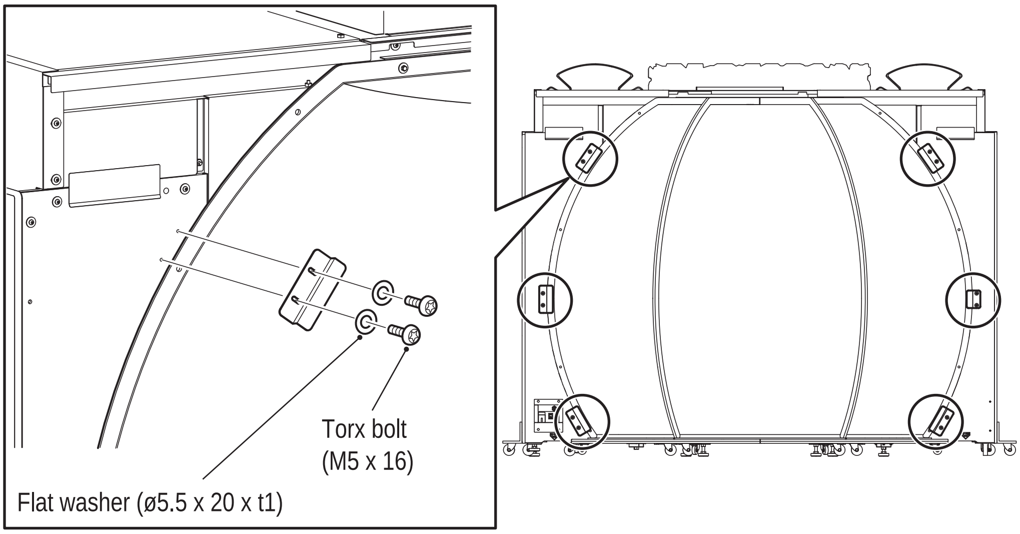
1 Align the front assembly with the center assembly.



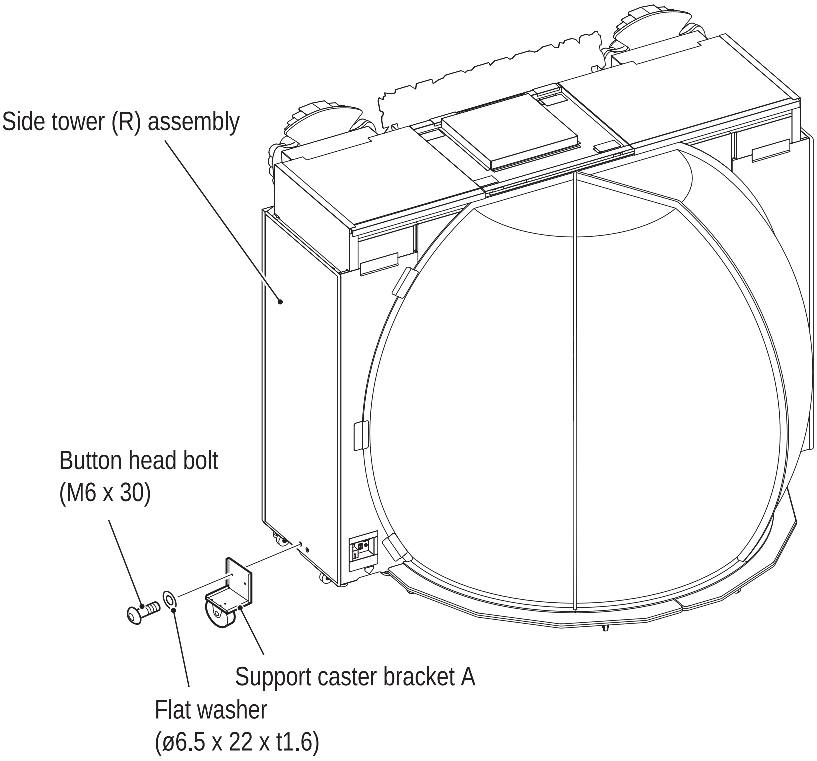
2 Enter the dome, and loosen the two button head bolts (M6 x 16) of the roof frame A. Insert the notches of the dome bracket, and refasten the two button head bolts loosened.


(View from the inside)
Button head bolts
(M6 x 16) (loosen)
Dome bracket
Fasten

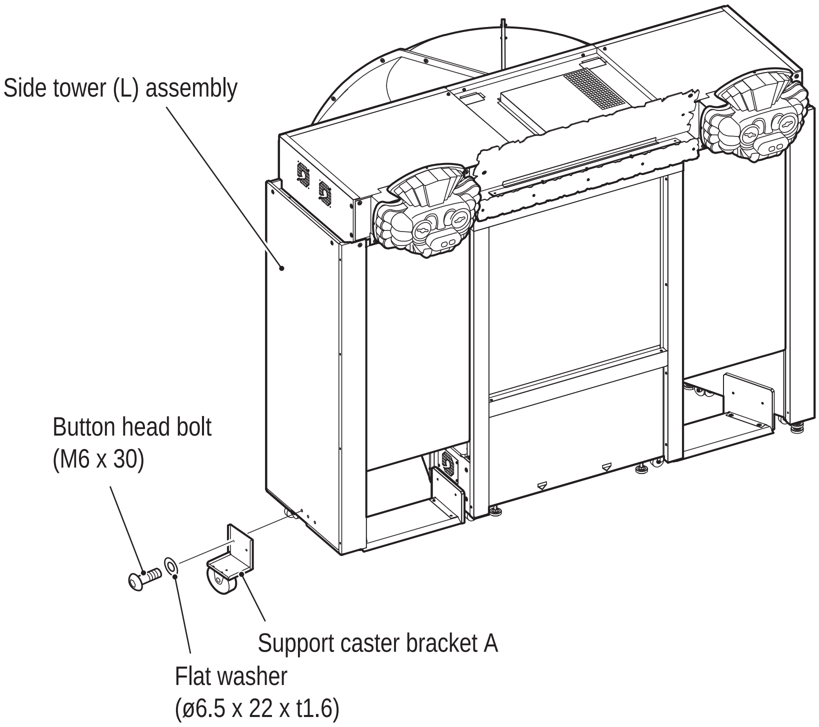
3 Align the dome with the flanges, and fix the six dome holders with two torx bolts (M5 x 16) and two flat washers (ø5.5 x 20 x t1) each.


Torx bolt
(M5 x 16)
Flat washer (ø5.5 x 20 x t1)

4 Remove the support caster bracket A of the side tower (R) assembly by removing the two button head bolts (M6 x 30) and two flat washers (ø6.5 x 22 x t1.6).
Place the removed button head bolts and flat washers back into the case.


Side tower (R) assembly
Button head bolt
(M6 x 30)
Support caster bracket A
Flat washer
(ø6.5 x 22 x t1.6)

5 Similarly to Step **4**, remove the support caster bracket A of the side tower (L) assembly by removing the two button head bolts (M6 x 30) and two flat washers (ø6.5 x 22 x t1.6).
Place the removed button head bolts and flat washers back into the case.

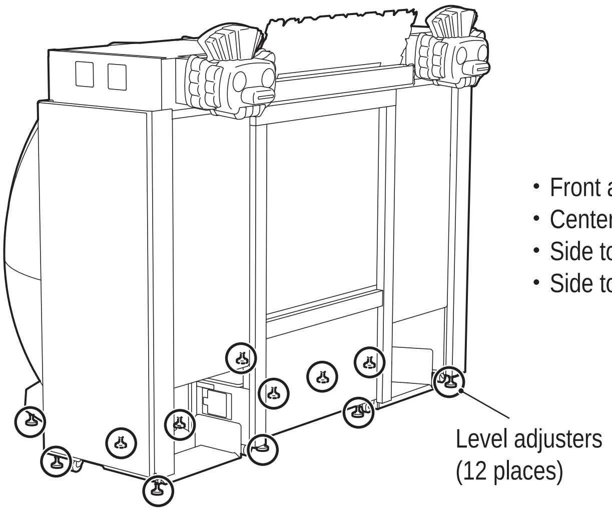

Side tower (L) assembly
Button head bolt
(M6 x 30)
Support caster bracket A
Flat washer
(ø6.5 x 22 x t1.6)

8A-12 Level Adjuster Adjustment

⚠WARNING

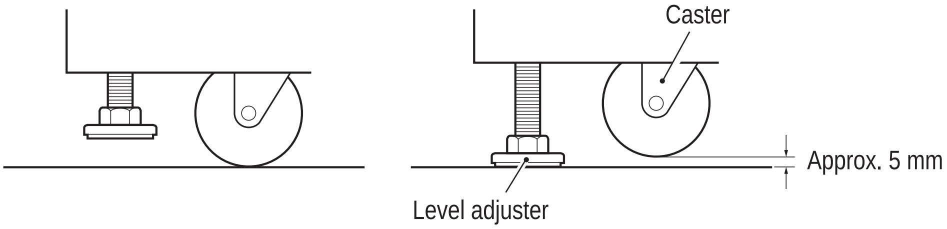
- **Install the machine securely by using the level adjusters. Unstable machine installation may result in an accident or injury.**

There are 12 level adjusters as illustrated.


Level adjusters
(12 places)

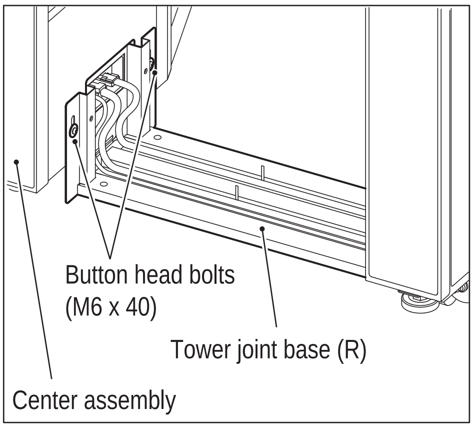
• Front assembly	two places
• Center assembly	four places
• Side tower (L) assembly	three places
• Side tower (R) assembly	three places

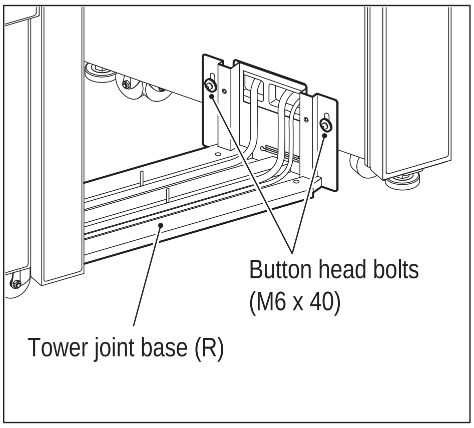
1 When machine assembly is complete, lower the 12 level adjusters such that the casters of each assembly come off the floor by around 5 mm.


Caster
Approx. 5 mm
Level adjuster

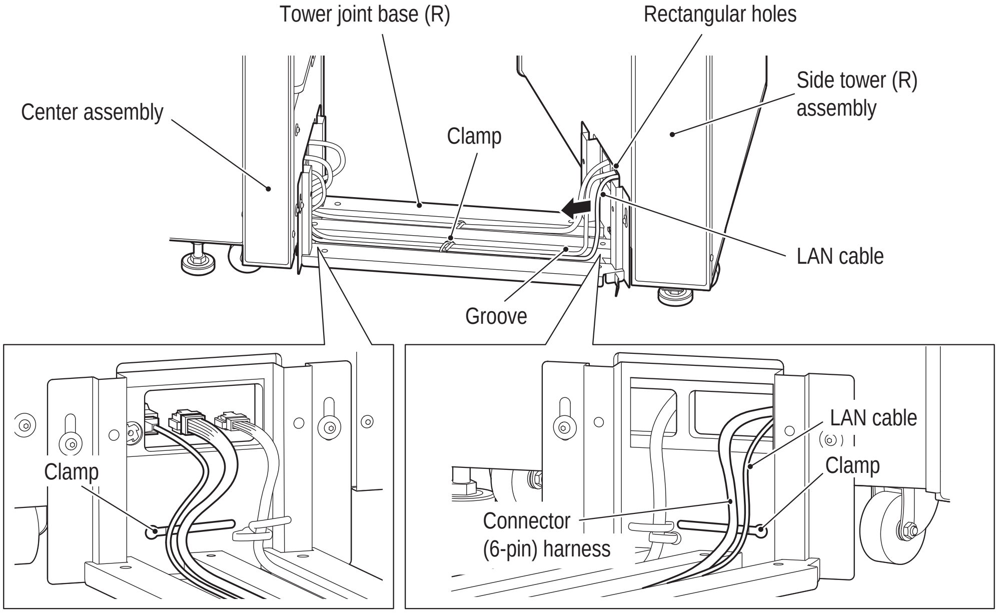
After being adjusted, make sure the machine does not rattle.

2 Make sure the tower joint base (R) on the right of the center assembly has contact with the floor, and fasten the four button head bolts (M6 x 40).

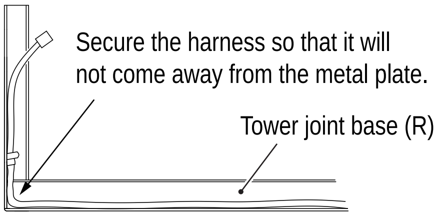

Button head bolts
(M6 x 40)
Tower joint base (R)
Center assembly


Button head bolts
(M6 x 40)
Tower joint base (R)

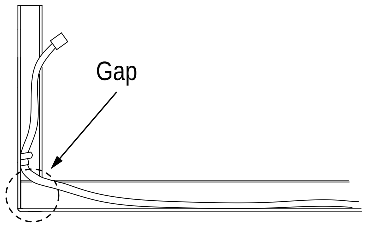
3 Place the LAN cable of the tower joint base (R) and connector (6-pin) harness in the groove in front of the entrance, and fix them with three clamps.
Similarly, place the connector (3-pin) harness in the back groove, and fix it with three clamps.
* Fix the harness with clamps in the order of the center assembly, tower joint base (R) and side tower (R) assembly along the metal plates.


Tower joint base (R)
Rectangular holes
Side tower (R) assembly
Center assembly
Clamp
LAN cable
Groove
Clamp
LAN cable
Clamp
Connector (6-pin) harness

OK


Secure the harness so that it will not come away from the metal plate.
Tower joint base (R)

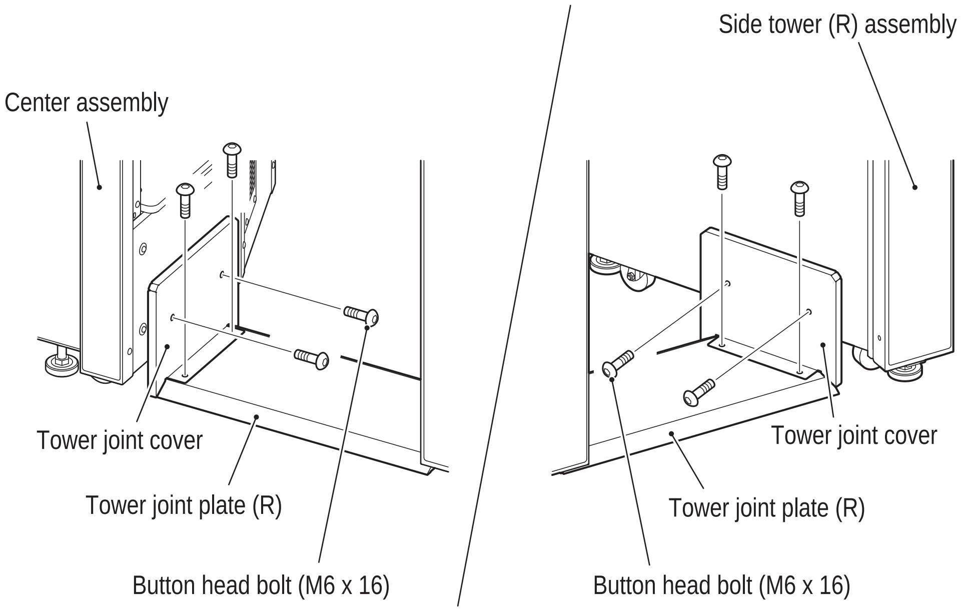
Not OK



NOTICE

- **Be careful not to pinch the connector or the harness during attachment.**
- **Be sure to fix harnesses with clamps along the metal plates.**

4 Place the tower joint plate (R) on the tower joint base (R), and mount the two tower joint covers with four button head bolts (M6 x 16) each.


Center assembly
Tower joint cover
Tower joint plate (R)
Button head bolt (M6 x 16)
Side tower (R) assembly
Tower joint cover
Tower joint plate (R)
Button head bolt (M6 x 16)

5 Similarly to Step **2**, make sure the tower joint base (L) on the left of the center assembly has contact with the floor, and fasten the four button head bolts (M6 x 40).

6 Similarly to Step **4**, place the tower joint plate (L) on the tower joint base (L), and mount the two tower joint covers (S) with four button head bolts (M6 x 16) each.

8A-13 Attaching the POP

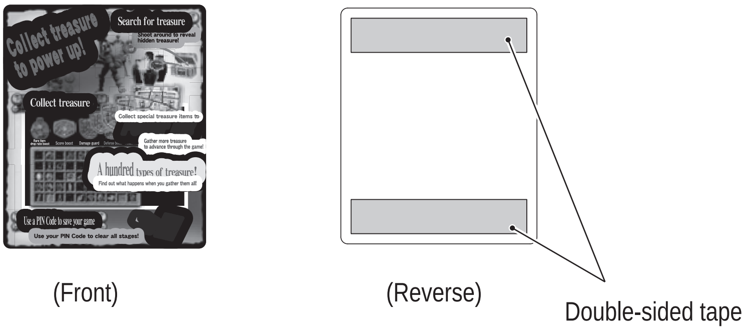
NOTICE

- **Wipe off dirt and dust on the areas where the POP will be attached with a soft cloth beforehand.**

1. Peel off the paper liner of the double-sided tape and stick the POP (B)(EXP) on the block panel as shown in the figure on the next page.

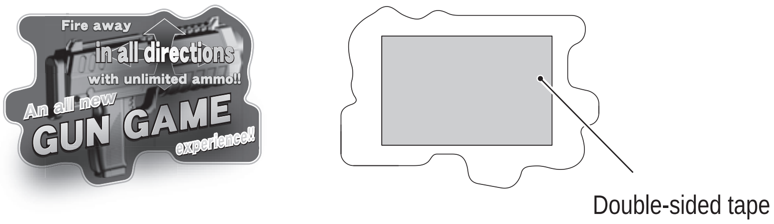
2. Stick POP (C)(EXP) and POP(D)(EXP) on the smoke panel (EXP) following the same procedure.

POP(B)(EXP)


Collect treasure to power up!
Search for treasure
Shoot around to reveal hidden treasure!
Collect treasure
Collect special treasure items to
Gather more treasure to advance through the game!
A hundred types of treasure!
Find out what happens when you gather them all!
Use a PIN Code to save your game
Use your PIN Code to clear all stages!
Double-sided tape

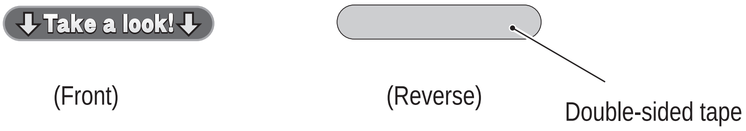
(Front) (Reverse)

POP(C)(EXP)

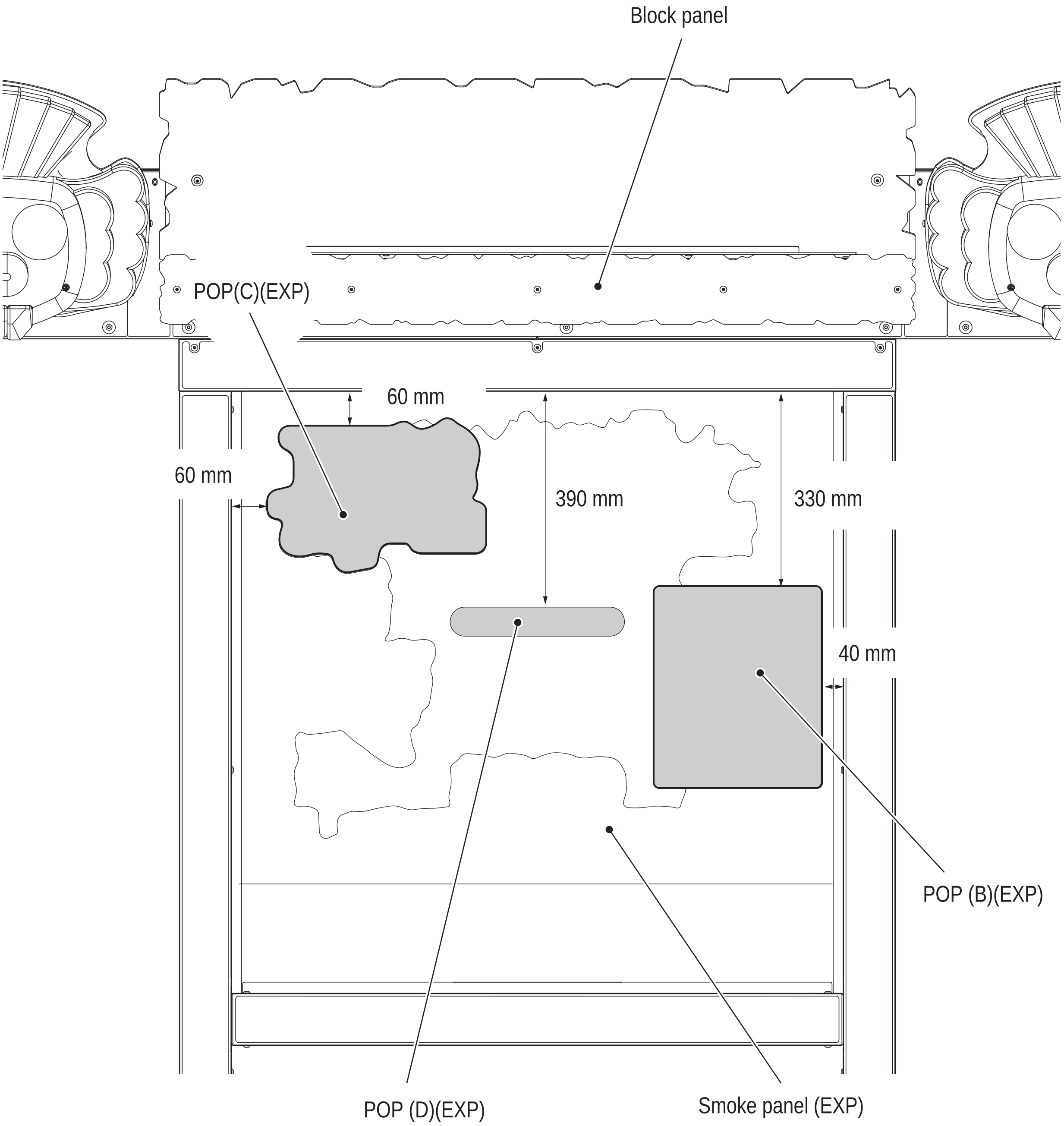

Fire away
in all directions
with unlimited ammo!!
An all new
GUN GAME
experience!!
Double-sided tape

(Front) (Reverse)

POP(D)(EXP)


⇓Take a look!⇓
Double-sided tape

(Front) (Reverse)


Block panel
POP(C)(EXP)
60 mm
60 mm
390 mm
330 mm
40 mm
POP (B)(EXP)
POP (D)(EXP)
Smoke panel (EXP)

8A-14 Connecting the Power Cord and Ground Wire

⚠WARNING

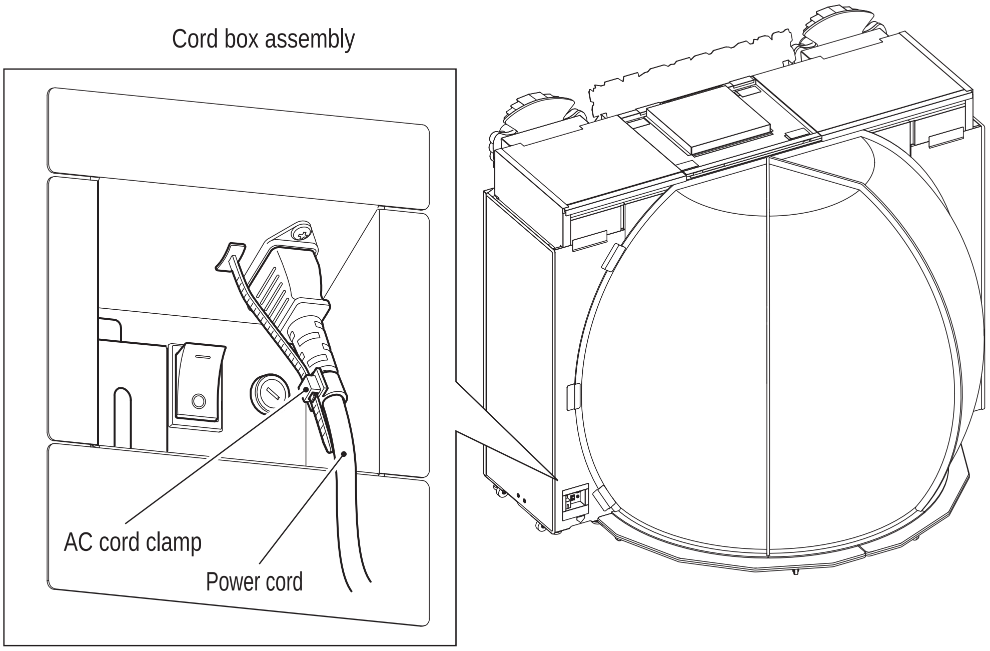
- **Be sure to install the ground wire. Failure to install the ground wire may result in electric shock in the event of electrical leakage.**
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

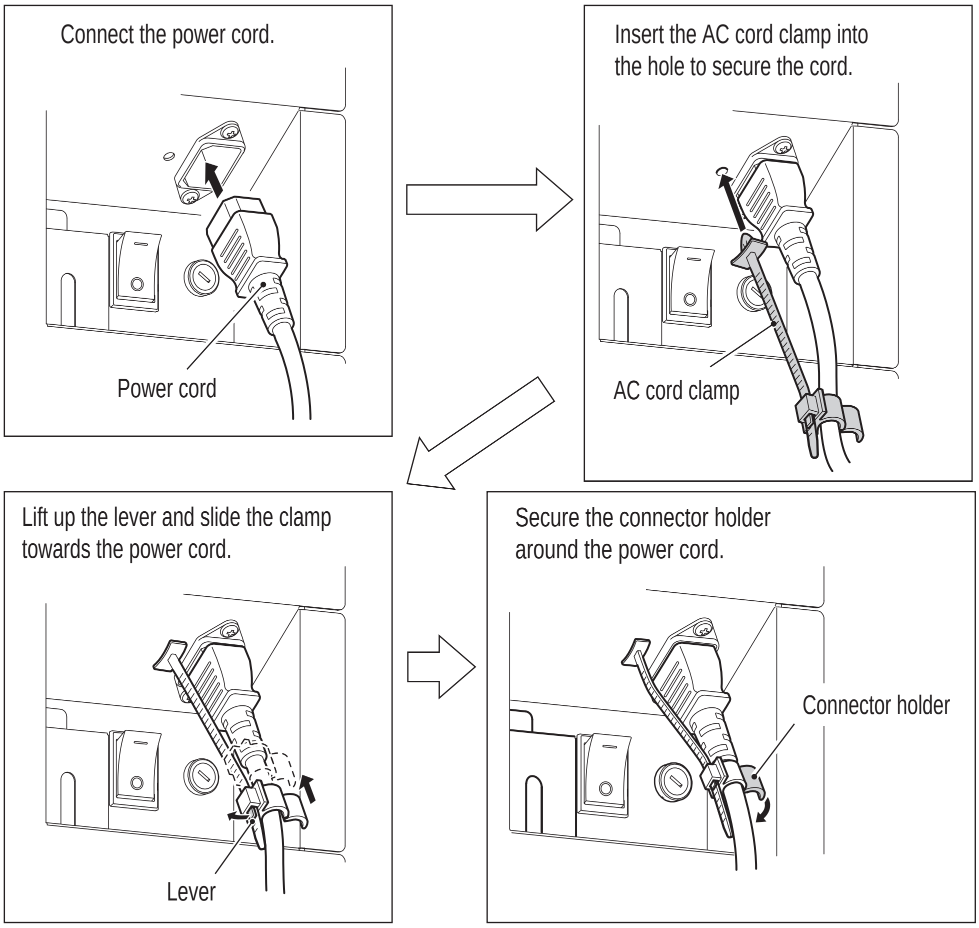
⚠CAUTION

- **Arrange the LAN cable and power cord in a manner that protects players, viewers and passers-by from tripping over them.**

(1) Connecting the Machine

Plug the power cord into the machine, and hold the cord with the AC cord clamp as illustrated below to prevent the cord from coming out.


Cord box assembly
AC cord clamp
Power cord


Connect the power cord.

Insert the AC cord clamp into the hole to secure the cord.

Lift up the lever and slide the clamp towards the power cord.

Secure the connector holder around the power cord.

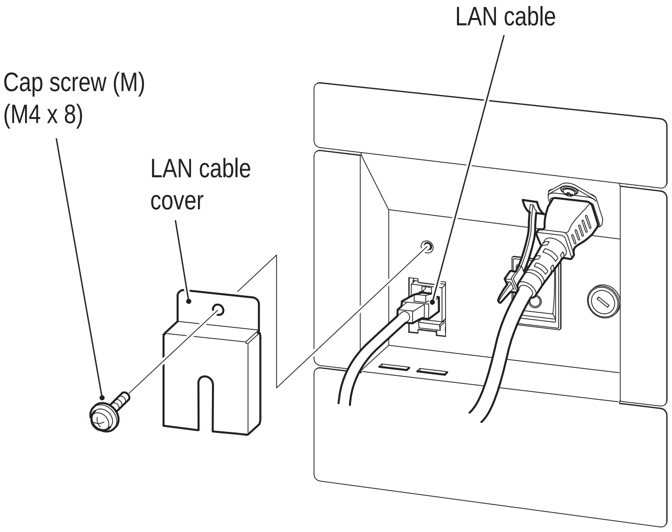
Power cord
AC cord clamp
Lever
Connector holder

8A-15 Connecting the LAN Cable

⚠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 main power switch before starting work.**
- **Arrange the LAN cable in a manner that protects players, viewers and passers-by from tripping over it.**

1. Remove a cap screw (M) (M4 x 8), and remove the LAN cable cover.
2. Insert the supplied LAN cable.
3. To attach the LAN cable cover, perform Step 1 in reverse.



NOTICE

- **Be sure to turn off the main power switch prior to connecting the LAN cable to protect the electric circuit from damage (see "8A-18 Turning on the Main Power Switch" on page 142).**
- **In case the LAN cable needs to be laid on the floor, a commercially available cable protector should be used for protecting the cable.**
- **Failure to observe the following instructions could cause communication problems, and the game might not play properly. Be sure to connect the LAN cable as instructed.**
  - **Communication problems could occur if the LAN cable is not properly connected. In case the LAN cable needs to be laid on the floor, arrange the LAN cable in a manner that protects passers-by from tripping over it.**
  - **Do not bundle the LAN cable with the power cord or put them in the same cable protector.**
  - **Do not forcibly bend the cable when installing or stretch it when connecting.**

8A-16 Inserting the USB Dongle

⚠WARNING

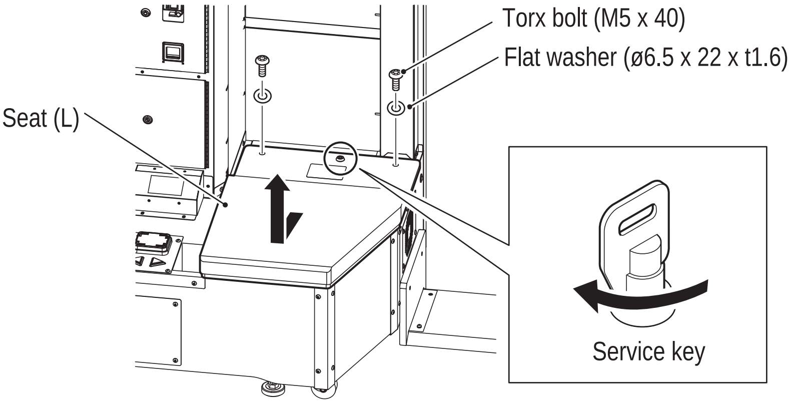
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

NOTICE

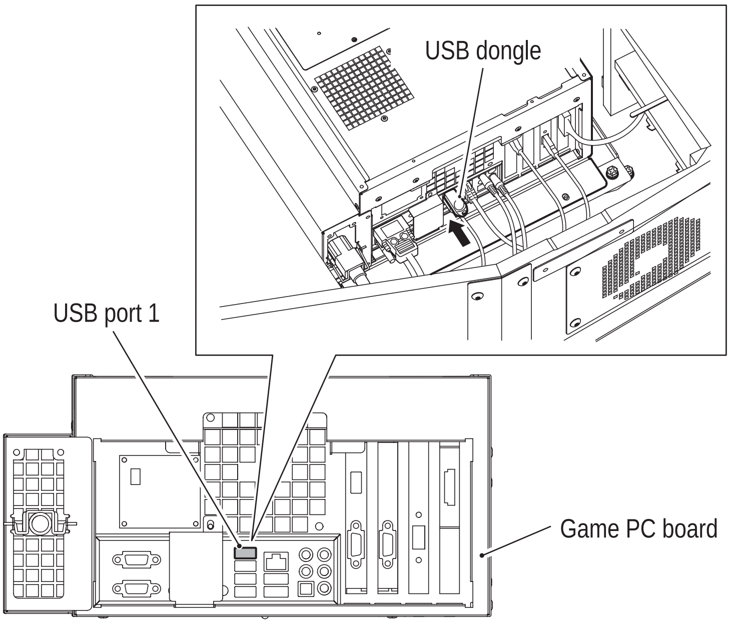
- **Be sure to turn off the power supply before inserting the USB dongle (see “8A-18 Turning on the Main Power Switch” on page 149).**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 After removing the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6), unlock with the service key and remove the seat (L).



3 Insert the USB dongle until it is securely fixed in the USB port 1 of the game PC board.



4 To reattach the seat (L), perform Steps **1** and **2** in reverse.

8A-17 Checks before Turning on the Power Switch

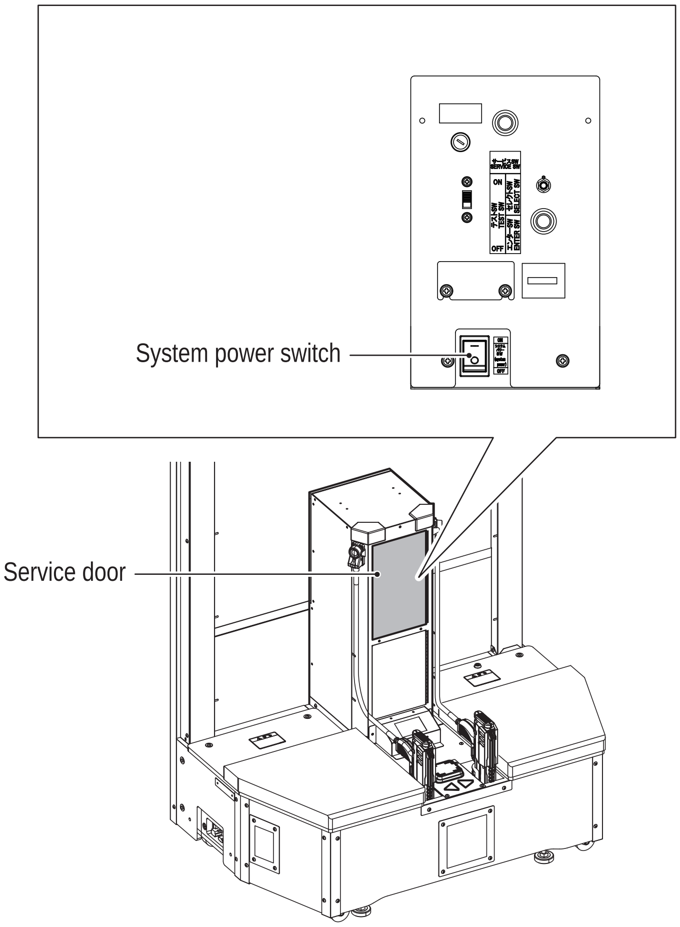
□ Does the installation conform to the specified installation conditions? (See "5-1 Installation conditions" on page 30.)
□ Does the voltage source capacity conform to the specified level?
□ Is the machine properly grounded?
□ Is the power cord installed with a protector, etc. to prevent players or other customers from tripping over it?

8A-18 Turning on the Main Power Switch

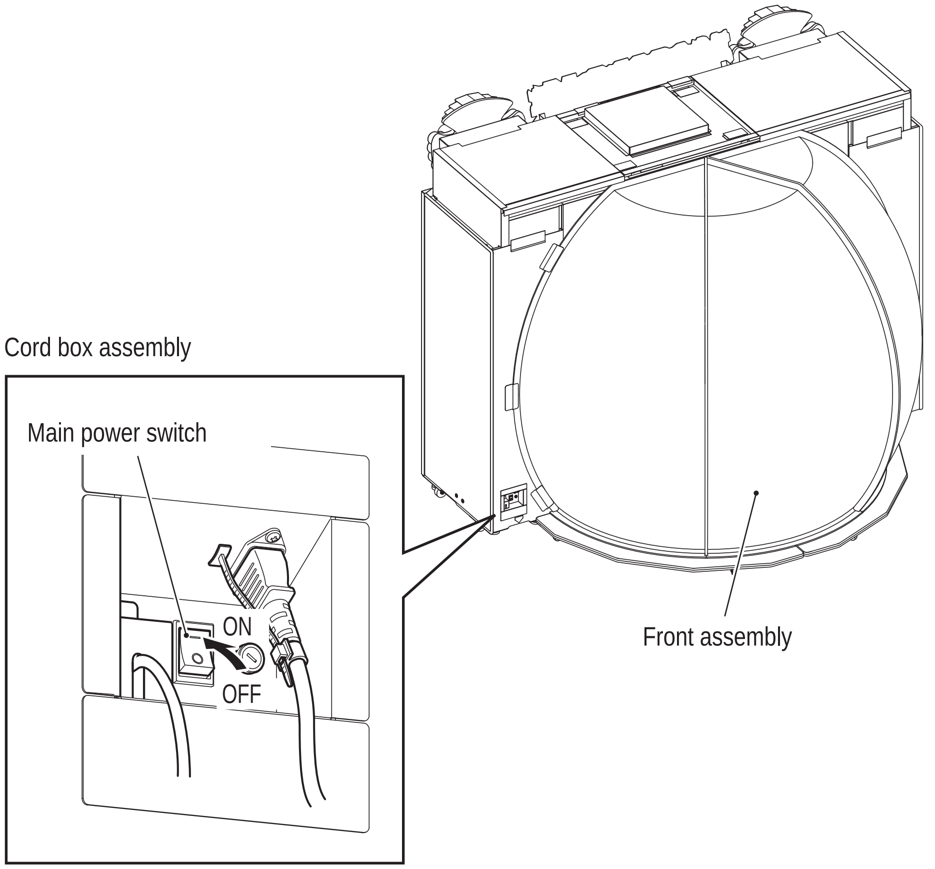
NOTICE

- **After turning off the main power switch, it takes time to restart the projector and nothing may be displayed on the screen for around 10 minutes. Use the system power switch to restart the game PC board.**
- **Be sure to turn on the system power switch 30 or more seconds after turning off the switch.**

1 Unlock the service door using the service key, and check that the internal system power switch is on.



2 Turn on the main power switch.


Cord box assembly
Main power switch
ON
OFF
Front assembly

8A-19 Checks after Turning on the Power Switch

□ Is the center of the image on the spherical screen consistent with the screen center? (see “8B-5-6 Positioning the Projector” on page 212).

□ Is communication with the network normal? (see “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73).

8A-20 Adjustment

8A-20-1 Adjusting the Projector

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Adjust the projector base such that the center of the image on the display screen is consistent with the screen center (see “8B-5-6 Positioning the Projector” on page 212).

8A-20-2 Adjusting the Gun Assembly

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Adjust the gun assembly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).

Installation is now complete.

8B. Maintenance

⚠WARNING

- **To avoid electric shock, accidents or injuries to yourself or other people, be sure to turn off the main power switch before performing service work (such as repairs or correcting malfunctions).**
- **Sections of the projector remain at a high temperature and high voltage even after the main power switch is turned off. To avoid electric shock or burns, be very careful not to accidentally touch these sections.**

8B-1 Inspection and Maintenance

⚠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 “7-1 Pre-operation Inspection” on page 39).**

8B-1-1 Inspection Items

Regularly check if there are any abnormalities with the following inspection items.

(1) Inspection of the level adjuster

- Confirm whether it is fixed securely (see “8A-12 Level Adjuster Adjustment” on page 133).

(2) Inspection of the projector

- Confirm that the image is normally projected from the projector.
- Confirm that the projected area of the projector is positioned properly on the screen (see “8B-5-6 Positioning the Projector” on page 212).
- Confirm that the mounting screws and adjustment screws of the projector base are not loose.

(3) Inspection of the plug for power supply

- Confirm that the cord box unit of the machine and the plug are inserted firmly.
- If dust, etc. adheres at the joint, clean it.
- Confirm that there are no cracks in the power cord or dirt on the coating. If there are any abnormalities with the power cord, replace it.

(4) Inspection of loose screws on each part

Confirm that the following screws are not loose. If there are any loose screws, screw them down firmly again.

- Gun assembly
- Seat (L), (R)
- Tower joint base (L), (R)

(5) Gun tube

Check whether there is any damage or abnormality on the tube.

8B-2 Troubleshooting

8B-2-1 Overall

Symptom	Cause	Action	Reference page
• It does not start.	• The USB dongle is not inserted.	• Insert the USB dongle.	Page 155
	• The system power switch is turned off.	• Turn on the system power switch.	Page 50
	• Failure of the game PC board.	• Contact your distributor.	–
	• Failure of the USB dongle.		
	• The fuse has blown.	• Replace with a fuse of the specified capacity. If the fuse blows often, there is a problem with the machine. • Contact your distributor.	–
• The operation is not stabilized.	• The power supply voltage is not within the range of AC90V - 110V.	• Remove large-capacity devices in the same line (air conditioners, large vehicles,etc.), and secure the specified power supply voltage.	–
• It becomes impossible to play the game.	• The projector and the game PC board are not connected.	• Check the connection of the RS232C cable.	Page 155
• The sound does not come out from each speaker.	• Failure of the AMP PC board.	• Replace the AMP PC board.	Page 162
	• The sound volume setting is small.	• Reset the sound volume.	Page 66
	• The connector is disconnected.	• Connect the connector firmly.	Page 155

8B-2-2 Center Assembly

Symptom	Cause	Action	Reference page
• PIN pad does not react.	• The connector is disconnected.	• Securely connect the connector.	Page 155
	• Failure of the PIN pad.	• Replace the PIN pad.	Page 174
• 1P/2P switch does not react.	• The connector is disconnected.	• Securely connect the connector.	Page 155
	• Failure of the illuminated switch	• Replace the illuminated switch.	Page 176
	• Failure of the NA-JV(S) PC board.	• Replace the NA-JV(S) PC board.	Page 158

8B-2-3 Gun Assembly

Symptom	Cause	Action	Reference page
• The gun assembly does not work.	• Incomplete calibration of the gun assembly.	• Calibrate the gun assembly on the test mode.	Page 57
	• The connector is disconnected.	• Securely insert the connector.	Page 155
	• Failure of the LED unit.	• Replace the LED unit.	Page 186
	• Failure of the NA-JV(S) PC board.	• Replace the NA-JV(S) PC board.	Page 158
• The gun assembly does not work both for 1P and 2P.	• Failure of the gun camera PC board.	• Replace the gun camera PC board.	Page 200
	• Failure of the NA-JV(S) PC board.	• Replace the NA-JV(S) PC board.	Page 158
• The gun trigger does not work.	• The connector is disconnected.	• Securely insert the connector.	Page 155
	• Failure of the micro switch.	• Replace the micro switch.	Page 191
	• Failure of the gun camera PC board.	• Replace the gun camera PC board.	Page 200
	• Failure of the NA-JV(S) PC board.	• Replace the NA-JV(S) PC board.	Page 158
• The gun assembly does not vibrate.	• The connector is disconnected.	• Securely insert the connector.	Page 155
	• Failure of the vibration motor.	• Replace the vibration motor.	Page 188
	• Failure of the NA-JV(S) PC board.	• Replace the NA-JV(S) PC board.	Page 158

8B-2-4 Roof Assembly

Symptom	Cause	Action	Reference page
• The face tape LED is not lit.	• Failure of the face tape LED.	• Replace the face tape LED.	Page 198
	• The connector is disconnected.	• Insert the connector firmly.	Page 155
	• Failure of the NA-JV (S) PC board.	• Replace the NA-JV (S) PC board.	Page 158
• The sign tape LED is not lit.	• Failure of the sign tape LED.	• Replace the sign tape LED.	Page 196
	• The connector is disconnected.	• Insert the connector firmly.	Page 155
	• Failure of the NA-JV (S) PC board.	• Replace the NA-JV (S) PC board.	Page 158

8B-2-5 Projector Assembly

Symptom	Cause	Action	Reference page
• The image is not displayed.	• The connector of the projector unit is disconnected.	• Insert the connector firmly.	Page 155
	• The main power of the projector unit is turned off.	• Turn on the main power of the projector unit.	Page 215
	• The lamp outer cover is removed.	• Attach the lamp outer cover correctly.	Page 202
	• The lamp of the projector unit is burned out.	• Replace the lamp of the projector unit.	Page 202
	• The lamp use time is over the predetermined time, and the operation was stopped. • The life of the projector lamp will soon expire.	• When the lamp use time exceeds approx. 3,400 hours at maximum, the lamp will not be turned on. Prepare a spare lamp, and replace the projector lamp.	Page 202
	• Failure of the projector unit.	• Refer to “8B-3 (3) Projector Errors”, and take measures.	Page 153
	• Failure of the game PC board.	• Contact your distributor.	–
• The image is not displayed normally.	• Some part of the projector settings is incorrect.	• Return the projector to the default settings in the test mode.	Page 59
• The image blurs.	• The lens or the lens cover of the projector unit is dirty.	• Clean the lens and the lens cover of the projector unit.	Page 83
• The image is dark.	• The brightness and the contrast are not adjusted properly.	• Adjust the brightness and the contrast.	Page 220
	• The projector lamp is close to the end of its service life.	• Replace the lamp of the projector unit.	Page 202
• The color is light. The color tone is bad.	• The red level, green level and blue level are not adjusted properly.	• Adjust the red level, green level and blue level.	Page 220
	• The spherical screen is dirty.	• Clean the spherical screen.	Page 82
	• The projector lamp is close to the end of its service life.	• Replace the lamp of the projector unit.	Page 202
• The remote controller does not work.	• The battery of the remote controller is depleted.	• Replace the battery of the remote controller.	Page 215
	• The battery of the remote controller is not attached properly.	• Attach the battery of the remote controller properly.	
	• The remote controller is not pointed at the remote control receiver.	• Operate the remote controller by pointing it at the remote control receiver of the projector unit.	Page 216

Symptom	Cause	Action	Reference page
• "09-01 PROJECTOR LAMP WARNING" is indicated on the spherical screen. * When the lamp operating time exceeds approx. 3,300 hours at maximum, the message is displayed for 30 seconds after turning on the power.	• The projector lamp is close to the end of its service life.	• When the lamp use time exceeds approx. 3,400 hours at maximum, the lamp will not be turned on. Prepare a spare lamp when this message is displayed, and replace the projector lamp.	Page 85

-Must be performed by a technician-

8B-3 Error Display

When an error is detected at startup or during game play, an error screen appears and machine operation stops. Refer to the error code tables below to identify and resolve the cause of the error.
When a screen not described in the error code tables appears or the error occurs again despite taking the appropriate action, something else may be causing the error. In these cases contact your distributor.

(1) Network Errors

Error code	Error message	Cause	Action	Reference page
05-20	ERROR DEVICE	• Error in connection to or authentication of the game server.	• Contact your distributor.	–
05-21	ERROR AUTH NG			
05-22	ERROR DNS TIMEOUT			
05-23	ERROR DNS HOST NOT FOUND			
05-24	ERROR SERVER NG			
05-30	ERROR TIP TIMEOUT	• Error in connection to or authentication of the authentication server of the game PC board.		
05-31	ERROR TIP HOST NOT FOUND			
05-32	ERROR DNS TIMEOUT			
05-33	ERROR DNS HOST NOT FOUND			
05-34	ERROR AUTH NG			
05-35	ERROR AUTH TIMEOUT			
05-38	NBLINE POINT BALANCE ERROR	• The balance of NBLINE points fell below the amount required for one play.	• Charge NBLINE points.	–
05-50	REVISION ERROR	• Different revision from that of the game server.	• Update the software.	Page 81
05-51	SERVER CONNECTION ERROR	• The game server is down due to maintenance or failure.	• Check communication later.	–
05-52	SERVER UNDER MAINTENANCE			
05-53	INCONSISTENT SERVER ERROR	• Error in communication with the game server.	• Check the network connection.	Page 73
05-55	NETWORK CONNECTION UNSTABLE	• Update necessary for operation not performed.	• Perform necessary update for operation.	Page 81
05-56	INITIAL NETWORK AUTH ERROR	• Error in communication with the game server at the time of the first activation after installing the machine.	• Check the network connection.	Page 73
05-57	NETWORK DISCONNECTION ERROR	• Error in connection of the LAN cable.	• Check the LAN cable connection.	Page 140

(2) Hardware Errors

Error code	Error message	Cause	Action	Reference page
01-01	COIN ERROR 1	• Failure of the coin microswitch. • Failure of the NA-JV (S) PC board.	• Replace the coin microswitch. • Replace the NA-JV (S) PC board.	Page 169 Page 158
01-02	COIN ERROR 2	• Error in the service switch. • Failure of the NA-JV (S) PC board.	• Contact your distributor. • Replace the NA-JV (S) PC board.	Page 158
01-03	COIN ERROR 3	• Failure of the coin counter. • Failure of the NA-JV (S) PC board.	• Contact your distributor. • Replace the NA-JV (S) PC board.	Page 158
03-01	I/O PCB ERROR	• The connector is not connected. • Failure of the NA-JV (S) PC board.	• Check the connection of the NA-JV (S) PC board. • Replace the NA-JV (S) PC board.	Page 158
03-02	FIRMWARE ERROR			
06-01	GUN CONTROLLER ERROR	• The connector is not connected. • Failure of the gun controller.	• Check the gun controller connection. • Replace the gun controller.	Page 182
06-02	GUN CAMERA ERROR			
08-01	AUTH CAMERA ERROR	• The connector is not connected. • Failure of the authentication camera.	• Check the authentication camera connection. • Replace the authentication camera.	Page 155 Page 178
09-01	PROJECTOR LAMP WARNING	• The lamp use time exceeded the specified time.	• Replace the lamp with a new one. * Voice guidance will be provided.	Page 202
09-02	PROJECTOR ERROR	• Operation stopped as the lamp use time exceeded the specified time.	• Replace the lamp with a new one and reset the lamp use time. * The screen will be hidden to provide voice guidance.	Page 202
09-03	PROJECTOR ERROR	• Failure of the projector.	• Contact your distributor if the same error occurs again. * The screen will be hidden to provide voice guidance.	–
09-04	PROJECTOR ERROR	• Failure of the internal projector fan.	• Contact your distributor if the same error occurs again. * The screen will be hidden to provide voice guidance.	–
09-05	PROJECTOR ERROR	• Only the cooling fan rotated and the lamp was not lit as the machine was powered on immediately after the lamp had been turned off.	• Power ON the machine again later. • Contact your distributor if the same error occurs again. * The screen will be hidden to provide voice guidance.	–
09-07	PROJECTOR ERROR	• The temperature inside the projector is high. • Failure of the projector.	• Clean the filter. • Contact your distributor if the same error occurs again. * Voice guidance will be provided.	–

Error code	Error message	Cause	Action	Reference page
09-08	SERIAL COMMUNICATION WARNING	• Error in serial communication of the projector.	• Check the projector connection. * Voice guidance will be provided.	Page 155
09-09	SERIAL COMMUNICATION ERROR	• Operation stopped as the specified time elapsed after activation while there was an error in serial communication of the projector.	• Check the projector connection. • Power ON the machine again later. * The screen will be hidden to provide voice guidance.	Page 155
09-10	PROJECTOR ERROR	• The projector is not connected.	• Check the projector connection. * Voice guidance will be provided.	Page 155
19-21	USB DONGLE ERROR 1	• The USB dongle for another model is inserted.	• Insert the USB dongle specific to this model, and turn the machine off and then on. Contact your distributor if the same error occurs again.	Page 141
19-22	USB DONGLE ERROR 2	• No USB dongle is inserted.		
19-23	USB DONGLE ERROR 3	• Two or more USB dongles are inserted.		
19-24	USB DONGLE ERROR 4	• Failed to read or write NBLINE points.		
20-02	VERSION UP ERROR 2	• No media for updating is inserted. • There is no updating file.	• Turn off the machine, and then perform updating again.	–
21-01	CLOCK ERROR	• Wrong time setting.	• Configure the time setting properly.	Page 70
22-01	ERROR	• Operation stopped as the specified time elapsed while the network remained disconnected. • Operation stopped as the number of unsent notifications on billing information exceeded the specified number.	• Check the network connection.	Page 73
22-02	ERROR	• Improper billing information.		
22-03	ERROR	• The billing process failed.	• Contact your distributor if the same error occurs again.	–
23-01	AUTH DATA INCONSISTENT ERROR	• Authentication data is damaged.	• Check the network connection.	Page 73

(3) Projector Errors

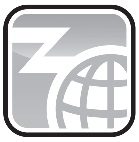
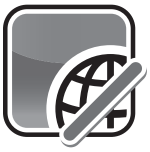
If an error occurs, the screen may not be displayed. Upon occurrence of an error, voice guidance starts.

Symptom	Cause	Action	Reference page
• The screen is not displayed and the 1P switch and the 2P switch are flashing alternately.	• Operation stopped because the lamp use time exceeded the specified time. • Service life of the projector lamp.	• If the lamp use time exceeds the maximum of 3,400 hours, the lamp will not light up. Prepare the lamp for replacement and replace the projector lamp.	Page 202
• The screen is not displayed and the 1P switch and the 2P switch are not flashing alternately.	• Difficulty in lighting up the lamp due to high temperature of the lamp.	• After turning off the projector power supply and waiting for a while, turn on the power supply again. If the lamp does not recover after cooling, replace it.	Page 202
	• The temperature inside the projector is high.	• After turning off the power supply and cleaning the filter of the projector, turn on the power supply again.	Page 82
	• Projector lamp outer cover open.	• After turning off the power supply, attach the projector lamp outer cover again.	Page 202
	• Projector main power supply turned off.	• Turn on the projector unit main power supply.	Page 216
	• The cable connectors connecting the projector and the game PC board are disconnected.	• Securely insert the projector connector and connectors for the video on the game PC board side and for the projector.	Page 155
	• Failure of the projector.	• Contact your distributor.	–
	• Failure of the projector cooling fan.	• Contact your distributor.	–

8B-4 Problems Concerning the Network

It is necessary to connect to the network (NBLINE) for operation of this machine. (*1)
If there are any issues with the network connection due to communication problems, etc., “22-01 ERROR” is displayed on the screen, and the game enters the “off-line operation state”.
If 336 hours or more pass after entering the “off-line operation state”, it becomes impossible to start a new game.(*2)
(If 336 hours pass while playing a game, it is possible to play until the current game is finished.)
In order to play the game again, correct the network problem, and connect to NBLINE. (*3)

*1 The state of the network connection can be checked in the test mode.
(See “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73.)
*2 The remaining time to operate in the “off-line operation state” can be checked in the test mode.
(See “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73.)
*3 Refer to the error display for taking measures against problems with the network.
(See “8B-3 Error Display” on page 150.)

	Online	Normally connected to NBLINE.
	Offline	Not connected to NBLINE.

The network icon displayed at the top left of the screen becomes the off-line indication in the following cases.
- There is a problem with the network connection.
- The network service is down.

8B-5 Removal, Installation and Replacement

8B-5-1 Center Assembly

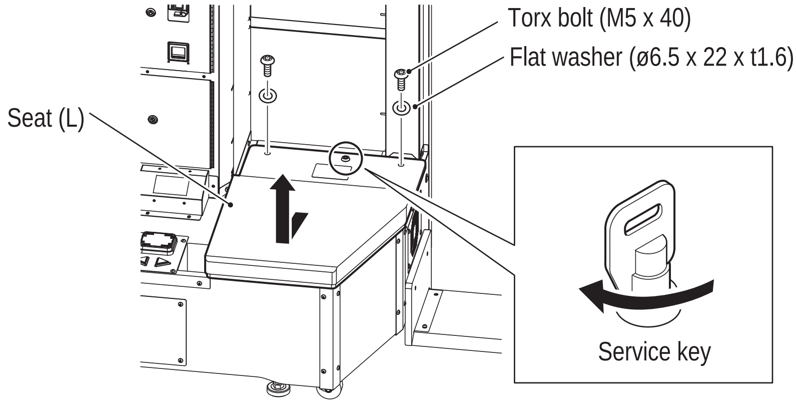
(1) Replacing the Game PC Board

⚠WARNING

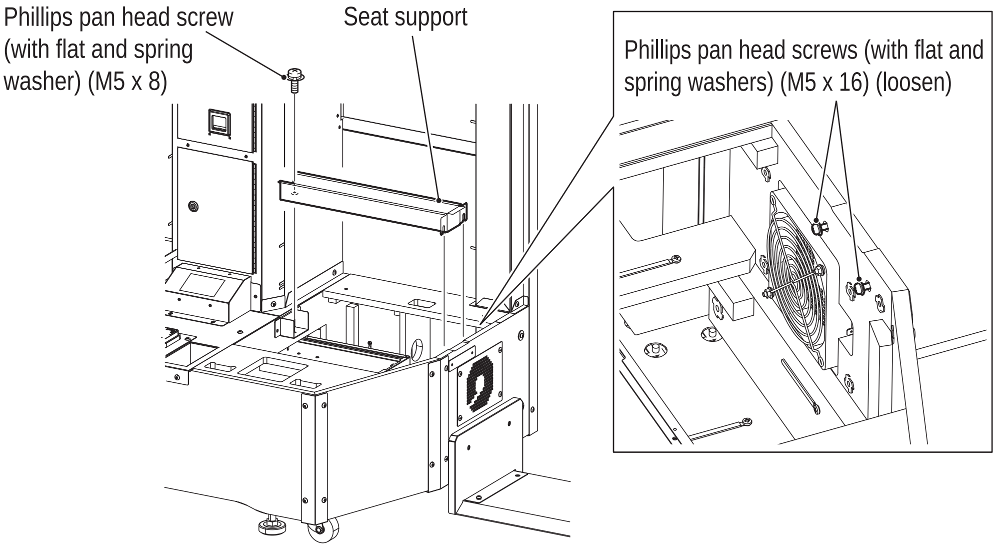
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

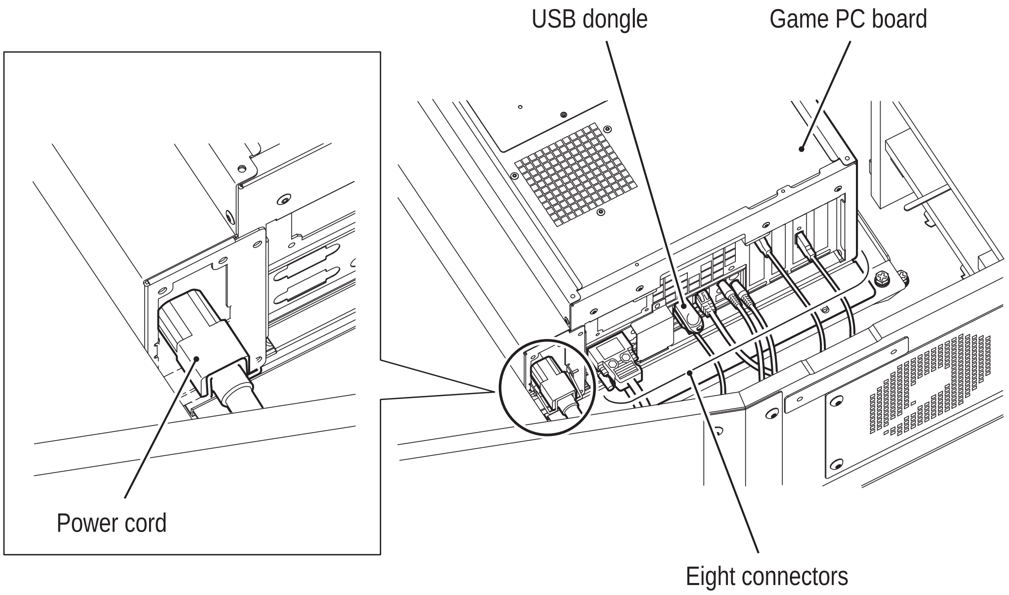
2 Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6), unlock with the service key, and remove the seat (L).


Torx bolt (M5 x 40)
Flat washer (ø6.5 x 22 x t1.6)
Seat (L)
Service key

3 Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), and loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16) to remove the seat support.

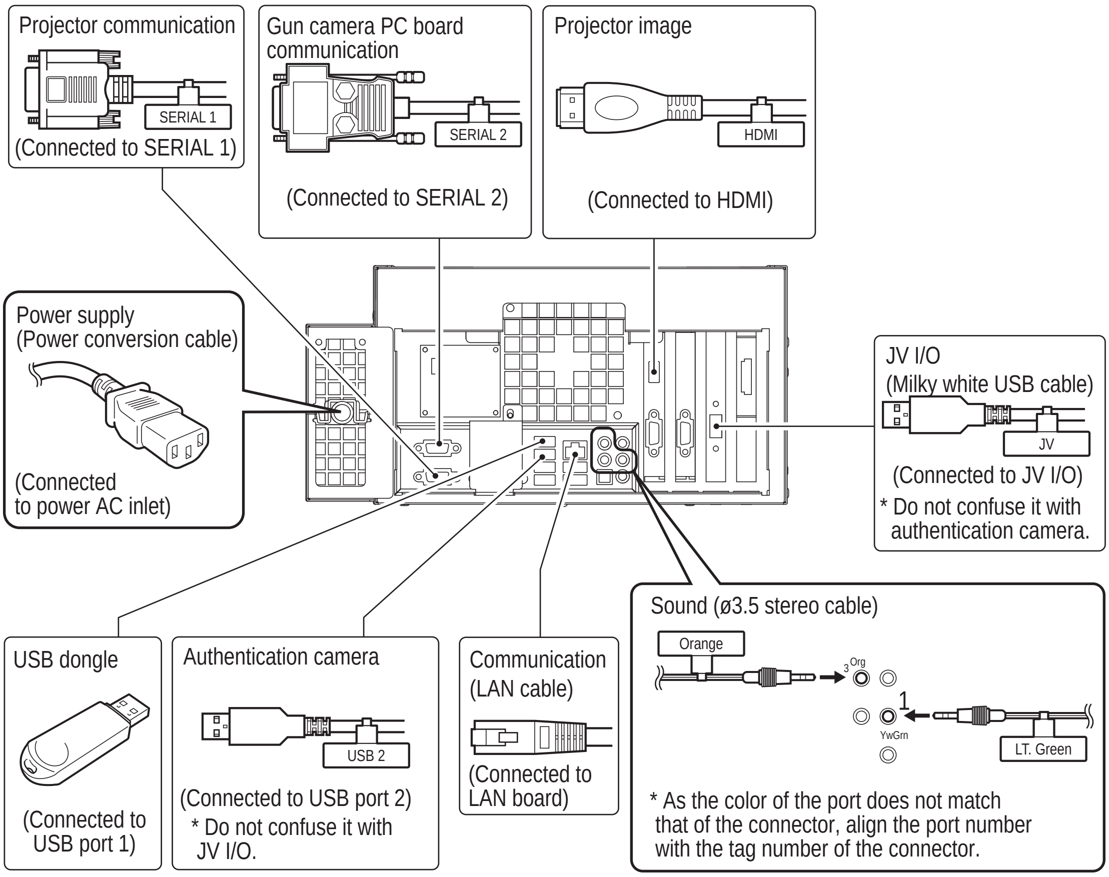

Phillips pan head screw (with flat and spring washer) (M5 x 8)
Seat support
Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)

4 Disconnect all of the power cords, faston terminals, USB dongles and cables connected to the game PC board.

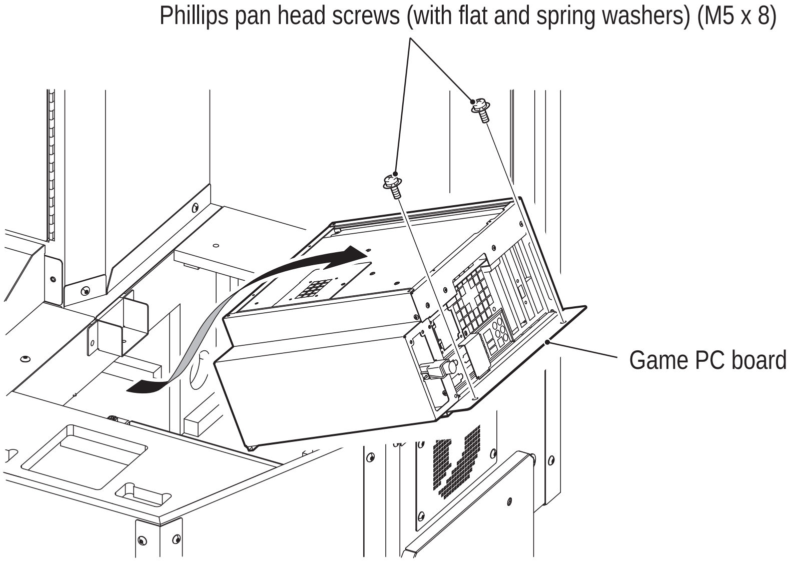

USB dongle
Game PC board
Power cord
Eight connectors

NOTICE

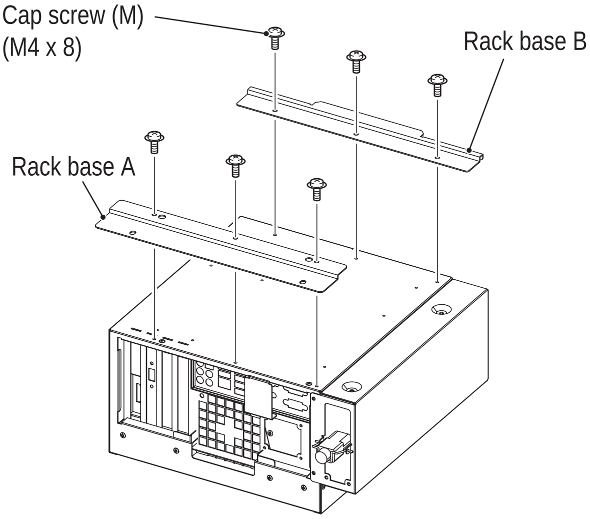
- **Connect each connector to the appropriate slot.**
- **If the sound connector is disconnected during operation of the unit, no sound will be output until it is restarted even if the sound connector is connected again. Insert it fully, and confirm that it is locked when attaching.**


Projector communication
SERIAL 1
(Connected to SERIAL 1)
Gun camera PC board communication
SERIAL 2
(Connected to SERIAL 2)
Projector image
HDMI
(Connected to HDMI)
Power supply
(Power conversion cable)
(Connected to power AC inlet)
JV I/O
(Milky white USB cable)
JV
(Connected to JV I/O)
* Do not confuse it with authentication camera.
Sound (ø3.5 stereo cable)
Orange
3 Org
1
YwGrn
LT. Green
* As the color of the port does not match that of the connector, align the port number with the tag number of the connector.
USB dongle
(Connected to USB port 1)
Authentication camera
USB 2
(Connected to USB port 2)
* Do not confuse it with JV I/O.
Communication
(LAN cable)
(Connected to LAN board)

5 Remove the two Phillips pan head screws (with flat and spring washers) (M5 x 8), and remove the game PC board.


Phillips pan head screws (with flat and spring washers) (M5 x 8)
Game PC board

6 Remove the six cap screws (M) (M4 x 8), and remove the rack base A and the rack base B.


Cap screw (M)
(M4 x 8)
Rack base B
Rack base A

7 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **The test mode settings are cleared when the game PC board is replaced. Make sure to adjust the gun and set the volume after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**

(2) Replacing the NA-JV (S) PC Board

⚠WARNING

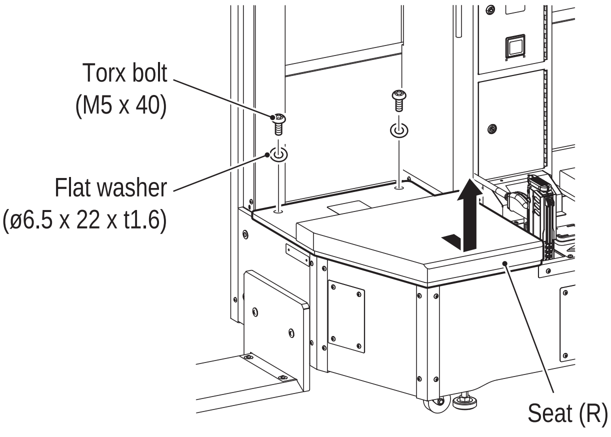
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

NOTICE

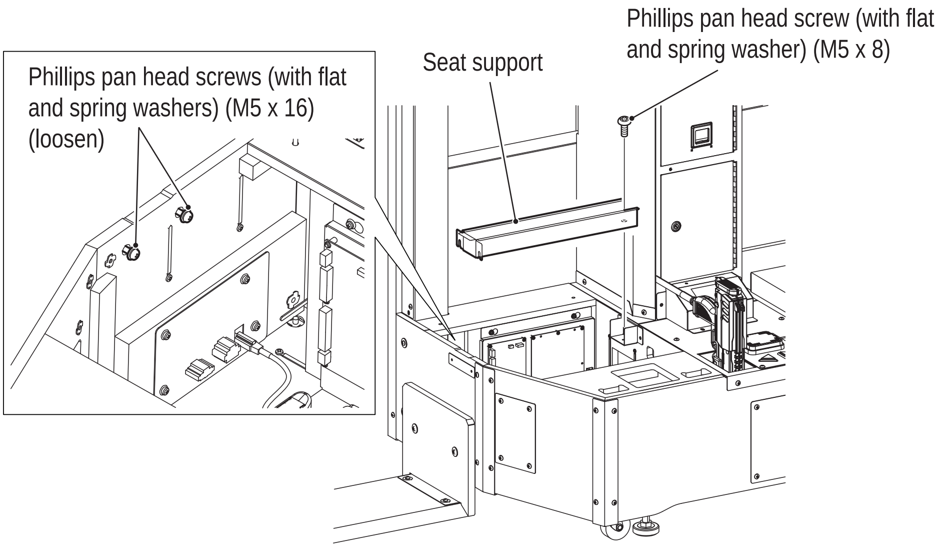
- **The PC board is vulnerable to static electricity. If a worker handles the PC board while statically charged, the parts on the PC board may be damaged. Touch a grounded metal surface, etc. before handling the PC board to remove static electricity on your body.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

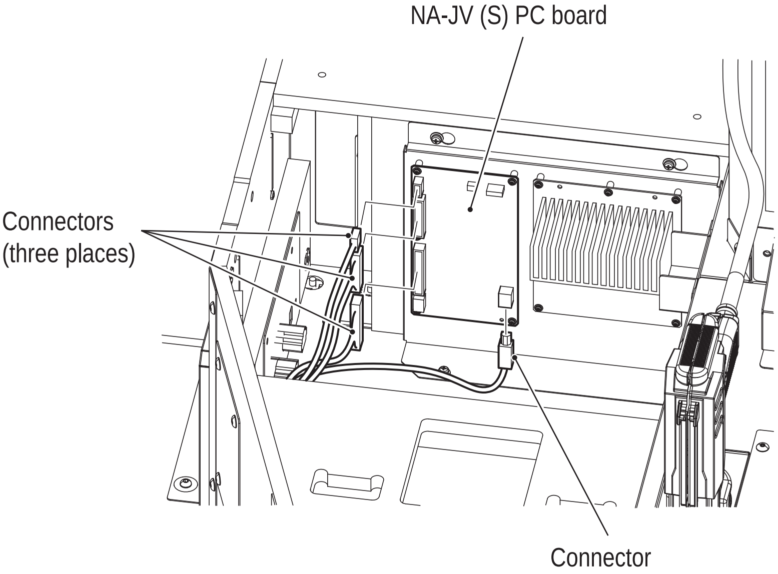
2 Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).


Torx bolt
(M5 x 40)
Flat washer
(ø6.5 x 22 x t1.6)
Seat (R)

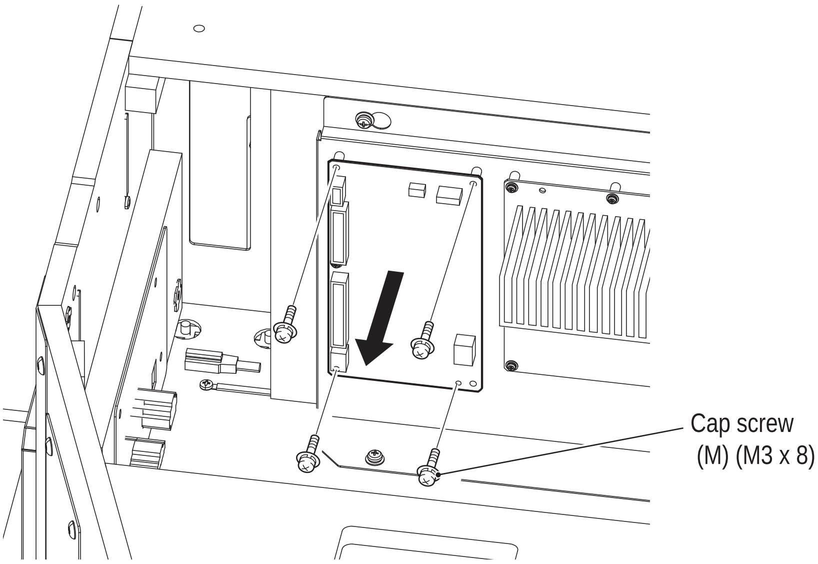
3 Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), and loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16) to remove the seat support.


Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)
Seat support
Phillips pan head screw (with flat and spring washer) (M5 x 8)

4 Disconnect the four connectors.


NA-JV (S) PC board
Connectors
(three places)
Connector

5 Remove the four cap screws (M) (M3 x 8), and remove the NA-JV (S) PC board.


Cap screw
(M) (M3 x 8)

6 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **After replacing the NA-JV (S) PC board, perform an I/O check in the test mode to confirm that there are no problems (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**

(3) Replacing the AMP PC Board

WARNING

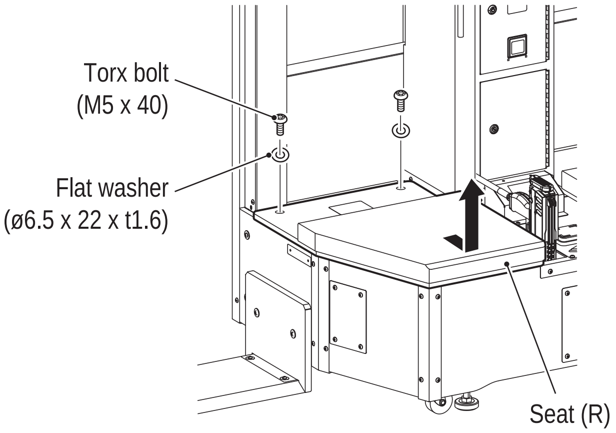
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

NOTICE

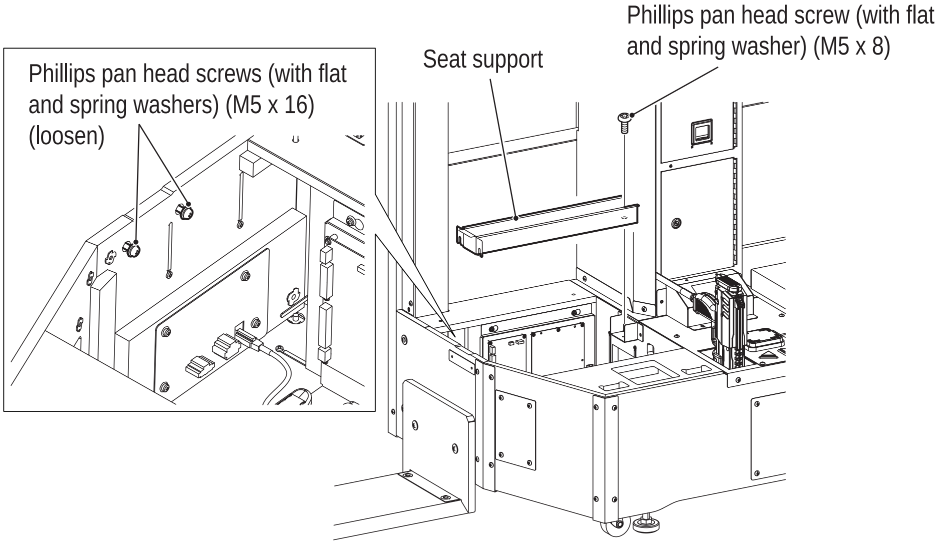
- **The PC board is vulnerable to static electricity. If a worker handles the PC board while statically charged, the parts on the PC board may be damaged. Touch a grounded metal surface, etc. before handling the PC board to remove static electricity on your body.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

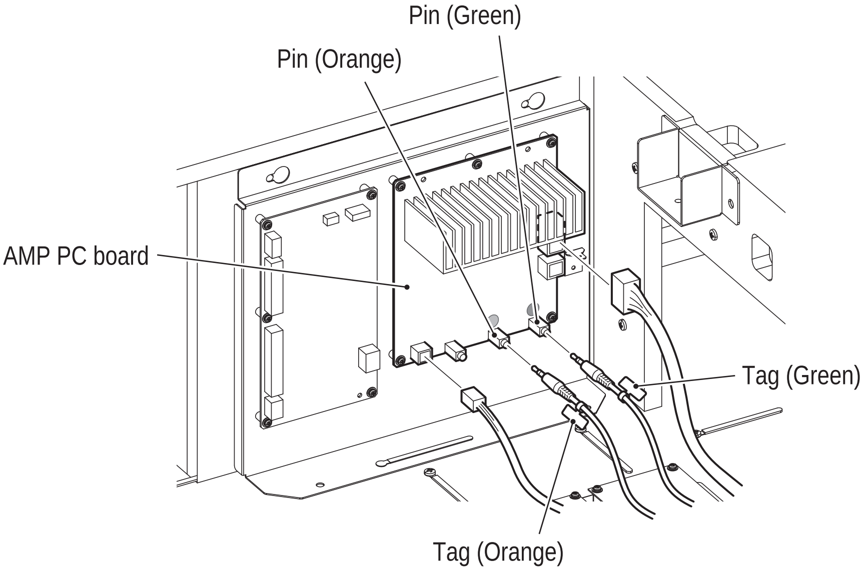
2 Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).


Torx bolt
(M5 x 40)
Flat washer
(ø6.5 x 22 x t1.6)
Seat (R)

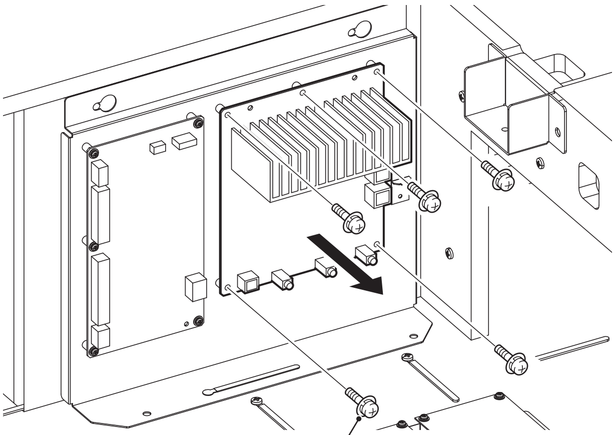
3 Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.


Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)
Seat support
Phillips pan head screw (with flat and spring washer) (M5 x 8)

4 Disconnect the four connectors.



5 Remove the five cap screws (M) (M3 x 8), and remove the AMP PC board.



Cap screw (M)
(M3 x 8)

6 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Connect the connector aligning the indication on the tag of the harness and the connector indication (Orange/Green) on the board.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **After replacing the AMP PC board, check the sound volume with the sound test in the test mode (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**

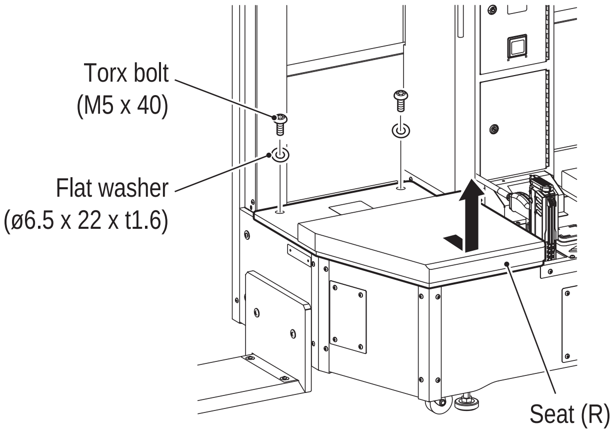
(4) Replacing the Switching Regulator (24V)

⚠WARNING

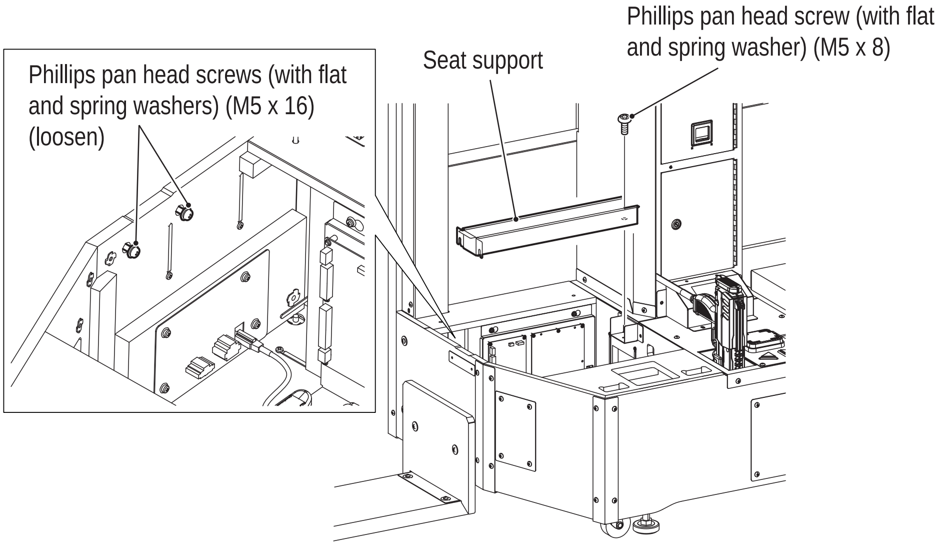
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

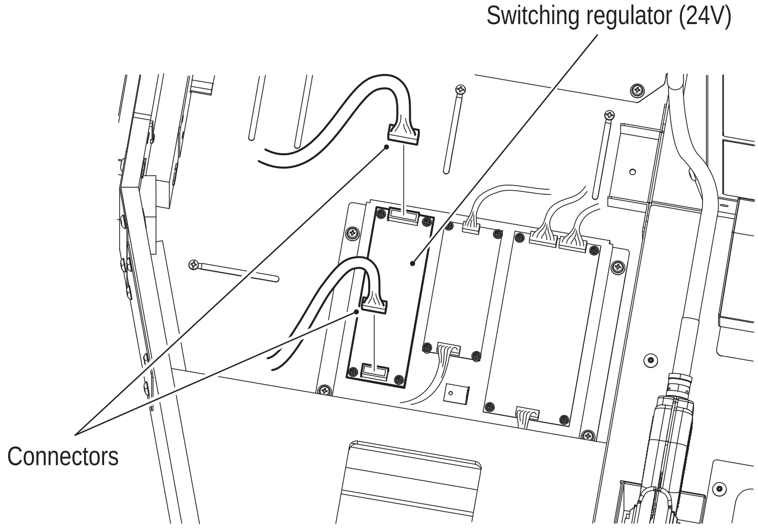
2 Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).


Torx bolt
(M5 x 40)
Flat washer
(ø6.5 x 22 x t1.6)
Seat (R)

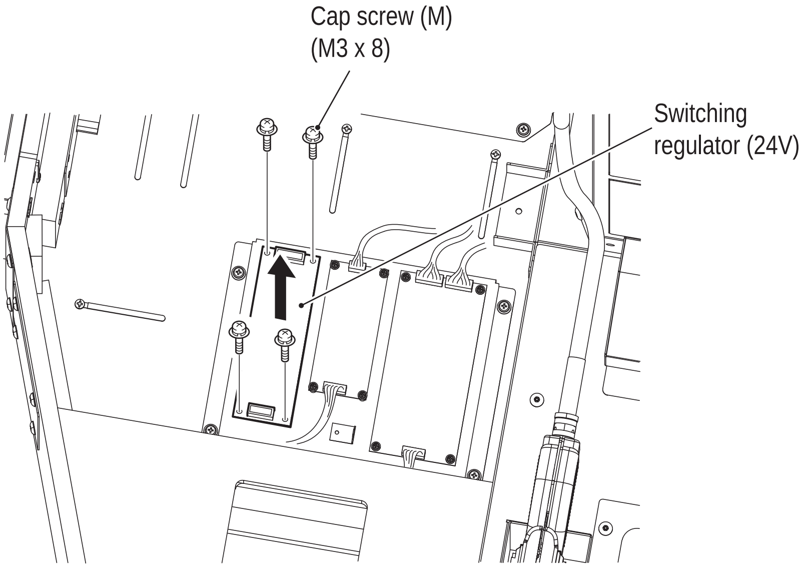
3 Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.


Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)
Seat support
Phillips pan head screw (with flat and spring washer) (M5 x 8)

4 Disconnect the two connectors.


Switching regulator (24V)
Connectors

5 Remove the four cap screws (M) (M3 x 8), and remove the switching regulator (24V).


Cap screw (M)
(M3 x 8)
Switching
regulator (24V)

6 To install, perform the procedure in reverse.

NOTICE

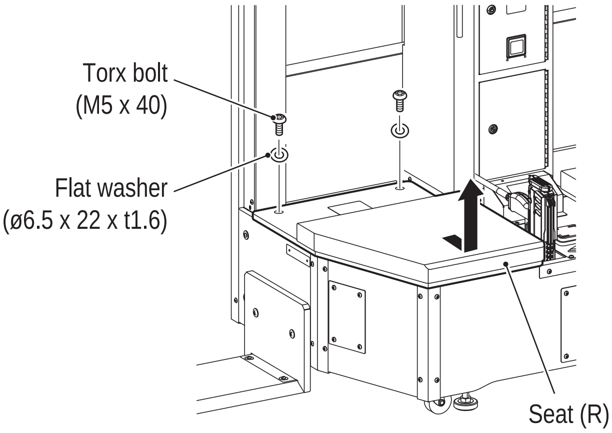
- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**

(5) Replacing the Switching Regulator (5V)

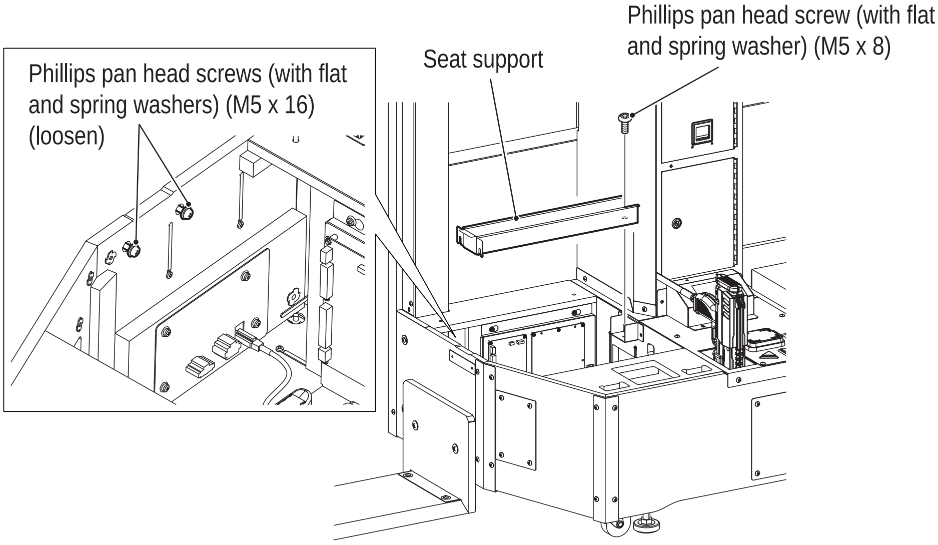
⚠WARNING

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

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).

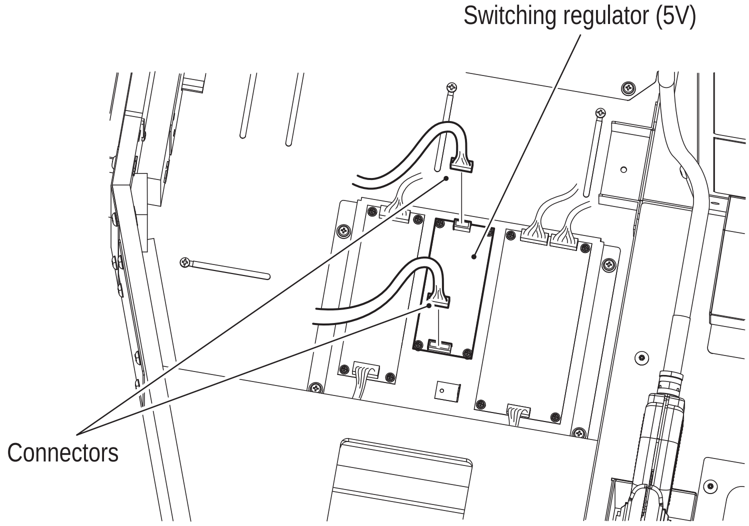

Torx bolt (M5 x 40)
Flat washer (ø6.5 x 22 x t1.6)
Seat (R)

3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.

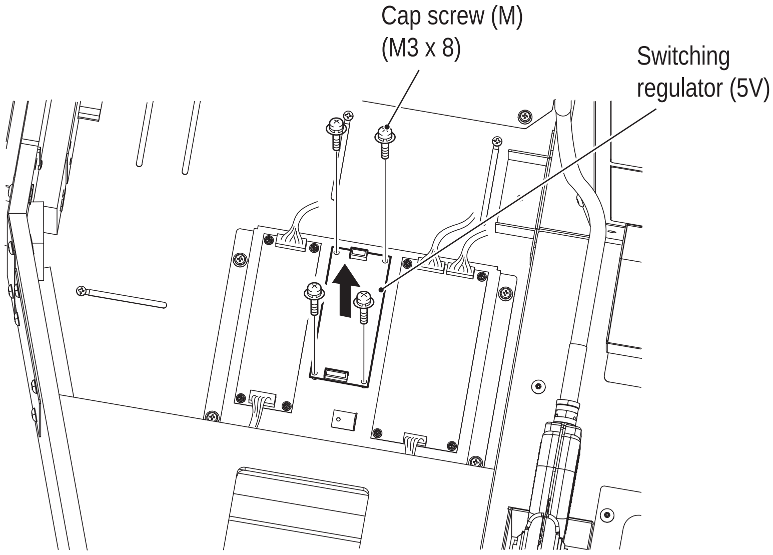

Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)
Seat support
Phillips pan head screw (with flat and spring washer) (M5 x 8)

-Must be performed by a technician-

4 Disconnect the two connectors.


Switching regulator (5V)
Connectors

5 Remove the four cap screws (M) (M3 x 8), and remove the switching regulator (5V).


Cap screw (M)
(M3 x 8)
Switching
regulator (5V)

6 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**

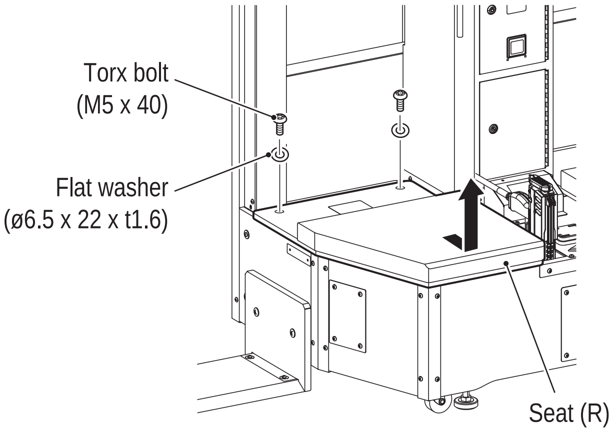
(6) Replacing the Switching Regulator (12V)

⚠WARNING

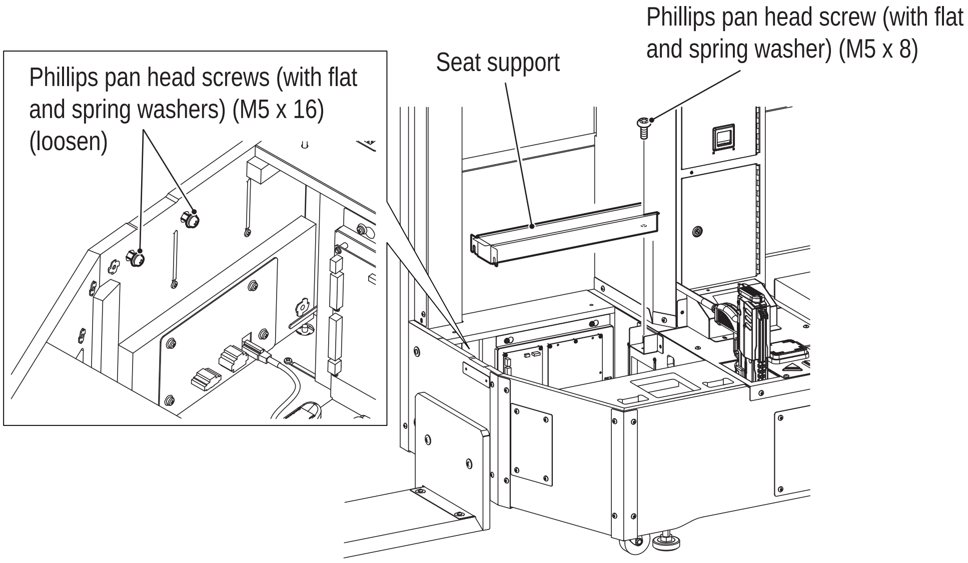
- **Make sure to turn off the main power switch in order to prevent electric shocks, accidents or injury of the workers and other people and the damage to the electric circuits.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

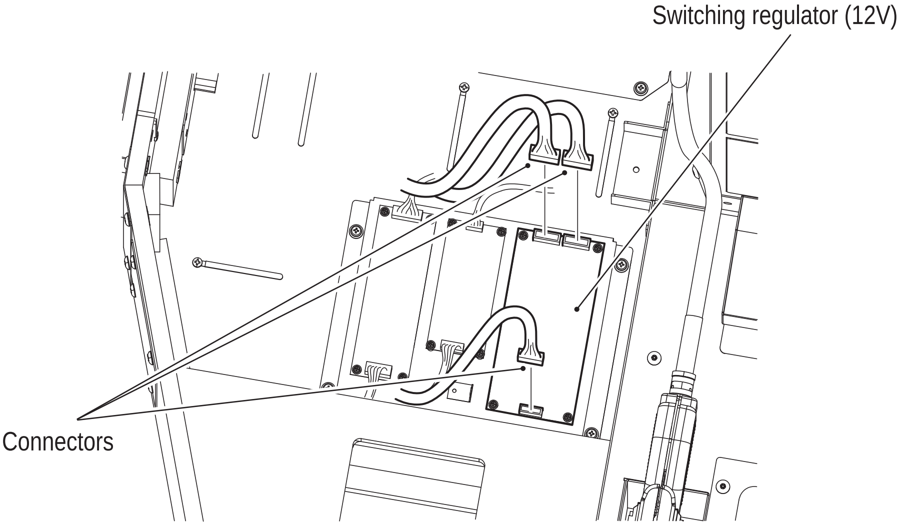
2 Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).


Torx bolt
(M5 x 40)
Flat washer
(ø6.5 x 22 x t1.6)
Seat (R)

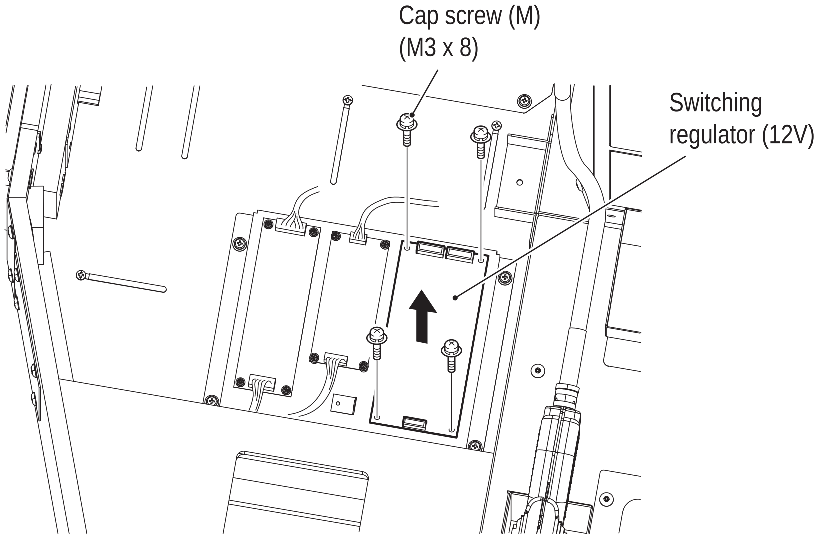
3 Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.


Phillips pan head screws (with flat and spring washers) (M5 x 16) (loosen)
Seat support
Phillips pan head screw (with flat and spring washer) (M5 x 8)

4 Disconnect the three connectors.


Switching regulator (12V)
Connectors

5 Remove the four cap screws (M) (M3 x 8), and remove the switching regulator (12V).


Cap screw (M)
(M3 x 8)
Switching
regulator (12V)

6 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**

(7) Replacing the Coin Selectors (US Specification)

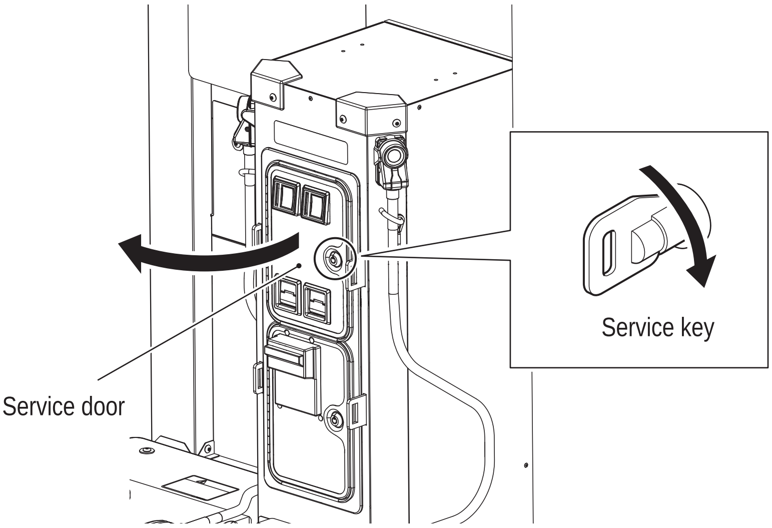
⚠WARNING

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

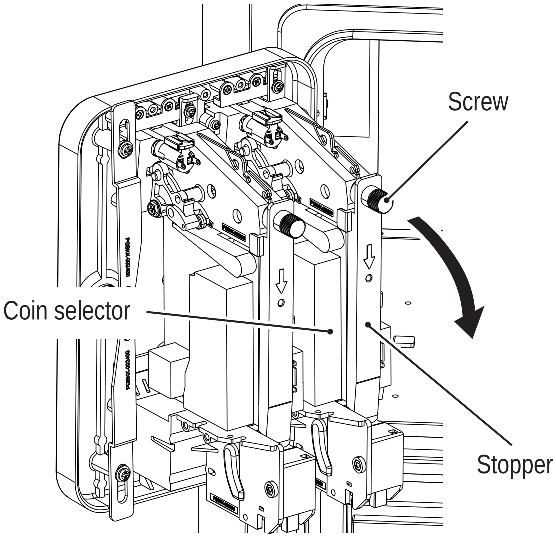
*** The coin selectors are to the provided yourself.**

1 Turn off the main power switch (see “8A-18 Turning on of the Main Power Switch” on page 142).

2 Open the service door using the service key supplied with the machine.



3 Loosen the screw and pull the stopper toward you to unlock. Then, remove the coin selector.



4 To install, perform the procedure in reverse.

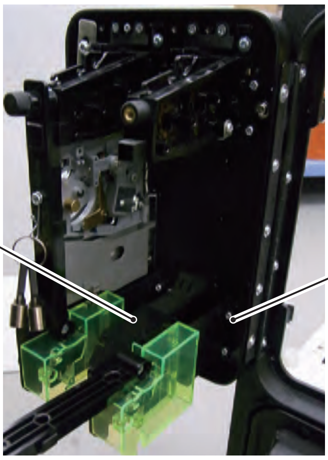
-Must be performed by a technician-

(8) Replacing the Coin Micro Switch (US Specification)

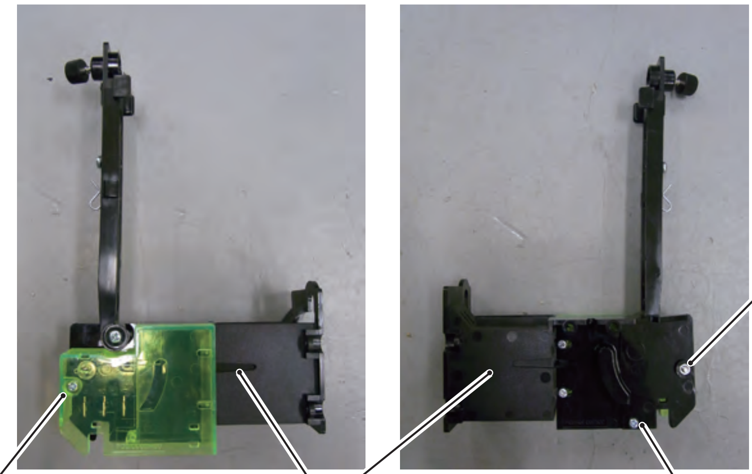
⚠WARNING

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

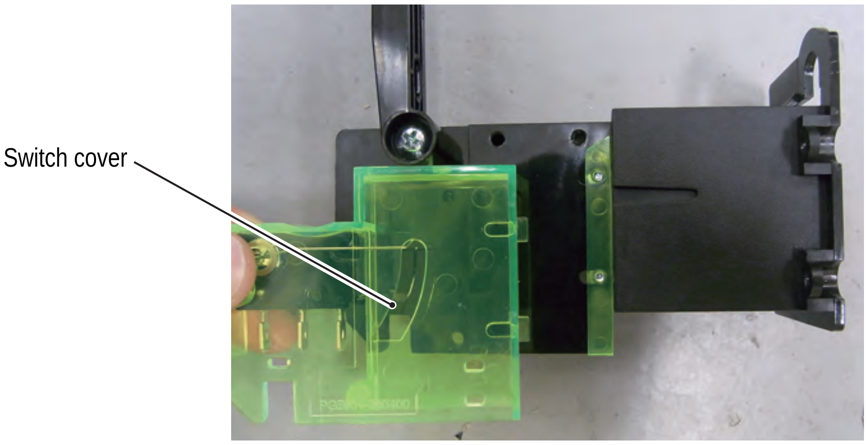
1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the coin selector (see “8B-5-1 (7) Replacing the Coin Selectors” on page 168).
3. Disconnect the two faston terminals.
4. Remove the four Phillips pan head screws (M3 x 8), and remove the coin selector base (under).


Coin selector base
(under)
Phillips pan head screw
(M3 x 8)

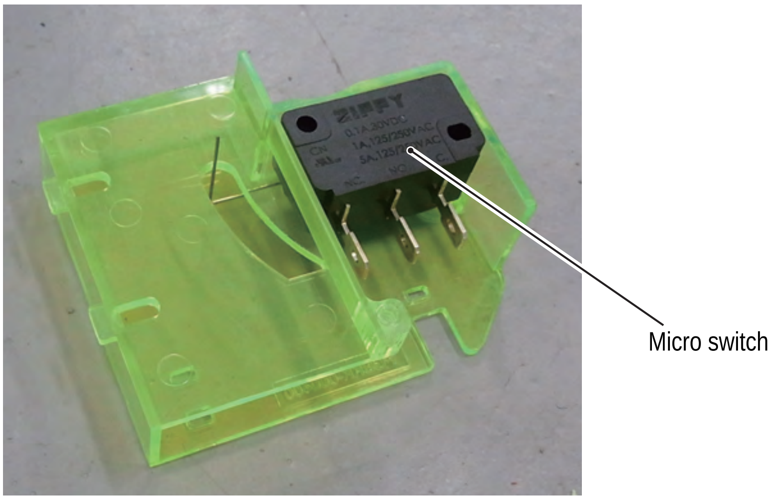
5. Remove one tapping screw (3 x 8), one Phillips pan head screw (M3 x 24) and one nut (M3) from the coin selector base (under).


Nut (M3)
Phillips pan head screw (M3 x 24)
Coin selector base
(under)
Tapping screw (3 x 8)

6 Slide the switch cover to remove it.



7 Remove the micro switch.



8 To install, perform the procedure in reverse.

NOTICE

- **Insert the faston terminal fully when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **There are two faston terminals. Refer to the above figure when connecting the faston terminal.**

(9) Replacing the Bill Validator (US Specification)

⚠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 main power switch before starting work.**

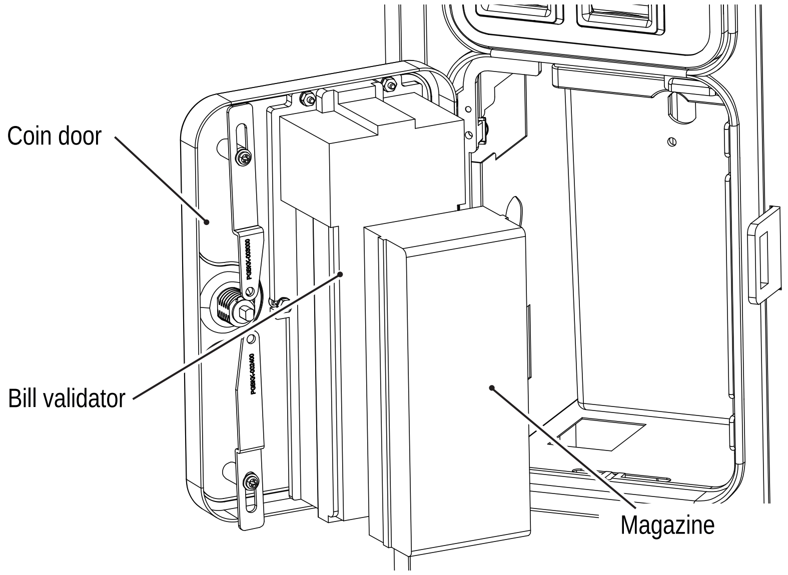
*** The bill validator is to the provided yourself.**

*** The fit and function of the bill validator have been confirmed with MEI AE2454U3.**

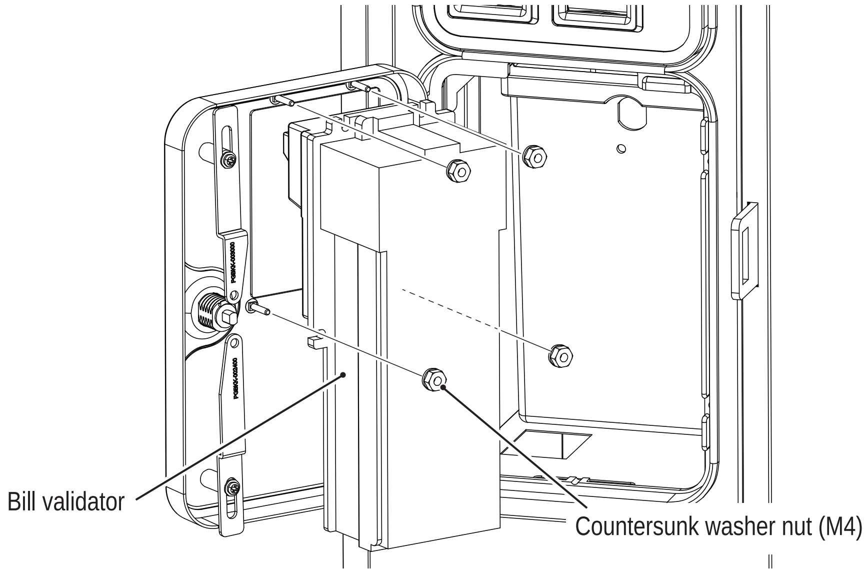
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Open the coin door using the supplied coin door key.

3 Remove the magazine from the bill validator.



4 Disconnect the connector and four countersunk washer nuts (M4), and remove the bill validator.



5 To install, perform the procedure in reverse.

NOTICE

- **Be careful not to pinch the connector or the harness during attachment.**

(10) Replacing the CASHFLOW (EU Specification)

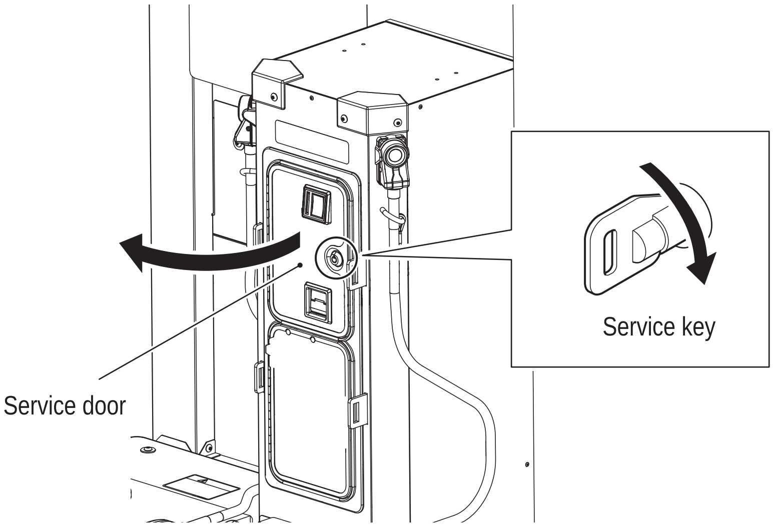
⚠WARNING

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

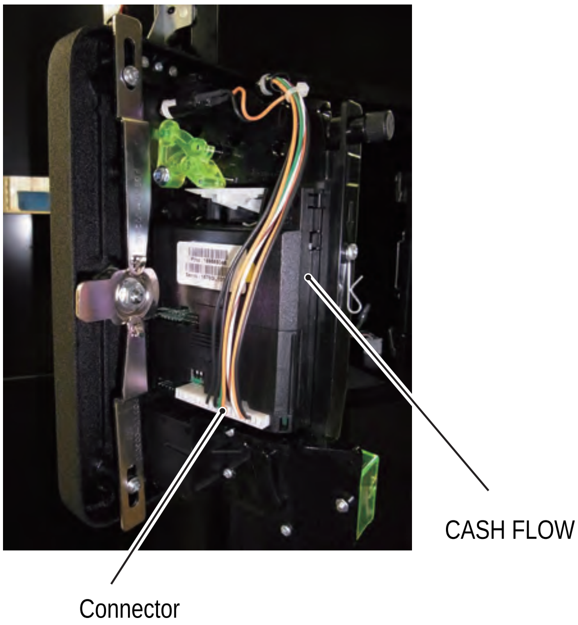
*** The CASHFLOW is to the provided yourself.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

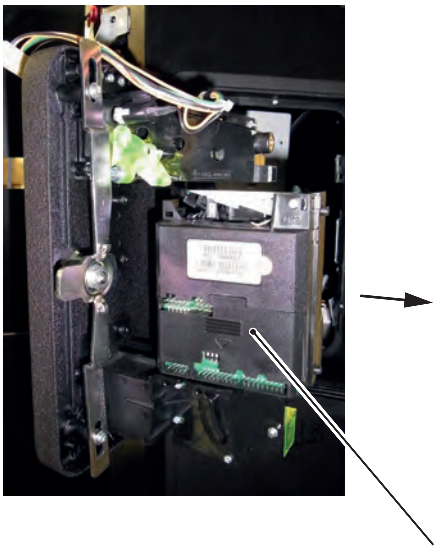
2 Open the service door using the supplied service key.



3 Disconnect the connector.



4 Loosen the screw and pull the coin selector base toward you to unlock. Then, remove the CASHFLOW.



5 To install, perform the procedure in reverse.

NOTICE

- **Be careful not to pinch the connector or the harness during attachment.**

(11) Replacing the PIN Pad

WARNING

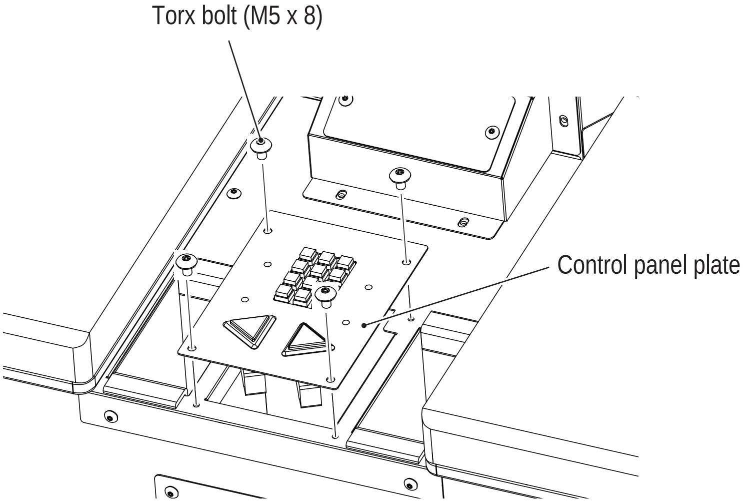
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

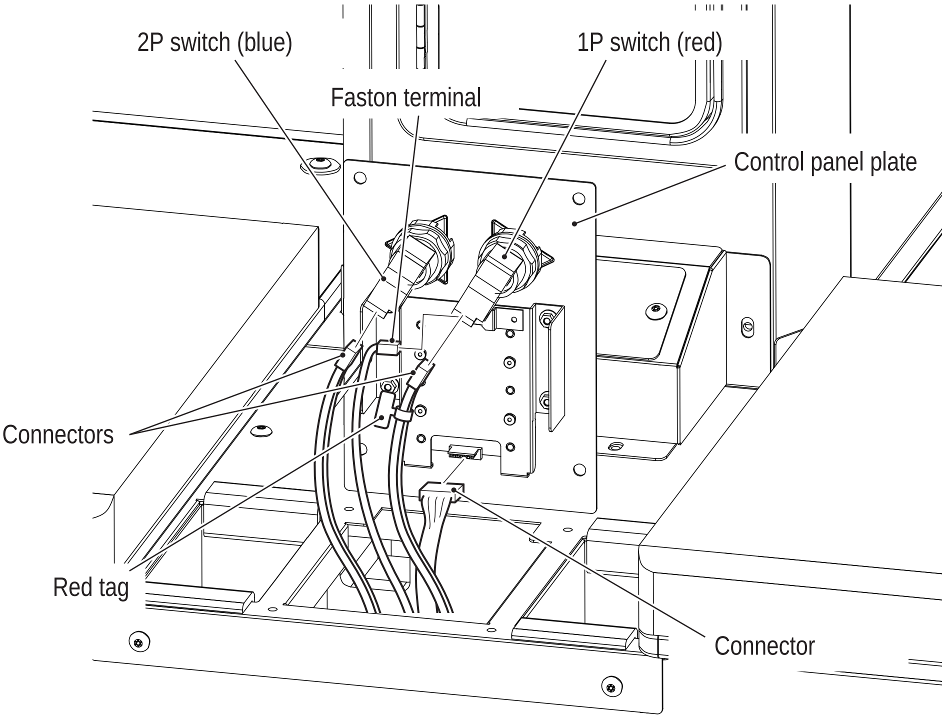
NOTICE

- **The PC board is vulnerable to static electricity. If a worker whose body is statically charged handles the PC board, the PC board parts may be damaged. Touch a grounded metal surface before handling the PC board to remove the static electricity on the body.**

1. Turn off the main power switch (see "8A-18 Turning on the Main Power Switch" on page 142).

2. Remove the four torx bolts (M5 x 8). Then, disconnect the three reverse side connectors and one faston terminal and remove the control panel plate.

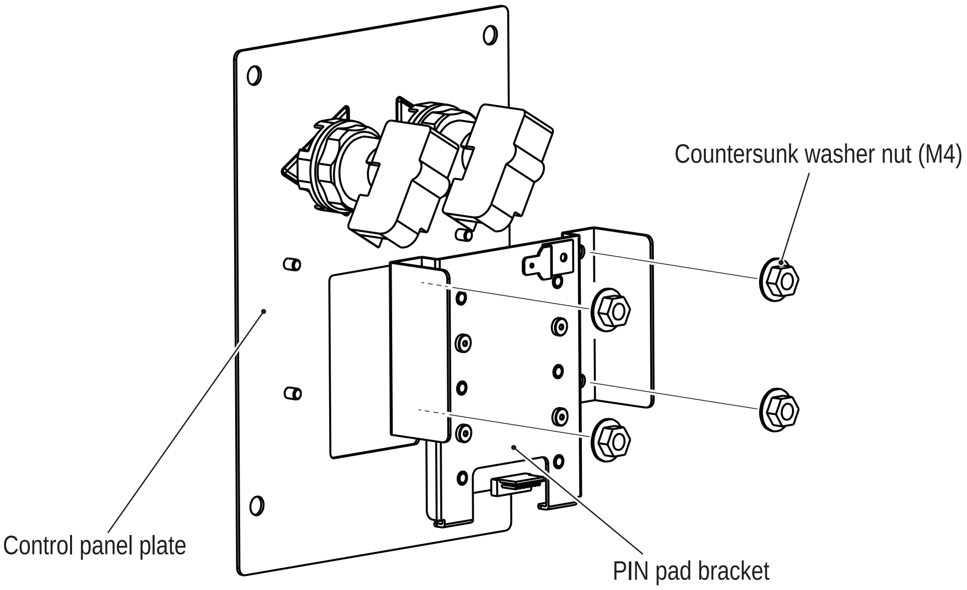

Torx bolt (M5 x 8)
Control panel plate


2P switch (blue)
1P switch (red)
Faston terminal
Control panel plate
Connectors
Red tag
Connector

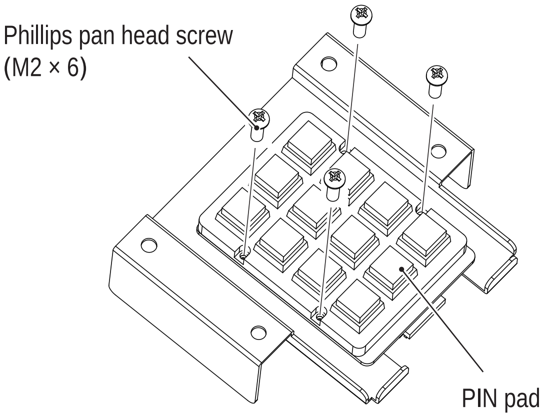
NOTICE

- **Be careful not to wrongly insert the connectors for 1P switch and 2P switch when mounting.**

3 Remove the four countersunk washer nuts (M4) and remove the PIN pad bracket from the control panel plate.



4 Remove the four Phillips pan head screws (M2 x 6) and remove the PIN pad from the PIN pad bracket to replace.



5 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **After replacing the PIN pad, check that it operates properly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**
- **Be careful not to wrongly insert the illuminated switch connectors when mounting (see “8B-5-1 (12) Replacing the Illuminated Switches and LED Lamps” on page 176).**

(12) Replacing the Illuminated Switches and LED Lamps

⚠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 main power switch before starting work.**

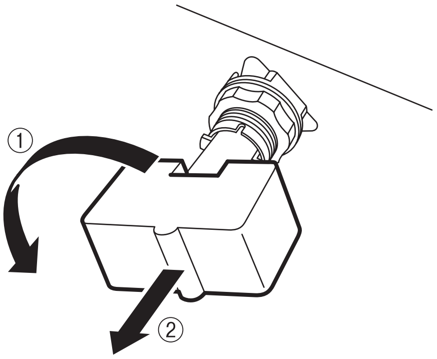
NOTICE

- **The PC board is vulnerable to static electricity. If a worker whose body is statically charged handles the PC board, the PC board parts may be damaged. Touch a grounded metal surface before handling the PC board to remove the static electricity on the body.**

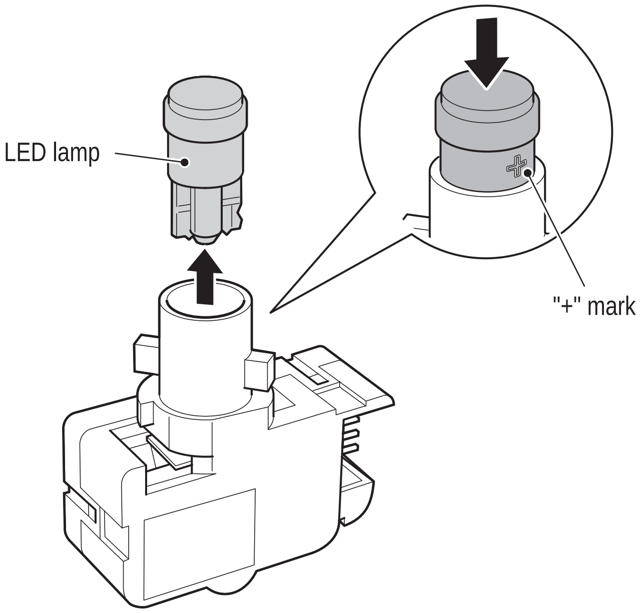
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the control panel plate (see “8B-5-1 (11) Replacing the PIN Pad” on page 174).

3 Turn the illuminated switch part 90 degrees and pull it out toward you.



4 Pull the LED lamp out from the illuminated switch.

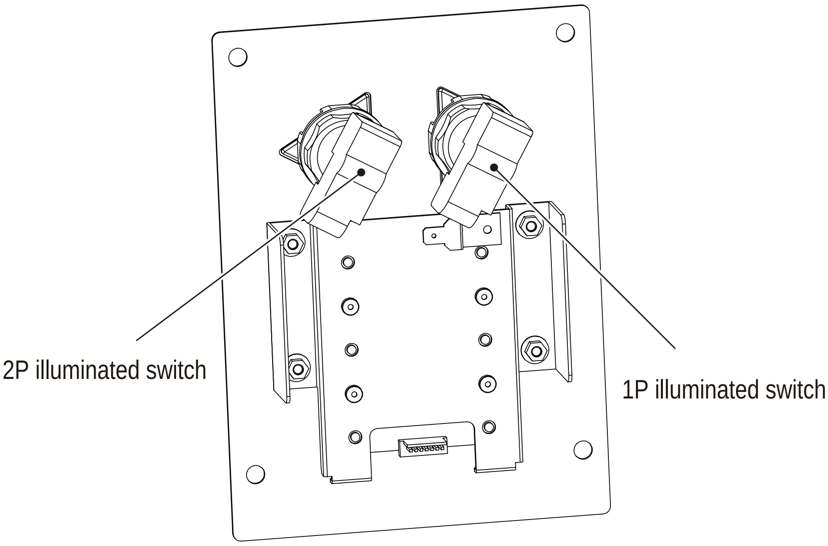


5 Replace the illuminated switch or LED lamp.

6 To install, perform the procedure in reverse.
Pay attention to the direction of LED lamp when mounting the LED lamp.

NOTICE

- **Securely turn the illuminated switch part until it makes a clicking sound when mounting.**
- **Set the direction of the illuminated switch part as shown in the figure when mounting.**



- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **After replacement, check the operation of the illuminated switch and lighting of the LED lamp (see “7-4-4 (7) LED TEST” on page 61).**
- **Pay attention to the LED lamp polarity when mounting the LED lamp.**

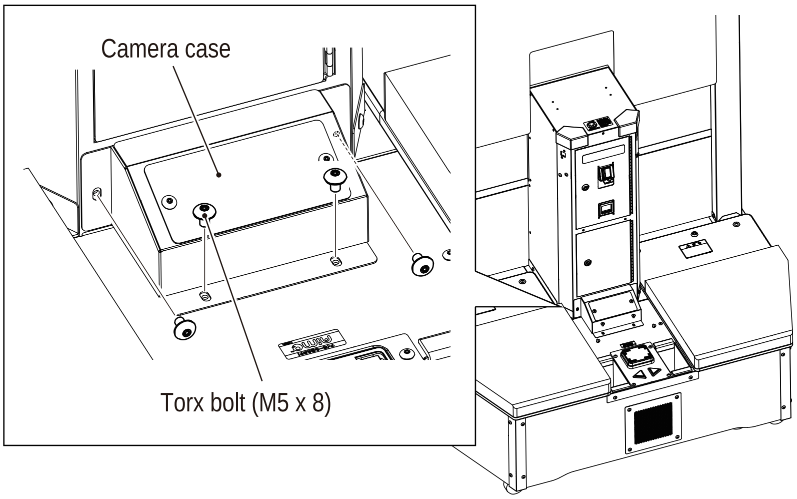
(13) Replacing the Authentication Camera

⚠WARNING

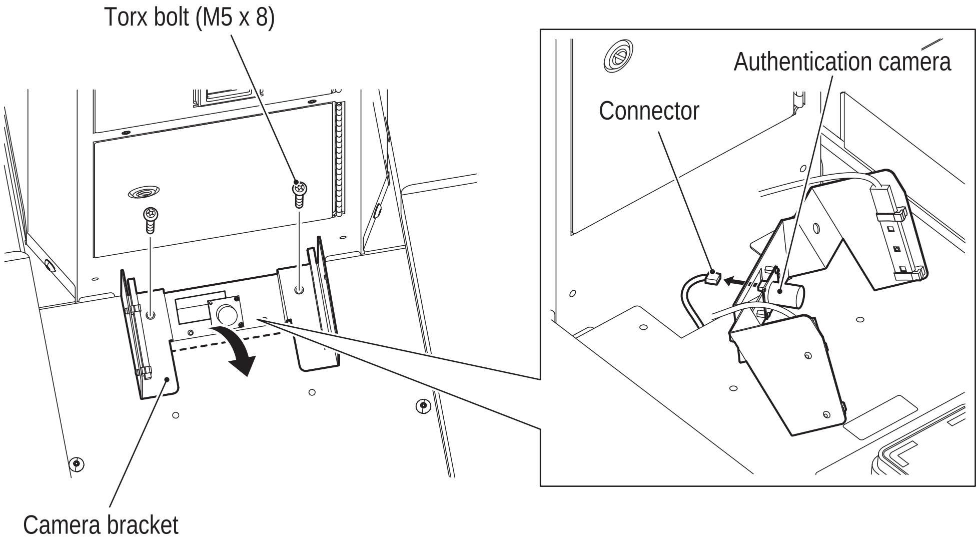
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

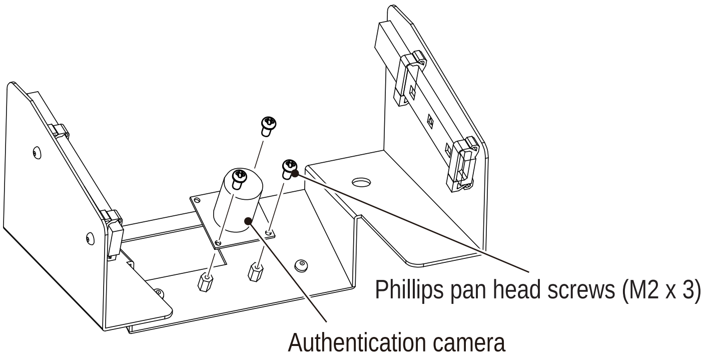
2. Remove the four torx bolts (M5 x 8), and remove the camera case.


Camera case
Torx bolt (M5 x 8)

3. Remove the two torx bolts (M5 x 8), pull the camera bracket toward you, and disconnect the connector of the authentication camera.


Torx bolt (M5 x 8)
Authentication camera
Connector
Camera bracket

4 Remove the three Phillips pan head screws (M2 x 3), and remove the authentication camera.


Phillips pan head screws (M2 x 3)
Authentication camera

5 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**

(14) Replacing the Camera Tape LED

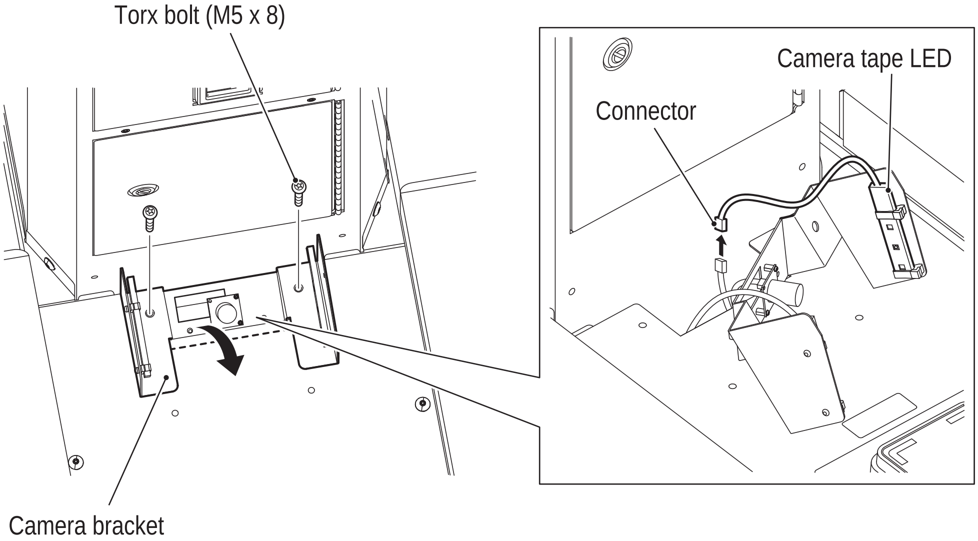
⚠WARNING

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

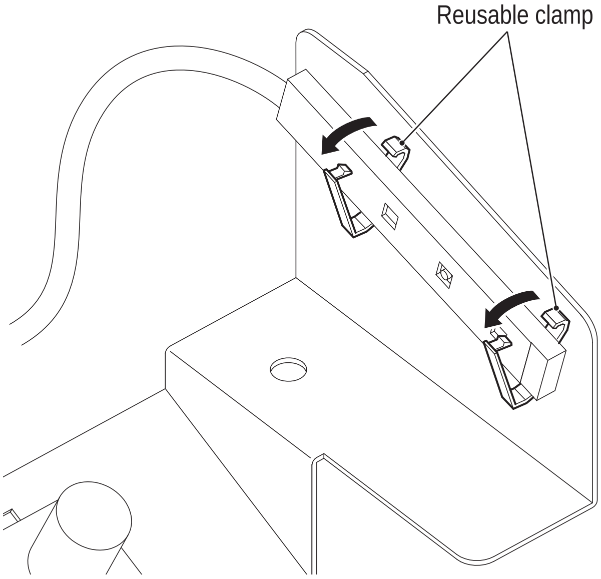
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the four torx bolts (M5 x 8), and remove the camera case (see **2** “8B-5-1 (13) Replacing the Authentication Camera” on page 178).

3 Remove the two torx bolts (M5 x 8) of the camera bracket, pull the camera bracket toward you, and disconnect the connector of the camera tape LED to be replaced.



4 Unlock the two locks of the reusable clamp, and remove the camera LED.



5 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**

8B-5-2 Gun Assembly

The replacement procedure of the gun assembly of the 1P side is explained in this section. Replace the gun assembly of the 2P side following the same procedure.

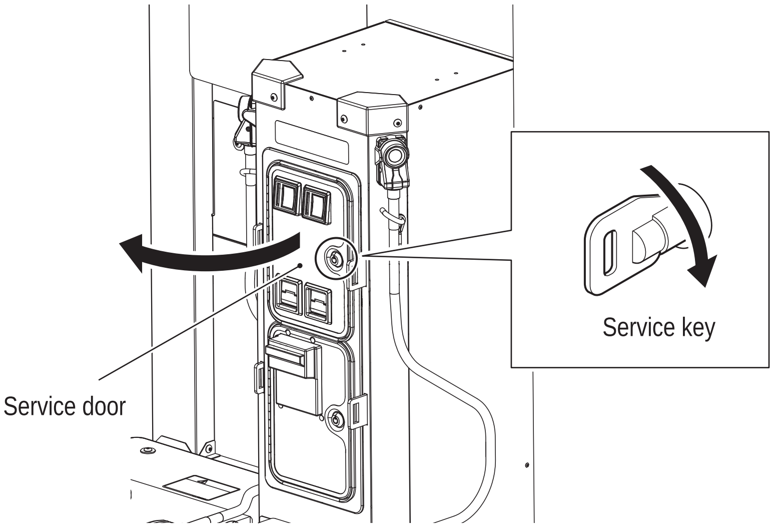
(1) Replacing the Gun Assembly

⚠WARNING

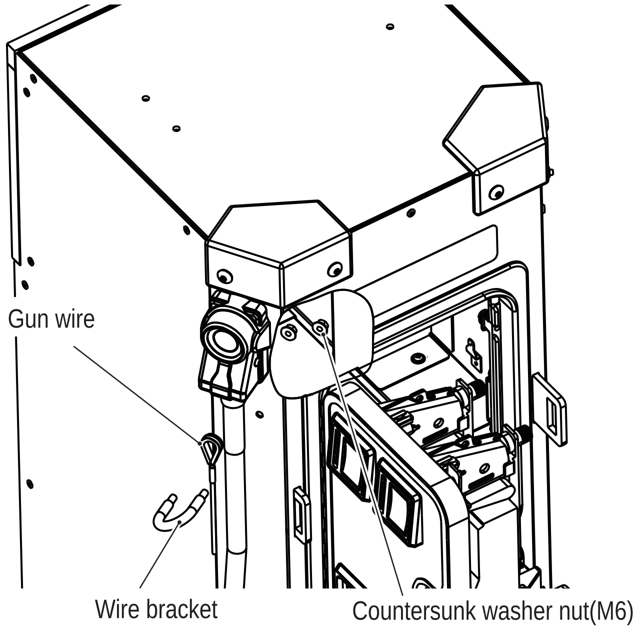
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

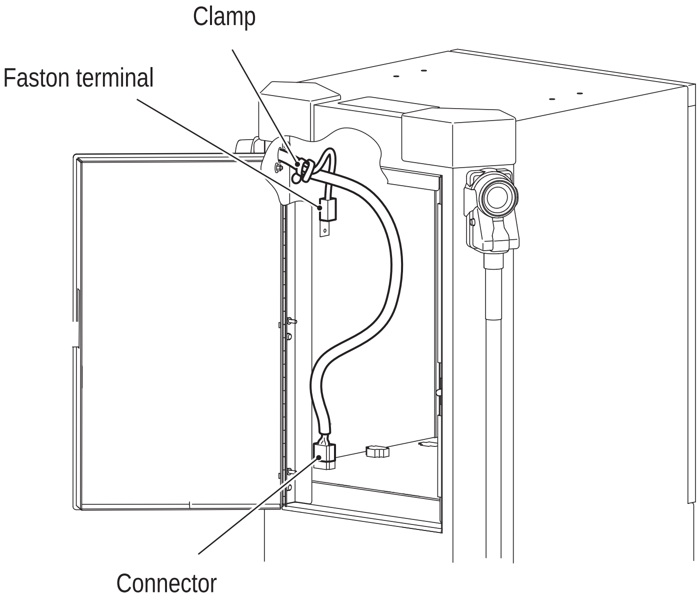
2 Open the service door with the supplied service key.



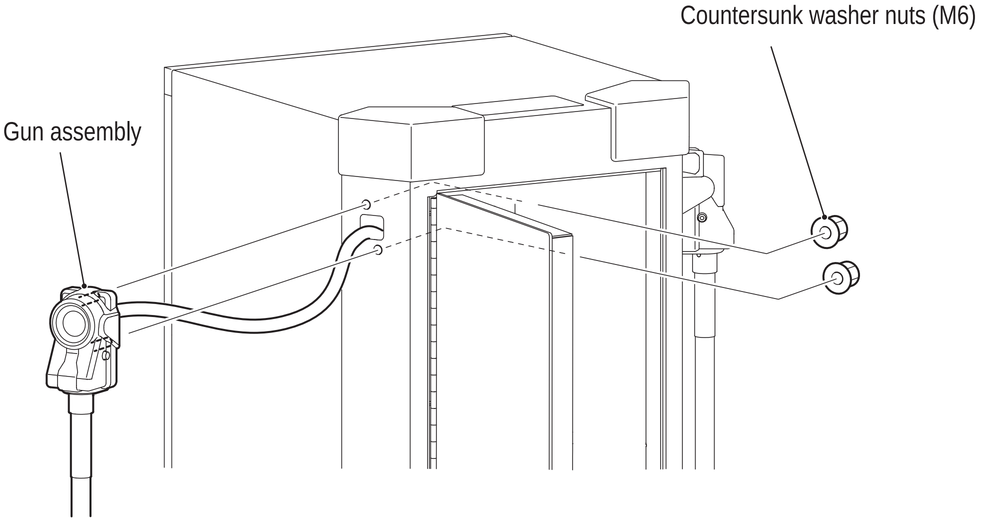
3 Remove the two countersunk washer nuts (M5), and remove the wire bracket.


Gun wire
Wire bracket
Countersunk washer nut(M6)

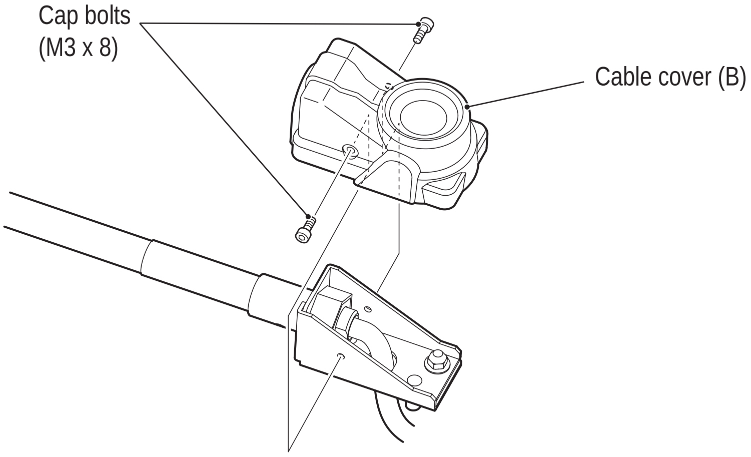
4 Remove the clamp, and disconnect the faston terminal and connector.


Clamp
Faston terminal
Connector

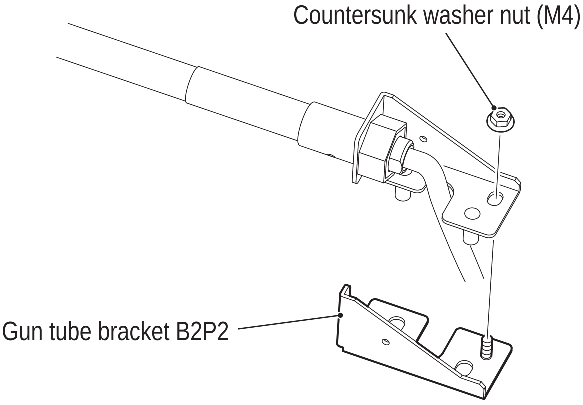
5 Remove the two countersunk washer nuts (M6), and remove the gun assembly from the coin tower.


Countersunk washer nuts (M6)
Gun assembly

6 Remove the two cap bolts (M3 x 8), and remove the cable cover (B).


Cap bolts
(M3 x 8)
Cable cover (B)

7 Remove the countersunk washer nut (M4), and remove the gun tube bracket B2P2.



8 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Make sure to perform an operation check of the gun assembly after replacement (see "7-4-4 Input / Output Test (I/O TEST)" on page 53).**

(2) Replacing the LED Unit

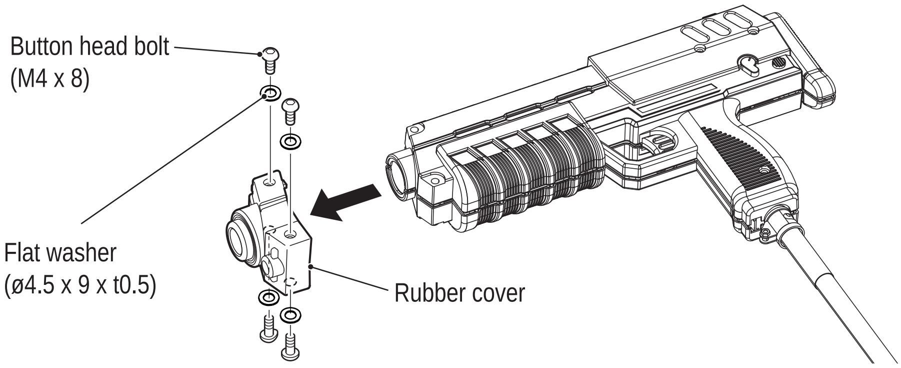
⚠WARNING

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

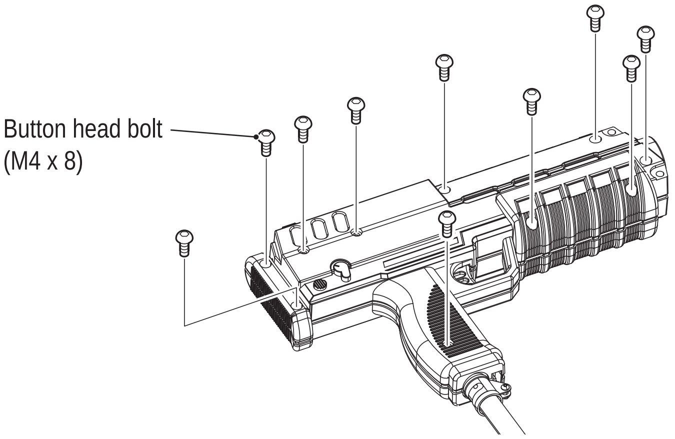
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

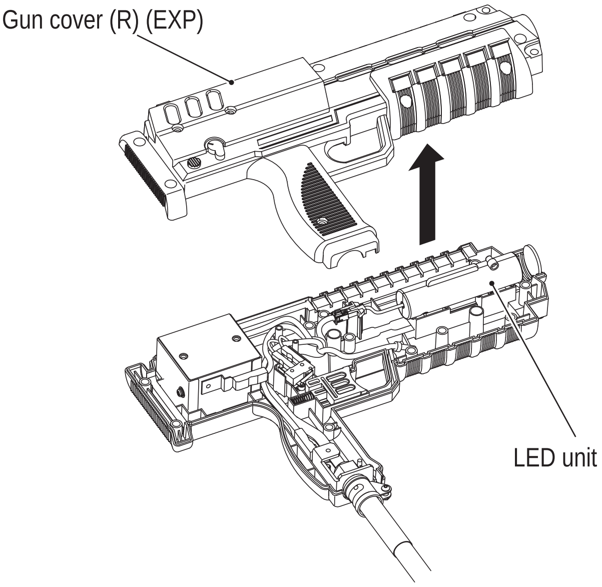
3 Remove the four button head bolts (M4 x 8) and four flat washers (ø4.5 x 9 x t0.5), and remove the rubber cover.


Button head bolt
(M4 x 8)
Flat washer
(ø4.5 x 9 x t0.5)
Rubber cover

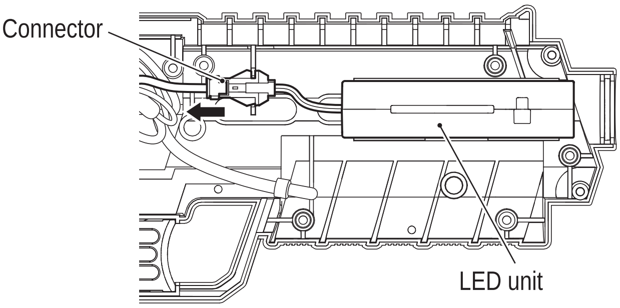
4 Remove the 10 button head bolts (M4 x 8).


Button head bolt
(M4 x 8)

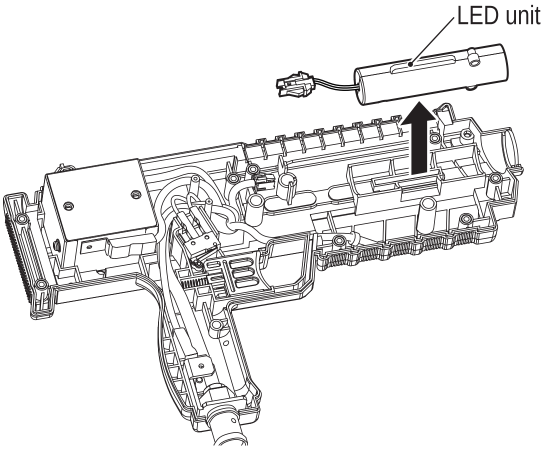
5 Remove the gun cover (R) (EXP).



6 Disconnect the connector.



7 Remove the LED unit.



8 To install, perform the procedure in reverse.

NOTICE

- **Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Make sure to perform an operation check of the gun assembly after replacement (see "7-4-4 Input / Output Test (I/O TEST)" on page 53).**

(3) Replacing the Vibration Motor

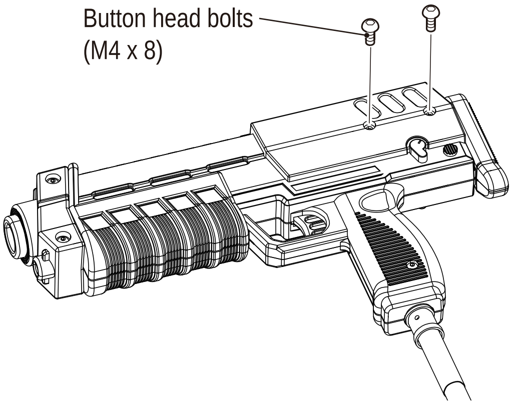
⚠WARNING

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

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

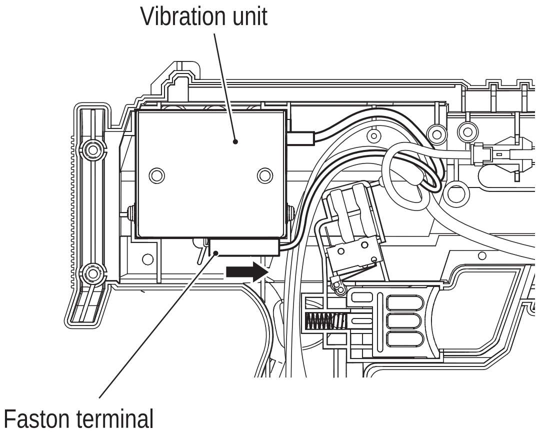
2 Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

3 Remove the two button head bolts (M4 x 8).

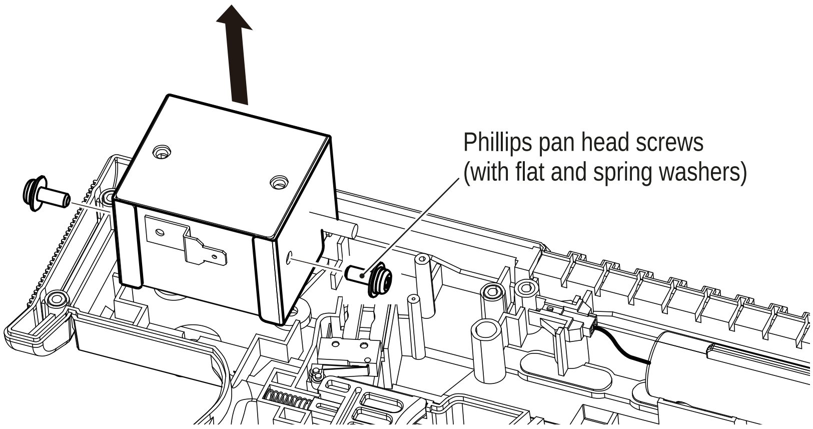


4 Remove the gun cover (R) (see **3** to **5** of “8B-5-2 (2) Replacing the LED Unit” on page 186).

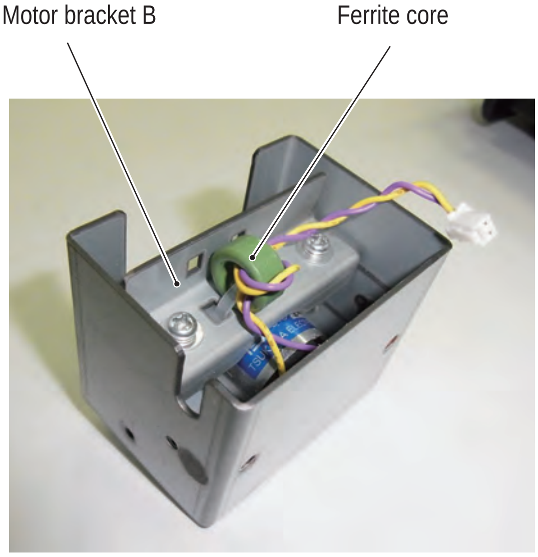
5 Remove the faston terminal.



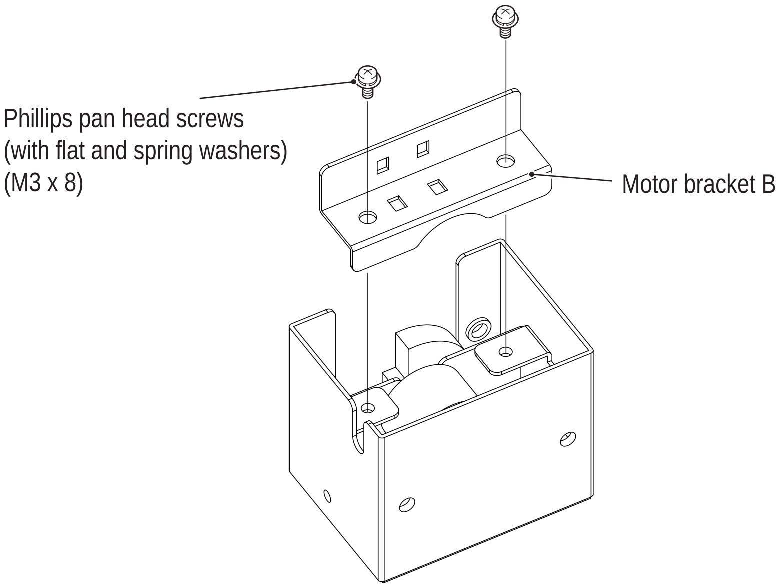
6 Remove the two Phillips pan head screws (with flat and spring washers) (M3 x 8) and remove the motor bracket cover from the vibration unit. Then, disconnect the motor connector.


Phillips pan head screws
(with flat and spring washers)

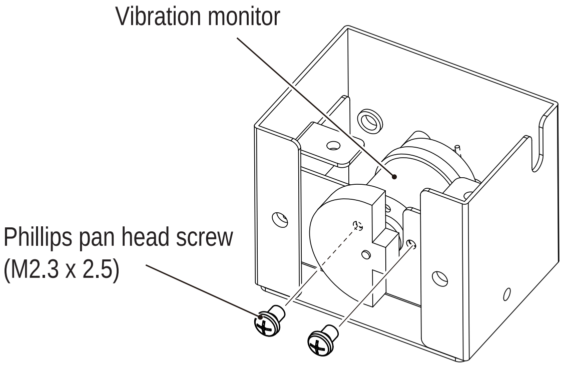
7 Remove motor harness wound in a ferrite core.


Motor bracket B
Ferrite core

8 Remove the two Phillips pan head screws (with flat and spring washers) (M3 x 8) and remove the motor bracket B.


Phillips pan head screws
(with flat and spring washers)
(M3 x 8)
Motor bracket B

9 Remove the two Phillips pan head screws (M2.3 x 2.5) and remove the vibration motor.


Vibration monitor
Phillips pan head screw
(M2.3 x 2.5)

10 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when mounting.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Mount the winding harness material inside the cover when putting the harness in the vibration unit.**
- **Wind the excessive wire attached to the motor to store in the cover.**
- **After replacement, be sure to check the operation of the gun assembly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**

(4) Replacing the Micro Switch

⚠WARNING

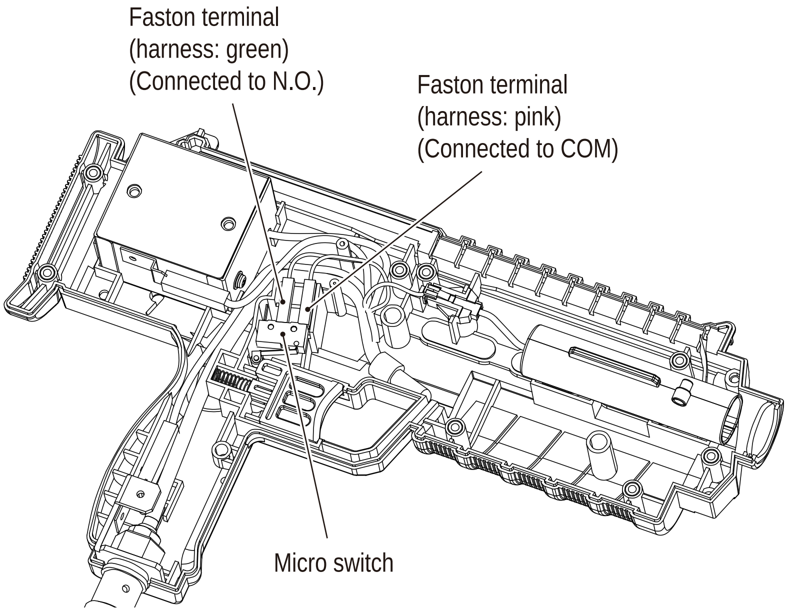
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

3 Remove the gun cover (R) (EXP) (see **3** to **5** of “8B-5-2 (2) Replacing the LED Unit” on page 186).

4 Disconnect the two faston terminals, and remove the micro switch.



5 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Make sure to perform an operation check of the gun assembly after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).**
- **Take care to ensure correct connection of the micro switch connectors.**

(5) Replacing the Gun Tube

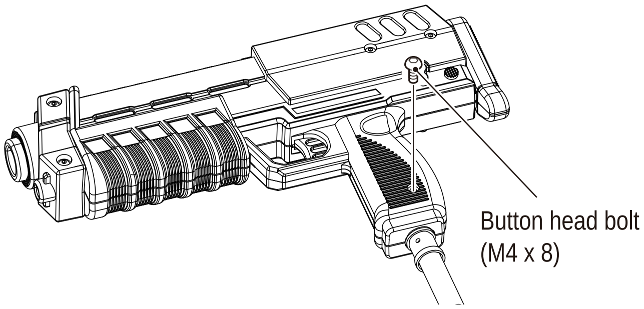
⚠WARNING

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

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

3 Remove the button head bolt (M4 x 8) of the grip of the gun cover (L) (EXP).



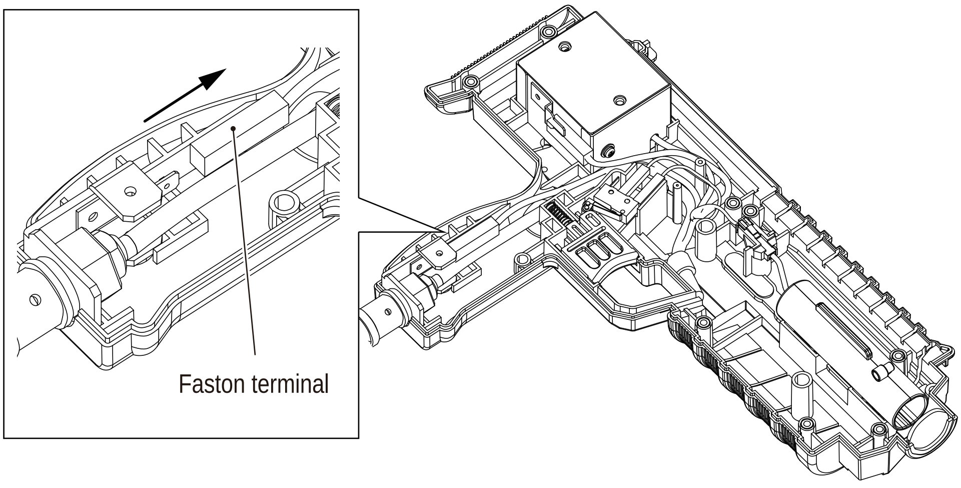
4 Remove the gun cover(R) (EXP) (see **3** to **5** of “8B-5-2 (2) Replacing the LED Unit” on page 186).

5 Disconnect the connector of the LED unit (see **6** of “8B-5-2 (2) Replacing the LED Unit” on page 187).

6 Remove the faston terminal and the connector of the vibration unit (see **5** to **7** of “(3) Replacing the Vibration Motor” on page 188).

7 Remove the two faston terminals of the micro switch (see “8B-5-2 (4) Replacing the Micro Switch” on page 191).

8 Remove the faston terminal at the base of the gun.

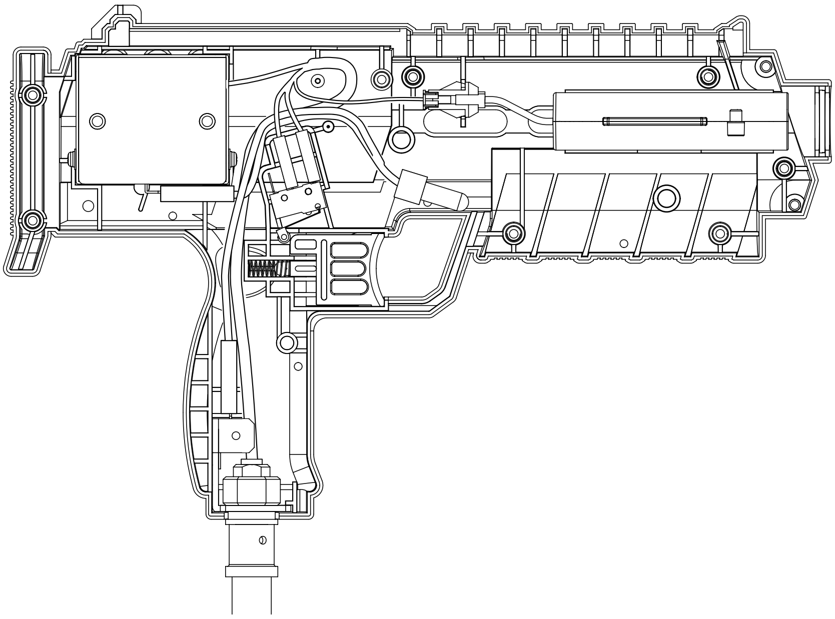


9 Remove the gun tube.

10 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Make sure to perform an operation check of the gun assembly after replacement (see "7-4-4 Input / Output Test (I/O TEST)" on page 53).**
- **Take care to ensure correct connection of the micro switch connectors.**
- **When installing a harness, assemble as shown in the figure below.**



8B-5-3 Side Tower (L), (R) Assembly

The replacement procedure of the R-side side speaker is explained in this section. Replace the L-side speaker following the same procedure.

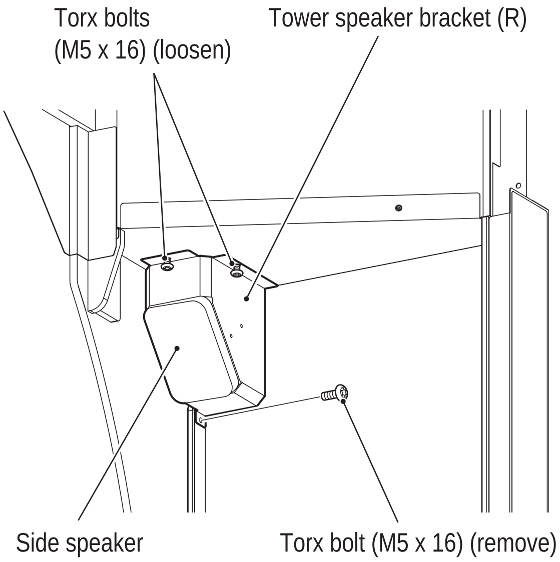
(1) Replacing the Speaker

⚠WARNING

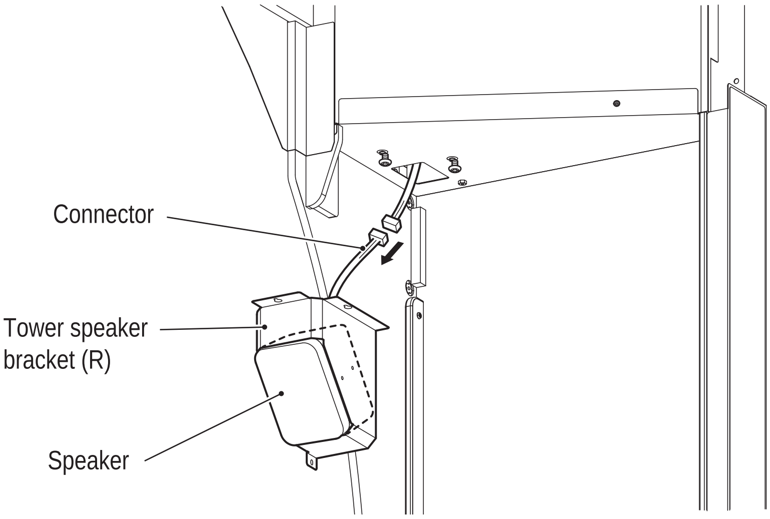
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see "8A-18 Turning on the Main Power Switch" on page 142).

2 Remove one torx bolt (M5 x 16), loosen two torx bolts (M5 x 16), and remove along with the tower speaker bracket (R).

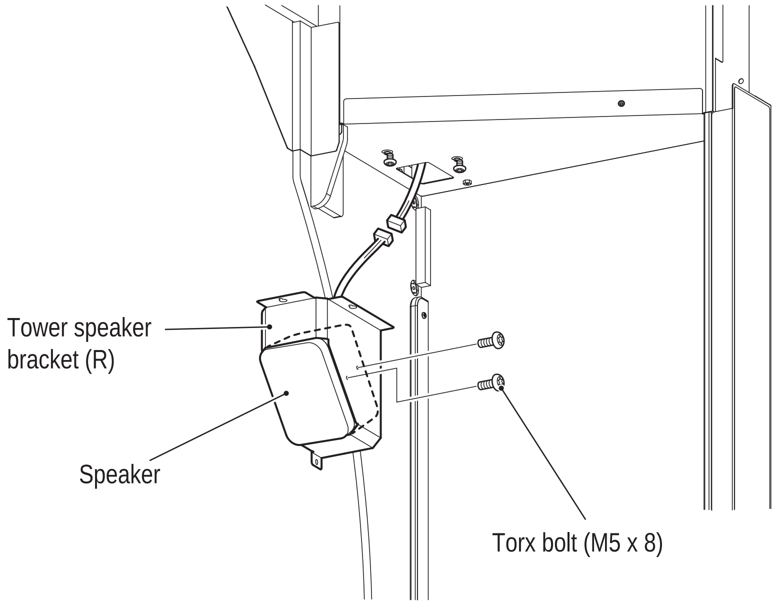

Torx bolts
(M5 x 16) (loosen)
Tower speaker bracket (R)
Side speaker
Torx bolt (M5 x 16) (remove)

3 Disconnect the connector.


Connector
Tower speaker
bracket (R)
Speaker

-Must be performed by a technician-

4 Remove the two torx bolts (M5 x 8), and remove the speaker main unit from the tower speaker bracket (R).



5 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**

8B-5-4 Roof Assembly

(1) Replacing the Sign Tape LED

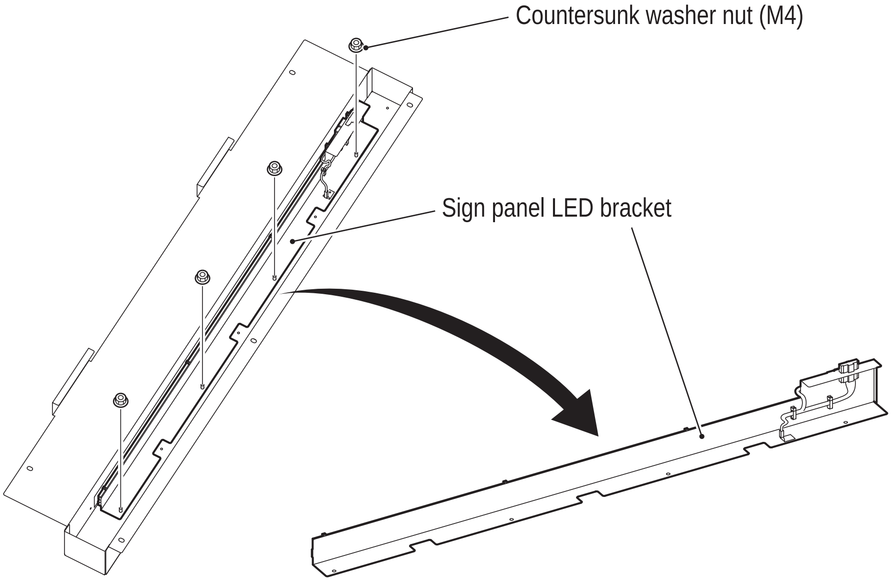
⚠WARNING

- **Replacing the sign tape LED requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.**
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

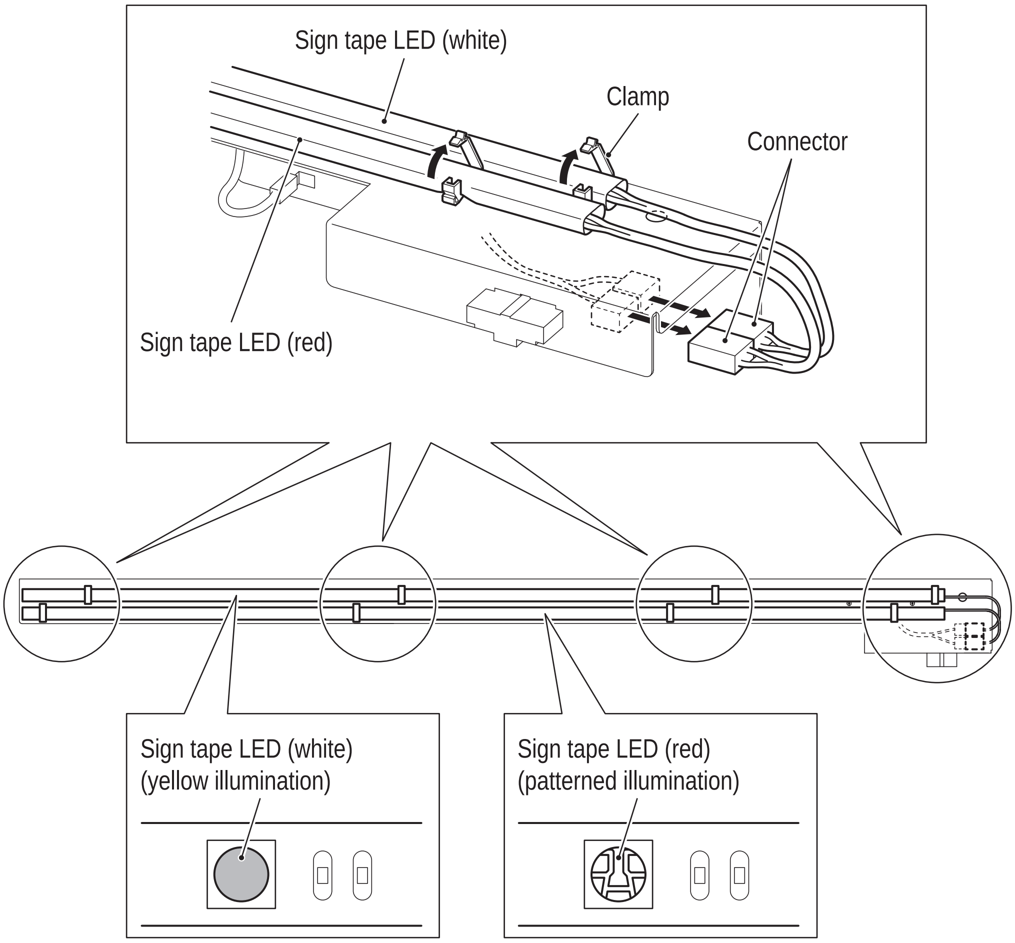
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Refer to “8A-7 Mounting the LEDBOX Unit for Signs” on page 121, and follow the procedure in reverse to remove the sign LEDBOX Unit.

3 Remove the four countersunk washer nuts (M4), and remove the sign panel LED bracket along with the sign tape LED.

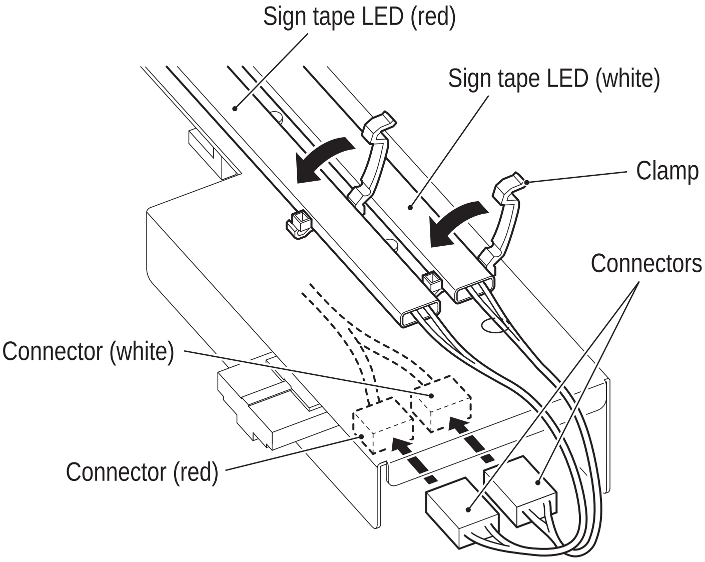


4 Disconnect the connector, and remove the sign tape LED (red) or the sign tape LED (white) from the clamp.


Sign tape LED (white)
Clamp
Connector
Sign tape LED (red)
Sign tape LED (white)
(yellow illumination)
Sign tape LED (red)
(patterned illumination)

5 Assemble the sign tape LED (red) or the sign tape LED (white) following the procedure in the reverse order.

*Connect the harness according to the following procedure.


Sign tape LED (red)
Sign tape LED (white)
Clamp
Connectors
Connector (white)
Connector (red)

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**
- **Take care to install the sign tape LED (red) / (white) in the correct place and connect the connector correctly.**

-Must be performed by a technician-

(2) Replacing the Face Tape LED

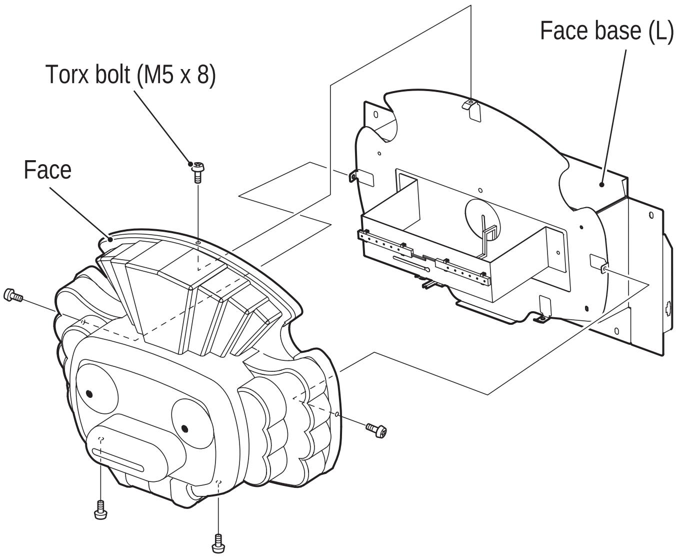
⚠WARNING

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

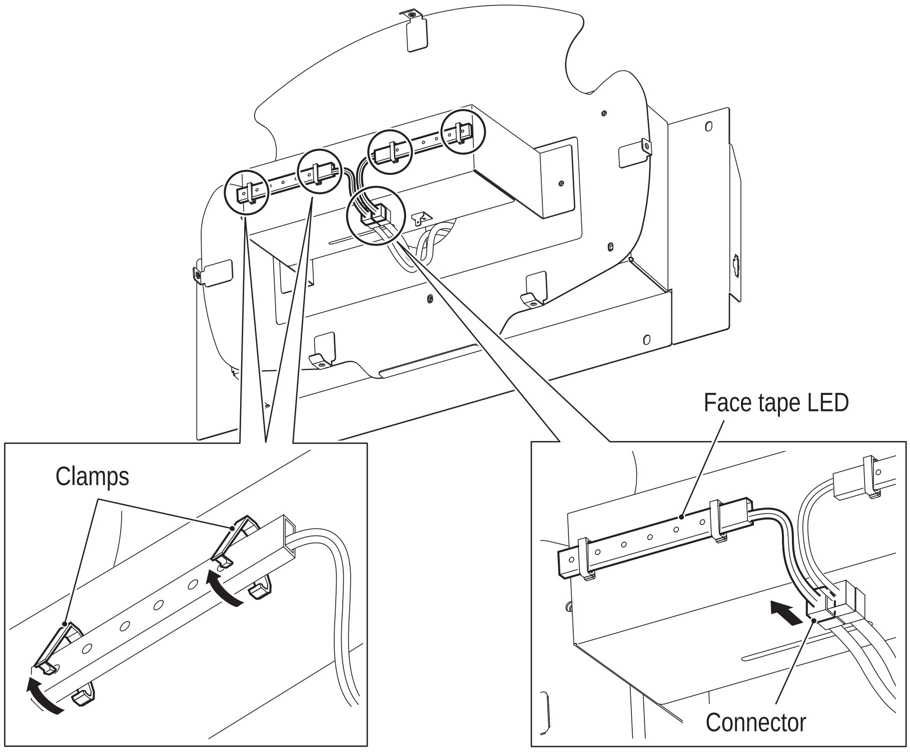
1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Refer to “8A-6 (1) Mounting the Face” on page 118, follow the procedure in reverse, and remove the face assembly on the side the LED is replaced.

3 Remove the five torx bolts (M5 x 8), and remove the face.



4 Remove the harness from the clamp, disconnect the connector, and remove the face tape LED to be replaced.



5 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**

8B-5-5 Projector 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 main power switch before starting work.**
- **Do not look into the lens while the projector assembly is lit. The strong light emitted from the lens may result in vision impairment or other problems.**
- **Be sure to use the dedicated lamp for this machine when replacing the lamp. Using other lamp than the dedicated lamp may result in malfunction, damage or injury. Also, do not reuse an old lamp. For inquiries regarding the dedicated lamp, contact your distributor.**
- **Contact your distributor for regular cleaning of the inside of the projector. Continued operation with dust accumulated inside the projector may result in fire or malfunction. Cleaning of the inside of the projector before humid or rainy seasons begin is particularly effective. Contact your distributor regarding the internal cleaning cost.**

NOTICE

- **For transportation, use the package box in which the projector unit was contained when you purchased the product.**

(1) Replacing the Gun Camera PC Board

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Refer to “8A-5 Mounting the Projector Assembly” on page 111, and remove the gun camera PC board following the procedure in reverse.
3. To install, perform the procedure in reverse.
4. Adjust the gun after attachment (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**

(2) Replacing the Projector 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 main power switch before starting work.**

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Refer to “8A-5 Mounting the Projector Assembly” on page 111, and remove the projector unit following the procedure in reverse.
3. To install, perform the procedure in reverse.
4. After attachment, perform positioning of the projector (see “8B-5-6 Positioning the Projector” on page 212).

(3) Replacing the Projector Lamp (Lamp 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 main power switch before starting work.
- Be sure to turn off the main power switch and wait one hour or more to allow the lamp unit to cool sufficiently before replacing the lamp unit. The lamp unit is very hot immediately after the main power switch is turned off, and may cause burns.
- Never insert metal objects, flammable foreign matter, hands or other objects into the lamp enclosure after removing the lamp unit. Doing so may result in fire or electric shock.
- Be careful not to drop the lamp unit fixing screws inside of the machine. Also do not allow pieces of metal or flammable matter to enter the inside of the machine. Operation with foreign matter inside the machine may result in electric shock or fire.
- Install the replacement lamp unit securely. Improper installation may result in dark images or fire.
- Never use other than a new dedicated lamp for this machine. Also do not reuse an old lamp. Doing so may result in malfunction, damage or injury. To order a lamp unit, contact your distributor.
- Do not place the removed lamp unit on or near flammable matter. Doing so may result in fire.
- Do not leave the removed lamp unit where other people may touch it. It may cause burns or if it dropped, it may be damaged and the glass pieces may cause injury.
- The lamp unit of this machine uses a tiny amount of inorganic mercury, which is an environmentally hazardous substance. Handle the used lamp unit carefully to avoid damaging it, and dispose of it properly as hazardous waste such as fluorescent lights. In addition, follow any applicable local municipal regulations or other ordinances when disposing of the lamp unit.
- If the lamp unit is damaged, a tiny amount of white gas (inorganic mercury) may be discharged. If you breathe in this gas or if it gets in your eyes or mouth, consult a doctor immediately.

⚠CAUTION

- In the case of breakage of the lamp, be sure to contact your distributor for cleaning the inside of the projector, replacement of lamp, and other necessary repairs.
- Depending on the lamp unit damage status, glass shards may have scattered inside the projector unit. Handle with particular care when removing the projector unit from the machine or when replacing the lamp unit, as glass shards may fall out. Should any glass shards fall onto the floor or seat, carefully and completely remove the glass shards using a vacuum cleaner, etc.
- Do not remove any screws other than necessary when replacing the lamp unit. Doing so may result in machine damage or malfunction.

NOTICE

- **After confirming the projector unit model, be sure to specify the corresponding replacement lamp that is specified by BANDAI NAMCO Games Inc.. If a replacement lamp other than the specified one is used, the projector may malfunction. Also, when asking for repair, be sure to specify the projector unit type.**

Projector unit	Replacement lamp
NP-PE401H (V1)	Part number: 307-923

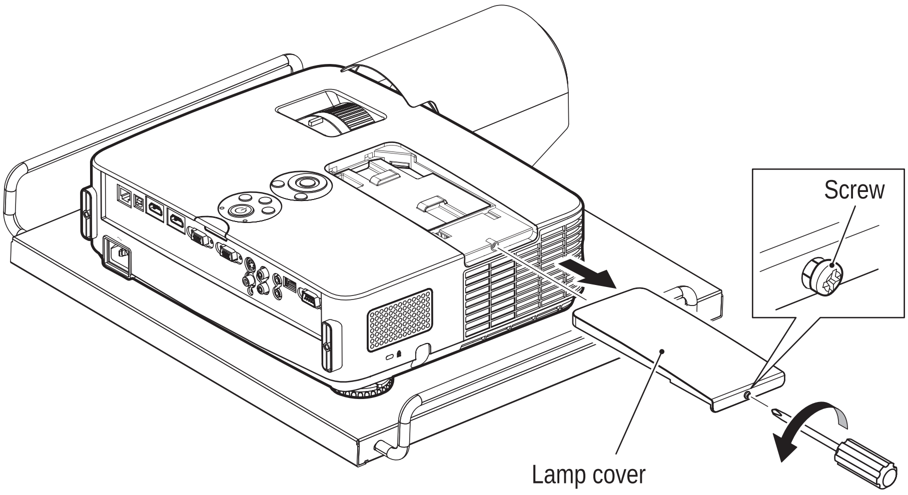
- **Mount the lamp cover securely without looseness. If it is not mounted correctly, the power supply may not be turned on, the lamp may not light, or other malfunctions may occur.**
- **When replacing lamp, be sure to use a new lamp.**
- **The lamp is made from glass. Do not touch the glass surface with bare hands. Do not apply strong impact or scratch it. (The lamp may be broken due to dirt, impact, scratch, etc.)**
- **Before replacing the lamp unit, be sure to remove the projector unit from the machine and place the lamp unit on a flat surface.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Secure a place close to the machine cabinet to put the projector unit after it is removed. Prepare a flat and sufficiently large space (approximately 1m^2) and cover the space with a plastic sheet, etc.

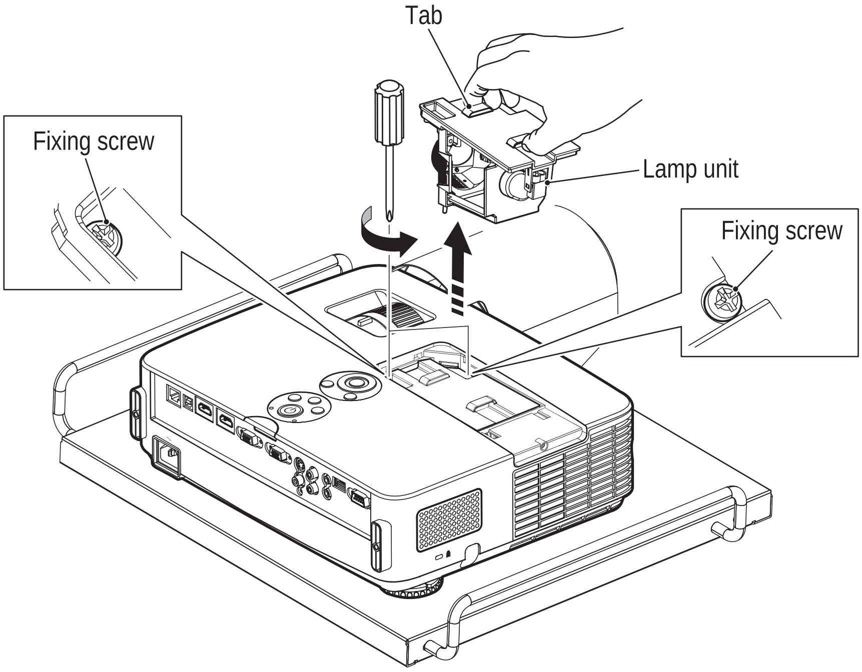
3 Remove the projector unit and put it on the place prepared in the step **2** above (see “8A-5 Mounting the Projector Assembly” on page 111).

4 Loosen the screw and remove the lamp cover by sliding it.



-Must be performed by a technician-

5 Loosen the two lamp unit fixing screws sufficiently and grasp the lamp unit knob. Then, slowly lift the lamp unit straight up and remove.



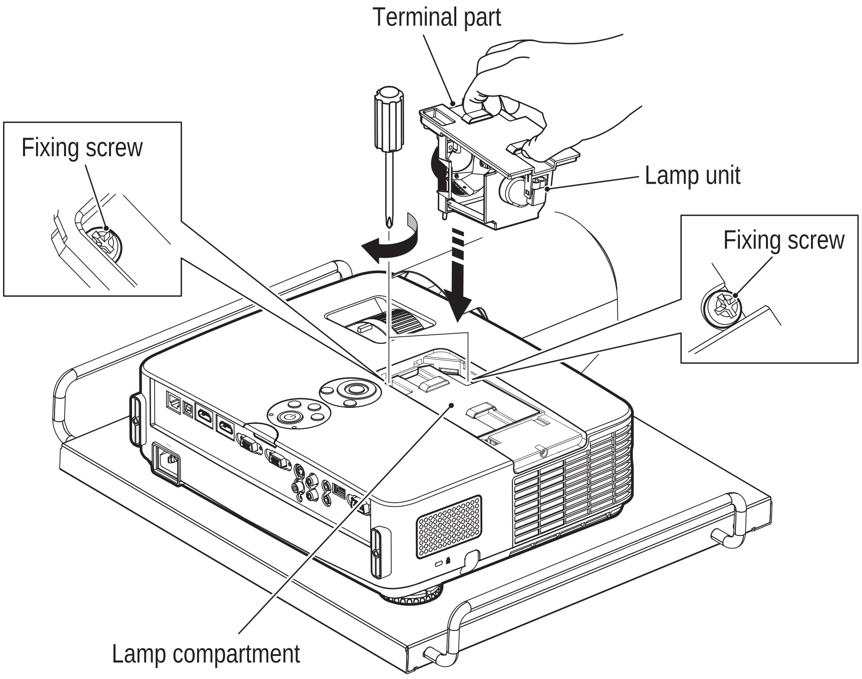
NOTICE

- **Do not loosen any screws other than the lamp unit fixing screws.**

⚠WARNING

- **Remove the lamp unit gently from the projector unit.**
- **Do not expose the removed lamp unit to water or other substances or place it where other people may touch it or near flammable objects. Doing so may result in burns or injury.**

6 Set a new lamp unit in the direction shown in the following figure and push in to the direction of the arrow to fit it into the lamp compartment. Securely insert the terminal part and secure it with the two fixing screws.



7 To reattach the lamp cover with the screws, perform Steps **3** and **4** in reverse.

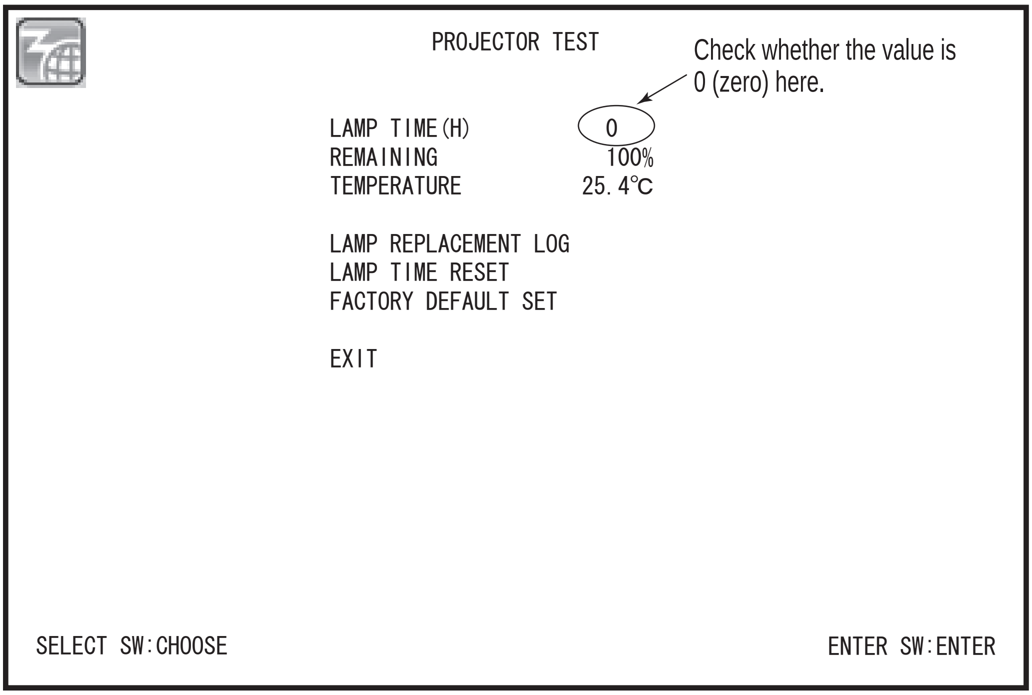
NOTICE

- **If the lamp cover is not mounted correctly, the power supply will not be turned on. Mount the lamp cover securely.**

8 To reattach the projector unit, perform the procedure in reverse (see “8A-5 Mounting the Projector Assembly” on page 111).

9 Turn on the main power switch to enter to the test mode.
In the case that the projector power supply is not turned on and the machine remains in standby mode, point the remote controller at the projector and press and hold the (HELP) button on the remote controller for 10 seconds or more. The power supply will be temporarily turned on.
After confirming that the lamp indicator on the projector main body, which was lit in red, is turned off, turn on the projector power supply using the power button on the projector main unit operation part or the power (ON) button on the remote controller.

10 Select “PROJECTOR TEST” on the “I/O TEST” screen and perform “LAMP TIME RESET”. Check whether **“LAMP TIME (H)” is 0 (zero)**.



```
                    PROJECTOR TEST

          LAMP TIME(H)              0
          REMAINING              100%
          TEMPERATURE           25.4℃

          LAMP REPLACEMENT LOG
          LAMP TIME RESET
          FACTORY DEFAULT SET

          EXIT

SELECT SW:CHOOSE                          ENTER SW:ENTER
```

Check whether the value is 0 (zero) here.

"PROJECTOR TEST" screen

11 Turn off the test switch and end the test mode.

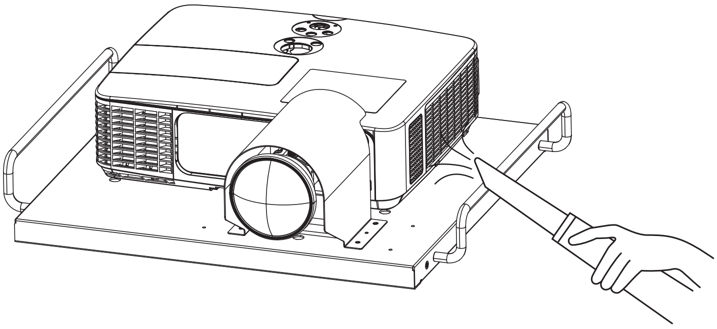
(4) Cleaning the Filter of the Projector Main Body

If dust piles up on the filter, air ventilation will be reduced and the inside temperature will rise. As this may cause malfunction, clean the filter frequently.

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 To remove the projector unit, refer to “8A-5 Mounting the Projector Assembly” on page 111 and perform the procedure in reverse.

3 Clean the filter through the intake duct with a vacuum cleaner. (It is not necessary to remove the filter.)



4 After cleaning the filter, perform the procedure in reverse to reattach the projector unit (see “8A-5 Mounting the Projector Assembly” on page 111).

-Must be performed by a technician-

(5) Replacing the Filter F (projector)

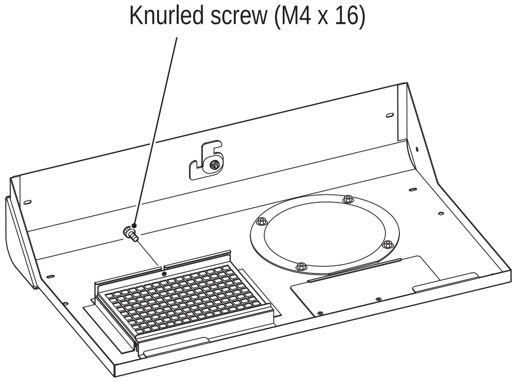
⚠WARNING

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

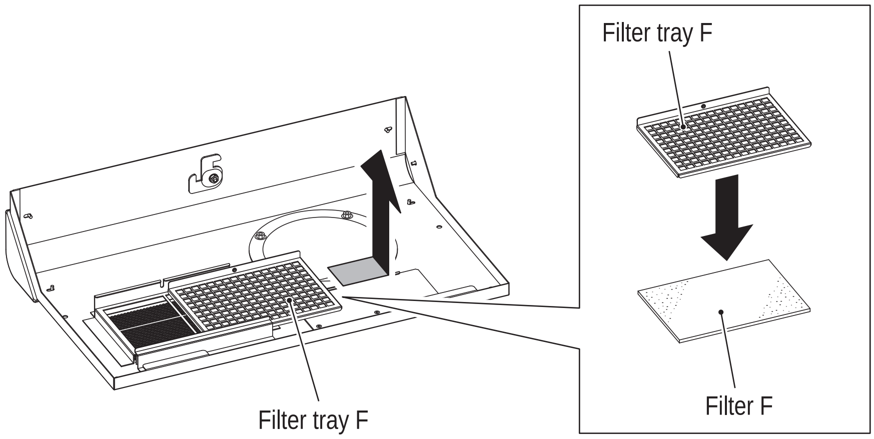
1 Turn off the main power switch (see "8A-18 Turning on the Main Power Switch" on page 142).

2 Remove the projector cover (see "8A-5 Mounting the Projector Assembly" on page 111).

3 Loosen the knurled screw (M4 x 16).



4 Slide the filter tray F aside, and remove the filter F.



5 To install, perform the procedure in reverse.

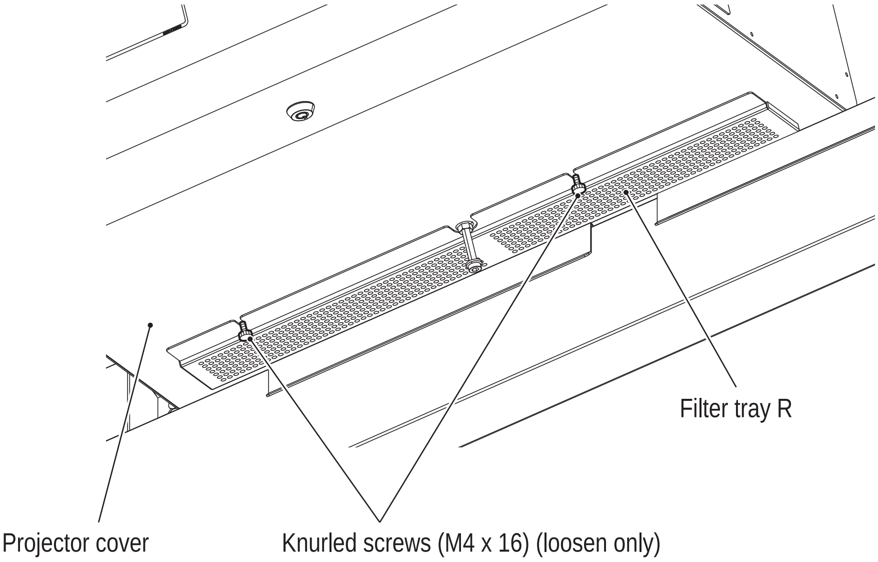
(6) Replacing the Filter R (projector)

⚠WARNING

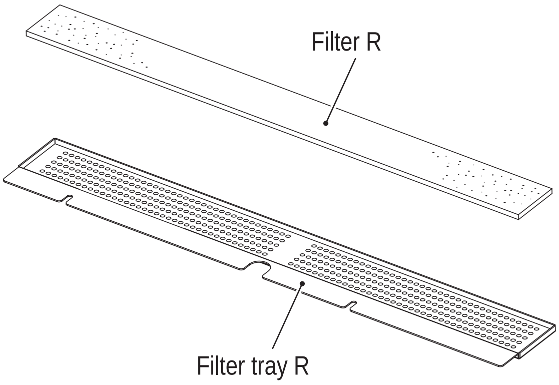
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Loosen the two knurled screws (M4 x 16) at the rear part of the projector cover, and remove the filter tray R.


Filter tray R
Projector cover
Knurled screws (M4 x 16) (loosen only)

3 Replace the filter R.


Filter R
Filter tray R

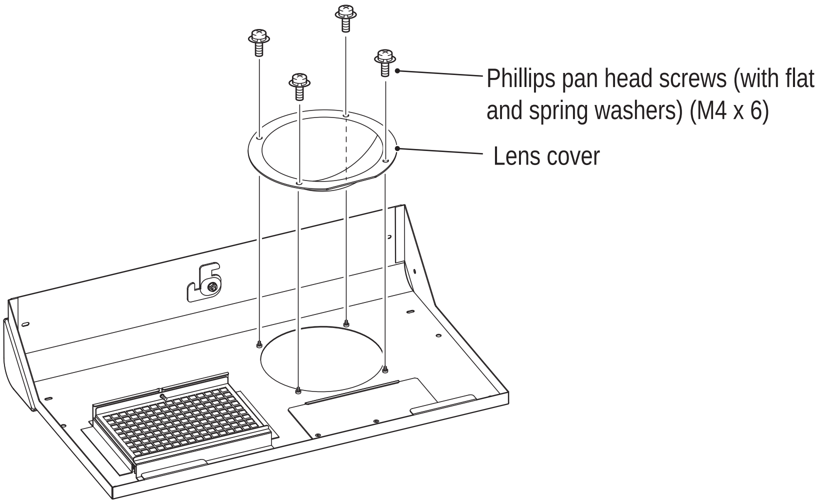
4 To install, perform the procedure in reverse.

(7) Replacing the Lens 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 main power switch before starting work.**

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the projector cover (see “8A-5 Mounting the Projector Assembly” on page 111).
3. Remove the four Phillips pan head screws (with flat and spring washers) (M4 x 6), and remove and replace the lens cover.


Phillips pan head screws (with flat and spring washers) (M4 x 6)
Lens cover

4. To install, perform the procedure in reverse.

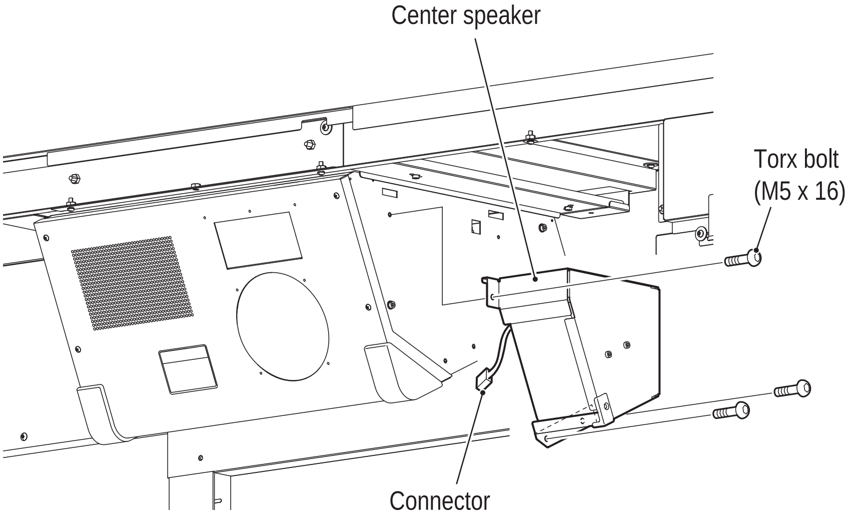
(8) Replacing the Center Speaker

⚠WARNING

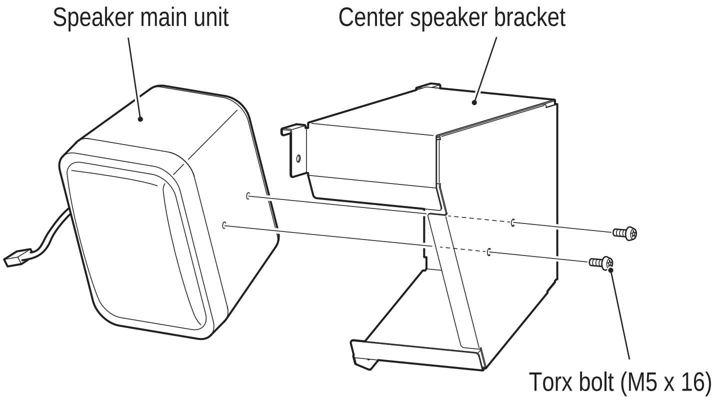
- **To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.**

1 Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2 Remove the three torx bolts (M5 x 16) and the connector, and remove the center speaker along with the center speaker bracket.


Center speaker
Torx bolt
(M5 x 16)
Connector

3 Remove the two torx bolts (M5x16), and remove the main unit of the speaker.


Speaker main unit
Center speaker bracket
Torx bolt (M5 x 16)

4 To install, perform the procedure in reverse.

NOTICE

- **Securely lock the connector when attaching.**
- **Be careful not to pinch the connector or the harness during attachment.**

8B-5-6 Positioning the Projector

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. After the title screen is displayed, enter “VIEW ANGLE AND FOCUS ADJUST PATTERN” of “MONITOR TEST” from the test mode (see “7-4-5 Monitor Test (MONITOR TEST)” on page 63).

3. Adjust the horizontal angle of view of the projector to align the center line (vertical white line) of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” to the dome center (see “8B-5-6 (1) Horizontal Adjustment” on page 213).
   *For adjustment, use the joint between the dome bases (L), (R) as the guideline of the center of the dome.

4. Adjust the vertical angle of view of the projector aligning the top end of the center line of the display screen (vertical white line) to the ridge line of the dome ceiling (see “8B-5-6 (2) Vertical Adjustment” on page 214).

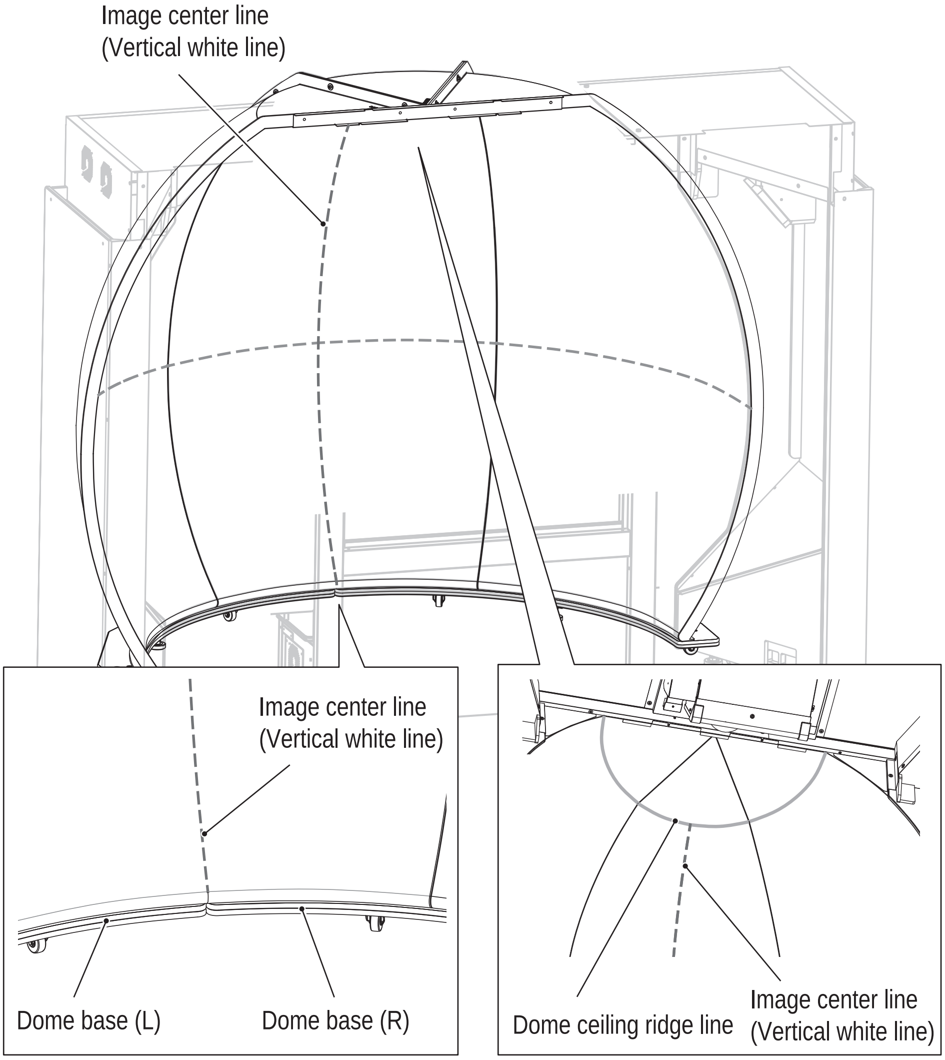
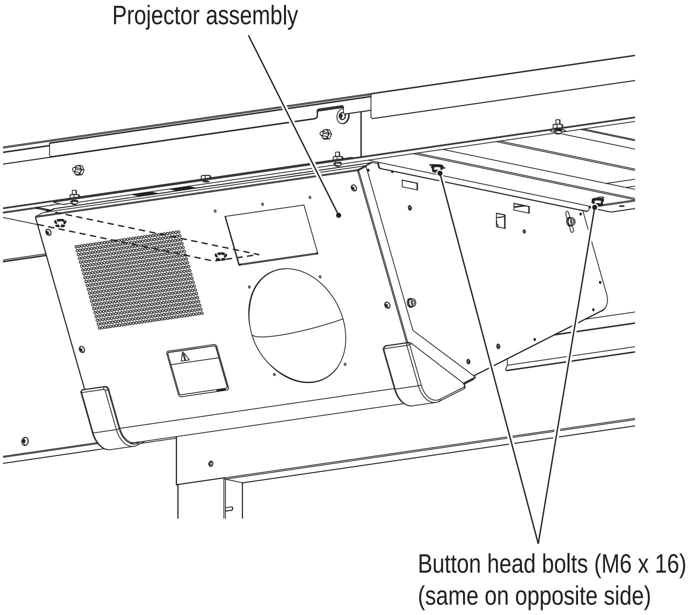


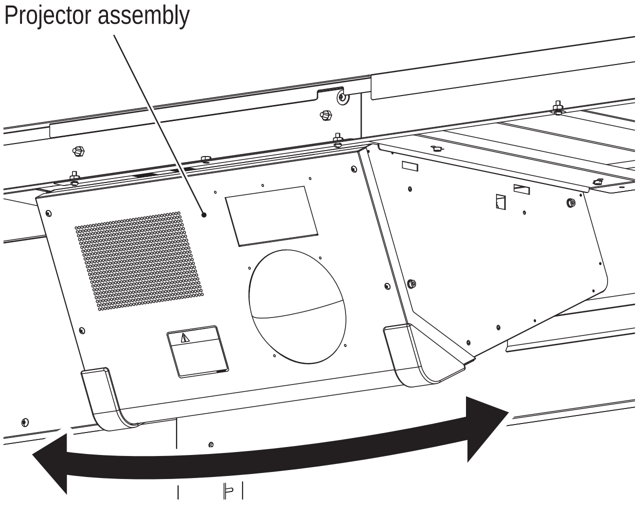
Image center line
(Vertical white line)
Image center line
(Vertical white line)
Dome base (L)
Dome base (R)
Dome ceiling ridge line
Image center line
(Vertical white line)

(1) Horizontal Adjustment

1 Loosen the four button head bolts (M6 x 16) on the right and left of the projector assembly. Loosen the bolts to the degree that the projector assembly can be moved.


Projector assembly
Button head bolts (M6 x 16)
(same on opposite side)

2 When the rear part of the projector assembly is swung from side to side, the image on the screen also moves side to side.

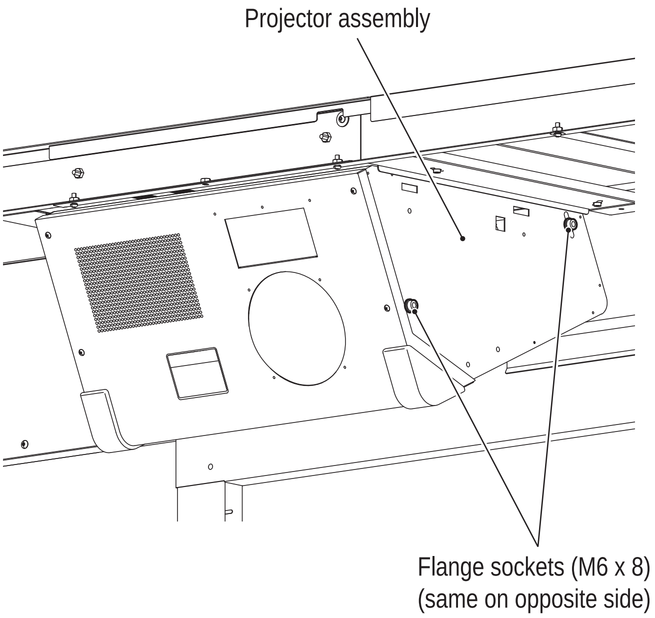

Projector assembly

3 Adjust the horizontal angle of view of the projector to align the center line (white) of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” to the dome center.

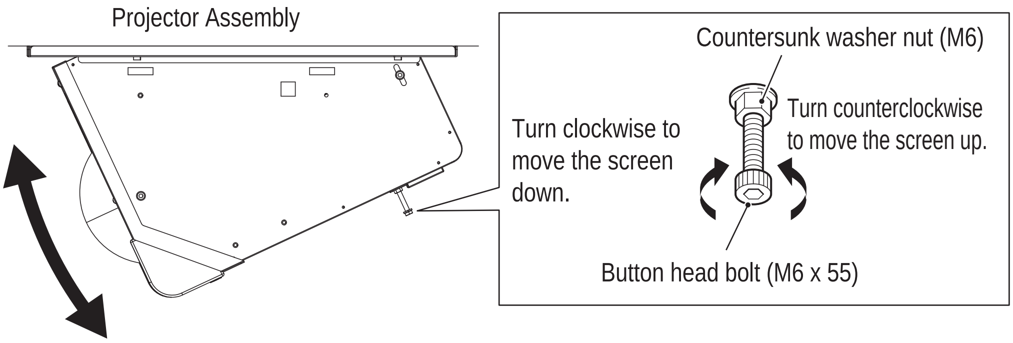
4 After the adjustment, fasten the bolts and screws in the reverse order.

(2) Vertical Adjustment

1 Loosen the four flange sockets (M6 x 8) on the right and left of the projector assembly.


Projector assembly
Flange sockets (M6 x 8)
(same on opposite side)

2 Loosen the countersunk washer nut (M6) and turn the button head bolt (M6 x 55) to move the screen vertically. Turn clockwise to move the screen downward, and turn counterclockwise to move the screen upward.


Projector Assembly
Countersunk washer nut (M6)
Turn clockwise to move the screen down.
Turn counterclockwise to move the screen up.
Button head bolt (M6 x 55)

3 Adjust the vertical angle of view of the projector aligning the top end of the center line of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” (vertical white line) to the ridge line of the dome ceiling.

4 After the adjustment, fasten the bolts and screws in the reverse order.

8B-5-7 Settings of the Projector

(1) Preparation of the Remote Controller

⚠WARNING

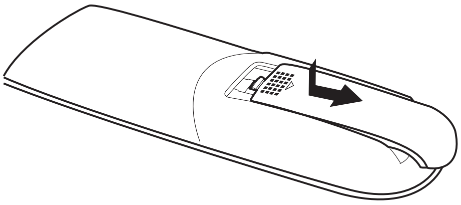
Be sure to observe the following regarding the dry cell batteries of the remote controller. Failure to do so may cause the batteries to leak fluid or burst, possibly resulting in burns or injury.

- **Do not use other than the specified batteries.**
- **Do not mix up the polarity indications (+ and –).**
- **Do not charge, heat, disassemble, or short-circuit the dry cell batteries or put them into fire.**
- **Do not leave dry cell batteries that have run out or are past the recommended use date indicated on the batteries in the remote controller.**
- **Do not mix different types of dry cell batteries or use new and old batteries together.**
- **If the fluid of the dry cell batteries adheres to appliances, do not touch the fluid directly. If you have touched the fluid, wash it off with water, and consult a doctor.**

■Inserting batteries into the remote controller

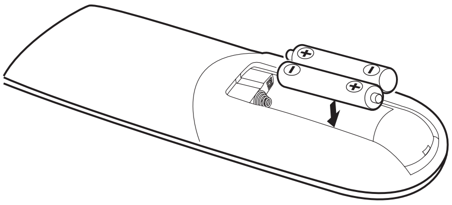
1 Remove the battery cover.

Pull the battery cover toward you while pressing it, and pull up to remove the cover.



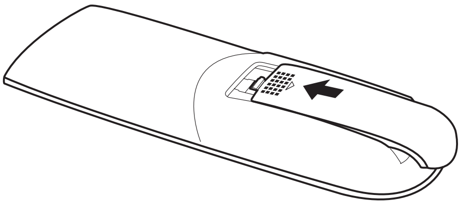
2 Insert batteries.

Confirm the indication of + and – inside the case, and insert the batteries matching + and –.



3 Close the battery cover.

Slide the tab at the rear part of the battery cover to close it.

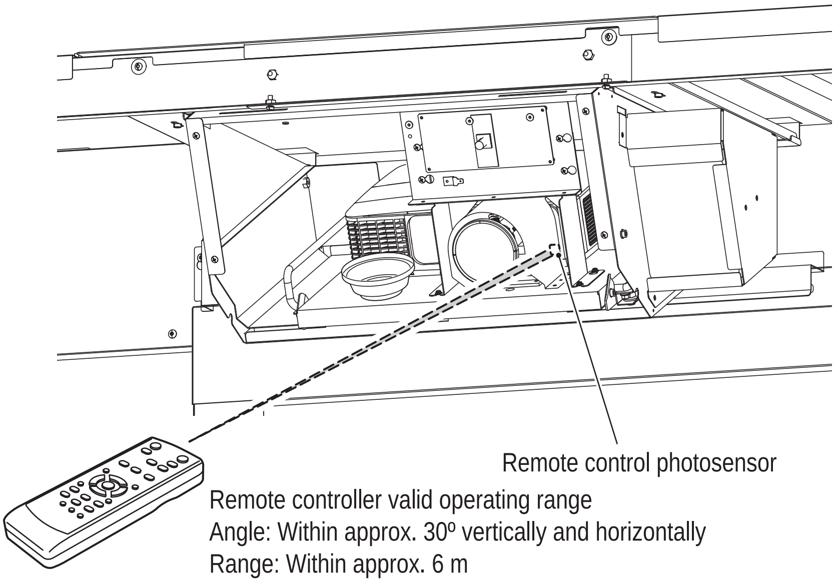


(2) How to Operate the Remote Controller

NOTICE

- **If the remote control receiver is exposed to strong light such as sunlight or the light from a fluorescent lamp, the remote controller may not operate.**
- **Do not drop or apply an impact.**
- **Do not place in an environment which will be subjected to high temperature or high humidity.**
- **Do not pour water on the unit or place the unit on a wet surface.**
- **Do not disassemble the remote controller.**
- **The remote controller may not work well depending on the place of use or the surrounding environment. In such a case, point the remote controller at the projector unit, and operate again.**

Remove the projector cover of the projector assembly (see “8A-5 Mounting the Projector Assembly” on page 111), and operate the remote controller while pointing at the remote control photosensor on the projector unit.

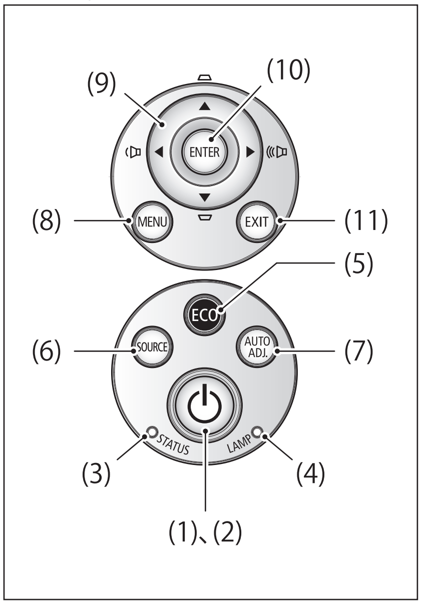


Remote controller valid operating range
Angle: Within approx. 30º vertically and horizontally
Range: Within approx. 6 m

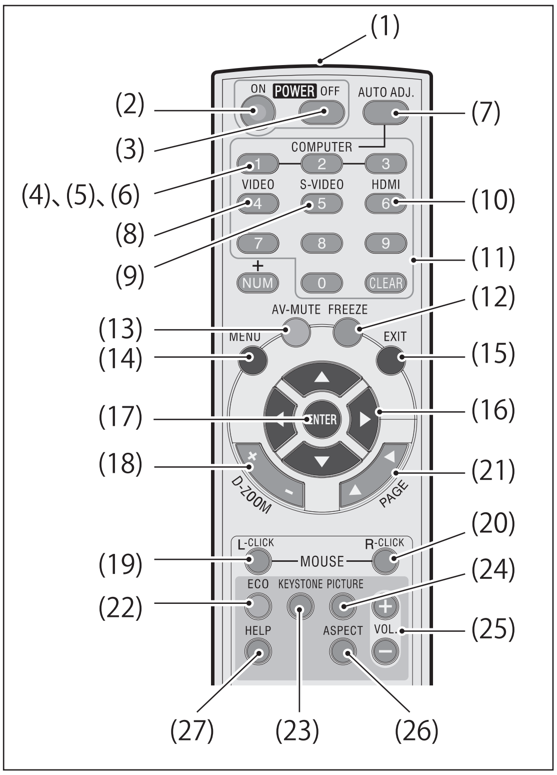
(3) Projector Unit Control Panel and Remote Controller Part Names

See the provided Projector User's Manual for details.

Projector Unit Control Panel


(9)
(10)
ENTER
(8)
MENU
EXIT
(11)
(5)
ECO
(6)
SOURCE
AUTO ADJ.
(7)
STATUS
LAMP
(3)
(4)
(1)、(2)

Remote Controller


(1)
(2)
ON
POWER
OFF
AUTO ADJ.
(7)
(3)
COMPUTER
1
2
3
(4)、(5)、(6)
VIDEO
S-VIDEO
HDMI
4
5
6
(10)
(8)
7
8
9
(11)
(9)
+
NUM
0
CLEAR
(12)
AV-MUTE
FREEZE
(13)
MENU
EXIT
(14)
(15)
(17)
ENTER
(16)
(18)
D-ZOOM
PAGE
(21)
(20)
L-CLICK
R-CLICK
(19)
MOUSE
(24)
ECO
KEYSTONE
PICTURE
(22)
HELP
ASPECT
VOL.
(25)
(27)
(23)
(26)

Projector Unit Control Panel

(1) Power button

This is used for turning on/off (standby) the power of the main unit.

When turning off the power (standby), a confirmation message is displayed on the screen when the button is pressed once. Press the button once again.

(2) Power indicator

This is the indicator which notifies the state of the power of the projector.

- Off: The main power is off.
- Flashing blue light (short): Preparing for turning on the power.
- Flashing blue light (long): Off timer (valid).
- Blue light: The power is on.
- Orange light: Standby (“Standard” standby mode).
- Red light: Standby (“Power-saving” standby mode).

(3) Status indicator

This is the indicator which notifies the internal state of the projector.

- Off: There is no error or it is on standby (“Power-saving” standby mode).
- Flashing red light: There is an error, and indicates the error type with the flashing frequency.
- Flashing green light: Preparing for lighting the lamp again after failing.
- Green light: Standby (“Standard” standby mode).
- Orange light: The key-lock of the main unit is “On”.

(4) Lamp indicator

This is the indicator which notifies the state of the projector lamp.

- Off: There is no error.
- Flashing red light: During the grade period for replacement of the lamp.
- Red light: The lamp service time is over.
- Green light: ECO mode.

(5) (ECO) button

Press this button to display the ECO mode selection window.

(6) (SOURCE) button

Every time the (SOURCE) button is pressed, Computer→HDMI1→HDMI2→Video→S-video are checked in this order, and if an input signal is detected, the signal is projected.

(7) (AUTO ADJ.) button

When the PC screen is projected, it is automatically adjusted to the optimal state.

(8) (MENU) button

On-screen menus for each setting and adjustment are displayed.

(9) ▲,▼ ,◀,▶ buttons

These buttons are used for selection of an item and adjustment in the button menu (see "8B-5-8 Settings of the Projector Menu" on page 220).

When the menu is not displayed, ◀ and ▶ buttons are used for adjustment of the volume, ▲ and ▼ buttons are used for adjustment of trapezoidal distortion in the vertical direction.

(10) (ENTER) button

When the menu is displayed, the menu of the next level is displayed by pressing this button (see "8B-5-8 Settings of the Projector Menu" on page 220). When the confirmation message is displayed, the item is determined.

(11) (EXIT) button

When the menu is displayed, the menu of the previous level is displayed by pressing this button.

When the cursor is at the main menu tab, the menu is closed.

When the confirmation message is displayed, the operation is canceled.

Remote controller

(1) Remote control transmitter

Remote control signals are transmitted by infrared rays.

Point it at the remote control receiver on the projector main unit.

(2) Power (ON) button

The power of the machine is turned on during standby (The power indicator lights in red.*).

(*When the standby mode is set to "power saving")

(3) Power (OFF) button

Press once to display the power off confirmation message, and press again to power off the machine (standby state).

(4) (COMPUTER 1) button

Computer input (or component) is selected.

(5) (COMPUTER 2) button

(This button is not used on this machine.)

(6) (COMPUTER 3) button

(This button is not used on this machine.)

(7) (AUTO ADJ.) button

When the computer screen is projected, it is automatically adjusted to the optimal state.

(8) (VIDEO) button

Video input is selected.

(9) (S-VIDEO) button

S-video input is selected.

(10) (HDMI) button

HDMI1 or HDMI2 input is selected. HDMI1 input and HDMI2 input are switched every time this button is pressed.

(11) (NUM) button, number (0 - 9) input buttons, is (CLEAR) button

These buttons are used when setting the security keyword for the projector.

(12) (FREEZE) button

The displayed image is frozen. Press again to return.

(13) (AV-MUTE) button

The image and sound are temporarily turned off. Press again to return.

(14) (MENU) button

On-screen menus for each setting and adjustment are displayed (see “8B-5-8 Settings of the Projector Menu” on page 220).

(15) (EXIT) button

When the on-screen menu is displayed, the menu of the previous level is displayed by pressing this button. When the cursor is at the main menu tab, the menu is closed.

When the confirmation message is displayed, the operation is canceled.

(16) ▲ ,▼ ◄, ► buttons

These buttons are used for adjusting the display position when the window is enlarged by operation of the on-screen menu or using the (D-ZOOM +/–) button.

When the optional mouse receiver is connected to the computer, they operate as the mouse of the computer.

(17) (ENTER) button

When the on-screen menu is displayed, the menu of the next level is displayed by pressing this button.

When the confirmation message is displayed, the item is determined.

(18) (D-ZOOM +/–) button

The window is zoomed in/out.

(19) (MOUSE L-CLICK) button

This is used when the optional mouse receiver is connected to the computer. This is used for operating the left button of the mouse.

(20) (MOUSE R-CLICK) button

This is used when the optional mouse receiver is connected to the computer. This is used for operating the right button of the mouse.

(21) (PAGE) button

This is used when the optional mouse receiver is connected to the computer. This is used for scrolling the screen or switching the slides of a PowerPoint presentation.

(22) (ECO) button

Press this button to display the ECO mode selection window.

(23) (KEYSTONE) button

Press this button to display the keystone correction adjustment window.

(24) (PICTURE) button

Press this button to display the picture mode selection window in the image adjustment of the on-screen menu.

(25) (VOL. +/–) button

(This button is not used on this machine.)

(26) (ASPECT) button

Press this button to display the aspect adjustment items.

(27) (HELP) button

Press this button to display the information screen.

8B-5-8 Settings of the Projector Menu

NOTICE

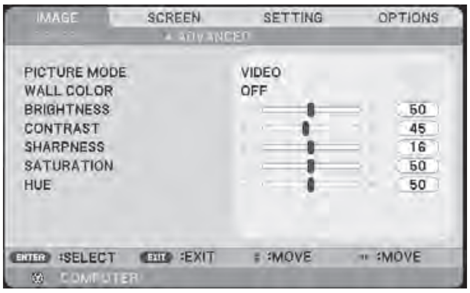
- **Please note that in some rare cases, the brightness changes slightly depending on the characteristics of the lamp.**
- **The lamp is a consumable. If it is used for a long period, the image may become dark or the lamp may be used up and will not light up. This is a characteristic of lamps, and is not a malfunction.**
- **The pixel engine used on this machine is created by high-precision technology. However, some non-lighting or continuously lighting points may exist. This is not a malfunction.**
- **When you want to return to the default state, execute PROJECTOR TEST to return to the initial state (see "7-4-4 (5) PROJECTOR TEST" on page 59).**

It is possible to make various adjustments and settings by displaying the menu on the screen from the operation section of the main unit or the operation buttons of the remote controller (see "8B-5-7 (3) Projector Unit Control Panel and Remote Controller Part Names" on page 217).

* Changing the values is limited with some of the items in the setting menu of this machine. Settings of some of the items which are not listed here are automatically changed.

■ How to set the on-screen menu

1 Press the (MENU) button.
The on-screen menu is displayed.



PICTURE MODE VIDEO
WALL COLOR OFF
BRIGHTNESS 50
CONTRAST 45
SHARPNESS 16
SATURATION 50
HUE 50

2 Press ▲ and ▼ buttons to select the sub menu. To enter the selected menu, press the (ENTER) button.

3 When a horizontal adjustment bar such as "Volume (volume)" is displayed, press ◀ and ▶ button to make adjustments.

■ How to close the on-screen menu

1 When the cursor is at the main menu tab, press the (EXIT) button.

- There are some cases where it is not possible to operate the menu screen by pressing the buttons. There is a possibility of malfunction in such a case. Unplug the power plug from the outlet, wait for at least 10 minutes, and connect the power plug to the outlet again.
- It is possible to make adjustments to the on-screen menu when the input signals are input from an external source.

Configuration of the on-screen menu

See the provided Projector User's Manual for details of the setting values, etc.

Main menu	Sub menu	Configurable item
IMAGE (image adjustment)	GENERAL (general)	PICTURE MODE (picture mode) WALL COLOR (wall color correction) BRIGHTNESS (brightness) CONTRAST (contrast) SHARPNESS (sharpness) SATURATION (saturation) HUE (hue)
	ADVANCED (advanced)	GAMMA (gamma correction) BrilliantColor™ COLOR TEMP. (color temperature) DYNAMIC CONTRAST (dynamic contrast) COLOR (color) COLOR SPACE (color space)
SCREEN (screen adjustment)	GENERAL (general)	ASPECT RATIO (aspect) OVERSCAN (overscan) V KEYSTONE (vertical keystone correction)
	3DSETTING (3D setting)	3D 3D INVERT (3D inversion) 3D STRUCTURE (3D format)
SETTING (installation)	GENERAL (general)	LANGUAGE (language) ORIENTATION (projection method) REMOTE SENSOR (setting of the remote control receiver) HDMI SETTINGS (HDMI settings) MUTE (mute) VOLUME (volume)
	SIGNAL (signal)	PHASE (phase) CLOCK (clock frequency) H. POSITION (horizontal position) V. POSITION (vertical position)
	ADVANCED (advanced)	LOGO (logo) PC CONTROL MODE (PC control mode) NETWORK (network) CLOSED CAPTION (closed caption) SECURITY (security)

Main menu	Sub menu	Configurable item
OPTIONS (options)	GENERAL (general)	INPUT SEARCH (automatic input switching) INPUT (terminal) FAN MODE (fan mode) INFORMATION HIDE (On-screen display is off.) BACKGROUND COLOR (background color) RESET (reset)
	LAMP/ FILTERSETTINGS (lamp/filter settings)	LAMP LIFE REMAINING (remaining lamp life)* LAMP HOURS USED (used hours of the lamp)* FILTER HOURS USED (used hours of the filter)* ECO MODE (ECO mode) FILTER LIFE REMINDER (lamp message) FILTER USAGE HOURS (filter cleaning hours) CLEAR LAMP HOURS (Clears the lamp usage time.) CLEAR FILTER HOURS (Clears the filter usage time.)
	INFORMATION (information)	MODEL NO.* SERIAL NUMBER* SOURCE (input terminal)* RESOLUTION (resolution)* SOFTWARE VERSION (software version)*
	ADVANCED (advanced)	STANDBY MODE (standby mode) DIRECT POWER ON (direct power on) AUTO POWER OFF (MIN.) (auto power off (minute)) OFF TIMER (MIN.) (off timer (minute)) CONTROL PANEL LOCK (key lock of the main unit)

*: Display only (unchangeable) items

9. Disposal

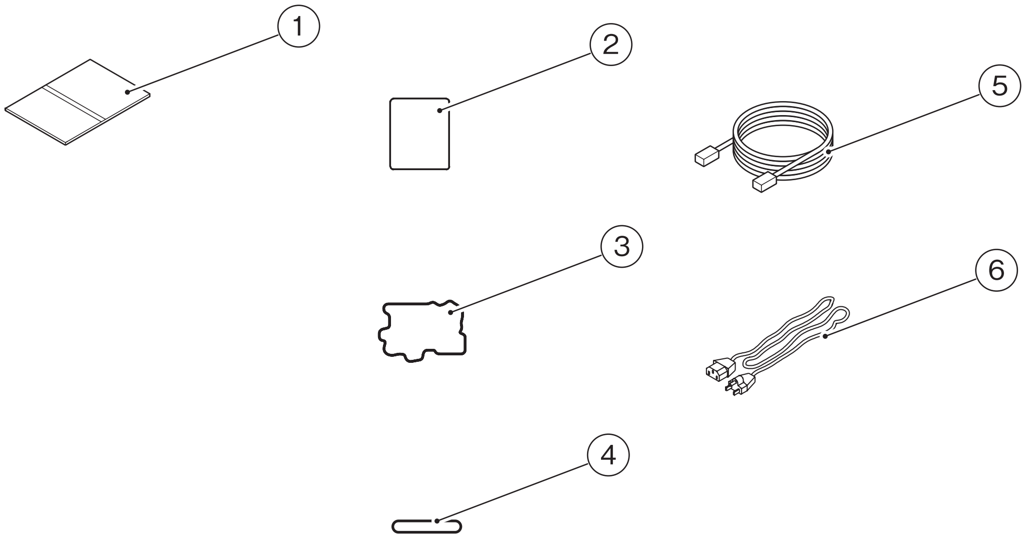
⚠WARNING

- **When disposing of the machine, follow the applicable regulations for collection, transportation and disposal.**
- **When outsourcing the collection, transportation and disposal of the machine, be sure to delegate to specialists in each field.**
- **The projector lamp used in this machine contains inorganic mercury, which is hazardous to the human body and the environment. When disposing of the used lamp, follow the applicable regulations for collection, transportation and disposal.**

* 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 be subject to criminal penalties.
In addition, do not use the recording media containing the software in a machine other than the specified machine. Doing so may result in equipment malfunction.

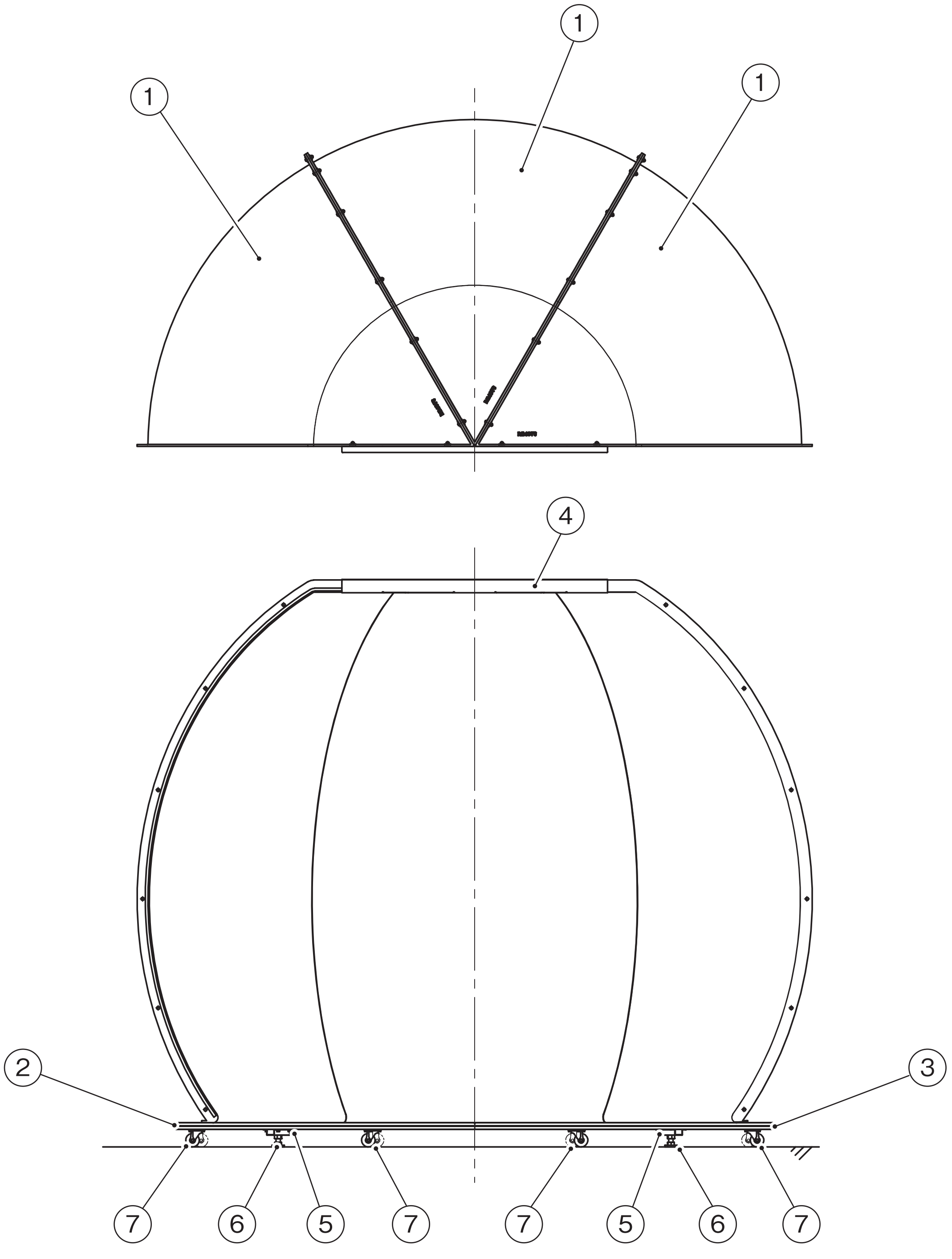
10. Parts List

10-1 Overall



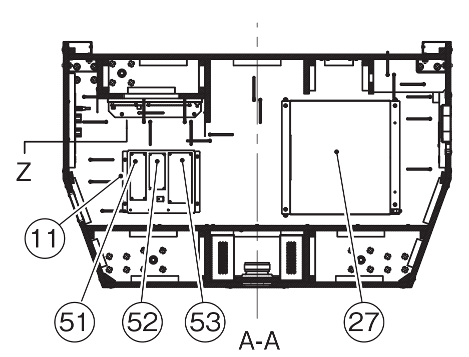
No.	Name	Qty.	Type and rating	Part No.
1	Operation Manual (English)	1	This manual	736-961
2	POP (B)(EXP)	1		736-963
3	POP (C)(EXP)	1		736-964
4	POP (D)(EXP)	1		736-965
5	LAN cable	1	20 m	011-091
6a	Power cord	1	UL (US specifications)	011-164
6b	Power cord	1	BSI (EU specifications)	011-165
7	Projector lamp	1	NP24LP(V1)	307-923

10-2 Front Assembly



No.	Name	Qty.	Type and rating	Part No.
1a	Oval dome (BNAA)	3	(US specifications)	737-008
1b	Oval dome	3	(EU specifications)	736-405
2	Dome base (L)	1		736-406
3	Dome base (R)	1		736-407
4	Dome bracket	1		736-408
5	Adjusting bolt bracket	2		731-158
6	Adjusting bolt	2	M16LEG ADJUSTER L50	102-280
7	Caster (swivel type)	4	LG-50N	102-279
8	Eptsealer (Attached to No. 1 oval dome)	3	EE-1010 W10 x t3 x L2750	106-241

10-3 Seat Assembly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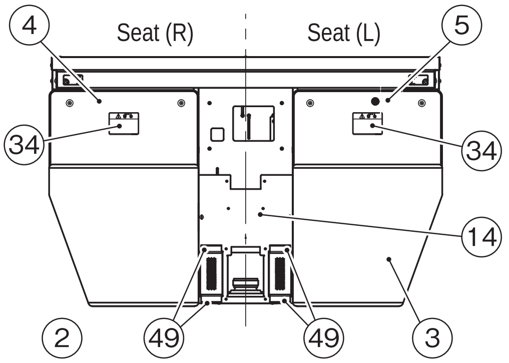
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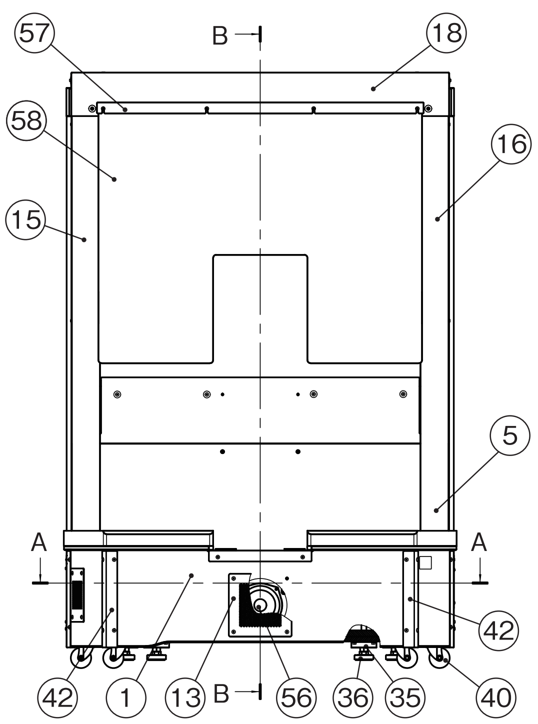
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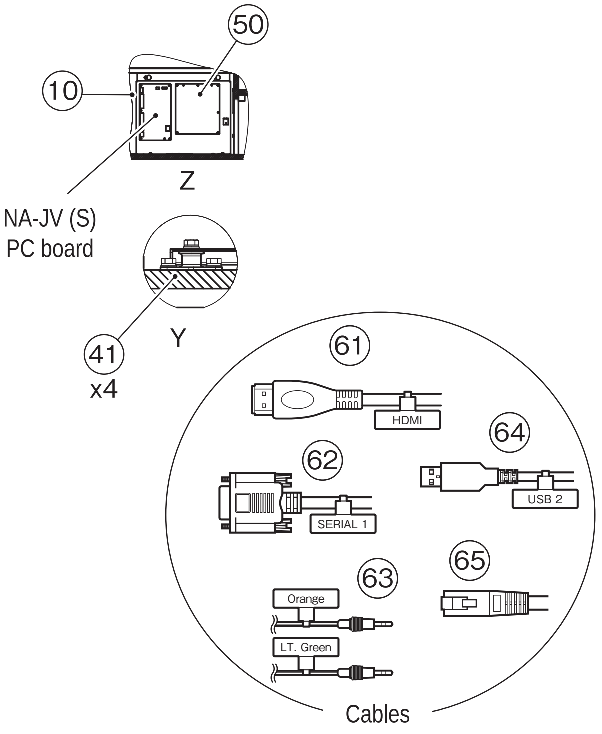
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HDMI
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SERIAL 1
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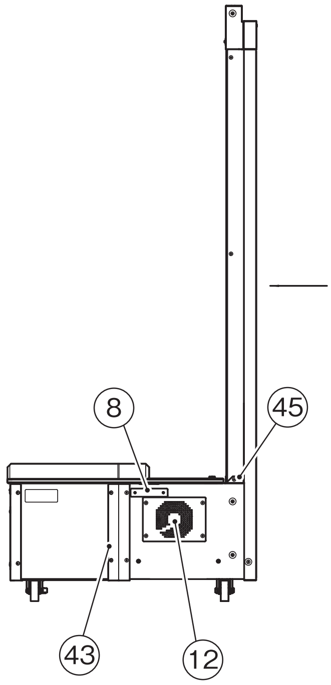
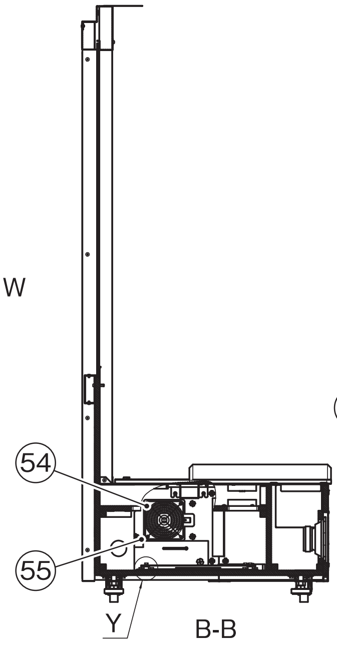
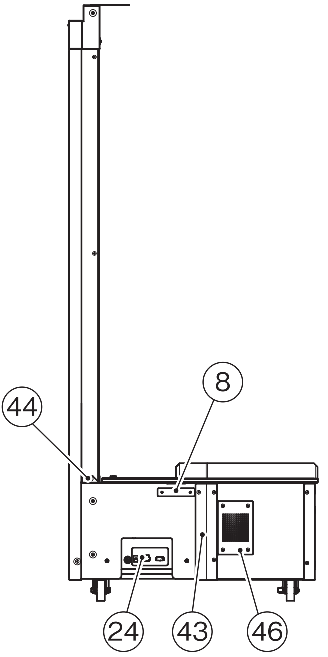
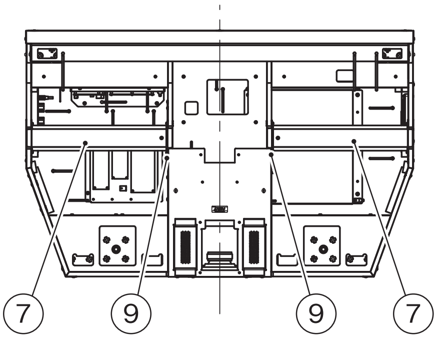
USB 2
(63)
Orange
LT. Green
(65)
Cables

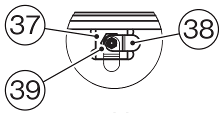








Seat (L) and Seat (R) removed



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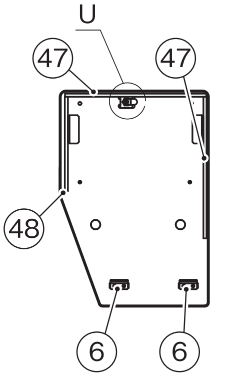
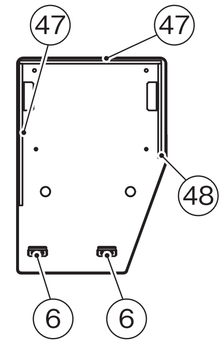
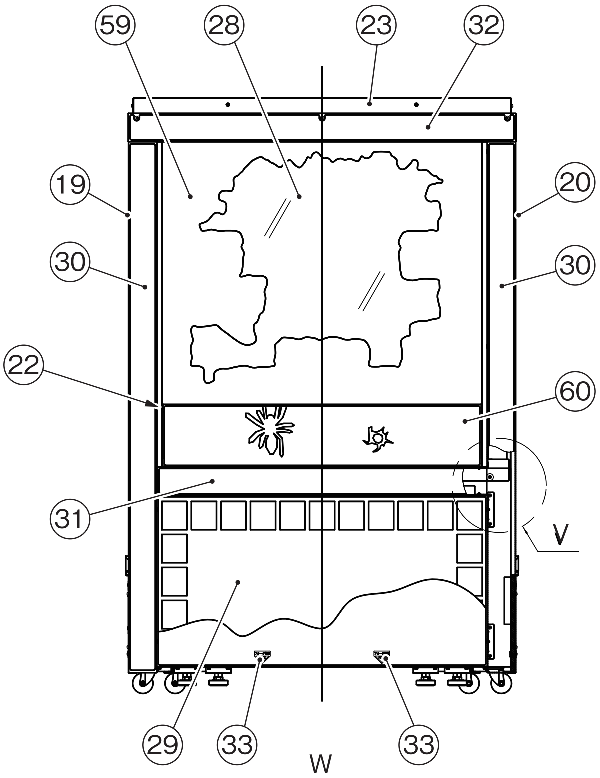


Seat (R) (reverse side)



Seat (L) (reverse side)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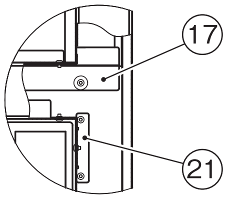


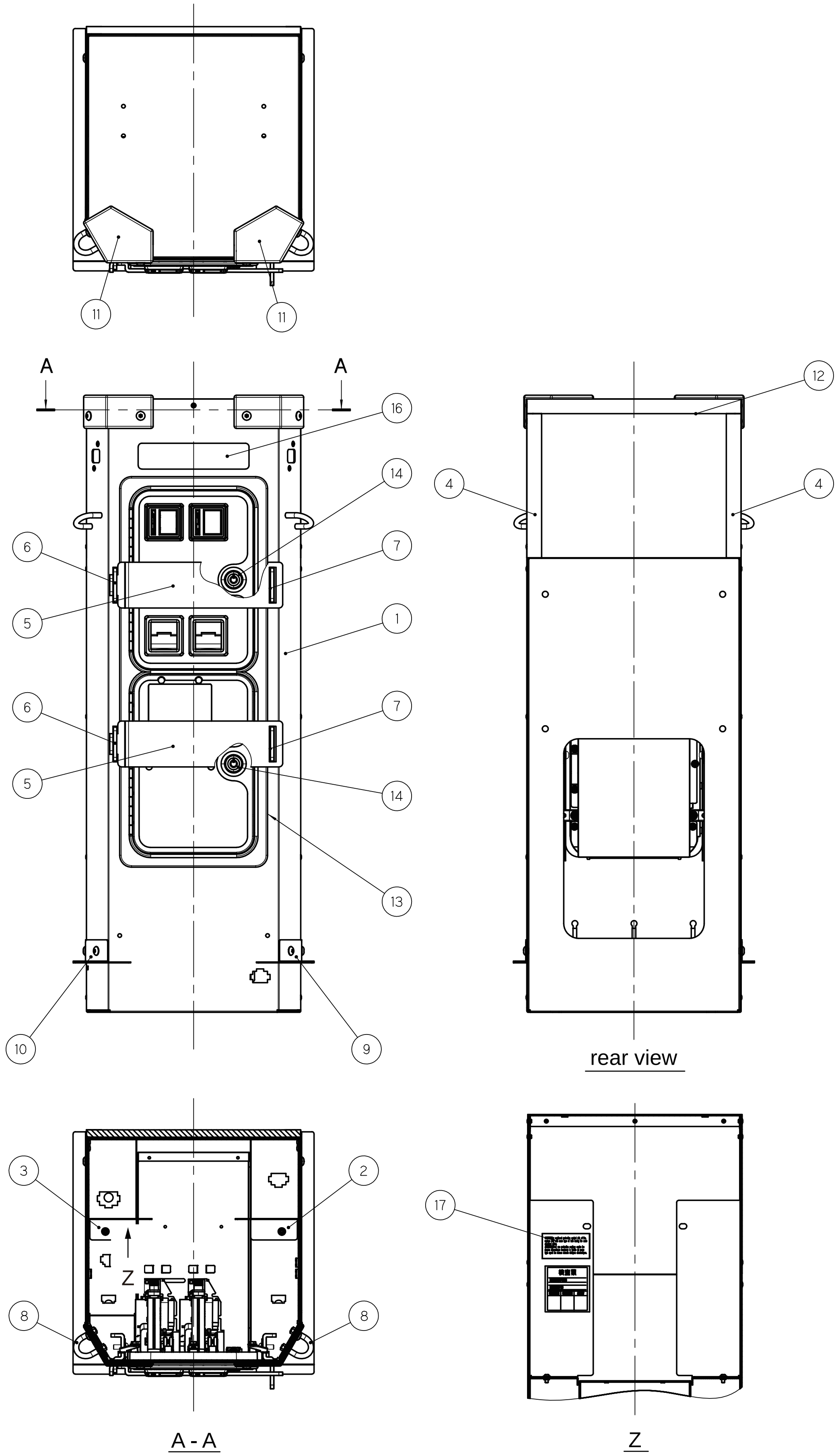
V

10. Parts List

No.	Name	Qty.	Type and rating	Part No.
1	Center cabinet	1		736-409
2	Seat cushion (L)	1		736-410
3	Seat cushion (R)	1		736-411
4	Seat base (L)	1		736-412
5	Seat base (R)	1		736-413
6	Seat hook	4		736-414
7	Seat support	2		736-415
8	Seat support bracket A	2		736-416
9	Seat support bracket B	2		736-417
10	PC board base	1		736-418
11	Regulator base	1		736-419
12	Fan plate	1		736-420
13	Woofer plate	1		736-421
14	Gun holder	1		736-422
15	Center frame (L)	1		736-423
16	Center frame (R)	1		736-424
17	Under frame (EXP)	1		736-966
18	Upper frame	1		736-426
19	Center cover (L)	1		736-427
20	Center cover (R)	1		736-428
21	Center cover bracket	4		736-429
22	Under cover (EXP)	1		736-967
23	Upper cover	1		736-431
24	Mount plate	1		736-432
25	Rack base A	1		736-433
26	Rack base B	1		736-434
27	Rack base C	1		736-435
28	Smoke panel (EXP)	1		736-968
29	Cabinet sticker	1		736-437
30	Center cover sticker	2		736-438
31	Under cover sticker	1		736-439
32	Upper cover sticker	1		736-440
33	Fork sticker PH	2		461-678
34	Warning sticker service (B) (EXP)	2		461-539
35	Adjusting bolt bracket	4		731-158
36	Adjusting bolt	4		102-281
37	Key washer	1		450-124
38	Key plate	1		736-441
39	Coin box lock	1	F750-DS8	101-175
40	Caster (swivel type)	4	SG-65N	102-228
41	Round anti-vibration rubber	4	RB-20	106-166
42	Cabinet corner guard A	2		736-442
43	Cabinet corner guard B	2		736-443
44	Center cover B (L)	1		736-444
45	Center cover B (R)	1		736-445
46	Intake plate	1		736-446
47	Eptsealer	2	EE-1010 W10 x t3 x L450	106-242

No.	Name	Qty.	Type and rating	Part No.
48	Eptsealer	2	EE-1010 W10 x t3 x L300	106-243
49	Gun holder cushion	4		736-448
50	3.1CH AMP PC board	1		307-940
51	Switching regulator (24V)	1	VS75E-24	009-280
52	Switching regulator (5V)	1	VS15C-5	009-112
53	Switching regulator (12V)	1	VS150E-12	009-231
54	Fan motor	1	PAAD2A225BM-Y369	005-516
55	Fan guard	1	8130-TR	005-413
56	Woofer speaker	1	FL130U70-4	006-184
57	Inside curtain support	1		736-478
58	Inside curtain	1		736-449
59	Panel sticker (A)(EXP)	1		736-969
60	Panel sticker (B)(EXP)	1		736-970
61	HDMI cable	1	BIZ-HDMI-1.3a-MM-4000-C	011-147
62	RS232C cable	1	DPE-S359A	011-167
63	φ3.5 stereo cable	2	BIZ-3.5S-3.5S-1500	011-146
64	USB cable (1.5 m)	1	DPE-S358A	011-168
65	LAN cable (2 m)	1	DPE-S360-02A	011-169
66	LAN relay connector (fixed to No. 24 Mount plate)	1	5662-RJ45COUPLER-0	011-123

10-4 Coin Box Assembly (US Specifications)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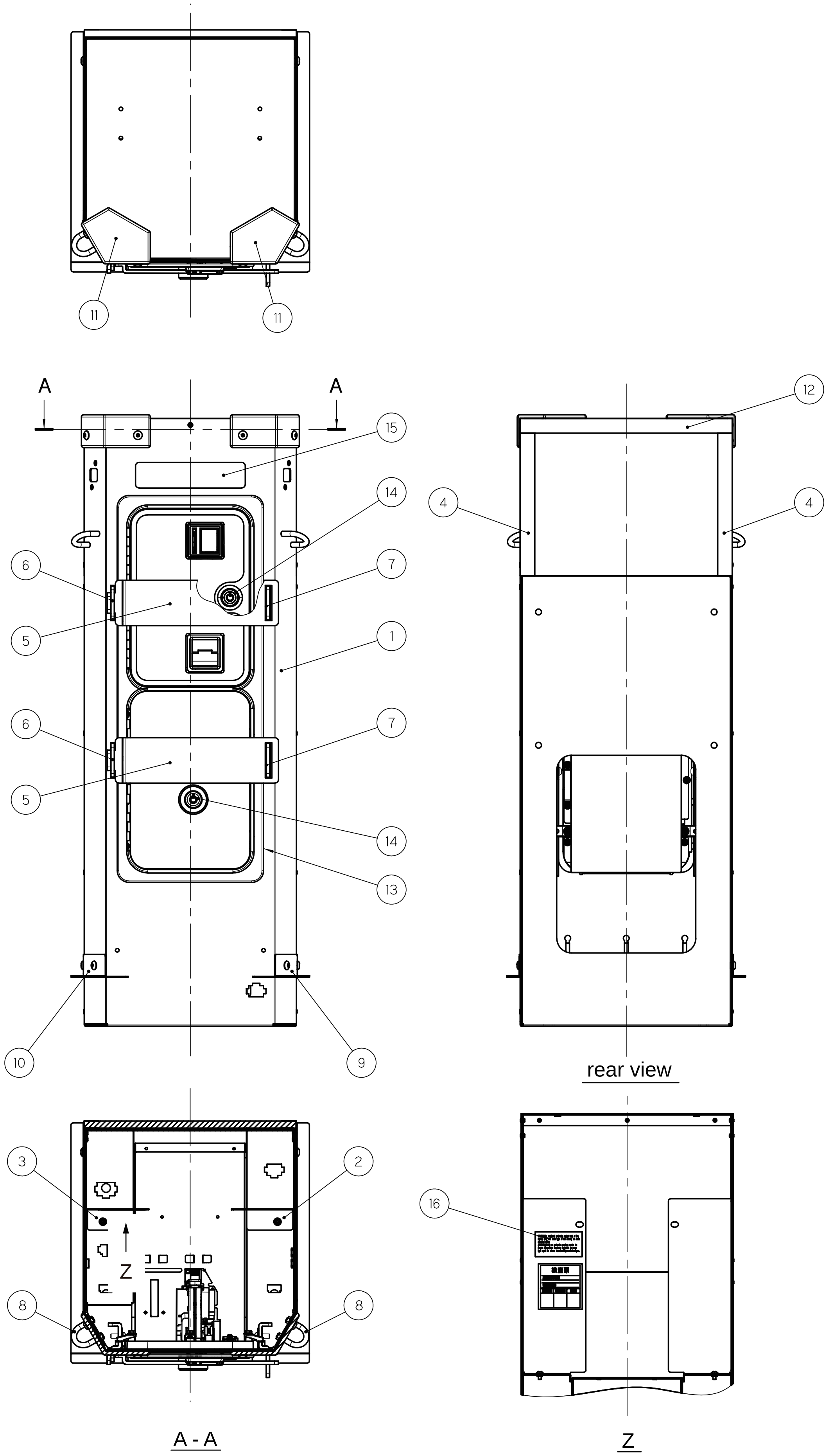
No.	Name	Qty.	Type and rating	Part No.
1	Coin tower(EXP)	1		736-972
2	Service panel cover(L)(EXP)	1		736-973
3	Service panel cover(R)(EXP)	1		736-974
4	Coin tower rear guard C	2		736-975
5	Lock bar	2		736-976
6	Lock bar bracket(L)	2		736-977
7	Lock bar bracket(R)	2		736-978
8	Wire bracket	2		736-979
9	Coin tower side cover(L)	1		736-451
10	Coin tower side cover(R)	1		736-452
11	Cushion rubber	2		736-453
12	Coin tower rear guard A	1		736-463
13	Coin door	1	BNWCD-L2SB	100-477
14	Coin box lock	2	F750-DS8	101-175
15	Price sticker (A)(EXP)	1		736-971
16	Fuse sticker	1		736-980

10-5 Coin Box Assembly (EU Specifications)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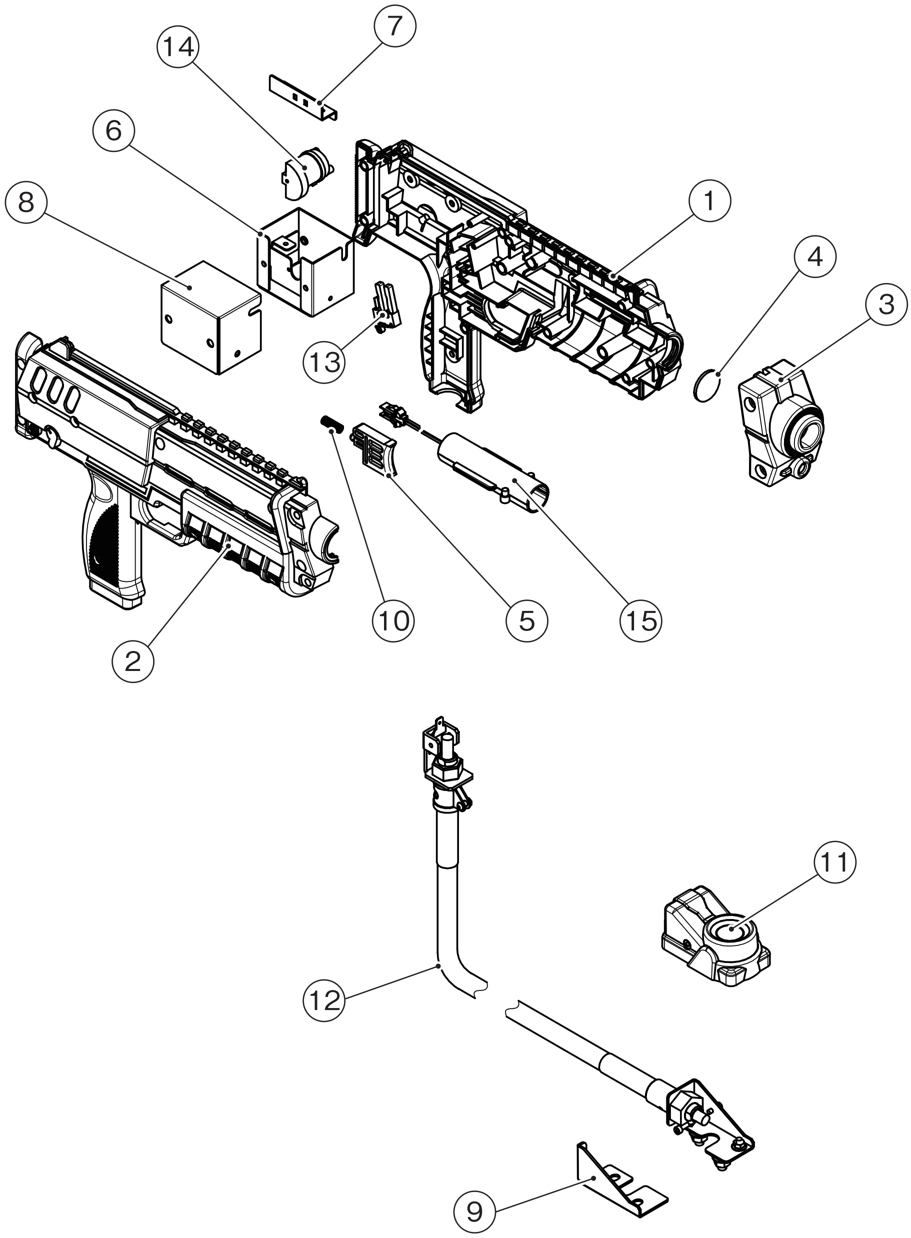
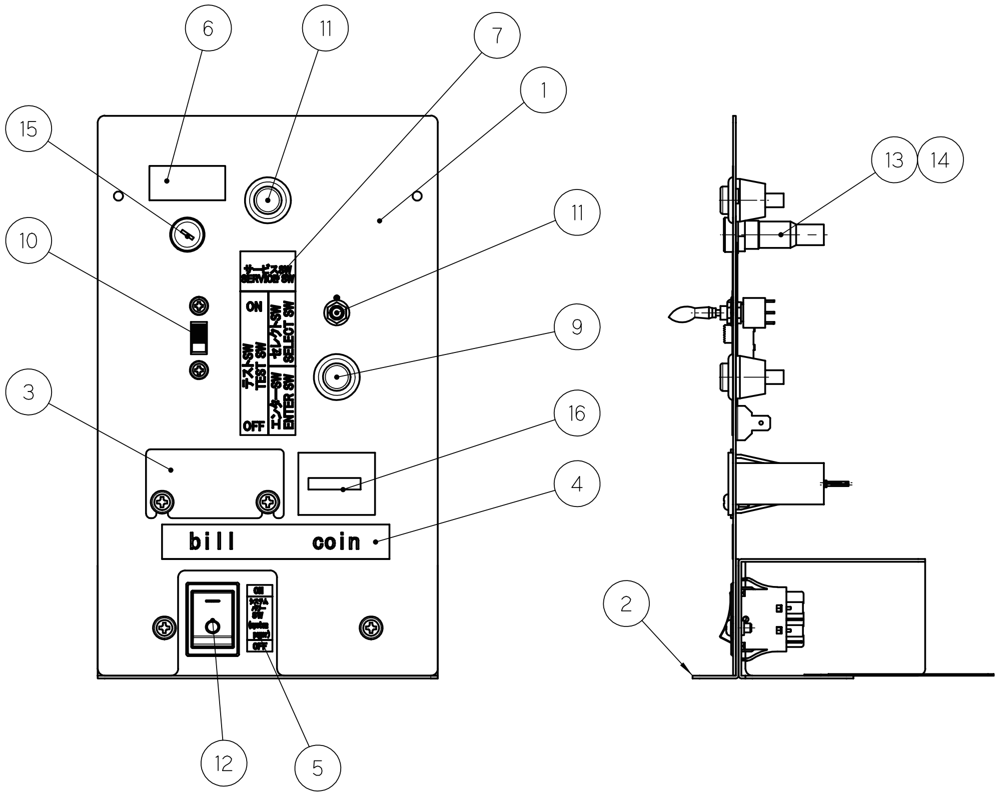
No.	Name	Qty.	Type and rating	Part No.
1	Coin tower(EXP)	1		736-972
2	Service panel cover(L)(EXP)	1		736-973
3	Service panel cover(R)(EXP)	1		736-974
4	Coin tower rear guard C	2		736-975
5	Lock bar	2		736-976
6	Lock bar bracket(L)	2		736-977
7	Lock bar bracket(R)	2		736-978
8	Wire bracket	2		736-979
9	Coin tower side cover(L)	1		736-451
10	Coin tower side cover(R)	1		736-452
11	Cushion rubber	2		736-453
12	Coin tower rear guard A	1		736-463
13	Coin door	1	BNWCD-L10H	100-478
14	Coin box lock	2	F750-DS8	101-175
15	Price sticker (A)(EXP)	1		736-971
16	Fuse sticker	1		736-980

10-6 Gun Assembly



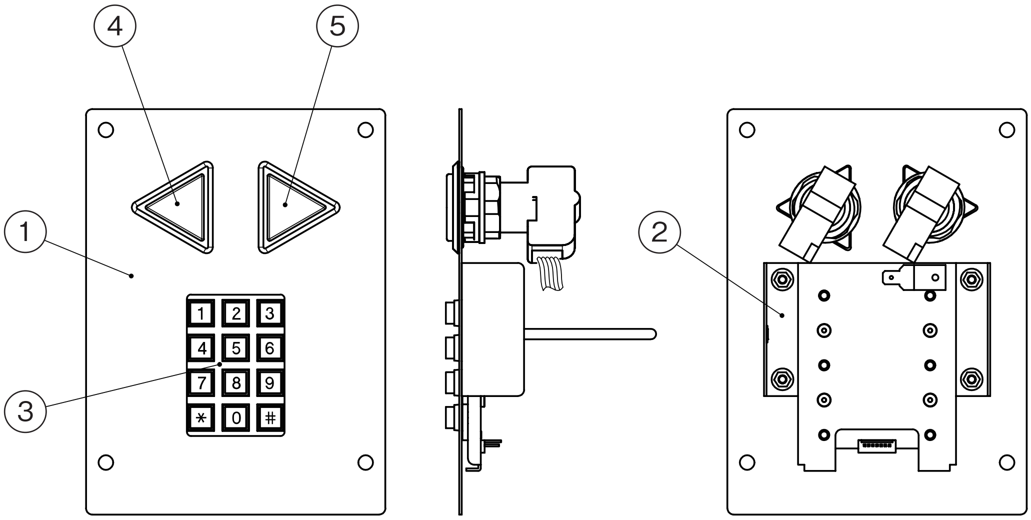
No.	Name	Qty.	Type and rating	Part No.
1	Gun cover (L)(EXP)	1	(L) (R) set	736-981
2	Gun cover (R)(EXP)	1	(L) (R) set	736-981
3	Rubber cover	1		736-467
4	Lens cover	1		736-468
5	Trigger	1		736-469
6	Motor bracket A	1		736-470
7	Motor bracket B	1		736-471
8	Motor bracket cover	1		736-472
9	Gun tube bracket B2P2	1		736-475
10	Trigger spring	1		717-309
11	Cable cover (B)	1	SS-01GL2TTG-203A-F1448 24 V	736-476
12	Gun tube(EXP)	1		307-962
13	Micro switch	1	SS-01GL2T	000-666
14	Motor	1	TG-203A-F1448 24 V	005-553
15	Infrared-emitting unit	1	IRU-01	307-941
—	Gun Assembly	1		307-961

10-7 Service panel Assembly



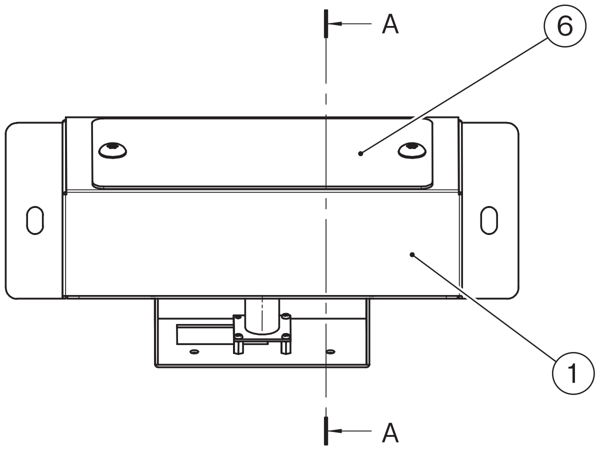
No.	Name	Qty.	Type and rating	Part No.
1	Service panel EXP	1		736-983
2	Service panel base EXP	1		736-984
3	Coin counter cover	1		736-985
4a	Coin counter label A	1	(US specifications)	736-986
4b	Coin counter label B	1	(EU specifications)	736-987
5	System power sticker	1		736-482
6	Fuse Sicker (B)	1		735-120
7	Service sticker M (B)	1		461-722
8	Push button (test)	1	SDP-103C-22RB	000-336
9	Push button (enter)	1	SDP-103C-22GB	000-619
10	Slide switch (test)	1	SDS-103A-03#13BJ	000-681
11	Toggle switch (select)	1	SDSA-331G-CR	000-337
12	Rocker switch (system power)	1	A8A-207-1D	000-906
13	Fuse holder	1		001-112
14	Fuse holder cap	1		001-113
15a	Fuse	1	6.3A 250V (US specifications)	001-114
15b	Fuse	1	2A 250V (EU specifications)	001-115
16	Coin counter	1	FX-06PD52 12V	003-039

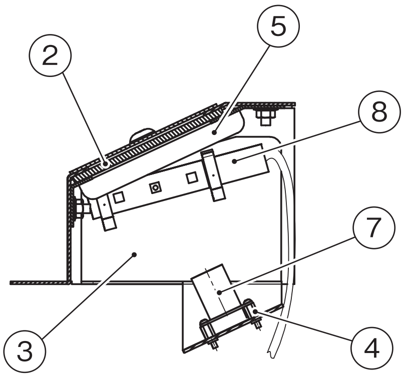
10-8 Control Panel Assembly



No.	Name	Qty.	Type and rating	Part No.
1	Control panel plate EXP	1		736-988
2	PIN pad bracket	1		736-989
3	PIN pad	1		307-984
4	Illuminated push button switch (red)	1		000-908
5	Illuminated push button switch (blue)	1		000-907

10-9 Camera Assembly





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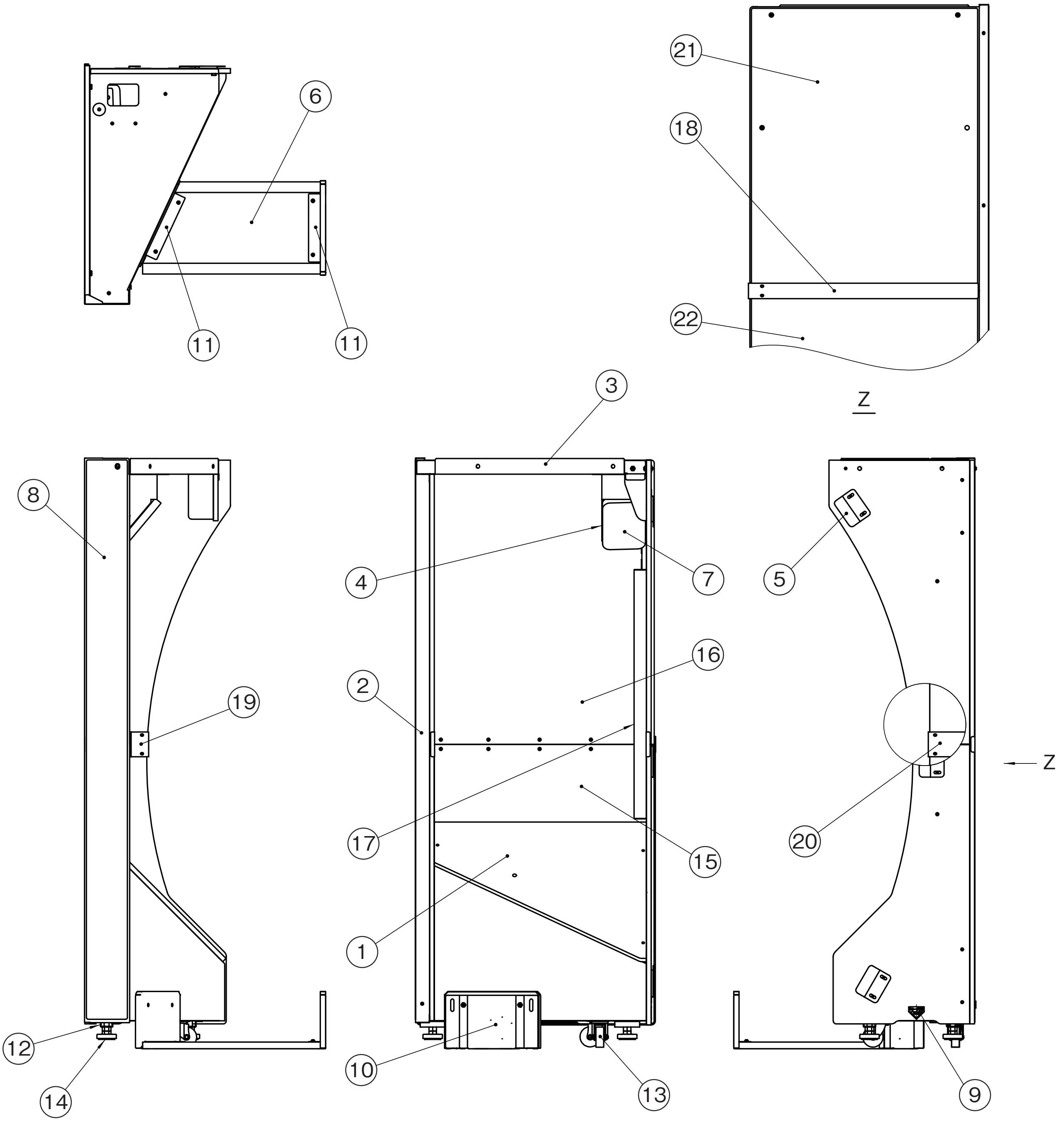
No.	Name	Qty.	Type and rating	Part No.
1	Camera case	1		736-484
2	Camera cover	1		736-485
3	Camera bracket	1		736-486
4	DURACON spacer (hexagonal)	3	BS-2006E	103-223
5	Camera cover retainer	1		736-487
6	Blind retainer	1		736-488
7	Authentication camera	1	DMM-11S0-0301	307-942
8	Tape LED (50 mm)	2	5050BCW-60W-12V-XA2R-L0050	002-713

10-10 Side Tower (L) Assembly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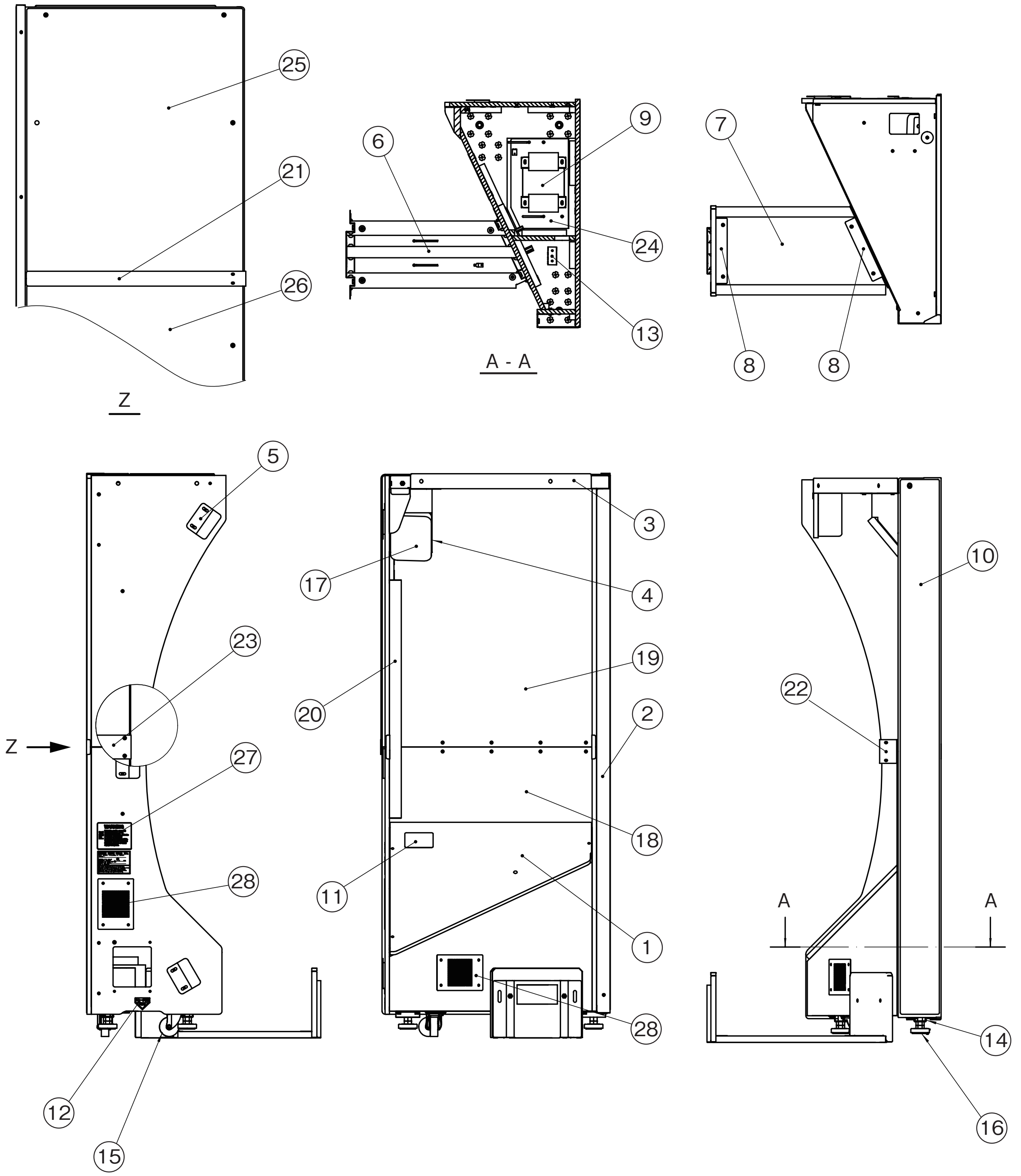
No.	Name	Qty.	Type and rating	Part No.
1	Door board (L)	1		736-490
2	Side cover (L)	1		736-491
3	Tower top base (L)	1		736-492
4	Tower speaker bracket (L)	1		736-493
5	Dome holder	3		736-494
6	Tower joint plate (L)	1		736-495
7	Speaker	1	SS00110D1	006-150
8	Side cover sticker (L)	1		736-498
9	Fork sticker PH	1		461-678
10	Tower joint base (L)	1		736-499
11	Tower joint cover (S)	2		736-500
12	Adjusting bolt bracket	3		731-158
13	Caster (swivel type)	3	SG-65N	102-228
14	Adjusting bolt	3	MF-EI-000100	102-281
15	Side tower cabinet under (L)(EXP)	1		736-990
16	Side tower cabinet upper (L)(EXP)	1		736-991
17	Side cabinet joint base(L) (EXP)	1		736-992
18	Side cabinet support plate (EXP)	1		736-993
19	Side cabinet joint angleA (EXP)	1		736-994
20	Side cabinet joint angleB (EXP)	1		736-995
21	Side tower upper sticker (EXP)	1		736-996
22	Side tower under sticker (EXP)	1		736-997

10-11 Side Tower (R) Assembly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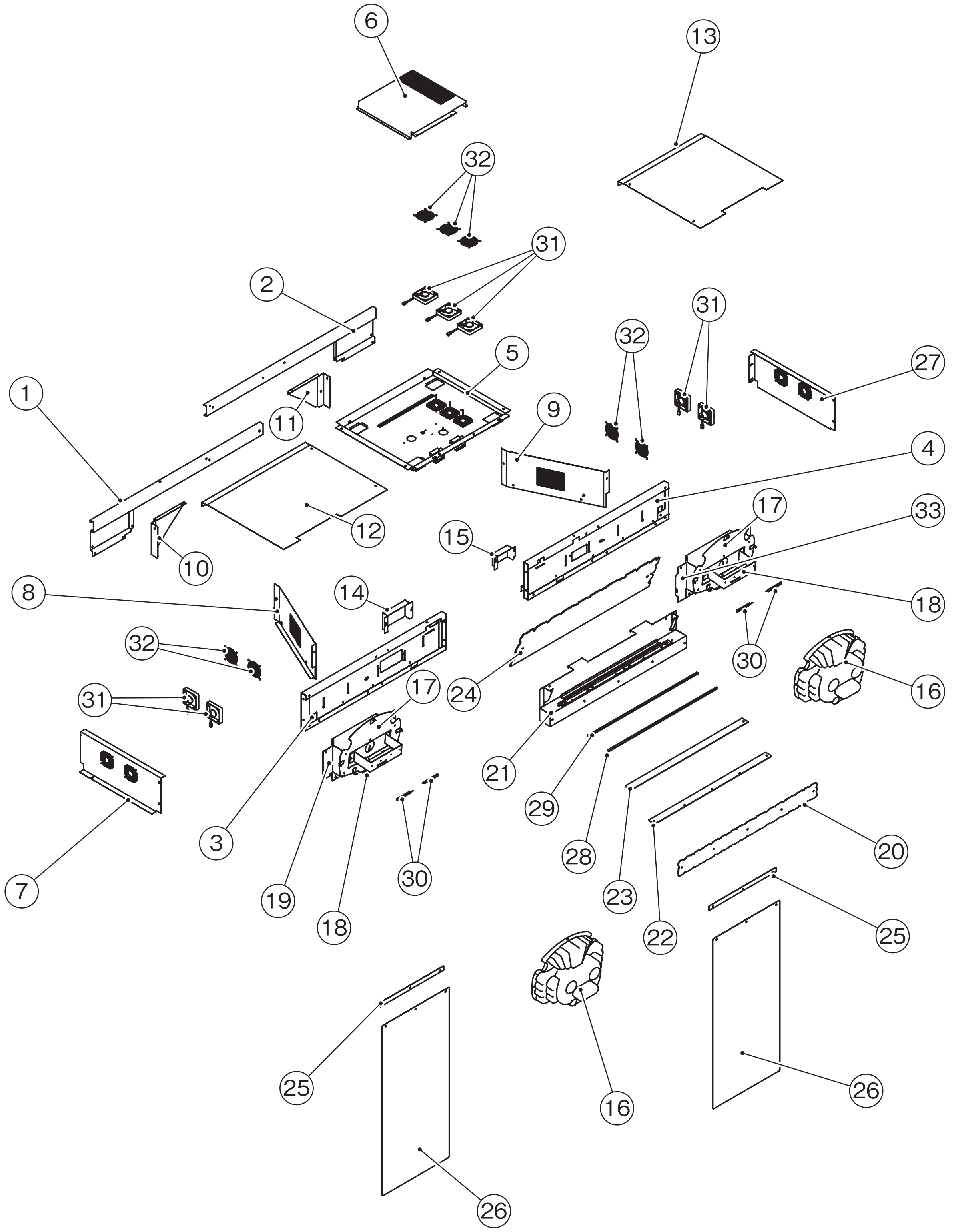
No.	Name	Qty.	Type and rating	Part No.
1	Door board (R)	1		736-502
2	Side cover (R)	1		736-503
3	Tower top base (R)	1		736-504
4	Tower speaker bracket (R)	1		736-505
5	Dome holder	3		736-494
6	Tower joint base (R)	1		736-506
7	Tower joint plate (R)	1		736-507
8	Tower joint cover	2		736-508
9	Transformer	1	S133C3B8PV	004-770
10	Side cover sticker (R)	1		736-509
11	Warning sticker service (B) (EXP)	1		461-539
12	Fork sticker PH	1		461-678
13	Eight terminal faston tab	1		736-510
14	Adjusting bolt bracket	3		731-158
15	Caster (swivel type)	3	SG-65N	102-228
16	Adjusting bolt	3	MF-EI-000100	102-281
17	Speaker	1	S00110D1	006-150
18	Side tower cabinet under (R)(EXP)	1		736-998
19	Side tower cabinet upper (R)(EXP)	1		736-999
20	Side cabinet joint base(R) (EXP)	1		737-000
21	Side cabinet support plate (EXP)	1		736-993
22	Side cabinet joint angleA (EXP)	1		736-994
23	Side cabinet joint angleB (EXP)	1		736-995
24	Transformer plate(EXP)	1		737-001
25	Side tower upper sticker (EXP)	1		736-996
26	Side tower under sticker (EXP)	1		736-997
27	FBI sticker	1		461-812
28	Intake plate	2		736-446
29	LAN cable (1.5 m)	1	DPE-S360-01A	011-163

10-12 Roof Assembly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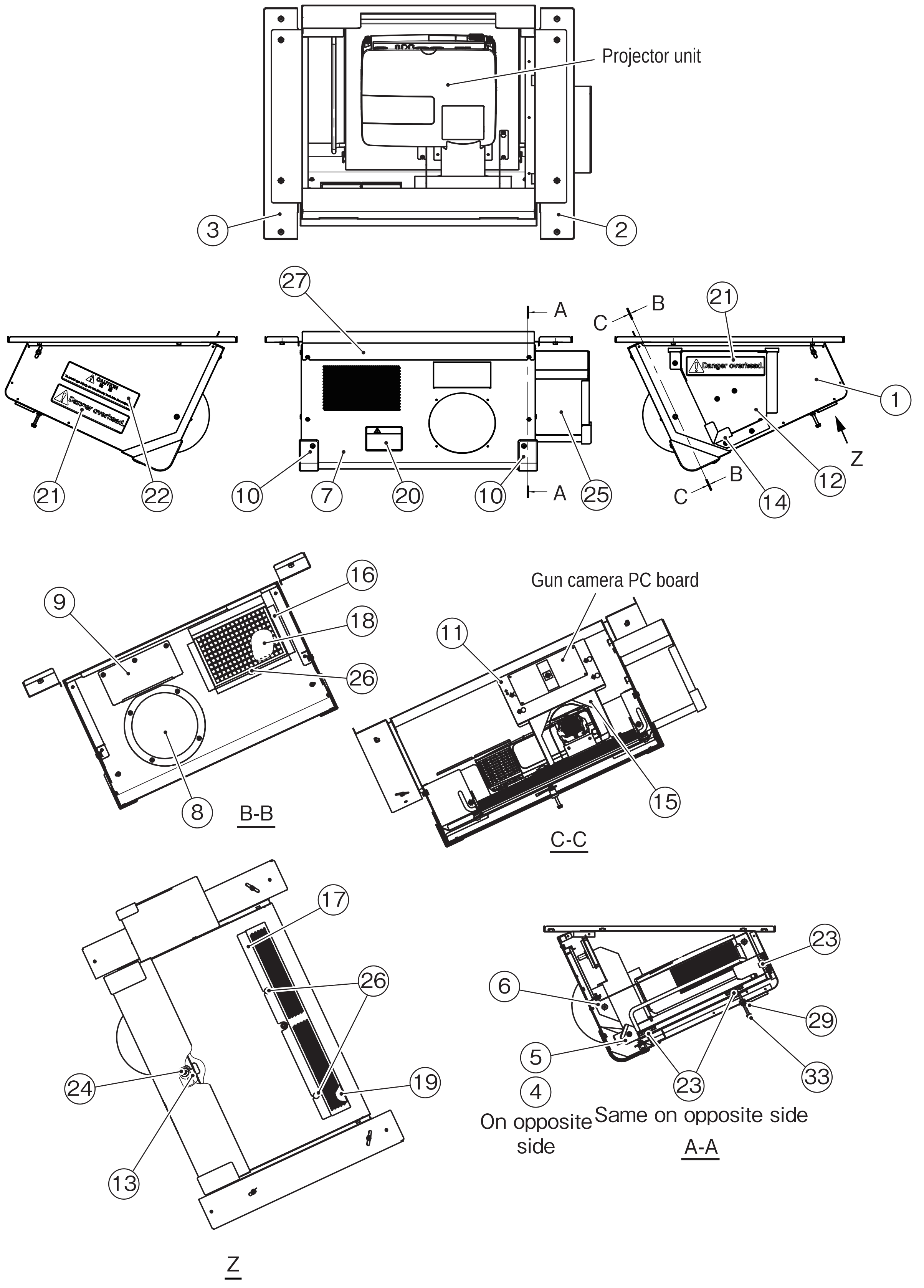
No.	Name	Qty.	Type and rating	Part No.
1	Roof frame A (L)	1		736-511
2	Roof frame A (R)	1		736-512
3	Roof frame B (L)	1		736-513
4	Roof frame B (R)	1		736-514
5	Roof frame C	1		736-515
6	Roof frame C cover	1		736-516
7	Roof frame D (L)	1		736-517
8	Roof frame E (L)	1		736-518
9	Roof frame E (R)	1		736-519
10	Corner cover (L)	1		736-520
11	Corner cover (R)	1		736-521
12	Roof panel (L)	1		736-522
13	Roof panel (R)	1		736-523
14	Harness cover (L)	1		736-524
15	Harness cover (R)	1		736-525
16	Face	2		736-526
17	Face cover	2		736-527
18	Face LED adjuster	2		736-528
19	Face support (L)	1		736-529
20	Block panel	1		736-530
21	Sign panel base	1		736-531
22	Sign panel LED cover	1		736-532
23	Sign panel LED bracket	1		736-533
24	Sign panel	1		736-534
25	Curtain support	2		736-535
26	Caution curtain limit	2		461-813
27	Roof frame D (R)	1		736-536
28	Sign tape LED (white)	1	5050BCW-60W-12V-XA2R-L1000	002-714
29	Sign tape LED (red)	1	5050BR-60W-12V-XA2R-L1000	002-715
30	Face tape LED	4	5050BR-60W-12V-XA2R-L0100	002-716
31	Fan motor	7	PAAD2A225BM-Y369	005-516
32	Fan guard	7	8130-TR	005-413
33	Face support (R)	1		736-537

10-13 Projector Assembly


Projector unit
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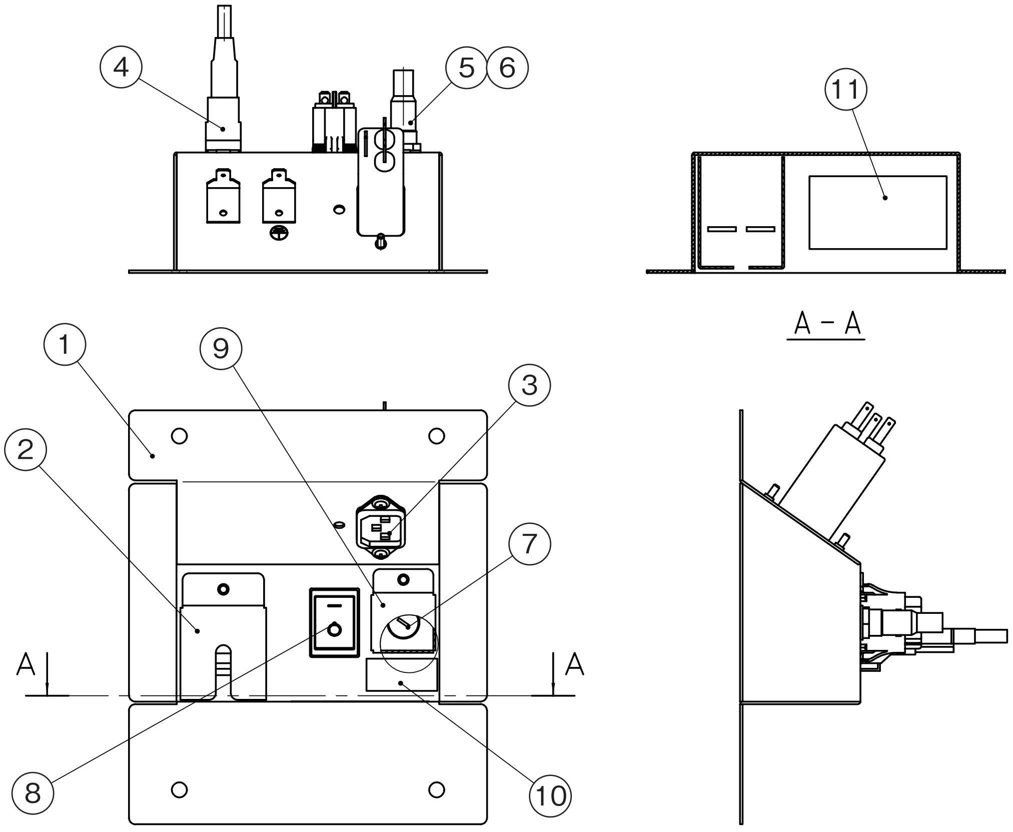
2
27
A
B
C
21
1
Z
12
14
22
10
7
20
25
16
9
18
26
11
Gun camera PC board
8
B-B
15
C-C
17
24
19
13
Z
6
5
4
23
29
33
On opposite side
Same on opposite side
A-A

No.	Name	Qty.	Type and rating	Part No.
1	Projector base	1		736-538
2	Projector bracket (R)	1		736-539
3	Projector bracket (L)	1		736-540
4	Projector hook (L)	1		736-541
5	Projector hook (R)	1		736-542
6	Adjust tray	1		736-543
7	Projector cover	1		737-004
8	Lens cover	1		736-545
9	Camera cover	1		736-546
10	Corner cover	2		736-547
11	Gun camera PC board base	1		736-552
12	Center speaker bracket	1		736-548
13	Key hook D	1		736-549
14	Speaker guard	1		736-550
15	Gun camera bracket	2		736-553
16	Filter tray F	1		718-113
17	Filter tray R	1		736-551
18	Filter F	1		718-116
19	Filter R	1		718-117
20	Warning sticker service (B) (EXP)	1		461-539
21	Danger sticker Watch your head POD (EXP)	2		461-622
22	Caution sticker projector (EXP)	1		461-621
23	Round anti-vibration rubber	6	RB-20	106-166
24	Coin box lock	1	F750-DS8	101-175
25	Speaker	1	S00110D1	006-150
26	Resin head screw	3	UN-2013W	110-044
27	Projector mask support(EXP)	1		737-005

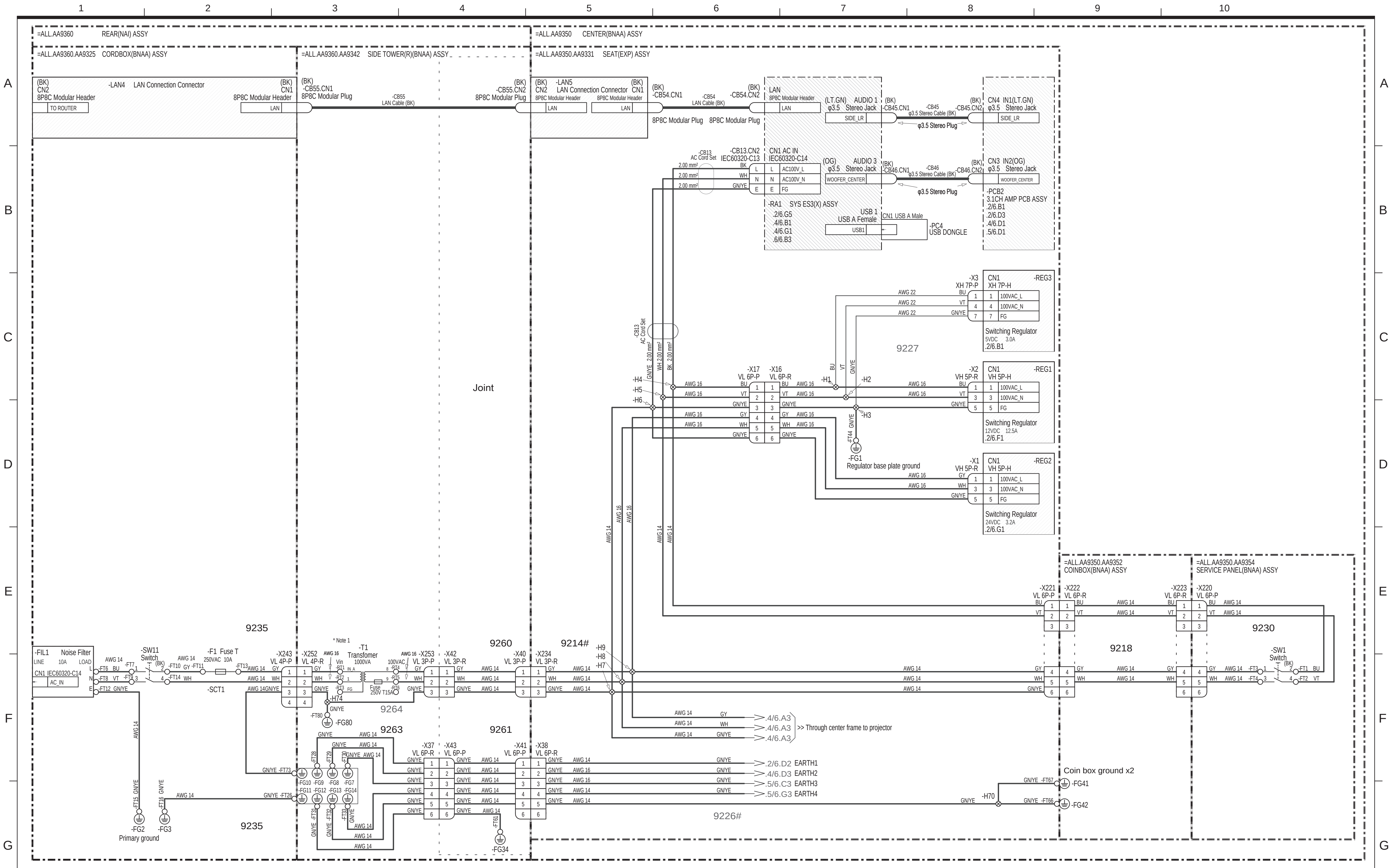
10-14 Cord Box Assembly



No.	Name	Qty.	Type and rating	Part No.
1	Cord box (EXP)	1		737-006
2	LAN cover	1		736-479
3	Noise filter	1	RPE-2010R	011-103
4	LAN relay connector	1	5662-RJ45COUPLER-0	011-123
5	Fuse holder	1	0031.1694	001-112
6a	Glass fuse	1	10A 250V (US specifications)	001-108
6b	Glass fuse	1	5A 250V(EU specifications)	001-111
7	Fuse holder cap	1	0031.1663	001-113
8	Rocker switch	1	A8A-207-1D	000-906
9	Fuse cover	1		737-007
10a	Fuse sticker	1	(US specifications)	734-323
10b	Fuse sticker (C)	1	(EU specifications)	735-126
11	Fuse TYUUI sticker	1	(US specifications only)	736-980

11. Wiring Diagram

US Specifications, AC 120V (1/6)


=ALL.AA9360 REAR(NAI) ASSY
=ALL.AA9360.AA9325 CORDBOX(BNAA) ASSY
=ALL.AA9360.AA9342 SIDE TOWER(R)(BNAA) ASSY
=ALL.AA9350 CENTER(BNAA) ASSY
=ALL.AA9350.AA9331 SEAT(EXP) ASSY
-LAN4 LAN Connection Connector
8P8C Modular Header
TO ROUTER
LAN
-CB55.CN1 8P8C Modular Plug
-CB55 LAN Cable (BK)
-CB55.CN2 8P8C Modular Plug
-LAN5 LAN Connection Connector
-CB54.CN1
-CB54 LAN Cable (BK)
-CB54.CN2
8P8C Modular Plug
AUDIO 1 φ3.5 Stereo Jack
-CB45.CN1
-CB45 φ3.5 Stereo Cable (BK)
-CB45.CN2
φ3.5 Stereo Plug
CN4 IN1(LT.GN) φ3.5 Stereo Jack
SIDE_LR
-CB13 AC Cord Set
-CB13.CN2 IEC60320-C13
CN1 AC IN IEC60320-C14
AC100V_L
AC100V_N
FG
AUDIO 3 φ3.5 Stereo Jack
-CB46.CN1
-CB46 φ3.5 Stereo Cable (BK)
-CB46.CN2
CN3 IN2(OG) φ3.5 Stereo Jack
WOOFER_CENTER
-RA1 SYS ES3(X) ASSY
.2/6.G5
.4/6.B1
.4/6.G1
.6/6.B3
USB 1 USB A Female
USB1
CN1 USB A Male
-PC4 USB DONGLE
-PCB2 3.1CH AMP PCB ASSY
.2/6.B1
.2/6.D3
.4/6.D1
.5/6.D1
-X3 XH 7P-P
CN1 XH 7P-H
-REG3
100VAC_L
100VAC_N
Switching Regulator 5VDC 3.0A
.2/6.B1
9227
-X17 VL 6P-P
-X16 VL 6P-R
-H1
-H2
-H3
-H4
-H5
-H6
-X2 VH 5P-R
CN1 VH 5P-H
-REG1
Switching Regulator 12VDC 12.5A
.2/6.F1
-FT44
-FG1 Regulator base plate ground
-X1 VH 5P-R
-REG2
Switching Regulator 24VDC 3.2A
.2/6.G1
Joint
=ALL.AA9350.AA9352 COINBOX(BNAA) ASSY
=ALL.AA9350.AA9354 SERVICE PANEL(BNAA) ASSY
-X221 VL 6P-P
-X222 VL 6P-R
-X223 VL 6P-R
-X220 VL 6P-P
9218
9230
-SW1 Switch
-FT1
-FT2
-FT3
-FT4
9235
-FIL1 Noise Filter
CN1 IEC60320-C14
AC_IN
-SW11 Switch
-F1 Fuse T 250VAC 10A
-SCT1
-X243 VL 4P-P
-X252 VL 4P-R
* Note 1
-T1 Transfomer 1000VA
Fuse 250V T15A
-X253 VL 3P-P
-X42 VL 3P-R
9260
-X40 VL 3P-P
-X234 VL 3P-R
9214#
-H7
-H8
-H9
-H74
-FT80
-FG80
9264
9263
9261
.4/6.A3
Through center frame to projector
-X37 VL 6P-R
-X43 VL 6P-P
-X41 VL 6P-P
-X38 VL 6P-R
.2/6.D2 EARTH1
.4/6.D3 EARTH2
.5/6.C3 EARTH3
.5/6.G3 EARTH4
Coin box ground x2
-H70
-FT67
-FG41
-FT66
-FG42
9226#
-FT61
-FG34
-FT15
-FT16
-FG2 Primary ground
-FG3
-FG7
-FG8
-FG9
-FG10
-FG11
-FG12
-FG13
-FG14
AWG 14
AWG 16
AWG 22
GN/YE

Note 1: Connect the -T1 transformer terminal which corresponds to the power supply voltage.

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	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" signed spiral cable.

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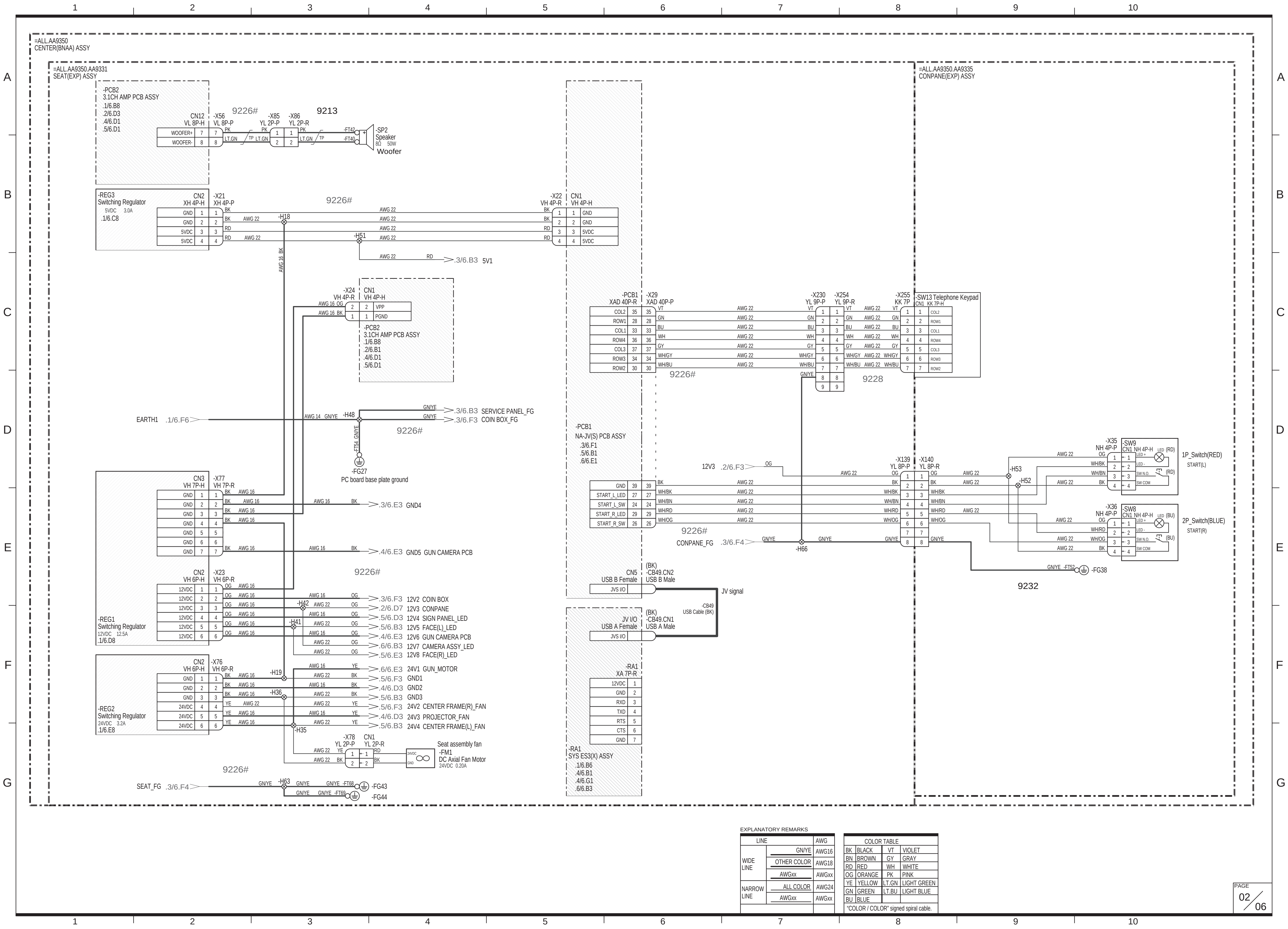
11. Wiring Diagram

US Specifications, AC 120V (2/6)



=ALL.AA9350
CENTER(BNAA) ASSY
=ALL.AA9350.AA9331
SEAT(EXP) ASSY
=ALL.AA9350.AA9335
CONPANE(EXP) ASSY
-PCB2
3.1CH AMP PCB ASSY
.1/6.B8
.2/6.D3
.4/6.D1
.5/6.D1
CN12
VL 8P-H
-X56
VL 8P-P
-X85
YL 2P-P
-X86
YL 2P-R
9226#
9213
WOOFER+
WOOFER-
PK
LT.GN
TP
-FT42
-FT40
-SP2
Speaker
8Ω 50W
Woofer
-REG3
Switching Regulator
5VDC 3.0A
.1/6.C8
CN2
XH 4P-H
-X21
XH 4P-P
GND
5VDC
BK
RD
AWG 22
-H18
-H51
-X22
VH 4P-R
CN1
VH 4P-H
AWG 16 BK
.3/6.B3 5V1
-X24
VH 4P-R
AWG 16 OG
AWG 16 BK
VPP
PGND
-PCB2
3.1CH AMP PCB ASSY
.1/6.B8
.2/6.B1
.4/6.D1
.5/6.D1
-PCB1
XAD 40P-R
-X29
XAD 40P-P
COL2
ROW1
COL1
ROW4
COL3
ROW3
ROW2
VT
GN
BU
WH
GY
WH/GY
WH/BU
GN/YE
-X230
YL 9P-P
-X254
YL 9P-R
-X255
KK 7P
-SW13 Telephone Keypad
CN1 KK 7P-H
9226#
9228
EARTH1 .1/6.F6
AWG 14 GN/YE
-H48
.3/6.B3 SERVICE PANEL_FG
.3/6.F3 COIN BOX_FG
-FT54 GN/YE
-FG27
PC board base plate ground
9226#
-PCB1
NA-JV(S) PCB ASSY
.3/6.F1
.5/6.B1
.6/6.E1
CN3
VH 7P-H
-X77
VH 7P-R
.3/6.E3 GND4
.4/6.E3 GND5 GUN CAMERA PCB
12V3 .2/6.F3
OG
GND
START_L_LED
START_L_SW
START_R_LED
START_R_SW
WH/BK
WH/BN
WH/RD
WH/OG
-X139
YL 8P-P
-X140
YL 8P-R
-H53
-H52
-X35
NH 4P-P
-SW9
CN1 NH 4P-H
LED (RD)
LED +
LED -
SW N.O.
SW COM
1P_Switch(RED)
START(L)
-X36
NH 4P-P
-SW8
CN1 NH 4P-H
LED (BU)
2P_Switch(BLUE)
START(R)
9226#
CONPANE_FG .3/6.F4
-H66
GN/YE -FT52
-FG38
9232
CN2
VH 6P-H
-X23
VH 6P-R
12VDC
-H42
-H41
.3/6.F3 12V2 COIN BOX
.2/6.D7 12V3 CONPANE
.5/6.D3 12V4 SIGN PANEL_LED
.5/6.B3 12V5 FACE(L)_LED
.4/6.E3 12V6 GUN CAMERA PCB
.6/6.B3 12V7 CAMERA ASSY_LED
.5/6.E3 12V8 FACE(R)_LED
-REG1
Switching Regulator
12VDC 12.5A
.1/6.D8
CN5
USB B Female
JVS I/O
(BK)
-CB49.CN2
USB B Male
JV signal
-CB49
USB Cable (BK)
JV I/O
USB A Female
(BK)
-CB49.CN1
USB A Male
-RA1
XA 7P-R
12VDC
GND
RXD
TXD
RTS
CTS
CN2
VH 6P-H
-X76
VH 6P-R
24VDC
YE
-H19
-H36
-H35
.6/6.E3 24V1 GUN_MOTOR
.5/6.F3 GND1
.4/6.D3 GND2
.5/6.B3 GND3
.5/6.F3 24V2 CENTER FRAME(R)_FAN
.4/6.D3 24V3 PROJECTOR_FAN
.5/6.B3 24V4 CENTER FRAME(L)_FAN
-REG2
Switching Regulator
24VDC 3.2A
.1/6.E8
-X78
YL 2P-P
CN1
YL 2P-R
Seat assembly fan
-FM1
DC Axial Fan Motor
24VDC 0.20A
-RA1
SYS ES3(X) ASSY
.1/6.B6
.4/6.B1
.4/6.G1
.6/6.B3
9226#
SEAT_FG .3/6.F4
-H63
GN/YE
-FT68
-FT69
-FG43
-FG44
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
PAGE
02
06

EXPLANATORY REMARKS

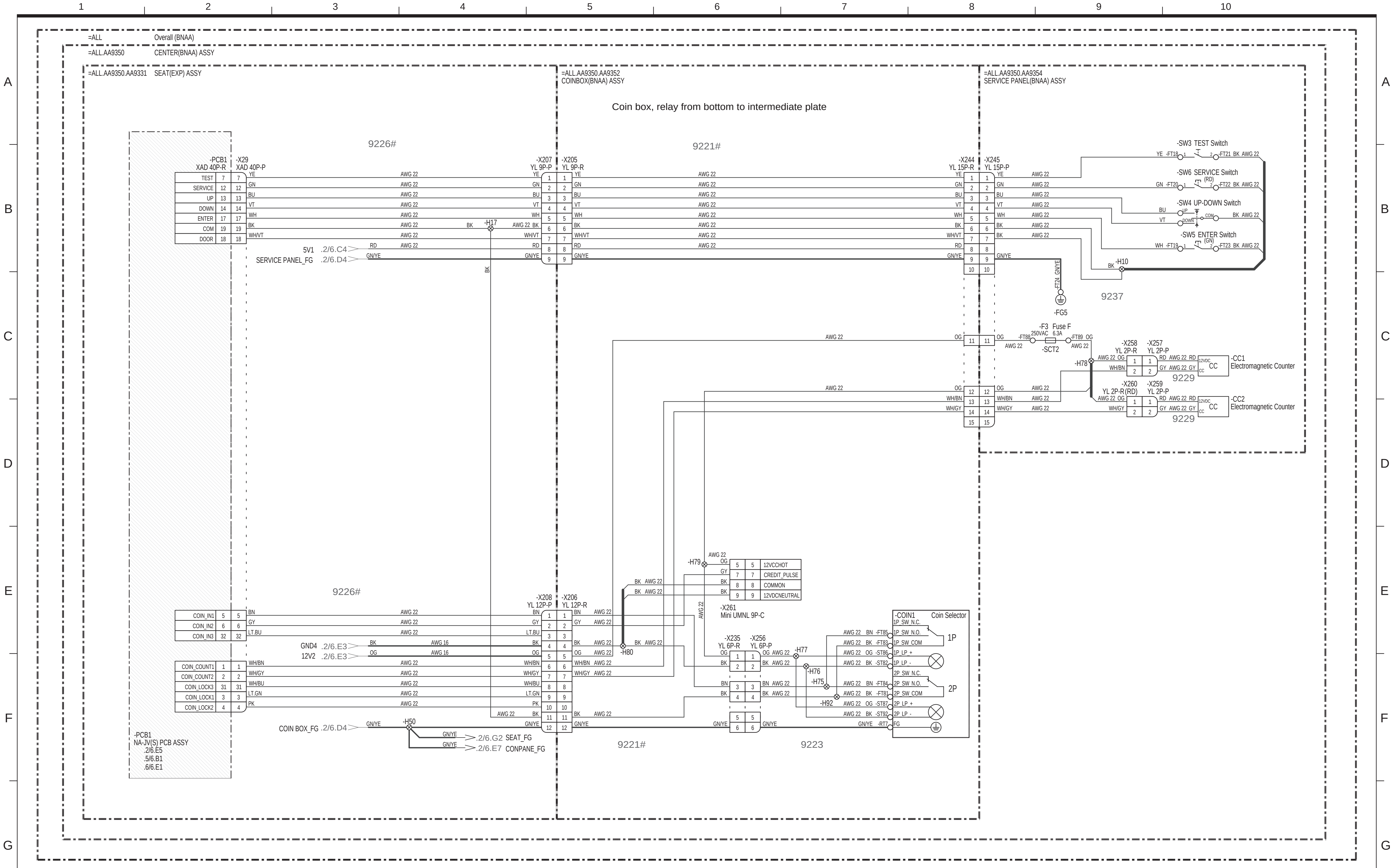
LINE		AWG
WIDE LINE	GN/YE	AWG16
	OTHER COLOR	AWG18
	AWGxx	AWGxx
NARROW LINE	ALL COLOR	AWG24
	AWGxx	AWGxx

COLOR TABLE			
BK	BLACK	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" signed spiral cable.

11. Wiring Diagram

US Specifications, AC 120V (3/6)


=ALL Overall (BNAA)
=ALL.AA9350 CENTER(BNAA) ASSY
=ALL.AA9350.AA9331 SEAT(EXP) ASSY
=ALL.AA9350.AA9352 COINBOX(BNAA) ASSY
=ALL.AA9350.AA9354 SERVICE PANEL(BNAA) ASSY
Coin box, relay from bottom to intermediate plate
9226#
9221#
9237
9229
9223
-PCB1 XAD 40P-R
-X29 XAD 40P-P
TEST
SERVICE
UP
DOWN
ENTER
COM
DOOR
5V1 .2/6.C4
SERVICE PANEL_FG .2/6.D4
-X207 YL 9P-P
-X205 YL 9P-R
-X244 YL 15P-R
-X245 YL 15P-P
-H17
-H10
-SW3 TEST Switch
-SW6 SERVICE Switch
-SW4 UP-DOWN Switch
-SW5 ENTER Switch
-FG5
-F3 Fuse F 250VAC 6.3A
-SCT2
-H78
-X258 YL 2P-R
-X257 YL 2P-P
-X260 YL 2P-R(RD)
-X259 YL 2P-P
-CC1 Electromagnetic Counter
-CC2 Electromagnetic Counter
CC
12VDC
-H79
-X261 Mini UMNL 9P-C
12VCCHOT
CREDIT_PULSE
COMMON
12VDCNEUTRAL
-X208 YL 12P-P
-X206 YL 12P-R
COIN_IN1
COIN_IN2
COIN_IN3
COIN_COUNT1
COIN_COUNT2
COIN_LOCK3
COIN_LOCK1
COIN_LOCK2
GND4 .2/6.E3
12V2 .2/6.E3
-H80
-X235 YL 6P-R
-X256 YL 6P-P
-H77
-H76
-H75
-H92
-COIN1 Coin Selector
1P SW N.C.
1P SW N.O.
1P SW COM
1P LP +
1P LP -
2P SW N.C.
2P SW N.O.
2P SW COM
2P LP +
2P LP -
FG
1P
2P
COIN BOX_FG .2/6.D4
-H50
.2/6.G2 SEAT_FG
.2/6.E7 CONPANE_FG
-PCB1 NA-JV(S) PCB ASSY .2/6.E5 .5/6.B1 .6/6.E1
AWG 22
AWG 16

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	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” signed spiral cable.			

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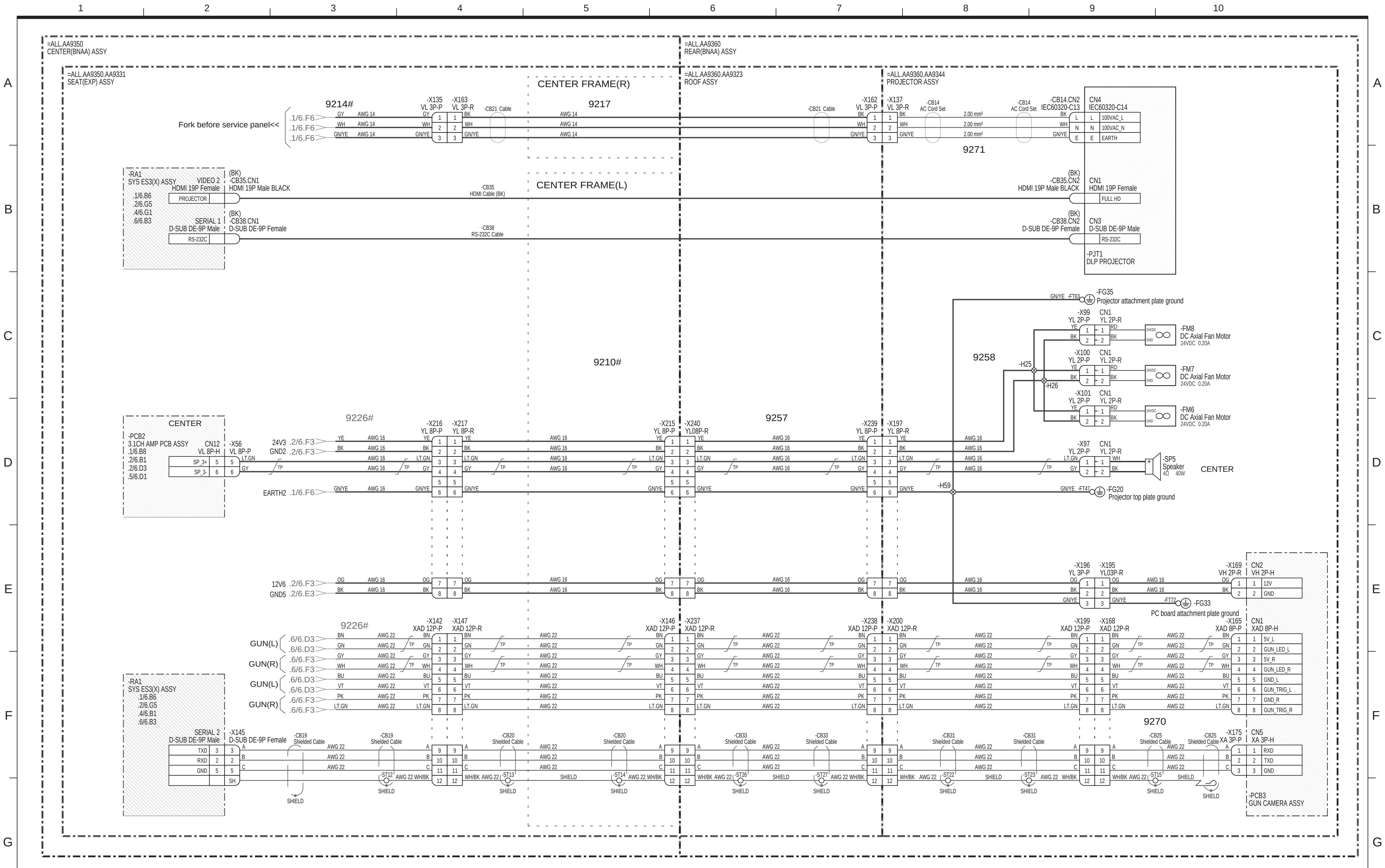
11. Wiring Diagram

US Specifications, AC 120V (4/6)


=ALL.AA9350
CENTER(BNAA) ASSY
=ALL.AA9350.AA9331
SEAT(EXP) ASSY
=ALL.AA9360
REAR(BNAA) ASSY
=ALL.AA9360.AA9323
ROOF ASSY
=ALL.AA9360.AA9344
PROJECTOR ASSY
CENTER FRAME(R)
CENTER FRAME(L)
9214#
9217
9271
9210#
9258
9257
9226#
9270
Fork before service panel<<
.1/6.F6
-X135 VL 3P-P
-X163 VL 3P-R
-CB21 Cable
-X162 VL 3P-P
-X137 VL 3P-R
-CB14 AC Cord Set
-CB14.CN2 IEC60320-C13
CN4 IEC60320-C14
100VAC_L
100VAC_N
EARTH
-RA1
SYS ES3(X) ASSY
VIDEO 2 HDMI 19P Female
PROJECTOR
(BK) -CB35.CN1 HDMI 19P Male BLACK
-CB35 HDMI Cable (BK)
(BK) -CB35.CN2 HDMI 19P Male BLACK
CN1 HDMI 19P Female
FULL HD
SERIAL 1 D-SUB DE-9P Male
RS-232C
(BK) -CB38.CN1 D-SUB DE-9P Female
-CB38 RS-232C Cable
(BK) -CB38.CN2 D-SUB DE-9P Female
CN3 D-SUB DE-9P Male
-PJT1
DLP PROJECTOR
-FG35
Projector attachment plate ground
-X99 YL 2P-P
CN1 YL 2P-R
-FM8
DC Axial Fan Motor
24VDC 0.20A
-X100 YL 2P-P
-FM7
DC Axial Fan Motor
24VDC 0.20A
-X101 YL 2P-P
-FM6
DC Axial Fan Motor
24VDC 0.20A
-H25
-H26
-H59
CENTER
-PCB2
3.1CH AMP PCB ASSY
CN12 VL 8P-H
-X56 VL 8P-P
SP_3+
SP_3-
24V3 .2/6.F3
GND2 .2/6.F3
EARTH2 .1/6.F6
-X216 YL 8P-P
-X217 YL 8P-R
-X215 YL 8P-P
-X240 YL08P-R
-X239 YL 8P-P
-X197 YL 8P-R
-X97 YL 2P-P
CN1 YL 2P-R
-SP5
Speaker
4Ω 40W
-FG20
Projector top plate ground
12V6 .2/6.F3
GND5 .2/6.E3
-X196 YL 3P-P
-X195 YL03P-R
-X169 VH 2P-R
CN2 VH 2P-H
12V
GND
-FG33
PC board attachment plate ground
-X142 XAD 12P-P
-X147 XAD 12P-R
-X146 XAD 12P-P
-X237 XAD 12P-R
-X238 XAD 12P-P
-X200 XAD 12P-R
-X199 XAD 12P-P
-X168 XAD 12P-R
-X165 XAD 8P-P
CN1 XAD 8P-H
GUN(L)
GUN(R)
.6/6.D3
.6/6.F3
5V_L
GUN_LED_L
5V_R
GUN_LED_R
GND_L
GUN_TRIG_L
GND_R
GUN_TRIG_R
-RA1
SYS ES3(X) ASSY
SERIAL 2 D-SUB DE-9P Male
TXD
RXD
GND
SH
-X145 D-SUB DE-9P Female
-CB19 Shielded Cable
-CB20 Shielded Cable
-CB33 Shielded Cable
-CB31 Shielded Cable
-CB25 Shielded Cable
-X175 XA 3P-P
CN5 XA 3P-H
RXD
TXD
GND
-ST12
-ST13
-ST14
-ST26
-ST27
-ST22
-ST23
-ST15
SHIELD
-PCB3
GUN CAMERA ASSY
AWG 14
AWG 16
AWG 22
2.00 mm²
GN/YE
TP

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	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” signed spiral cable.

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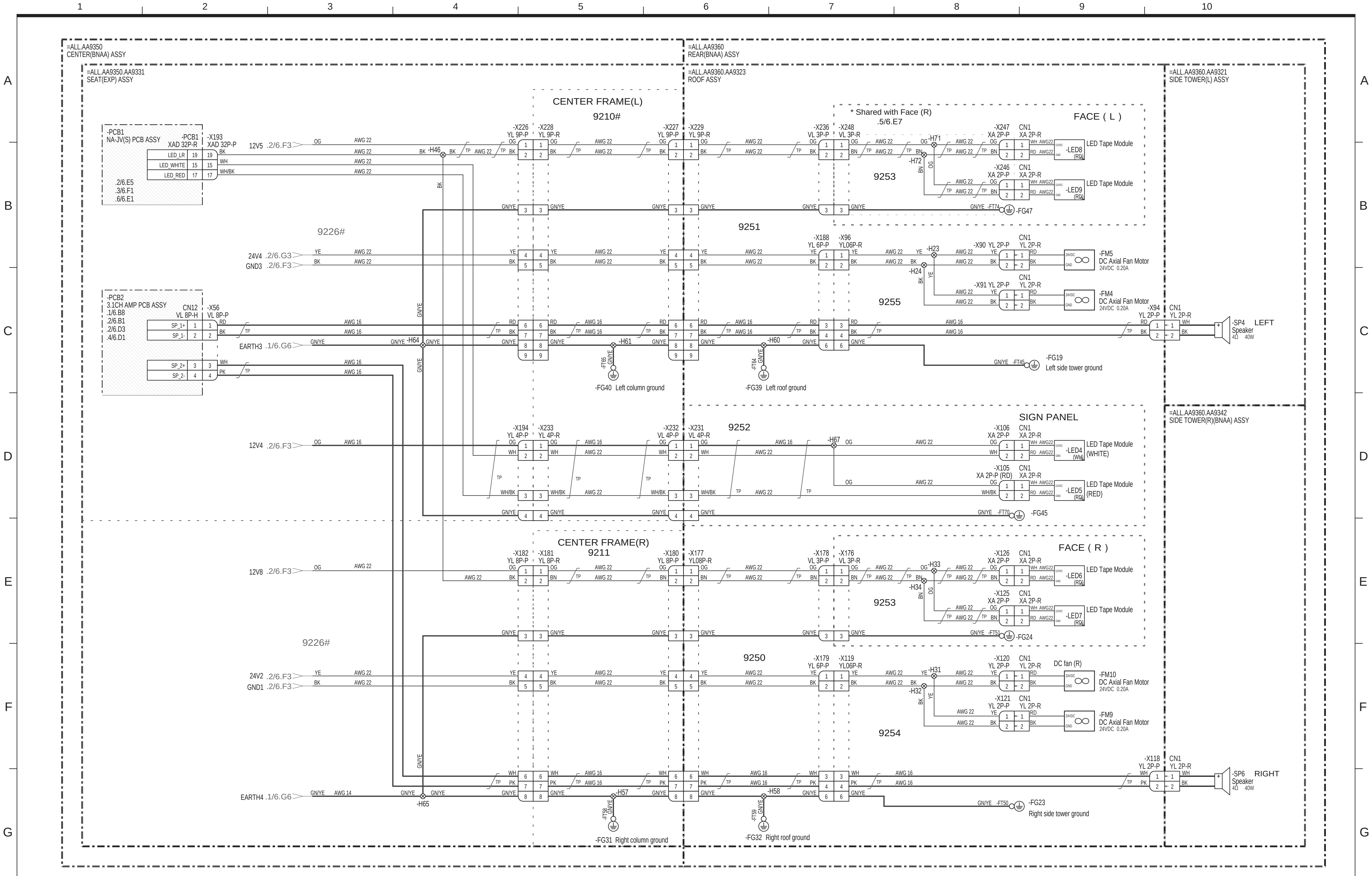
1 2 3 4 5 6 7 8 9 10

11. Wiring Diagram

US Specifications, AC 120V (5/6)


=ALL.AA9350
CENTER(BNAA) ASSY
=ALL.AA9350.AA9331
SEAT(EXP) ASSY
=ALL.AA9360
REAR(BNAA) ASSY
=ALL.AA9360.AA9323
ROOF ASSY
=ALL.AA9360.AA9321
SIDE TOWER(L) ASSY
=ALL.AA9360.AA9342
SIDE TOWER(R)(BNAA) ASSY
CENTER FRAME(L)
9210#
CENTER FRAME(R)
9211
* Shared with Face (R)
.5/6.E7
FACE (L)
FACE (R)
SIGN PANEL
-PCB1
NA-JV(S) PCB ASSY
XAD 32P-R
-X193
XAD 32P-P
LED_LR
LED_WHITE
LED_RED
.2/6.E5
.3/6.F1
.6/6.E1
-PCB2
3.1CH AMP PCB ASSY
.1/6.B8
.2/6.B1
.2/6.D3
.4/6.D1
CN12
VL 8P-H
-X56
VL 8P-P
SP_1+
SP_1-
SP_2+
SP_2-
12V5 .2/6.F3
24V4 .2/6.G3
GND3 .2/6.F3
EARTH3 .1/6.G6
12V4 .2/6.F3
12V8 .2/6.F3
24V2 .2/6.F3
GND1 .2/6.F3
EARTH4 .1/6.G6
9226#
9251
9252
9253
9255
9250
9254
-X226 YL 9P-P
-X228 YL 9P-R
-X227 YL 9P-P
-X229 YL 9P-R
-X236 VL 3P-P
-X248 VL 3P-R
-X247 XA 2P-P
-X246 XA 2P-P
-X188 YL 6P-P
-X96 YL06P-R
-X90 YL 2P-P
-X91 YL 2P-P
-X94 YL 2P-P
-X194 YL 4P-P
-X233 YL 4P-R
-X232 VL 4P-P
-X231 VL 4P-R
-X106 XA 2P-P
-X105 XA 2P-P (RD)
-X182 YL 8P-P
-X181 YL 8P-R
-X180 YL 8P-P
-X177 YL08P-R
-X178 VL 3P-P
-X176 VL 3P-R
-X126 XA 2P-P
-X125 XA 2P-P
-X179 YL 6P-P
-X119 YL06P-R
-X120 YL 2P-P
-X121 YL 2P-P
-X118 YL 2P-P
CN1
XA 2P-R
YL 2P-R
-H46
-H64
-H61
-H60
-H71
-H72
-H23
-H24
-H67
-H33
-H34
-H31
-H32
-H65
-H57
-H58
-LED8 (RD)
-LED9 (RD)
-LED4 (WH)
-LED5 (RD)
-LED6 (RD)
-LED7 (RD)
LED Tape Module
LED Tape Module (WHITE)
LED Tape Module (RED)
-FM5
-FM4
-FM10
-FM9
DC Axial Fan Motor
24VDC 0.20A
DC fan (R)
-SP4 LEFT
-SP6 RIGHT
Speaker
4Ω 40W
-FG47
-FT74
-FG19
-FT45
Left side tower ground
-FG40 Left column ground
-FT65
-FG39 Left roof ground
-FT64
-FG45
-FT70
-FG24
-FT51
-FG23
-FT50
Right side tower ground
-FG31 Right column ground
-FT58
-FG32 Right roof ground
-FT59
AWG 22
AWG 16
AWG 14
GN/YE
TP
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G

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	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" signed spiral cable.			

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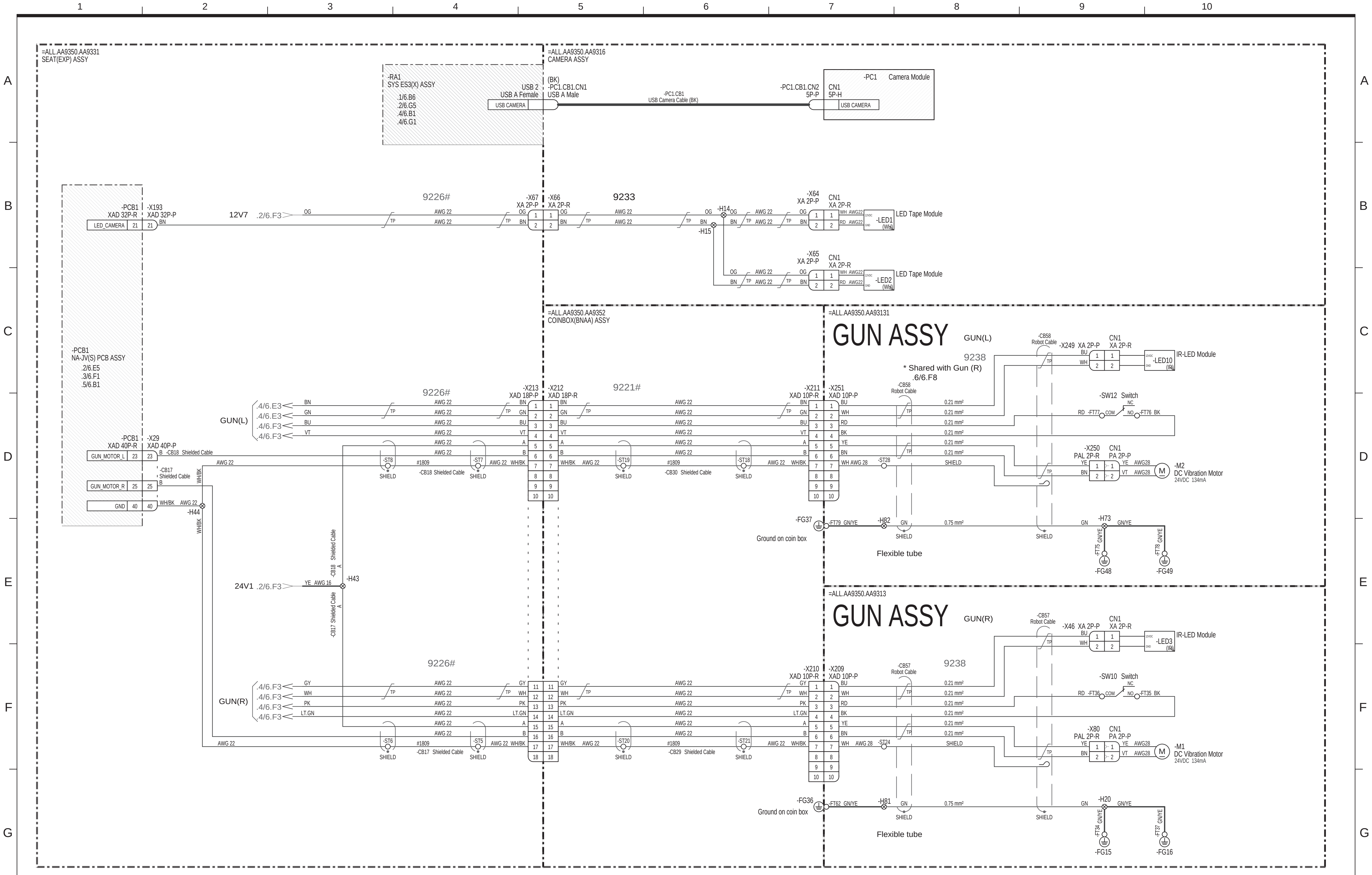
1 2 3 4 5 6 7 8 9 10

11. Wiring Diagram

US Specifications, AC 120V (6/6)



=ALL.AA9350.AA9331
SEAT(EXP) ASSY
=ALL.AA9350.AA9316
CAMERA ASSY
-RA1
SYS ES3(X) ASSY
.1/6.B6
.2/6.G5
.4/6.B1
.4/6.G1
USB 2
USB A Female
USB CAMERA
(BK)
-PC1.CB1.CN1
USB A Male
-PC1.CB1
USB Camera Cable (BK)
-PC1.CB1.CN2
5P-P
CN1
5P-H
-PC1
Camera Module
-PCB1
XAD 32P-R
-X193
XAD 32P-P
LED_CAMERA
12V7
.2/6.F3
9226#
-X67
XA 2P-P
-X66
XA 2P-R
9233
-H14
-H15
-X64
XA 2P-P
CN1
XA 2P-R
-LED1
LED Tape Module
-X65
XA 2P-P
-LED2
LED Tape Module
-PCB1
NA-JV(S) PCB ASSY
.2/6.E5
.3/6.F1
.5/6.B1
=ALL.AA9350.AA9352
COINBOX(BNAA) ASSY
=ALL.AA9350.AA93131
GUN ASSY
GUN(L)
-CB58
Robot Cable
-X249 XA 2P-P
-LED10
IR-LED Module
9238
* Shared with Gun (R)
.6/6.F8
-X213
XAD 18P-P
-X212
XAD 18P-R
9221#
-X211
XAD 10P-R
-X251
XAD 10P-P
-SW12 Switch
GUN(L)
.4/6.E3
-PCB1
XAD 40P-R
-X29
XAD 40P-P
GUN_MOTOR_L
GUN_MOTOR_R
GND
-CB18 Shielded Cable
-CB17 Shielded Cable
-H44
-ST8
-ST7
-ST19
-ST18
-ST28
SHIELD
-CB30 Shielded Cable
-X250
PAL 2P-R
CN1
PA 2P-P
-M2
DC Vibration Motor
24VDC 134mA
-FG37
Ground on coin box
-H82
-H73
Flexible tube
-FG48
-FG49
24V1
.2/6.F3
-H43
-CB18 Shielded Cable
-CB17 Shielded Cable
=ALL.AA9350.AA9313
GUN ASSY
GUN(R)
-CB57
Robot Cable
-X46 XA 2P-P
-LED3
IR-LED Module
9226#
-X210
XAD 10P-R
-X209
XAD 10P-P
9238
-SW10 Switch
GUN(R)
.4/6.F3
-ST6
-ST5
-ST20
-ST21
-ST24
-CB29 Shielded Cable
-X80
PAL 2P-R
-M1
DC Vibration Motor
24VDC 134mA
-FG36
Ground on coin box
-H81
-H20
Flexible tube
-FG15
-FG16

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	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" signed spiral cable.

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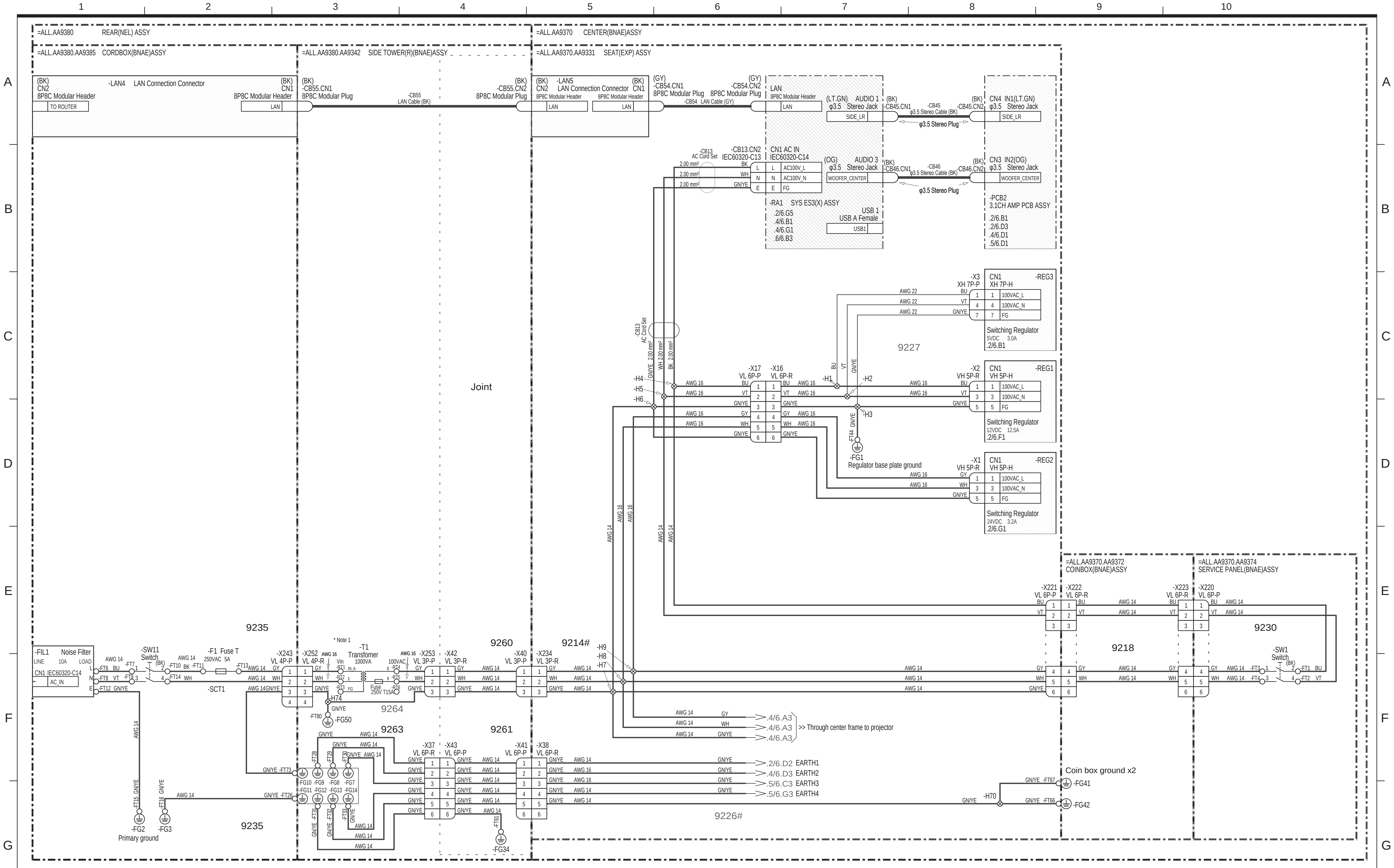
11. Wiring Diagram

EU Specifications, AC 230V (1/6)


1 2 3 4 5 6 7 8 9 10
A B C D E F G
=ALL.AA9380 REAR(NEL) ASSY
=ALL.AA9380.AA9385 CORDBOX(BNAE)ASSY
=ALL.AA9380.AA9342 SIDE TOWER(R)(BNAE)ASSY
=ALL.AA9370 CENTER(BNAE)ASSY
=ALL.AA9370.AA9331 SEAT(EXP) ASSY
(BK) CN2 8P8C Modular Header
TO ROUTER
-LAN4 LAN Connection Connector
(BK) CN1 8P8C Modular Header
LAN
(BK) -CB55.CN1 8P8C Modular Plug
-CB55 LAN Cable (BK)
(BK) -CB55.CN2 8P8C Modular Plug
(BK) CN2 -LAN5 LAN Connection Connector (BK) CN1
8P8C Modular Header
(GY) -CB54.CN1 8P8C Modular Plug
(GY) -CB54.CN2 8P8C Modular Plug
-CB54 LAN Cable (GY)
LAN 8P8C Modular Header
(LT.GN) AUDIO 1 φ3.5 Stereo Jack
SIDE_LR
(BK) -CB45.CN1
-CB45 φ3.5 Stereo Cable (BK)
(BK) -CB45.CN2
φ3.5 Stereo Plug
CN4 IN1(LT.GN) φ3.5 Stereo Jack
-CB13 AC Cord Set
2.00 mm²
-CB13.CN2 IEC60320-C13
CN1 AC IN IEC60320-C14
AC100V_L
AC100V_N
FG
(OG) AUDIO 3 φ3.5 Stereo Jack
WOOFER_CENTER
(BK) -CB46.CN1
-CB46 φ3.5 Stereo Cable (BK)
(BK) -CB46.CN2
CN3 IN2(OG) φ3.5 Stereo Jack
-RA1 SYS ES3(X) ASSY
.2/6.G5
.4/6.B1
.4/6.G1
.6/6.B3
USB 1 USB A Female
USB1
-PCB2 3.1CH AMP PCB ASSY
.2/6.B1
.2/6.D3
.4/6.D1
.5/6.D1
-X3 XH 7P-P
CN1 XH 7P-H
-REG3
100VAC_L
100VAC_N
Switching Regulator 5VDC 3.0A
.2/6.B1
9227
-X17 VL 6P-P
-X16 VL 6P-R
-H1
-H2
-H3
-H4
-H5
-H6
-X2 VH 5P-R
CN1 VH 5P-H
-REG1
Switching Regulator 12VDC 12.5A
.2/6.F1
-FT44
-FG1 Regulator base plate ground
-X1 VH 5P-R
CN1 VH 5P-H
-REG2
Switching Regulator 24VDC 3.2A
.2/6.G1
Joint
=ALL.AA9370.AA9372 COINBOX(BNAE)ASSY
=ALL.AA9370.AA9374 SERVICE PANEL(BNAE)ASSY
-X221 VL 6P-P
-X222 VL 6P-R
-X223 VL 6P-R
-X220 VL 6P-P
9218
9230
-SW1 Switch (BK)
-FT1 BU
-FT2 VT
-FT3
-FT4
9235
-FIL1 Noise Filter
LINE 10A LOAD
CN1 IEC60320-C14
AC_IN
-SW11 Switch (BK)
-F1 Fuse T 250VAC 5A
-FT6 -FT7 -FT8 -FT9 -FT10 -FT11 -FT12 -FT13 -FT14
-SCT1
-X243 VL 4P-P
-X252 VL 4P-R
* Note 1
-T1 Transfomer 1000VA
Vin
100VAC
-RT1 -RT2 -RT3 -RT4 -RT5 -RT6
Fuse 250V T15A
-H74
-FT80
-FG50
9264
-X253 VL 3P-P
-X42 VL 3P-R
9260
-X40 VL 3P-P
-X234 VL 3P-R
9214#
-H9
-H8
-H7
9263
9261
-X37 VL 6P-R
-X43 VL 6P-P
-X41 VL 6P-P
-X38 VL 6P-R
-FT28 -FT29 -FT30 -FT31 -FT32 -FT33
-FT73 -FT26
-FG10 -FG9 -FG8 -FG7
-FG11 -FG12 -FG13 -FG14
-FT61
-FG34
-FT15 -FT16
-FG2 Primary ground
-FG3
.4/6.A3
.4/6.A3
.4/6.A3
>> Through center frame to projector
.2/6.D2 EARTH1
.4/6.D3 EARTH2
.5/6.C3 EARTH3
.5/6.G3 EARTH4
9226#
-H70
Coin box ground x2
-FT67 -FG41
-FT66 -FG42
AWG 14
AWG 16
AWG 22
BU VT GY WH GN/YE BK

Note 1: Connect the -T1 transformer terminal which corresponds to the power supply voltage.

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	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" signed spiral cable.			

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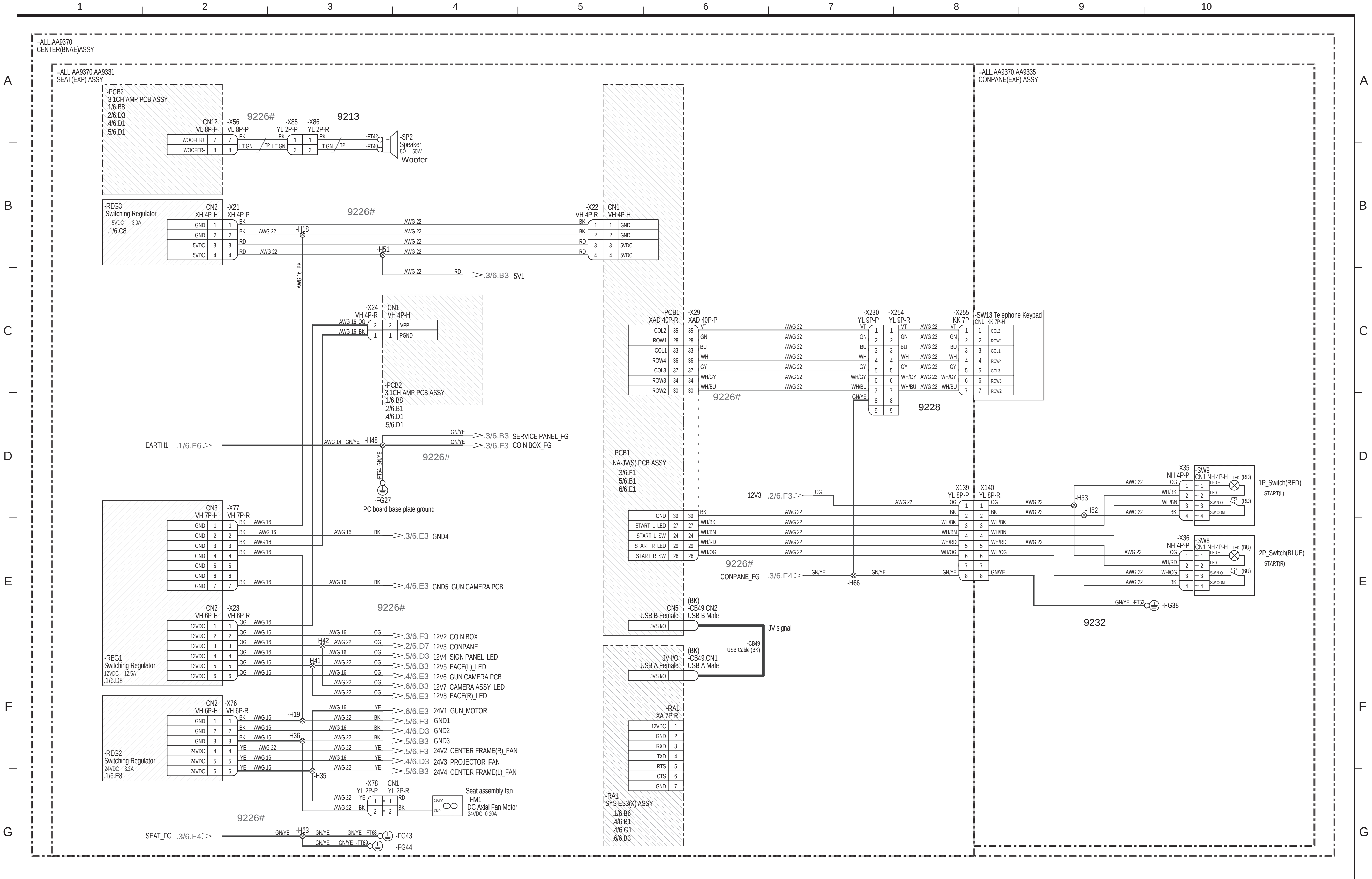
11. Wiring Diagram

EU Specifications, AC 230V (2/6)


=ALL.AA9370
CENTER(BNAE)ASSY
=ALL.AA9370.AA9331
SEAT(EXP) ASSY
=ALL.AA9370.AA9335
CONPANE(EXP) ASSY
-PCB2
3.1CH AMP PCB ASSY
.1/6.B8
.2/6.D3
.4/6.D1
.5/6.D1
CN12 VL 8P-H
-X56 VL 8P-P
-X85 YL 2P-P
-X86 YL 2P-R
9226#
9213
WOOFER+
WOOFER-
-SP2
Speaker
8Ω 50W
Woofer
-REG3
Switching Regulator
5VDC 3.0A
.1/6.C8
CN2 XH 4P-H
-X21 XH 4P-P
-H18
-H51
-X22 VH 4P-R
CN1 VH 4P-H
GND
5VDC
.3/6.B3 5V1
-X24 VH 4P-R
CN1 VH 4P-H
VPP
PGND
EARTH1 .1/6.F6
-H48
.3/6.B3 SERVICE PANEL_FG
.3/6.F3 COIN BOX_FG
-FT54
-FG27
PC board base plate ground
CN3 VH 7P-H
-X77 VH 7P-R
.3/6.E3 GND4
.4/6.E3 GND5 GUN CAMERA PCB
CN2 VH 6P-H
-X23 VH 6P-R
-H42
-H41
-REG1
Switching Regulator
12VDC 12.5A
.1/6.D8
.3/6.F3 12V2 COIN BOX
.2/6.D7 12V3 CONPANE
.5/6.D3 12V4 SIGN PANEL_LED
.5/6.B3 12V5 FACE(L)_LED
.4/6.E3 12V6 GUN CAMERA PCB
.6/6.B3 12V7 CAMERA ASSY_LED
.5/6.E3 12V8 FACE(R)_LED
CN2 VH 6P-H
-X76 VH 6P-R
-H19
-H36
-H35
-REG2
Switching Regulator
24VDC 3.2A
.1/6.E8
.6/6.E3 24V1 GUN_MOTOR
.5/6.F3 GND1
.4/6.D3 GND2
.5/6.B3 GND3
.5/6.F3 24V2 CENTER FRAME(R)_FAN
.4/6.D3 24V3 PROJECTOR_FAN
.5/6.B3 24V4 CENTER FRAME(L)_FAN
-X78 YL 2P-P
CN1 YL 2P-R
Seat assembly fan
-FM1
DC Axial Fan Motor
24VDC 0.20A
SEAT_FG .3/6.F4
-H63
-FT68
-FT69
-FG43
-FG44
-PCB1
XAD 40P-R
-X29 XAD 40P-P
COL2
ROW1
COL1
ROW4
COL3
ROW3
ROW2
-X230 YL 9P-P
-X254 YL 9P-R
-X255 KK 7P
-SW13 Telephone Keypad
CN1 KK 7P-H
9228
-PCB1
NA-JV(S) PCB ASSY
.3/6.F1
.5/6.B1
.6/6.E1
12V3 .2/6.F3
START_L_LED
START_L_SW
START_R_LED
START_R_SW
-X139 YL 8P-P
-X140 YL 8P-R
-H53
-H52
-X35 NH 4P-P
-SW9
CN1 NH 4P-H
1P_Switch(RED)
START(L)
-X36 NH 4P-P
-SW8
CN1 NH 4P-H
2P_Switch(BLUE)
START(R)
CONPANE_FG .3/6.F4
-H66
-FT52
-FG38
9232
CN5 USB B Female
(BK) -CB49.CN2 USB B Male
JVS I/O
JV signal
-CB49
USB Cable (BK)
JV I/O USB A Female
(BK) -CB49.CN1 USB A Male
-RA1 XA 7P-R
12VDC
GND
RXD
TXD
RTS
CTS
-RA1
SYS ES3(X) ASSY
.1/6.B6
.4/6.B1
.4/6.G1
.6/6.B3

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	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" signed spiral cable.

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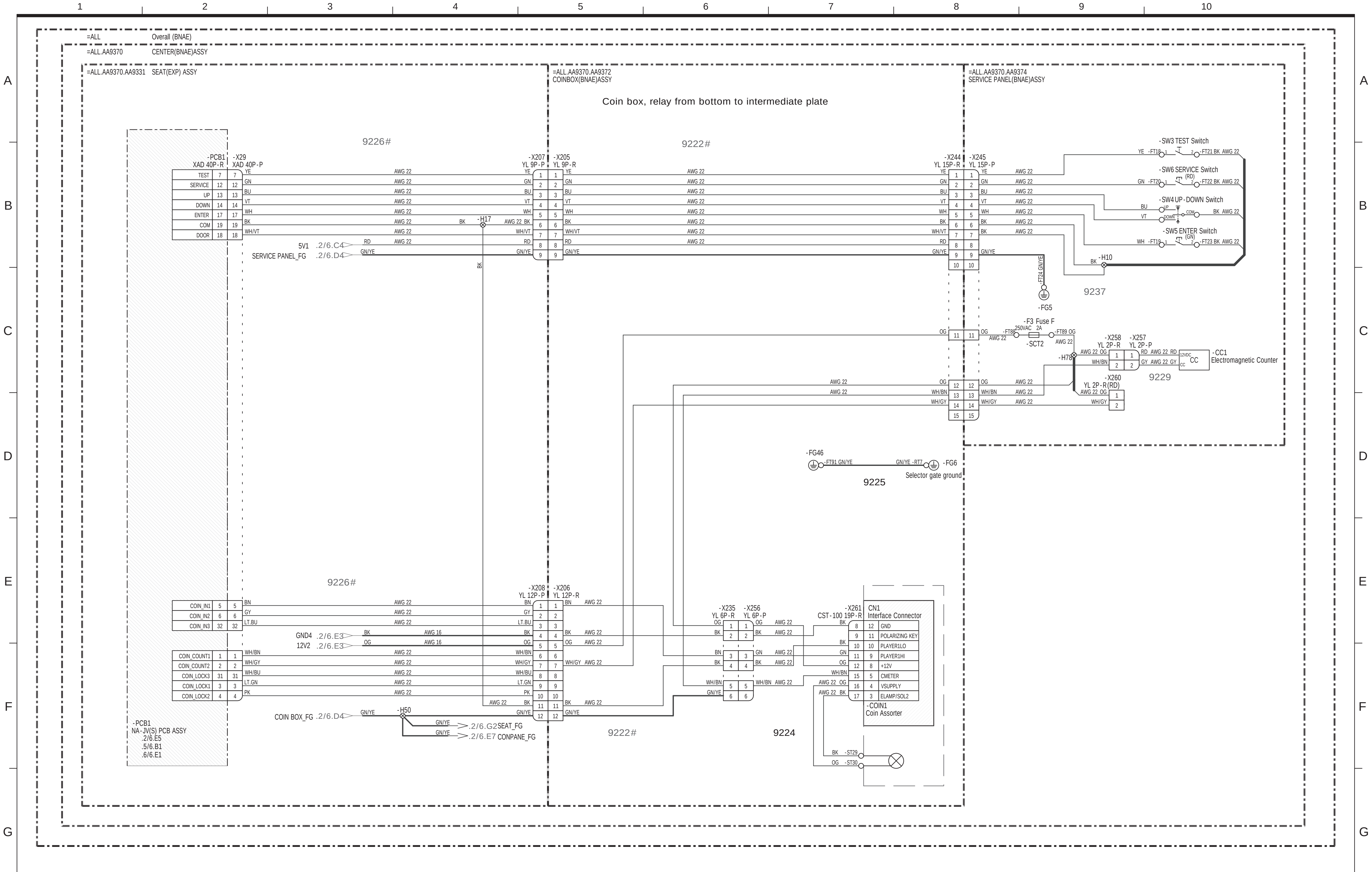
11. Wiring Diagram

EU Specifications, AC 230V (3/6)


1 2 3 4 5 6 7 8 9 10
A B C D E F G
=ALL Overall (BNAE)
=ALL.AA9370 CENTER(BNAE)ASSY
=ALL.AA9370.AA9331 SEAT(EXP) ASSY
=ALL.AA9370.AA9372 COINBOX(BNAE)ASSY
=ALL.AA9370.AA9374 SERVICE PANEL(BNAE)ASSY
Coin box, relay from bottom to intermediate plate
9226#
9222#
-PCB1 XAD 40P-R
-X29 XAD 40P-P
TEST 7 7
SERVICE 12 12
UP 13 13
DOWN 14 14
ENTER 17 17
COM 19 19
DOOR 18 18
YE
GN
BU
VT
WH
BK
WH/VT
RD
GN/YE
AWG 22
5V1 .2/6.C4
SERVICE PANEL_FG .2/6.D4
-H17
-X207 YL 9P-P
-X205 YL 9P-R
-X244 YL 15P-R
-X245 YL 15P-P
-SW3 TEST Switch
-FT18
-FT21 BK AWG 22
-SW6 SERVICE Switch (RD)
-FT20
-FT22 BK AWG 22
-SW4 UP-DOWN Switch
UP
DOWN
COM
-SW5 ENTER Switch (GN)
-FT19
-FT23 BK AWG 22
-H10
-FT24 GN/YE
-FG5
9237
-F3 Fuse F
250VAC 2A
-FT88
-FT89 OG
-SCT2
-X258 YL 2P-R
-X257 YL 2P-P
-H78
12VDC
CC
-CC1 Electromagnetic Counter
-X260 YL 2P-R(RD)
9229
OG
WH/BN
WH/GY
-FG46
-FT91 GN/YE
GN/YE -RT7
-FG6
Selector gate ground
9225
COIN_IN1 5 5
COIN_IN2 6 6
COIN_IN3 32 32
COIN_COUNT1 1 1
COIN_COUNT2 2 2
COIN_LOCK3 31 31
COIN_LOCK1 3 3
COIN_LOCK2 4 4
BN
GY
LT.BU
WH/BU
LT.GN
PK
GND4 .2/6.E3
12V2 .2/6.E3
AWG 16
-X208 YL 12P-P
-X206 YL 12P-R
COIN BOX_FG .2/6.D4
-H50
.2/6.G2 SEAT_FG
.2/6.E7 CONPANE_FG
-PCB1
NA-JV(S) PCB ASSY
.2/6.E5
.5/6.B1
.6/6.E1
-X235 YL 6P-R
-X256 YL 6P-P
-X261 CST-100 19P-R
CN1 Interface Connector
8 12 GND
9 11 POLARIZING KEY
10 10 PLAYER1LO
11 9 PLAYER1HI
12 8 +12V
15 5 CMETER
16 4 VSUPPLY
17 3 ELAMP/SOL2
-COIN1 Coin Assorter
9224
-ST29
-ST30

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	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" signed spiral cable.			

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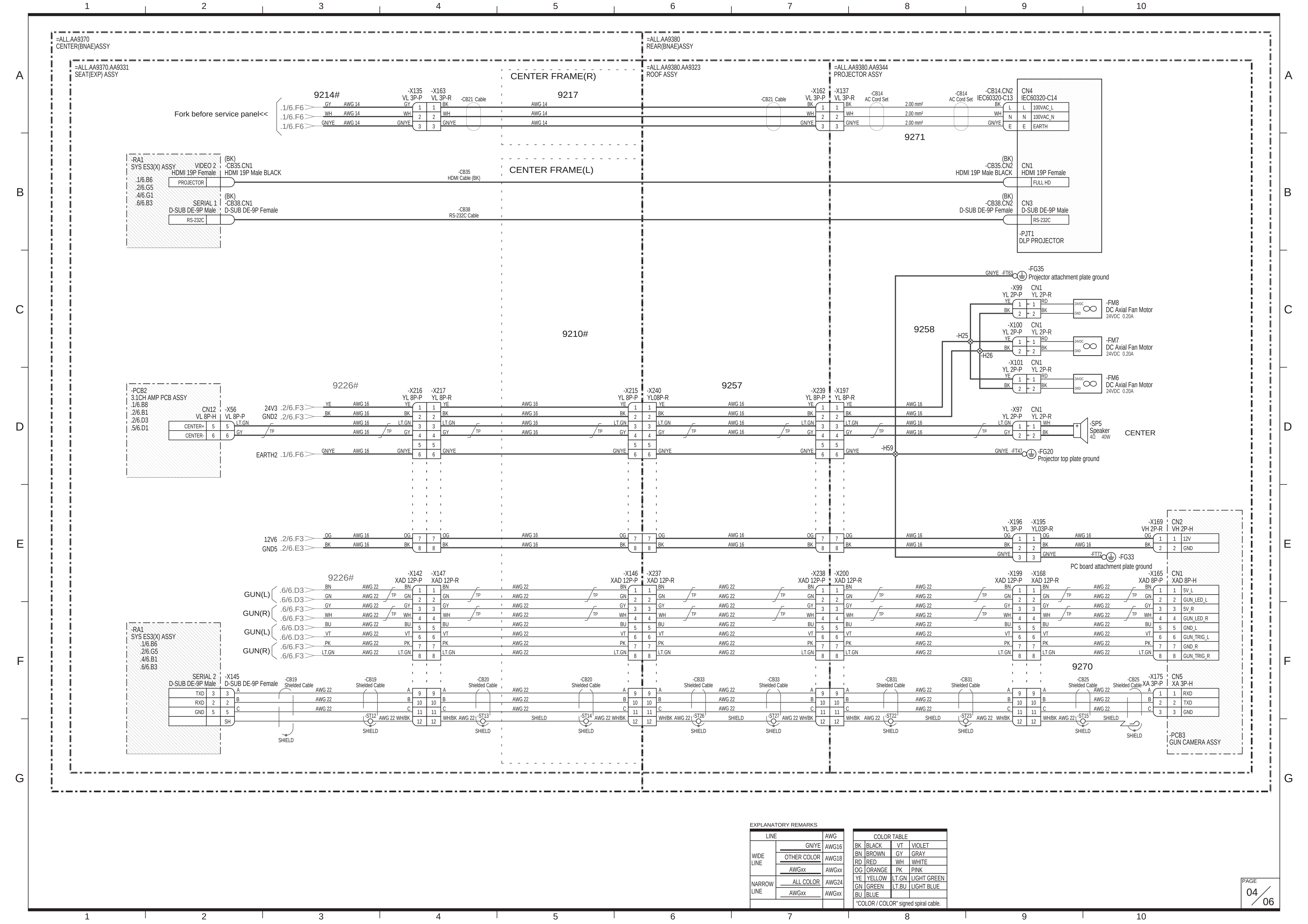
11. Wiring Diagram

EU Specifications, AC 230V (4/6)



=ALL.AA9370
CENTER(BNAE)ASSY
=ALL.AA9370.AA9331
SEAT(EXP) ASSY
=ALL.AA9380
REAR(BNAE)ASSY
=ALL.AA9380.AA9323
ROOF ASSY
=ALL.AA9380.AA9344
PROJECTOR ASSY
CENTER FRAME(R)
CENTER FRAME(L)
9214#
9217
9271
9210#
9226#
9257
9258
9270
Fork before service panel<<
.1/6.F6
-X135 VL 3P-P
-X163 VL 3P-R
-CB21 Cable
-X162 VL 3P-P
-X137 VL 3P-R
-CB14 AC Cord Set
-CB14.CN2 IEC60320-C13
CN4 IEC60320-C14
100VAC_L
100VAC_N
EARTH
-RA1 SYS ES3(X) ASSY
VIDEO 2 HDMI 19P Female
PROJECTOR
(BK) -CB35.CN1 HDMI 19P Male BLACK
-CB35 HDMI Cable (BK)
(BK) -CB35.CN2 HDMI 19P Male BLACK
CN1 HDMI 19P Female
FULL HD
SERIAL 1 D-SUB DE-9P Male
RS-232C
(BK) -CB38.CN1 D-SUB DE-9P Female
-CB38 RS-232C Cable
(BK) -CB38.CN2 D-SUB DE-9P Female
CN3 D-SUB DE-9P Male
-PJT1 DLP PROJECTOR
-FG35 Projector attachment plate ground
-X99 YL 2P-P
CN1 YL 2P-R
-FM8 DC Axial Fan Motor 24VDC 0.20A
-X100 YL 2P-P
-FM7 DC Axial Fan Motor 24VDC 0.20A
-H25
-H26
-X101 YL 2P-P
-FM6 DC Axial Fan Motor 24VDC 0.20A
-PCB2 3.1CH AMP PCB ASSY
CN12 VL 8P-H
-X56 VL 8P-P
CENTER+
CENTER-
24V3 .2/6.F3
GND2 .2/6.F3
EARTH2 .1/6.F6
-X216 YL 8P-P
-X217 YL 8P-R
-X215 YL 8P-P
-X240 YL08P-R
-X239 YL 8P-P
-X197 YL 8P-R
-X97 YL 2P-P
CN1 YL 2P-R
-SP5 Speaker 4Ω 40W
CENTER
-H59
-FG20 Projector top plate ground
12V6 .2/6.F3
GND5 .2/6.E3
-X196 YL 3P-P
-X195 YL03P-R
-X169 VH 2P-R
CN2 VH 2P-H
12V
GND
-FG33 PC board attachment plate ground
-X142 XAD 12P-P
-X147 XAD 12P-R
-X146 XAD 12P-P
-X237 XAD 12P-R
-X238 XAD 12P-P
-X200 XAD 12P-R
-X199 XAD 12P-P
-X168 XAD 12P-R
-X165 XAD 8P-P
CN1 XAD 8P-H
GUN(L)
GUN(R)
5V_L
GUN_LED_L
5V_R
GUN_LED_R
GND_L
GUN_TRIG_L
GND_R
GUN_TRIG_R
-RA1 SYS ES3(X) ASSY
SERIAL 2 D-SUB DE-9P Male
TXD
RXD
GND
-X145 D-SUB DE-9P Female
-CB19 Shielded Cable
-CB20 Shielded Cable
-CB33 Shielded Cable
-CB31 Shielded Cable
-CB25 Shielded Cable
-X175 XA 3P-P
CN5 XA 3P-H
SHIELD
-PCB3 GUN CAMERA ASSY
AWG 14
AWG 16
AWG 22
TP

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	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" signed spiral cable.

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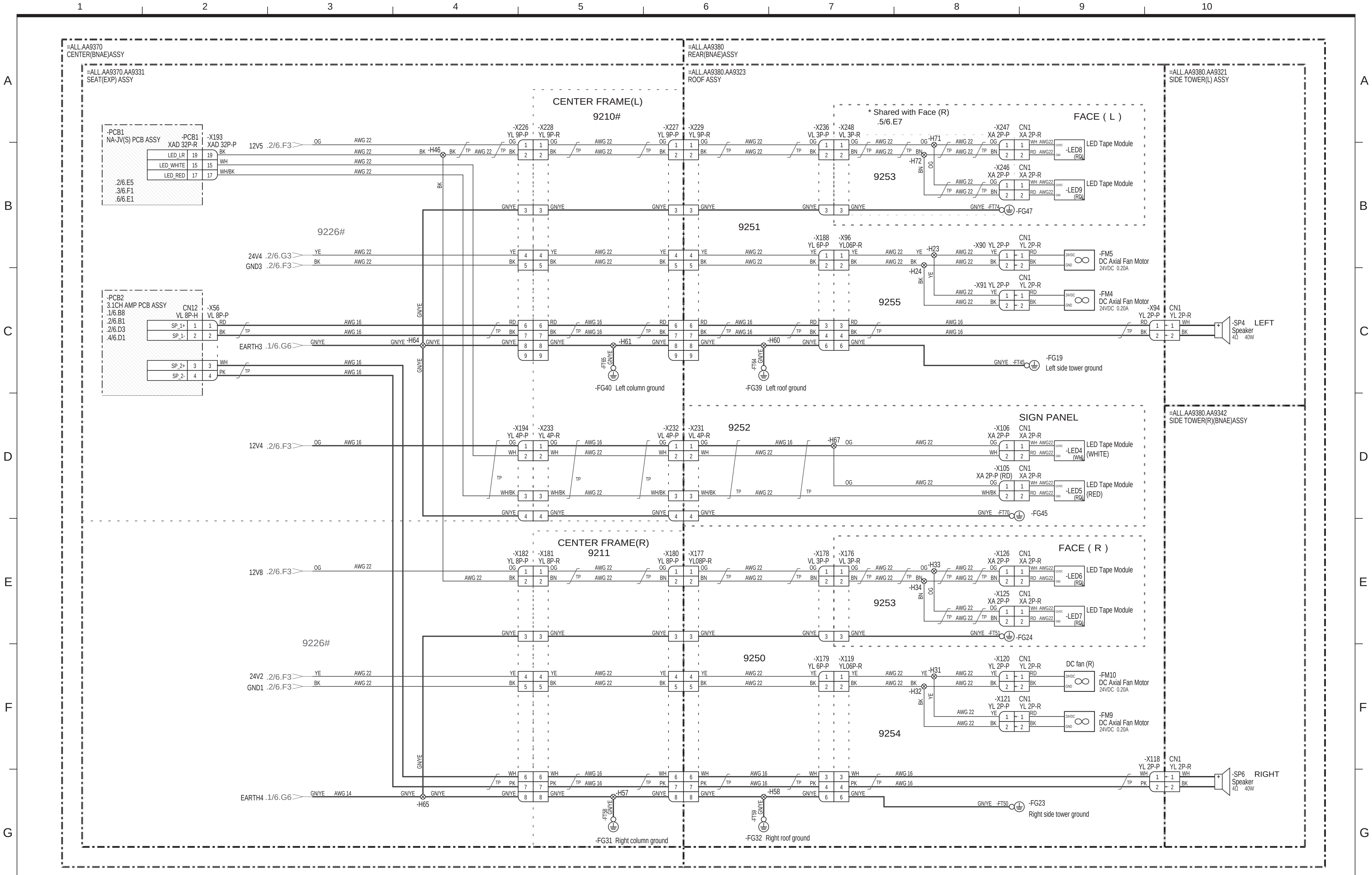
11. Wiring Diagram

EU Specifications, AC 230V (5/6)



=ALL.AA9370
CENTER(BNAE)ASSY
=ALL.AA9370.AA9331
SEAT(EXP) ASSY
=ALL.AA9380
REAR(BNAE)ASSY
=ALL.AA9380.AA9323
ROOF ASSY
=ALL.AA9380.AA9321
SIDE TOWER(L) ASSY
=ALL.AA9380.AA9342
SIDE TOWER(R)(BNAE)ASSY
CENTER FRAME(L)
9210#
CENTER FRAME(R)
9211
* Shared with Face (R) .5/6.E7
FACE (L)
FACE (R)
SIGN PANEL
-PCB1
NA-JV(S) PCB ASSY
-PCB1 XAD 32P-R
-X193 XAD 32P-P
LED_LR
LED_WHITE
LED_RED
.2/6.E5
.3/6.F1
.6/6.E1
-PCB2
3.1CH AMP PCB ASSY
.1/6.B8
.2/6.B1
.2/6.D3
.4/6.D1
CN12 VL 8P-H
-X56 VL 8P-P
SP_1+
SP_1-
SP_2+
SP_2-
12V5 .2/6.F3
24V4 .2/6.G3
GND3 .2/6.F3
EARTH3 .1/6.G6
12V4 .2/6.F3
12V8 .2/6.F3
24V2 .2/6.F3
GND1 .2/6.F3
EARTH4 .1/6.G6
9226#
9226#
-X226 YL 9P-P
-X228 YL 9P-R
-X227 YL 9P-P
-X229 YL 9P-R
-X236 VL 3P-P
-X248 VL 3P-R
-X247 XA 2P-P
-X246 XA 2P-P
CN1 XA 2P-R
-LED8 (RD)
-LED9 (RD)
LED Tape Module
-FG47
9253
9251
-X188 YL 6P-P
-X96 YL06P-R
-X90 YL 2P-P
-X91 YL 2P-P
CN1 YL 2P-R
-FM5 DC Axial Fan Motor 24VDC 0.20A
-FM4 DC Axial Fan Motor 24VDC 0.20A
9255
-X94 YL 2P-P
-SP4 Speaker 4Ω 40W LEFT
-H46
-H64
-H61
-H60
-H71
-H72
-H23
-H24
-FT65
-FT64
-FT74
-FT45
-FG40 Left column ground
-FG39 Left roof ground
-FG19 Left side tower ground
-X194 YL 4P-P
-X233 YL 4P-R
-X232 VL 4P-P
-X231 VL 4P-R
9252
-H67
-X106 XA 2P-P
-X105 XA 2P-P (RD)
-LED4 (WH) LED Tape Module (WHITE)
-LED5 (RD) LED Tape Module (RED)
-FT70
-FG45
-X182 YL 8P-P
-X181 YL 8P-R
-X180 YL 8P-P
-X177 YL08P-R
-X178 VL 3P-P
-X176 VL 3P-R
-X126 XA 2P-P
-X125 XA 2P-P
-LED6 (RD)
-LED7 (RD)
-H33
-H34
-FT51
-FG24
9250
-X179 YL 6P-P
-X119 YL06P-R
-X120 YL 2P-P
-X121 YL 2P-P
DC fan (R)
-FM10 DC Axial Fan Motor 24VDC 0.20A
-FM9 DC Axial Fan Motor 24VDC 0.20A
-H31
-H32
9254
-X118 YL 2P-P
-SP6 Speaker 4Ω 40W RIGHT
-H65
-H57
-H58
-FT58
-FT59
-FT50
-FG31 Right column ground
-FG32 Right roof ground
-FG23 Right side tower ground
AWG 22
AWG 16
AWG 14
GN/YE
OG
BK
WH
WH/BK
YE
RD
PK
BN
TP
1 2 3 4 5 6 7 8 9 10
A B C D E F G

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	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" signed spiral cable.			

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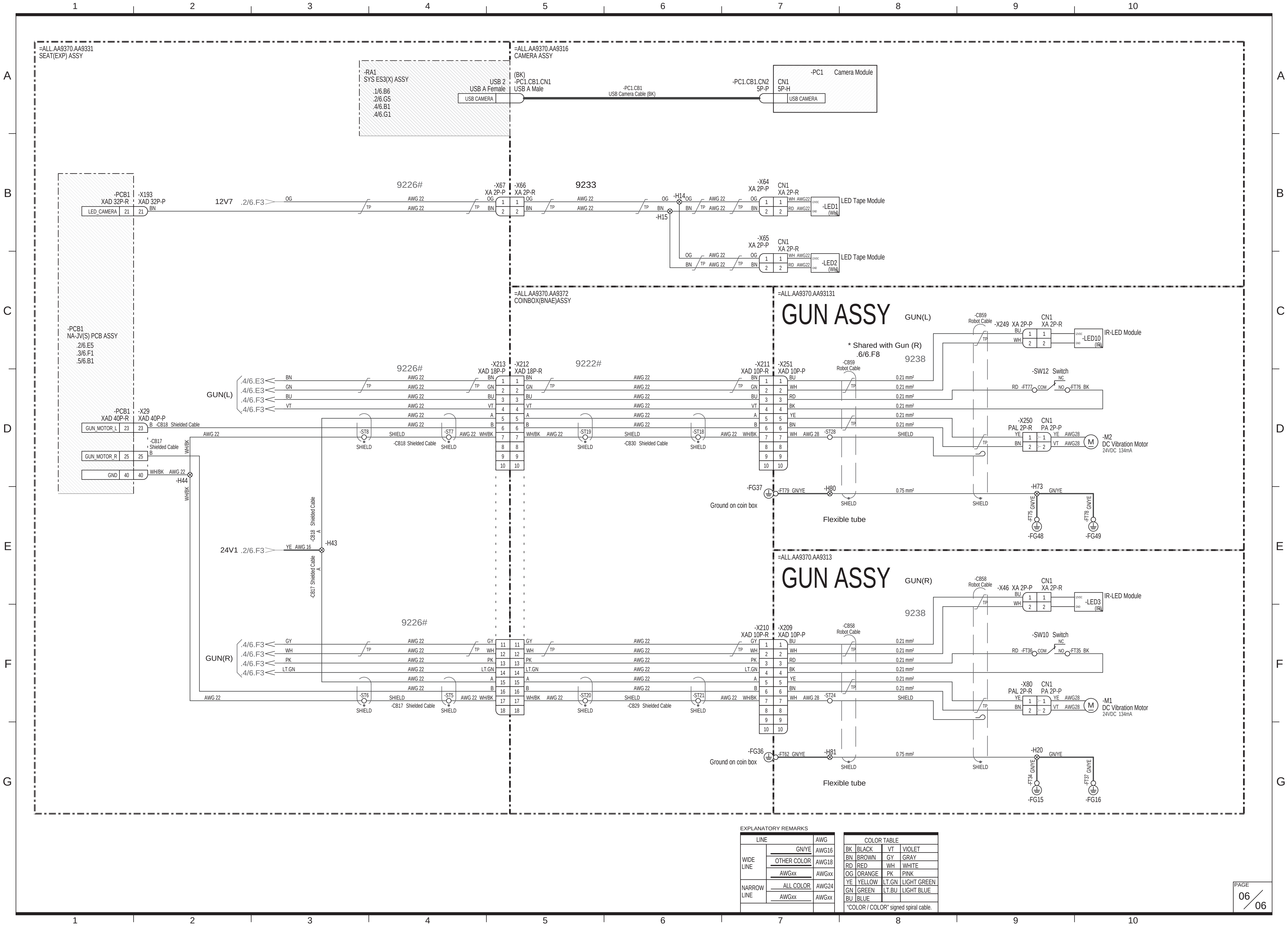
11. Wiring Diagram

EU Specifications, AC 230V (6/6)



1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
=ALL.AA9370.AA9331
SEAT(EXP) ASSY
=ALL.AA9370.AA9316
CAMERA ASSY
-RA1
SYS ES3(X) ASSY
.1/6.B6
.2/6.G5
.4/6.B1
.4/6.G1
USB 2
USB A Female
USB CAMERA
(BK)
-PC1.CB1.CN1
USB A Male
-PC1.CB1
USB Camera Cable (BK)
-PC1.CB1.CN2
5P-P
-PC1
Camera Module
CN1
5P-H
USB CAMERA
-PCB1
XAD 32P-R
-X193
XAD 32P-P
LED_CAMERA
21
12V7
.2/6.F3
9226#
-X67
XA 2P-P
-X66
XA 2P-R
9233
-H14
-H15
-X64
XA 2P-P
CN1
XA 2P-R
-LED1
LED Tape Module
-X65
XA 2P-P
-LED2
LED Tape Module
OG
BN
TP
AWG 22
=ALL.AA9370.AA9372
COINBOX(BNAE)ASSY
=ALL.AA9370.AA93131
GUN ASSY
GUN(L)
-PCB1
NA-JV(S) PCB ASSY
.2/6.E5
.3/6.F1
.5/6.B1
* Shared with Gun (R)
.6/6.F8
9238
-CB59
Robot Cable
-X249 XA 2P-P
CN1
XA 2P-R
-LED10
IR-LED Module
9226#
-X213
XAD 18P-P
-X212
XAD 18P-R
9222#
-X211
XAD 10P-R
-X251
XAD 10P-P
GUN(L)
.4/6.E3
.4/6.F3
GN
BU
VT
A
B
WH/BK
-SW12 Switch
NC
COM
NO
-FT77
-FT76
RD
BK
0.21 mm²
-X250
PAL 2P-R
CN1
PA 2P-P
-M2
DC Vibration Motor
24VDC 134mA
YE
AWG28
-PCB1
XAD 40P-R
-X29
XAD 40P-P
GUN_MOTOR_L
23
GUN_MOTOR_R
25
GND
40
-CB18 Shielded Cable
-CB17
Shielded Cable
-H44
-ST8
SHIELD
-ST7
-ST19
-CB30 Shielded Cable
-ST18
AWG 28
-ST28
-FG37
-FT79 GN/YE
-H80
0.75 mm²
Ground on coin box
Flexible tube
-H73
GN/YE
-FT75 GN/YE
-FT78 GN/YE
-FG48
-FG49
24V1
.2/6.F3
YE AWG 16
-H43
-CB18 Shielded Cable A
-CB17 Shielded Cable A
=ALL.AA9370.AA9313
GUN ASSY
GUN(R)
-CB58
Robot Cable
-X46 XA 2P-P
CN1
XA 2P-R
-LED3
IR-LED Module
9238
9226#
-X210
XAD 10P-R
-X209
XAD 10P-P
GUN(R)
GY
WH
PK
LT.GN
-SW10 Switch
-FT36
-FT35
-X80
PAL 2P-R
CN1
PA 2P-P
-M1
DC Vibration Motor
24VDC 134mA
-ST6
-CB17 Shielded Cable
-ST5
-ST20
-CB29 Shielded Cable
-ST21
-ST24
-FG36
-FT62 GN/YE
-H81
Ground on coin box
Flexible tube
-H20
-FT34 GN/YE
-FT37 GN/YE
-FG15
-FG16
PAGE
06
06

EXPLANATORY REMARKS

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YE	YELLOW	LT.GN	LIGHT GREEN
GN	GREEN	LT.BU	LIGHT BLUE
BU	BLUE		
"COLOR / COLOR" signed spiral cable.			

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pcre

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   a. **Specific Use.** BNGI designed the device for a specific use. You may only use the software for that use.

   b. **Other Software.** You may use other programs with the software as long as the other programs

   - directly supports the manufacturer’s specific use for the device, or
   - provide system utilities, resource management, or anti-virus or similar protection.
   - Software that provides consumer or business tasks or processes may not be run on the device. This includes email, word processing, spreadsheet, database, scheduling and personal finance software. The device may use terminal services protocols to access such software running on a server.

   c. **Device Connections.** You may not use the software as server software. In other words, more than one device may not access, display, run, share or use the software at the same time.

   You may use terminal services protocols to connect the device to a server running business task or processes software such as email, word processing, scheduling or spreadsheets.

   You may allow up to ten other devices to access the software to use

   - File Services,
   - Print Services,
   - Internet Information Services, and
   - Internet Connection Sharing and Telephony Services.

   The ten connection limit applies to devices that access the software indirectly through “multiplexing” or other software or hardware that pools connections. You may use unlimited inbound connections at any time via TCP/IP.

   d. **Remote Access Technologies.** You may access and use the software remotely from another device using remote access technologies as follows.

   Remote Desktop. The single primary user of the device may access a session from any other device using Remote Desktop or similar technologies. A “session” means the experience of interacting with the software, directly or indirectly, through any combination of input, output and display peripherals. Other users may access a session from any device using these technologies, if the remote device is separately licensed to run the software.

Other Access Technologies. You may use Remote Assistance or similar technologies to share an active session.

Other Remote Uses. You may allow any number of devices to access the software for purposes other than those described in the Device Connections and Remote Access Technologies sections above, such as to synchronize data between devices.

e. **Font Components.** While the software is running, you may use its fonts to display and print content. You may only

- embed fonts in content as permitted by the embedding restrictions in the fonts; and
- temporarily download them to a printer or other output device to print content.

f. **Icons, images and sounds.** While the software is running, you may use but not share its icons, images, sounds, and media.

3. **VHD BOOT.** Additional copies of the software created using the software's Virtual Hard Disk functionality ("VHD Image") may be pre-installed on the physical hard disk of the device. These VHD Images may only be used for maintaining or updating the software installed on the physical hard disk or drive. If the VHD Image is the only software on your device, it may be used as the primary operating system but all other copies of the VHD Image may only be used for maintenance and updating.

4. **POTENTIALLY UNWANTED SOFTWARE.** The software may include Windows Defender. If Windows Defender is turned on, it will search this device for "spyware," "adware" and other potentially unwanted software. If it finds potentially unwanted software, the software will ask you if you want to ignore, disable (quarantine) or remove it. Any potentially unwanted software rated "high" or "severe," will be automatically removed after scanning unless you change the default setting. Removing or disabling potentially unwanted software may result in

- Other software on your device ceasing to work, or
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- Web Content Features. Features in the software can retrieve related content from Microsoft and provide it to you. Examples of these features are clip art, templates, online training, online assistance and Appshelp. You may choose to switch them off or not use them.
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- Windows Media Player. When you use Windows Media Player, it checks with Microsoft for
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  - new versions of the player; and
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- Network Awareness. This feature determines whether a system is connected to a network by either passive monitoring of network traffic or active DNS or HTTP queries. The query only transfers standard TCP/IP or DNS information for routing purposes. You can switch off the active query feature through a registry setting.
- Windows Time Service. This service synchronizes with www.time.windows.com once a week to provide your l device with the correct time. The connection uses standard NTP protocol.
- Search Suggestions Service. In Internet Explorer, when you type a search query in the Instant Search box or type a question mark (?) before your search term in the Address bar, you will see search suggestions as you type (if supported by your search provider). Everything you type in the Instant Search box or in the Address bar when preceded by a question mark (?) is sent to your search provider as you type. Also, when you press Enter or click the Search button, the text in the Instant Search box or Address bar is sent to the search provider. If you use a Microsoft search provider, use of the information sent is subject to the Microsoft Online Privacy Statement. This statement is available at go.microsoft.com/fwlink/?linkid=31493. If you use a third-party search provider, use of the information sent will be subject to the third party's privacy practices. You can turn search suggestions off at any time. To do so, use Manage Add-ons under the Tools button in Internet Explorer. For more information about the search suggestions service, see go.microsoft.com/fwlink/?linkid=128106.
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