

SEGA[®]



Upright Version
Operators's Manual



***HOUSE OF THE DEAD UPRIGHT* TABLE OF CONTENTS**

<u>INTRODUCTION OF THE OWNERS MANUAL</u>
<u>GENERAL PRECAUTIONS</u>
<u>1. NAME OF PARTS</u>
<u>2. ACCESSORIES</u>
<u>3. ASSEMBLING PRECAUTIONS</u>
<u>4. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE</u>
<u>5. CONTENTS OF GAME</u>
<u>6. EXPLANATION OF TEST AND DATA DISPLAY</u>
<u>6-1 SWITCH UNIT AND COIN METER</u>
<u>6-2 TEST MODE</u>
<u>6-3 MEMORY TEST</u>
<u>6-4 T.G.P. TEST</u>
<u>6-5 INPUT TEST</u>
<u>6-6 OUTPUT TEST</u>
<u>6-7 SOUND TEST</u>
<u>6-8 C.R.T. TEST</u>
<u>6-9 GAME ASSIGNMENTS</u>
<u>6-10 COIN ASIGNMENTS</u>
<u>6-11 GUN SETTING</u>
<u>6-12 BOOKKEEPING</u>
<u>6-13 BACKUP DATA CLEAR</u>
<u>7. CONTROLLER (GUN)</u>
<u>7-1 REPLACING THE MICRO SWITCH</u>
<u>7-2 REPLACING THE SENSOR BOARD</u>
<u>8. COIN SELECTOR</u>
<u>9. MONITOR</u>
<u>9-1 CAUTION CONCERNING HANDLING</u>
<u>9-2 CLEANING THE SCREEN</u>
<u>9-3 ADJUSTMENT METHOD</u>
<u>10. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS</u>
<u>10-1 REPLACEMENT OF FLUORESCENT LAMP</u>
<u>10-2 REPLACEMENT OF LAMPS</u>
<u>11. PERIODIC INSPECTION TABLE</u>
<u>12. TROUBLESHOOTING</u>
<u>13. GAME BOARD</u>
<u>13-1 EXPOSING THE GAME BOARD</u>

<u>13-2 COMPOSITION OF THE GAME BOARD</u>
<u>14. DESIGN RELATED PARTS</u>
<u>15. PARTS LIST</u>
<u>ZMB CABINET STD</u>
<u>ASSY MONITOR</u>
<u>ASSY CONTROL PANEL</u>
<u>CONTROL UNIT</u>
<u>SENSOR UNIT</u>
<u>ASSY SPEAKER</u>
<u>AC UNIT</u>
<u>SW UNIT/COIN METER</u>
<u>ASSY ELEC BASE</u>
<u>ASSY MAIN BD</u>
<u>16. WIRING DIAGRAM</u>

SPECIFICATIONS

Installation space: 67 in.(L) x 47 in.(W)

Height: 89 in.

Weight: Approx. 400 lbs.

Power maximum current: 5 Amp AC 120V 60 Hz AREA

MONITOR: 29 INCH COLOR MONITOR

SEGA ENTERPRISES, LTD., has for more than 30 years been supplying various innovative and popular amusement products to the world market. This Owners Manual is intended to provide detailed descriptions together with all the necessary installation, game settings and parts ordering information related to the HOUSE OF THE DEAD STD, a new SEGA product.

This manual is intended for those who have knowledge of electricity and technical expertise, especially in ICs, CRTs, microprocessors, and circuit boards. Read this manual carefully to acquire sufficient knowledge before working on the machine. Should there be a malfunction, non-technical personnel should under no circumstances touch the interior system. Should the need arise, contact our main office, or the closest branch office listed below.

SEGA ENTERPRISES, INC. (USA)

Customer Service

45133 Industrial Drive

Fremont, CA 94538

Phone 650-802-1750

Fax 650-802-1754

7:30 am - 4:00 pm, Pacific Standard Time

Monday thru Friday

INTRODUCTION OF THE OWNERS MANUAL

General Precautions

Follow Instructions: All operating and use instructions should be followed.

Attachments: Do not use attachments not recommended by the product manufacturer as they may cause hazards.

Accessories: Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use only mounting accessories recommended by the manufacturer.

Moving the Product: This product should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product to overturn.

Ventilation: Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product and to protect it from overheating; these openings must not be blocked or covered. The openings should never be blocked by placing the product in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

Power Sources: This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.

Grounding or Polarization: This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

Power Cord Protection: Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

Overloading: Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

Object and Liquid Entry: Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Servicing: Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Service: Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) If the power cord or plug is damaged;
- b) If liquid has been spilled, or objects have fallen into the product;
- c) If the product has been exposed to rain or water;
- d) If the product does not operate normally when following the operating instructions. Adjust only those controls that are explained in the operating instructions. An improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation;
- e) If the product has been dropped or damaged in any way;
- f) When the product exhibits a distinct change in performance; this indicates a need for service.

Replacement Parts: When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

Safety Check: Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

Heat: The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Lithium Battery- Dispose of batteries only in accordance with the battery manufacturer's recommendations. Do not dispose in an open flame condition, since the battery may explode.

Cleaning: When cleaning the monitor glass, use water or glass cleaner and a soft cloth. Do not apply chemicals such as benzene, thinner, etc.

Location: This is an indoor game machine, DO NOT install it outside. To ensure proper usage, avoid installing indoors in the places mentioned below:

- Places subject to rain/water leakage, or condensation due to humidity;
- In close proximity to a potential wet area;
- Locations receiving direct sunlight;
- Places close to heating units or hot air;
- In the vicinity of highly inflammable/volatile chemicals or hazardous matter;

- On sloped surfaces;
 - In the vicinity of emergency response facilities such as fire exits and fire extinguishers;
 - Places subject to any type of violent impact;
 - Dusty places.
-

Installation Precautions

- Verify the amperage of the branch circuit outlet before plugging in the power plug. Do not overload the circuit.
 - Avoid using an extension cord. If one is required, use an extension cord of type SJT, 16/3 AWG rated min. 120 VAC, 7A.
 - Moving this unit requires a minimum clearance (of doors, etc.) of 32" (W) by 77" (H).
 - For the operation of this machine, secure a minimum area of 32" (W) by 42"(D).
-

Regulatory Approvals

This game has been tested and found to comply with the Federal Communications Commission Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This game has been tested and listed by Underwriters Laboratories, Inc., to ANSI/UL22.





1. NAME OF PARTS



Game Specifications	Width	Length	Height	Weight
	PACKAGED GAME	34 x 65 x 80		
ASSEMBLED GAME	67 x 47 x 89			400 lbs.
MONITOR	29" NANA0 COLOR MONITOR (med resolution 24k)			
GAME POWER REQUIREMENTS	5 Amp 120V 60Hz			

2. ACCESSORIES

Below is a list of items that are packaged with the HOUSE OF THE DEAD STD game. If you have purchased a game without receiving the following accessories please contact your distributor.

<p>DESCRIPTION Part No. (Qty.) Note</p> <p>OWNERS MANUAL 4202-6292-03 (1)</p> <p>Figures If part No. has no description, the number has not been registered or can not be registered. Such a part may not be obtainable even if the customer desires to purchase it. Therefore, ensure that the part is in safekeeping with you.</p>	<p>(TAMPERPROOF WRENCH) ALLEN KEY 4-40</p>
<p>(TAMPERPROOF WRENCH) M4 540-0006-01 (1) M4 540-0007-01 (1) TOOL</p> 	<p>FUSE 5000mA 125V (1) : AC 120V AREA FUSE 6000mA_{sb} 250V (1) : AC 120 V AREA</p> <p>For spare, refer to section 12.</p> 

3. ASSEMBLING PRECAUTIONS



CAUTION! Assembling should be performed as per this manual. Since this is a complex machine, erroneous assembling may cause damage to the machine, or malfunctioning to occur. When assembling, be sure to perform work by plural persons. Depending on the assembly work, there are some cases in which performing the work by a single person can cause personal injury or parts damage.

Note that the tools such as a Phillips screwdriver and wrench for M16 hexagon bolt w/24 mm width across flats are required for the assembly work.

When carrying out the assembly work, follow the procedure in the following 3-item sequence:

[1.] SECURING IN PLACE (ADJUSTER ADJUSTMENT)



CAUTION! Be sure to have all the Adjusters make contact with the surface. Unless the Adjusters come into contact with the surface, the Cabinet can move of itself, causing an accident.

This machine has 4 each of casters and adjusters (fig. 3.1a). When the installation position is determined, cause the adjusters to come into contact with the floor directly, make adjustments in a manner so that the casters will be raised approximately 5mm. from the floor and make sure that the machine position is level.

- ① Move the machine to the installation position.
- ② Cause all of the leg adjusters to make contact with the floor. By using a wrench, make adjustments in the height of the leg adjusters to ensure that the machine's position is level.
- ③ After making adjustments, fasten the leg adjuster nut upward and secure the height of the leg adjuster.

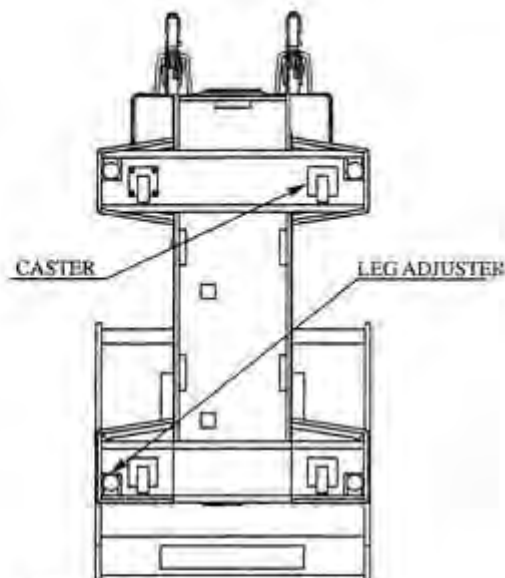


FIG. 3. 1a BOTTOM VIEW

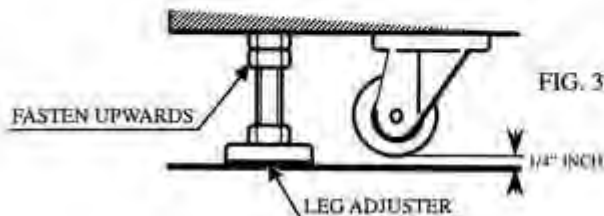


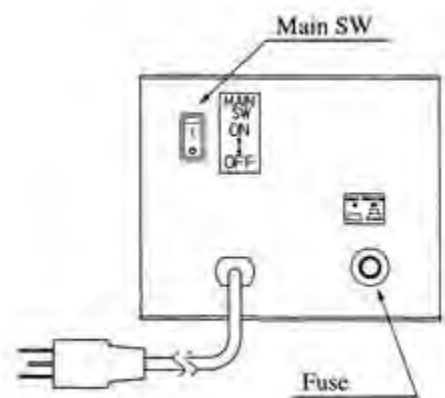
FIG. 3. 2b ADJUSTER

[2.] POWER SUPPLY



Ensure that the power cord is not exposed on the surface (passage, etc.). If exposed, they can be caught and are susceptible to damage. If damaged, the cord can cause an electric shock or short circuit. Ensure that the wiring position is not in the customer's passage way or the wiring has protective covering.

The AC Unit is mounted on the left side of the FRONT CABINET . The AC Unit incorporates the Main SW. Firmly insert the Power Plug into the Socket Outlet. Turn the Main SW ON to turn power ON.



- 1) Ensure that the main power SW is OFF.

REPLACEMENT AND ADJUSTMENT OF FUSE

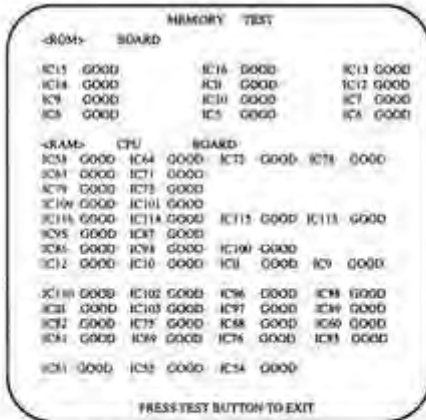


IMPORTANT! In order to prevent electrical shock, be sure to turn power off before performing work by touching the interior parts of the the product. Be careful so as not to damage wirings. Damaged wirings can cause an electrical shock or short circuit accident. Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause a fire or electrical shock. After eliminating the cause of the fuse blowing, continued use with the fuse as is blown can cause generation of heat resulting in fire.

-
- 1.> Unplug the unit.
 - 2.> Remove the AC Switch Panel on the left side of the Front Cabinet.
 - 3.> The 3 fuses are now visible. Replace the blown fuse. Always replace the fuses with the same type and current rating for continued protection.
 - 4.> By using the reverse procedure reinstall the AC Switch Panel.

[3.] ASSEMBLY CHECK

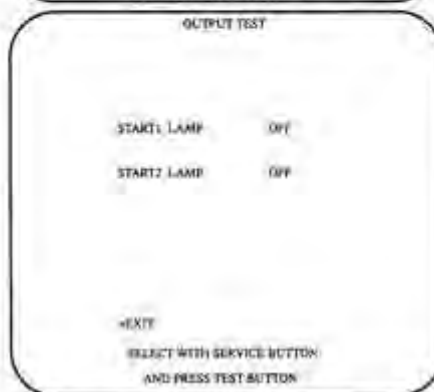
In the TEST MODE, ensure that the assembly has been made correctly and IC BD is satisfactory (refer to Section 6). In the test mode, perform the following test:



Selecting the MEMORY TEST on the test mode menu screen causes the on-board memory to be tested automatically. The game board is satisfactory if the display beside each IC No. shows GOOD.



Selecting the INPUT TEST on the test mode menu screen causes the screen (on which each switch is tested) to be displayed. Press each switch. For the coin switch test, insert a coin from the coin inlet with the coin chute door being open. If the display beside each switch indicates "ON," the switch and wiring connections are satisfactory.

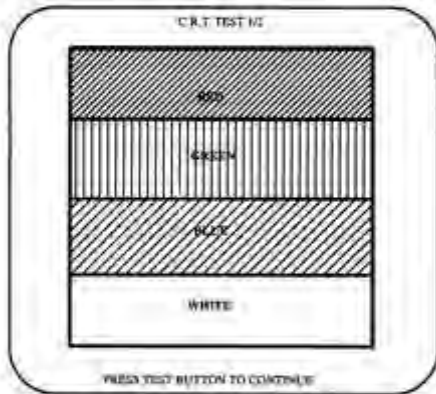


Select "OUTPUT TEST" from the Test Menu in the Test Mode to have the Lamp Test Screen displayed. Check if each lamp lights up satisfactorily.

[3.] ASSEMBLY CHECK cont'd



In the Test Mode, selecting SOUND TEST causes the screen, on which the sound related BD and wiring connections are tested, to be displayed. Be sure to check if the sound is emitted from each speaker and the sound volume is appropriate.



In the TEST MODE menu, selecting C.R.T. TEST allows the screen (on which the monitor is tested) to be displayed. Although the monitor adjustments have been made at the time of shipment from the factory, color deviation, etc., may occur due to the effect caused by geomagnetism, the location building's steel frames and other game machines in the periphery. By watching the test mode screen, make adjustment as to whether an adjustment is needed. If it is necessary, adjust the monitor by referring to Section 9. In case of color deviation due to the monitor's magnetization, use DAMAGE SW (see Section 6).



On the menu screen in the test mode, selecting GUN SETTING displays the screen on which gun setting is set. Check to see if there is any problem for playing game.

Perform the above inspection also at the time of monthly inspection.

4. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE

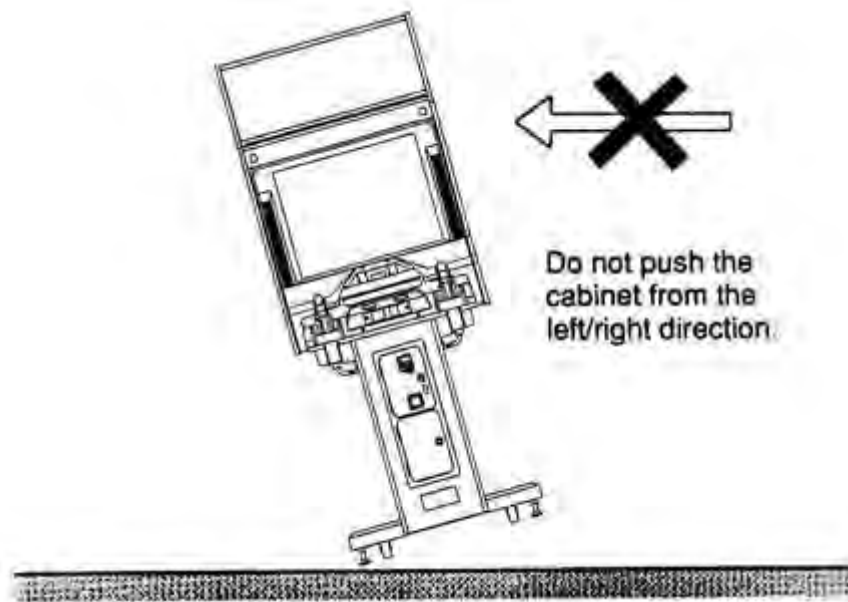


CAUTION! When moving the machine, be sure to pull out the plug from the power supply. Moving the machine with the plug as is inserted can damage the power cord and cause a fire or electric shock.

When moving the machine on the floor, retract the Adjusters and ensure that Casters make contact with the floor. During transportation, pay careful attention so that Casters do not tread power cords. Damaging the power cords can cause an electric shock and/or short circuit.

When lifting the cabinet, be sure to hold the catch portions or bottom part. Lifting the cabinet by holding other portions can damage parts and installation portions, due to the empty weight of the cabinet, and cause personal injury.

Use care when handling glass made parts. When the glass is damaged, fragments of glass may cause injury.

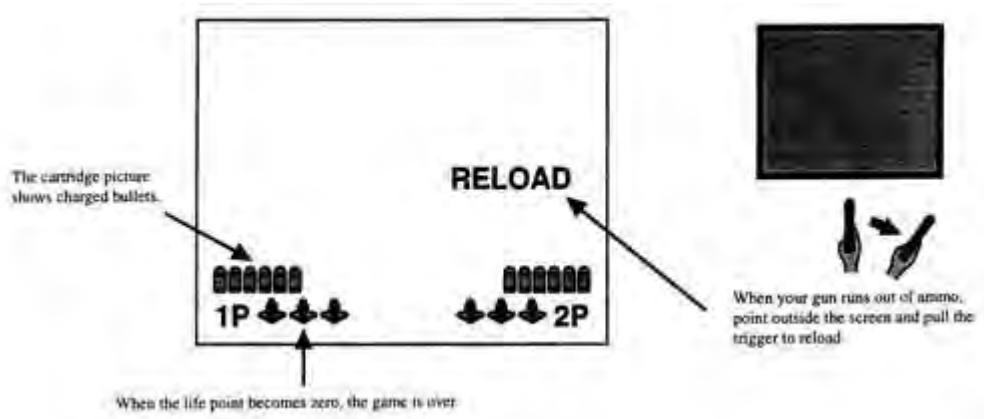


5. CONTENTS OF GAME

1.> Inserting a coin(s) causes the credit display on the bottom of the screen to count. Inserting one credit worth of coin(s) changes the message on the bottom of the screen from the "INSERT COIN(S)" to "PRESS START BUTTON" and both of the start buttons will flash.

2.> Pressing either of the start buttons determines which side (left or right) you are playing on. Press the START button to start the game.

3.> After starting the game, the Title of the Stage being started and the purpose of game are displayed.



◦ The life points and the number of bullets of the left-hand side player (1P) are displayed on the lower left-hand side of the screen, and those of the right-hand side player (2P), on the lower right-hand side of the screen.

◦ The player loses one life if he shoots a hostage by mistake.

◦ The gun holds bullets. When it runs out of ammo, "RELOAD" is displayed on the screen. At this time, point outside the screen and pull the trigger to reload.

◦ The enemy's axes, knives, drum cans, barrels, etc., can be shot down for your defense.

◦ Shooting the background scenery can cause Special Items to appear sometimes. The Special Items can be captured by shooting. Capturing an item allows you to earn points or recovers life points (explanations as regards to the Items are given later).

◦ When the life point becomes zero, the game is over.

◦ Downing the boss character awaiting you at the end of each stage results in clearing that particular stage. The player cannot defeat the boss until his life meter becomes zero (the boss character's life meter).



4.> If you would like to join in the game at anytime while the other person is playing, insert a coin(s) and press the start button. Also, when credits allowing the game to be played still remain, the start button on the other side will keep flashing. The player can participate i the game by pressing the flashing button.

5.> When the life point becomes zero, if you want continue, insert a coin(s) required to continue and press the start button. If credits allowing the player to continue still remain, you can continue by merely pressing the start button.

6.> At the time of game over, if the player's score ranks 10th or higher, hi/her name can be entered.

CONCERNING SPECIAL ITEMS



LIFE> The life point increases by one. The upper limit of Life Point can be set to 3, 4, and 5.



COIN or GOLDEN FROG> Capturing either of these items increases the Life Point.

KNACK OF PLAY

°**Accurately shoot at the head:** In each stage, the head is the weak point of enemy characters other than the Boss. Hitting the head greatly decreases the enemy's life points and can down the enemy quickly. In the latter half of the stages, the higher the stage level you proceed to, the more important the shooting accuracy becomes.

°**Look for your favorite routes:** The stage has various routes which are determined by the player's action. Some routes have less enemy appearance, frequent life recovery, etc. You can master a knack of play by looking for your favorite routes.

°**Memorizing the enemy's appearance position:** Since the enemy's appearance pattern is the same every time, you can also master a knack of play by memorizing such pattern through repeated game play.



6. EXPLANATION OF TEST AND DATA DISPLAY

By operating the switch unit, periodically perform the tests and data check. When installing the machine initially or collecting cash, or when the machine does not function correctly, perform checking in accordance with the explanations given in this section. The following show tests and modes that should be utilized as applicable.

ITEMS	DESCRIPTION	SECTIONS
INSTALLATION OF MACHINE	<p>When the machine is installed, perform the following:</p> <p>1.> Check to see that each setting is as per standard setting made at the time of shipment.</p> <p>2.> In the INPUT TEST mode, check each SW and VR.</p> <p>3.> In the OUTPUT TEST mode, check each of the lamps.</p> <p>4.> In the MEMORY TEST mode, check IC's on the IC Board.</p>	<p>6-9, 6-10</p> <p>6-5</p> <p>6-6</p> <p>6-3, 6-4</p>
MEMORY	<p>Choose MEMORY TEST in the MENU mode to allow the MEMORY test to be performed. In this test, PROGRAM RAMs, ROMs, and ICs on the IC Board are checked.</p>	6-3, 6-4
PERIODIC SERVICING	<p>Periodically perform the following:</p> <p>1.> MEMORY TEST</p> <p>2.> Ascertain each setting.</p> <p>3.> In the INPUT TEST mode, test the CONTROL device.</p> <p>4.> In the OUTPUT TEST mode, check each of the lamps.</p>	<p>6-3, 6-4</p> <p>6-9, 6-10</p> <p>6-5</p> <p>6-6</p>
CONTROL SYSTEM	<p>1.> In the INPUT TEST mode, check each SW and VR.</p> <p>2.> Adjust or replace each SW and VR.</p> <p>3.> If the problem can not be solved yet, check the CONTROL's moves.</p>	<p>6-5</p> <p>7</p> <p>7</p>
MONITOR	<p>In the MONITOR ADJUSTMENT mode, check to see if the MONITOR adjustment is appropriately made.</p>	6-8
IC BOARD	<p>1.> MEMORY TEST</p> <p>2.> In the SOUND TEST mode, check the sound related ROM's.</p>	<p>6-3, 6-4</p> <p>6-7</p>
DATA CHECK	<p>Check such data as game play time and histogram to adjust the difficulty level, etc.</p>	6-12

6 - 1 SWITCH UNIT AND COIN METER



IMPORTANT! Never touch places other than those specified. Touching places not specified can cause electric shock and short circuit.



CAUTION! Adjust to the optimum sound volume by considering the environmental requirements of the installation location. If the COIN METER and the game board are electrically disconnected, game play is not possible.

Open FRONT DOOR RIGHT, and the switch unit shown appears. The function of each switch is as follows:

1.> SOUND VOLUME

Controls the speaker volume.

2.> TEST BUTTON (TEST SW)

For the handling of the TEST BUTTON, refer to the section on the test mode.

3.> SERVICE BUTTON (SERVICE SW)

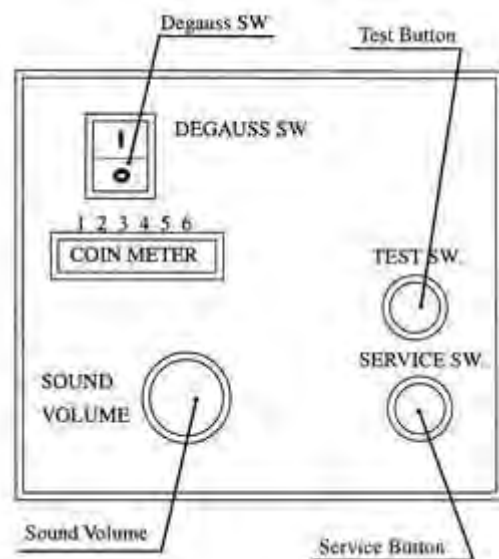
Give credits without registering on the coin meter.

4.> DEMAGNETIZER SWITCH (DEG MAG SW)

Eliminates the unevenness of the on-screen color of the MONITOR.

5.> SUB POWER SWITCH (POWER SW)

The AC UNIT at the rear of the cabinet has the main power switch. Note that normally, the SUB POWER SWITCH should be kept in the ON position.



6 - 2 TEST MODE

This mainly checks if the operation of Game BD is accurate, and allows for COIN ASSIGNMENTS/GAME ASSIGNMENTS setting Projector adjustments.

SELECTION OF TEST ITEMS



FIG. 6.2 TEST MENU

1.> Push the TEST BUTTON to cause the following TEST MENU to appear.

2.> By pushing the SERVICE BUTTON, bring the arrow mark to the desired item and press the TEST BUTTON.

3.> After the test is complete, move the arrow mark to "EXIT" and press the TEST BUTTON to return to game mode.

6 - 3 MEMORY TEST

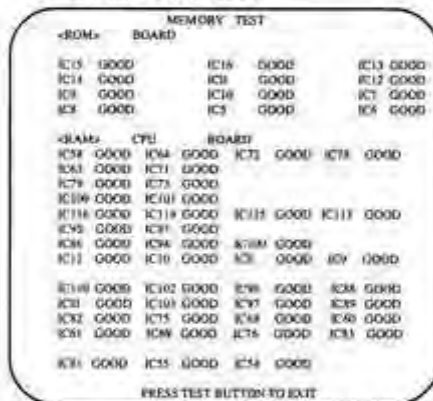


FIG. 6.3 MEMORY TEST

The MEMORY TEST mode is for checking the on-BD memory IC functioning. "GOOD" is displayed for normal ICs and "BAD" is displayed for abnormal ICs.

◦ When the test is completed, if the display as shown left, it is satisfactory.

6 - 4 T.G.P. TEST



FIG. 6.4 T.G.P. TEST

◦ After finishing the test, pressing the TEST BUTTON allows the MENU MODE to return on the screen.

In this test, T.G.P. (on screen display related IC) is checked. As shown at the left, if "GOOD" is displayed for all, it is satisfactory. Press TEST BUTTON to return to the menu screen.

6 - 5 INPUT TEST

When INPUT TEST is selected, the MONITOR will show the following, allowing you to watch the status of each switch. On the screen, periodically check the status of each switch.

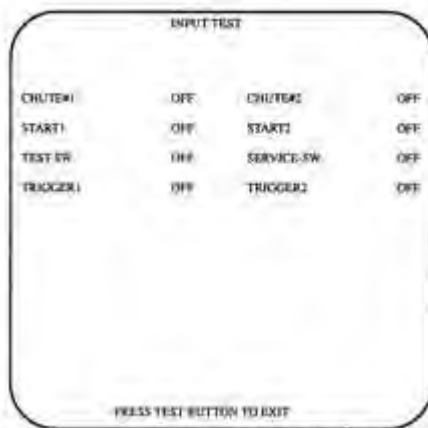


FIG. 6.5 INPUT TEST

1.> By pressing each switch, if the display on the right-hand side of the name of each switch changes to ON from OFF, the SW and the wiring connections are satisfactory.

2.> Open the COIN CHUTE DOOR and insert a coin from the COIN ENTRY to check the COIN CHUTE SW.

6 - 6 OUTPUT TEST

Choose OUTPUT TEST to cause the following lower screen to appear. In the test, periodically adjust the projector and check the status of each lamp.

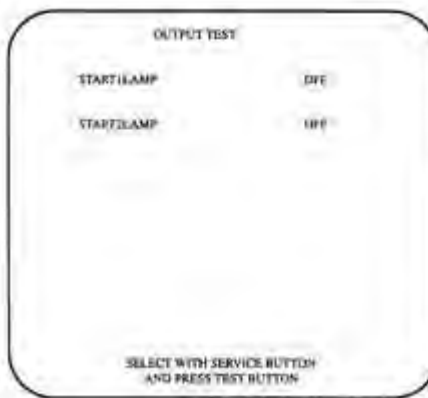


FIG. 6.2 OUTPUT TEST

Choose OUTPUT TEST to have the MONITOR screen shown left to appear. This screen allows status to be checked. Periodically check the lamp status in this mode.

Press the SERVICE BUTTON to move the arrow to the desired lamp test item.

Press the TEST BUTTON. If the display to the right of the lamp changes to ON from OFF, the lamp and wiring connection are satisfactory.

Choose EXIT and press the TEST BUTTON to return to MENU MODE.

6 - 7 SOUND TEST

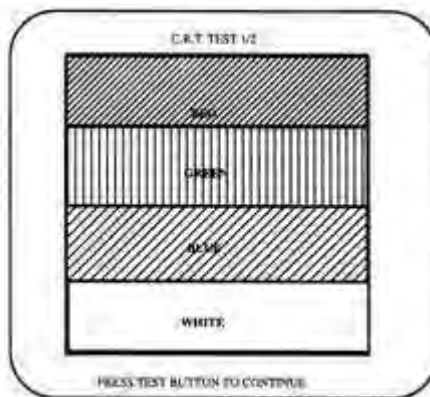
This enables sound used in the game to be checked. Sound related memory and each speaker are checked. Press the SERVICE BUTTON to bring the arrow to the desired sound item to be tested. Pressing the TEST BUTTON causes the desired sound test to appear.



FIG. 6.7 SOUND TEST

Each time the SERVICE BUTTON is pressed, numeral displayed on the screen counts up and sound is emitted.

6 - 8 C.R.T. TEST



Select C.R.T. TEST to cause the MONITOR to display the screen shown left, allowing MONITOR adjustment status to be checked.

Periodically check the MONITOR adjustment status on this screen.

The screen (1/2) enables color adjustment check to be performed. The color bar of each of the 4 colors, i.e., red, green, blue, and white, is the darkest at the extreme left and becomes brighter towards the extreme right.

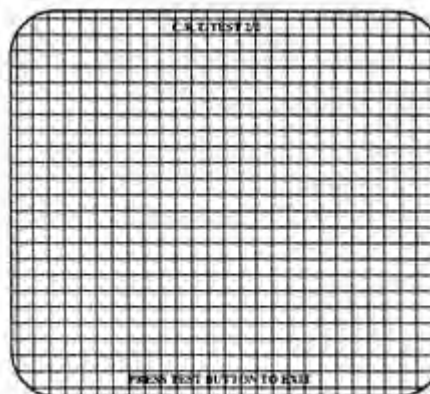


FIG. 6.8 C.R.T. TEST

Press the TEST BUTTON to shift to the next page (2/2).

The screen (2/2) allows screen size and distortion to be tested.

Check if the CROSSHATCH FRAME LINE goes out of the screen and if the crosshatch lines are distorted.

Press the TEST BUTTON to return to the MENU mode.

6 - 9 GAME ASSIGNMENTS

Selecting the GAME ASSIGNMENTS in the MENU mode causes the present game settings to be displayed and also the game settings changes (game difficulty, etc.) can be made. Each ite displays the following content.

SETTING CHANGE PROCEDURE



IMPORTANT! Setting changes cannot be stored unless the TEST BUTTON is pressed while the arrow is on EXIT.

1.> Press the SERVICE BUTTON to move the arrow to the desired item.

2.> Choose the desired setting change item by using the TEST BUTTON.

3.> To return to the MENU MODE, move the arrow to EXIT and press the TEST BUTTON.



◦ GAME DIFFICULTY: Game difficulty can be set in 5 different levels from VERY EASY to VERY HARD.

◦ LIFE SETTING: The combination set of INTIAL LIFE (the number of life points allotted to the player at the time of game start) and MAX LIFE (the limited number of life points) can be selected from the following 12 variations.

INTIAL LIFE: 1 2 3 1 2 3 4 1 2 3 4 5

MAX LIFE: 3 3 3 4 4 4 4 5 5 5 5 5

◦ BLOOD COLOR: The blood color is chosen from among the 4 kinds, i.e., GREEN, RED, BLUE, and PURPLE.

◦ ADVERTISE SOUND: Determines whether ADVERTISE SOUND is to be emmitted or not by setting to ON when emmitting it and to OFF when not emmitting it.

◦ COUNTRY: Message language.

THE FOLLWING FIGURES/TABLES SHOW THE FACTORY RECOMMENDED SETTINGS.

6 - 10 COIN ASSIGNMENTS

Selecting the COIN ASSIGNMENTS in the MENU mode permits you to set the start number of credits, as well as the basic numbers of coins and credits., This mode expresses "how many coins correspond to how many credits."

SETTING CHANGE PROCEDURE



IMPORTANT! Setting changes cannot be stored unless the TEST BUTTON is pressed while the arrow is on EXIT.

1.> Press the SERVICE BUTTON to move the arrow to the desired item.

2.> Choose the desired setting change item by using the TEST BUTTON.

3.> To return to the MENU MODE, move the arrow to EXIT and press the TEST BUTTON.



◦ COIN CHUTE TYPE: Sets the combination of the number of COIN CHUTES and the number of players as applicable. In the case that the COIN CHUTE is changed, be sure the setting is made in a manner meeting the replaced coin chute.

COMMON: Coins are accepted in common for both players.

INDIVIDUAL: Each player uses a coin chute which accepts coins independently.

◦ CREDIT TO START: Number of credits required for starting game. (1~5 credits are selected.)

◦ CREDIT TO CONTINUE: Number of credits required for continuing game (1~5 credits are selected)

◦ COIN/CREDIT SETTING: Sets the CREDITS increase increment per coin insertion. There are 27 settings from #1 to #27, expressed in XX CREDIT as against XX COINS inserted. (TABLE 6.10a, 6.10b) #27 refers to FREE PLAY. When the COIN CHUTE TYPE is set to INDIVIDUAL, there are some setting numbers not displayed as indicated in TABLE 6.10b.

◦ MANUAL SETTING: This allows credit increase setting as against coin insertion to be further set in the manner finer than COIN/CREDIT SETTING (refer to TABLE 6.10c).

TABLE 6.10a COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

SETTING	FUNCTIONING OF CHUTE #1
SETTING #1	1 COIN ~ 1 CREDIT
SETTING #2	1 COIN ~ 2 CREDITS
SETTING #3	1 COIN ~ 3 CREDITS
SETTING #4	1 COIN ~ 4 CREDITS
SETTING #5	1 COIN ~ 5 CREDITS
SETTING #6	1 COIN ~ 2 CREDITS
SETTING #7	1 COIN ~ 5 CREDITS
SETTING #8	1 COIN ~ 3 CREDITS
SETTING #9	1 COIN ~ 4 CREDITS
SETTING #10	1 COIN ~ 5 CREDITS
SETTING #11	1 COIN ~ 6 CREDITS
SETTING #12	1 COIN ~ 1 CREDIT
SETTING #13	1 COIN ~ 1 CREDIT
SETTING #14	1 COIN ~ 2 CREDITS
SETTING #15	1 COIN ~ 1 CREDIT 2 COINS ~ 3 CREDITS
SETTING #16	1 COIN ~ 3 CREDITS
SETTING #17	1 COIN ~ 1 CREDIT
SETTING #18	1 COIN ~ 1 CREDIT

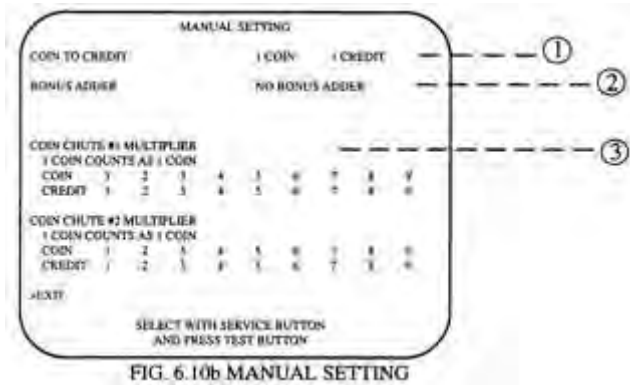
SETTING #19	1 COIN ~ 1 CREDIT 2 COINS ~ 2 CREDITS 3 COINS ~ 3 CREDITS 4 COINS ~ 4 CREDITS
SETTING #20	1 COIN ~ 5 CREDITS
SETTING #21	5 COINS ~ 1 CREDIT
SETTING #22	1 COIN ~ 2 CREDITS
SETTING #23	2 COINS ~ 1 CREDIT 4 COINS ~ 2 CREDITS 5 COINS ~ 3 CREDITS
SETTING #24	1 COIN ~ 3 CREDITS
SETTING #25	1 COIN ~ 1 CREDIT 2 COINS ~ 2 CREDITS 3 COINS ~ 3 CREDITS 4 COINS ~ 4 CREDITS 5 COINS ~ 6 CREDITS
SETTING #26	1 COIN ~ 6 CREDITS
SETTING #27	FREE PLAY

TABLE 6.10b COIN/CREDIT SETTING (COIN CHUTE INDIVIDUAL TYPE)

SETTING	FUNCTIONING OF COIN CHUTE
SETTING #1	1 COIN ~ 1 CREDIT
SETTING #6	1 COIN ~ 2 CREDITS
SETTING #8	1 COIN ~ 3 CREDITS
SETTING #9	1 COIN ~ 4 CREDITS
SETTING #10	1 COIN ~ 5 CREDITS
SETTING #11	1 COIN ~ 6 CREDITS
SETTING #12	1 COIN ~ 1 CREDIT
SETTING #15	1 COIN ~ 1 CREDIT 2 COINS ~ 3 CREDITS
SETTING #17	1 COIN ~ 1 CREDIT
SETTING #18	1 COIN ~ 1 CREDIT
SETTING #19	1 COIN ~ 1 CREDIT 2 COINS ~ 2 CREDITS 3 COINS ~ 3 CREDITS 4 COINS ~ 4 CREDITS
SETTING #21	5 COINS ~ 1 CREDIT
SETTING #22	1 COIN ~ 2 CREDITS
SETTING #23	2 COINS ~ 1 CREDIT 4 COINS ~ 2 CREDITS 5 COINS ~ 3 CREDITS
SETTING #25	1 COIN ~ 1 CREDIT 2 COINS ~ 2 CREDITS 3 COINS ~ 3 CREDITS 4 COINS ~ 4 CREDITS 5 COINS ~ 6 CREDITS
SETTING #27	FREE PLAY

MANUAL SETTING

Selecting MANUAL SETTING in the COIN ASSIGNMENTS mode displays the following screen.



- 1.> Determines the Coin/Credit setting.
- 2.> This sets how many coins should be inserted to obtain one Service Coin.
- 3.> This sets how many tokens one coin represents.

COIN TO CREDIT	1 COIN 1 CREDIT
	2 COINS 1 CREDIT
	3 COINS 1 CREDIT
	4 COINS 1 CREDIT
	5 COINS 1 CREDIT
	6 COINS 1 CREDIT
	7 COINS 1 CREDIT
	8 COINS 1 CREDIT
	9 COINS 1 CREDIT

BONUS ADDER	NO BONUS ADDER
	2 COINS GIVE 1 EXTRA COIN
	3 COINS GIVE 1 EXTRA COIN
	4 COINS GIVE 1 EXTRA COIN
	5 COINS GIVE 1 EXTRA COIN
	6 COINS GIVE 1 EXTRA COIN
	7 COINS GIVE 1 EXTRA COIN
	8 COINS GIVE 1 EXTRA COIN
	9 COINS GIVE 1 EXTRA COIN

COIN CHUTE MULTIPLIER	1 COIN COUNTS AS 1 COIN
	1 COIN COUNTS AS 2 COINS
	1 COIN COUNTS AS 3 COINS
	1 COIN COUNTS AS 4 COINS
	1 COIN COUNTS AS 5 COINS
	1 COIN COUNTS AS 6 COINS
	1 COIN COUNTS AS 7 COINS
	1 COIN COUNTS AS 8 COINS
	1 COIN COUNTS AS 9 COINS

6 - 11 GUN SETTING

Selecting GUN SETTING causes the following screen at the top to appear. This allows the controller sighting to be adjusted. Periodically check the sighting adjustment status on this screen.



FIG. 6.11a SIGHTING ADJUSTMENT MENU

The screen shown at the left is the sighting adjustment menu mode. Press the SERVICE BUTTON to bring the arrow to the desired adjustment item to select. Press the TEST BUTTON to cause the following sighting check to appear. There are 2 types of adjustments, i.e., one for 1 P side and one for 2P side. Adjustments for both 1 P and 2P can not be made on the same screen. To return to the Main Menu bring the arrow to EXIT and press TEST BUTTON. (Fig. 6.2)

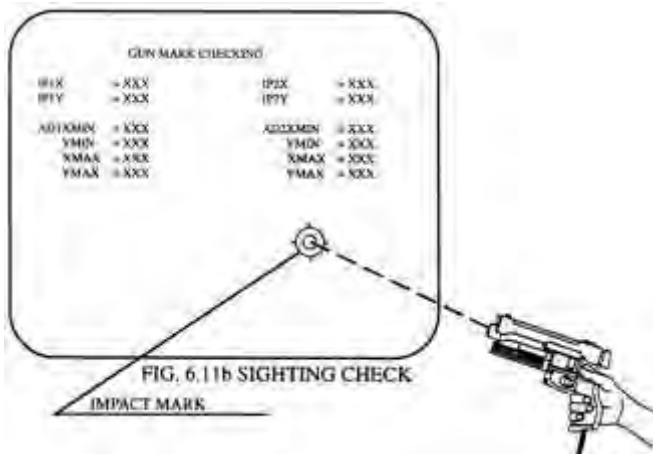


FIG. 6.11b SIGHTING CHECK
IMPACT MARK

Selecting GUN MARK causes the screen at the left to appear. Point the controller at this screen to have an impact mark appear on the screen. The position of the mark shows the impact point shot by the controller. A red impact mark applies to the left 1P side and a blue impact mark applies to the right 2P side. Perform the TEST BUTTON to return to the above sighting adjustment menu screen.

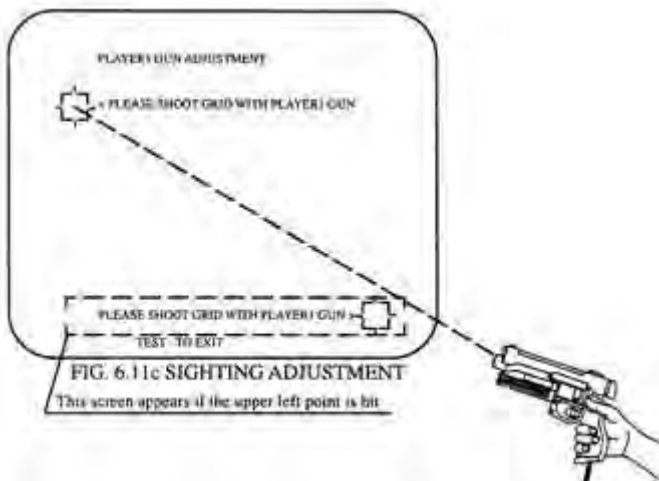


FIG. 6.11c SIGHTING ADJUSTMENT

Selecting PLAYER 1 GUN ADJUSTMENT causes the screen shown at the left to be displayed. 1P side sighting adjustment menu returns to the screen without performing anything. Adjustment procedure: First shoot at the center of grid (the square mark at the upper left portion of the screen). This causes another grid to appear at the lower right portion of the screen. Shoot at this grid also.

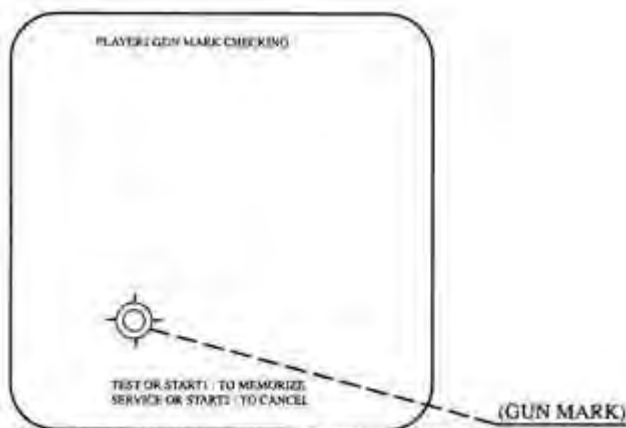


FIG. 6.11d SIGHTING ADJUSTMENT SELECTION

Shooting the 2 grid displays "NOW CALCULATING" on the center of the screen to allow sighting to be adjusted. Next, the gun mark checking screen shown left appears. When the controller is pointed to the screen, the gun mark is shown on the screen. The mark position shows the gunshot. If this adjustment is satisfactory, press either the TEST BUTTON or 1P side START BUTTON. When readjusting, press either the SERVICE BUTTON or 2P side START BUTTON.



FIG. 6.11e SIGHTING ADJUSTMENT

Choosing PLAYER 1 GUN DEFAULT ADJUSTMENT causes the screen shown at left to be displayed. The sighting is reset to the initial setting made at the time of shipment from the factory. However, due to some changes in the unit's environment and cabinet after shipment, sighting may not always be accurate. To reset to the initial setting, press the TEST BUTTON or 1P side START BUTTON. To return to the sighting adjustment menu without doing anything, press the SERVICE BUTTON or 2P START BUTTON.

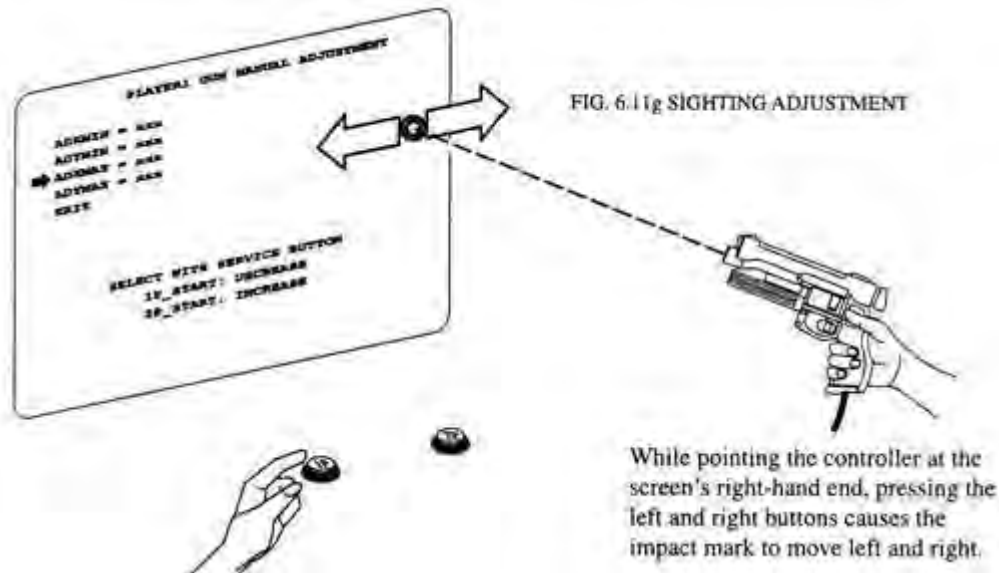


FIG. 6.11f SIGHTING ADJUSTMENT

Select PLAYER 1 GUN MANUAL ADJUSTMENT to cause the screen shown at the left to be displayed. In this screen, the 4 adjustment values can be set. Use this adjustment mode only when accurate sighting can not be achieved in the above 2 screens. When setting each of the 4 adjustment values, follow the procedure below: Be sure to shoot at the screen's end portion in the designated direction and determine the adjustment value by paying attention to the impact mark movement.

6 - 11 GUN SETTING cont'd

While pointing the controller at the screen's right-hand end, pressing the left and right buttons causes the impact mark to move left and right.



ADADMIN=xxx

Determines the adjustment value of the screen's left-hand end horizontal direction. Point the controller at the screen's left-hand end to bring the impact mark to the screen's left-hand end. While pointing at the screen's left-hand end, changing the adjustment value by pressing the left and right START BUTTON causes the impact mark to move left and right. Make adjustments in a manner so that the impact mark is at an appropriate position. At this time, disregard vertical directions.

ADXMAX=xxx

Determines the adjustment value of the screen's right-hand end horizontal direction. Point the controller at the screen's right-hand end to bring the impact mark to the screen's right-hand end. While pointing at the screen's right-hand end, changing the the adjustment value by pressing the left and right START BUTTON causes the impact mark to move left and right. Make adjustments in a manner so that the impact mark is at an appropriate position. At this time, disregard vertical directions.

ADYMIN=xxx

Determines the adjustment value of the screen's upper end in the vertical direction. Point the controller at the screen's upper end to bring the impact mark to the screen's upper end. While pointing at the upper end, changing the adjustment value by pressing the left and right START BUTTONS causes the impact mark to move up and down. Make adjustments in a manner so that the impact mark is at an appropriate upper end position. At this time, disregard horizontal directions.

ADYMAX=xxx

Determines the adjustment value of the screen's lower end in the vertical direction. Point the controller at the screen's lower end to bring the impact mark to the screen's lower end. While pointing at the lower end, changing the adjustment value by pressing the left and right START BUTTONS causes the impact mark to move up and down. Make adjustments in a manner so that the impact mark is at an appropriate lower end position. At this time, disregard horizontal directions.

Choosing PLAYER 2 GUN ADJUSTMENT causes 2P side sighting screen to be displayed. How to operate is the same for 1P side.

Choosing PLAYER 2 GUN DEFAULT ADJUSTMENT causes 2P side sighting to be reset to the initial setting. How to operate is the same as for 1 P side.

Choosing PLAYER 2 GUN MANUAL ADJUSTMENT causes the screen to adjust the 4 adjustment values for 2P side to appear. How to operate is the same as for 1P side.

6 - 12 BOOKKEEPING

Choosing BOOKKEEPING in the MENU mode displays the data of operating status up to the present are shown on 2 pages. Press the TEST BUTTON to proceed to PAGE 2/2.



FIG. 6.12a BOOKKEEPING (1/2)

- COIN CHUTE#*: Number of coins put in each Coin Chute.
- TOTAL COINS: Total number of activations of Coin Chutes.
- COIN CREDITS: Number of credits registered by inserting coins.
- SERVICE CREDITS: Credits registered by the SERVICE BUTTON.
- TOTAL CREDITS: Total number of credits (COIN CREDITS+SERVICE CREDITS).
- TOTAL TIME: The total energized time.

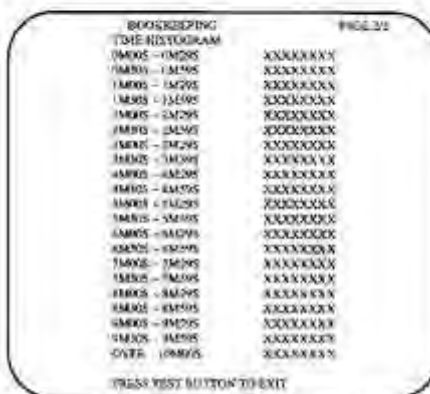


FIG. 6.12b BOOKKEEPING (2/2)

On page (2/2), each play frequency is displayed. When setting difficulty levels, the frequency can be referred to as a standard.

When in the PAGE 2/2 mode, press the TEST BUTTON to return to the MENU mode. (Fig.6.2).

6 - 13 BACKUP DATA CLEAR

Clears the contents of BOOKKEEPING and high score player ranking entry.



FIG. 6.13 BACKUP DATA CLEAR

When clearing, bring the arrow to "YES" and when not clearing, to "NO", by using the SERVICE BUTTON, and push the TEST BUTTON. When the data has been cleared, "COMPLETED" will be displayed. Bring the arrow to "NO" and press the TEST BUTTON to cause the MENU mode to return on to the screen.

Note that the contents of the game setting and sighting adjustment are not affected by BACKUP DATA CLEAR.

7. CONTROLLER (GUN)

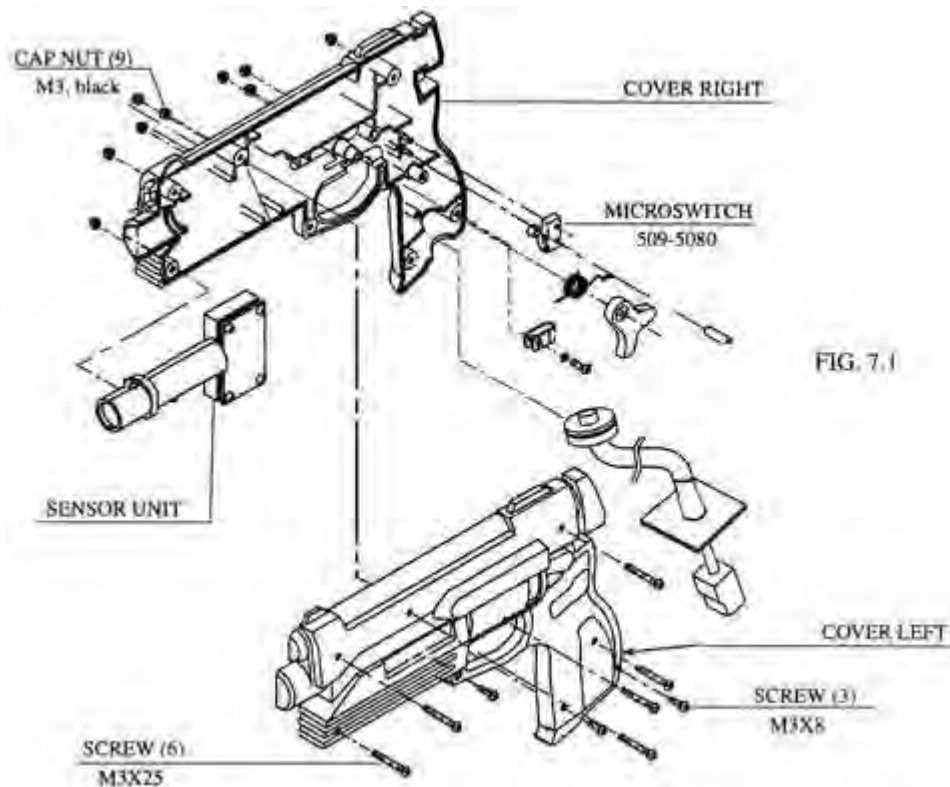


In order to prevent electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product. Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.

In the cases where the controller's operation is not satisfactory or the controller sight deviates from the direction in which the controller is pointed, it is possible that some maintenance may be required (the controller's interior parts may have been damaged). Replace the parts by disassembling the controller in the following procedure: Also, be sure to perform sighting check in the TEST mode when the controller parts are replaced.

7 - 1 REPLACING THE MICROSWITCH

1. Disassemble the controller.
2. Pull out the microswitch from COVER RIGHT.
3. Take out the microswitch by removing the soldering from it.
4. Solder the new microswitch and assemble the controller.



7 - 2 REPLACING THE SENSOR BOARD

The sensor board fits between LENS HOLDER L and LENS HOLDER R. Replace the sensor board by disassembling sensor unit in the following procedure:

1. Disassemble the controller.
2. Remove the sensor unit from COVER R.
3. Take off the 2 tapping screws to remove the LENS HOLDER L.
4. Take off the tapping screws and remove the sensor board from LENS HOLDER R.

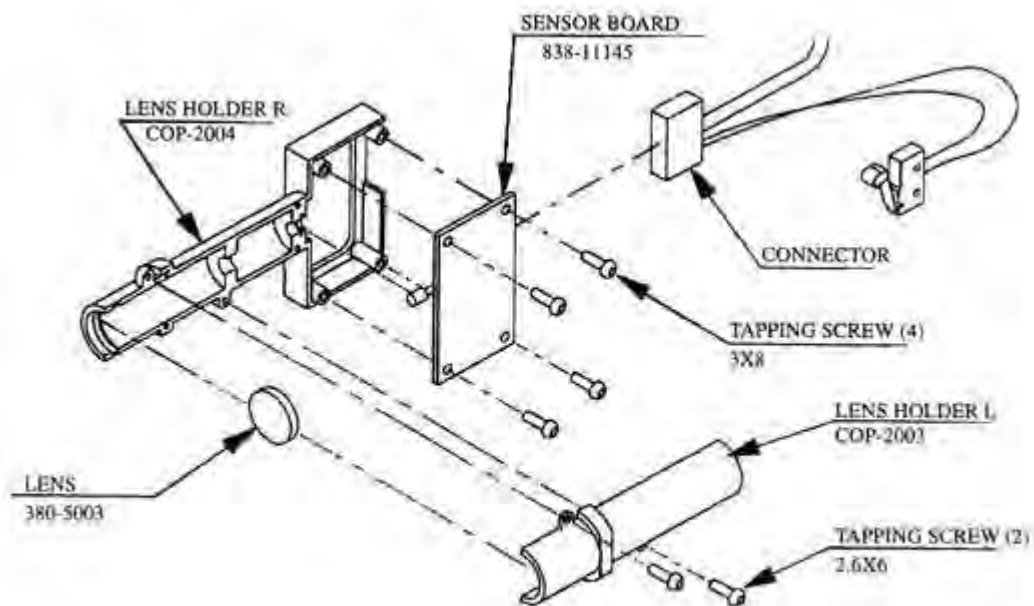


FIG. 7.2

8. COIN SELECTOR

HANDLING THE COIN JAM

If the coin is rejected when the REJECT BUTTON is pressed, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector functions correctly.

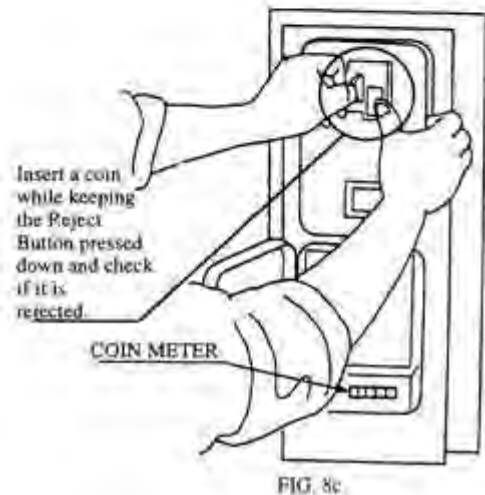
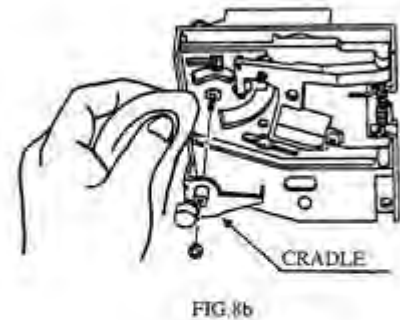
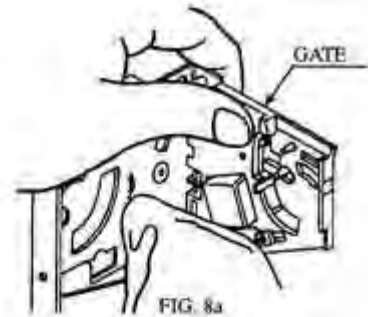
CLEANING THE COIN SELECTOR

The coin selector should be cleaned once every 3 months. When cleaning, follow the procedure below:

1. Turn the power for the machine off. Open the coin chute door.
2. Open the gate and dust off by using a soft brush (made of wool, etc.).
3. Remove and clean smears by using a soft cloth and dipped in water or diluted chemical detergent and then squeezed dry.
4. remove the CRADLE. When removing the retaining ring (E-ring), be very careful not to bend the shaft.
5. Remove stains from the shaft and pillow portions by wiping off with a soft cloth, etc.
6. After wiping as per #5 above, further apply a dry cloth, etc. to cause the coin selector to dry completely.



IMPORTANT! Never apply machine oil, etc. to the coin selector. After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the Selector functions correctly.



COIN INSERTION TEST

Once a month, when performing the COIN SW TEST, simultaneously check the following:

1. Does the Coin Meter count satisfactorily?
2. Does the coin drop into the Cash box correctly?

3. is the coin rejected when inserted while keeping the REJECT BUTTON pressed down?

OPTIONAL DOLLAR BILL ACCEPTOR

THE COIN DOOR ASSEMBLY USED ON THE **HOUSE OF THE DEAD STD** COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL NEEDED WIRING CONNECTIONS ARE CONVIENENTLY LOCATED INSIDE THE GAME FOR THIS APPLICATION.

HOLE POSITION#1 (FORWARD MOST POSITION) VFM5 (MARS)-110 V; AL4 (MARS)-110 V

HOLE POSITION#2 VFM2 (MARS)-110 V; VFM4 (MARS)-110 V; DBV45 (JCM)+12 V

HOLE POSITION#3 CURRENTLY NOT USED

HOLE POSITION#4 DSI01*-DSTOJ +12Vdc

*** The back flange on the chute can be removed for hold position#4. If the flange is not removed, it may interfere with the back of the cabinet.**

9. PROJECTOR

9 - 1 CAUTIONS CONCERNING THE SAFETY FOR HANDLING THE MONITORS.

Before handling the monitors, be sure to read the following explanations and comply with the caution/warning instructions below. Note that the caution/warning symbol marks are used in the instruction.



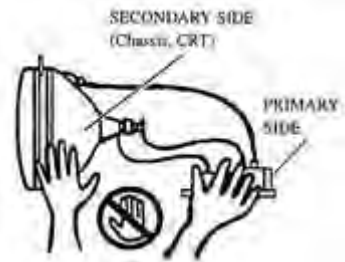
CAUTION!

When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from monitor interior and the monitor, be sure to disconnect the power connector before starting work. Proceeding the work without following the this instruction can cause electric shock and/or malfunctioning. Using the monitor by converting it without obtaining a prior permission is not allowed. SEGA shall not be liable for any malfunctioning and accident caused by said conversion.



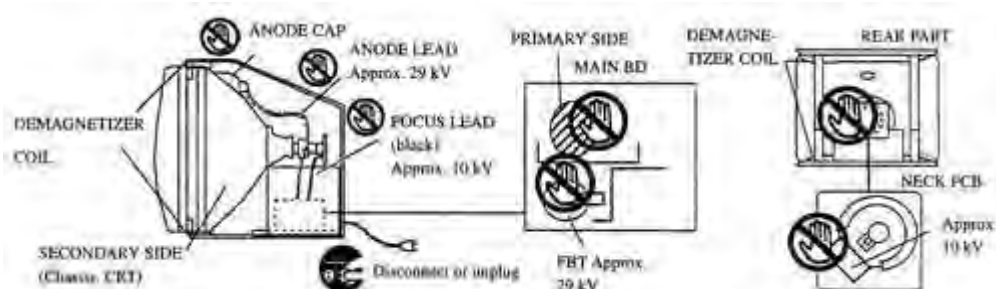
WARNING!

CONNECTING THE CRT AND PCB; The monitor's circuit which is divided into the Primary side and Secondary side, is electrically isolated. Do not touch the primary side and the secondary side simultaneously. When making monitor adjustments, use a non-conductive driver and make adjustments without touching any other part other than the Adjustment V.R. and knob. Also, be sure not to cause a short circuit to the primary side and secondary side. Failing to observe these instruction can cause a short circuit, malfunctioning, and/or electric shock.



CAUTION!

HIGH TENSION VOLTAGE; Some parts of the inside monitor are subject to high tension voltage in excess of 20,000 volts and very dangerous. Therefore , do not touch the monitor interior, and keep free from debris to prevent hazards.



CONNECTING THE CRT AND PCB cont'd; For combining the CRT and PCB, use the specified part No. to maintain the status of adjustments made at the factory. The anode of the CRT itself will be accumulatively charged as time elapses, generating high tension voltage, which is very dangerous. The monitor should be used with the Chassis, CRT, and PCB assembled. When repair, etc. is required a the time of malfunctioning, be sure

to send it in an "as is assembled" condition. If these are disabled, what's charged to said high tension voltage can be discharged, causing a very hazardous situation. Therefore, under no circumstances should it be disassembled.



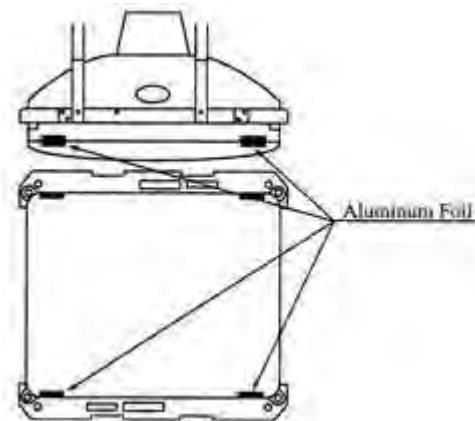
STATIC ELECTRICITY; Touching the CRT surface sometimes causes you to slightly feel electricity. This is because the CRT surfaces are subject to static and will not adversely affect a human body.

INSTALLATION AND REMOVAL; Ensure that the Magnetizer Coil, FBT (Fly-Back Transformer), Anode Lead and Focus Lead are not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as not to cause an electric shock and malfunctioning.



CAUTION! For purposes of static prevention, special coating is applied to the CRT face of this product. To protect the coating, pay attention to the following points. Damaging the coating film can cause electric shock to the customers. For the caution to be heeded when cleaning, refer to the section of [Periodic Inspection Table](#).

- > Do not rub with a hard item (a rod with pointed edge, pen, etc.) to or on the CRT surfaces.
- > Avoid applying stickers, seals, etc. on the CRT face.
- > Removing the aluminum foils can cause static prevention effects to be lowered.



9 - 2 CLEANING THE SCREEN



CAUTION! Static preventive coating is applied to the CRT surfaces. When cleaning, pay attention to the following points. Peeling off static preventive coat can cause electric shock.

- > Remove smears by using a dry, soft cloth (flannels, etc.). Do not use coarse gauze, etc.

> For smear removing solvent, alcohol (ethanol) is recommended. When using chemical detergent, be sure to follow instructions below:

- a. Dilute chemical detergent with water and dip a soft cloth in and then thoroughly wring it out to wipe smears off.
- b. Do not use chemical detergents containing an abradant, powder or bleaching agent.
- c. Do not use alkaline chemical detergents such as glass cleaner available on the market or solvents such as thinner, etc.
- d. Do not rub or scratch the CRT face with hard items such as brushes, scrub brush, etc...

Clean the CRT surfaces once a week. When cleaning, pay attention to the above caution so that the anti-static coating will not come off.

9 - 3 ADJUSTMENT METHOD

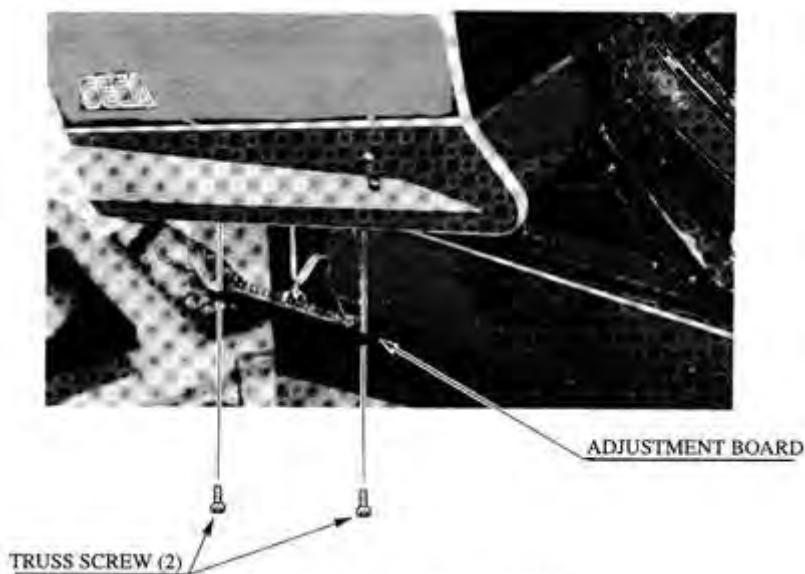


CAUTION!

Monitor adjustments have been made at the time of shipment. Therefore, do not make further adjustment without a justifiable reason. Adjusting the monitor which contains high tension parts is dangerous work. Also, an erroneous adjustment can cause deviated synchronization and projection fault, resulting in malfunctioning. When making adjustment, utilize a resinous Alignment Screwdriver. Servicing with bare hand or using conductive tools can cause electric shock.

Remove the back door at the rear of the cabinet, and the monitor adjustment kob appears. When cleaning the CRT, be sure to turn switch to OFF and then remove the back door.

1. off the 3 tamperproof screws to remove the back door.



- 2.

NANAO MONITOR: 2001-5242-24-04 (24K)

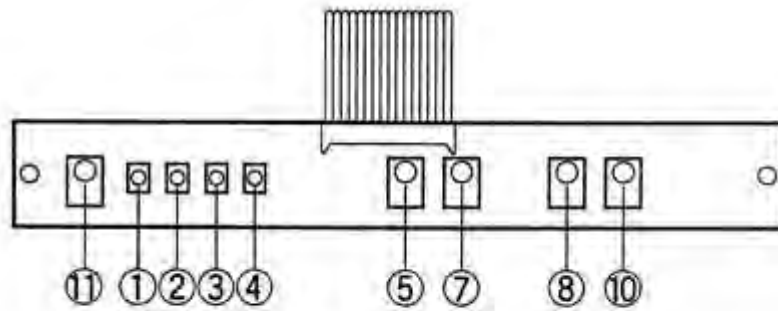


FIG. 9b ADJUSTMENT BOARD

- ① R-GAIN — } Controls Colors
- ② G-GAIN — } Controls Colors
- ③ B-GAIN — }
- ④ BRIGHT — — Controls screen brightness.
- ⑤ H. SIZE — — Controls horizontal screen size.
- ⑥ H. HOLD — — Provides horizontal synchronization, i.e., controls right/left hold.
- ⑦ H. POSI — — Controls horizontal display position on screen.
- ⑧ V. SIZE — — Controls vertical screen size
- ⑨ V. HOLD — — Provides vertical synchronization, i.e. controls up-down hold.
- ⑩ V. POSI — — Controls vertical display position on screen.
- ⑪ CONTRAST — Adjust image contrast.

10. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS



When performing the work, be sure to turn power off. Working with power on can cause an electric shock or short circuit accident. The Fluorescent Lamp, when it gets hot, can cause burns. Be very careful when replacing the Fluorescent Lamp.

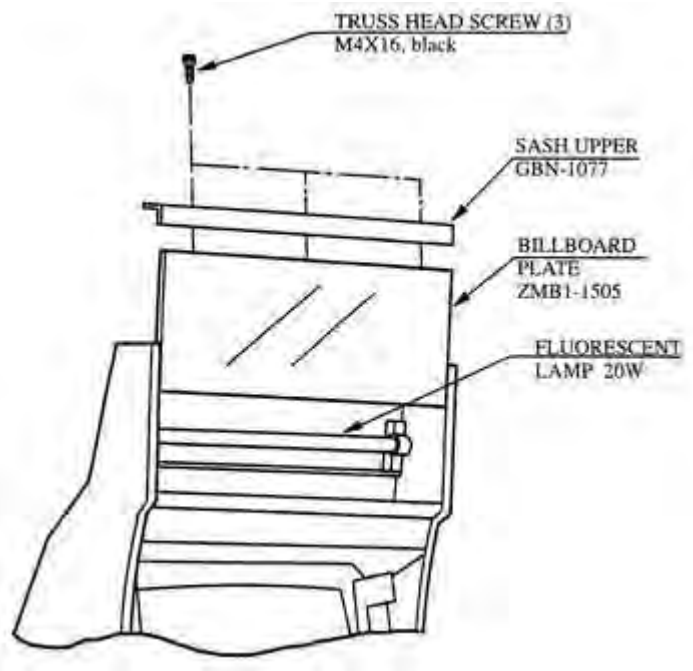


To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Not using a step or using an unable step can cause a violent falling down accident.

10 - 1 REPLACEMENT OF FLUORESCENT LAMP

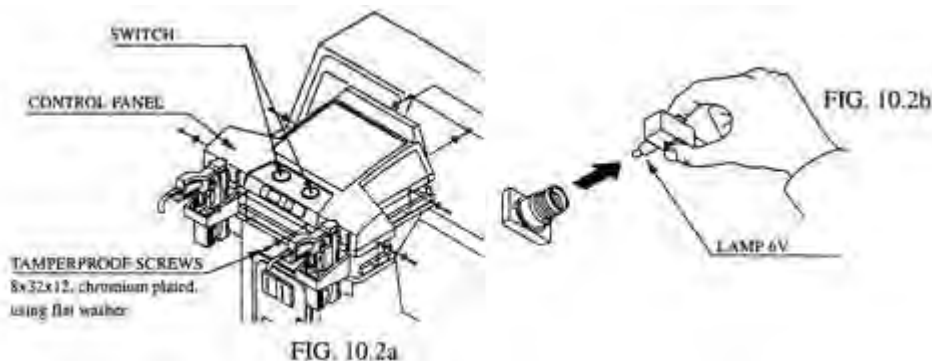
Replace the fluorescent lamp by taking off the related parts in the following procedure:

- 1.> Take off the 3 screws and remove either of BILLBOARD SASH (upper) or BILLBOARD SASH (lower).
- 2.> Take out the billboard from the cabinet and replace the fluorescent lamp (20W)




10 - 2 REPLACEMENT OF LAMPS

- 1.> Take off the 8 tamper proof screws to remove the control panel upward.(FIG. 10.2a)
- 2.> Disconnect the connector which comes from the switch.
- 3.> Pull the lower part of the switch and remove the lamp portion of it. (FIG. 10.2b)



11. PERIODIC INSPECTION TABLE

The items listed below require periodic check and maintenance to retain the performance of this machine and ensure safe operation. When handling the controller, the player will be in direct contact with it, In order to always allow the player to enjoy the game, be sure to clean it regularly. Also, it is advisable to provide wet tissues, etc. available for player use.

 **Be sure to check once a year to see if power cords are damaged, the plug is securely inserted, dust is accumulated between the socket outlet and the power plug, etc. Using this product with dust as is accumulated can cause a fire or electrical shock. Periodically once a year, request the place of contact herein stated or the distributor, etc. where the product was purchased from, as regarding the interior cleaning. Using this product with dust as is accumulated in the interior without cleaning can cause a fire or accident. Note that cleaning the interior parts can be performed on a pay-basis.**

ITEMS	DESCRIPTION	PERIOD	REFERENCE
CONTROLLER	Cleaning	as required	
	Sight Check	Weekly	6
	Check SW	Monthly	6
COIN SELECTOR	Check COIN SW	Monthly	6
	COIN SELECTOR cleaning	Trimonthly	8
MONITOR	C.R.T. cleaning	Weekly	9
	Check adjustments	Monthly	3, 6, 9
GAME BD	Setting Check	Monthly	6
INTERIOR	Cleaning	Annually	see above
POWER PLUG	Inspection and cleaning	Annually	see above
FRONT GLASS	Cleaning	Weekly	11

CLEANING THE FRONT GLASS AND MIRROR

When cleaning, be sure to comply with the following caution and instructions so as not to damage front glass and mirror.



Use care when handling glass made parts. When glass is damaged, fragments of glass can cause injury.



Use alcohol based cleaner. Use a soft cloth. When removing an attached large particle of dust (or foreign matter), do not rub with a cloth.

12.TROUBLESHOOTING

Should trouble occur, first check connector connections.

PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation	Power is not supplied. Power Supply/Voltage is not correct. AC Main fuse causes the power to be cut off due to momentary overload.	Plug in correctly. Make sure that power supply/voltage is correct. Check fuse. Remove the cause of overload and replace fuse.
The Monitor screen always sways or shrinks.	The power supply voltage is not correct. AC current has too much load.	1.> Ensure that the power supply voltage is correct. 2.> Connect unit to AC Brkt with enough available current
No sound is emitted.	Sound volume adjustment is not appropriate. Sound BD and speaker are malfunctioning.	Adjust sound volume. (see section 6) Perform sound test to find and replace defective parts. (see section 6)
Controller operation is not satisfactory.	Due to environmental changes, etc., sighting became inappropriate. Micro switch malfunctioning. Sensor BD malfunctioning	Perform sighting adjustment in the TEST MODE. (see section 6) Replace the micro switch. (see section 7) Replace the Sensor BD. (see section 7)
The Fluorescent lamp does not light up.	The Fluorescent tube is burnt out.	Replace the Fluorescent tube. (see section 10)

13. GAME BOARD



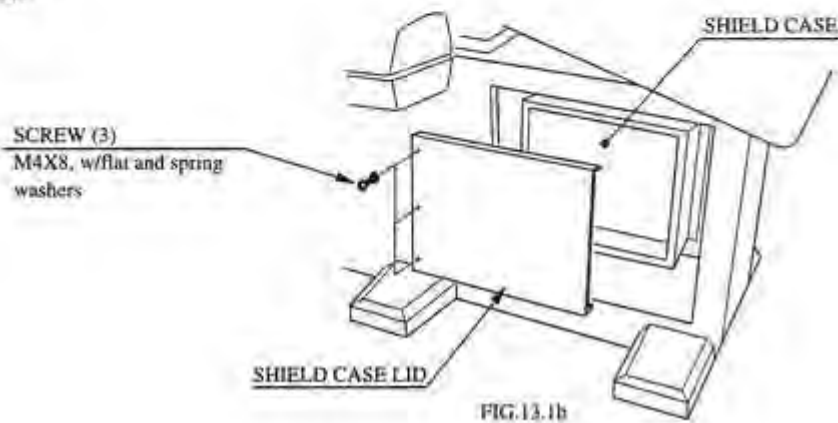
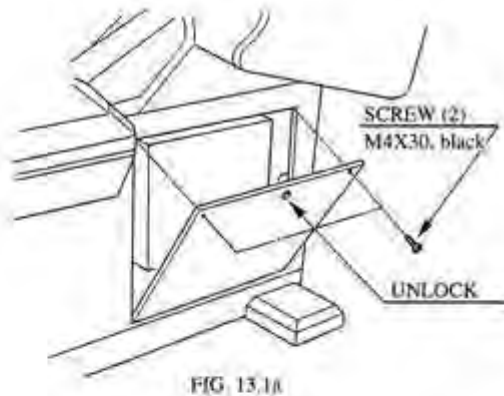
In order to prevent an electrical shock, be sure to turn power off before performing work by touching the interior of the product. Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.



Do not expose the Game BD, etc. without a good reason. In this product, setting changes are made during the test mode. The Game BD need not be operated. Use the Game BD, etc. as is with the same setting made at time of shipment.

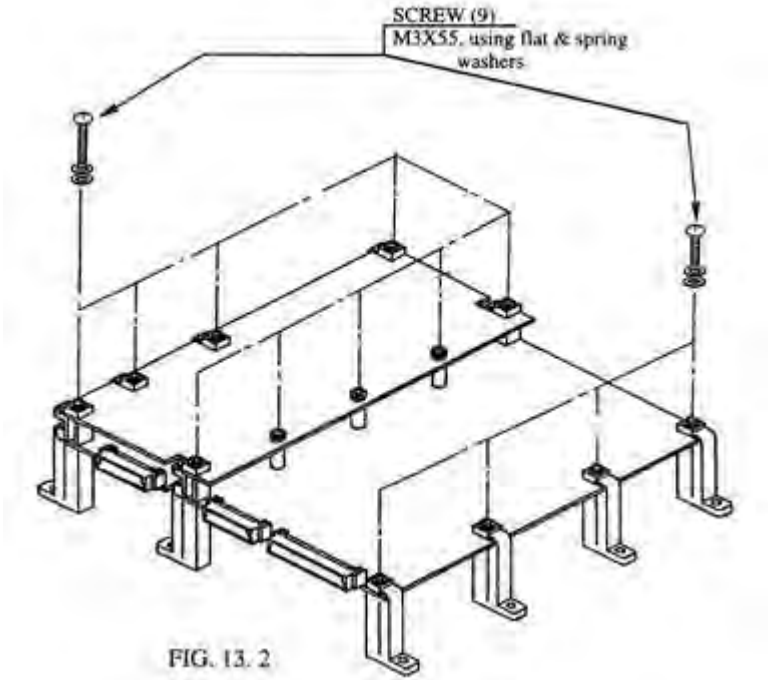
13 - 1 EXPOSING THE GAME BOARD

- ① Turn main switch off
- ② Remove the side door from the right hand side of the cabinet by using the Master Key and taking off the 2 screws.
- ③ Take off the 3 screws to remove the Case Lid. Game Board is contained in the Shield Case.

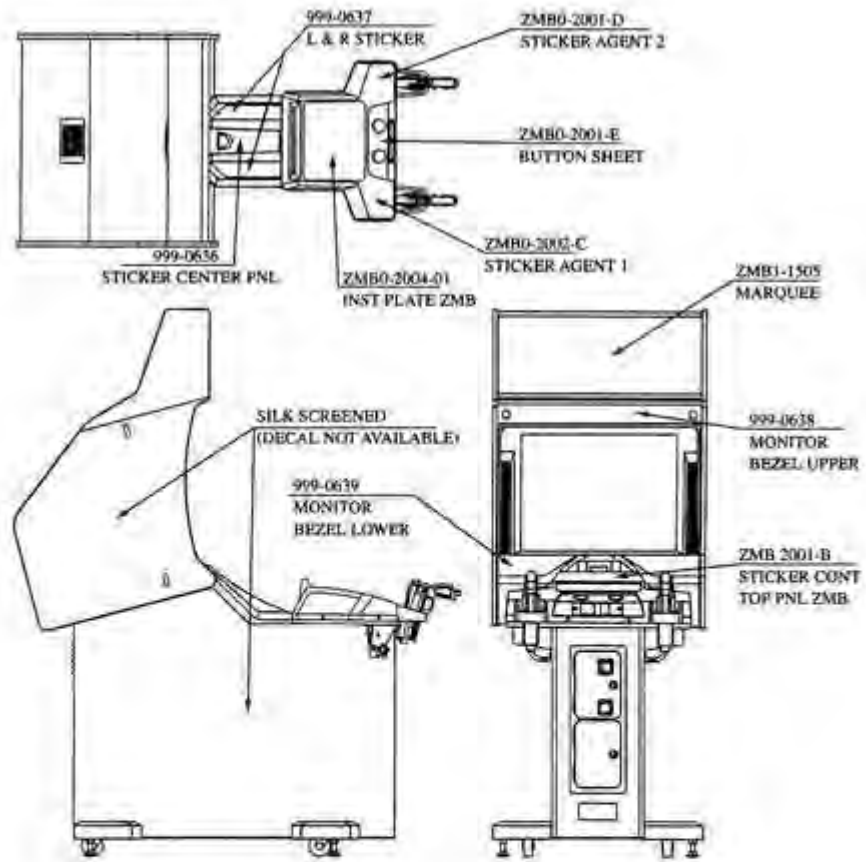


13 -2 COMPOSITION OF GAME BOARD

GAME BD THE HOUSE OF THE DEAD (610-0396-13054)



14. DESIGN RELATED PARTS

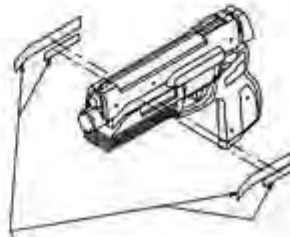


ZMB5-2300 1P SIDE



ZMB1-2301
STICKER CONTROLLER 1P

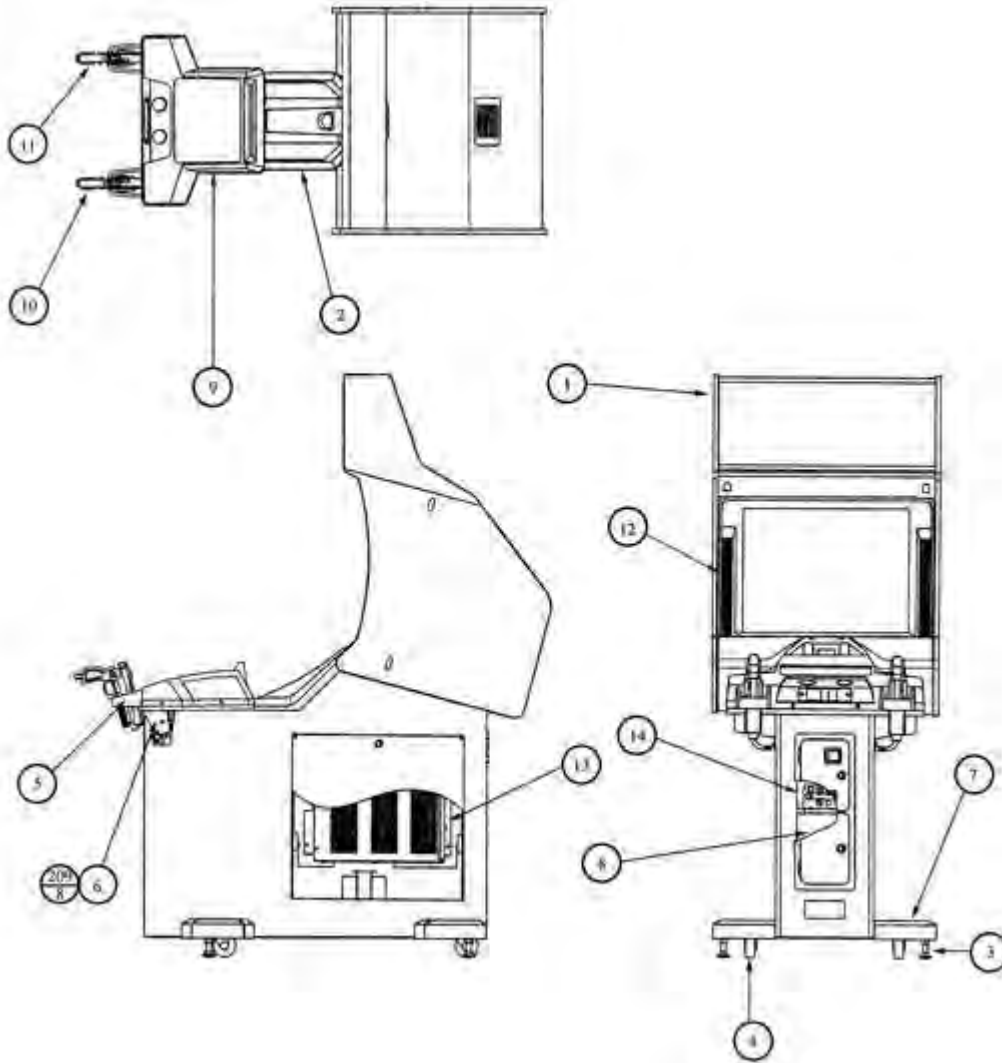
ZMB5-2350 2P SIDE



ZMB1-2351
STICKER CONTROLLER 2P

15. PARTS LIST

<1> ZMB CABINET STD

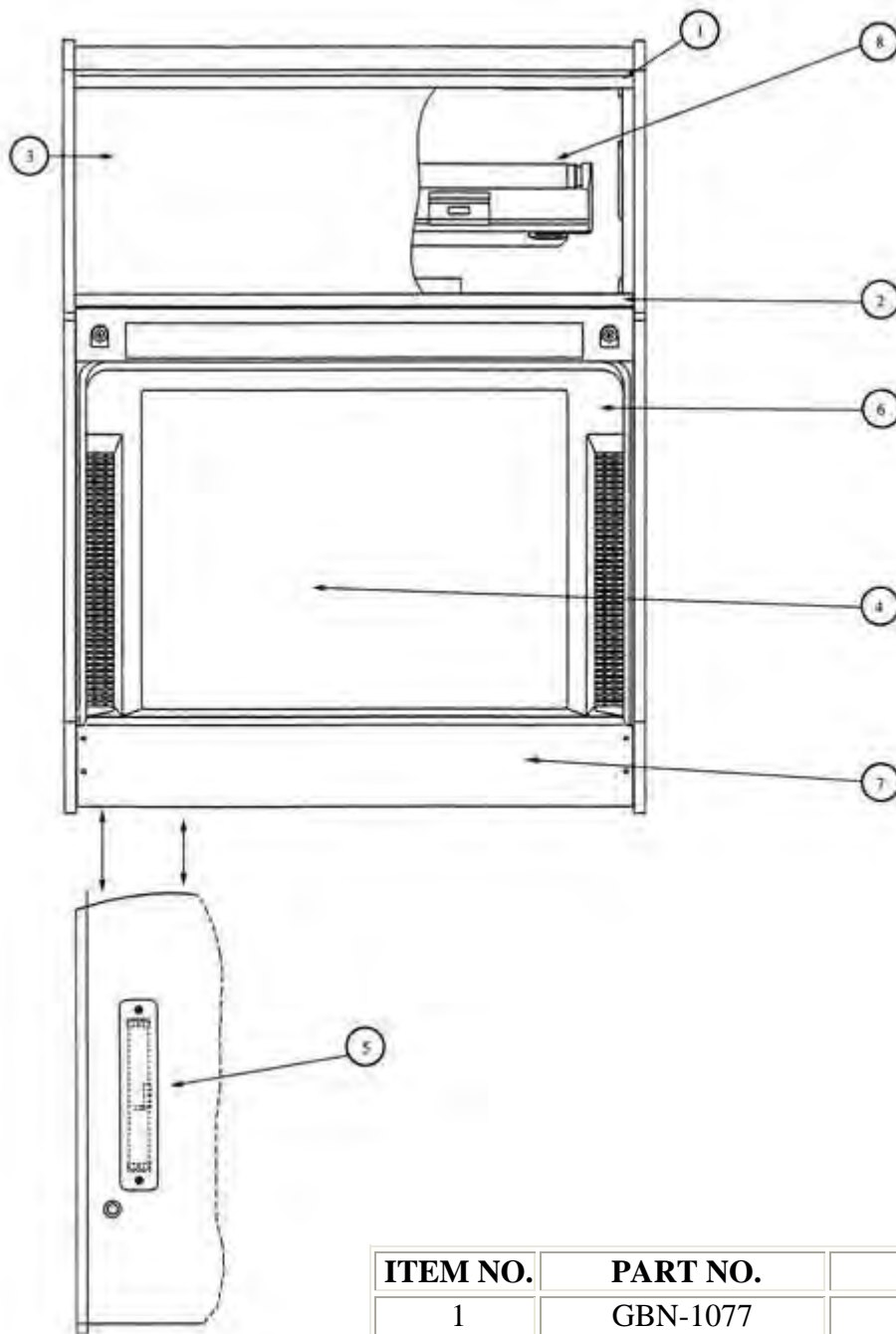


ITEM NO.	PART NO.	DESCRIPTION
1	SEE PAGE 43	ASSY MONITOR
2	999-0635	CENTER COVER
3	999-0167	LEVELER
4	999-0168	CASTER
5	CPT-1019	GUN HOLDER
6	CPT-1020	HOLDER BRACKET
7	GBN-1510	LEG COVER
8	BOX-CASH	CASH BOX

9	ZMB1-200	ASSY CONTROL PANEL
10	ZMB5-2350	CONTROLLER UNIT 2P
11	ZMB5-2300	CONTROLLER UNIT 1P
12	130-5152	SPEAKER
13	SEE PAGE 51	ASSY MAIN BD
14	*SEE BELOW	COIN DOOR ASSY
209	030-000630-SC	HEX BLT W/S CRM M6x30

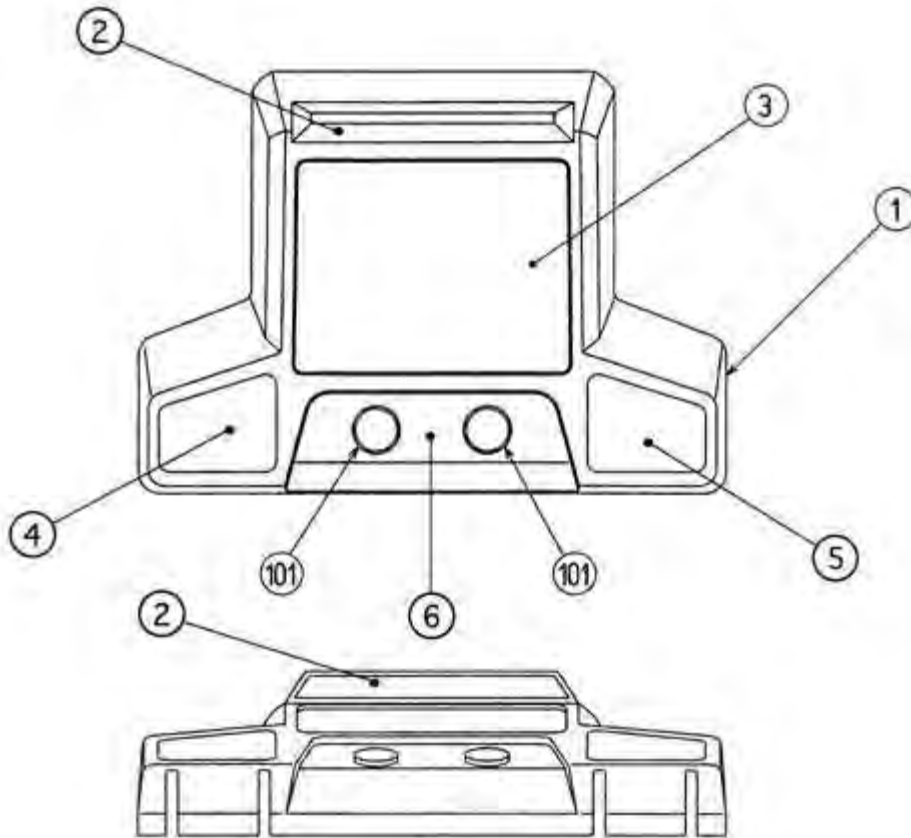
*** FOR INFORMATION CONCERNING THIS PART ASSY PLEASE CALL OUR
PARTS DEPARTMENT @ 650-802-1750**

<2> ASSY MONITOR



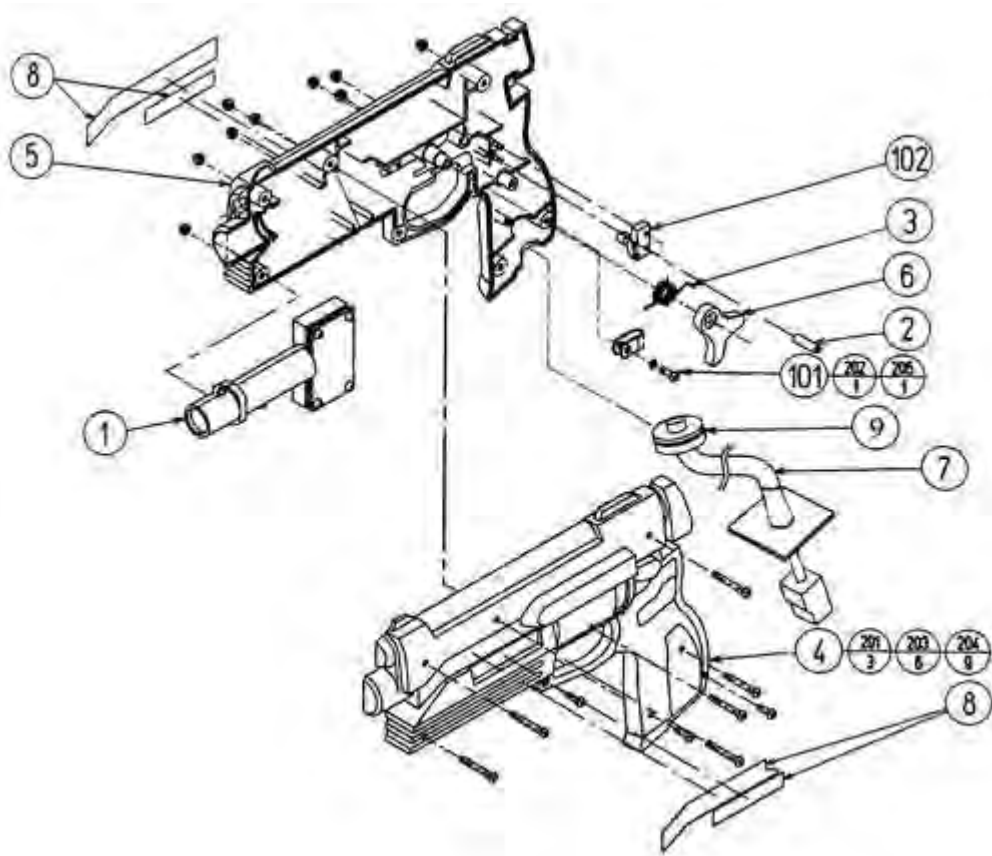
ITEM NO.	PART NO.	DESCRIPTION
1	GBN-1077	SASH UPPER
2	GBN-1078	SASH LOWER
3	ZMB1-1505	BILLBOARD PLATE
4	2001-5242-24-04	MONITOR NANA0 29
5	GBN-1081	ADJUST PANEL
6	TTR-1067	MONITOR MASK
7	GBN-1080	MASK HOLDER
8	LOCAL PURCHASE	FL 20W TUBE

<3> ASSY CONTROL PANEL (ZMB1-2000)



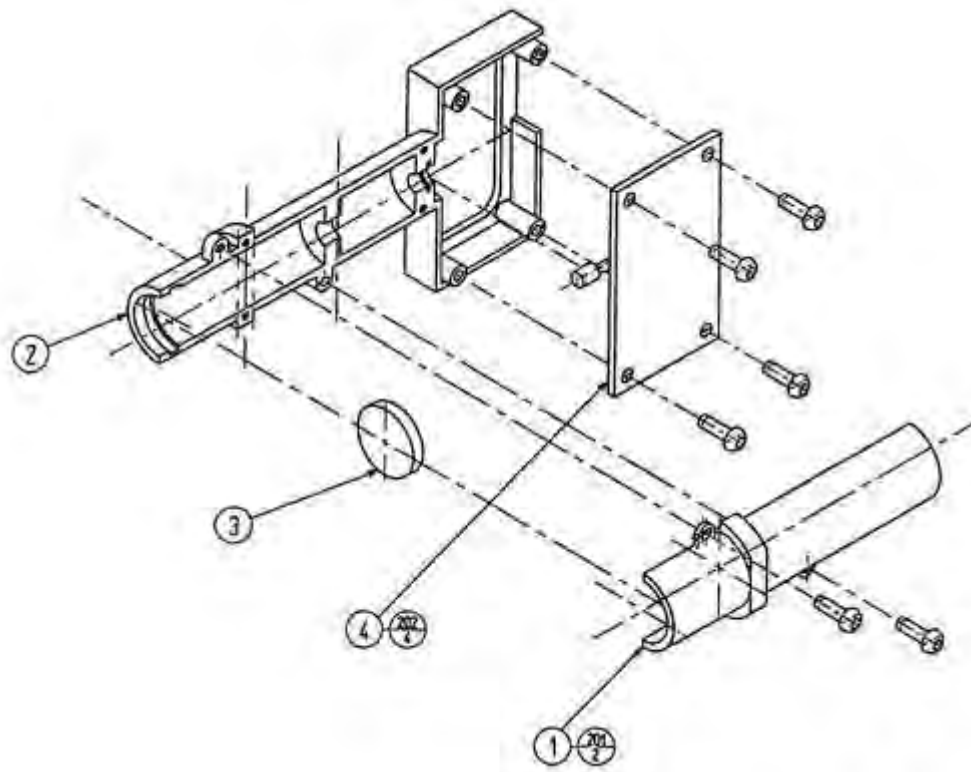
ITEM NO.	PART NO.	DESCRIPTION
1	ZMB1-2001	CONTROL PANEL BLANK
2	ZMB0-2001-B	STICKER CONTROL PANEL TOP
3	ZMB0-2004-01	INSTR. PLATE ZMB ENG
4	ZMB0-2001-C	STICKER AGENT 1
5	ZMB0-2001-D	STICKER AGENT 2
6	ZMB0-2001-E	BUTTON SHEET
101	5091-5712-01	SW PB W/L 6V (Y)-IMPERIAL 1 1/2"

<4> CONTROL UNIT 1P (ZMB5-2300)a CONTROL UNIT 2P (ZMB5-2350)b



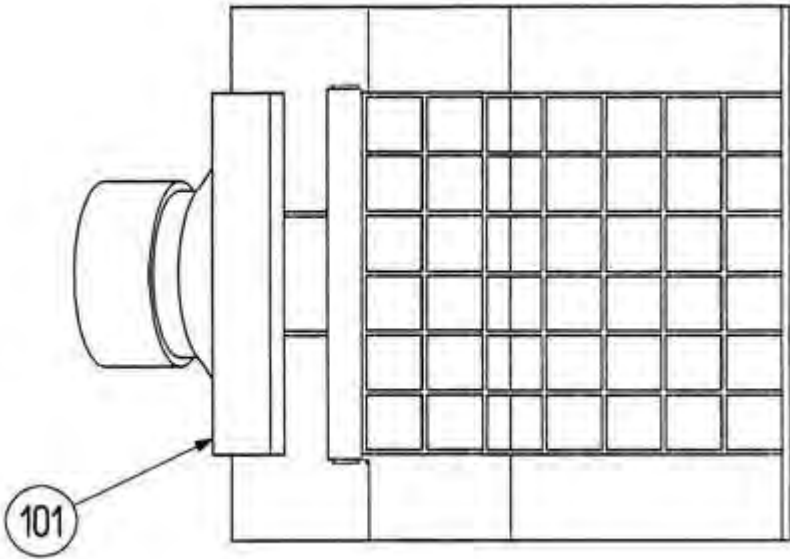
ITEM NO.	PART NO.	DESCRIPTION
1	COP-2020	SENSOR UNIT
2	COP-2005	STOPPER PIN
3	125-5124	TORSION SPRING
4	253-5404-01	COVER LEFT BLUE
5	253-5405-01	COVER RIGHT BLUE
6	253-5406-01	TRIGGER BLUE
7	999-0648	PROTECT TUBE W/WIRE
8a	ZMB1-2301	STICKER CONTROLLER 1P
8b	ZMB1-2351	STICKER CONTROLLER 2P
9	999-0649	HYDRAULIC WASHER-VIRTUA COP
101	280-5124-03	NYLON CLAMP NK03
102	509-5080	SW MICRO TYPE
201	000-P00308-0B	M SCR PH BLK M3x8
202	012-P00308	TAP SCR #2 PH 3x8
203	FAS-000015	M SCR PH BLK M3x25
204	FAS-500006	CAP NUT TYPE 3 BLK M3
205	060-F00300	FLT WSHR M3

<5> SENSOR UNIT (COP-2020)



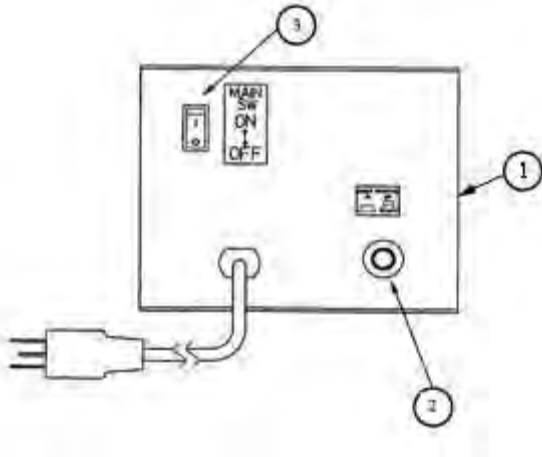
ITEM NO.	PART NO.	DESCRIPTION
1	COP-2003	LENS HOLDER L
2	COP-2004	LENS HOLDER R
3	380-5003	LENS LP
4	838-11145	SENSOR BD
201	012-P02606	TAP SCR PH 2.6x6
202	012-P00306	TAP SCR PH 3x6

<6> ASSY SPEAKER (130-5152)



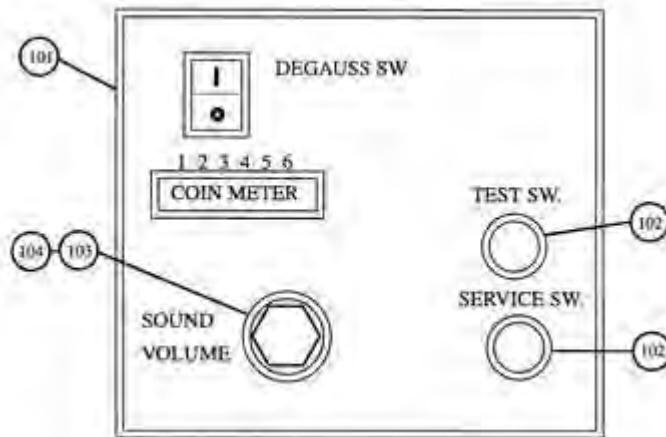
ITEM NO.	PART NO.	DESCRIPTION
101	130-5152	SPEAKER BOX MINI DOME 12W

<7> AC UNIT



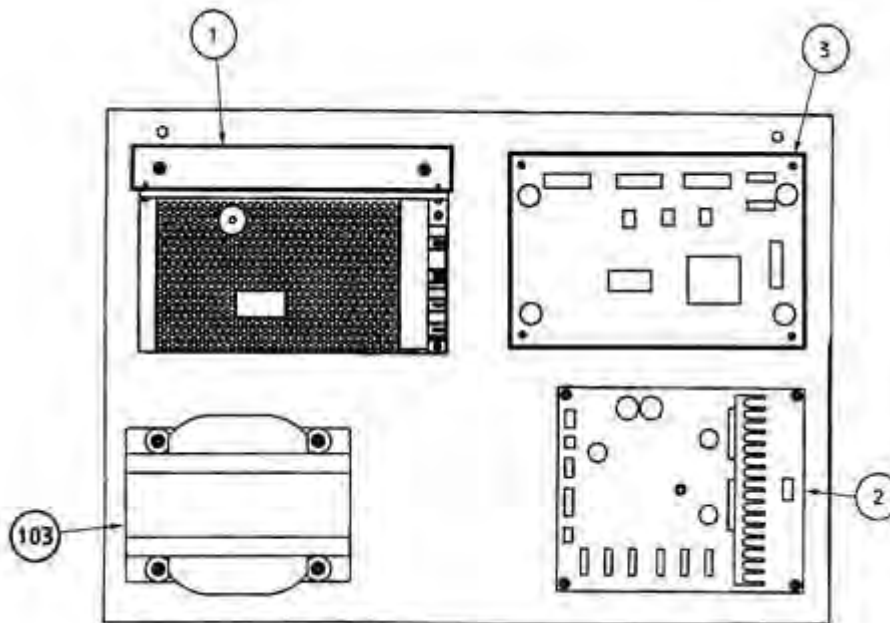
ITEM NO.	PART NO.	DESCRIPTION
1	N/A	AC BRACKET
2	LOCAL PURCHASE	6 1/4A slow blow 3AG
3	5091-5234	ROCKER SW 25A

<8> SW UNIT/COIN METER



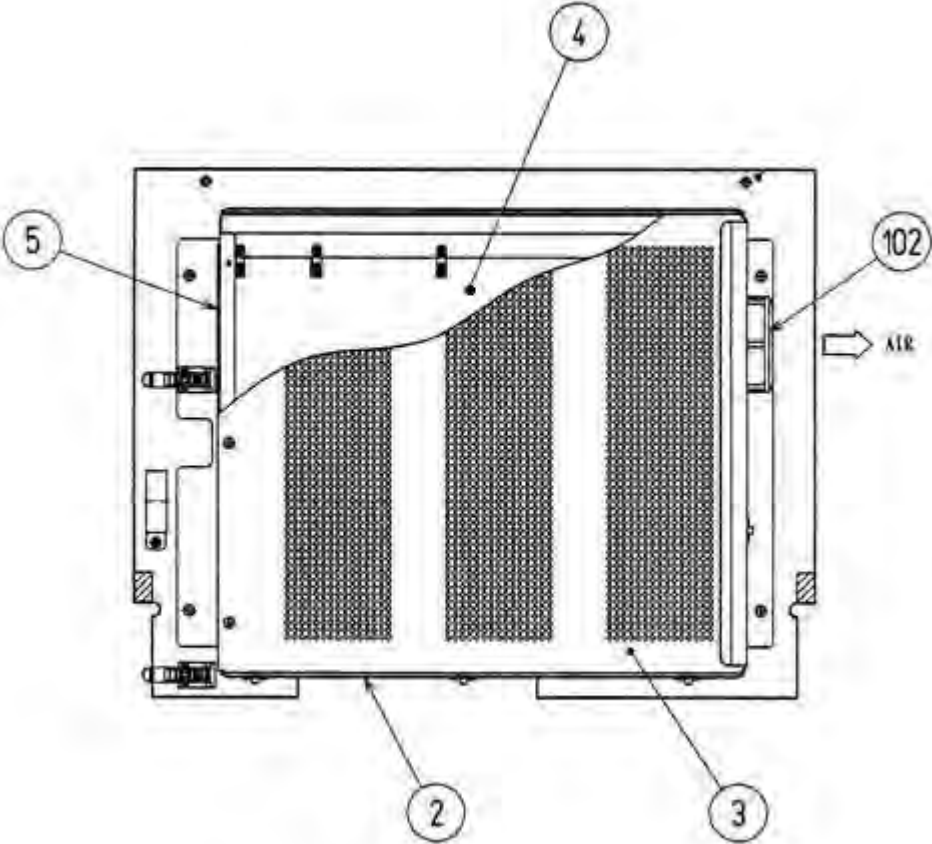
ITEM NO.	PART NO.	DESCRIPTION
101	AIN1-1022	SW BRKT
102	5091-5028	SW PB 1M
103	2201-5179	VOL CONT B-5K OHM
104	6011-0042	KNOB

<9> ASSY ELEC BASE

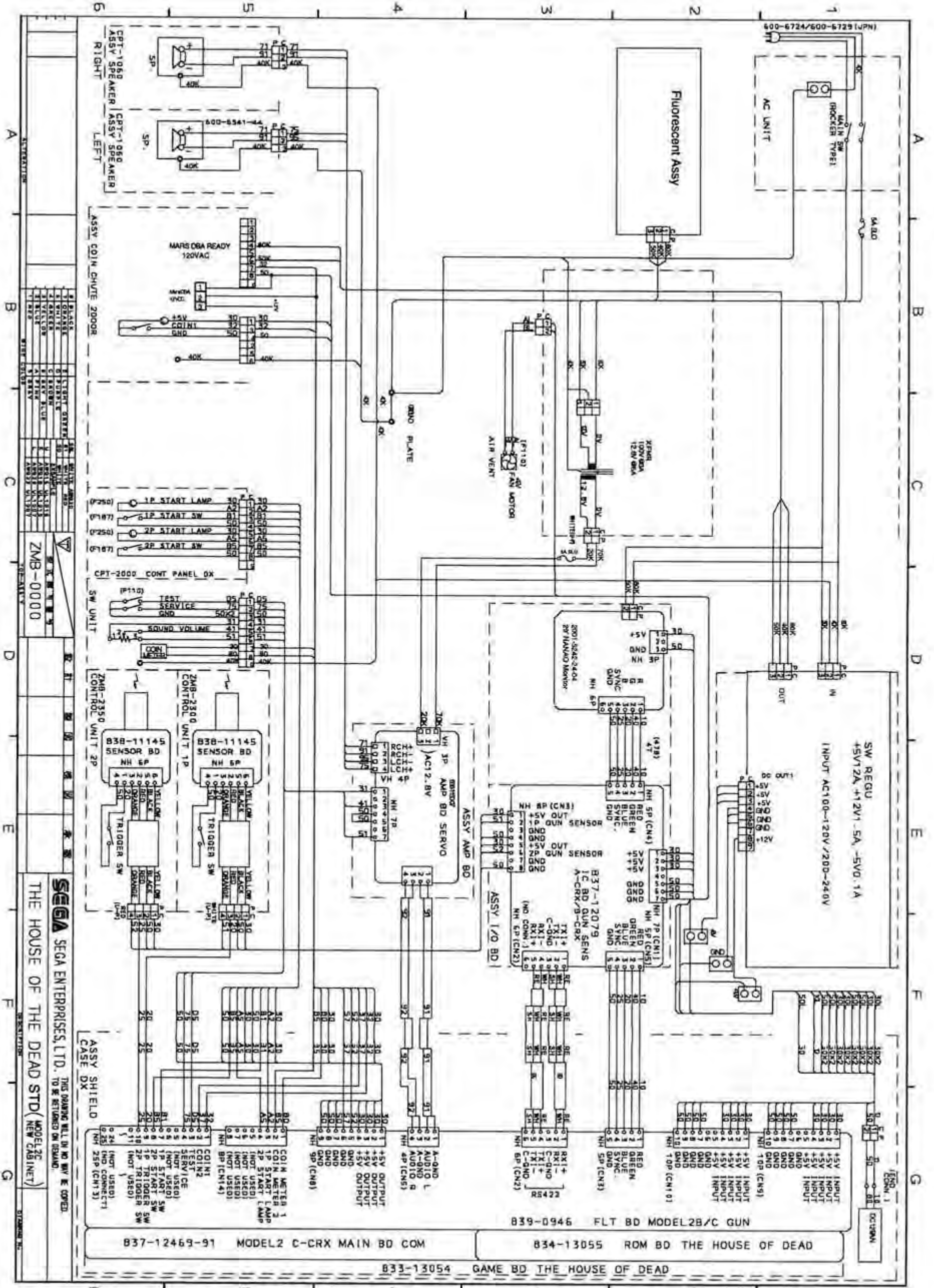


ITEM NO.	PART NO.	DESCRIPTION
1	STVV-00045	STV POWER SUPPLY
101	838-11650-15	EQ. PWR AMP ZMB
102	837-12079	GUN SENSOR BD
103	560-5250-01	PWR XMFR 120V prim. 12.8Vsec. 8A

<10> ASSY MAIN BD-SHEILD CASE (ZMB-0100)



ITEM NO.	PART NO.	DESCRIPTION
2	105-5218	SHIELD CASE
3	105-5219-91	SHIELD CASE LID
4	610-0396-13054	GAME BD
5	839-0778	FLT BD B-CRX RCT
102	209-0055	FAN MOTO DC 12V



SEGA SEGA ENTERPRISES, LTD. THIS DRAWING WILL BE NO WAY BE COPIED.
 THE HOUSE OF THE DEAD STD (MODEL 2C NEW CABINET)

- 837-12469-91 MODEL 2 C-CRX MAIN BD COM
- 833-13054 GAME BD THE HOUSE OF DEAD
- 834-13055 ROM BD THE HOUSE OF DEAD
- 839-0946 FLT BD MODEL 2B/C GUN