

**KONAMI**

# LETHAL ENFORCERS 3™

## LETHAL ENFORCERS 3

Set-up, Operation, Maintenance, Parts catalog and Wiring diagram

### Operator's Manual

**GMD22-TB**  
**GMD22-HD**



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- !**
- Failure to operate the machine correctly could result in malfunction or accidents, so please read this manual carefully before commencing operation. Be sure to operate the machine as described in this manual.
  - Keep this manual carefully so as to be ready for use when necessary.

# About this product

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Thank you for purchasing this KONAMI product. This manual explains how to operate your game machine correctly and safely.



- **Failure to operate the machine correctly could result in malfunction or accidents, so please read this manual carefully before commencing operation. Be sure to operate the machine as described in this manual.**
- **Keep this manual carefully so as to be ready for use when necessary.**
- **If the machine still fails to display or to get started, immediately turn OFF the main power switch and contact your nearest dealer.**

• **This product is of “LETHAL ENFORCERS 3 (GMD22-TB, HD)”.** \_\_\_\_\_

• **Be sure to read the following.**

- **The contents of the CD-ROMs (SYSTEM DISC and APPLICATION DISC) attached to this product have been installed at the time of shipment. Keep the CD-ROMs, which are necessary for reinstallation of the game software.**

- **The specifications of this product are subject to change without notice for reasons such as improving the performance.**
- **The contents of this game, its main devices and design are protected under each law concerning patent, copyright and other intellectual properties.**
- **Unauthorized reproduction of this document or any of its contents is strictly forbidden.**

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# ■ Precautions for use

The following safety precautions are given throughout this manual. They must be strictly followed to protect those who install, use or maintain this product as well as to prevent other people's injuries and property damages.

## Be sure to read the following

- The following suggestions show the degree of danger and damage caused when the product is used improperly with the suggestions disregarded.



Indicates a situation where disregarding the suggestions could result in death or serious injury.



Indicates a situation where disregarding the suggestions could result in injury or product damage.

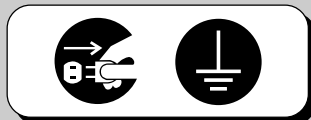
- The following graphic suggestions describe the types of precautions to be followed.



Indicates a matter of which care should be taken.



Indicates a matter which is forbidden.



Indicates a matter which should be performed without fail.

- Definitions of qualified in-shop maintenance persons and industry specialist who handle this product.

•In this instruction manual, some procedures require a qualified in-shop maintenance person or industry specialist. For such instructions, a qualified person must take care of the jobs.

·Otherwise an electric shock, machine trouble, or a serious accident may result.  
·Replacing the machine parts, inspecting and maintaining the machines, and troubleshooting must be assigned only to a qualified in-shop maintenance person or industry specialist. This booklet gives instructions that hazardous jobs in particular must be handled by an industry specialist. Qualified in-shop maintenance persons and industry specialist are defined as follows.

### Qualified in-shop maintenance persons

·A qualified in-shop maintenance person must have experiences in maintaining amusement machines, money changers and the like. Under the supervision of an amusement machines shop owner or manager, he or she routinely assembles, installs, inspects and maintains the amusement machines, or replaces their component units and consumable parts, in the amusement machines workshop and/or shop.

### Jobs handled by qualified in-shop maintenance persons

·Assembling, installing, inspecting and maintaining amusement machines and money changers, and replacing their component units and consumable parts.

### Industry specialist

·An industry specialist must be engaged in designing, manufacturing, inspecting and servicing amusement machines. Or he or she must have an education in electrical, electronic and mechanical engineering, and routinely maintain and repair amusement machines.

### Jobs handled by industry specialist

·Assembling and installing amusement machines and money changers, and repairing and adjusting their electrical, electronic and mechanical component parts.



## Setting Up



## WARNING

- **Be sure to consult your nearest dealer when setting up, moving or transporting this product.**

  - This product should not be set up, moved or transported by anyone other than industry specialist. Doing so could result in injury or product damage.
  - When installing this product, be sure to set the 8 adjusters stable on the floor and make sure that the product is installed stably in a horizontal position. Unstable installation may result in injury or accident.
  - When installing this product, use care not to apply undue force to opening and closing parts and other movable parts. Otherwise, injury or accident may result, or the product may be damaged.
- **This product is an indoor game machine. Never set up the game machine outside.**

  - Setting up this product outside could result in accidents or equipment failure.
- **Do not set up the game machine near emergency exits.**

  - Doing so could block exits in time of emergency and could result in death or serious injury.
- **Do not set up the game machine.**

  - Otherwise an accident or malfunction may result.
    - In a place exposed to rain or moisture.
    - In a place exposed to direct sunlight.
    - In a place exposed to direct heat from air-conditioning and heating equipment, etc..
    - Near hazardous flammable substance such as thinner and kerosene.
    - On an inclined or uneven floor.
    - Near fire extinguishing equipment.
    - In a place exposed to strong vibration.
    - In a place exposed to excessive dust.
    - Near equipment generating strong magnetism or electric waves.
    - Where a high-pressure cleaning machine is used.
- **Do not place containers holding chemicals or water on or near the game machine.**

  - Electrical shock or damage could be caused by water or foreign matter entering the inside of the machine.
- **Do not place objects near the radiating holes.**

  - Doing so could cause the internal temperature to rise excessively, resulting in fire or equipment failure.
- **Do not bend the AC power cord by force or place objects on it.**

  - Doing so could result in electric leakage or fire.
- **Never plug or unplug the AC power cord with wet hands.**

  - Doing so could result in electrical shock.
- **Do not hold the cord when plugging and unplugging the AC power cord.**

  - Doing so could damage the AC power cord, resulting in electric leakage or fire.
- **When opening the back door and the side door, be sure to turn OFF the main power switch and unplug the AC power cord.**

  - Otherwise an accident or electric shock may result.

Setting Up



•Be sure to use indoor wiring for within the specified voltage range. When using an extension cord, connect it independently to the indoor wiring of more than the specified rating.

·Otherwise a fire or machine trouble may result.

•Be sure to use the attached AC power cord.

·Otherwise a fire or machine trouble may result.

•Never plug more than one cord at a time in the electrical receptacle.

·Doing so could result in fire or electrical shock.

•Do not lay the AC power cord where people walk through. You may tread on or stumble over it.

·You may stumble down and get injured, or damage the cord.

•Be sure to ground to the machine. Never connect the grounding wire to gas pipe, water pipe or telephone ground terminal.

·Otherwise an electric shock or machine trouble may be caused.

•Before attaching and detaching the security plug, put on a grounding band for anti-static measure. Do not handle these parts on a carpet or rug.

·Static electricity may damage the electronic parts in the PCB unit.

•Keep the specified clearances (See page 11.) between the game machine and walls as well as other products.

·Otherwise the machine cannot be ventilated well, resulting in malfunction.

•Do not install this machine in a place where the sensors are exposed to direct sunlight or a strong light, or near a place where exists something like a mirror or metal plate which reflects the light. (See page 64.)

·Otherwise, the sensors may not work normally.

•Do not apply a strong force for moving the machine.

·Otherwise, it may result in an accident or breakage of the units.

•Do not put anything around the machine, which may hamper the play. (See page 11.)

·This may not just stand in the player's way but also cause an accident or injury. Ensure space open enough for the player's body not to hit against nearby walls or other machines.

•Do not coat the monitor glass, nor apply stickers and the like on it.

·Otherwise, the machine may fail to play the game properly or get in trouble.



## Operation

**WARNING**

- **If there is any abnormality such as smoke, bad smell or abnormal noise being emitted from the machine, immediately turn OFF the main power switch and unplug the AC power cord from the receptacle to stop operating it.**



·Using the machine in abnormal conditions could result in fire or accidents.

**In case of abnormality**

- 1 Turn OFF the main power switch.
- 2 Unplug the AC power cord from the receptacle.
- 3 Contact your nearest dealer.

- **Do not plug or unplug the AC power cord with wet hands.**

·Doing so could result in electrical shock.



- **Do not leave the AC power cord plugged improperly or covered with dust.**

·Doing so could result in electrical shock or fire. Check the AC power cord once a month or more frequently.

**CAUTION**

- **Do not use this product anywhere other than industrial areas.**

·Using in a residential area or an area next to a residential area could affect signal reception of radios, television sets, telephones, etc..



- **Players should be advised of the following precautions.**

·Doing so could cause accidents or illness.

·Please do not play this game if

- |  |   |
|--|---|
| ·You have been drinking.   | ·You are tired are sick or have been recently sick. |
| ·You think you might be pregnant.  | ·You exercise is medically regulated.               |
| ·You are susceptible to muscle spasms or loss of consciousness due to sound, light or moving pictures. | ·Those who has a disease in hands or wrists.        |

- **Players should be advised of the following precautions during a play.**

·Inobservance of the precaution may cause an accident.

·Do not play violently. You may get injured.

- **Do not give impact to the glass cover.**

·Otherwise, it may result in an unexpected accident or injury.



- **Adjust the monitor appropriately.**

·If the player continues the game with distorted image or flickers appearing on the monitor display, he (or she) and onlookers around him (or her) may have a headache or feel dizzy to cause disturbance of health.

- **Make sure that the gun unit is set correctly in place. (See page 37.)**

·Otherwise malfunction or trouble may result.

- **Do not give an impact to the gun unit nor throw it.**

·Otherwise, an unexpected accident or injury may be caused.



- **In handling the AC power cord, follow the instructions below.**

·Otherwise an electric leak, fire or electric shock may result.

- |   |  |
|---|--|
| ·Do not damage the AC power cord.           | ·Do not modify the AC power cord.            |
| ·Do not bend the AC power cord excessively. | ·Do not twist the AC power cord.             |
| ·Do not heat the AC power cord.             | ·Do not pull the AC power cord.              |
| ·Do not bind the AC power cord.             | ·Do not tread on the AC power cord.          |
| ·Do not sandwich the AC power cord.         | ·Do not drive a nail into the AC power cord. |

- **If the AC power cord or power plug becomes damaged, stop using the machine immediately and ask your nearest dealer to replace the parts.**

·Using a damaged power cord or power plug could result in fire or electrical shock.

**Inspection and cleaning**



**WARNING**

- **Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle before inspecting or cleaning the machine.**

· Failure to do so could result in electrical shock.



- **When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.**

· Using improper parts could result in fire or equipment failure.



- **When opening the back door and the side door, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.**

· Otherwise, there may arise a danger of accident or electric shock.



- **Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.**

· Otherwise, a fire, malfunction or trouble may result.

In case of any trouble, ask your nearest dealer for repairs and other services.

KONAMI will not resume any responsibility for the damage to the product attributable to disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.



- **There is a high voltage section inside the monitor unit . This section is very dangerous. Do not open the back door of the monitor unit by any other person than industry specialist. When the back door is opened, use due care not to touch the equipments around the monitor or inside the units unnecessarily.**

· Otherwise an accident or electric shock may result.



- **To clean the game machine, wipe it with a soft cloth dampened in a neutral detergent and wrung out.**

· Use of organic solvents such as thinner, alcohol, etc. for cleaning may degrade the machine body.

· Electrical shock or equipment failure could be caused by water entering the inside of the machine.

- **Do not use a high-pressure cleaning machine to clean up this product.**

· Water coming in the product may result in an electric shock or machine trouble.



**CAUTION**

- **Do not coat the monitor glass, nor apply stickers and the like on it.**

· Otherwise, the machine may fail to play the game properly or get in trouble.



## Moving and transportation



### CAUTION

- **Before separating the units or moving the machine, be sure to turn OFF the main power switch, unplug the AC power cord, and disconnect the AC power cord.**

·Stepping on or tripping over the AC power cord may result in an accident or damage the machine.



- **When moving the machine, be sure to separate the front unit, monitor unit and floor unit beforehand.**

·Otherwise, an accident, breakage or trouble may result.

- **When moving the front unit and the monitor unit, raise the all adjusters each for the units to full extent and roll them on the casters.**

·Otherwise, an accident, breakage or trouble may result.

- **When moving the units, use care not to apply a strong force to them.**

·Otherwise, it may result in an accident or breakage of the units.

- **When moving the front unit, do not heave it up by holding the gun unit.**

·Otherwise, injury or accident may be caused.



- **The front unit and the monitor unit may fall down depending on to which direction it is pushed. When moving the units, always push the front unit as against the coin door mounting side and the monitor unit sideways as against the monitor glass side. When moving them on a slope or across a difference in level, more than four persons should hold the front unit and more than eight persons should hold the monitor unit by the grips.**

·Otherwise, it may fall down to cause an accident or be broken.

- **The floor unit weights about 41 kg (90.0 lb). When moving the unit, more than 2 persons should be hold it always by the grips.**

·Otherwise, injury or accident may be caused.

- **When moving the machine, use care not to apply undue force to opening and closing parts as well as moving parts.**

·Otherwise, injury or accident may be caused.

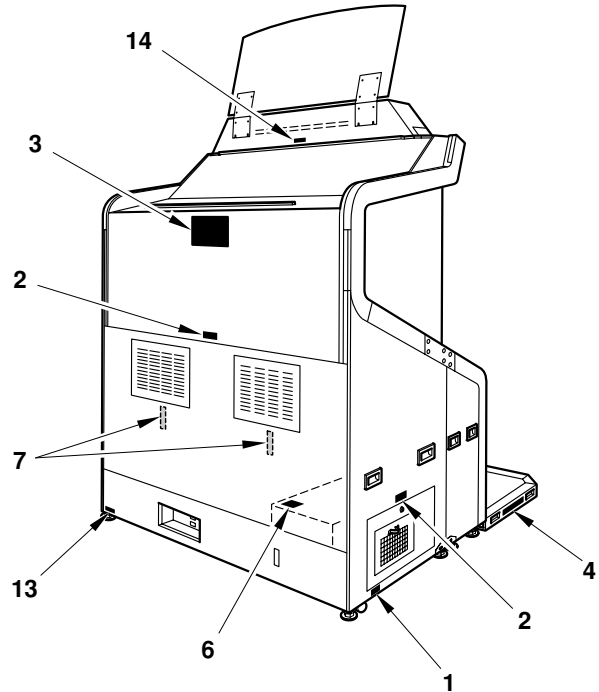
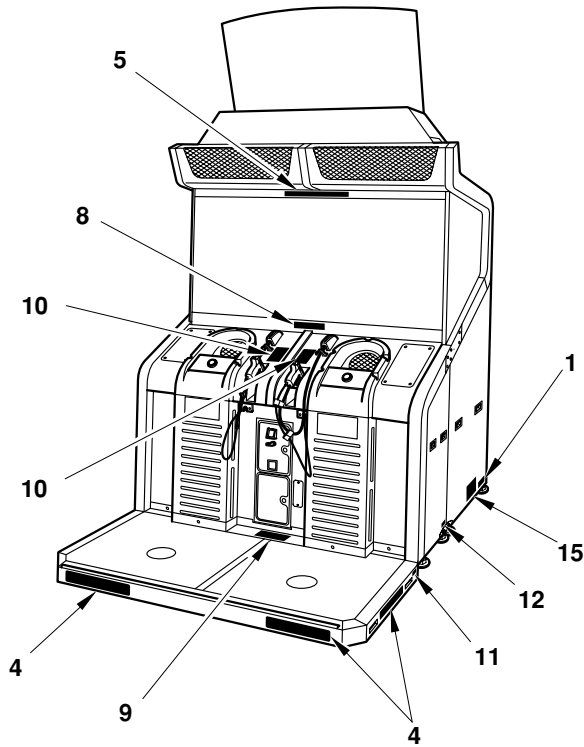
## Disposal

- **When disposed, this machine and its components must be handled as industrial solid waste. The owner of this product is responsible for disposing of them according to the relevant laws. The shipping package and other materials should also be disposed of according to your local rules and regulations.**

**PRECAUTION  
IN HANDLING**

- When setting up or handling this product, follow the procedures and instructions set forth in this manual and perform such work safely.
- Do not remove labels of “WARNING”, “CAUTION”, etc. attached to the product.
- Do not set up or handle this product under conditions equivalent to the condition of “WARNING” or “CAUTION” specified in this manual.
- If a new owner is to have this product as a result of transfer, etc., be sure to give this manual to the new owner.

# Locations of warning and other safety labels



## Types of warning and other safety labels



PN.000036360



PN.0000237198



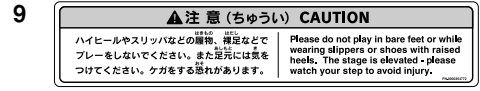
PN.0000049570



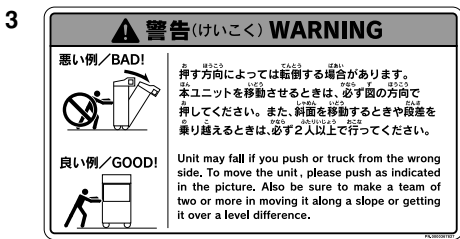
PN.0000368505



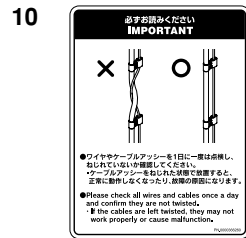
PN.0000032450



PN.00000354772



PN.0000367827



PN.0000366260



PN.0000366253



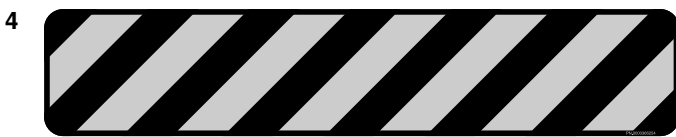
PN.0000049002



PN.0000368510



PN.0000095471



PN.0000366254

15

MODEL	GMD22-TB LETHALFORCERS 3
POWER	110 W / 60 hr 740 W (MAX)
MANUFACTURER	KONAMI CORPORATION
DATE OF MANUFACTURE	December 2004
WEIGHT	482kg(1062.6lb)
SERIAL NUMBER	
KONAMI MADE IN JAPAN INDOOR USE	

MODEL	GMD22-HD LETHALFORCERS 3
POWER	220 W / 50 hr 420 W
MANUFACTURER	KONAMI CORPORATION
DATE OF MANUFACTURE	December 2004
WEIGHT	482kg(1062.6lb)
SERIAL NUMBER	
KONAMI MADE IN JAPAN INDOOR USE	

GMD22-TB(TAIWAN) GMD22-HD(HONG KONG)

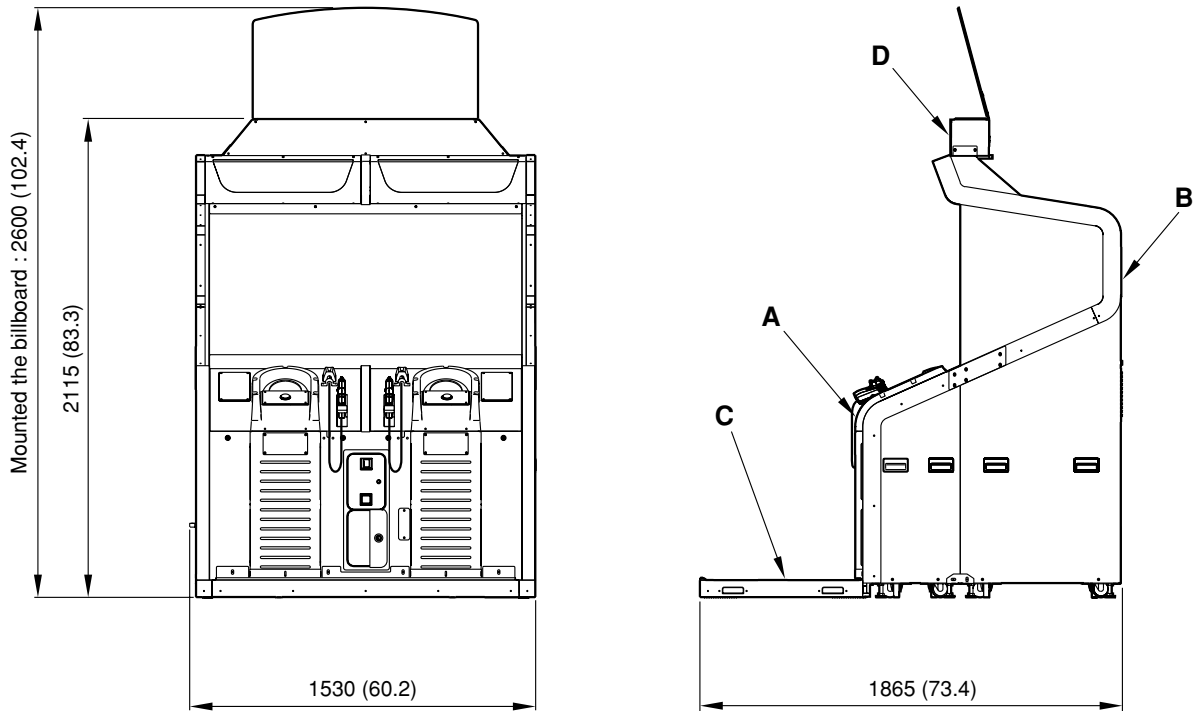
•Label 15 is not reissued.



PN.0000354708

# 1 Specifications

ENGLISH



## Specifications

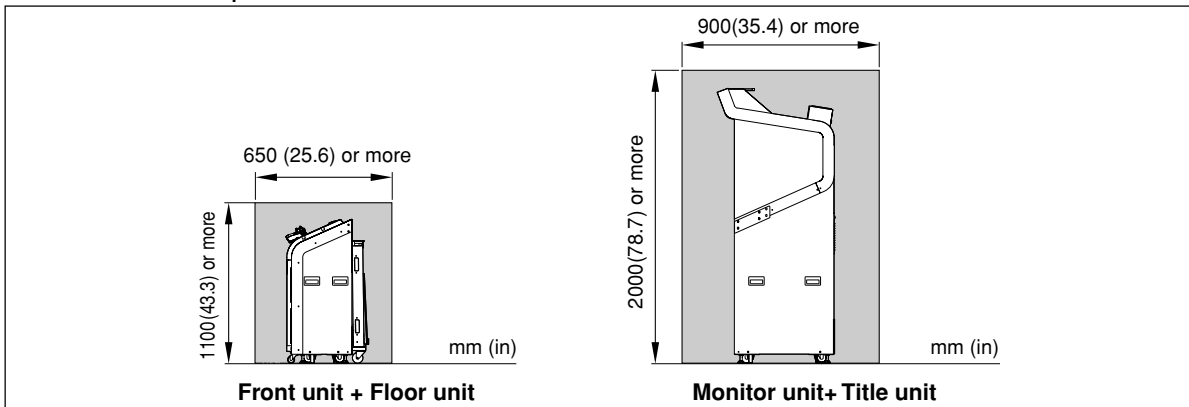
Dimensions	Refer to the figure above : mm (in)
Weight	Total weight : Approx. 482 kg (1062.6 lb) <b>A</b> Front unit : Approx. 110kg (242.5 lb) <b>B</b> Monitor unit : Approx. 320kg (705.5 lb) <b>C</b> Floor unit : Approx. 41 kg (90.0 lb) <b>D</b> Title unit : Approx. 11 kg (24.3 lb)
Rated power consumption	•GMD22-TB : 740W (MAX) •GMD22-HD : 420W
Monitor	29-inch CRT (2 sets)
Service condition	Temperature 5 to 35°C (33 to 95°F), Humidity 30 to 70% (No dewing is allowed.)

•The specifications of this product are subject to change without notice for reasons such as improving the performance.



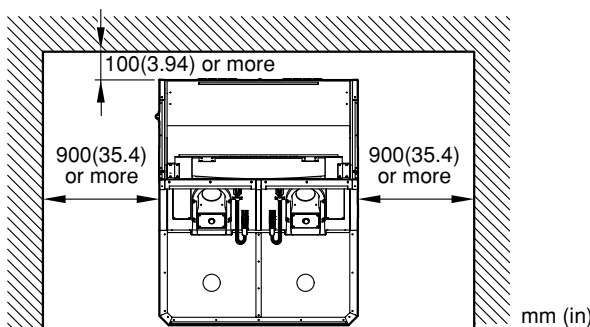
**■ Allowance for Carrying-in and Installation of Product ■■■■■■■■■■**

The following allowance dimensions are necessary for carrying the product indoors. Form in transportation.



Provide a space of the following dimensions for installation of the product.

**Clearances from the wall and other machines**



**!**

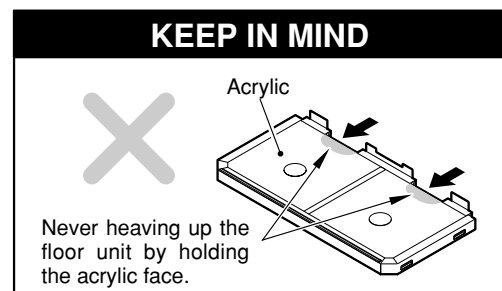
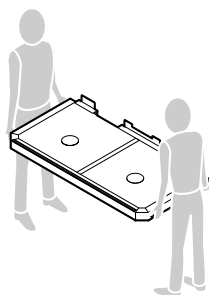
- Keep the specified clearances between the game machine and walls as well as other products.
- Do not put anything around the machine, which may hamper the play.

Keep the following points in mind when moving the product.

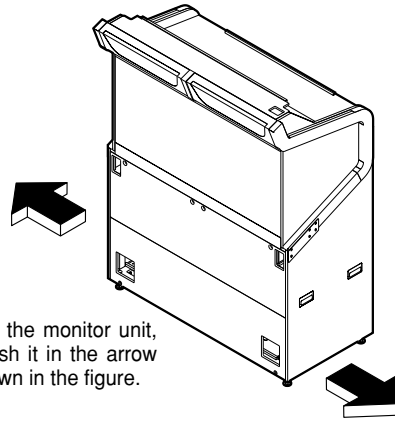
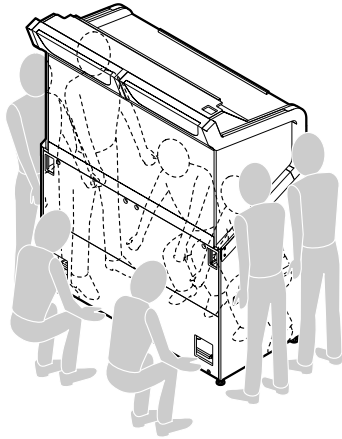
**!**

- When moving the machine, be sure to separate the units beforehand.
- When moving the units, use care not to apply a strong force to them.
- When moving the units, use care not to apply undue force to opening and closing parts as well as moving parts.
- The front unit and the monitor unit may fall down depending on to which direction it is pushed. When moving the units, always push the front unit as against the coin door mounting side and the monitor unit sideways as against the monitor glass side. When moving them on a slope or across a difference in level, more than four persons should hold the front unit and more than eight persons should hold the monitor unit by the grips.
- When moving the front unit, do not heave it up by holding the gun unit.

- When heaving up the floor unit, more than 2 persons should hold it by the grips. (Approx. 41 kg / 90.0 lb)

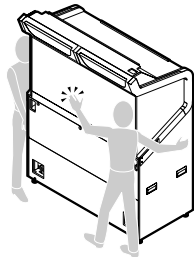


- When heaving up the monitor unit, more than 8 persons should hold it by the grips or at the bottoms. (Approx. 320 kg / 705.5 lb)

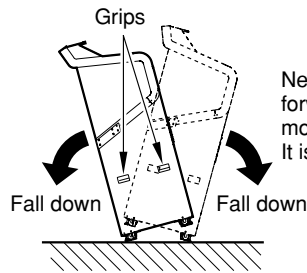


When moving the monitor unit, be sure to push it in the arrow directions shown in the figure.

**KEEP IN MIND**

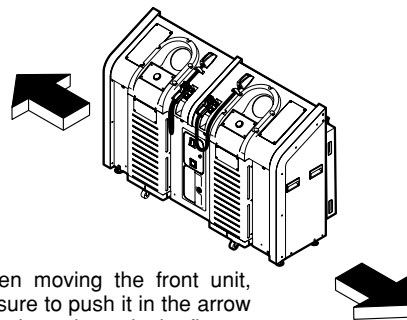
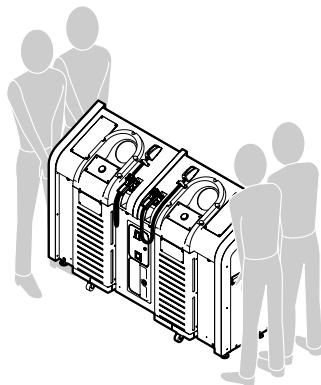


Never moving the monitor unit by holding the glass face.



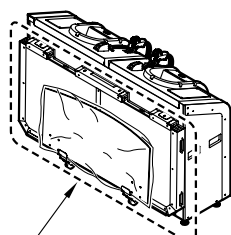
Never tilt the monitor unit forward or backward when moving it. It is very dangerous.

- When heaving up the front unit, more than 4 persons should hold it by the grips or at the bottoms. (Approx. 110 kg / 242.5 lb)

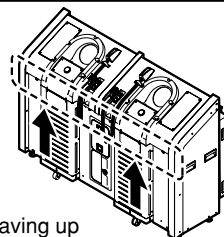


When moving the front unit, be sure to push it in the arrow directions shown in the figure.

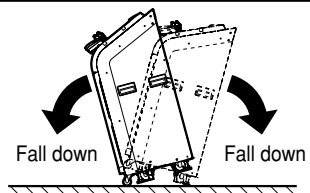
**KEEP IN MIND**



Never moving the front unit by holding the floor unit.



Never heaving up the front unit by holding the portions of control panel.



Never tilt the front unit forward or backward when moving it. It is very dangerous.

# 安全使用注意事項

本書說明為防止危害本產品的設置、使用、維護等人員及他人和財產的安全注意事項，本書內容務請遵守。

## 務請閱讀

●本書使用如下標注，區分無視表示內容、錯誤使用時產生的危險和損害程度。



該項標注表示“有可能造成死亡或身負重傷”的內容。



該項標注表示“有可能造成傷害或物品損壞”的內容。

●本書使用如下圖標，說明務請遵守的內容種類。



本圖標表示“提請注意”的內容。



本圖標表示“禁止”的內容。



本圖標表示“強制實行”的內容。

●經營本產品的店內維修人員和技術人員的定義

- 本書中記載的說明中，凡指示為由“店內維修人員”或“技術人員”進行的操作，必須由具有專門知識和技術的人員進行。
- 否則，將造成觸電或故障等重大事故。
- 交換本產品零件、維修檢查、以及處置發生的異常情況時必須由“店內維修人員”或“技術人員”進行。本書中，特別是有關危險的操作規定由“技術人員”進行。有關“店內維修人員”和“技術人員”定義如下：

### 什麼是店內維修人員？

- 擁有娛樂機器、換錢機的維修經驗，在娛樂機器（本產品）的所有者和運營者的管理下，對娛樂設施或店內的機器進行日常的安裝、設置、檢查維修，交換裝置和消耗零部件等對機器整體進行維修管理的人員。

### 店內維修人員的工作內容

- 安裝、設置、檢查維修娛樂機器和換錢機，交換裝置和消耗零部件。

### 什麼是技術人員？

- 關機器設計、製造、檢查和維修工作的人員，以及具有，擁有電子、機械工學等專門技術知識，日常對娛樂機器進行維修管理和修理的人員。

### 技術人員的工作內容

- 安裝、設置娛樂機器和換錢機，對電子部件和結構部件進行修理和調整。

設置時

**警告**

- 本產品的設置、移動或搬運時，務必同當地的經銷店商洽。
  - 除專門人員以外，擅自設置、移動以及搬運本產品，將會導致產品損壞。
  - 設置本產品時，必須將八個調節腳的底面平穩地放在地面，使其成為水平狀態，不可晃動。否則，不穩定的放置將會導致受傷或發生事故。
  - 在設置本產品時，請不要對開關部位和可動部位癸分施加力量，否則將會導致受傷或發生事故，並導致產品損壞。
  
- 本產品為室內用遊戲機，絕對不可設置在室外。
  - 如果設置在室外，將會導致發生事故或出現故障。
  
- 請不要把本產品設置在建築物的緊急出口處。
  - 否則發生災害時人員無法避難，將會導致傷亡。
  
- 此外，請不要把本產品設置在以下場所。
  - 否則將會導致發生事故或出現故障。
    - 漏雨或因潮濕結露的場所
    - 受直射陽光照射的場所
    - 直接受取暖用具等直接輻射的場所
    - 煤油、稀釋劑等引火性強的危險品附近
    - 傾斜以及強度弱的不穩定場所
    - 消防設備附近
    - 振動的場所
    - 灰塵集中的場所
    - 散發強烈磁氣和電波的機器附近
    - 使用高壓清洗機的地方
  
- 本產品上側及附近，請勿放置裝水或藥品的器物。
  - 水分和異常物品進入內部時，將會導致觸電或發生故障。
  
- 請勿在放熱口附近放置物品。
  - 如果妨礙通氣，內部溫度上昇，將會導致發生火災或故障。
  
- 請不要將電源軟線過分彎曲，或在電源軟線上放置東西。
  - 否則將會導致發生火災或故障，不能進行通訊遊戲。
  
- 絕對不可用濕手插拔電源插頭。
  - 否則將會導致觸電。
  
- 拔下電源插頭時，不要手持軟線部分。
  - 否則電源軟線破損，將會導致發生漏電事故或火災。
  
- 打開背面門及側面門時，請務必關閉主電源開關，將電源插頭從插座上拔下。
  - 否則將會導致觸電或發生故障。



禁止



禁止



禁止



禁止



禁止



禁止



禁止



禁止



拔下電源插頭

設置時

**⚠ 注意**

- 務必使用符合規格的電源。利用加長電線時，應單獨使用符合規格的室內用線。
  - 否則，將會導致發生火災或故障。
- 務請使用附屬的電源軟線。
  - 否則，將會導致發生火災或故障。
- 請絕對不要使用多用插頭。
  - 否則，將會導致發生火災或觸電。
- 請不要將電源軟線舖在過道上，以免被人踩或被拉扯。
  - 否則將會導致人員摔倒受傷，或軟線受到傷損。
- 本產品必須連接地線。另外請絕對不要將接地線接在瓦斯管、水管、電話專用地線端子上。
  - 如果不連接地線，將會導致觸電或故障。
- 設置本產品時，請與牆壁和其他產品按規定的距離隔開（參閱第二十二頁）。
  - 否則，將會導致本體不能正常散熱，發生故障。
- 在設置本產品時，請勿將各傳感器設在會受強烈陽光照射，及鏡子或金屬板等會反射陽光的地方（參閱第六十四頁）。
  - 傳感器可能會無法正常運作。
- 移動本產品時請不要過分用力。
  - 否則將會導致發生事故或破損。
- 在本產品的周圍，請勿放置會妨礙遊戲的物品（參閱第二十二頁）。
  - 否則將會影響正常遊戲，導致發生事故或人員受傷。此外，還需要留下一定的空間，以免遊戲時身體碰到牆壁或其它產品。
- 請勿塗抹螢幕玻璃板，或是貼上貼紙。
  - 否則將會導致無法進行正常遊戲或發生故障。



禁止



禁止



連接地線



禁止



禁止



禁止



禁止

使用時

 警告

- 如果本產品萬一發生冒煙、臭味或者異常聲響時、請立即關閉主電源開關，將電源插頭從插座上拔下，停止使用。
- 否則，繼續在異常狀態下使用，會導致發生火災和事故。



拔下電源插頭

發生異常情況時

- 1 關閉主電源開關
- 2 將電源插頭從插座上拔下
- 3 通知當地的經銷店

- 絕對不可用濕手插拔電源插頭。
- 否則將會導致觸電。
- 不得在電源插頭未正確插入插座中或積滿灰塵的狀態下放置不管。
- 否則，可造成觸電或火災。應至少每月一次以上進行檢查。



禁止



禁止

 注意

- 本產品不可在商工業地區以外使用。
- 如果在住宅地區或與其相鄰的地區使用，將會影響電視機、收音機和電話機等接受信號。



禁止

- 請遊戲者注意以下事項。
- 否則將會導致發生事故或病癥，致使病癥加重。

- 請以下人士不要進行遊戲。
- 飲酒者
- 疲勞、睡眠不足、病中病後、受傷以及身體不適者
- 孕婦或有可能懷孕者
- 醫囑不能激烈運動者
- 曾經因受聲音、光線以及影像等的刺激而發生肌肉痙攣、意識喪失者或有其可能者
- 手和手腕處患有疾病，或正在治療中。

- 在遊戲中如遇以下情況，請招喚服務人員。
- 否則將會導致事故。

- 請不要過分激烈遊戲，否則將會導致人員受傷。

- 請不要撞擊玻璃面。
- 否則將會導致發生意外事故或受傷。



禁止

- 請妥當地調整螢幕，進行運作。
- 如果在螢幕畫面出現搖晃或是歪斜的狀態下進行遊戲時，遊戲者及周圍的人有可能會因此產生頭暈或頭疼等的身體不適現象。

- 請確認槍支組裝是否收放在正確的位置（參閱第三十七頁）。
- 否則將會導致動作失誤或故障。

- 請勿將槍支組裝給予衝擊或是投扔。
- 否則將會導致發生意外事故或受傷。



禁止

- 使用電源軟線時，請遵守以下事項。
  - 否則將會導致發生漏電事故、火災或觸電。

· 不可損傷 · 不可加工 · 不可過分彎折 · 不可擰轉 · 不可加熱  
 · 不可拉拽 · 不可捆綁 · 不可用腳踩 · 不可夾住或釘釘

- 萬一發生電源軟線或電源插頭損傷時，立即停止使用，委託當地的經銷店更換零件。
  - 在破損狀態下持續使用，將會導致發生火災或觸電。

## 檢查和清掃

### 警告

- 檢查或清掃本產品時，務請關閉主電源開關，將電源插頭從插座上拔下。
  - 否則將會導致觸電。
- 交換零件或消耗零件時，必須使用本公司指定的零件，絕對不可使用其他零件或混用。
  - 否則將會導致發生火災或故障。
- 打開背面門及側面門時，請務必關閉電源組裝的主電源開關，將電源插頭從插座上拔下。
  - 否則將會導致發生事故或觸電。
- 請不要對本說明書中未指定的部位進行分解、修理、各種設定或者改造。
  - 否則將會導致火災、動作失誤或故障等。需要修理等時，請委託當地的經銷店。因對未指定的部位進行分解、修理、各種設定或者改造而導致的損害，本公司概不負責。
- 顯示屏組件內部有高壓危險。除技術人員以外，不可打開顯示屏組件的背面門。並且打開背面門時，不可隨意觸摸顯示屏附近及其內部器械。
  - 否則將會導致發生事故或觸電。
- 清掃本產品時，請使用浸有中性洗滌劑的軟布擰乾後進行擦拭。
  - 使用稀釋劑或是酒精等有機溶劑時，本體可能會產生變質。
  - 如果本體內部浸水，將會導致觸電或發生故障。
- 請不要用高壓沖洗機對本產品進行沖洗。
  - 否則，機器里面進水會導致觸電或產生故障。



### 注意

- 請勿塗抹螢幕玻璃板，或是貼上貼紙。
  - 否則將會導致無法進行正常遊戲或發生故障。



## 移動、搬運時

### 注意

- 分拆或移動本產品前，務必關閉主電源開關，從插座上拔下電源插頭，取下電源軟線。
  - 否則踩到或勾到電源軟線，將會導致發生事故或破損。
- 在移動本產品時，請務必事先拆解前方組裝和顯示屏組裝、以及地面組裝後再行作業。
  - 否則將會導致發生事故，破損或故障。
- 在移動前方組裝、顯示屏組裝時，請事先把各組裝的所有固定器轉至最上方，再以小腳輪移動。
  - 否則將會導致發生事故，破損或故障。
- 移動各裝置時，請不要過分施加力量。
  - 否則將會導致發生事故或破損。
- 在移動前方組裝時，請勿持著槍支組裝進行作業。
  - 否則將會導致人員受傷或發生事故與破損。
- 關於前方組裝和顯示屏組裝，根據推移的方向，有時會出現翻倒的情況。移動時，前方組裝請對著投幣門面、顯示屏組裝請對著顯示屏玻璃面，向左右方向推移。另外，斜面移動及越過高低差異處時，前方組裝請務必由四人以上、顯示屏組裝務必由八人以上抓好把手處搬動。
  - 否則會導致因該裝置跌倒而發生事故或破損。
- 地面組裝重約41kg (90.0 lb)。移動時，請務必由2個人以上抓好把手處搬動。
- 移動各裝置時，請不要對開閉部位與可動部位施加過分的壓力。
  - 否則將會導致人員受傷或發生事故與破損。



拔下電源插頭



禁止

## 有關廢棄事項

- 在廢棄本體或是零件時，本產品的所有者請負責將本產品以產業廢棄物進行廢棄。同時，出貨時的捆包材料請遵守當地的規定進行廢棄。

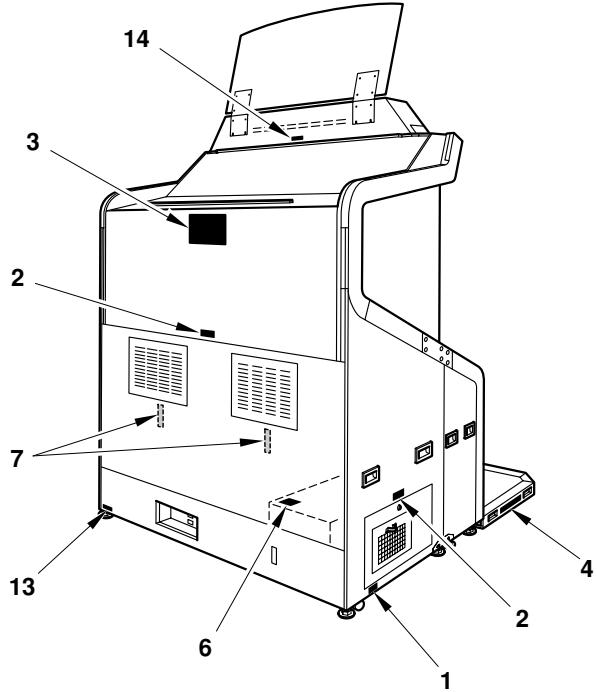
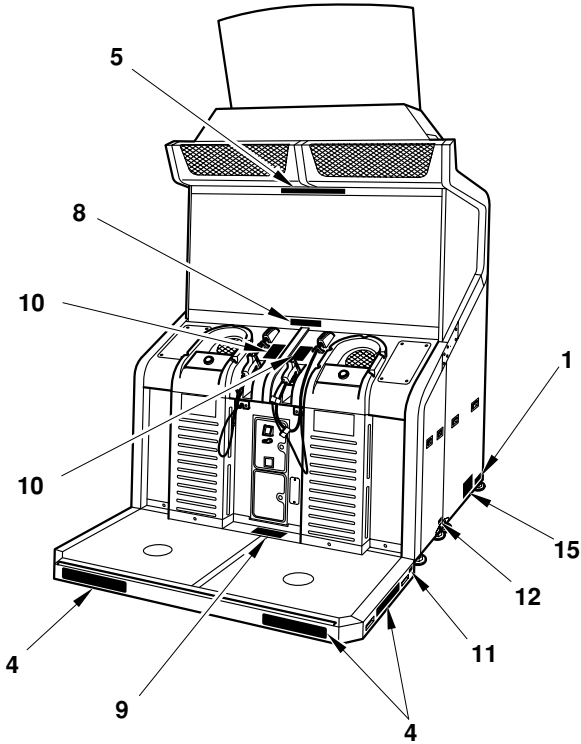


## 敬請遵守

- 本產品的設置、使用等方法等請務必按照本書記載的順序和內容安全進行。
- 請不要撕去貼在產品上的“警告”和“注意”標籤。
- 不要在間接相當於警告或注意事項的條件下進行設置。
- 轉讓等變更本產品的所有權時，務請將本書轉交給新的所有者。

# 警告標籤等的張貼位置

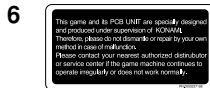
CHINESE



## 警告標籤等的種類



PN.0000036360



PN.0000237198



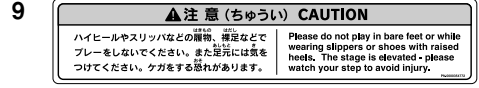
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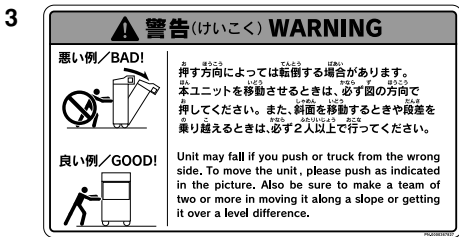
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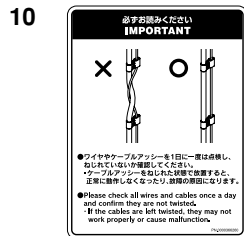
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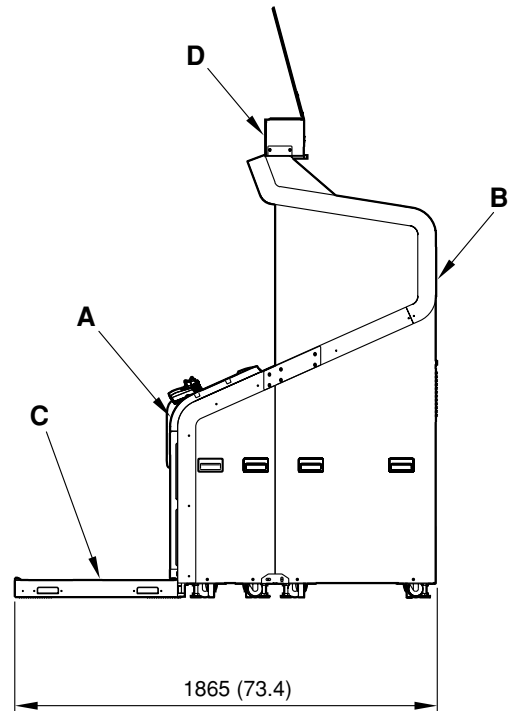
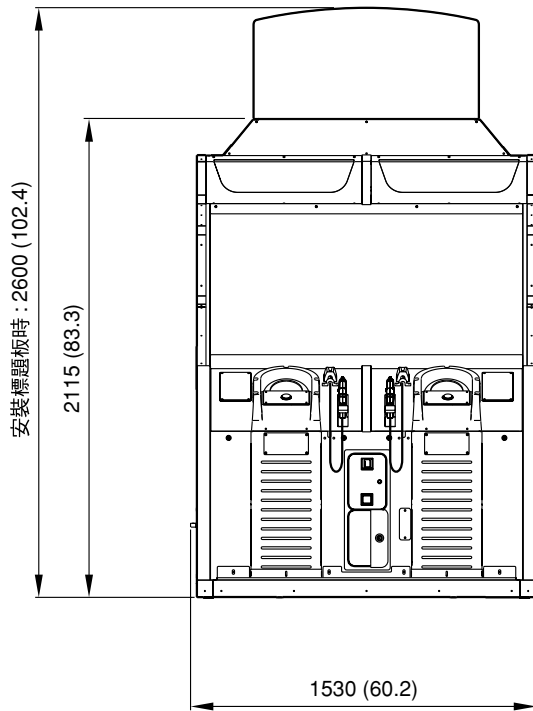
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MODEL	GMD22-TB LETHALFORCERS 3	MODEL	GMD22-HD LETHALFORCERS 3
POWER	110V / 50 Hz 740 W (MAX)	POWER	220V / 50 Hz 420 W
MANUFACTURER	KONAMI CORPORATION	MANUFACTURER	KONAMI CORPORATION
DATE OF MANUFACTURE	December, 2004	DATE OF MANUFACTURE	December, 2004
WEIGHT	482kg(1062.6lb)	WEIGHT	482kg(1062.6lb)
SERIAL NUMBER		SERIAL NUMBER	
KONAMI MADE IN JAPAN		KONAMI MADE IN JAPAN	

GMD22-TB(TAIWAN) GMD22-HD(HONG KONG)

・15不重新發行。

# 1 規 格



CHINESE

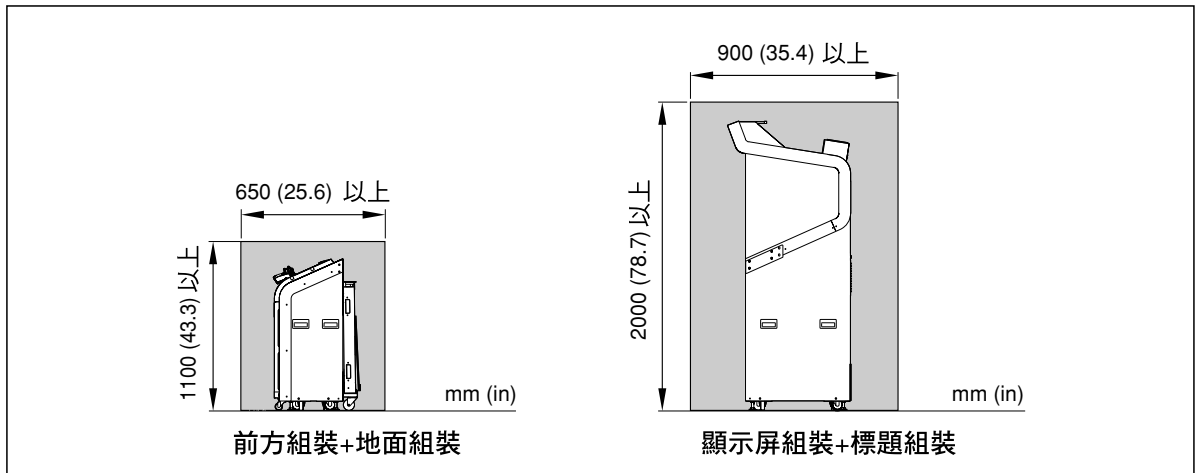
## 規 格

外形尺寸	參閱上圖 mm(in)
重 量	總重量：約482kg (1062.6 lb) A. 前方組裝：約110kg (242.5 lb) B. 顯示屏組裝：約320kg (705.5 lb) C. 地面組裝：約41kg (90.0 lb) D. 標題組裝：約11kg (24.3 lb)
額定消耗電力	●GMD22-TB：740W (MAX) ●GMD22-HD：420W
顯 示 屏	29英寸顯示屏(2台)
使 用 條 件	溫度5~35 °C (33~95°F) 濕度30~70% (不可結霜)

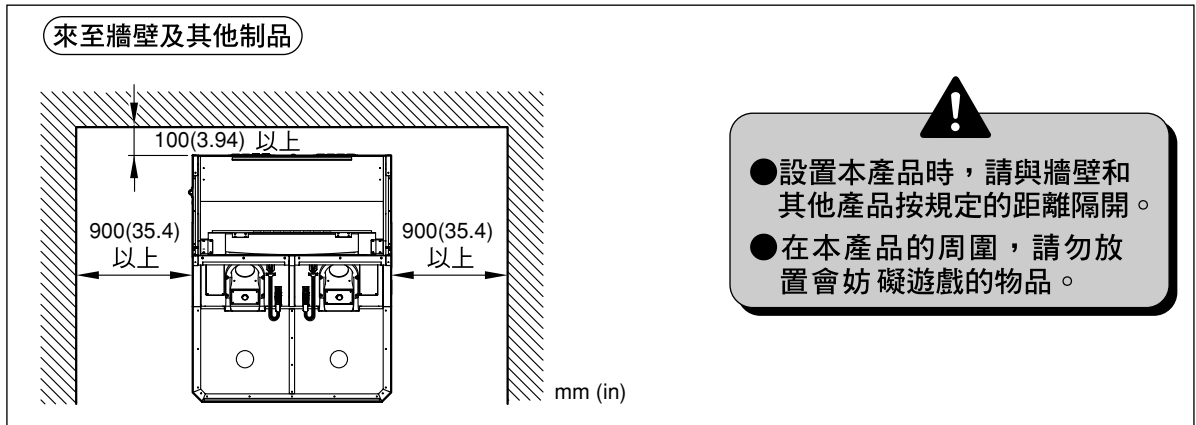
●因提高產品性能等理由，本產品的規格不經預告可能有所變更。

### ■有關搬運與設置的尺寸

為便於搬進本裝置，門口的尺寸大小需按下列所示進行。



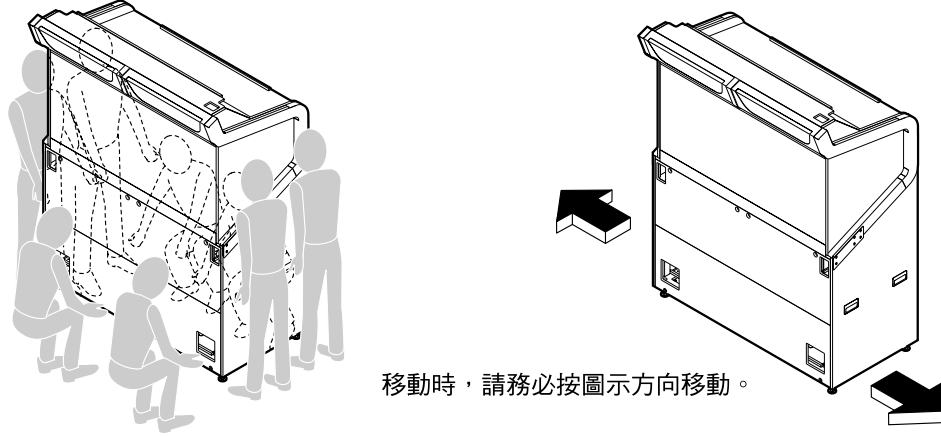
設置本產品時，請確保以下空間。



移動本產品時，請按以下方法進行。

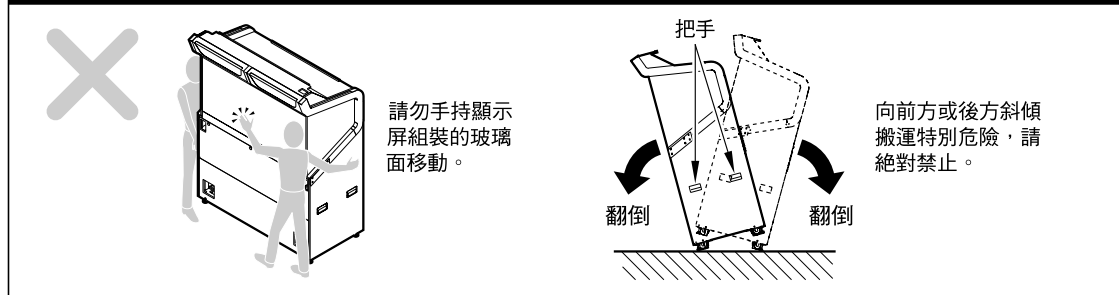


●在抬舉顯示屏組裝時，需要8個人以上，並務必手持把手或底部。（重約320kg / 705.5 lb）

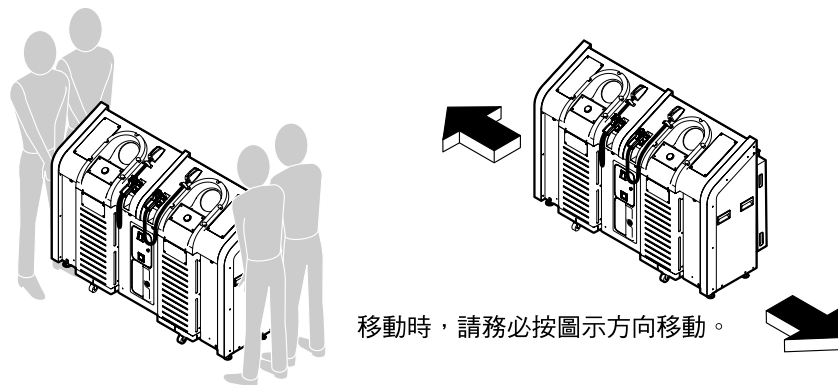


移動時，請務必按圖示方向移動。

**絕對禁止**

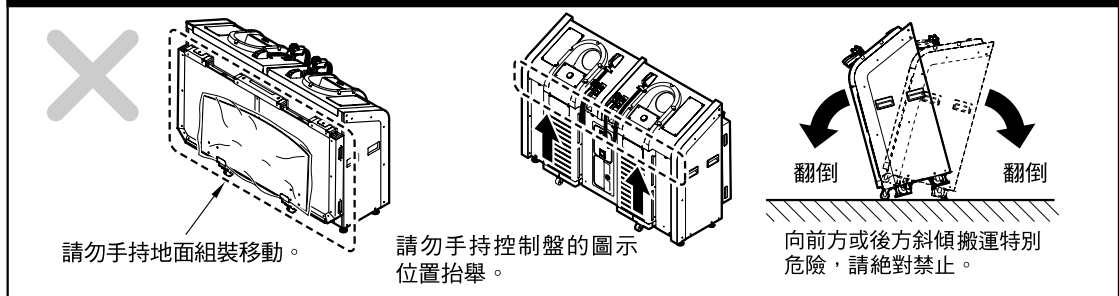


●在抬舉前方組裝置時，需要4個人以上，並務必手持把手或主題底部。（重約110kg / 242.5 lb）



移動時，請務必按圖示方向移動。

**絕對禁止**

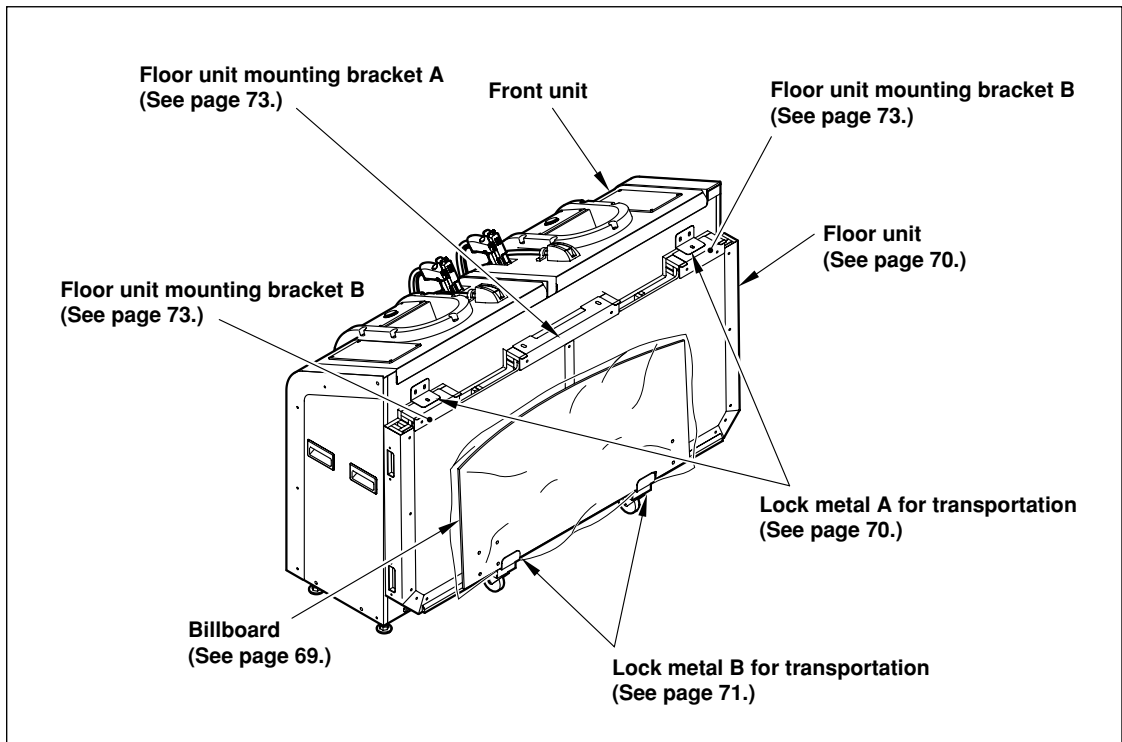


# 2 Contents of the product

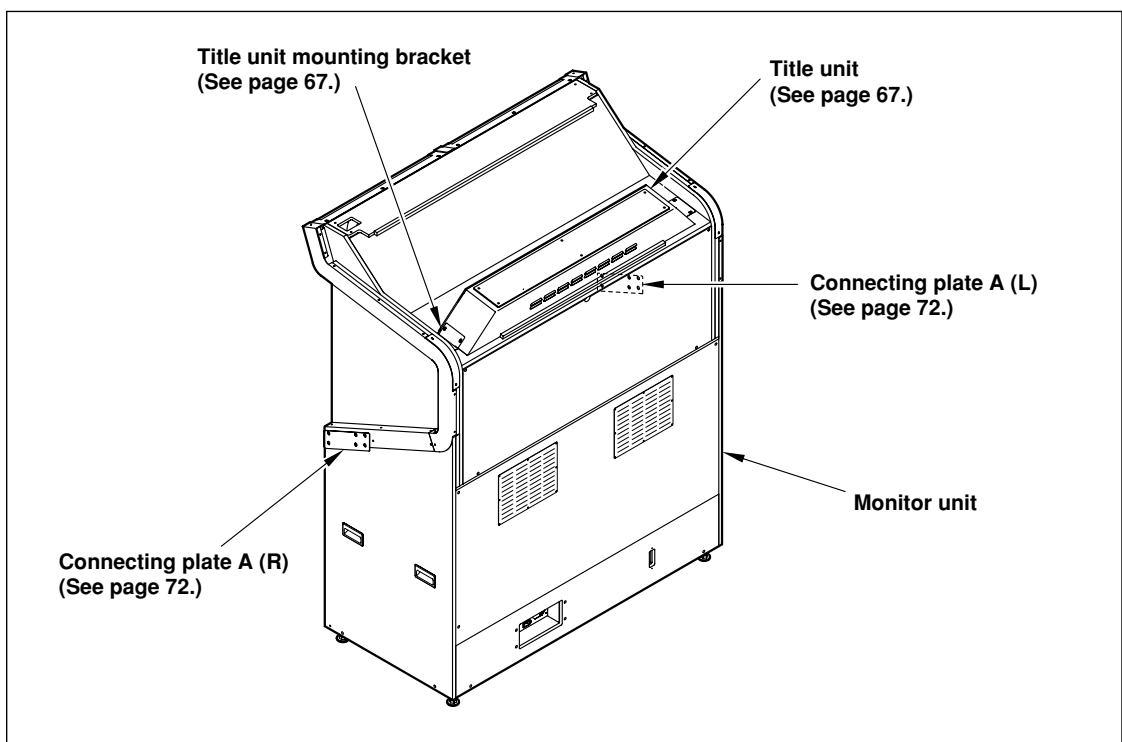
## ■ Transportation form

The product is transported in the form shown in the figure below.  
As for separation of units, please see to the relevant pages shown below.

### ● Front unit

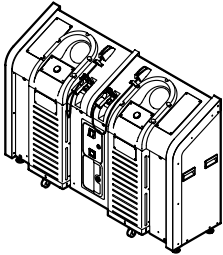
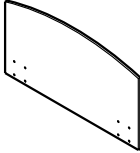

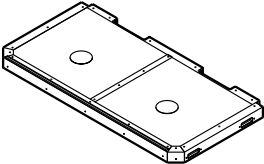

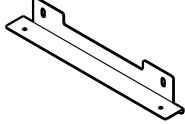
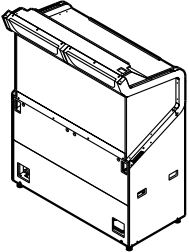
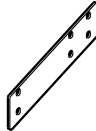
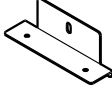
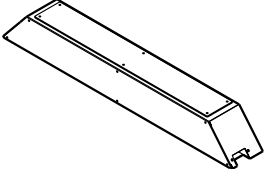
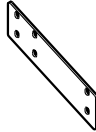
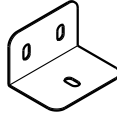
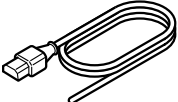
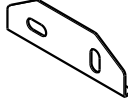
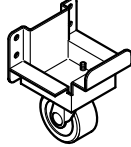







### ● Monitor unit



**List of parts**

Make sure the following parts are all in the product.

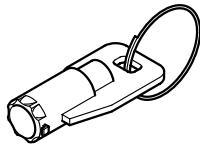
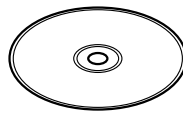

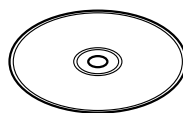
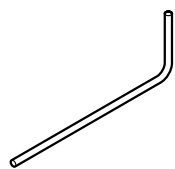
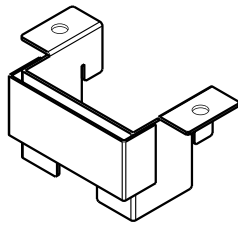
NAME	QTY	NAME	QTY	NAME	QTY
 Front unit	1	 Billboard This unit has been mounted to the front unit at the time of shipment.	1	 Title unit mounting bracket This unit has been mounted to the monitor unit at the time of shipment.	2
 Floor unit This unit has been mounted to the front unit at the time of shipment.	1	 Billboard mounting bracket	2	 Floor unit mounting bracket A This unit has been mounted to the floor unit at the time of shipment.	1
 Monitor unit	1	 Connecting plate A (R) This unit has been mounted to the monitor unit at the time of shipment.	1	 Floor unit mounting bracket B This unit has been mounted to the floor unit at the time of shipment.	2
 Title unit This unit has been mounted to the monitor unit at the time of shipment.	1	 Connecting plate A (L) This unit has been mounted to the monitor unit at the time of shipment.	1	 Lock metal A for transportation This unit has been mounted to the floor unit at the time of shipment.	2
 AC power cord (Approx.3m / 118.1 in)	1	 Connecting plate B	2	 Lock metal B for transportation This unit has been mounted to the floor unit at the time of shipment.	2
		 Security plug (GMD22 AA  )	1	 Cross recessed head screws (M6x20L)	8
				 Cross recessed head screws (M6x15L)	16
				 Plain washer (nominal diameter 6)	8

•If any part is defective or not found, contact your nearest dealer.

## 2 Contents of the product

### ■ Accessories

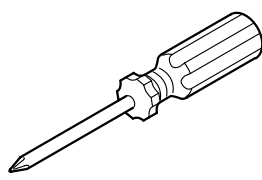
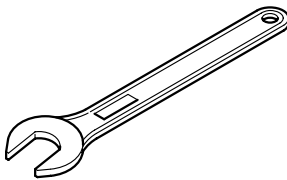
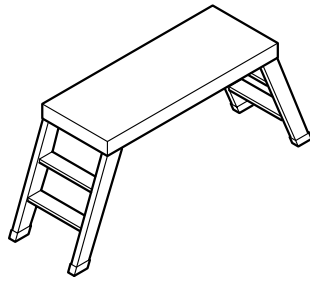
Make sure the following accessories are all in the product.

NAME	QTY	NAME	QTY
Instruction manual (This manual)	1	 Maintenance door key	2
End user license agreement	1		
 CD-ROM : SYSTEM DISC** (D22 *01) •The *-marked code may differ by the shipment period of the product.	1	 Coin door key	2
 CD-ROM : APPLICATION DISC** (D22 *02) •The *-marked code may differ by the shipment period of the product.	1		
 CD eject pin Keep the pin safe, since it is necessary when setting CD-ROM.	1	 Recoil unit adjusting jig for gun recoil unit (Mounted inside the Player 1 control panel of the front unit.)	1

\*\*The contents of the SYSTEM DISC and APPLICATION DISC are installed when the machine leaves the factory. Keep them safe. (The discs will be required when reinstall the game software.)

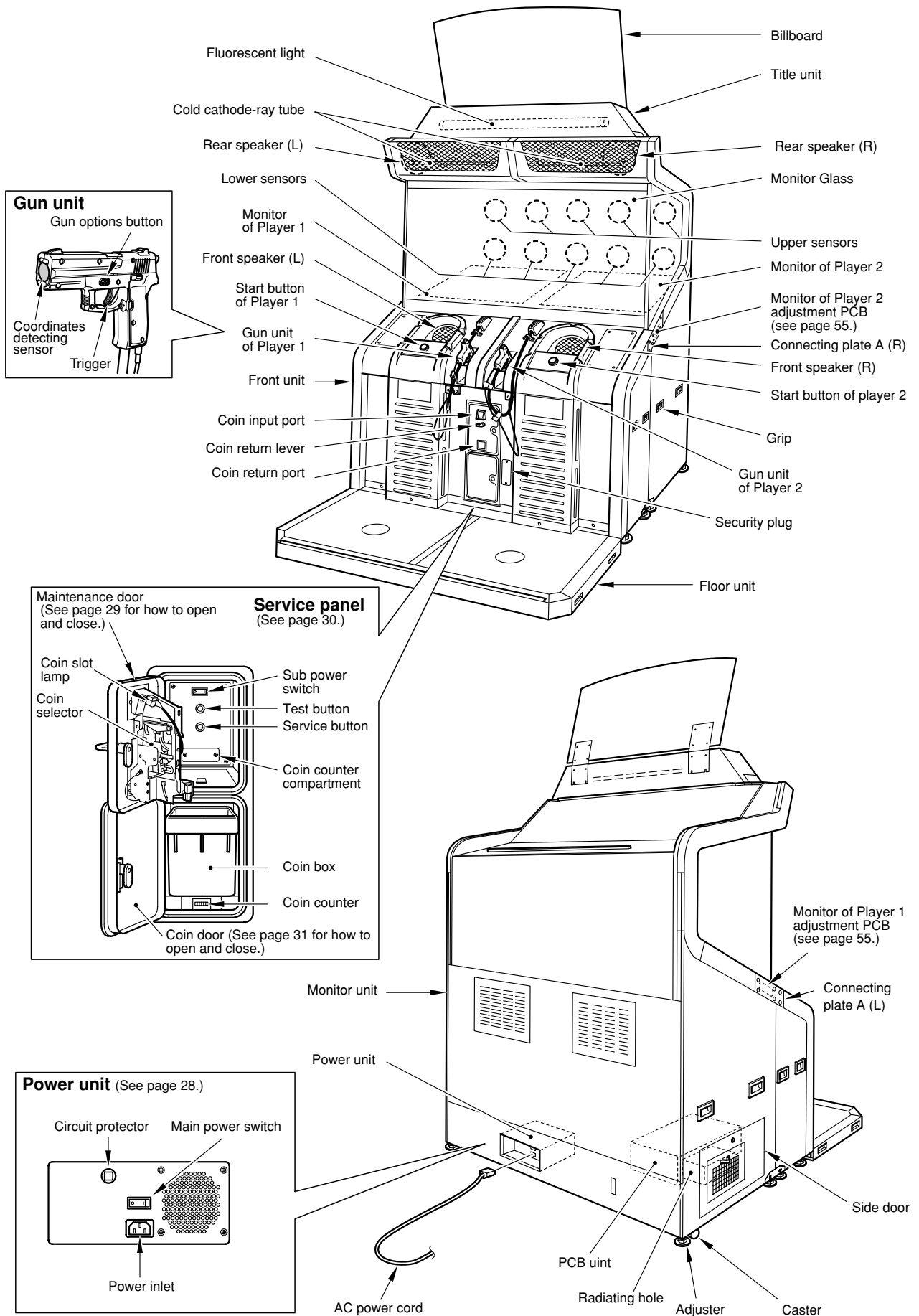
•If any part is defective or not found, contact your nearest dealer.

### ■ Tools necessary for set up job

 ⊕ screwdriver (#2)	 Wrench (24 mm width across flats) (Necessary for fixing the adjusters)	 Stepladder
---	--	---



# 3 Names of parts



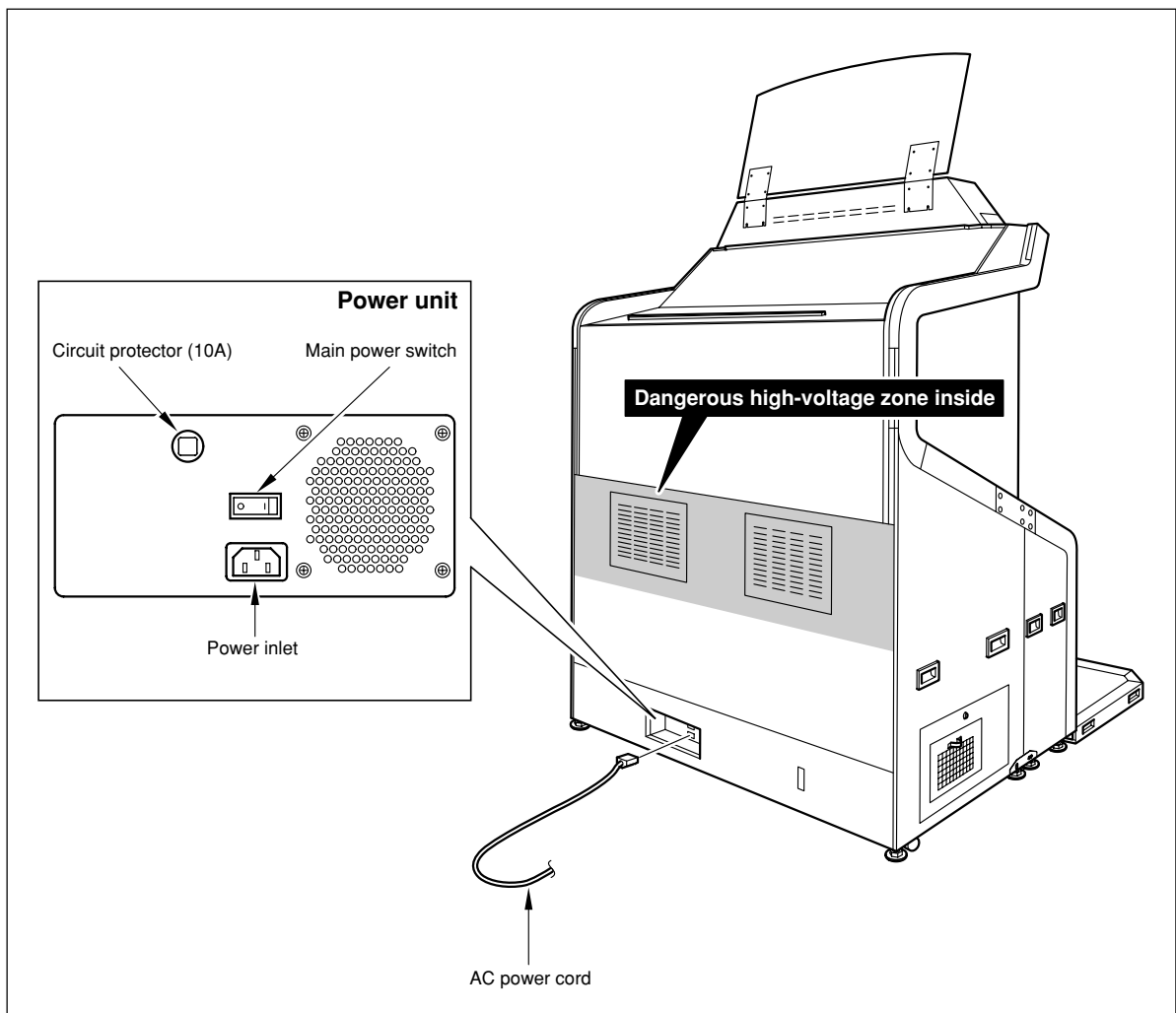
## 3-1 Power unit

### ■ Power unit

The power supply unit is found at the backside of the monitor unit.



- Be sure to use the attached AC power cord.
- Be sure to ground to the machine. Never connect the grounding wire to gas pipe, water pipe or telephone ground terminal.
- There is high voltage inside the machine. Only the qualified industry specialist is allowed to open the back door. When the back door is opened, use due care not to touch the equipments around the monitor or inside the units unnecessarily.
- If the sub power switch of the service panel is turned OFF without turning OFF the main power switch of the power unit, some parts in the units remain live. When opening the back door, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.



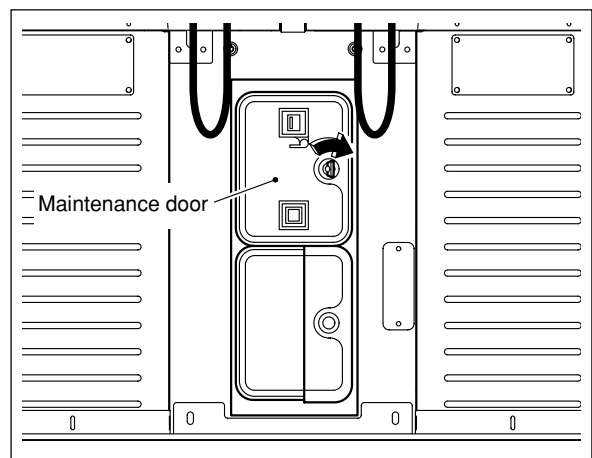
## 3-2 Opening and closing the maintenance door



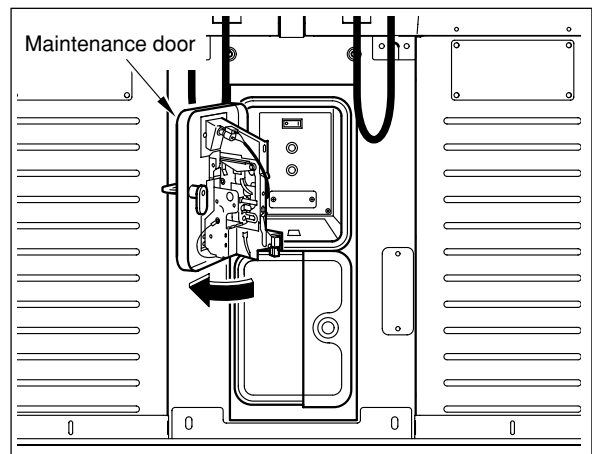
- Take care not to apply any load or impact to the maintenance door when it is open.
- After closing the maintenance door, be sure to check that the door is locked securely.

### ■ How to open the maintenance door

- 1 Insert the accompanying maintenance door key and turn it clockwise.



- 2 Open the maintenance door.



### ■ How to close the maintenance door

- 1 Close the maintenance door.
- 2 Turn the maintenance door key counterclockwise and draw it out.

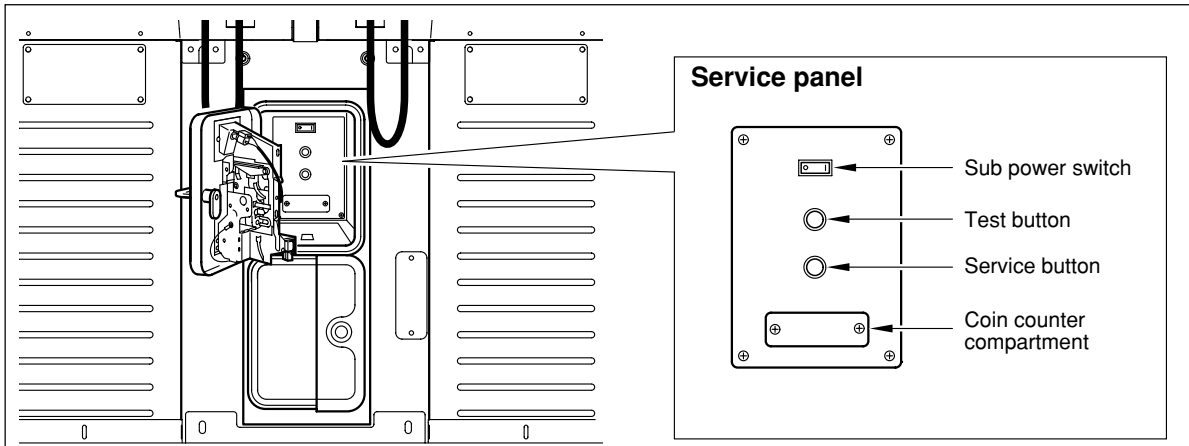
## 3-3 Service panel

### ■ Service panel

Using the accompanying maintenance key, open and detach the maintenance door to access the service panel inside.



- Take care not to apply any load or impact to the maintenance door when it is open.
- After closing the maintenance door, be sure to check that the door is locked securely.



#### ● Test button

When this button is pressed while the power is turned ON, the mode changes to TEST MODE. (See page 39.)

(To return it to the game mode, select the "GAME MODE" from the "MAIN MENU".)

#### ● Service button

When this button is pressed while the power is turned ON, the credit appears, enabling the test play.

(The coin counter will count nothing and nothing is recorded in the "BOOKKEEPING". The current number of credits is displayed on the screen.)

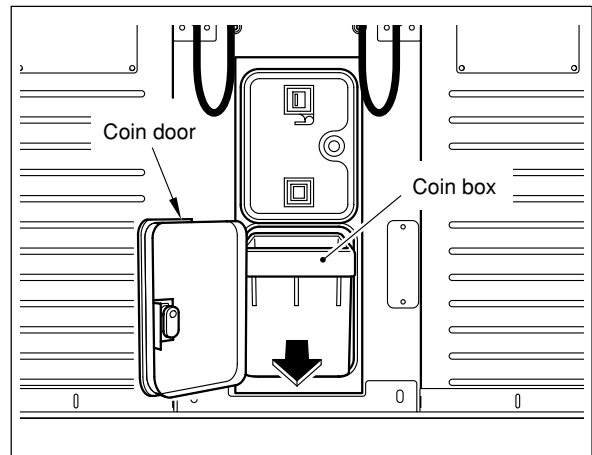
## 3-4 Opening and closing the coin door

### ■ Opening and closing the coin door and removing the coin box — — — — —



- Take care not to apply any load or impact to the coin door when it is open.
- Securely lock the door for protection against burglaries.
- Note that the coin box is considerably heavy to take out if it is full of coins.

- 1 Insert the attached coin door key in the coin door and turn it clockwise.
- 2 Open the coin door and take out the coin box.

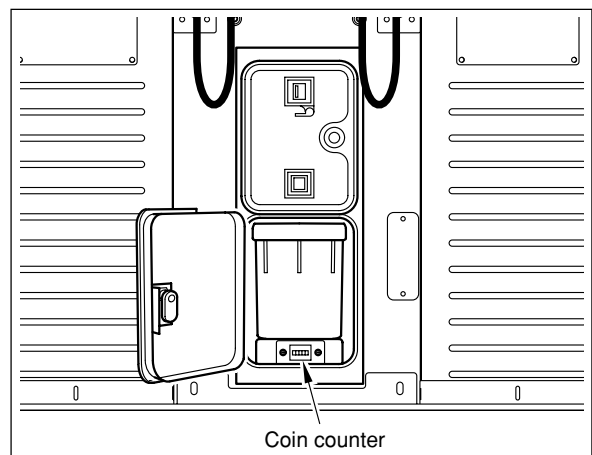


### ■ Coin counter — — — — —

You will find the coin box when the coin door is opened.  
The coin counter is located under the coin box.

- To move the coin counter onto the service panel, see page 78.

**MEMO**



## 3-5 Opening and closing the control panel

The figure shows how to open and close the control panel at Player 1 side. Open and close the control panel at Player 2 side in the same manner.

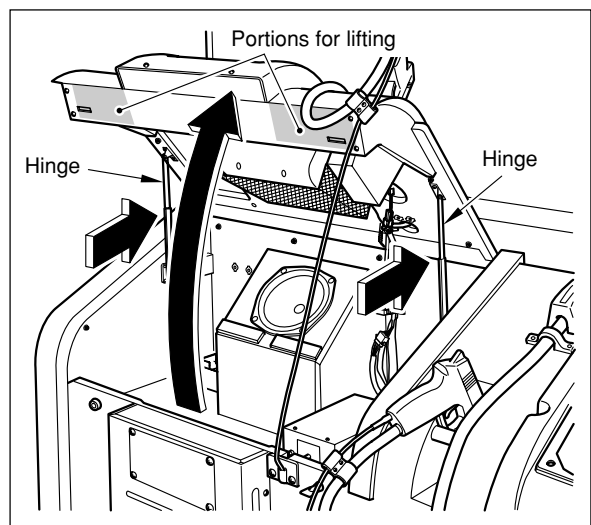
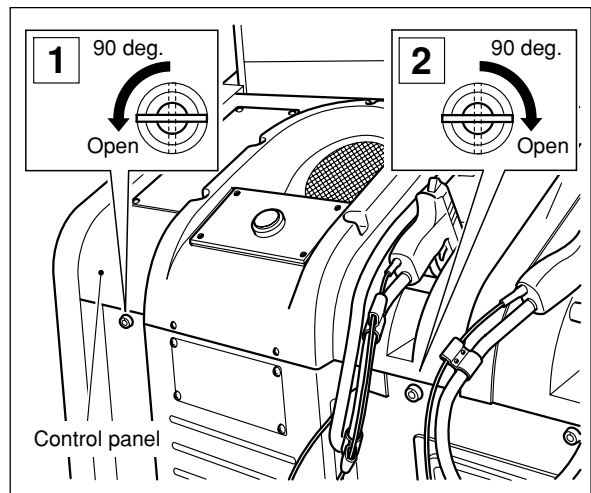


- Before opening the control panel, be sure to turn OFF the main power switch and unplug the AC power cord from receptacle.
- When opening or closing the control panel, use due care not to allow your hands to be pinched.
- Take care not to apply any load or impact to the control panel when it is open.
- After closing the control panel, be sure to check that the panel is locked securely.

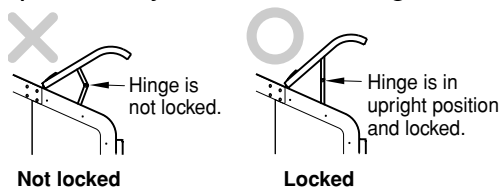
### How to play the control panel



- 1** Turn OFF the main power switch. Then unplug the AC power cord from the receptacle.
- 2** Insert the accompanying maintenance door key in the keyhole(L) and turn it counterclockwise by 90 deg. before drawing it out.
- 3** Insert the same key in the keyhole(R) and turn it clockwise by 90 deg.. At this time, the key is not drawn.
- 4** Lift up the control panel by the portions shown in the figure and open it. At this time, be sure to lock the hinges so that they should be in upright position.



- If the control panel is opened abruptly with force, wireharness may be disconnected or internally broken.
- When opening the control panel, be sure to lock the hinges. If the hinges are not locked, the control panel may be closed during work.

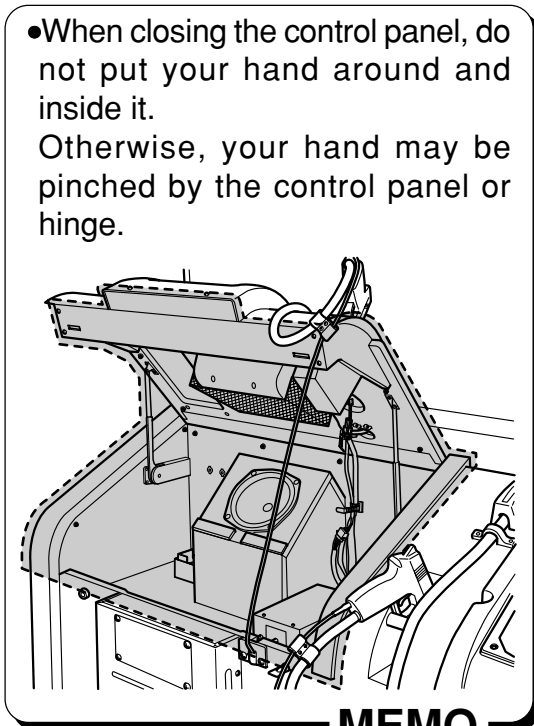


**MEMO**

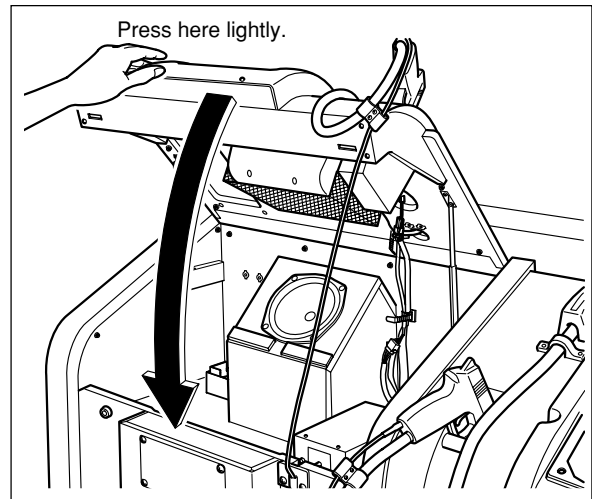
■ How to close the control panel — — — — —

- 1 When the control panel is pressed lightly by hand, it will be closed slowly by its own weight.

●When closing the control panel, do not put your hand around and inside it. Otherwise, your hand may be pinched by the control panel or hinge.

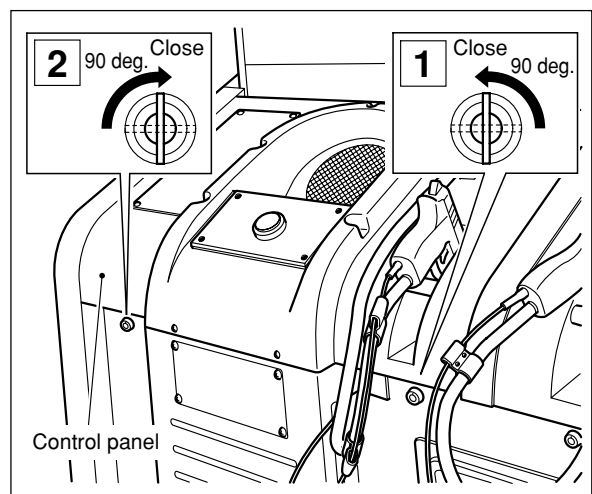


**MEMO**



- 2 Turn the maintenance door key that has been inserted in the keyhole(R) of the control panel as shown in the figure counterclockwise by 90 deg. before drawing it out.

- 3 Insert the same key in the keyhole(L) and turn it clockwise by 90 deg.. Then make sure that the control panel will not be opened before drawing out the maintenance door key.







## ■ How to play

1. Put coin(s) in the slot and press the start button.

In the case of solo play, the player can make a choice of game mode between “CPU Rival Mode” and “Time Attack Mode”. In “CPU Rival Mode”, the most suitable play data out of the records of play achieved by past users is reproduced as “CPU Rival”, and player can enjoy the game with his shadow rival.

2. Then, “Nickname Selection” appears on the screen.  
Out of the nicknames displayed on the screen, aim at and shoot a desired nickname by the gun.



Nickname Selection Screen

There are two screens to select a nickname. The screen changes alternately each time when the gun option button is pressed.

3. Then, “Stage Selection” appears, displaying six stages.  
Select a stage and aim at and shoot the stage by gun for entry.  
(Cleared stage(s) can not be selected. “LETHAL ENFORCERS 3” is for the last stage only.)



COPS IN THE CITY



Coast Intruders



RIVAL HEAT



Airport 2004



JJ



LETHAL ENFORCERS 3  
(Last stage only)

4. After the selection of stage, “Start Demonstration” starts and then the game starts.
  - When the gun unit is directed toward the screen, the screen scrolls automatically forwards. Find the enemy and pick him off by gun.  
If the policeman is killed in the line of duty (or is shot by bullet(s) of enemy), or he shoots a colleague or an ordinary citizen by mistake, the player temporarily stops advancing.
  - When bullets run out, reload them.  
The player can not advance during reloading.
  - Protect yourself from the attack of enemy by means of shield.  
Player can not advance as long as the shield is displayed on the screen.
  - If the player could not protect himself from the attack of enemy and has been damaged, one life point will be lost.
  - If the player hits enemies continuously without miss, score will be added.
  - “Weapon Item” comes out of a particular enemy who has been shot down. Aim at and shoot it by the gun and get it.
  - The result report is displayed when the roundup game for a stage is over.  
In dual play, a higher-ranked player becomes “Superior”, who has choice of the next stage.
  
5. The game is over when all of the stages have been cleared or when the life point becomes “0”.
  - The result report is displayed when all of the stages have been cleared or the game is over.  
In the case of all stages-clear, “Clear Ending” starts after displaying the result report.

■ **About “Ranking”** -----

If the player has brought a successful achievement, he will be promoted in rank (10 ranks in total).

	<b>Police</b>	<b>Maritime Guard</b>	<b>Army</b>
↑	Superintendent General	Coast Guard Superintendent 1st Class(A)	General
	Superintendent Supervisor	Coast Guard Superintendent 1st Class(B)	Major General
	Chief Superintendent	Coast Guard Superintendent 2nd Class	Colonel
	Senior Superintendent	Coast Guard Superintendent 3rd Class	Lieutenant Colonel
	Police Superintendent	Coast Guard Officer 1st Class	Major
	Police Inspector	Coast Guard Officer 2nd Class	Captain
	Assintant Police Inspector	Coast Guard Officer 3rd Class	Lieutenant
	Policce Sergeant	Junior Coast Guard Officer 1st Class	Sergeant
	Senior Policeman	Junior Coast Guard Officer 2nd Class	Corporal
	Policeman	Junior Coast Guard Officer 3rd Class	Private

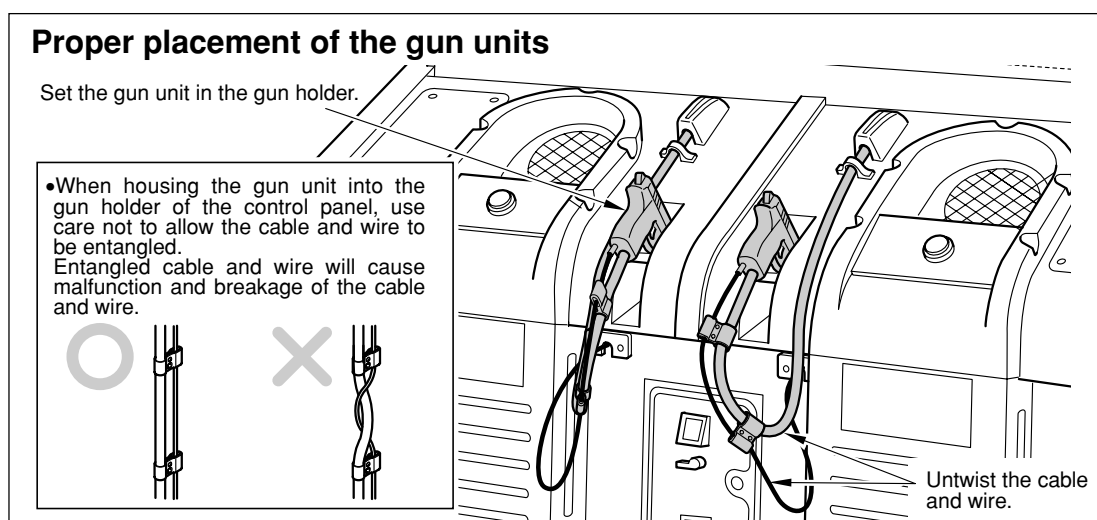
Police..... “COPS IN THE CITY” “RIVAL HEAT”  
 “Airport 2004” “LETHAL ENFORCERS 3”  
 Maritime Guard..... “Coast Intruders”  
 Army..... “JJ”

### ■ Joining the game halfway

Another player can participate in the game halfway at any time during play.  
(When the “Score Attack Mode” is selected in solo play, you cannot participate in the game on the way.)

### ■ Standing the gun unit

Set the gun unit correctly in position shown in the figure.  
(The gun unit has been set upside down in the gun holder at the time of shipment. Set the gun correctly in position as shown in the figure.)



### ■ Continuation of the game

The continuation of the game is accepted for 15 seconds after the end of the game.  
(Factory-set)  
(The time for acceptance of the continuation can set by the procedure of “GAME OPTIONS” is page 48.)

### ■ Event mode

By selecting a desired one out of 6 stage modes memorized in the “EVENT MODE” of the “GAME OPTIONS”, this product can provide a mode suitable to the event or competition organized by customer. (See page 48.)

### ■ Ranking in the “INTERNET RANKING” program

By setting the “INTERNET RANKING” in the “GAME OPTION” at “ON” to play the game in “ATTACK MODE”, this product enables players to participate in the internet ranking event on the KONAMI’s Web site. (See page 48.)

#### Ranking-in procedure

- 1 Password is displayed at the end of the play in “SCORE ATTACK MODE”.
- 2 Note down the password, access the Konami homepage at the following website.  
**<http://www.konami.co.jp/am/>**
- 3 Enter the specified items and get them registered for ranking in.  
·The above Konami website can be accessed from the player’s computer or other terminal, not on the game machine. The player is expected to pay the access cost.

The schedules and durations of ranking events will be separately introduced.  
(Keep in mind that those events will not be held for some reasons.)

# 5 Game settings

---

## 5-1 Checking the game start up

- When the power ON after installation of machine, the selfdiagnostic test will get started. The test results will be displayed on the screen. If the power is not turned ON, make sure that the main power switch and sub power switch are all at the ON position. (See pages 28 and 30.)



- If an abnormality persists or the machine does not operate properly, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.

### ■ Result of test — — — — —

#### If test is OK

The machine goes to the game mode and the demonstration game gets started. If “BAD” or “ERROR” appears onscreen, take proper measures, referring to “9-9Troubleshooting” on page 100.

### ■ Setting the time — — — — —

If the timer is not set yet in the “CLOCK”, the message shown in the right figure appears on the screen.

Press the test button, and the “MAIN MENU” screen shows up instead in the test mode. Select the “CLOCK” screen and set the time. Without this setting, the message shown in the right figure appears each time the machine gets started.

**PLEASE SET THE CLOCK BEFORE OPERATION.**

PRESS TEST BUTTON = MAIN MENU

### ■ Making the gun calibration setting — — — — —

If calibration of the gun has not yet been made by “GUN CHECK”, the message shown in the right figure appears on the screen. (Since the calibration of the gun has been made at the time of shipment, this indication will not appear.)

When the test button is pressed at this time, the indication changes to “MAIN MENU” of “TEST MODE”. Then, calibrate the gun by “GUN CHECK” of “I/O CHECK”. (See page 42.)

If the gun is not calibrated, the message shown in the right figure appears each time the machine gets started.

**PLEASE CALIBRATE GUN.**

PRESS TEST BUTTON = MAIN MENU

### ■ When two or more machines are installed — — — — —

This product employs infrared sensors. When more than 2 machines are installed, change the ID of gun sensor operating frequency by “GUN CHECK” of “I/O CHECK” in test mode in order to prevent interference between the side-by-side machines. (See page 42.)

## 5-2 Setting and adjustment of game mode

Manually check and change the settings for the screen displays and game contents and change them as required.

### Starting the test mode

- 1 Turn ON the power switch.
- 2 While the demonstration game is playing, press the test button on the service panel.  
·The main menu is displayed on the screen.  
The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

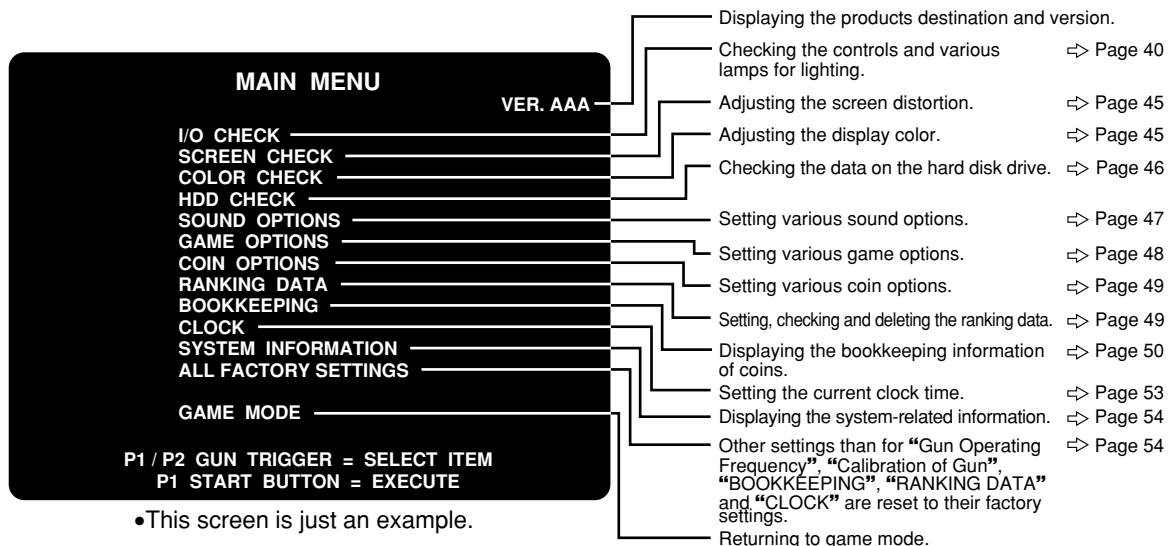
•When the power is turned ON while keeping the test button pressed, the current settings and the all data in the “Gun Operating Frequency”, “Calibration of Gun”, “BOOKKEEPING”, “RANKING DATA” and “CLOCK” are deleted to return to their factory settings.

**MEMO**

### Quit the test mode

- 1 Pull the trigger of Player 1 or Player 2 gun to select “GAME MODE” on the main menu screen.
- 2 Press the start button of the player 1.  
·The screen goes back to the game mode.

### Main menu screen (basic items)



- If the system clock has not been set, “>” and “<” start flashing at both ends of “CLOCK” to prompt you to set the clock.
- If gun calibration has not yet been made, “>” and “<” flicker on both sides of the “I/O CHECK” screen to prompt you to make gun calibration.

**MEMO**

### Selecting each mode

How to select each mode from the main menu

- SELECT --> Pull the trigger of Player 1 or Player 2 gun.
- SET --> Press the start button of the player 1 .

For details on the modes, refer back to the reference pages listed above.

## 5-3 Mode descriptions

■ The original factory settings are displayed in green; the changed settings are displayed in red.

· To change the preset value, pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1.

· After the setting has been changed, select “SAVE AND EXIT” and press the start button of Player 1 for entry.

“NOW SAVING” will appear, the modified settings will be saved, and the screen returns to the main menu.

· If “EXIT” is selected after the modification of the settings, the following message will appear.

**YOU HAVE NOT SAVED YET. SAVE CHANGES NOW? YES / NO**

Pull the gun trigger of Player 1 or Player 2 to make selection of “YES/NO” and press the start button of Player 1 for entry.

If “YES” is selected, the new settings will be saved with “NOW SAVING” displayed and the screen will return to the main menu.

If “NO” is selected, the message “NO MODIFICATION” will appear, the modified settings will not be saved, but the main menu will show up again on the screen.

• If “FACTORY SETTINGS” is selected and the start button of player 1 is pressed, all the setting of the mode will be returned to the factory setting.

**MEMO**

## I/O CHECK

### Checking the controls and various lamps for lighting

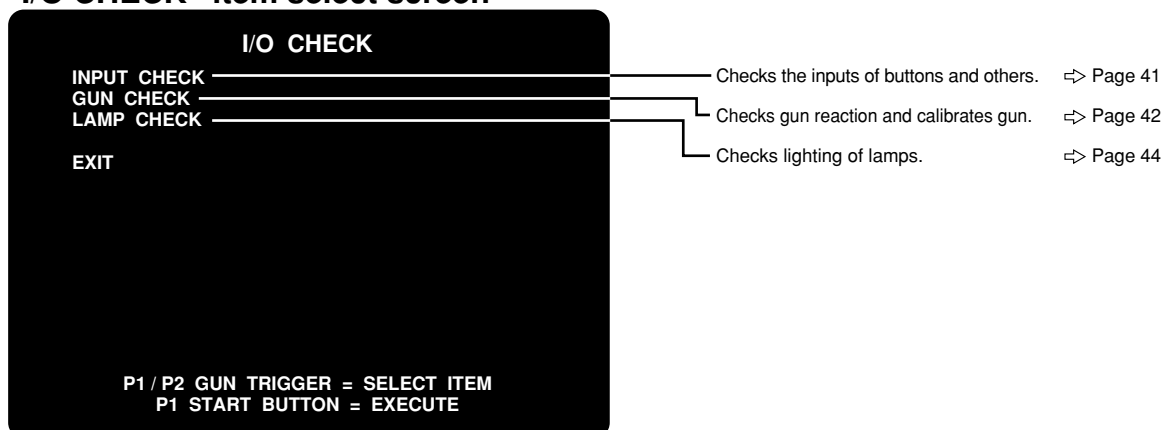
■ Mode for checking the buttons and others and lighting of lamps.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

Select the item(s) to be checked by pulling the gun trigger of Player 1 or Player 2, and press the start button of Player 1 to change the item(s). Then, checking item(s) appears (appear) on the screen.

To return to the “MAIN MENU” screen, select “EXIT” and then press the start button of Player 1.

### “I/O CHECK” item select screen



• This screen is just an example.

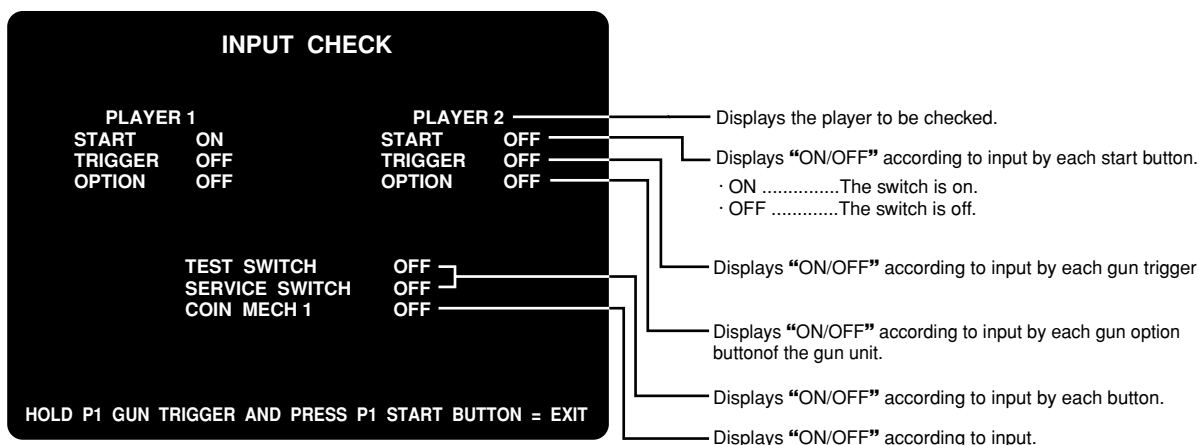
# INPUT CHECK

## Checking the inputs of buttons and others

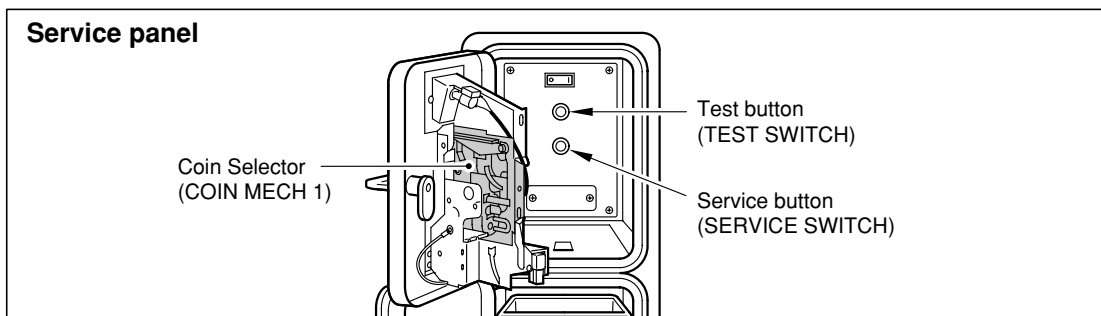
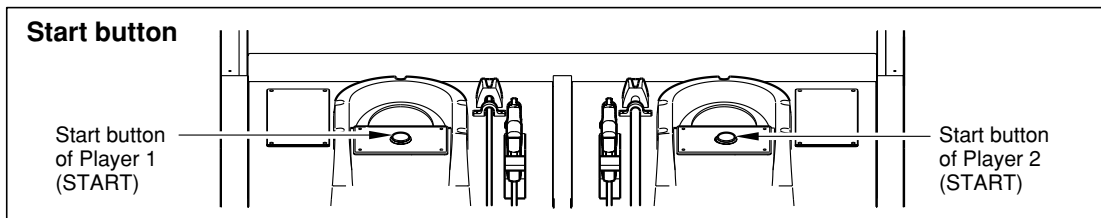
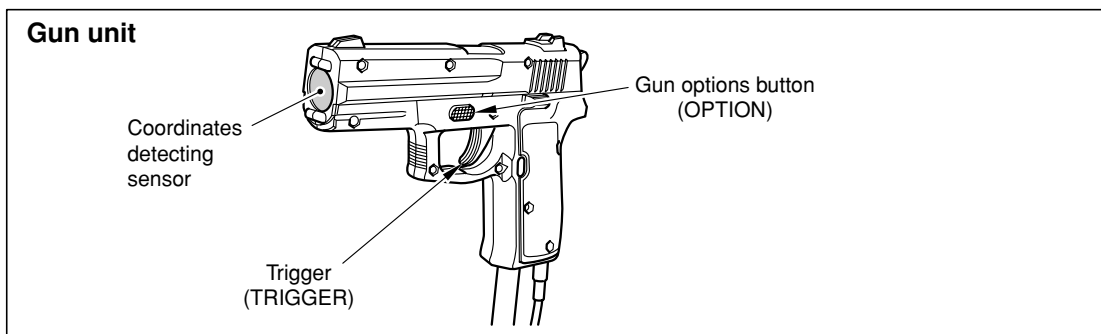
■ Mode for checking the buttons and others.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

This screen is intended to see whether the inputs of these controls are ON or OFF. To return to the "I/O CHECK" item select screen, press the start button of Player 1 while pulling the gun trigger of Player 1.



•This screen is just an example.



# GUN CHECK

## Checking the gun reaction and calibrating gun

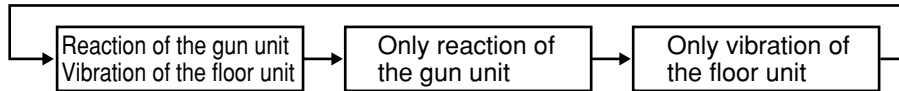
■ Mode for checking the reaction and calibrating gun.

The reaction of gun can be checked by pulling the trigger.

Point the gun to the screen and the hit position is marked.

Reaction of the gun and vibration of the floor unit are transmitted by pulling the trigger.

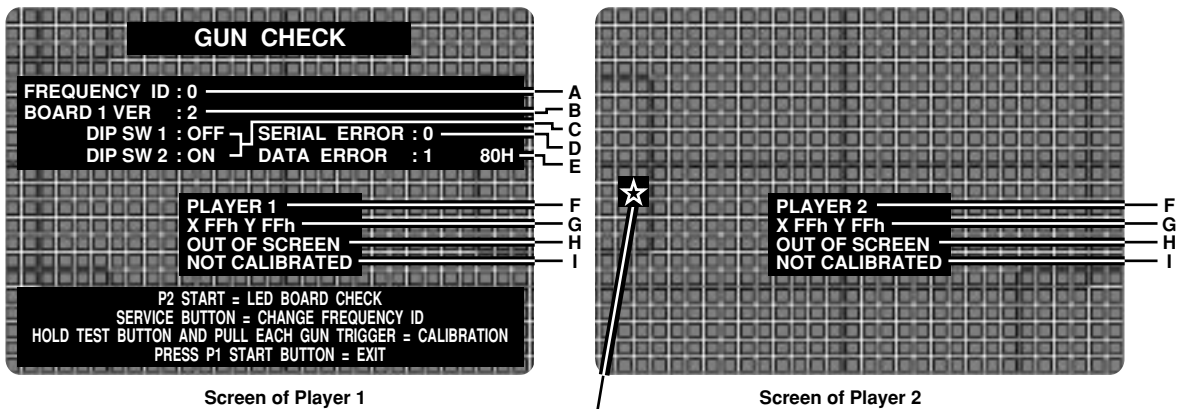
When the gun option button is pressed, reaction of the gun changes in the order as shown below.



To return to “I/O CHECK” item select screen, press the start button of Player 1.



- After the gun unit has been repaired or replaced, be sure to calibrate the target points. Make sure that the gun unit recoils and the floor unit vibrates simultaneously when the gun is triggered.
- Make exact calibration, because otherwise the game may fail to play properly.



● This screen is just an example.

Point the gun to the screen and the hit position is marked with “★”.  
The hit position are different in color from player to player.  
Player 1 : Red      Player 2 : Blue

- A : Changing the gun sensor operating frequency ID. There are 2 kinds of frequency IDs, namely, “0” and “1”. When more than 2 machines are installed, interference between them can be prevented by such IDs. ID can be changed by pressing the frequency change service button.
- B : Displaying the version of gun board 1.
- C : Displaying the setting of DIP switches on the gun board 1.
- D : Displaying the frequency of error in data communication between gun board1 and PCB unit. Make sure that the number does not increase frequently. (Watch for 1 minute or so to make sure there are less than 3 errors.)
- E : Displaying the frequency of error in data reception between gun board 1. When an error occurs, a 2-digit hexadecimal error code appears after the error number.
- F : The following G, H and I status are displayed for each of the Player 1 and Player 2 gun units.
- G : Coordinates in which each gun is aiming is displayed here in hexadecimal notation. The values change within the range of “00h to ffh” for X (in horizontal direction) and Y (in vertical direction). If the player aims at the outside of the screen, “ffh” is displayed.
- H : This message is displayed when the player aims at the outside of the screen.
- I : This message is displayed when the calibration setting of gun has not yet been made. If this setting has not been made, a message appears at each start up to prompt you to make this setting.



### ■ Making the gun calibration setting

When the gun to be calibrated is triggered while pressing the test button on the “GUN CHECK” mode screen, the screen changes to the calibration mode for the relevant gun.

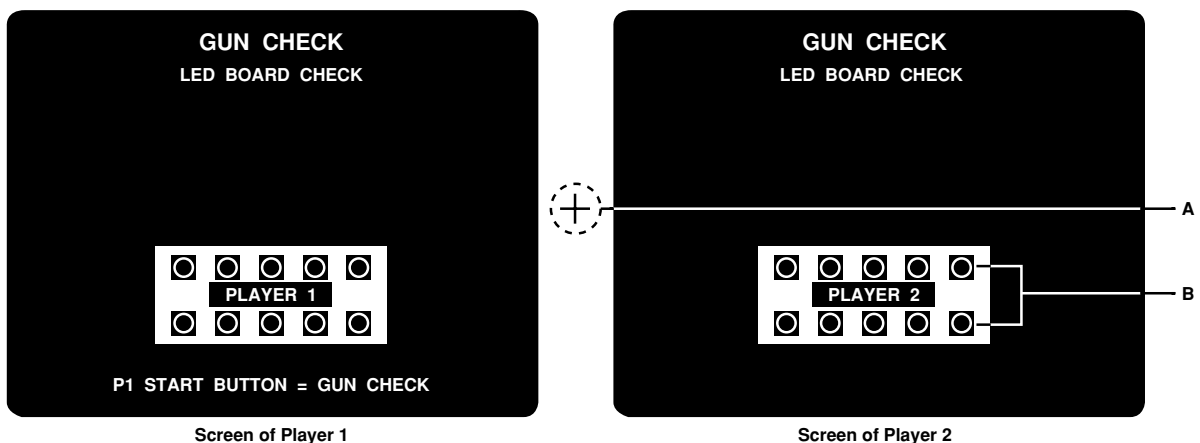
At this time, when the player aims at 5 “\*” marks appearing one after another on the screen and pulls the trigger, the gun is calibrated correctly and the screen returns to automatically to “GUN CHECK”.

Calibrate the guns for Player 1 and Player 2.

### ■ Checking the Sensors (LED board)

When the start button of Player 2 is pressed on the “GUN CHECK” mode screen, the screen changes to sensor (LED board) check mode screen. Point the gun unit to the center between the screens to Player 1 and 2, and check to see if each of the 10 sensors around the screen unit gets activated.

To return to the “GUN CHECK” screen, press the start button of Player 1.



•This screen is just an example.

**A :** Direct the gun unit to the center between the screens of Player 1 and 2 and make sure all the 10 sensors change to orange. And move the gun unit outside the screen and make sure all the 10 sensors are now marked “O” in grey.

**B :** Reaction of each of the guns of Players 1 to 2 is displayed here. Active sensor is displayed by “O” in orange, while non-active sensor is displayed by “O” in grey.

•Check the sensor while standing in front of the center between the screens of Player 1 and 2 and staying away as far as possible from the screen.

**MEMO**

# LAMP CHECK

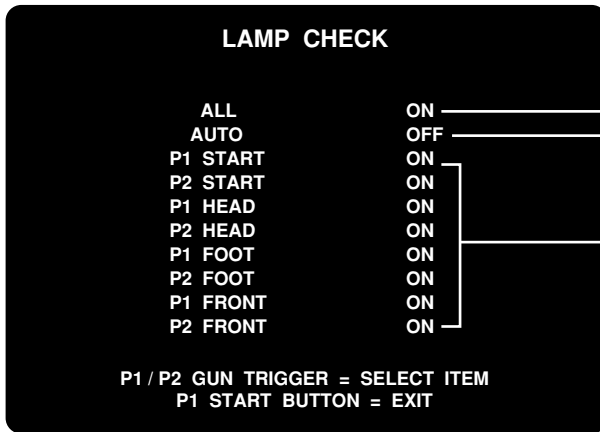
## Checking lighting of lamps

■ Mode for checking the lighting of the lamps.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

When checking item is selected by pulling the gun trigger of Player 1 or Player 2, "OFF" on the screen changes to "ON" and at the same time the related lamp lights up.

To return to the "I/O CHECK" item select screen, press the start button of Player 1.



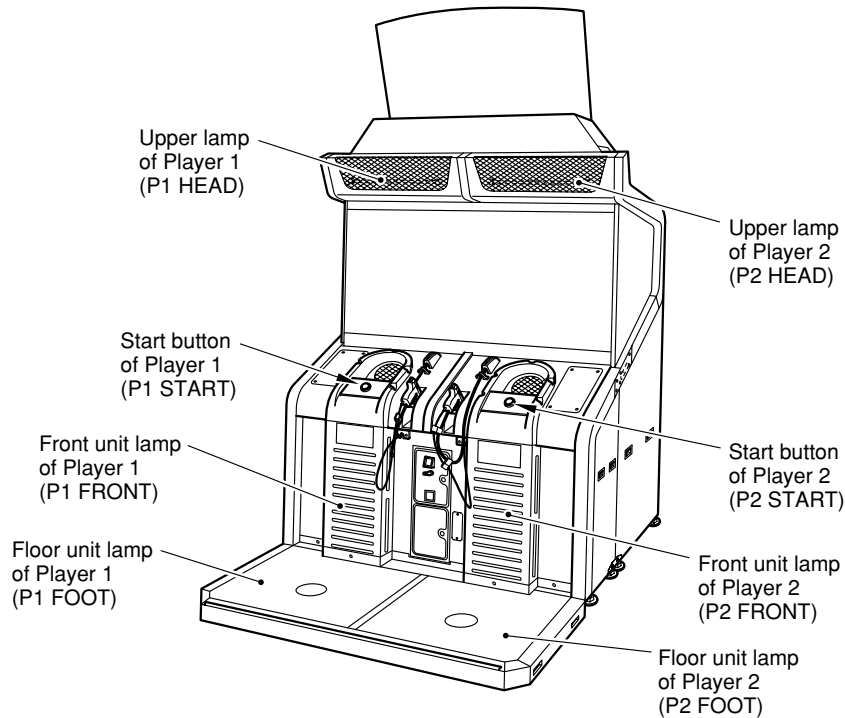
Select "ALL", and "ON" appears at once to tell that all the lamps come on.

When "AUTO" is selected, the display turns to "ON" and the lamps light up automatically in the order from the start button of Player 1. All other lamps than the one on the front unit lamp of Player 2 light up thereafter, and then lighting returns to the start button of Player 1 and the lamps light up repeatedly in the same order. (As for the arrangement of lamps, refer to the figure as shown below.)

The indication changes to "ON" simultaneously when the item to be checked is selected, and the related lamp lights up.

•This screen at left is just an example.

## Arrangement of the lamps



## SCREEN CHECK

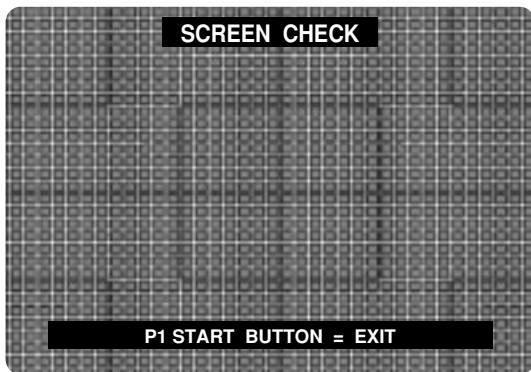
### Adjusting the screen distortion

- Mode for checking the screen display.

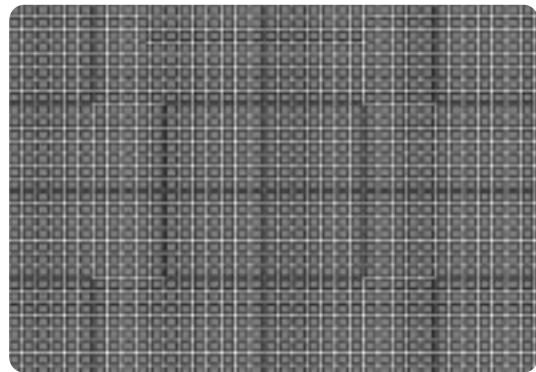
Adjust the size and vertical as well as horizontal displacement of the image, as required, on the screen while watching the crosshatch pattern. Use the monitor adjustment PCB to make adjustments. (See page 55.)

Adjust both the screens of Player 1 and Player 2.

To return to the “MAIN MENU” screen, press the start button of Player 1.



Screen of Player 1



Screen of Player 2

- This screen is just an example.

## COLOR CHECK

### Adjusting the display color

- Mode for checking the display color.

Make the adjustment using the monitor adjustment PCB so that the colors of the color bars should appear properly graded and the background should become black sufficiently. (See pages 56 and 57.)

Adjust both the screens of Player 1 and Player 2.

At the same time, adjust the gradation in the range of ▲“COLORLESS” so that it is darkened. Adjust also the color balance between the right and left screens.

To return to the “MAIN MENU” screen, press the start button of Player 1.

## HDD CHECK

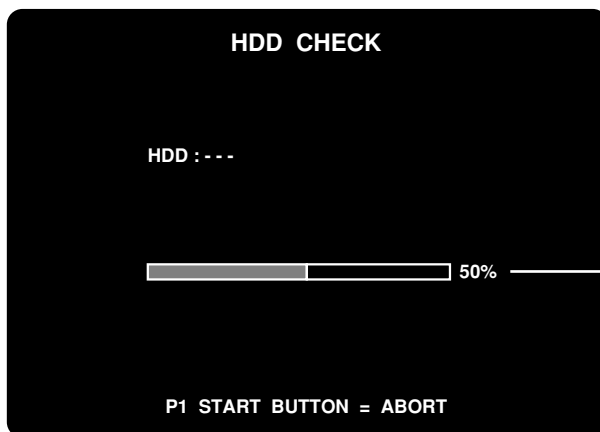
### Checking the data on the hard disk drive

- Mode for checking the data on the hard disk drive of the PCB unit.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

In this mode, the data on the hard disk drive of the PCB unit is automatically checked. When a hard disk drive is normal, "OK" is indicated, and if an abnormal hard disk drive is found, "BAD" is indicated. It takes about 30 seconds for checking. (It may take much time to check up depending on the hard disk drive contents.)

Press the start button of Player 1 to interrupt checking or return to the "MAIN MENU" screen.



Counts up from "0%".  
Checking is complete when at "100%".

- This screen is just an example.

When the disk media have been completely checked, "OK" appears.

**HDD : OK**

If checking is interrupted, "ABORTED" is displayed.

**HDD : ABORTED**

- If anything wrong is in the check results, "BAD" appears.

**HDD : BAD**

If "BAD" is indicated, turn OFF the power switch and turn it ON again. If "BAD" still appears, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.

**MEMO**

# SOUND OPTIONS

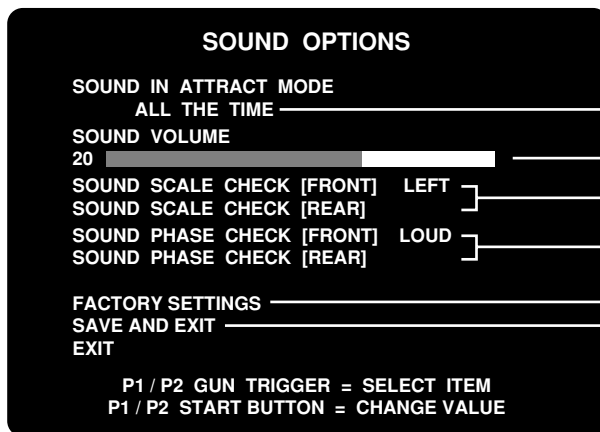
## Setting various sound options

■ Mode for setting and checking the sound options.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

Pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1 or Player 2.

To return to the "MAIN MENU" screen, select "SAVE AND EXIT" or "EXIT" and then press the start button of Player 1.



•This screen is just an example.

Turns on and off the demo play sound.  
 ·ALL THE TIME ..... Sound always on. (Factory-set)  
 ·ONCE EVERY 4CYCLES ... Sound on every 4 cycles.  
 ·COMPLETELY OFF ..... Sound always off.

Adjusts BGM sound level and SE (sound effects) sound level with the range from 0 (Mute) to 30 (Max.). (Factory-set)  
 ·To raise the sound volume, press the start button of Player 1.  
 ·To lower the sound volume, press the start button of Player 2.  
 The sound stops when the item ends.

The scale "do, re, mi ... do" is heard alternately from the left and right speakers.  
 The sound stops when the item ends.  
 Displays "LEFT" or "RIGHT" according to which of the right or left speaker the sound is heard through.

**SOUND SCALE CHECK [FRONT] LEFT**

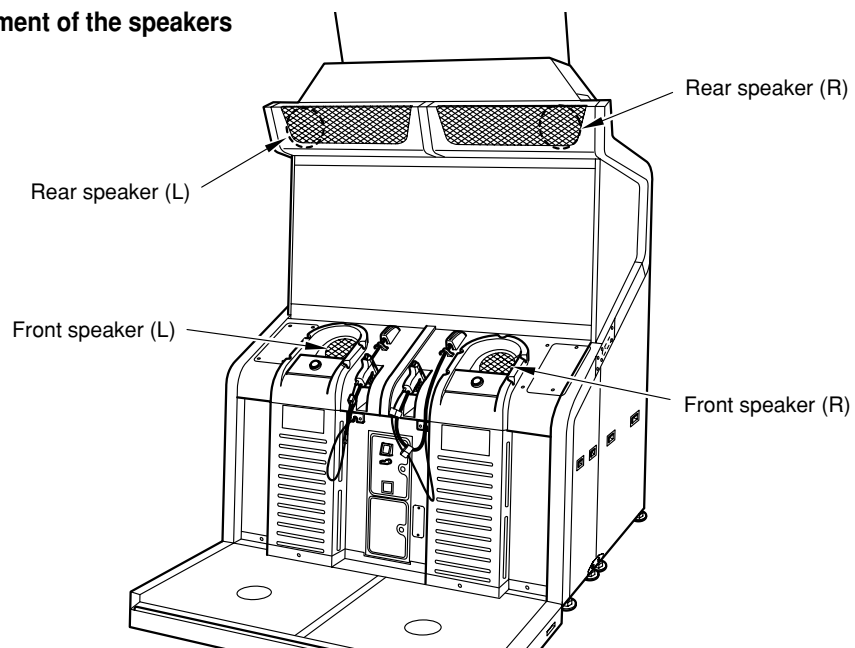
"LEFT" denotes the front speaker (L) and rear speaker (L).  
 "RIGHT" denotes the front speaker (R) and rear speaker (R).

Checks the phase of speakers.  
 ·Stand in front of the glass cover about 2.0 m away from the speakers.  
 A loud sound is heard when "LOUD" is displayed.  
 A soft sound is heard when "SOFT" is displayed.  
 If the sound is heard reversely to the displayed sound, reverse connection of the speaker cable is suspected.

Press the start button of Player 1 to return all the settings to the factory settings.

Although the settings have returned to the status in "FACTORY SETTINGS", they will not actually be resumed unless they have not been confirmed of entry by this item.

Arrangement of the speakers

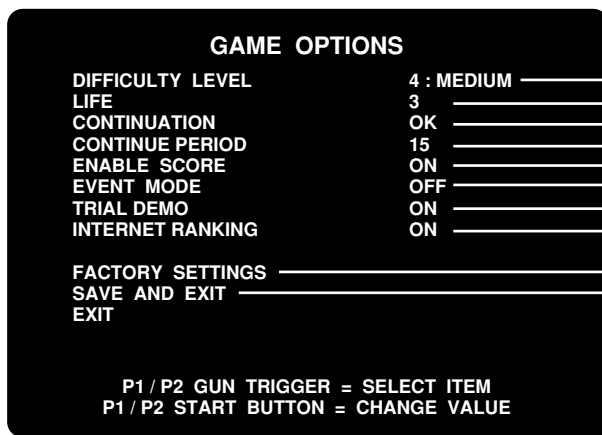


# GAME OPTIONS

## Setting various game options

- Mode for setting and checking the game options.  
The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)  
Pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1 or Player 2.  
To return to the “MAIN MENU” screen, select “SAVE AND EXIT” or “EXIT” and then press the start button of Player 1.

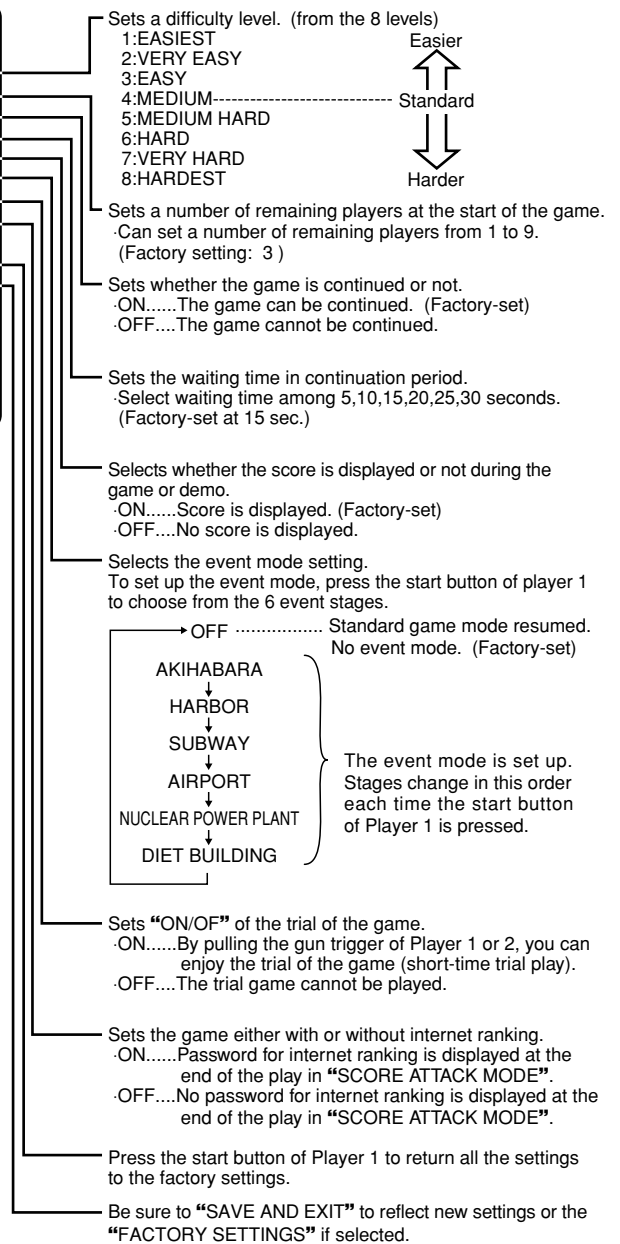
### “GAME OPTIONS” item select screen



•This screen is just an example.

•In the event mode, the game can be played for selected stages only. Using this function, you can enjoy a competitive event of how fast each stage has been cleared, for example.

### MEMO



## COIN OPTIONS

### Setting various coin options

- Mode for setting and checking the coin options.  
The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)  
Pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1 or Player 2. To return to the "MAIN MENU" screen, select "SAVE AND EXIT" or "EXIT" and then press the start button of Player 1.



- The coin setting options are not displayed when "FREE PLAY" is set to "ON". In such case, remember the games will be free.

COIN OPTIONS	
FREE PLAY	OFF
COIN SLOT	1 COIN 1 CREDIT
START	2 CREDITS TO START
CONTINUATION	1 CREDIT TO CONTINUE
FACTORY SETTINGS	
SAVE AND EXIT	
EXIT	

P1 / P2 GUN TRIGGER = SELECT ITEM  
P1 / P2 START BUTTON = CHANGE VALUE

- Selects a free play.  
-ON.....Can be played free of charge.  
-OFF....Can be played charged.
- Sets the number of credits for a coin.  
(16 COINS 1 CREDIT to 1 COIN 7 CREDITS.)
- Sets the number of credits required to start the game.  
(1 CREDIT to 16 CREDITS.)
- Sets the number of credits necessary for continuation of the game. ( 1 CREDIT to 16 CREDITS.)
- Press the start button of Player 1 machine to return all the settings to the factory settings.
- Although the settings have returned to the status in "FACTORY SETTINGS", they will not actually be resumed unless they have not been confirmed of entry by this item.

- This screen shows the factory settings.

## RANKING DATA

### Setting, checking and deleting the ranking data

- Mode for setting, checking and deleting the ranking data.  
The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)  
As for the items followed by setting or deletion, pull the gun trigger of Player 1 to select item and press the start button of Player 1 or Player 2 to change or delete the content of setting. When the start button of Player 2 is pressed, the ranking data being displayed on the screen is scrolled to the next page. To return to the "MAIN MENU" screen, select "SAVE AND EXIT" or "EXIT" and then press the start button of Player 1.

RANKING DATA			
1ST	AAA 99999	11TH	AAA 5000
2ND	AAA 90000	12TH	AAA 1000
3RD	AAA 80000	13TH	AAA 1000
4TH	AAA 70000	14TH	AAA 1000
5TH	AAA 70000	15TH	AAA 1000
6TH	AAA 67530	16TH	AAA 1000
7TH	AAA 40000	17TH	AAA 1000
8TH	AAA 30000	18TH	AAA 1000
9TH	AAA 20000	19TH	AAA 1000
10TH	AAA 10000	20TH	AAA 1000
RECORD SAVING	ON		
CLEAR RANKING DATA			
CLEAR CPU RIVAL DATA			
FACTORY SETTINGS			
SAVE AND EXIT			
EXIT			

P1 / P2 GUN TRIGGER = SELECT ITEM  
P1 START BUTTON = CHANGE VALUE  
P2 START BUTTON = NEXT PAGE

- Displays the ranking, player name and score.
- Selects the score ranking setting.  
-ON.....Score ranking is recorded.  
-OFF....Score ranking is not recorded.
- By pressed the start button of Player 1, machine return the "RANKING DATA" to the factory setting.
- By pressed the start button of Player 1, machine return the "CPU RIVAL DATA" of solo play to the factory setting.
- Press the start button of Player 1 machine to return all the settings to the factory settings.
- Although the settings have returned to the status in "FACTORY SETTINGS", they will not actually be resumed unless they have not been confirmed of entry by this item.

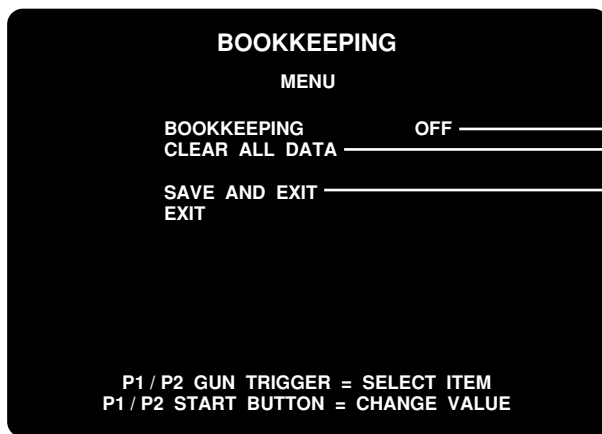
- This screen is just an example.

# BOOKKEEPING

## Displaying the bookkeeping information of coins

- Mode for displaying the total data on the number of coins put in the machine. The items are shown at the screen of Player 1. (Nothing appears at the screen of player 2.)  
If the time is preset on the “CLOCK” screen on page 53, the total data on the number of coins put into the machine can be checked. Pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1 or Player 2.  
To return to the “MAIN MENU” screen, select “SAVE AND EXIT” or “EXIT” and then press the start button of Player 1.

### “BOOKKEEPING” menu screen



•This screen is just an example.

Turns ON or OFF the bookkeeping of coins. (“ON” can be selected by setting the clock time on the “CLOCK” screen on page 52.)  
·OFF ... The bookkeeping of coins is not done. (Factory-set)  
·ON .... The bookkeeping of coins is done.  
(If set at “OFF”, the bookkeeping of coins is not done and the related screens do not show up either.)

Returns the coin and play data to the factory settings. When the start button of Player 1 is pressed, the message.

**DO YOU WANT TO CLEAR ALL DATA? YES/NO**

appears on the screen. Pull the trigger of gun of the Player 1 or Player 2 to make “YES/NO” selection and press the start button of the Player 1 to make entry. When “YES” is selected, you are prompted to confirm the choice. Select “YES” again, and “NOW ERASING” appears and the “BOOKKEEPING” data will be erased. When “NO” is selected, “NOT CLEARED” appears and the data will not be erased.

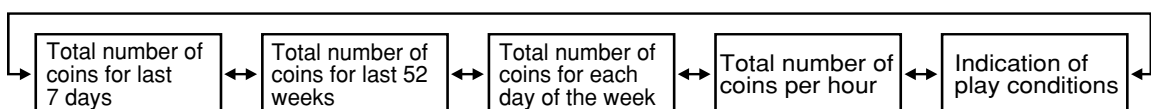
The ON/OFF setting on the “BOOKKEEPING” screen must be saved here.

•Let’s suppose that the clock is not set yet (just after this product has been installed or initialized, for example). If you try to set “BOOKKEEPING” to “ON”, the following message appears onscreen to prompt you to set the clock. The bookkeeping screens cannot be opened. In such case, press the start button of Player 1 to clear this message and set the clock on the “CLOCK” screen. (See page 53.)



### MEMO

- When the time has been preset on the “CLOCK” screen as shown on page 53, the “BOOKKEEPING” item on the “BOOKKEEPING” menu screen can be turned ON. Now the following coin data and play data screens show up. The screen changes in the order as below each time the gun trigger of Player 1 or Player 2 is pulled.  
To return to the “BOOKKEEPING” menu screen, press the start buttons of Player 1 in individual display screen.  
To return to the main menu screen, press the start button of Player 1 in individual display screen.





### Screen of the total number of coins for last 7 days

**BOOKKEEPING**

COIN DATA OF LAST 7 DAYS

TODAY	100
LAST 7 DAYS AVERAGE	135
LAST 7 DAYS TOTAL	810
YESTERDAY	120
- 2 DAY	130
- 3 DAY	140
- 4 DAY	110
- 5 DAY	100
- 6 DAY	210
- 7 DAY	-

P1 / P2 GUN TRIGGER = PREV NEXT PAGE  
 P1 START BUTTON = EXIT  
 P2 START BUTTON = SUB MENU

- Number of coins of today.
- Average number of coins on the day for the last 7 days except this day.
- Total number of coins for the last 7 days except today.
- Number of coins of yesterday.
- Number of coins of 2 days ago.
- Number of coins of 3 days ago.
- Number of coins of 4 days ago.
- Number of coins of 5 days ago.
- Number of coins of 6 days ago.
- Number of coins of 7 days ago.
- "-" appears for the day whose data is not totalized.
- Gun trigger of Player 1 → Goes back to the previous page.
- Gun trigger of Player 2 → Goes to the next page.
- When the start button of Player 1 is pressed, the screen returns to "MAIN MENU".
- When the start button of Player 2 is pressed, the screen returns to "BOOKKEEPING" menu.

•This screen is just an example.

### Screen of the total number of coins for last 52 weeks

**BOOKKEEPING**

COIN DATA OF LAST 52 WEEKS

- 01	910	- 14	-	- 27	-	- 40	-
- 02							
- 03							
- 04							
- 13	-	- 26	-	- 39	-	- 52	-

P1 / P2 GUN TRIGGER = PREV / NEXT PAGE  
 P1 START BUTTON = EXIT  
 P2 START BUTTON = SUB MENU

- Number of coins of 1 week before.
- Number of coins of 2weeks before.
- Number of coins of 3 weeks before.
- ...
- Number of coins of 52 weeks before.
- "-" appears for the week whose data is not totalized.
- Gun trigger of Player 1 → Goes back to the previous page.
- Gun trigger of Player 2 → Goes to the next page.
- When the start button of Player 1 is pressed, the screen returns to "MAIN MENU".
- When the start button of Player 2 is pressed, the screen returns to "BOOKKEEPING" menu.

•This screen is just an example.

### Screen of the total number of coins for each day of the week

**BOOKKEEPING**

COIN DATA OF EACH DAY

	<b>TOTAL</b>
MONDAY	120
TUESDAY	130
WEDNESDAY	140
THURSDAY	110
FRIDAY	100
SATURDAY	210
SUNDAY	-

P1 / P2 GUN TRIGGER = PREV NEXT PAGE  
 P1 START BUTTON = EXIT  
 P2 START BUTTON = SUB MENU

- Number of coins for Monday.
- Number of coins for Tuesday.
- Number of coins for Wednesday.
- Number of coins for Thursday.
- Number of coins for Friday.
- Number of coins for Saturday.
- Number of coins for Sunday.
- "-" appears for the week whose data is not totalized.
- Gun trigger of Player 1 → Goes back to the previous page.
- Gun trigger of Player 2 → Goes to the next page.
- When the start button of Player 1 is pressed, the screen returns to "MAIN MENU".
- When the start button of Player 2 is pressed, the screen returns to "BOOKKEEPING" menu.

•This screen is just an example.

**Screen of the total number of coins per hour**

**BOOKKEEPING**  
COIN DATA OF EACH HOUR

	TOTAL		TOTAL		TOTAL
00 : 00	-	08 : 00	0	16 : 00	3771
01 : 00	0	09 : 00	0	17 : 00	5416
02 : 00	0	10 : 00	882	18 : 00	5723
03 : 00	0	11 : 00	1237	19 : 00	5110
04 : 00	0	12 : 00	1449	20 : 00	6513
05 : 00	0	13 : 00	1666	21 : 00	4546
06 : 00	0	14 : 00	2293	22 : 00	3828
07 : 00	0	15 : 00	3137	23 : 00	1988

P1 / P2 GUN TRIGGER = PREV NEXT PAGE  
P1 START BUTTON = EXIT  
P2 START BUTTON = SUB MENU

- Total number of coins per hour.  
“.” appears for the week whose data is not totaled.
- Gun trigger of Player 1 → Goes back to the previous page.  
Gun trigger of Player 2 → Goes to the next page.
- When the start button of Player 1 is pressed, the screen returns to “MAIN MENU”.
- When the start button of Player 2 is pressed, the screen returns to “BOOKKEEPING” menu.

•This screen is just an example.

**Screen of indication of play conditions**

**BOOKKEEPING**  
PLAY DATA SUMMARY

TOTAL ACTIVE TIME	10H 2M 0S
TOTAL PLAY TIME	5H 1M 0S
AVERAGE PLAY TIME	3 M 0S
LONGEST PLAY TIME	5 M 0S
SHORTEST PLAY TIME	2 M 0S
TOTAL PLAY COUNT	110
GAME - STARTING COUNT	40
CONTINUATION COUNT	70
SOLO PLAY COUNT	60
2-PERSON PLAY COUNT	50
	23:45:51

P1 / P2 GUN TRIGGER = PREV / NEXT PAGE  
P1 START BUTTON = EXIT  
P2 START BUTTON = SUB MENU

- Total active time after setting the current time.
- Total play time after setting the current time.
- Average play time.
- Longest play time.
- Shortest play time.
- Total number of play rounds since the clock has been set.
- Total number of initial play rounds since the clock has been set.
- Total number of continue play rounds since the clock has been set.
- Total number of solo plays.
- Total number of 2-person plays.
- Displays the clock setting in 24-hour system.  
(The displayed denotes 23 hours, 45 minute, 51 second)
- Gun trigger of Player 1 → Goes back to the previous page.  
Gun trigger of Player 2 → Goes to the next page.
- When the start button of Player 1 is pressed, the screen returns to “MAIN MENU”.
- When the start button of Player 2 is pressed, the screen returns to “BOOKKEEPING” menu.

•This screen is just an example.

## CLOCK

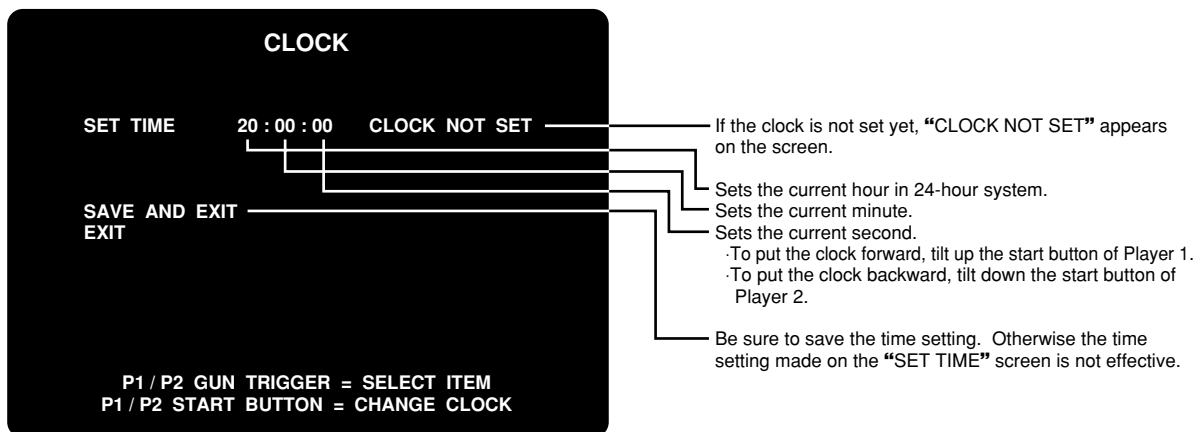
### Setting the current clock time

#### ■ Mode for making the current clock settings.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

Once the clock settings have been made here, the total coin data and play data can be viewed on the “BOOKKEEPING” screens. Pull the gun trigger of Player 1 or Player 2 to select the “hour”, “minute” and “second” and press the start button of Player 1 or Player 2 to set the current time.

To return to the “MAIN MENU” screen, select “SAVE AND EXIT” or “EXIT” and then press the start button of Player 1.



•This screen is just an example.

- If the clock is not set yet (just after this product has been installed or initialized, for example), the following message appears on the “BOOKKEEPING” menu screen to prompt you to set the clock.

**FIRST SET THE CLOCK.**

“CLOCK” ITEM IS IN MAIN MENU.

P1 START BUTTON = OK

**MEMO**

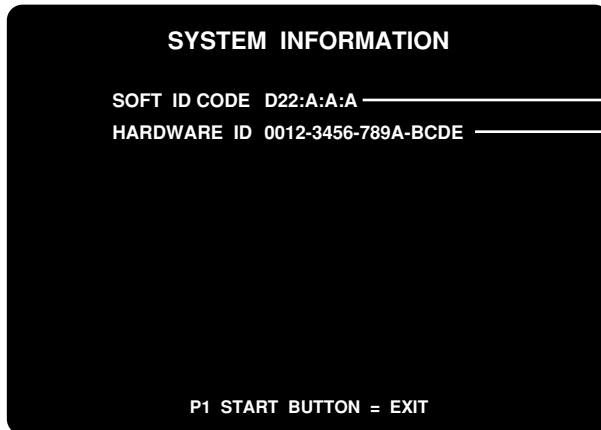
## SYSTEM INFORMATION

### Displaying the system-related information

- Mode for displaying the system-related information.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

To return to the main menu screen, press the start button.



Shows the software version.

Shows the system identification code.

- This screen is just an example.

## ALL FACTORY SETTINGS

### Returning all the settings to factory ones

- Mode for returning the test mode settings to their factory ones.

The items are shown at the screen of Player 1. (Nothing appears at the screen of Player 2.)

Pull the gun trigger of Player 1 or Player 2 to select the desired item and press the start button of Player 1.

When “YES” is selected, you are requested to confirm it. When “YES” is selected again, all the settings of test-mode will be returned to the factory settings with “NOW SAVING” appearing on the screen. The main menu screen will then show up itself.

- The following modes return to the factory settings.  
“SOUND OPTIONS” “GAME OPTIONS” “COIN OPTIONS”
- The following modes do not return to the factory settings.  
“Operating frequency of gun” “Calibration of gun” “BOOKKEEPING” “RANKING DATA” “CLOCK”

### MEMO

If “NO” is selected, “NO MODIFY SETTING” is indicated. This means the modified settings are not saved.

## 5-4 Adjusting the monitor

The monitor has already been adjusted at the time of shipment, but it may be readjusted as desired. When adjusting the monitor, refer to “SCREEN CHECK” and “COLOR CHECK” on pages 45.

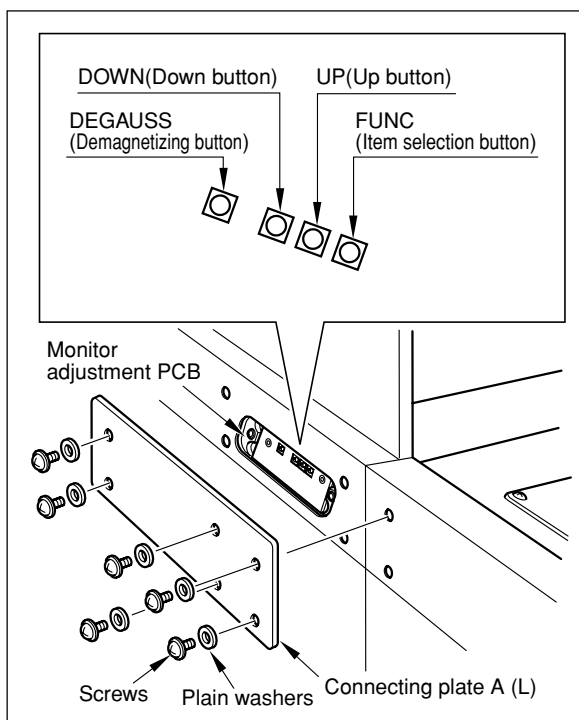


•Adjust the monitor appropriately.

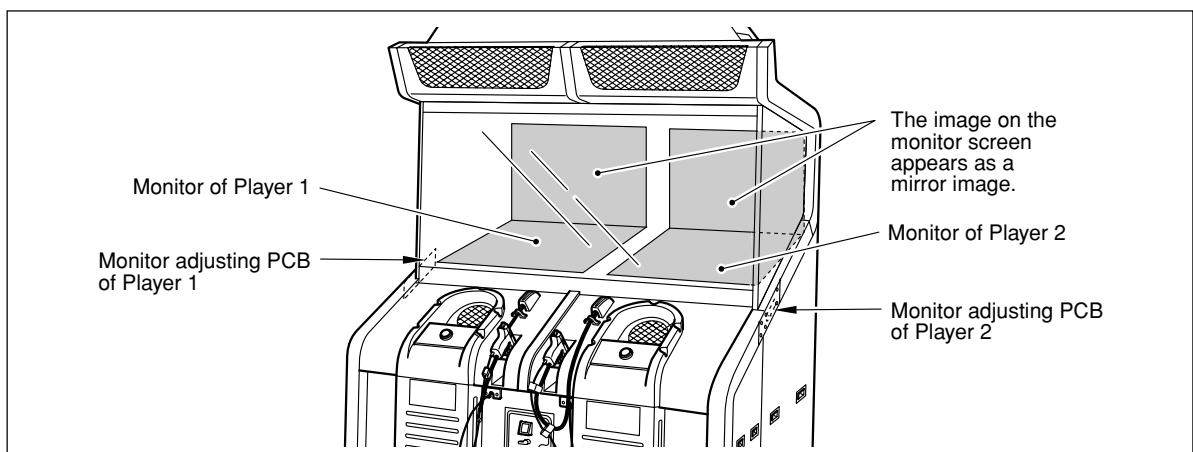
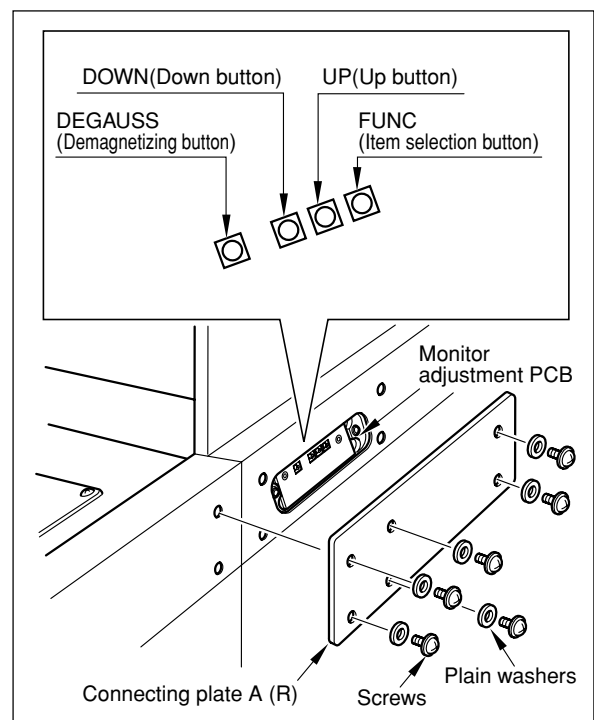
### ■ Monitor adjustment PCB

The monitor adjusting PCBs are mounted at the backsides of the connecting plates A(R),(L) provided at the both sides of the unit. When adjusting the monitors, remove the screws shown in the figure and dismount them using care not to let the connecting plates drop.

#### Adjust the monitor of Player 1



#### Adjust the monitor of Player 2



■ How to Adjusting the monitor

**1** When the “FUNC” button is pressed, the menu as shown in the figure appears on the screen.

- The item which has been selected is shown in red, and the other items are shown in green.
- If there is no input for 6 seconds, the adjustment mode is cancelled and the menu display goes out.

**MEMO**

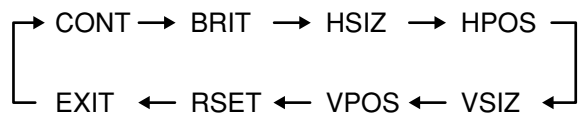
**Menu display**



**Contents of Menu**

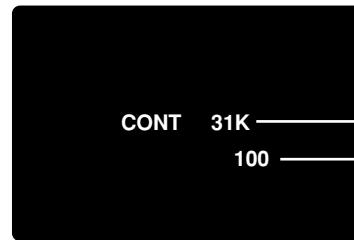
	<b>CONTRAST(CONT) : Picture contrast is adjusted.</b>
1	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, color contrast of the screen is intensified.</li> <li>• When the “DOWN” button is pressed, color contrast of the screen is weakened.</li> </ul>
	<b>BRIGHTNESS(BRIT) : Picture brightness is adjusted.</b>
2	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, brightness of the screen increases.</li> <li>• When the “DOWN” button is pressed, darkness of the screen increases.</li> </ul>
	<b>H.SIZE(HSIZ) : Horizontal size is adjusted. (Horizontal picture size is adjusted.)</b>
3	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, horizontal picture size is enlarged.</li> <li>• When the “DOWN” button is pressed, horizontal picture size is reduced.</li> </ul>
	<b>H.POSI(HPOS) : Horizontal position is adjusted. (Horizontal picture position is adjusted.)</b>
4	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, the picture moves to the right.</li> <li>• When the “DOWN” button is pressed, the picture moves to the left.</li> </ul>
	<b>V.SIZE(VSIZ) : Vertical size is adjusted. (Vertical picture size is adjusted.)</b>
5	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, vertical picture size is enlarged.</li> <li>• When the “DOWN” button is pressed, vertical picture size is reduced.</li> </ul>
	<b>V.POSI(VPOS) : Vertical position is adjusted. (Vertical picture position is adjusted.)</b>
6	<ul style="list-style-type: none"> <li>• When the “UP” button is pressed, the picture moves upwards.</li> <li>• When the “DOWN” button is pressed, the picture moves downwards.</li> </ul>
	<b>Reset(RSET) : All adjusted values are reset. (All adjusted values return to the factory settings.)</b>
7	<ul style="list-style-type: none"> <li>• When the “UP” and “DOWN” buttons are pressed simultaneously while “RSET” is displayed in red, “RSET” is displayed for 3 seconds and the data of the adjusting items return to their factory settings.</li> </ul>
	<b>EXIT : Adjustment mode is cancelled. (Adjustment mode is cleared and menu screen disappears.)</b>
8	<ul style="list-style-type: none"> <li>• When the “UP” or “DOWN” button is pressed while “EXIT” is displayed in red, the adjustment mode is cancelled.</li> </ul>

**2** Selection item changes in the following order each time the “FUNC” button is pressed.



- 3 When the item to be adjusted is selected and the “UP” button or “DOWN” button is pressed once, the adjusting item is displayed.
- 4 Proceed to adjustment by pressing the “UP” or “DOWN” button again.

- If there is no input by the “UP” or “DOWN” button for 6 seconds, or when the “FUNC” button is pressed, the selected item is memorized in the currently adjusted value.

**MEMO****Adjustment mode screen**

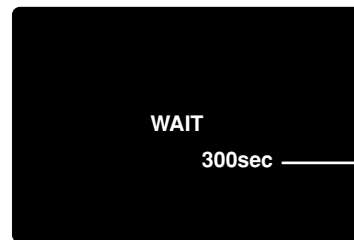
Adjustment item is displayed.

Current adjustment value is displayed.

- This screen is just an example.

**“DEGAUSS” button**

- 1 When the “DEGAUSS” button is pressed, degaussing is performed and “DEGAUSS” is displayed for about 5 seconds.
- 2 When the “DEGAUSS” button is pressed again after the completion of degaussing, in a few minute the indication as shown at right is displayed and the waiting time until the subsequent degaussing becomes effective appears.

**Degaussing wait screen**

Waiting time until the subsequent degaussing becomes effective.

- This screen is just an example.

- If the “FUNC” button is pressed while the waiting time until the subsequent degaussing is displayed, the mode changes to adjustment mode.
- The waiting status continues even when the mode has been changed to adjustment mode. But degaussing starts automatically when the waiting time becomes “0”.

**MEMO**

# 6 Operation

## 6-1 Checking at the start of work

### ■ Checking at the start of work (More than once a day) -----



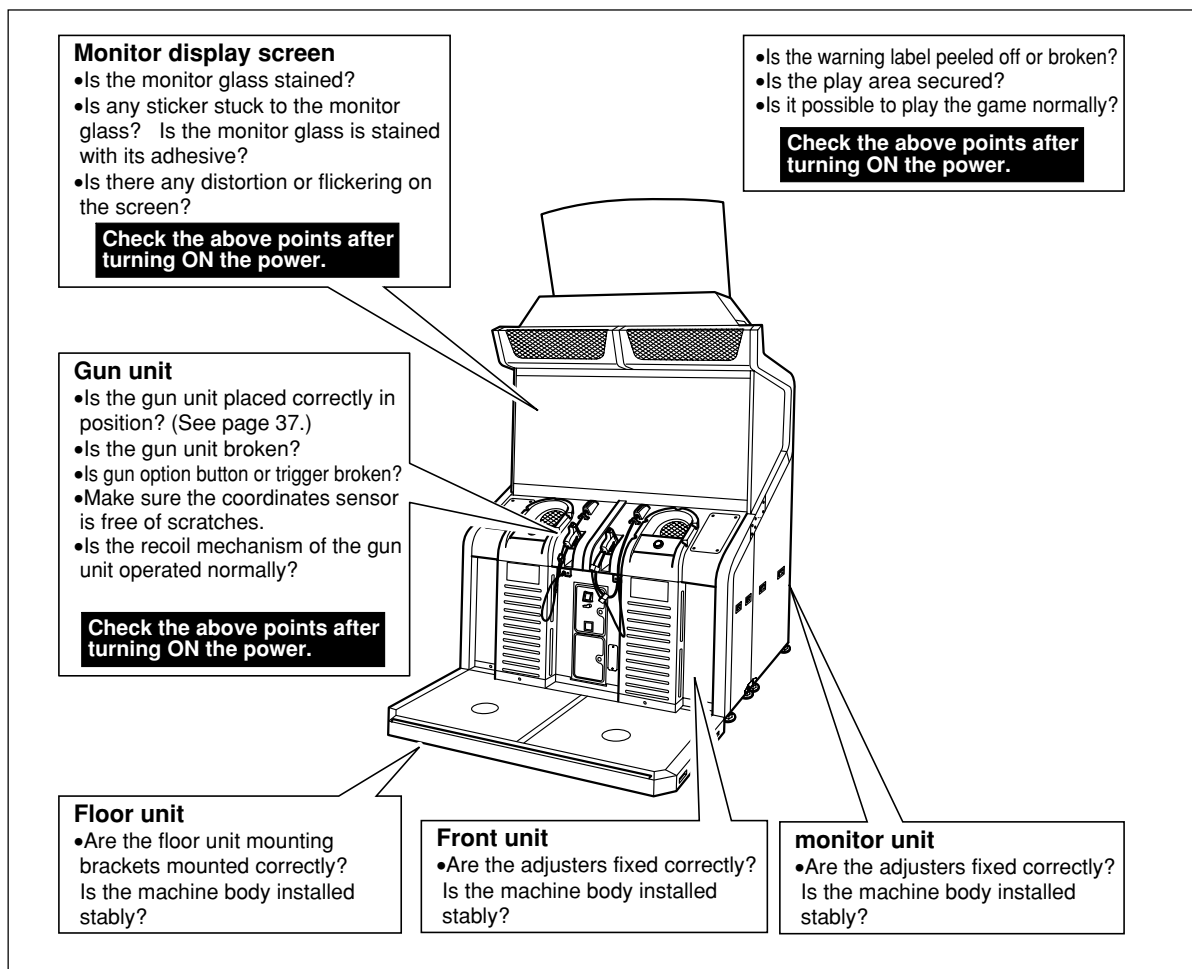
- Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle before inspecting or cleaning the machine.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.
- To clean the game machine, wipe it with a soft cloth dampened in a neutral detergent and wrung out.



**1** Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

**2**

Check the following points and proceed to maintenance if necessary.  
(See page 60.)





## 6-2 Periodic inspection

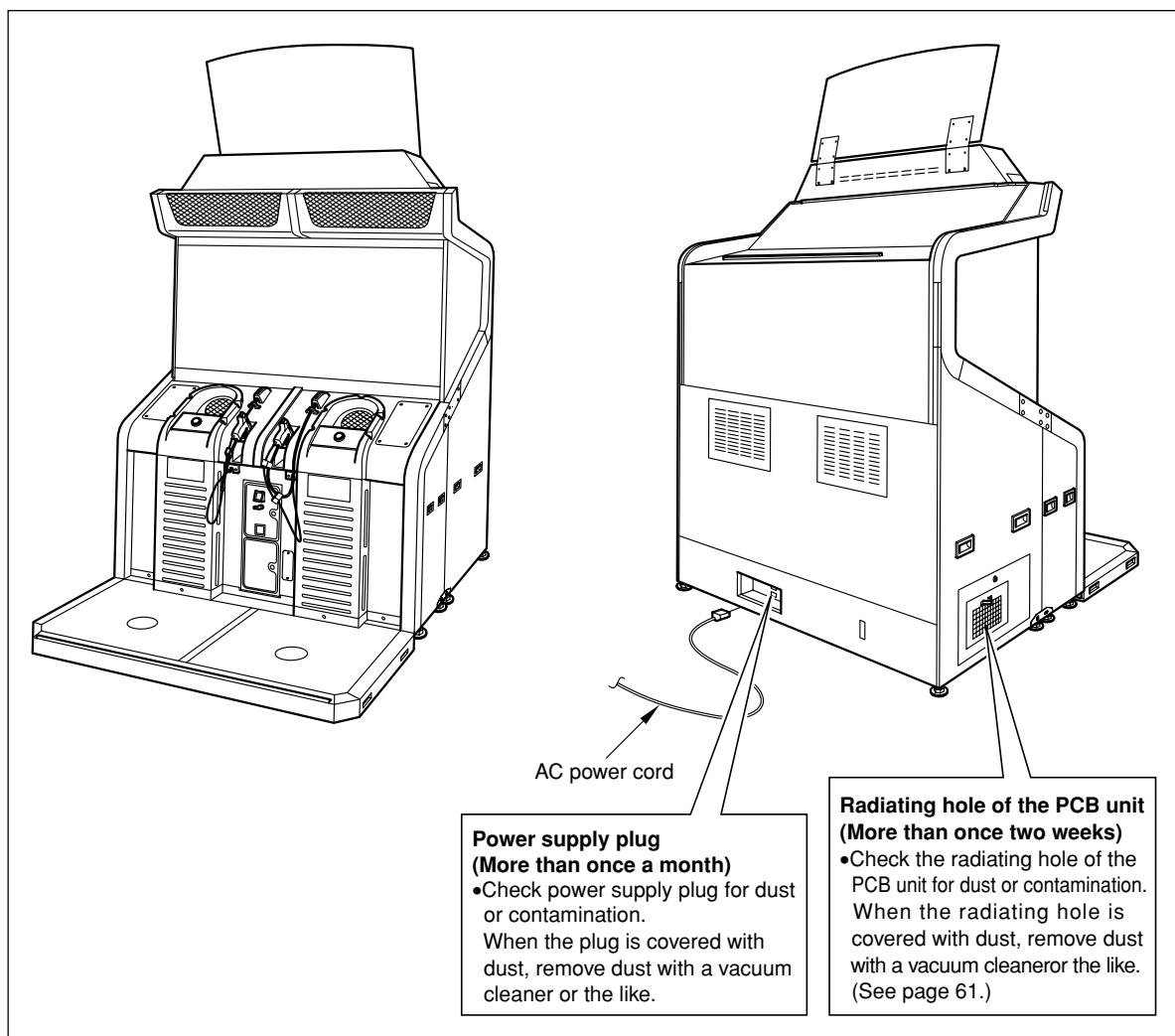
### ■ Checking at the periodic inspection



- Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle before inspecting or cleaning the machine.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.



- 1 Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- 2 Check the following points and carry out servicing or maintenance work, if necessary. (See page 60.)



# 7 Daily maintenance

## 7-1 Maintaining the machine body

### ■ How to clean the machine body



- Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle before inspecting or cleaning the machine.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.
- To clean the game machine, wipe it with a soft cloth dampened in a neutral detergent and wrung out.
- Do not use a high-pressure cleaning machine to clean up this product.

**title unit**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

**Monitor glass**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

**Gun unit**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

**Front unit**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

**Floor unit**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

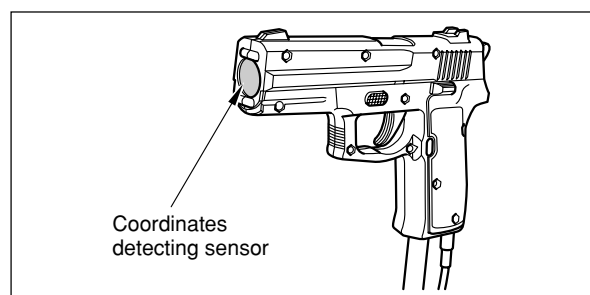
**Monitor unit**  
•Wipe the surface with soft cloth that is first soaked with neutral detergent and then squeezed tightly.

**Radiating hole of the PCB unit**  
•When the exhaust opening and fan unit are covered with dust, remove dust with a vacuum cleaner or the like.  
**Frequency of maintenance: more than once two weeks**  
(See page 61.)

•It is recommended to carry out maintenance work occasionally at the time of checking to be done at the start of work for the item, in case the maintenance cycle is not specified.

### ■ Cleaning the gun unit

Check to see if the gun unit's coordinates sensor and posture-for-fire sensor are not scratched or stained. If so, the sight may fail or the gun may malfunction.



## 7-2 Cleaning of radiating hole

### ■ How to clean of radiating hole



- Before cleaning the machine, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.

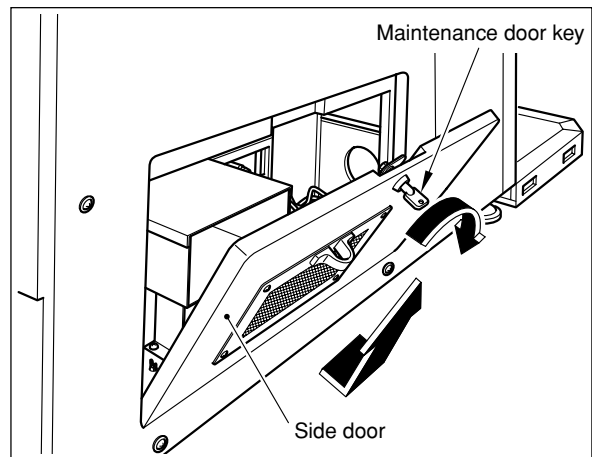
- Take the following clean-up procedure once two weeks or more often.



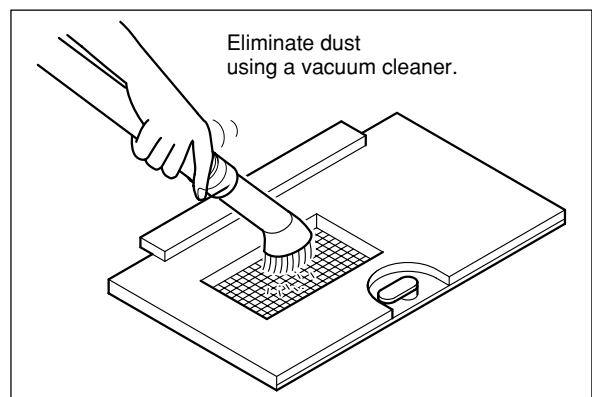
- 1 Turn OFF the main power switch. Then unplug the AC power cord from the receptacle.

- 2 Insert the attached maintenance door key in the side door and turn it clockwise.

- 3 Dismount the side door while slightly lifting it.



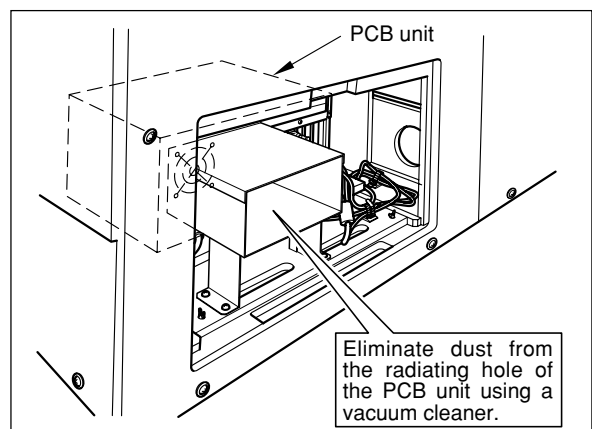
- 4 Eliminate dust from the rear side of the side door using a vacuum cleaner.



- 5 Then, eliminate dust from the radiating hole of the PCB unit using a vacuum cleaner.

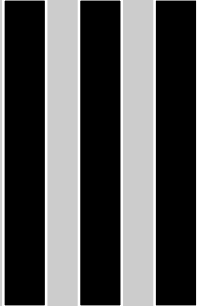
- 6 Mount the side door into position (removed in Step 2).

- 7 Turn the maintenance door key counterclockwise and draw it out.



# MEMO

---



The Chapters “Installation and Assembling” and “Maintenance” are written particularly for qualified in-shop maintenance persons or industry specialist. Please read through these chapters.

# 8 Installation and assembling

## 8-1 Installation environment

### ■ Installation environment for this product

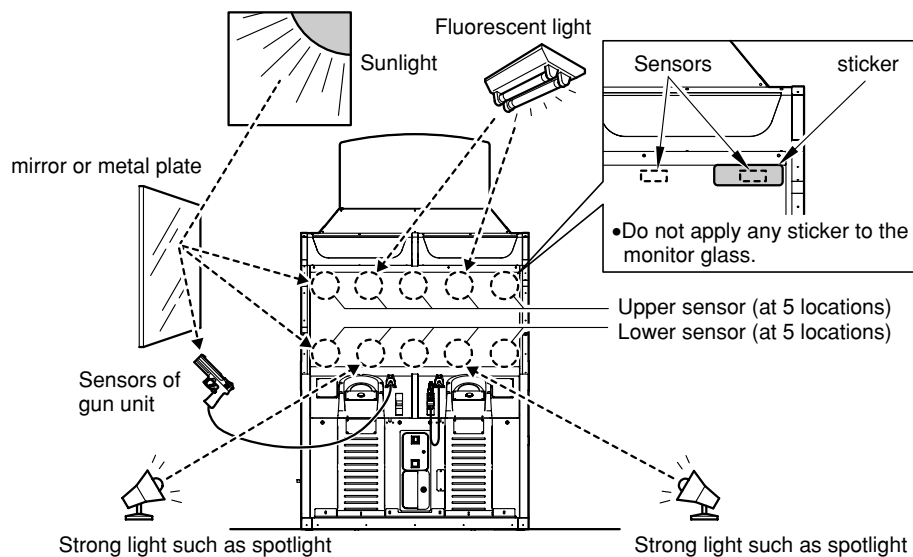


- Do not install this product in a place where the sensors and the gun unit coordinates detecting sensor are exposed to direct sunlight, fluorescent lamp light or spotlight, or near a place where exists something like a mirror or metal plate which reflects the light.

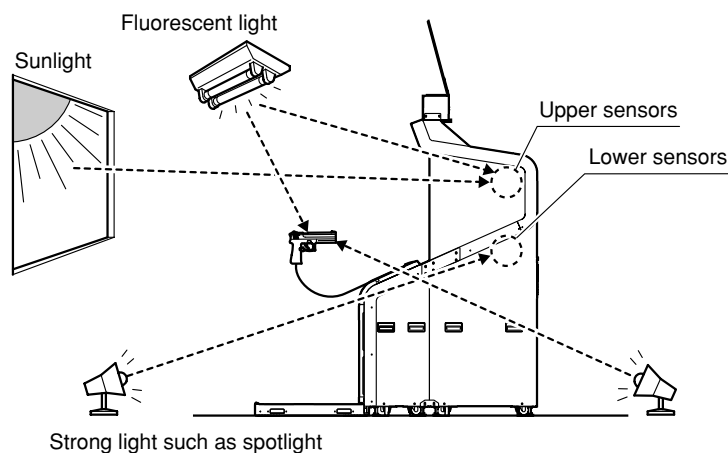
Do not install this product in such places as follows.

Do not install this product in a place where the sensors and the gun unit coordinates detecting sensor are exposed to strong light.

- Avoid a place exposed to direct or indirect strong light.



- Place exposed to direct and strong light

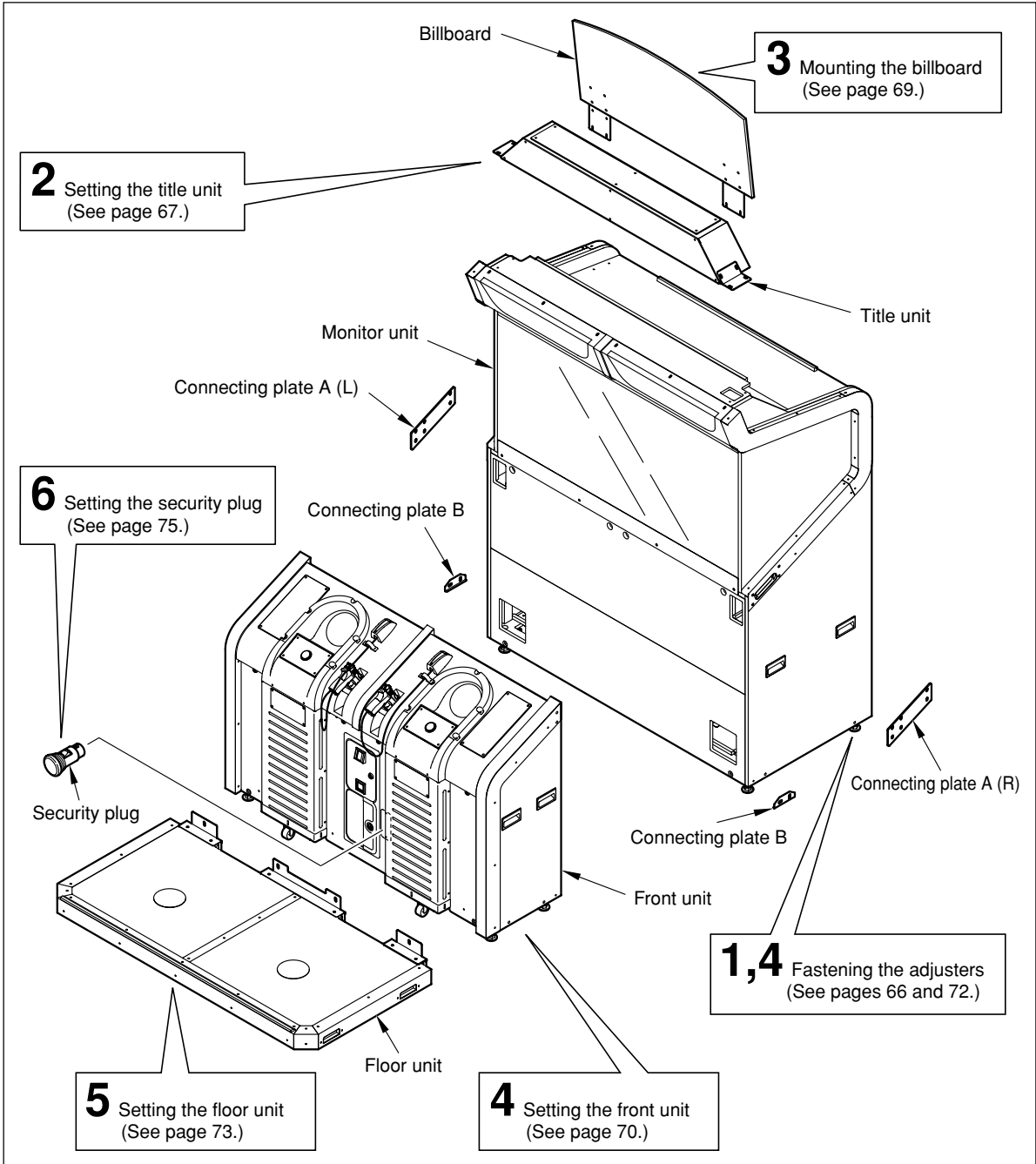


# 8-2 Installation procedure

■ Outline of installation and assembling —————



•When connecting the units, use due care not to allow your hands and the wire harnesses to be pinched.  
•The front unit and the monitor unit may fall down depending on to which direction it is pushed. When moving the units, always push the front unit as against the coin door mounting side and the monitor unit sideways as against the monitor glass side. When moving them on a slope or across a difference in level, more than four persons should hold the front unit and more than eight persons should hold the monitor unit by the grips.



## 8-3 Fastening the adjusters

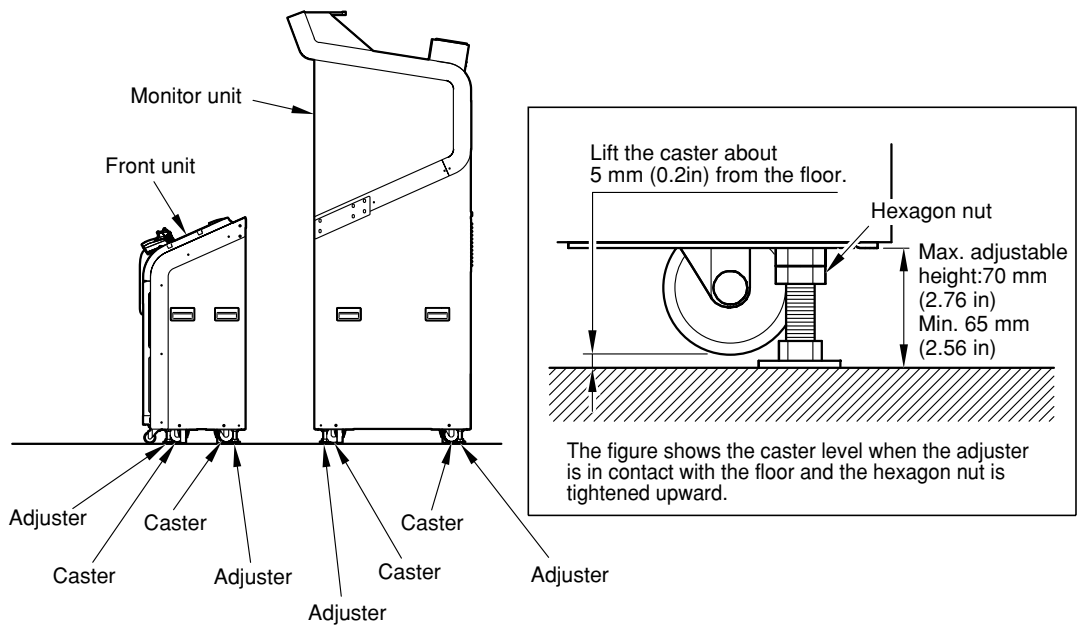
### ■ How to fasten the cabinet adjusters



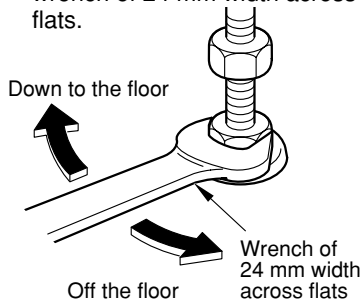
- Do not tighten up one adjuster at a time, but tighten up the adjusters evenly.
- Adjust the adjusters so that the casters do not touch the floor. Take care not to exceed the maximum adjusting height of the adjuster.
- With the units connected, make sure that the 8 adjusters are all in contact with the floor and the units is stable and well leveled. Then tighten the hexagon nuts upward.

- Secure the front unit's adjusters after taking the procedure in "8-6 Setting the front unit" on page 70.

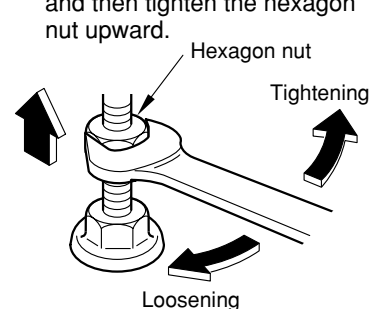
### MEMO



- 1 Bring the adjuster in contact with the floor by means of a wrench of 24 mm width across flats.



- 2 Make sure that the caster is approx. 5 mm above the floor, and then tighten the hexagon nut upward.



Continued on next page.



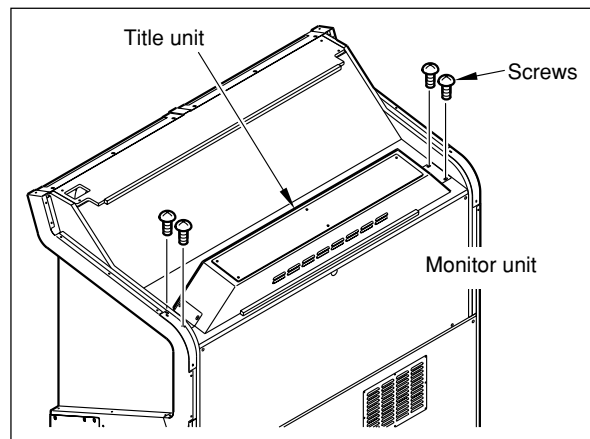
## 8-4 Setting the title unit

### ■ How to set the title unit

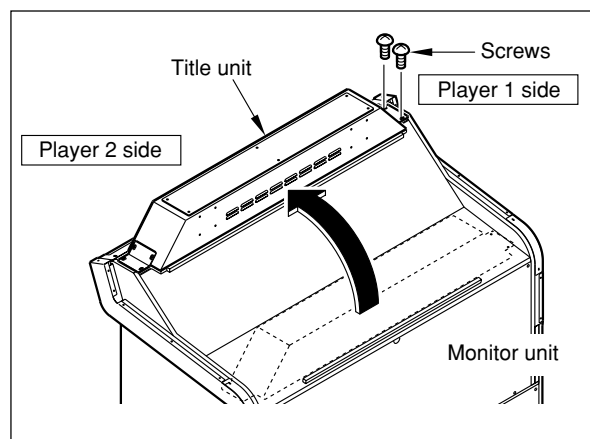


- Before attaching and detaching the title unit, fix the adjusters of the monitor unit. (See page 66.)
- The title unit weighs about 11 kg (24.3 lb). Be sure to attach and detach the machine by more than 2 persons with use of stepladders or the like for your safety.
- When setting the title unit, be careful not to pinch your hands and the wire harnesses.

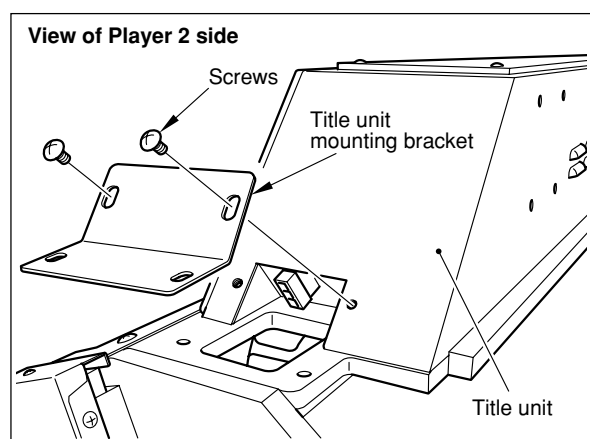
- 1** Remove the screws shown in the figure and remove the title unit from the monitor unit.



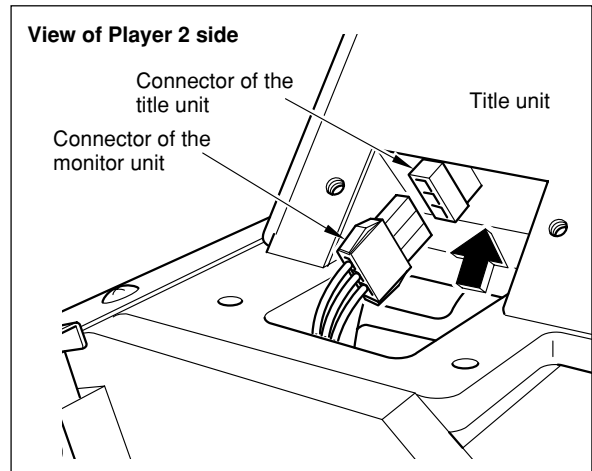
- 2** Move the title unit to the position of the monitor unit shown in the figure and fix only its Player 1 side temporarily by screws.



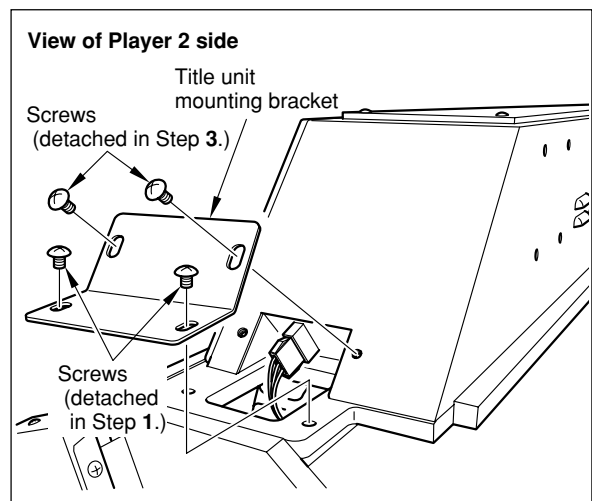
- 3** Remove the screws shown in the figure and remove the title unit mounting bracket of Player 2 side.



- 4** Draw out the wire harness from the monitor unit and connect it to the connector of the title unit.



- 5** Fix the title unit mounting bracket (detached in Step 3) of Player 2 side with use of screws, using care not allow the wire harness to be pinched.



- 6** Retighten the screws by which the Player 1 side of the title unit has been temporarily fixed in Step 2.

Continued on next page.

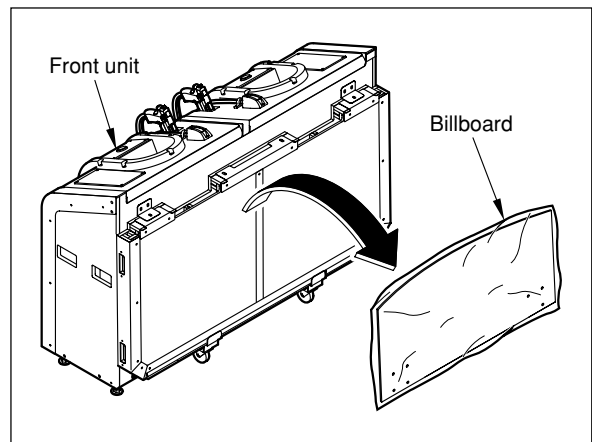
## 8-5 Mounting the billboard

### How to mount the billboard



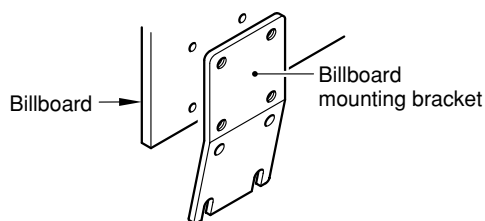
- Before attaching and detaching the billboard, fix the adjusters of the monitor unit. (See page 66.)
- When handling the billboard, be sure to make a team of two or more people, using a stepladder for added safety.

- 1** Remove the billboard which is attached at the position of the front unit.



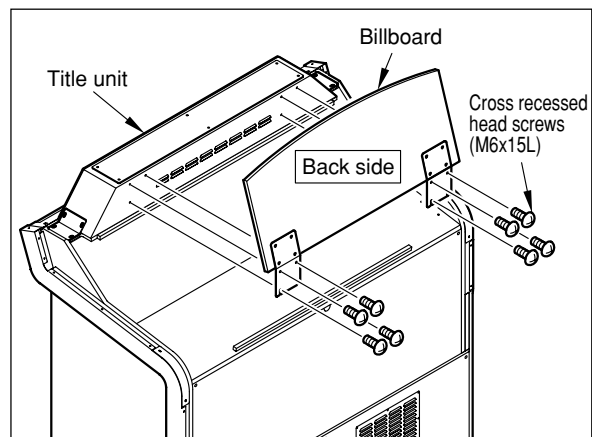
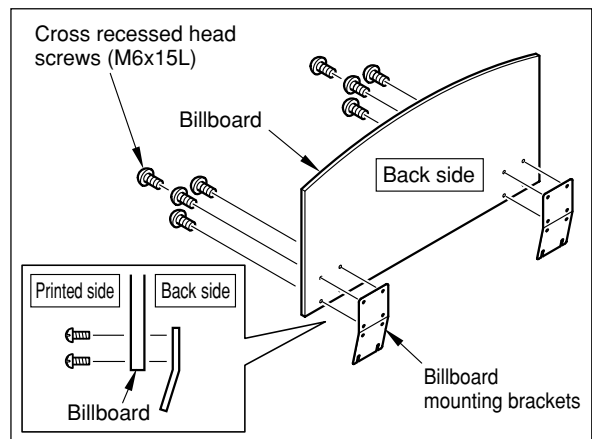
- 2** Mount the billboard mounting brackets to the billboard with use of accompanying screws in the manner as shown in the figure.

- Fit the billboard mounting bracket to the billboard shown in the figure.



**MEMO**

- 3** Mount the billboard to the title unit with use of accompanying screws.



Continued on next page.

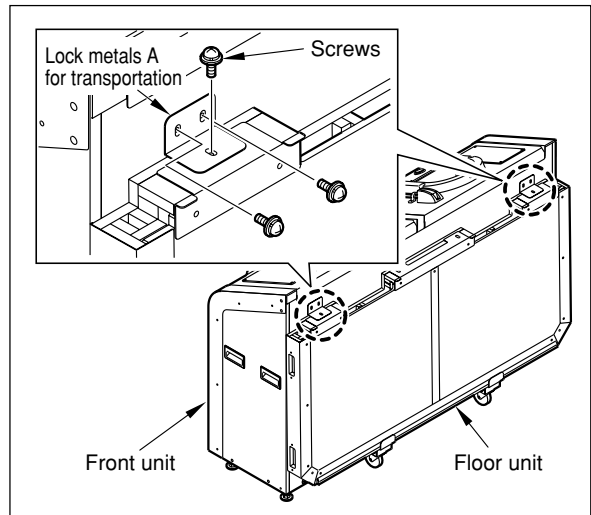
## 8-6 Setting the front unit

### ■ How to mount the front unit



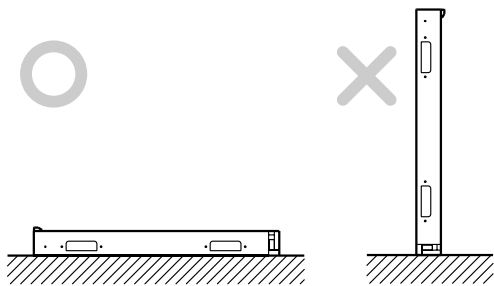
- When attaching the units, be very careful not to get your hands and wire harnesses caught.
- When attaching the units, be sure to make a team of two or more people, using a stepladder for added safety.
- The front unit may fall down depending on to which direction it is pushed. When moving the front unit, always push it as against the coin door mounting side. When moving the front unit on a slope or across a difference in level, more than four persons should hold it by the grips.
- When moving the front unit, do not heave it up by holding the gun unit.
- The floor unit weights about 41 kg (90.0 lb). When moving the unit, more than 2 persons should be hold it always by the grips.

- 1** Remove the screws shown in the figure and remove the lock metals A for transportation which fix the floor unit to the front unit (2 positions).

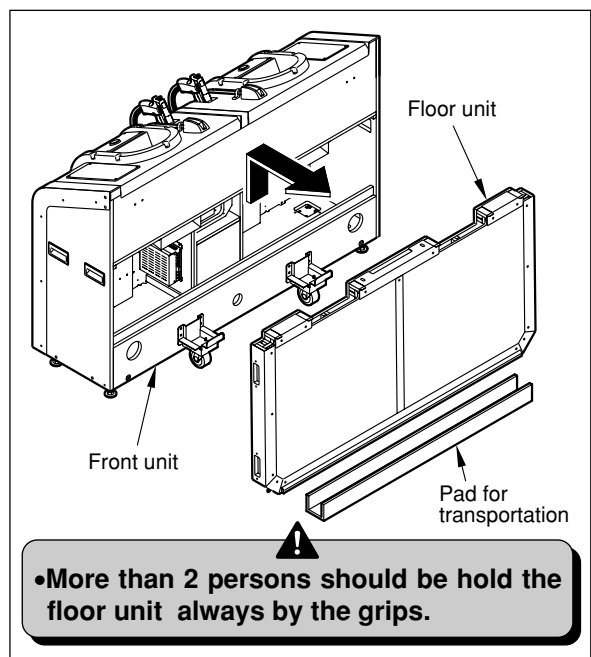


- 2** Remove the floor unit and the pad for transportation from the front unit.

- Do not leave the removed floor unit being in upright position.

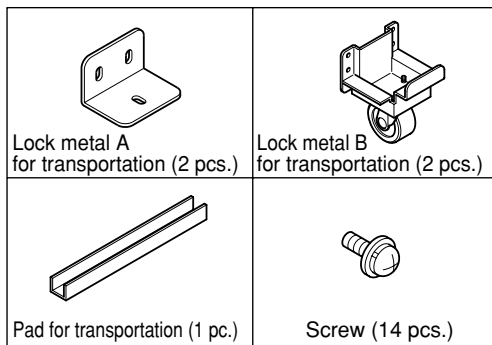


**MEMO**

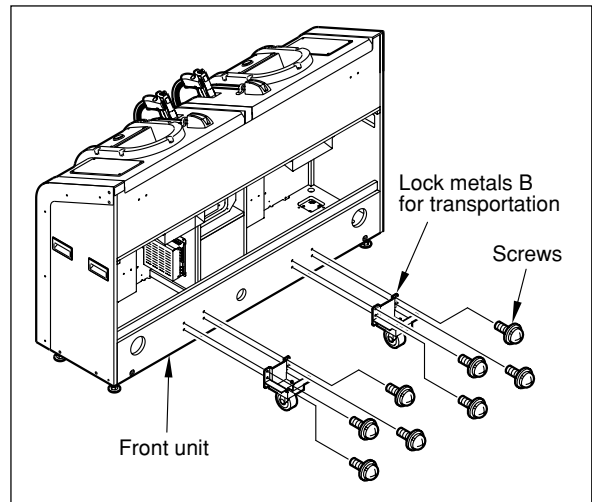


- 3** Remove the screws shown in the figure and remove the lock metals B for transportation from the front unit.

•Keep the removed parts shown in the figure. They will be necessary for transportation of the machine, though they are not used when the game machine is in operation.



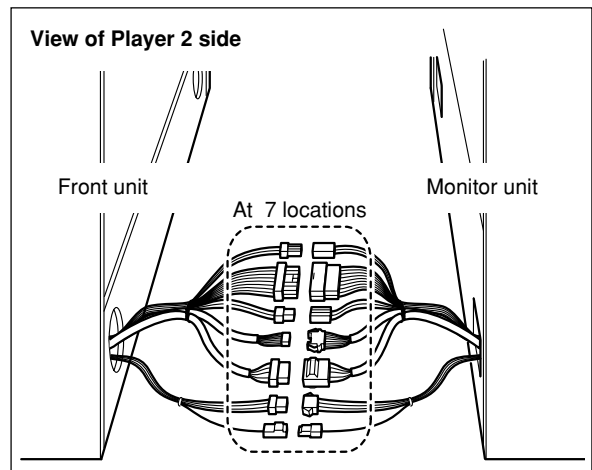
**MEMO**



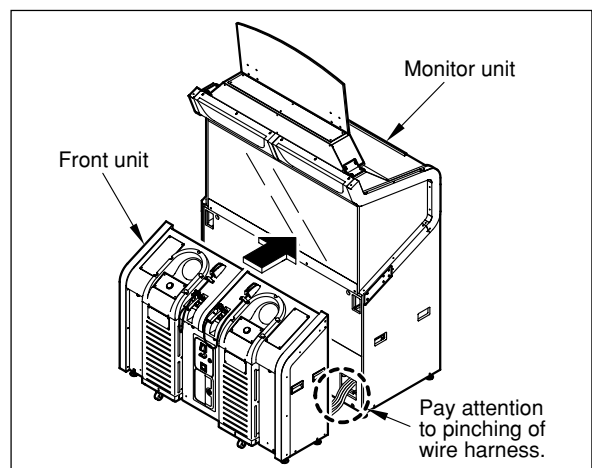
- 4** Draw out the wire harnesses of the front unit and monitor unit from each unit and connect the connectors to the mating connectors.

•Put the connectors and wire harnesses having been connected inside the monitor unit.

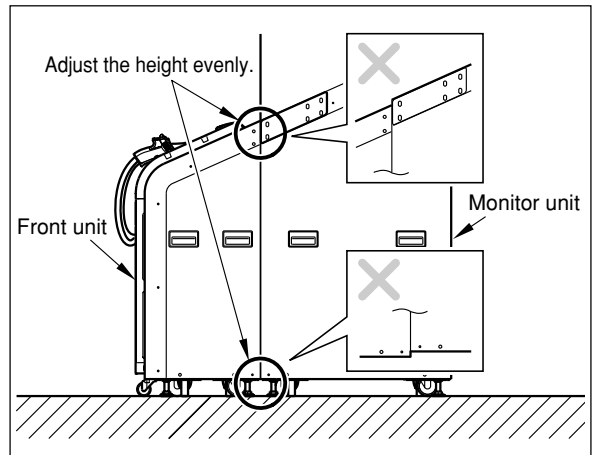
**MEMO**



- 5** Align the front unit slowly with the motor unit, using care not to pinch the wire harness in between.



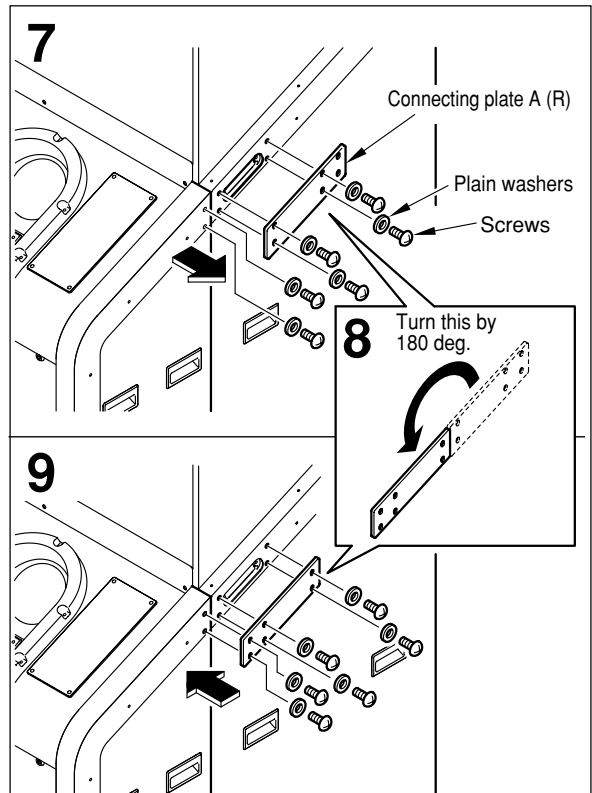
**6** Referring to “8-3 Fastening the adjusters” on page 66, adjust the height of the front unit.



**7** Remove the connecting plate A (R) and the screws mounted the monitor unit.

**8** Turn the removed connecting plate A (R) by 180 deg..

**9** Mount the turned connecting plate A (R) to the position shown in the figure with use of the screws which have been removed in Step 7.



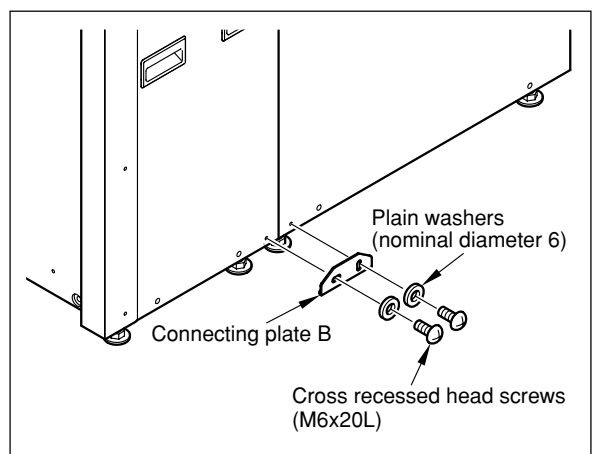
- Since the connecting plate fixing position and direction have been changed, mount the plate correctly.
- The right figure shows how to mount the connecting plate A (R) at the right side of the motor unit. Mount the connecting plate A (L) at the left side in the same manner.

**MEMO**

**10** Fix the front unit and the monitor unit by the accompanying connecting plates B, screws and plain washers.

- The right figure shows how to mount the connecting plate B at the right side of the motor unit. Mount the connecting plate B at the left side in the same manner.

**MEMO**



Continued on next page.

## 8-7 Setting the floor unit

### ■ How to mount the floor unit

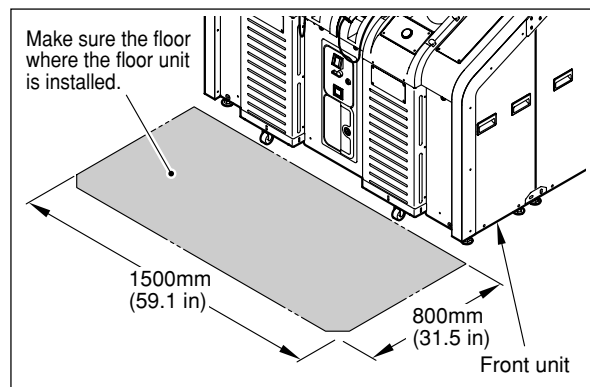


- The floor unit weights about 41 kg (90.0 lb). When moving the unit, more than 2 persons should hold it always by the grips.
- When moving and connecting the floor unit, use due care not to allow your hands and the wire harness to be pinched.
- Before attaching the floor unit, fix the adjusters of the front unit (See page 65).
- Be sure to install the floor unit on an even and no difference in level floor and secure it immobile.

- 1** Make sure that the floor where the floor unit is installed is even and has no difference in level.

- Install the front unit on a flat and leveled surface to connect stably. Otherwise it may become unstable and resulting an accident.

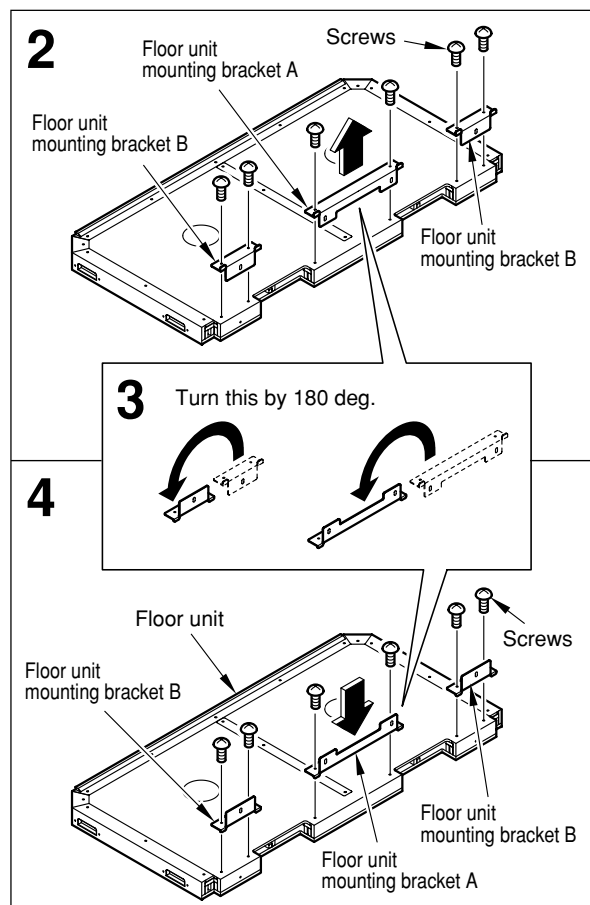
#### MEMO



- 2** Remove the screws shown in the figure and remove the floor unit mounting brackets A and B from the floor unit.

- 3** Turn the removed floor unit connecting plates A and B by 180 deg. to put them upside down.

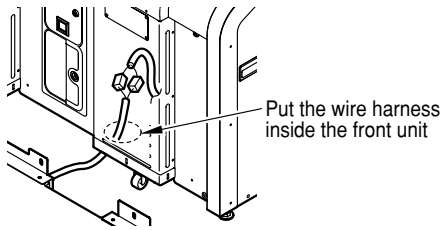
- 4** Mount the floor unit mounting brackets A and B turned by 180 deg. to the original positions with use of screws (detached in Step 2).



**5** Remove the tape which fixes the wire harness to the front unit.

**6** Draw the floor unit to the front unit and connect the connectors shown in the figure.

•Put the connectors and wire harness having been connected inside the front unit from the bottom hole.



**MEMO**

**7** Align the floor unit and the front unit slowly, paying attention not to pinch the wire harness.

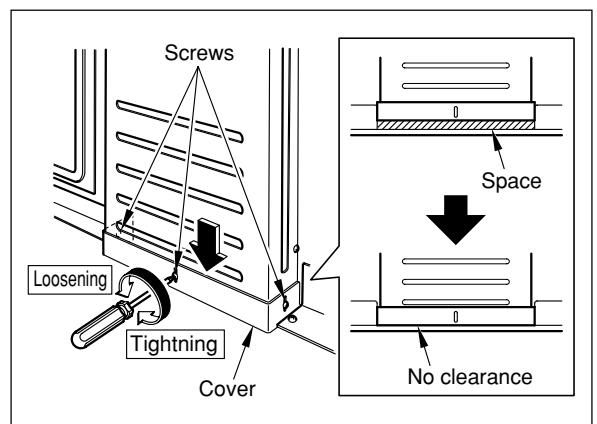
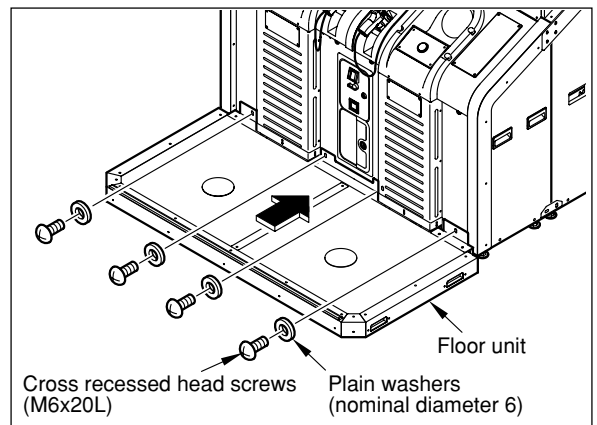
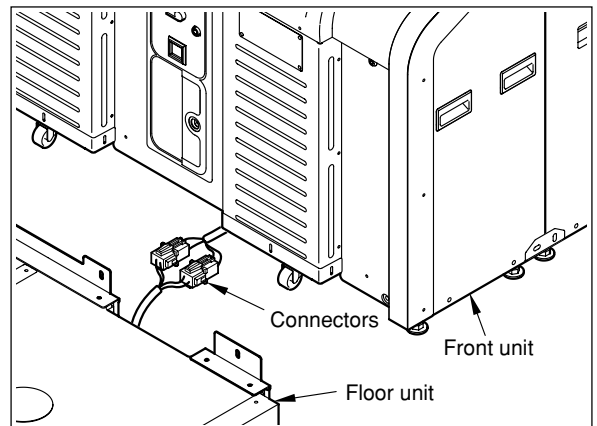
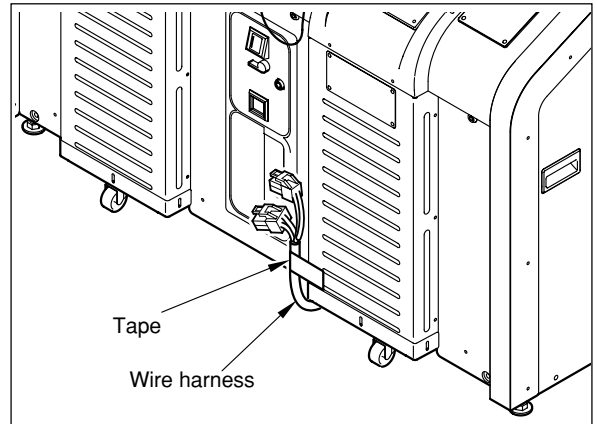
**8** Make sure that the screw holes of the floor unit and those of the front unit are aligned in position, and fix the units by the accompanying screws and plain washers.

•If the positions of the screw holes are displaced, adjust the height of the front unit and monitor unit in reference to “8-3 Fastening the adjusters” in page 66.

**MEMO**

**9** Loosen the three screws of the front unit shown in the figure and put down the cover.

**10** Make sure that there is no clearance between the cover and the floor unit and then tighten the screws.



Continued on next page.



## 8-8 Setting the security plug

**Set the security plug appropriately, otherwise the machine will not operate normally. Be sure to mount it in the procedure as follows.**

### How to set the security plug

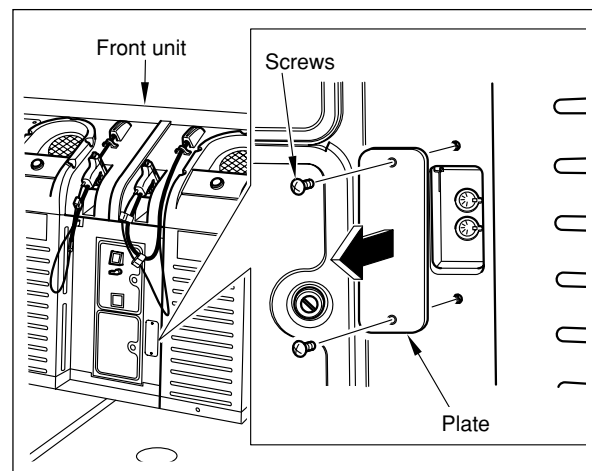


- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before setting the security plug, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Before attaching and detaching the security plug, put on a grounding band for anti-static measure. Do not handle these parts on a carpet or rug.
- Do not moisten the security plug nor touch the terminal.



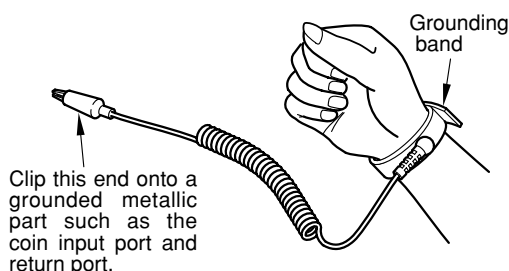
- 1 Make sure that the machine's main power switch is turned OFF and the AC power cord is unplugged.

- 2 Remove the screws shown in the figure and remove the plate.



- 3 Wear a grounding band to prevent static electricity. Be sure to keep on the grounding band for the later procedures too. (The grounding band does not come with this product.)

- Static electricity may damage the electronic parts in the PCB unit.

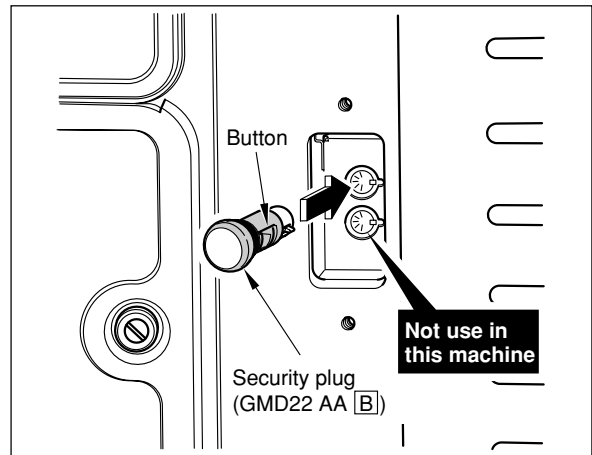


**MEMO**

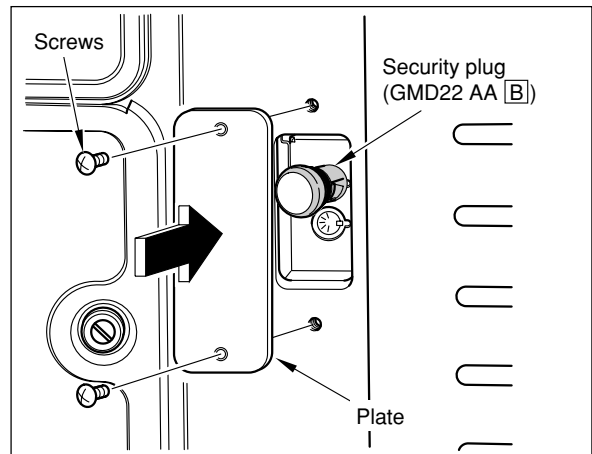
- 4** Push the security plug (GMD22\_AA [B]) completely into the upper socket to such extent that a click sound is heard, using care not to mismatch between the pins and the mating holes.

- Be sure to use the security plug that come with this machine.
- Do not mount anything to the lower socket.
- To draw out the security plug, keep pressing the button and gently take out the plug.

**MEMO**



- 5** Attach the plate (detached in step 2 above) back in position using the screws.



- 6** **Now the entire machine is completely installed.** Set the gun unit in the gun holder properly, referring to “Proper placement of the gun units” on “4 How to Play” on page 37.

- 7** Plug in the AC power cord and turn ON the main power switch to get the machine started. (See page 28.)

- 8** Make sure that the self-test is over and the demonstration screen appears on the monitor.

- 9** Then press the test button on the service panel to go to the test mode. Adjust the screen size and horizontal position on the “SCREEN CHECK” screen. (See pages 30 and 45.)  
Then, carry out various settings in test mode.(see pages 38 to 54.)

- For moving the coin counter to the service panel, see the description in page 78.
- If the units will not operate in normal condition even with the settings having been made as specified in this manual, see the description of “9-9 Troubleshooting” and take an appropriate remedial measure.
- If the same problem still occurs or if a problem not described in this manual happens, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle, and contact your nearest dealer.

**MEMO**

## 8-9 Splitting into and moving of units

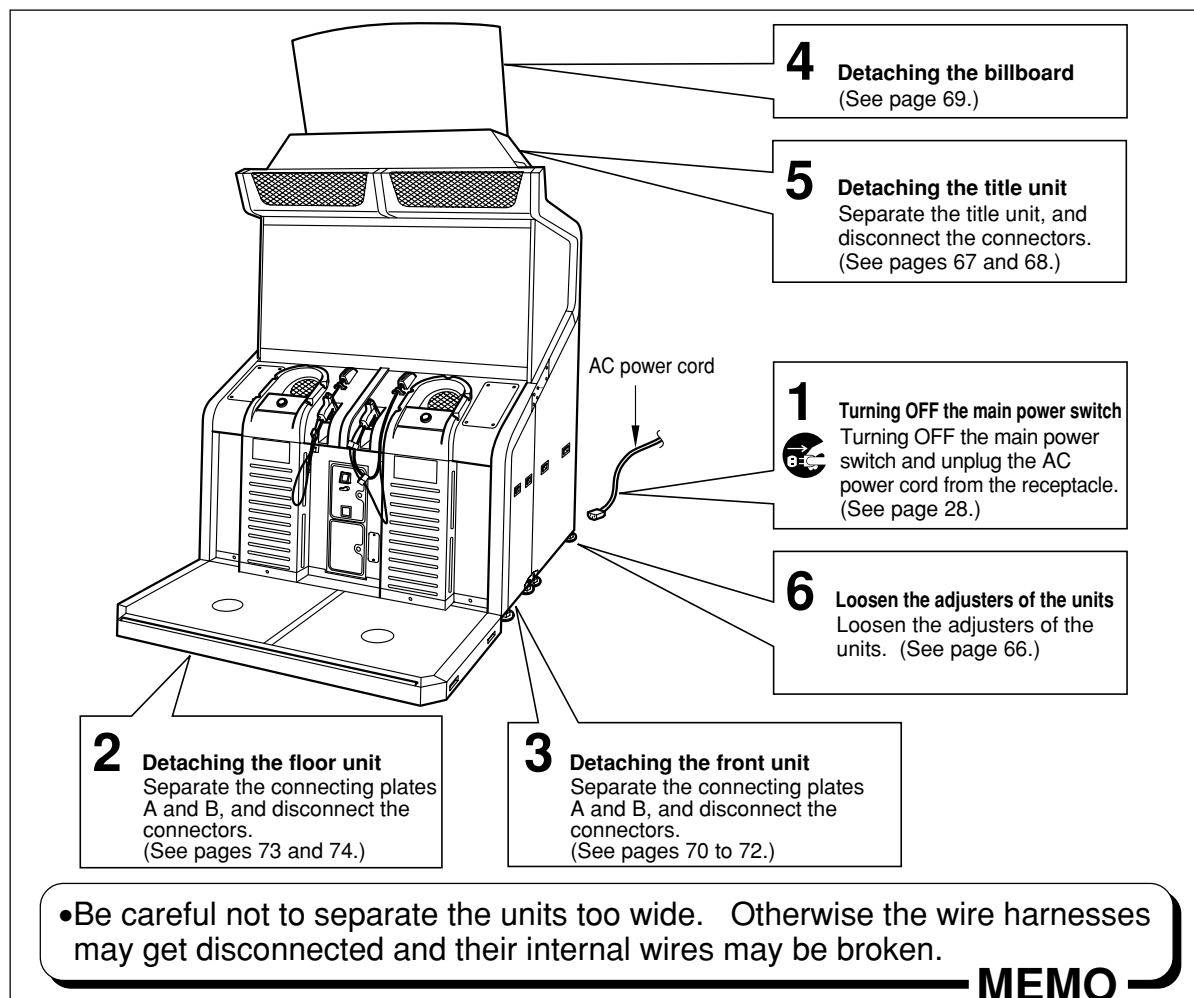
Before moving the machine, be sure to remove the units.

### ■ How to split into units



- Before separating the units or moving the machine, be sure to turn OFF the main power switch, unplug the AC power cord, and disconnect the power cord.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- When moving the units, use care not to apply a strong force to them.
- When moving the units, raise the all adjusters each for the units to full extent and roll them on the casters.
- The front unit and the monitor unit may fall down depending on to which direction it is pushed. When moving the units, always push the front unit as against the coin door mounting side and the monitor unit sideways as against the monitor glass side. When moving them on a slope or across a difference in level, more than four persons should hold the front unit and more than eight persons should hold the monitor unit by the grips.
- When moving the floor unit, more than 2 persons should be hold it always by the grips.
- When connecting the split units again, pay due attention not to pinch your hand and wire harnesses.

Take the following steps, shown below, to separate the units.



## 8-10 Moving the coin counter

The coin counter was installed in the coin box when the machine left the factory, but it can be moved onto the service panel.

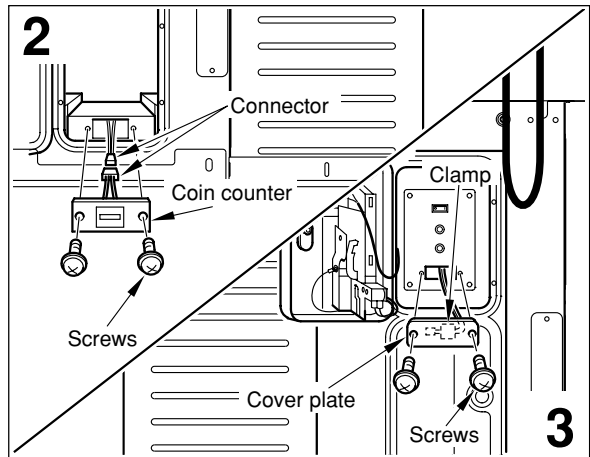
### ■ How to move the coin counter



- Before moving the coin counter, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.



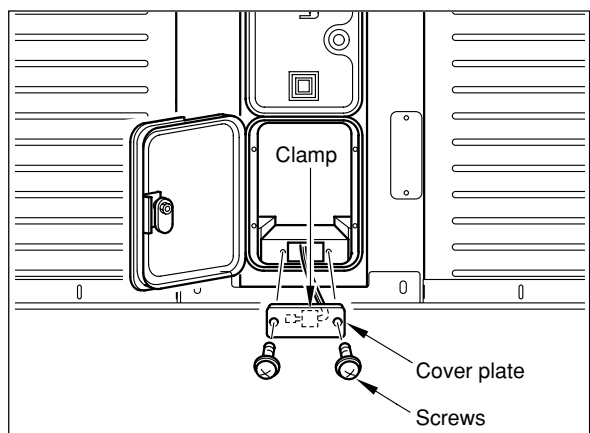
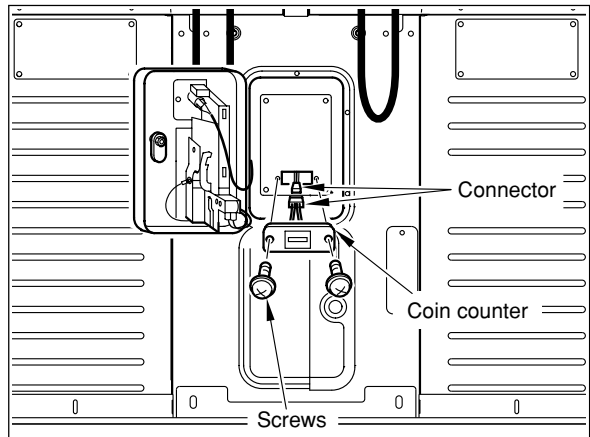
- 1 Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- 2 Open the coin door and take out the coin box. Remove the screws and take out the coin counter. In the meanwhile, disconnect the connector.
- 3 Remove the maintenance door and unscrew the cover plate to remove it from the service panel.



- The wires for relocation are fixed with the clamp behind the cover plate.
- Be careful not to remove the cover plate too widely, or the wire harness may get disconnected or the internal wires may get broken.

### MEMO

- 4 Draw the connector from behind the cover plate and connect it to the coin counter.
- 5 Attach the coin counter on the service panel with the screws.
- 6 Attach the cover plate (detached in Step 3 above) back in position on the coin counter using the screws. At this time, fix the connectors, which were disconnected in Step 2, behind the cover plate with the clamp.
- 7 Place the coin box back into position and close the coin door.



# 9 Maintenance

## 9-1 Replacing the coin selector

### ■ How to replace the coin selector —————



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before replacing the coin selector, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Take care not to apply any load or impact to the maintenance door when it is open.
- After closing the maintenance door, be sure to check that the door is locked securely.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.



**1** Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

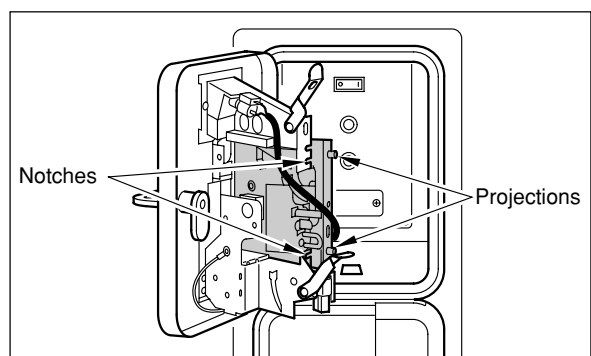
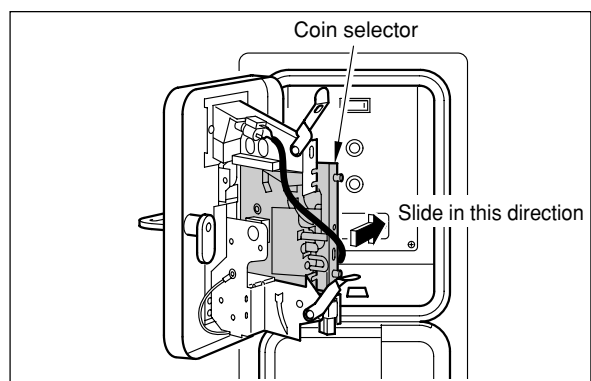
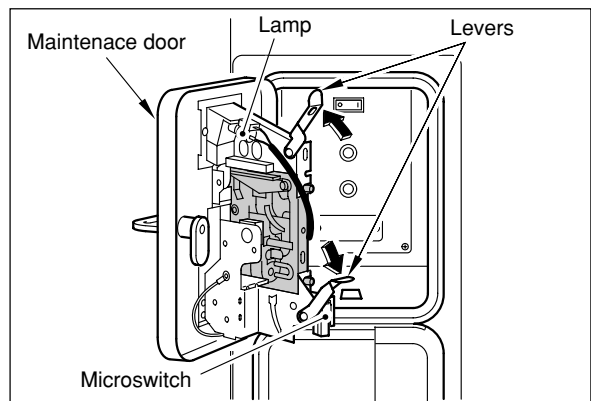
**2** Open the maintenance door.

**3** Release the levers that fix the coin selector. See at right.

**4** Slide the coin selector to the right, and take it out.

**5** **To fit a new coin selector**  
Fit the 2 projections of the coin selector to their mating notches.

**6** Lock the levers (in Step 3 above) again, and close the maintenance door.



## 9-2 Replacing the fluorescent light

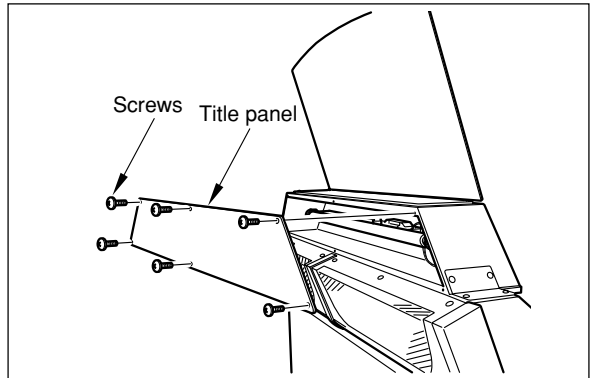
### ■ How to replace the fluorescent light



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before replacing the fluorescent light, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- The fluorescent light is hot just after the power switch is turned off. Wait until it cools down and then replace it with a new one of the same type.
- When replacing the fluorescent lamp, be sure to carry out the work by more than 2 persons with use of stepladders for your safety.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

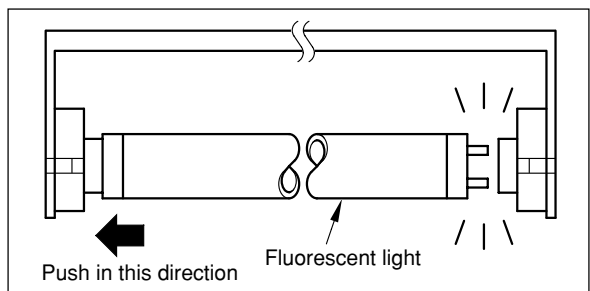


- 1** Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.



- 2** Remove the screws shown in the figure and dismount the title panel.

- 3** Push one end of the fluorescent light in the direction of the socket. The other end of the fluorescent light will be detached from the opposite socket.

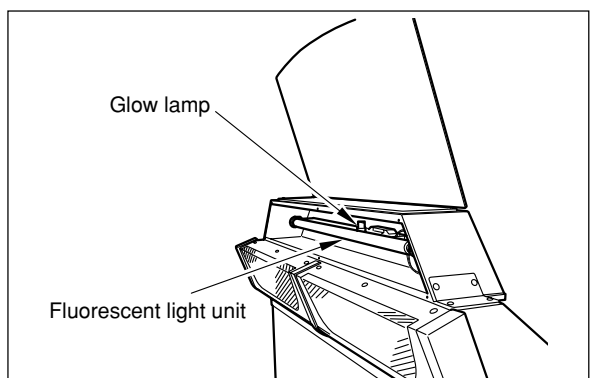


- 4** Install a new fluorescent light in the reverse order.

- It is recommended that the glow lamp should be also replaced.

### MEMO

- 5** Mount the title panel to the original position.



## 9-3 Replacing the cold cathode-ray tube

### ■ How to replace the cold-cathode tube —————

The figure illustrates how to replace the cold cathode-ray tube of Player 1.  
Do the same for the cold cathode-ray tube of Player 2.



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before replacing the cold cathode-ray tube, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- When replacing the cold cathode-ray tube, be sure to carry out the work by more than 2 persons with use of stepladders for your safety.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

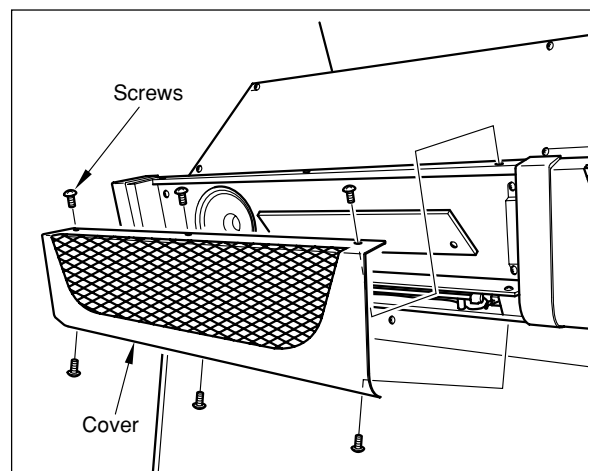


- 1 Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

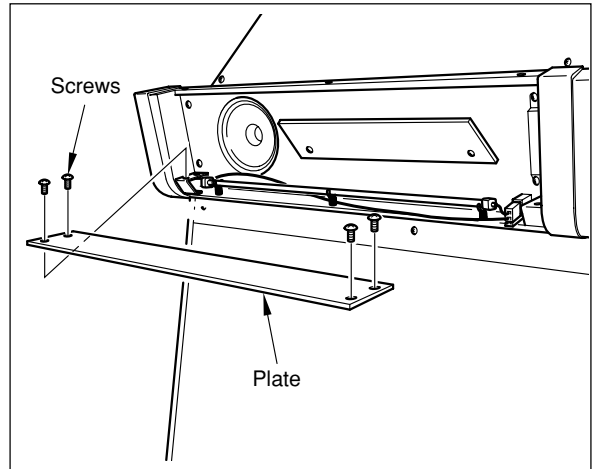
- 2 Remove the screws shown in the figure and dismount the cover.

- Remove the screws while holding the cover by hand so that it should not drop.

**MEMO**



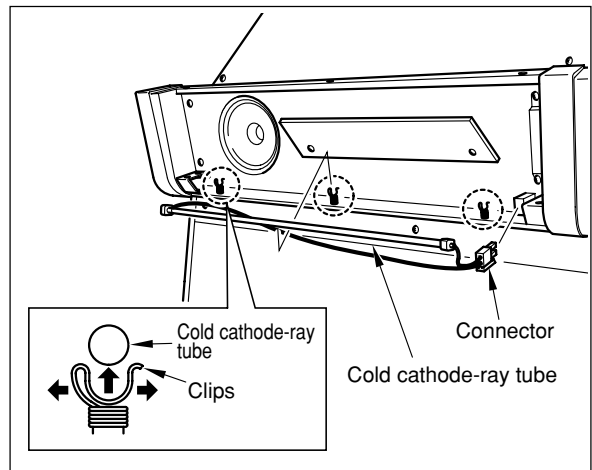
- 3** Remove the screws shown in the figure and dismount the plate.



- 4** Remove the cold cathode-ray tube from the three clips, and unplug the connector.

•When removing the cold cathode-ray tube, be careful not to use force because it may break.

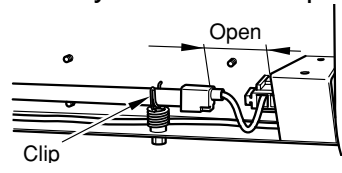
**MEMO**



- 5** Install a new cold cathode-ray tube by reversing the procedure used to remove it.

•Provide a clearance for mounting the connector and mount the cold cathode-ray tube to the clip.

**MEMO**



- 6** Mount the cover and plate to the original position.



## 9-4 Replacing the start button

The figure illustrates how to replace the start button of Player 1. Do the same for the start button of Player 2.



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before replacing the start button, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the power, wait for longer than 10 sec. and turn ON the main power switch.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

### How to remove the start button

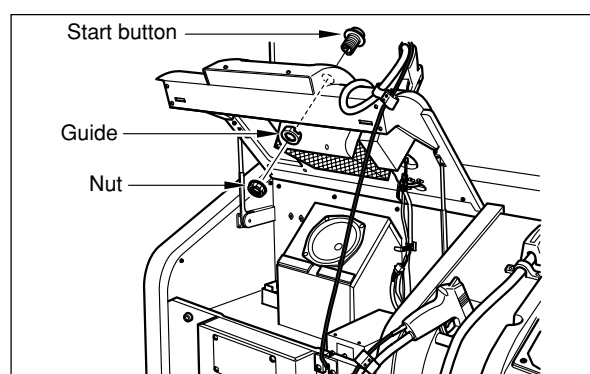
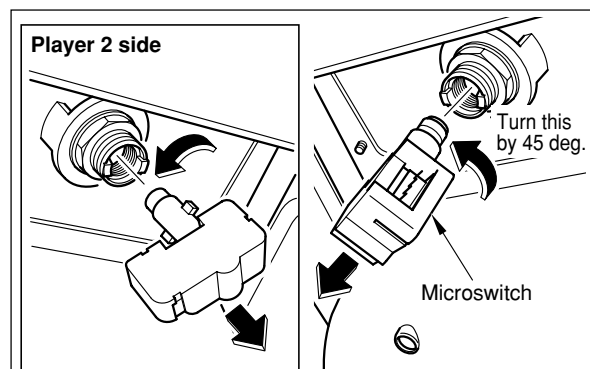
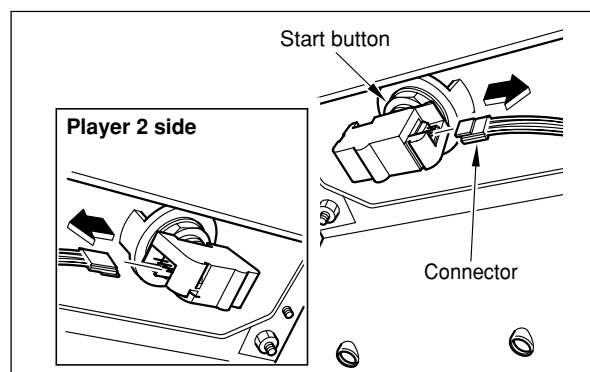


- 1 Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- 2 Open the control panel, referring to “3-5 Opening and closing the control panel” on page 32.
- 3 Pull off the connector from the start button.
- 4 Turn the microswitch in arrow direction by approximately 45 deg. and draw it out of the start button.

• The microswitch can be replaced singly in the procedure so far.

### MEMO

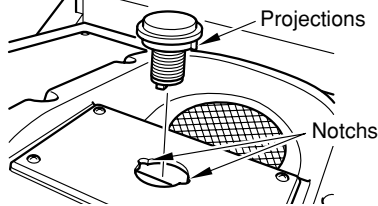
- 5 Remove the nut and remove the start button and the guide.



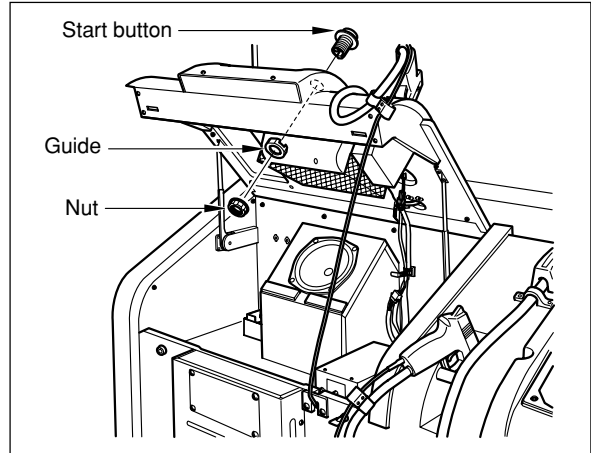
**How to set up the start button**

**1** Attach the start button to the control panel and attach the guide and nut.

- Align the projections of the start button with the notches of the mounting hole.

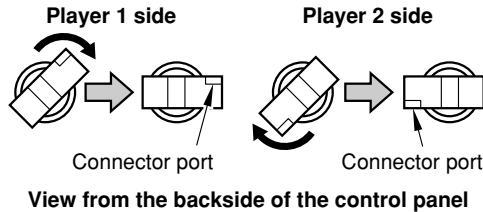


**MEMO**

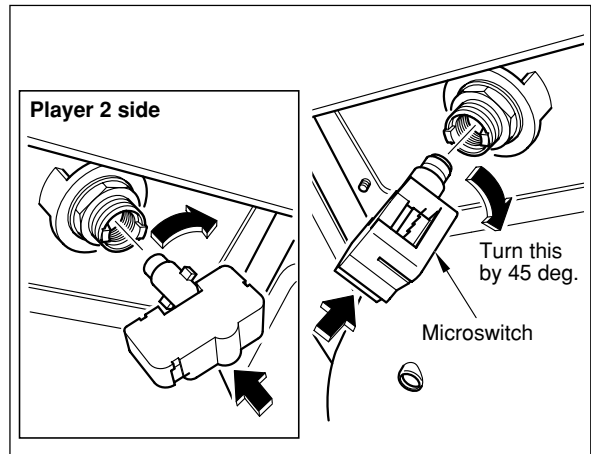


**2** Turn the microswitch in arrow direction by approximately 45 deg. and mount it to the start button.

- Mount the microswitch in the direction shown in the figure and turn it in arrow direction.



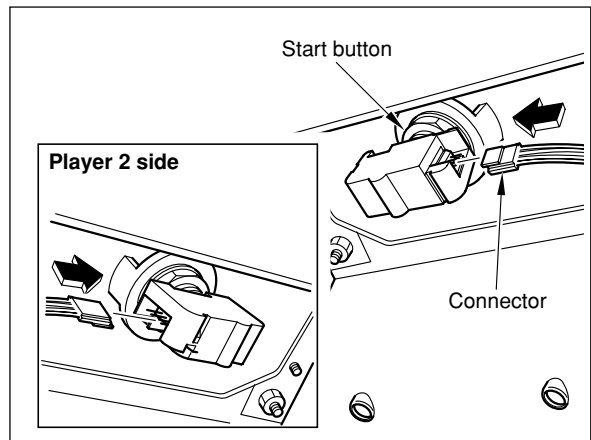
**MEMO**



**3** Connect the connector (pull off in step 3 on page 83) back in position on the start button.

- When connecting the connector, make sure of its orientation. Connection in wrong orientation will cause malfunction.

**MEMO**



**4** Close the control panel with care not to allow your hands to be pinched (See page 33).

**5** Plug in the AC power cord and turn ON the power to start the machine. (See page 28.)

**6** Then, operate the machine in test mode, and carry out "INPUT CHECK" and "LAMP CHECK" on the "I/O CHECK" screen (See pages 40, 41 and 44.) and check to see if the start buttons work normally.

## 9-5 Adjusting the gun unit wire

If the gun unit wire is elongated or displaced, the recoil unit will not work normally and adequate recoiling impact will not be transmitted to the gun unit. If that is the case, it is necessary to adjust the gun unit wire. Adjust the wire in the procedure as shown below.

The figure illustrates how to adjust the gun unit wire of Player 1. Do the same for the gun unit wire of Player 2.

### ■ How to adjusting the gun unit wire



- **To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).**
- **Before adjusting the gun unit wire, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.**
- **When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.**
- **Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.**



**1**

Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

- Make sure that the gun unit is set correctly in position. (See page 37.)

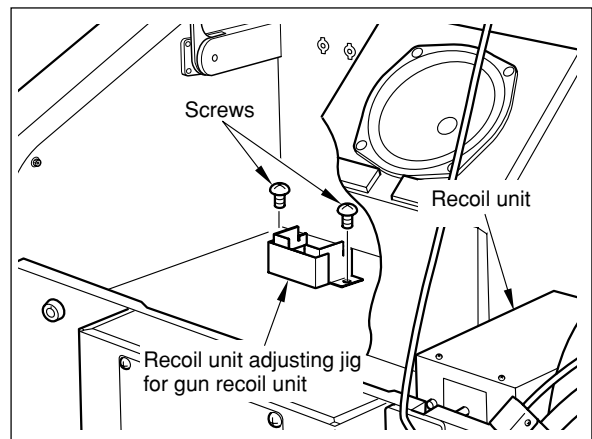
**MEMO**

**2**

Open the control panel of Player 1 in reference to “3-5 Opening and closing the control panel” on page 32. Remove the screws and remove the recoil unit adjusting jig from the position shown in the figure.

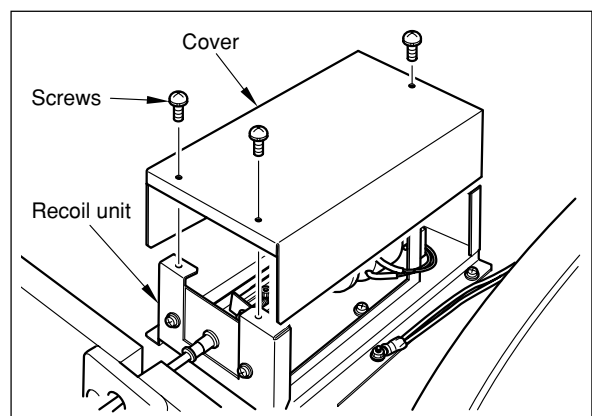
- For Player 1  
Proceed to Step 3.
- For Player 2  
Close the control panel of Player 1. Then, open the control panel of Player 2 in reference to “3-5 Opening and closing the control panel” on page 32. Then proceed to Step 3.

**MEMO**



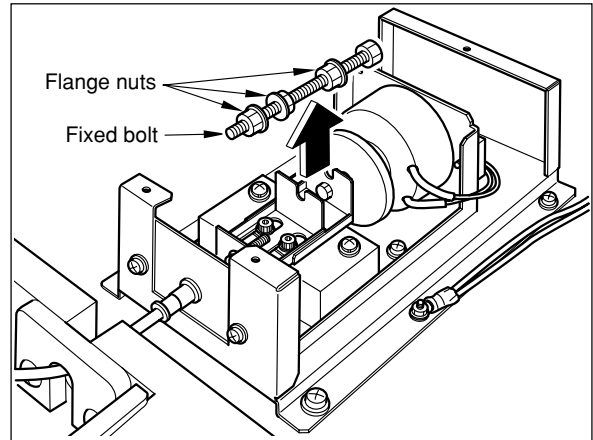
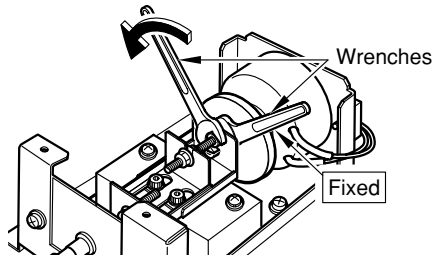
**3**

Remove the screws shown in the figure and remove the cover of recoil unit.



**4** Loosen the flange nuts (3 pcs.) of the fixed bolt and remove the fixed bolt.

- Loosen the flange nuts with use of two 7 mm gauge wrenches.

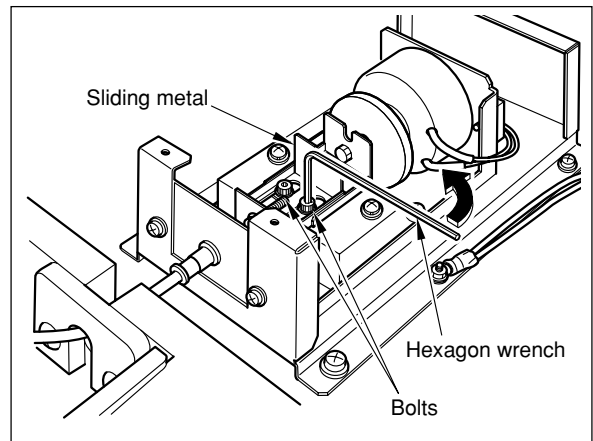


**MEMO**

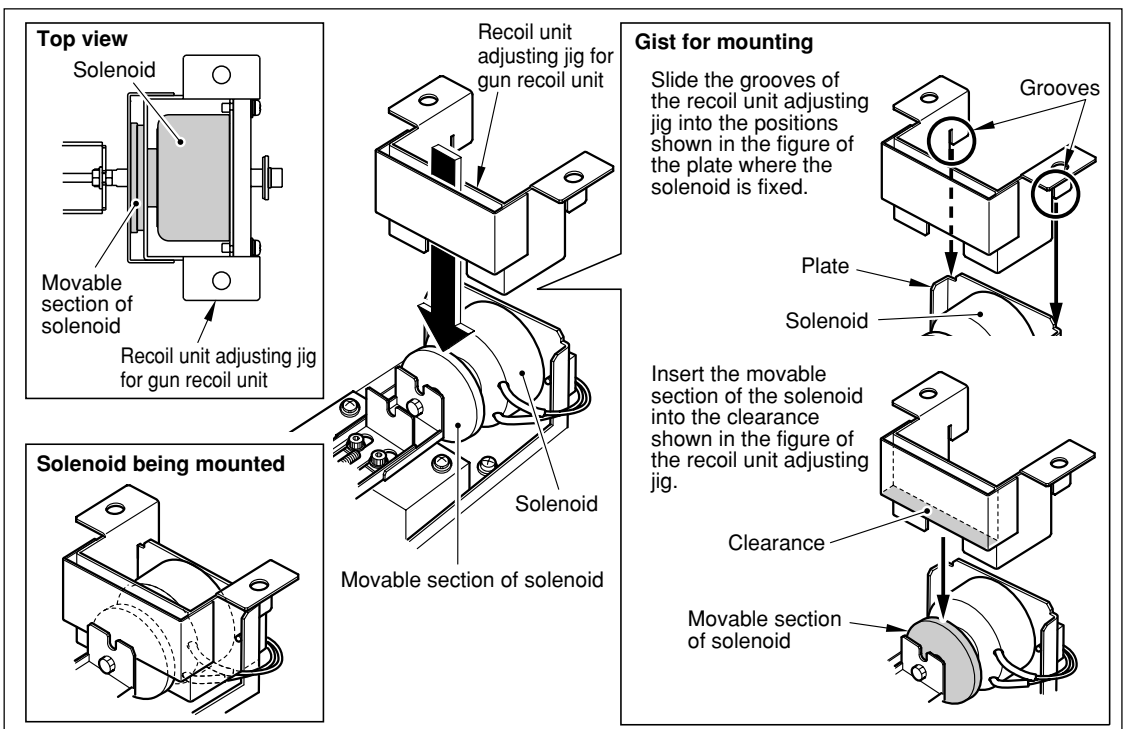
**5** Loosen the bolts (2 pcs.) which fix the sliding metal. When the bolts are loosened, the slide metal can be moved.

- Loosen the bolts with use of 3 mm gauge hexagon wrench.

**MEMO**

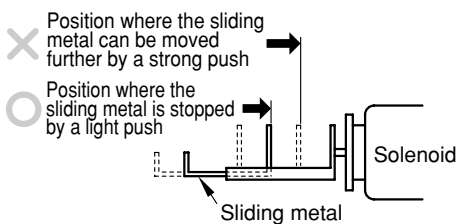


**6** Next, mount the recoil unit adjusting jig which has been removed in Step 2 in the direction shown in the figure so as to make the solenoid immovable.



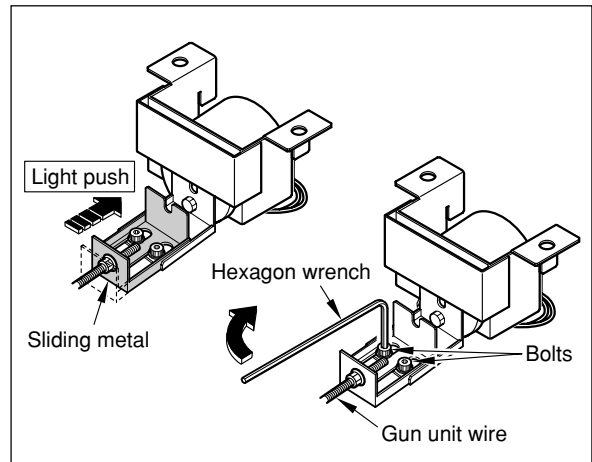
**7** Place the sliding metal in position and adjust the gun unit wire. When the sliding metal is pushed lightly toward the solenoid until stopped, then tighten the bolts (2 pcs.) shown in the figure.

- Even when the sliding metal is stopped, it can be moved further by a strong push. Exact adjustment will not be expected in this state.



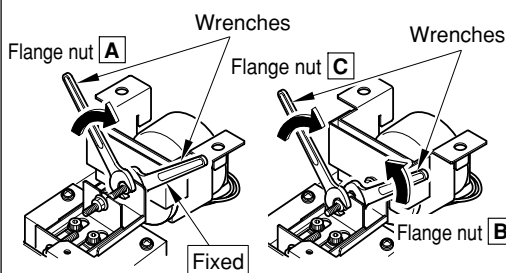
- Tighten the bolts with use of 3 mm gauge hexagon wrench.

**MEMO**



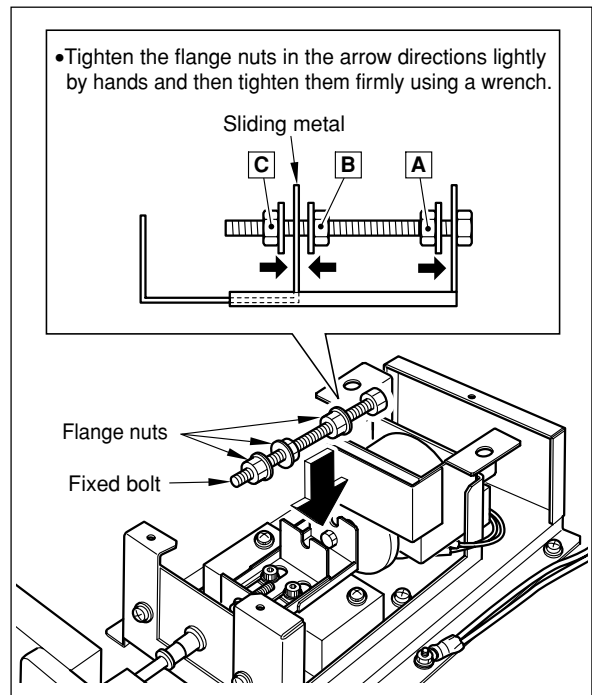
**8** The above procedure completes adjusting the gun unit wire. Then, mount the fixed bolt to their original positions.

- Tighten the flange nuts with use of two 7 mm gauge wrenches.



**MEMO**

- Tighten the flange nuts in the arrow directions lightly by hands and then tighten them firmly using a wrench.



**9** Remove the recoil unit adjusting jig for gun recoil unit from the solenoid. Attach it original position, refer to Step 2.

**10** Attach the cover (remove in Step 3 on page 85) original position.

**11** Close the control panel, referring to “3-5 Opening and closing the control panel” on page 32.

**12** Plug in the AC power cord and turn ON the power to start the machine. (See page 28.)

**13** Then, go to the test mode. Check the reaction of the gun unit by “GUN CHECK” on the “I/O CHECK” screen. (See pages 40, 42 and 43.)

## 9-6 Replacing the gun unit

The figure illustrates how to replace the gun unit of Player 1. Do the same for the gun unit of Player 2.



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before replacing the gun unit and recoil unit, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

### ■ How to replace the gun unit -----



1

#### To remove the gun unit

Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

- Make sure that the gun unit is set correctly in position. (See page 37.)

**MEMO**

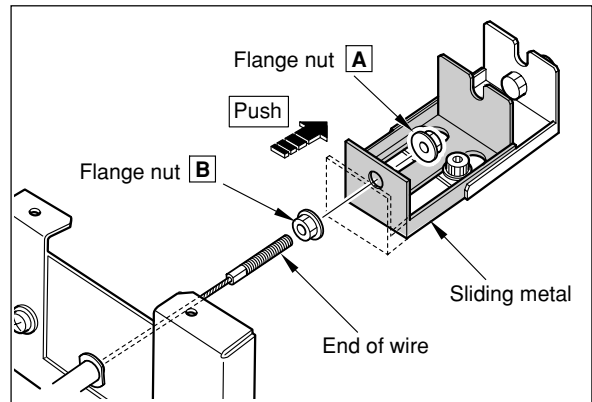
2

Open the control panel, referring to “3-5 Opening and closing the control panel” on page 32.

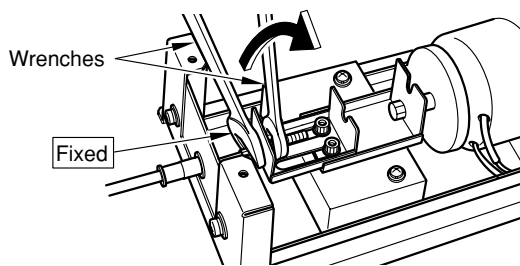
3

Carry out the replacing work in procedure of Steps 3 to 5 of “Adjusting the gun unit wire” on pages 85 and 86.

- 4** Remove the end of wire from the sliding metal. Remove the flange nut **A** shown in the figure and push the sliding metal toward the solenoid and draw out the end of wire from the sliding metal. Then, remove the flange nut **B** from the end of wire.

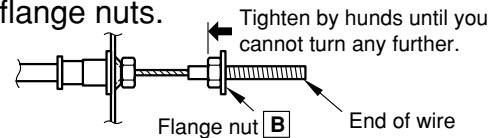


- Loosen the flange nuts with use of two 7 mm gauge wrenches.



**Gist for mounting**

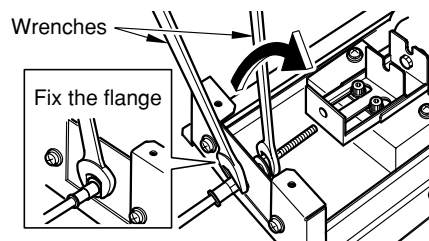
- When mounting the flange nuts, first tighten the flange nut **B** to the end of the wire by hands until you cannot turn any further, and then fix the slide metal by the flange nut **A** so that it comes between the flange nuts.



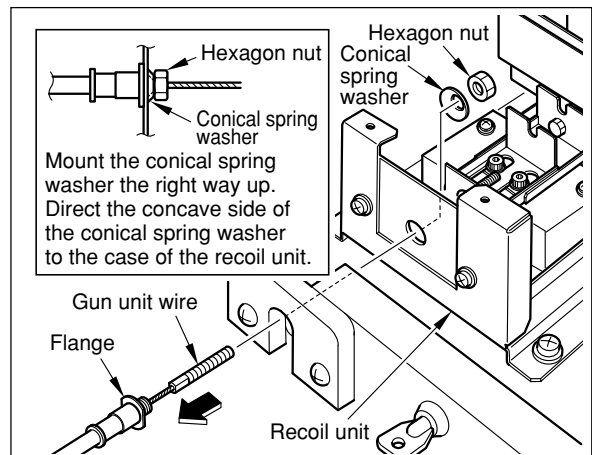
**MEMO**

- 5** Next, remove the hexagon nut and conical spring washer that fix the wire and remove the wire from the recoil unit.

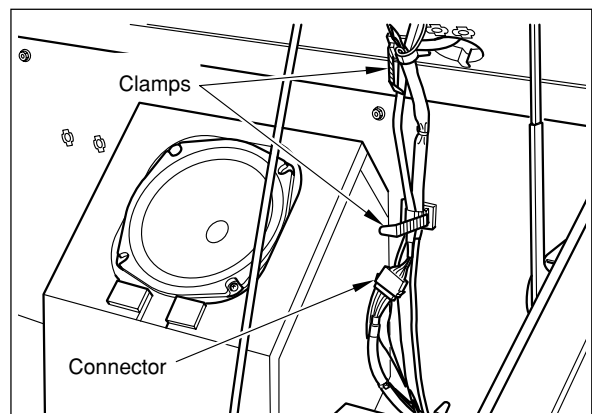
- Loosen the hexagon nut with use of two 10 mm gauge wrenches.



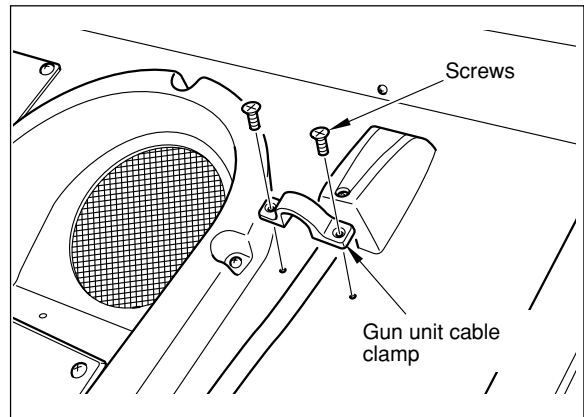
**MEMO**



- 6** Remove the clamps (at 2 pos.) and disconnect the connector. Close thereafter the control panel in reference to "3-5 Opening and closing the control panel" on page 32.



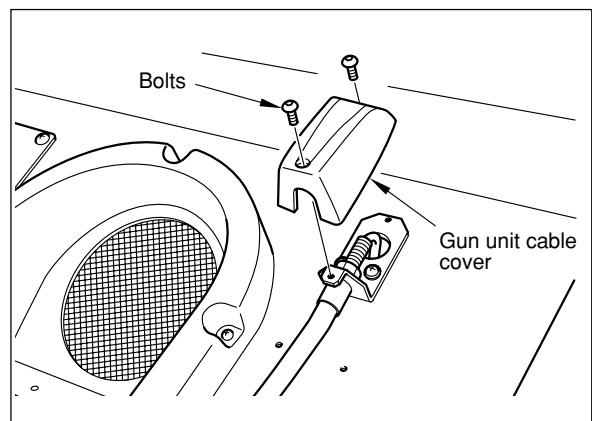
- 7** Remove the screws shown in the figure and remove the gun unit cable clamp.



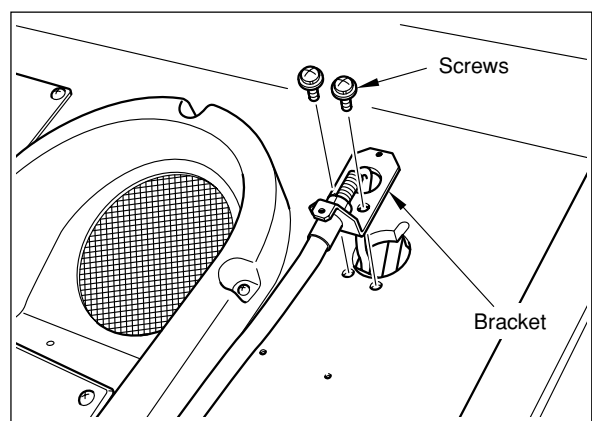
- 8** Remove the screws shown in the figure and remove the gun unit cable cover.

•Loosen the bolts with use of 2.5 mm gauge hexagon wrench.

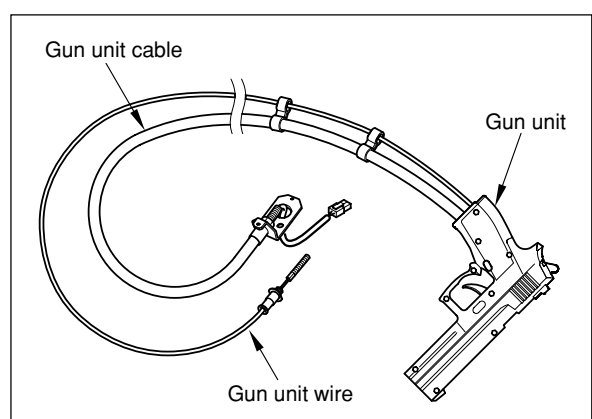
**MEMO**



- 9** Remove the screws shown in the figure and remove the bracket which fixes the gun unit cable.



- 10** Draw out the gun unit cable from the control panel and dismount the gun unit.





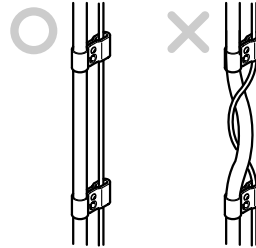
**11** | **To mount the gun unit**

Mount the new gun unit in the reverse order. (See pages 88 to 90.)

- Make sure that the gun unit is set correctly in position. (See page 37.)

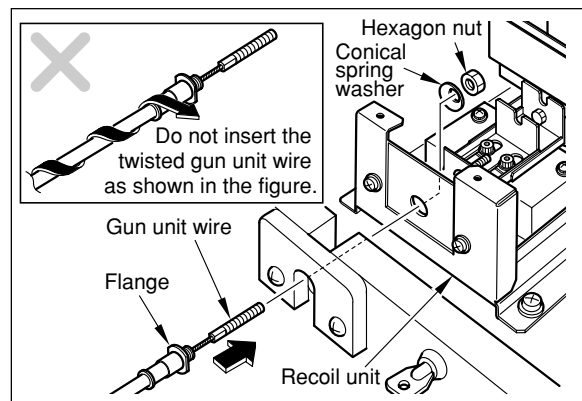
- When housing the gun unit into the gun holder of control panel, use care not to allow the cable and wire to be entangled.

Entangled cable and wire will cause malfunction and breakage of the cable and wire.

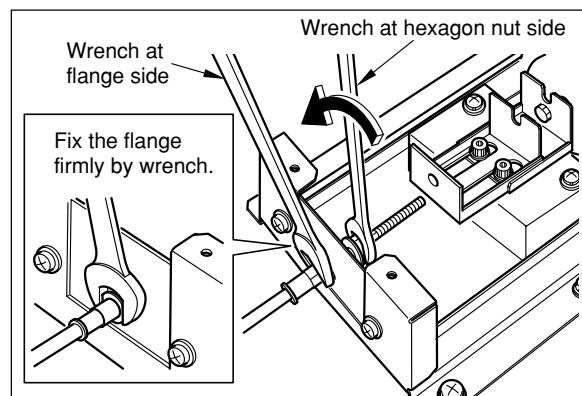
**MEMO****IMPORTANT** | **Precautions in connection of the gun unit wire to the recoil unit**

When connect the gun unit wire, referring to Step 5 on page 89, connection of twisted gun unit wire may cause malfunction of the unit and breakage of wire. Connect the gun unit wire, paying attention to the following points.

- Insert the gun unit wire straight into the recoil unit so that it should not be twisted.



- Do not move the wrench for fixing the flange while mounting hexagon nut to the gun unit. Otherwise the gun unit wire may be twisted. Mount the hexagon nut by turning the wrench at the hexagon nut side.



**12** | Adjust the gun unit wire, referring to “9-5 Adjusting the gun unit wire” on page 85.

**13** | Plug in the AC power cord and turn ON the power to start the machine. (See page 28.)

**14** | Then, go to the test mode. Check the input check of the gun unit by “INPUT CHECK” on the “I/O CHECK” screen, and check the reaction of the gun unit and calibrate the gun unit by “GUN CHECK”. (See pages 40 to 43.)

■ How to replace the gun unit and recoil unit —————



1

**To remove the recoil unit**

Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

- Make sure that the gun unit is set correctly in position. (See page 37.)

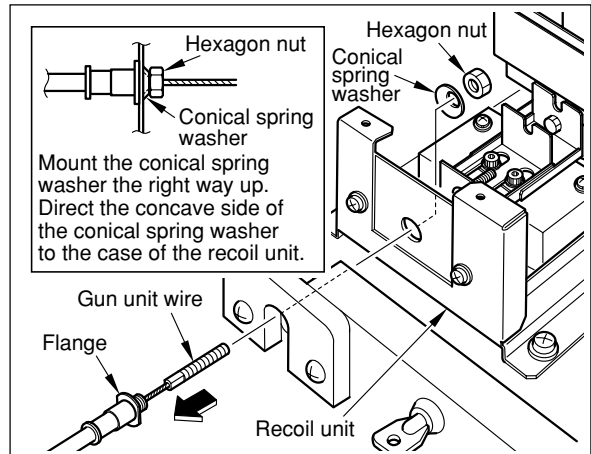
**MEMO**

2

Open the control panel, referring to “3-5 Opening and closing the control panel” on page 32.

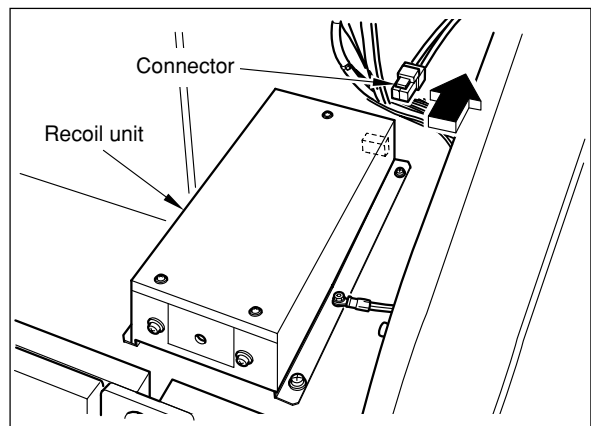
3

Remove the gun unit wire from the recoil unit, referring to the procedure of Step 3 to 5 of “How to replace the gun unit” on pages 88 and 89. Then attach the recoil unit cover with using the screws. (Refer to Step 3 of “Adjusting the gun unit wire” on page 85.)



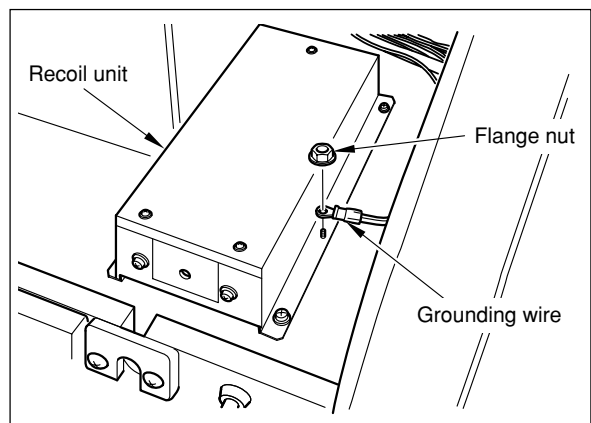
4

Pull off the connector which is connected the recoil unit shown in the figure.

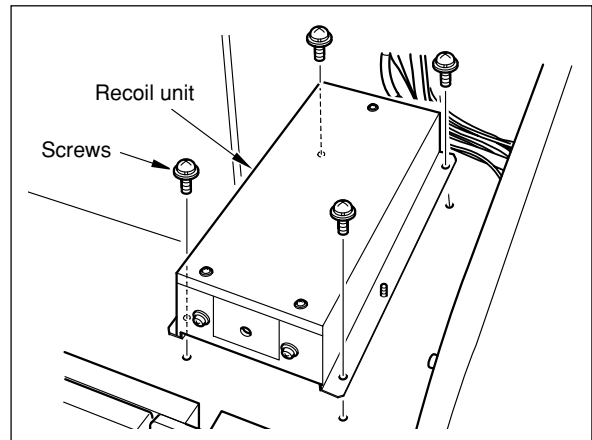


5

Remove the flange nut shown in the figure and remove the grounding wire.

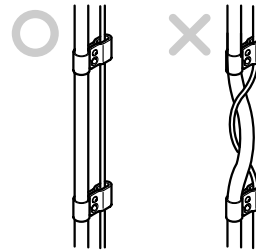


- 6** Remove the four screws that fix the recoil unit shown in the figure and remove the recoil unit.



- 7** **To mount the recoil unit**  
Mount the new recoil unit in the reverse order.

- Make sure that the gun unit is set correctly in position. (See page 37.)
- When housing the gun unit into the gun holder of control panel, use care not to allow the cable and wire to be entangled. Entangled cable and wire will cause malfunction and breakage of the cable and wire.

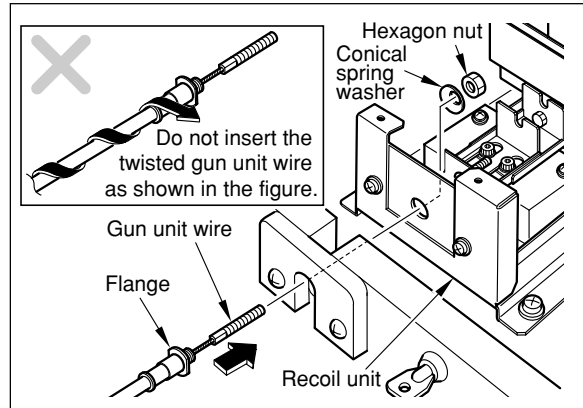


**MEMO**

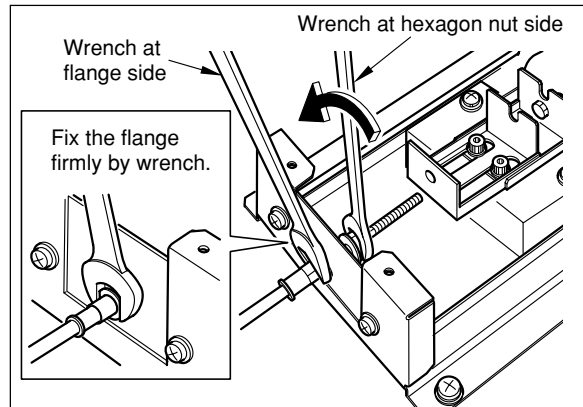
**IMPORTANT** Precautions in connection of the gun unit wire to the recoil unit

When connect the gun unit wire, referring to Step 5 on page 89, connection of twisted gun unit wire may cause malfunction of the unit and breakage of wire. Connect the gun unit wire, paying attention to the following points.

- Insert the gun unit wire straight into the recoil unit so that it should not be twisted.



- Do not move the wrench for fixing the flange while mounting hexagon nut to the gun unit. Otherwise the gun unit wire may be twisted. Mount the hexagon nut by turning the wrench at the hexagon nut side.



- 8 Adjust the gun unit wire, referring to “9-5 Adjusting the gun unit wire” on page 85.
- 9 Plug in the AC power cord and turn ON the power to start the machine. (See page 28.)
- 10 Then, go to the test mode. Check the input check of the gun unit by “INPUT CHECK” on the “I/O CHECK” screen, and check the reaction of the gun unit and calibrate the gun unit by “GUN CHECK”. (See pages 40 to 43.)

## 9-7 Reinstalling the game software



- To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).
- Before reinstalling the game software, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle. Then, start the operation.
- When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.
- Take care not to apply any load or impact to the side door when it is detach.
- After attach the side, be sure to check that the side door is locked securely.
- Be careful not to get the CD-ROM wet, finger-printed, stained or scratched. If the CD-ROM gets stain or dusty, clean it up using a commercially available CD cleaner.

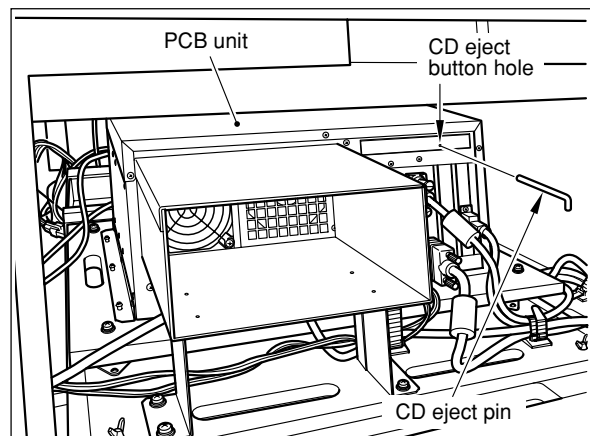
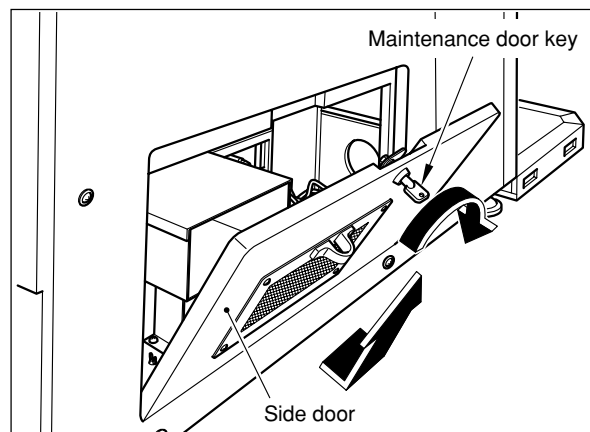
### ■ On reinstallation of game software

If the machine does not operate normally or error arises during the game, try to reinstall the game software by the “SYSTEM DISC” and “APPLICATION DISC”. When the game software has been reinstalled, the values that had been set in test mode having been used up to then and the data that had been accumulated by the “BOOKKEEPING” are deleted. When you want to operate the machine at the same set values as previous ones, it is recommended to record (take down) the set values before reinstallation.

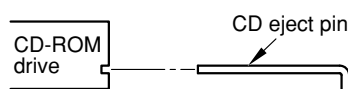
### ■ Installation of SYSTEM DISC (D22 \* 01)



- 1** Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- 2** Insert the attached maintenance door key in the side door and turn it clock wise.
- 3** Dismount the side door while slightly lifting it.
- 4** Insert the included CD eject pin straight into the eject button hole of the PCB unit and draw out the tray by hand.



- Insert the CD eject pin straight in.

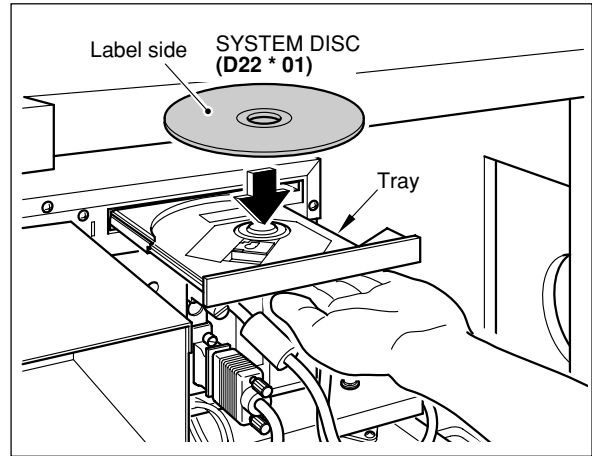


**MEMO**

**5** | Hold the tray by hand and set the SYSTEM DISC (D22 \*01). At this time, the label side (where the title is printed) should face upwards.

**6** | Push the center of the tray until it is all the way in.

**7** | Plug in the AC power cord and turn ON the main power switch to get the machine started.



**8** | After starting, the disc is checked automatically, and when the checking ends, the installation starts.



•Never turn the main power switch OFF during installation.  
•If an error is displayed before the installation, the PCB unit may be damaged. Referring to “9-9 Troubleshooting”, take proper measures. If the same problem still occurs or if a problem not described in this manual happens, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle, and contact your nearest dealer.

**9** | When the installation is completed, the message appears on the monitor screen.

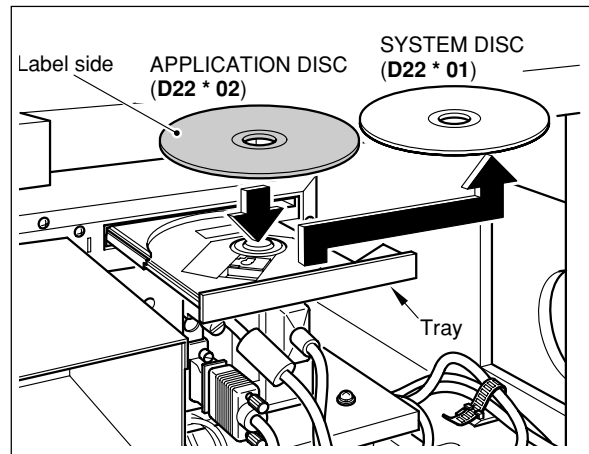
**NO SIGNAL**

**10** | The installation of the SYSTEM DISC has been completed. Carry out the work in “Installation of APPLICATION DISC” in the next page.

## ■ Installation of APPLICATION DISC (D22 \* 02) -----



- 1 Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.
- 2 Take out the SYSTEM DISC referring to the Step 4 on page 95. Then, set the APPLICATION DISC (D22 \* 02) referring to the Steps 5 and 6 on page 96.
- 3 Plug in the AC power cord and turn ON the main power switch to get the machine started.
- 4 After starting, the disc is checked automatically, and when the checking ends, the installation starts.



- Never turn the main power switch OFF during installation.
- If an error is displayed before the installation, the PCB unit may be damaged. Referring to “9-9 Troubleshooting”, take proper measures. If the same problem still occurs or if a problem not described in this manual happens, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle, and contact your nearest dealer.

- 5 When the installation is completed, the message appears on the monitor screen.

**Please extract CD. And please reboot**

- 6 The installation of the APPLICATION DISC has been completed. Carry out the work in “Taking out the APPLICATION DISC” in the next page.

■ Taking out the APPLICATION DISC (D22 \* 02) -----



**1** | Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

**2** | **Important: Taking out the APPLICATION DISC (D22 \* 02)**  
Take out the APPLICATION DISC with reference to the Step 4 on page 95.

- The SYSTEM DISC and APPLICATION DISC will be required when reinstall the game software. Keep them in a safe place.
- Never apply the SYSTEM DISC and APPLICATION DISC to any other game machines, personal computers and audio-visual equipment.

**MEMO**

**3** | Attach the side door (remove in Step 3 on page 95) original position.

**4** | Turn the maintenance door key counterckwise and draw it out.

**5** | Installing has been completed successfully. The game is ready to be played.

- This is the state of factory settings. Carry out the work in the “Game Setting (Setting the Test Mode)” successively. (See pages 39 to 57.)

**MEMO**



## 9-8 Resetting the circuit protector

If an overcurrent or short circuit occurs, the circuit protector will be automatically actuated to protect the electric circuits of the game machine. When resetting the circuit protector, turn OFF the main power switch, unplug the AC power cord from the receptacle, eliminate the cause, and then press the button of the circuit protector.

### ■ How to reset the circuit protector — — — — —

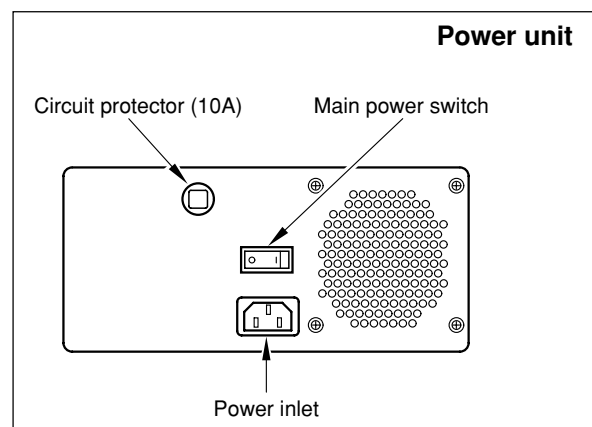


- **To replace parts in this product, or for maintenance or inspections, or to deal with abnormalities, ask a “qualified in-shop maintenance person”, an “industry specialist” or your nearest dealer (You will be charged).**
- **Before resetting the circuit protector, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.**
- **When restart the machine after turning OFF the main power switch, wait for longer than 10 sec. and turn ON the main power switch.**
- **If the circuit protector trips soon again, immediately turn OFF the main power switch, unplug the AC power cord and contact your nearest dealer.**
- **There is high voltage inside the machine. Only the qualified industry specialist is allowed to open the back door. When the back door is opened, use due care not to touch the equipments around the monitor or inside the units unnecessarily.**
- **When opening the back door, be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.**
- **If the machine is in abnormal conditions and does not operate normally, immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.**



- 1** Be sure to turn OFF the main power switch and unplug the AC power cord from the receptacle.

- 2** Remove the cause of the trouble. Press the button on the circuit protector of the power unit.



## 9-9 Troubleshooting

If the power switch is turned ON but the machine fails to start properly, take the following measures. If the machine still malfunctions or any other problem than described below occurs, immediately turn OFF the machine's main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.

**■ When the machine is used alone** — — — — —

Trouble	Possible causes and check points	Measures
Nothing onscreen, and fluorescent lamp (at the title panel) failure to light up.	<ul style="list-style-type: none"> <li>•No power turned ON. (Main power switch, Sub-power switch.)</li> <li>•AC power cord disconnected from the machine or wall outlet.</li> <li>•Connectors not properly reconnected between monitor unit and front unit.</li> <li>•Circuit protector activated.</li> </ul>	<ul style="list-style-type: none"> <li>•Turn ON the power switch. Check also the shop's circuit breaker. (See Page 28.)</li> <li>•Reconnect the AC power cord tightly (See Page 28.)</li> <li>•Reconnect the connector. (See page 71.)</li> <li>•Take an appropriate measure referring to page 99.</li> </ul>
Nothing appearing onscreen, but title panel's fluorescent lamps on.	<ul style="list-style-type: none"> <li>•PCB unit defective.</li> <li>•Monitor defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
Fluorescent lamp (at the title panel) failure to light up.	<ul style="list-style-type: none"> <li>•Fluorescent lamp or glow lamp broken.</li> <li>•Connectors not properly connected between title unit and monitor unit.</li> </ul>	<ul style="list-style-type: none"> <li>•Replace the fluorescent lamp or glow lamp with new one of the same type. (See page 80.)</li> <li>•Reconnect the connector. (See page 68.)</li> </ul>
Screen too dark or too bright. Images out of position on left and right screens.	<ul style="list-style-type: none"> <li>•Monitor maladjusted.</li> </ul>	<ul style="list-style-type: none"> <li>•Referring to "5-4 Adjusting the monitor", readjust the screen brightness and image position. (See page 55.)</li> </ul>
Coins are put in, but the credits in "CREDIT" onscreen are not properly counted.	<ul style="list-style-type: none"> <li>•Microswitch of the coin selector or coin selector defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Check the performance, referring to "INPUT CHECK" on the "I/O CHECK" screen. (See pages 40,41.) If NG, replace the microswitch. If OK, replace the coin selector. (See page 79.)</li> </ul>

Trouble	Possible causes and check points	Measures
Coin input port failure to light up.	<ul style="list-style-type: none"> <li>•Lamp of the coin input port broken.</li> </ul>	<ul style="list-style-type: none"> <li>•Replace the lamp with new one of the same type. (See page 79.)</li> </ul>
No sound or too loud (or too soft) sound.	<ul style="list-style-type: none"> <li>•Sound level maladjusted.</li> <li>•Connectors of speakers disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>•Make proper setting on the "SOUND OPTIONS" screen. (See page 47.)</li> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
Sensor does not react at all or reacts abnormally.	<ul style="list-style-type: none"> <li>•Monitor glass covered by something.</li> <li>•Sensor(s) exposed to direct sunlight, strong light or infrared light.</li> <li>•Other game machine or the like using infrared ray set up near this machine.</li> <li>•Connectors not connected properly between monitor unit and front unit.</li> <li>•Trouble with sensor.</li> </ul>	<ul style="list-style-type: none"> <li>•Make sure the 10 sensors are not blocked.</li> <li>•Relocate the machine to a place not exposed to direct sunlight, strong light or infrared light. (See page 64.)</li> <li>•Change "FREQUENCY ID" by "GUN CHECK" on the "I/O CHECK" screen. (See pages 40,42) If the same symptom persists, then relocate the machine. If the trouble persists, move this machine to other place.</li> <li>•Reconnect the connector. (See page 71.)</li> <li>•Check the performance, referring to "GUN CHECK" on the "I/O CHECK" screen. (See pages 40,42.) Immediately turn OFF the main power switch, unplug the AC power cord and contact your nearest dealer.</li> </ul>
Lamp of the floor unit failure to light up.	<ul style="list-style-type: none"> <li>•Connectors not properly connected between front unit and floor unit.</li> </ul>	<ul style="list-style-type: none"> <li>•Reconnect of the connector. (See pages 73,74.)</li> </ul>
Floor unit failure to vibrate.	<ul style="list-style-type: none"> <li>•Connectors not properly connected between front unit and floor unit.</li> </ul>	<ul style="list-style-type: none"> <li>•Reconnect of the connector. (See pages 73,74.)</li> </ul>

Trouble	Possible causes and check points	Measures
Gun unit malfunctioning.	<ul style="list-style-type: none"> <li>•Muzzle's coordinates sensor exposed to direct sunlight, spotlight or infrared light source.</li> <li>•Connectors of gun unit disconnected.</li> <li>•Trigger microswitch defective.</li> <li>•Gun unit defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Relocate the machine to a place not exposed to direct sunlight or light source such as spotlight. (See page 64.)</li> <li>•Check the connectors for poor contact. (See page 89.)</li> <li>•Check the performance, referring to "INPUT CHECK" on the "I/O CHECK" screen. (See pages 40,41.) If malfunctioning, contact your nearest dealer.</li> <li>•Check the performance on the "GUN CHECK" screen. (See pages 40,42.) If malfunctioning, replace the gun unit with new one. (See page 88.)</li> </ul>
Recoil of the gun unit does not work normally.	<ul style="list-style-type: none"> <li>•Gun trigger is pulled while aiming at the outside of the screen.</li> <li>•Gun unit cable and wire are twisted.</li> <li>•Gun unit wire is elongated or not adjusted appropriately.</li> <li>•Gun unit wire is broken.</li> <li>•Connector of the recoil unit disconnected.</li> <li>•Recoil unit defective.</li> </ul>	<ul style="list-style-type: none"> <li>•The gun unit is set so that the recoil action is weakened when aiming at the outside of the screen. Check the gun unit action by aiming at the inside of the screen.</li> <li>•Untwist the gun unit cable and wire and check the gun unit action. (See page 37.)</li> <li>•Re-adjust the gun unit wire. (See page 85.)</li> <li>•Replace the gun unit. (See page 88.)</li> <li>•Check the connector for poor contact. (See page 89.)</li> <li>•Check the performance on the "GUN CHECK" screen. (See pages 40,42.) If malfunctioning, replace the recoil unit with new one. (See page 92.)</li> </ul>

Trouble	Possible causes and check points	Measures
<p>“BAD” appearing repeatedly onscreen by “HDD CHECK” in test mode.</p>	<ul style="list-style-type: none"> <li>•Hard disk drive defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
<p>“ERROR” displayed when the program is to be reinstalled.</p>	<ul style="list-style-type: none"> <li>•PCB unit is broken, or something wrong with the hardware.</li> </ul>	<ul style="list-style-type: none"> <li>•Turn OFF the main power switch and re-install the game software. (See pages 95 to 98.)</li> <li>•If the above step still fail, jot down the error, immediately turn OFF the main power switch, unplug the AC power cord and contact your nearest dealer.</li> </ul>
<p><b>DATA CHECK (*) ERROR</b> is displayed on the screen after re-installation of software.</p>	<ul style="list-style-type: none"> <li>•The data is initialized and returned to the factory settings by re-installation.</li> </ul>	<ul style="list-style-type: none"> <li>•Press the test button according to the instruction displayed on the screen, proceed to “MAIN MENU” of test mode and then carry out various settings. (See pages 39 to 54.)</li> </ul>
<p><b>I/O BOARD INITIALIZE FATAL ERROR</b> displayed on screen.</p>	<ul style="list-style-type: none"> <li>•Connector of the I/O PCB disconnected or defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
<p><b>GUN BOARD INITIALIZE ERROR</b> or <b>GUN BOARD ERROR</b> displayed on screen.</p>	<ul style="list-style-type: none"> <li>•Connector of the gun PCB disconnected or defective.</li> </ul>	<ul style="list-style-type: none"> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
<p><b>SECURITY ERROR</b> displayed on screen.</p>	<ul style="list-style-type: none"> <li>•Security plug is not set.</li> </ul>	<ul style="list-style-type: none"> <li>•Set the security plug. (See pages 75.)</li> </ul>
<p><b>HARDWARE ERROR</b> displayed on screen.</p>	<ul style="list-style-type: none"> <li>•Something wrong with the hardware.</li> </ul>	<ul style="list-style-type: none"> <li>•Immediately turn OFF the main power switch, unplug the AC power cord from the receptacle and contact your nearest dealer.</li> </ul>
<p><b>SYSTEM DATA CHECK (*) ERROR</b> displayed on screen.</p>	<ul style="list-style-type: none"> <li>•Something wrong with the hardware.</li> </ul>	<ul style="list-style-type: none"> <li>•Turn OFF the main power switch and reinstall the game software. (See pages 95 to 98.)</li> </ul>

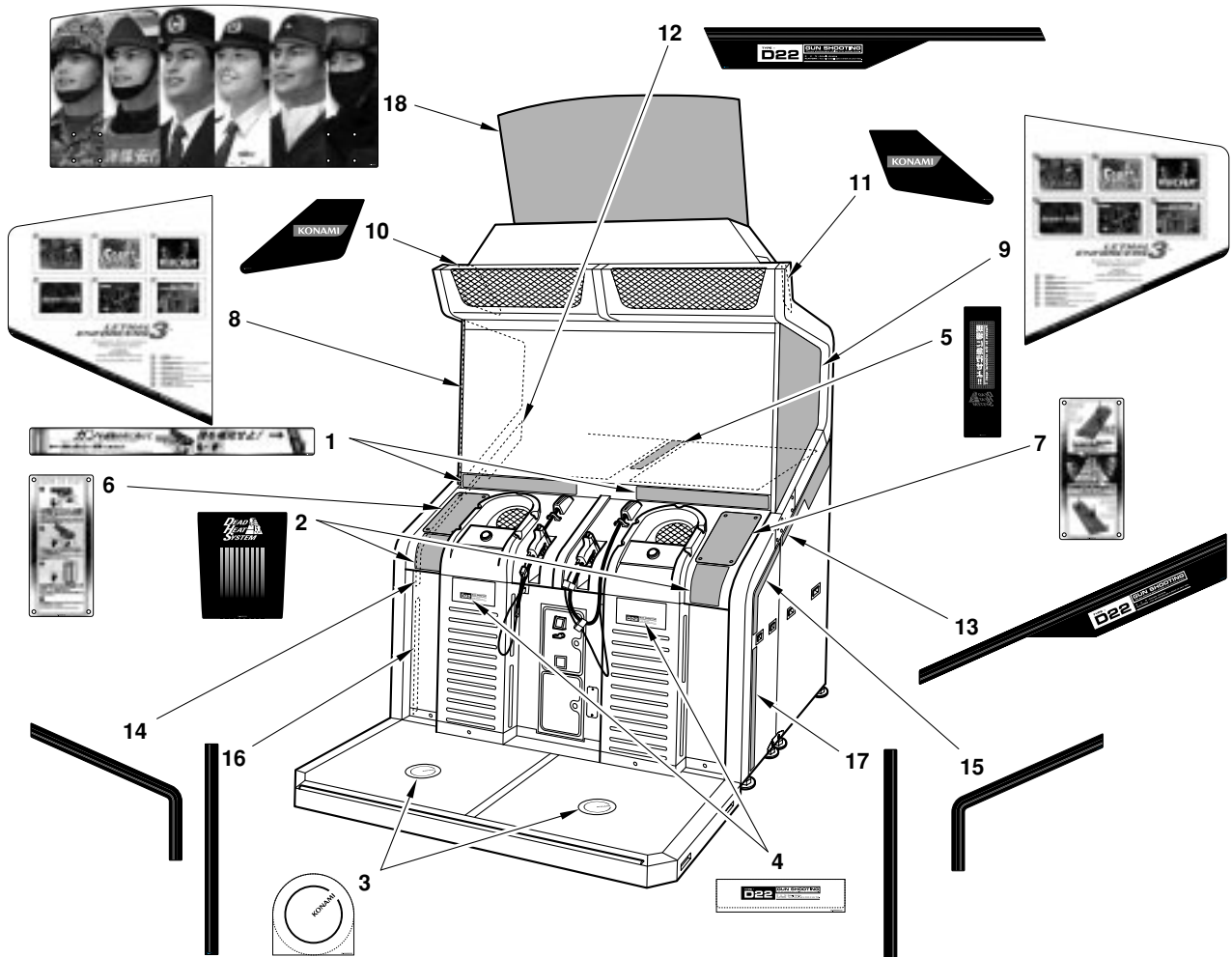
# MEMO

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# 10 Annex

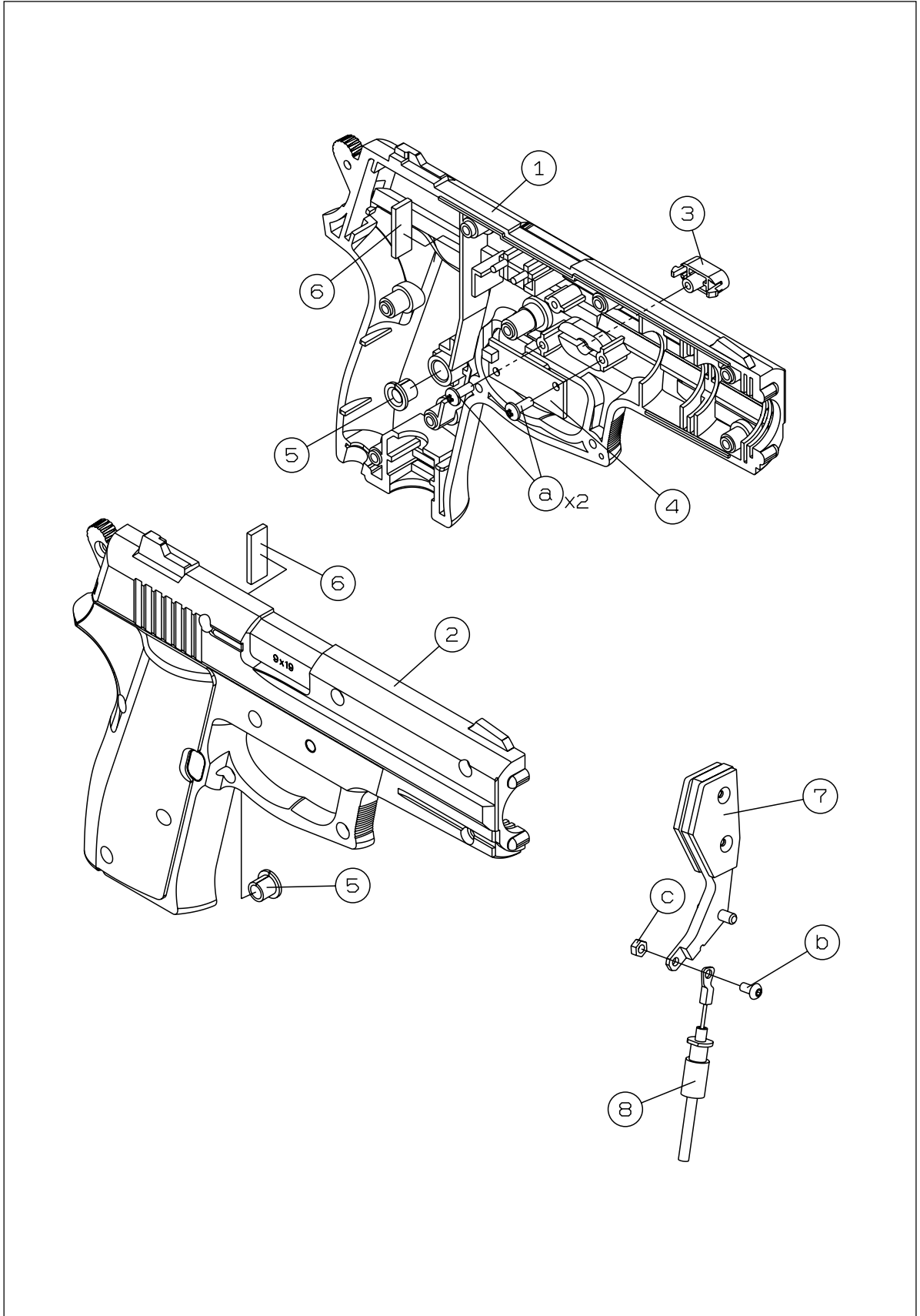
## 10-1 Label locations and exploded view

■ Label, billboard



No.	CODE No.	NAME	QTY	NOTE
1	0000354710	LABEL, PLAY	2	
2	0000354762	LABEL, FRONT	2	
3	0000366222	LABEL, KONAMI/B	2	
4	0000366220	LABEL, COVER	2	
5	0000366258	LABEL, DHS	2	
6	0000376066	LABEL, CONTROL/L	1	
7	0000367493	LABEL, CONTROL/R	1	
8	0000368352	LABEL, SIDE/L/HD	1	
9	0000368403	LABEL, SIDE/R/HD	1	
10	0000354761	LABEL, KONAMI/A/L	1	
11	0000363338	LABEL, KONAMI/A/R	1	
12	0000354763	LABEL, LINE/L/A	1	
13	0000354766	LABEL, LINE/R/A	1	
14	0000354764	LABEL, LINE/L/B	1	
15	0000354767	LABEL, LINE/R/B	1	
16	0000354765	LABEL, LINE/L/C	1	
17	0000354768	LABEL, LINE/R/C	1	
18	0000354773	POP	1	Billboard

■ FIG.1 UNIT, RECOIL GUN(1/2) - - - - -





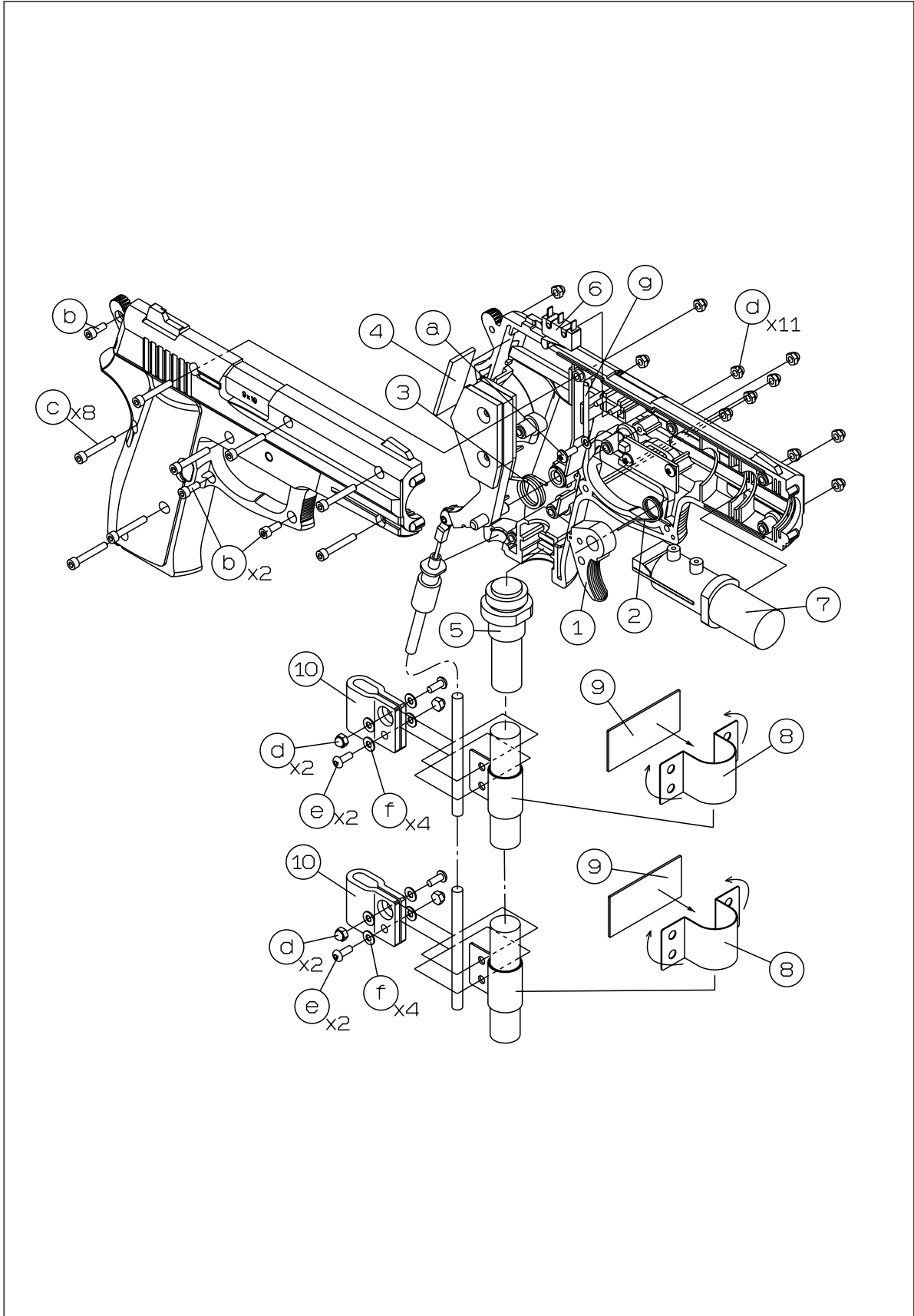
## UNIT,RECOIL GUN(1/2)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000377043	CASE,GUN(L)		2	
2	0000377022	CASE,GUN(R)		2	
3	0000377020	BUTTON		2	
4	0000361846	UNIT,PCB(G)		2	
5	0000363339	BUSH		4	
6	0000366174	STOPPER		4	
7	0000366170	WEGHT		2	
8	0000363379	TUBU,WIRE		2	

## UNIT,RECOIL GUN(1/2)SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS P-TITE BIND	M3×8	4	
b	BOLT,HEXAGON SOCKET BUTTON	M4×8	2	
c	NUT,HEXAGON	M4	2	

■ FIG.2 UNIT, RECOIL GUN(2/2) - - - - -



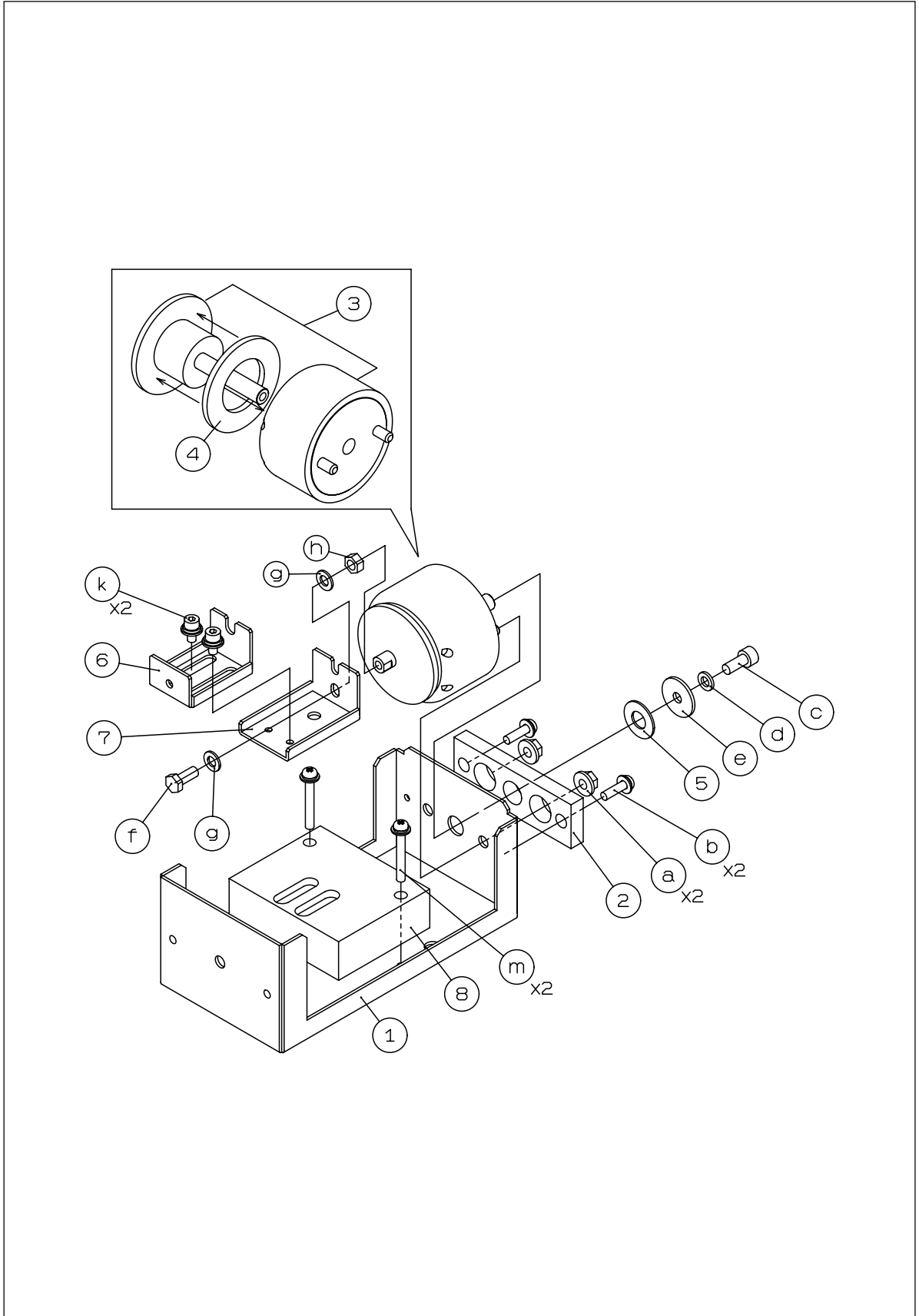
## UNIT,RECOIL GUN(2/2)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000377021	TRIGGER		2	
2	0000366861	SPRING		2	
3	0000366862	SPRING		2	
4	0000366173	STOPPER		2	
5	0000363378	CABLE,FLEXIBLE		2	
6	0000367095	ASS'Y,WIRING(TRIG)		2	Expendables
7	0000126505	#PCB,UNIT		2	
8	0000366169	BRACKET,CABLE		4	
9	0000367913	TAPE,SPONGE		4	
10	0000366189	COVER,CABLE		4	

## UNIT,RECOIL GUN(2/2)SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS P-TITE BIND	M3 × 8	2	
b	BOLT,HEXAGON SOCKET CAP	M3 × 8	6	
c	BOLT,HEXAGON SOCKET CAP	M3 × 20	16	
d	NUT,DOMED CAP	M3	30	
e	BOLT,HEXAGON SOCKET BUTTON	M3 × 8	8	
f	WASHER,PLAIN	d3	16	
g	CLIP,COATING	CS-1	2	

■ FIG.3 ASS'Y, RECOIL MECH(1/2) - - - - -



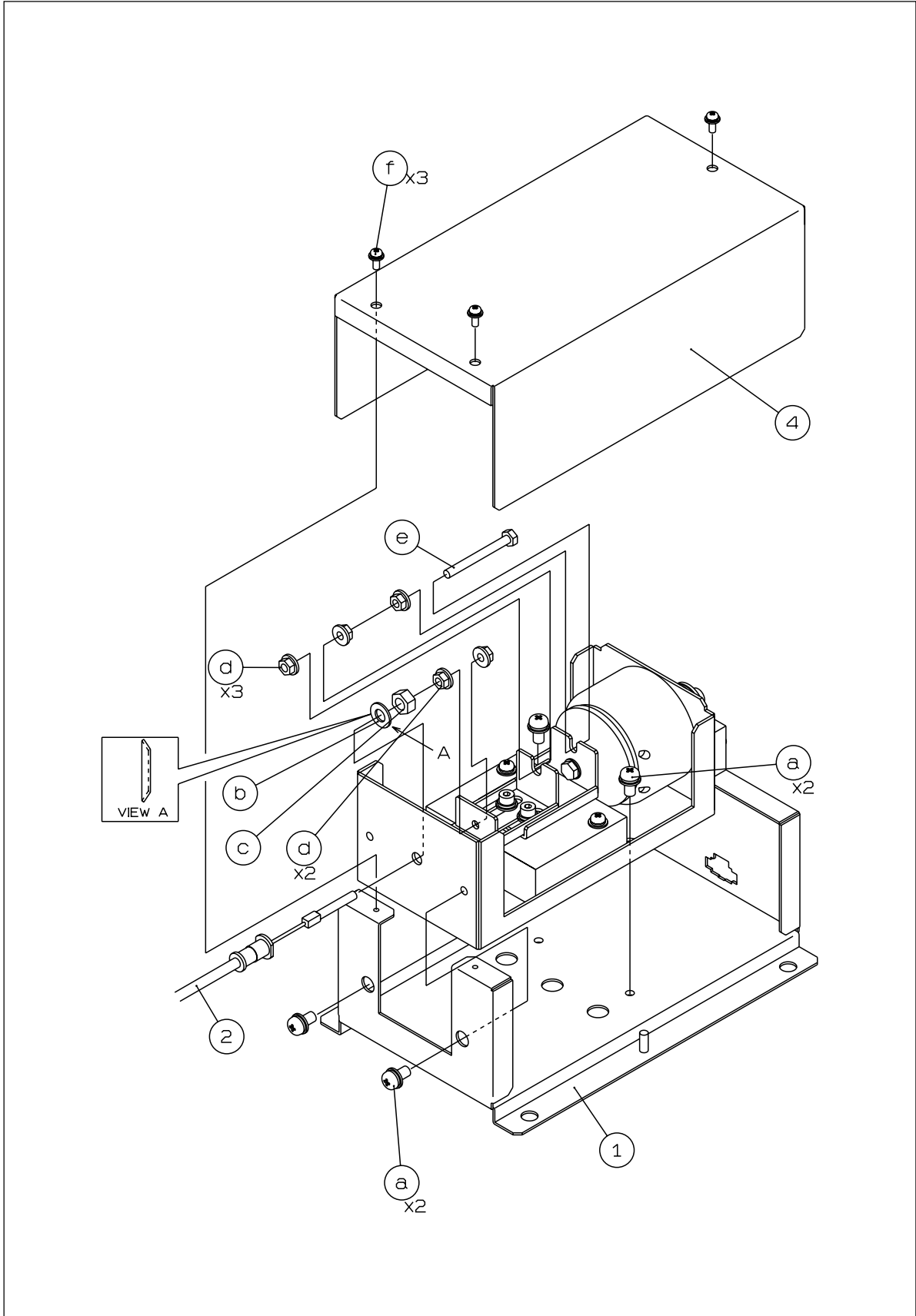
## ASS'Y,RECOIL MECH(1/2)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000369062	BRACKET,SOLENOID		2	
2	0000366175	STOPPER		2	
3	0000363478	SOLENOID		2	
4	0000366172	SHEET,SPONGE		2	
5	0000366171	SHEET,RUBBER		2	
6	0000366166	BRACKET,CABLE		2	
7	0000368954	BRACKET,CABLE		2	
8	0000375580	FIXTURE,SOLENOID		2	

## ASS'Y,RECOIL MECH(1/2)SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	NUT,HEXAGON WITH FLANGE	M5	4	
b	SCREW,CROSS PAN SEMS	M4×15 SW,PW	4	
c	BOLT,HEXAGON SOCKET CAP	M5×12	2	
d	WASHER,SPRING	d 5	2	
e	WASHER,PLAIN	d 5 (D20 T1.6)	2	
f	BOLT,HEXAGON	M5×12	2	
g	WASHER,PLAIN	d5	4	
h	NUT,HEXAGON	M5	2	
k	BOLT,HEXAGON SOCKET CAP	M4×8 SW,PW	4	
m	SCREW,CROSS PAN SEMS	M4×30 SW,PW	4	

■ FIG.4 ASS'Y, RECOIL MECH(2/2) - - - - -



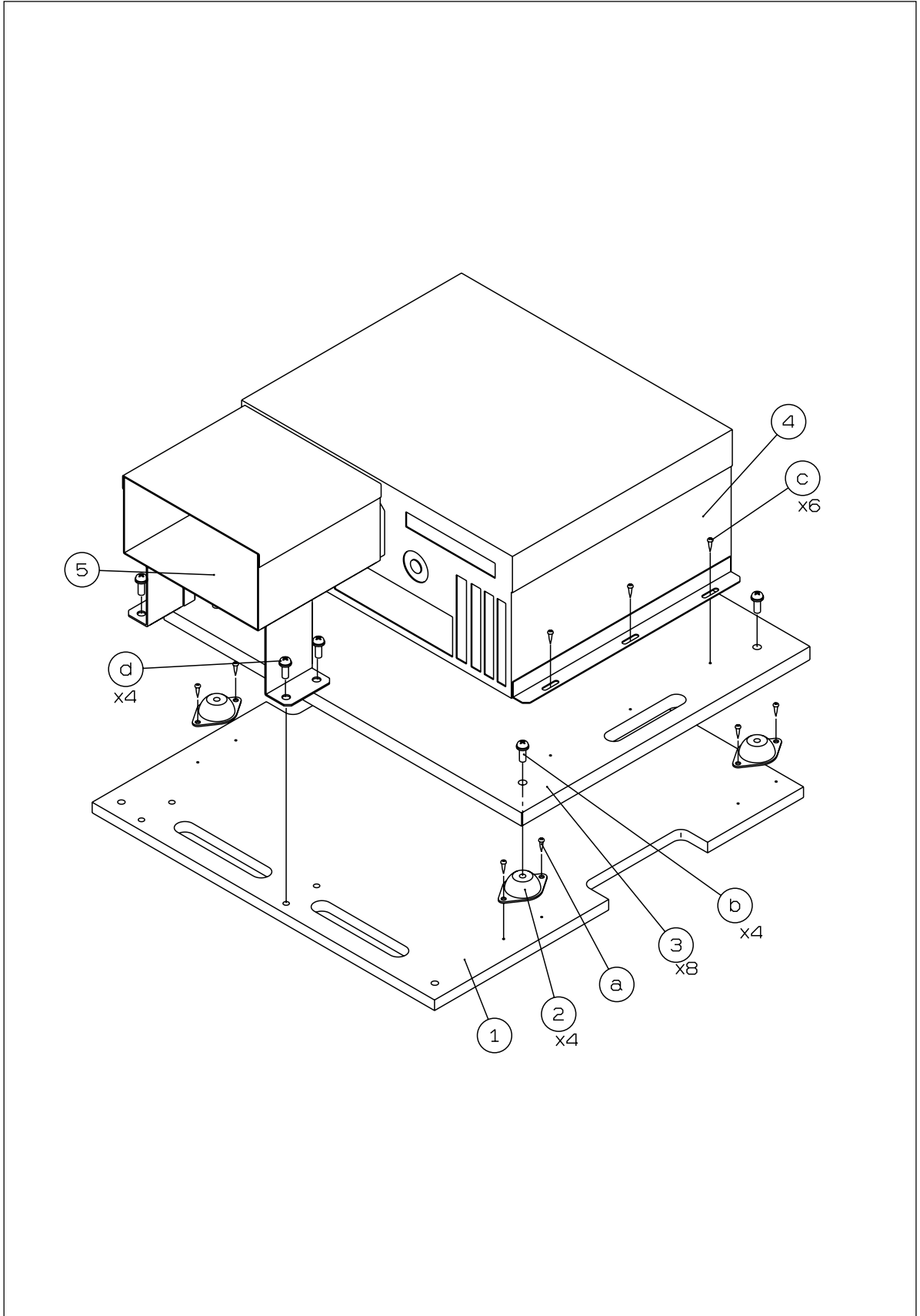
## ASS'Y,RECOIL MECH(2/2)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000373016	BOX,SOLENOID		2	
2	0000377044	UNIT,RECOIL GUN		2	Refer to Fig.1,2
3	0000366168	COVER,BOX		2	

## ASS'Y,RECOIL MECH(2/2)SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M5 × 10 SW,PW	8	
b	WASHER,CONICAL SPRING	d6 (D12.5 T0.7 H1.0)	2	
c	NUT,HEXAGON	M6	2	
d	NUT,HEXAGON WITH FLANGE	M4	10	
e	BOLT,HEXAGON	M4 × 40	2	
f	SCREW,CROSS PAN SEMS	M3 × 8 SW,PW	6	

■ FIG.5 ASS'Y, PCB





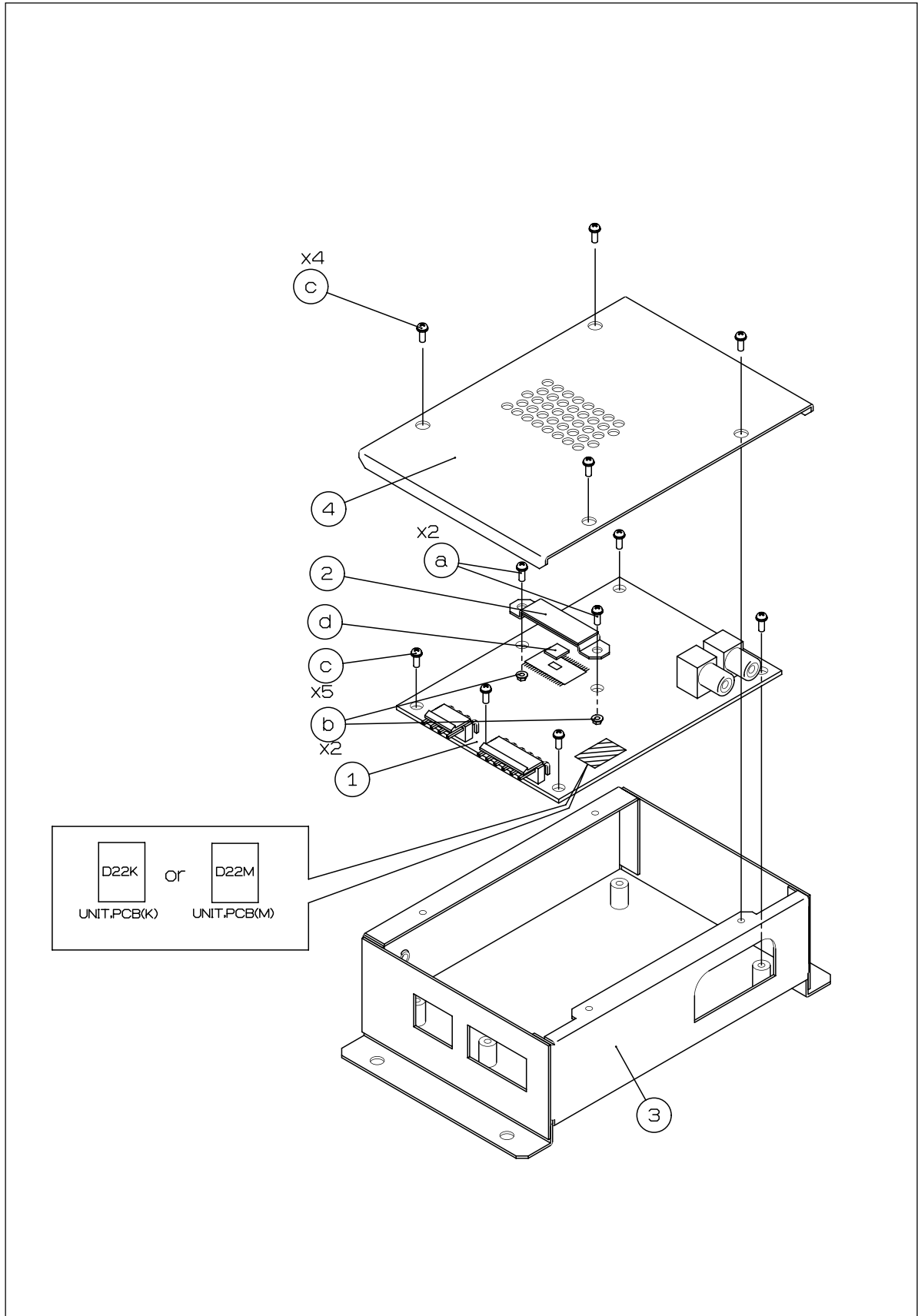
## ASS'Y,PCB

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365751	BOARD,PCB		1	
2	0000099027	RUBBER,VIB.CTRL		4	
3	0000365750	BOARD,PCB		1	
4	0000362202	PCB,ATX		1	
5	0000372924	COVER,DUCT		1	

## ASS'Y,PCB SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS WODD ROUND	d3.1X13	8	
b	SCREW,CROSS PAN SEMS	M6X25 SW,PW	4	
c	SCREW,CROSS TAPPING TRUSS	d3.5X12	6	
d	SCREW,CROSS PAN SEMS	M6X15 SW,PW	4	

■ FIG.6 ASS'Y, PCB BOX(AMP) - - - - -



## ASS'Y,PCB BOX(AMP)(UNIT,PCB(K))

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000361848	UNIT,PCB(K)		1	D22K
2	0000365850	PLATE,PCB		1	
3	0000365824	BOX,PCB		1	
4	0000365849	COVER,BOX		1	

## ASS'Y,PCB BOX(AMP)(UNIT,PCB(K)) SCREW etc.

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS		M3X10 SW	2	
b	NUT HEXAGON WITH FLANGE		M3	2	
c	SCREW,CROSS PAN SEMS		M3X8 SW,PW	9	
d	HEAT CONDUCTION SHEET		TMS-M-1 7X7(HC)	1	

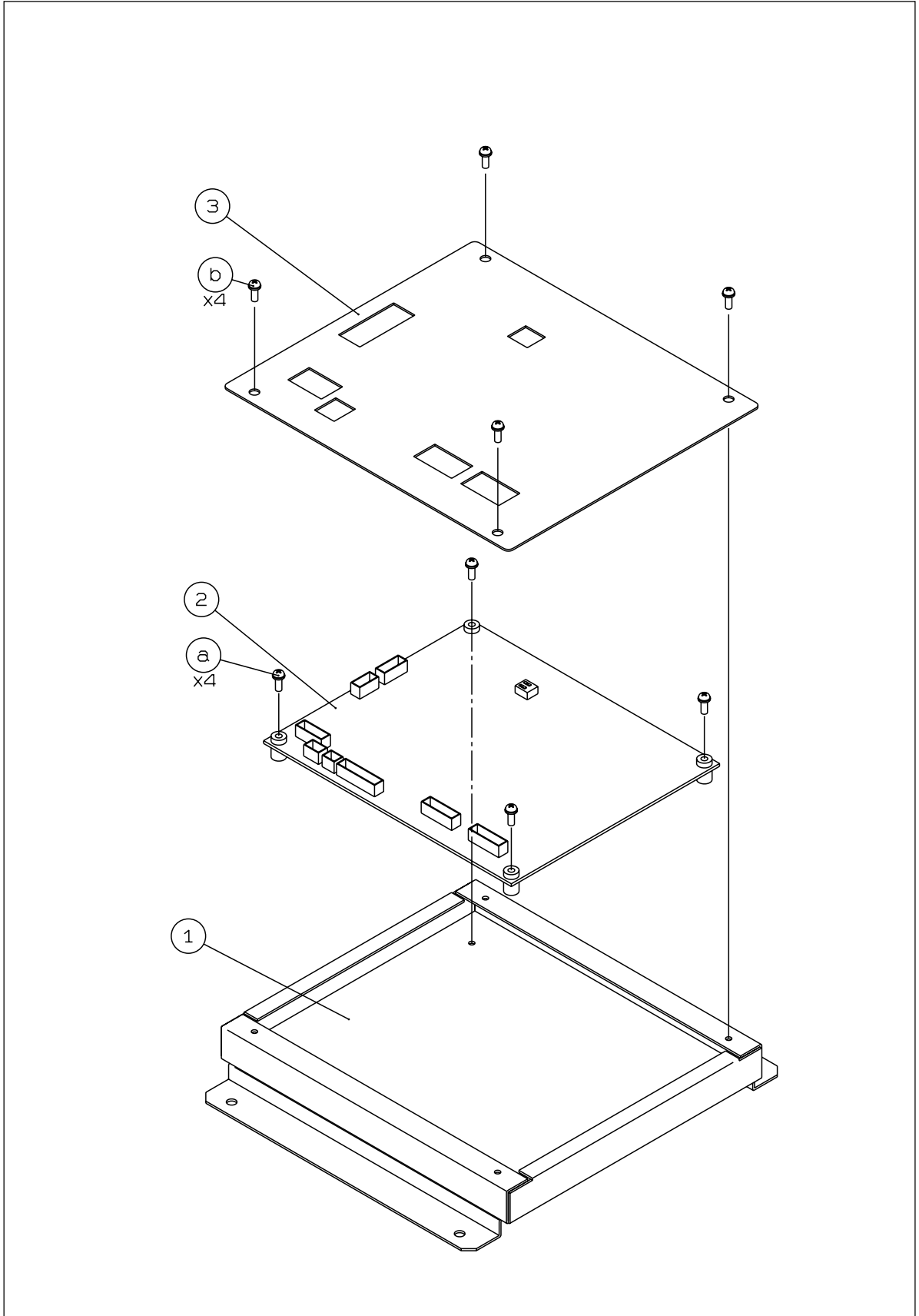
## ASS'Y,PCB BOX(AMP)(UNIT,PCB(M))

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000355841	UNIT,PCB(M)		2	D22M
2	0000365850	PLATE,PCB		2	
3	0000365824	BOX,PCB		2	
4	0000365849	COVER,BOX		2	

## ASS'Y,PCB BOX(AMP)(UNIT,PCB(M)) SCREW etc.

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS		M3X10 SW	4	
b	NUT HEXAGON WITH FLANGE		M3	4	
c	SCREW,CROSS PAN SEMS		M3X8 SW,PW	18	
d	HEAT CONDUCTION SHEET		TMS-M-1 7X7(HC)	2	

■ FIG.7 ASS'Y, PCB BOX(SEN) - - - - -



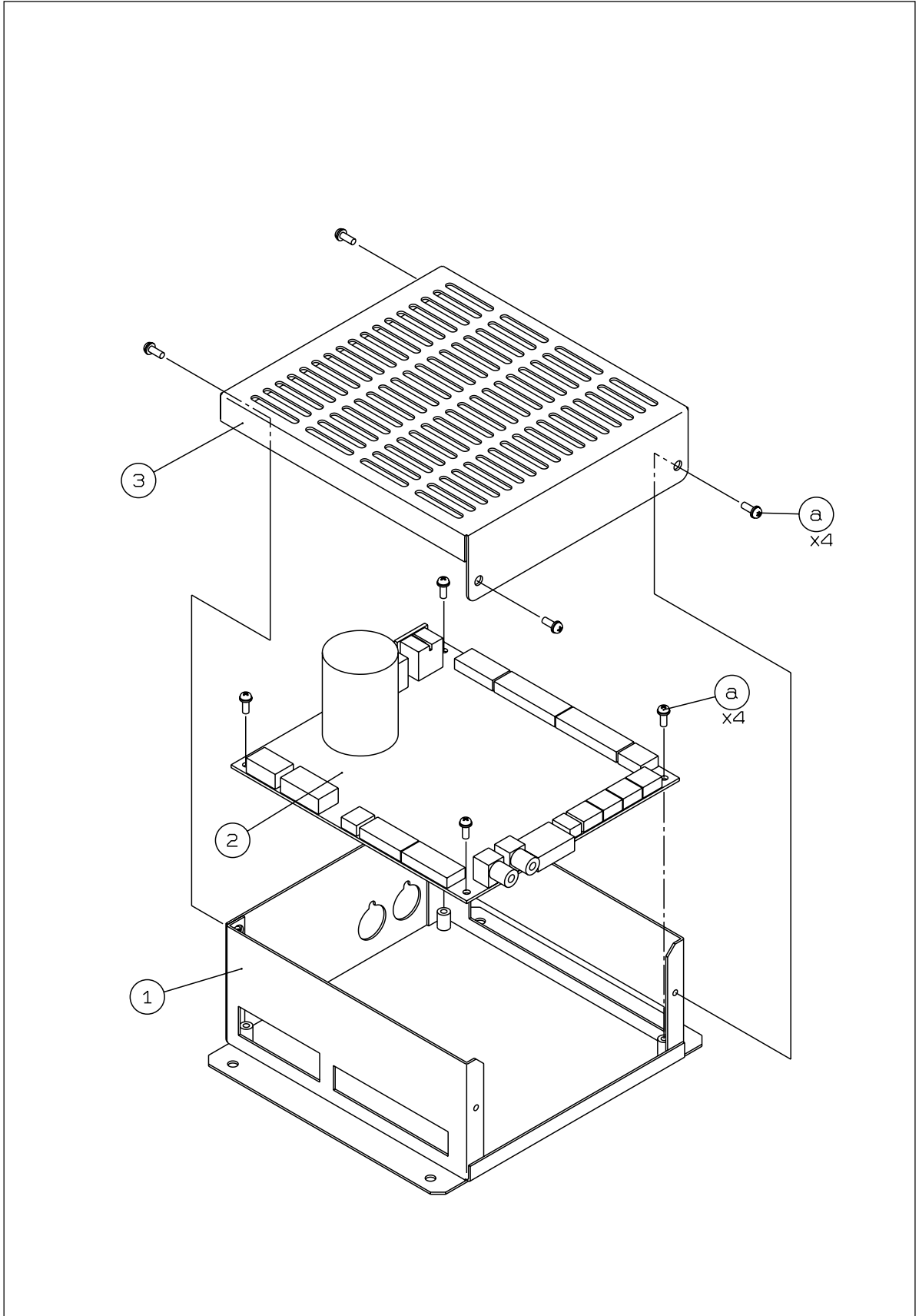
## ASS'Y,PCB BOX(SEN)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000367269	BOX,PCB		1	
2	0000362207	#PCB UNIT		1	
3	0000367270	COVER,BOX		1	

## ASS'Y,PCB BOX(SEN) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M3X20 SW,PW	4	
b	SCREW,CROSS PAN SEMS	M3X8 SW,PW	4	

■ FIG.8 ASS'Y, PCB BOX(IO) - - - - -



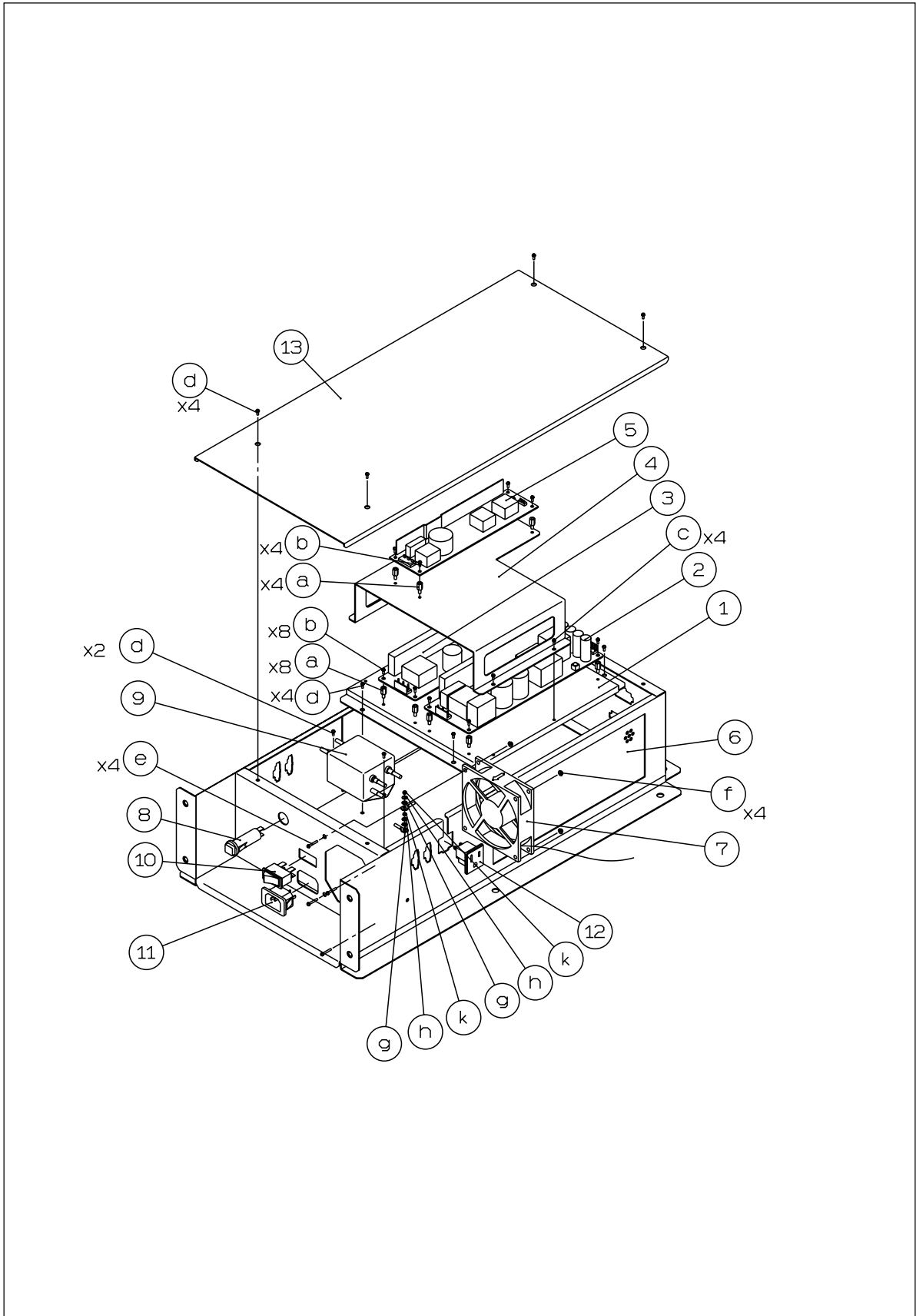
## ASS'Y,PCB BOX(IO)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365822	BOX,PCB		1	
2	0000369848	UNIT,PCB(1)		1	
3	0000365823	COVER,BOX		1	

## ASS'Y,PCB BOX(IO) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M3X8 SW,PW	8	

■ FIG.9 ASS'Y, POWER BOX





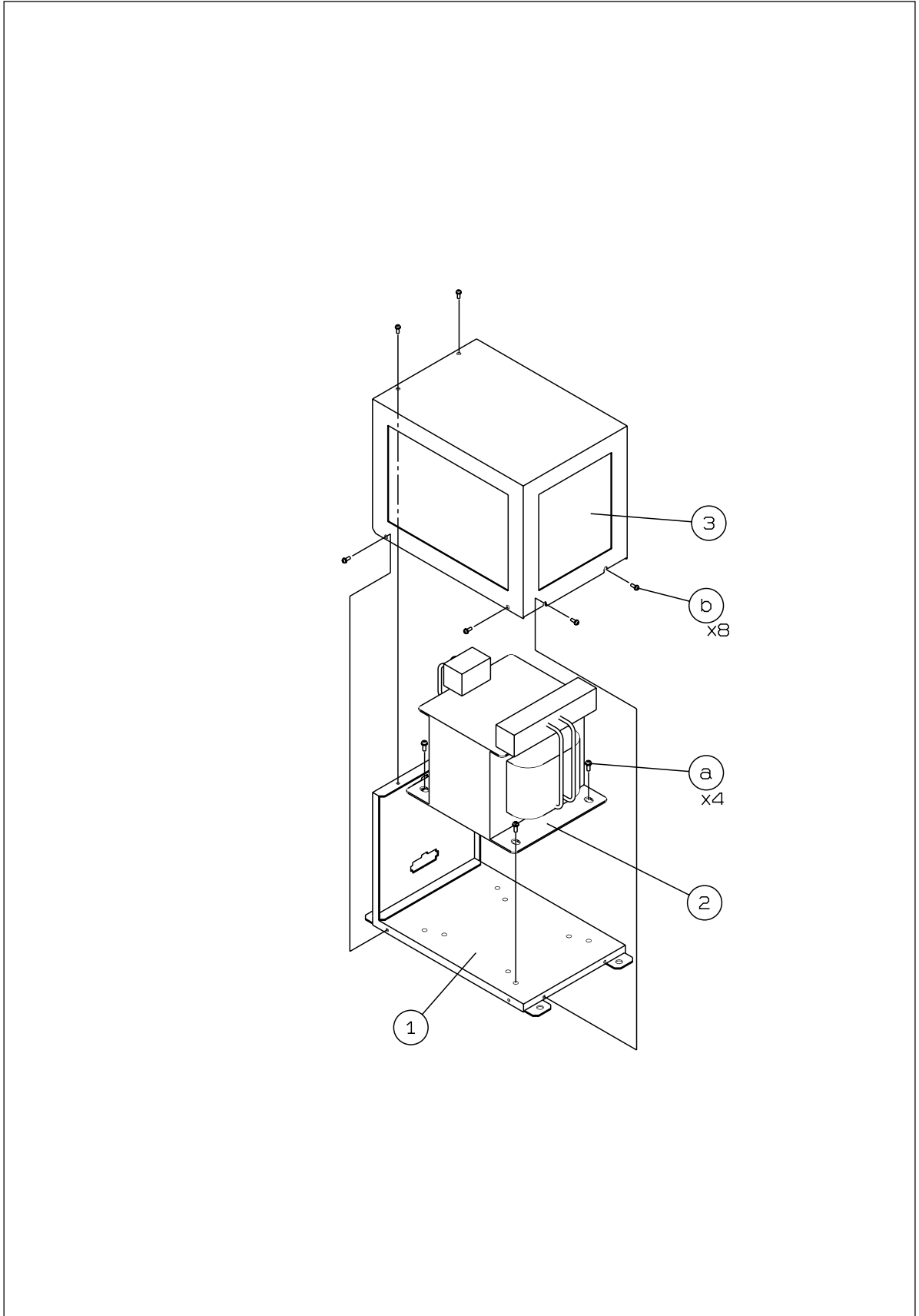
## UNIT,POWER BOX

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365798	BRACKET,P.SUPPLY		1	
2	0000060477	SUPPLY,POWER		1	
3	0000063605	SUPPLY,POWER		1	
4	0000372923	BRACKET,P.SUPPLY		1	
5	0000046734	SUPPLY,POWER		1	
6	0000365767	BOX,POWER		1	
7	0000297288	MOTOR,FAN		1	
8	0000036921	PROTECTOR,CIRCUIT		1	
9	0000003180	FILTER,NOISE		1	
10	0000110013	SWITCH,ROCKER		1	
11	0000031056	INLET,AC		1	
12	0000031059	OUTLET,AC		1	
13	0000190500	COVER,BOX		1	

## UNIT,POWER BOX SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SPACER,BRASS	BSB-308	12	
b	SCREW,CROSS PAN SEMS	M3X6 SW	12	
c	SCREW,CROSS PAN SEMS	M3X8 SW,PW	4	
d	SCREW,CROSS PAN SEMS	M4X10 SW,PW	10	
e	SCREW,CROSS PAN SEMS	M4X35 SW,PW	4	
f	NUT,HEXAGON WITH FLANGE	M4	4	
g	WASHER,PLAIN	d4	2	
h	WASHER,SPRING	d4	2	
k	NUT,HEXAGON	M4	2	

■ FIG.10 ASS'Y, TRANSFORMER — — — — —



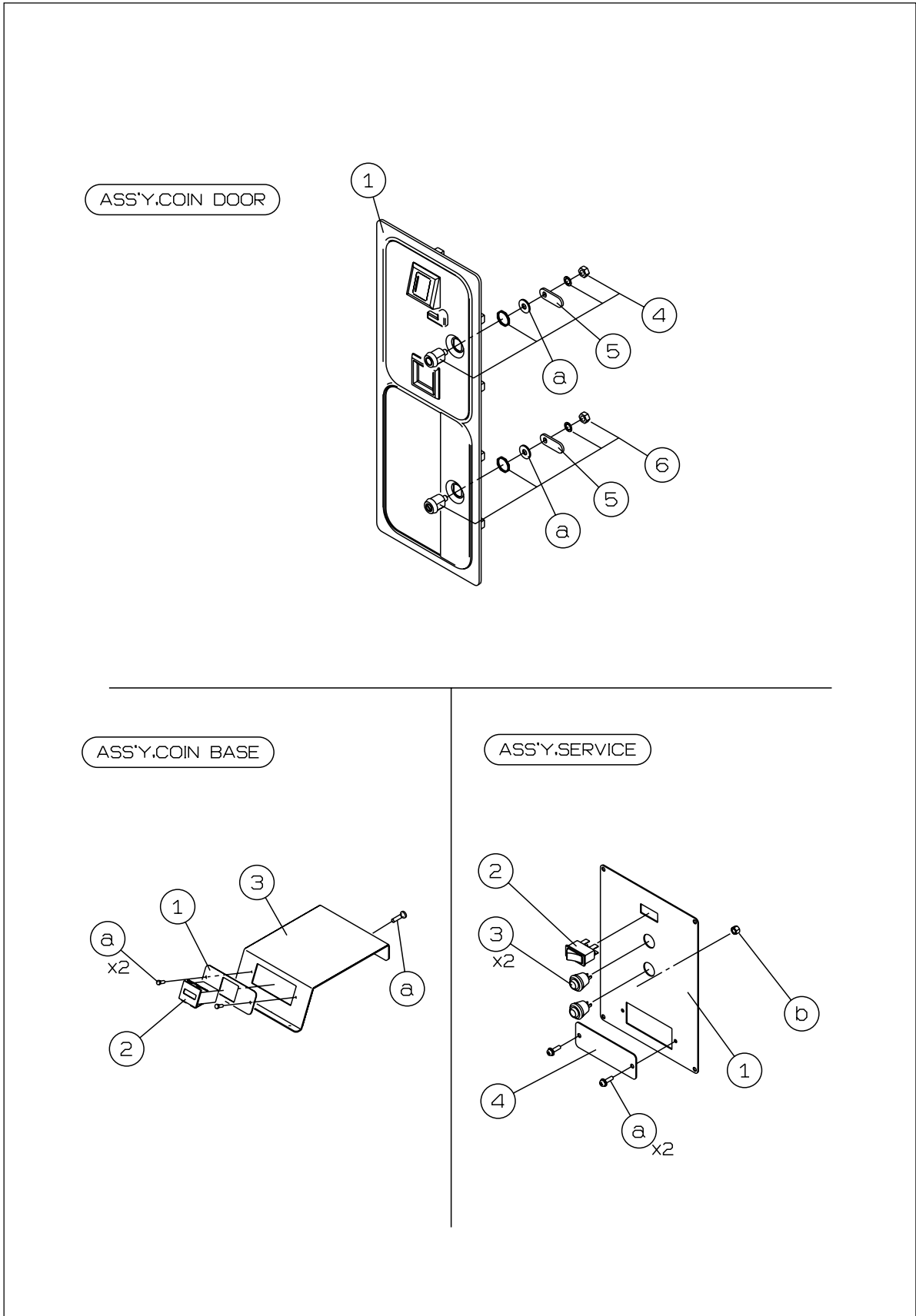
## UNIT, TRANSFORMER

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000036573	BASE, TRANSFORMER		1	
2	0000065795	TRANSFORMER		1	
3	0000303559	COVER, TRANSFORMER		1	

## UNIT, TRANSFORMER SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW, CROSS PAN SEMS	M6X12 SW, PW	4	
b	SCREW, CROSS PAN SEMS	M4X10 SW, PW	8	

■ FIG.11 ASS'Y - - - - -



## ASS'Y, COIN DOOR

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000086341	DOOR, COIN	NAD-W1-KBHA	1	HD, Include No.2 and 3
	0000086343	DOOR, COIN	NAD-W1-KBTA	1	TB, Include No.2 and 3
2	0000034489	LAMP	T10BA9S	1	Expendables
3	0000042050	SWITCH, MICRO	V4-5210M-A	1	Expendables
4	0000097424	LOCK		1	2Keys and Cylinder
5	0000254433	PLATE, LOCK		2	
6	0000265203	LOCK		1	2Keys and Cylinder

## ASS'Y, COIN DOOR SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	WASHER, PLAIN	d8 (D18, T2)	2	

## ASS'Y, COIN BASE

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000096147	BRACKET, COUNTER		1	
2	0000110050	COUNTER		1	
3	0000102028	BASE, COIN BOX		1	

## ASS'Y, COIN BASE SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW, CROSS PAN SEMS	M4X10 SW, PW	3	

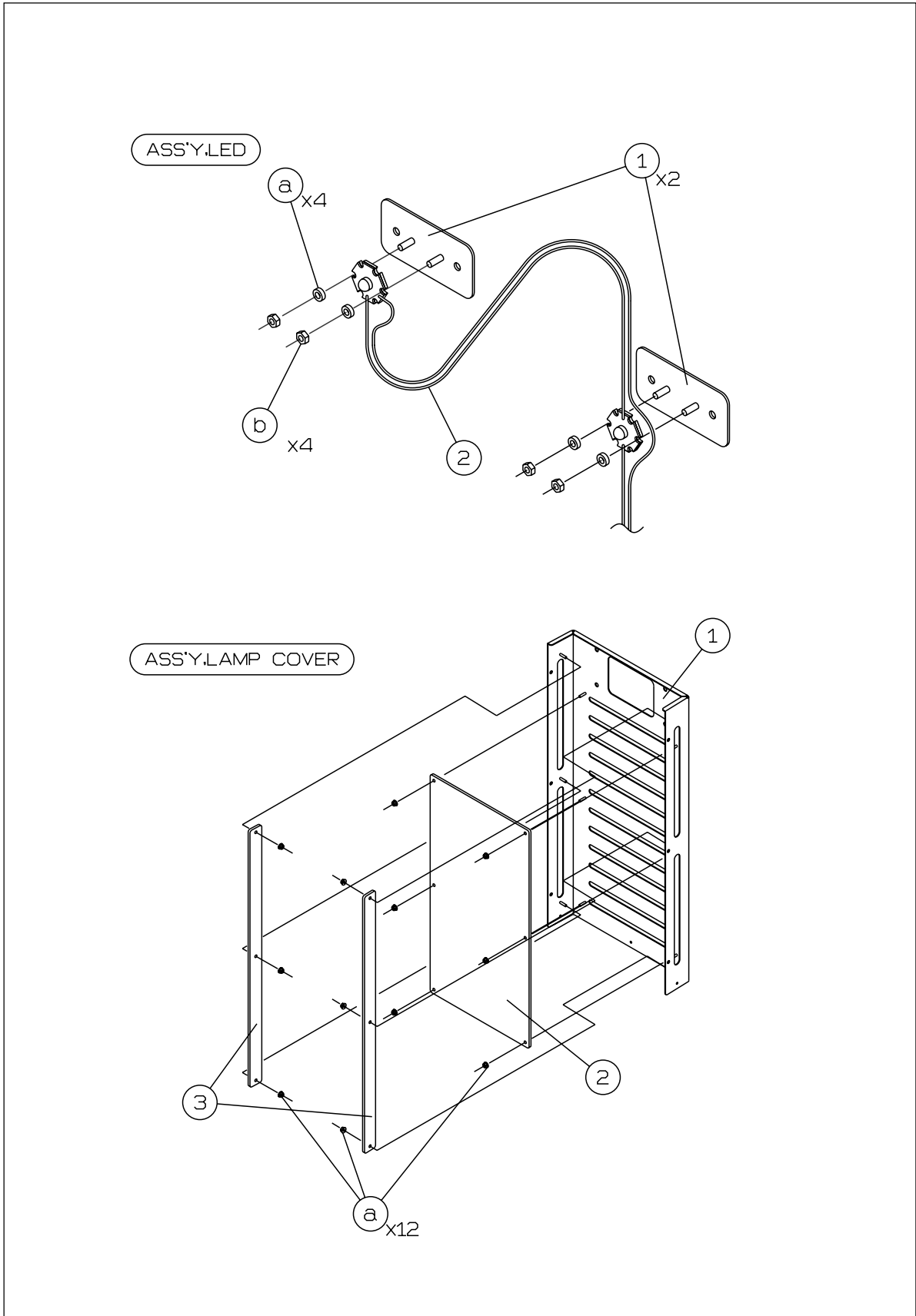
## ASS'Y, SERVICE

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000106667	PLATE, SERVICE		1	
2	0000110013	SWITCH, ROCKER		1	
3	0000005098	SWITCH, PUCH		2	
4	000096148	COVER, COUNTER		1	

## ASS'Y, SERVICE SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW, CROSS PAN SEMS	M4X10 SW, PW	2	
b	NUT, HEXAGON WITH FLANGE	M4	1	

■ FIG.12 ASS'Y, LED



## ASS'Y,LED

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365836	BRACKET,LED		8	
2	0000361689	HARNESS,LED		4	

## ASS'Y,LED SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SPACER,POM	C-302	16	
b	NUT,HEXAGON	M3	16	

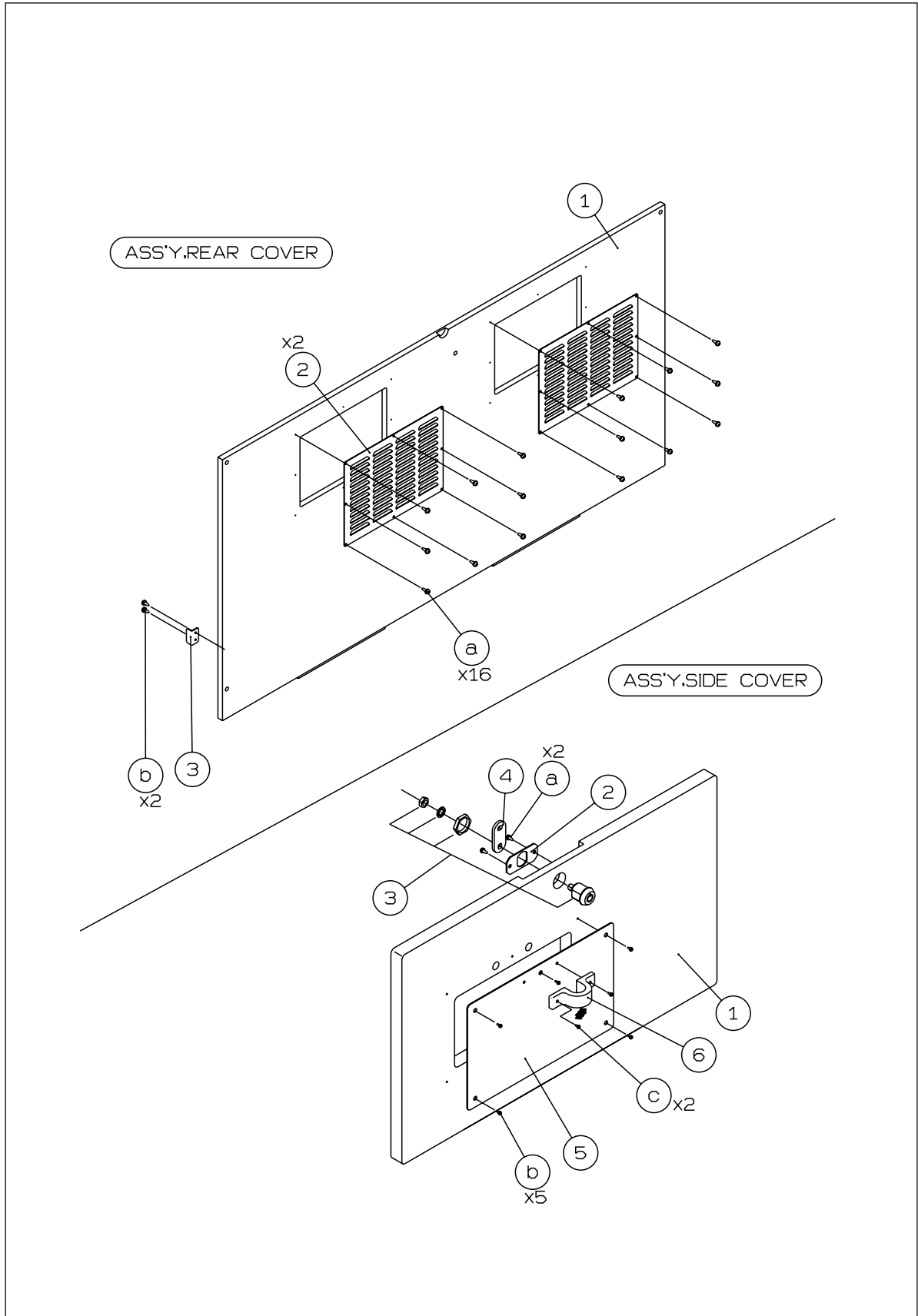
## ASS'Y,LAMP COVER

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000366464	COVER,LAMP		2	
2	0000366480	PLATE,LAMP		2	
3	0000366481	PLATE,LAMP		4	

## ASS'Y,LAMP COVER SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	NUT,HEXAGON WITH FLANGE	M4	24	

■ FIG.13 ASS'Y, DOOR





## ASS'Y,REAR COVER

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365763	COVER,REAR		1	
2	0000052370	COVER,DUCT		2	
3	0000038230	PLATE,SWITCH		1	

## ASS'Y,REAR COVER SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TAPPING TRUSS	d3.5X12	16	
b	SCREW,CROSS WODD ROUND	d3.1X13	2	

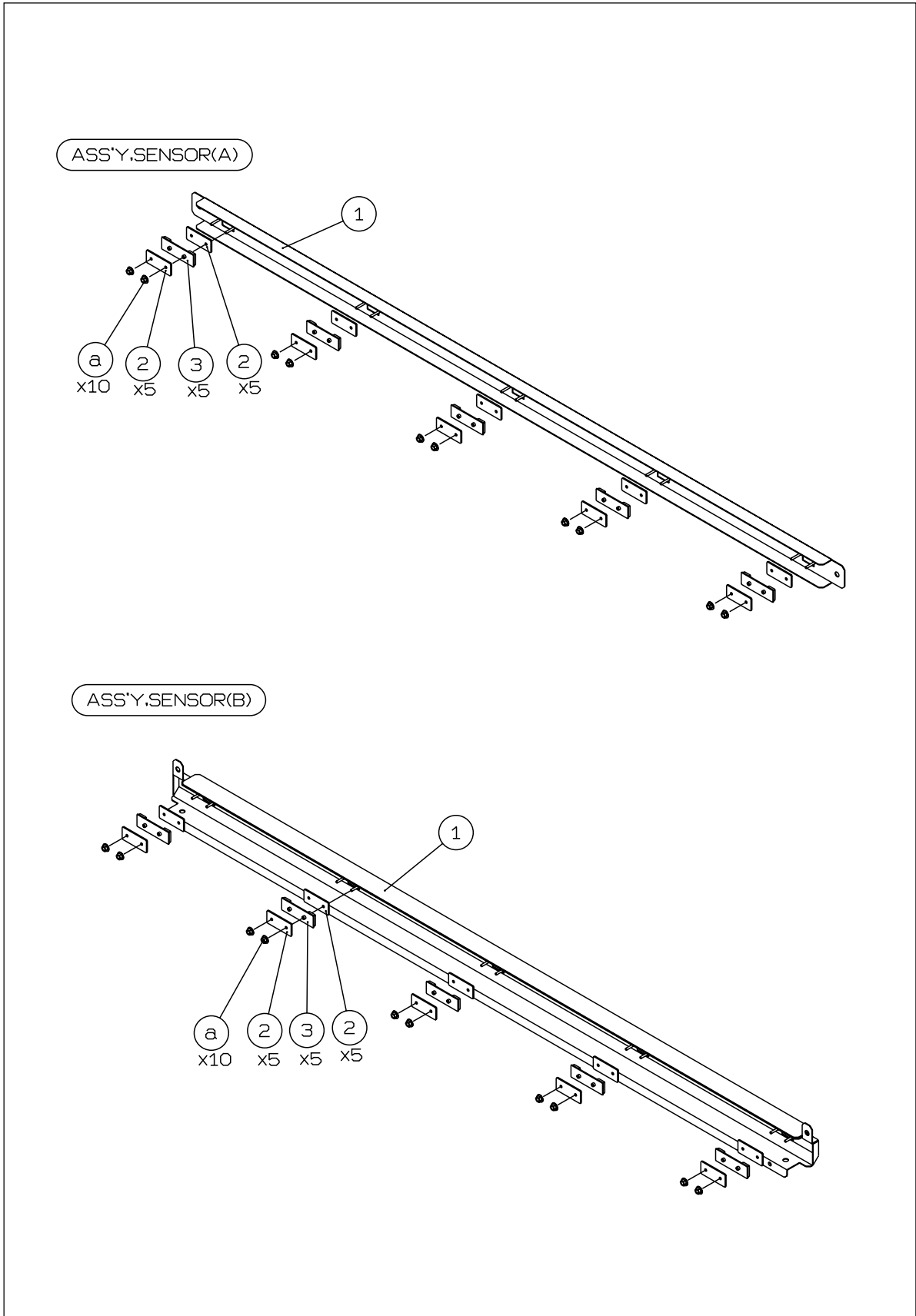
## ASS'Y,SIDE COVER

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365764	COVER,SIDE		1	
2	0000365847	KEY,LOCK		1	
3	0000097425	LOCK		1	Only Cylinder
4	0000254433	PLATE,LOCK		1	
5	0000365803	COVER,DUCT		1	
6	0000096233	HANDLE		1	

## ASS'Y,SIDE COVER SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS WODD ROUND	d3.1X8	2	
b	SCREW,CROSS TAPPING TRUSS	d3.5X12	5	
c	SCREW,CROSS FLAT	M3X10	2	

■ FIG.14 ASS'Y, SENSOR ———



## ASS'Y,SENSOR(A)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365799	BRACKET,SENSOR		1	
2	0000190520	COVER,SENSOR		10	
3	0000126504	#PCB UNIT		5	

## ASS'Y,SENSOR(A) SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	NUT HEXAGON WITH FLANGE	M3	10	

## ASS'Y,SENSOR(B)

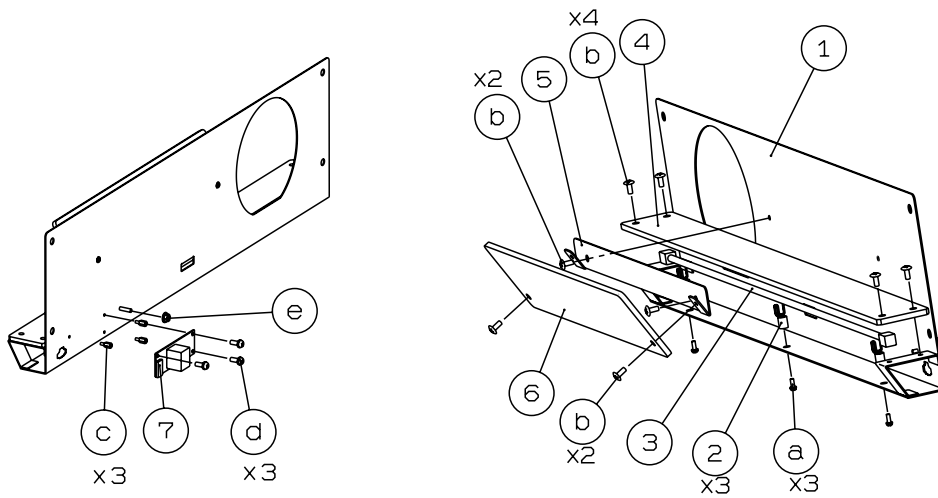
No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365800	BRACKET,SENSOR		1	
2	0000190520	COVER,SENSOR		10	
3	0000126504	#PCB UNIT		5	

## ASS'Y,SENSOR(B) SCREW etc.

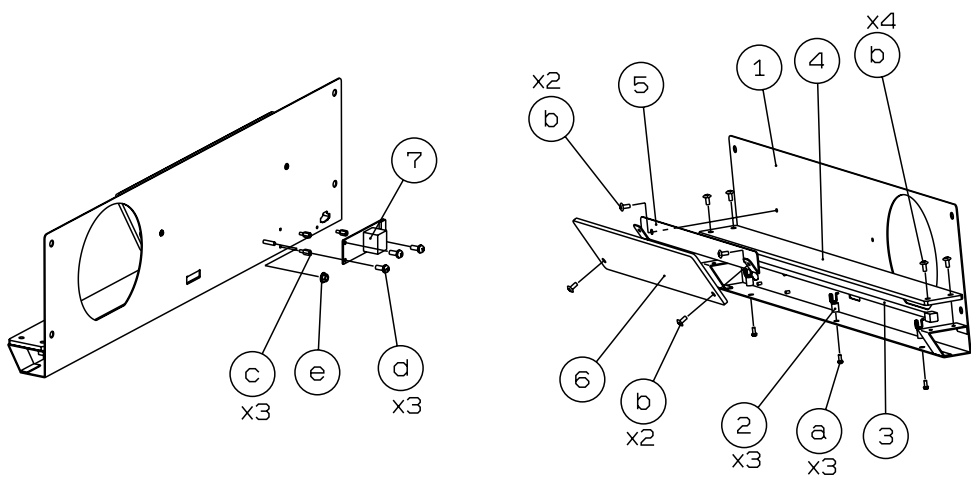
No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	NUT HEXAGON WITH FLANGE	M3	10	

■ FIG.15 ASS'Y, LAMP

ASS'Y.LAMP(L)



ASS'Y.LAMP(R)



## ASS'Y,LAMP(L)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000373286	BRACKET,LAMP		1	
2	0000111133	SUPPORT,LAMP		3	
3	0000253369	TUBE,COLD CATHODE	FLE-80565(KJ)FB-M	1	Expendables
4	0000365854	COVER,LAMP		1	
5	0000365818	PLATE		1	
6	0000365857	PLATE		1	
7	0000070742	INVERTER		1	

## ASS'Y,LAMP(L) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M4X10 SW,PW	3	
b	SCREW,CROSS TRUSS	M4X10	8	
c	SPACER,POM	BS-308W	3	
d	SCREW,CROSS PAN SEMS	M3X6 SW	3	
e	NUT,HEXAGON WITH FLANGE	M4	1	

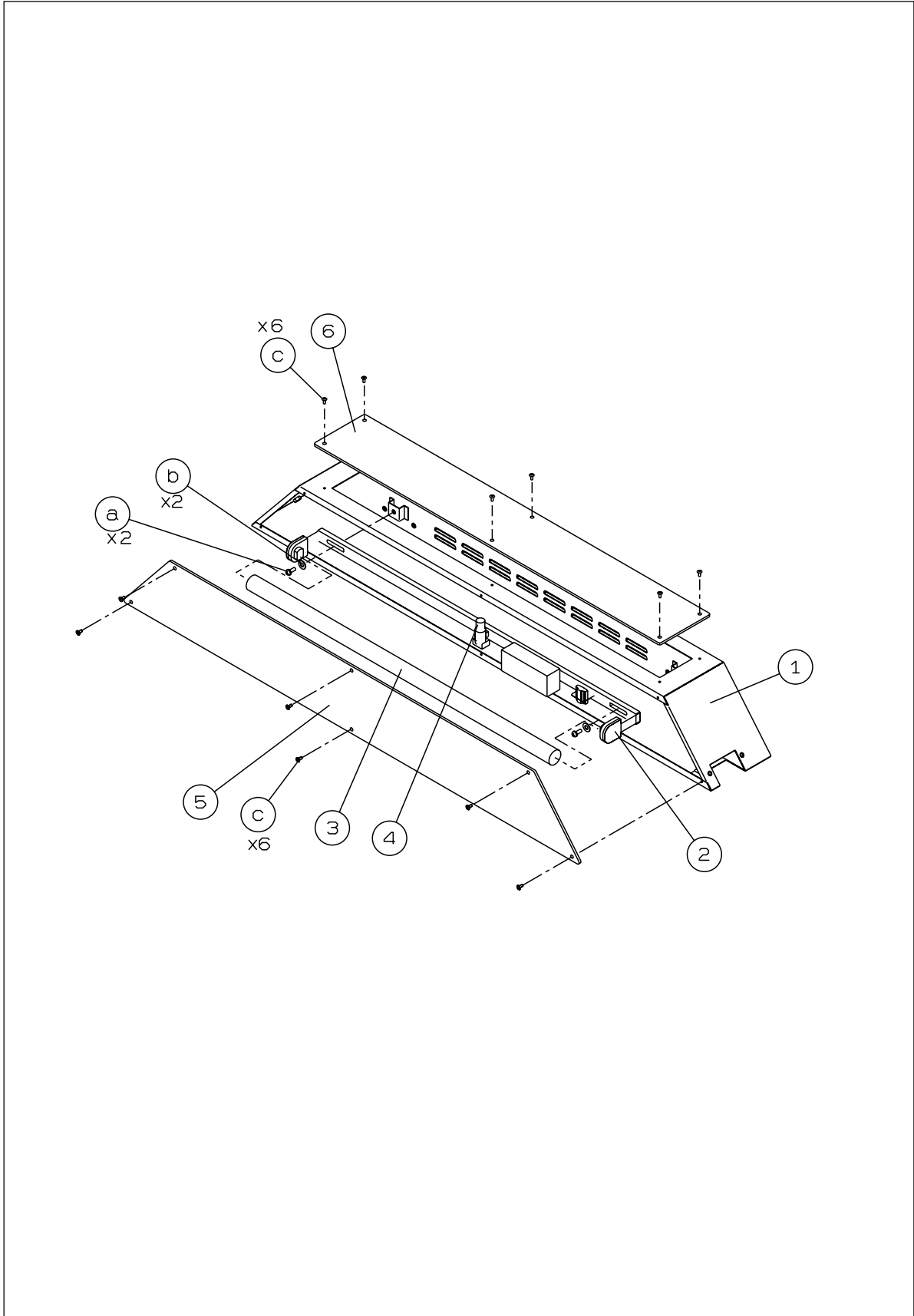
## ASS'Y,LAMP(R)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000373014	BRACKET,LAMP		1	
2	0000111133	SUPPORT,LAMP		3	
3	0000253369	TUBE,COLD CATHODE	FLE-80565(KJ)FB-M	1	Expendables
4	0000365854	COVER,LAMP		1	
5	0000365818	PLATE		1	
6	0000365870	PLATE		1	
7	0000070742	INVERTER		1	

## ASS'Y,LAMP(R) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M4X10 SW,PW	3	
b	SCREW,CROSS TRUSS	M4×10	8	
c	SPACER,POM	BS-308W	3	
d	SCREW,CROSS PAN SEMS	M3X6 SW	3	
e	NUT,HEXAGON WITH FLANGE	M4	1	

■ FIG.16 UNIT, TITLE - - - - -



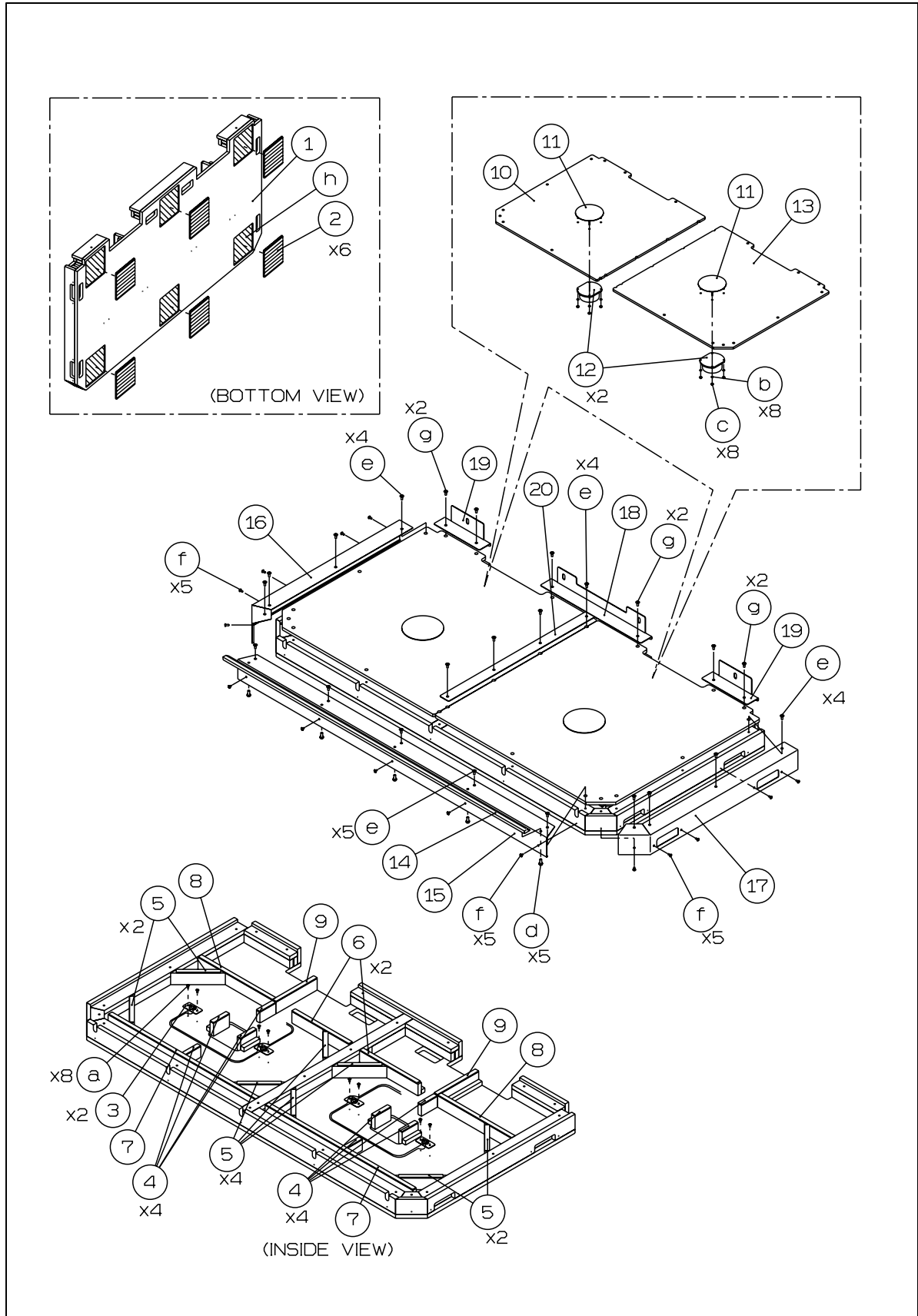
## UNIT, TITLE

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365768	BOX, TITLE		1	
2	0000277887	HOLDER, LAMP		1	
3	0000113441	LAMP, FLUORESCENT	FL32S.D	1	Expendables
4	0000002775	LAMP, GROW	FG-5P	1	Expendables
5	0000373363	PANEL, TITLE		1	
6	0000365858	PLATE, COVER		1	

## UNIT, TITLE SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW, CROSS PAN SEMS	M6X20 SW, PW	2	
b	WASHER, PLAIN	d8	2	
c	SCREW, CROSS TRUSS	M4X10	12	

**FIG.17 UNIT, BASE CABINET**





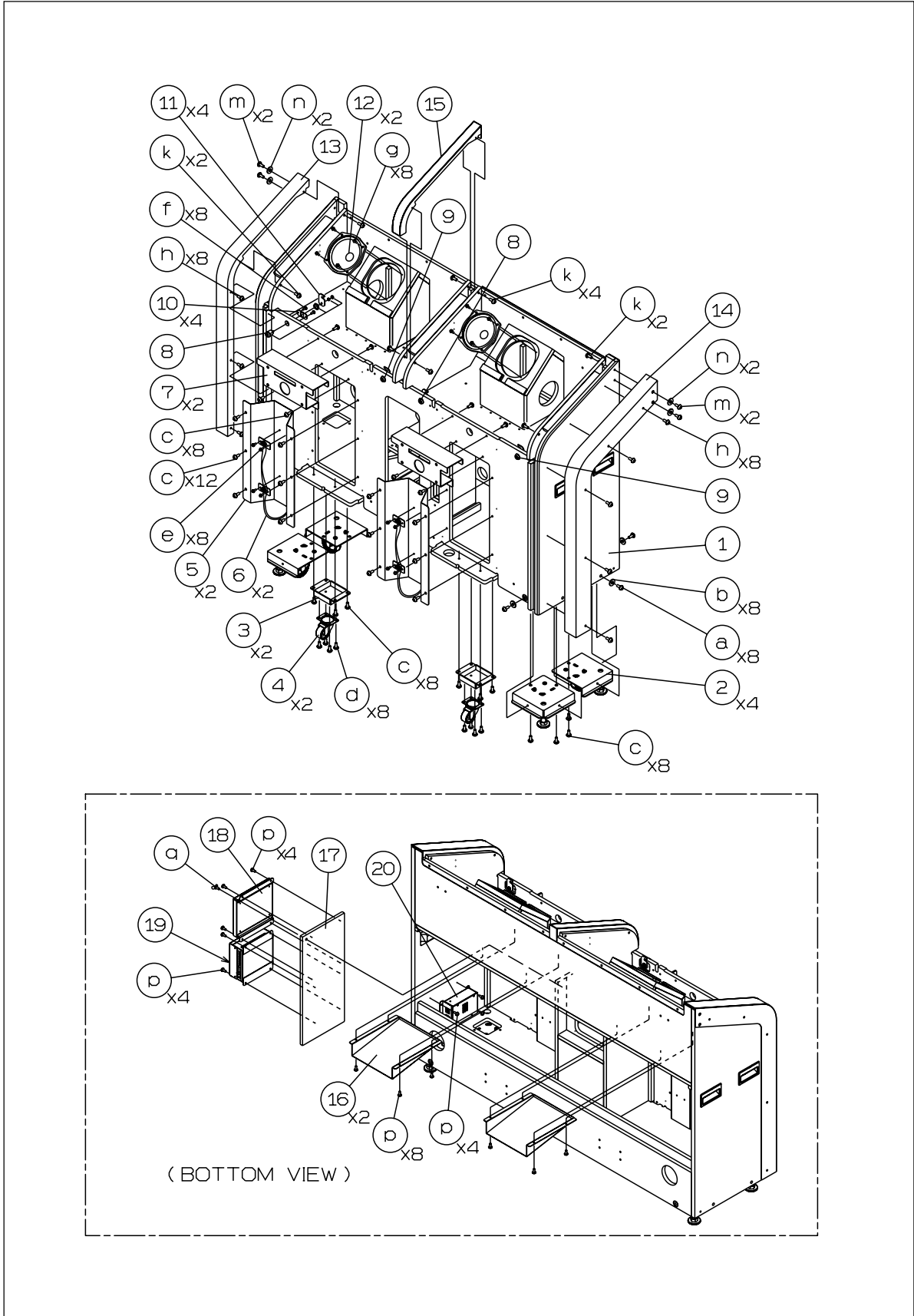
## UNIT, BASE CABINET

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365748	CABINET, BASE		1	
2	0000059088	MAT, STAGE(A)		6	
3	0000367120	ASS'Y, LED		2	Refer to Fig.12
4	0000365859	RUBBER, CUSHION		8	
5	0000365860	RUBBER, CUSHION		8	
6	0000365861	RUBBER, CUSHION		2	
7	0000365862	RUBBER, CUSHION		2	
8	0000365863	RUBBER, CUSHION		2	
9	0000365865	RUBBER, CUSHION		2	
10	0000365852	PLATE, BASE		1	
11	0000365839	BRACKET, SPEAKER		2	
12	0000363442	SPEAKER		2	
13	0000365853	PLATE, BASE		1	
14	0000365817	STOPPER		1	
15	0000365804	COVER, EDGE		1	
16	0000365805	COVER, EDGE		1	
17	0000365806	COVER, EDGE		1	
18	0000365840	COVER, EDGE		1	
19	0000365841	COVER, EDGE		2	
20	0000365820	PLATE		1	

## UNIT, BASE CABINET SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW, CROSS WOOD ROUND	呼3.1X13	8	
b	WASHER, SPRING	d5	8	
c	NUT, HEXAGON WITH FLANGE	M5	8	
d	SCREW, CROSS PAN SEMS	M4X10 SW, PW	5	
e	SCREW, CROSS TRUSS	M5X25	17	
f	SCREW, CROSS TAPPING TRUSS	d3.5X12	15	
g	SCREW, CROSS TRUSS	M5X25	6	
h	ADHESIVE	G17	1	

■ FIG.18 UNIT, FRONT CABINET(1/3) - - - - -



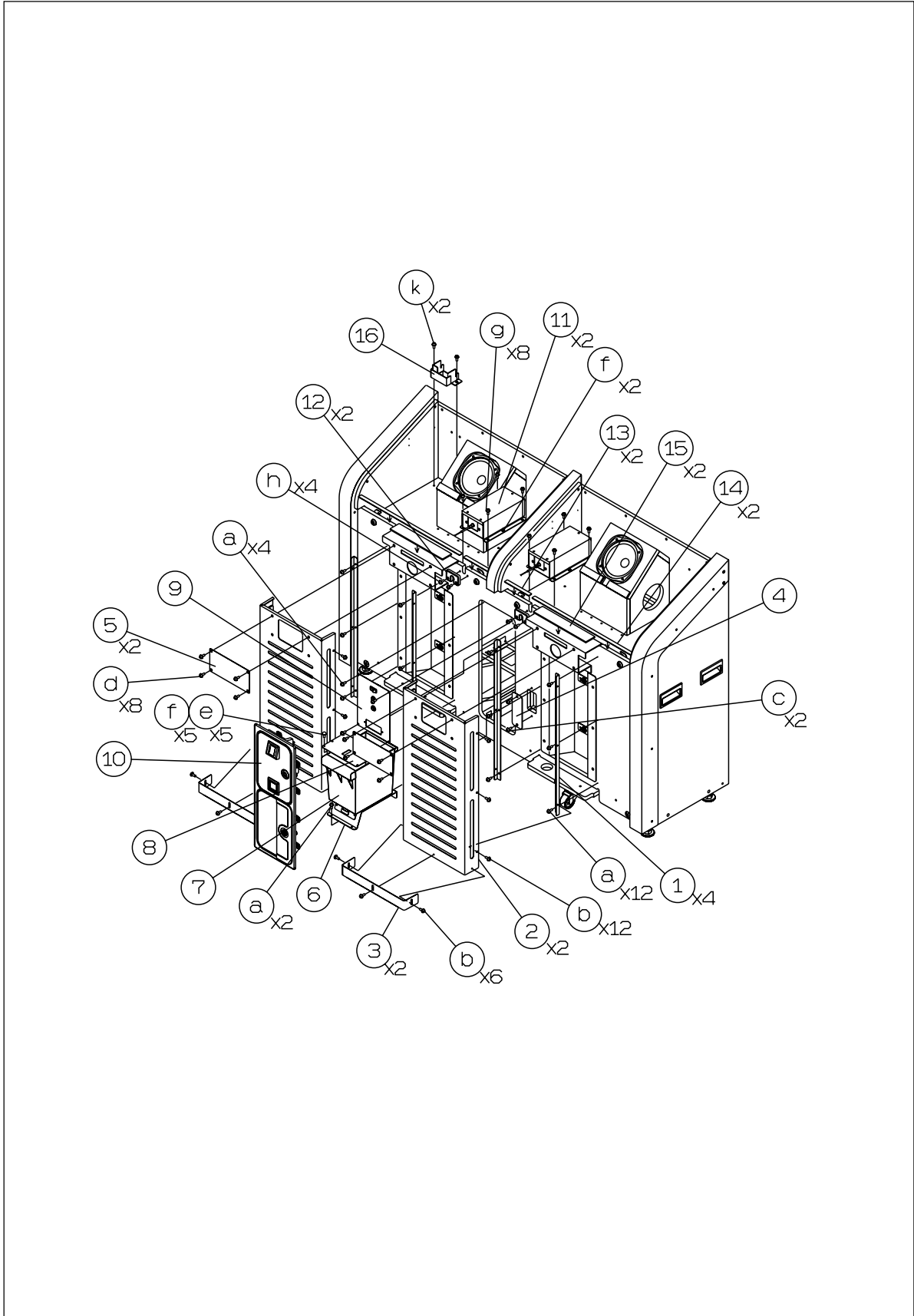
## UNIT,FRONT CABINET(1/3)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000377045	CABINET,FRONT		1	
2	0000072591	SET,ADJUSTER		4	
3	0000366460	BRACKET,CASTER		2	
4	0000304598	CASTER		2	
5	0000366462	BRACKET,LAMP		2	
6	0000367120	ASS'Y,LED		2	Refer to Fig.12
7	0000366467	FIXTURE,HOLDER		2	
8	0000097427	LOCK		2	
9	0000097425	LOCK		2	
10	0000365847	KEY,LOCK		4	
11	0000366473	PLATE,LOCK		4	
12	0000363441	SPEAKER		2	
13	0000373019	COVER,SIDE		1	
14	0000366456	COVER,SIDE		1	
15	0000366463	COVER,CENTER		1	
16	0000366465	COVER,SLOPE		2	
17	0000366454	BOARD,PCB		1	
18	0000367267	ASS'Y,PCB BOX(SEN)		1	Refer to Fig.7
19	0000369647	ASS'Y,PCB BOX(IO)		1	Refer to Fig.8
20	0000367268	ASS'Y,PCB BOX(AMP)		1	Refer to Fig.6 UNIT,PCB(K)

## UNIT,FRONT CABINET(1/3) SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TRUSS	M6X30	8	
b	WASHER,PLAIN	d6 (D20,T1.6)	8	
c	SCREW,CROSS PAN SEMS	M6X20 SW,PW	36	
d	SCREW,CROSS PAN SEMS	M6X15 SW,PW	8	
e	SCREW,CROSS PAN SEMS	M3 X 8 SW,PW	8	
f	SCREW,CROSS WOOD ROUND	d3.1 X 8	8	
g	SCREW,CROSS TAPPING TRUSS	d3.5 X 12	8	
h	SCREW,CROSS TAPPING TRUSS	d3.5 X 12	16	
k	SCREW,CROSS TRUSS	M4 X 25	8	
m	SCREW,CROSS TRUSS	M6 X 20	4	
n	WASHER,PLAIN	d6 (D20,T1.6)	4	
p	SCREW,CROSS WOOD ROUND	d3.1 X 13	20	
q	BOLT,WING	M5 X 25	1	

■ FIG.19 UNIT, FRONT CABINET(2/3) - - - - -



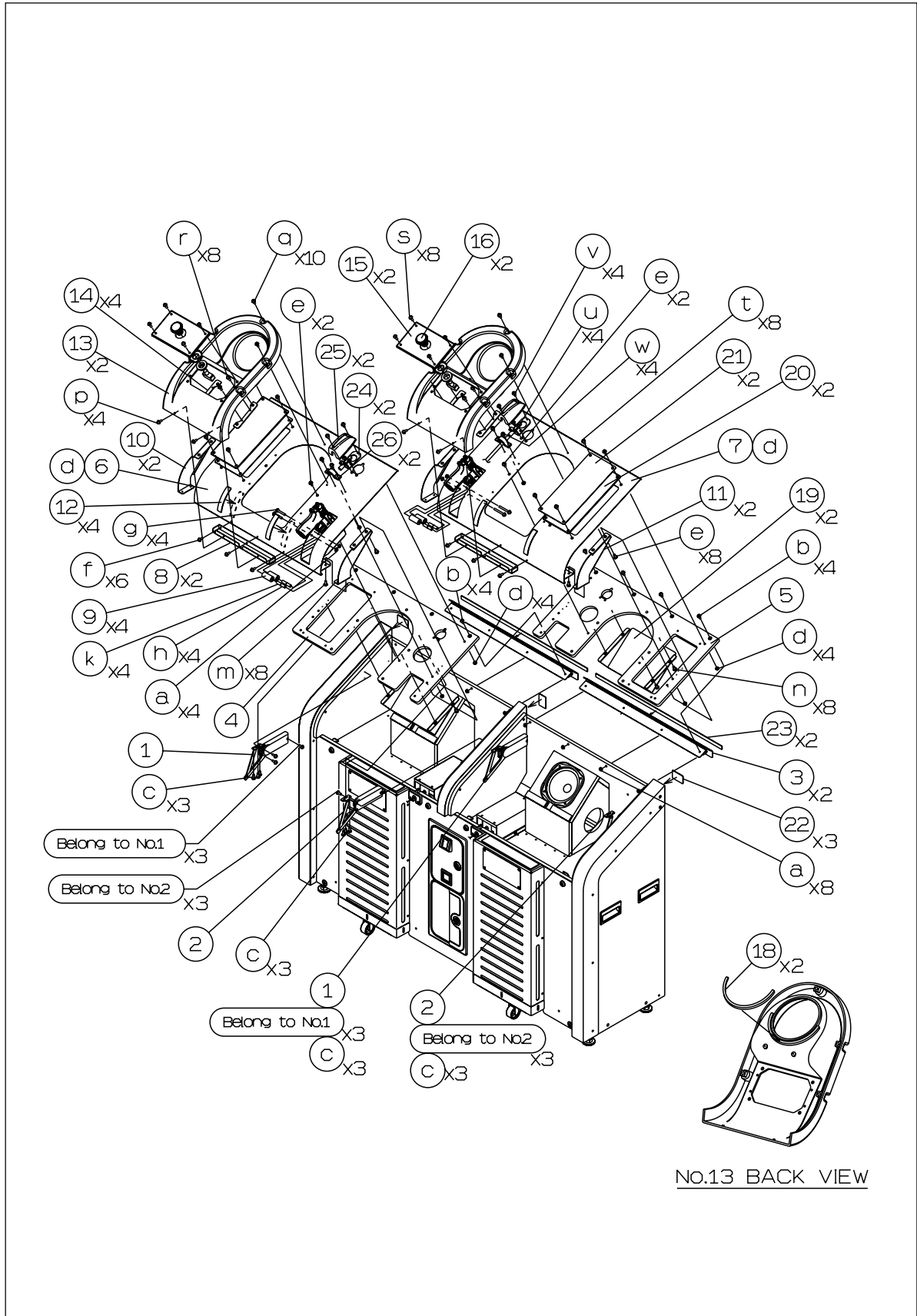
## UNIT,FRONT CABINET(2/3)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000366466	FIXTURE,COVER		4	
2	0000367121	ASS'Y,LAMP COVER		2	Refer to Fig.12
3	0000366469	COVER,FRONT		2	
4	0000366472	COVER,MAINTENANCE		1	
5	0000366470	COVER,CONNECTOR		2	
6	0000367284	ASS'Y,COIN BASE		1	Refer to Fig.11
7	0000239679	BOX,COIN		1	
8	0000193608	PLATE,COIN		1	
9	0000367285	ASS'Y,SERVICE		1	Refer to Fig.11
10	0000367283	ASS'Y,COIN DOOR		1	Refer to Fig.11
11	0000373023	ASS'Y,RECOIL MECH		2	Refer to Fig.3,4
12	0000366187	COVER,CABLE		2	
13	0000366487	TAPE,SPONGE		2	
14	0000366486	TAPE,SPONGE		2	
15	0000366483	TAPE,SPONGE		2	
16	0000366165	ADJUSTER		1	

## UNIT,FRONT CABINET(2/3) SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS WOOD ROUND	d3.1 X 13	18	
b	SCREW,CROSS TRUSS	M4 X 10	18	
c	SCREW,CROSS TRUSS	M6X20	2	
d	SCREW,CROSS TRUSS	M6X20	8	
e	BOLT,CAP SQUARE NECK	M4X20	5	
f	NUT,HEXAGON WITH FLANGE	M4	7	
g	SCREW,CROSS PAN SEMS	M6X20 SW,PW	8	
h	SCREW,CROSS TRUSS	M5X25	4	
k	SCREW,CROSS PAN SEMS	M5X20 SW,PW	2	

■ FIG.20 UNIT, FRONT CABINET(3/3) ———



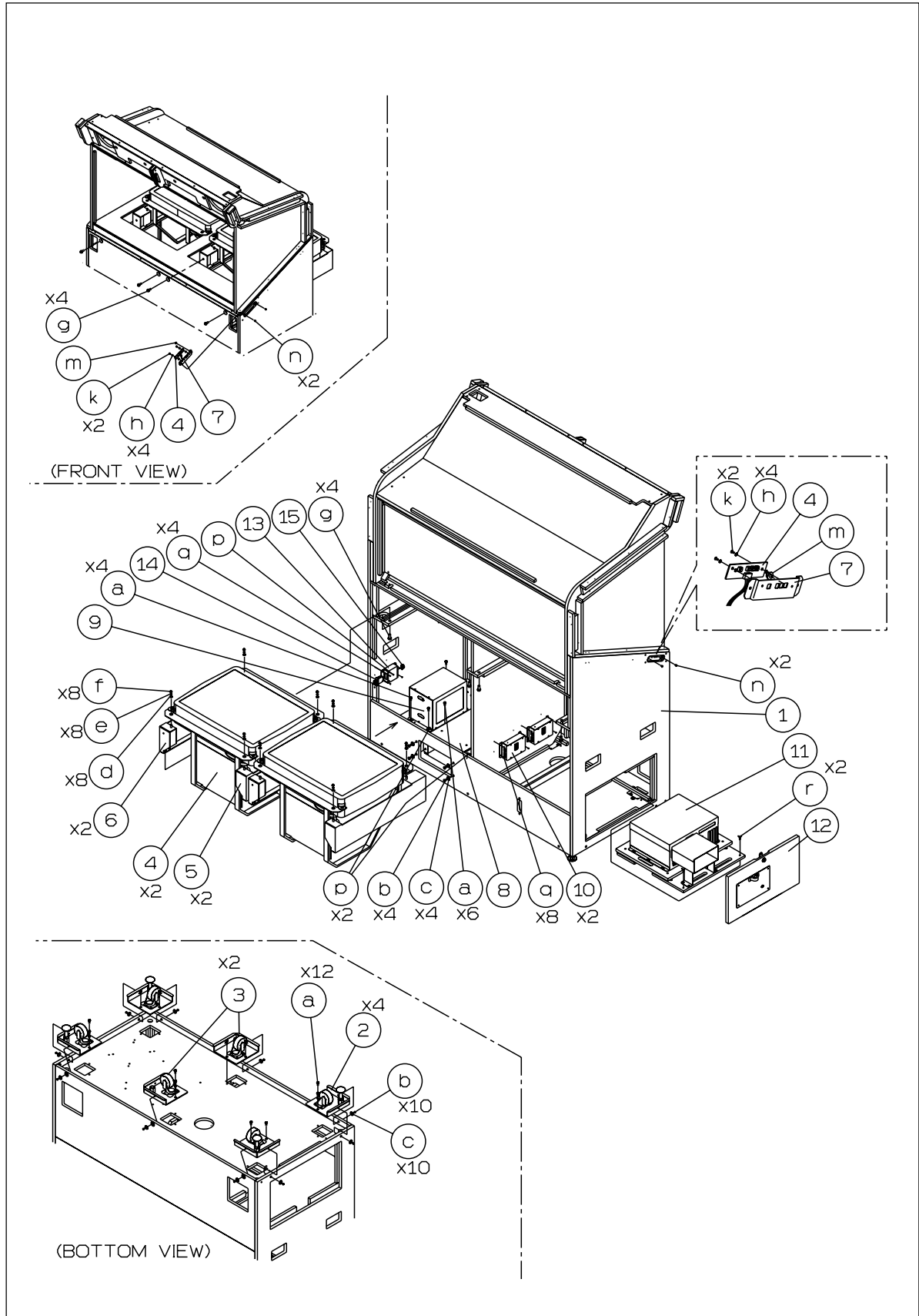
## UNIT,FRONT CABINET(3/3)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000363376	STAY		2	
2	0000363377	STAY		2	
3	0000366459	HINGE		2	
4	0000366442	BOARD,FRONT		1	
5	0000366453	BOARD,FORNT		1	
6	0000366457	PANEL,FRONT		1	
7	0000373018	PANEL,FRONT		1	
8	0000366461	BRACKET,COVER		2	
9	0000366478	COLLAR		4	
10	0000366474	STAY		2	
11	0000366475	STAY		2	
12	0000366487	TAPE,SPONGE		4	
13	0000363792	COVER,SPEAKER		2	
14	0000366476	PLATE,NUT		4	
15	0000366482	PLATE,SWITCH		2	
16	0000319239	BUTTON,PUSH	OBSA-45UM-R-1FLED-R-12v	2	Expendables Include No.17
17	0000224343	HOLDER,LAMP	OBSA-LHS1F	2	Expendables
18	0000366488	TAPE,SPONGE		2	
19	0000366468	NET,SPEAKER		2	
20	0000366471	COVER,CONTROL		2	
21	0000366479	COVER.CONTROL		2	
22	0000366485	TAPE,SPONGE		3	
23	0000366484	TAPE,SPONGE		2	
24	0000367469	UNIT,RECOIL GUN		2	Refer to Fig.1,2
25	0000126697	COVER,CABLE		2	
26	0000096233	HANDLE		2	

## UNIT,FRONT CABINET(3/3) SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	NUT,HEXAGON WITH FLANGE	M5	12	
b	SCREW,CROSS TRUSS	M5 X 15	8	
c	SCREW,CROSS TAPPING TRUSS	d3.5 X 12	12	
d	NUT,HEXAGON WITH FLANGE	M4	10	
e	SCREW,CROSS PAN SEMS	M6 X 15 SW,PW	12	
f	SCREW,CROSS PAN SEMS	M4 X 10 SW,PW	6	
g	SCREW,CROSS PAN SEMS	M5 X 55 SW,PW	4	
h	SPACER,POM	C-520	4	
k	SPACER,POM	C-525	4	
m	SCREW,CROSS TRUSS	M4 X 10	8	
n	SCREW,CROSS TAPPING TRUSS	d3.5 X 12	8	
p	SCREW,CROSS TRUSS	M4 X 10	4	
q	SCREW,CROSS TRUSS	M4 X 20	10	
r	SCREW,CROSS FLAT	M4X10	8	
s	SCREW,CROSS TRUSS	M5 X 20	8	
t	SCREW,CROSS TRUSS	M6 X 20	8	
u	SCREW,CROSS PAN SEMS	M6 X 20 SW,PW	4	
v	BOLT,HEXAGON SOCKET BUTTON	M4 X 10	4	
w	SCREW,CROSS TRUSS	M3 X 10	4	

■ FIG.21 UNIT, REAR CABINET(1/4) ———





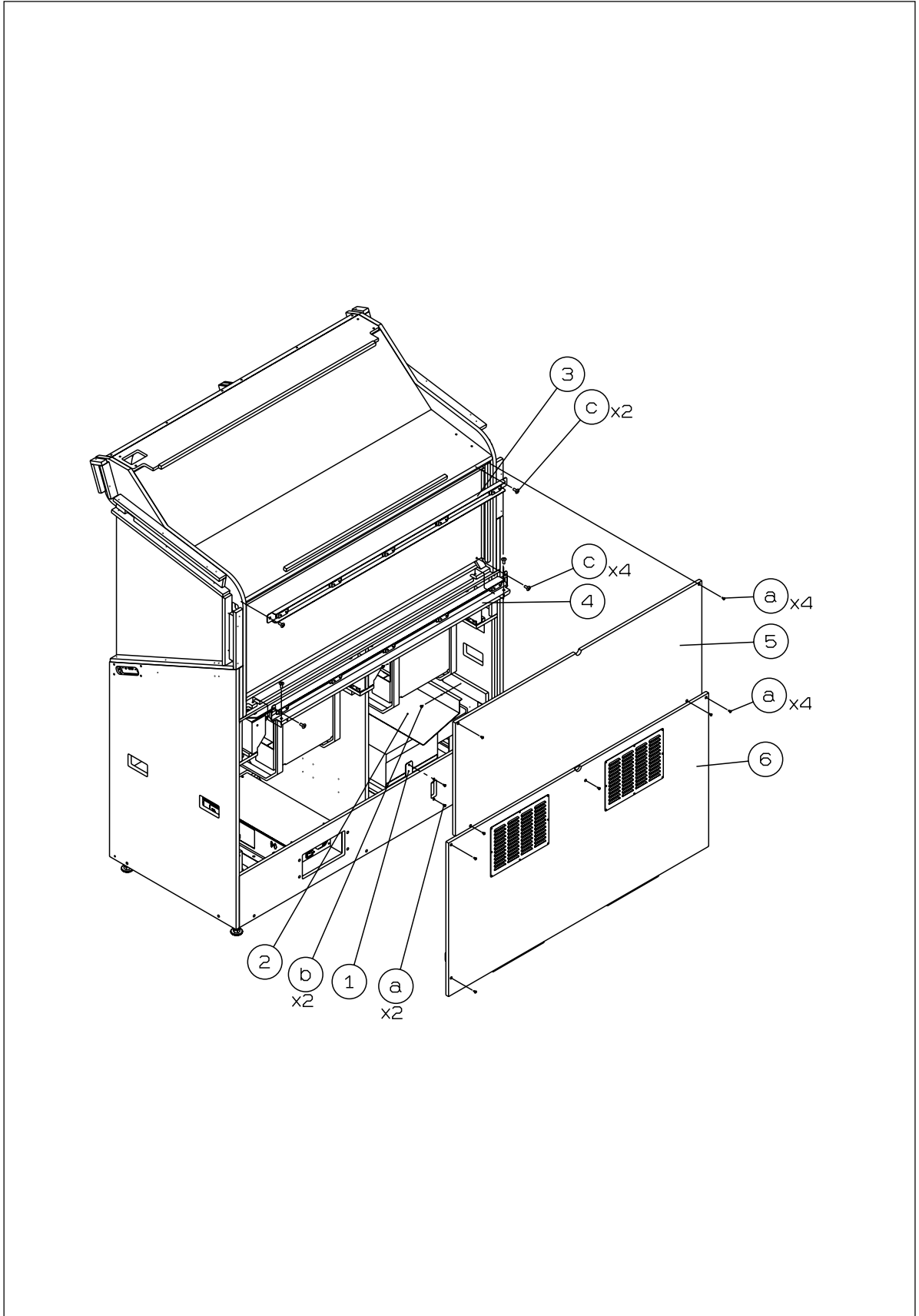
## UNIT,REAR CABINET(1/4)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000375366	CABINET,REAR		1	
2	0000072591	SET,ADJUSTER		4	
3	0000102307	SET,CASTER		2	
4	0000360981	MONITOR,FLAT		2	
5	0000365795	BRACKET,MONITOR		2	
6	0000365796	BRACKET,MONITOR		2	
7	0000365838	BRACKET,PCB		2	
8	0000373021	UNIT,POWER BOX		1	Refer to Fig.9
9	0000305169	UNIT,TRANSFORMER		1	Refer to Fig.10
10	0000366850	ASS'Y,PCB BOX(AMP)		2	Refer to Fig.6 UNIT,PCB(M)
11	0000373020	ASS'Y,PCB		1	Refer to Fig.5
12	0000366855	ASS'Y,SIDE COVER		1	Refer to Fig.13
13	0000038221	BRACKET,SWITCH		1	
14	0000108553	SWITCH,DOOR		1	
15	0000038413	BUSH		1	

## UNIT,REAR CABINET(1/4) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS PAN SEMS	M6X20 SW,PW	22	
b	SCREW,CROSS TRUSS	M6X30	14	
c	WASHER,PLAIN	呼6 (D20 T1.6)	14	
d	WASHER,PLAIN	呼8 (D20 T1.6)	8	
e	WASHER,SPRING	呼8	8	
f	NUT,HEXAGON WITH FLANGE	M8	8	
g	SCREW,CROSS PAN SEMS	M8X40 SW,PW	8	
h	WASHER,PLAIN	CC-0307-08	8	
k	SCREW,CROSS PAN SEMS	M3X8 SW,PW	4	
m	NUT,HEXAGON WITH FLANGE	M4	2	
n	SCREW,CROSS PAN SEMS	M4X20 SW,PW	4	
p	SCREW,CROSS PAN SEMS	M4X10 SW,PW	3	
q	SCREW,CROSS WODD ROUND	呼3.1X13	12	
r	BOLT,WING	M5X25	2	

■ FIG.22 UNIT, REAR CABINET(2/4) - - - - -



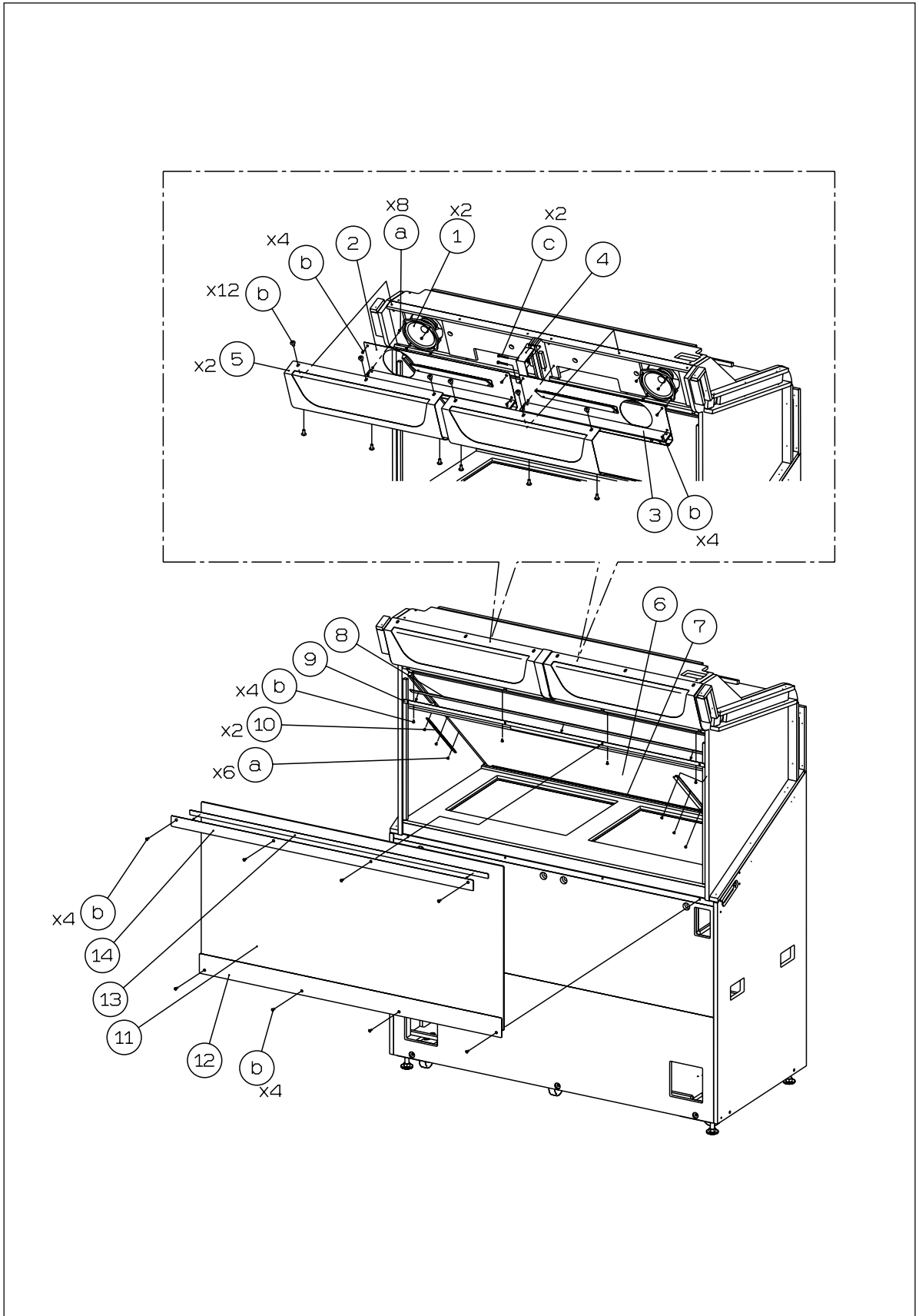
## UNIT,REAR CABINET(2/4)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365848	COVER,CONNECTOR		1	
2	0000365807	COVER,MONITOR		1	
3	0000366851	ASS'Y,SENSOR(A)		1	Refer to Fig.14
4	0000366852	ASS'Y,SENSOR(B)		1	Refer to Fig.14
5	0000365752	COVER,REAR		1	
6	0000366856	ASS'Y,REAR COVER		1	Refer to Fig.13

## UNIT,REAR CABINET(2/4) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TRUSS	M6X30	10	
b	SCREW,CROSS WODD ROUND	d3.1X13	2	
c	SCREW,CROSS TRUSS	M6X12	6	

■ FIG.23 UNIT, REAR CABINET(3/4) ———



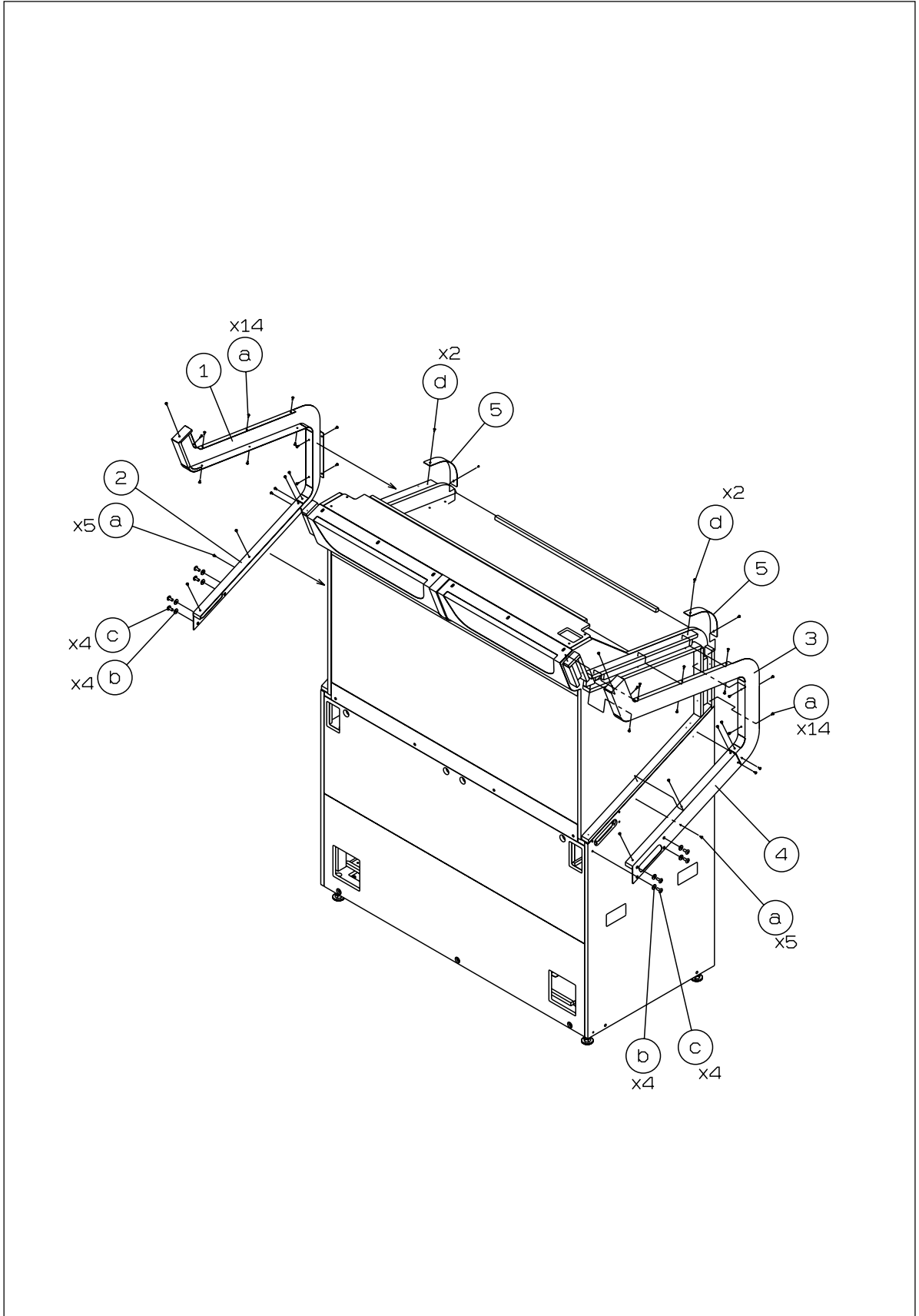
## UNIT, REAR CABINET(3/4)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000363441	SPEAKER		2	
2	0000373287	ASS'Y,LAMP(L)		1	Refer to Fig.15
3	0000373022	ASS'Y,LAMP(R)		1	Refer to Fig.15
4	0000365801	COVER,CENTER		1	
5	0000375365	COVER,SPEAKER		2	
6	0000365856	MIRROR,HALF		1	
7	0000207813	RUBBER,EDGE		1	
8	0000365866	TAPE,SPONGE		1	
9	0000365813	FIXTURE,MIRROR		1	
10	0000365814	FIXTURE,MIRROR		2	
11	0000365855	GLASS,MONITOR		1	
12	0000365812	FIXTURE,GLASS		1	
13	0000365867	TAPE,SPONGE		1	
14	0000365811	FIXTURE,GLASS		1	

## UNIT, REAR CABINET(3/4) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TAPPING TRUSS	d3.5X12	14	
b	SCREW,CROSS TRUSS	M6X12	32	
c	SCREW,CROSS PAN SEMS	M4X50 SW,PW	2	

■ FIG.24 UNIT, REAR CABINET(4/4) - - - - -



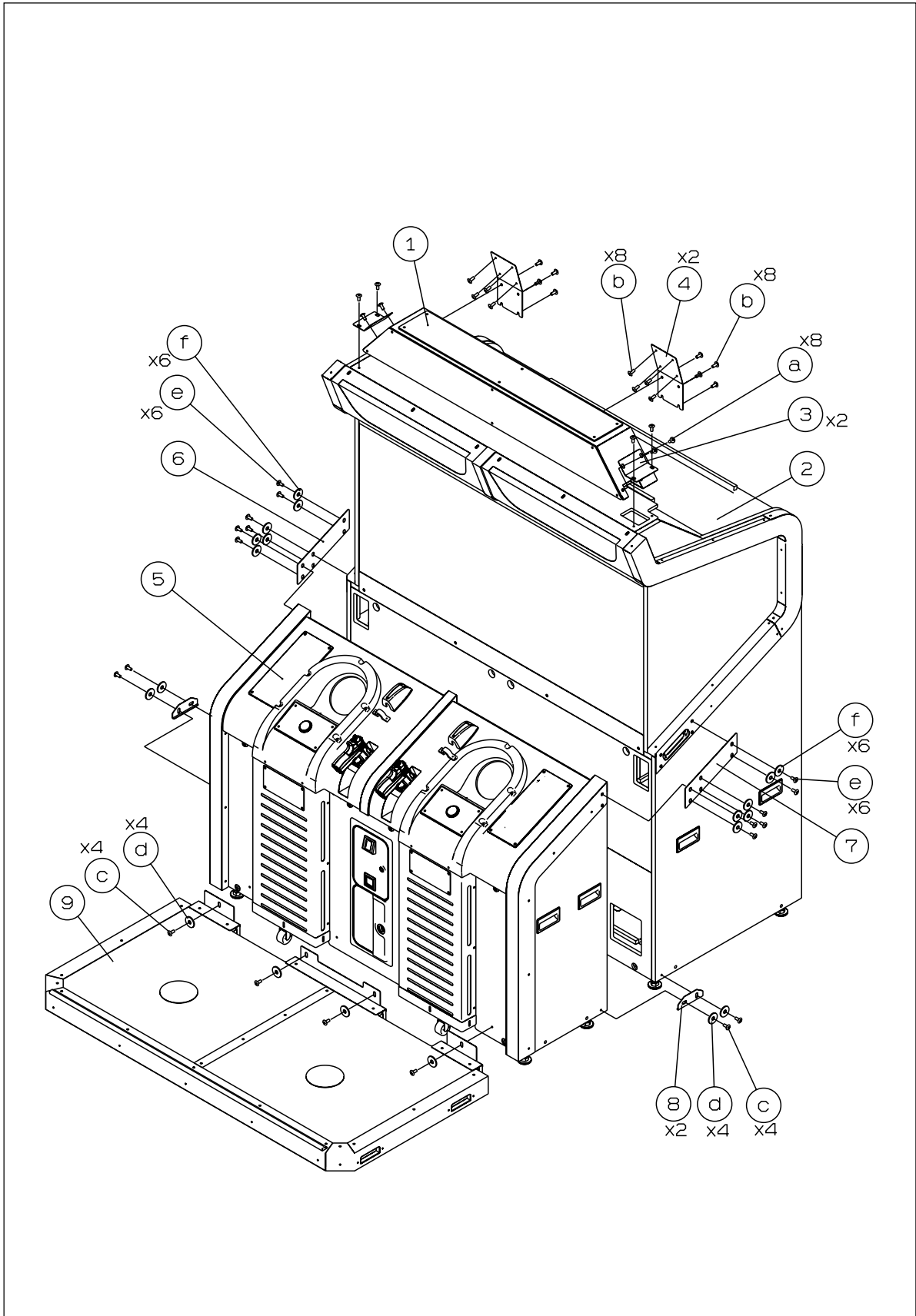
## UNIT,REAR CABINET(4/4)

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000365769	COVER,SIDE		1	
2	0000365808	COVER,SIDE		1	
3	0000365770	COVER,SIDE		1	
4	0000365809	COVER,SIDE		1	
5	0000365821	PLATE,REAR		2	

## UNIT,REAR CABINET(4/4) SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TAPPING TRUSS	d3.5X12	38	
b	WASHER,PLAIN	d6 (D20 T1.6)	8	
c	SCREW,CROSS TRUSS	M6X20	8	
d	SCREW,CROSS TAPPING TRUSS	d3.5X12	4	

■ FIG.25 UNIT





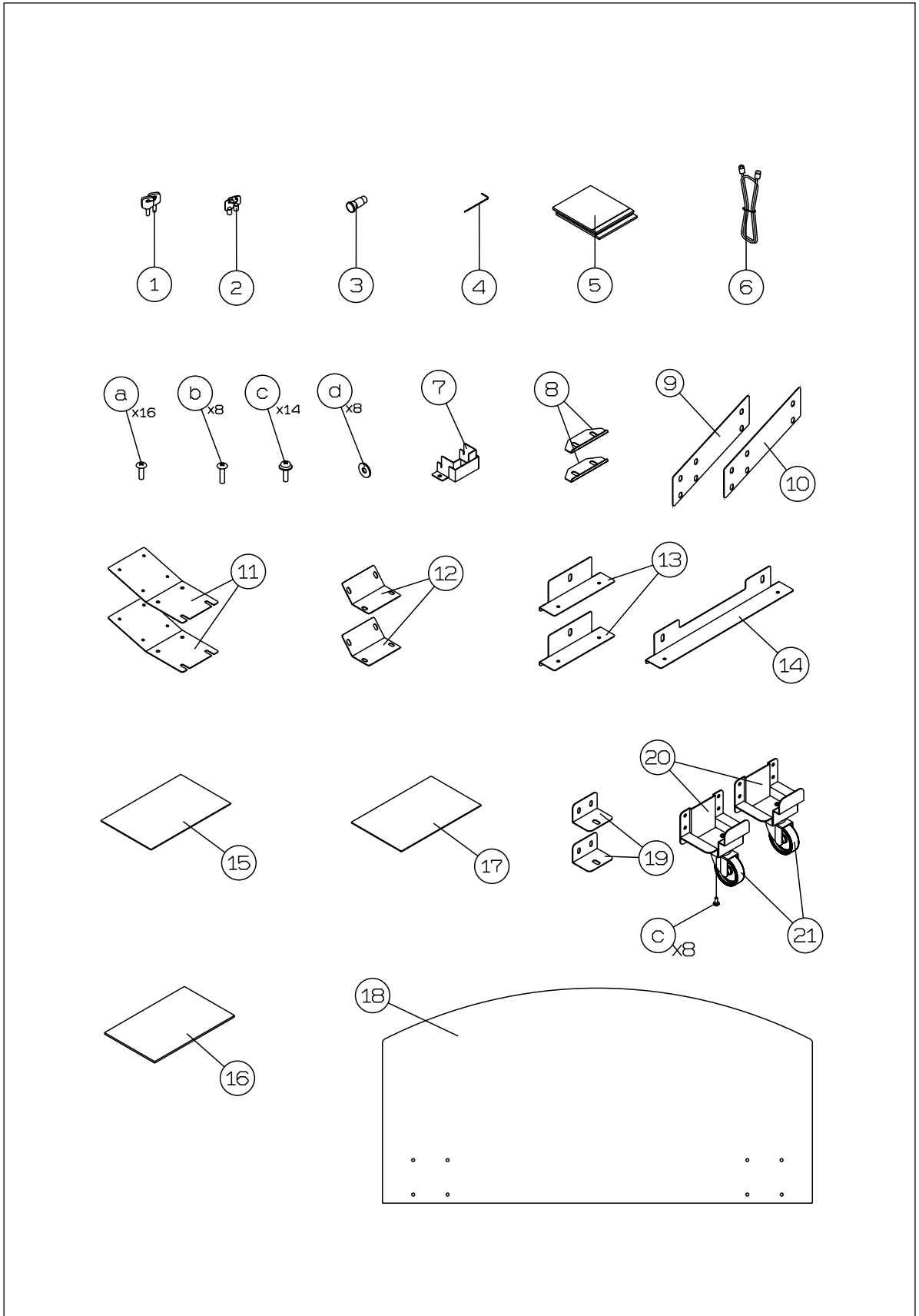
## UNIT

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000366858	UNIT,TITLE		1	Refer to Fig.16
2		UNIT,REAR CABINET		1	Refer to Fig.24
3	0000365846	JOINT		2	
4	0000365842	FIXTURE,POP		2	
5		UNIT,FRONT CABINET		1	Refer to Fig.20
6	0000365843	JOINT		1	
7	0000365844	JOINT		1	
8	0000373279	JOINT		2	
9		UNIT,BASE CABINET		1	Refer to Fig.17

## UNIT SCREW etc.

No.	CODE NO.	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TRUSS	M6X12	8	
b	SCREW,CROSS TRUSS	M6X15	16	
c	SCREW,CROSS TRUSS	M6X20	8	
d	WASHER,PLAIN	d6 (D20,T1.6)	8	
e	SCREW,CROSS TRUSS	M6X20	12	
f	WASHER,PLAIN	d6 (D20,T1.6)	12	

■ FIG.26 PARTS, ATTACHMENT



## PARTS,ATTACHMENT

No.	CODE NO.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
1	0000265203	LOCK		2	Cylinder and 2Keys
2	0000097424	LOCK		2	Cylinder and 2Keys
3		UNIT,SECU.PLUG(B)		1	
4	0000105303	PIN		1	
5		UNIT,CDROM		1	
6	0000239115	CORD,POWER		1	
7	0000366165	ADJUSTER		1	
8	0000373279	JOINT		2	
9	0000365843	JOINT		1	
10	0000365844	JOINT		1	
11	0000365842	FIXTURE,POP		2	
12	0000365846	JOINT		2	
13	0000365841	COVER,EDGE		2	
14	0000365840	COVER,EDGE		1	
15	0000368507	SHEET,LICENSE/HD		1	
16	0000368508	BOOK,MANUAL/HD		1	
17	0000366256	POP,MANUAL		1	
18	0000354773	POP		1	
19	0000365827	BRACKET,BASE		2	Transport parts
20	0000365771	BRACKET,BASE		2	Transport parts
21	0000047156	CASTER		2	Transport parts

## PARTS,ATTACHMENT SCREW etc.

No.	NAME	SPEC/CATALOG TYPE	QTY	NOTE
a	SCREW,CROSS TRUSS	M6X15	16	
b	SCREW,CROSS TRUSS	M6X20	8	
c	SCREW,CROSS PAN SEMS	M6X20 SW,PW	22	Transport parts
d	WASHER,PLAIN	d6	8	

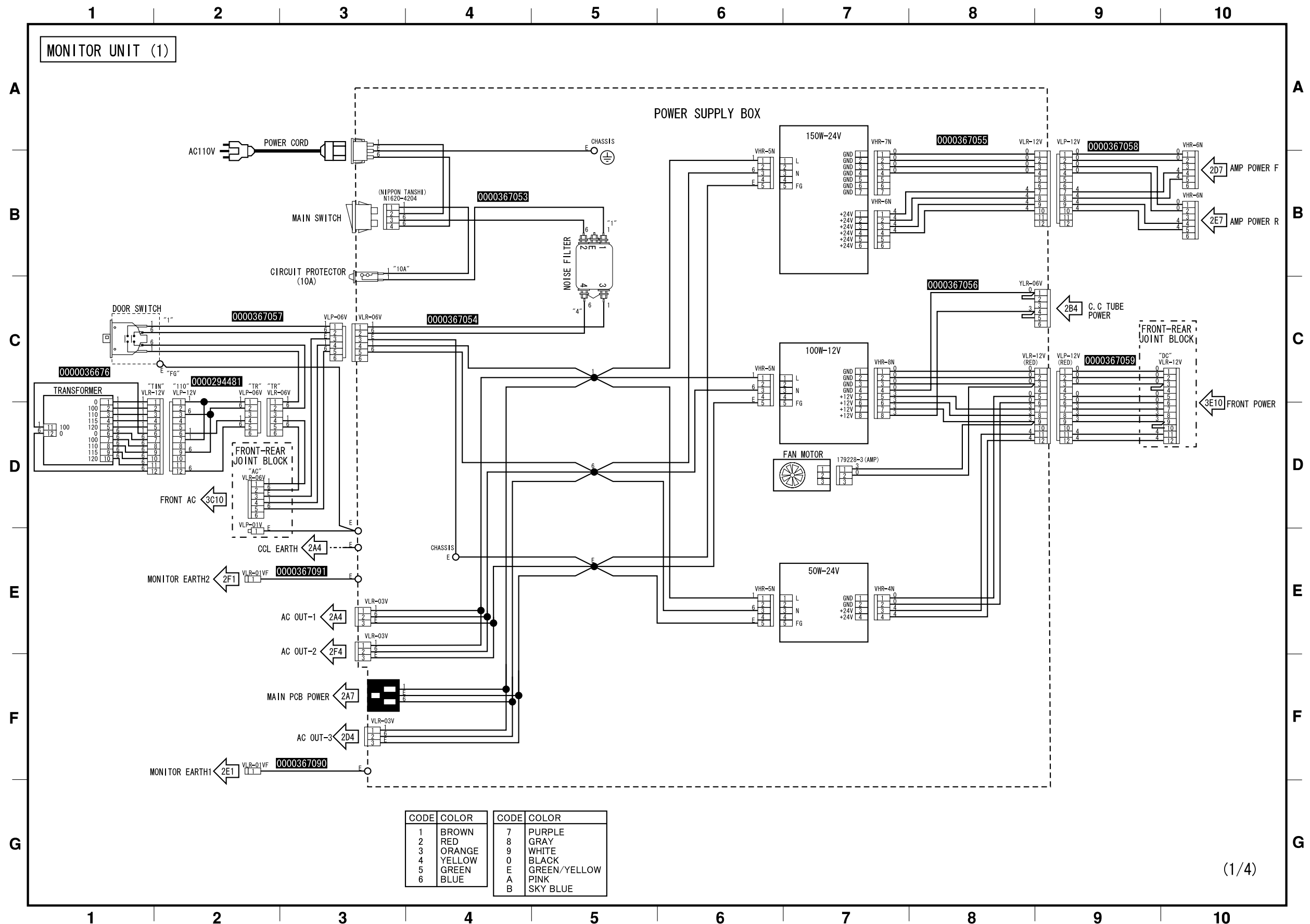
# MEMO

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# 10-2 Wiring diagram

Power unit

# GMD22-TB specifications for regions using 110 voltage area in Asia. 1/4A

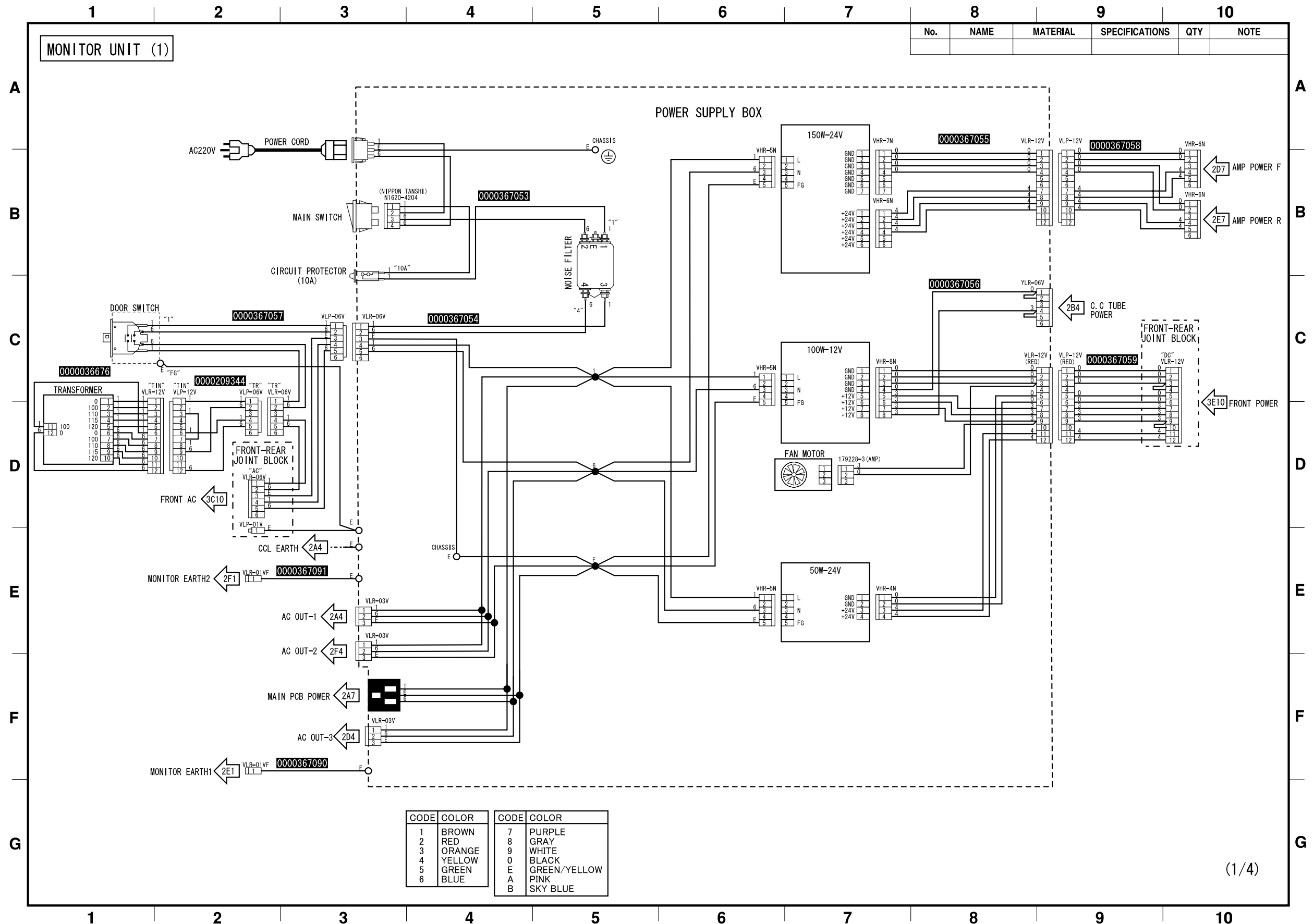


(1/4)

# Wiring diagram

Power unit

# GMD22-HD specifications for regions using 220 voltage area in Asia. 1/4B



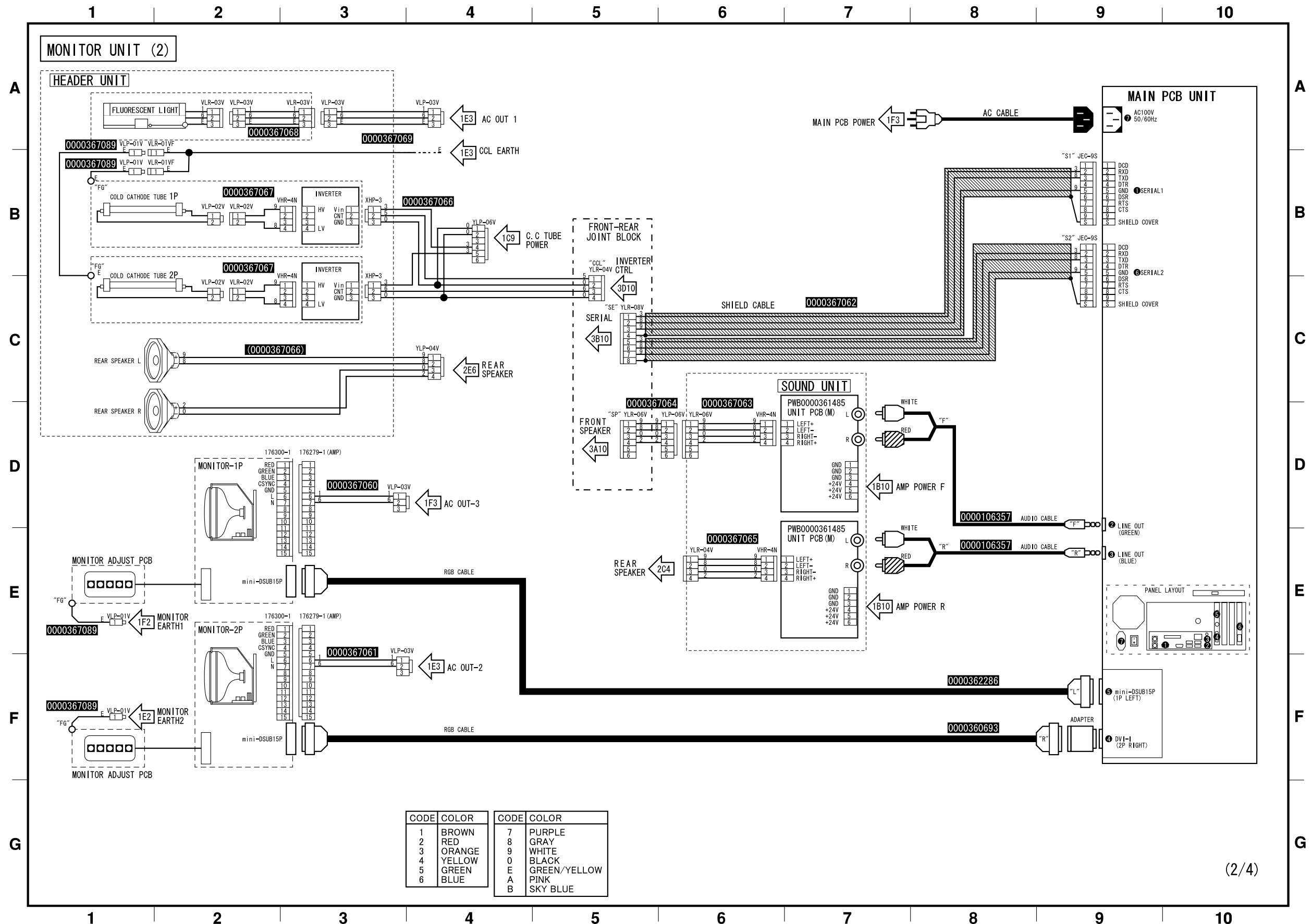
No.	NAME	MATERIAL	SPECIFICATIONS	QTY	NOTE

(1/4)

# Wiring diagram

Monitor unit / Speaker unit / PCB unit

## GMD22-TB/HD specifications for regions using 110 and 220 voltage area in Asia. 2/4

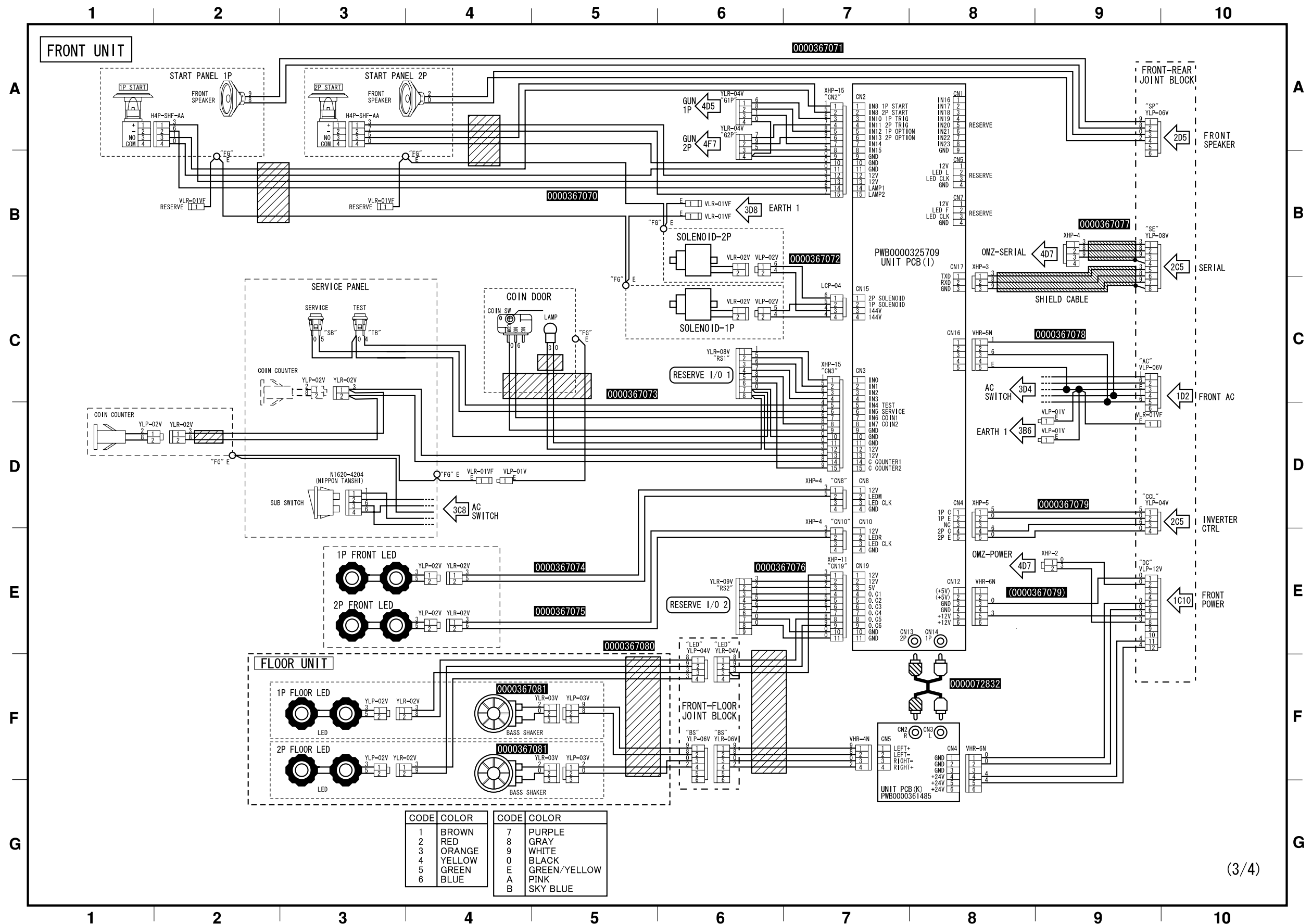


(2/4)

# Wiring diagram

Front unit / Floor unit

# GMD22-TB/HD specifications for regions using 110 and 220 voltage area in Asia. 3/4

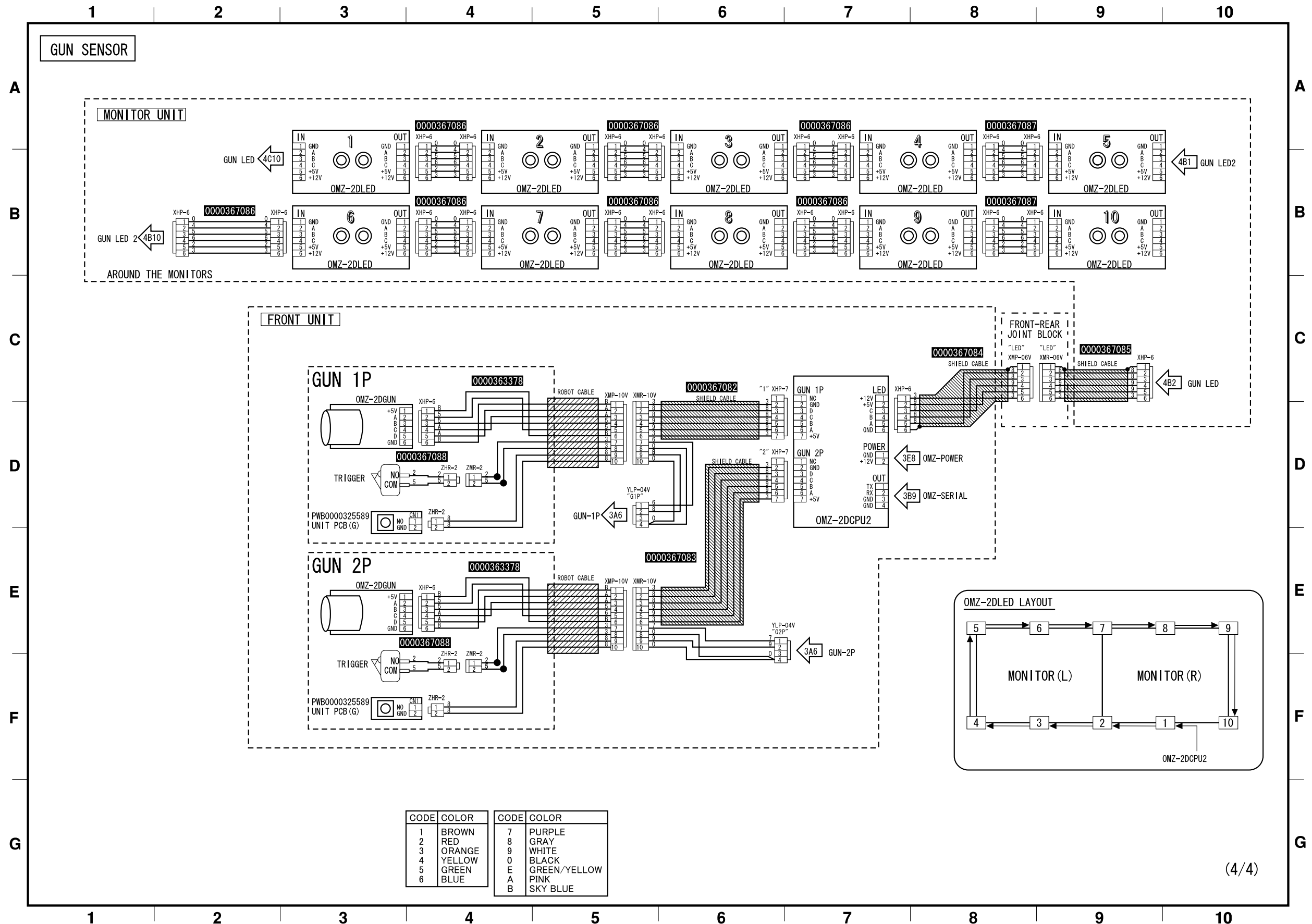




# Wiring diagram

Gun units / Sensor units

## GMD22-TB/HD specifications for regions using 110 and 220 voltage area in Asia. 4/4



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