

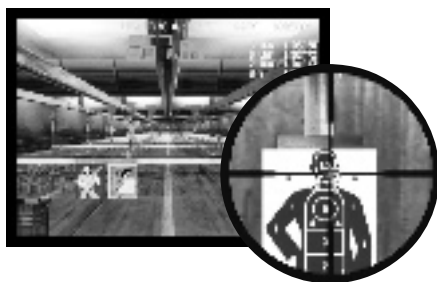
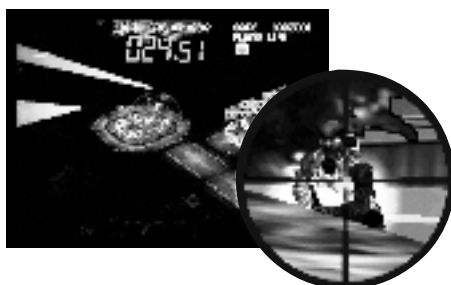
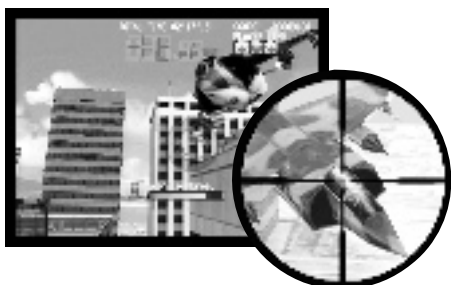
ORIGINAL VIDEO GAME

# OPERATOR'S MANUAL

## ■ SILENT SCOPE ■

# SILENT SCOPE

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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, unplug the power cord from the receptacle and contact your nearest dealer.**

• **This manual covers the following models:** \_\_\_\_\_

• **GQ830-TB**

• **GQ830-SD**

• **GQ830-HD**

The specifications of GQ830-TB may be somewhat different from GQ830-SD and GQ830-HD. In such a case, read the descriptions of the model which applies to the game machine you are operating.

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- 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.

 <b>WARNING</b>	Indicates a situation where disregarding the suggestions could result in death or serious injury.
 <b>CAUTION</b>	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, set the 6 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.
- **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 ventilating holes.**
  - Doing so could cause the internal temperature to rise excessively, resulting in fire or equipment failure.
- **Do not bend the power cord by force or place heavy objects on it.**
  - Doing so could result in electric leakage or fire.
- **Never plug or unplug the power cord with wet hands.**
  - Doing so could result in electrical shock.
- **Never unplug by pulling the power cord.**
  - Doing so could damage the cord, resulting in electric leakage or fire.



## Setting Up



### CAUTION

- **Be sure to use indoor wiring for within the specified voltage range. For extension cord, use indoor wiring of the specified rating or more.**  
 · Failure to do so could result in fire or equipment failure.
- **Be sure to use the attached 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 power cord where people walk through. You may tread on or stumble over them.**  
 · You may stumble down and get injured, or damage the power cord.
- **Be sure to ground this product.**  
 · Otherwise an electric shock or machine trouble may be caused.
- **Do not apply a strong force for moving the machine.**  
 · Otherwise, it may result in an accident or breakage of the units.
- **Do not hold the rifle unit when moving the machine.**  
 · Otherwise, it may result in an injury or damage to this product.
- **Clearance of 100 mm (3.94in) or more should be created between the game machine and walls.**  
 · Otherwise the machine (s) cannot be ventilated well, resulting in malfunction.
- **Do not change the DIP switch setting of this product to other than factory setting.**  
 · Otherwise, the game can not be played properly.



## 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 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 power cord from the receptacle.
- 3 Contact your nearest dealer.

- **Do not leave the power cord plugged improperly or covered with dust.**  
 · Doing so could result in electrical shock or fire, so inspect the power cord periodically.





## Operation



### 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..



- **The following users should not play the game.**

Doing so could cause accidents or illness.

Those under the influence of alcohol.	Those with drink and / or food in hand.
Those suffering from or being treated for arm, wrist or small - of - the back ailments.	

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

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

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

Doing so could result in electrical shock.



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

Otherwise an electric leak, fire or electric shock may result. Normal communication play may also be impossible.

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

- **If the 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 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.



- **There are high-voltaged parts inside the product. Other persons than qualified industry specialist should not open the back door and side door. When the back door and side door is opened, pay due attention not to touch the inside unnecessarily.**

Otherwise an accident or electric shock may result.



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

- **Gently open the fluorescent light cover.**

Otherwise, the fluorescent light or other part may get broken.

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

Using thinner or other organic solvent or alcohol may decompose the material.




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



## Moving and transportation




### CAUTION

- The game machine contains parts such as the monitor, electronic components and precision components which are sensitive to vibrations and impacts. Great care therefore should be taken when moving and transporting the game machine. Be sure not to let the machine tip over. 
- Before moving the machine, be sure to turn OFF the main power switch, unplug the power cord from the receptacle and remove the power cord from the machine. 
  - Stepping on or tripping over the power cord may result in an accident or damage the machine.
- Before moving the machine, be sure to fully lift the six adjusters and move it on the casters.
  - Otherwise, an accident, breakage or trouble may result.
- Do not apply a strong force for moving the machine.
  - Otherwise, it may result in an accident or breakage of the units.
- Do not hold the rifle unit when moving the machine.
  - Otherwise, it may result in an injury or damage to this product.
- When moving the monitor unit, be sure to push it along sideways (to the right or left). When moving it on a slope or getting it over a level difference, be sure to take the buddy system. 
  - Otherwise, the unit may turn over, resulting in an accident or damage.
- When moving the machine, take care that no undue force is applied to the opening / closing sections or moving sections of the machine.
  - Otherwise injury, accidents or machine damage may result.

## Disposal



### WARNING

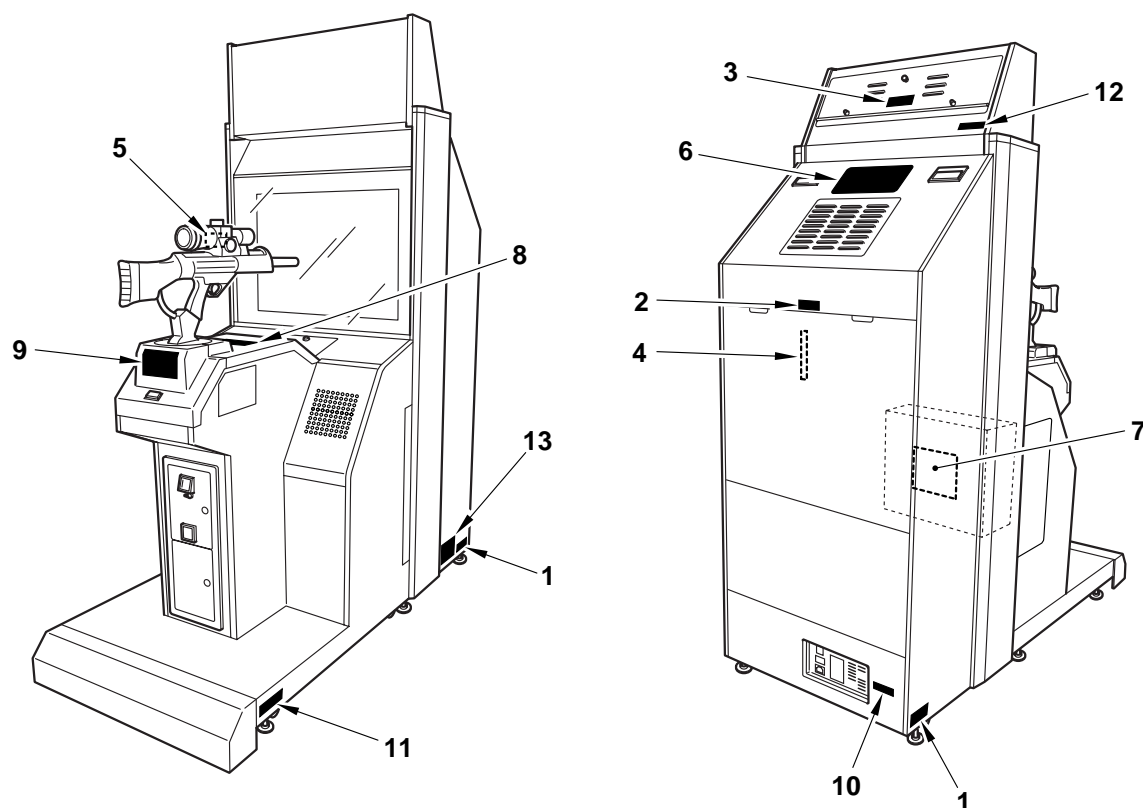
- When disposing of the rifle unit of this product, do not leave it with the scope exposed. 
  - Doing so could result in fire due to direct sunlight, etc..

### PRECAUTION IN HANDLING

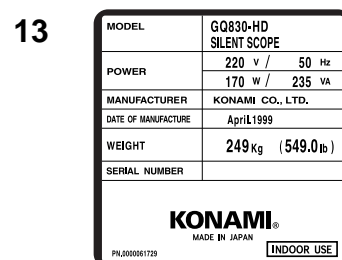
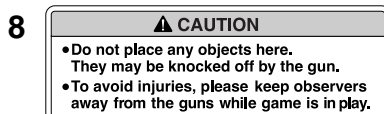
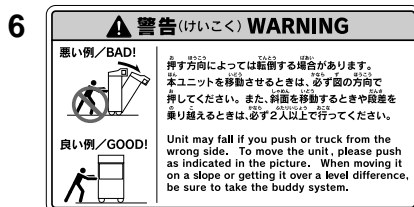
- When setting up, inspecting, maintaining, moving or transporting this product, follow the procedures and instructions set forth in this manual and perform such work safely.
- Do not remove labels of "WARNING", "CAUTION", etc. attached to the product.
- Do not set up, handle, inspect, maintain, move or transport 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



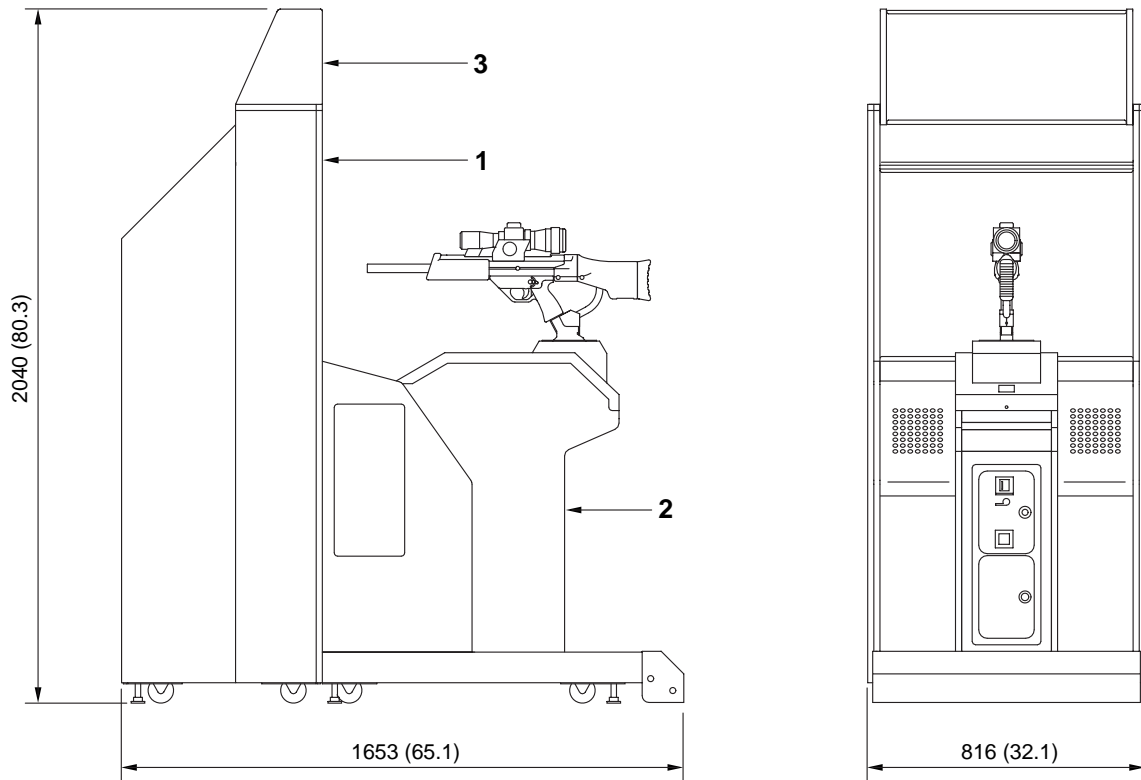
## Types of warning and other safety labels



• The above is an example.  
The entries are different from destination to destination.



# 1 Specifications



## Specifications

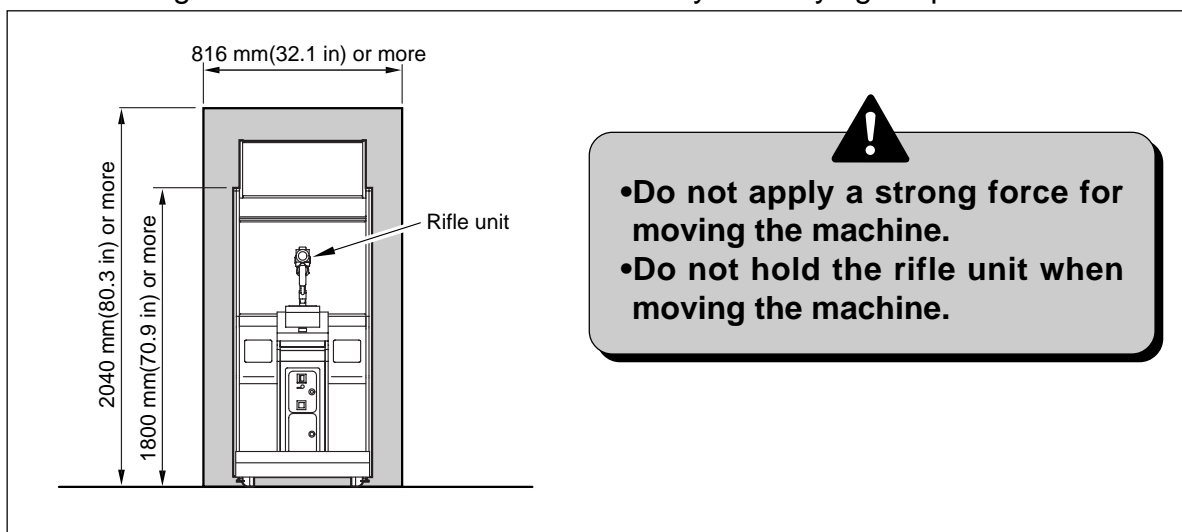
Dimensions	Refer to the figure above : mm (in)
Weight	Approx.249 kg (549 lb) <b>1</b> Monitor unit: Approx. 127 kg (280.0 lb) <b>3</b> Title unit : Approx. 12 kg (26.5 lb) <b>2</b> Control unit : Approx. 110 kg (242.5lb)
Rated power consumption	•GQ830-TB : 215W (MAX) •GQ830-HD: 170W (235VA)
Monitor	29-inch CRT(Scope: 2-inch LCD)
Service condition	Temperature 10 to 35°C (50 to 95°F), Humidity 20 to 80% (No dewing is allowed.)
Attachments	·Instruction manual ..... This manual ·Keys for coin door ..... 2 ·Keys for maintenance ..... 2 ·AC power cord ..... 1 ·Title unit ..... 1 ·Title unit mounting screw (M6 x 15L) ..... 4 ·Allen wrench (for servicing the scope) ..... 1

- If any part is defective or not found, contact your nearest dealer.
- The specifications of this product are subject to change without notice for reasons such as improving the performance.

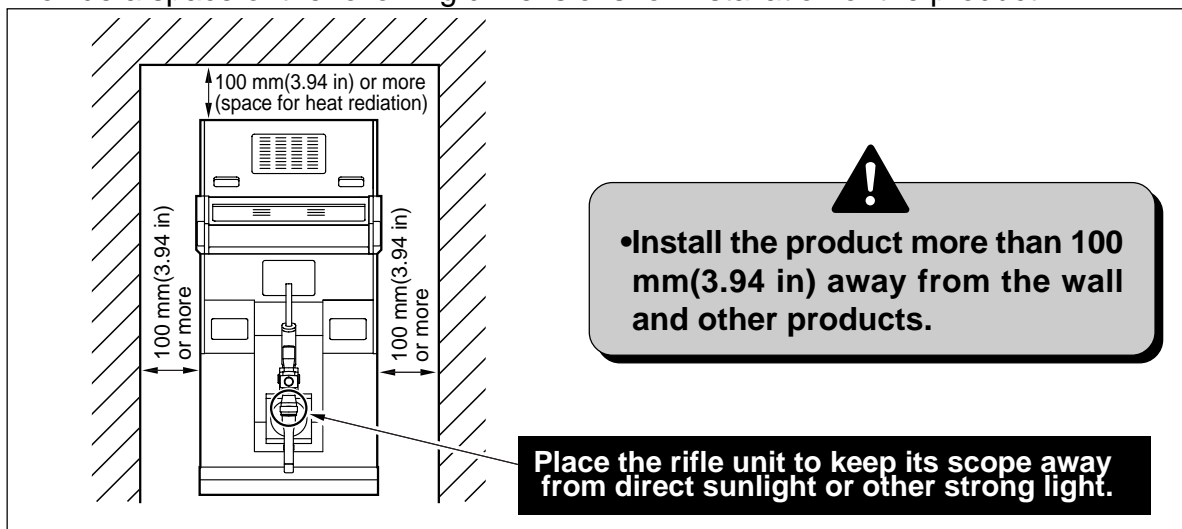


## ■ Allowance for Carrying-in and Installation of Product

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

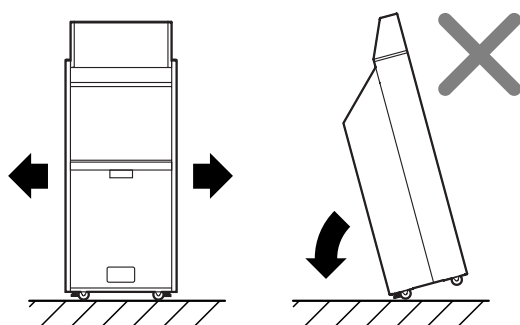


Provide a space of the following dimensions for installation of the product.



Follow the instructions below when carrying in this product with its units disconnected.

- To move the monitor unit, be sure to push it in either of the directions of arrow.



Never move the monitor unit tilted backward. It is hazardous.

- !**

  - When moving the monitor unit, be sure to push it along sideways (to the right or left). When moving it on a slope or getting it over a level difference, be sure to take the buddy system.



# 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。



**警告**

該項標注表示“有可能造成死亡或身負重傷”的內容。



**注意**

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。
  - ▶在設置本產品時，必須在地面設置六個支腳，平穩地放在地面。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
- 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。
- 請勿在通風口附近放置物品。
  - ▶如果妨礙通氣，內部溫度上昇，將會導致發生火災或故障。
- 請不要過分彎折或重壓電源軟線。
  - ▶否則將會導致發生漏電事故或火災。
- 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，不要手持電源軟線。
  - ▶否則電源軟線破損，將會導致發生漏電事故或火災。





## 設置時

### ! 注意

- 務必使用符合規格的電源。利用加長電線時，應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故障。
- 請不要將電源軟線設置在可被人踩拉的通道上。
  - ▶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。
  - ▶如果不連接地線，將會導致觸電或故障。
- 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。
- 移動本產品時，請不要手持來福槍裝置。
  - ▶否則將會導致人員受傷或發生事故，裝置受到傷損。
- 設置本產品時，請距離牆壁和其他產品10公分以上。
  - ▶否則，將會導致本體不能正常散熱，發生故障。
- 請不要改變本產品的開關位置。
  - ▶否則，將不能正常遊戲。



禁止



禁止



連接地線



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

- 請不要在電源插頭未正確插入插座或者堆積灰塵時放置不管。
  - ▶否則將會導致觸電或發生火災，請定期進行檢查。



禁止



**⚠ 注意**

- 禁止



**警告**

- 

拔下電源插頭



禁上



禁上



拔下電源插頭



禁止分解



## 移動、搬運時

### ⚠ 注意

- 本產品裝設有顯示屏以及不抗震動的電子零件和精密零件，在移動、搬運時請小心注意。此外，絕對不可橫放。
- 移動本產品前，務請關閉主電源開關，將電源插頭從插座上拔下，並將電源軟線從本體上取下。
  - ▶ 否則踩到或勾到電源軟線，將會導致發生事故或破損。
- 移動本產品時，務必將六個支腳提高到最大限度，用腳輪移動。
  - ▶ 否則將會導致發生事故或破損、故障。
- 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。
- 移動本產品時，請不要手持來福槍裝置。
  - ▶ 否則將會導致人員受傷或發生事故，裝置受到傷損。
- 顯示器裝置根據推動方向會翻倒。移動時應面對屏幕向左右方向推動。在斜面或臺階處移動時必須由兩個人以上進行。
  - ▶ 否則翻倒時造成事故和破損。
- 移動本產時，不可強行向機體開關部位和可動部位施加過份的力量。
  - ▶ 否則，可致受傷或事故，破壞機器本體。



禁止



拔下電源插頭



禁止

## 廢棄

### ⚠ 警告

- 廢棄處分本產品的來福槍裝置時，不可將瞄準鏡部位露出放置。
  - ▶ 否則，會受直射陽光等影響造成火災。



禁止

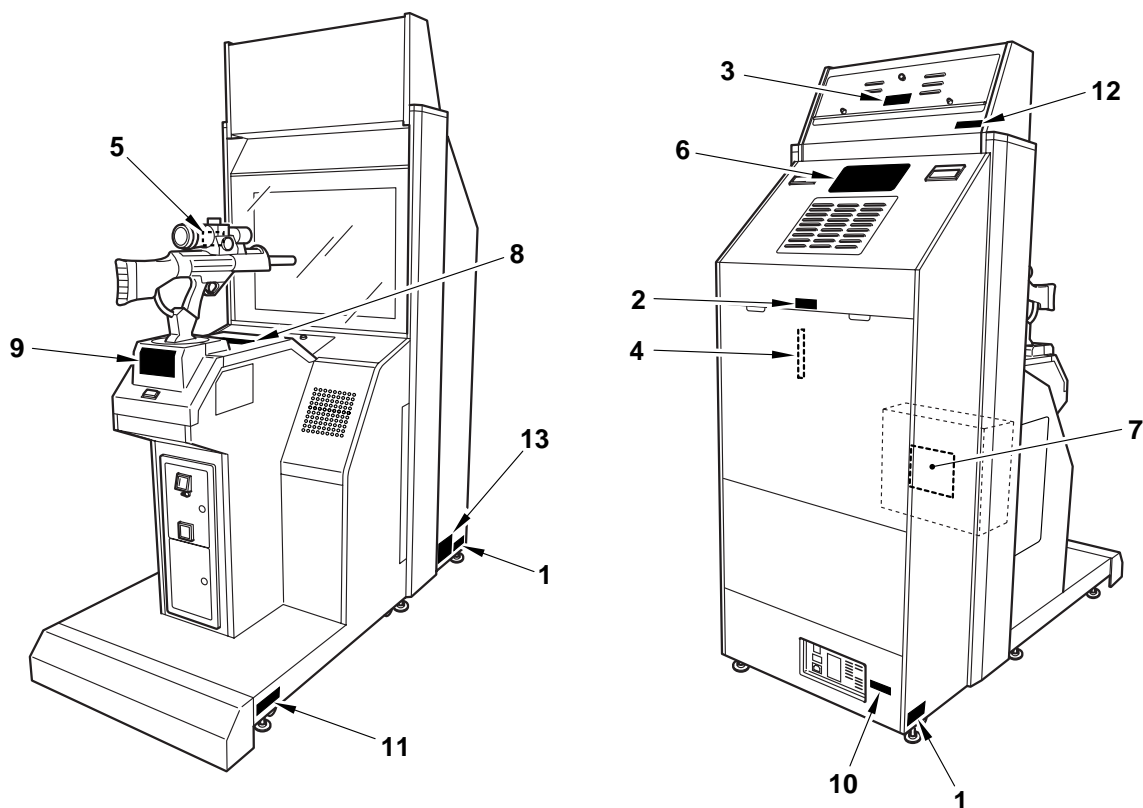
### 敬請遵守

- 本產品的設置、使用、檢查、清掃、移動以及搬運的方法，請按照本書中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。
- 請不要在間接相當於警告或注意的條件下進行設置、使用、檢查、清掃、移動以及搬運。
- 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。

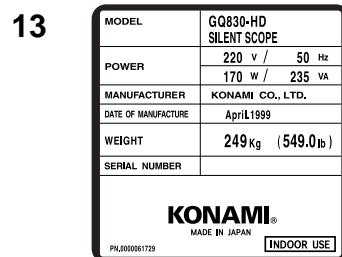
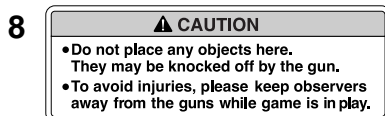
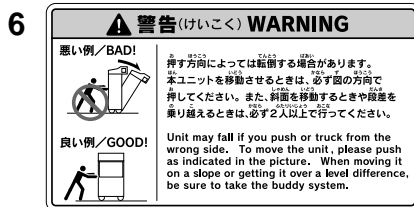


# 警告標籤等的張貼位置

CHINESE



## 警告標籤等的種類

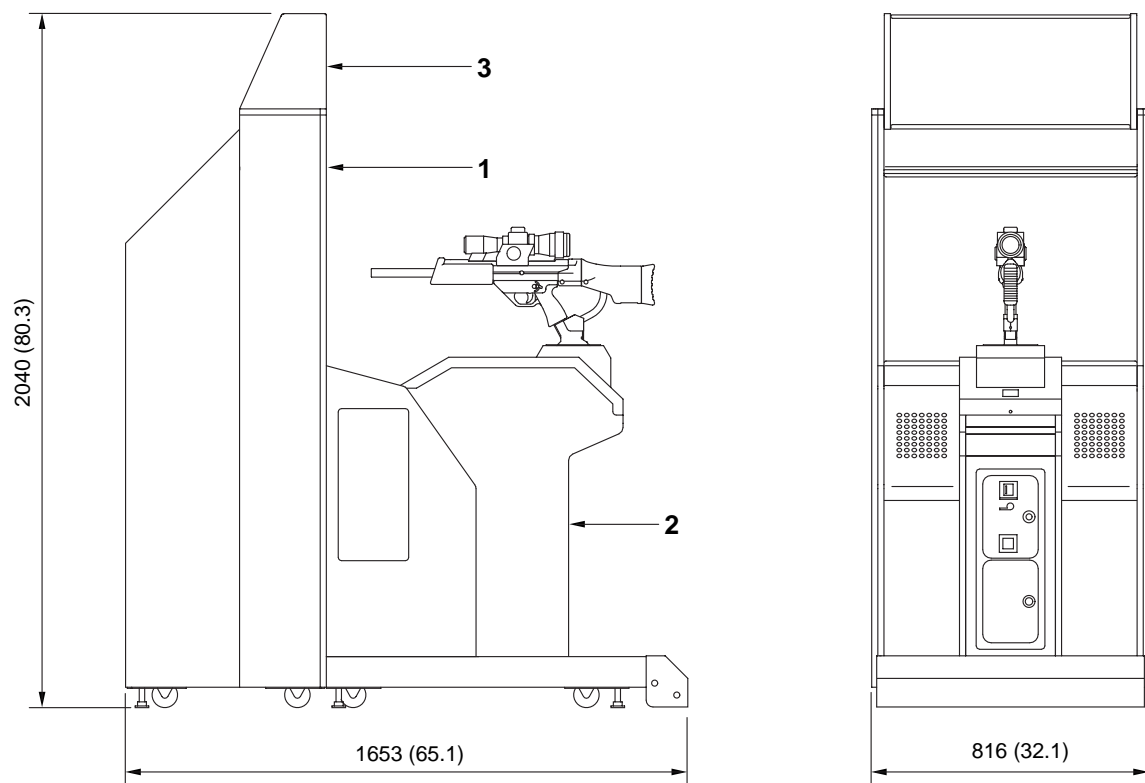


以上標注內容僅為示例。  
不同輸出地區，其標  
注內容有所不同。



# 1 規 格

CHINESE



## 規 格

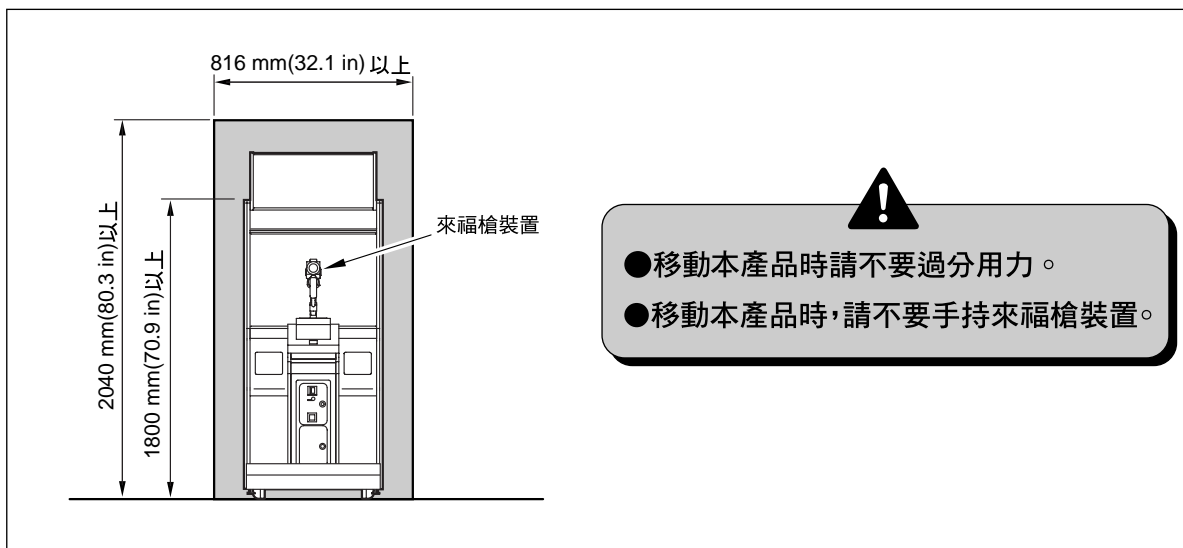
外 形 尺 寸	參閱上圖 mm(in)
重 量	總重：約249kg (549lb) 1 顯示器裝置：約127kg (280.0lb)      3 標題裝置：約12kg (26.5lb) 2 來福槍裝置：約110kg (242.5lb)
額 定 消 耗 電 力	・ GQ830-TB : 215W (MAX) ・ GQ830-HD : 170W (235VA)
顯 示 器	29英寸彩色顯示器(瞄準鏡部位：2英寸液晶顯示器)
使 用 條 件	溫度10～35℃ (50～95°F) 濕度20～70% (不可結露)
附 屬 物 品	・ 使用說明書 ..... 本書 ・ 錢箱鑰匙 ..... 2 ・ 維修用鑰匙 ..... 2 ・ 電源軟線 ..... 1 ・ 標題裝置 ..... 1 ・ 標題裝置安裝用螺絲(M6×15L) ..... 4 ・ L形扳手(維修瞄準鏡部位用) ..... 1

- 萬一附屬品不全或發現其他次品時，請惠詢當地的經銷店。
- 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。

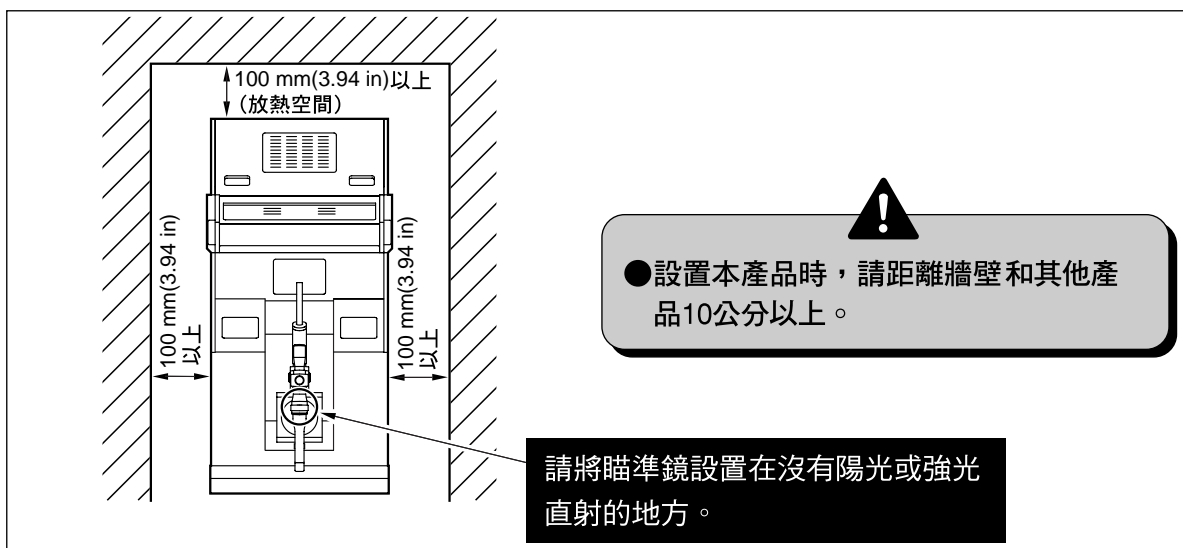


## ■有關搬運與設置的尺寸

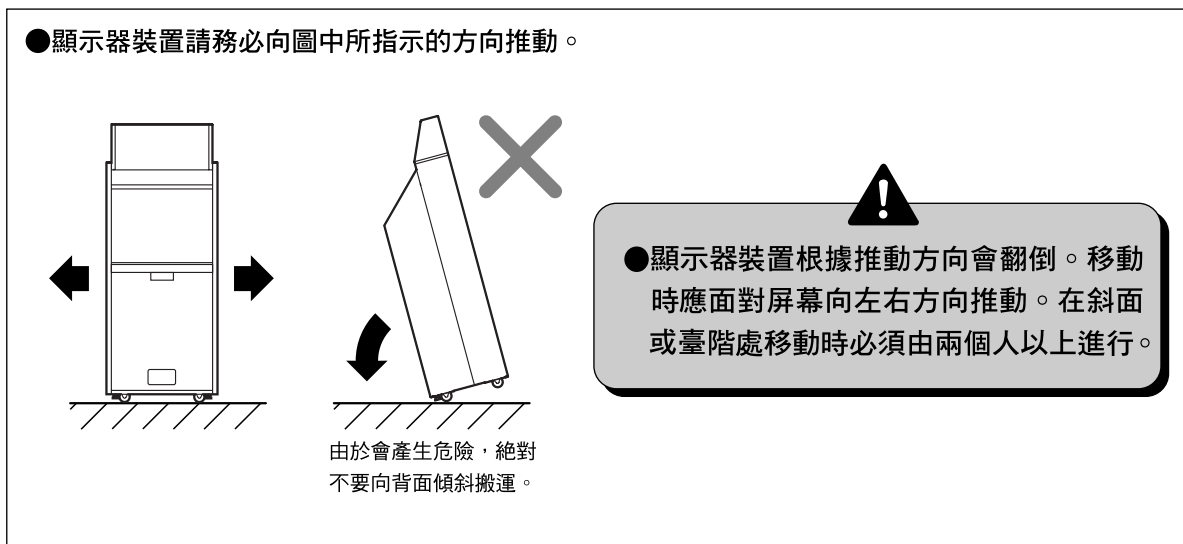
為搬進本產品，門口需要以下的尺寸。



設置本產品時，請確保以下空間。

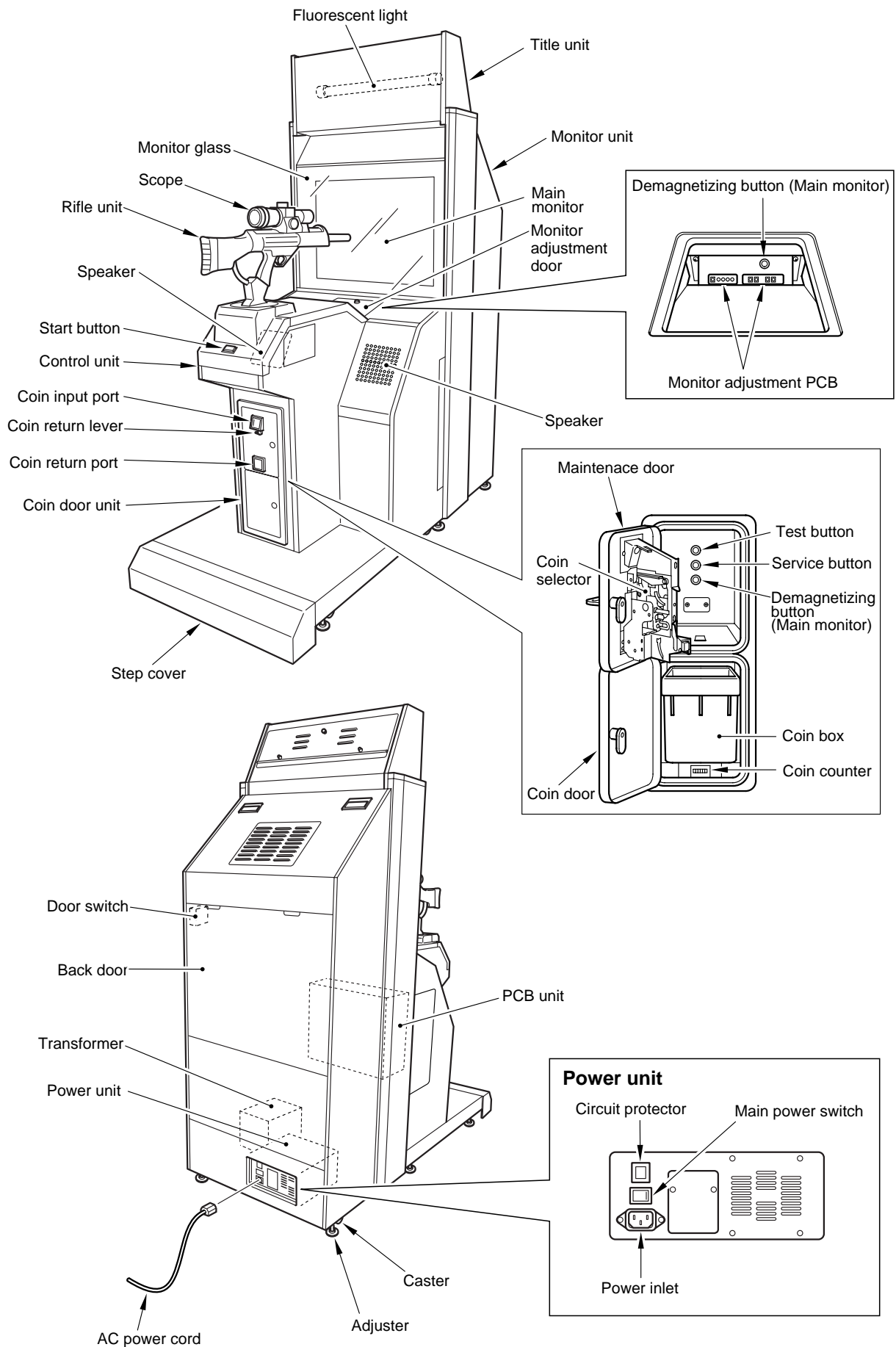


將本產品分開搬運時，請遵守以下指示。





## 2 Names of parts





## 3 How to play

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The “SILENT SCOPE™” gun shooting game is for you to look into the rifle unit’s scope and snipe at enemy characters. Looking through the scope, you can find images in the distance or in the dark which cannot be pinpointed on the main monitor screen. You are challenged to find out a target quickly and shoot at it precisely at the first fire.

### ■ How to play —————

- 1 Put coin(s) into the coin input port and press the start button.
- 2 The play mode select screen shows up. In less than 15 seconds, move the rifle unit to select a mode and pull the trigger to enter the mode. (To enter the mode, you can press the start button instead.)
  - Shooting range mode ..... The player tries to get the highest score possible within a specified time in the firing range.
  - Story mode ..... A story progresses in which you come to the rescue of the president from a terrorist group.
  - Time attack mode ..... On some stages of the story mode, you are challenged to clear all the targets in the shortest time possible.  
Play modes includes the three courses: beginners, intermediate and advanced.
- 3 Once a play mode has been selected, the game gets started automatically.
  - Watch for an enemy on the main monitor screen, and looking through the scope, shoot at it. The rifle is loaded with 5 bullets and can also be automatically reloaded no matter how many times.  
In the story mode, there are two ways to go from each stage. The story mode will be over in one of the 2 ending styles.
  - If you hit anyone but the enemies, you get a penalty and lose one of your life points.
  - When you find a beauty (appearing in a swimsuit, bath towel or dress) through the scope, you gain one life point.
- 4 The game is over when you have been attacked and lost all your life points or when the game time is up.

### ■ Setting the hit effect at gunning down of an enemy —————

- There are some levels of a hit enemy’s bloodshed (hit effect) and sexual expression (sexual content) to choose from. To make selections, refer to “GAME OPTIONS” screen on page 29.

### ■ Continuing the game —————

- You can continue the game if you take the procedure within about 20 seconds before the game is over.



# 4 Opening and closing the doors

---

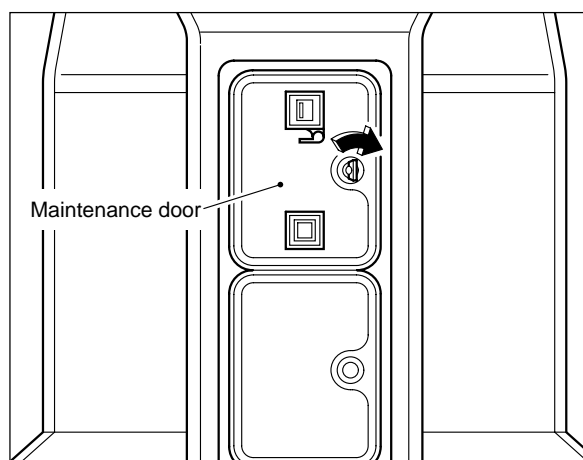
## 4-1 Opening and closing the maintenance door

### ■ How to open the maintenance door — — — — —

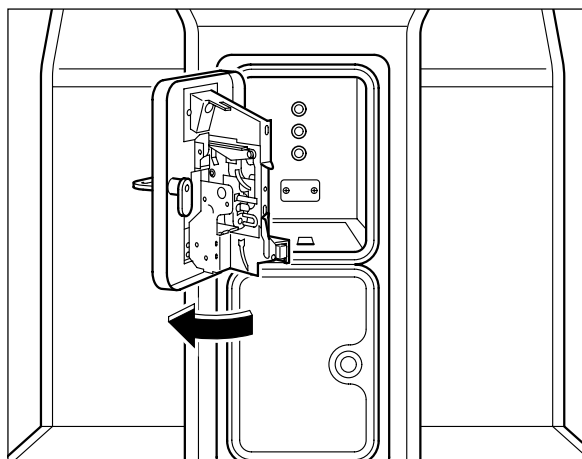


- Take care not to apply any load or impact to the maintenance door when it is open.
- After closing the maintenance door, be sure to check that the door is locked securely.

- 1** Insert the accompanying maintenance 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 key counterclockwise and draw it out.



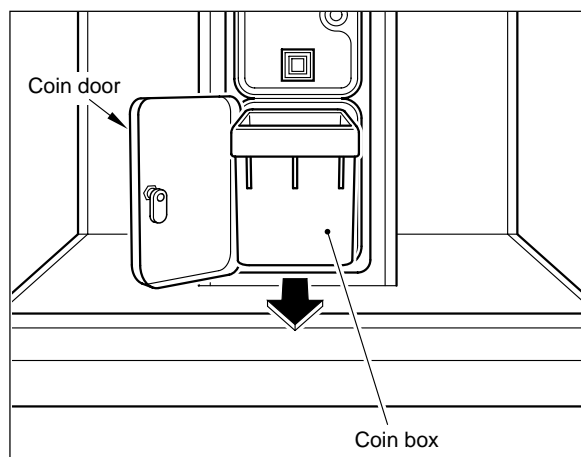
## 4-2 Opening and closing the coin door

### ■ 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.

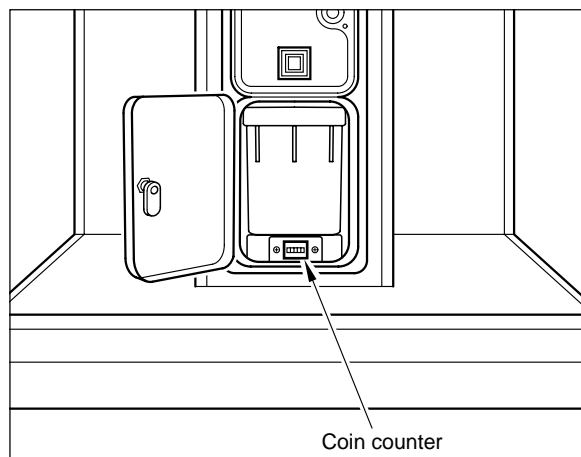


### ■ Coin counter — — — — —

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 41.

**MEMO**





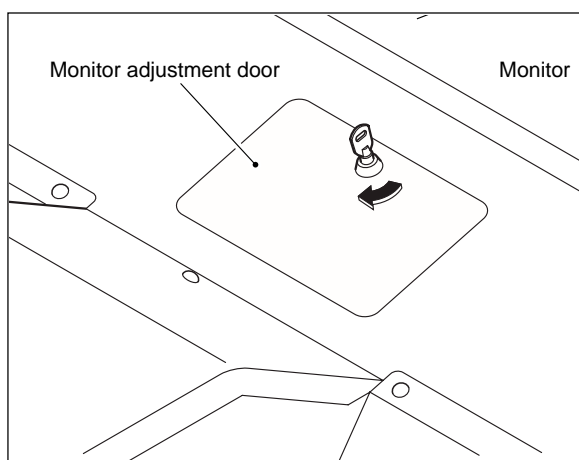
## 4-3 Opening and closing the monitor adjustment door

### ■ How to open the monitor adjustment door — — — — —

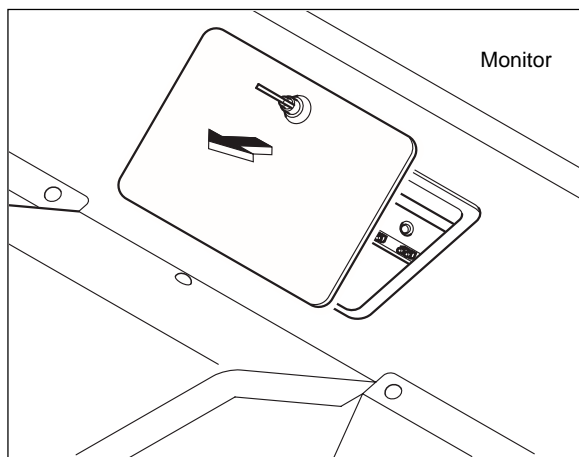


- When opening the monitor adjustment door, be careful not to hit it against the monitor glass.
- When closing the monitor adjustment door, be very careful not to get your finger pinched by the door.

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



- 2 Open and detach the monitor adjustment door.



### ■ How to close the monitor adjustment door — — — — —

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



# 5 Game settings

## 5-1 Checking the game performance

- When the main power switch is turned ON after installation of machine, the game Printed Circuit Boards (PCB) is checked automatically and the result is displayed on the screen.



- **Be sure to check the PCB unit (self test) before using the machine.**
- **Once the main power switch has been turned on (while the PCB unit is being checked), never touch the rifle unit until the demonstration game gets started.**
- **Preferably turn OFF the main power switch while the LCD screen of the scope is off (this happens if the game is not played for longer than 30 seconds) in order to prolong the product service life.**
- **Do not change the DIP switch setting of this product to other than factory setting.**
- **If an abnormality persists or the machine does not operate properly, immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.**

### ■ Result of test —————

#### If test is OK

- The machine goes to the game mode and the demonstration game gets started.

#### If any abnormality is detected

- “BAD” appears on the screen, and the checking is repeated.

After the installation of this product or when the PCB unit has been repaired or replaced, turn ON the power switch while pressing the test button of the service panel to initialize the setting once to the original factory setting.

At this time, keep pressing the test button until “BACKUP DATA INITIALE-COMplete/OPTION SETTINGS/RANKING DATA/BOOKKEEPING INCOME DATA/PLEASE RELEASE TEST SWITCH” appears.

**Never turn ON the power switch while holding down the test button.  
All the “BOOKKEEPING” data will be erased. (The data once erased can not be resumed.)**

If an abnormal display continues or the machine does not operate normally, immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.

### ■ On-screen message at power on —————

When the machine is powered on for the first time after installation, the following screen shows up. Set the clock on the “BOOKKEEPING” screen. (See page 31.) If the clock has not been set, this message appears each time the power is turned on. When the clock has been set, the message does not appear at power on. It appears again if the “BOOKKEEPING” data is cleared.

**[CLOCK]  
PRESS TEST SWITCH to MANUAL TEST MODE**



## 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.

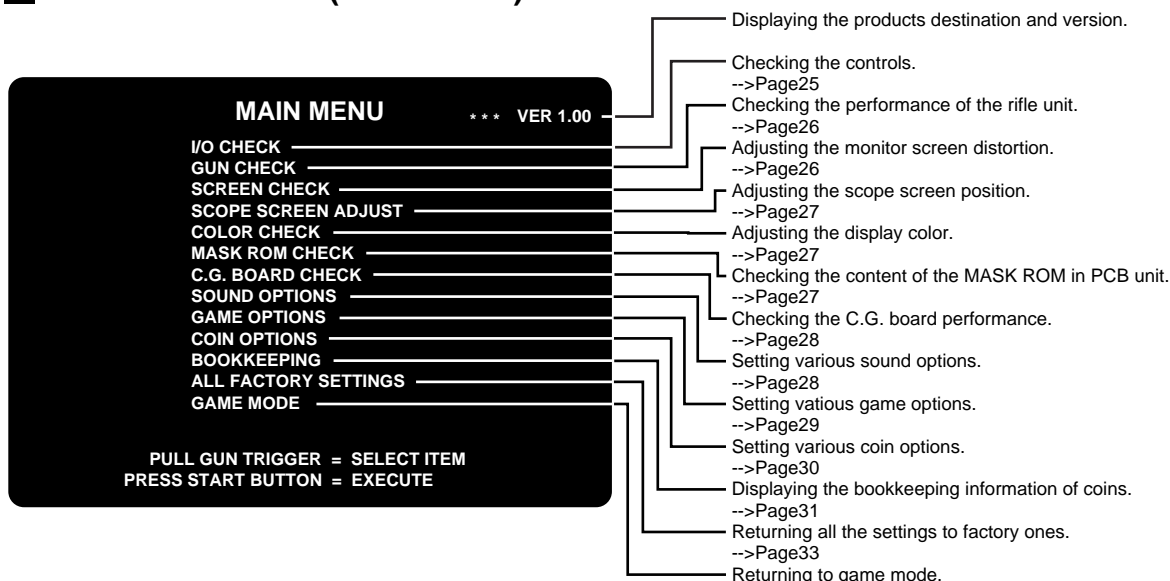
### ■ Starting the test mode — — — — —

- 1 Turn ON the main power switch.
- 2 While the demonstration game is playing, press the test button on the service panel. (Do not turn ON the main power switch with the test button held down. The current settings as well as the BOOKKEEPING data will be erased and the machine will have the factory settings.)
  - The main menu is displayed on the screen.

### ■ Quit the manual test mode — — — — —

- 1 Pull the rifle unit's trigger to select "GAME MODE" on the main menu screen.
- 2 Press the start button.
  - The screen goes back to the game mode.

### ■ Main menu screen (basic items) — — — — —



•If an error happens in "SCOPE SCREEN ADJUST DATA" or "GUN VOLUME DATA" at the start of the machine, a triangular marker is displayed at the error item. Pick up the item and make new settings. The "GAME MODE" item does not appear until those settings are properly made. This means the game cannot be played.

### MEMO

### ■ Selecting each mode — — — — —

How to select each mode from the main menu.

- SELECT --> Pull the rifle unit's trigger.
- SET --> Press the start button.

After selecting a mode, refer to the page on which that mode is described in details.



## 5-3 Mode descriptions

- The original factory settings are displayed in green; the changed settings are displayed in red.
  - Pull the rifle unit's trigger to select a setting to be modified, and press the start button to change the setting.
  - After the setting has been changed, select "SAVE AND NEXT" and press the start button 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 DID NOT SAVE. DO YOU WANT TO SAVE? YES/NO" select "YES" or "NO". Pull the rifle unit's trigger to select "YES" or "NO". Press the start button 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 MODIFY SETTINGS" will appear, the modified settings will not be saved, but the main menu will show up again on the screen.

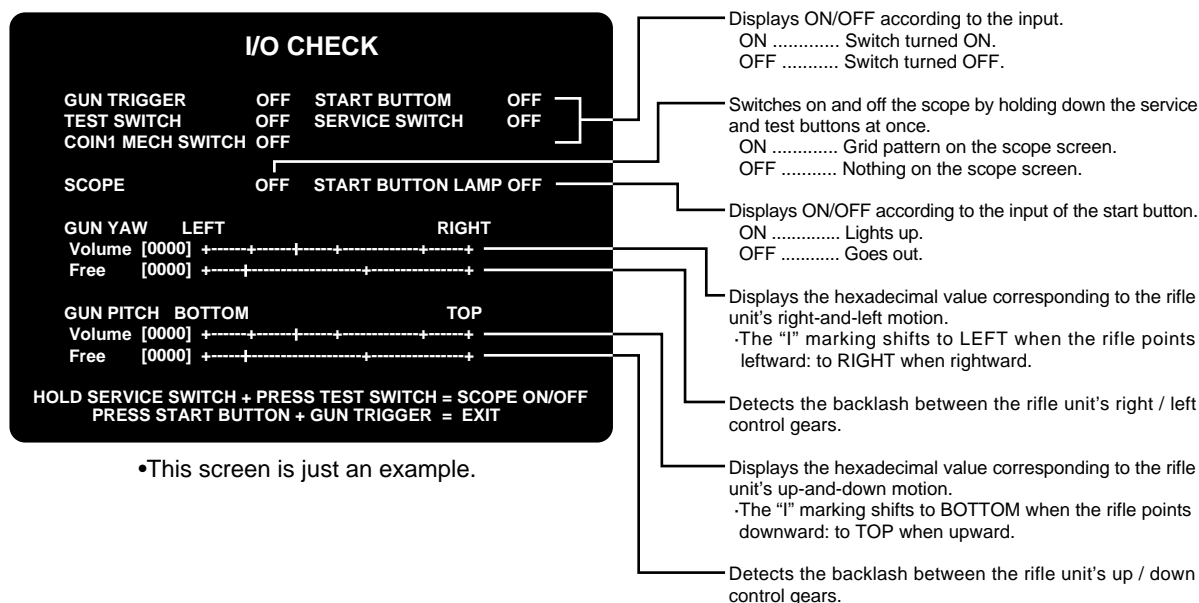
- If "FACTORY SETTINGS" is selected and the start button is pressed, all the settings of the mode will go back to the factory ones.
- If "DEFAULT SETTINGS" is selected, the settings of the mode will become the default ones.

**MEMO**

## I/O CHECK

### Checking the controls

- Mode for checking the performance of the controls.
  - To return to the main menu screen, pull the rifle unit's trigger and press the start button at once.





## GUN CHECK

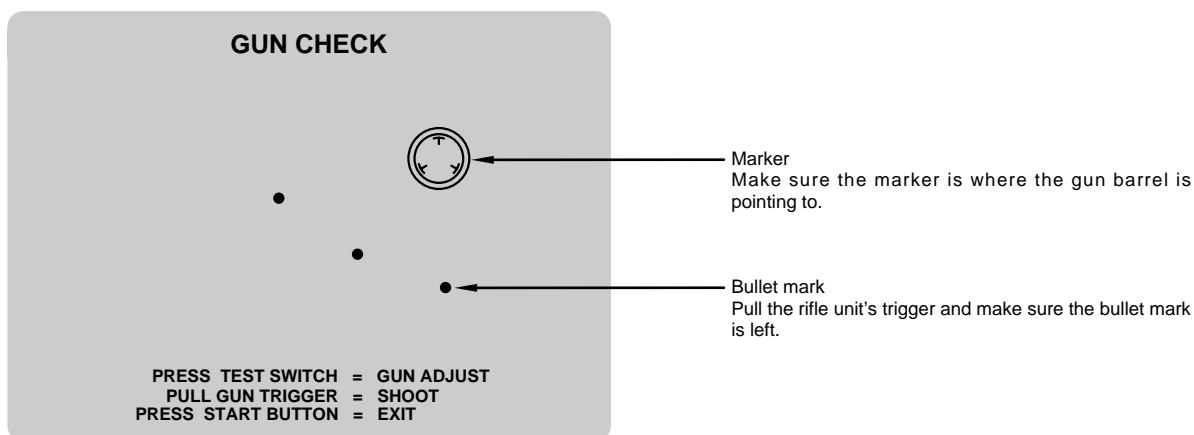
### Checking the performance of the rifle unit

- Mode for adjusting and checking the rifle unit's swing range.

Look at the screen for the marker that the gun barrel is pointing to. If the marker is extremely out of position, press the test button on the service panel to call the gun adjustment mode.

To return to the main menu screen or interrupt the gun adjustment mode, press the start button.

### Gun check mode



•This screen is just an example.

### Gun adjustment mode

This mode is intended to adjust the pinpointing of the rifle unit. Take the following adjustment procedure.

- 1 Point the gun barrel to the lower-left corner of the screen, and pull the rifle unit's trigger.
- 2 Point the gun barrel to the upper-right corner of the screen, and pull the rifle unit's trigger.
- 3 The "NOW SAVING" message appears and the settings will be saved. Then the "GUN CHECK" screen shows up again. Move the rifle unit and make sure the marker is in position.

- If an error happens in "GUN VOLUME DATA" at the start of the machine, the "Gun adjustment mode" screen shows up itself.
- No image appears on the scope while in the "Gun check mode" and "Gun adjustment mode".

**MEMO**

## SCREEN CHECK

### Adjusting the monitor screen distortion

- Mode for checking the monitor screen display.

Adjust the focus, distortion and size of the image on the screen while watching the crosshatch pattern. Use the monitor adjustment PCB (See page 56) to make adjustments.

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



## SCOPE SCREEN ADJUST

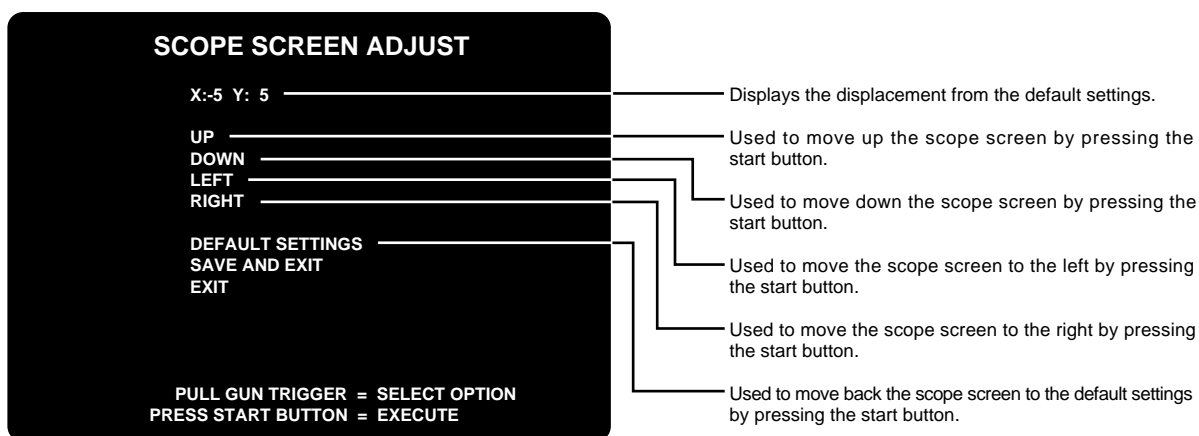
### Adjusting the scope screen position

- Mode for adjusting the display position on the scope screen.

Pull the rifle unit's trigger to select an item. Press the start button to modify the setting.

Looking into the scope, adjust so that the crosshatch pattern be centered.

To return to the main menu screen, select "SAVE AND EXIT" or "EXIT" and press the start button.



•This screen is just an example.

- The crosshatch pattern may appear slightly tilted on the scope screen. The game is not affected, however.

**MEMO**

## COLOR CHECK

### Adjusting the display color

- Mode for checking the display color.

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

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

## MASK ROM CHECK

### Checking the content of the MASK ROM in PCB unit

- Mode for checking the MASK ROM on the game PCB unit.

If the MASK ROM is not in trouble, "OK" is displayed: if in trouble, "BAD" is displayed. Once in this mode, this checking gets started automatically. To return to the main menu screen, press the start button.

- If "BAD" is indicated, turn OFF the power switch and turn it ON again. If "BAD" still appears, write down the ROM number. And immediately turn OFF the main power switch, unplug the power cord and contact your nearest dealer.



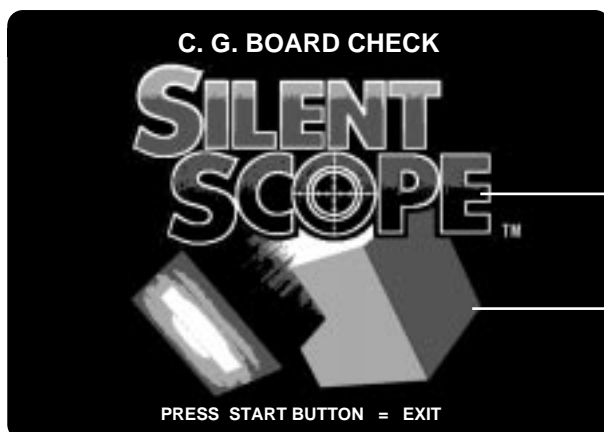
## C.G. BOARD CHECK

### Checking the C.G. board performance

- Mode for checking the C.G. board function.

Check the function of the C.G. board by watching the motion on the screen in this mode to see if the board works normally or not.

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



The product's logo mark flashes semi-transparent here.  
(The KONAMI logo mark appears on the scope.)

Two cubes are turning entangled each other behind the logo mark.

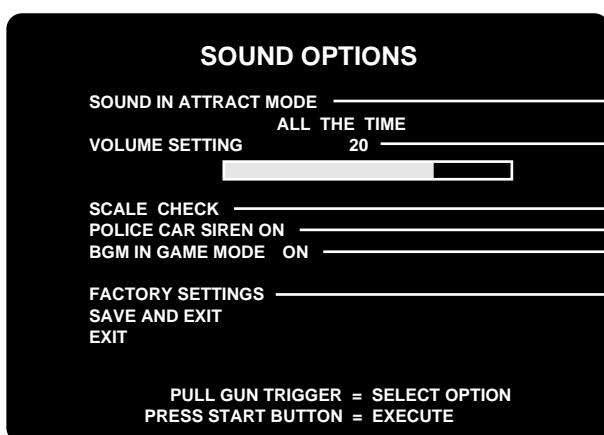
## SOUND OPTIONS

### Setting various sound options

- Mode for setting and checking the sound options.

Pull the rifle unit's trigger to select an item. Press the start button to modify the setting.

To return to the main menu screen, select "SAVE AND EXIT" or "EXIT" and press the start button.



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

Adjusts the sound volume level of voice and sound effects in the range of 0 (mute) to 30 (maximum).  
\*To raise the sound level, press the start button.  
\*To lower the sound level, press the start button so many times that the zero level is reached and make a new setting.

You will hear a do-re mi...do musical scale from the left speaker first and then from the right speaker, which is repeated twice.  
(Sound effect is given for the 2nd round.)

Switches on and off the police car siren during the game.  
-ON ..... Siren on as specified.  
-OFF ..... Siren always off.

Sets to give background music while the game is being played.  
-ON ..... Background music heard.  
-OFF ..... Background music not heard.

Press the start button to return all the settings to the factory settings.

•This screen is just an example.



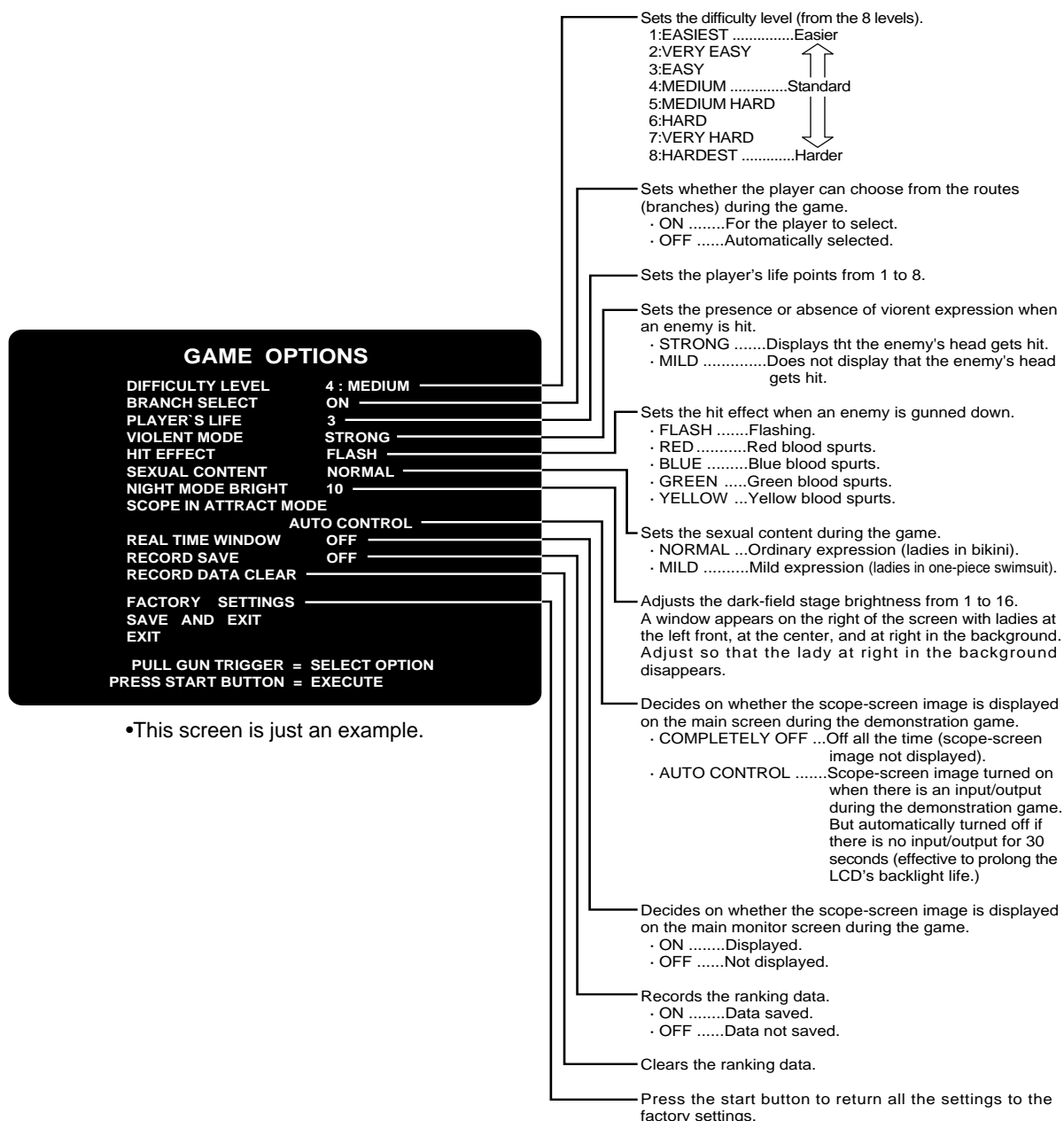
## GAME OPTIONS

### Setting various game options

- Mode for setting and checking the game options.

Pull the rifle unit's trigger to select an item. Press the start button to modify the setting.

To return to the main menu screen, select "SAVE AND EXIT" or "EXIT" and press the start button.





## COIN OPTIONS

### Setting various coin options

- Mode for setting and checking the coin options.

Pull the rifle unit's trigger to select an item. Press the start button to modify the setting.

To return to the main menu screen, select "SAVE AND EXIT" or "EXIT" and press the start button.



- 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 MECHANISM   COMMON \_\_\_\_\_

COIN SLOT 1   1COIN(S) 1CREDIT(S) \_\_\_\_\_

COIN SLOT 2   1COIN(S) 1CREDIT(S) \_\_\_\_\_

START   2CREDIT(S) to START \_\_\_\_\_

CONTINUE   1CREDIT(S) to CONTINUE \_\_\_\_\_

FACTORY SETTINGS \_\_\_\_\_

SAVE AND EXIT \_\_\_\_\_

EXIT \_\_\_\_\_

PULL GUN TRIGGER = SELECT OPTION  
PRESS START BUTTON = EXECUTE

\_\_\_\_\_ Selects a free play.  
ON.....Available for free play.  
OFF.....Not available for free play.

\_\_\_\_\_ Always keep it set to COMMON.

\_\_\_\_\_ Sets the number of credits for the coin.  
(Presettable to 16 coins for 1 credit through 1 coin for 16 credits)

\_\_\_\_\_ Sets the number of credits required to start the game.  
(Presettable to 1 thru 16 credits)

\_\_\_\_\_ Sets the number of credits required to continue the game.  
(Presettable to 1 thru 16 credits)

\_\_\_\_\_ Press the start button to return all the settings to the factory settings.

- This screen is just an example.



## BOOKKEEPING

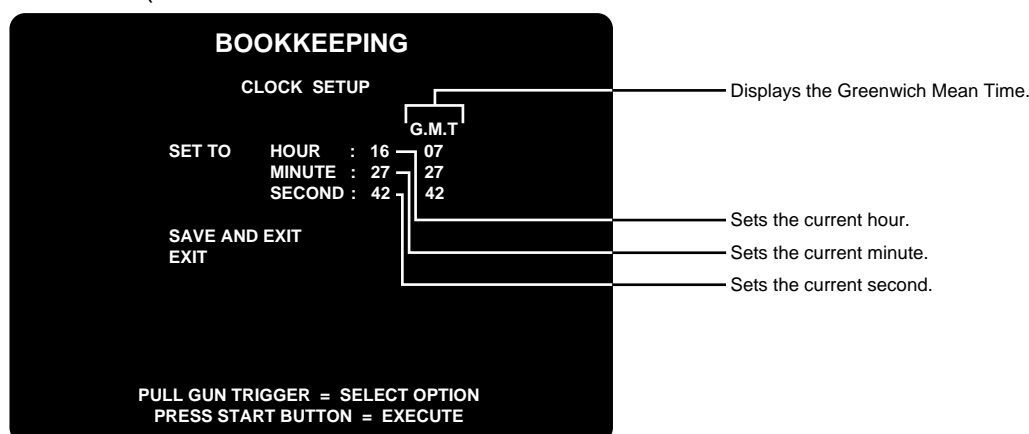
### Displaying the bookkeeping information of coins

■ Mode for displaying the total data on the number of coins put in the machine.

If the time is preset on the “CLOCK SETUP” screen, the total data on the number of coins put into the machine can be checked for each coin slot.

Pull the rifle unit’s trigger to select “HOUR”, “MINUTE”, and “SECOND”. Press the start button to adjust the current time.

Make sure the current time is correct, select “SAVE AND EXIT” and press the start button. (The current time is now set and the main menu screen shows up.)

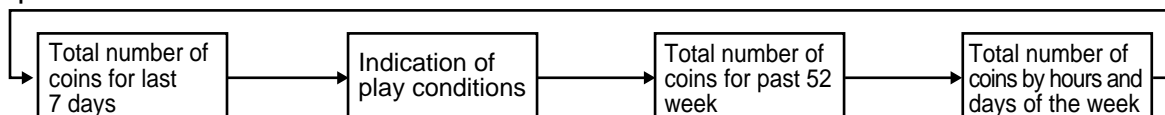


•This screen is just an example.

- If the time setting has not been made — for example, after the machine has been set up or initialized —, the “CLOCK SETUP” screen shows up.
- When the time setting has been modified, the bookkeeping information is automatically cleared. With the current time not set, the total of received coins and other bookkeeping data are not displayed. (The data once erased can not be resumed.)

## MEMO

■ When the time has been preset on the “CLOCK SETUP” screen as shown above, the following “BOOKKEEPING” information is displayed on the screen. Select “NEXT DATA SUMMARY” and press the start button, and the screen will switch in the following sequence. To return to the main menu screen, select “EXIT” and press the start button.



Also, when the current time has been set and “INCOME DATA CLEAR” has been selected and the start button pressed, the current time and BOOKKEEPING data can be cleared.

At this time, the question “DO YOU WANT TO CLEAR DATA? YES/NO” is indicated on the screen. Pull the rifle unit’s trigger to select “YES” or “NO”. If “YES” is selected, “NOW CLEARING” appears on the screen and the “BOOKKEEPING” data will be deleted. The data will be saved in the factory settings and the main menu screen will show itself up.

If “NO” is selected, “NO MODIFIED” is indicated and the main menu appears again without deletion of the data.



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

**BOOKKEEPING**

INCOME DATA of LAST 7 DAYS

	SLOT1	SLOT2
TOTAL	0	0
LAST 7DAYS AVERAGE	0	0
TODAY	0	0
YESTERDAY	0	0
-2DAY	0	0
-3DAY	0	0
:		
-7DAY	0	0

NEXT DATA SUMMARY  
INCOME DATA CLEAR  
EXIT

PULL GUN TRIGGER = SELECT OPTION  
PRESS START BUTTON = EXECUTE

•This screen is just an example.

## Screen of indication of play conditions

**BOOKKEEPING**

PLAY DATA SUMMARY

TOTAL ACTIVE TIME	0h 0m 0s
TOTAL PLAY TIME	0h 0m 0s
ACTIVITY RATE	0%
AVWRAGE PLAY TIME	0m 0s
ONE TIME ONLY COUNT	0
CONTINUE COUNT	0
SOLD PLAY COUNT	0
STORY MODE	0
SHOOTING RANGE	0
T.A.EASY	0
T.A.MEDIUM	0
T.A.HARD	0

NEXT DATA SUMMARY  
INCOME DATA CLEAR  
EXIT

PULL GUN TRIGGER = SELECT OPTION  
PRESS START BUTTON = EXECUTE

•This screen is just an example.

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

**BOOKKEEPING**

COIN SLOT1 INCOME DATA of LAST 52 WEEKS

-01:00000	-02:00000	-03:00000	-04:00000
-05:00000	-06:00000	-07:00000	-08:00000
-09:00000	-10:00000	-11:00000	-12:00000
:	:	:	:
-49:00000	-50:00000	-51:00000	-52:00000

NEXT DATA SUMMARY  
INCOME DATA CLEAR  
EXIT

PULL GUN TRIGGER = SELECT OPTION  
PRESS START BUTTON = EXECUTE

•This screen is just an example.

## Screen of the total number of coins by hours and days of the week

**BOOKKEEPING**

COIN SLOT1 INCOME DATA of WEEK

TIME	SUN	MON	TUE	WED	THU	FRI	SAT	TOTAL
0:00	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0
:								
22:00	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

NEXT DATA SUMMARY  
INCOME DATA CLEAR  
EXIT

PULL GUN TRIGGER = SELECT OPTION  
PRESS START BUTTON = EXECUTE

•This screen is just an example.



## ALL FACTORY SETTINGS

### Returning all the settings to factory ones

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

Pull the rifle unit's trigger to select "YES" or "NO" and press the start button for entry. If "YES" is selected, the question for re-confirmation appears on the screen.

If "YES" is selected again, the "NOW SAVING" message appears on the screen and the next test-mode settings are saved as the factory settings.

- SOUND OPTIONS
- GAME OPTIONS
- COIN OPTIONS

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



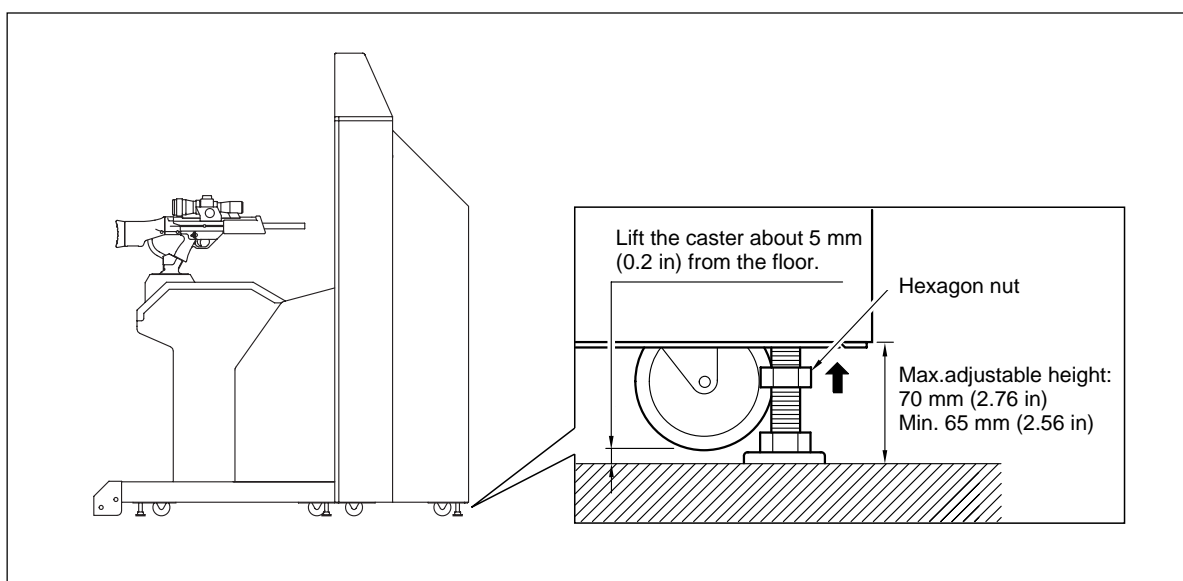
# 6 Installation and assembling

## 6-1 Fastening the adjusters

### ■ How to fasten the adjusters



- Adjust the adjusters so that the casters do not touch the floor. Take care not to exceed the maximum adjusting height of the adjuster.
- Make all the 6 adjusters come in contact with the floor, tighten them with hexagon nuts after making sure that all the units are placed stably in a horizontal position.



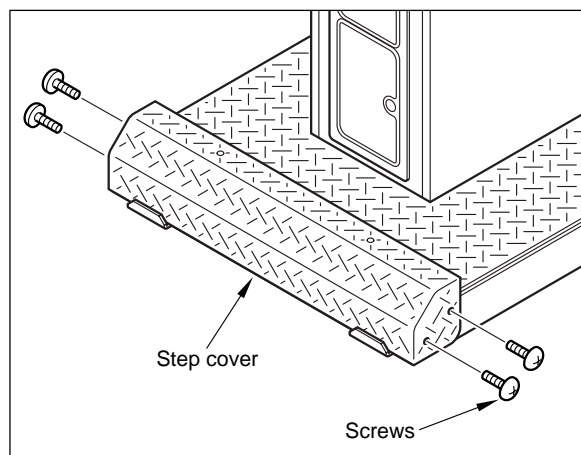


## 6-2 Installing the step cover

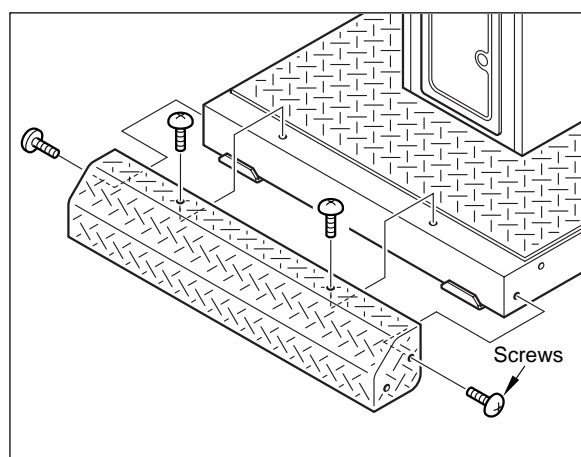
### ■ How to install the step cover — — — — —

First make sure the machine is secured with the adjusters and then attach the step cover as shown below.

- 1** Remove the screws and detach the step cover.



- 2** Place the step cover back in position and fix it with the above four screws. See the figure at right.





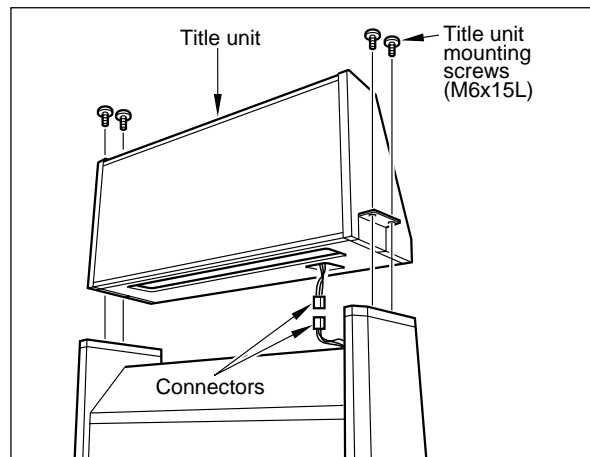
## 6-3 Installing the title unit

### ■ How to install the title unit



- Before installing the title unit, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- Before installing the title unit, make sure the adjusters of the machine are tight on the floor.
- The title unit weights approx. 12kg(26.5lb). Be sure to make a team of 2 people or more and to use stepladders or the like for added safety.
- When connecting the title unit, take care not to catch the wiring and your hand between the unit.

- 1 Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- 2 Connect all the specified connectors. Place the title unit on the monitor unit with care not to get the wires caught between them.
- 3 Fix the title unit with the accompanying title unit mounting screws.



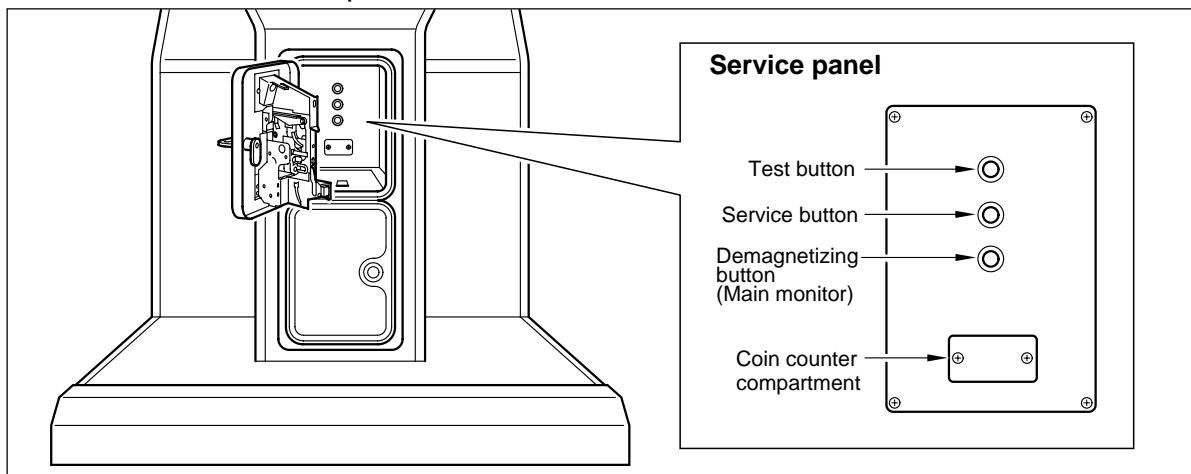
- When placing the title unit on the monitor unit, be careful not to get your hand and the wires caught between them.
- Fix each of the unit on the monitor unit and fix it by tightening the screws.

**MEMO**

## 6-4 Service panel

### ■ Service panel

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





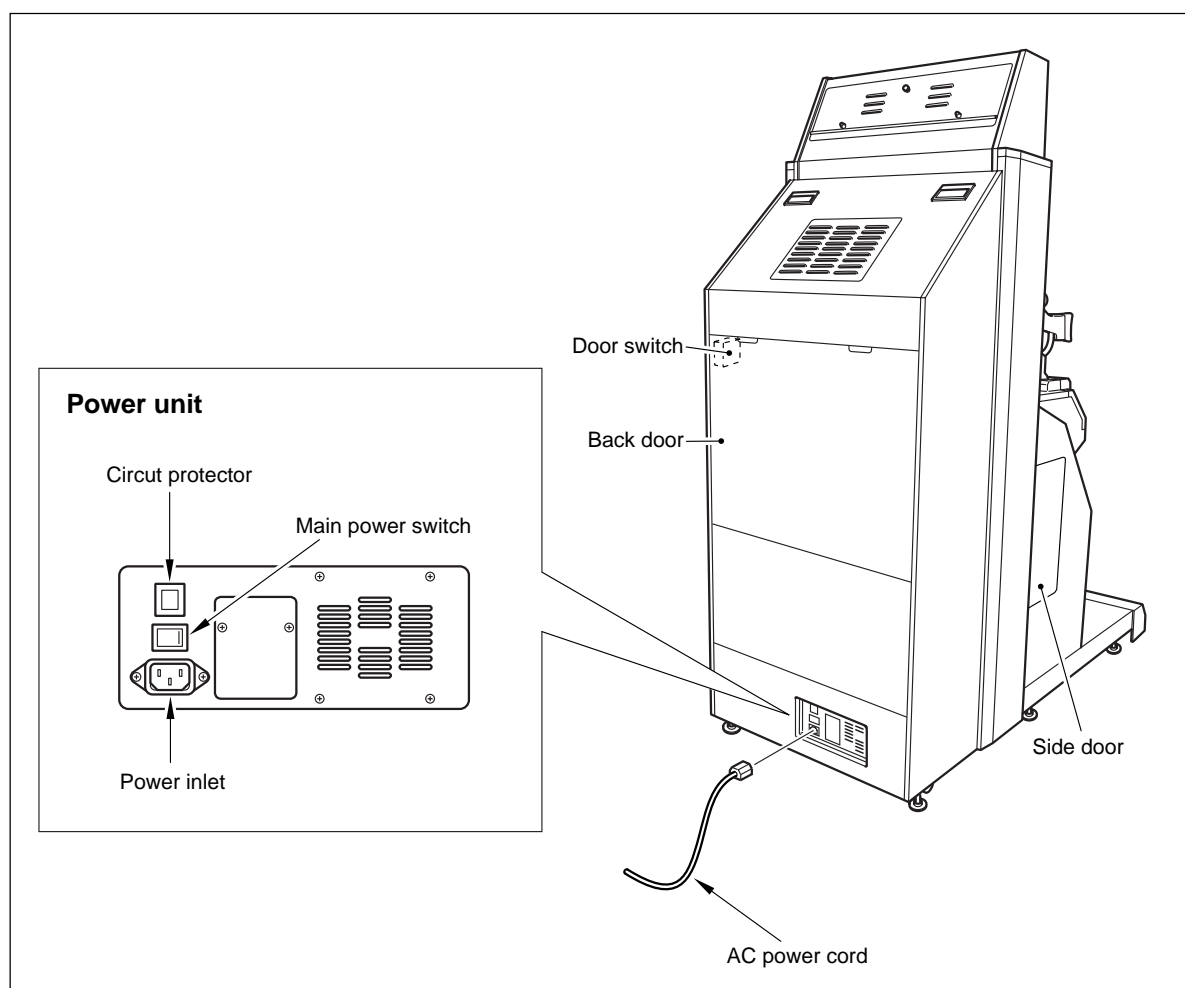
## 6-5 Power unit

### ■ Power unit

The power supply unit is provided at the rear side of the machine.



- 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 are high-voltaged parts inside the product. Other persons than qualified industry specialist should not open the back door and side door. When the back door and side door is opened, pay due attention not to touch the inside unnecessarily.
- When opening the back door and side door, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- Preferably turn OFF the main power switch while the LCD screen of the scope is off (this happens if the game is not played for longer than 30 seconds) in order to prolong the product service life.





## 6-6 Separating the machine

### ■ How to separate the machine

The machine can be divided into the units.

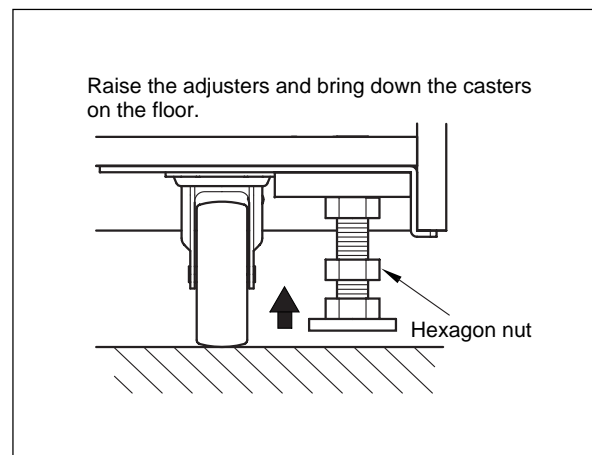


- Before separating the units from the machine, be sure to turn OFF the main power switch and remove the power cord plug from the receptacle.
- Before moving the machine, be sure to turn OFF the main power switch, unplug the power cord from the receptacle and remove the power cord from the machine.
- Before moving the machine, be sure to fully lift the six adjusters and move it on the casters.
- When moving the monitor unit, be sure to push it along sideways (to the right or left). When moving it on a slope or getting it over a level difference, be sure to take the buddy system.
- When connecting the separated units, take care not to catch the wiring and your hand between the units.

### ■ How to separate the monitor unit and control unit

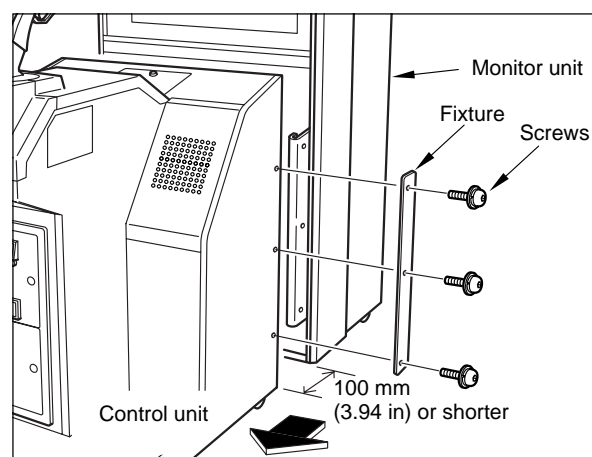
**1** Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

**2** Raise the six adjusters to let the casters come in contact with the floor.



**3** Unscrew the fixtures off both sides. Draw the units 100 mm (3.94 in) or shorter apart from each other.

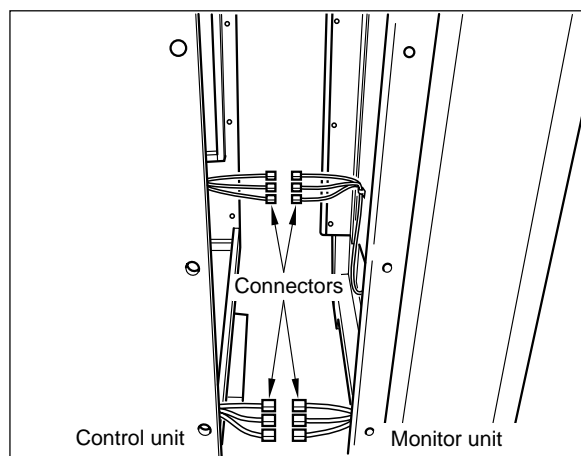
- Be careful not force the units too far from each other. The wires connected between the units may be damaged inside.
- Fix each of the unit on the monitor unit and fix it by tightening the screws



**MEMO**



**4** ■ Disconnect all the connectors.





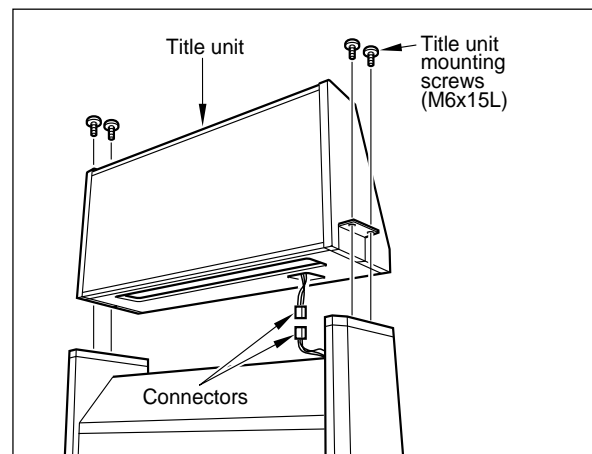
### ■ Separating the title unit — — — — —



- Before separating the title unit, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- Before detaching the title unit, make sure the adjusters of the machine are tight on the floor.
- The title unit weighs approx. 12 kg (26.5 lb). Be sure to make a team of 2 people or more and to use stepladders or the like for added safety.
- When reconnecting the title unit, take care not to catch the wiring and your hand between the units.

- 1** Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- 2** Remove the lock screws off the title unit. Lift the title unit slightly and disconnect the connectors.

- Be careful not to force the title unit up too far. The wires connected may be damaged inside.



**MEMO**



## 6-7 Moving the coin counter

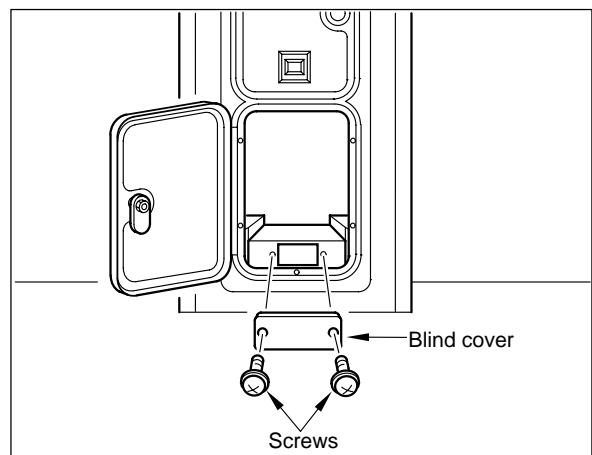
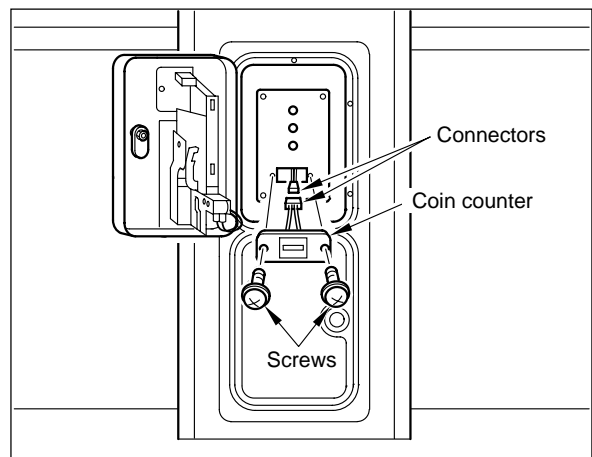
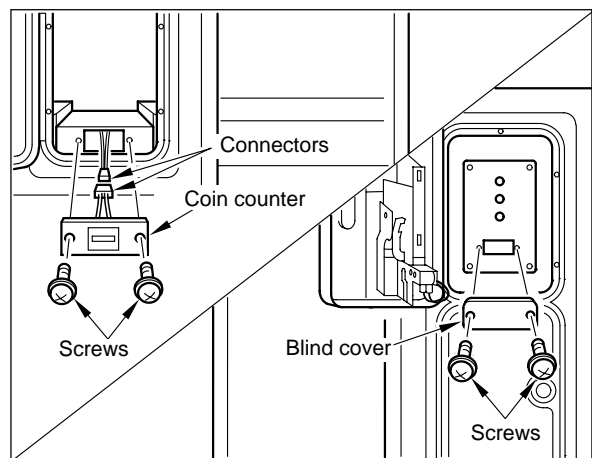
### ■ How to move the coin counter — — — — —

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



•Before moving the coin counter, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

- 1 Be sure to turn OFF the main power switch and unplug the 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 connectors.
- 3 Remove the maintenance door and unscrew the blind cover to remove it from the service panel.
- 4 Draw the connector out of the opening of the service panel and connect this connector to the coin counter's connector.
- 5 Attach the coin counter on the service panel with the screws.
- 6 Attach the blind cover (detached in Step 3 above) back in position on the coin counter using the screws.
- 7 Place the coin box back into position and close the coin door.





# 7 Maintenance

## 7-1 Replacing the coin selector

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

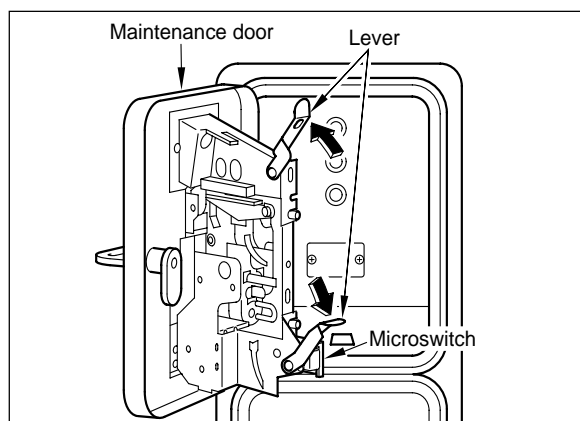


- Before replacing the coin selector, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

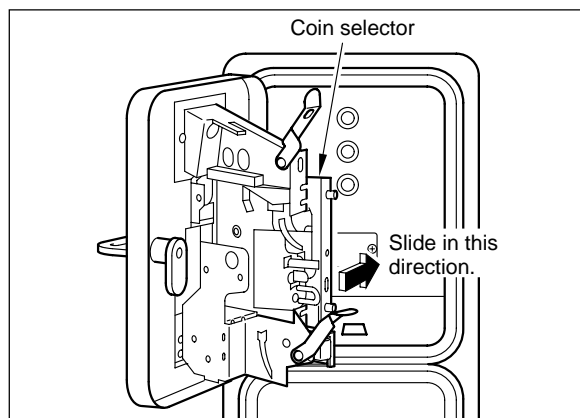
**1** Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

**2** Open the maintenance door.

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

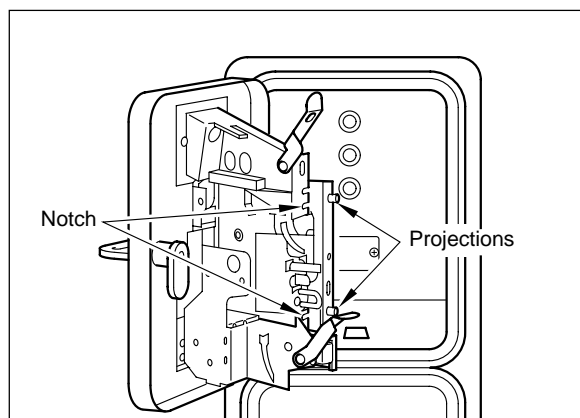


**4** Slide the coin selector to the right, and take it out.



**5** **To fit the coin selector again**  
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.





## 7-2 Replacing the fluorescent light

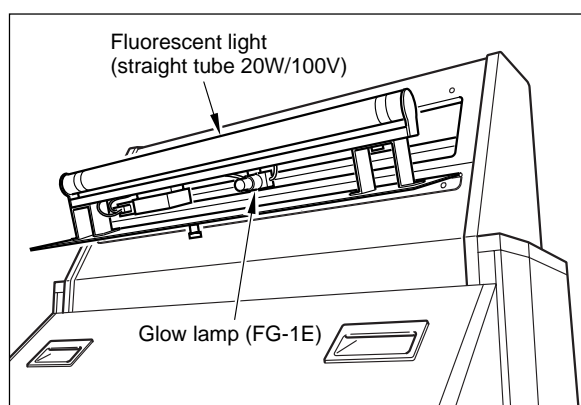
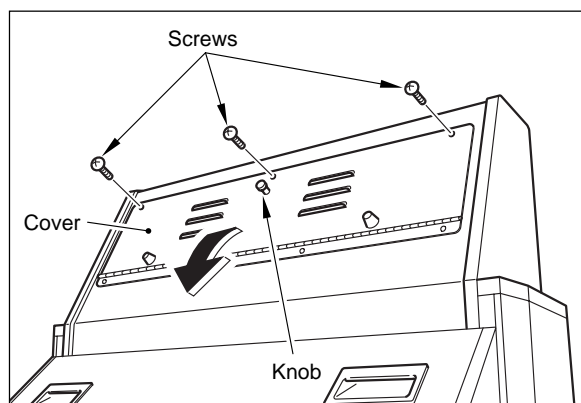
### ■ How to replace the fluorescent light —————



- Before replacing the fluorescent light, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- Gently open the fluorescent light cover.
- 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 (straight tube 20W / 100V).
- 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.

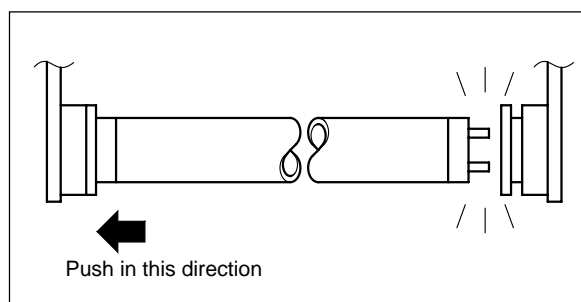
- 1 Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

- 2 Remove the screws off the back cover (see at right). Hold the knob and gently open the cover.



- 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 to replace the glow lamp at the same time.

**MEMO**



## 7-3 Replacing the start button

### ■ How to replace the start button



- Before replacing the start button, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- 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 power cord from the receptacle.

**2** Remove the screws and detach the cover.

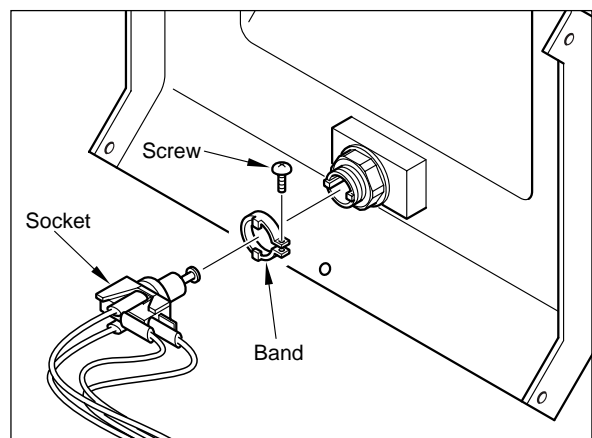
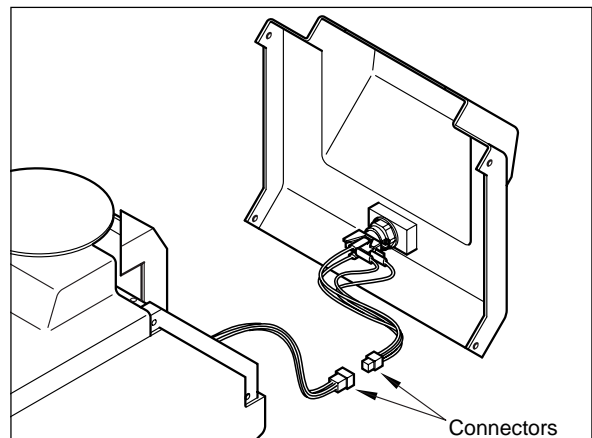
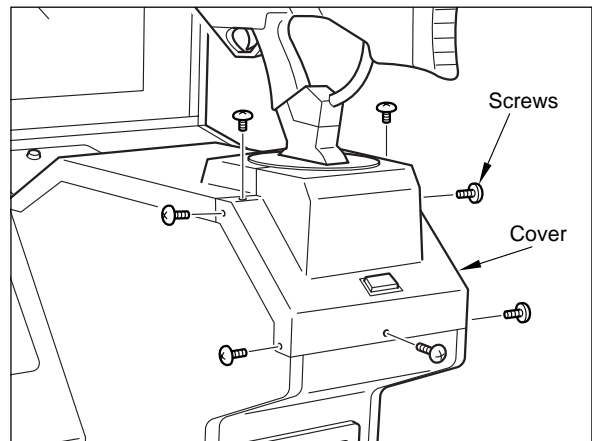
• Be careful not to force the cover up too far. The wires connected may be damaged inside.

#### MEMO

**3** Disconnect the connectors.

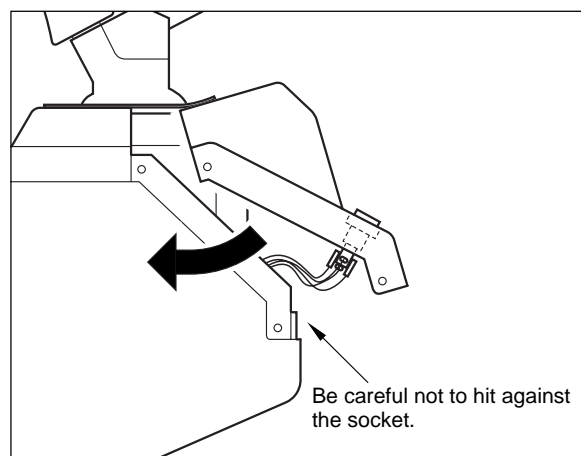
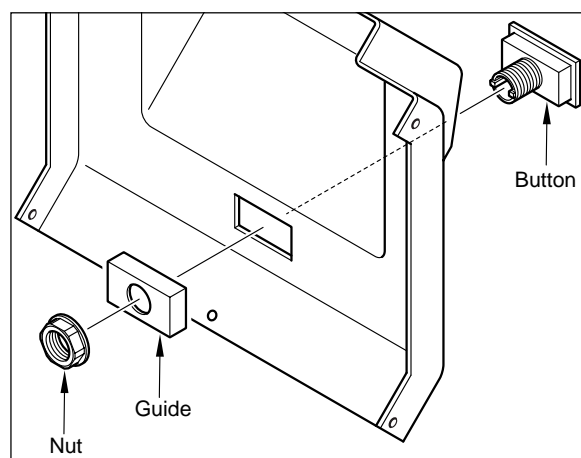
**4** Remove the screw off the band that secures the button and the socket.

**5** Pull out the socket from the button.





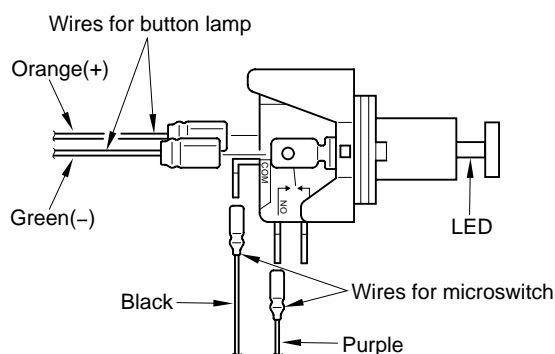
- 6** Loosen the nut and separate the button.
- 7** **To fit the button again**  
To install the button, take the reverse procedure.
- 8** Pay attention to the posture of socket and assemble it in the reverse of disassembly, using care not to confuse the wires.
- 9** Reconnect the connectors (disconnected in Step 3 above).
- 10** Mount the cover into position.



- 11** Take the steps in “5-1 Checking the game performance (self test)” on page 23 and the steps in “I/O CHECK” on page 25.

#### •Replacing the socket

Reconnect the wires to a new socket as shown below.



Be sure to connect the orange and green wires to the (+) and (-) terminals, respectively, that are marked on the LED PC board.

**MEMO**



## 7-4 Replacing the rifle unit

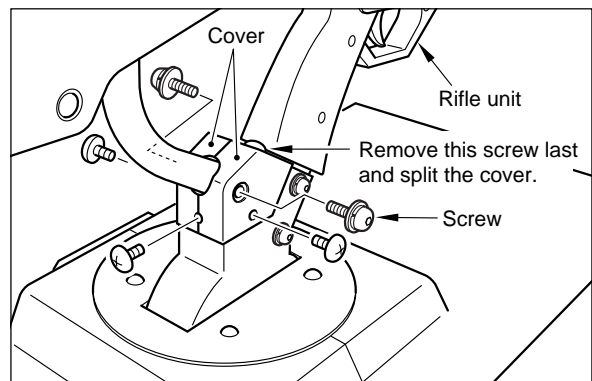
### ■ How to replace the rifle unit — — — — —



- Before replacing the rifle unit, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- The rifle unit weighs approx. 4 kg (8.8 lb). Be careful not to drop it.
- 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.

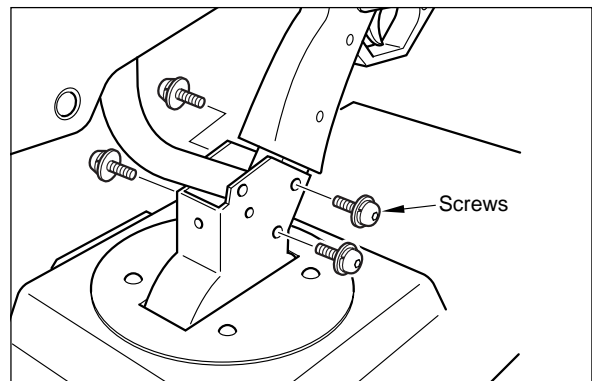
**1** Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

**2** Remove the screws (see at right).



**3** Detach the cover and remove another set of screws (see at right).

**4** Lift the rifle unit and disconnect the connectors.



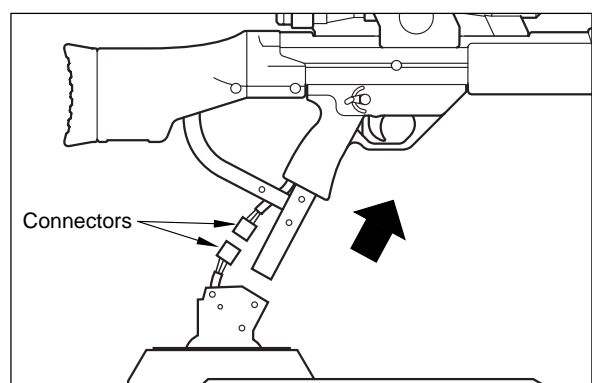
• Be careful not to force the rifle unit up too far. The wires connected may be damaged inside.

### MEMO

**5** To fit the rifle unit again

To install the rifle unit, take the reverse procedure.

**6** Take the steps in “5-1 Checking the game performance (self test)” on page 23 and the steps in “I/O CHECK” on page 25.





## 7-5 Replacing the rifle unit microswitch

### ■ How to replace the microswitch

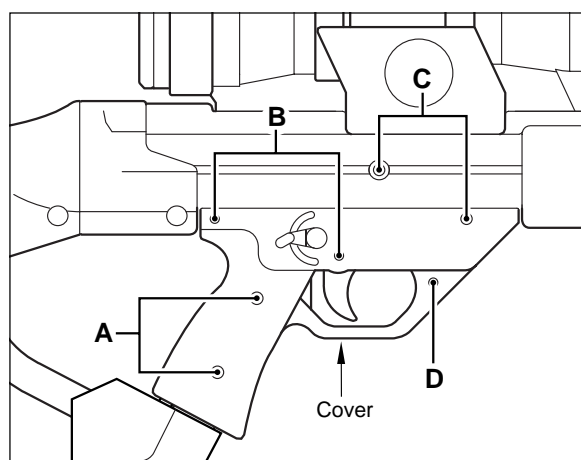


- Before replacing the microswitch of the rifle unit's trigger, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly 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 power cord from the receptacle.

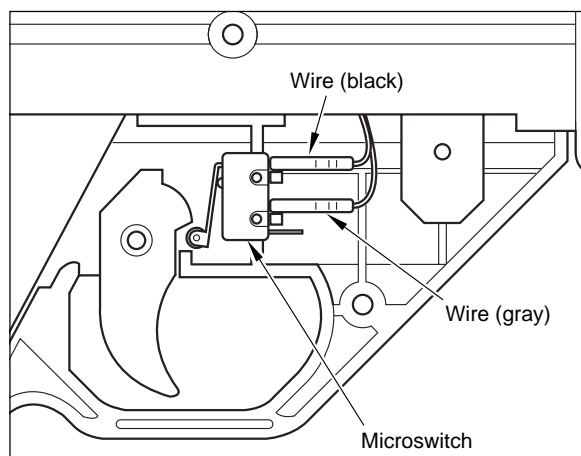
- 2 Remove the screws (see at right) and detach the cover of the trigger.

- A** : M5 x 25L ..... 2  
**B** : M4 x 30L ..... 2  
**C** : M4 x 8 L (no cap nut) .... 4  
**D** : M4 x 10L ..... 1



- 3 Detach the microswitch.

- 4 Disconnect the wires from the microswitch.



- 5 **To fit the microswitch again**

Fit a new microswitch in the reverse order. Be careful not to get the wires caught.

- 6 Place and fix the cover (detached in Step 2 above) back into position.

- 7 Take the steps in "5-1 Checking the game performance (self test)" on page 23 and the step in "I/O CHECK" on page 25.



## 7-6 Replacing the scope

### ■ How to replace the scope



- Before replacing the scope, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- 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 power cord from the receptacle.

**2** Remove the screws (see at right) and detach the scope up straight.

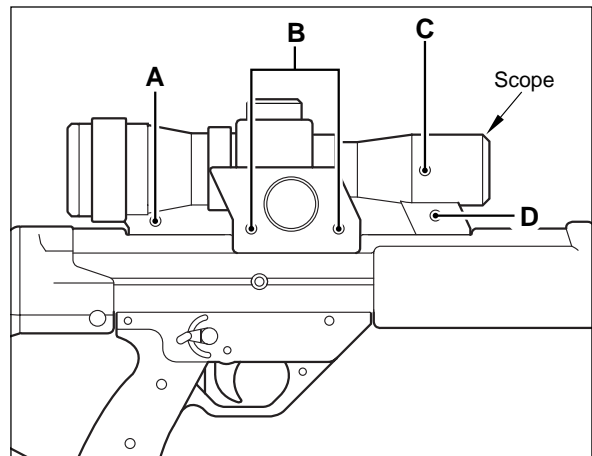
A : M5 x 25L ..... 2

\*B : M4 x 30L ..... 2

C : M4 x 8 L (no cap nut) .... 4

D : M4 x 10L ..... 1

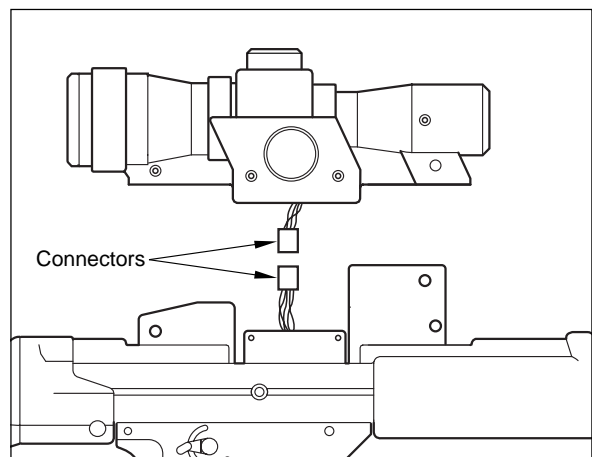
\*Use the accompanying Allen wrench to remove the screws B.



**3** Disconnect the connectors.

- Be careful not to force the scope up too far. The wires connected may be damaged inside.

**MEMO**



**4** To fit the scope again

Fit a new scope in the reverse order. Be careful not to get the wires caught.

**5** Take the steps in “5-1 Checking the game performance (self test)” on page 23 and the step in “I/O CHECK” on page 25.



## 7-7 Replacing the rifle unit potentiometers

### ■ How to replace the rifle unit potentiometers — — — — —

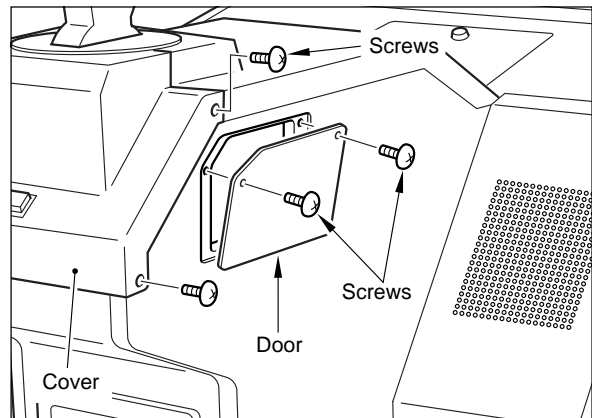


- Before replacing the rifle unit potentiometers, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.
- Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodelling.

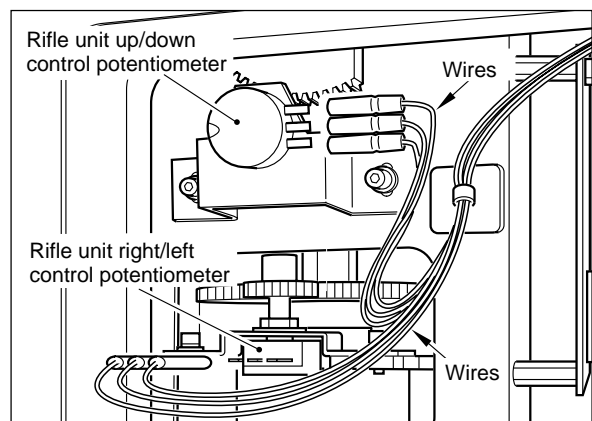
**1** Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.

**2** Unscrew and detach the door off the control unit.

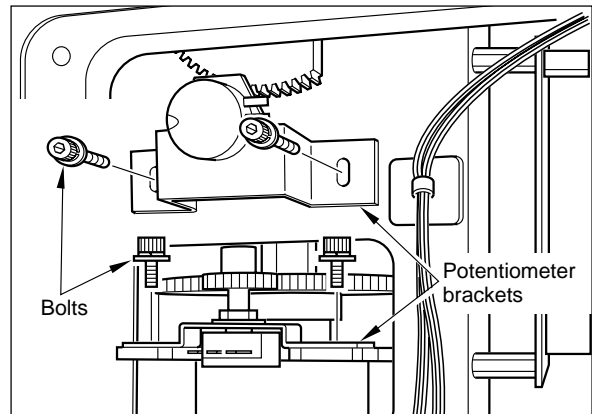
**3** Detach the cover (see at right), referring back to page 44.



**4** Disconnect the wires from the potentiometers.



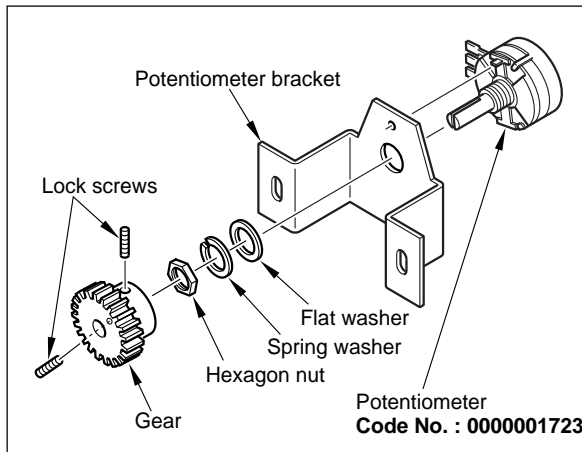
**5** Remove the bolts off the potentiometer brackets. Detach the potentiometers and their brackets together.



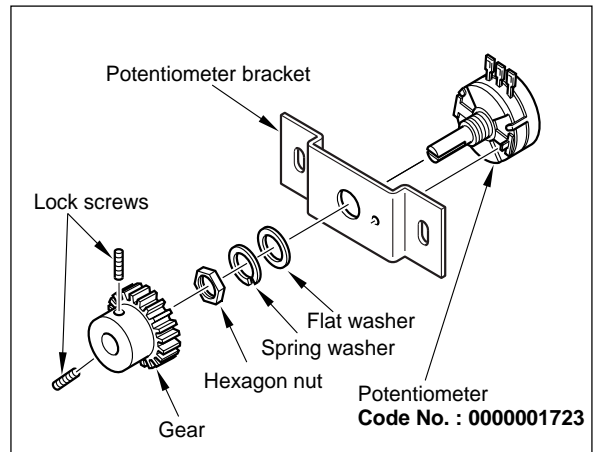


## 6 | Remove the hexagon nut and separate the potentiometer.

**Rifle unit up/down control potentiometer**



**Rifle unit right/left control potentiometer**



- When replacing the potentiometers with new ones, be sure to first make the adjustment on the next page.

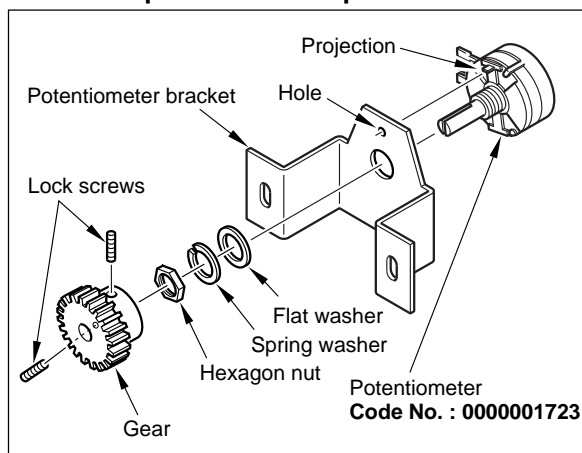
**MEMO**



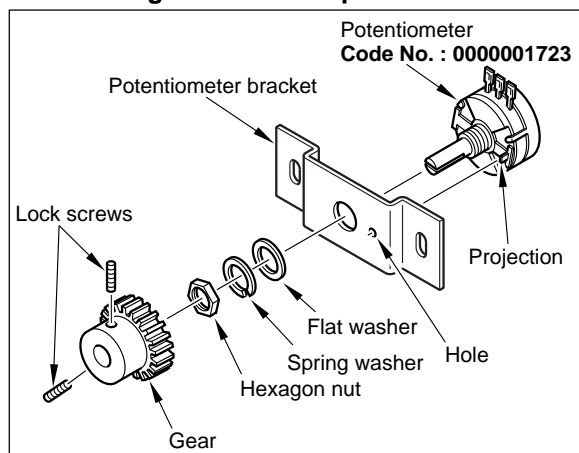
## ■ How to adjust the rifle unit potentiometers —————

- 1** Fit the potentiometer projection to the smallest hole of the potentiometer bracket. Tighten up the hexagon nut.
- 2** Install the gear onto the shaft of the potentiometer. Tighten up the two lock screws.

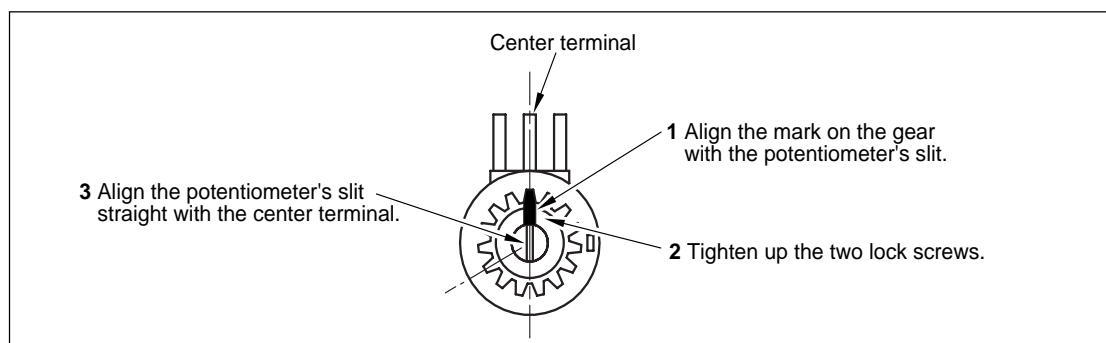
**Rifle unit up/down control potentiometer**



**Rifle unit right/left control potentiometer**

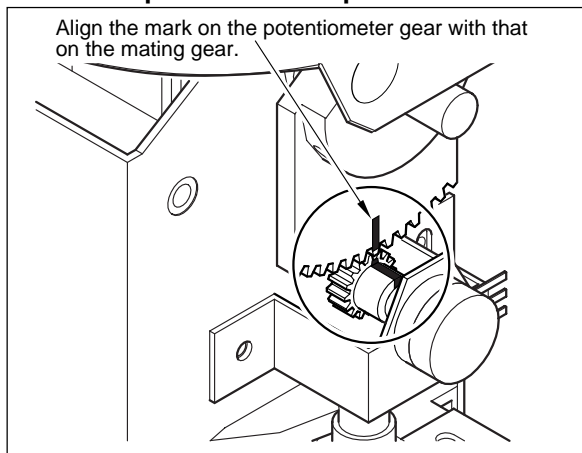


- 3** Align the potentiometer tip, as shown below.

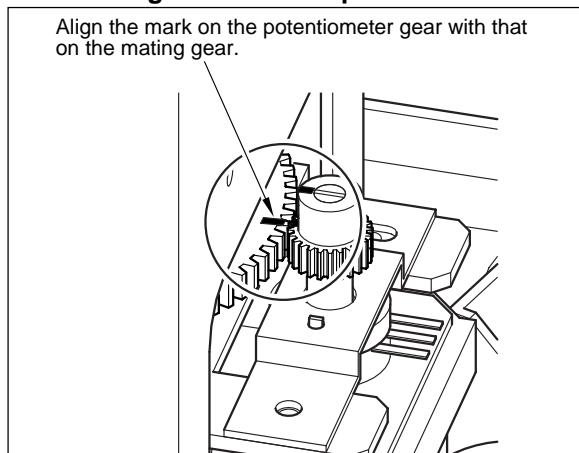


- 4** Set the potentiometer bracket so that the mark on the potentiometer gear and that on the mating gear be in alignment (see below). Also adjust the gears into good mesh.

**Rifle unit up/down control potentiometer**

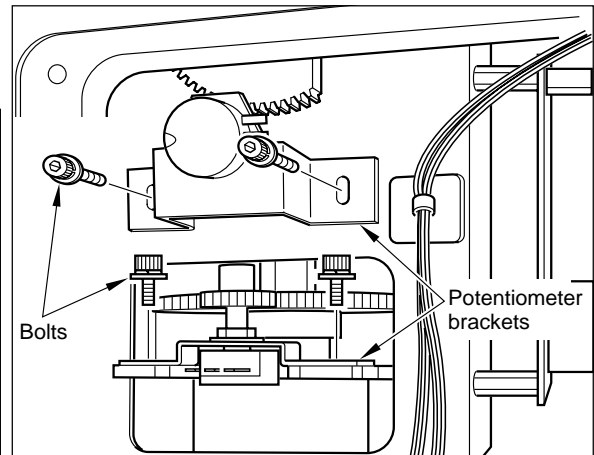
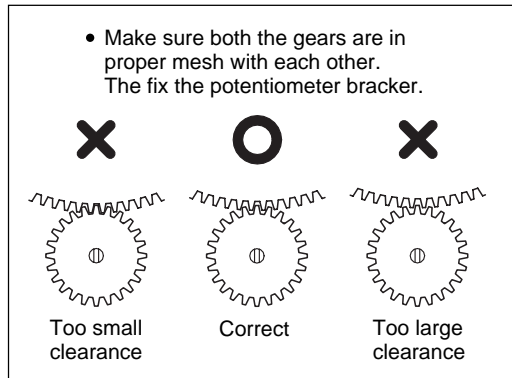


**Rifle unit right/left control potentiometer**





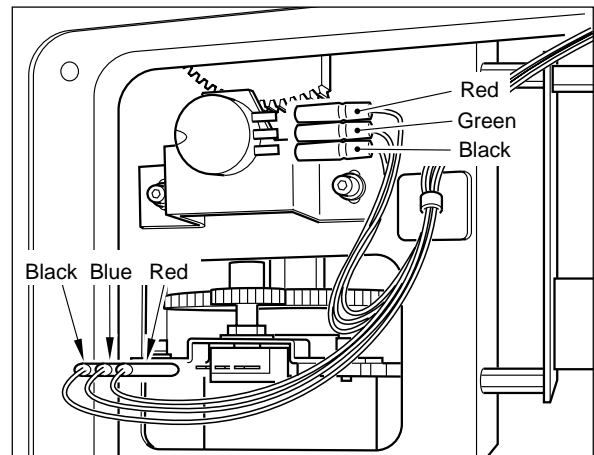
- 5** Place and fix the potentiometer brackets with the bolts.



- 6** Reconnect the wires back to their respective terminals.

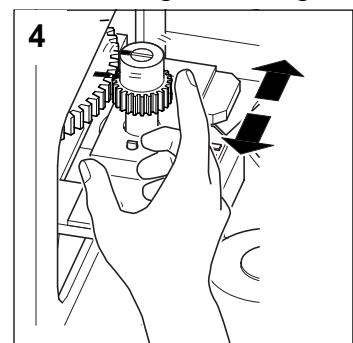
- 7** Place and fix the cover (detached in Step 3 on page 49), referring back to page 45.

- 8** Plug in the power cord and turn ON the main power switch.



- 9** Take the steps in “5-1 Checking the game performance” on page 23 and the steps in “I/O CHECK” on page 25. Follow the procedure below to check the rifle unit performance.

- 1 Swing the rifle unit all the way to the left or the right. Hold it in this position.
- 2 Make sure that the “I” bar in “Volume” of “GUN YAW” is not in the red range. If in the red range, the potentiometer may get in trouble. Reposition and readjust the potentiometer so that the “I” bar comes into the green range.
- 3 While holding the rifle unit in that position, make sure that the “Free” reading is “0000”. (If the reading is not “0000”, go back to the above step 1.)
- 4 Make sure the reading is “0000”, and make one turn of the potentiometer gear gently by hand. If the “I” bar in “Free” comes in the red range again, it means the gear’s clearance is too large. This fails to play the game. Readjust the potentiometer gear into good mesh. Finally make sure the “I” bar is in the green range.



- 10** Make sure the rifle unit functions as specified. Place and fix the door and cover (detached in Step 2 and 3 on page 49) with the screws.



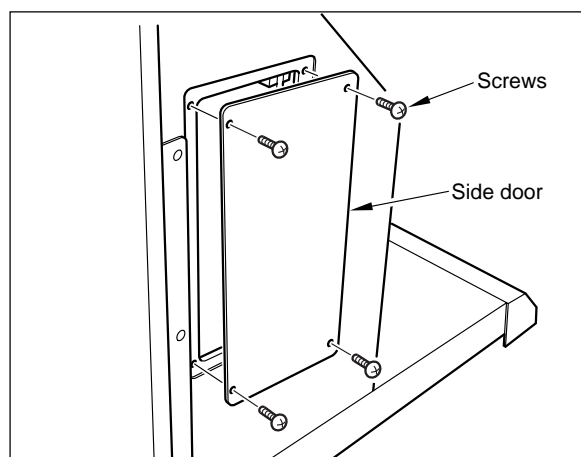
## 7-8 Taking out the PCB unit

### ■ How to take out the PCB unit — — — — —

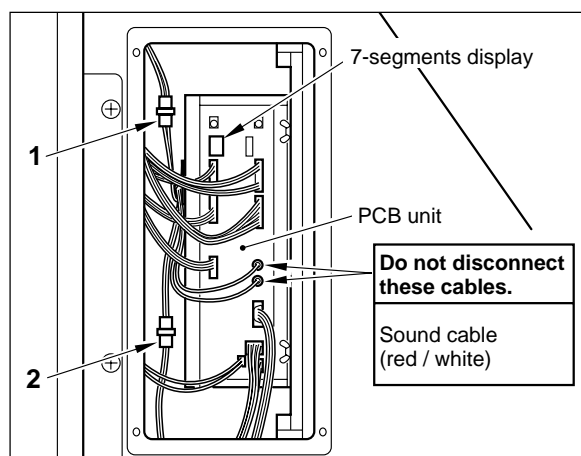


- Be sure to ask a qualified industry specialist or your nearest dealer to take out the PCB unit. (You will be charged.)
- Before removing the PCB unit, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- There are high-voltaged parts inside the product. Other persons than qualified industry specialist should not open the side door. When the side door is opened, pay due attention not to touch the inside unnecessarily.
- Do not touch the PCB unit with wet hands.
- Keep the PCB unit's DIP switches at the factory settings.
- 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 power cord from the receptacle.
- 2 Detach the side door of the control unit (see at right).



- 3 Disconnect all the connectors from the PCB unit as well as the connectors 1 and 2.

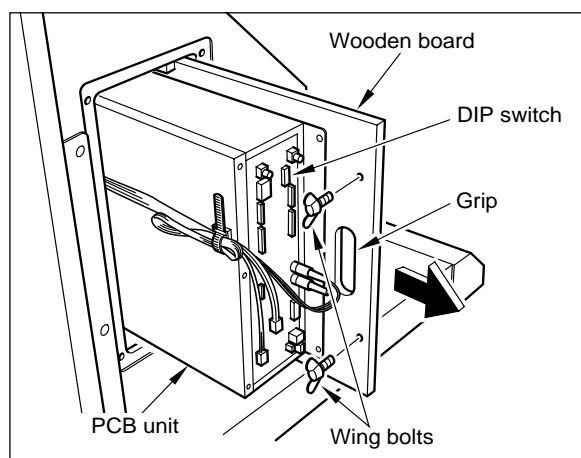




- 4** Remove the wing bolts. Hold the grip and gently draw out the wooden board with the PCB unit attached.

- Be careful not to force the cover up too far. The wires connected may be damaged inside.
- Factory-adjusted DIP switch settings:
  - Bit Nos. 1 thru 8: Set at OFF

### MEMO



- 5** **To fit the PCB unit again**  
Push the unit fully into position with enough care not to get the wires caught.
- 6** Fix the wooden board with the wing bolts and reconnect the connectors.
- 7** Secure the side door tightly with the screws.



## 7-9 Resetting the circuit protector

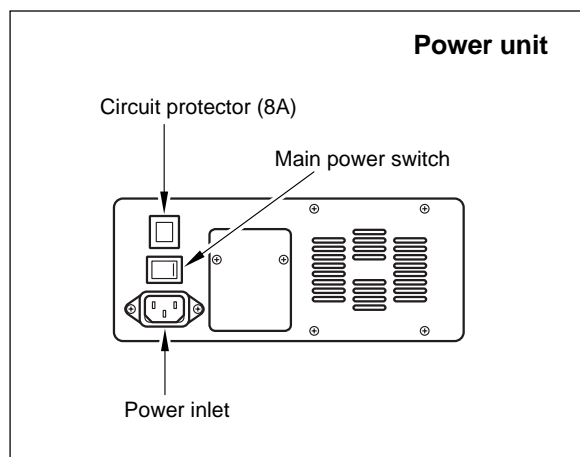
### ■ How to reset the circuit protector —————

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 power cord from the receptacle, eliminate the cause, and then press the button of the circuit protector.



- Before resetting the circuit protector, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- If the circuit protector trips soon again, immediately turn OFF the main power switch, unplug the power cord, and contact your nearest dealer.
- There are high-voltaged parts inside the product. Other persons than qualified industry specialist should not open the back door and side door. When the back door and side door is opened, pay due attention not to touch the inside unnecessarily.
- When opening the back door and side door, be sure to turn OFF the main power switch and unplug the 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 power cord from the receptacle and contact your nearest dealer.

- 1 Be sure to turn OFF the main power switch and unplug the power cord from the receptacle.
- 2 Remove the cause of the trouble. Press the button on the circuit protector of the power unit.



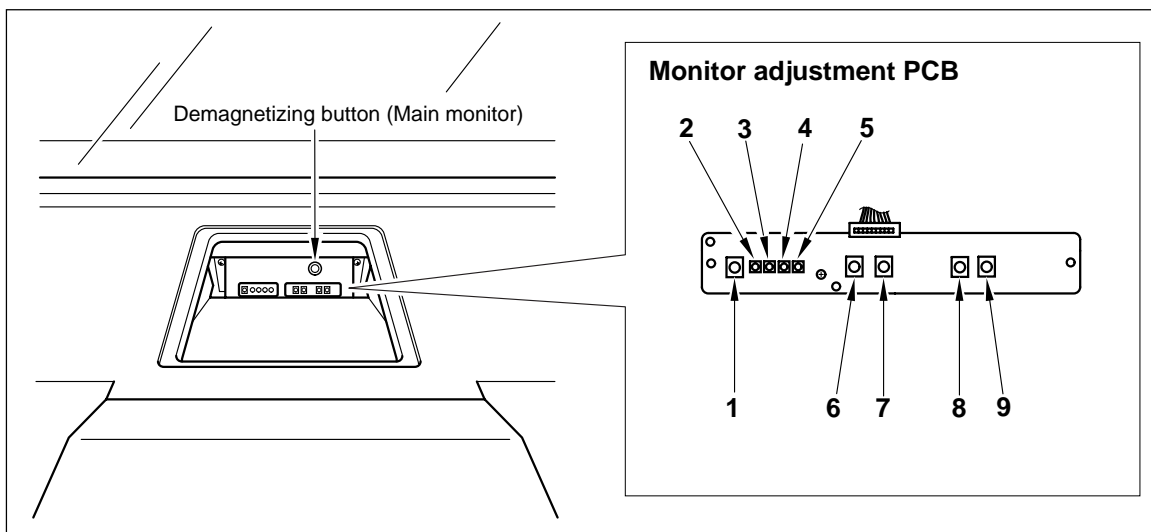


## 7-10 Adjusting the monitor

### ■ Monitor adjustment PCB

The monitor has already been adjusted at the time of shipment, but it may be readjusted as desired.

The monitor adjustment PCB is located inside the machine. To access the PCB, open the monitor adjustment door (refer to page 22).



1	<b>CONTRAST</b>	<b>Contrast adjustment</b> Used to changes the contrast.
2	<b>R.GAIN</b>	<b>Red input gain adjustment</b> Changes red brightness. Turning it clockwise will make the red deeper.
3	<b>G.GAIN</b>	<b>Green input gain adjustment</b> Changes green brightness. Turning it clockwise will make the green deeper.
4	<b>B.GAIN</b>	<b>Blue input gain adjustment</b> Changes blue brightness. Turning it clockwise will make the blue deeper.
5	<b>BRIGHT</b>	<b>Brightness adjustment</b> Changes brightness. Turning it clockwise will make the image brighter.
6	<b>H.SIZE</b>	<b>Horizontal screen size adjustment</b> Changes the width of the screen.
7	<b>H.POSI</b>	<b>Horizontal image position adjustment</b> Changes the image position in the horizontal direction.
8	<b>V.SIZE</b>	<b>Vertical screen size adjustment</b> Changes the height of the screen.
9	<b>V.POSI</b>	<b>Vertical image position adjustment</b> Changes the image position in the vertical direction.



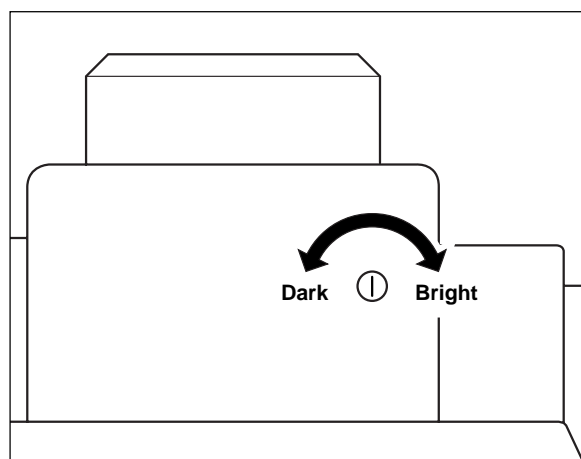
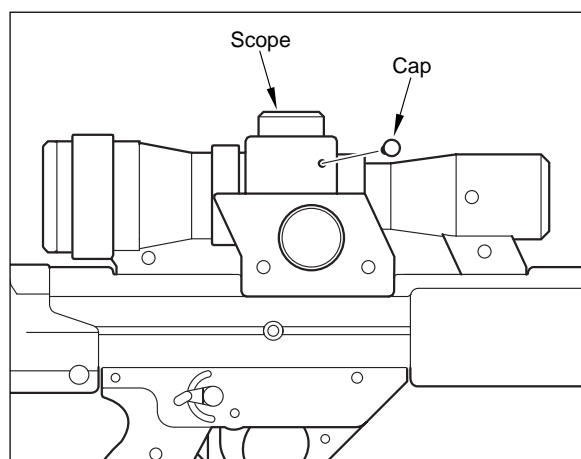
## 7-11 Adjusting the brightness on the scope LCD screen

### ■ How to adjust the LCD screen brightness — — — — —



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

- 1** Turn ON the main power switch and get the game started.
- 2** While the demonstration game is playing, press the test button on the service panel.
- 3** Select “COLOR CHECK” on the main menu screen.
- 4** Remove the cap, shown at right, off the scope.
- 5** Insert the tip of a thin bladed screwdriver into this hole. Adjust the contrast while looking into the scope.



•Images on the scope LCD screen can also be displayed on the main screen during the demonstration game. For this setting, refer to “GAME OPTIONS” on page 29.

**MEMO**



## 7-12 Troubleshooting

Let's suppose that the main power switch has been turned ON but the machine does not get started. Check the points listed below.

If the machine still fails, immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.

Trouble	Possible cause & check point	Measures
No image on main screen, title unit fluorescent light failure to light up.	<ul style="list-style-type: none"> <li>•No power supply.</li> <li>•Power cord unplugged at machine or wall outlet.</li> <li>•Back door open or poorly closed.</li> </ul>	<ul style="list-style-type: none"> <li>◦Turn ON the main power switch. Check also store's circuit breaker. (See page 37.)</li> <li>◦Reconnect power cord. (See page 37.)</li> <li>◦Close back door tightly with screws: door switch activated to cut off power. (See page 37.)</li> </ul>
No image on main screen: title unit fluorescent light on, but PCB unit 7-segments display off.	<ul style="list-style-type: none"> <li>•Connector(s) wrongly connected when joining the separated units.</li> <li>•Wires (connectors) disconnected on PCB unit.</li> </ul>	<ul style="list-style-type: none"> <li>◦Reconnect connector(s) properly. (See page 39.)</li> <li>◦Check to see if PCB unit wires (connectors) are all connected. (See page 53.)</li> </ul>
Title unit fluorescent light failure to light up.	<ul style="list-style-type: none"> <li>•Fluorescent light or glow lamp broken.</li> <li>•Connector(s) wrongly connected when joining the separated units.</li> </ul>	<ul style="list-style-type: none"> <li>◦Replace fluorescent light and glow lamp with same-type ones. (See page 43.)</li> <li>◦Reconnect connector(s) properly. (See page 39.)</li> </ul>
Main monitor screen too dark or too bright.	<ul style="list-style-type: none"> <li>•Monitor maladjusted.</li> </ul>	<ul style="list-style-type: none"> <li>◦Readjust brightness on main monitor screen using monitor adjustment PCB. (See page 56.)</li> </ul>
Game started, but no image on scope screen.	<ul style="list-style-type: none"> <li>•Connector(s) wrongly connected after replacing the rifle unit or the scope.</li> <li>•Wires (connectors) disconnected on PCB unit.</li> </ul>	<ul style="list-style-type: none"> <li>◦Reconnect connector(s) properly. (See pages 46 and 48.)</li> <li>◦Check to see if PCB unit wires (connectors) are all connected. (See page 53.)</li> </ul>





Trouble	Possible cause & check point	Measures
Start button malfunctioning.	<ul style="list-style-type: none"> <li>• Switch wires disconnected from start button socket.</li> <li>• Wires (connectors) disconnected on PCB unit.</li> <li>• Start button defective.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Reconnect switch wires properly to socket. (See page 45.)</li> <li>◦ Check to see if PCB unit wires (connectors) are all connected. (See page 53.)</li> <li>◦ Replace start button as required. (See page 44.)</li> </ul>
Start button functioning, but button lamp failure to light up.	<ul style="list-style-type: none"> <li>• Lamp wires disconnected from start button socket, or wrongly connected.</li> <li>• Start button lamp (LED) defective.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Reconnect lamp wires properly to socket. (See page 45.)</li> <li>◦ Check performance on "I/O CHECK" screen. Replace start button as required. (See page 44.)</li> </ul>
Rifle unit's trigger malfunctioning.	<ul style="list-style-type: none"> <li>• Wires disconnected from trigger's microswitch.</li> <li>• Wires (connectors) disconnected on PCB unit.</li> <li>• Trigger's microswitch defective.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Reconnect microswitch wires properly. (See page 47.)</li> <li>◦ Check to see if PCB unit wires (connectors) are all connected. (See page 53.)</li> <li>◦ Check performance on "I/O CHECK" screen. Replace trigger's microswitch as required. (See page 47.)</li> </ul>
Coin selector malfunctioning.	<ul style="list-style-type: none"> <li>• Coin selector defective.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Check performance on "I/O CHECK" screen. Replace coin selector or microswitch as required. (See page 42.)</li> </ul>



Trouble	Possible cause & check point	Measures
Rifle unit orientation cursor failure to move or out of position.	<ul style="list-style-type: none"> <li>•Reference settings greatly out of spec.</li> <li>•Wires disconnected from rifle unit's potentiometer.</li> <li>•Rifle unit's potentiometer wrongly installed.</li> <li>•Rifle unit's potentiometer defective.</li> </ul>	<ul style="list-style-type: none"> <li>◦Check performance on "I/O CHECK" screen. Make new settings on "GUN CHECK" screen as required. (See page 26.)</li> <li>◦Reconnect potentiometer wires properly. (See page 52.)</li> <li>◦Install potentiometer properly. (See page 49.)</li> <li>◦Replace potentiometer with new one. (See page 49.)</li> </ul>
Image out of position on scope screen.	<ul style="list-style-type: none"> <li>•Reference settings greatly out of position.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Make new settings on "SCOPE SCREEN ADJUST" screen. (See page 27.)</li> </ul>
Image too dark or too bright on scope screen.	<ul style="list-style-type: none"> <li>•Scope LCD screen maladjusted.</li> </ul>	<ul style="list-style-type: none"> <li>◦Readjust brightness on scope LCD screen. (See page 57.)</li> </ul>
No sound, or sound too weak or too loud.	<ul style="list-style-type: none"> <li>•Sound level maladjusted.</li> <li>•Wires (connectors) disconnected on PCB unit.</li> </ul>	<ul style="list-style-type: none"> <li>◦Make new settings on "SOUND OPTIONS" screen. (See page 28.)</li> <li>◦Check to see if PCB unit wires (connectors) are all connected. (See page 53.)</li> </ul>
No image on screen at start (power supplied and monitor well adjusted)	<ul style="list-style-type: none"> <li>•Error message "Er**" in 7-segments display of PCB unit. (See page 52.)</li> </ul>	<ul style="list-style-type: none"> <li>◦Write down the error code "**", immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.</li> </ul>



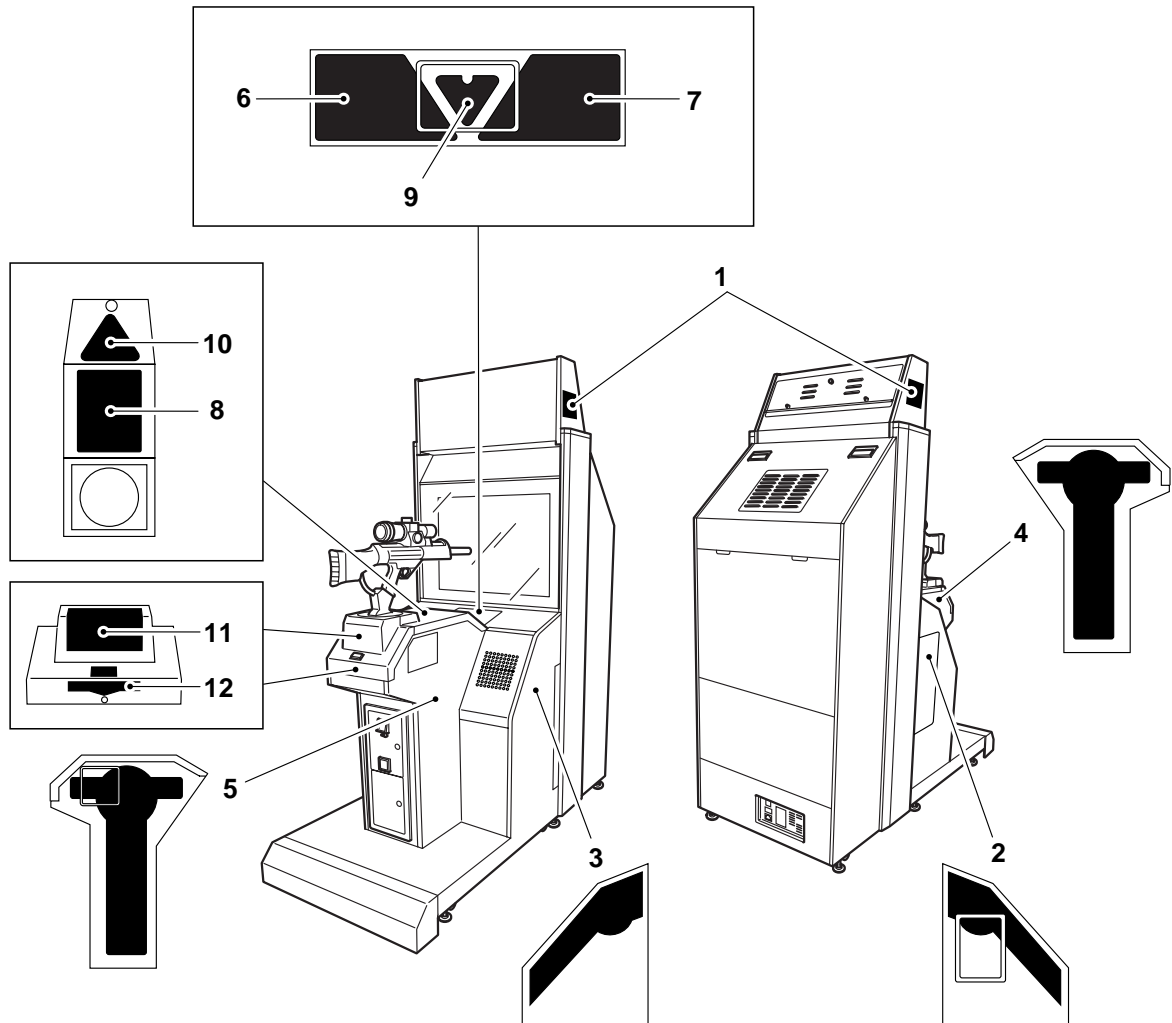
Trouble	Possible cause & check point	Measures
<p>“BAD” displayed on “MASK ROM CHECK” screen in test mode.</p>	<p>•Indicated Mask ROM defective.</p>	<p>◦Write down the error code “***”, immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.</p>
<p>“HARDWARE ERROR (***)” displayed on screen. Game failure to start.</p>	<p>•Hardware getting in trouble.</p>	<p>◦Write down the error code “***”, immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.</p>
<p>Following display shown on screen at start. Game failure to start.</p> 	<p>•Error in indicated item.</p>	<p>◦Press test button to return “OPTION SETTINGS”, “RANKING DATA” and “BOOKKEEPING INCOME DATA” settings to factory ones. For “SCOPE SCREEN ADJUST DATA” and “GUN VOLUME DATA” settings, press test button to go back to test mode. Then make new settings.</p>
<p>The following message appears. (The game may fail to play.)</p> 	<p>•Something is wrong with the product.</p>	<p>◦Immediately turn OFF the main power switch, unplug the power cord from the receptacle and contact your nearest dealer.</p>



## 8 Annex

### 8-1 Label locations and exploded view

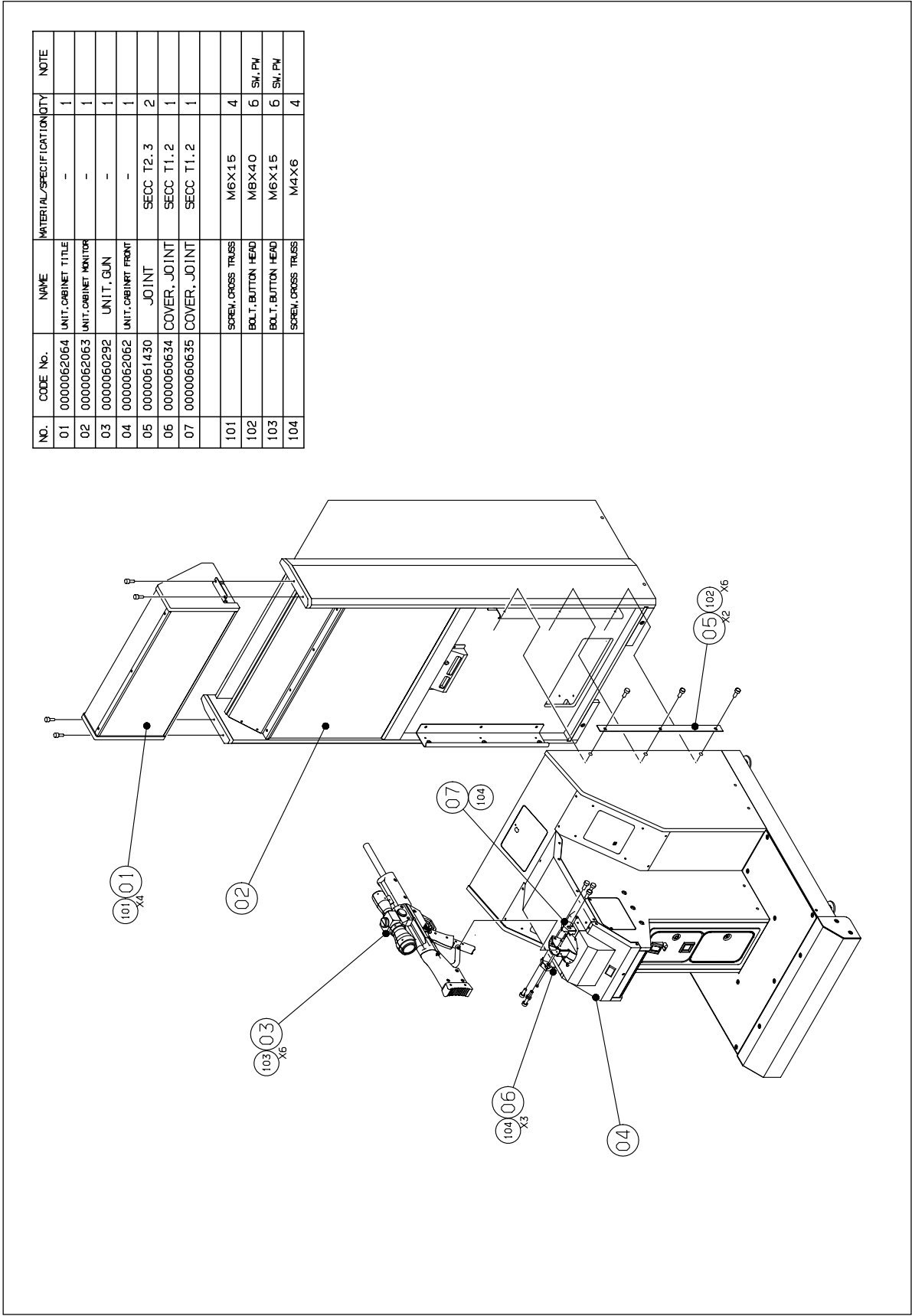
■ Label — — — — —



No.	CODE No.	NAME	QTY	NOTE
1	0000061690	LABEL, KONAMI REG/M	2	
2	0000061562	LABEL, SIDE A/L	1	
3	0000061563	LABEL, SIDE A/R	1	
4	0000061564	LABEL, SIDE B/L	1	
5	0000061565	LABEL, SIDE B/R	1	
6	0000061723	LABEL, PLAING/HD/L	1	
7	0000061724	LABEL, PLAING/HD/R	1	
8	0000061725	LABEL, PL/INST/HD	1	
9	0000061726	LABEL, TRIANGL A/HD	1	
10	0000061570	LABEL, TRIANGL B	1	
11	0000061728	LABEL, PL/START/HD	1	
12	0000061572	LABEL, INSERT COIN	1	



FIG.1 UNIT





■ FIG.2 UNIT, CABINET CONTROL ■

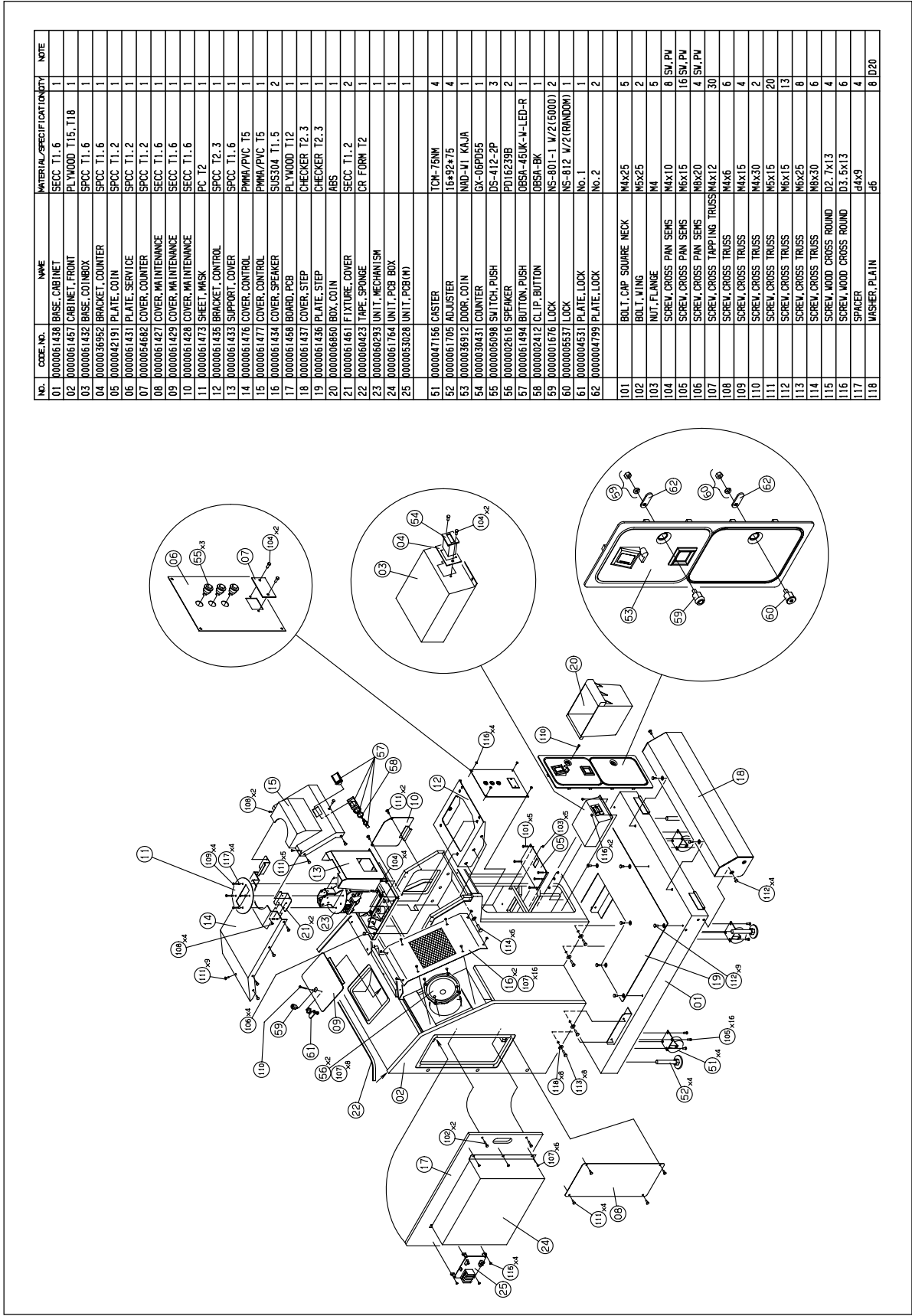




FIG.3 UNIT, CABINET MONITOR

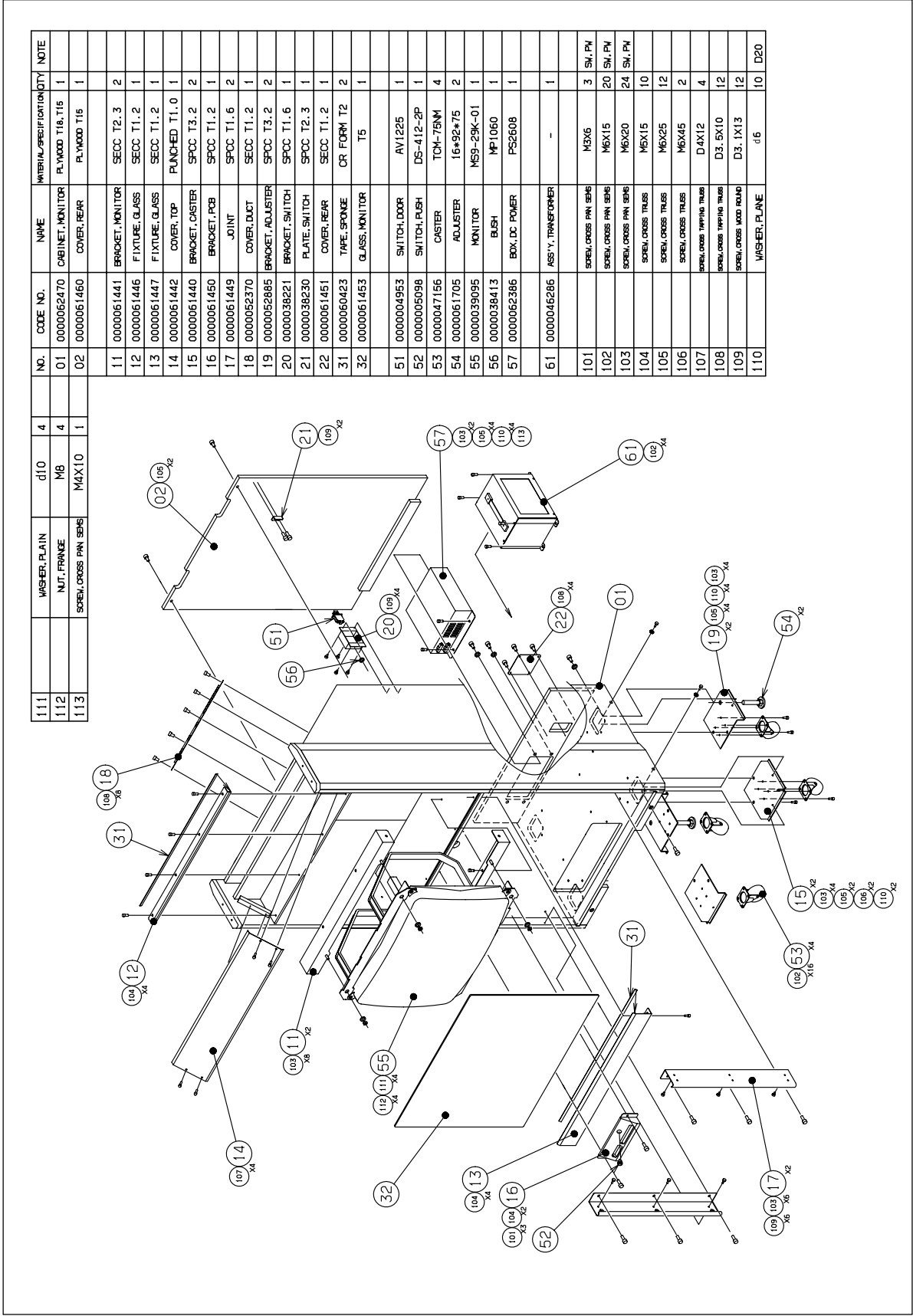








FIG.5 UNIT, RIFLE

NO.	CODE No.	NAME	MATERIAL/SPECIFICATION	QTY	NOTE
01	0000060311	ASS'Y, SCOPE	-	1	
02	0000060312	ASS'Y, BARREL	-	1	
101		SCREW, CROSS TRUSS	M4X15	2	
102		BOLT, TRUSS CENTER PIN TRUSS	M4X25	4	
103		SCREW, CROSS TRUSS	M4X45	1	
104		NUT, DOME CAP	M4	3	

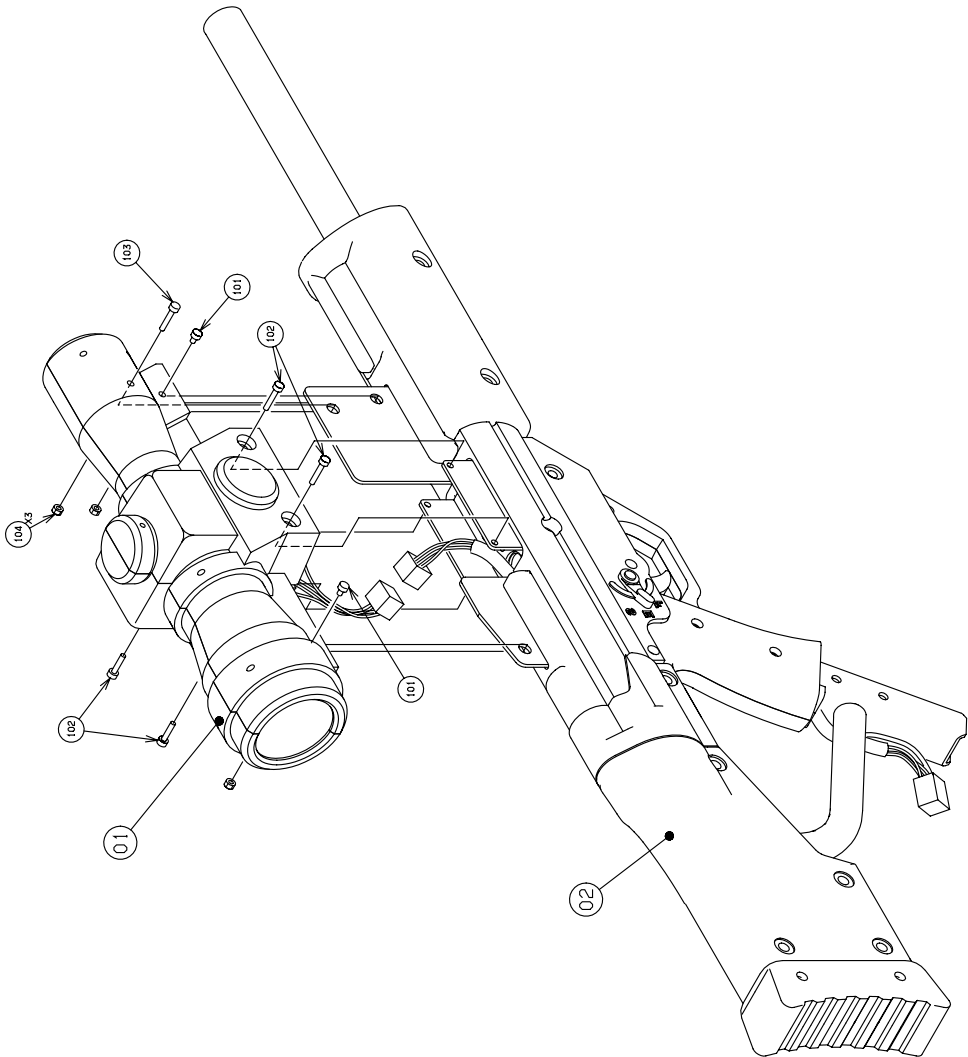




FIG.6 ASS'Y, SCOPE

NO.	CODE No.	NAME	MATERIAL/SPECIFICATION	QTY	NOTE
01	0000059782	CASE, SCOPE (L)	PC	1	
02	0000059783	CASE, SCOPE (R)	PC	1	
03	0000060326	PIPE, SCOPE	ABS	1	
04	0000060325	COVER, SCOPE	PC	1	
11	0000060333	COVER, LCD	SECC T1.0	1	
12	0000060334	BRACKET, LCD	SPGC T1.0	1	
13	0000060337	BRACKET, LCD	SPGC T1.0	1	
21	0000060324	TAPE, SPONGE	OR FORM T3	2	
22	0000060323	TAPE, SPONGE	OR FORM T2	8	
51	0000059798	DISPLAY, LCD	LB20HR-BC00	1	
52	0000059790	LENS	L-020	1	
53	0000060654	BUSH	DP-187	1	
61	0000060479	PCB (L) UNIT	-	1	
62	0000060522	LABEL, PL/HIVOLT	YUPO-TAX	1	
63	0000060424	ASS'Y, LCD	-	1	
64	0000060617	WIRE	-	1	
65	0000060854	CABLE, FCC	-	1	
101		SCREW, CROSS PIN, SENS	M3X8	10	SW
102		BOLT, HEX SOCKET CAP	M3X30	6	
103		BOLT, HEX SOCKET CAP	M3X35	1	
104		SCREW, CROSS TAPPING TUBE	D4X8	2	
105		SPACER, PC	d6X3	4	
106		NUT, DOMED CAP	M3	7	

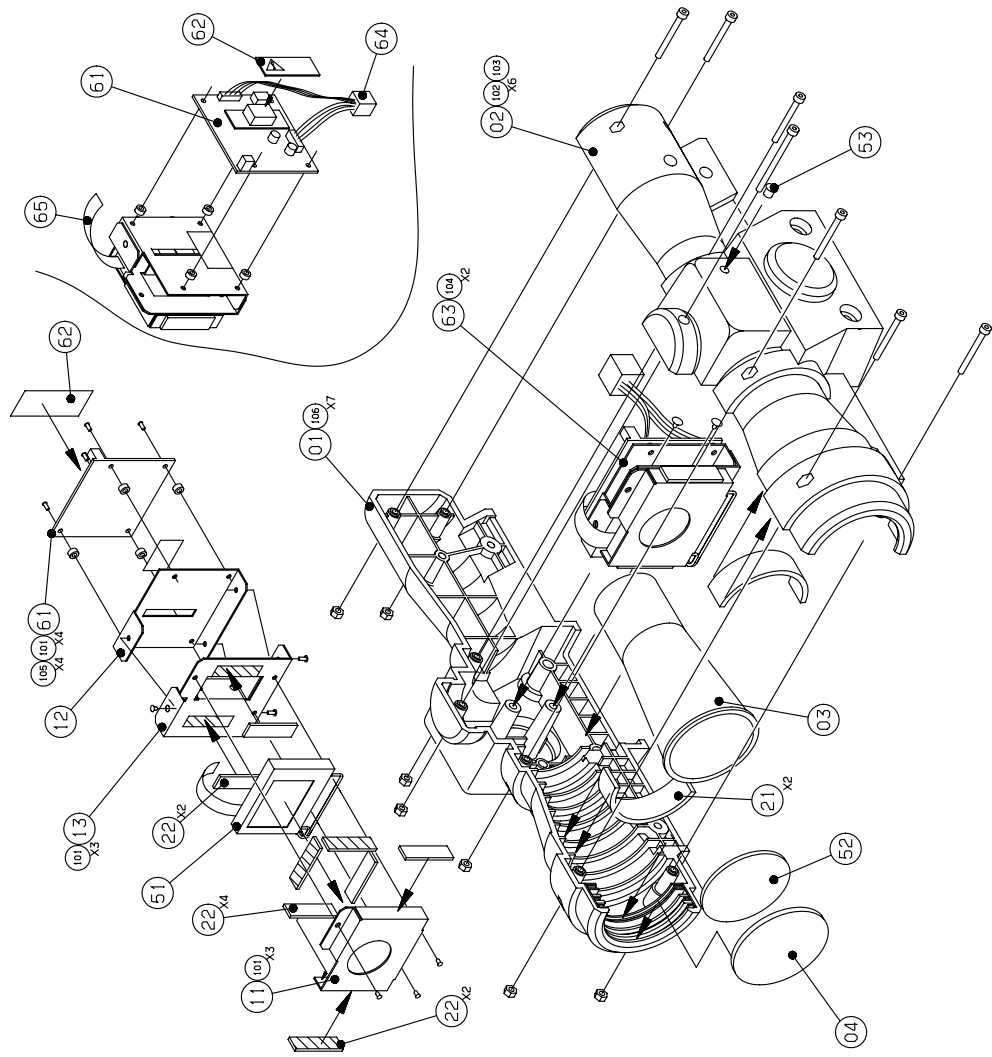




FIG.7 ASS'Y, BARREL

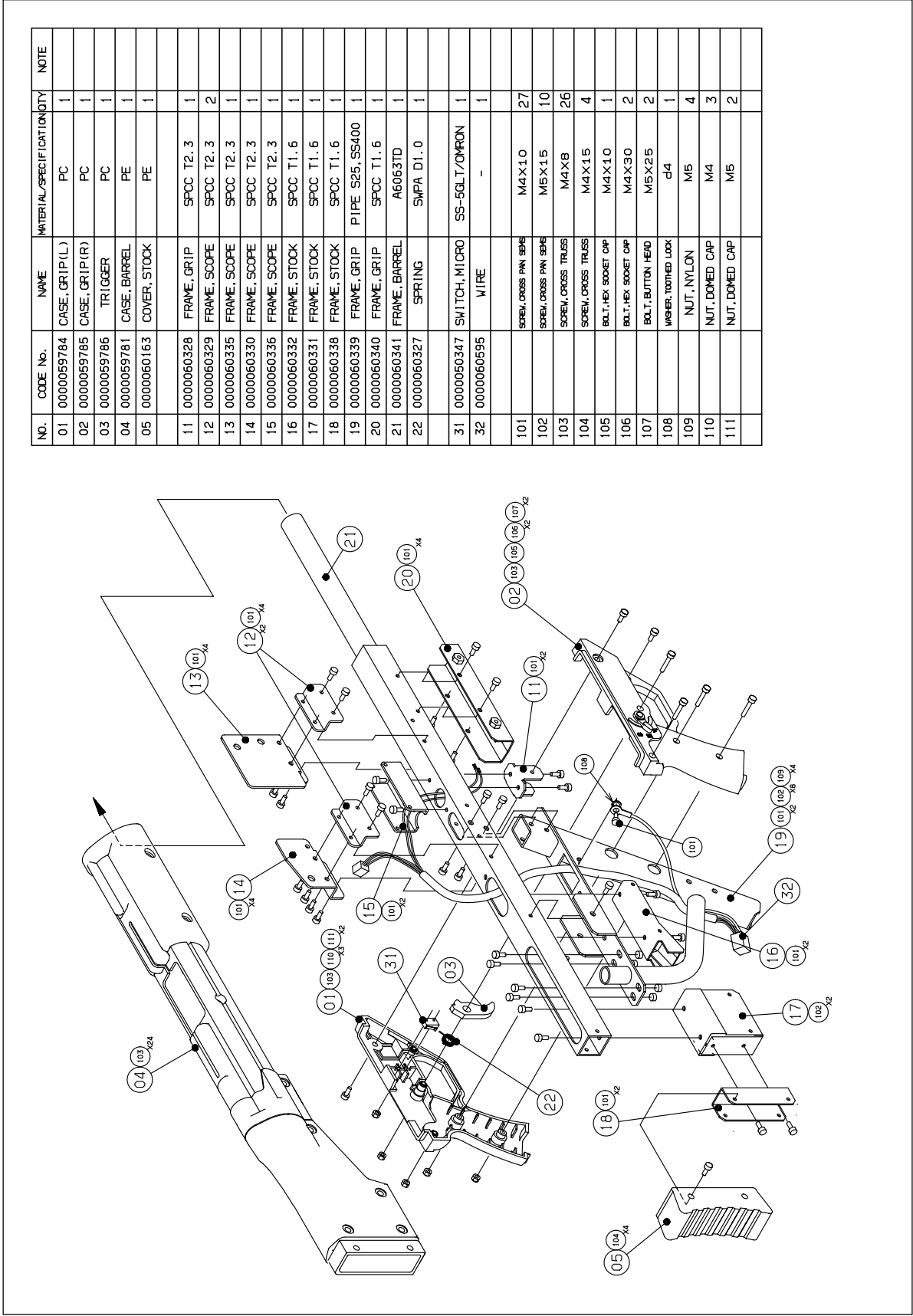




FIG.8 UNIT, MECHANISM

NO.	CODE NO.	NAME	MATERIAL/SPECIFICATION	QTY	NOTE
01	0000060642	BASE	S45C/SPCC T3.2	1	
02	0000060629	RUBBER, STOPPER	UR H590	2	
03	0000060637	BRACKET, BEARING	SPCC T3.2	1	
04	0000060630	GEAR	SS400	1	
05	0000060625	SPACER	SS400	1	
06	0000060632	GEAR	SS400	2	
07	0000060626	BRACKET, P. METER	SPCC T1.6	1	
08	0000060638	FRAME	SPCC T2.3	1	
09	0000060639	FRAME	SPCC T2.3	1	
10	0000060624	PIN, STOPPER	SS400	2	
11	0000060628	RUBBER, STOPPER	UR H590	2	
12	0000060641	SHAFT	S45C/SPCC T3.2	1	
13	0000060631	GEAR	SS400	1	
14	0000060627	BRACKET, P. METER	SPCC T1.6	1	
15	0000060640	BRACKET, SUSPENSION	SPCC T2.3	1	
16	0000060636	BRACKET, SUSPENSION	SPCC T2.3	1	
17	0000060633	PLATE, MASK	SECC T1.6	1	
18	0000060580	SHEET, COVER	PVC T0.5	1	
19	0000060481	PCB(J)UNIT		1	
20	0000060596	WIRE	GU2	1	
21	0000060597	WIRE	G_VOL	1	
22	0000060602	WIRE	A/D IN	1	
51	0000059792	STOPPER, RUBBER	RI-25	4	
52	0000059794	BEARING	7005	2	
53	000001723	POTENTIOMETER	EVS-U0AS25E53	2	
54	0000059795	BUSH	R-MLCT2010	2	
55	0000059789	SUSPENSION, RUBBER	DR-S-15X25	1	
56	0000060665	BUSH	NB-35	1	
101		BOLT, HEX SOCKET CAP	M4x10	4 SW, PW	
102		BOLT, HEX SOCKET CAP	M6x18	4	
103		KEY, PARALLEL	5x5x10	2	
104		NUT, NYLON	M12	2	
105		SCREW, CROSS PAN SEMS	M3x6	6 SW, PW	
106		SCREW, CROSS PAN SEMS	M6x15	14 SW, PW	
107		SCREW, CROSS TRUSS	M4x6	2	
108		SCREW, HEX SOCKET SET	M4x4	4 W POINT	
109		SCREW, HEX SOCKET SET	M5x8	4 W POINT	
110		SPACER	BS-318	4	
111		WASHER, PLAIN	d12	2	
112		WASHER, PLAIN	d6	2 D25	
113		WASHER, PLAIN	d8	4	
114		WASHER, SPRING	d8	4	
115		SCREW, CROSS PAN SEMS	M4x10	1 SW, PW	

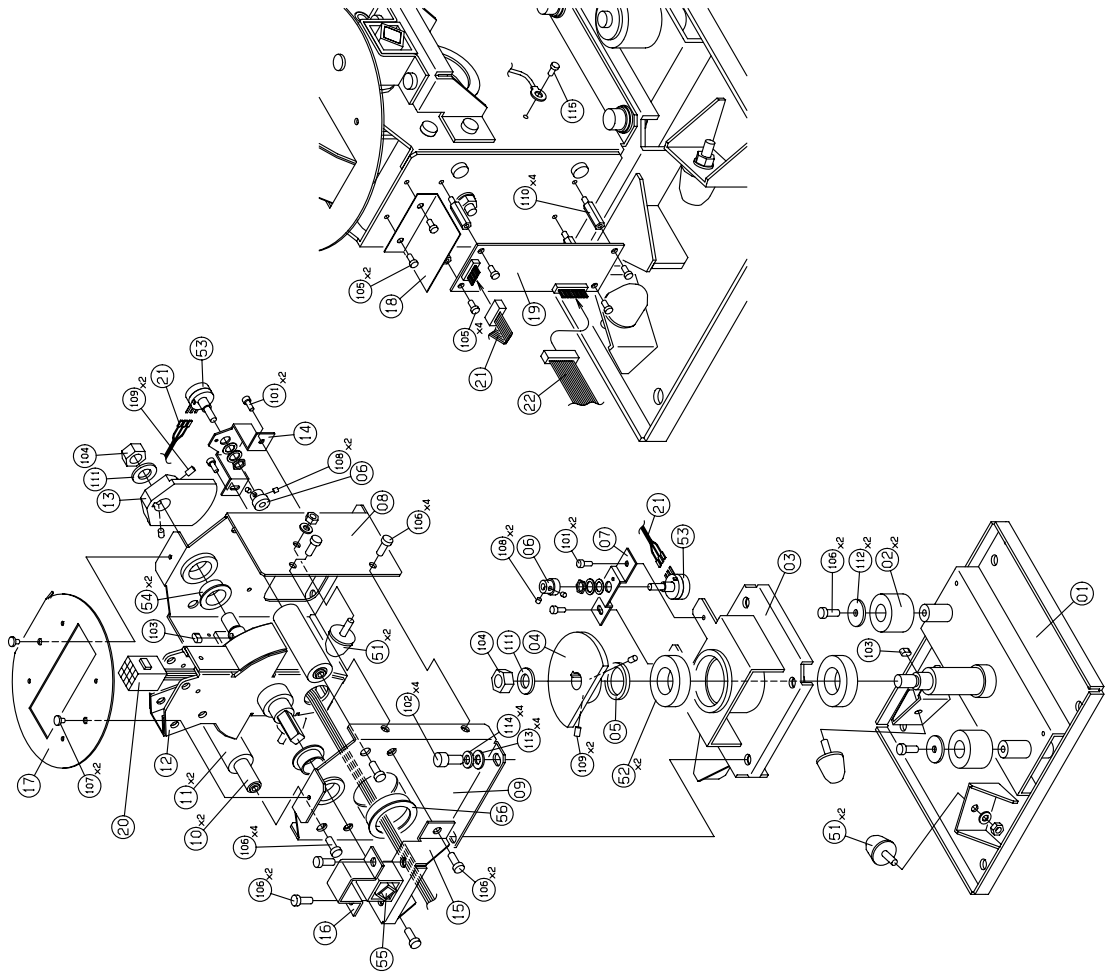
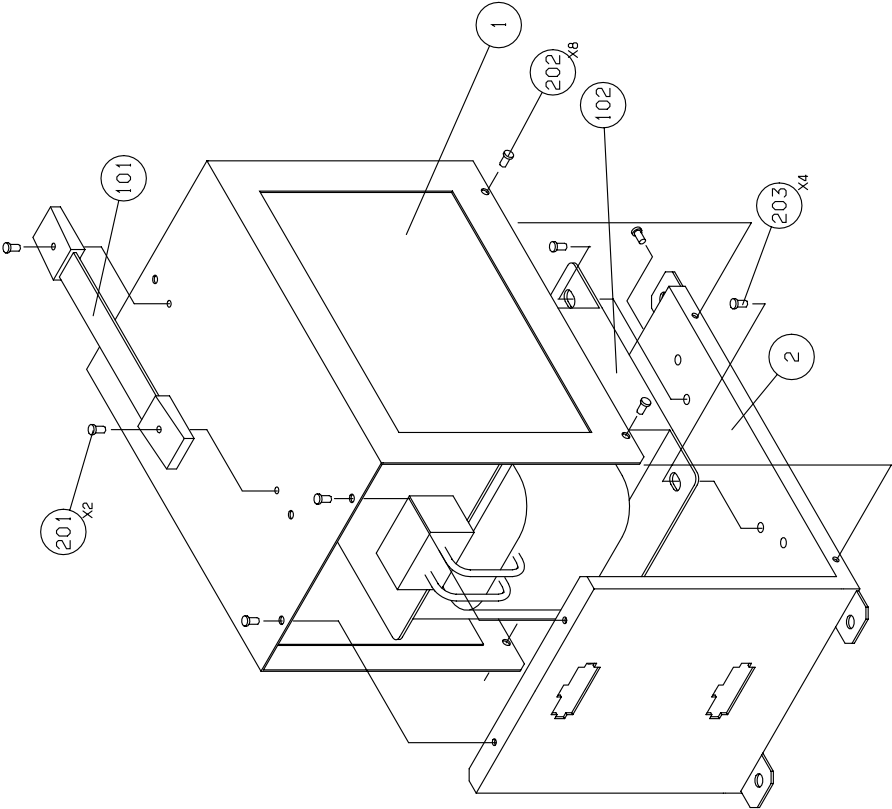




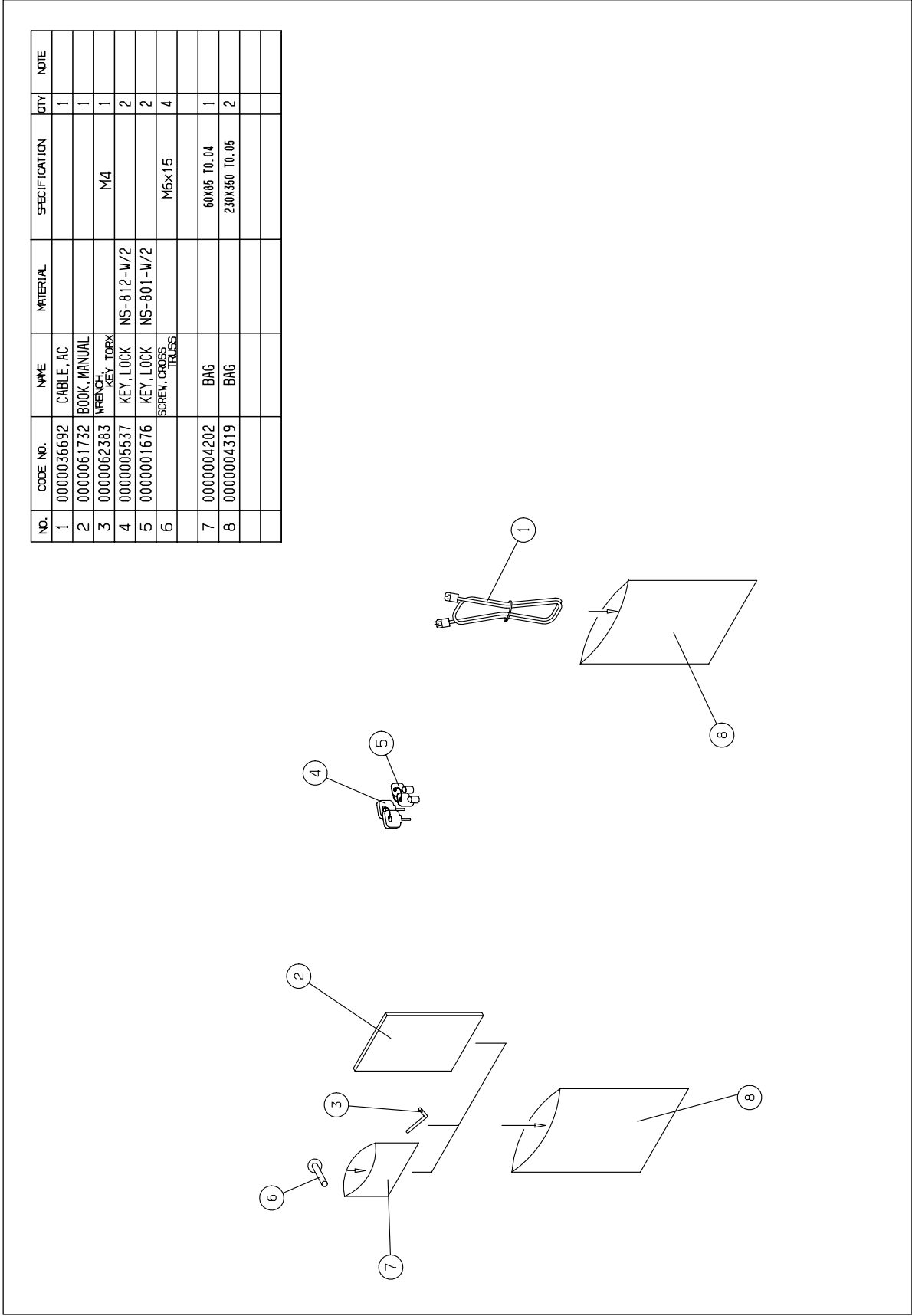
FIG.9 ASS'Y, TRANSFORMER

NO.	CODE NO.	NAME	SPEC. /CATALOG TYPE	QTY	NOTE
1	0000036571	COVER, TRANSFORMER		1	
2	0000036573	BASE, TRANSFORMER		1	
101	0000036586	HANDLE, VINYL		1	
102	0000043603	TRANSFORMER(500VA)		1	
201		SCREW, CROSS PAN SEMS	M4x15	2 SW, PW	
202		SCREW, CROSS PAN SEMS	M4x10	8 SW, PW	
203		SCREW, CROSS PAN SEMS	M6x12	4 SW, PW	





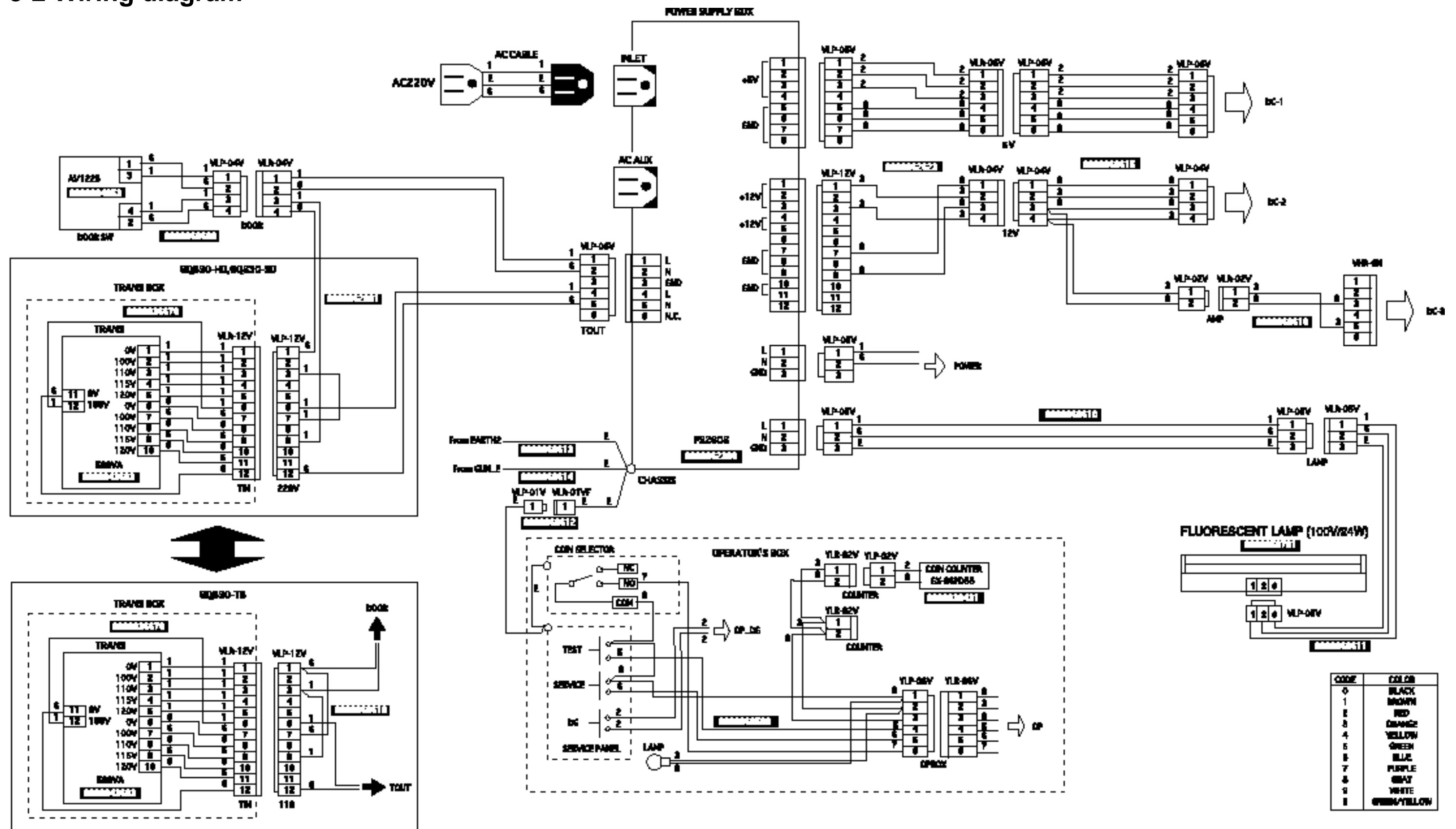
■ FIG.10 ATTACHMENT -----





## 8-2 Wiring diagram

**1/2**





## Wiring diagram

