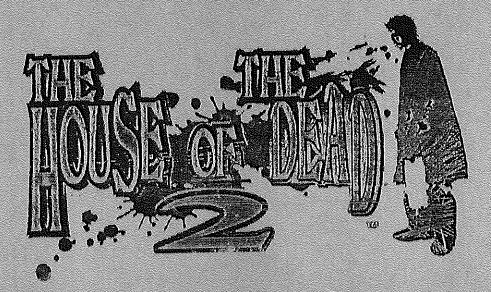
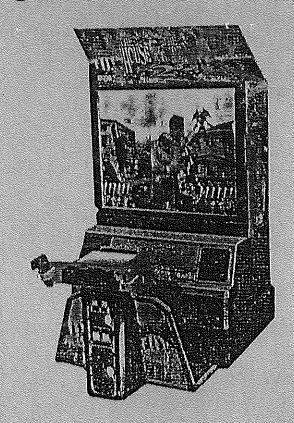
1st PRINTING DEC 98

SEGA



DLX VERSION
OWNER'S MANUAL



SEGA ENTERPRISES, INC. USA

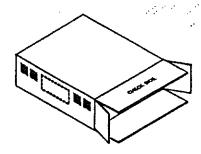
MANUAL NO. 4201-6428-03



THE SHIPMENT METHOD DESCRIBED BELOW ONLY APPLIES TO 'MODEL 3' AND 'NAOMI' BOARDS CONTAINED IN THE FOLLOWING GAMES:

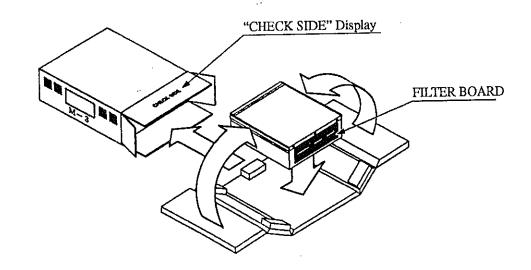
LOST WORLD, VIRTUA FIGHTER 3, SUPER GT, SEGA BASS FISHING, STRIKER 2 HARLEY DAVIDSON, RALLY 2, DAYTONA 2, DIRT DEVILS, THE OCEAN HUNTER, STAR WARS TRILOGY, HOUSE OF THE DEAD 2

!!NEVER SHIP MODEL 3 AND/OR NAMOI GAME BOARDS OUTSIDE OF CAGE!!



CARTON BOX 601-8928 (1) Used for transporting the GAME BOARD. {SUPPLIED WITH YOUR GAME}

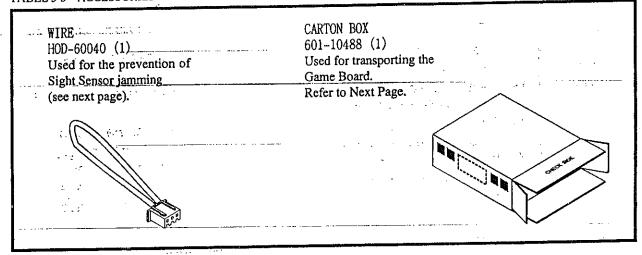
DO NOT SHIP GAME BOARD WITHOUT THIS BOX AS IT MAY DAMAGE THE GAME BOARD AND VOID YOUR WARRANTY.





NO OTHER GAMES BOARDS ARE TO BE SHIPPED IN THE CAGE AS THEY MAY BE DAMAGED BEYOND REPAIR. PLEASE SHIP THEM WITHOUT CAGE PROPERLY PROTECTED DURING SHIPPING.

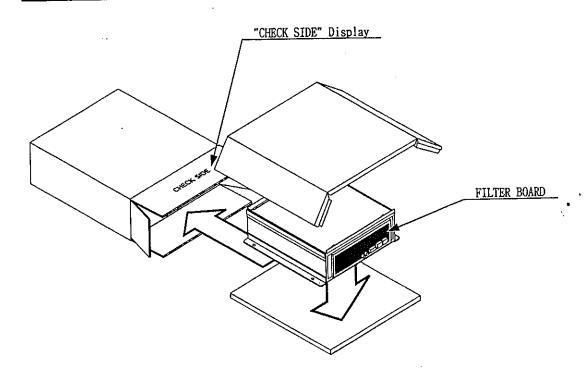
TABLE 5 b ACCESSORIES



HOW TO USE THE CARTON BOX



- When asking for the replacement or repair of the product's Game Board, be sure to put the Game Board together with the Shield Case in a Carton Box. Otherwise, the request is not acceptable.
- Put the Shield Case in the Carton Box by paying attention to the correct direction as per the following instructions and as shown by the instructions printed on the Carton Box. Handling in an erroneous manner can damage the Game Board.



Wrap the Shield Case with the packing material and put it in the Carton Box as shown. Putting it upside down or packing otherwise in the manner not shown can damage the Game Board and parts.

6. ASSEMBLING AND INSTALLATION



Perform assembly work by following the procedure herein stated.
 Failing to comply with the instructions can cause electric shock hazard.

Assembling should be performed as per this manual. Since this is a complex machine, erroneous assembling can cause an electric shock, machine damage and or not functioning as per specified performance.

When assembling, be sure to use plural persons. Depending on the assembly work, there are some cases in which working by one person alone can cause personal injury or parts damage.

When carrying out the assembling and installation, follow the following 5-item sequence.

ASSEMBLING THE PTV

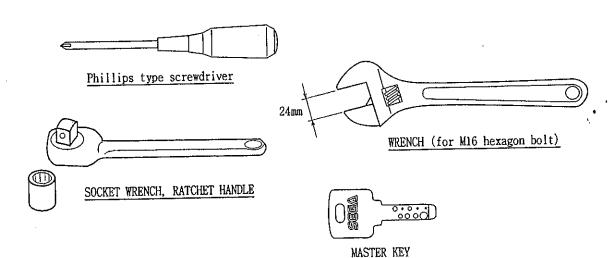
2 ASSEMBLING THE CABINET

3 SECURING IN PLACE (ADJUSTER ADJUSTMENT)

4 POWER SUPPLY, AND EARTH CONNECTION

5 ASSEMBLY CHECK

The master key (accessories) in addition to the tools such as a Phillips type screwdriver, wrench for M16 hexagon bolt, sockt wrench and Ratchet Handle are required for the assembly work.



ASSEMBLING THE PTV

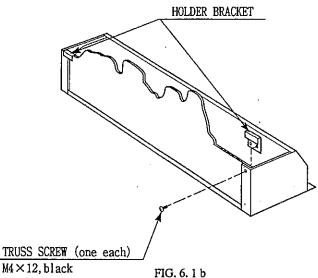


Installing the Billboard by one person is difficult. Be sure to use plural persons to perform work safely and accurately.

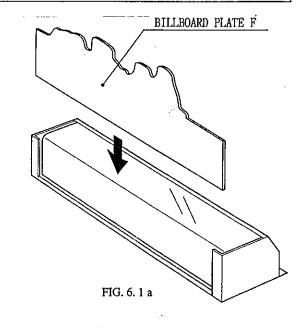


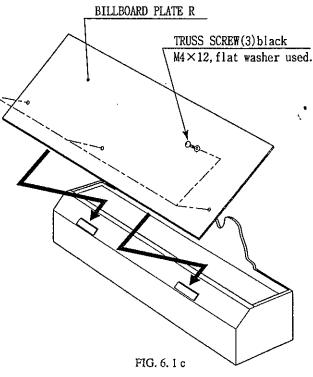
To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Performing work without using the step can cause violent falling down accidents.

- ① Insert Billboard Plate F into the Billboard Box.
- ② Secure the 2 Holder Brackets with a screw for each.

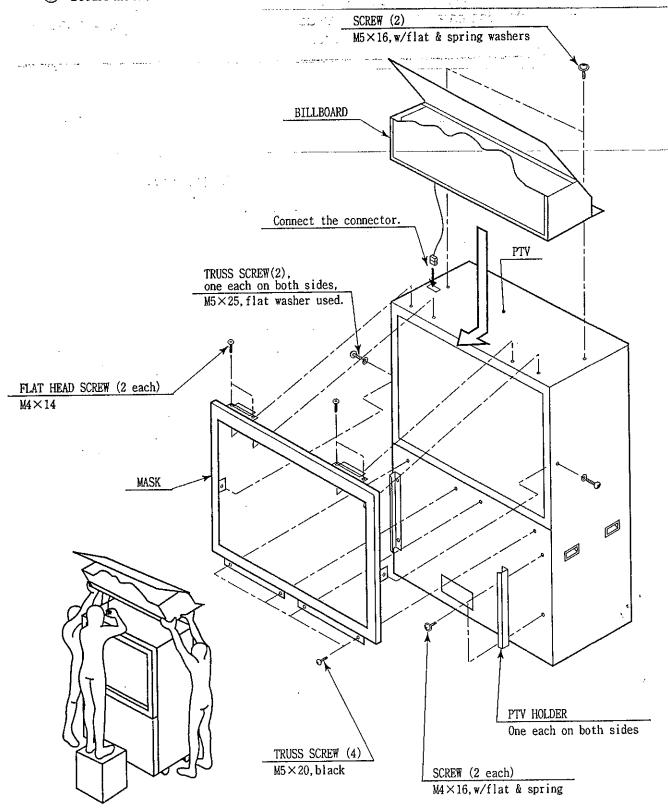


③ Insert Billboard Plate R into the Billboard Box and secure with 3 screws.





- 4 Install the Mask to the PTV with 10 screws.
- (5) Connect the Billboard's wire connector to the PTV ceiling connector.
- 6 Insert the Billboard to the Mask and secure to the PTV with 2 screws.
- Secure the 2 PTV Holders to the front of PTV with 2 screws for each.



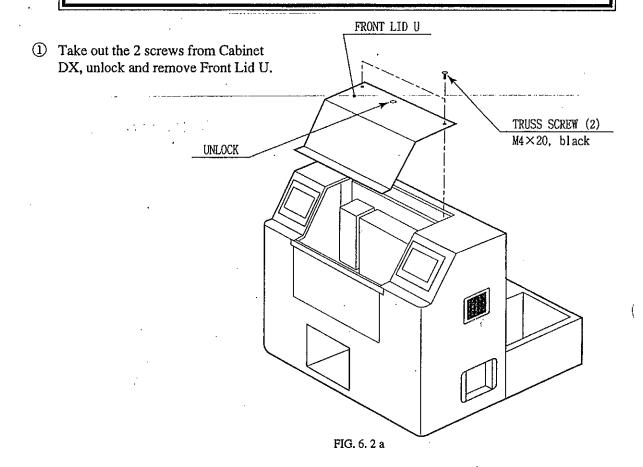
For performing work, use 2 or more workers. Be sure to prepare a step.

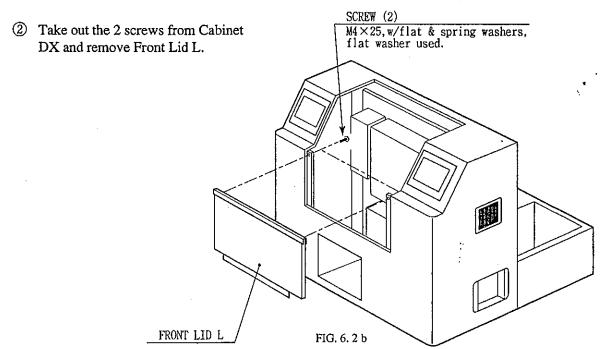


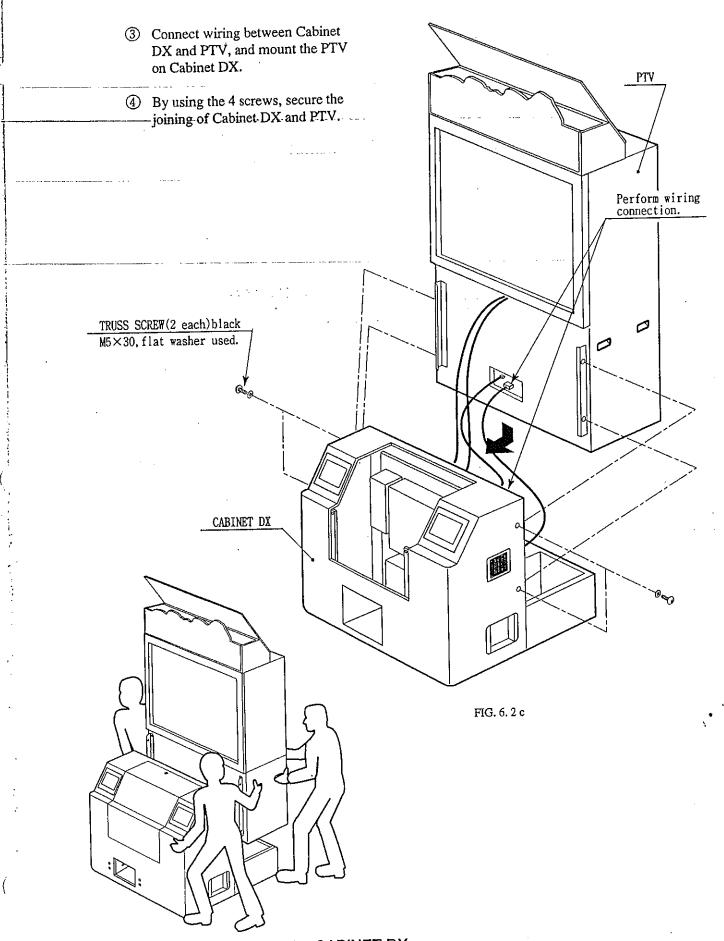
ASSEMBLING THE CABINET



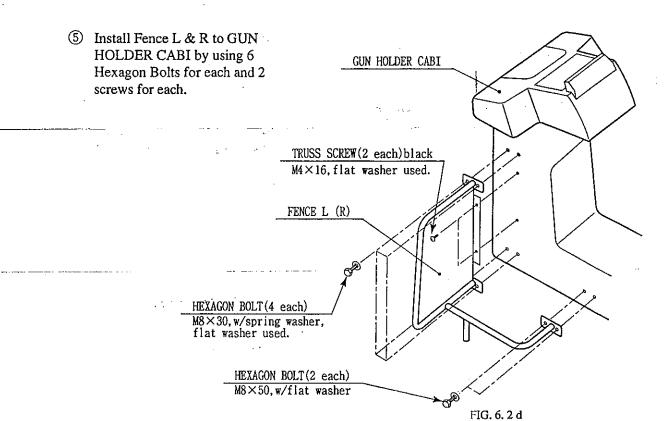
- Be sure to connect connectors securely. Incomplete connector connection can cause electric shock accident.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock or short circuit accident.







When mounting the PTV on the CABINET DX, be sure to perform the work by 3 or more persons.



- 6 Insert GUN HOLDER CABI into the square hole of Cabinet DX.
- ② Install and secure two BRACKET L to the joint portion with 4 Hexagon Bolts for each.
- 8 Secure GUN HOLDER CABI from inside the Cabinet DX with a total of 4 Hexagon Bolts.

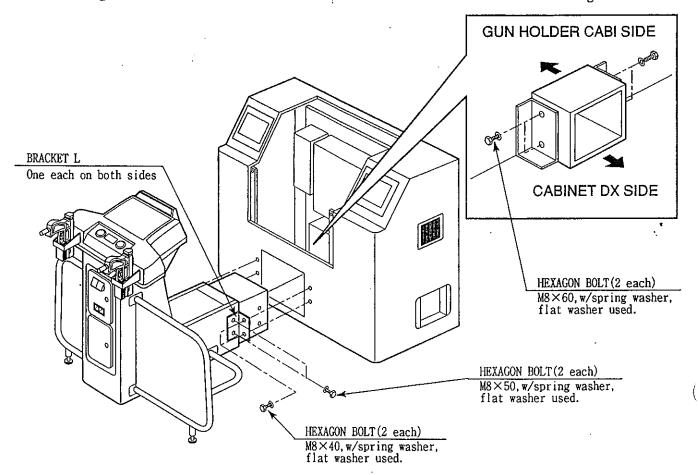


FIG. 6. 2 e

- Remove the 4 screws from Joint Part Lid.
- (I) Connect the wiring between Cabinet DX and GUN HOLDER CABI.

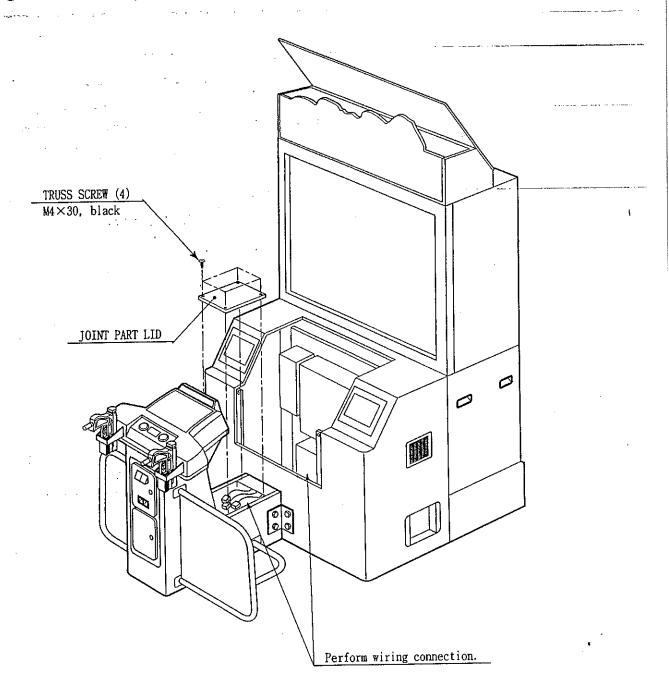


FIG. 6. 2 f



Make sure that all of the adjusters are in contact with the floor. If they are not, the cabinet can move and cause an accident.

This product has 6 casters (4 for Cabinet DX, 2 for GUN HOLDER CABI) and 8 Adjusters (4 for Cabinet DX, 4 for GUN HOLDER CABI). (FIG. 6. 3a) 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.

- Transport the product to the installation position. When installing the product near the wall, be sure to secure the passage space to allow player to get in the machine.
- ② Have all of the Adjusters make contact with the floor. Adjust the Adjuster's height by using a wrench so that the machine position is kept level.
- 3 After making adjustment, fasten the Adjuster Nut upward and secure the height of Adjuster (FIG. 6. 3 b).

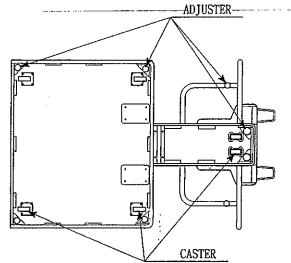


FIG. 6. 3 a BOTTOM VIEW

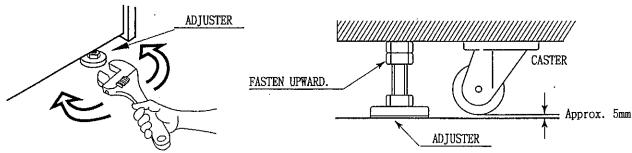


FIG. 6. 3 b ADJUSTER

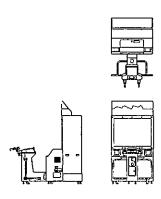


FIG. 6. 3 c Refer to this Fig. (Scale: 1/100) for the layout of the place of installation.

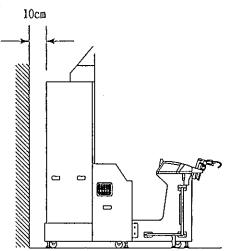
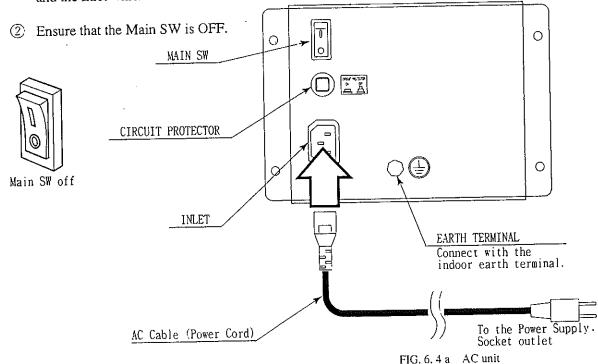


FIG. 6. 3 d
Provide ventilation space for the ventilation opening.



- Be sure to independently use the power supply socket outlet equipped with an Earth Leakage Breaker. Using a power supply without an Earth Leakage Breaker can cause a fire when electric leakage occurs.
- Ensure that the "accurately grounded indoor earth terminal" and the earth wire cable are available (except in the case where a power cord plug with earth is used). This product is equipped with the earth terminal. Connect the earth terminal and the indoor earth terminal with the prepared cable. If the grounding work is not performed appropriately, customers can be subjected to an electric shock, and the product's functioning may not be stable.
- Ensure that the power cord and earth wire are not exposed on the surface (passage, etc.). If exposed, they can be caught and are susceptible to damage. If damaged, the cord and wire can cause electric shock and short circuit hazards. Ensure that the wiring position is not in the customer's passage way or the wiring has protective covering.
- ① The AC Unit is located on one side of Cabinet DX. The AC Unit has Main SW, Earth Terminal and the Inlet which connects the Power Cord.



3 Connect one end of the earth wire to the AC Unit earth terminal, and the other end to the indoor earth terminal. The AC Unit earth terminal has a Bolt and Nut combination. Take off the Nut, pass the end of earth wire through the Bolt, and fasten the Nut. Note that the Earth Wire is incorporated in the Power Cord for the Areas of AC 120V (USA) and AC 220 ~ 240V, and therefore, this procedure is not necessary.

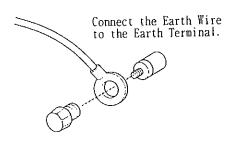


FIG. 6, 4 b Earth Wire Connection

- ④ Firmly insert the power plug into the socket outlet.

 Insert the opposite side of Power Cord plug to the AC Unit's connector ("INLET").
- (5) Perform wiring for the Power Cord and Earth Wire. Install protective covering for the Power Cord and Earth Wire.

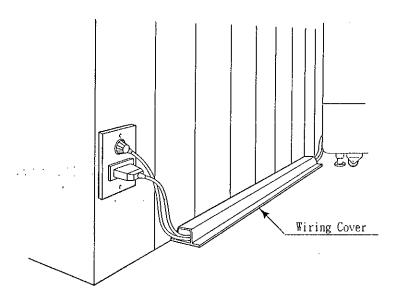
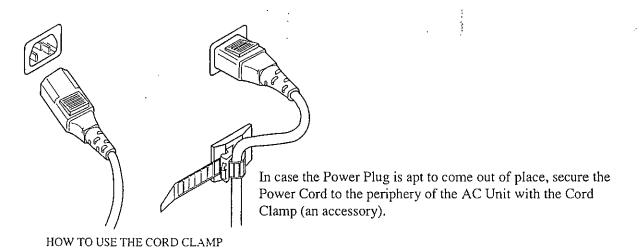


FIG. 6. 4 c Connecting Power Cord and Earth Wire



. .

5 ASSEMBLING CHECK

In the TEST MODE, ensure that the assembly has been made correctly and IC BD. is satisfactory (refer to Section 9).

In the test mode, perform the following test:

(1) MEMORY TEST

MEMORY TEST MODE

RAM TEST

1C29 G00D 1C34 G00D

IC16 GOOD IC18 GOOD

IC20 GOOD IC22 GOOD

IC9 GOOD 1C10 GOOD

IC11 GOOD IC12 GOOD

PRESS TEST BUTTON TO CONTINUE

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.

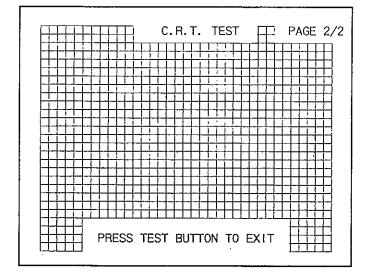
MEMORY TEST MODE ROM TEST GOOD . 1C1 (ROM1) GOOD 1C22(ROMO) 1C3 (ROM3) GOOD GOOD IC2(ROM2) GOOD GOOD 1C5 (ROM5) 1C4 (ROM4) 1C7 (ROM7) GOOD 1C6(ROM6) GOOD GOOD GOOD IC9 (ROM9) IC8 (ROM8) IC11 (ROM11) GOOD 1C10 (ROM10) GOOD (ROM13) GOOD GOOD IC13 LC12(ROM12) (ROM15) GOOD IC14(ROM14) GOOD 1C15 IC17 (ROM17) GOOD IC16(ROM16) GOOD GOOD IC19 (ROM19) GOOD IC18(ROM18) IC20 (ROM20) GOOD PRESS TEST BUTTON TO EXIT

(2) C.R.T. TEST

C.R.T. TEST PAGE 1/2

RED
GREEN
BLUE
WHITE

In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the projector is tested) to be displayed. Although the projector adjustments have been made at the time of shipment from the factory, make judgment as to whether an adjustment is needed by watching the test mode screen. If it is necessary, adjust the projector by referring to Section 12.



(3) INPUT TEST

INPUT TEST

PLAYER1 PLAYER2 0FF 0FF START 0FF **OFF** TRIGGER GUN-X 00 00 GUN-Y 00 00 OUT OUT SCREEN-IN

PRESS TEST BUTTON TO EXIT

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. If the display beside each switch indicates "ON," the switch and wiring connections are satisfactory.

(4) OUTPUT TEST

OUTPUT TEST

START1 LAMP OFF START2 LAMP OFF

→ EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

The OUTPUT Test menu screen in the TEST mode allows Lamps and wiring connections to be checked. Check if each lamp lights up satisfactorily.

(5) SOUND TEST

SOUND TEST

NO. 0

SELECT WITH SERVICE BUTTON PRESS TEST BUTTON TO EXIT

On the Menu screen in the TEST mode, selecting SOUND TEST causes the screen (on which sound related BD and wiring connections are tested) to be displayed. Be sure to check if the sound is satisfactorily emitted from each speaker and the sound volume is appropriate.

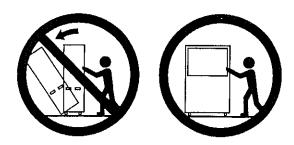
7. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE



- When moving the machine, be sure to unplug the power plug. Moving the machine with the plug as is inserted can damage the power cord and cause fire and electric shock hazards.
- 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 and earth wires. Damaging the power cords can cause electric shock and short circuit hazards.
- When lifting the cabinet, be sure to hold the grip 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.
- When moving the PTV, do not push it from the back. Push it from the side. Pushing the PTV from the back can have the PTV fall down, causing personal injury etc. In case the floor is slanted, or has steps, use 2 or more persons for safety.

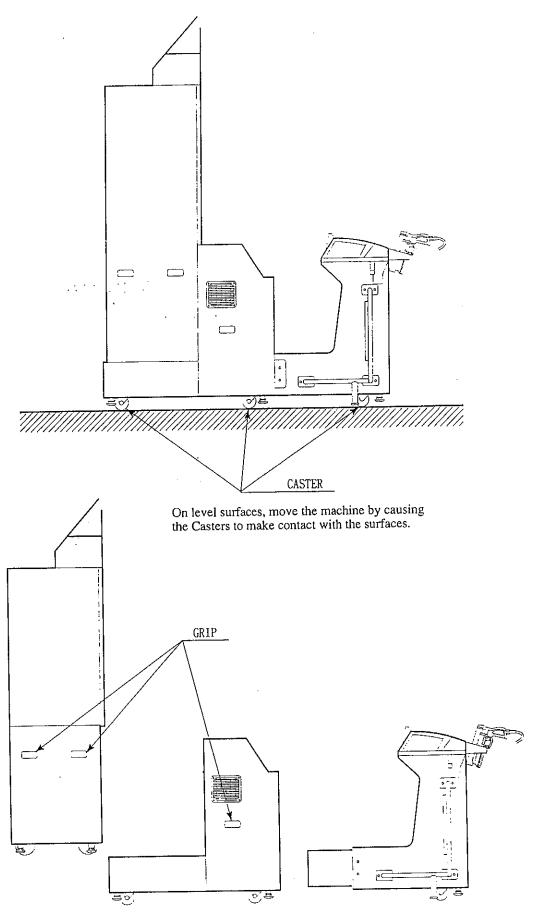


When moving the machine on slanted surfaces or places with a step or step-like difference in grade, be sure to separate Cabinet DX and GUN HOLDER CABI. Lifting the Cabinet with these items as is joined can cause the joint portions to be damaged.



Do not push PTV from the back. Pushing the PTV from the back can cause the PTV to fall down. Push it from the side.

FIG. 7 a

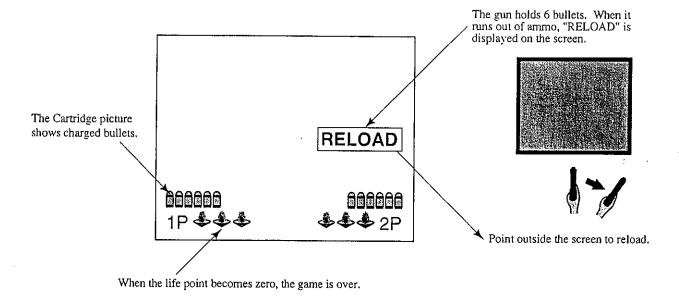


Where there are steps (or step-like differences in grade), move the machine by separating into each unit.

8. CONTENTS OF GAME

The following explanations apply to the case the product is functioning satisfactorily. Should there be any moves different from the following contents, some sort of faults may have occurred. Immediately look into the cause of the fault and eliminate the cause thereof to ensure satisfactory operation.

- ① Inserting a coin(s) causes the credit display on the bottom of the screen to count. Inserting one credit worth coin(s) changes the message on the bottom of the screen from "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 GAME DEMO follows game start. Next, Stage Title is 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.
- Shooting townspeople by mistake loses one life.
- The gun holds 6 bullets. When it runs out of ammo, "RELOAD" is displayed on the screen. Point outside the screen 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 the Items are given later).
- · When the life point becomes zero, the game is over.

BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:

To maintain the safety:

To ensure the safe usage of the product, be sure to read the following before using the product. The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning displays and cautions, handle the product appropriately. Be sure to keep this manual nearby the product or elsewhere convenient for referring to it when necessary.

Herein, explanations which require special attention are enclosed with dual lines. Depending on the potentially hazardous degrees, the terms of DANGER!, WARNING!, CAUTION!, etc. are used. Be sure to understand the contents of the displays before reading the text.



Indicates that mishandling the product by disregarding this pictograph will cause severe injury or



Indicates that mishandling the product by disregarding this caution will cause a slight hazardous situation which can result in personal injury and or material dam-



Indicates that mishandling the product by disregarding this warning will cause a potentially hazardous situation which can result in death or serious injury.



Indicates that mishandling the product by disregarding this display can cause the product's intrinsic performance not to be obtained, resulting in malfunctioning.

For the safe usage of the product, the following pictographs are used:



Indicates "HANDLE WITH CARE." In order to protect the human body and equipment, this display is attached to places where the Owner's Manual and or Service Manual should be referred to.



Indicates a "Protective Earth Terminal." Before operating the equipment, be sure to connect it to the Ground.

Perform work in accordance with the instructions herein stated.

Instructions for work are explained by paying attention to the aspect of accident prevention. Failing to perform work as per the instructions can cause accidents. In the case where only those who have technical expertise should perform the work to avoid hazardous situation, the instructions herein state that the serviceman should perform such work.

Be sure to turn off power before working on the machine.

To prevent electric shock, be sure to turn off power before starting the work in which the worker touches the interior of the product. If the work is to be performed in the power-on status, the Instruction Manual herein always states to that effect.

O Be sure to ground the Earth Terminal (this, however, is not required in the case where a

power cord with earth is used). This product is equipped with the Earth Terminal. When installing the product, Connect the Earth Terminal to the "accurately grounded indoor earth terminal" by using an earth wire. Unless the product is grounded appropriately, the user can be subject to electric shock. After performing repair, etc. for the Control equipment, ensure that the Earth Wire is firmly connected to the Control equipment.

- Ensure that the Power Supply used is equipped with an Earth Leakage Breaker. This product does not incorporate the Earth Leakage Breaker. Using a power supply which is not equipped with the Earth Leakage Breaker can cause a fire when earth leakage occurs.
- O Be sure to use fuses which meet the specified rating. (only for the machines which use fuses). Using fuses exceeding the specified rating can cause a fire and electric shock.

 Specification changes (removal of equipment, conversion and addition) not designated by SEGA are not allowed.

The parts of the product include warning labels for safety, covers for personal protection, etc. It is very hazardous to operate the product by removing parts and or modifying the circuits. Should doors, lids and protective parts be damaged or lost, refrain from operating the product, and contact where the product was purchased from or the office herein stated.

Ensure that the product meets the requirements of appropriate Electrical Specifications.

Before installing the product, check for Electrical Specifications. SEGA products have a nameplate on which Electrical Specifications are described. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location. Using any Electrical Specifications different from the designated Specifications can cause a fire and electric shock.

O Install and operate the product in places where appropriate lighting is available, allowing warning labels to be clearly read.

To ensure safety for the customers, labels and printed instructions describing potentially hazardous situation are applied to places where accidents can be caused. Ensure that where the product is operated has sufficient lighting allowing the warnings to be read. If any label is peeled off, apply it again immediately. Please place an order with where the product was purchased from or the office herein stated.

When handling the Monitor, be very careful. (Applies only to the product w/monitor).

Some of the monitor (TV) parts are subject to high tension voltage. Even after turning off power, some portions are still subject to high tension voltage sometimes. Monitor repair and replacement should be performed only by those technical personnel who have knowledge of electricity and technical expertise.

O When transporting or reselling this product, be sure to attach this manual to the product.

In the case where commercially available monitors and printers are used in this product, only the contents relating to this product are explained herein. Some commercially available equipment has functions and reactions not stated in this manual. Read this manual together with the specific Instruction Manual of such equipment.

- · Descriptions herein contained may be subject to improvement changes without notice.
- The contents described herein are fully prepared with due care. However, should any question arise or errors be found, please contact SEGA.

INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION.

Normally, at the time of shipment, SEGA products are in a status allowing for usage immediately after transporting to the location. Nevertheless, an irregular situation may occur during transportation. Before turning on power, check the following points to ensure that the product has been transported in a satisfactory status.

	•
	'Are there any dented portions or defects (cuts, etc.) on the external surfaces of the cabinet?
┚	Are Casters and Adjusters, damaged?
	Do the power supply voltage and frequency requirements meet with those of the location?
	Are all wiring connectors correctly and securely connected? Unless connected in the correct direction, connector connections can not be made accurately. Do not insert connectors forcibly.
□	Do power cords have cuts and dents?
	Do the fuses used meet specified rating? Is the Circuit Protector in an energized status?
	Are all accessories available?
	Can all Doors and Lids be opened with the Accessory keys? Can Doors and Lids be
	firmly closed?

OPTIONAL DOLLAR BILL ACCEPTOR

- THE COIN DOOR ASSEMBLY USED ON HOUSE OF THE DEAD 2

 DLX COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL

 NEEDED WIRING CONNECTIONS ARE CONVIENENTLY LOCATED INSIDE

 THE GAME FOR THIS APPLICATION.
- THE COIN DOOR CAN ACCCOMMODATE THE FOLLOWING VALIDATORS:

HOLE POSITION#1

MARS 2000 SERIES

(FORWARD-MOST POSITION)

HOLE POSITION#2

MARS 2000 SERIES

DBV45 (JCM)

HOLE POSITION #3

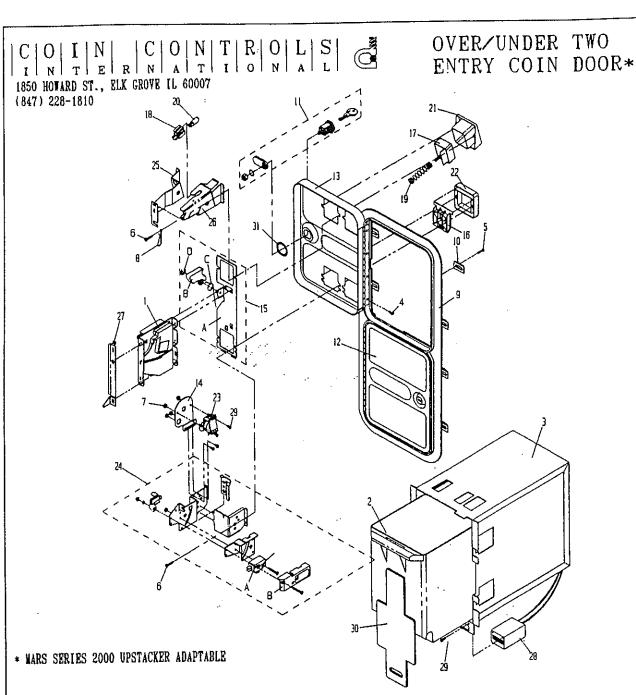
CURRENTLY NOT USED

HOLE POSITION #4

DSI01*

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

The frame and cashbox enclosure on this coindoor has been modified to accomodate a Mars 2000 series upstacker. A 2000 series stacker can be added by simply removing the top two entry door and replacing it with a one entry door with a cut-out for a stacker. This one entry door can be ordered through Coin Controls or one of Coin Controls authorized distributors. The Part # is 91-4000-01. The Mars stacker can be obtained through an authorized Mars distributor.



PART # DES	SCRIPTION CO	OST	PART #	DESCRIPTION	COST	PART #	DESCRIPTION	COST
),50	16) 91-1109-16	REJECT FLAP HYLOK, BLACK	2.70	28) 23-1011-00	124 DC METER	8.50
	, Marian	2.00	17) 91-1113-01	ENTRY/REJECT SUTTON 25c	4.45	23-1103-00	4.5V DC XETEE	8.50
•	** *****	7.40	[8] 91-1117-00	LAMPHOLDER	1.40	29) 90-1032-01	IBTER & LOCKOUT SCREET	.25
a		27.50	(9) 91-1121-00	E/R ENTTON SPRING	.80	30) 22-(400-00	LOCKTING BAR	7.00
• • • • • • • • • • • • • • • • • • • •	CI SCILI	.25	20) 91-1118-00	OF LAND TEDGE BASE	.\$5	31) 90-1019-00	3/4" LOCKVASHER	.25
•	IP SCRET	.95	21) 91-1311-16	BUTTON BEZEL BLACK	2.70			
	ET BEZEL NYLON	.25	22) 91-1312-16	REJECT BEZIEL BLACK	2.70			
V. VV 2021 VV	40 EEP NOT	.ద	23) 91-2125-00	124 LOCKOUT COIL ASSEMBLY	12.85			
	THOOK	.35	24) 91-2216-16	MICROSTITCH ASSEMBLY	15.00			
9) 91-0508-16 FRA	IME 3	0.00	244) 91-1116-16	MICROSPITCH BLACK	5.40	<u> </u>		
10) 91-0506-00 CLA	INP	.45	91-1116-11	NICROSTITCE THITE	5.40			
	IBLE D CAN LOCK	5.25	91-1116-10	NICROSTITCE RED	5.40			
12) 91-0603-16 BLA	ACT MINI DOOR	8.40	2(B) 91-1125-00	MICROSTITCH PLASTIC COVER	.85	[
	BALLEA ADDATE DOOR	0.00	25) 92-1002-01	COIN INLET LANP SIDE	1.80	[
14) 91-1008-039 LOG	CTOUT BRACTET	4.30	26) 92-1002-021	COIN LALET COVER SIDE	1.80	1		
	SEPLATE ASSEMBLY	5.00	27) 92-1002-10	BOLD BOTH BRACKET	1.50			

TABLE OF CONTENTS =

	BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:	
_	TABLE OF CONTENTS	
	INTRODUCTION OF THE OWNER'S MANUAL	
	1. HANDLING PRECAUTIONS	
	2. PRECAUTIONS CONCERNING INSTALLATION LOCATION	
	3. OPERATION 5 ~ 6	
	4. NAME OF PARTS	
	5. ACCESSORIES	
	6. ASSEMBLING AND INSTALLATION	
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	20. WIRING DIAGRAM)

```
SPECIFICATIONS
                                       : 1,140 mm (W) \times 1,646 mm (D)
Installation space
                                          (44.9 in. \times 64.8 in.)
                                          2,254 mm (88.7 in.)
Height ....
                                          242 kg. (533.5 lbs.)
Weight
Power, maximum current
                                          340 W 3.99 A (AC 110V 50 Hz AREA)
                                          330 W 3.86 A (AC 110V 60 Hz AREA)
र प्रस्तान हो है है
                                          332 W 3.57 A (AC 120V 60 Hz AREA)
and the standard of the control of the second
                                                 2.04 A (AC 220V 50 Hz AREA)
                                          344 W
                                                 1.98 A (AC 220V 60 Hz AREA)
                                          334 ₩
                                          341 W 1.94 A (AC 230V 50 Hz AREA)
                                                1.89 A (AC 230V 60 Hz AREA)
                                          333 ₩
                                          347 ₩
                                                 1.88 A (AC 240V 50 Hz AREA)
                                          332 W 1.80 A (AC 240V 60 Hz AREA)
For TAIWAN (TOSHIBA PROJECTION DISPLAY TYPE)
                                         305 W
                                                 3.63 A (MAX.)
Power, current
                                                 3.15 A (MIN.)
                                          260 ₩
For TAIWAN (MITSUBISHI PROJECTION DISPLAY TYPE)
                                          330 W 3.95 A (MAX.)
Power, current
                                          245 W 3.05 A (MIN.)
                                          50 INCH PROJECTION DISPLAY
MONITOR
```

INTRODUCTION OF THE OWNER'S MANUAL

This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards the product,

THE HOUSE OF THE DEAD 2 DX TYPE.

This manual is intended for the owners, personnel and managers in charge of operation of the product. Operate the product after carefully reading and sufficiently understanding the instructions. If the product fails to function satisfactorily, non-technical personnel should under no circumstances touch the internal system. Please contact where the product was purchased from.

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE 45133 Industrial Drive, Fremont, California 94538, U.S.A.

Phone: (415) 802-3100 Fax: (415) 802-1754

DEFINITION OF LOCATION MAINTENANCE MAN AND SERVICEMAN



Non-technical personnel who do not have technical knowledge and expertise should refrain from performing such work that this manual requires the location's maintenance man or a serviceman to carry out, or work which is not explained in this manual. Failing to comply with this instruction can cause a severe accident such as electric shock.

Ensure that parts replacement, servicing & inspections, and troubleshooting are performed by the location's maintenance man or the serviceman. It is instructed herein that particularly hazardous work should be performed by the serviceman who has technical expertise and knowledge.

The location's maintenance man and serviceman are herein defined as follows:

"Location's Maintenance Man":

Those who have experience in the maintenance of amusement equipment and vending machines, etc., and also participate in the servicing and control of the equipment through such routine work as equipment assembly and installation, servicing and inspections, replacement of units and consumables, etc. within the Amusement Facilities and or locations under the management of the Owner and Owner's Operators of the product.

Activities of Location's Maintenance Man:

Assembly & installation, servicing & inspections, and replacement of units & consumables as regards amusement equipment, vending machines, etc.

Serviceman:

Those who participate in the designing, manufacturing, inspections and maintenance service of the equipment at an amusement equipment manufacturer.

Those who have technical expertise equivalent to that of technical high school graduates as regards electricity, electronics and or mechanical engineering, and daily take part in the servicing & control and repair of amusement equipment.

Serviceman's Activities:

Assembly & installation and repair & adjustments of electrical, electronic and mechanical parts of amusement equipment and vending machines.

1. HANDLING PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.

Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine.



- Before performing work, be sure to turn power off. Performing the work without turning power off can cause an electric shock or short circuit. In the case work should be performed in the status of power on, this manual always states to that effect.
- To avoid electric shock or short circuit, do not plug in or unplug quickly.
- To avoid electric shock, do not plug in or unplug with a wet hand.
- Do not expose Power Cords and Earth Wires on the surface, (floor, passage, etc.). If exposed, the Power Cords and Earth Wires are susceptible to damage. Damaged cords and wires can cause electric shock or short circuit.
- To avoid causing a fire or electric shock, do not put things on or damage Power Cords.
- When or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or electric shock.
- In case the power cord is damaged, ask for replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause a fire or electric shock.
- Completely make connector connections for IC BD and others. Insufficient insertion can cause an electric shock.
- To avoid causing a fire or electric shock, do not make Specification changes by removing, converting and making additions unless otherwise designated by SEGA.
- Be sure to perform periodic maintenance inspections herein stated.



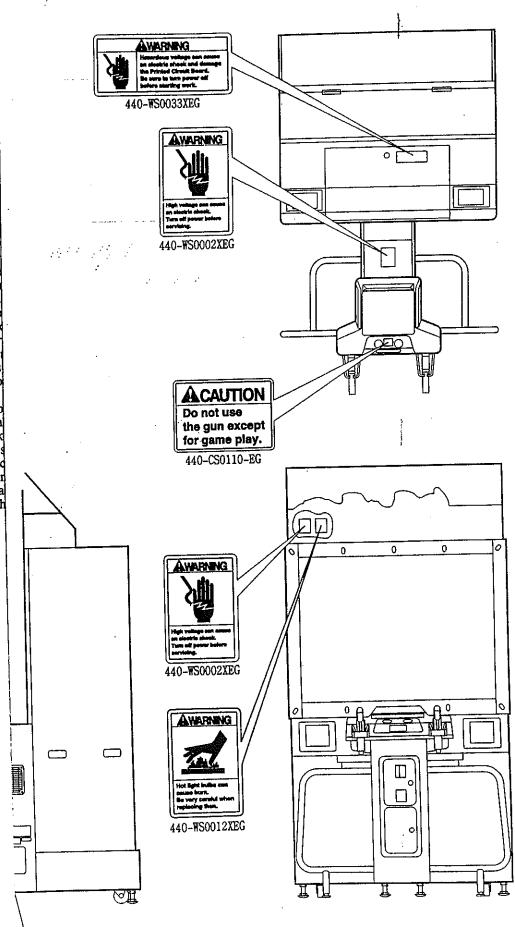
- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- The Projector is employed for this machine. The Projector's screen is susceptible to damage, therefore, be very careful when cleaning the screen. For details, refer to PROJECTOR.

CONCERNIN

SEGA product ha manufacture No. (Specifications. A where to contact f When inquiring at the Serial No. and Sticker. The Seria register. Identical parts depending o improvements and made after the put to meet the above when contacting t

CONCERNIN

SEGA product ha Labels and or prin to or incorporated hazardous situatio are intended for a customers and for relating to mainter are some portions to high tension vo caused merely by servicing work, b displays. Especia replacement work performed by thos knowledge of elec For the prevention customer whose a to the effect that h



2. PRECAUTIONS CONCERNING INSTALLATION LOCATION



This product is to be used indoors. Do not install it outside. Even indoors, avoid installing in places mentioned below so as not to cause a fire, electric shock, injury and or malfunctioning.

- Places subject to rain or water leakage, or places subject to high humidity in the proximity of an indoor swimming pool and or shower, etc. .
- Places subject to direct sunlight, or places subject to high temperatures in the proximity of heating units, etc.
- Places filled with inflammable gas or vicinity of highly inflammable/ volatile chemicals or hazardous matter.
- Dusty places.
- Sloped surfaces.
- Places subject to any type of violent impact.
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- The operating (ambient) temperature range is from 5°C to 40°C. Only in the case a projector is employed, the temperature range is from 5℃ to 30℃.

LIMITATIONS OF USAGE REQUIREMENTS



- Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage and frequency requirements.
 - A plate describing Electrical Specifications is attached to the product. Non-compliance with the Electric Specifications can cause a fire and electric shock.
- This product requires the Breaker and Earth Mechanisms as part of the location facilities. Using them in a manner not independent can cause a fire and electric shock.
- Ensure that the indoor wiring for the power supply is rated at 7 A or higher (AC single phase 100~120V), and 7 Å or higher (AC 220~ 240V). Non-compliance with the Electrical Specifications can cause a fire and electric shock.
- Be sure to independently use the power supply equipped with the Earth Leakage Breaker. Using a power supply without the Earth Leakage Breaker can cause an outbreak of fire when earth leakage
- Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.
- When using an extension cord, ensure that the cord is rated at 7 A or higher (AC 100~120V area) and 7 A or higher (AC 220~240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

```
MAX. 3.99 A (AC 110V 50 Hz)
MAX. 3.86 A (AC 110V 60 Hz)
MAX. 3.57 A (AC 120V 60 Hz)
MAX. 2.04 A (AC 220V 50 Hz)
MAX. 1.98 A (AC 220V 60 Hz)
MAX. 1.94 A (AC 230V 50 Hz)
MAX. 1.89 A (AC 230V 60 Hz)
MAX. 1.88 A (AC 240V 50 Hz)
MAX. 1.80 A (AC 240V 50 Hz)
MAX. 1.80 A (AC 240V 60 Hz)
MAX. 3.63 A (For TAIWAN, TOSHIBA projection display)
MAX. 3.95 A (For TAIWAN, MITSUBISHI projection display)
```



75.

- For transporting the machine into the location's building, the minimum necessary dimensions of the opening (of doors, etc.) are 1m(W) and 1.6m (H).
- For the operation of this machine, secure a minimum area of 1.35m (W)× 2.5m (D).
- Provide sufficient space so as to allow this product's ventilation fan to function efficiently. To avoid machine malfunctioning, do not turn off power for the fan, or do not place any obstacles near the ventilation opening.

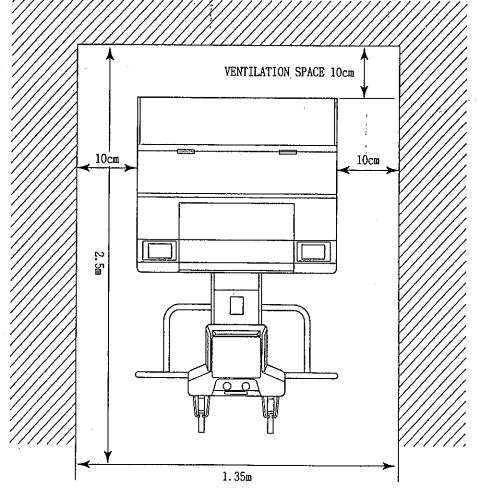


FIG. 2

3. OPERATION

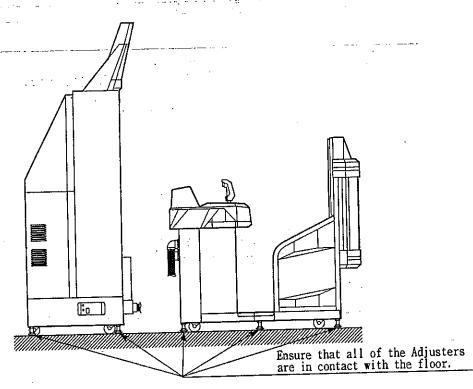
For the safe opration of the product, be sure to observe the following points before starting and during operation.

PRECAUTIONS TO BE HEEDED FOR OPERATION



In order to avoid accidents, check the following before starting the operation:

Oheck if all of the adjusters are in contact with the surface. If they are not, the cabinet can move and cause an accident.



- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step.
- To avoid electric shock, check to see if door & cover parts are damaged or omitted.
- To avoid electric shock, short circuit and or parts damage, do not put the following items on or in the periphery of the product.
 - Flower vases, flowerpots, cups, water tanks, cosmetics, and receptacles/containers/vessels containing chemicals and water.



To avoid injury, be sure to provide sufficient space by considering the potentially crowded situation at the installation location. Insufficient installation space can cause the player to come into contact with or hit the others and result in injury or trouble.

PRECAUTIONS TO BE HEEDED DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

To avoid injury and trouble, be sure to constantly give careful attention to the behavior and manner of the visitors and players.



To avoid injury and accidents, those who fall under the following categories are not allowed to play the game.

Intoxicated persons.

Pregnant women or those who are in the likelihood of pregnancy.

· Those who need assistance such as the use of an apparatus when walking.

· Those who have high blood pressure or a heart problem.

 Those who have experienced muscle convulsion or loss of consciousness when playing video game, etc.

· Persons susceptible to motion sickness.

Persons whose act runs counter to the product's warning displays.

To avoid injury resulting from falling down, and electric shock due to spilled drinks, instruct the player not to place heavy items or drinks on the product.

To avoid electric shock and short circuit, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.

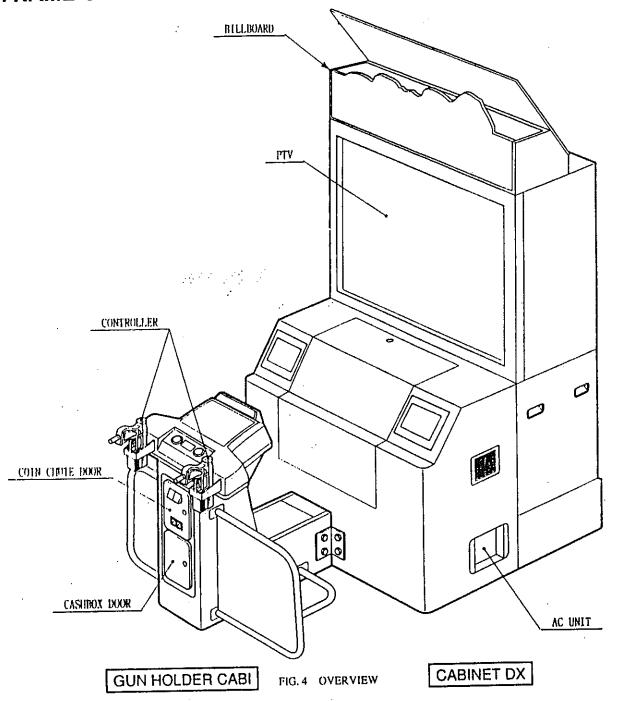
To avoid falling down and injury resulting from falling down, immediately stop the customer's leaning against or climbing on the product, etc.

To avoid electric shock and short circuit, do not allow the customers to unplug the power plug without a justifiable reason.



Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or falling down, resulting in injury due to fragments and falling down.

4. NAME OF PARTS



GAME SPECIFICATIONS	WIDTH		HEIGHT		DEPTH	WEIGHT
OAMD BLOCK TO THE	all measure	ments c	ire rounded	up to th	e nearest 0.5"	
PTV	45"	X	62.5"	X	21"	~201 LBS.
BILLBOARD	45"	х	7"	х	12"	~37.5 LBS.
CABINET DX	45"	Х	37"	Х	38"	~192.5 LBS.
GUN HOLDER CABI	21.5"	X	39"	Х	40"	~88.5 LBS.
WHEN ASSEMBLED	45''	X	89"	Х	65"	~535 LBS.

5. ACCESSORIES

TARLES a ACCESSORIES

DESCRIPTION

OWNERS MANUAL

Part No. (Qty.)

42046428-03 (1)

Note

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. KEY MASTER

220-5576 (2)

For opening/closing the doors

KLY. (2)

For the CASHBOX DOOR





AC Cable (Power Cord)

600-6724 600-6729 (1) AC 110V AREA

Used for installation, see 4 of Section 6.

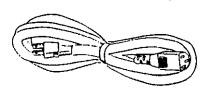
CORD CLAMP 280-5009-01 (1) Used for installation,

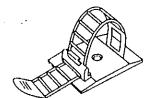
see 4 of Section 6.

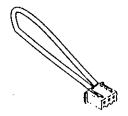
WIRE

100-60040 (1)

Used for the prevention of Sight Sensor jamming



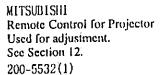




SW MICRO TYPE 509-5080 (1) Spare, see Section 10.



TOSHIBA Remote Control for Projector Used for adjustment. Sec Section 12. 200-5536(1)

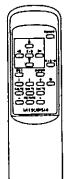




LAMP WEIGH 6V 3W 390-5160 (1) Spare, see Section 13.

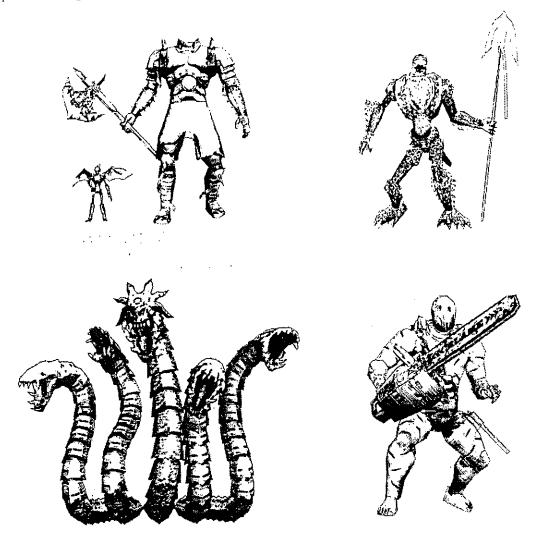


One of the above 2 types of Remote Controls is used for the Projector.



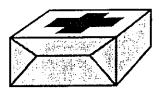


Downing the boss character awaiting you at the end of each stage results in clearing that particular stage. The player can not defeat the boss until his life meter becomes zero.



- 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 in the game by pressing the flashing button.
- (5) When the life point becomes zero, if you want to 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, his name can be entered.

CONCERNING SPECIAL ITEMS



LIFE
The life point increases by one.
MAX. No. of LIFE: 5

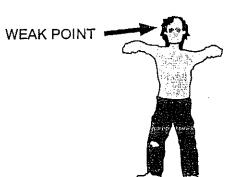




COIN or GOLDEN FROG
Capture a Coin or Golden Frog to earn points.

KNACK OF PLAY

- Accurately shoot at the head: In each stage, the head part is the weak point of the 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.



9. 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 shows tests and modes that should be utilized as applicable.

TABLE 9 EXPLANATION OF TEST MODE

ITEMS	DESCRIPTION	REFERENCE SECTIONS
INSTALLATION OF MACHINE	 When the machine is installed, perform the following: Check to see that each setting is as per standard setting made at the time of shipment. In the INPUT TEST mode, check such input devices as each SW, V.R., etc. In the OUTPUT TEST mode, check such output devices as lamps, motors, etc. In the SELF-TEST mode, check ICs on the IC Board. 	9 - 2③, 9 - 3⑤ 9 - 3② 9 - 3③ 9 - 2①
MEMORY	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.	9 – 2 ①
PERIODIC SERVICING	Periodically perform the following: 1. MEMORY TEST 2. Ascertain each setting. 3. In the INPUT TEST mode, test the CONTROL device 4. In the OUTPUT TEST mode, check such output devices as lamps, motors, etc.	9-2① 9-2③,9-3③ 9-3② 9-3③
CONTROL SYSTEM	 In the INPUT TEST mode, check such input devices as each SW, V.R., etc. Adjust or replace each SW and VR. If the problem can not be solved yet, check the CONTROL's moves. 	9-3②
MONITOR	In the MONITOR ADJUSTMENT mode, check to see if the MONITOR adjustment is appropriately made.	9-2② 12
IC BOARD	 MEMORY TEST In the SOUND TEST mode, check the sound related ROMs. 	9-2① 9-3③
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc.	9-23,9-33



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



- 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.

SWITCH UNIT

Open the coin chute door, and the switch unit shown will appear.

The functioning of each SW is as follows:

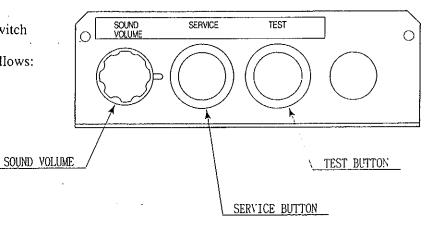


FIG. 9. 1 a SWITCH UNIT

TEST BUTTON:

TEST

For the handling of the test button, refer to the following pages.

SERVICE BUTTON:

SERVICE

Gives credits without registering on the coin meter.

SOUND VOLUME: SOUND VOLUME

Adjusts sound volume for all of the machines' Speakers.

COIN METER

Open the Cashbox Door by using the key to have the Coin Meter appear underneath the Cashbox.

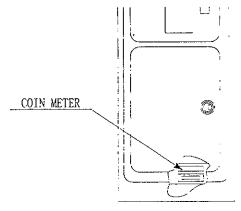


FIG. 9. 1 b

NAOMI GAME BOARD is employed in this product. This Game BD allows another game to be played by replacing the Cartridge. In this product, however, only The House of The Dead 2 is playable. For this system, the Test Mode for the system (NAOMI Test Mode) and the Game Test Mode of THE HOUSE OF THE DEAD 2 are available.

NAOMI Test Mode mainly allows the functioning of board to be checked, monitor adjustment to be checked, and coin assignments to be set.



- The contents of settings changed in the TEST mode are stored when the test mode is finished from EXIT in the menu mode. If the power is turned off before the TEST mode is finished, the contents of setting change become ineffective.
- Executing "BACKUP DATA CLEAR" in the NAOMI Test Mode also clears the BOOKKEEPING DATA in the Game Test Mode.

TEST MODE OPERATION METHOD

After turning power on, press the TEST button to display the menu screen of NAOMI Test Mode. To execute the Game Test Mode, select GAME TEST MODE in the menu mode. Carefully read the explanations of 9-3.

- ① Press the TEST button to display the menu screen of NAOMI Test Mode.
- ② Press the SERVICE button to move the arrow. Bring the arrow to the desired item.
- ③ Press the TEST button to execute the item indicated by the arrow.
- 4 After finishing the test, select EXIT and press the TEST button. The TEST mode is completed and the Game mode returns on to the screen.

NAOMI TEST MODE

MEMORY TEST C.R.T. TEST COIN ASSIGNMENTS SYSTEM ASSIGNMENTS SYSTEM BOOKKEEPING BACKUP DATA CLEAR

GAME TEST MODE

-> EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 2 a Menu Screen, NAOMI TEST MODE

①MEMORY TEST

First, check if MEMORY IC functioning on the Main Board is accurate. If the IC is in good operating condition, "GOOD" will be indicated. If there exists any malfunctioning of the IC's, "BAD" will be indicated.

```
MEMORY TEST MODE

RAM TEST

IC29 GOOD
IC34 GOOD
IC16 GOOD IC18 GOOD
IC20 GOOD IC22 GOOD
IC9 GOOD IC10 GOOD
IC11 GOOD IC12 GOOD
IC11 GOOD IC12 GOOD

PRESS TEST BUTTON TO CONTINUE
```

FIG. 9. 2 b MEMORY TEST MODE (RAM TEST)

After the completion of test, press the TEST button to execute ROM test.

MEMORY	TEST	MODE	
ROM TE	ST		
IC22 (ROMO) IC2 (ROM2) IC4 (ROM4) IC6 (ROM6) IC8 (ROM8) IC10 (ROM10) IC12 (ROM12) IC14 (ROM14) IC16 (ROM16) IC18 (ROM18) IC20 (ROM20)	GOOD GOOD GOOD GOOD GOOD GOOD GOOD GOOD	IC1 (ROM1 IC3 (ROM3 IC5 (ROM5 IC7 (ROM7 IC9 (ROM9 IC11 (ROM IC13 (ROM IC15 (ROM IC17 (ROM IC17 (ROM	GOOD GOOD GOOD GOOD GOOD GOOD GOOD GOOD
PRESS	TEST	BUTTON TO E	XIT

FIG. 9. 2 c MEMORY TEST MODE (ROM TEST)

If the IC is in good operating condition, "GOOD" will be indicated. If there exists any malfunctioning of the IC's, "BAD" will be indicated.

After the test has been completed, press the TEST button to return to the menu mode.

② C. R. T. TEST

A) RGB COLOR ADJUSTMENT SCREEN

This page allows the monitor's color adjustment to be checked.

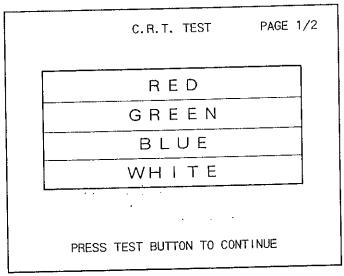


FIG. 9. 2 d C.R.T. TEST (1/2)

Each of red, green and blue is the darkest at the leftmost end and becomes brighter towards the right-hand end.

The monitor brightness is satisfactory if the white color bar is black at the left-hand end and white at the right-hand end.

Press the TEST button to have the size check screen appear.

B) MONITOR SIZE ADJUSTMENT SCREEN

This page allows monitor size to be checked.

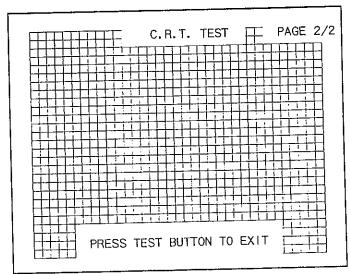


FIG. 9. 2 e C.R.T. TEST (2/2)

Make adjustment in the manner so that crosshatches do not go beyond the screen. Press the TEST button to have MENU return to the screen.



Changing the settings in COIN ASSIGNMENTS clears BOOKKEEPING data and the SYSTEM BOOKKEEPING data of the Game Test Mode.

In this mode, the setting of credit increments, etc., as against coin insertion can be changed.

- 1) Press the SERVICE button to bring the "->" to the desired item.
- 2) Press the TEST button to change the setting.
- 3) When settings are completed, move the arrow to EXIT and press the TEST button.

COIN ASSIGNMENTS

COIN CHUTE TYPE
CREDIT TO START
CONTINUE

COMMON 2 CREDITS 1 CREDIT

COIN/CREDIT SETTING # 1

COIN CHUTE #1 1 COIN 1 CREDIT

COIN CHUTE #2 1 COIN 1 CREDIT

MANUAL SETTING

-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

FIG. 9. 2 f COIN ASSIGNMENTS

(A) COIN CHUTE TYPE (COMMON, INDIVIDUAL) Set to COMMON.

COMMON

Used for the type of the cabinet whose coin acceptance is a common type for plural players. Regardless of the number of players, COIN 1/COIN 2 ports are used.

INDIVIDUAL

Not used.

- (B) CREDIT TO START (1 CREDIT ~ 5 CREDITS) Sets the number of credits necessary to start game.
- (C) CREDIT TO CONTINUE (1 CREDIT~5 CREDITS)
 Sets the number of credits necessary to continue game.

(D) COIN/CREDIT SETTING (# 1 \sim # 27) Set the CREDIT increase increment per coin insertion. There are 27 settings from #1 to #27, expressed in OO credits as against OO COINS inserted. #27 refers to FREE PLAY. For details, refer to Table 1 (COMMON).

(E) MANUAL SETTING

The CREDIT's incremental increase settings as against a coin insertion are shown in further details than in (D) above (refer to Table 2). Also, note that when this MANUAL setting is performed, the (D) COIN/CREDIT setting becomes ineffective.

MANUAL SETTING SCREEN COIN ASSIGNMENTS MANUAL SETTING COIN TO CREDIT 1 COIN 1 CREDIT NO BONUS ADDER BONUS ADDER COIN CHUTE #1 MULTIPLIER 1 COIN COUNT AS 1 COIN 9 COIN 1 2 3 4 5 6 CREDIT 1 2 3 4 5 COIN CHUTE #2 MULTIPLIER 1 COIN COUNT AS 1 COIN COIN 1 2 3 4 5 6 7 CREDIT 1 2 3 4 5 6 7 8 9 -> EXIT SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 2 g MANUAL SETTING

- (F) COIN TO CREDIT Determines COIN/CREDIT setting.
- (G) BONUS ADDER This sets how many COINs should be inserted to obtain one SERVICE COIN.
- (H) COIN CHUTE #1/#2 MULTIPLIER This sets how many tokens one COIN represents.

TABLE 1 COIN/CREDIT SETTING

ET CONVCREDIT SE			· · · · · · · · · · · · · · · · · · ·	
NAME OF SETTING		OF COIN CHUTE #1		NG OF COIN CHUTE #2
SETTING #1		CREDIT	1 COIN	1 CREDIT
SETTING #2		2 CREDITS	1 COIN	1 CREDIT
SETTING #3		3 CREDITS	1 COIN	1 CREDIT
SETTING #4		4 CREDITS	I COIN	1 CREDIT
SETTING #5		5 CREDITS	1 COIN	1 CREDIT
SETTING #6		2 CREDITS	1 COIN	2 CREDITS
SETTING #7		CREDITS	1 COIN	2 CREDITS
SETTING #8		3 CREDITS	1 COIN	3 CREDITS
SETTING #9	1 COIN 4	1 CREDITS	1 COIN	4 CREDITS
SETTING #10	1 COIN 5	5 CREDITS	1 COIN	5 CREDITS
SETTING #11	1 COIN (CREDITS	1 COIN	6 CREDITS
SETTING #12	2 COINS	CREDIT	2 COINS	1 CREDIT
SETTING #13	1 COIN	CREDIT	2 COINS	1 CREDIT
SETTING #14	1 COIN . 2	2 CREDITS	2 COINS	1 CREDIT
SETTING #15	1 COIN	CREDIT	1 COIN	1 CREDIT
	2 COINS 3	3 CREDITS	2 COINS	3 CREDITS
SETTING #16	1 COIN 3	3 CREDITS	1 COIN	1 CREDIT
			2 COINS	3 CREDITS
SETTING #17	3 COINS	CREDIT	3 COINS	1 CREDIT
SETTING #18	4 COINS	CREDIT	4 COINS	1 CREDIT
SETTING #19	1 COIN 1	CREDIT	1 COIN	1 CREDIT
	2 COINS 2	CREDITS	2 COINS	2 CREDITS
	3 COINS 3	CREDITS	3 COINS	3 CREDITS
	4 COINS	CREDITS	4 COINS	5 CREDITS
SETTING #20	1 COIN 5	CREDITS	1 COIN	1 CREDIT
			2 COINS	2 CREDITS
			3 COINS	3 CREDITS
			4 COINS	5 CREDITS
SETTING #21	5 COINS	CREDIT	5 COINS	1 CREDIT
SETTING #22	1 COIN 2	2 CREDITS	3 COINS	1 CREDIT
			5 COINS	2 CREDITS
SETTING #23	2 COINS 1	CREDIT	2 COINS	1 CREDIT
	4 COINS 2	2 CREDITS	4 COINS	2 CREDITS
	5 COINS 3	3 CREDITS	5 COINS	3 CREDITS
SETTING #24		3 CREDITS	2 COINS	1 CREDIT
			4 COINS	2 CREDITS
			5 COINS	3 CREDITS
SETTING #25	1 COIN · 1	CREDIT	1 COIN	1 CREDIT
		2 CREDITS	2 COINS	2 CREDITS
		3 CREDITS	3 COINS	3 CREDITS
		CREDITS	4 COINS	4 CREDITS
		CREDITS CREDITS	5 COINS	6 CREDITS
SETTING #26		CREDITS	1 COIN	1 CREDIT
βΕΙΙΙΙΟ π20	1 COM		2 COINS	2 CREDITS
			3 COINS	3 CREDITS
			4 COINS	4 CREDITS
		i	5 COINS	6 CREDITS
SETTING #27	FREE	DI AV		E PLAY
SETTING #4/	FREE	ILAI	1.10	L ILAI

Table 2 MANUAL SETTING

COIN TO CREDIT	1 COIN 1 CREDIT
	2 COINS 1 CREDIT
1	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
BONGS ADDDA	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 (#1/#2)	1 COIN COUNTS AS 1 COIN
MULTIPLIER	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

4 SYSTEM ASSIGNMENTS

The setting for sound output during advertise can be changed. Settings of game itself such as difficulty level, etc. are performed in the Game Test Mode.

- 1) Press the SERVICE button to bring the arrow to ADVERTISE SOUND.
- 2) Press the TEST button to change the setting.
- $\boldsymbol{3}$) Move the arrow to EXIT and press the TEST button to return to the menu mode.

SYSTEM ASSIGNMENTS

-> ADVERTISE SOUND ON

EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 2 h SYSTEM ASSIGNMENTS

(5) SYSTEM BOOKKEEPING

Data for Number of coins inserted / Number of Credits can be checked. Press the TEST button to have the MENU mode return to the screen.

SYSTEM BOOKKEEPING
COIN CHUTE #1 0 COIN CHUTE #2 0 TOTAL COINS 0 COIN CREDITS 0 TOTAL CREDITS 0 SERVICE CREDITS 0
PRESS TEST BUTTON TO EXIT

FIG. 9. 2 i SYSTEM BOOKKEEPING

● COIN CHUTE ‡*: Number of coins put in each chute.

Total number of coins inserted.

• COIN CREDITS: Number of credits registered by inserting coins.

TOTAL CREDITS: Total number of credits.

(COIN CREDITS + SERVICE CREDITS)

● SERVICE CREDITS: Credits registered by the SERVICE button.



Executing BACKUP DATA CLEAR also clears BOOKKEEPING DATA in the Game Test Mode.

Clears SYSTEM BOOKKEEPING DATA.

When clearing, bring the arrow to "YES" and press the TEST button. Move the arrow to "NO" and press the TEST button to return to the menu mode.

BACKUP DATA CLEAR

YES(CLEAR) -> NO (CANCEL)

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 2 j BACKUP DATA CLEAR

9-3 GAME TEST MODE

1) TEST MENU

The GAME TEST MODE proceeds from NAOMI TEST MODE.

Select each item by using the SERVICE button and execute with TEST button.

The SERVICE button corresponds to the Cabinet's Gun Trigger, and TEST button corresponds to the Cabinet's START button.

Executing by selecting EXIT proceeds to NAOMI Test Mode.

NAOMI TEST MODE

MEMORY TEST C.R.T. TEST COIN ASSIGNMENTS SYSTEM ASSIGNMENTS SYSTEM BOOKKEEPING BACKUP DATA CLEAR

-> GAME TEST MODE

EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON



GAME TEST MODE

INPUT TEST OUTPUT TEST SOUND TEST GAME ASSIGNMENTS GUN SETTING BOOKKEEPING

→ EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 3 a Test Menu. GAME TEST MODE

INPUT TEST

	PLAYER1	PLAYER2
START	0FF	0FF
TR1GGER	0FF	0FF
GUN-X	00	00
GUN-Y	00	00
SCREEN-IN	OUT	0UT

PRESS TEST BUTTON TO EXIT

FIG. 9. 3 b INPUT TEST

- PLAYER 1 START: To cause this to be ON, press START button 1.
- PLAYER 2 START:
 To cause this to be ON, press START button 2.
- PLAYER 1 TRIGGER: To cause this to be ON, press TRIGGER 1.
- PLAYER 2 TRIGGER: To cause this to be ON, press TRIGGER 2.
- PLAYER 1 GUN-X: Displays SIGHT position of GUN 1 in the X direction.
- PLAYER 2 GUN-X: Displays SIGHT position of GUN 2 in the X direction.
- PLAYER 1 GUN-Y:
 Displays SIGHT position of GUN 1 in the Y direction.
- PLAYER 2 GUN-Y:
 Displays SIGHT position of GUN 2 in the Y direction.
- PLAYER 1 SCREEN-IN: IN is displayed when GUN 1 points the screen.
- PLAYER 2 SCREEN-IN: IN is displayed when GUN 2 points the screen.

Press the TEST button to return to the TEST MENU.

③ OUTPUT TEST

OUTPUT TEST

START1 LAMP OFF START2 LAMP OFF

→ EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

START 1 LAMP:

To cause this to be ON, select START 1 LAMP and press either TEST button or START button 1. The Cabinet's START button 1 lights up.

START 2 LAMP:

To cause this to be ON, select START 2 LAMP and press either TEST button or START button 2. The Cabinet's START button 2 lights up.

EXIT:

Returns to the TEST MENU.

(4) SOUND TEST

SOUND TEST

NO. 0

Press the SERVICE button to increase the number sequentially so as to emit the next sound. Press the TEST button to return to TEST MENU.

SELECT WITH SERVICE BUTTON PRESS TEST BUTTON TO EXIT

FIG. 9. 3 d SOUND TEST

⑤ GAME ASSIGNMENTS

GAME ASSIGNMENTS

GAME DIFFICULTY NORMAL LIFE SETTING INITIAL LIFE 3 MAX LIFE 5 BLOOD COLOR GREEN

→ EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

GAME DIFFICULTY:

VERY EASY →
MEDIUM EASY →
NORMAL →
MEDIUM HARD →
VERY HARD

Game Difficulty Level varies sequentially in order as above.

FIG. 9.3 e GAME ASSIGNMENTS

LIFE SETTING:

INITIAL LIFE and MAX. LIFE are interlocked in the following 12 combination sets.

INITIAL LIFE 1 2 3 1 2 3 4 1 2 3 4 5 MAX LIFE 3 3 3 4 4 4 4 4 5 5 5 5 5

The SOUND OUTPUT during ADVERTISE can be set in the NAOMI Test Mode.

BLOOD COLOR:

Depending on the destination, this can not be set. Set BLOOD COLOR to GREEN or RED.

6 GUN SETTING

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

GUN SETTING

GUN MARK CHECK
PLAYER1 GUN ADJUSTMENT
PLAYER1 GUN DEFAULT ADJUSTMENT
PLAYER2 GUN ADJUSTMENT
PLAYER2 GUN DEFAULT ADJUSTMENT

→ EXIT

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

FIG. 9. 3 d 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 screen and sighting adjustment screen to appear. There are 2 types of adjustments, i. e., one for 1P side and the other for 2P side. Adjustments for both 1P and 2P can not be made on the same screen.

To return to the menu, bring the arrow to EXIT and press the TEST BUTTON (FIG. 9. 3 a).

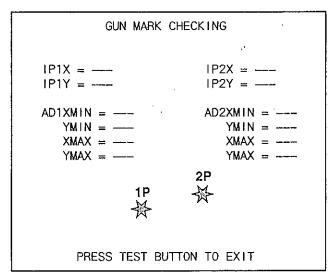


FIG. 9. 3 e SIGHTING CHECK

Selecting GUN MARK CHECK 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. Perform sighting check on this screen.

Press the TEST BUTTON to return to the above sighting adjustment menu screen.

 $\not \Longrightarrow \rightarrow \text{IMPACT MARK}$

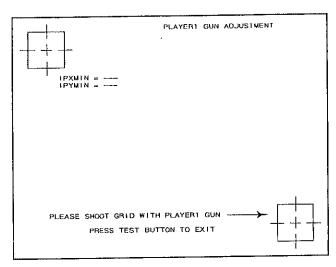


FIG. 9. 3 f SIGHTING ADJUSTMENT

PLAYER GUN ADJUSTMENT

IPXMIN = --IPYMIN = --IPYMAX = --IPYMAX = --NOW CALCULATING

FIG. 9. 3 g SIGHTING ADJUSTMENT

PLEASE SHOOT GRID WITH PLAYERI GUN PRESS TEST BUTTON TO EXIT

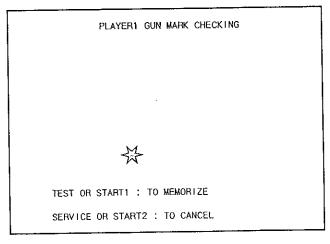


FIG. 9. 3 h SIGHTING ADJUSTMENT SELECTION

Selecting PLAYER 1 GUN ADJUSTMENT causes the screen shown at the left to be displayed. 1P side sighting adjustment can be made on this screen. If the TEST BUTTON is pressed, the sighting adjustment menu returns to the screen without performing anything. Adjustment procedure: First shoot at the center of the 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. (To be continued.)

Shooting the 2 Grid points displays "NOW CAL-CULATING" on the center of 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.



DEFAULT PLAYER1 GUN ADJUSTMENT

TEST OR START1 : TO SET DEFAULT

SERVICE OR START2 : TO CANCEL

FIG. 9. 3 i SIGHTING ADJUSTMENT

Choosing PLAYER 1 GUN DEFAULT ADJUST-MENT causes the screen shown at the 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 be always 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 side start button.

DEFAULT PLAYERI GUN ADJUSTMENT

COMPLETED

FIG. 9. 3 j SIGHTING ADJUSTMENT

The 2P side SIGHT setting is performed in the "PLAYER 2 GUN ADJUSTMENT," and "PLAYER 2 GUN DEFAULT ADJUSTMENT." The setting method is the same as in the 1P side.

⑦ BOOKKEEPING

BOOKKEEPING GAME REPORT	PAGE1/2
NUMBER OF GAMES 1P GAMES 2P GAMES NUMBER OF CONTINUE 1P GAMES 2P GAMES TOTAL TIME PLAY TIME AVERAGE PLAY TIME LONGEST PLAY TIME SHORTEST PLAY TIME	
PRESS TEST BUTTON TO	CONTINUE

FIG. 9. 3 k BOOKKEEPING (1/2)

- NUMBER OF GAMES (CONTINUE):
 The total number of games played (continued) on 1P side and 2P side.
- *P GAMES:
 Displays the number of games played (continued) on 1P side and 2P side respectively.
- TOTAL TIME: Refers to TOTAL TIME energized except for the time used for the TEST Mode.
- PLAY TIME: Refers to the game play time.

By-playtime play frequency bookkeeping is displayed in increments of 30 seconds from 0M00S to 9M59S. Playtime in excess of 10 minutes is displayed all in the category of OVER 10 M00S.

BOOKKEEP1NG	
THE HISTOGRA	IM .
· omoos ~	
OM30S ~	OM59S -
1M00S ~	· 1M29S -
l 1M30S ~	1M59S -
2M00S ~	- 2M29S -
2M30S ~	· 2M59S →
3M00S ~	
3M30S ~	
4M00S ~	
4M30S ~	
5M00S ~	
5M30S ~	
6M00S ~	
6M30S ~	
7M00S ~	
7M003 7M30S ~-	
8M00S ~	
8M30S ~	
9мооѕ ~	
9M30S ~	
OVER	10M00S -
PRESS TEST BUTTON	TO EXIT

FIG. 9. 3 k BOOKKEEPING (2/2)

10. CONTROLLER



- In order to prevent an 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, 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.

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) Bend the new Microswitch Actuator as shown.
- (5) Solder the new microswitch and assemble the controller.
- 6 By operating the Trigger, check if the Microswitch can be turned ON/OFF correctly.

REPLACING THE SENSOR UNIT

- ① Disassemble the controller.
- ② Remove the sensor unit from COVER.

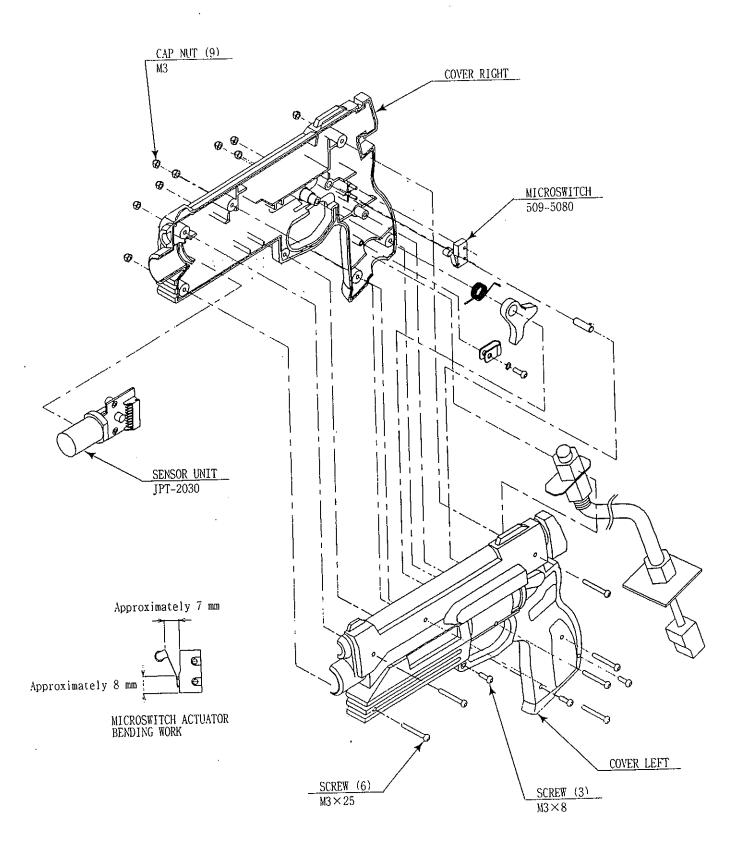


FIG. 10

11. COIN SELECTOR

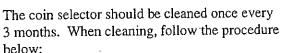
HANDLING THE COIN JAM

If the coin is not 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 correctly functions.

CLEANING THE COIN SELECTOR



- Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- 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 correctly functions.



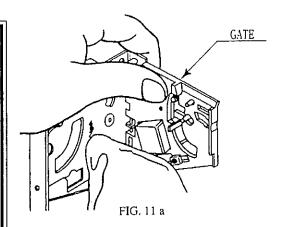
- ① Turn the power for the machine OFF. Open the coin chute door.
- ② Open the gate and dust off by using a soft brush (made of wool, etc.).
- ③ Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- ④ Remove the CRADLE.
 When removing the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

COIN INSERTION TEST

Once every month, when performing the Coin SW Test, simultaneously check the following:

- Does the Coin Meter count satisfactorily?Does the coin drop into the Cashbox
- correctly?

 Is the coin rejected when inserted while keeping the Reject Button pressed down?



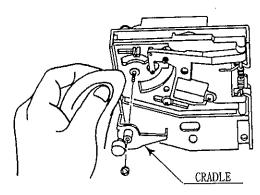


FIG. 11 b

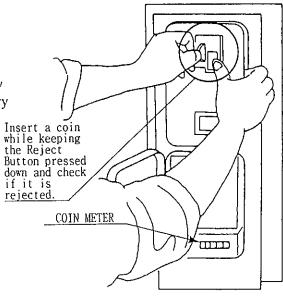


FIG. 11 c

12. PROJECTOR



Since the Projector has been adjusted at the time of shipment, avoid making further adjustments without good reason.



The Projector is subject to color deviation due to Convergence deviation caused by the geomagnetism at the installation location and peripheral magnetic field. After the installation of machine, and before commencing operation, check for Convergence deviation and if deviated, make adjustments.

Projector adjustments are stored. Due to distortion or color deviation in the TEST mode, if an adjustment is necessary, use the Remote Control to make adjustments. There are two Projector Makers (Toshiba and Mitsubishi) and the adjustment method varies depending on the specific maker.

12-1 CLEANING THE SCREEN



Since the Projector screen is susceptible to damage, pay careful attention to its handling. When cleaning, refrain from using water or volatile chemicals.

When the screen surface becomes dirty with dust, etc., clean it by using a soft cloth such as gauze. When water, and volatile chemicals such as benzine, thinner, etc., spill on the screen surface, it may be subject to damage, therefore, do not use them. Also, since the surfaces are susceptible to damage, refrain from rubbing them with a hard material or using a duster.

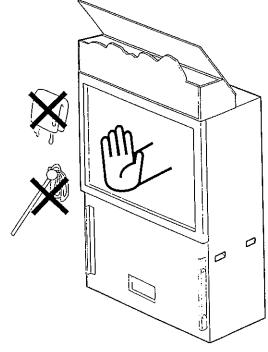


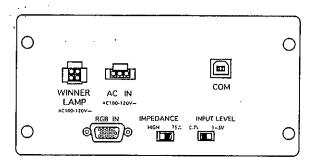
FIG. 12. 1

SETTING THE INTERFACE



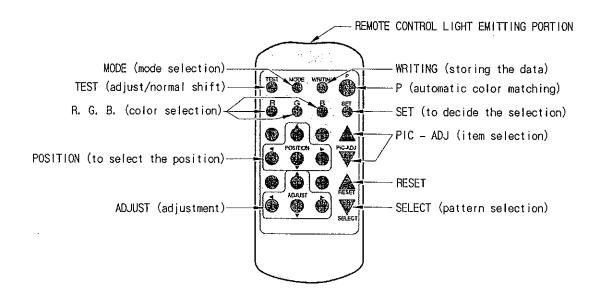
In this product, set to INPUT LEVEL: 0.7V and IMPEDANCE: 75Ω . Failure to observe this can cause CRT membrane to burn or Shutdown device to function resulting in power off.

The Projector's Connector Panel contains the Interface setting SW.



REMOTE CONTROL BUTTONS

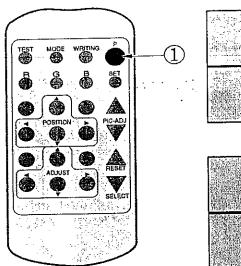
When adjusting the Projector, direct the Remote Control's light emitting portion towards the Projector Screen.

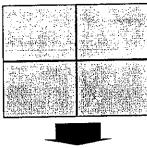


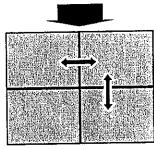
AUTOMATIC COLOR MATCHING

The Projector may be subject to color deviations affected by earth magnetism, the building steel frames, etc. When the Projector is initially installed or the Projector's installation position is changed, have the color matching performed automatically.

(1) Keep pressing the P button (red) for approximately 3 seconds to have the ensuing movements performed automatically.







The Projector will shift to the color deviation correction mode from the game mode, with the green cross pattern appearing on the screen.

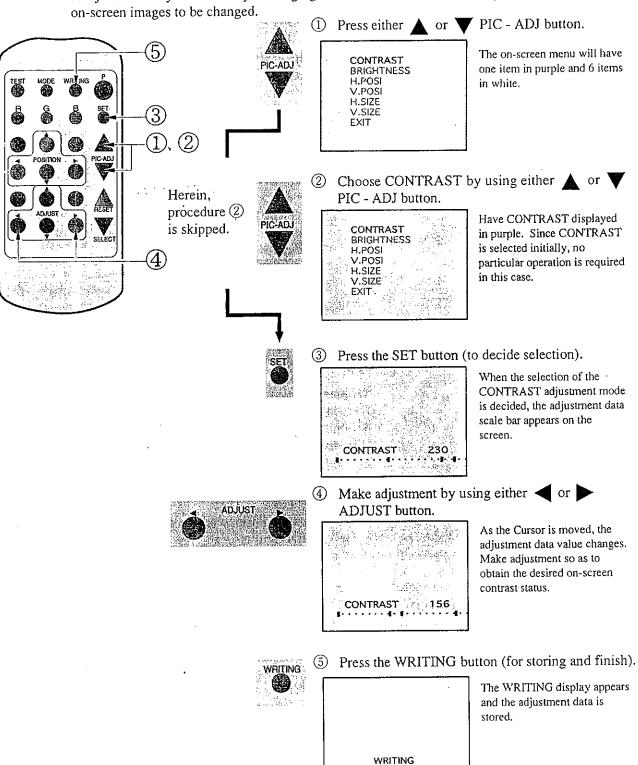
The cross pattern moves up/down and right/left to start the movement of searching the correct screen position and inclination.

When the green cross pattern movements are finished, similar detection is performed sequentially in order of red and then blue cross movements. After detecting by green, red and blue cross movements, the game mode returns with the color deviation status being corrected.

- Although very rarely, the TRY AGAIN error display in red may appear. At this time, press the P button (red) for approximately 3 seconds.
 Even after the above operation is repeated, if the error condition still exists, then the display shifts to PLEASE ADJ. In this case, the auto color matching function can not be used. Contact the place of contact herein stated or where the product was purchased from.
- If the automatic color matching indicates an error, color matching can manually be performed.
 Refer to CONVERGENCE ADJUSTMENT (manual color matching).

ADJUSTING THE ON-SCREEN CONTRAST

Although the on-screen picture quality has been adjusted at the time of shipment from the factory, the on-screen contrast can be readjusted if desired. When the Game Board is replaced, readjustment may be necessary. Changing the CONTRAST causes the light and shade of the on-screen images to be changed.

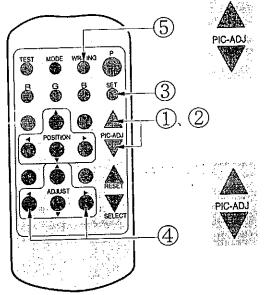


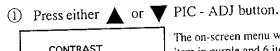
- When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure ② and press the SET button.
- To continue adjusting other menu items, repeat procedure 2~4.
- Unless the adjustment data is stored, the data in the adjusted status will be erased at the time the power is turned off and the pre-adjustment status will remain when the power is turned on next time.

ADJUSTING THE SCREEN BRIGHTNESS

Although the on-screen picture quality has been adjusted at the time of shipment from the factory, readjustment can be made if desired. When the Game Board is replaced, readjustment may be necessary. Changing the BRIGHTNESS causes the brightness of the on-screen images of black portions to be changed.

> V.SIZE EXIT





The on-screen menu will have one item in purple and 6 items in white. CONTRAST BRIGHTNESS H.POSI V.POSI H.SIZE

Choose BRIGHTNESS by using either ▲ or ▼ PIC - ADJ button.



Have the BRIGHTNESS displayed in purple.



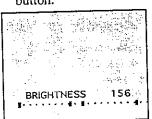
Press the SET button (to decide selection).



When the selection of the BRIGHT-NESS adjustment mode is decided, the adjustment data scale bar appears on the screen.



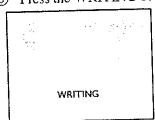
Make adjustment by using either ◀ or ► ADJUST button.



As the Cursor is moved, the adjustment data value changes. Make adjustment so as to obtain the desired on-screen brightness status.



Press the WRITING button (for storing and finish).



The WRITING display appears and the adjustment data is stored.

- When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure 2 and press the SET button.
- To continue adjusting other menu items, repeat procedure $@\sim@$.
- Unless the adjustment data is stored, the data in the adjusted status will be erased at the time the power is turned off and the pre-adjustment status will remain when the power is turned on next time.

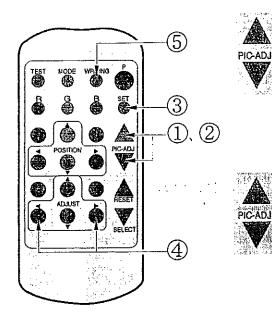
ADJUSTING THE ON-SCREEN DISPLAY POSITION

Although the on-screen display position (H. POSI, V. POSI) has been adjusted at the time of shipment from the factory, readjustment can be made if desired. When the Game Board is replaced, readjustments may be necessary.

> H POSI V.POSI H.SIZE V.SIZE **EXIT**

H.POSL V.POSI

H.SIZE V.SIZE

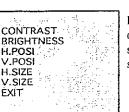


1 Press either A or PIC - ADJ button. CONTRAST BRIGHTNESS

The on-screen menu will have one item in purple and 6 items in white.



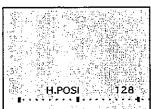
Choose H. POSI or V. POSI by using either PIC ADJ button.



Have the H. POSI or V. POSI displayed in purple. The Figure shows the status in which H. POSI is selected.



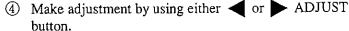
Press the SET button (to decide selection).

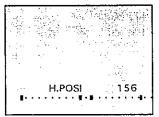


When the selection of the H. POSI or V. POSI is decided, the adjustment data scale bar appears on the screen.



When making adjustments in vertical directions, also use either \triangleleft or \triangleright ADJUST button.

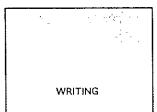




As the Cursor is moved, the adjustment data value changes. Make adjustment so as to obtain the desired on-screen position status.



5 Press the WRITING button (for storing and finish).

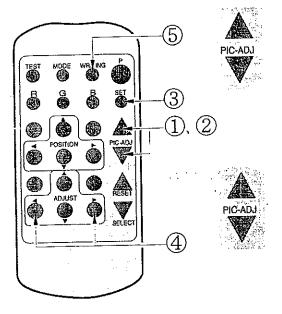


The WRITING display appears and the adjustment data is stored.

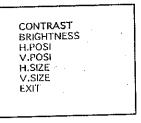
- When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure ② and press the SET button.
- To continue adjusting other menu items, repeat procedure $2 \sim 4$.
- Unless the adjustment data is stored, the data in the adjusted status will be erased at the time the power is turned off and the pre-adjustment status will remain when the power is turned on next time.

ADJUSTING THE SCREEN SIZE

Although the on-screen size (H. SIZE, V. SIZE) has been adjusted at the time of shipment from the factory, readjustment can be made if desired. When the Game Board is replaced, readjustments may be necessary.

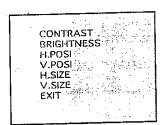


Press either ▲ or ▼ PIC - ADJ button.



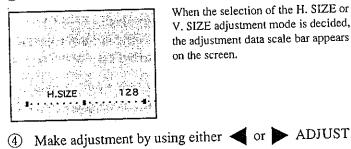
The on-screen menu will have one item in purple and 6 items in white.

Choose H. SIZE or V. SIZE by using either A or V PIC - ADJ button.



Have the H. SIZE or V. SIZE displayed in purple. The Figure shows the status in which H. SIZE is selected.

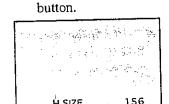
③ Press the SET button (to decide selection).



When the selection of the H. SIZE or V. SIZE adjustment mode is decided, the adjustment data scale bar appears on the screen.



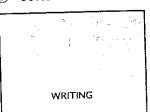
When making adjustments in vertical directions, also use either
or button.



As the Cursor is moved, the adjustment data value changes. Make adjustment so as to obtain the desired on-screen position status.



Tress the WRITING button (for storing and finish).



The WRITING display appears and the adjustment data is stored.

When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure ② and press the SET button.

To continue adjusting other menu items, repeat procedure $@\sim @$.

Unless the adjustment data is stored, the data in the adjusted status will be erased at the time the power is turned off and the pre-adjustment status will remain when the power is turned on next time.



To avoid circuitry malfunctioning due to electrical load increase, never utilize CONVERGENCE ADJUSTMENT (Line Convergence Adjustment in particular) for adjusting screen size changes.

There is no means to restore the Convergence Adjustment data once stored, to its original state. To avoid changing the screen size by erroneously using convergence adjustment, do not perform the green Line Convergence Adjustment.

As such, be sure to perform the adjustment work from this page onward by the Technical staff and the location's Maintenance Personnel who are well versed in such adjustment work. In the Static Convergence Adjustments, if satisfactory adjustments can not be performed, do not make another convergence adjustments inadvertently. Contact the office herein stated or where the product was purchased from.



- To avoid making the adjustment work ineffective, do not press the RESET button during adjustment.
- To discontinue adjustment work, keep pressing the TEST button for approximately 3 seconds at the stage before storing the adjustment data by pressing the WRITING button.
- Should the screen be abnormally disturbed by noise due to static electricity, etc., turn the power off without storing the adjustment data.
- Pressing the ▲ or ▼ PIC ADJ button in the Convergence Adjustment mode status will display the Adjustment Menu shown right. Do not utilize this Adjustment Menu as this is the one applied at the factory.

Adjusting this menu causes the Customer's adjustment range to be deviated.

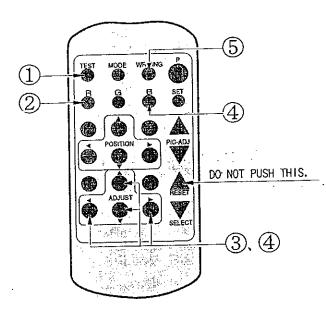
Should the menu shown right be displayed by mistake, first choose EXIT by using either ▲ or ▼ PIC - ADJ button and then press the SET button.

1,47			
12.40	ADJUST	MODE	
	SUB V	IZE	
	SUB H		
	SUB BI	NGHT :	
	EXIT	41.	
	8		

. Adjustment menu used in the factory.

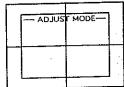
STATIC CONVERGENCE ADJUSTMENT

In the static convergence adjustment, each of red and blue images is comprehensively moved to and superimposed on the green color. If automatic color matching function is not sufficiently satisfactory, perform this adjustment. Be sure to perform automatic color matching before starting the above adjustment.



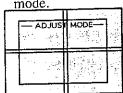
When either of ② ④ COLOR SELECT buttons (R, B) is pressed, if the color desired to be adjusted disappears, press that particular button again. For example, if the red color needs to be adjusted again at the stage of ④, the R button need to be pressed twice.

① Keep pressing the TEST button for approximately 3 seconds.



The screen will change to ADJUST mode from the Game mode to cause the green test pattern to be displayed on the screen.

② Press the R button to have the red adjustment mode.



The red test pattern is added to the display. The frame color turns red and this signifies the red adjustment mode.

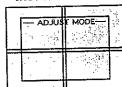
Make adjustment by using the ADJUST buttons.





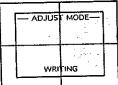
Make adjustment so as to have red superimposed on green. When red is superimposed on green, the color becomes yellow.

Press the B button to have the blue adjustment mode.



Similarly as in the case of red, adjust the blue color. When green, red, and blue are superimposed, the color becomes white.

(5) Press the WRITING button (for storing and finish).

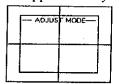


The WRITING display appears and the adjustment data is stored. After the data is stored, the Game mode returns.

POINT CONVERGENCE ADJUSTMENT

In the POINT CONVERGENCE adjustment, each of red, green and blue images is partially moved for color matching. The adjustment may be necessary when the Game Board is replaced or changed, or screen size is changed. Be sure to perform automatic color matching before starting the adjustment.

① Keep pressing the TEST button for approximately 3 seconds.



The screen changes to ADJUST mode from the Game mode and displays the green test pattern.

② Press the MODE button twice to have the POINT ADJUSTMENT mode. Note 1



MARKER

DO NOT PRESS.

(6)

The crosshatch test pattern appears and the MARKER indicating the adjustment point is displayed.

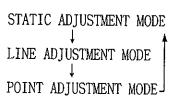
3 Using either R or B button, select the desired color to be adjusted. Note 2 By using the G button, the green color can also be selected.



The selected color is displayed by superimposing on green. The MARKER will be in the color selected.

Note 1 When the MODE button is repeatedly pressed, the adjustment modes will circulate as follows:

(5)



Note 2 When either of the COLOR SELECT buttons (R, B) is pressed, if the desired color to be adjusted disappears, press that particular button again.

Note 3 By repeatedly pressing the SELECT button, only the Projector's TEST pattern screen and the screen superimposing the Game Board Test pattern can be alternately displayed.

By using the A ADJUST buttons, move the MARKER to the position to be adjusted.



The MARKER moves in the direction of the button's arrow. However, the movable point is predetermined.

(5) Make adjustment by using the ADJUST buttons.



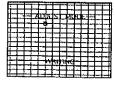
Although the direct vicinity of the MARKER's center moves most conspicuously, make adjustment by paying attention to the periphery area also. Shown left is the magnified MARKER periphery.

6 Press the SELECT button as necessary to superimpose Game Board images. Note 3



If the test pattern is not displayed in the periphery of the screen, adjustments can be made by pressing the SELECT button to superimpose the test pattern and the Game Board's CRT test screen.

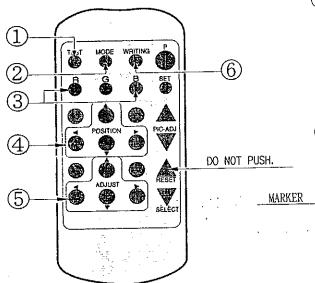
Press the WRITING button (for storing and finish).



WRITING is displayed and the adjustment data is stored. After the data is stored, the Game Board screen returns.

LINE CONVERGENCE ADJUSTMENT

In the LINE CONVERGENCE ADJUSTMENT, the adjustment point of the column line (vertical) or row line (horizontal) is comprehensively moved for color matching. It is convenient to utilize this adjustment when the color of the column line or row line is uniformly deviated.

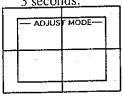


Note 1 When the MODE button is repeatedly pressed, the adjustment modes will circulate as follows:

STATIC ADJUSTMENT MODE
LINE ADJUSTMENT MODE
POINT ADJUSTMENT MODE

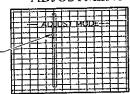
Note 2 When either of the COLOR SELECT buttons (R, B) is pressed, if the desired color to be adjusted disappears, press that particular button again.

① Keep pressing the TEST button for approximately 3 seconds.



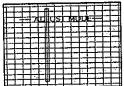
The screen changes to ADJUST mode from the Game Board mode and displays the green test pattern.

2 Press the MODE button once to have the POINT ADJUSTMENT mode. Note 1



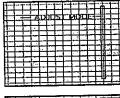
The crosshatch test pattern appears and the vertically long MARKER is shown.

(3) Using either R or B button, select the desired color to be adjusted. Note 2 Although the green color can also be selected by using the G button, to avoid the screen size change adjustment, do not choose green.



The selected color is displayed by superimposing on green. The MARKER will be in the color selected.

4 By using the POSITION buttons, move the MARKER to the position to be adjusted.



Use the ◀ ▶ buttons to select the column line, and the MARKER moves in the right/left direction. However, the movable range is predetermined.

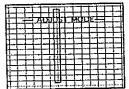


Use the buttons to select the row line and the MARKER moves in the up/down direction. However, the movable range is predetermined.

Make adjustment by using the ADJUST buttons.

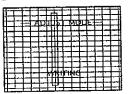






The selected column line or row line (shown left is the column line) can be moved in the desired up/down or right/left directions as applicable.

6 Press the WRITING button (for storing and finish).



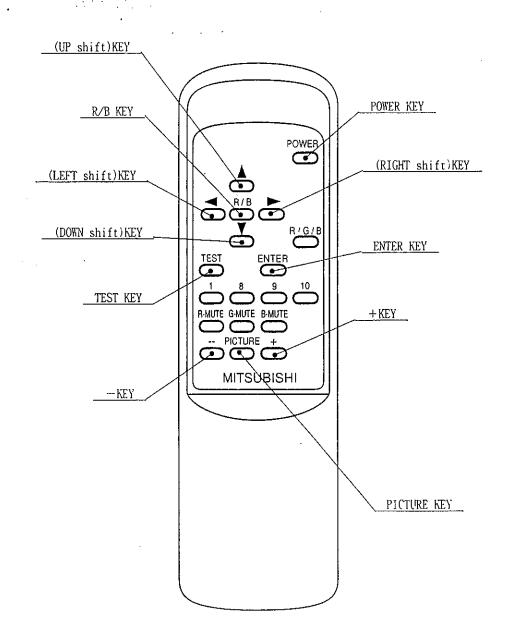
WRITING is displayed and the adjustment data is stored. After the data is stored, the Game Board screen returns.

12-3 ADJUSTMENT OF MITSUBISHI PROJECTOR



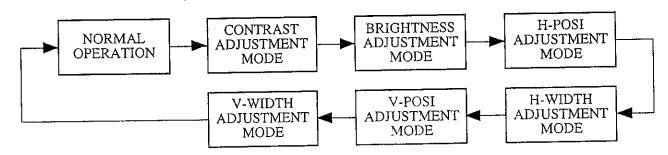
- For the operation of Remote Control, use only the Keys of POWER, R/B, ▲ (UP shift), < (LEFT shift), ▼ (DOWN shift), ▷ (RIGHT shift), TEST, ENTER, ─, +, and PICTURE. Do not press keys other than those explained in this manual.
- When operating the Remote Control, have it point the screen.

The Projector has DYNAMIC CONVERGENCE adjustment functions. This manual does not refer to the functions as the adjustment of DYNAMIC CONVERGENCE is very troublesome and in addition, visual effects are negligible.



· FOWER KEY	This does not have power ON/OFF function.
•	Does not function even if it is pressed.

- (UP shift) KEY Used to move the test cross upward in the STATIC CONVERGENCE ADJUSTMENT mode.
- · (LEFT shift) KEY............... Used to move the test cross to the left in the STATIC CONVERGENCE ADJUSTMENT mode.
- · > (RIGHT shift) KEY Used to move the test cross to the right in the STATIC CONVERGENCE ADJUSTMENT mode.
- TEST KEY This is the ON/OFF key in the STATIC CONVERGENCE ADJUSTMENT mode. In the ON status of this key, the test cross pattern appears in the approximately on-screen center.
- · ENTER KEYUsed for DYNAMIC CONVERGENCE.

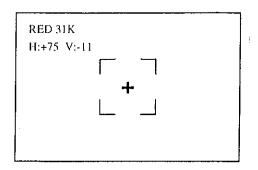


EXPLANATIONS OF ADJUSTMENT MODES

- · CONTRAST Used to vary image contrast. Use + and keys to adjust.
- · BRIGHTNESS Used to change image brightness. Use + and keys to adjust.
- H-POSI Used to move the image position in the horizontal direction. Use + and keys to adjust.
- · H-WIDTH Used to change the horizontal width of image. Use + and keys to adjust.
- V-POSI Used to move the image position in the vertical direction. Use + and keys to adjust.
- · V-WIDTH...... Used to change the vertical width of image. Use + and keys to adjust.

STATIC CONVERGENCE ADJUSTMENT

Press the TEST KEY to change the screen to Red Line Adjustment mode.



Superimpose the red line on the green line. When the red line is superimposed on the green line, the green line turns to yellow or white.

To MOVE RED LINE:

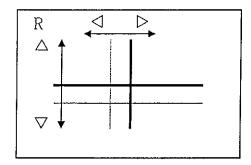
Use

key to move it left.

Use ▷ key to move it right.

Use \triangle key to move it upward.

Use ▼ key to move it downward.



Press the R/B KEY.

Changes to the Blue Line Adjustment screen. Every time the key is pressed, "from red to blue" and "from blue to red" are alternated.

SUPERIMPOSING BLUE LINE ON GREEN LINE:

Superimposing blue line on green line causes the green line to turn to white.

TO MOVE BLUE LINE:

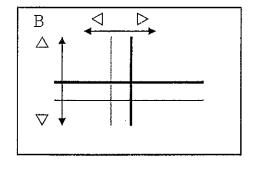
Use

key to move it left.

Use ▷ key to move it right.

Use ▲ key to move it upward.

Use ▼ key to move it downward.



Press the TEST KEY. Adjustment is finished.

AUTOMATIC CANCELLATION OF ADJUSTMENT MODE

In each adjustment mode, only in the case where an effective key input (variation of values and images) is not performed within the time limit indicated below, the adjustment mode is automatically cancelled and finished, shifting to on-screen normal images.

Approximately 6 seconds

CONTRAST

BRIGHTNESS

H-POSI

H-WIDTH

V-POSI

V-WIDTH

Approximately 5 min.

STATIC CONVERGENCE

13. REPLACING THE FLUORESCENT LAMP, AND LAMPS



- When performing work, be sure to turn power off. Working with power on can cause electric shock and short circuit hazards.
- The Fluorescent Lamp, when it gets hot, can cause burn. Be very careful when replacing the Fluorescent Lamp.
- Be sure to use lamps of the designated rating. Using lamps of undesignated rating can cause a fire or malfunctioning.



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 unstable step can cause violent falling down accidents.

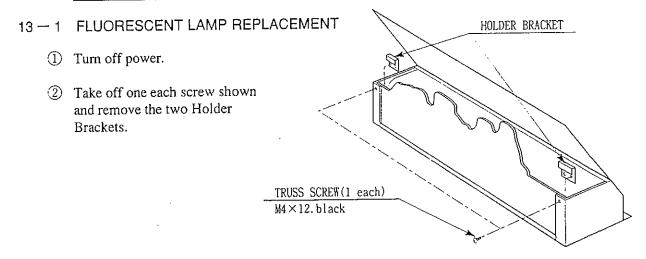
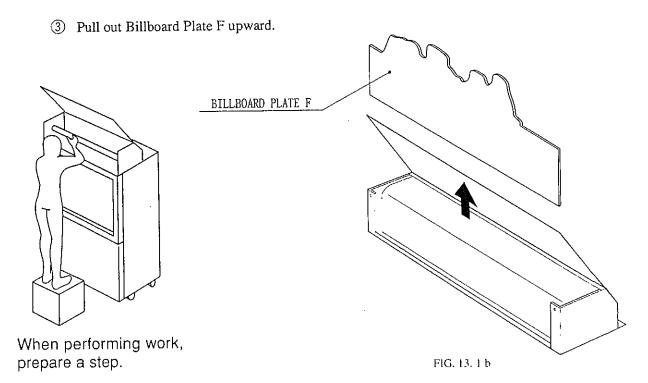


FIG. 13, 1 a



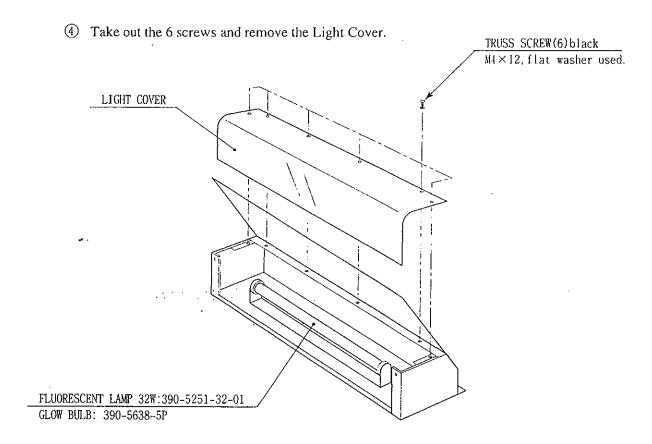
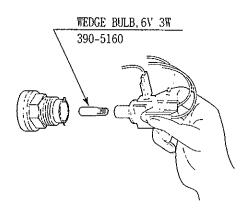


FIG. 13. 1 c

13 - 2 LAMP REPLACEMENT

- ① Take out the 8 screws and remove Control Panel DX.
- ② Hold both sides of the switch portion with fingers and pull out from the button's base portion. At this time, be careful so as not to damage the wiring connected to the switch.
- The lamp is positioned at the end of the switch portion. Pull out the lamp straight without turning it.



TRUSS SCREW: S. black
M4×16. flat washer used.

CONTROL PANEL DX

FIG. 13, 2 a

FIG. 13. 2 b

14. PERIODIC INSPECTION TABLE

The items listed below require periodic check and maintenance to retain the performance of this machine and to ensure safe business 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 tissue, 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 the product with dust as is accumulated can cause fire and electric shock hazards.
- Periodically once a year, request the place of contact herein stated or the Distributor, etc. where the product was purchased from, as regards the internal cleaning. Using the 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.

TABLE 14

TABLE 14	Item	Interval	Reference
CABINET	Check Adjusters' contact with surface.	Daily	3
CONTROLLER	Cleaning	As necessary	
	Sight check	Weekly	9,10
	Check SWes.	Monthly	9,10
COIN CHUTE DOOR	Check COIN SW.	Monthly	9
	Coin insertion test.	Monthly	11
	Cleaning of COIN SELECTOR.	Trimonthly	11
PROJECTOR	SCREEN cleaning.	Weekly	12-1
1110,221011	Check adjustments.	Monthly or when moving.	6, 9, 12
GAME BD	MEMORY TEST.	Monthly	9
5. A. D. D.	Check settings.	Monthly	9
INTERIOR	Cleaning	Annually	See above.
POWER SUPPLY PLUG	Inspection and cleaning		
Cabinet surfaces	Cleaning	As necessary.	See below.

CLEANING THE CABINET SURFACES

When the cabinet surfaces are badly soiled, remove stains with a soft cloth dipped in water or diluted (with water) chemical detergent and squeezed dry. To avoid damaging surface finish, do not use such solvents as thinner, benzine, etc. or abrasives, bleaching agent and chemical dustcloth.

15. TROUBLESHOOTING



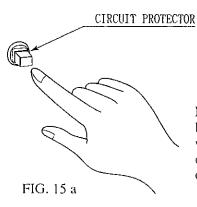
- In order to prevent electric shock and short circuit hazards, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
- After removing the cause of the functioning of the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the functioning, using the Circuit Protector as is without removing the cause can cause generation of heat and fire hazard.

In case a problem occurs, first check wiring connector connections.

TABLE 15 a

TABLE 15 a		
PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation.	Power is not supplied.	Securely insert the power plug into the plug socket.
	Power supply/voltage is not correct.	Make sure that power supply/voltage is correct.
	The Circuit Protector functioned due to the momentary overload.	After eliminating the cause of overload, reinstate the AC Unit's Circuit Protector (see 3, Section 6, Refer to the following).
	The CONNECT BOARD fuse is blown due to the momentary overload.	After eliminating the cause of overload, replace the CONNECT BOARD fuse (see next page). 514-5036-7000 FUSE 6.4 $\phi \times 30$ 7000mA 125V
The color on PTV screen is incorrect.	Image adjustment is inappropriate.	Adjust appropriately (see Sec.12).
Color deviation on PTV screen.	Affected by peripheral machines or the building's steel frames.	Perform convergence adjustment (see Sec. 12).
		Change installation direction or position.
		Move the machine which causes the problem.

CIRCUIT PROTECTOR



Functions due to the activation of bimetal. To restore the function, wait for approximately one minute or longer until the bimetal cools off. (Press the Button.)

TABLE 15 b

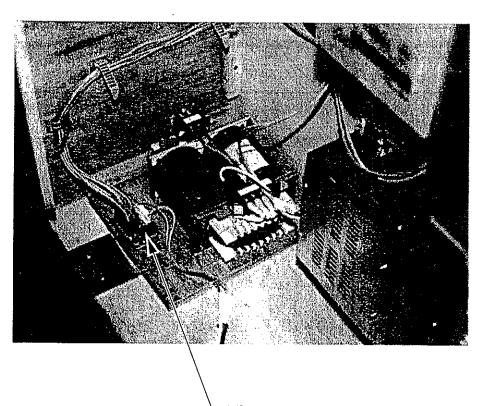
PROBLEMS	CAUSE	COUNTERMEASURES
No sound is emitted.	Sound volume adjustment is not appropriate.	Adjust sound volume (see Sec. 9).
	Board and Amplifier malfunctioning.	Perform the sound test and confirm (see Sec. 9).
Controller sighting is not	Due to environmental changes, etc., sighting became inappropriate.	Perform sighting adjustment in the test mode (see Sec. 9).
satisfactory.	LED BD malfunctioning.	Check to ensure that the LED lights up. If it does not light up, replace (see next page).
	Sensor Unit malfunctioning.	Replace the Sensor Unit (see Sec.10).
	LED BD, Front Glass, and Mirror are soiled.	Wipe off soiled surfaces (see Sec. 14 and next page).
During game play, the Controller is not	Malfunctioning of microswitch.	Check for ON and OFF in the INPUT test and if it is not functioning, replace the microswitch (see Sec. 10).
operable for shooting.	Malfunctioning of LED BD.	Check if the LED is lit, and if it is not lit, replace (see next page).
!	Malfunctioning of Sensor Unit.	Replace the Sensor Unit.
The Fluorescent lamp does not light up.	The Fluorescent tube is burnt out.	Replace the Fluorescent tube (see Sct. 13).
The Lamp does not light up.	Lamp malfunctioning.	Replace the Lamp (see Sec. 13).

REPLACMENT OF FUSE



- In case fuse replacements other than those stated in this manual are necessary, contact where you purchased the product from for inquiries regarding this matter.
- Fuse replacements other than those specified can cause hazards and are strictly forbidden.
- In order to prevent an electric shock, be sure to turn power off and unplug from the socket outlet before performing work by touching the internal parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause fire and electric shock hazards.
- After eliminating the cause of the blowing of fuse, replace the fuse.
 Depending on the cause of fuse blowing, continued use with the fuse as is blown can cause generation of heat and fire hazard.

By referring to 2 Section 6, remove Front Lid U & Front Lid L of Cabinet DX, and replace the fuse.



FUSE 125V 7A 514-5036-7000

HEPLACEMENT OF LED BD

In case two of LED's do not emit light, failure and malfunctioning may be considered. Replace in the following procedure. When removing surface soils, also use the following procedure.

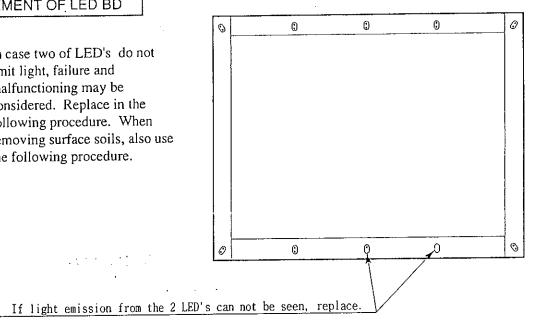


FIG. 15 b

- ① Turn off power.
- By referring to 2, Section 6, demount the PTV from Cabinet DX.
- By referring to 1, Section 6, remove the Mask from the PTV.
- The Mask has the LED Board. Disconnect the Connectors from both ends of LED Board, remove 2 U Nuts, take out and replace the LED Board.

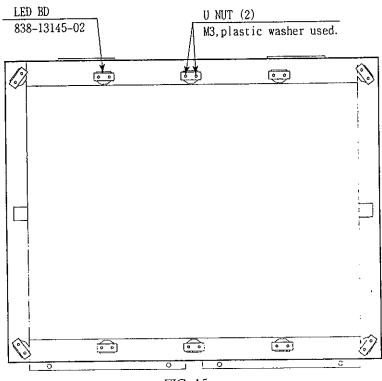


FIG. 15 c

16. GAME BOARD



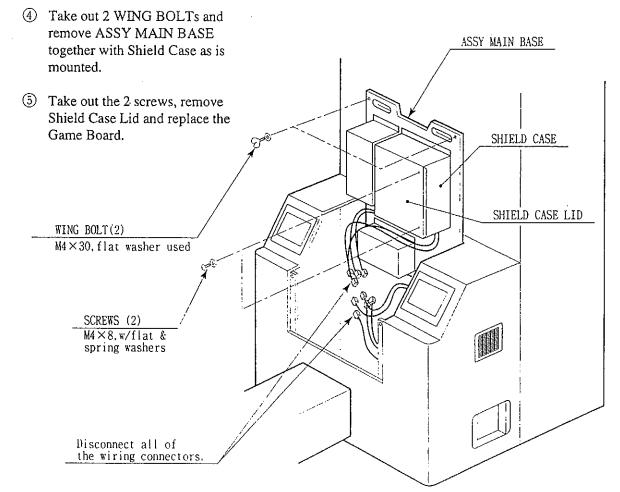
- In order to prevent electric shock and short circuit hazards, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause fire, electric shock and short circuit hazards.
- Do not expose the Game BD, etc. without a good reason. Failure to observe this can cause electric shock hazard or malfunctioning.



The electronic parts on the IC Board may be damaged due to human body's static electricity. Before performing IC Board related work, be sure to discharge physically accumulated statics by touching grounded metallic surfaces, etc.

16-1 TAKING OUT THE GAME BOARD

- ① Tum off power.
- ② By referring to 2, Section 6, remove Front Lid U & Front Lid L.
- ③ Disconnect all of the Connectors connected to ASSY MAIN BASE.



16-2 COMPOSITION OF GAME BOARD

GAME BD HOD USA (833-13635-01):For USA
GAME BD HOD EXP (833-13635-02):For OTHERS
GAME BD HOD KOR (833-13635-03):For KOREA
GAME BD HOD AUS (833-13635-04):For AUSTRALIA

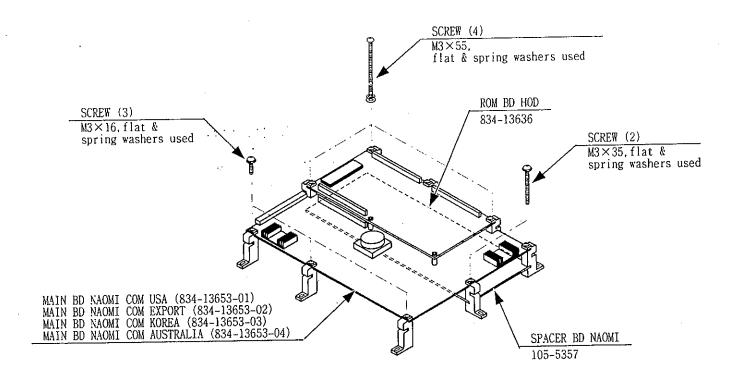
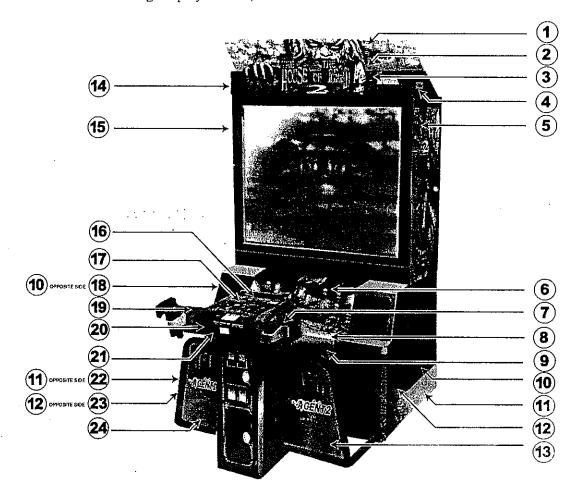


FIG. 16. 2

17. DESIGN RELATED PARTS

For the Warning Display stickers, refer to Section 1.



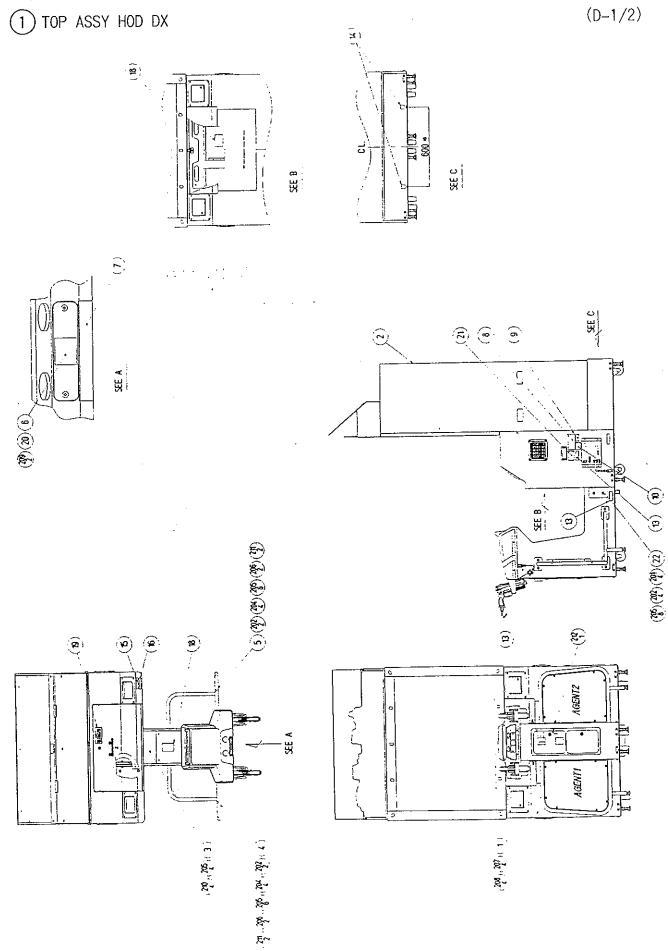
- HOD-1203
 BILLBOARD PLATE R
- (2) HOD-1204 LIGHT COVER
- 3 HOD-1202 BILLBOARD PLATE F
- 4) 421-10007 STICKER SEGA HOD
- (5) 421-10004 STICKER PTV SIDE UP R HOD
- (6) HOD-1051-B STICKER FRONT LID U HOD DX
- HOD-2001-D STICKER AGENT 2 HOD DX
- (8) HOD-1062-B STICKER FRONT LID BRKT HOD DX
- 9 HOD-1061-B STICKER FRONT LID L HOD DX
- 421-10005 STICKER PTV SIDE LOW L HOD

- HOD-1002-D
 STICKER CABI LOW HOD DX
- HOD-1002-C STICKER CABI R HOD DX
- (13) HOD-1362 GUARD PLATE R
- 14) 421-10007 STICKER SEGA HOD
- 421-10003 STICKER PTV SIDE UP L HOD
- (16) HOD-2001-B STICKER CONT PNL TOP HOD DX
- HOD-2002-01
 INST PLATE HOD DX ENG
- 421-10006 STICKER PTV SIDE LOW R HOD
- HOD-2001-C STICKER AGENT 1 HOD DX
- HOD-2001-E
 BUTTON SHEET HOD DX

- HOD-2003
- (22) HOD-1002-D STICKER CABI LOW HOD DX
- HOD-1002-B STICKER CABIL HOD DX
- HOD-1352 GUARD PLATE L

18. PARTS LIST

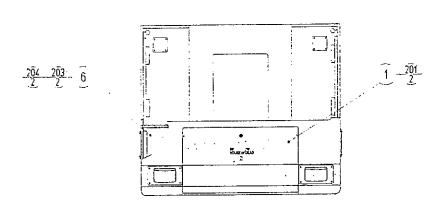
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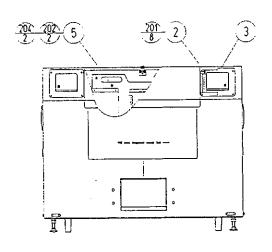


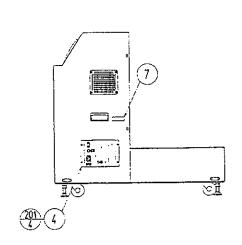
1 TOP ASSY HOD DX

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4 5 6 11 12 14 17 18 19 20 22	HOD-1000 HOD-1100 HOD-1300 HOD-1350 HOD-1360 421-7308-~ SGM-4346 SGM-4426 421-8885 421-8479-01 440-WS0002XEG 440-WS0033XEG HOD-2003 HOD-0006	ASSY CABINET DX ASSY PTV ASSY GUN HOLDER CABI ASSY FENCE L ASSY FENCE R DENOMINATION SHIET 1GAME ~ POLY COVER 1200 × 1200 × 1300 POLY COVER 800 × 750 × 900 STICKER CAUTION FORK STICKER INSTR SUNLIGHT ENG STICKER W POWER OFF ENG STICKER W BD POWER OFF ENG DENOMI PLATE HOD L BRKT.	
201 202 204 205 206 207 208 209 210 211 212	030-000840-SB 030-000850-SB 030-000830-SB 068-852216-0B 000-T00416-0B 000-T00530-0B 068-552016-0B 000-T00416-0C 030-000860-SB 068-441616-0B 008-T00412-0B	HEX BLT W/S BLK M8 \times 40 HEX BLT W/S BLK M8 \times 50 HEX BLT W/S BLK M8 \times 30 FLT WSHR BLK 8.5-22 \times 1.6 M SCR TH BLK M4 \times 16 M SCR TH BLK M5 \times 30 FLT WSHR BLK 5.5-20 \times 1.6 M SCR TH CRM M4 \times 16 HEX BLT W/S BLK M8 \times 60 FLT WSHR BLK 4.4-16 \times 1.6 TMP PRF SCR TH BLK M4 \times 12	
401 402 403 405 406 407 408 409 411 412	601-6604-70 SGM-2675 420-6428-03 390-5160 509-5080 600-6724 600-6729 600-6695 600-6695 600-6618 SGM-4111 220-5576 514-5036-7000	CARTON BOX 70 POLYETHYLENE BAG 240 × 370 OWNERS MANUAL HOD DX ENG LAMP WG B TYPE 6V 3W SW MICRO TYPE AC CABLE CONNECT TYPE 15A AC CABLE CONNECT TYPE 15A AC CABLE CONNECT TYPE USA 15A AC CABLE CONNECT TYPE USA 15A AC CABLE CONNECT TYPE FOR EXP KEY BAG (SGB-1035X) KEY MASTER FOR 220-5575 FUSE 6.4 × 30 7000MA 125V	TAIWAN USA OTHERS
413	280-5009-01 HOD-60040 GPD-0002X 421-8740 421-6690-06 421-6690-03 421-6690-01 421-6119-91 421-6119-91	CORD CLAMP 21 WIRE HARN FREQ. CHANGE SHIPPING BRKT CAUTION INSTR COP U/R STICKER 110V STICKER 220V STICKER 240V STICKER 120V STICKER FCC STICKER SEGA USA	AC 110V AREA AC 220V AREA AC 240V AREA AC 120V AREA USA USA

2 ASSY CABINET DX (HOD-1000)

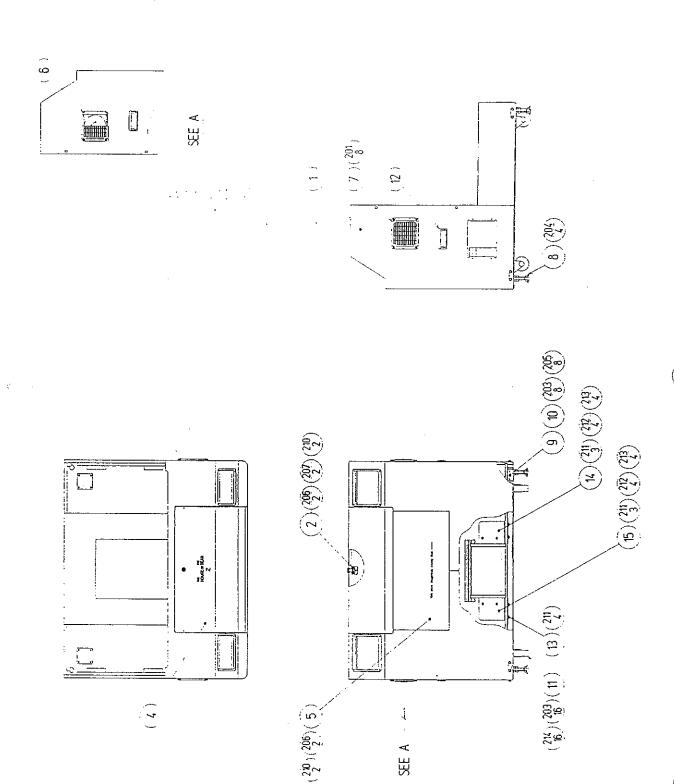




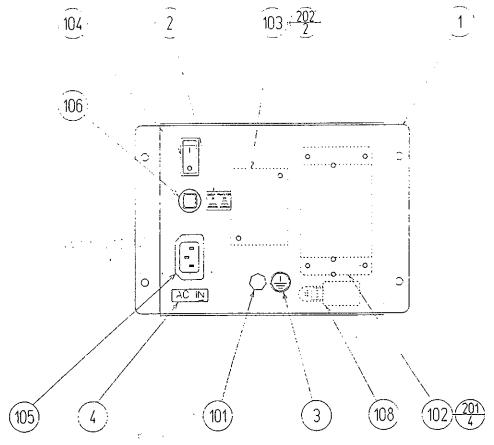


NOTE

ITEM NO.	PART NO.	DESCRIPTION
1 2 3 4 5	HOD-1001 HOD-1070 HOD-1005 HOD-1020 HOD-4000 HOD-4100	ASSY SUB-CABI DX ASSY SPEAKER SPEAKER COVER AC UNIT ASSY MAIN BD ASSY PWR SPLY
201 202 203 204	000-T00420-0B 032-000530 000-P00530-S 068-552016	M SCR TH BLK M4 > 20 WING BLT M5 + 30 M SCR PH W S M5 × 30 FLT WSHR 5.5-20 + 1.6

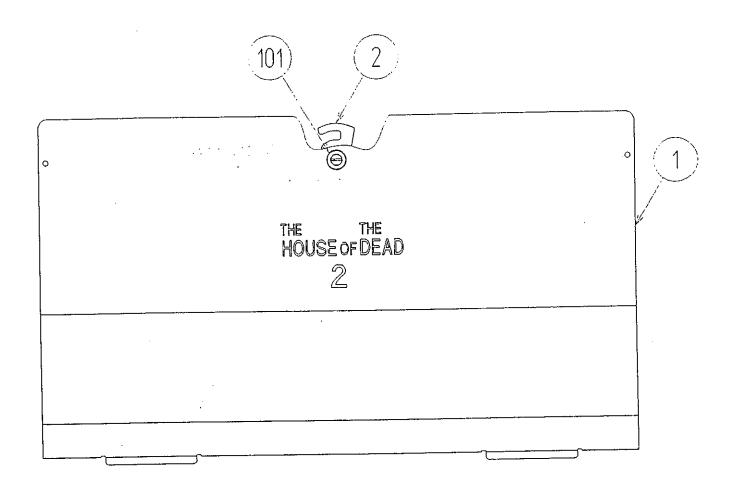


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 4 5 6 7 8 9 10 11 12 13 14 15	HOD-1002 HOD-1003 HOD-1050 HOD-1060 HOD-1530 253-5460-01 601-5699X ARC-1006 117-5233 601-9377 253-5396-91 HOD-1006 HOD-1007 HOD-1008	FRONT CABINET LOCKING BRKT HOD ASSY FRONT LID U ASSY FRONT LID L FAN UNIT AIR VENT BLACK LEG ADJUSTER BOLT M16 × 75 LEG BRACKET PLATE LEG BRACKET BLACK CASTER FAI=75 CABINET HANDLE NUT PLATE LOW JOINT BRKT R JOINT BRKT L	
101 102 103	280-5009-01 280-0419 601-0460	CORD CLAMP 21 HARNESS LUG PLASTIC TIE BELT 100 MM	
201 203 204 205 206 207 208 209 210 211 212 213 214	000-T00420-0B 030-000630-SB 050-H01600 030-000640-SB 000-P00425-W 050-F00400 011-F00310 011-T03512 068-441616-0B 011-P00312 030-000830-SB 060-F00800-0B	HEX BLT BLK W/S M6 × 30 HEX NUT M16 HEX BLT W/S BLK M6 × 40 M SCR PH W/FS M4 × 25 FLG NUT M4 TAP SCR FH 3 × 10 TAP SCR TH 3.5 × 12 FLT WSHR BLK 4.4-16 × 1.6 TAP SCR PH 3 × 12 HEX BLT W/S BLK M8 × 30	
301 303 304 305 306 307 308	HOD-60003 HOD-60010 HOD-60024 HOD-60027 HOD-60028 600-6743-150 600-7141-200	WIRE HARN FRONT CABIO1 WIRE HARN FRONT CABIO3 WIRE HARN FRONT CABIO4 WIRE HARN E FRONT CABIO1 WIRE HARN E FRONT CABIO2 ASSY RGB CABLE 150CM CABLE JVS TYPE A-B 200CM	



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4	HOD-1021X 421-7468-02 421-8202 421-9108	AC BRKT STICKER C.P W/PIC STICKER EARTH MARK STICKER AC IN	
101 102	280-0417 270-5131 270-5081	TERMINAL BINDING POST BLACK N.F ZRP2210-02 AC250V 10A NOISE FILTER 20A	OTHERS TAIWAN
103	450-5126 450-5135 450-5133 450-5134	MAGNET CONTACT S-NIOCX MAGNET CONTACT S-NIOCX AC 120V MAGNET CONTACT S-NIOCX AC 200V MAGNET CONTACT S-NIOCX AC 230V	AC 220V 60Hz AREA
104	509-5453-V-B	SW ROCKER J8 V-B	
105	214-0202	AC INLET PANEL TYPE	Loverty cont. (DD)
. 106	512-5046-10000 512-5046-5000	C.P 5000MA CE UL	$AC110V \sim 120V$ AREA $AC220V \sim 240V$ AREA
107	310-5029-G20	SUMITUBE F G 20MM	
108	280-5009-01	CORD CLAMP 21	
109	601-0460	PLASTIC TIE BELT 100 MM	
110	280-5275-SR10	CORD CLAMP SR10	
201	000-P00408-W	M SCR PH W/FS M4 $ imes$ 8	
202	000-P00416-W	M SCR PH W/FS M4 $ imes$ 16	
301 302 303 304	H0D=60023 500=6911=048 500=6911=049 600=6911=950	WIRE HARN AC UNIT IN WIRE HARN AC UNIT SW WIRE HARN AC UNIT NOISE FILTER WIRE HARN AC UNIT OUT	

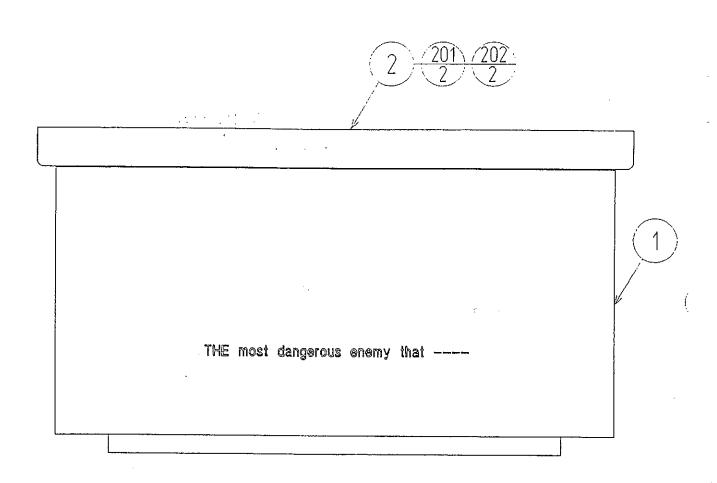
5 ASSY FRONT LID U (HOD-1050)



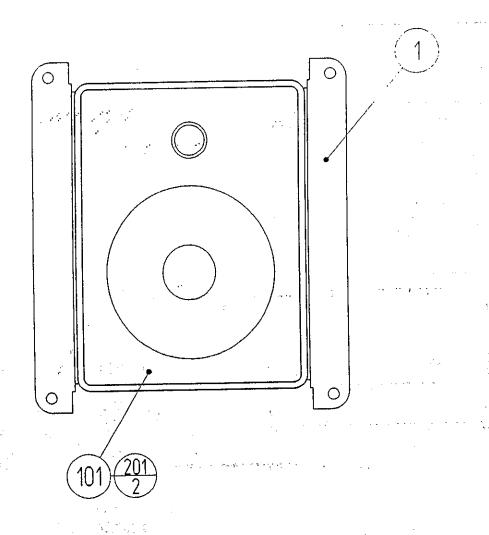
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2	HOD-1051 TH-1015	FRONT LID U LOCKING TONGUE	
101	220-5575	CAM LOCK MASTER W/O KEY	

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6 ASSY FRONT LID L (HOD-1060)

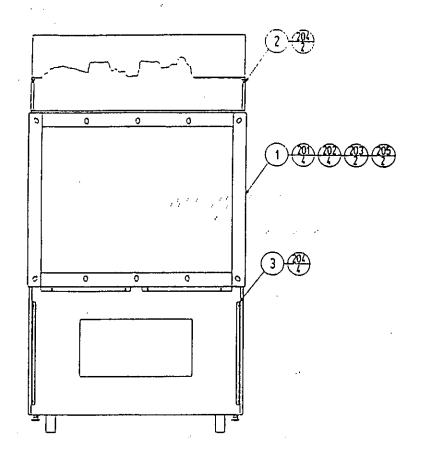


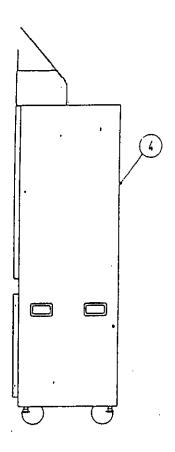
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HOD-1061	FRONT LID L	
2	HOD-1062	FRONT LID BRKT	
201	050-F00400	FLG NUT M4	
202	050-F00400	FLT WSHR M4	



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	CPT-1061	SPEAKER BRKT	
101 102	130-5096 280-0425	ASSY SERVO SPEAKER BOX CORD CLAMP 10	
201	000-P00512-W	M SCR PH W/FS M5 \times 12	
301 302	HOD-60025 HOD-60026	WIRE HARN SPEAKER UNIT WIRE HARN E SPEAKER UNIT	

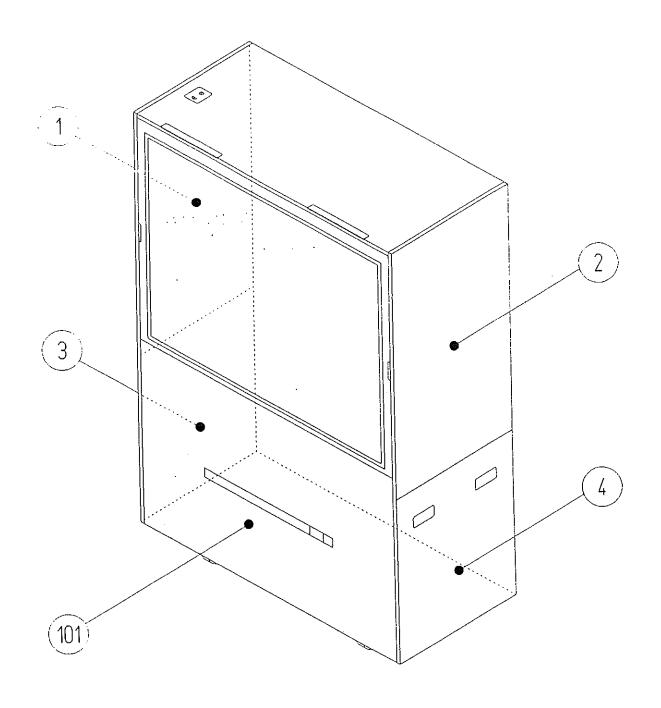
8 ASSY PTV (HOD1-1100)





ITEM NO.	PART NO.	DESCRIPTION
1	HOD-1150	- ASSY MASK
2	HOD1-1200	ASSY BILLBOARD
3	HOD-1101	PTV HOLDER
4	HOD-1110	PTV W/STICKER HOD DX
201	000-Т00520-0В	M SCR TH BLK M5X20
202	000-F00414	M SCR FH M4X14
203	000-T00525-0B	M SCR TH BLK M5X25
204	000-P00516-W	M SCR PH W/FS M5X16
205	068-5526016	FLT WSHR BLK 5.5-20X1.6

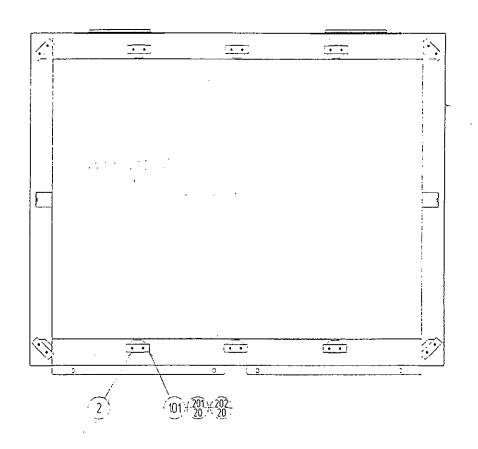
9 PTV W/STICKER HOD DX (HOD-1110)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4	421-10003 421-10004 421-10005 421-10006	STICKER PTV SIDE UP L HOD STICKER PTV SIDE UP R HOD STICKER PTV SIDE LOW L HOD STICKER PTV SIDE LOW R HOD	
101	200-5788-31 200-5789-31	PROJECTION DSPL T 50TYPE 31K PROJECTION DSPL M 50TYPE 31K	

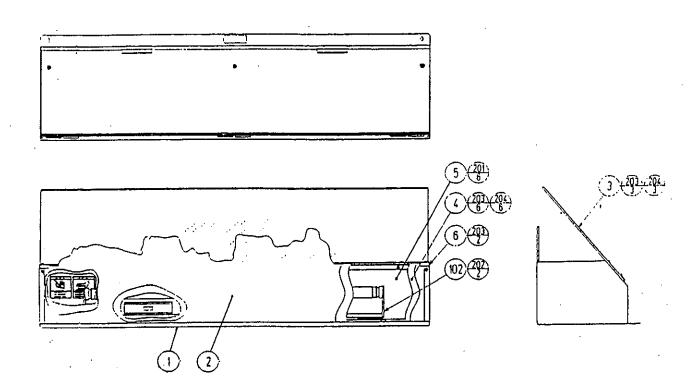
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10 ASSY MASK (HOD-1150)



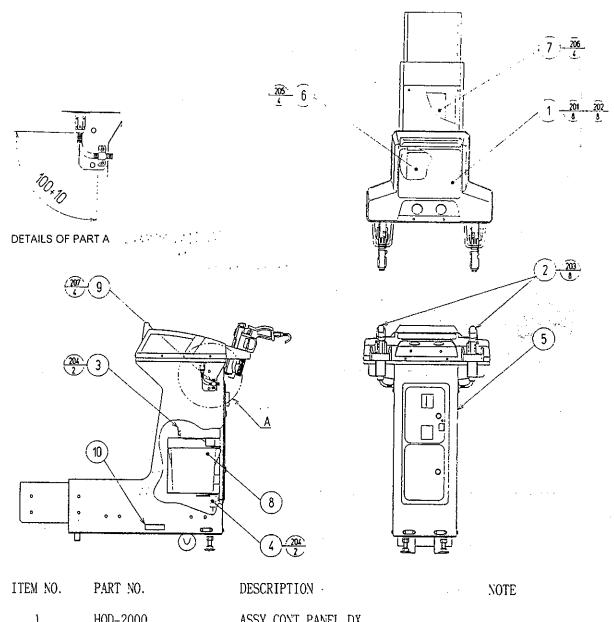
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HOD-1151	MASK BASE	
2	JPT-1082	IR COVER	
101	838-13145-02	LED BD GUN SENSE HOD	
102	280-5275-SR10	CORD CLAMP SR10	
103	280-5008	CORD CLAMP 15	
201 202 203 204 205	050-U00300 068-330808-PN 050-H00400 060-F00400 060-S00400	U NUT M3 FLT WSHR PLASTIC 3.3-8 × 0.8 HEX NUT M4 FLT WSHR M4 SPR WSHR M4	
301	HOD-50011	WIRE HARN MASKO1	
303	HOD-50013	WIRE HARN MASKO3	
304	HOD-50014	WIRE HARN MASKO4	
305	HOD-60035	WIRE HARN E MASKO1	

11 ASSY BILLBOARD (HOD1-1200)

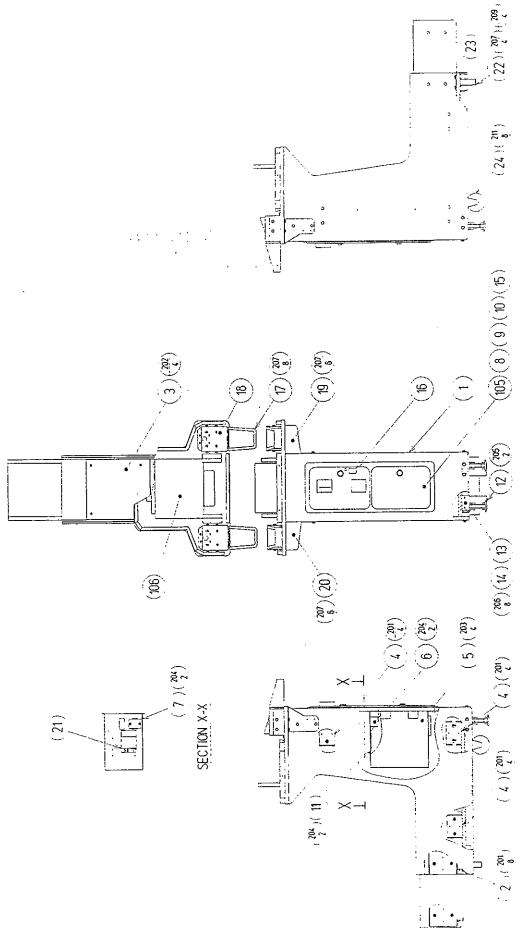


ITEM NO.	PART NO.	DESCRIPTION
1	HOD-1201	BILLBOARD BOX
$\overline{2}$	HOD-1202	BILLBOARD PLATE F
3	HOD-1203	BILLBOARD PLATE R
4	HOD-1204	LIGHT COVER
5	HOD-1205	REFLECTOR
6	HOD-1206	HOLDER BRKT
102	LOCAL PURCHASE	ASSY FL 20W EX W/CONN HIGH
201	000-T00408-0C	M SCR TH CRM M4X8
202	000-P00416-W	M SCR PH W/FS M4X16
203	000-T00412-0B	M SCR TH BLK M4X12
204	068-441616-0B	FLT WSHR BLK 4.4-16X1.6

12) ASSY GUN HOLDER CABI (HOD-1300)



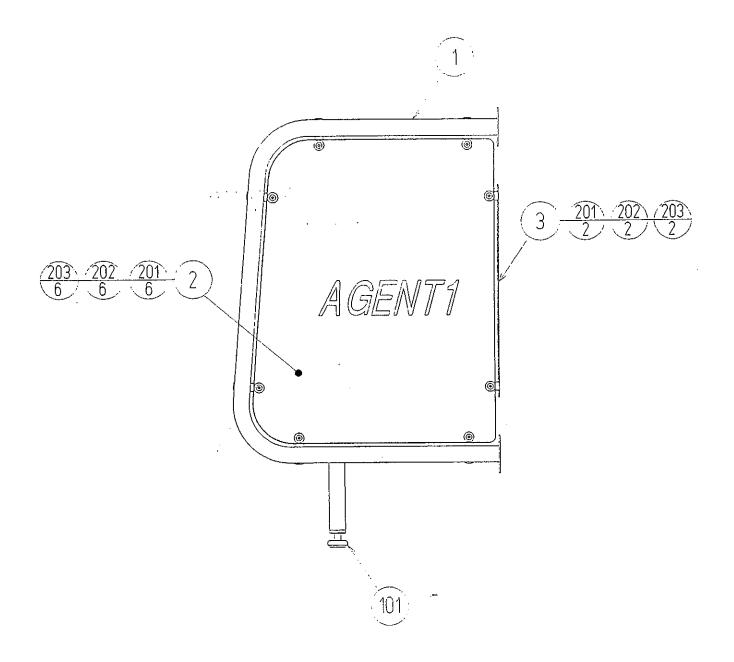
ITEM NO.	PART NO.	DESCRIPTION -	NOTE
1	HOD-2000	ASSY CONT PANEL DX	
2 3	HOD-2100	CONTROL UNIT DX	
	HOD-1030	SW UNIT	
4	HOD-1590	METER UNIT	OTHERS
	HOD-1590-01	METER UNIT TWIN	USA
5	HOD-1301	ASSY SUB-CABI GUN HOLDER	
6	838-13143-03	IC BD GUN SENCE HOD	
6 7	837-13551	I/O CONTROL BD FOR JVS	
8	253-5366	CASH BOX	
ą	CPT-1017	CABLE CLAMP	
101	271-5117	FERRITE CORE TDK ZCAT 3035-1330	
201	000-T00416-0B	M SCR TH BLK M4 × 16	
202	068-441616-0B	FLT WSHR BLK 4.4-16 × 1.6	
203	000-T00430-0C	M SCR TH CRM M4 \times 30	
204	000-P00410-W	M SCR PH W FS M4 $ imes$ 10	
206	011-P00325	TAP SCR PH 3 × 25	
207	000-T00416-0C	M SCR TH CRM M4 $ imes$ 16	



(13) ASSY SUB-CABI GUN HOLDER (HOD-1301)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4 5 6	HOD-1302 HOD-1303 HOD-1304 HOD-1306 105-5106 105-5107 105-5188	GUN HOLDER CABI JOINT NUT PLATE JOINT PART LID NUT PLATE FOR PIPE CASH BOX COVER CHUTE HOLE COVER	OTHERS
8 9 10 11 12 13 14 15 17 18 19 20 21 22 23 24	ARC-1006 ·	NOT USED TNG LKG CAM LOCK MASTER W/O KEY CAM LOCK W/KEYS LOCK BRACKET S LEG ADJUSTER BOLT M16 × 75 LEG BRACKET PLATE LEG BRACKET BLACK STICKER 6. 3V O. 15A HOLDER HOLDER BRKT SIDE BRKT L SIDE BRKT R STICKER W POWER OFF ENG UNDER BRKT UNDER PLATE CASTER 75	USA
101 102 103 104 105	280-5009-01 601-0460 280-5275-SR10 310-5029-F20 220-5482-91- ~ 220-5237-92- ~ 601-10391-01 270-5052-04	CORD CLAMP 21 PLASTIC TIE BELT 100 MM CORD CLAMP SR10 SUMI TUBE F F 20MM ASSY C.C 2DR ~ ASSY C.C 2DR ~ SLIONTEC AL TAPE 8060 200 × 240 L FILTER D	
201 202 203 204 205 206 207 208 209 210 211	011-P00310 000-T00430-0B 000-P00406-W 000-P00410-W 050-H01600 030-000640-SB 030-000630-SB 011-F00310 060-F00600 000-P00408-W 030-000830-SB	TAP SCR PH 3 × 10 M SCR TH BLK M4 × 30 M SCR PH W/FS M4 × 6 M SCR PH W/FS M4 × 10 HEX NUT M16 HEX BLT W/S BLK M6 × 40 HEX BLT BLK W/S M6 × 30 TAP SCR FH 3 × 10 FLT WSHR M6 M SCR PH W/FS M4 × 8 HEX BLT W/S BLK M8 × 30	
301 303 304 307 308 309 310 311 314	HOD-60015 HOD-60017 HOD-60018 HOD-60029 HOD-60030 HOD-60031 600-6709-52 600-6709-54 600-6455-02 600-7134	WIRE HARN GUN HOLDERO1 WIRE HARN GUN HOLDERO3 WIRE HARN GUN HOLDERO4 WIRE HARN E GUN HOLDERO1 WIRE HARN E GUN HOLDERO2 WIRE HARN E GUN HOLDERO3 WIRE HARN EARTH 400MM WIRE HARN EARTH 150MM WIRE HARN C. C POOR SINGLE WIRE HARN COIN CHUTE 2	OTHERS USA

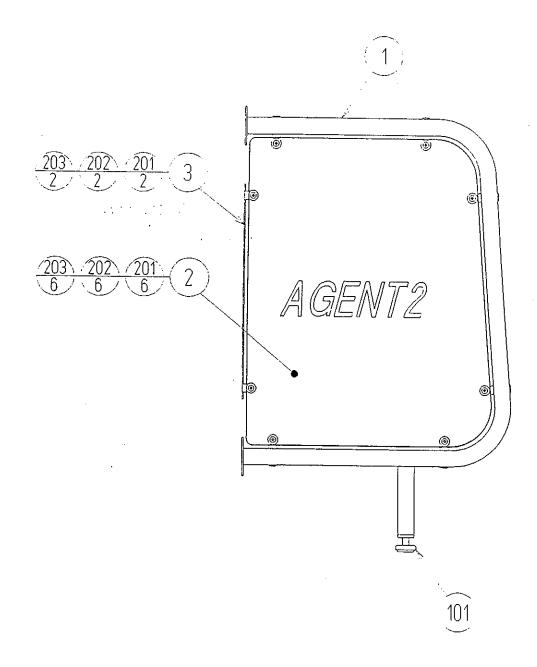
14) ASSY FENCE L (HOD-1350)



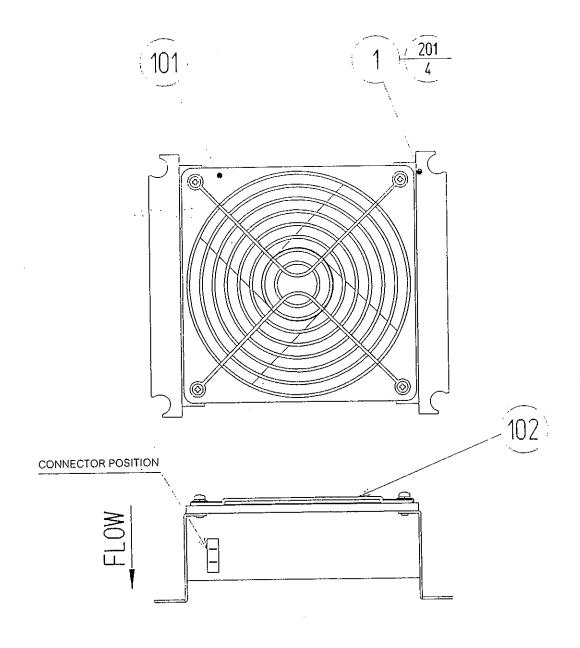
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	HOD-1351	PIPE L	
2	HOD-1352	GUARD PLATE L	
3	HOD-0004	PLATE HOLDER	
101	601-6076	LEG ADJUSTER 32-MAP-32	
201	000-T00412-0B	M SCR TH BLK M4 × 12	
202	058-441616-0B	FLT WSHR BLK 4, 4-16 × 1, 6	
203	050-C00400-3B	CAP NUT TYPE3 BLK M4	

Α.

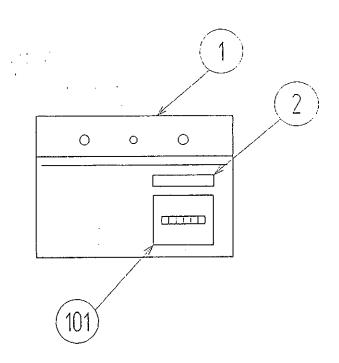
(15) ASSY FENCE R (HOD-1360)



ITEM NO.	PART NO.	DESCRIPTION .	NOTE.
1	HOD-1361	PIPE R	
2	HOD-1362	GUARD PLATE R	
3	HOD-0004	PLATE HOLDER	
101	601-6076	LEG ADJUSTER 32 MAP-32:	
201	900-700412-06	M SCR TH BLK M4 \times 12	
202	068-441616-0B	FLT WSHR BLK 4.4~16 \times 1.6	
203	050-000400-38	CAP NUT TYPE3 BLK M4	

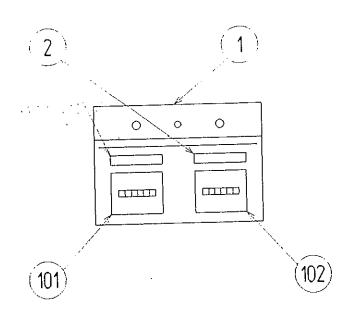


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5340-01	FAN BRKT LONG	
101 102 103	260-0011-02 601-8543 280-5275-SR10	AXIAL FLOW FAN AC100V 50-60HZ FAN GUARD CORD CLAMP SR10	
201	000-P00312-W	M SCR PH W/FS M3 \times 12	



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2	H0D-1591 421-6591-01	METER BRKT STICKER COIN METER	
101	220-5617-01 220-5643-01	MAG CNTR DC5V W CONN 6P WH MAG CNTR DC5V 6P WH MZ-674-D04	

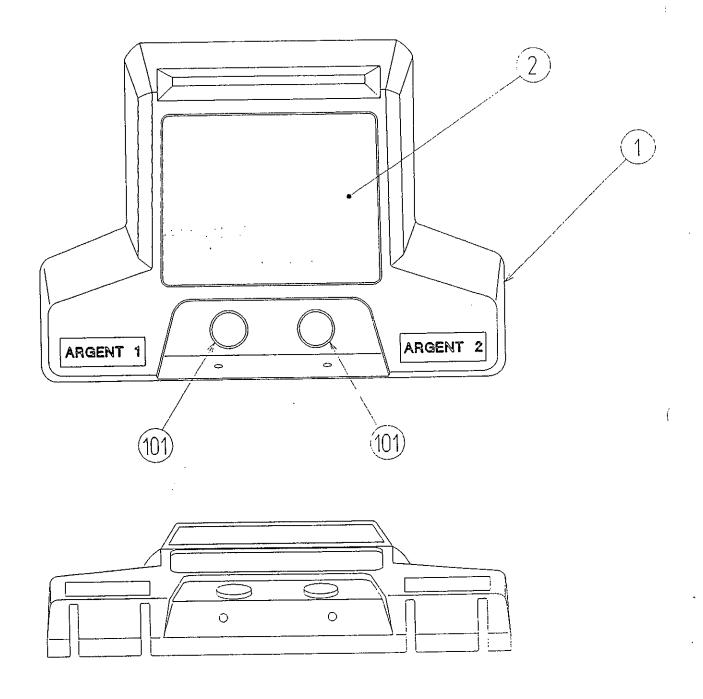
17 METER UNIT TWIN (HOD-1590-01)



ITEM NO.	PART NO.	DESCRIPTION	701 F
1 2	EOD-1592 421-6591-01	METER BRKT TWIN STICKER COIN METER	
101 102	220-5643-01 220-5643-02	MAG CNTR DC5V 6P WH MZ-674-D04 MAG CNTR DC5V 6P YE MZ-674-D05	

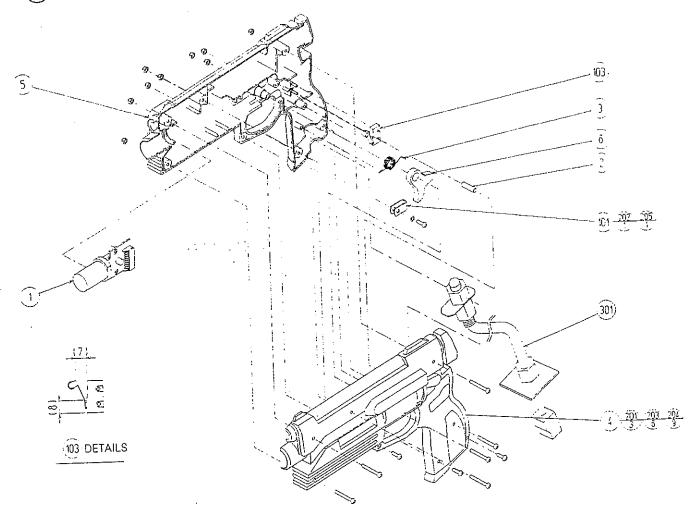
 $\sim r$

18) ASSY CONT PANEL DX (HOD-2000)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2	HOD-2001 HOD-2002-01	CONT PNL INST PLATE HOD DX ENG	
101 102	509-5712-01 280-5009-01	SW PB W/L 6V YELLOW CORD CLAMP 21	
301	H0D-60020 440-CS0110-EG	WIRE HARN CONTROL PANEL STICKER C ZMB DX ENG	

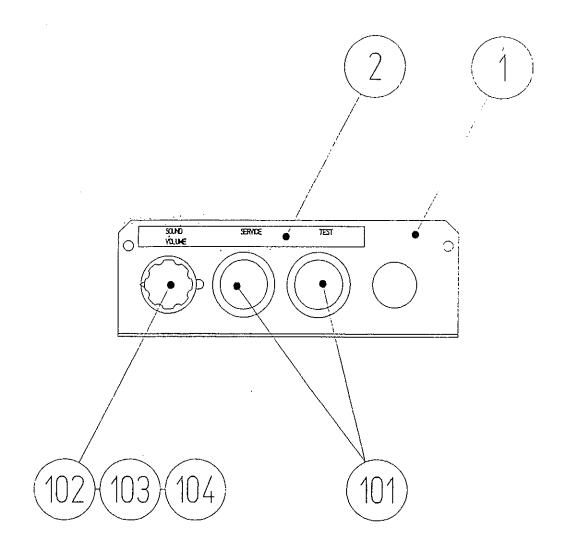
19 CONTROL UNIT DX (HOD-2100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3 4 5 6	JPT-2030 C0P-2005 125-5124 253-5404-02 253-5405-02 253-5406-02	SENSOR UNIT STOPPER PIN TORSION SPRING COVER LEFT RED COVER RIGHT RED TRIGGER RED	
101 102 103 104	280-5124-03 310-5029-D20 509-5080 601-0460	NYLON CLAMP NKO3 SUMITUBE F D 20 MM SW MICRO TYPE PLASTIC TIE BELT 100 MM	
201 202 203 204 205	000-P00308-0B 012-P00308 FAS-000015 FAS-500006 060-F00300	M SCR PH BLK M3 × 8 TAP SCR ≠2 PH 3 × 8 M SCR PH BLK M3 × 25 CAP NUT TYPE 3 BLK M3 FLT WSHR M3	
301	H0D-60021 H0D-60036	WIRE HARN GUN UNIT WIRE HARN CTRL UNIT W/O TUBE	OTHERS USA

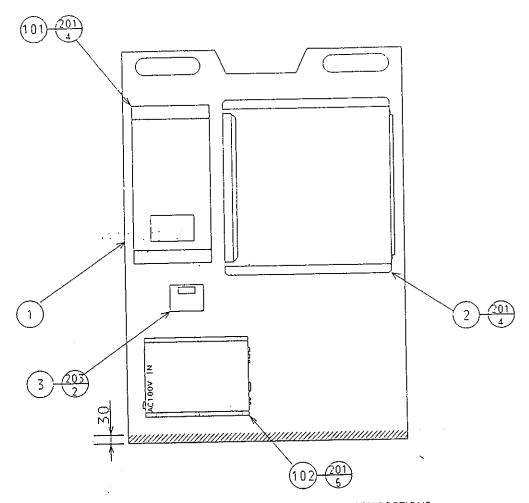
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20 SW UNIT (HOD-1030)



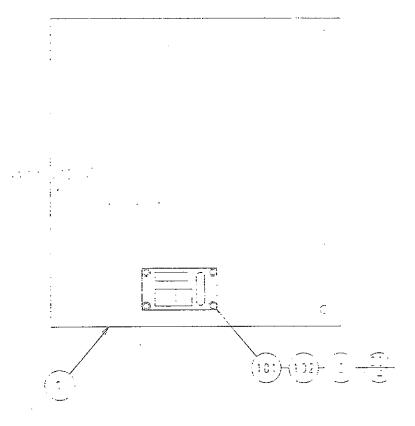
ITEM NO.	PART NO.	DESCRIPTION'	NOTE
1 2	KR-1060 421-8126	SW BRACKET STICKER SWITCH PANEL	
101 102 103 104 105	509-5028 220-5179 601-0042 310-5029-F20 601-0460	SW PB 1M VOL CONT B-5K OHM KNOB 22MM SUMITUBE F F20MM PLASTIC TIE BELT 100MM	¢1
301	600-6568-53	WIRE HARN SW UNIT	

21) ASSY MAIN BD (HOD-4000)



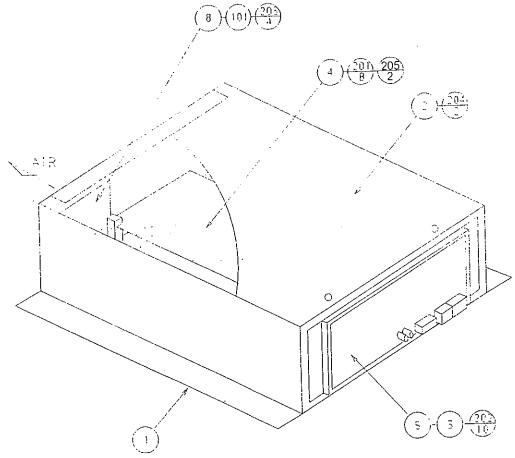
NOTE: MAKE SURE THAT THERE IS WIRING, ETC. IN THE SLASH MARK PORTIONS.

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3	HOD-4001 HOD-4200-01 HOD-4200-02 HOD-4200-03 HOD-4200-04 839-0979	WOODEN BASE ASSY SHIELD CASE USA ASSY SHIELD CASE EXP ASSY SHIELD CASE KOR ASSY SHIELD CASE AUS CONDENSER BD	USA OTHERS KOREA AUSTRALIA
101 102 103 104	400-5330-03 601-10369 280-5009-01 601-0460	SW REGU FOR MODEL3 STEREO PWR AMP 47 CORD CLAMP 21 PLASTIC TIE BELT 100 MM	
201 202 203	000-P00416-W 011-F00310 011-P00325	M SCR PH W/FS M4 \times 16 TAP SCR PH 3 \times 10 TAP SCR PH 3 \times 25	
301 302 303 304	HOD-60005 HOD-60006 HOD-60007 HOD-60008	WIRE HARN MAIN BD01 WIRE HARN MAIN BD02 WIRE HARN MAIN BD03 WIRE HARN MAIN BD04	



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2	HOD-4101 421-6595-11	WOODEN BASE STICKER 7A	
101	838-11856-01-UL	CONNECT BD W/FUSE & COVER UL	
102 103 104	514-5036-7000 280-5009-01 601-0460	FUSE $6.4 \times 30\ 7000 MA\ 125 V$ CORD CLAMP 21 PLASTIC TIE BELT 100 MM	
201 202	011-P00325 011-F00310	TAP SCR PH 3×25 TAP SCR FH 3×10	
301	HOD-60001 000-P00616-W HOD-60038 HOD-60039 560-5384 560-5377	WIRE HARN PWR SPLY01 M SCR PH W FS M6 × 16 WIRE HARN XFMR IN WIRE HARN XFMR OUT XFMR 100-120V 100V 10A WB PWR XFMR 200-240V 106V 10A CE	AC110V ~ 120V AREA AC220V ~ 240V AREA

(23) ASSY SHIELD CASE \sim (HOD-4200-01 \sim 04)



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ITEM NO.	PART NO.	DESCRIPTION	NOTE
1 2 3	105~5345 105~5346	SHIELD CASE NAOMI SHIELD CASE LID NAOMI FILTER BD BRKT NAOMI	
3 4	105-5347 833-13635-01 833-13635-02 833-13635-03	GAME BD HOD USA GAME BD HOD EXP GAME BD HOD KOR GAME BD HOD AUS	USA OTHERS KOREA AUSTRALIA
õ	833-13635-04 839-1069 421-6510-136351 421-6510-136352 421-6510-136353	FLT BD NAOMI STICKER 833-13635-01 STICKER 833-13635-02 STICKER 833-13635-03	USA OTHERS KOREA AUSTRALIA
7 8 9 10	421-6510-136354 421-9174 105-5351 421-10023 501-10488	STICKER 833-13635-04 STICKER CAUTION ANTISTATIC FAN MOTOR BRKT NAOMI STICKER BD SERIAL NUMBER CARTON BOX NAOMI METAL	A(OINALIA
101 102	260-0064 280-5275-SR10	FAN MOTOR DC12V CORD CLAMP SR10	
201 202 203 204 205	010-P00310-F 010-P00306-F 050-F00400 000-P00408-W 010-P00365-F	S-TITE SCR PH W/F M3 × 10 S-TITE SCR PH W/F M3 × 6 FLG NUT M4 M/SCR PH W/FS M4 × 8 S-TITE SCR PH W/F M3 × 65	
301	H0D=60037	WIRE HARN FAN SHIELD CASE	

19. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

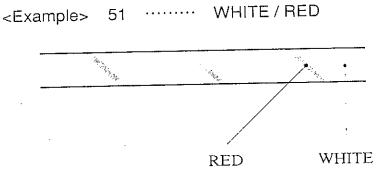
- A PINK
- B SKY BLUE
- C BROWN
- D PURPLE
- E LIGHT GREEN

Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

- 1 RED
- 2 BLUE
- 3 YELLOW
- 4 GREEN
- 5 WHITE
- 7 ORANGE
- 8 BLACK
- 9 GRAY

If the right-hand side numeral of the code is 0, then the wire will be of a single color shown by the left-hand side numeral (see the above).

Note 1: If the right-hand side alphanumeric is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

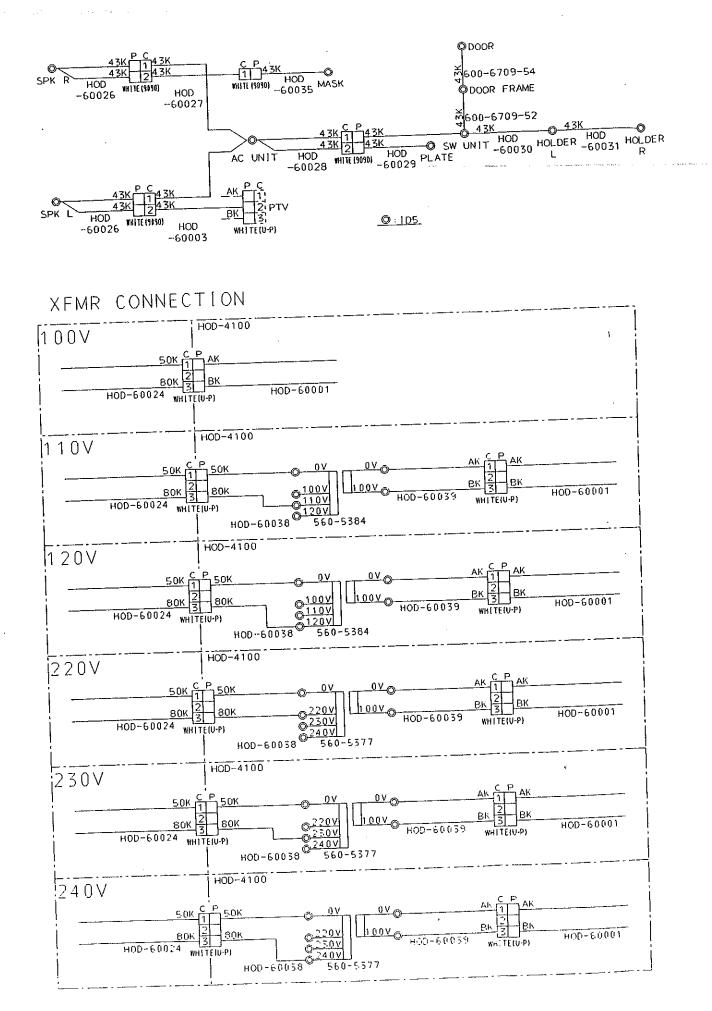


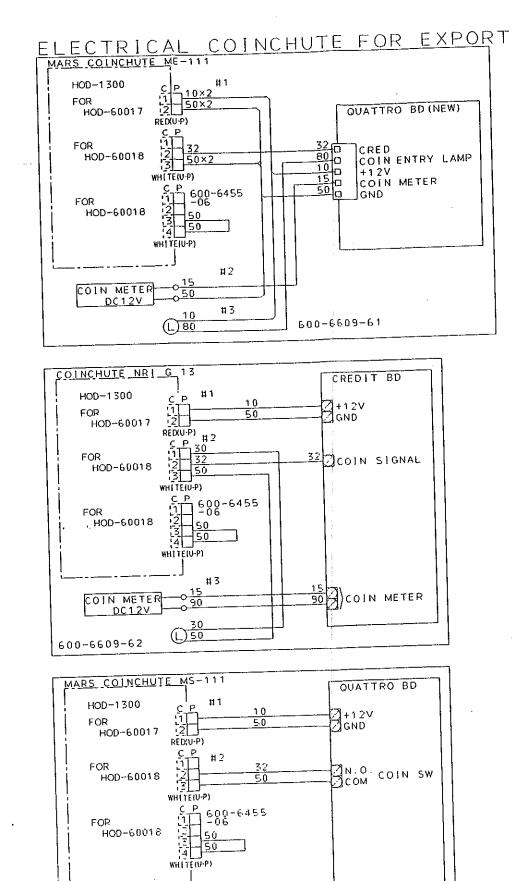
Note 2: The character following the wire color code indicates the size of the wire.

K: AWG18, UL1015

L: AWG20, UL1007

None: AWG22, UL1007



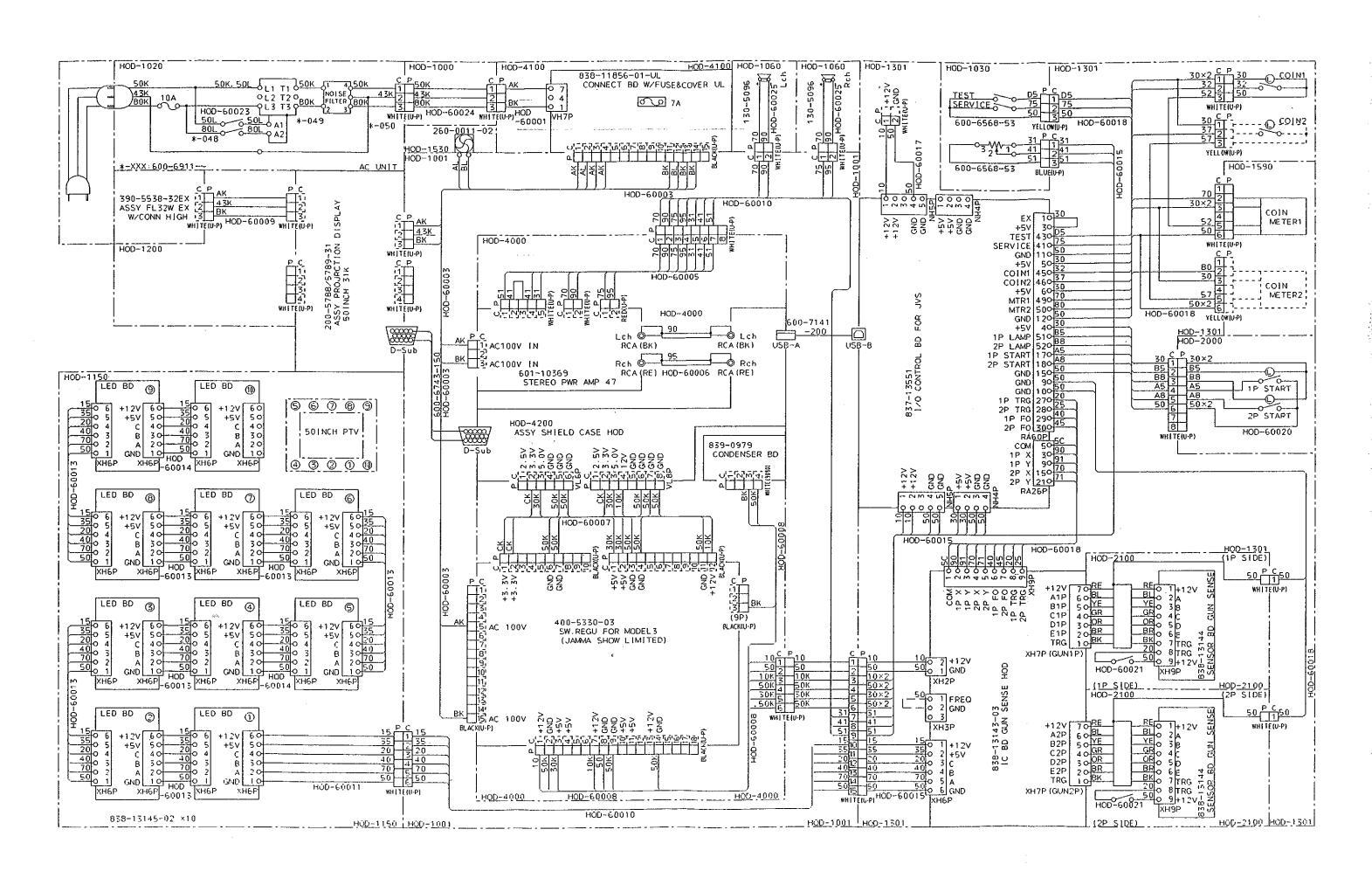


COIN METER

600-6609-66

20. WIRING DIAGRAM (D-2/2)

50 ENTRY LAMP



20. WIRING DIAGRAM (D-1/2)