SEGA™

SEGA Bass Fishing™

OWNER'S MANUAL

SEGA ENTERPRISES, USA

Warranty

Your new Sega Product is covered for a period of 90 days from the date of shipment. This certifies that the Printed Circuit Boards, Power Supplies and Monitor are to be free of defects in workmanship or materials under normal operating conditions. This also certifies that all Interactive Control Assemblies are to be free from defects in workmanship and materials under normal operating conditions. No other product in this machine is hereby covered.

Sellers sole liability in the event a warranted part described above fails shall be, at its option, to replace or repair the defective part during the warranty period. For Warranty claims, contact your Sega Distributor.

Should the Seller determine, by inspection that the product was caused by Accident, Misuse, Neglect, Alteration, Improper Repair, Installation or Testing, the warranty offered will be null and void.

Under no circumstances is the Seller responsible for any loss of profits, loss of use, or other damages.

This shall be the exclusive written Warranty of the original purchaser expressed in lieu of all other warranties expressed or implied. Under no circumstance shall it extend beyond the period of time listed above.

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│                       SPECIFICATIONS                        │
│                                                             │
│   Installation space:              110 in.(L) x 68 in.(W)   │
│                                                             │
│   Height:                          92 in.                   │
│                                                             │
│   Weight:                          Approx. 831 lbs.         │
│                                                             │
│   Power maximum current:           7 Amp AC 120V 60 Hz      │
│                                                             │
│                                                             │
│   MONITOR:                         50 INCH PROJECTION DISPLAY│
│                                                             │
└─────────────────────────────────────────────────────────────┘
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INTRODUCTION OF THE OWNERS MANUAL

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

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

SEGA ENTERPRISES, INC. (USA)
Customer Service
45133 Industrial Drive
Fremont, CA 94538
Phone 650-802-1750
Fax   650-802-1754
7:30 am - 4:00 pm, Pacific Standard Time
Monday thru Friday

General Precautions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Places subject to rain/water leakage, or condensation due to humidity;
- In close proximity to a potential wet area;
- Locations receiving direct sunlight;
- Places close to heating units or hot air;
- In the vicinity of highly inflammable/volatile chemicals or hazardous matter;
- On sloped surfaces;
- In the vicinity of emergency response facilities such as fire exits and fire extinguishers;
- Places subject to any type of violent impact;
- Dusty places.

INSTALLATION PRECAUTIONS

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

REGULATORY APPROVALS

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

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

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

LISTED

UL

5K92

AMUSEMENT MACHINE
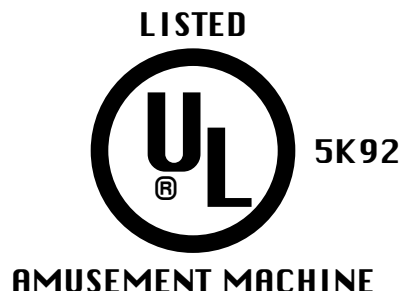
1 . PRECAUTIONS TO BE HEEDED FOR OPERATION

In order to prevent accidents, be sure to comply with the following points before and during operation.

PRECAUTIONS TO BE HEEDED FOR OPERATION BEFORE STARTING THE OPERATION

⚠️ WARNING!

● In order to avoid accidents, check the following before starting the operation:
Check if all of the adjusters are in contact with the surface. If they are not, the cabinet can move and cause an accident.

Ensure that all of the Adjusters are in contact with the floor.
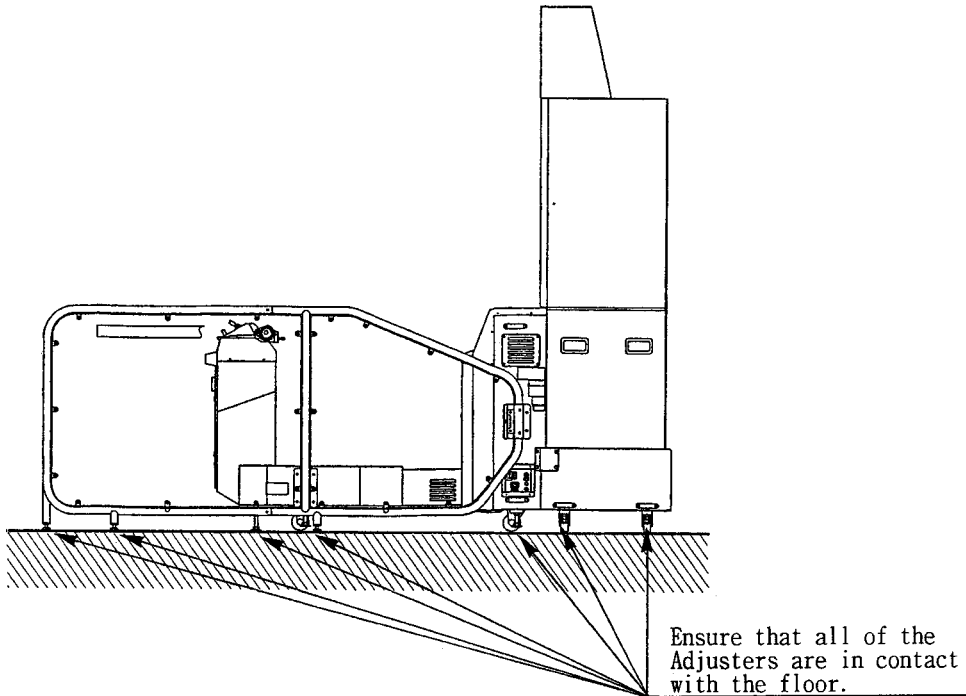
● Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step.
● To avoid electric shock, check to see if door & cover parts are 508.5

● 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, flower pots, cups, water tanks, cosmetics, and receptacles/containers/vessels containing chemicals and water.

⚠️ CAUTION!

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 others and result in injury or trouble.

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⚠ CAUTION!

To avoid injury and accidents, those who fall under the following catagories are not allowed to play the game:
* Intoxidated persons
* Pregnant women or those in the likelyhood od pregnancy.
* Those who need assistasnce such as the use of an apparatus when walking.
* Those who have high blood pressure or heart problems.
* Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
* Persons susceptible to motion sickness.
* Persons whose acts runs counter to the products warning displays.

* Instruct those who wear high-heeled shoes to refrain from playing the game by explaining that playing the game with high-heeled showes is very dangerous and likely to cause a potentially hazardous situation.

⚠ CAUTION!

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

⚠ WARNING!

*Do not take hold of the line. Failure to observe this can cause injury.
*Lookers-on are not allowed to lean over the fence or put their hands inside. Failure to observe this can cause injury or trouble between customers.
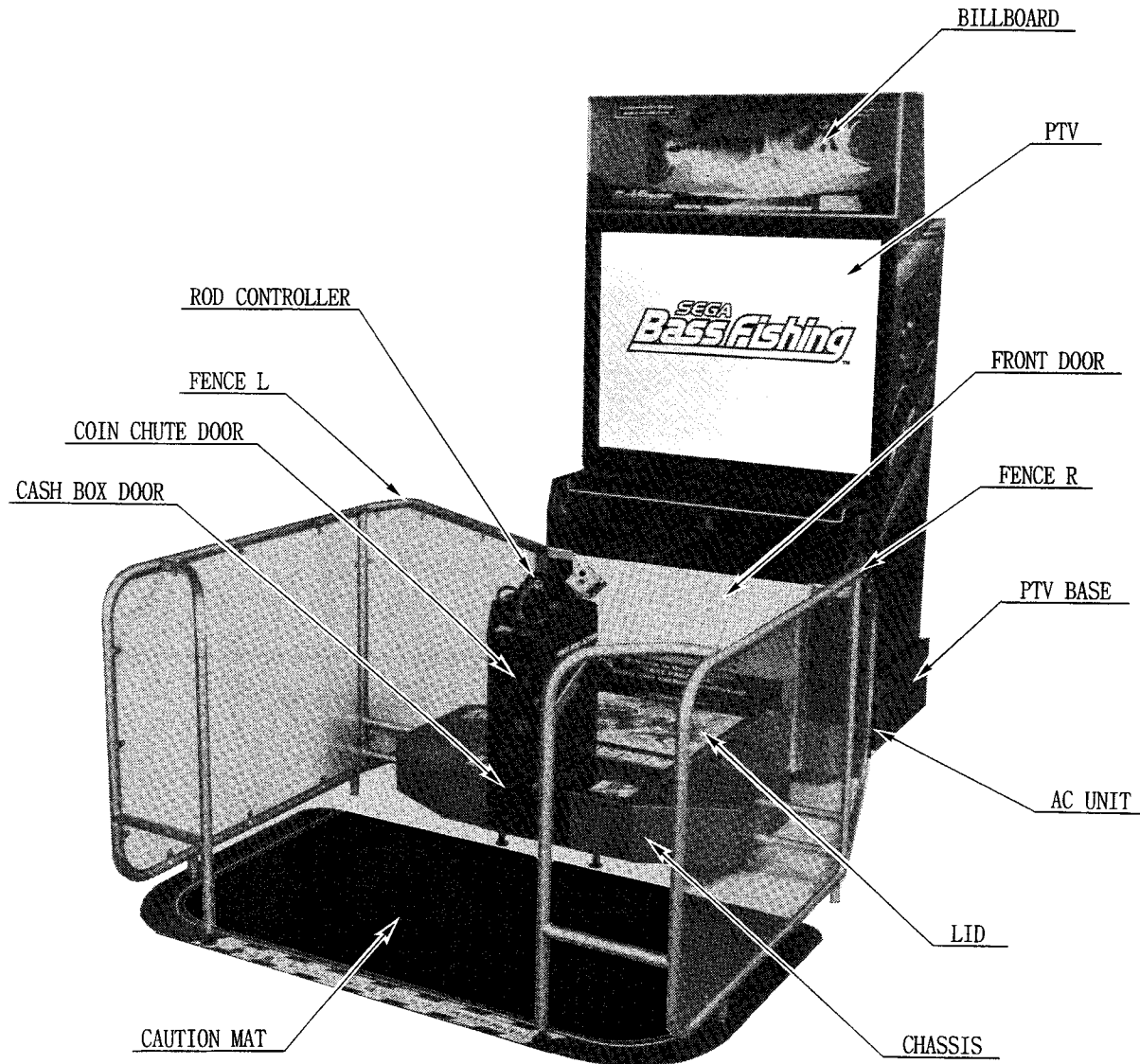*Use care so that lookers-on do not enter inside the CAUTION MAT area to avoid accidents.
*Caution the player not to have his or her face come close to the Controller or the rod when playing. Failure to observe this by the player can cause in case of contigencies such as line or rod breakage.
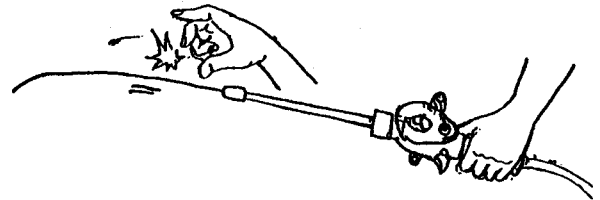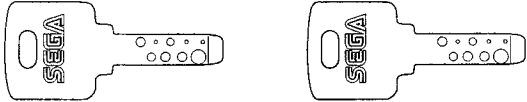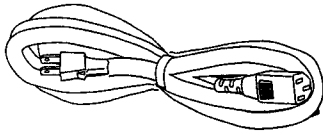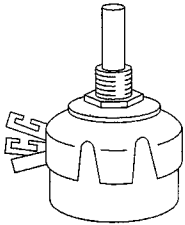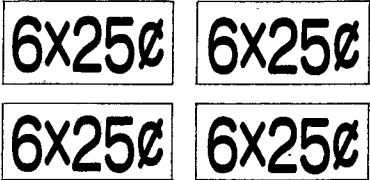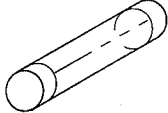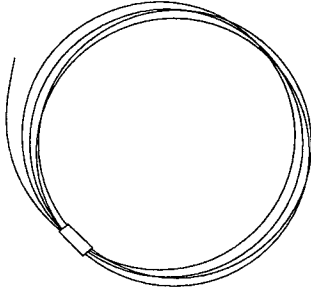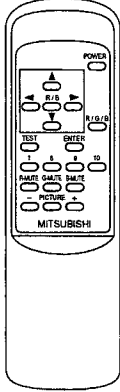
Immediatly stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage ar falling down, resulting in injury due to fragments and falling down.

2 . NAME OF PARTS

BILLBOARD

PTV

ROD CONTROLLER

FENCE L

COIN CHUTE DOOR

CASH BOX DOOR

FRONT DOOR

FENCE R

PTV BASE

AC UNIT

LID

CAUTION MAT

CHASSIS

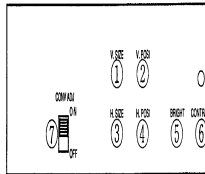| GAME SPECIFICATIONS	WIDTH		LENGTH		HEIGHT	WEIGHT
FENCE	14.5"	X	85"	X	39"	53 LBS.
BILLBOARD	46"	X	12.5"	X	16"	42 LBS.
CHASSIS	46"	X	53"	X	11.25"	380 LBS.
PTV	46"	X	22"	X	67"	243 LBS.
PTV BASE	47"	X	23"	X	14.5"	62 LBS.
WHEN ASSEMBLED	68"	X	110"	X	92"	833 LBS.

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3 . ACCESSORIES

DESCRIPTION   OWNERS MANUAL
Part No. (Qty.)   4200-6355-01 (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   KEY
220-5576 (2)   (2)

For opening/closing   For the CASHBOX DOOR
the doors

Power Cord

Already installed on the game cabinet

600-6695
600-6695-01 (1) : for USA

VOL CONT B-5K OHM
220-5573
220-5484 (1)

FUSE
Local Purchase

STICKER DENOMI
421-9710-12 (1) for USA

6X25¢ **6X25¢**

6X25¢ **6X25¢**

MITSUBISHI
Remote Control for
Projector
Used for adjustment.

200-5532(1)

LINE
BBS-0001 (2)

Please note:
There may be another
monitor type supplied
with your game.
Toshiba or Hitachi
See Projector section
For Proper Remote and
Adjustment instructions.

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

LOST WORLD, VIRTUA FIGHTER 3, SUPER GT, **SEGA BASS FISHING**, STRIKER 2

!!NEVER SHIP MODEL 3 GAME BOARDS OUTSIDE OF CAGE!!

① V. SIZE   ② H. SIZE   ③ V. POSI
④ H. POSI   ⑤ BRIGHT   ⑥ CONTRAST
⑦ CONV ADJ   If this is not ON, remote control operation is not accepted.

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

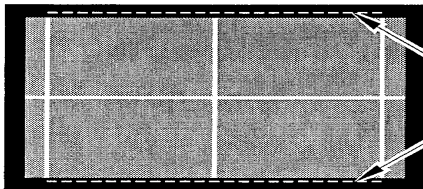**DO NOT SHIP GAME BOARD WITHOUT THIS BOX AS IT MAY DAMAGE THE GAME BOARD AND VOID YOUR WARRANTY.**
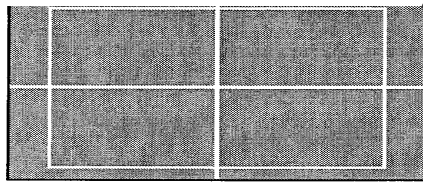
"CHECK SIDE" Display

Test Pattern

FILTER BOARD

Adjustment Mode

Due to the TV mask, the up/down lines of the Frame Line cannot be seen.

4 . ASSEMBLING AND INSTALLATION

⚠ **WARNING!**

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

When carrying out the assembly work, follow the procedure in the following 7-item sequence:

1	ASSY OF PTV
2	ASSY OF CHASSIS
3	ASSY OF FENCE
4	SECURING IN PLACE (ADJUSTER ADJUSTMENT)
5	POWER SUPPLY
6	TURNING POWER ON
7	ASSEMBLING CHECK

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

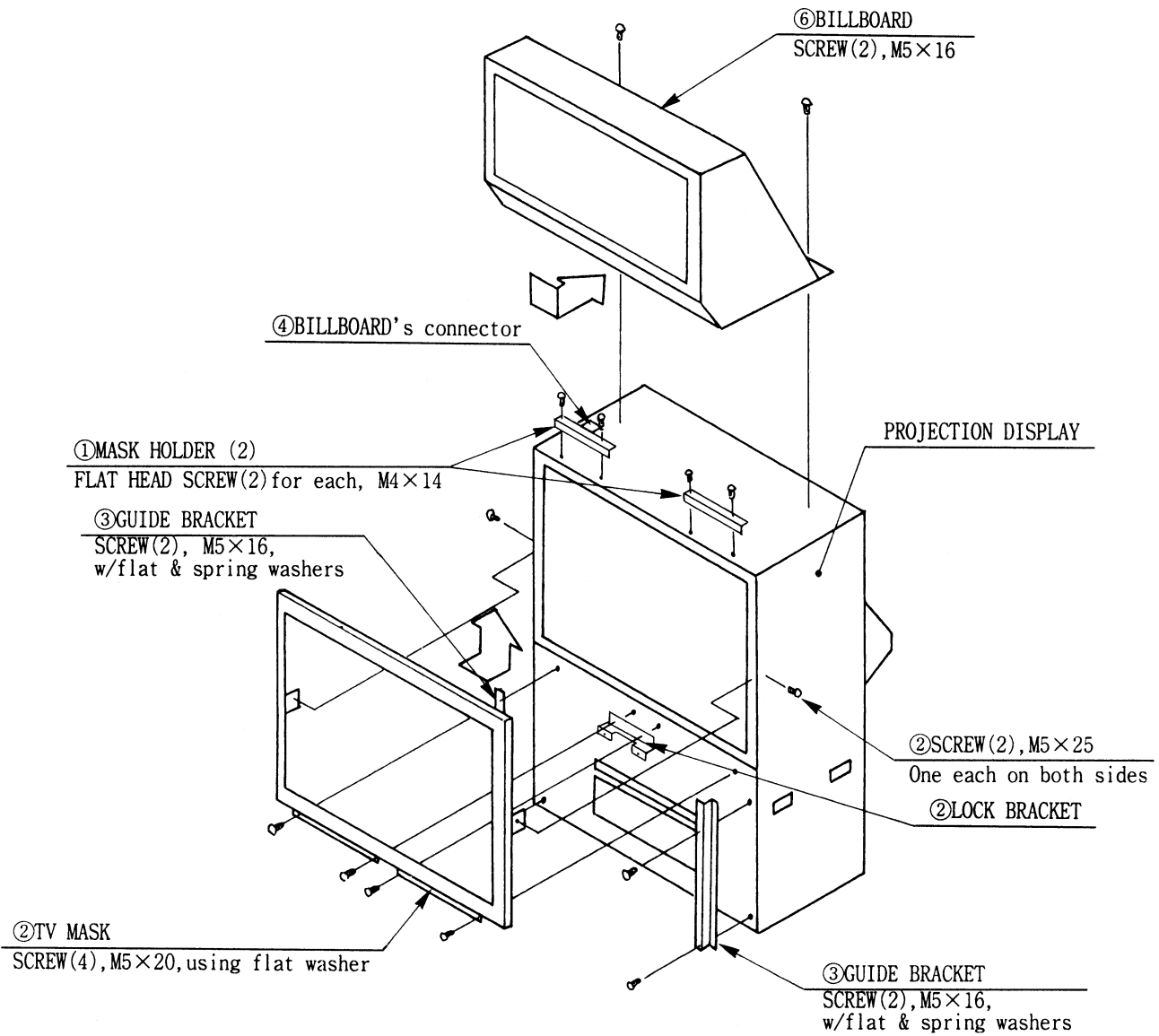| 1 | ASSY OF PTV |

⚠ **CAUTION!**

> When installing the billboard, it is difficult to carry out work by one person. To perform work properly and safely, be sure work is performed by at least two people.

⚠ **WARNING!**

> 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 a violent falling down accident.
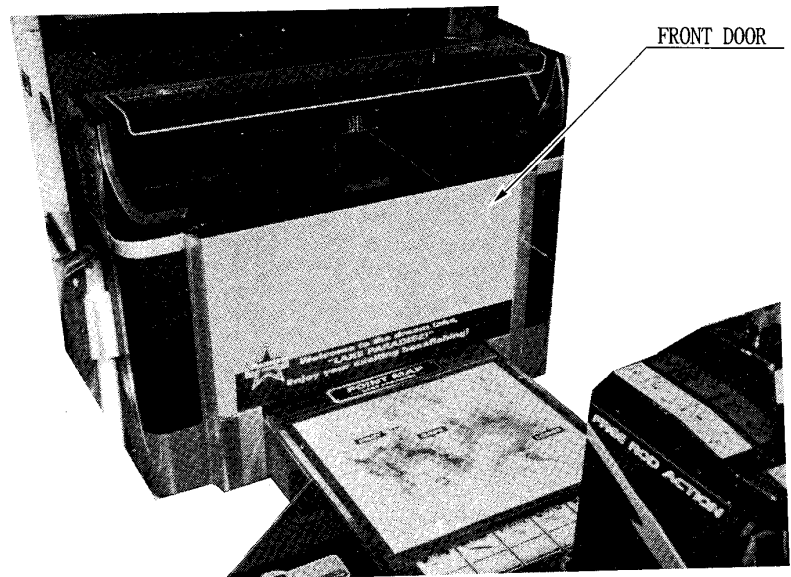
① By using the specified screws, secure the 2 Mask Holders to the Projection Display ceiling. (Fig. 4.1a)

② Insert the TV Mask from the underside as shown and secure with a total of 6 screws.

③ While supporting the Billboard by 2 persons, another person using a step is to insert the Billboard Connector into the Terminal Board of Projection Display ceiling. (Fig. 4.1b)

④ Insert the Billboard From the front as shown and secure with 2 screws (Fig. 4.1a)

⑥BILLBOARD
SCREW(2),M5×16

④BILLBOARD's connector

①MASK HOLDER (2)
FLAT HEAD SCREW(2)for each, M4×14

③GUIDE BRACKET
SCREW(2), M5×16,
w/flat & spring washers

PROJECTION DISPLAY

②SCREW(2),M5×25
One each on both sides
②LOCK BRACKET

②TV MASK
SCREW(4),M5×20,using flat washer
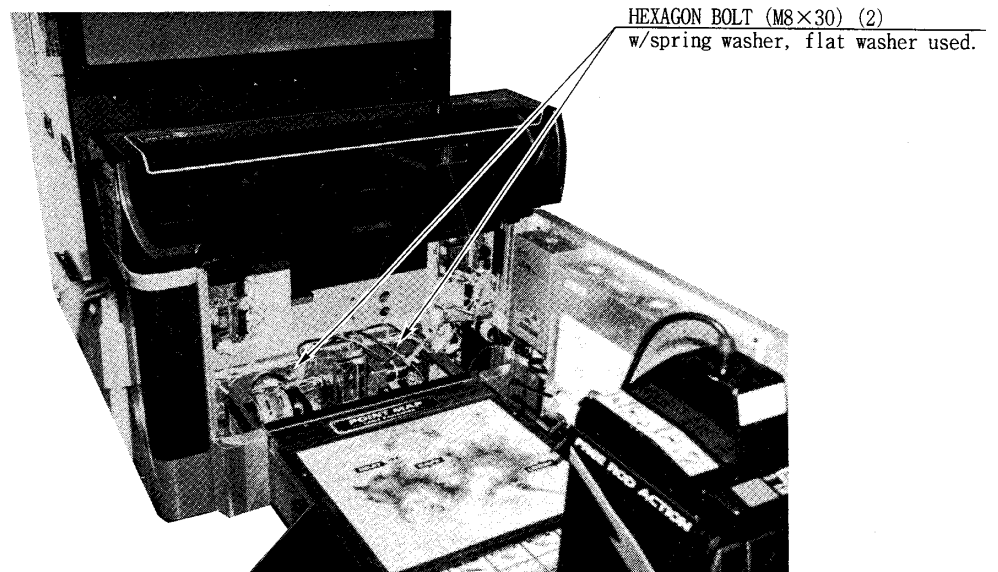
③GUIDE BRACKET
SCREW(2),M5×16,
w/flat & spring washers

⑤　Install Wire Lid by using care so that the wiring will not be caught.

⑥　Secure the Billboard and Wire Lid with 2 screws.

⑦　Draw the connector from the hole for the PTV wiring, ahead of time.

⑧　Mount the assembled PTV on the Base. After mounting, bring the PTV to the rear of the PTV Base. Be sure to perform this work by 4 or more persons.

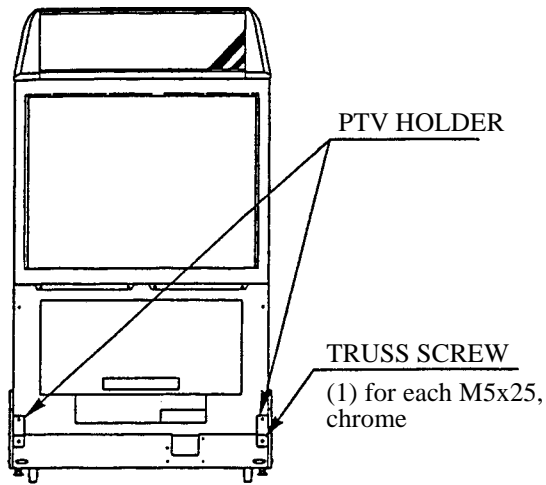## 2 ASSY OF CHASSIS

①　Insert the 3 connectors (2 connectors for USA) of Chassis to the corresponding 3 connectors of PTV.

②　By using care so as no to pinch the wiring, tightly join the Chassis and PTV.
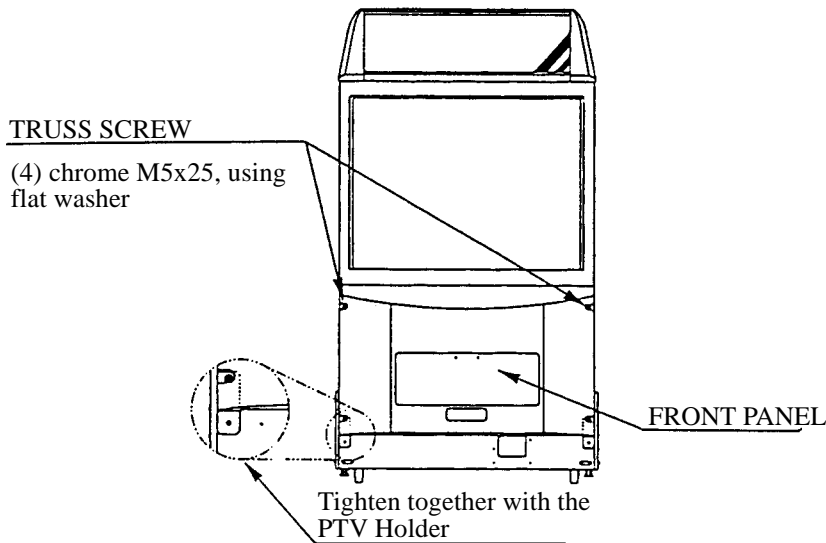
③　Open the Front Door with the Master Key.

FRONT DOOR

④　Secure with the 2 hexagon bolts by using care so as not to damage wiring.

HEXAGON BOLT (M8×30) (2)
w/spring washer, flat washer used.

PTV HOLDER

TRUSS SCREW
(1) for each M5x25,
chrome

⑤ Secure the 2 joint brackets witht he total of 8 hexagon bolts.

⑥ As shown in the WIRING DIAGRAM, execute connection between the PTV and the Chassis. Insert the wiring connectors each of which wire covering is red, green, and blue to the corresponding one of the R.G.B. terminals as per connector panel display inside PTV, and insert the remaining wire connector to the SYNC terminal.
The Connector's insertion angle is predetermined. Inserting the Connector in a forcible manner will damage the Connector. Check for the correct inserting direction and then insert the connector. After the insertion Connnetor. After the insertion of Connector, turn the Connector's Ring to the right to lock the connection.

TRUSS SCREW
(4) chrome M5x25, using flat washer

FRONT PANEL

Tighten together with the PTV Holder

⑦ The PTV Connector Panel has Connector 3p white in addition to the connectors dispalyed as R. G. B. and sync. Connect the wiring from the Chassis Power Supply Unit to the 3p white connector.

⑧ The wiring available is longer than necessary to allow for corresponding to the PTVs of the respective makers. After connection, secure the excessive wiring with clamp.
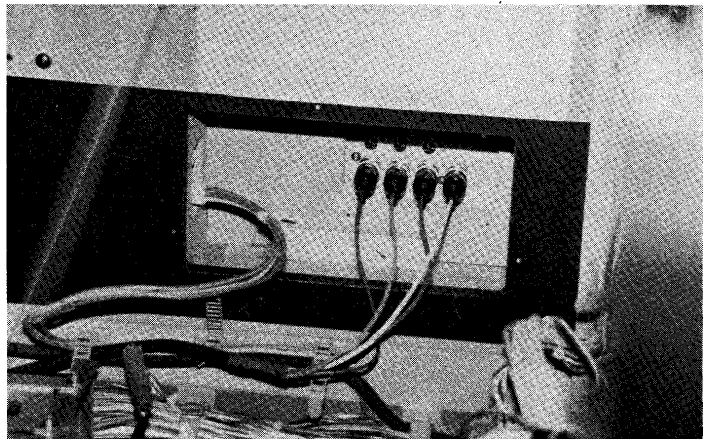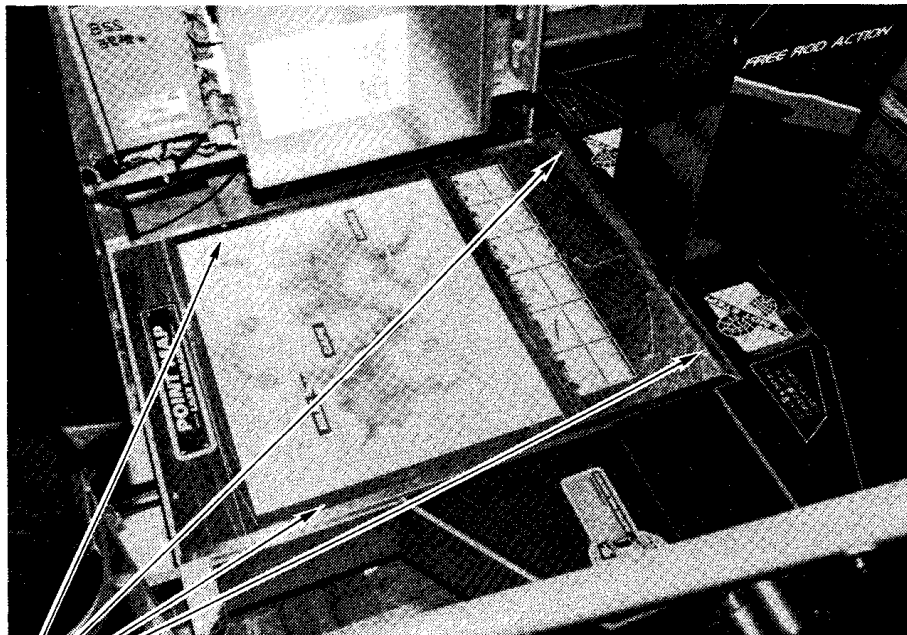
> playing game without securing the wiring can cause the line to get tangled with the wiring. Besure to secure the wiring with clamp.

(1) Take out the 4 screws and remove the lid.

SCREW (4)
M4×20

(2) Take out the 4 screws and remove the 2 Side Lids.

SIDE LID

SCREW (4) (both sides)
M4×12
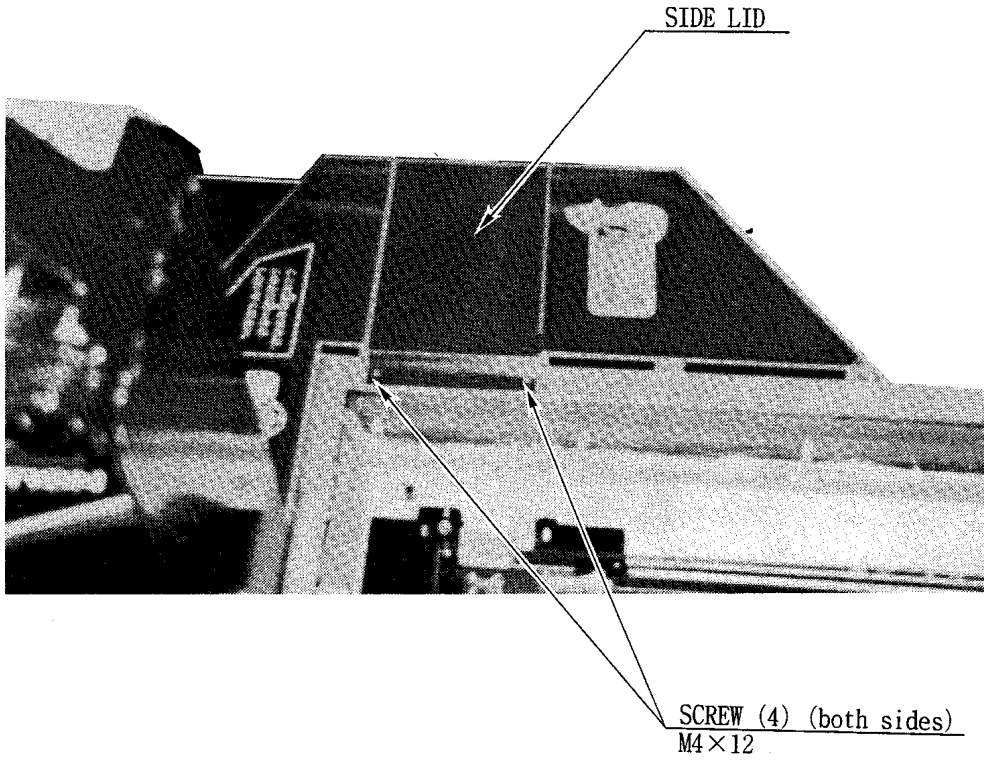
BEFORE REMOVAL
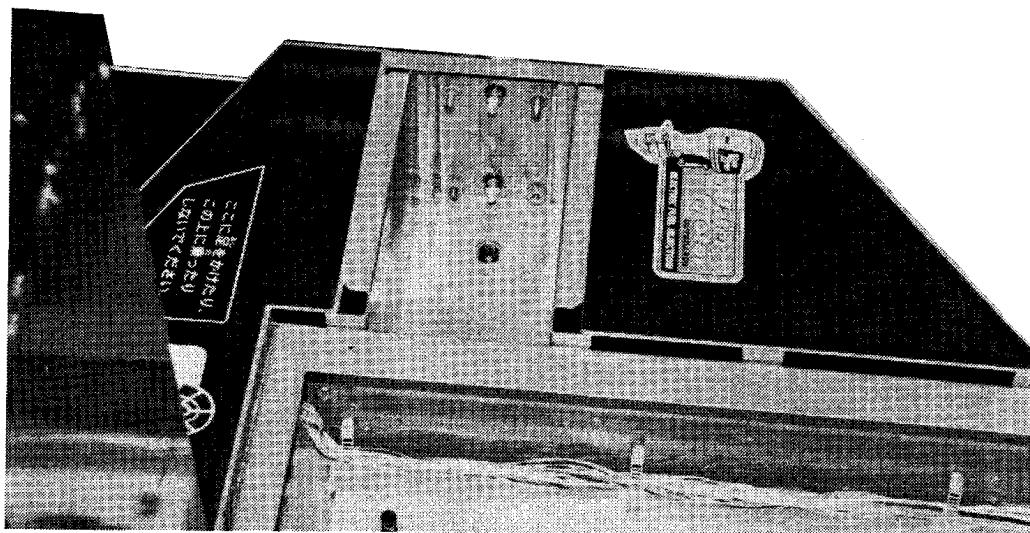
AFTER REMOVAL

③ As shown, insert the Fence onto the side of the Chassis and secure with the 2 hexagon nuts and 8 hexagon bolts from outside. Similarly install to the oppiste side.
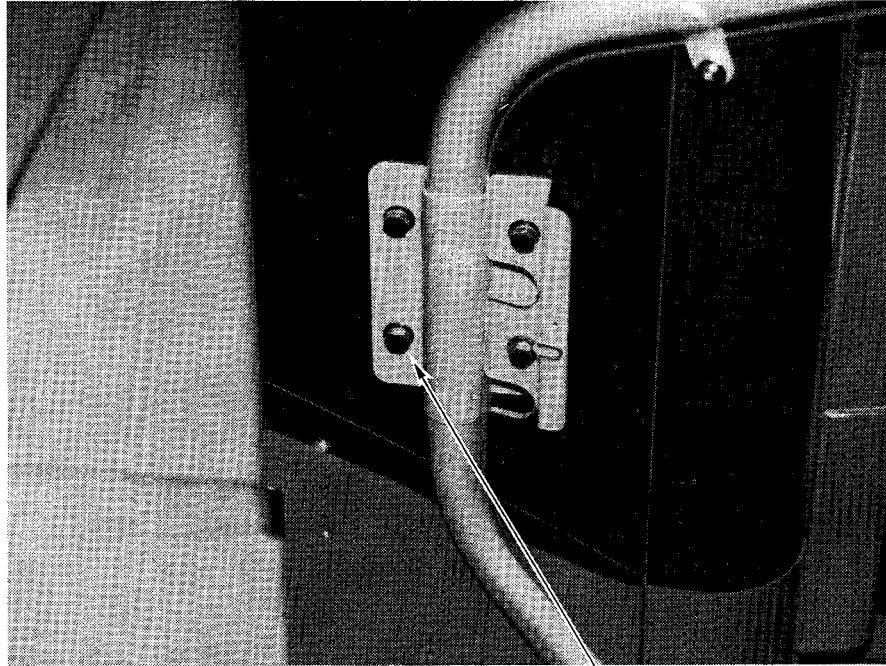
HEXAGON BOLT (M8×35)
w/spring washer, M8 flat washer used,
both sides, 8 in total.
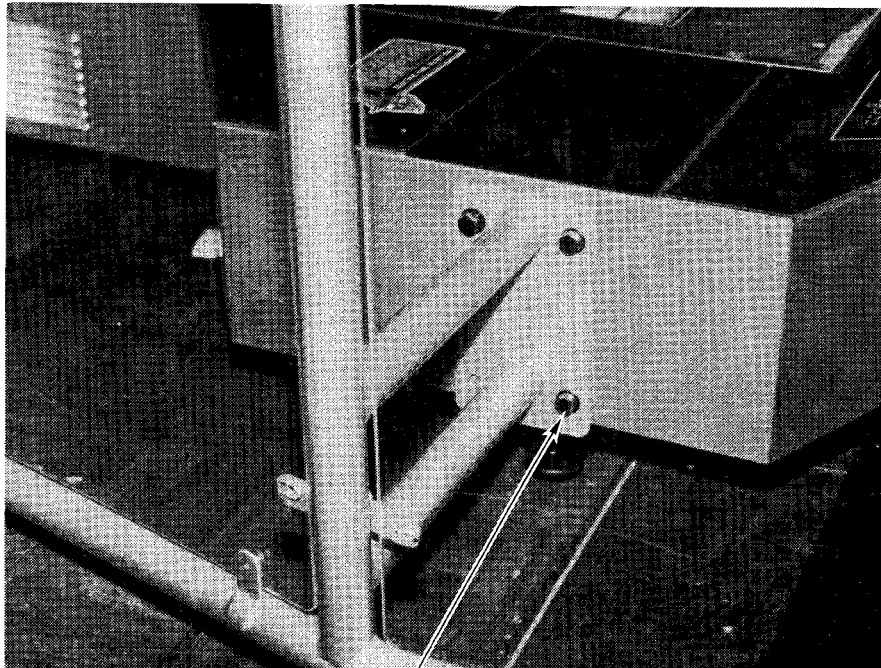
HEXAGON BOLT (M8×20)
w/spring washer, M8 flat washer used,
both sides, 8 in total.
Install with hexagon nut (M8) w/ 4 each of spring
washers & flat washers used, both sides.

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4 | SECURING IN PLACE (ADJUSTER ADJUSTMENT)

⚠ **WARNING!**

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

This machine has 8 each of casters and adjusters (shown below). When the installation position is determined, cause the adjusters to come into contact with the floor directly, make adjustments in a manner so that the casters will be raised approximately 5mm. from the floor and make sure that the machine position is level.

① Move the machine to the installation position.

② Cause all of the leg adjusters to make contact with the floor. By using a wrench, make adjustments in the height of the leg adjusters to ensure that the machine's position is level.

③ After making adjustments, fasten the leg adjuster nut upward and secure the height of the leg adjuster.

BOTTOM VIEW

④ Depending on the floor surface status of the installation location, the Rear Cabinet may move of itself. As shown, the NON-SLIP SHEET is attached to the back side of the CAUTION MAT. Ensure that the Adjuster is installed in the manner to match the position of NON-SLIP SHEET

⑤ After making adjustments, fasten the adjuster nut upwards and secure the height of the adjuster

FASTEN UPWARDS

CASTER

LEG ADJUSTER

Approx. 1/4" INCH

POWER SUPPLY

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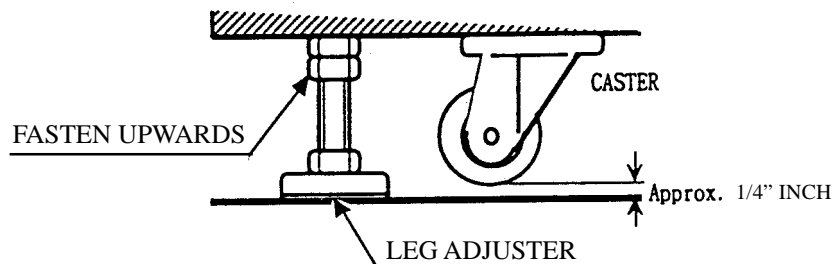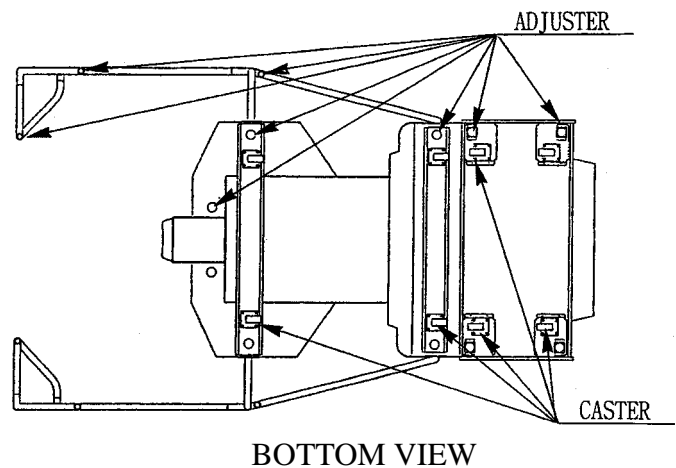
● Ensure that the power cord is not exposed on the surface (passage, etc.). If exposed, they can be caught and are susceptible to damage. If damaged, the cord can cause an electric shock or short circuit. Ensure that the wiring position is not in the customer's passage way or the wiring has protective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

The AC unit is mounted on the left side of Front Cabinet DX. The AC Unit incorporates the Main SW, Earth Terminal and Inlet. Firmly insert the Power Plug into the Socket Outlet and the other side of the plug to the Inlet. Turn the Main SW ON to turn power ON.

① Ensure that the Main SW is OFF.

MAIN SW

CIRCUIT PROTECTOR
(FUSE)
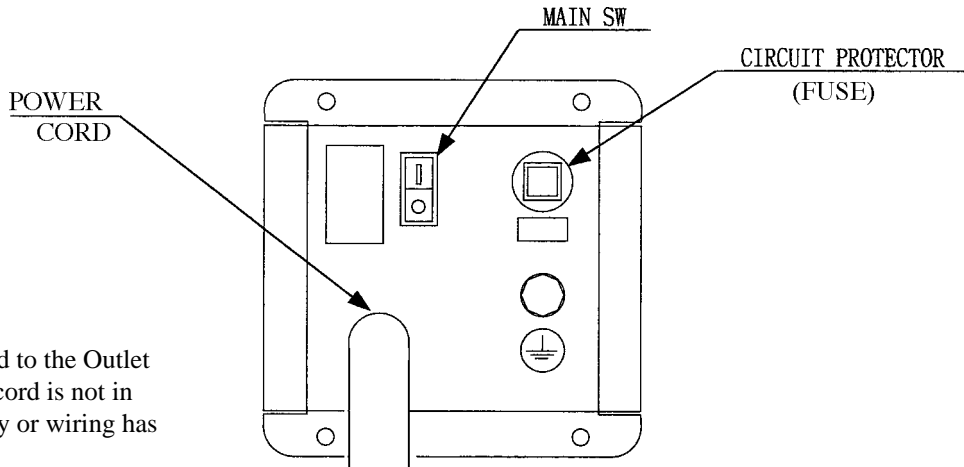
POWER
CORD

② Connect the Power cord to the Outlet Socket. Ensure power cord is not in customer's passage way or wiring has protective covering.

6   TURNING POWER ON

To turn power on, turn the AC Unit's Main SW on.

The Billboard's Fluorescent Lamp lights up and images will be outputted on the projector.

Background music (BGM) is outputted during ADVERTISE from the speaker. However, this BGM is not emitted if "No BGM output during ADVERTISE" is set.

7 ASSEMBLING CHECK

The TEST MENU allows for each part of the cabinet to be checked, the Monitor to be adjusted, and the coin and game related various functions to be performed.

```
                      CPU ROM TEST

GOOD      (CROM03 BANK)      IC.1      *****
GOOD      (CROM02 BANK)      IC.2      *****
GOOD      (CROM01 BANK)      IC.3      *****
GOOD      (CROM00 BANK)      IC.4      *****
GOOD      (CROM13 BANK)      IC.5      *****
GOOD      (CROM12 BANK)      IC.6      *****
GOOD      (CROM11 BANK)      IC.7      *****
GOOD      (CROM10 BANK)      IC.8      *****
GOOD      (CROM23 BANK)      IC.9      *****
GOOD      (CROM22 BANK)      IC.10     *****
GOOD      (CROM21 BANK)      IC.11     *****
GOOD      (CROM20 BANK)      IC.12     *****
GOOD      (CROM33 BANK)      IC.13     *****
GOOD      (CROM32 BANK)      IC.14     *****
GOOD      (CROM31 BANK)      IC.15     *****
GOOD      (CROM30 BANK)      IC.16     *****
GOOD      (CROM3)            IC.17     *****
GOOD      (CROM2)            IC.18     *****
GOOD      (CROM1)            IC.19     *****
GOOD      (CROM0)            IC.20     *****

              PRESS TEST BUTTON TO EXIT
```

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.

```
                      INPUT TEST

        LINE SENSOR LIP              OFF
        LINE SENSOR DOWN             OFF
        LINE SENSOR RIGHT            OFF
        LINE SENSOR LEFT             OFF
        CAST                         OFF
        SELECT                       OFF
        SWING MECHA LIMIT RIGHT      OFF
        SWING MECHA LIMIT LEFT       OFF
        PULL MECHA LIMIT NEAR        OFF
        PULL MECHA LIMIT FAR         OFF
        VIBE MECHA SENSOR            OFF
        COIN                         OFF
        SERVICE                      OFF
        TEST                         OFF

        PULL POSITION                80H
        SWING POSITION               80H
        TENSION                      80H
        REEL SPEED                   80H
        STICK X                      80H
        STICK Y                      80H

              PRESS TEST BUTTON TO EXIT
```

Selecting the INPUT TEST on the menu screen in the test mode to display the screen on which each SW and Volume is tested. Press each switch. (To check the Coin SW, insert a Coin from the inlet with the Coin Chute Door being opened.) If the display beside each switch is ON, the switch and wiring connection are satisfactory. Check the display of each Volume value. The Volume could have an irregularity caused by differences between machines and vibration during transportation. Set the Volume values by referring to Section ?

```
                      OUTPUT TEST

    PULL MECHA FAR                   OFF
    PULL MECHA NEAR                  OFF
    SWING MECHA RIGHT                OFF
    SWING MECHA LEFT                 OFF
    VIBE MECHA                       OFF
    REEL                             OFF
    EXIT                             OFF


                      INPUT

    SWING MECHA LIMIT RIGHT          OFF
    SWING MECHA LIMIT LEFT           OFF
    PULL MECHA LIMIT NEAR            OFF
    PULL MECHA LIMIT FAR             OFF
    VIBE MECHA SENSOR                OFF
    PULL POSITION                    80H
    SWING POSITION                   80H

              PRESS TEST BUTTON TO EXIT
```
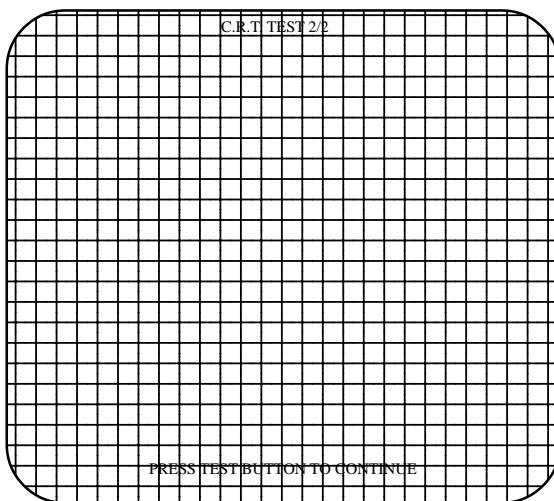
In the output test mode, carry out lamp test to ascertain that each lamp lights up satisfactorily.

```
                SOUND TEST


        NO        :        ( 0 )
```
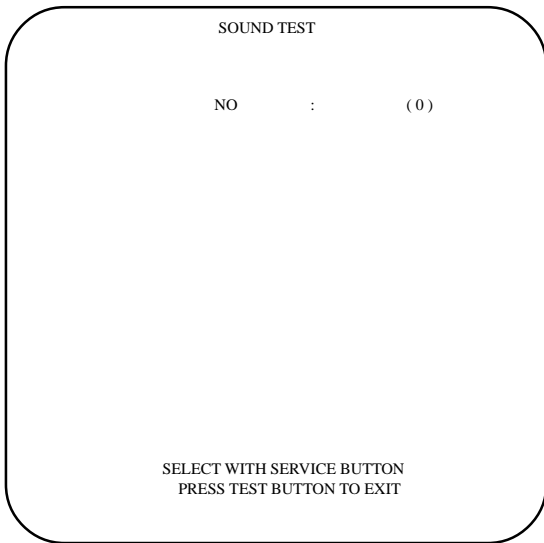
In the TEST mode, selecting SOUND TEST causes the screen, on which sound related BD and wiring connections are tested, to be displayed. be sure to check if the sound is satisfactorily emitted from each of speaker and the sound volume is appropriate.

```
        SELECT WITH SERVICE BUTTON
        PRESS TEST BUTTON TO EXIT
```
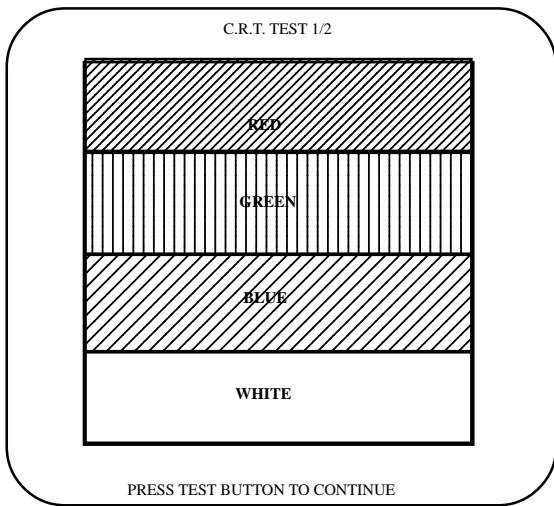
In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the projector is tested) to be displayed. Although the projector adjustments have been made at the same time of shipment from the factory, color deviation, etc., may occur due to the effect caused by geomagnitism, the location building's steel frames and other game machines in the periphery. By watching the test mode screen, make judgement as to whether an adjustment is needed. If it is neccessary, adjust the projector by refering to Section 9.

```
            C.R.T. TEST 1/2

                  RED

                 GREEN

                  BLUE

                 WHITE

        PRESS TEST BUTTON TO CONTINUE
```

```
            C.R.T TEST 2/2











        PRESS TEST BUTTON TO CONTINUE
```

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

5 . PRECATIONS TO BE HEEDED WHEN MOVING THE MACHINE

● When moving the machine, be sure to pull out the plug from the power supply. Moving the machine with the plug as is inserted can damage the power cord and cause a fire or electric shock.
● When moving the machine on the floor, retract the Adjusters and ensure that Casters make contact with the floor. During transportation, pay careful attention so that Casters do not tread power cords. Damaging the power cords can cause an electric shock and/or short circuit.
● When lifting the cabinet, be sure to hold the catch portions or bottom part. Lifting the cabinet by holding other portions can damage parts and installation portions, due to the empty weight of the cabinet, and cause personal injury.

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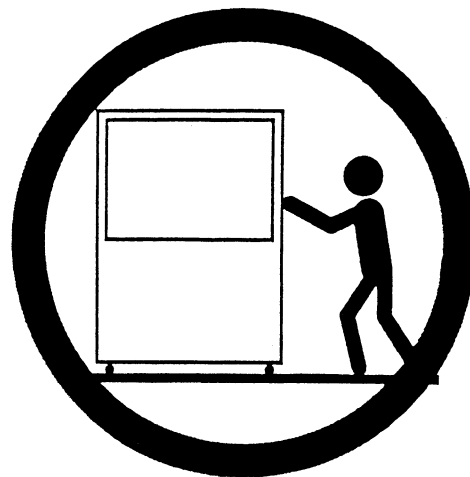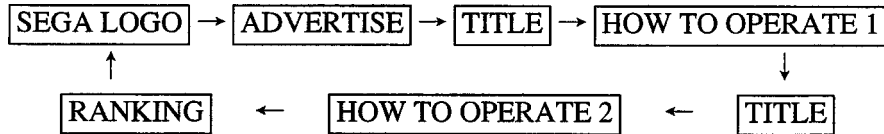

Do not push the PTV from the rear side. Pushing the PTV from the rear side can cause the PTV to fall down. Push it from the side.

6 . CONTENTS OF GAME

The following are operations and responses obtained when the machine functions satisfactorily. Any functioning different from the following may have been caused by a certain fault. Immediately investigate and eliminate the cause of malfunctioning to ensure satisfactory operation.
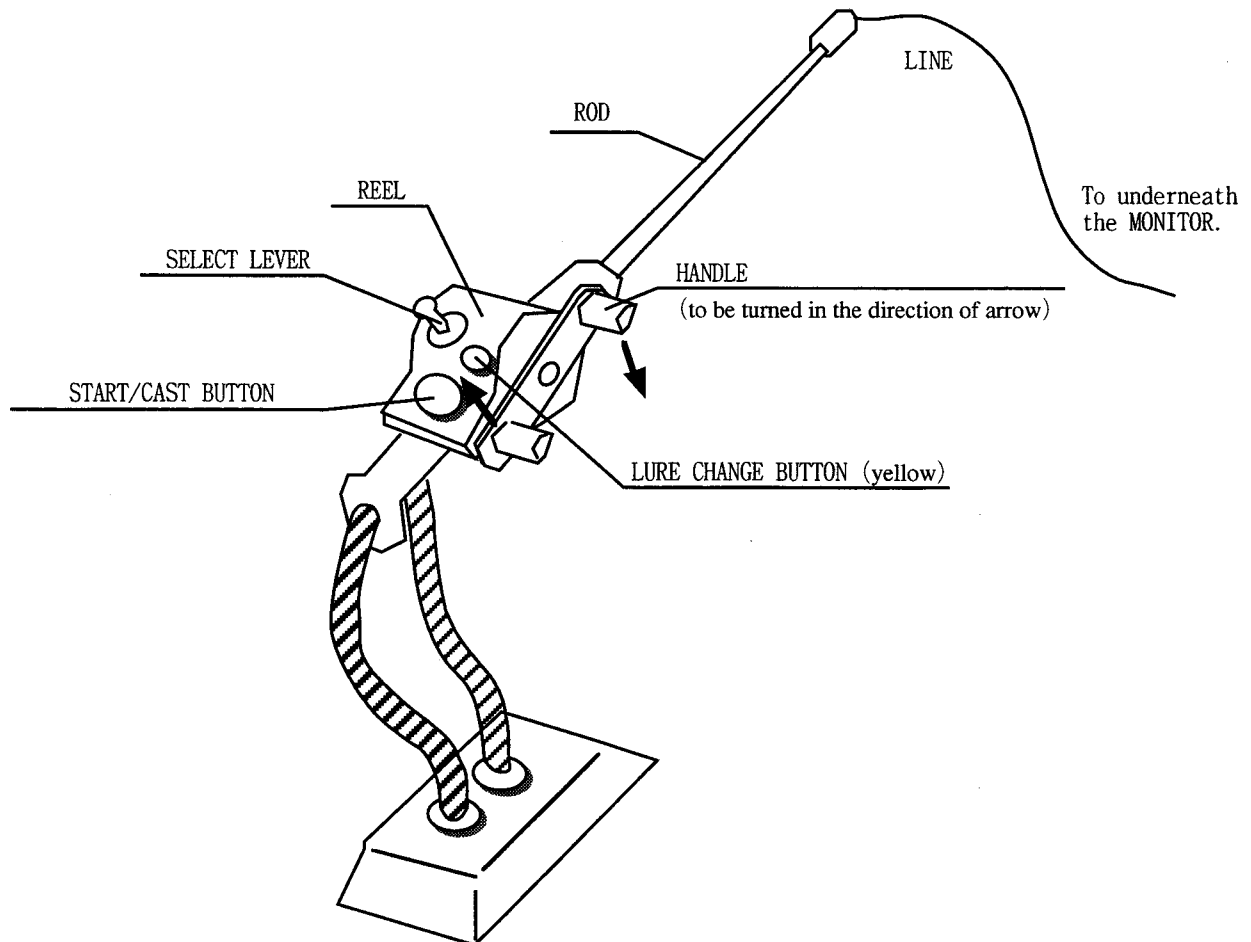
HOW TO PLAY

The ADVERTISE mode appearing on the screen before game play is comprised of the following:

$$\boxed{\text{SEGA LOGO}} \rightarrow \boxed{\text{ADVERTISE}} \rightarrow \boxed{\text{TITLE}} \rightarrow \boxed{\text{HOW TO OPERATE 1}}$$

$$\boxed{\text{RANKING}} \leftarrow \boxed{\text{HOW TO OPERATE 2}} \leftarrow \boxed{\text{TITLE}}$$

In this game, satisfying the condition of "CLEAR WEIGHT" (the total weight of bass fished up) preset for each area within the time limit results in a STAGE CLEAR. If you continue when the time is up, however, the current total weight will remain effective. Clearing all of the Areas allows you to proceed to the Special Stage where huge bass reside. The player who fishes up big bass can rank among the BIG BASS RANKING players by entering his name.

This game employs an exclusively used Special Controller inclusive of the Game Start Button.


LINE

ROD

REEL

To underneath the MONITOR.

SELECT LEVER

HANDLE
(to be turned in the direction of arrow)

START/CAST BUTTON

LURE CHANGE BUTTON (yellow)

①   Insert a coin(s). Up to 9 credits can be counted at one time. Coins inserted after counting 9 credits will neither be counted nor returned.

②   Select a Fishing area from among the 3 Areas of Lake Paradise (a virtual lake). Choose with SELECT LEVER and decide by START/CAST button.
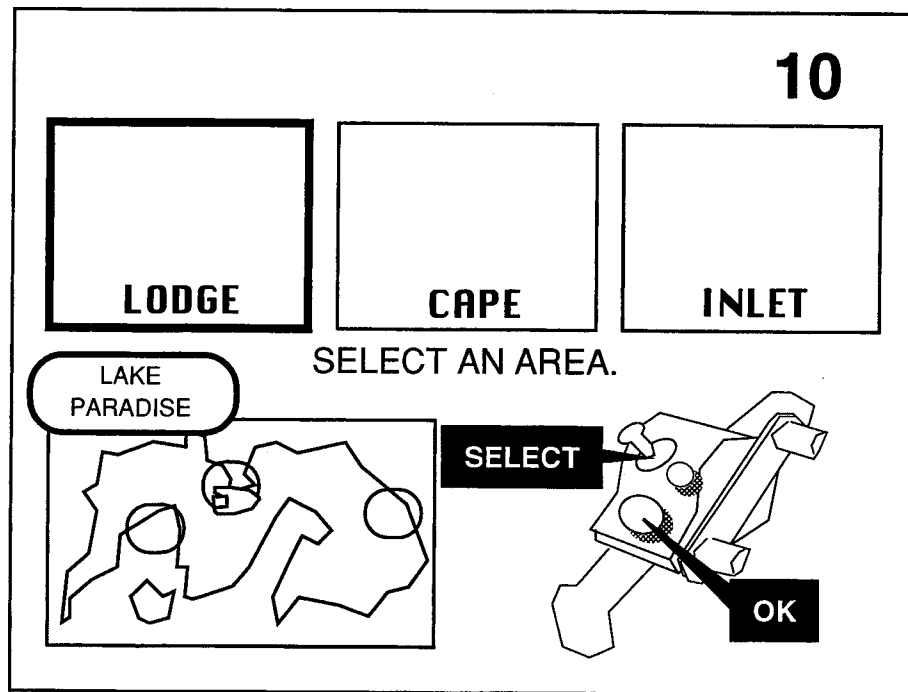
LODGE
CAPE
INLET

③   Then, select the LURE. Select with the SELECT LEVER and decide by START/CAST button. Each type of lure has specific characteristics (for example, some may be appropriate for a certain depth of water while others may be suitable for a specific action, time zone, or status of desired bass). By considering these factors, using lures in the most efficient manner will contribute to increasing the bass fishing-up rate. The characteristics of each type of lure are as follows:
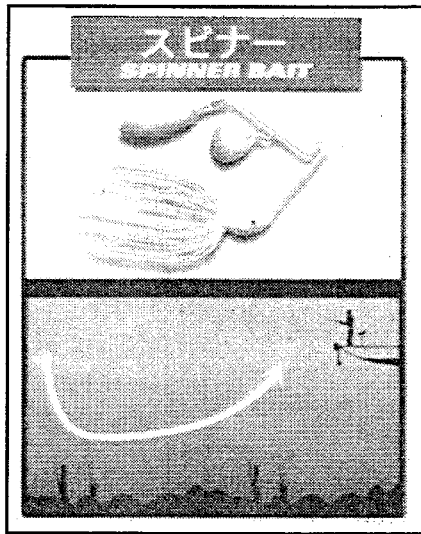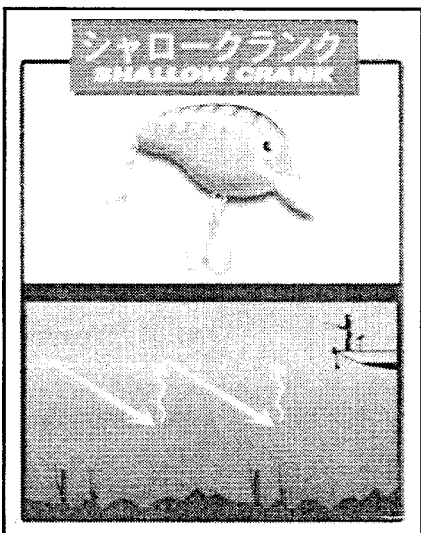
SPINNER BAIT (EASY)

Attract bass with this bait while reeling at a constant speed, or stopping to reel sometimes to allow for blade glistening.
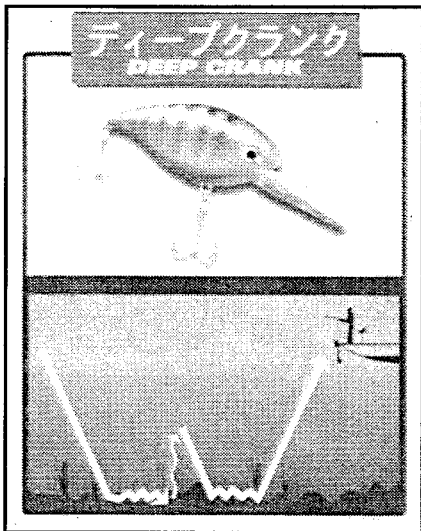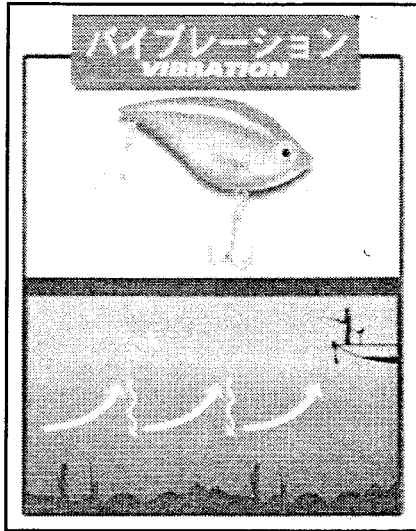

DEEP CRANK (EASY)

This type is used for deep water. Have the lure hit the bottom and reel, then repeat real and stop action.
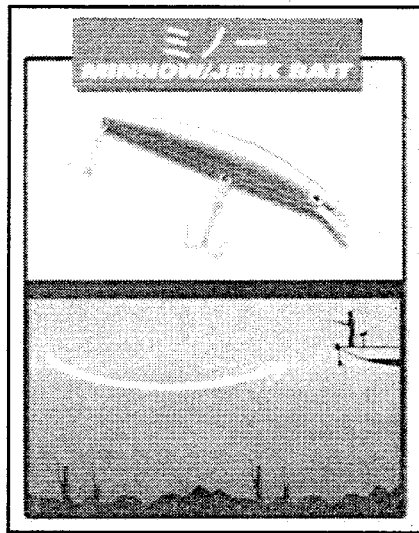

SHALLOW CRANK (EASY)

This is used for shallow water. Have the lure hit the bottom and reel, then repat reel and stop motion.
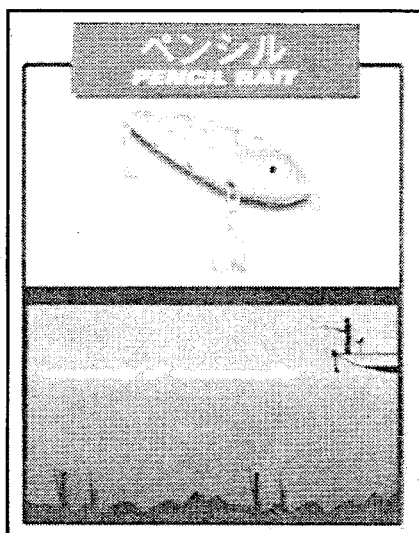
24

VIBRATION (EASY)

Attract bass by reeling at the constant speed or having the lure hit an obstacle such as a stone, driftwood, etc. to cause irregular movements.

MINNOW/ JERK BAIT (NORMAL)

Attract bass by reeling at a constant speed and jerking the rod to reel so that the lure will look like a small fish making a quick escape.

PENCIL BAIT (DIFFICULT)

Attract bass to the water surface by reeling the rod while repeating the slightly twitching motion to have the lure look like a smalll fish of insects writhing on the surface.

LINE OUT

0.0m

W,TEMP 21℃

Water temperature

Name of Lure

SHALLOW CRANK

2' 00 "

TOTAL WEIGHT

0g

clear / **5,000g**

Weight to
clear
(Norm)

Currently
selected lure

EASY

SELECT   **OK**

Selected lure's
range of
water depth.
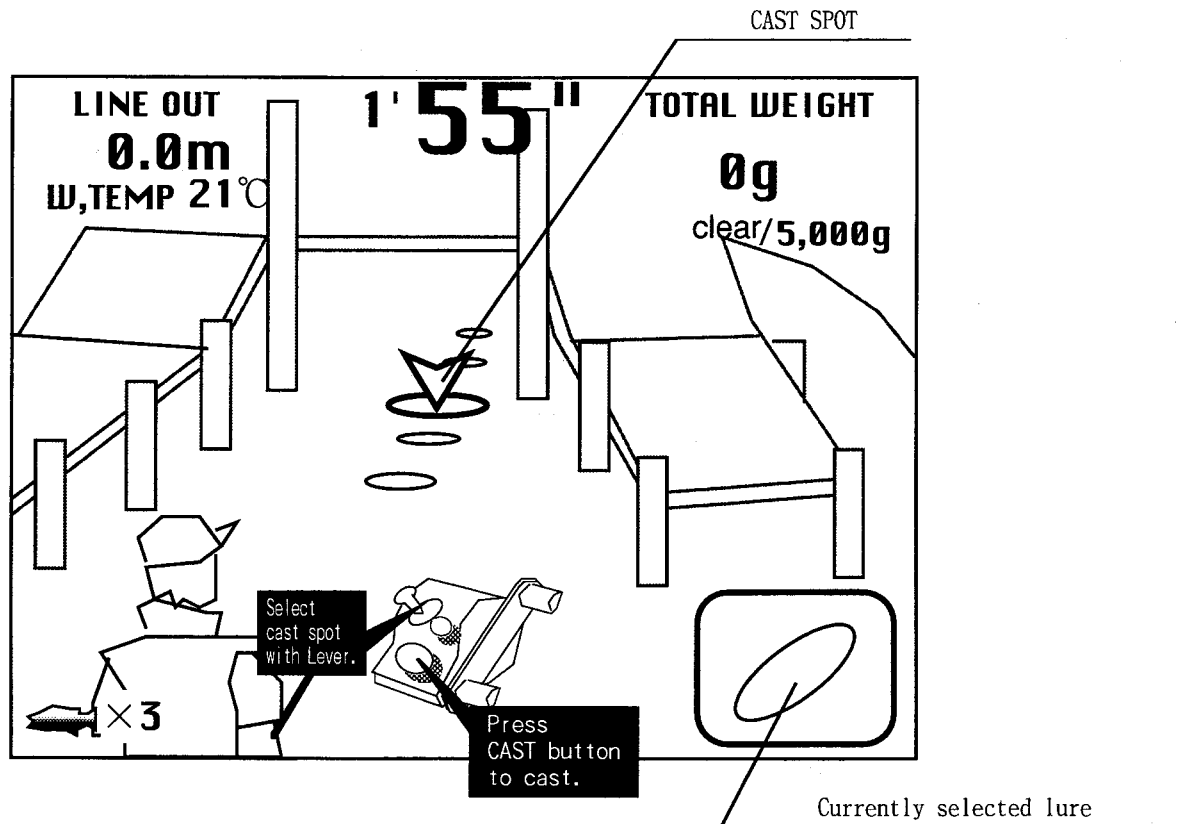
HOW TO OPERATE
the selected lure.

HINT !

Try to master the best lure and the most appropriate action to catch a big fish.

④ After the lure is decided, set the CAST spot (where to cast the lure). Select with the SELECT LEVER and decide by START/CAST button. Press the START/CAST button to have the lure cast automatically (at this time the player does not have to do the cast movement).

CAST SPOT

LINE OUT
0.0m
W,TEMP 21℃

1'**55**"

TOTAL WEIGHT
0g
clear/**5,000g**

Select cast spot with Lever.

Press CAST button to cast.

◀×3

Currently selected lure

HINT!

Having its own territory, a big fish is hiding at a certain point in each area depending on the time zone and water temperatures. Cast in various points and find where the big one is.

⑤ When the lure hits the surface, turn the reel handle, move the rod, and activate the lure to attract bass.

LINE OUT
12.0m
W,TEMP 21℃

1'45"

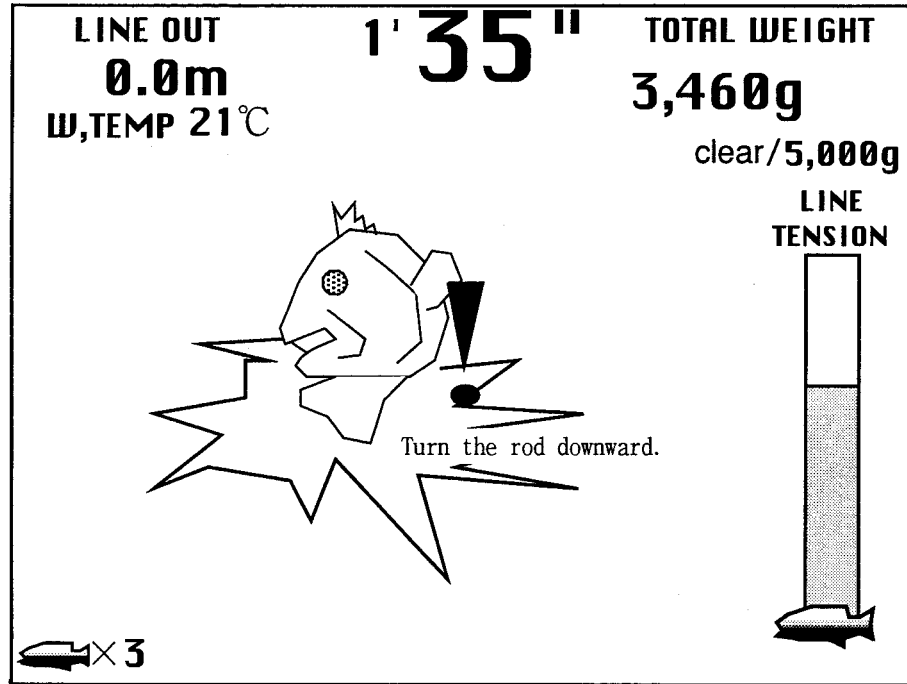TOTAL WEIGHT
0g
clear/5,000g

IMAGE IN WATER
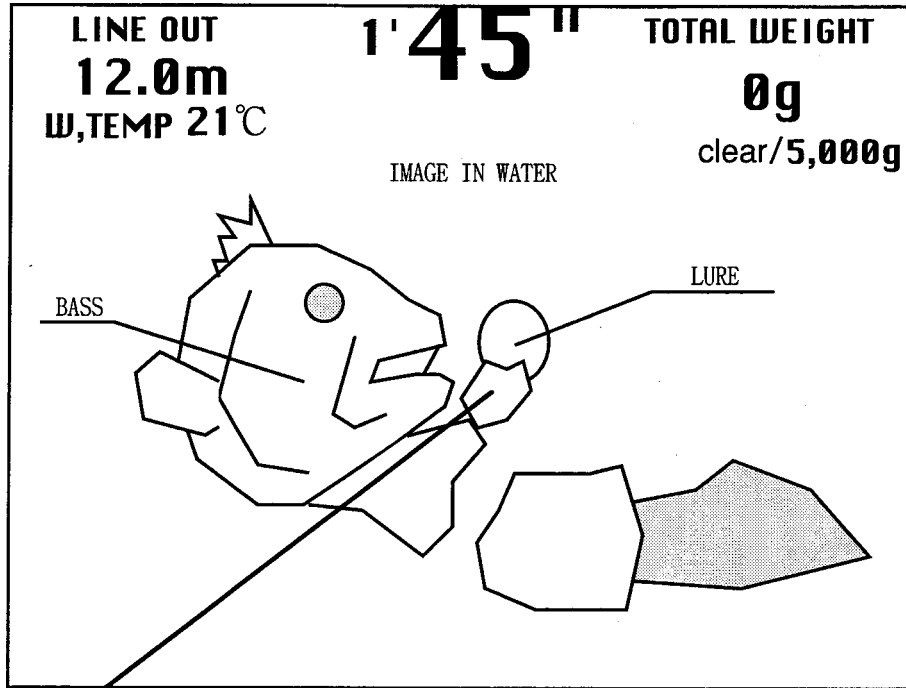
BASS

LURE

When bass snaps at the lure, pull the rod towards you by hooking up.
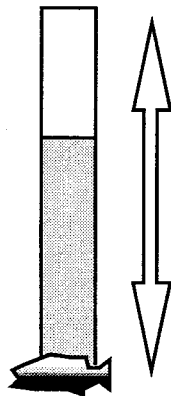
For timely hooking.........FISH! is displayed.
For untimely hooking.....MISS! is displayed.

For a successful hooking, HIT BONUS time is added depending on the size of the hit bass.

(6) When the bass is hooked, pull it towards you by paying attention to LINE TENSION METER.

LINE OUT	1' 35"	TOTAL WEIGHT
0.0m		**3,460g**
W,TEMP 21℃		clear/5,000g

LINE
TENSION

Turn the rod downward.

◁×3

LINE TENSION

LINE TENSION METER

If the line tension is too high, "Line's gonna break!" will be displayed.

If the line tension is too low, "Reel it in" will be displayed.

Stop reeling and hold out! ⇒ "Line's gonna break!" ⇒ "Line's gonna break!"

If not operated skilfully.

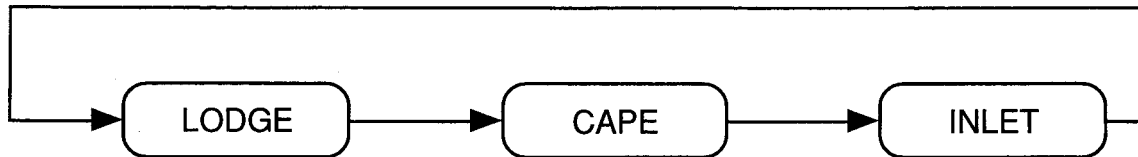"Reel it in" ⇒ Reel and stretch the line tight. ⇒ LOST!

If not operated skilfully.

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⑦ When the bass is fished up, the following 5-step display &WEIGHT to be added to the total weight are shown. Then, BONUS TIME is added depending on the weight of the bass.

SMALL ONE
MEDIUM
BIG ONE
SUPER BIG
RECORD SIZE

⑧ If the total wieght exceeds the Norm weight, the player can proceed to the next Area. The next Area will be determined automatically as shown.

```
  ┌─────────────────────────────────────────────────┐
  │                                                 │
  └──►┌─────────┐    ┌─────────┐    ┌─────────┐──────┘
      │  LODGE  │──► │  CAPE   │──► │  INLET  │
      └─────────┘    └─────────┘    └─────────┘
```

⑨ Clearing all of the Areas allows the player to proceed to the Special Area where lots of big ones are.

* Everytime the player catches 4 basses, the Special Lure will be awarded. Continued use of the lure is allowed in cases of CONTINUE and AREA CLEAR.
* When the player catches a big bass and ranks in the BIG BASS RANKING, he can enter his name. Only the Black Bass is counted for the ranking.

7 . 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 7   EXPLANATION OF TEST MODE

ITEMS	DESCRIPTION	SECTIONS
INSTALLATION OF MACHINE	When the machine is installed, perform the following: 1. Check to see that each setting is as per standard setting made at the time of shipment.	7 - 9, 7 - 10
	2. In the INPUT TEST mode, check each SW and VR.	7 - 5
	3. In the OUTPUT TEST mode, check each of lamps.	7 - 6
	4. In the MEMORY TEST mode, check ICs on the IC Board.	7 - 3, 7 - 4
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.	
PERIODIC SERVICING	Periodically perform the following: 1. MEMORY TEST	7 - 3, 7 - 4
	2. Ascertain each setting.	7 - 9, 7 - l0
	3. In the INPUT TEST mode, test the CONTROL device	7 - 5
	4. In the OUTPUT TEST mode, check each of lamps.	7 - 6
CONTROL SYSTEM	1. In the INPUT TEST mode, check each SW and VR.	7 - 5
	2. Adjust or replace each SW and VR.	8
	3.If the problem can not be solved yet, check the CONTROL's moves.	8
PROJECTOR	In the PROJECTOR ADJUSTMENT mode, check to see if the PROJECTOR adjustment is appropriately made.	7 - 8
IC BOARD	1. MEMORY TEST	
	2. In the SOUND TEST mode, check the sound related ROMs.	7 - 7
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc	7 - 12

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WARNING!

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

STOP

IMPORTANT!

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

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

SWITCH UNIT

① SOUND VOLUME
Controls the speaker volume of the right/left speakers on the coin chute tower.

② TEST BUTTON (TEST SW)
For the handling of the TEST BUTTON, refer to the section on test mode.

③ SERVICE BUTTON (SERVICE SW)
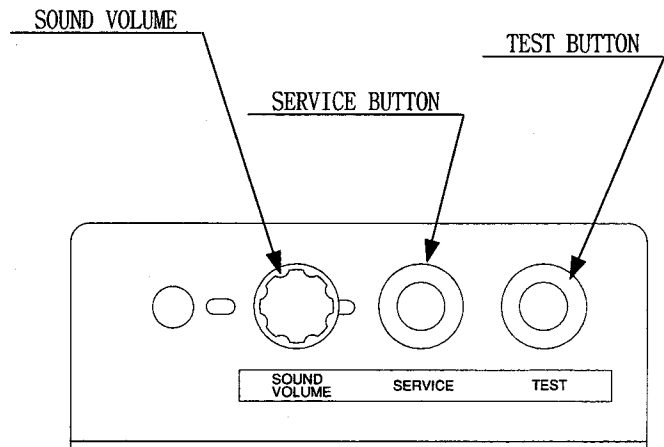Gives credits without registering on the coin meter.

Fig. 7.1

COIN METER

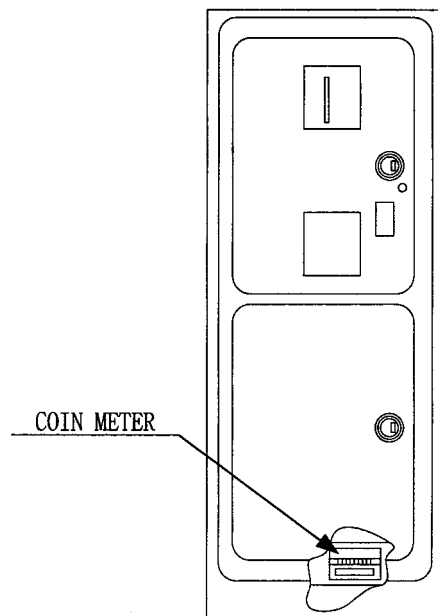Open Cash Box Door and the Coin Meter will appear. The Coin Meter counts the number of coins inserted

Fig. 7.2

7 - 2 TEST MODE

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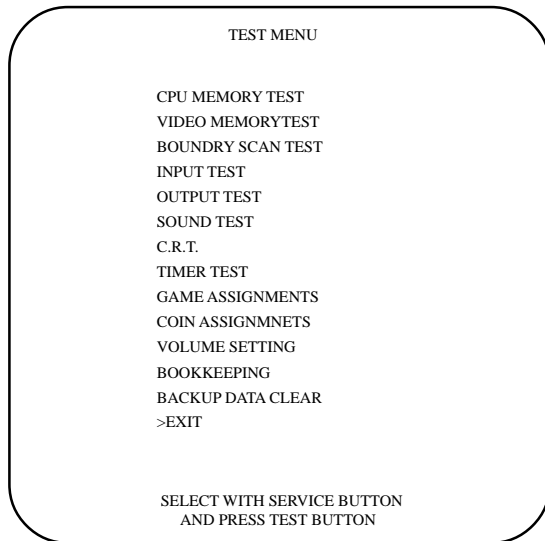
```
                TEST MENU


        CPU MEMORY TEST
        VIDEO MEMORYTEST
        BOUNDRY SCAN TEST
        INPUT TEST
        OUTPUT TEST
        SOUND TEST
        C.R.T.
        TIMER TEST
        GAME ASSIGNMENTS
        COIN ASSIGNMNETS
        VOLUME SETTING
        BOOKKEEPING
        BACKUP DATA CLEAR
        >EXIT



        SELECT WITH SERVICE BUTTON
          AND PRESS TEST BUTTON
```

FIG. 7.2 TEST MENU

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

2. By pushing the SERVICE BUTTON, bring the ">" mark to the desired item and press the TEST BUTTON. This will select the item's test.

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

7 - 3 MEMORY TEST

```
                CPU ROM TEST

   GOOD    (CROM03 BANK)     IC.1      *****
   GOOD    (CROM02 BANK)     IC.2      *****
   GOOD    (CROM01 BANK)     IC.3      *****
   GOOD    (CROM00 BANK)     IC.4      *****
   GOOD    (CROM13 BANK)     IC.5      *****
   GOOD    (CROM12 BANK)     IC.6      *****
   GOOD    (CROM11 BANK)     IC.7      *****
   GOOD    (CROM10 BANK)     IC.8      *****
   GOOD    (CROM23 BANK)     IC.9      *****
   GOOD    (CROM22 BANK)     IC.10     *****
   GOOD    (CROM21 BANK)     IC.11     *****
   GOOD    (CROM20 BANK)     IC.12     *****
   GOOD    (CROM33 BANK)     IC.13     *****
   GOOD    (CROM32 BANK)     IC.14     *****
   GOOD    (CROM31 BANK)     IC.15     *****
   GOOD    (CROM30 BANK)     IC.16     *****
   GOOD    (CROM3)           IC.17     *****
   GOOD    (CROM2)           IC.18     *****
   GOOD    (CROM1)           IC.19     *****
   GOOD    (CROM0)           IC.20     *****



         PRESS TEST BUTTON TO EXIT
```
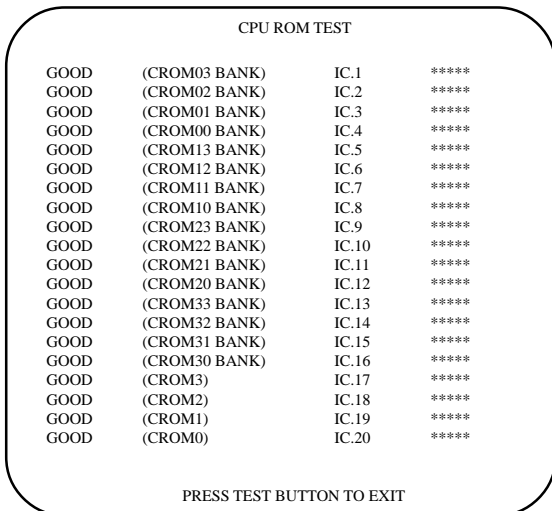
FIG. 7.3a MEMORY TEST

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

This test starts immediately after selection from the menu in the test mode. When in execution, the "TESTING NOW" message will be displayed at the lower part to the screen. Press the Test Button to proceed to CPU RAM TEST

```
                CPU ROM TEST



   GOOD    (SDRAM)          IC. 13        IC. 15
   GOOD    (BACK UP SRAM)   IC. 21        IC. 22
   GOOD    (SDRAM)          IC. 94 or IC.19      IC. 20
   GOOD    (SDRAM)          IC. 17        IC. 18








         PRESS TEST BUTTON TO EXIT
```
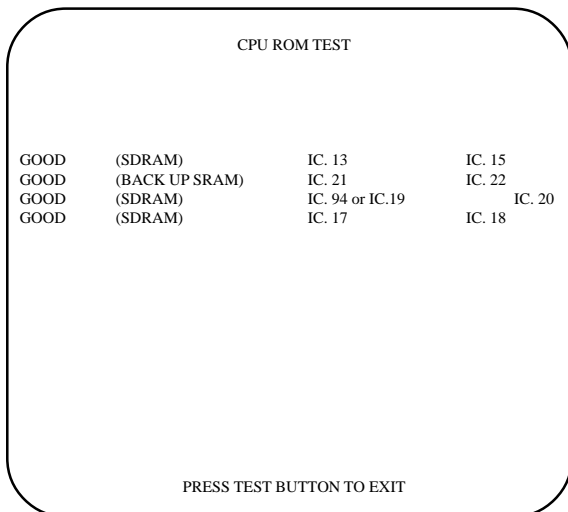
FIG. 7.3b MEMORY TEST

Test starts immediately after proceeding to this mode from CPU ROM TEST. During execution, the "TESTING NOW" message will be displayed at the lower part of the screen. When an error occurs, the ERROR message is shown. After finising the test, press the TEST button to return to the menu mode.
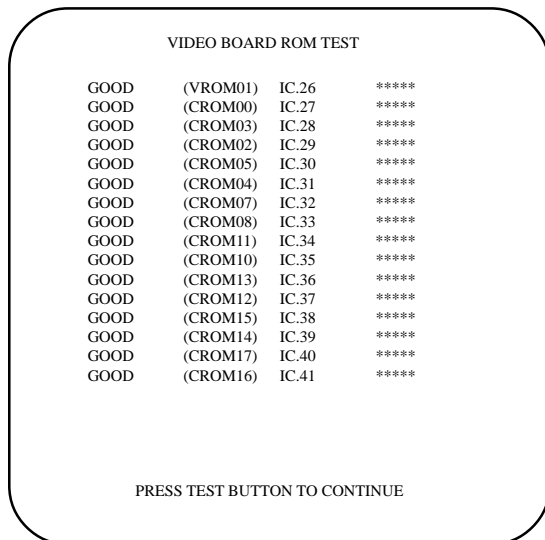
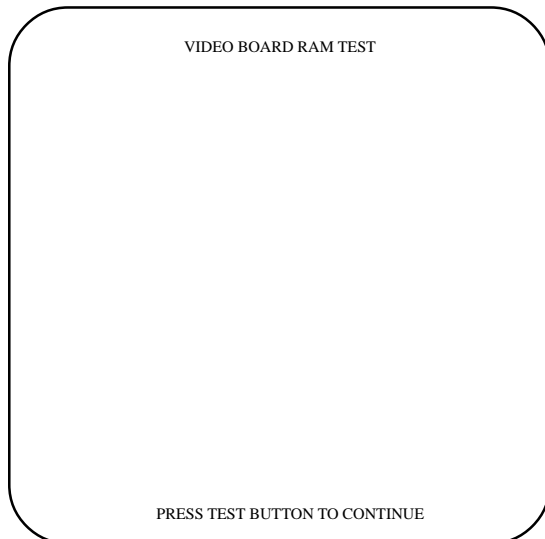## 7 - 4 VIDEO MEMORY TEST

```
              VIDEO BOARD ROM TEST

    GOOD        (VROM01)    IC.26      *****
    GOOD        (CROM00)    IC.27      *****
    GOOD        (CROM03)    IC.28      *****
    GOOD        (CROM02)    IC.29      *****
    GOOD        (CROM05)    IC.30      *****
    GOOD        (CROM04)    IC.31      *****
    GOOD        (CROM07)    IC.32      *****
    GOOD        (CROM08)    IC.33      *****
    GOOD        (CROM11)    IC.34      *****
    GOOD        (CROM10)    IC.35      *****
    GOOD        (CROM13)    IC.36      *****
    GOOD        (CROM12)    IC.37      *****
    GOOD        (CROM15)    IC.38      *****
    GOOD        (CROM14)    IC.39      *****
    GOOD        (CROM17)    IC.40      *****
    GOOD        (CROM16)    IC.41      *****



              PRESS TEST BUTTON TO CONTINUE
```

FIG. 7.4a VIDEO MEMORY TEST

This allows the functioning of the VIDEO MEMORY IC's on the IC board to be checked. "GOOD" is displayed for normal IC's and "BAD" is displayed for abnormal IC's if any.

Test starts immediately after proceeding to this mode from the menu in the test mode. During execution, the "TESTING NOW" message will be didplayed at the lower portion of the screen. After fininshing the test, press the TEST BUTTON to proceed to VIDEO RAM.

```
              VIDEO BOARD RAM TEST






              PRESS TEST BUTTON TO CONTINUE
```

FIG. 7.4b VIDEO MEMORY TEST

Test starts immediately after proceeding to this mode from the VIDEO BOARD ROM TEST. During execution, the "TESTING NOW" message will be displayed at the lower portion of the screen. If staus is satisfactory, nothing will be displayed. After fininshing the test, press the TEST BUTTON to return to the menu mode.

Selecting the "BOUNDRY SCAN TEST" causes the Game board's testing in terms of hardware to be performed automatically.

7 - 5 BOUNDRY SCAN TEST

```
              BOUNDRY SCAN TEST






              PRESS TEST BUTTON TO EXIT
```

FIG. 7.5 BOUNDRY SCAN TEST

● When the test is completed, if the results are as shown left, it is satisfacory.

● After finishing the test, press the TEST BUTTON to have the MENU MODE return on the screen. Next, turn power off and then turn it back on again. To avoid malfunctioning, have the Board intialized by turning the power off and then on.

● If there is any hardware problems, an error message is displayed. Please contact the offices herein stated or where the product was purchased from.

7 - 6 INPUT TEST

When INPUT TEST is selected, the MONITOR will show the following, allowing you to watch the status of each switch and the value of each V.R.
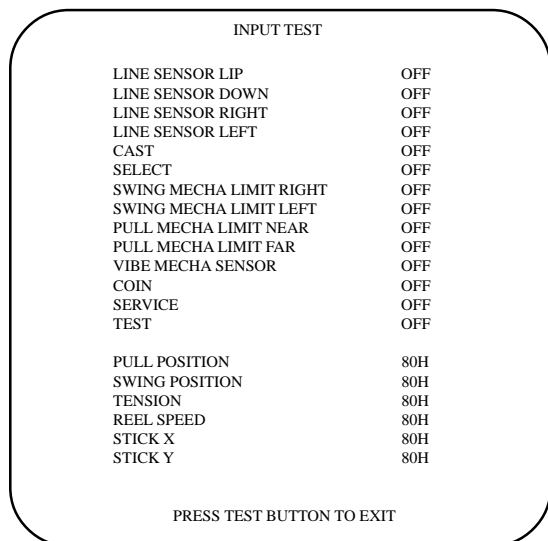
```
                    INPUT TEST

        LINE SENSOR LIP              OFF
        LINE SENSOR DOWN             OFF
        LINE SENSOR RIGHT            OFF
        LINE SENSOR LEFT             OFF
        CAST                        OFF
        SELECT                      OFF
        SWING MECHA LIMIT RIGHT     OFF
        SWING MECHA LIMIT LEFT      OFF
        PULL MECHA LIMIT NEAR       OFF
        PULL MECHA LIMIT FAR        OFF
        VIBE MECHA SENSOR           OFF
        COIN                        OFF
        SERVICE                     OFF
        TEST                        OFF

        PULL POSITION               80H
        SWING POSITION              80H
        TENSION                     80H
        REEL SPEED                  80H
        STICK X                     80H
        STICK Y                     80H


             PRESS TEST BUTTON TO EXIT
```

FIG. 7.6 INPUT TEST

● This test mode displays the status of each switch, button, and Volu me. When the switch/button corrsponds to the name of the item is pressed, if OFF changes to ON, it is satisfactory. When corresponding Volume is operated, if the Volume value differs in a natural manner, it is satisfactory.

APPROPRIATE VALUE OF TENSION VOLUME

● Tension volume values are displayed in hexadecimal numerals within the range of 00H~ffH. If the value does not satisfy the following limitations, adjust the Volumes gear mesh so as to meet the requiremnts.

LOWER LIMIT: Over 05H
UPPER LIMIT: Under faH

● Press the test button to return to the menu mode

7 - 7 OUTPUT TEST

```
                    OUTPUT TEST

        PULL MECHA FAR              OFF
        PULL MECHA NEAR             OFF
        SWING MECHA RIGHT          OFF
        SWING MECHA LEFT           OFF
        VIBE MECHA                 OFF
        REEL                       OFF
        EXIT                       OFF


                       INPUT

        SWING MECHA LIMIT RIGHT    OFF
        SWING MECHA LIMIT LEFT     OFF
        PULL MECHA LIMIT NEAR      OFF
        PULL MECHA LIMIT FAR       OFF
        VIBE MECHA SENSOR          OFF
        PULL POSITION              80H
        SWING POSITION             80H


             PRESS TEST BUTTON TO EXIT
```
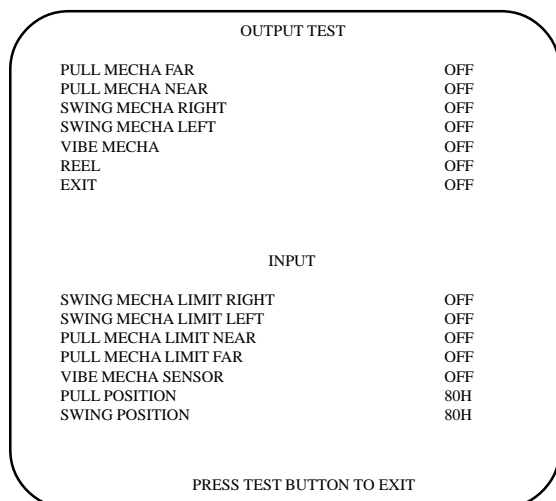
FIG. 7.7 OUTPUT TEST

Choose OUTPUT TEST to cause the following lower screen to appear. In this test, check the status of each lamp.

● Pressing the TEST BUTTON causes "ON" to be displayed and the corresponding lamp lights up. Pressing the TEST BUTTON again cuases "OFF" to be displayed and the lamp goes off. The Foot Controller is locked with the Slide Lock in the ON status, and Unlocked to become free with the Slide Lock in the OFF status.

● Press the test Button to return to the MENU MODE.

7 - 8 SOUND TEST

```
                    SOUND TEST


        NO        :          ( 0 )

        >EXIT










             SELECT WITH SERVICE BUTTON
             PRESS TEST BUTTON TO EXIT
```
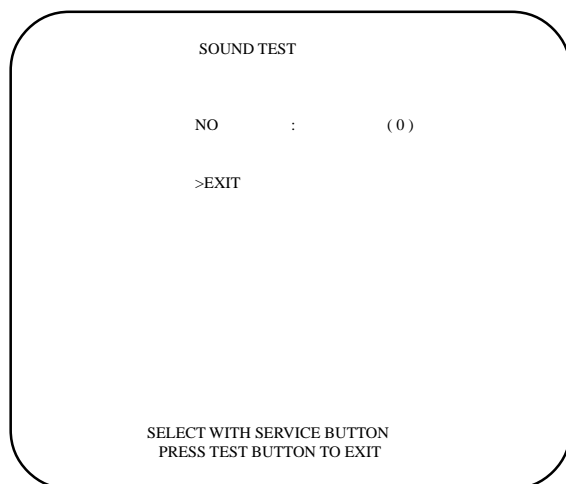
FIG. 7.8 SOUND TEST

This enables sound used in the game to be checked. Sound related memory and each speaker are checked.

● Press the SERVICE BUTTON to increse the number by one and the sound corresponding to the number will be emitted. Note that No. 000 does not emit any sound.

● Bring the ">" to EXIT and press the TEST BUTTON to return to the MENU MODE.

7 - 9 C.R.T. TEST

C.R.T. TEST 1/2
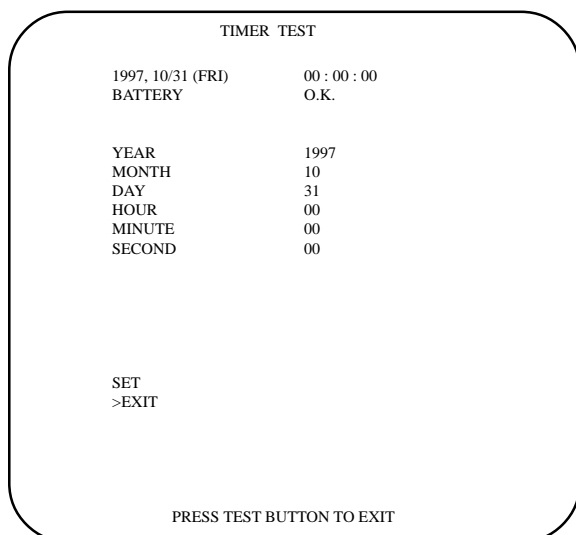
RED

GREEN

BLUE

WHITE

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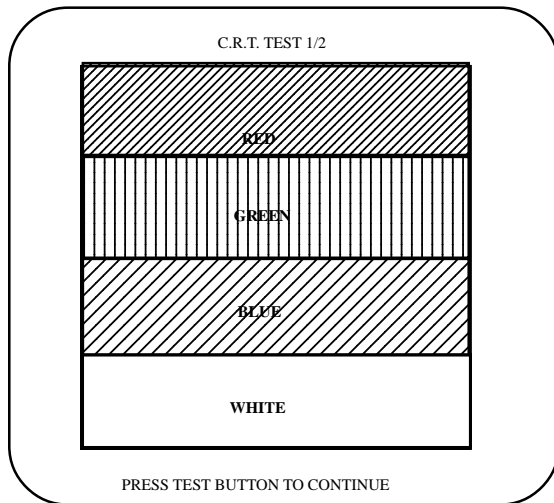
● Select C.R.T. TEST to cause the MONITOR to display the screen shown left, allowing MONITOR adjustment status to be checked.

● Periodically check the MONITOR adjustment status on this screen.

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

● Press the TEST BUTTON to shift to the next screen (2/2).
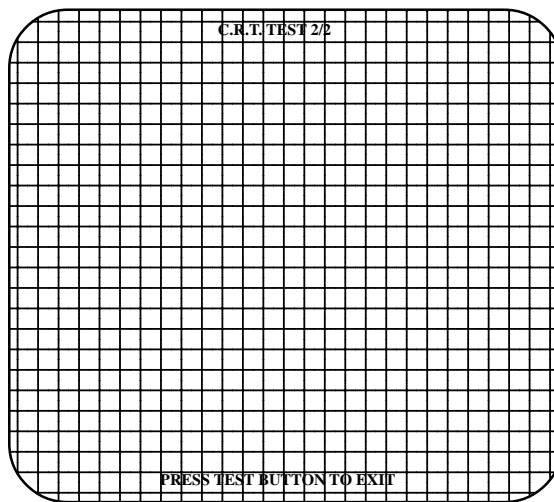
● The screen (2/2) allows screen size and distortion to be tested.

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

● Press the TEST BUTTON to return to the MENU mode.

C.R.T. TEST 2/2

PRESS TEST BUTTON TO EXIT

FIG. 7.9 C.R.T. TEST

7 - 10 TIMER TEST

TIMER TEST

1997, 10/31 (FRI)   00 : 00 : 00
BATTERY   O.K.

YEAR   1997
MONTH   10
DAY   31
HOUR   00
MINUTE   00
SECOND   00

SET
>EXIT

PRESS TEST BUTTON TO EXIT

FIG. 7.10 TIMER TEST

This test mode allows the setting of year, month, and day, as well as built-in battery, and real time clock to be checked.

● Press the Service Button to bring the arrow to the setting item.

● Press the Test Button to set the desired value for each item.

● Press the Service Button to move the arrow and bring it to SET, then press the test button to change to the set value.

● Bring the arrow to EXIT and press the test button to return to the menu mode.

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

SETTING CHANGE PROCEDURE

STOP

IMPORTANT!

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

(1) Press the SERVICE BUTTON to move the ">" to the desired item.

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

(3) To return to the MENU mode, move the arrow to EXIT and press the TEST BUTTON.

GAME ASSIGNMENTS

ADVERTISE SOUND   ON
GAME DIFFICULTY   NORMAL

>EXIT

COUNTRY TYPE: ****

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTTON
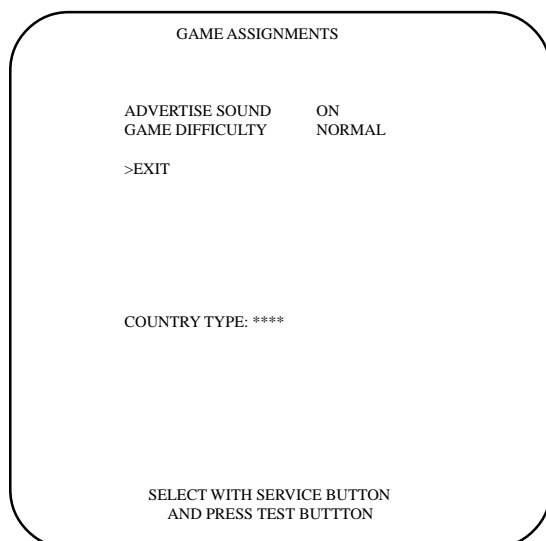
● ADVERTISE SOUND
Determines wether ADVERTISE SOUND is to be emitted or not by the setting to ON when emitting it and to OFF when not emitting it.

● GAME DIFFICULTY
Sets the Game Difficulty in 5 catagories from 1 to 8. The greater the number is, the higher the difficulty level becomes. Alternately it may display each catagory by name;
Very Easy, Easy, Normal, Hard, Very Hard

The Following FIGURES/TABLES show the factory recommended settings.

7 - 12 COIN ASSIGNMENTS

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

SETTING CHANGE PROCEDURE

STOP **IMPORTANT!**

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

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

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

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

```
            COIN ASSIGNMENTS

COIN CHUTE TYPE        COMMON
CREDIT TO START        2 CREDITS
CREDIT TO CONTINUE     1 CREDIT

COIN/CREDIT SETTING    #1

        CHUTE#1    1 COIN      1 CREDIT


        CHUTE#2    1 COIN      1 CREDIT

MANUAL SETTING

>EXIT




        SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

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

COMMON:
Coins are accepted in common for both players.

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

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

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

● COIN/CREDIT SETTING
Sets the CREDITS increase increment per coin insertion. There are 27 setings from #1 to #27, expressed in XX CREDIT as against XX COINS inserted. (TABLE 7.9a, 7.9b) #27 refers to FREE PLAY.
When the COIN CHUTE TYPE is set to INDIVIDUAL, there are some setting numbers not displayed as indicated in TABLE 7.9b.

● MANUAL SETTING
This allows credit increase setting as against coin insertion to be further set in the manner finer than COIN/ CREDIT SETTING (refer to TABLE 7.9c).

TABLE 7.12a COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

SETTING	FUNCTIONING OF CHUTE#1	
SETTING #1	1 COIN	1 CREDIT
SETTING #2	1 COIN	2 CREDITS
SETTING #3	1 COIN	3 CREDITS
SETTING #4	1 COIN	4 CREDITS
SETTING #5	1 COIN	5 CREDITS
SETTING #6	1 COIN	2 CREDITS
SETTING #7	1 COIN	5 CREDITS
SETTING #8	1 COIN	3 CREDITS
SETTING #9	1 COIN	4 CREDITS
SETTING #10	1 COIN	5 CREDITS
SETTING #11	1 COIN	6 CREDITS
SETTING #12	2 COINS	1 CREDIT
SETTING #13	1 COIN	1 CREDIT
SETTING #14	1 COIN	2 CREDITS
SETTING #15	1 COIN	1 CREDIT
	2 COINS	3 CREDITS
SETTING #16	1 COIN	3 CREDITS
SETTING #17	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT
SETTING #19	1 COIN	1 CREDIT
	2 COINS	2 CREDITS
	3 COINS	3 CREDITS
	4 COINS	5 CREDITS
SETTING #20	1 COIN	5 CREDITS
SETTING #21	5 COINS	1 CREDIT
SETTING #22	1 COIN	2 CREDITS
SETTING #23	2 COINS	1 CREDIT
	4 COINS	2 CREDITS
	5 COINS	3 CREDITS
SETTING #24	1 COIN	3 CREDITS
SETTING #25	1 COIN	1 CREDIT
	2 COINS	2 CREDITS
	3 COINS	3 CREDITS
	4 COINS	4 CREDITS
	5 COINS	6 CREDITS
SETTING #26	1 COIN	1 CREDITS
SETTING #27	FREE PLAY	

MANUAL SETTING

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

```
                  MANUAL SETTING

COIN TO CREDIT              1 COIN     1 CREDIT      — — — — ①

BONUS ADDER                NO BONUS ADDER          — — — — — ②


COIN CHUTE #1 MULTIPLIER                 — — — —  — — — — ③
  1 COIN COUNTS AS 1 COIN
  COIN     1    2    3    4    5    6    7    8    9
  CREDIT   1    2    3    4    5    6    7    8    9

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

>EXIT

             SELECT WITH SERVICE BUTTON
             AND PRESS TEST BUTTON
```
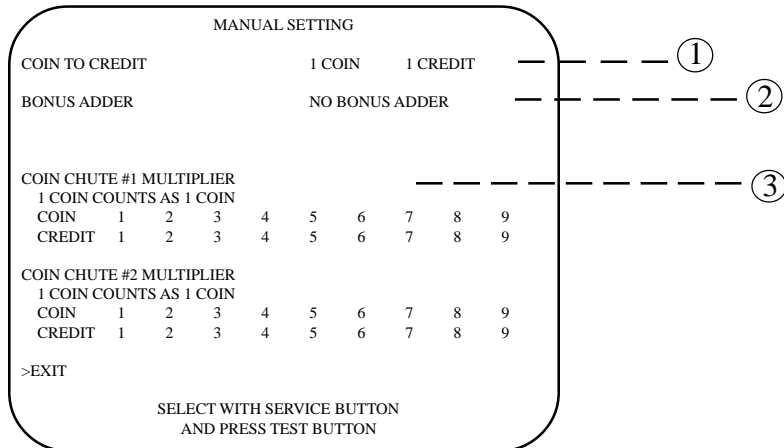
FIG. 7.12b MANUAL SETTING

① Determines Coin/Credit setting.

② This sets how many coins should be inserted to obtain one Service Coin.

③ This sets how many tokens one coin represents.

Table 7.12c MANUAL SETTING

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

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

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

7 - 13 VOLUME SETTING

This allows Slide Volume to be set.

```
            VOLUME  SETTING
            AUTO SETTING


PULL POSITION        MAX dd (df)  MIN 74 (75)
SWING POSITION       MAX 98 (95)  MIN 07 (03)
REEL                 NEUTRAL 88 (88)


          >CONTINUE WITH SAVE
           CONTINUE WITHOUT SAVE







          SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

Fig. 7.13a VOLUME SETTING

```
            VOLUME  SETTING
            MANUAL SETTING


TENSION        MAX da (de)  MIN 07 (06)
STICK X        MAX ao (aB)  MIN 61 (62)  NEUTRAL 82 (83)
STICK Y        MAX af (a1)  MIN 66 (63)  NEUTRAL 84 (84)



          >EXIT WITH SAVE
           EXIT WITHOUT SAVE






          SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

Fig. 7.13b VOLUME SETTING

● Settings of volumes, etc., can be executed. Volume setting has 2 catagories, i.e., AUTO SETTING and MANUAL SETTING. AUTO SETTING performs the setting of the Volume of the portions that can be set automatically. MANUAL SETTING executes the setting of the Volume of the portions that can only be set manually. Selecting VOLUME SETTING causes AUTO SETTING to be executed first.

AUTO SETTING

● AUTO SETTING starts of itself. By holding the rod, when the line is pulled, move the rod forward so that the line will be withdrawn up to the limit. If the length is short, "LINE ERROR" occurs.

● When "LINE ERROR" occurs, check to see if the length of the knotted portions at both ends of the line is appropraite or not by referring to Section 8. If the "LINE ERROR" still occurs when the length of the knotted portions is appropri- ate, then replace the line. During setting, "AUTO SET- TING NOW" is displayed. When setting is finished, "AUTO SETTING COMPLETE' and each Volume value are displayed.

● By using the Service Button, select CONTINUE WITH SAVE, press the Test Button to have the results stored, and proceed to the next mode.

7 - 14 BOOKKEEPING

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

```
          BOOKKEEPING          PAGE1/2
          COIN REPORT

COIN CHUTE #1                   XXXXXXXXXXX
COIN CHUTE #2                   XXXXXXXXXXX
TOTAL COINS                     XXXXXXXXXXX
COIN CREDITS                    XXXXXXXXXXX
SERVICE CREDITS                 XXXXXXXXXXX
TOTAL CREDITS                   XXXXXXXXXXX
NUMBER OF GAMES
  1 P GAMES                     XXXXXXXXXXX
  2 P GAMES                     XXXXXXXXXXX
NUMBER OF CONTINUE
  1 P GAMES                     XXXXXXXXXXX
  2 P GAMES                     XXXXXXXXXXX

TOTAL      TIME                 XDXXHXXMXXS
PLAY       TIME                 XDXXHXXMXXS
AVERAGE PLAY      TIME              XXMXXS
LONGEST PLAY      TIME              XXMXXS
SHORTETEST PLAY   TIME              XXMXXS


          PRESS TEST BUTTON TO CONTINUE
```
FIG. 7.14a BOOKKEEPING (1/2)

```
          BOOKKEEPING          PAGE 2/2

TIME HISTOGRAM
0M00S ~ 0M29S        XXXXXXXX
0M30S ~ 0M39S        XXXXXXXX
0M40S ~ 0M49S        XXXXXXXX
0M50S ~ 0M59S        XXXXXXXX
1M00S ~ 1M09S        XXXXXXXX
1M10S ~ 1M19S        XXXXXXXX
1M20S ~ 1M29S        XXXXXXXX
1M30S ~ 1M39S        XXXXXXXX
1M40S ~ 1M49S        XXXXXXXX
1M50S ~ 1M59S        XXXXXXXX
4M00S ~ 4M09S        XXXXXXXX
4M10S ~ 4M19S        XXXXXXXX
4M20S ~ 4M29S        XXXXXXXX
4M30S ~ 4M39S        XXXXXXXX
4M40S ~ 4M49S        XXXXXXXX
4M50S ~ 4M59S        XXXXXXXX
5M00S ~             XXXXXXXX


          PRESS TEST BUTTON TO EXIT
```
FIG. 7.14b BOOKKEEPING (2/2)

● COIN CHUTE#*:
Number of coins put in each Coin Chute.

● TOTAL COINS:
Total number of activations of Coin Chutes.

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

● SERVICE CREDITS:
Credits registered by the SERVICE BUTTON.

● TOTAL CREDITS:
 Total number of credits (COIN CREDITS+SERVICE CREDITS).

● TOTAL TIME:
The total energized time.

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

When in the PAGE 2/2 mode, press the TEST BUTTON to return to the MENU mode.

7 - 15 BACKUP DATA CLEAR

```
          BACKUP DATA CLEAR


               YES (CLEAR)
          >NO (CANCEL)













          SELECT WITH SERVICE BUTTON
          PRESS TEST BUTTON TO EXIT
```
FIG. 7.15 BACKUP DATA CLEAR

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

● When clearing, bring the arrow to "YES" and when not clearing, to "NO", by using the SERVICE BUTTON, and push the TEST BUTTON.

● When the data has been cleared, "COMPLETED" will be displayed. Bring the arrow to "NO" and press the TEST BUTTON to cause the MENU mode to return on to the screen.

● Note that the contents of the GAME SETTING, COIN SETTING, and BOARD SETTING are not affected by BACKUP DATA CLEAR operation.

8 . MAINTENANCE OF MECHANISM UNIT

⚠ **WARNING!**

● 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.

8 - 1 LINE REPLACEMENT

To replace the line, openthe Chassis Front Door and remove the lid by referring to ②, Section 4.

① Install the line to the rod. The line provided has a loop. Firmly secure it is shown.

HOW TO LOOP:

Knot the line by folding it at approximately 120mm from the end of the line and loop it as shown.

120mm
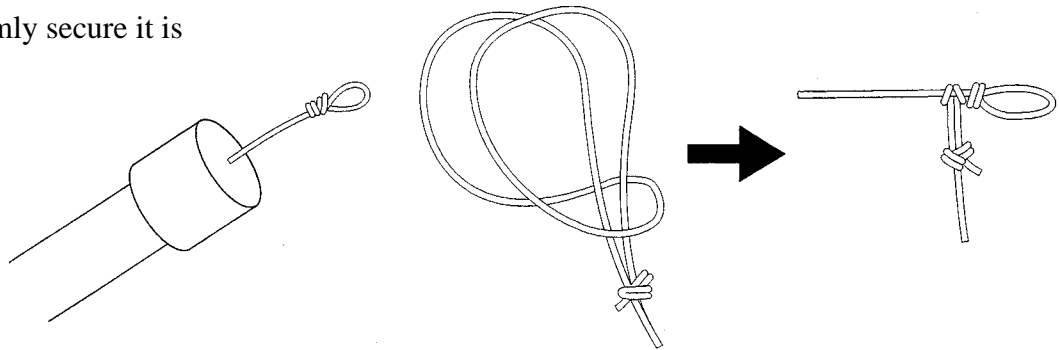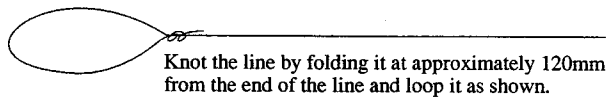
② Pass the line through the Sensor Unit
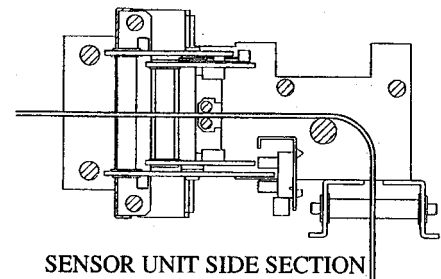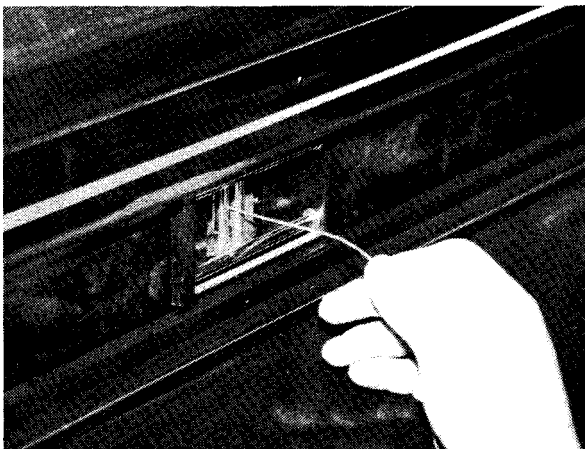
SENSOR UNIT SIDE SECTION
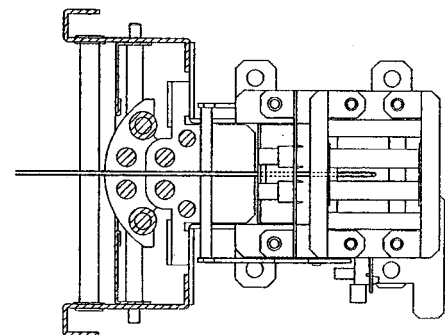
SENSOR UNIT BOTTOM SECTION
Ensure that the line passes between each Roller.

VIBRATION MECHA

VIBRATION MECHA SECTION

LINE DIRECTION

GUIDE UNIT

ROLLER

③

④

⑥

⑦

ROLLER

⑤

TENSION UNIT

FIG. 10. 1 d
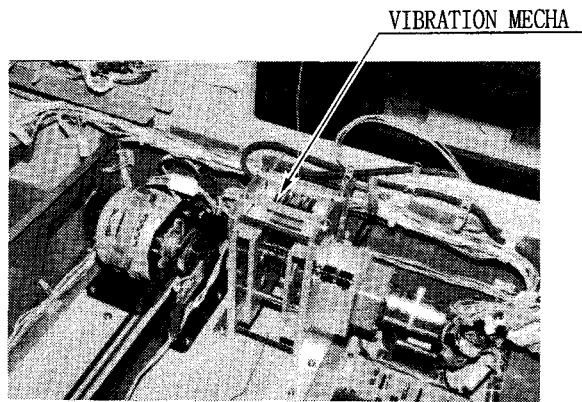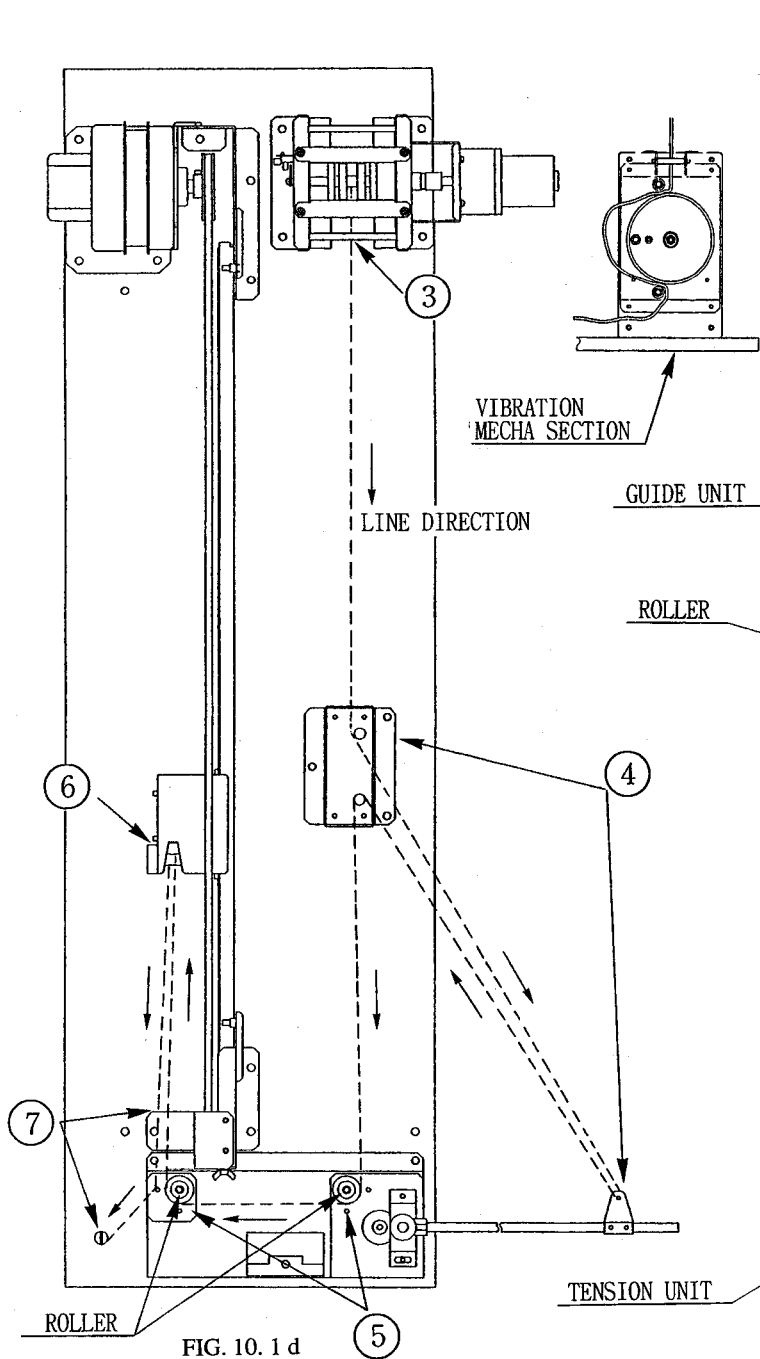
③ Pass the line through the Vibration Mecha.
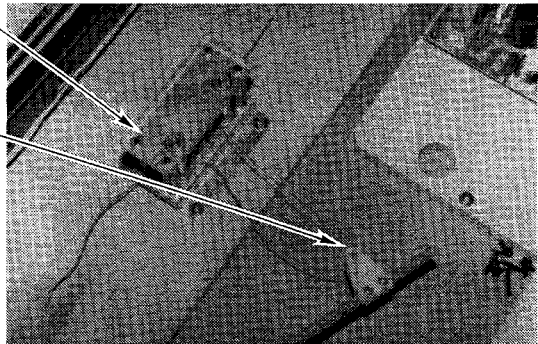
④ Have the line pass the Roller portions of GUIDE UNIT and TENSION UNIT.
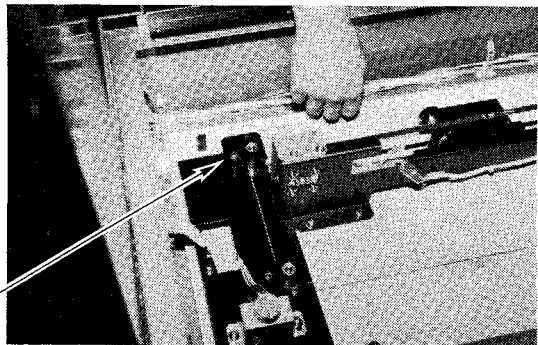
⑤ Have the line pass the TENSION UNIT. At this time, ensure that the line passes only the Roller.

SLIDE UNIT

WIRE HOLDER
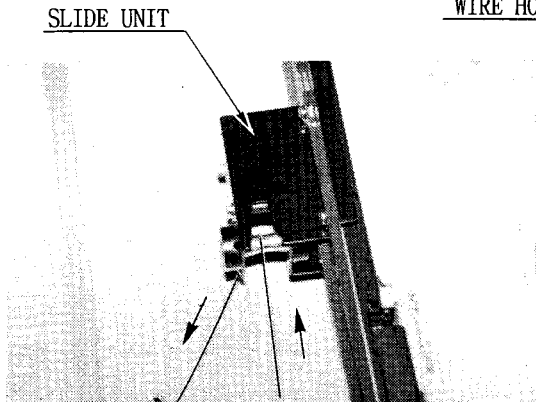
TENSION UNIT HOLE

⑥ Have the line pass the SLIDE UNIT from above.
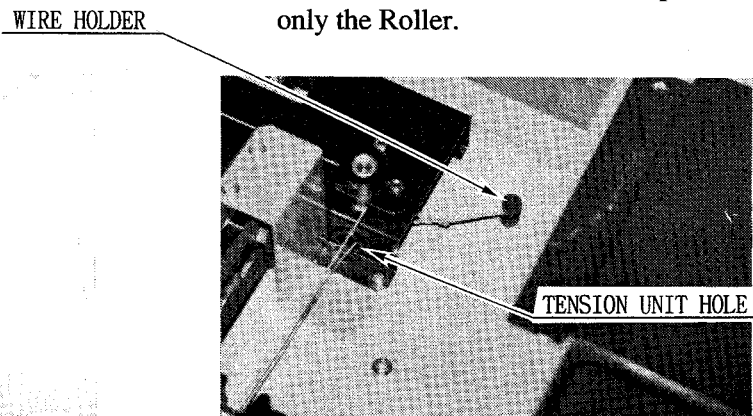
⑦ Pass the line through the hole of TENSION UNIT and loop the line as shown in FIG. 10. 1 b and secure the line to the WIRE HOLDER as in ① above.

① Take Out the 2 screws and remove the cover.
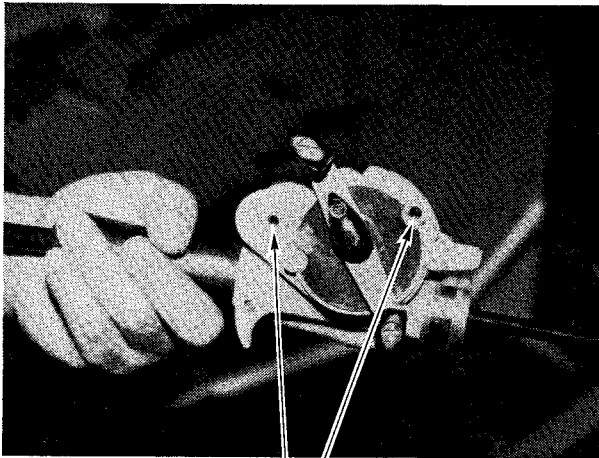
SCREW (2)
M3×45

② Remove the cap from each button.

COVER

CAP
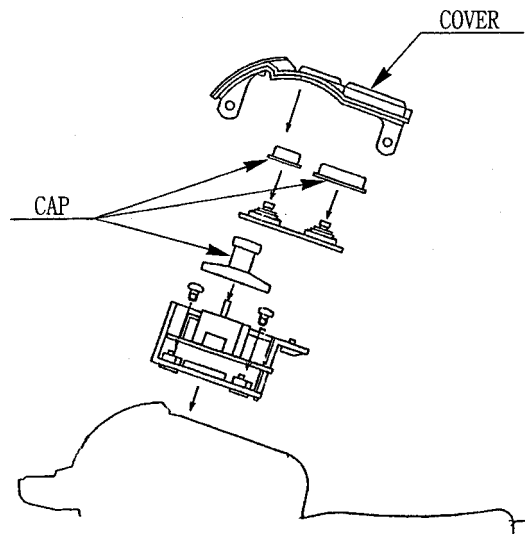
③ Withdraw and disconnect white 8P and 4P
connectors to replace.
Being so small, the connectors can be
damaged if subjected to excessive force.
Use special care when connecting and
disconnecting the connectors.
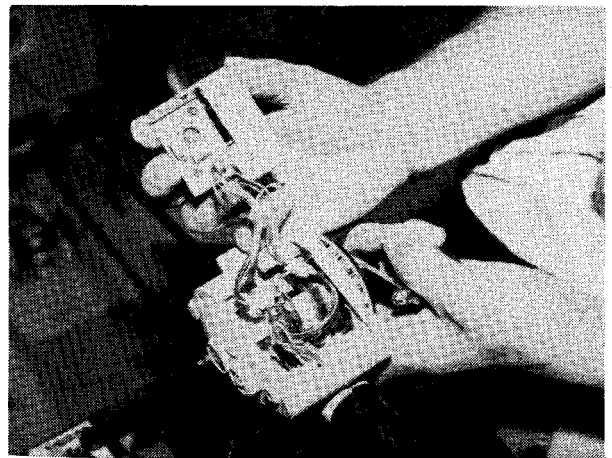
8 - 3 ADJUSTING AND REPLACING THE TENSION VOLUME

In the INPUT TEST, if the Tension Volume value is not in the appropriate position, adjust or replace in the following procedure.

SCREW (2)
M4×8, w/flat
& spring washers

① Turn power off.

② Open the Front Door and remove the rod.

③ Loosen the 2 screws and adjust gear mesh. If the Volume is malfunctioning, remove the 2 screws and replace the Volume.
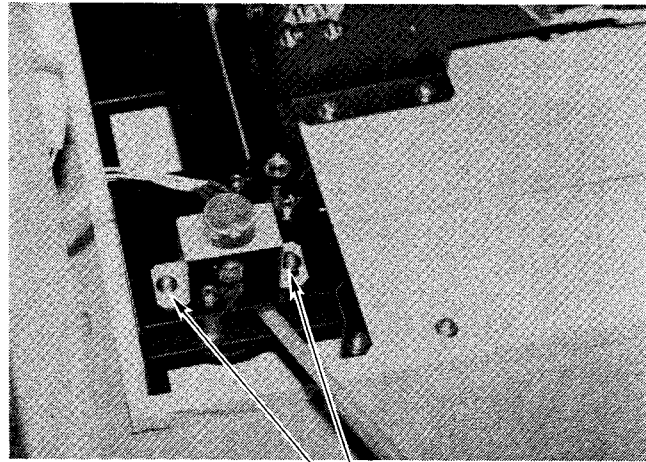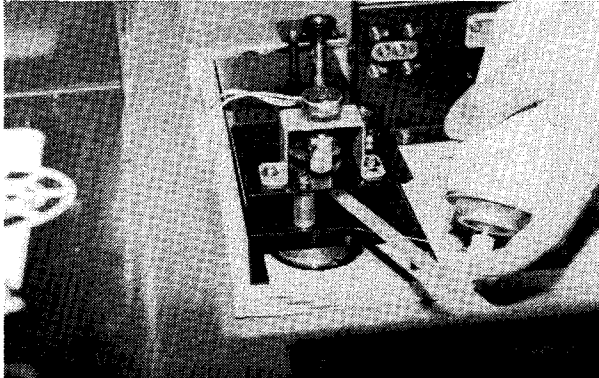
SPRING PORTIONS
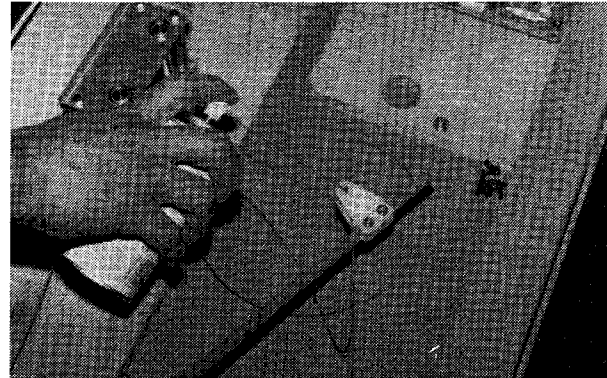
SLACK REMOVING PORTIONS
Do not apply grease to the line passing portions.
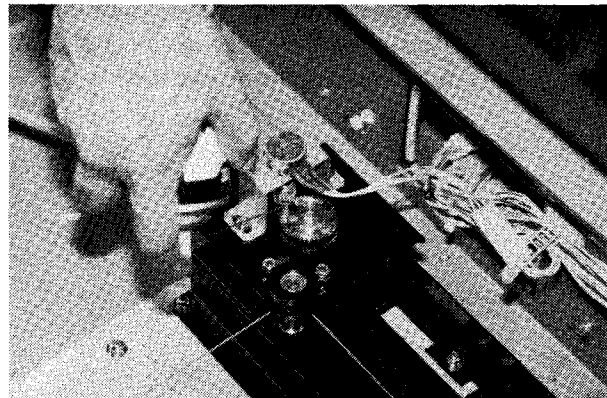
VOLUME GEAR PORTION

9 . 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

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

①　Turn the power for the machine OFF. Open the coin chute door.

②　Open the gate and dust off by using a soft brush (made of wool, etc.).

③　Remove and cleen 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 shaft.

⑤　Remove stain from the shaft and pillow portions by wiping off with a soft cloth, etc.

⑥　After wiping as per #5 above, further apply a dry cloth, etc. to cause the coin selector to dry completely.

GATE

FIG. 9a

CRADLE
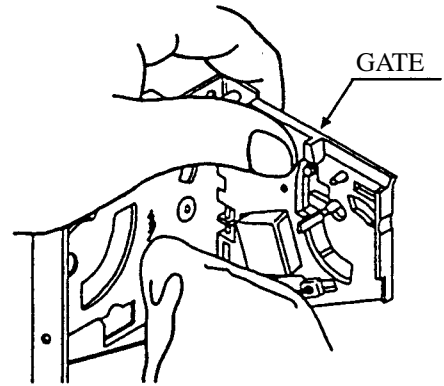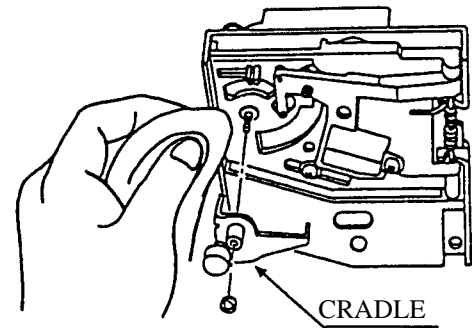
FIG.9b

STOP IMPORTANT!

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

COIN INSERTION TEST

Once a 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 is pressed down?

Insert a coin while keeping the Reject Button pressed down and check if it is rejected.

COIN METER
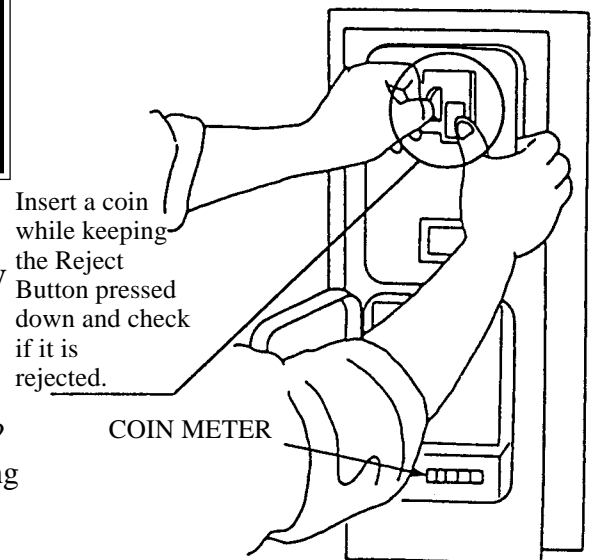
FIG. 9c

OPTIONAL DOLLAR BILL ACCEPTOR

● THE COIN DOOR ASSEMBLY USED ON **SEGA BASS FISHING** 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   VFM5 (MARS)
(FORWARD-MOST POSITION)

HOLE POSITION#2   VFM2 (MARS)
                                            VFM4 (MARS)
                                            DBV45 (JCM)

HOLE POSITION #3   CURRENTLY NOT USED

HOLE POSITION #4   DSI01*

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

10 . PROJECTOR

Fine adjustments are stored in the Projector. Pressing the Fine Adjustment SW (Convergence Adjustment) results in entering the Fine Adjustment mode, and this may cause the stored fine adjustment to be changed. During work other than for adjustment, Should you touch the Fine Adjustment SW by mistake, immediately turn power off by using the main SW and then turn it back on again. If any distortion or color deviation is found in the test mode and adjustments are needed, use the specified adjustment knob, or perform adjustment by remote control. To find the adjustment knob, move Cabinet DX and remove the PTV Front Service Door by using the procedure opposite the one for installing and assembling. In some cases a cover is installed to the Adjustment Knobs. Remove the Cover.

10 - 1 CLEANING THE SCREEN

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. 10.1

SERVICE DOOR
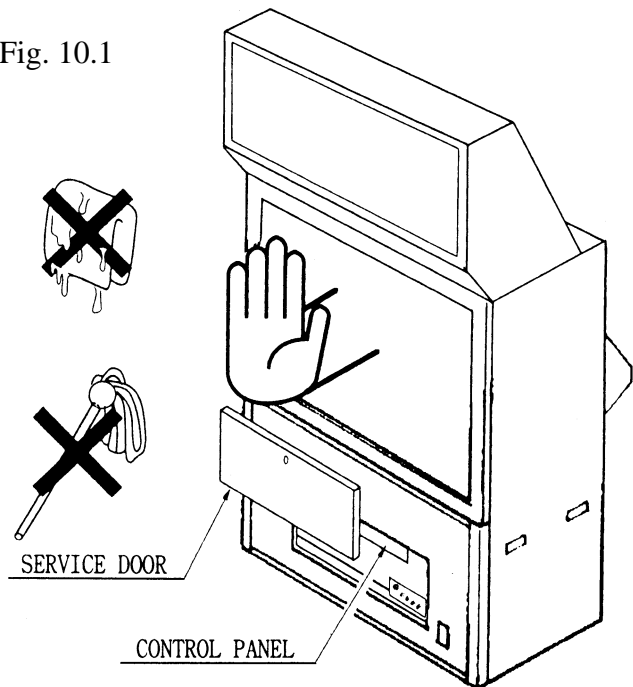
CONTROL PANEL

☐ MITSUBISHI PROJECTOR CONTROL PANEL

POWER BUTTON

Convergence Adjustment SW
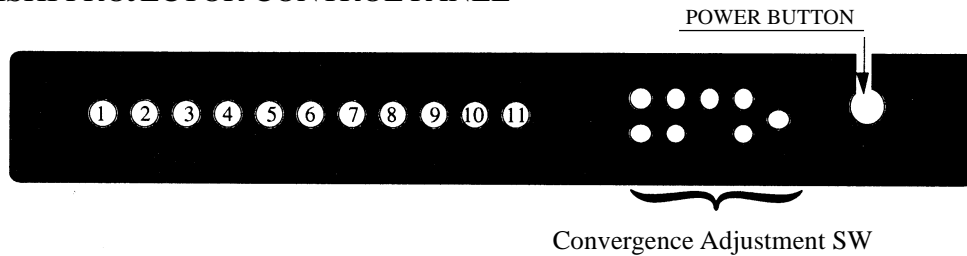
①	V.POS	②	H.POS	③	R-GAIN	④	G-GAIN	⑤	B-GAIN
⑥	CONT	⑦	BRI	⑧	V.W	⑨	H.W		

⑩ R.H.L. ⎫
⑪ B.H.L. ⎭ Linearity adjustments in horizontal directions (red or blue) are made.

STATIC CONVERGENCE ADJUSTMENT

◁ ▷ ▽ △
⑭ ⑮ ⑯ ⑰
⑫ ⑬ ⑱
TEST R/B POWER

Convergence Adjustment SW

R
+
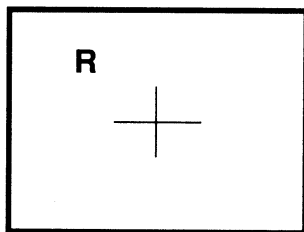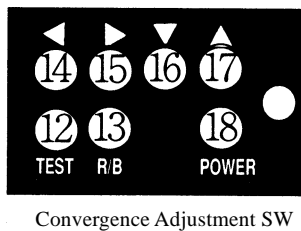
⑫ TEST — Test mode on/off key

⑬ R/B — R/B key

⑭ ◁ — Left shift key

⑮ ▷ — Right shift key

⑯ ▽ — Lower shift key

⑰ △ — Upper shift key

⑱ POWER — Power button

① For the Convergence adjustment mode, press the test mode on/off key. ⑫

② Ensure that "R" is displayed on the screen.

③ Make adjustments so as to cause the red cross pattern to match with the green cross pattern by using Left shift key ⑭ , Right shift key ⑮ , Lower shift key ⑯ , and Upper shift key ⑰ .

④ By using R/B shift key ⑬ , cause the red adjustment "R" to shift to blue adjustment "B" and make sure that "B" is displayed on the screen.

⑤ In the same manner as in ③ above, cause the blue cross pattern to match with the green cross pattern.

⑥ After making adjustment, press the test mode on/off key ⑫ to cancel the convergence adjustment mode.

STOP

IMPORTANT!

● Although Remote Control Buttons other than those specified below do not function even if pressed during Convergence Adjustment, do not press them during adjustment work so as to avoid causing malfunctioning.

● Operate the Remote Control towards the PTV screen. If directed other than to the PTV screen, the Remote Control does not function.

BEFORE USING REMOTE CONTROL:
First make sure that the main SW on the Projector's control panel is ON (the LED adjacent to the main SW is lit).
The Remote Control has 2 different types. Depending on the type, the Adjustment procedure is different.

In case of REMOTE CONTROL (Part No. 200-5298):

① For the Convergence Adjustment mode, press the test button. Ensure that "R" is displayed on the screen.

② Make adjustment so as to cause the red cross pattern to match with the green cross pattern.
When the red cross matches the green cross, the green cross turns yellow or white.

Use remote control buttons shown below to move the red cross as follows:

Button ⑤ ——————— to the left
⑦ ——————— to the right
② ——————— Upward
⑩ ——————— Downward

③ Use Remote Control button ⑥ to shift "R" to "B".
Make sure that "B" is displayed on the screen. Each time Button ⑥ is pressed, red and blue adjustments are shifted.

④ In the same manner as in ② above, cause the blue cross to match the green cross. When the blue cross matches the green cross, the green cross turns white.

⑤ After adjustment is made, press the test button to cancel the Convergence Adjustment mode.
*When 2 minutes or more elapses in the Convergence mode screen without taking any action, the on-screen adjustment mode will disappear.

1·5

2·3·4

In case of REMOTE CONTROL (Part No. 200-5532):

Redline adjustment

Press shift to superimpose
the red line on the green line.

Completion of Adjustment
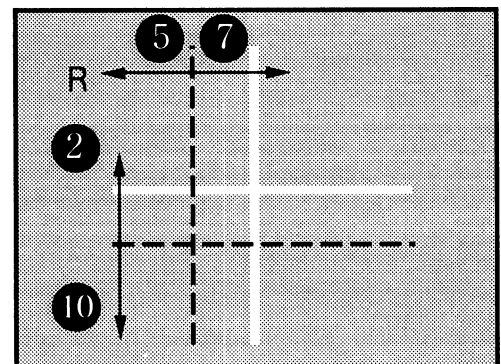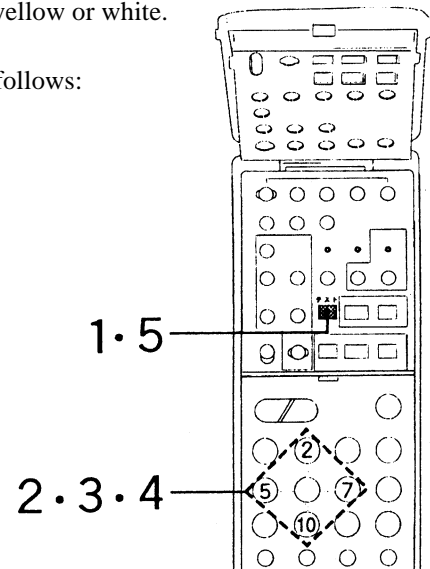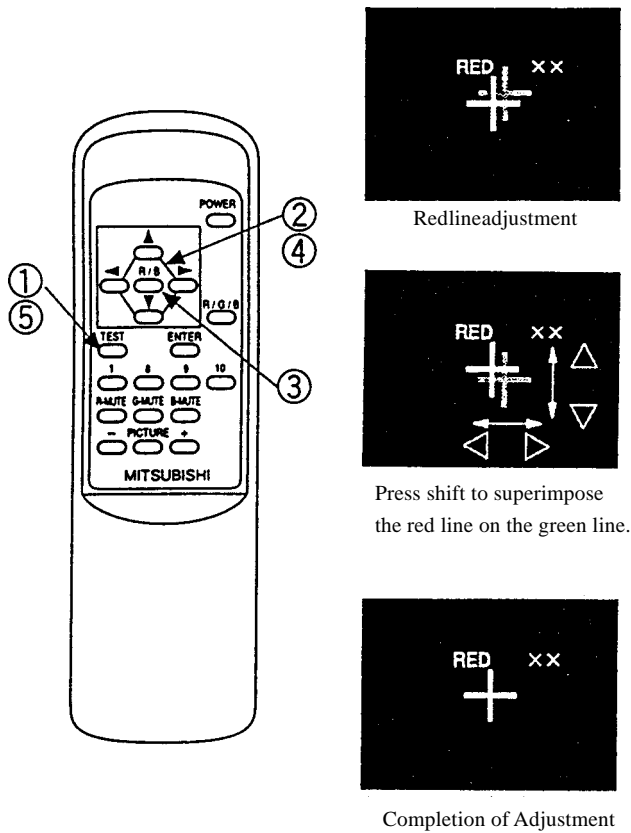
① Press the TEST KEY to have the red line adjustment screen appear.

② Superimpose the red cross on the green cross at the center of the screen.
Move the red cross to the left, right, up, and down respectively with the corresponding buttons of the remote control.
When the red cross is superimposed on the green cross, the green cross turns into yellow or white.

③ Press the R/B Key to have the blue line adjustment screen appear. Each time R/B Key is pressed, the red line and blue line will be alternated.

④ In the manner similar to ② above, press each key to superimpose the blue cross on the green cross. When it is superimposed, the cross in the center will become white.

⑤ Press the TEST KEY to exit from the adjustment mode.

⑥ During STATIC CONVERGENCE Adjustment Mode, if no action is taken within 5 minutes, the adjustment mode will be exited automatically.

| NORMAL FUNCTIONING | CONTRAST Adjustment mode The brightness of image is adjusted. | BRIGHT Adjustment mode The black level of image is adjusted. | H - POS Adjustment mode The position of image is adjusted in the horizontal direction. |
| V - WIDTH Adjustment mode The vertical width of image is adjusted. | V - POS Adjustment mode The position of image is adjusted in the vertical direction. | H - WIDTH Adjustment mode The horizontal width of image is adjusted. |

Every time the PICTURE KEY is pressed, the Adjustment mode proceeds sequentially in order as above.

In each Adjustment mode, press the + or - key to make adjust ment. In each Adjustment mode, unless the key input (value or image variation) is effectively performed within approximately 6 seconds, the Adjustment mode is automatically cancelled and shifts to the normal image. When the horizontal width or vertical width is adjusted the convergence is automatically corrected (auto adjuster functioning).

⚠️ **WARNING!**

Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

TOSHIBA PROJECTOR has two different types, i.e., one equipped with the Control Panel and the other without the Control Panel. When adjusting, be sure to confirm the type used.

TOSHIBA PROJECTOR CONTROL PANEL

STATIC CONVERGENCE ADJUSTMENT (With the Control Panel)

🛑 **STOP**

IMPORTANT!

Do not press undesignated key. Pressing any undesignated key can cause malfunction and adjustment fault. Should the key be pressed by mistake, turn power off and turn it back on again.
During adjustment, should the screen image be abnormally disfigured due to static electricity and other cuases, do not have adjustment status stored, and be sure to turn power off.
Operate the Remote Control towards the PTV screen. If directed other than to the PTV screen, the Remote Control does not function.

① Unless the CONV ADJ SW is ON, remote control operation is not acceptable. At the time of shipment, the SW is set to ON. If remote control is not accepted, check status of this SW.

② Direct the remote control towards the PTV screen and keep the Test Key pressed down for approxiamtely 3 seconds. The adjustment mode should appear on the screen and the screen turns into the green test pattern.

On the screen, the cross pattern and the square frame line will be projected. However, due to the TV mask, the up/down lines cannot be seen.
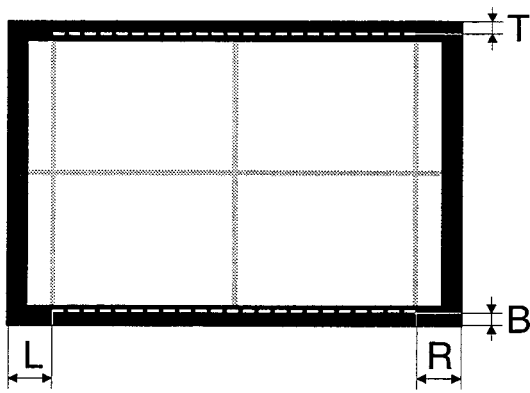
Adjust the position of green frame line to L=R, T=B.
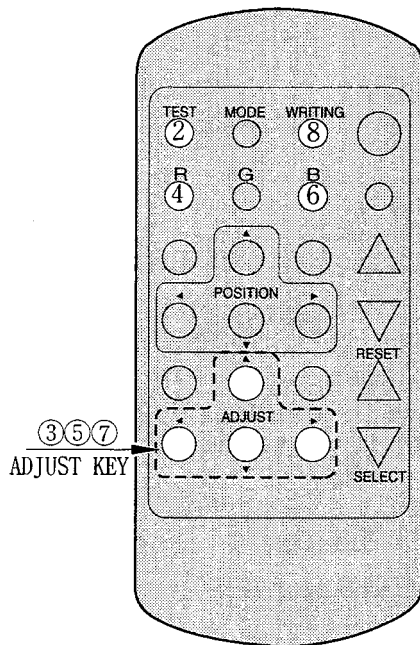
ADJUST KEY ③⑤⑦

③ When intially installing the machine, or when the installation position is changed, check to see if the Test Pattern is in the central, well balanced position. If deviated, adjust the green position by using the Adjust Key "up/down/left/right" in the manner so as to improve the balance (L&R, and T&B are approximately equal as shown).
In the normal usage, with green as reference color, red and blue are adjusted. Therefore, skip the above procedure.

④ Press the R Key of the remote control. The red pattern together with the green pattern are displayed on the screen. At this time, the frame color turns into red.

⑤ By operating the Adjust Key of the remote control "up/down/left/right", have the center red match with that of green. When red color is superimposed on green color, it seems to be yellow.

⑥ Press the B Key of remote control. The blue test pattern is added to the display on the screen. At this time, the frame color turns into blue.

⑦ By operating the Adjsut key of the remote control "up/down/left/right", have the center of the blue match with that of yellow. When blue color is superimposed on yellow color, it seems to be white.

⑧ By pressing the WRITING KEY, have the adjustment status stored. After it has been stored, the Adjsutment Mode is exited automatically, and the noraml mode returns. If the Test Key is pressed down for approximately 3 seconds without having the adjustment status stored, pre adjustment status will remain.

⑨ The R.G.B. Keys have screen display color change functions. Pressing the key of the color presently shown on the screen causes the color to disappear, therefore, for adjustment, press the key again.
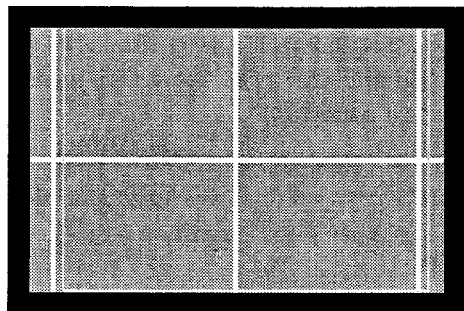
Choosing red causes the frame color to turn into red and the display indicates that red is adjustable. Choosing blue causes the frame color to turn into blue and the display indicates that blue is adjustable.
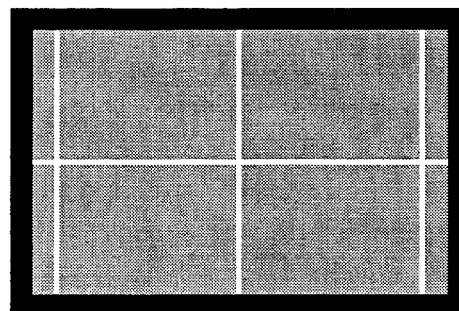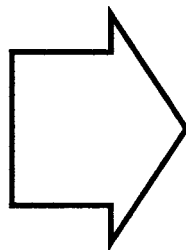
By operating ADJUST Key, have the center of red and blue frame match with that of green frame (the reference color). When the center matches with each other, the frame line becomes white.

STATIC CONVERGENCE ADJUSTMENT

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ADJUSTMENT OF TOSHIBA PROJECTOR (THE TYPE WITHOUT CONTROL PANEL)

The Remote Control is used for adjustment of the type without Control Panel. When adjsuting the Projector, direct the Remote Control's light emitting portion towards the Projector Screen.

REMOTE CONTROL BUTTONS

REMOTE CONTROL LIGHT EMITTING PORTION

MODE (mode selection)
TEST (adjust/normal shift)
R. G. B. (color selection)

POSITION (to select the position)

ADJUST (adjustment)

WRITING (storing the data)
P (automatic color matching)
SET (to decide the selection)
PIC - ADJ (item selection)

RESET
SELECT (pattern selection)
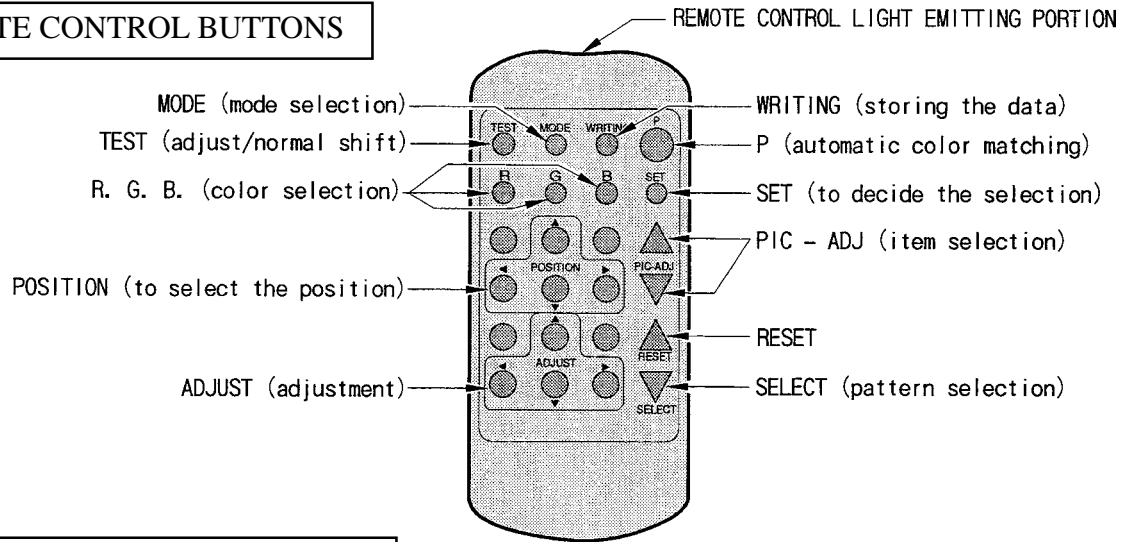
AUTOMATIC COLOR MATCHING

The Projector may be subject to color deviations affected by earth magnetism, the building's steel frames, etc. When the Projector is intially installed of 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.
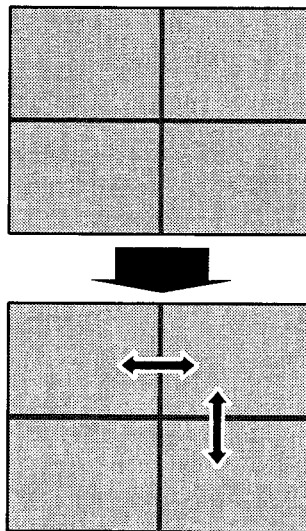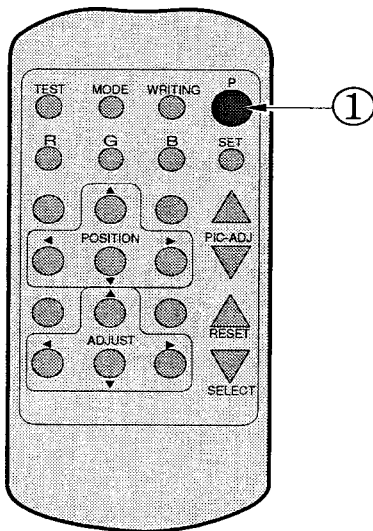
The Projector will shift to the color deviation correction mode from the game mode, with the green cross pattern appearing on the screen.

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 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).

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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.
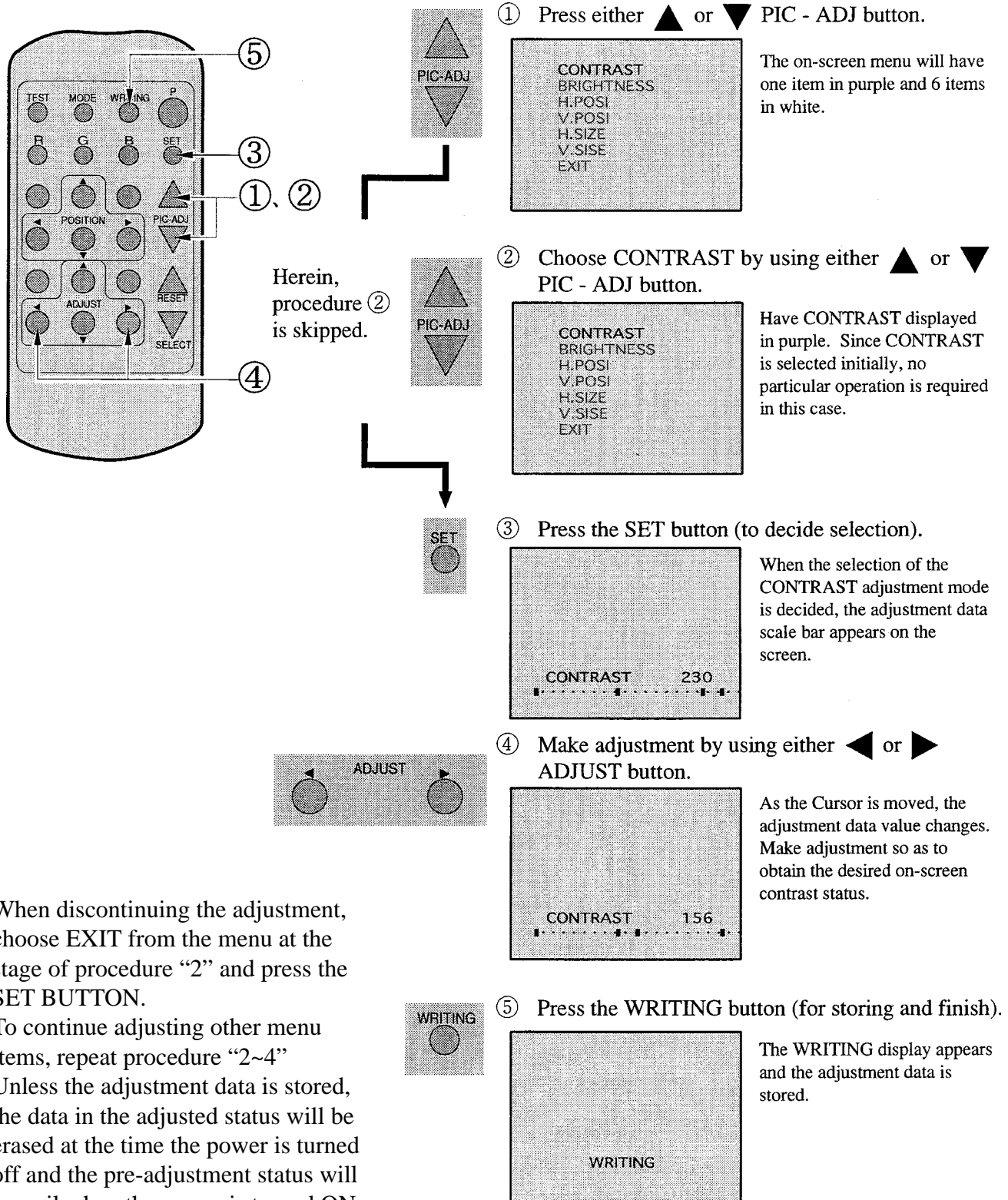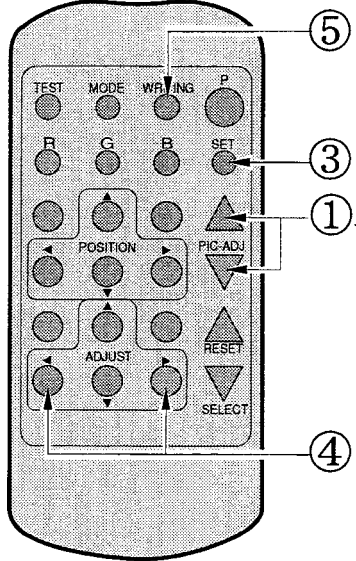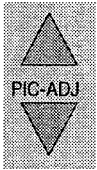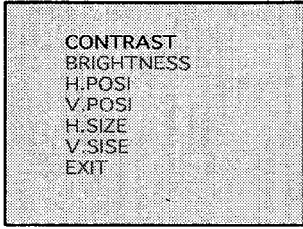
Herein, procedure ② is skipped.

① Press either ▲ or ▼ PIC - ADJ button.

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

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
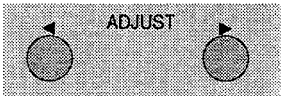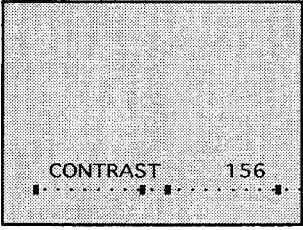H.SIZE
V.SISE
EXIT

② Choose CONTRAST by using either ▲ or ▼ PIC - ADJ button.

Have CONTRAST displayed in purple. Since CONTRAST is selected initially, no particular operation is required in this case.

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
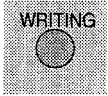EXIT

③ Press the SET button (to decide selection).

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

CONTRAST   230

④ 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 contrast status.

CONTRAST   156

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 prevail when the power is turned ON the next time.

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

The WRITING display appears and the adjustment data is stored.

WRITING

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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 BRIGHTNESS causes the light and shade of the on-screen images to be changed.

① Press either ▲ or ▼ PIC - ADJ button.

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

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT

② Choose CONTRAST by using either ▲ or ▼ PIC - ADJ button.

Have CONTRAST displayed in purple. Since CONTRAST is selected initially, no particular operation is required in this case.

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT

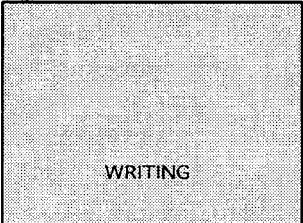③ Press the SET button (to decide selection).

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

CONTRAST   230

④ 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 contrast status.

CONTRAST   156

When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure "2" and press the SET BUTTON.
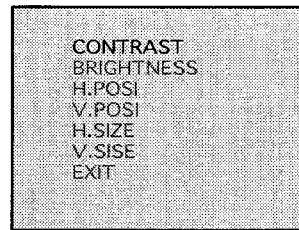To continue adjusting other menu items, repeat procedure "2~4"
Unless the adjustment data is stored, the data in the adjusted status will be erased at the time the power is turned off and the pre-adjustment status will prevail when the power is turned ON the next time.
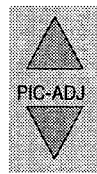
⑤ Press the WRITING button (for storing and finish).

The WRITING display appears and the adjustment data is stored.

WRITING

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ADJUSTING THE ON-SCREEN CONTRAST

Although the on-screen display position (H. POSI, V. POSI) has been adjusted at the time of ship-ment from the factory, the on-screen contrast can be readjusted if desired. When the Game Board is replaced, readjustment may be necessary.
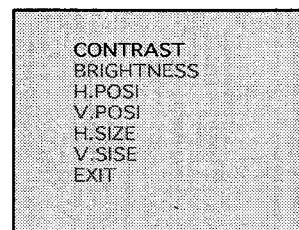
① Press either ▲ or ▼ PIC - ADJ button.

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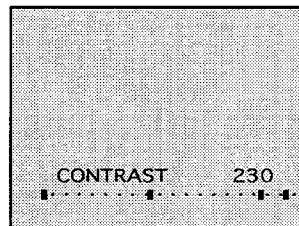
CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT

② Choose CONTRAST by using either ▲ or ▼ PIC - ADJ button.

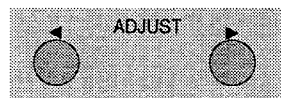Have CONTRAST displayed in purple. Since CONTRAST is selected initially, no particular operation is required in this case.
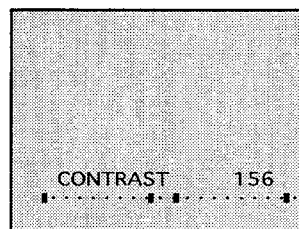
CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT

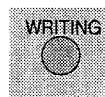③ Press the SET button (to decide selection).

When the selection of the CONTRAST adjustment mode is decided, the adjustment data scale bar appears on the screen.
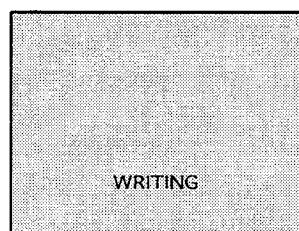
CONTRAST   230

④ 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 contrast status.

CONTRAST   156

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 prevail when the power is turned ON the next time.

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

The WRITING display appears and the adjustment data is stored.

WRITING

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ADJUSTING THE SCREEN SIZE

Although the on-screen size (H. SIZE, V. SIZE) 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.

① Press either ▲ or ▼ PIC - ADJ button.

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

```
CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT
```

② Choose CONTRAST by using either ▲ or ▼ PIC - ADJ button.

Have CONTRAST displayed in purple. Since CONTRAST is selected initially, no particular operation is required in this case.

```
CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SISE
EXIT
```

③ Press the SET button (to decide selection).

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

```
CONTRAST      230
```

④ 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 contrast status.

```
CONTRAST      156
```

When discontinuing the adjustment, choose EXIT from the menu at the stage of procedure ④ 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 prevail when the power is turned ON the next time.

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

The WRITING display appears and the adjustment data is stored.

```
WRITING
```

CAUTION!

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 errone-ously 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 Adjsutments, if satisfactory adjustments can not be performed, do not make another convergence adjustment inadvetently. Contact the office herein stated or where the product was purchased from.

STOP

IMPORTANT!

To avoid making the adjustment work ineffective, do not press the RE-SET 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 elec-tricity, etc., turn the power off without storing the adjustment data.

Pressing the "up or down" PIC-ADJ but-ton in the Convergence Adjustment Mode status will display the Adjustment Menu as this is the one applied at the factory.

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

Should the menu shown right be dis-played by mistake, first choose EXIT by using either "up or down" PIC-ADJ but-ton and then press the SET button.

----- ADJUST MODE -----

SUB VSIZE
SUB HSIZE
SUB BRIGHT
EXIT
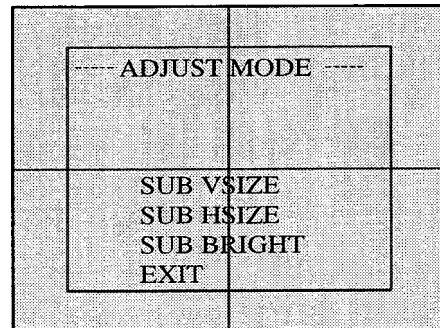
Adjustment menu used in the factory.

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.


DO NOT PUSH THIS.
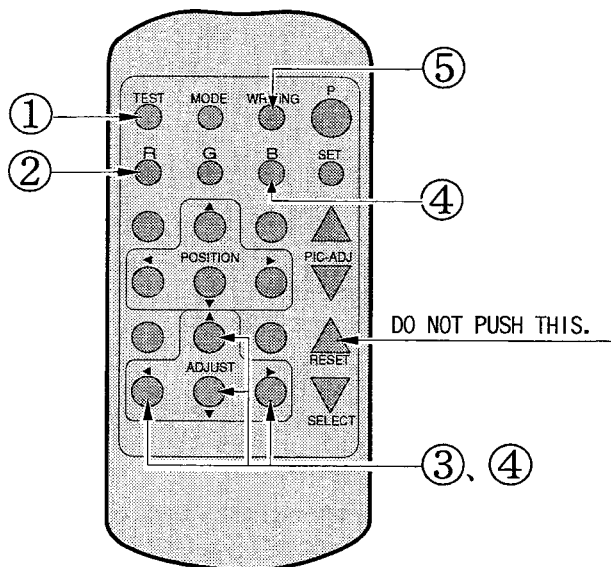
When either of "2" "4" COLOR SELECT buttons (R,B) is pressed, if the color desired to be adjusted disappears, press that particular button again. For example, if the red color needs to be adjusted again at the stage of "4" the R button need to be pressed twice.

① Keep pressing the TEST button for approximately 3 seconds.
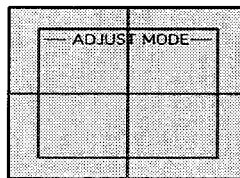
The screen will change to ADJUST mode from the Game mode to cause the green test pattern to be displayed on the screen.

② Press the R button to have the red adjustment mode.
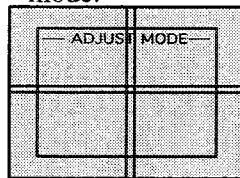
The red test pattern is added to the display. The frame color turns to red and this signifies the red adjustment mode.

③ Make adjustment by using the ▲ ▼ ◀ ▶ ADJUST buttons.
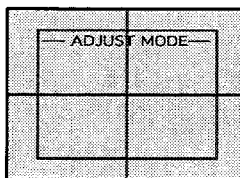
Make adjustment so as to have red superimposed on green. When red is superimposed on green, the color becomes yellow.

④ Press the B button to have the blue adjustment mode.
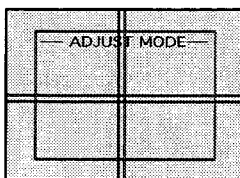
Similarly as in the case of red, adjust the blue color. When green, red, and blue are superimposed, the color becomes white.
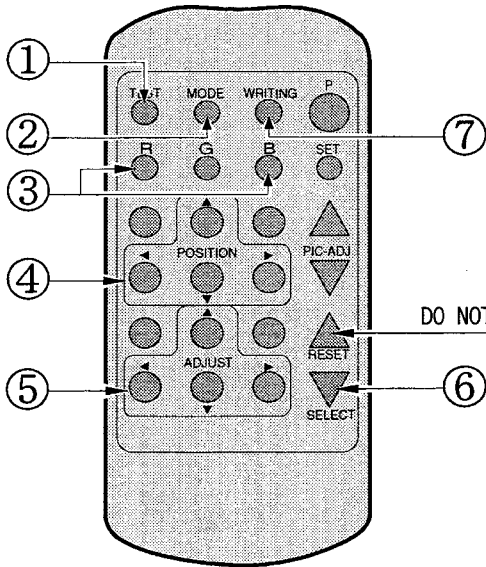
⑤ Press the WRITING button (for storing and finish).
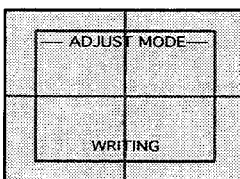
The WRITING display appears and the adjustment data is stored. After the data is stored, the Game mode returns.
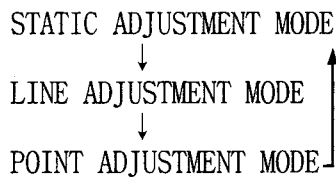
POINT CONVERGENCE ADJUSTMENT

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.

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

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

MARKER

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.

DO NOT PRESS.

④ By using the ▲ ▼ ◀ ▶ ADJUST buttons, move the MARKER to the position to be adjusted.
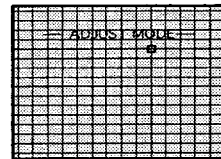
The MARKER moves in the direction of the button's arrow. However, the movable point is predetermined.

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

STATIC ADJUSTMENT MODE
↓
LINE ADJUSTMENT MODE
↓
POINT ADJUSTMENT MODE

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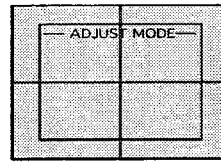
NOTE 2:
When either of the COLOR SELECT buttons (R, B) is pressed, if the desired color to be adjusted is erased, press that particular button again.

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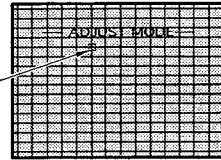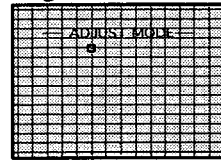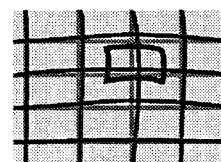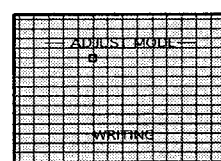
NOTE 3:
By repeatedly pressing the SELECT button, only the Projector's TEST pattern screen and the screen superimposing the Game Board Test pattern can be alternately displayed.

⑦ 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 column line (vertical) or row line (horizontal) is comprehensively moved for color matching. It is convenient to utilize this adjustment when color of the column line or row is uniformly deviated.


DO NOT PUSH.

MARKER
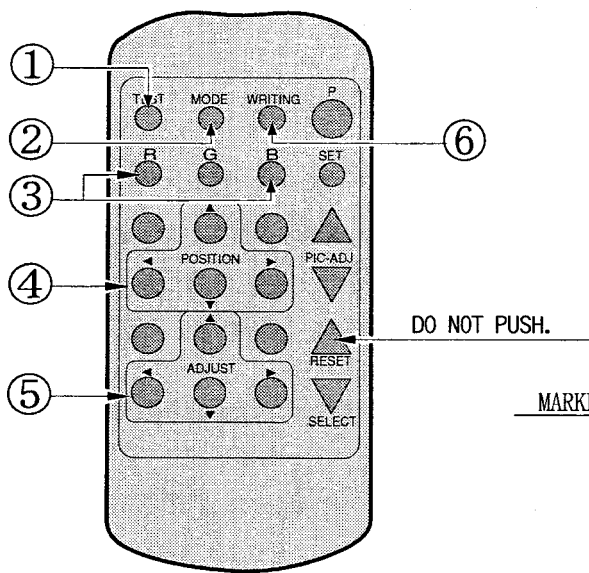
NOTE 1:
When the MODE button is repeatedly pressed, the adjustment modes will circulate as follows:
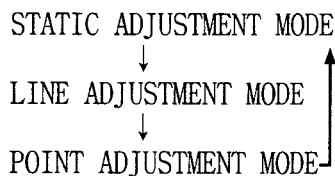
```
STATIC ADJUSTMENT MODE
         ↓
LINE ADJUSTMENT MODE
         ↓
POINT ADJUSTMENT MODE
```
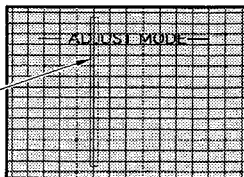
NOTE 2:
When either of the COLOR SELECT buttons (R, B) is pressed, if the desired color to be adjusted is erased, press that particular button again.

① Keep pressing the TEST button for approximately 3 seconds.
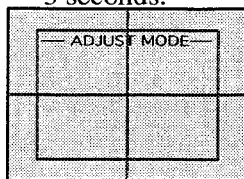
The screen changes to ADJUST mode from the Game Board mode and displays the green test pattern.

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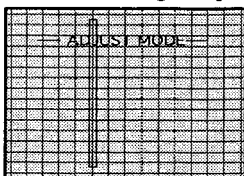
The selected color is displayed by superimposing on green. The MARKER will be in the color selected.

④ By using the ▲ ▼ ◀ ▶ POSITION buttons, move the MARKER to the position to be adjusted.
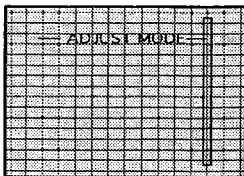
Use the ◀ ▶ buttons to select the column line, and the MARKER moves in the right/left direction. However, the movable range is predetermined.
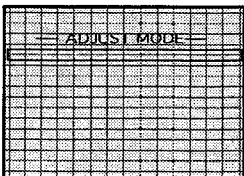
Use the ▲ ▼ buttons to select the row line and the MARKER moves in the up/down direction. However, the movable range is predetermined.

⑤ Make adjustment by using the ▲ ▼ ◀ ▶ ADJUST buttons.
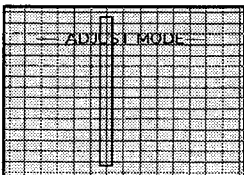
The selected column line or row line (shown left is the column line) can be moved in the desired up/down or right/left directions as applicable.

⑥ Press the WRITING button (for storing and finish).
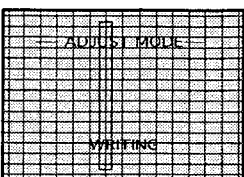
WRITING is displayed and the adjustment data is stored. After the data is stored, the Game Board screen returns.

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11 . REPLACEMENT OF FLUORESCENT LAMP AND LAMPS

⚠ WARNING!

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

⚠ CAUTION!

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 a violent falling down accidents.

11 -1 REPLACEMENT OF FLUORESCENT LAMP

① Take off the 3 screws which secure the Holder on the upper part of Billboard.

② Take out the billboard from the cabinet and replace the fluorescent lamp (20W)

TRUSS SCREW (3)
M4×8

BILLBOARD HOLDER

BILLBOARD

FLUORESCENT LAMP 32W: 390-5251-32-01
GLOW LAMP: 390-5638-5P

SCREW (4)
M4×10, w/ flat & spring washers

DIFFUSION PLATE
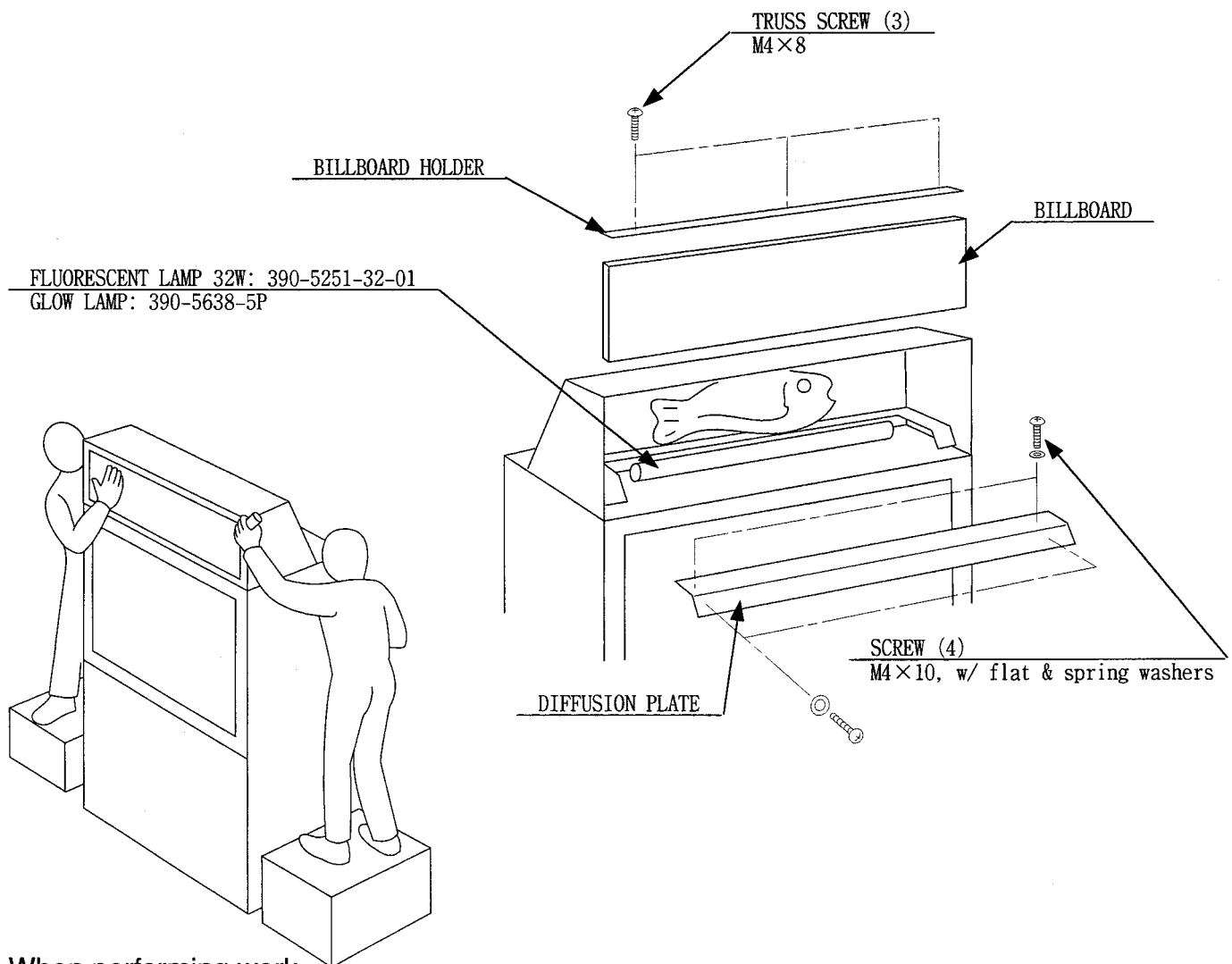
When performing work,
prepare a step.

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12 . PERIODIC INSPECTION TABLE

The items listed below require periodic check and maintenance to retain the performance of this machine and ensure safe operation.

⚠️ **WARNING!**

● Be sure to check once a year to see if Power Cords are damaged, the plug is securley inserted, dust is accumulated between the Socket Outlet and the Power Plug, etc. Using the product with dust as is accumulated can cause a fire or electrical shock.

● Periodically once a year, request the place of contact herin stated or the Distributer, etc. where the product was purchased from, as regards the interior 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.

ITEMS	DESCRIPTION	PERIOD	REERENCE
CHASSIS	Volume V.R. inspection	Monthly	1
	Greasing to gears and pillows	Semi-annually	
	Memory Test	Monthly	1
	Setting Check	Monthly	
CONTROL MECHA (pole)	SW Volume inspection	Monthly	7
	Line Inspection	Monthly	8
	Line Replacement	Semi-annually	8
COIN SELECTOR	Check COIN SW	Monthly	7
	COIN SELECTOR cleaning	Trimonthly	9
PROJECTOR	Screen cleaning	Weekly	10
	Check adjustments	Monthly	4, 7, 10
GAME BD	Setting check	Monthly	7
INTERIOR	Cleaning	Annually	see above.
POWER PLUG	Inspection and cleaning		
CABINET SURFACES	Cleaning	As necessary	see below

> **LINE INSPECTION**

Periodically check line. If the yellow covering is worn away, replace. Be sure to replace the line every 6 months even if seemingly no irregularity exists.

13 . TROUBLESHOOTING

Should trouble occur, first check connector connections.

PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation	Power is not supplied. Power supply/voltage is not correct. AC main fuse causes the power to be cut off due to momentary overload.	Plug in correctly Make sure that power supply/voltage is Check fuse. Remove the cause of overload and replace fuse
Rod Controller's Movements are unsatisfactory	Volume Setting Failure Encoder malfunctioning The fuse is blown due to an overload. Brake malfunctioning Thermal element functioned	Perform Volume setting Replace Encoder. Replace Fuse. Replace Brakes Activates @70°C, recovers after cool-off.
Irregular sound emitted from inside Rear Cabinet	Greasing to gear mesh portion is not satisfactory, or extraneous matter mixed in.	Apply greasing or eliminate extraneous matter.
The color of the image on PROJ. screen is incorrect.	Connector connections are defective.	Check the connection for the RGB and SYNC connectors of the PROJ. TERM. BD and VPM BUFFER BD.
The image on PROJ. screen has color deviation.	Affected by the magnetic field of installation location.	Make CONVERGENCE adjustment. (Refer to Section 9.)
No sound is emitted.	Sound Volume adjustment is not appropriate. Sound BD and speaker are malfunctioning.	Adjust sound volume. (see Section 6). Perform sound test to find and replace defective parts.(Refer to Section 6).
Line Pull Mecha movements are unstable.	Line length is inappropriate or line is broken Tension Volume setting failure	Use the designated line of specified length Perform Volume setting.
Lateral mecha does not function.	Motor's Overheat.	Motor replacement is needed. (Check Motor Driver as this may be malfunctioning.)
Vibration Mecha does not function.	Fuse is blown.	Replace Fuse.
The Fluorescent lamp does not light up.	The Fluorescent tube is burnt out.	Replace the Fluorescent tube (Refer to Section 10).
Switches of Control Panel,	Connection fault of connector between Front and Rear Cabi.	Accurately connect the connector.

Should any trouble occur to I/O Board, etc., TROUBLE display will be shown depending on the contents of the trouble. The contents of trouble can largely be classified into the following 2 catagories:

1.> TROUBLE allowing for continued game play:
After stopping the malfunctioning Mecha only, the TROUBLE display text "I/O BOARD TROUBLE CODE: XX" will be shown on part of the screen. Depending on the contents of the trouble, the ERROR CODE will be displayed at the posistion of XX.

2.> TROUBLE that does not allow fro continued game play:
The game will be interrupted and the screen shown right will appear. Take the following measures in the manner to meet the displayed ERROR CODE.

ERROR CODE	TYPE OF TROUBLE	CAUSE/COUNTERMEASURES
E 0 E 1 E 2	ROM ERROR RAM ERROR EEPROM ERROR	I/O BD malfunctioning. Replace I/O BD.
E 3 E 4	Swing Mecha Error (right-hand side LIMIT SW) Swing Mecha Error (left-hand side LIMIT SW)	Swing Mecha Limit Sensor malfunctioning or dust attached to the Sensor portion may be the cause. Clean the Sensor portion and check in the Input Test. If malfunctioning, replace.
E 5	Swing Mecha Error (Encoder)	Swing Mecha Encoder malfunctioning. Turn power off and turn it back on again to execute Initialization setting, and if still malfunctioning, replace it.
E 6 E 7	Line Pull Mecha Error (Fore side Limit SW) Line Pull Mecha Error (Inner Limit SW)	Line Pull Mecha Limit Sensor malfunctioning or dust attached to the Sensor portion may be the cause. Clean the Sensor portion and check in the Input Test. If malfunctioning, replace.
E 8	Line Pull Motor Error (Encoder)	Line Pull Motor's accessory Encoder is malfunctioning. Replacement of Motor or Motor Driver is needed.
E 9	Line Pull Motor Error (overload)	This occurs when the Line Pull Motor is subject to overload. First turn power off, and approximately 10 min. later, turn power on again. Even then, if the same Error occurs, it is malfunctioning and in this case, Motor or Motor Driver need to be replaced.
E A	Line Outlet Sensor Error	Line Outlet Sensor malfunctioning or dust, etc., attached to the Sensor portion may be the cause. Clean the Sensor portion, and check in the Input test. If malfunctioning, replace.
E B	Tension Volume Error	The Tension Volume of Slack Removing Mecha is malfunctioning. Check in the Input test.
E C	Vibration Mecha	This occurs when the Vibration Mecha is not revolving. Check Home Position Sensor and the Motor.
E E	System Error	I/O BD System is malfunctioning. If the problem is not solved, it is malfunctioning. In this case, replace.
F F	No I/O BD reaction.	I/O BD malfunctioning. Replace.

13 - 1 REPLACEMENT OF FUSE

⚠️ **WARNING!**

● In order to prevent an electric shock, 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 circiut accident
● After eliminating the cause of the blowing of fuse, replace the fuse.
   Depending on the cause of the fuse blowing, using the fuse as is blown can cause generation of heat resulting in fire.

① Turn off the AC Unit's Main SW.

② Unplug from the Plug Socket.

③ Open the Chassis Door to Have fuse appear.
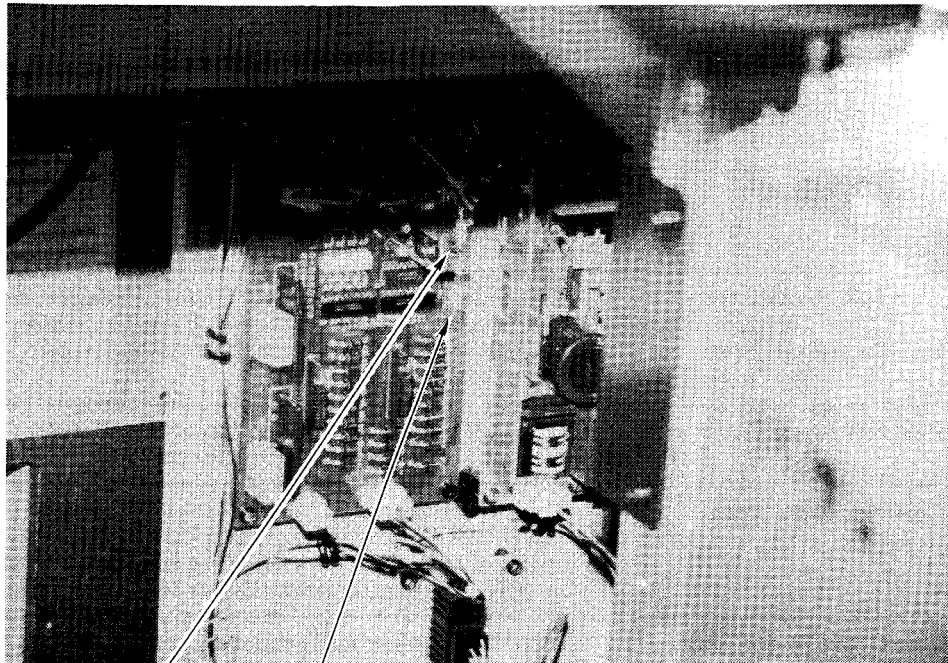
FUSE 2.5A
514-5086-2500
for Brake

FUSE 2.5A
514-5086-2500
for Vibration Mecha

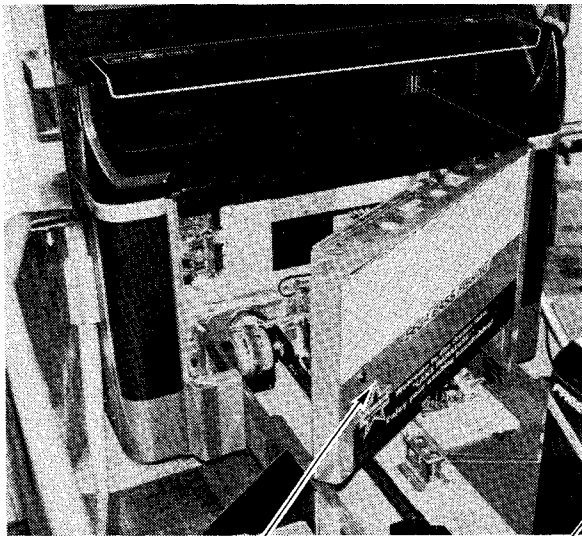# 14 . GAME BOARD

<table>
<tr>
<td>

⚠

WARNING!

</td>
<td>

● In order to prevent an electrical shock, 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.

</td>
</tr>
<tr>
<td>

⚠

CAUTION!

</td>
<td>

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

</td>
</tr>
</table>

14 -1   REMOVING THE IC BOARD

① The IC board such as Game BD, etc., is on the Rear side of the Front Cabi.

② Take out the 2 Truss screws, unlock with the Master Key, and remove the Back Door from the rear part of the Front Cabinet.

③ Take out the 3 screws, unlock with the Master Key, and remove the Back Door from the rear part of the Front Cabinet. (refer to photos shown below)
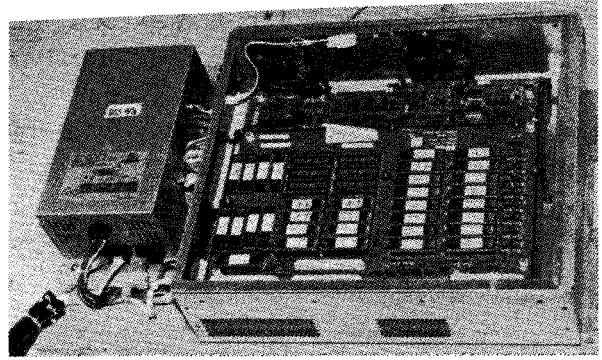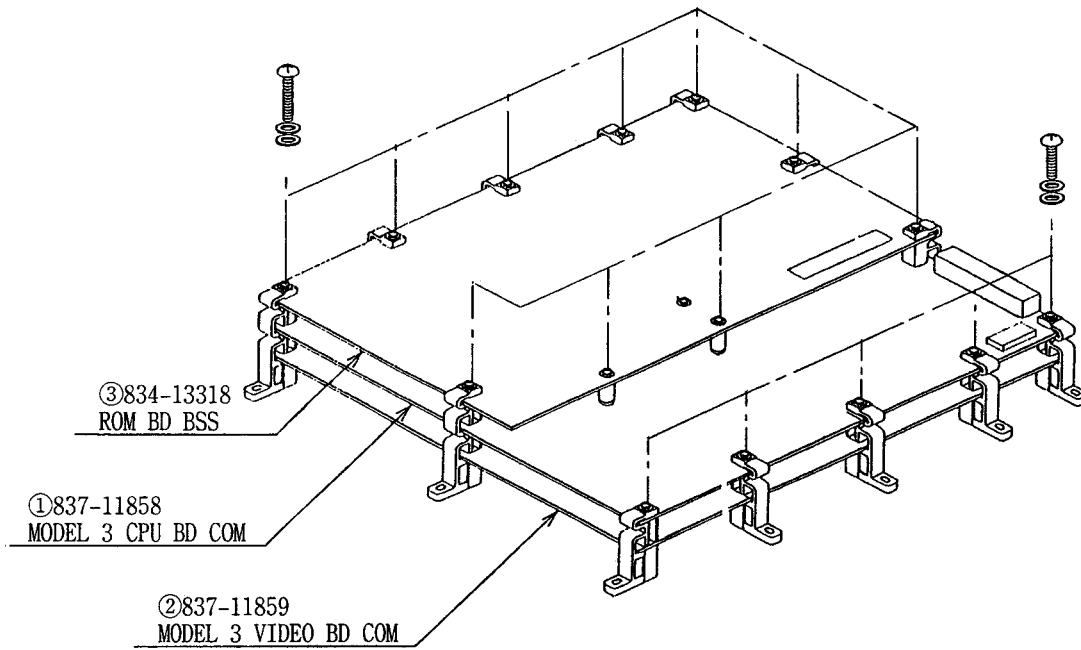

INSIDE FRONT DOOR

SHIELD CASE
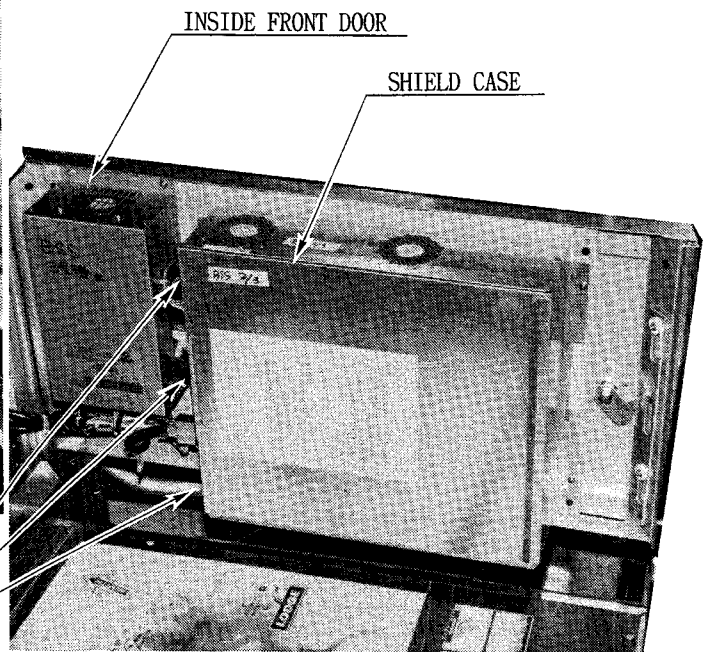
SCREW (1)
M4×30

SCREW (3)
M4×8

④ Take Out the 3 screws and the Shield Case Lid to remove the Game Board.

14 - 2 COMPOSITION OF GAME BOARD

GAME BD BSS
(833-13317)

③834-13318
ROM BD BSS

①837-11858
MODEL 3 CPU BD COM

②837-11859
MODEL 3 VIDEO BD COM

No.	PART No.	DESCRIPTION
①	837-11858	MODEL3 CPU BOARD COM
②	837-11859	MODEL3 VIDEO BOARD COM
③	834-13318	ROM BD BSS

NOTE: THIS PICTURE IS FOR REFERENCE ONLY!! UNIT IS NOT TO BE OPENED. EXPOSING THE GAME BD FOR ANY REASON MAY VOID WARRANTY.

15 . DESIGN RELATED PARTS

For the Warning Display
stickers, refer to Section 1.

BSS-1609 STICKER RECORD SIZE L

BSS-1610 STICKER RECORD SIZE R

BSS-1606-01 BILLBOARD PLATE BSS ENG

BSS-1602 CORK SHEET

BSS-1603 BASS MOLDING

BSS-1016-B STICKER LINE OUT

BSS-1211-01 STICKER TITLE EXP

BSS-1025 (L/R) STICKER SILVER LINE

BSS-1210 STICKER FRONT DOOR

BSS-1026 (L/R) STICKER GREEN LINE

BSS-1024 STICKER BASE R

BSS-1028 GUARD STICKER B

BSS-1022-01 STICKER STEP R ENG

BSS-1257 STICKER LID MAP ENG

BSS-1417-01 STICKER ROD HOLDER ENG

BSS-0003-01 STICKER DENOMI BSS ENG

422-0645-01 PLAY INSTR SH BSS ENG

BSS-1021-01 STICKER STEP L ENG

BSS-1256 STICKER LID MAP

BSS-1023 STICKER BASE L

421-9706(-9707)-01 STICKER PTV SIDE UPPER L(R)EXP

BSS-1004-C(-1005-C) STICKER SIDE UPPER L(R)

BSS-1303(-1304) STICKER COIN TOWER L(R)

BSS-1004-B(-1005-B) STICKER SIDE LOWER L(R)

421-9708(-9709) STICKER PTV SIDE LOWER L(R)

BSS-1551-B(-1551-C) STICKER PTV BASE L(R)

BSS-1258 GUARD STICKER A

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ITEM NO.	PART NO.	DEXCRIPTION
1	421-9706	STICKER PTV SIDE UPPER L
2	421-9707	STICKER PTV SIDE UPPER R
3	421-9708	STICKER PTV SIDE LOWER L
4	421-9709	STICKER PTV SIDE LOWER R
5	422-0645	PLAY INSTR SHEET BSS
6	BSS-0008	STICKER DENOMI BSS
7	BSS-1004-B	STICKER SIDE LOWER L
8	BSS-1004-C	STICKER SIDE UPPER R
9	BSS-1005-B	STICKER SIDE LOWER R
10	BSS-1005-C	STICKER SIDE UPPER R
11	BSS-1016-B	STICKER LINE OUT
12	BSS-1021	STICKER STEP L
13	BSS-1022	STICKER STEP R
14	BSS-1023	STICKER BASE L
15	BSS-1024	STICKER BASE R
16	BSS-1025	STICKER SILVER LINE
17	BSS-1026	STICKER GREEN LINE
18	BSS-1210	STICKER FRONT DOOR
19	BSS-1211	STICCKER TITLE
20	BSS-1256	STICKER LID MAP
21	BSS-1303	STICKER COIN TOWER L
22	BSS-1304	STICKER COIN TOWER R
23	BSS-1417	STICKER ROD HOLDER
24	BSS-1551-B	STICKER PTV BASE L
25	BSS-1551-C	STICKER PTV BASE R
26	BSS-1602	CORK SHEET
27	BSS-1603	BASS MOLDING
28	BSS-1606	BILLBOARD PLATE BSS
29	BSS-1609	STICKER RECORD SIZE L
30	BSS-1610	STICKER RECORD SIZE R

16 . PARTS LIST

TOP ASSY GET BASS (BSS-0000)
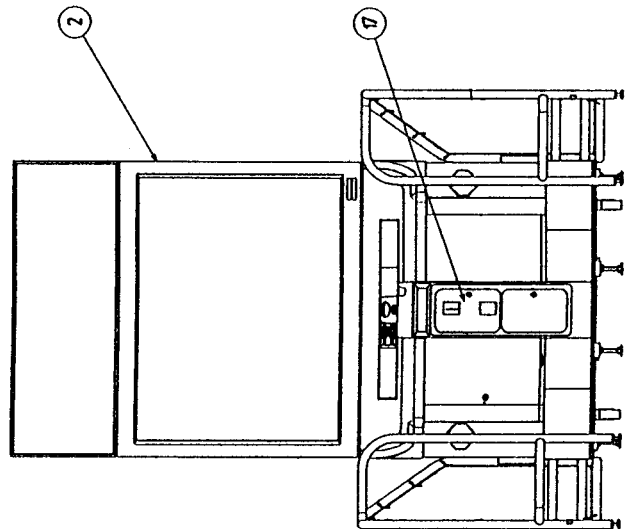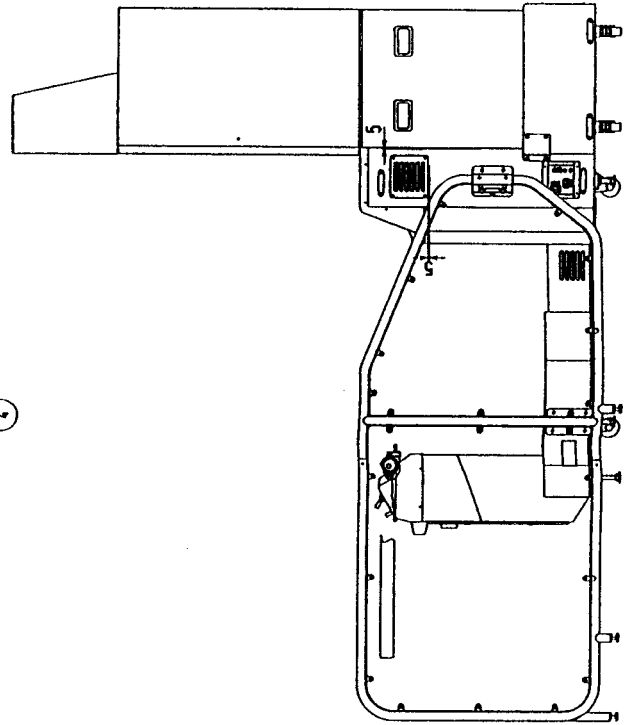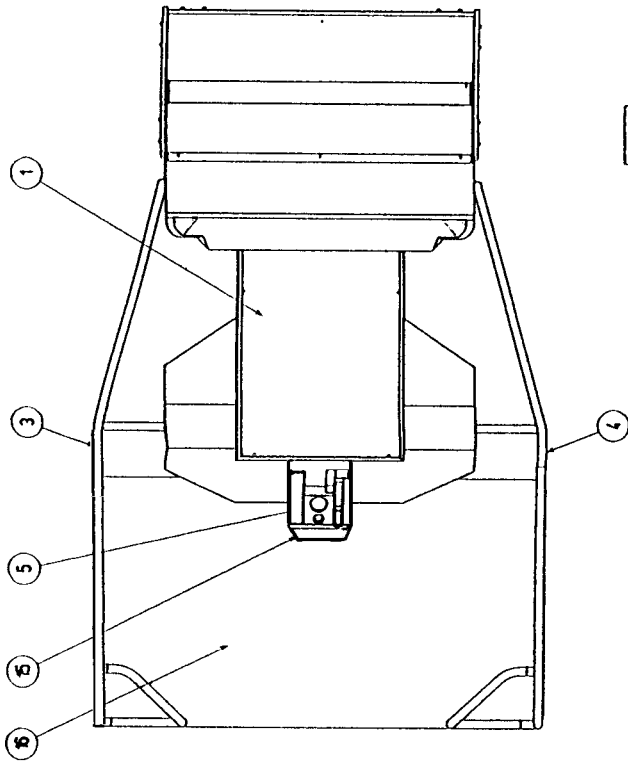
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1000	ASSY CHASSIS
2	BSS-1500	ASSY PTV
3	BSS-1700	ASSY FENCE L
4	BSS-1750	ASSY FENCE R
5	422-0645	PLAY INSTR SH BSS
14	BSS-0002	JOINT BRKT
15	BSS-0003-01	STICKER DENOMI PLATE
16	440-CP0108-EG	PLATE C CAUTION MAT BSS ENG

ASSY CHASSIS (BSS-1000)
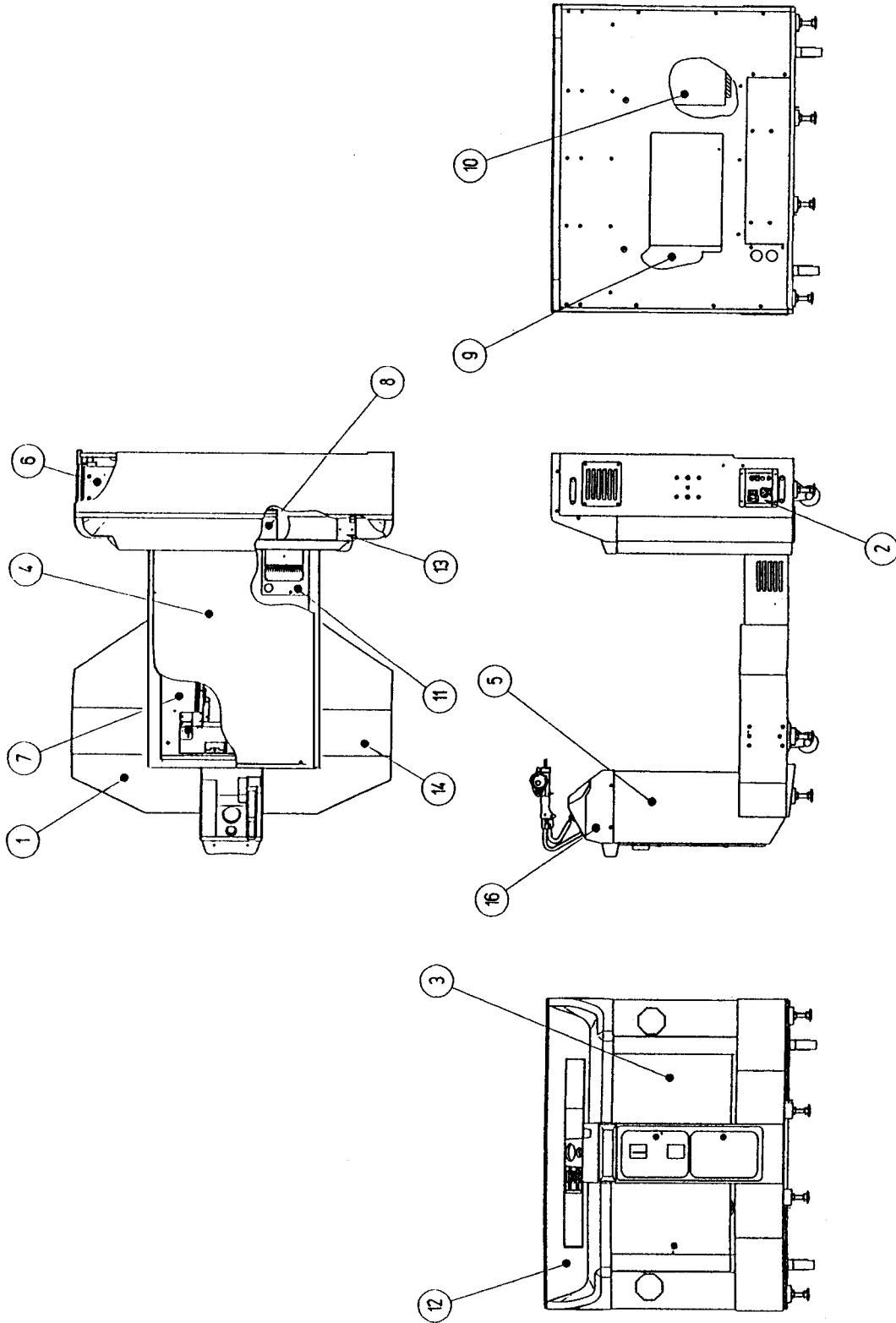
ASSY CHASSIS (BSS-1000)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1001	ASSY SUB CHASSIS
2	BSS-1100	AC UNIT
3	BSS-1200	ASSY FRONT DOOR
4	BSS-1250	ASSY LID
5	BSS-1300	ASSY COIN CHUTE TOWER
6	BSS-2000	ASSY X MECHA
7	BSS-2500	ASSY REACTION MECHA
8	BSS-4000	ASSY MAIN BD BSS
9	BSS-4100	ASSY PWR SUPPLY
10	BSS-4200	ASSY I/O BD BSS
11	BSS-4300	ASSY DRIVER & AMP BD
12	BSS-1016	X MECHA COVER
13	BSS-1017	HINGE MEMBER UP
14	BSS-1018	SIDE LID A
16	BSS-1400	ASSY ROD DAMPER

ASSY SUB CHASSIS (BSS-1001)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1002	CHASSIS
2	BSS-1003	BACK BOARD
3	BSS-1004	SIDE PNL L
4	BSS-1005	SIDE PNL R
5	BSS-1006	SIDE TUBE L
6	BSS-1007	SIDE TUBE R
7	BSS-1008	MECHA COVER BRKT
8	BSS-1009	X MECHA HOLDER
9	BSS-1010	DUMY FRAME L
11	BSS-1012	NUT PLATE
12	BSS-1013	NUT PLATE DUMY
13	BSS-1014	SPEAKER BRKT
14	BSS-1015	FENCE MOUNT PLATE
15	BSS-1900	ASSY FAN MOTOR
16	UP-1018	AIR VENT
17	ARM-1019	HOOK BRKT
18	117-5284	PLATE 6-80 BLACK
19	105-5272-633	FRONT FRAME 633
20	105-5273-200	DOOR FRAME 200
21	BSS-1800	ASSY WIRE
22	BSS-1020	NUT PLATE TUBE
23	BSS-1205	DUMY FRAME
103	130-5124	SPEAKER MINI BOX 40
104	270-5022-01	NOISE FILTER 20A GA1B

AC UNIT (BSS-1100)
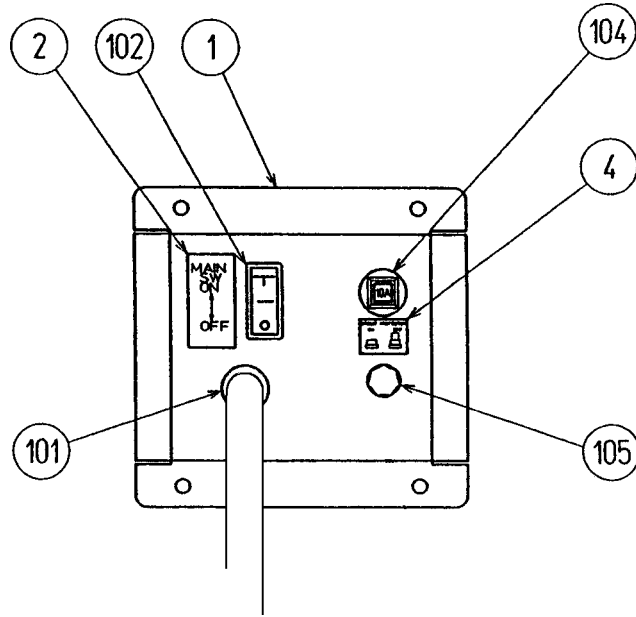
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1101	AC BRKT
2	421-6526	STICKER ON/OFF
102	509-5453-91-V-B	SW ROCKER J8 V-B

ASSY FRONT DOOR (BSS-1200)
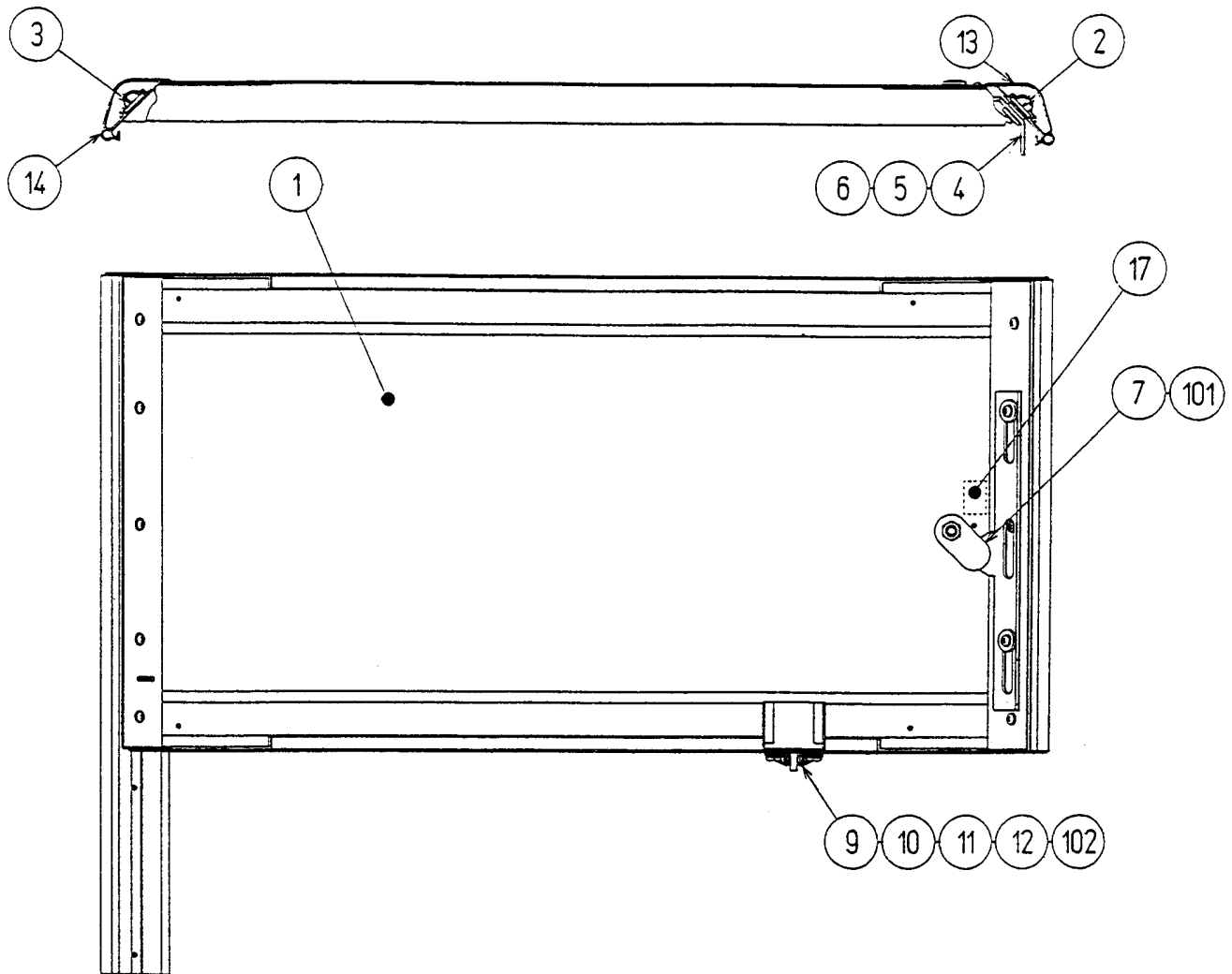
ITEM NO	PART NO.	DESCRIPTION
1	BSS-1201	FRONT DOOR
2	BSS-1202	NUT PLATE DOOR L
3	BSS-1203	NUT PLATE DOOR R
4	BSS-1204	HOOK
5	ARM-1105	SPACER
6	ARM-1106	WASHER
7	ARM-1107	LINK TNG
9	BSS-1206	SHAFT
10	BSS-1207	SHAFT BRKT L
11	BSS-1208	SHAFT BRKT R
12	BSS-1209	COLLAR
13	105-5273-429	DOOR FRAME 429
14	105-5273-631	DOOR FRAME 631
101	220-5575	CAM LOCK MASTER W/O KEY
102	100-5301	BEARING 6

ASSY LID (BSS-1250)
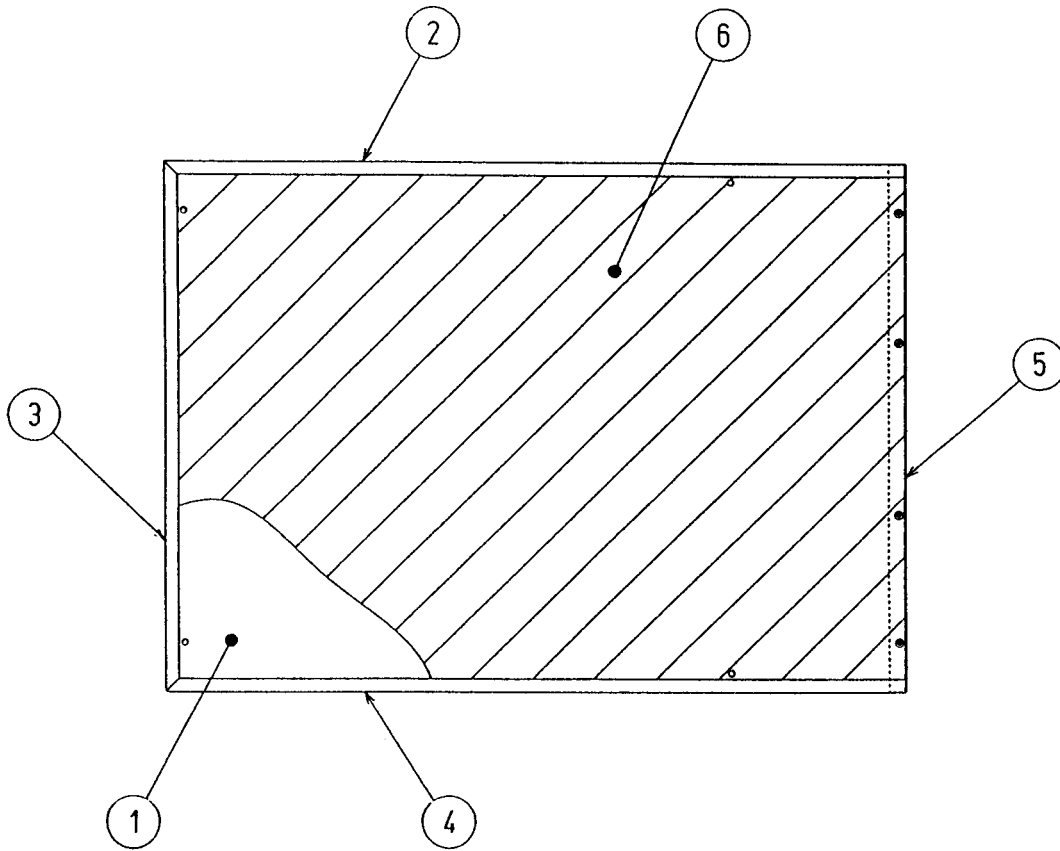
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1251	LID
2	BSS-1252	SASH LL
3	BSS-1253	SASH S
4	BSS-1254	SASH LR
5	BSS-1255	DOOR MASK
6	BSS-1256	STICKER LID MAP

ASSY COIN CHUTE TOWER (BSS-1300)
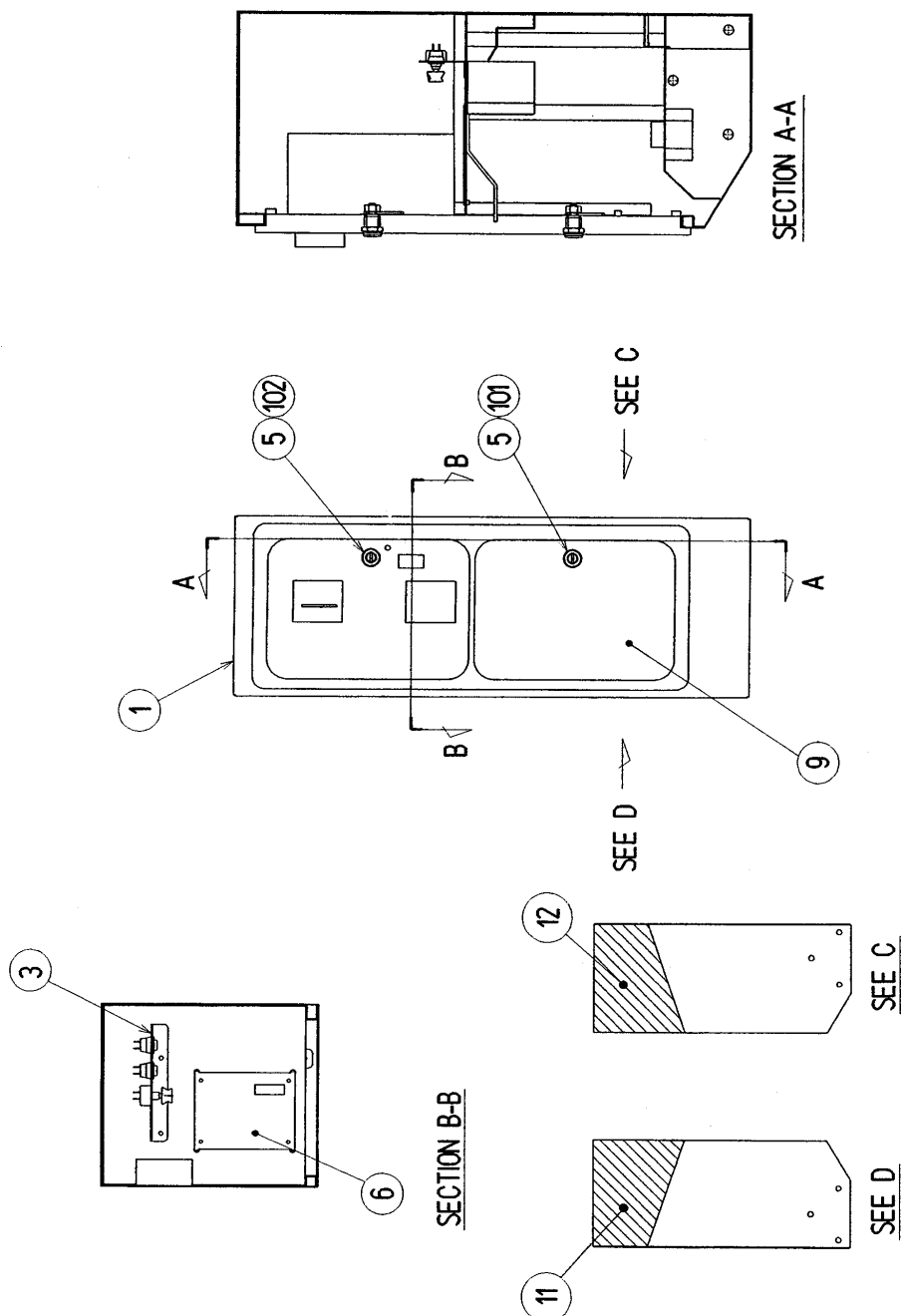
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1301	COIN CHUTE TOWER
2	MJT-3550	SW UNIT
3	BSS-1470	METER UNIT
5	DP-1167	TNG LKG
7	BOX-CASH	CASH BOX
9	220-5237-92~	ASSY C.C. 2 DOOR
11	BSS-1303	STICKER COIN TOWER L
12	BSS-1304	STICKER COIN TOWER R
101	220-5574	CAM LOCK W/KEYS
102	220-5575	CAM LOCK W/O KEYS

SW UNIT (MJT-3550)
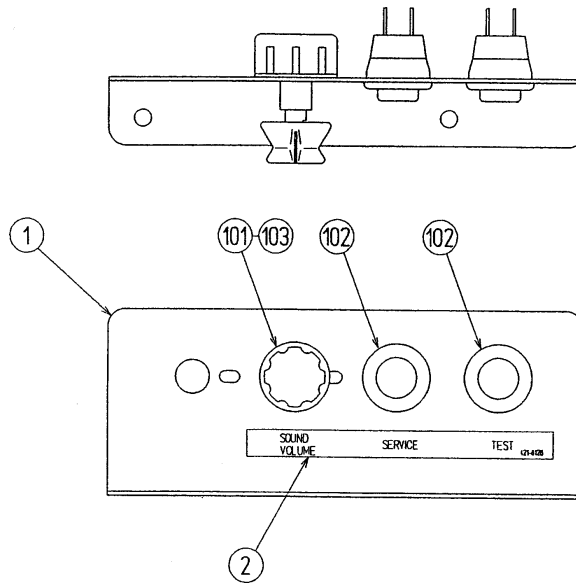
ITEM NO.	PART NO	DESCRIPTION
1	INY-1181	SW BRKT
2	421-8126	STICKER SWITCH PANEL
101	220-5179	VOL CONT B-5K OHM
102	509-5028	SW PB 1M
103	601-0042	KNOB 22M
104	310-5029-D20	SUMI TUBE F D 20MM

METER UNIT (BSS-1470)
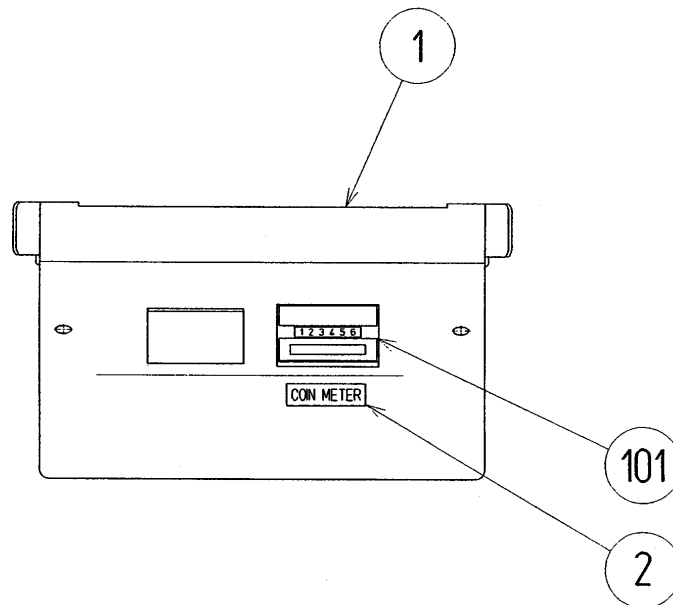
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1471	METER BRKT
2	421-6591-01	STICKER COIN METER
3	BSS-1472	METER HOLE LID
101	220-5617-01	MAG CNTR DC5V W.CONN 6P WH

ASSY ROD DAMPER (BSS-1400)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1401	BASE HOLDER
2	BSS-1402	MECHA BASE
3	BSS-1403	DAMPER BOSS
4	BSS-1404	FRONT COVER
5	BSS-1405	FRONT COVER BASE
6	BSS-1406	FRONT COVER BRKT A
7	BSS-1407	FRONT COVER BRKT B
8	BSS-1408	TOWER COVER
9	BSS-1409	COVER BASE
10	BSS-1411	CHAIN HOLDER
11	BSS-3000	ASSY ROD CONTROLLER
12	BSS-3057	SUPPORT CHAINS BSS
13	BSS-1412	SPRING SHAFT
14	BSS-1413	BOSS HOLDER
15	AIN-2206	COM SPRING
16	BSS-1414	SPRING HOLDER
17	BSS-1415	DAMPER ING
18	BSS-1416	L BRKT
19	BSS-3056	STOPPER BRKT BSS
20	BSS-3058	TUBE FOR CHAINS
21	BSS-1417	STICKER ROD HOLDER

ASSY PTV (BSS-1500)
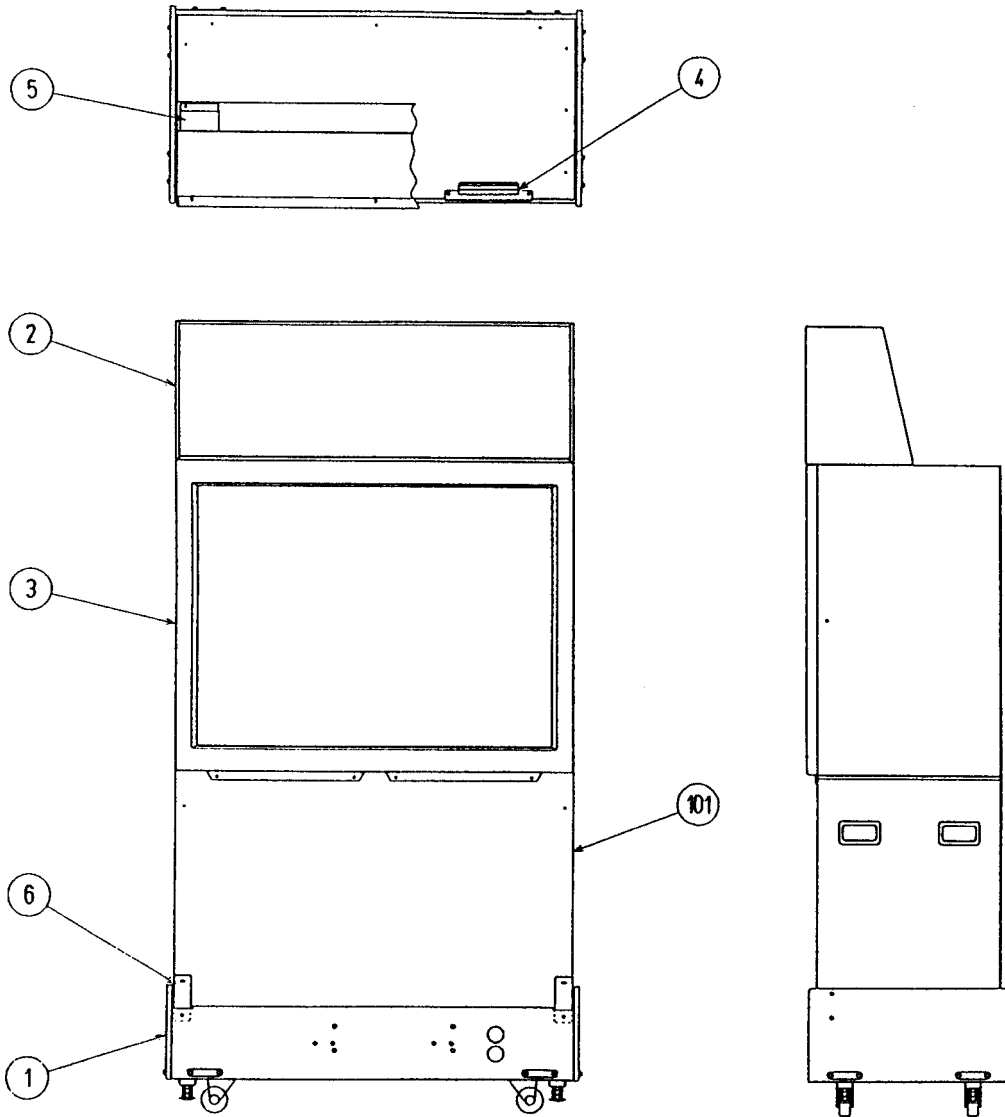
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1550	ASSY PTV BASE
2	BSS-1600	ASSY BILLBOARD
3	MGL-1150	ASSY AMSK
4	RAL-0501	MASK HOLDER
5	BSS-1501	WIRE LID
6	BSS-1502	PTV BRKT
101	200-5315-01-BSS	ASSY PROJECTION DISPLAY
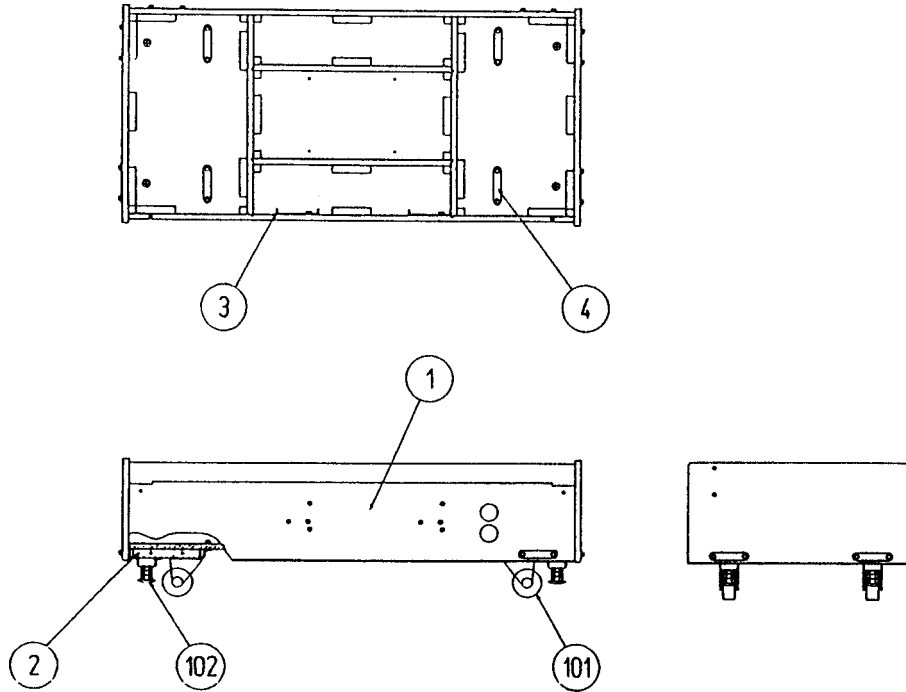
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1551	PTV BASE
2	BSS-1552	LEG CASTER BRKT
3	BSS-1553	JOINT PLATE
101	999-0169	CASTER 2 1/2"
102	999-0167	LEG ADJUSTER BOLT 1/2x13x3

ASSY BILLBOARD (BSS-1600)
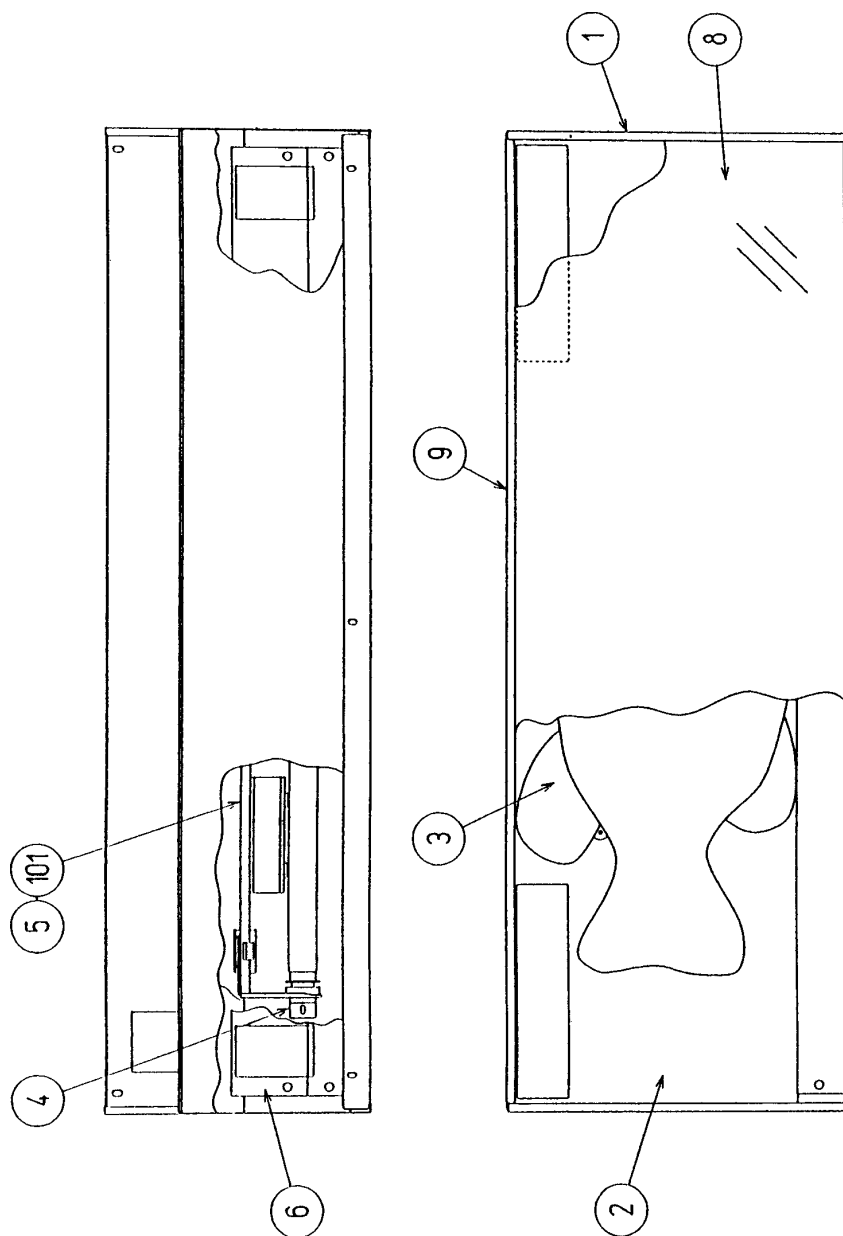
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1601	BILLBOARD BOX
2	BSS-1602	CORK SHEET
3	BSS-1603	BASS MOLDING
4	BSS-1608	FL STAY
5	253-5457	FL HOLDER
6	BSS-1604	DIFFUSION PLATE
7	BSS-1606	BILBOARD PLATE
8	BSS-1606	BILLBOARD PLATE BSS
9	BSS-1607	BILLBOARD HOLDER
101	LOCAL PURCHASE	ASSY FL 20W SD W/CONN HIGH T CE

ASSY MASK (MGL-1150)
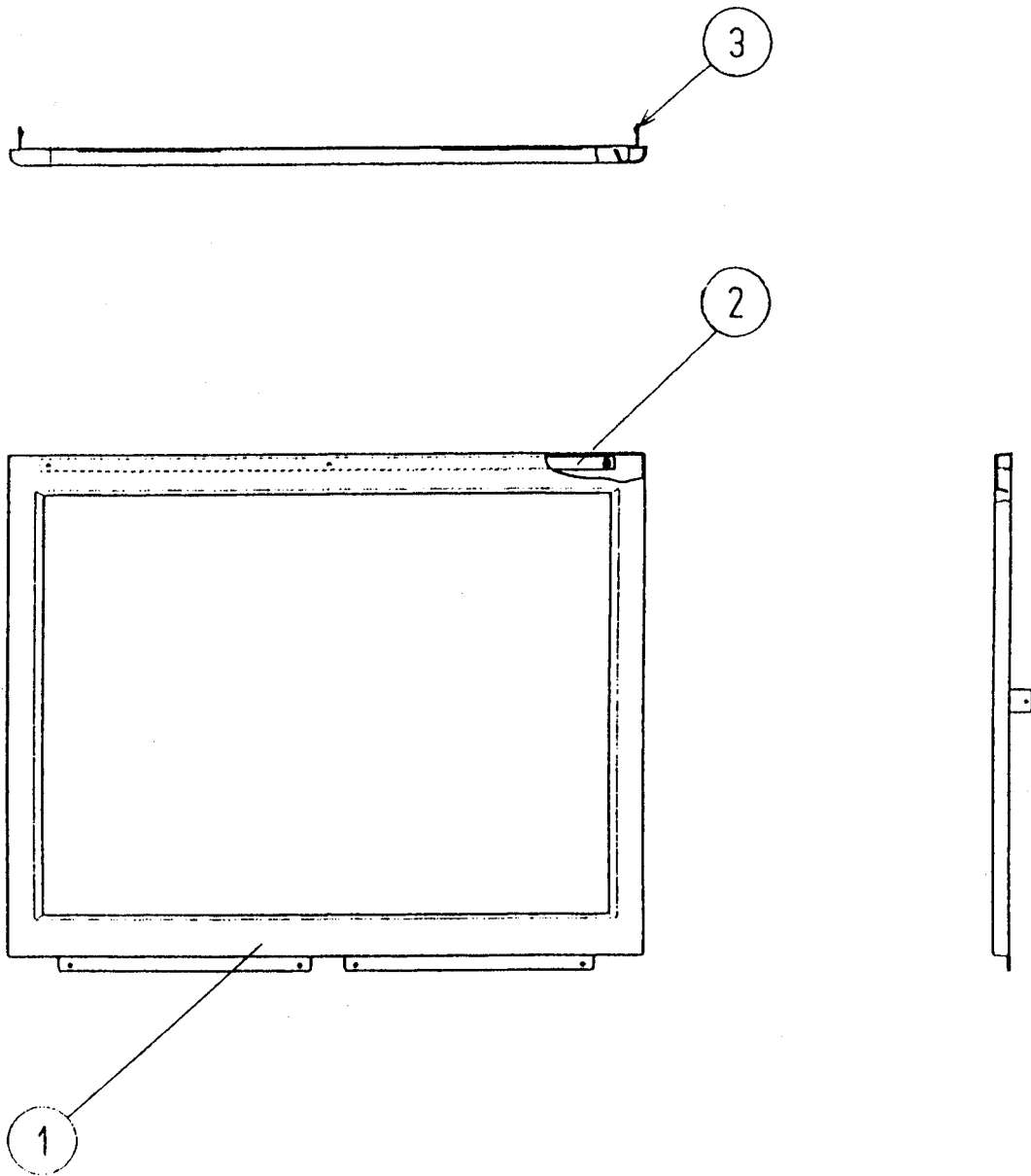
ITEM NO.	PART NO.	DECSRIPTION
1	MGL-1102	TV MASK
2	MGL-1151	SLIT PLATE
3	MGL-1152	MASK SIDE HOLDER

ASSY FENCE *L (BSS-1700)
*R (BSS-1750)
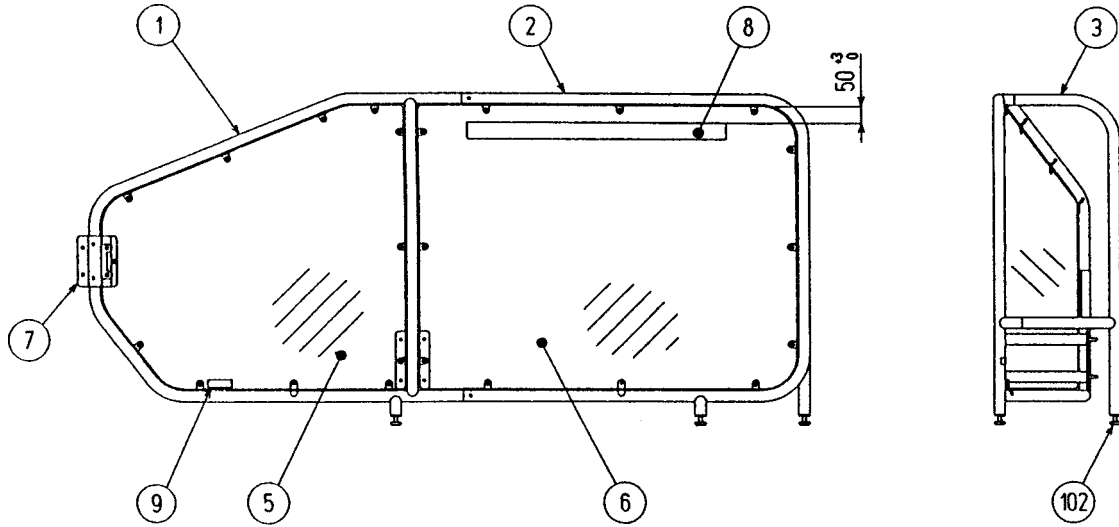
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-1701	BASE PIPE L
	BSS-1751	BASE PIPE R
2	BSS-1702	PIPE FL
3	BSS-1703	PIPE RL
5	BSS-1705	GUARD PLATE F
6	BSS-1706	GUARD PLATE R
7	BSS-1707	FENCE BRKT
102	601-6076	LEG ADJSUTER BOLT 32

ASSY FAN MOTOR (BSS-1900)
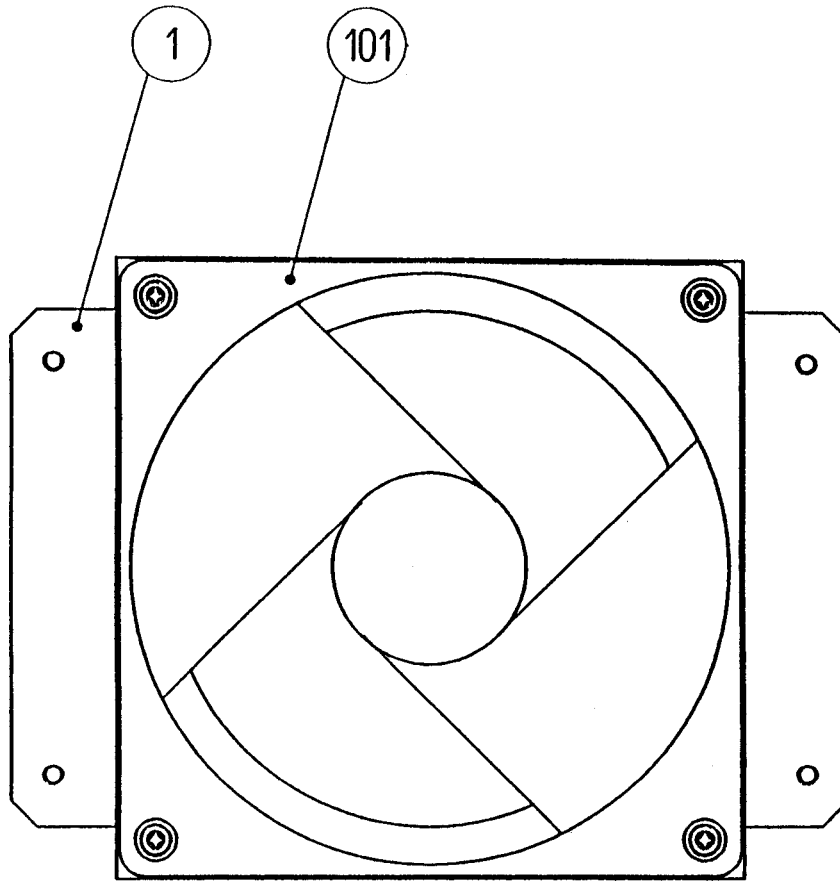
ITEM NO.	PART NO.	DESCRIPTION
1	TCW-3071	FAN BRKT
101	260-0011-02	AXIAL FLOW FAN AC100V 50-60Hz

ASSY X MECHA (BSS-2000)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2001	RAIL FRAME
2	BSS-2002	RAIL STOPPER
3	BSS-2003	STOPPER BRKT
4	BSS-2050	ASSY MOTOR
5	BSS-2005	PULLEY BASE X
6	BSS-2006	PULLEY BRKT X
7	BSS-2007	PULLEY SHAFT
8	601-7053	PULLEY A
9	BSS-2008	SENSOR BRKT X
10	BSS-2009	FRAME STAY
11	BSS-2100	SENSOR UNIT
12	BSS-2010	SLIT BASE
13	BSS-2011	SLIDE PLATE A
14	BSS-2012	SLIDE PLATE B
15	BSS-2013	SLIDE PLATE C
16	BSS-2014	SLIDE PIN
17	BSS-2015	SLIDE PLATE HOLDER
18	BSS-0001	LINE BSS
19	BSS-2004	PULLEY BOSS X
101	610-6687	SLIDE PACK L=783
102	601-9973	TIMING BELT L=1512
103	370-5161	PHOTO INTERUPTER GP1A71A
104	370-5165-91	ENCODER 100PULSE
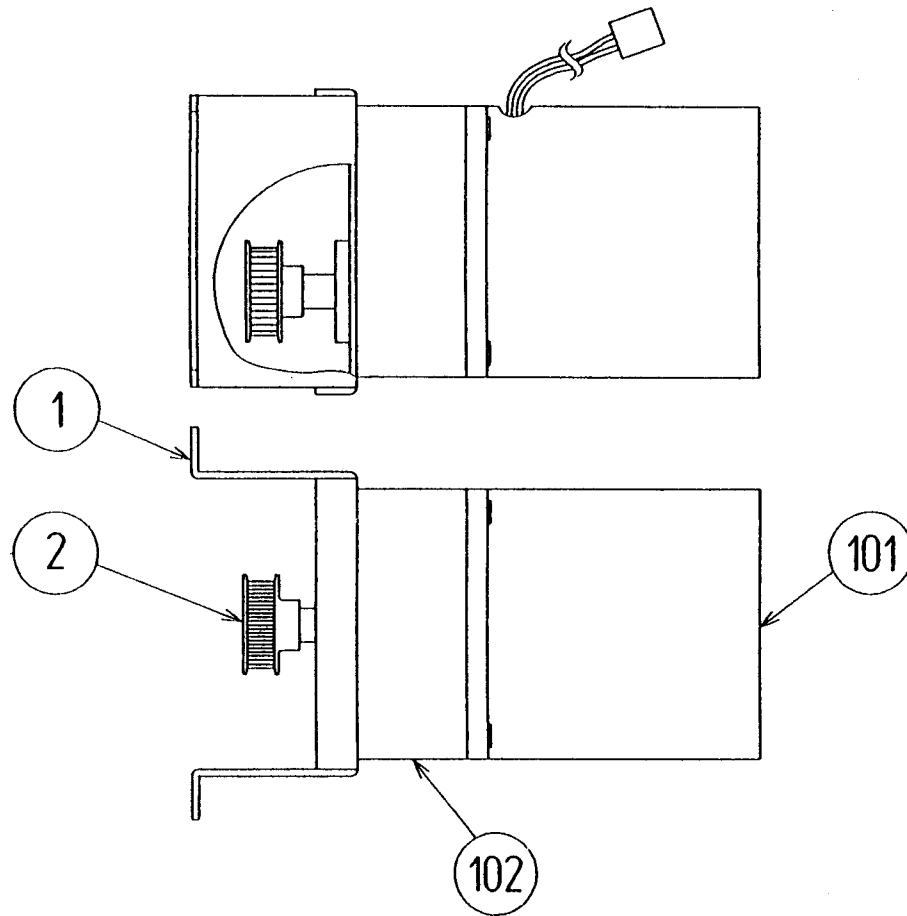
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2051	MOTOTR BASE AC
2	601-9974	PULLEY P28 10
101	350-5517	MOTOTR AC100V S5W 1/5 UL
102	350-5520	GEAR HEAD M8GA5M
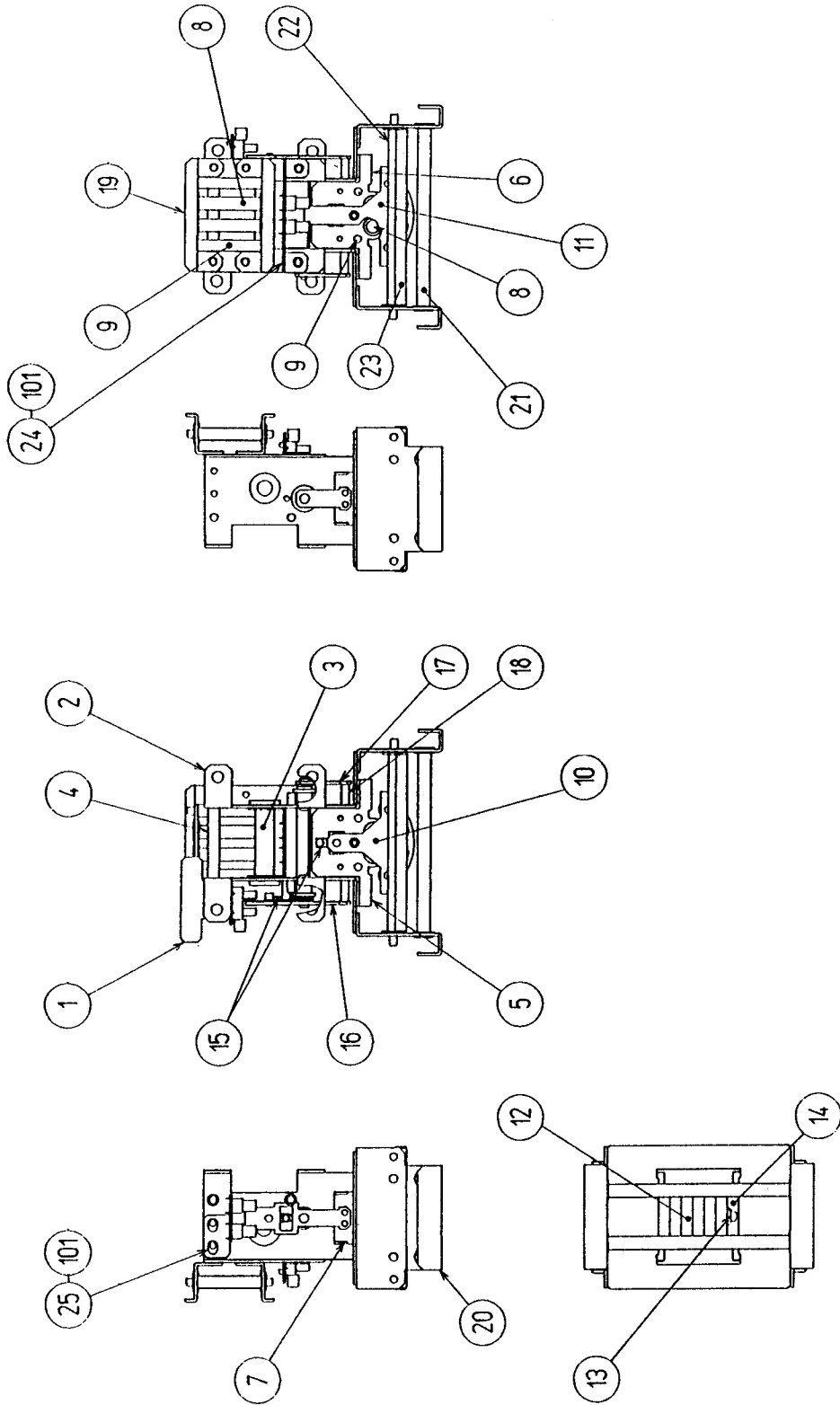
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2101	SUX BASE L
2	BSS-2102	SUX BASE R
3	BSS-2103	ROLLER SUY
4	BSS-2104	STAY SUY
5	BSS-2105	CUX BASE UPPER
6	BSS-2106	CUX BASE LOWER
7	BSS-2107	STOPPER CUY
8	BSS-2108	ROLLER CUX BASE
9	BSS-2109	STAY CUX BASE
10	BSS-2110	CUX BRKT UPPER
11	BSS-2111	CUX BRKT LOWER
12	BSS-2112	ROLLER CUX
13	BSS-2113	STAY CUX
14	BSS-2114	STOPPER CUX
15	BSS-2115	TORSION SPRING SU
16	BSS-2116	CUY BRKT L
17	BSS-2117	CUY BRKT R
18	BSS-2118	SHAFT CUY
19	BSS-2119	ROLLER BRKT SUX
20	BSS-2120	ROLLER BRKT SUY
21	BSS-2121	ROLLER CUY
22	BSS-2122	STAY CUY
23	BSS-2123	BLIND BRKT
24	BSS-2124	SENSOR BRKT CUX
25	BSS-2125	SENSOR BRKT CUY
101	370-5161	PHOTO INTERPRTER GP1A71A
102	280-0419	HARNESS LUG
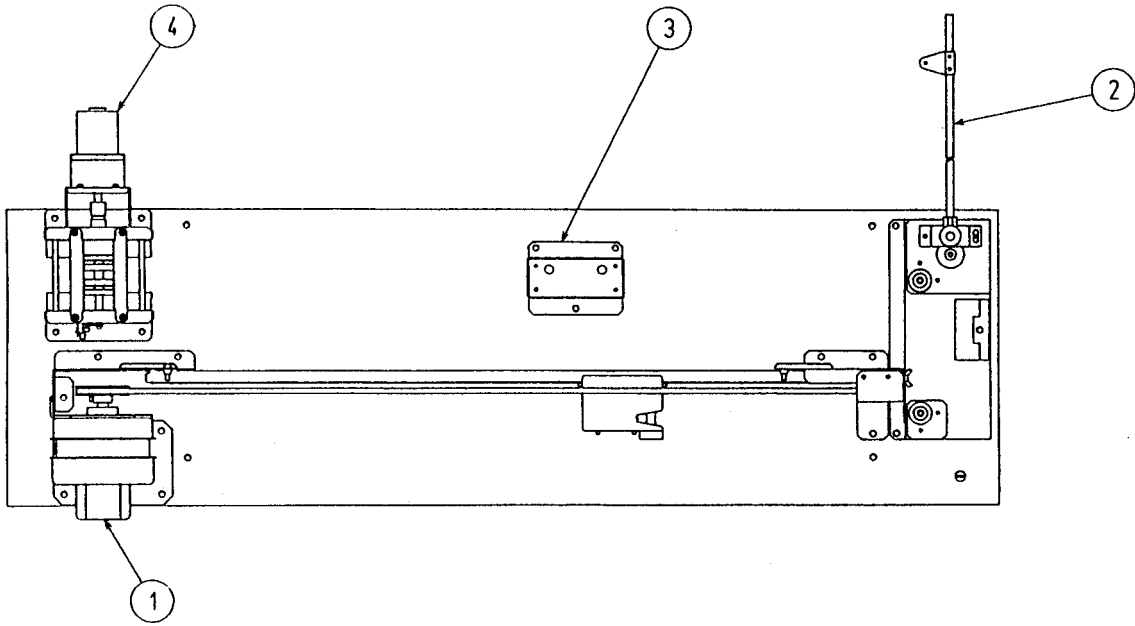
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2600	ASSY Y MECHA
2	BSS-2700	TENSION UNIT
3	BSS-2800	GUIDE UNIT
4	BSS-2900	VIBRATION UNIT

ASSY Y MECHA (BSS-2600)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2601	WOODEN MECHA BASE
2	BSS-2602	ROLLER BASE A
3	BSS-2603	ROLLER BASE B
4	BSS-2604	ROLLER YM
5	BSS-2605	STAY YM
6	BSS-2606	MOTOR BASE SERVO
7	BSS-2607	RAIL HOLDER
8	BSS-2608	PULLEY BRKT Y
9	BSS-2609	PULLEY BOSS Y
10	BSS-2002	RAIL STOPPER
11	BSS-2610	SENSOR BRKT Y
12	BSS-2611	RAIL COVER
13	BSS-2612	WIRE HOLDER
14	601-9975	PULLEY P60
15	601-9976	PULLEY P44
101	350-5512	SERVO MOTOR BSS
102	610-6687	SLIDE PACK L=783
103	601-9977	TIMING BELT L-1872
104	370-5161	PHOTO INTERRUPTER
107	601-6231-B050	EDGEING NEW TYPE
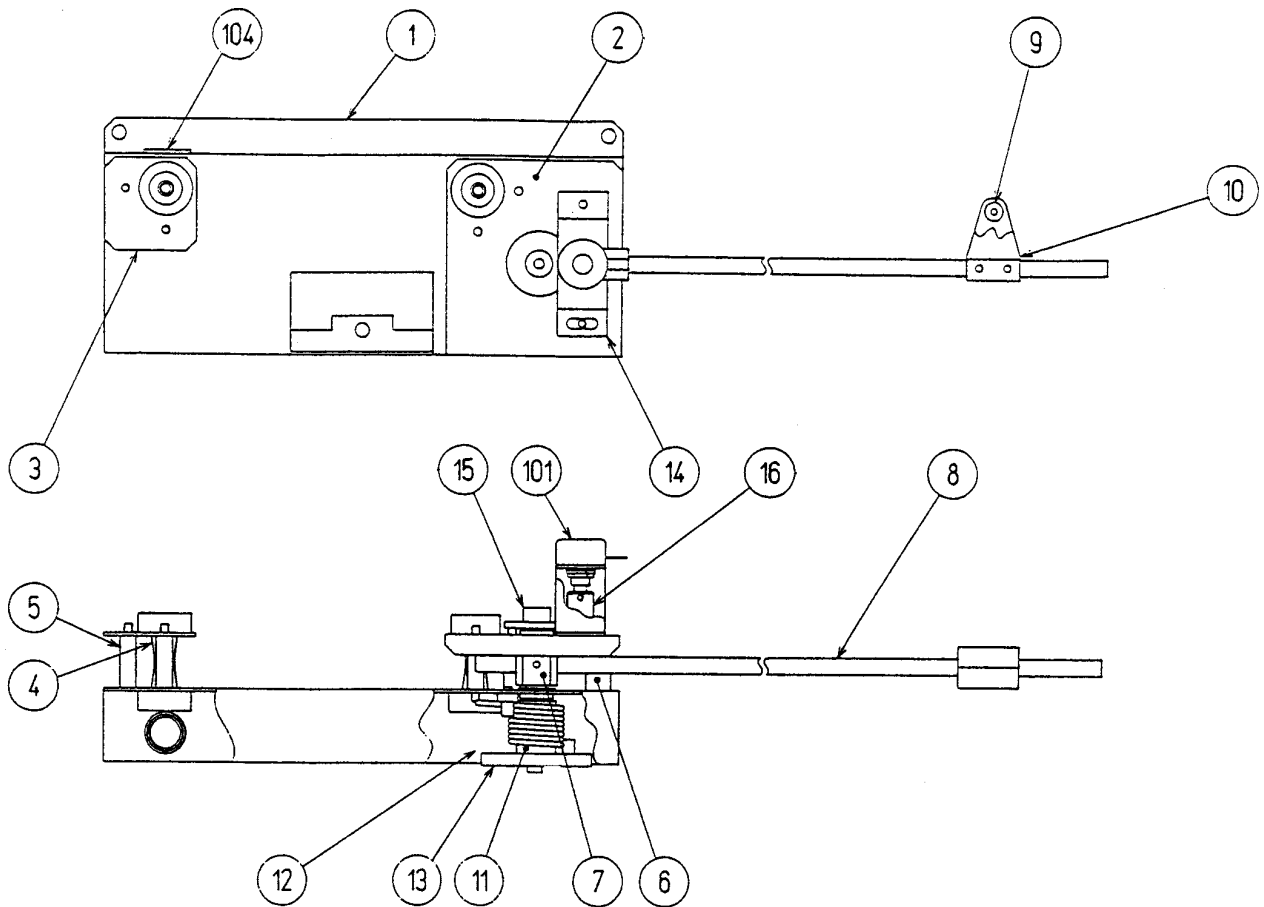
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2701	TU BASE A
2	BSS-2702	TU BASE B
3	BSS-2703	TU BASE C
4	BSS-2604	ROLLER YM
5	BSS-2605	STAY YM
6	BSS-2704	STOPPER TU
7	BSS-2705	SHAFT TU
8	BSS-2706	TU ARM
9	BSS-2707	TU GUIDE
10	BSS-2708	TU GUIDE HOLDER
11	BSS-2709	TORSION SPACER
12	BSS-2710	TORSION SPRING TU
13	BSS-2711	TORSION HOLDER
14	BSS-2712	VOL BRKT
15	601-9978	GEAR 40
16	601-7944	GEAR 15
101	220-5373	VOL CONT B-5K
102	310-5029-F20	SUMI TUBE F F 20MM
104	280-5116	ONE TOUCH BUSH FAI 15

GUIDE UNIT (BSS-2800)
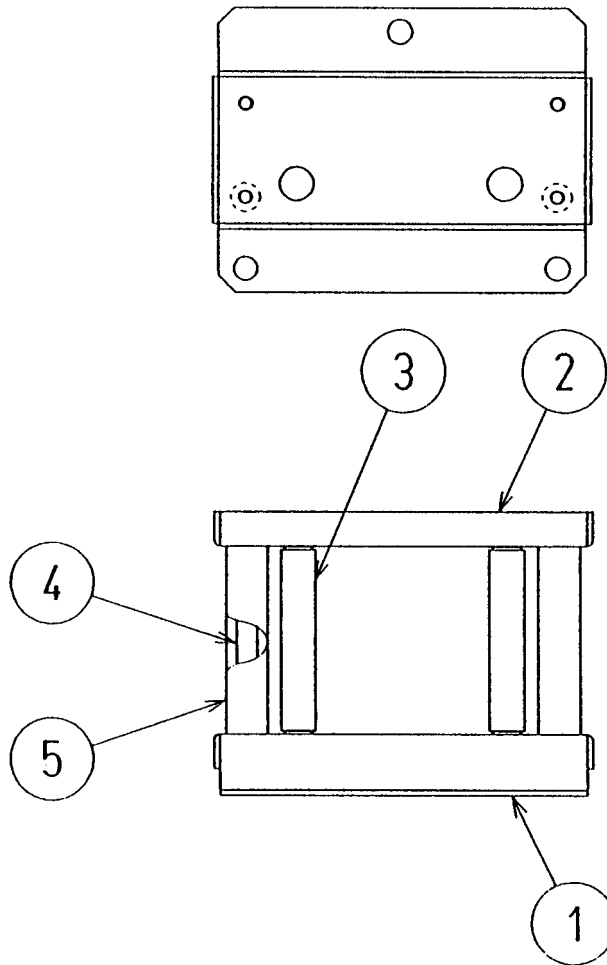
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2801	GU BASE A
2	BSS-2802	GU BASE B
3	BSS-2803	ROLLER GU
4	BSS-2804	STAY GU
5	BSS-2805	STOPPER GU

VIBRATION UNIT (BSS-2900)

SEE A
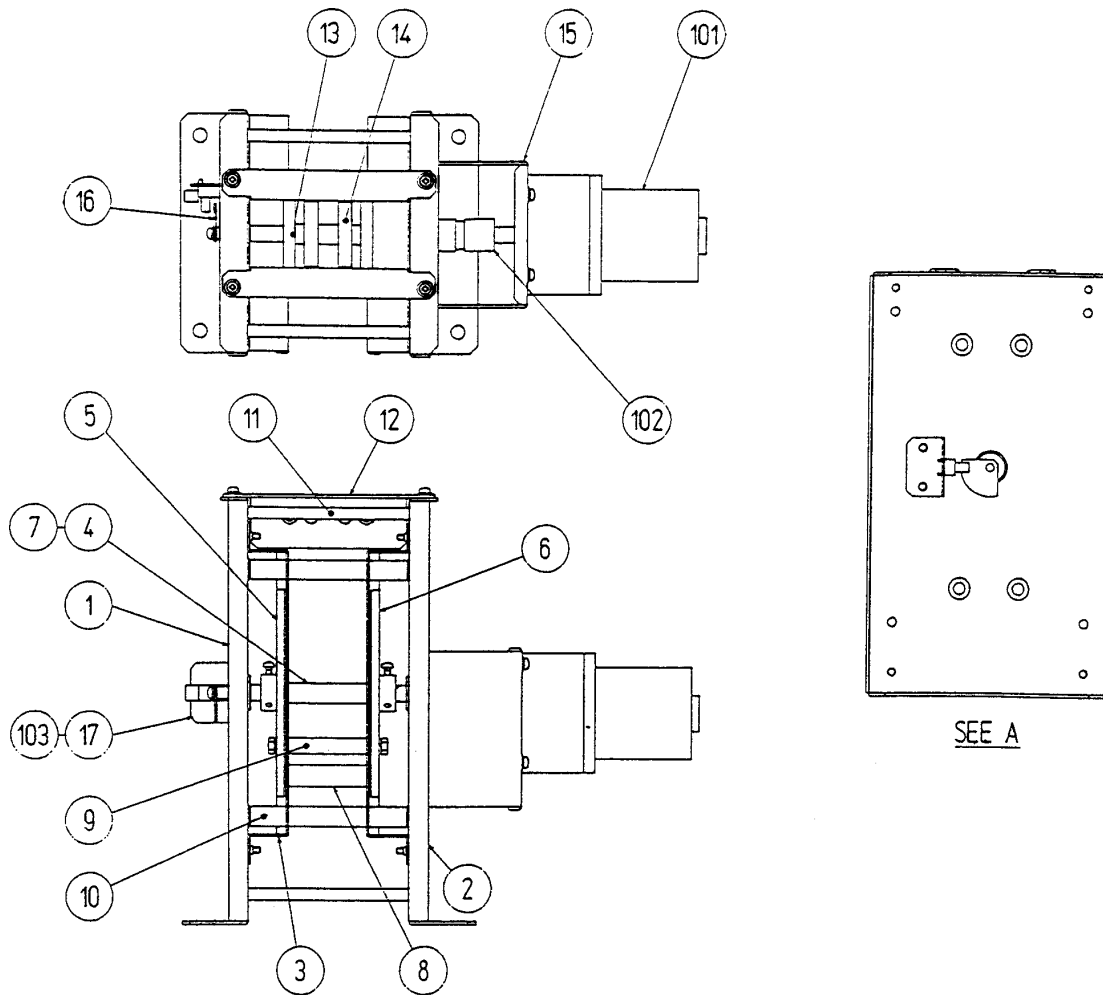
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-2901	VU BASE L
2	BSS-2902	VU BASE R
3	BSS-2903	VU GUIDE BRKT
4	BSS-2904	SHAFT VU
5	BSS-2905	CLANK BASE L
6	BSS-2906	CLANK BASE R
7	BSS-2907	KEY 3X3X8
8	BSS-2908	ROLLER CLANK
9	BSS-2909	STAY CLANK
10	BSS-2910	ROLLER VU
11	BSS-2911	STAY VU
12	BSS-2912	ROLLER BRKT VU
13	BSS-2109	STAY CUX BASE
14	BSS-2108	ROLLER CUX BASE
15	BSS-2913	MOTOR BASE VU
16	BSS-2914	INT BRKT VU
17	BSS-2915	SENSOR BRKT VU
101	350-5518	MOTOR DC24V
102	601-9737	COUPLING 5X6
103	370-5161	PHOTO INTERRUPTER GP1A71A

101

SEE A

SEE A

BSS-3019-H   REEL STICKER H

ASSY ROD CONTROLLER (BSS-3000)

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-3001	COVER R
2	BSS-3002	COVER L
3	BSS-3003	COVER U
4	BSS-3004	COVER S
5	BSS-3005	BD HOLDER
6	BSS-3006	CAST SW CAP
7	BSS-3007	SELECT SW CAP
8	BSS-3008	JOYSTICK CAP
9	BSS-3009	HANDLE BAR
10	BSS-3010	HANDLE PIN
11	BSS-3011	HANDLE GRIP
12	BSS-3012	ORIGINAL NUT M8
13	BSS-3013	SPACER A
14	BSS-3014	SPACER B
15	BSS-3015	SPACER C
16	BSS-3016	HANDLE CAP
17	BSS-3017	FRONT RING
18	BSS-3018	FRONT RING SPRING
19	BSS-3022	ASSY ROD
20	BSS-3050	ASSY TUBE
21	839-1003	STICK CONT BD
22	839-1004	REEL SW BD
23	BSS-3040	ASSY BRAKE W/PS
101	090-0054	SIICON SEAL

ADHESIVES : Use adhesives No. 403, a product
of Nihon Rokku Taito ("phonetic").
(Apply to the entire periphery.)

After winding the line tightly,
apply instantaneous adhesives
(aron alpha-- "phonetic" ---,
or an equivalent).

22

3

1 $^{0}_{-0.5}$

65 $^{+5}_{0}$ (5)

ADHESIVES : Apply Nihon Rokku Taito No. 403 to the entire periphery of ② and ③ .

ADHESIVES : Apply Nihon Rokku Taito No. 403
to the entire periphery of ③ and the pink line section.
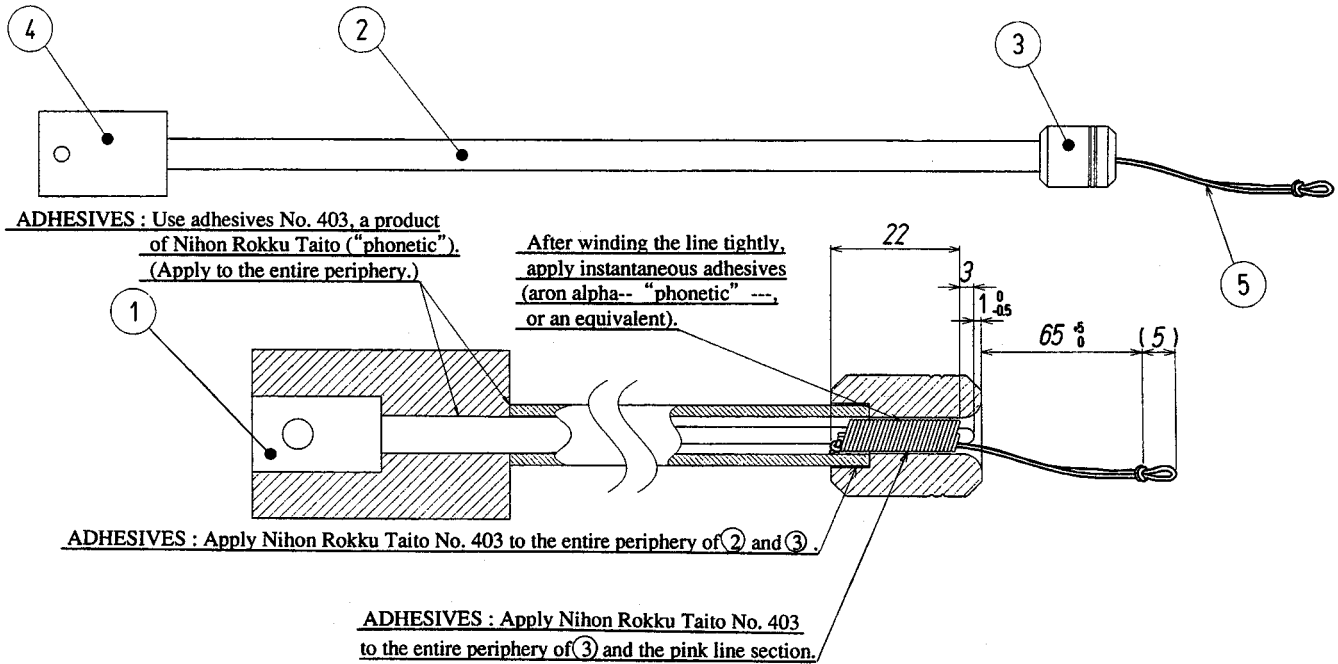
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-3023	ROD FRAME
2	BSS-3024	TUBE
3	BSS-3025	PL RUBBER
4	BSS-3026	FRONT UG
5	BSS-3028	LINE BSS FOR REEL

104

090-0206 ACETATE TAPE 4MMX30M
130mm

(104)

35° or

BLACK
YELLOW
WHITE GREEN

(301)

(103) (104)

PIN ASSIGN	
B	GREEN
A	YELLOW
Vcc(+5V)	BLACK
GND	WHITE

(105) (101)

(103)

(102)

(70)

(3)
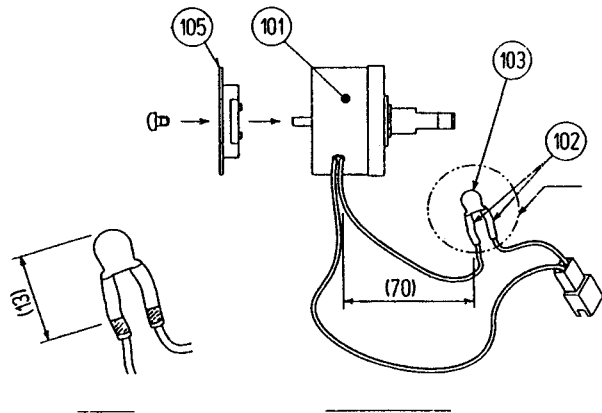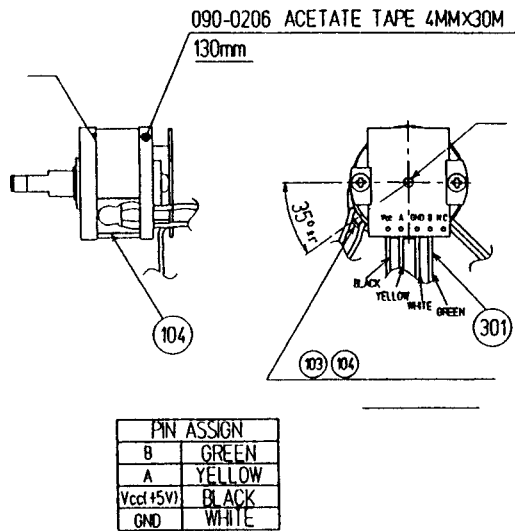
ITEM NO.	PART NO.	DESCRIPTION
101	601-9942	POWDER BRAKE 0.1NM MITISUBISHI
102	310-5029-C20	SUMI TUBE F C 20MM
103	512-5052-017	POLYSWITCH RXE17
104	310-5376-	SILICONE SHEET
105	370-5165-01-91	ENCODER 100 PULSE W/O CONN
106	090-0206	ACETATE TAPE 4MMX30M

80 20 40 60

U-P 6P
CAP
WHITE

U-P 6P
CAP
YELLOW

①

⑩①

③⓪①

MOLEX
51021-0800

JST SM 2P
PLUG
BLACK
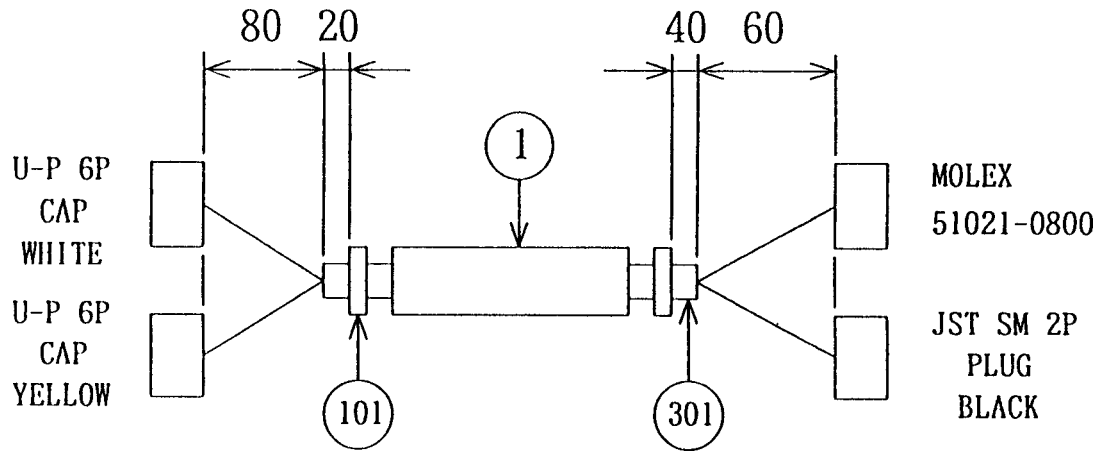
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-3060	ASSY TUBE W/O WIRE
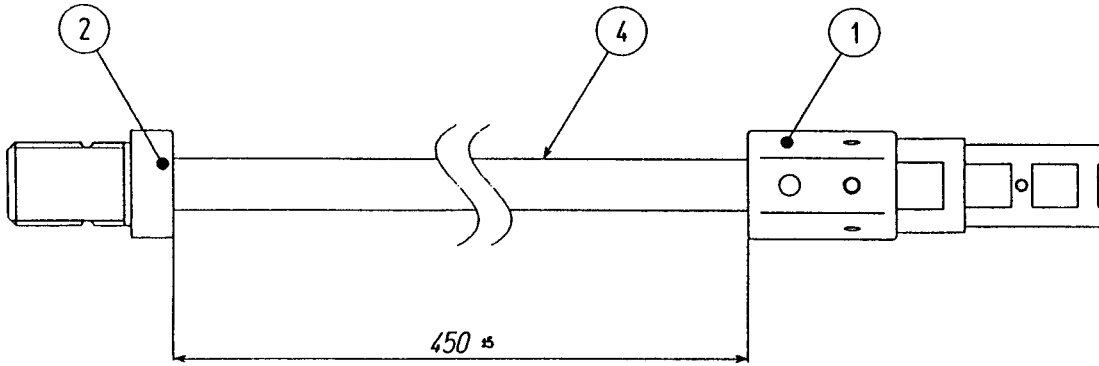
ITEM NO	PART NO.	DESCRIPTION
1	BSS-3051	TUBE HOLDER FRONT
2	BSS-3052	TUBE HOLDER REAR
3	BSS-3055	TKK TUBE

ASSY MAIN BD BSS (BSS-4000)
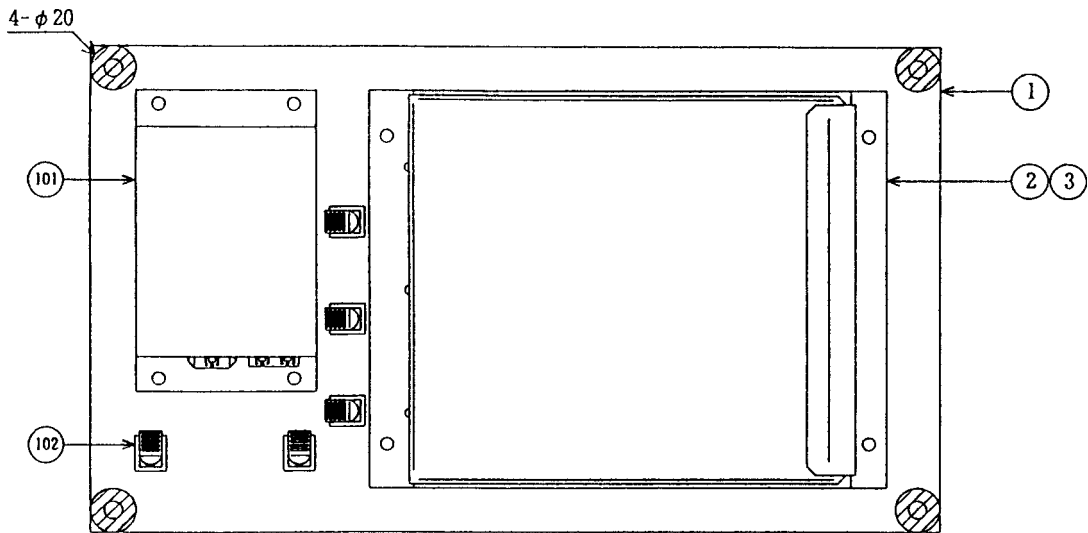
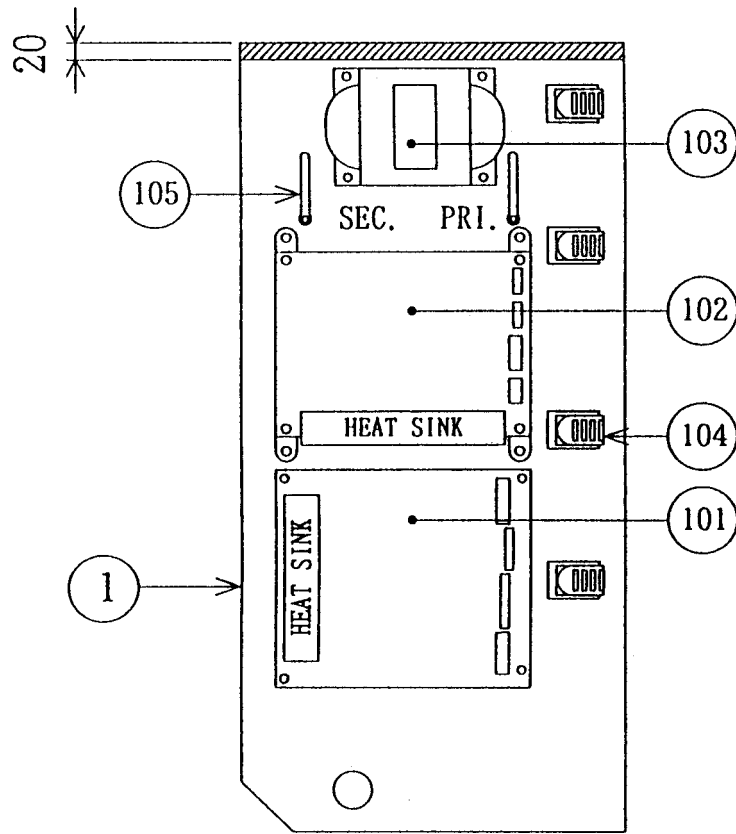| ITEM NO.	PART NO.	DESCRIPTION
1	BSS-4001	WOODEN BASE MAIN BD
2	BSS-4500	ASSY SHIELD CASE BSS
3	105-5241	SHIELD CASE BRKT
101	400-5330-02-91	SW REGU FOR MODEL 3

ASSY POWER SUPPLY (BSS-4100)
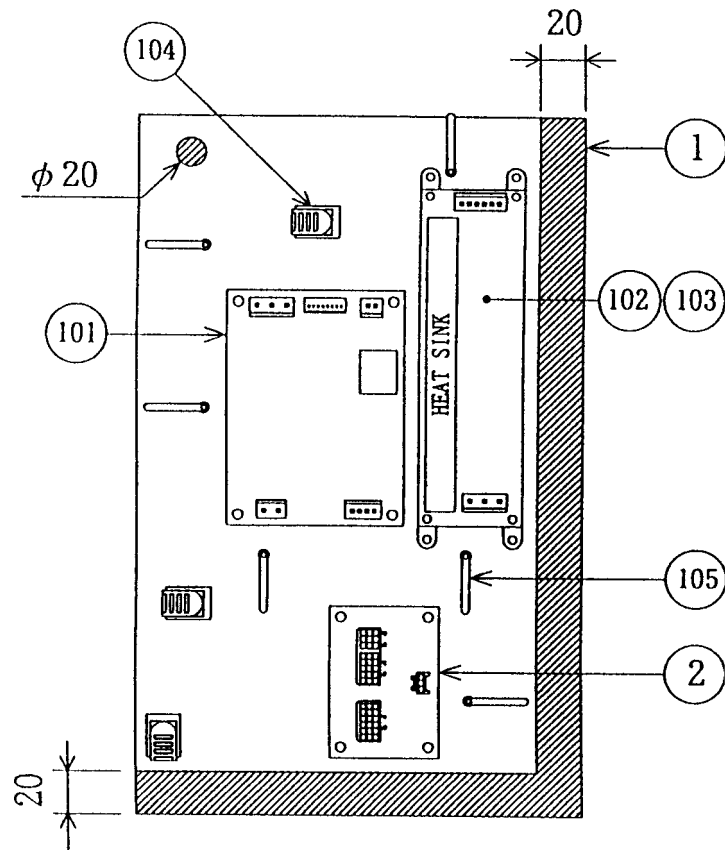
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-4101	WOODEN BASE PWR SUPPLY
2	839-0976	CONN BD
101	838-13282	MOTOR DRV BD BSS
102	400-5368-07524	SW REGU LCA75S-24
103	601-7467	L-LOCK BK
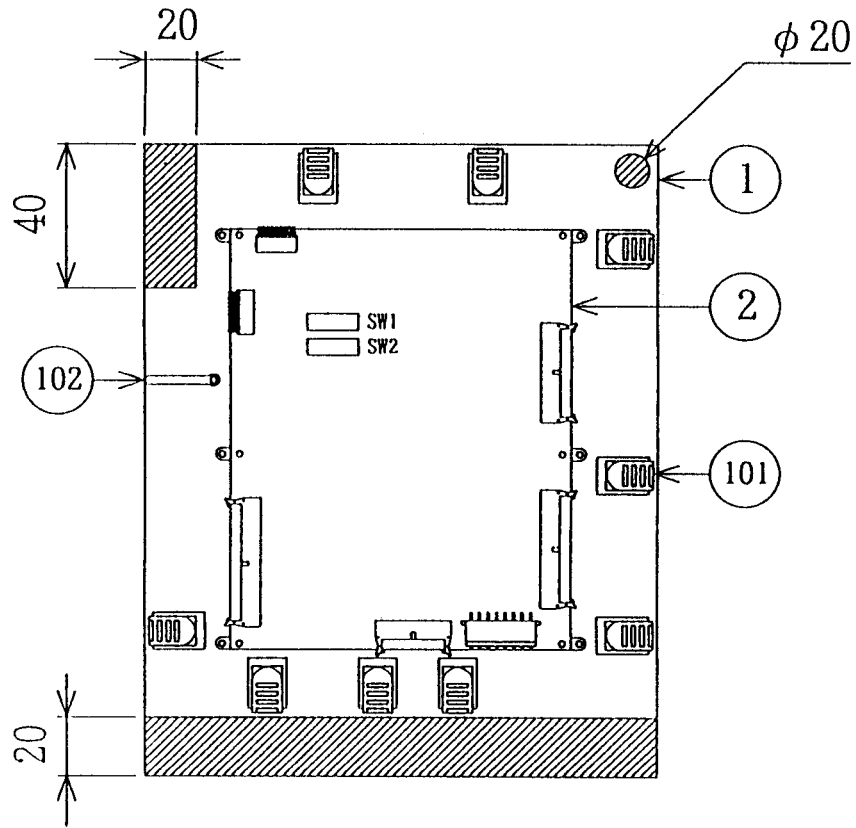
ITEM NO.	PART NO.	DESCRIPTION
1	BSS-4201	WOODEN BASE I/O BD
2	837-13283	GET BASS MEC CONT BD

ITEM NO.	PART NO.	DESCRIPTION
1	BSS-4301	WOODEN BASE DRIVER BD
101	838-13276	SERVO DRIVER BD BSS
102	838-12796	PWR AMP FOR M3
103	560-5339-91	XFMR 18-0-18V 2.4V

ASSY SHIELD CASE BSS (BSS-4500)
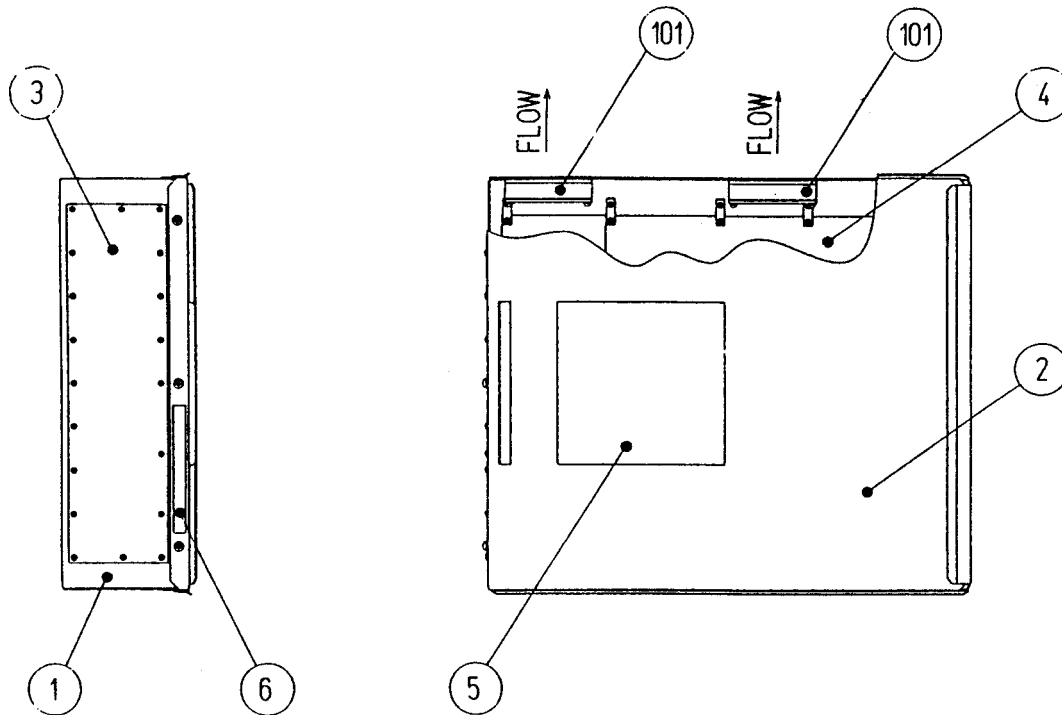
ITEM NO.	PART NO.	DESCRIPTION
1	105-5240	SHIELD CASE MODEL 3
2	105-5242	SHIELD CASE LID MODEL 3
3	839-0951	FILTER BD MODEL 3 JPT
4	833-13317	GAME BD BSS
7	601-8928	CARTON BOX (NOT SHOWN)
101	260-0064	FAN MOTOR DC 12V

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