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SEGA

STAR WARS TRILOGY ARCADE

50" BENCH DLX VERSION

OWNER'S MANUAL

SEGA ENTERPRISES, INC. USA

MANUAL NO. 999-0803

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:                    89 in.(D) x 45 in.(W)         │
│                                                                       │
│  Height:                                82 in.                        │
│                                                                       │
│  Weight:                                Approx. 820 lbs.              │
│                                                                       │
│  Power maximum current:                 5.2 Amps (AC 120V 60 Hz AREA) │
│                                                                       │
│                                                                       │
│  MONITOR:                               50" PROJECTION DISPLAY        │
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
```

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 THE STAR WARS 50" BENCH DLX, 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.
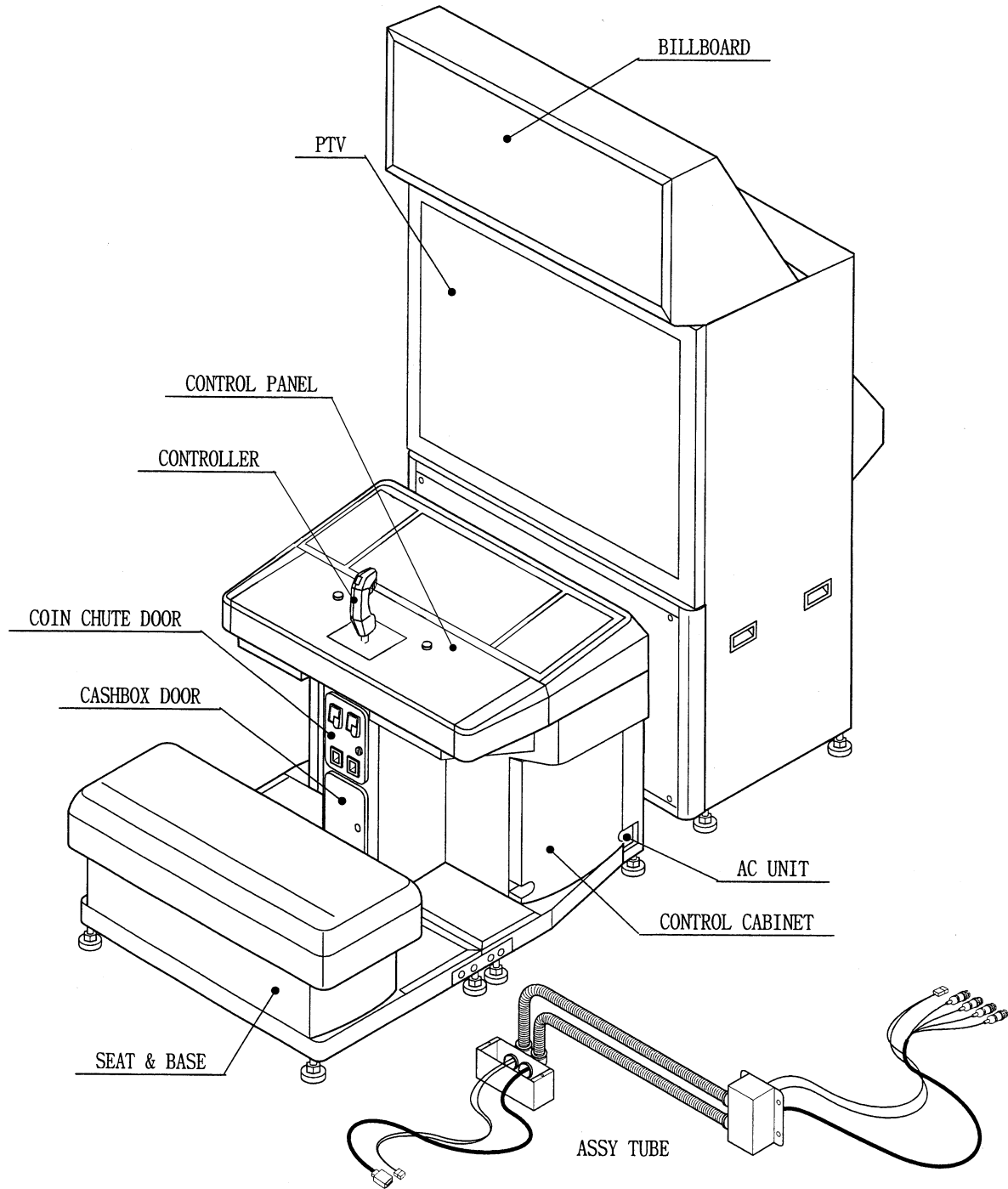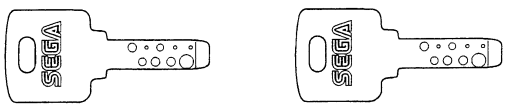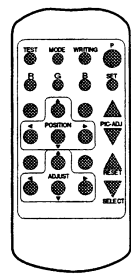

LISTED

5K92

AMUSEMENT MACHINE
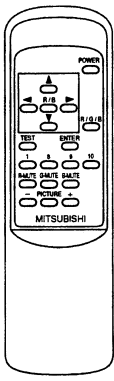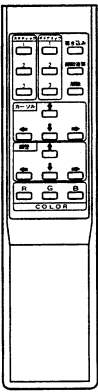
1. NAME OF PARTS

GAME SPECIFICATIONS	WIDTH		HEIGHT		DEPTH		WEIGHT
all measurements are rounded up to the nearest 0.5"							
PTV	45"	X	68"	X	22"		~210 LBS.
BILLBOARD	45"	X	16"	X	16"		~50 LBS.
CONTROL CABINET	39.5"	X	44.5"	X	35.5"		~400 LBS.
SEAT AND BASE	39.5"	X	21"	X	24"		~140 LBS.
WHEN ASSEMBLED	45"	X	82"	X	89"		~820 LBS.

2. ACCESSORIES

DESCRIPTION   OWNERS MANUAL

Part No. (Qty.)   4201-6419-01 (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

220-5576 (2)

For opening/closing the doors

KEY

(2)

For the CASHBOX DOOR

CARTON BOX

601-8928 (2)

Used for transporting the Game Board.
Refer to Next Page.

AC Cable (Power Cord)

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

Used for installation

TAMPERPROOF WRENCH
M4   540-0006-01 (1)
TOOL

TOSHIBA
Remote Control for Projector
Used for adjustment.

200-5536(1)

MITSUBISHI
Remote Control for Projector
Used for adjustment.

200-5532(1)

HITACHI
Remote Control for Projector
Used for adjustment.

200-5410(1)

One of the above 3 types of Remote Controls is used for the Projector.

⚠ WARNING!

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 HARLEY DAVIDSON, RALLY 2, DAYTONA 2, DIRT DEVILS, **STARWARS TRILOGY**

!!NEVER SHIP MODEL 3 GAME BOARDS OUTSIDE OF CAGE!!
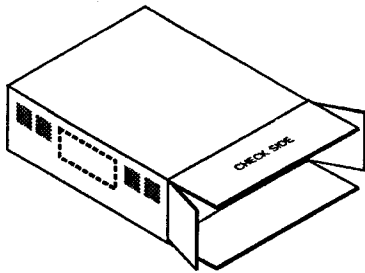
CARTON BOX
601-8928 (1)
Used for transporting the GAME BOARD.
{SUPPLIED WITH YOUR GAME}

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

"CHECK SIDE" Display

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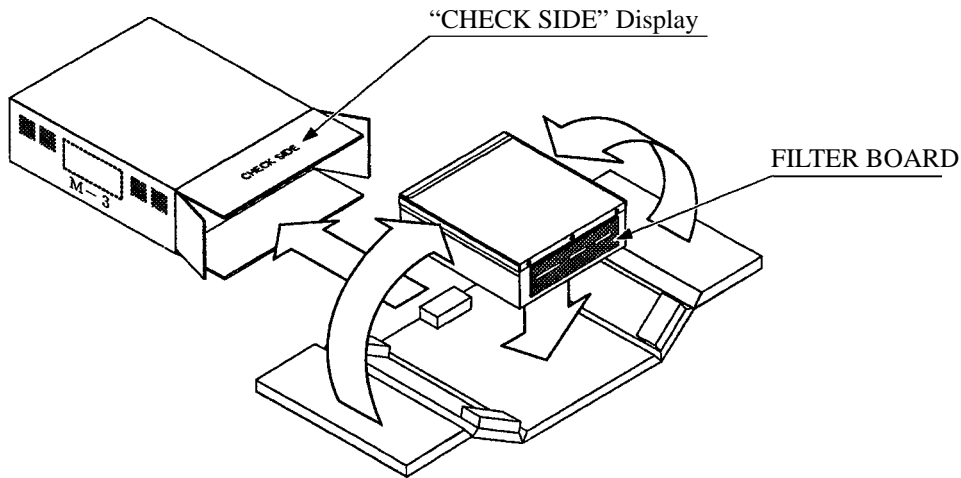
⚠ WARNING! NO OTHER GAMES BOARDS ARE TO BE SHIPPED IN THE CAGE AS THEY MAY BE DAMAGED BEYOND REPAIR. PLEASE SHIP THEM WITHOUT CAGE PROPERLY PROTECTED DURING SHIPPING.

3. ASSEMBLING PRECAUTIONS

⚠ **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 4-item sequence:

| 1 | ASSEMBLING OF THE PTV |

| 2 | JOINING CONTROL CABINET AND SEAT & BASE |

| 3 | WIRING CONNECTION BETWEEN PTV AND CABINETS |

| 4 | SECURING IN PLACE |

| 5 | POWER SUPPLY |

| 6 | ASSEMBLY 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 ASSEMBLING OF PTV

① By using the specified screws, secure the 2 Mask Holders to the Projection Display Ceiling.

② Insert the TV Mask from the underside as shown and secure with the total of 6 screws in the manner to sandwich the LOCK BRACKET as shown.

③ Secure the two Guide Brackets to the front of the Projection Display in the correct installation direction shown, by using 2 screws for each bracket.

④ Insert the Billboard's 2 Connectors into the front as shown and secure with 2 screws.

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

2 JOINING CONTROL CABINET AND SEAT & BASE

⚠ WARNING!
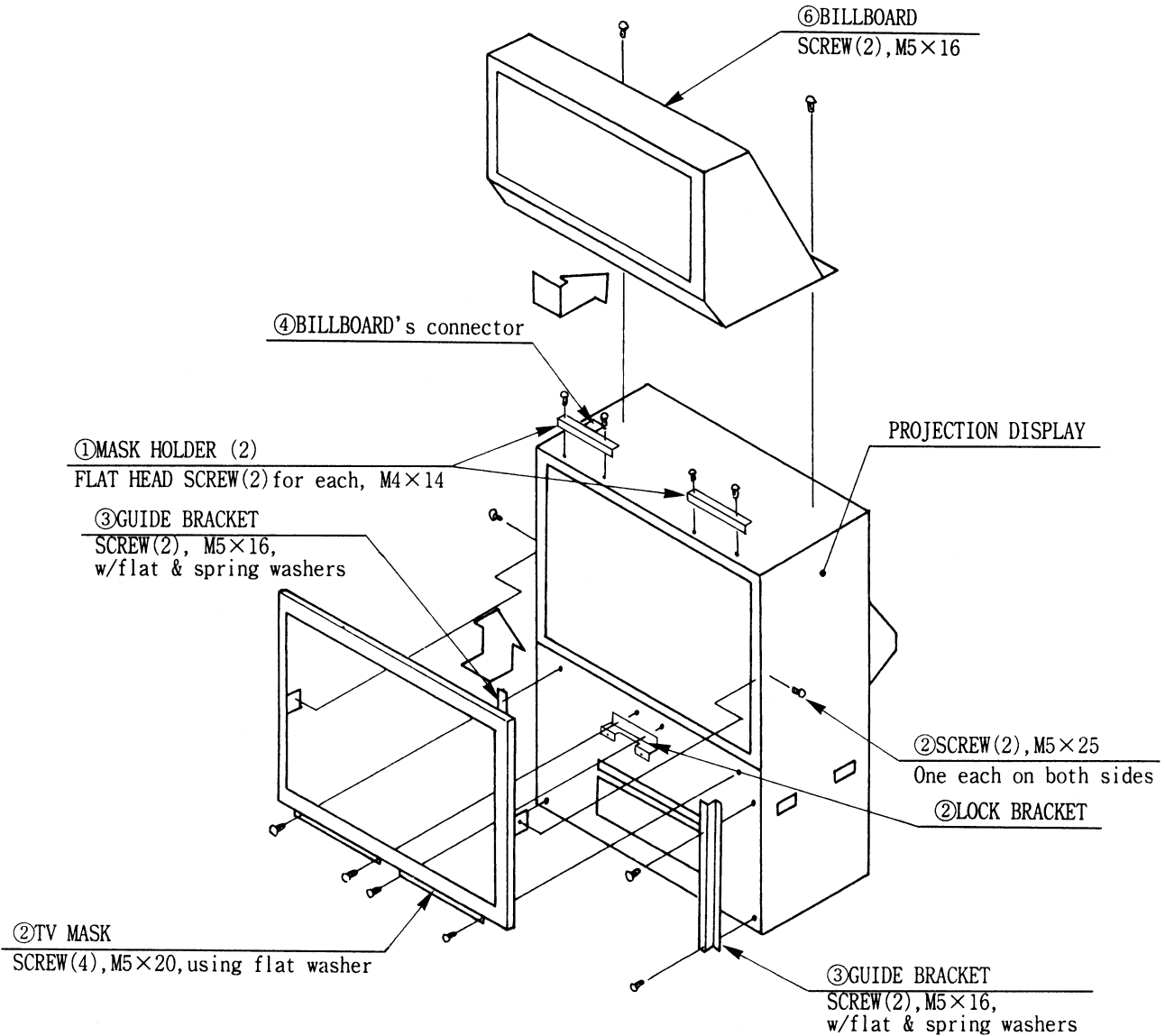
During assembling work, the cabinet is moved. When assembling, ensure that casters of each cabinet are in contact with the floor.

① Connect the Seat & Base connector to the Control Panel connector.

② Install the 2 Joint Brackets to the Seat & Base and the Control Cabinet by securing with 4 Hexagon Bolts for each Joint Bracket.

Connect the Connector.

CONTROL CABINET

SEAT & BASE

JOINT BRACKET

HEXAGON BOLT (4), chrome,
M8×20, w/flat and spring washers
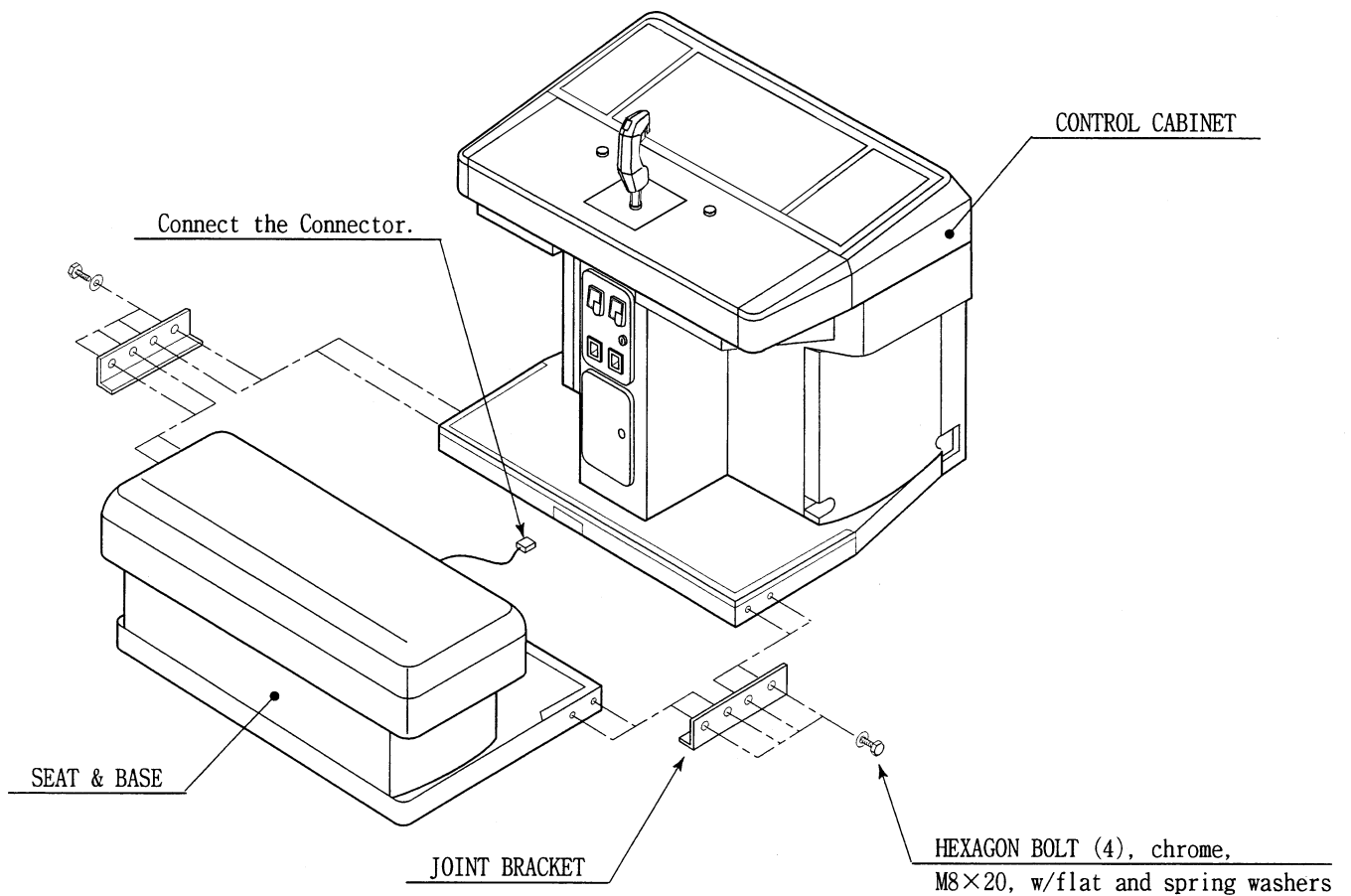
3 | WIRING CONNECTIONS BETWEEN PTV AND CABINETS

⚠️ **WARNING!**

Be sure to connect connectors securely. Incomplete connector connection can cause electric shock accident.
Use car so as not to damage wirings. Dmaged wiring canc ause electric shock or short circuit accident.

Install the ASSY TUBE to each cabinet joined as per [2] on the previous page. and perform wiring connection on PTV.

PTV

CONTROL CABINET

SEAT & BASE
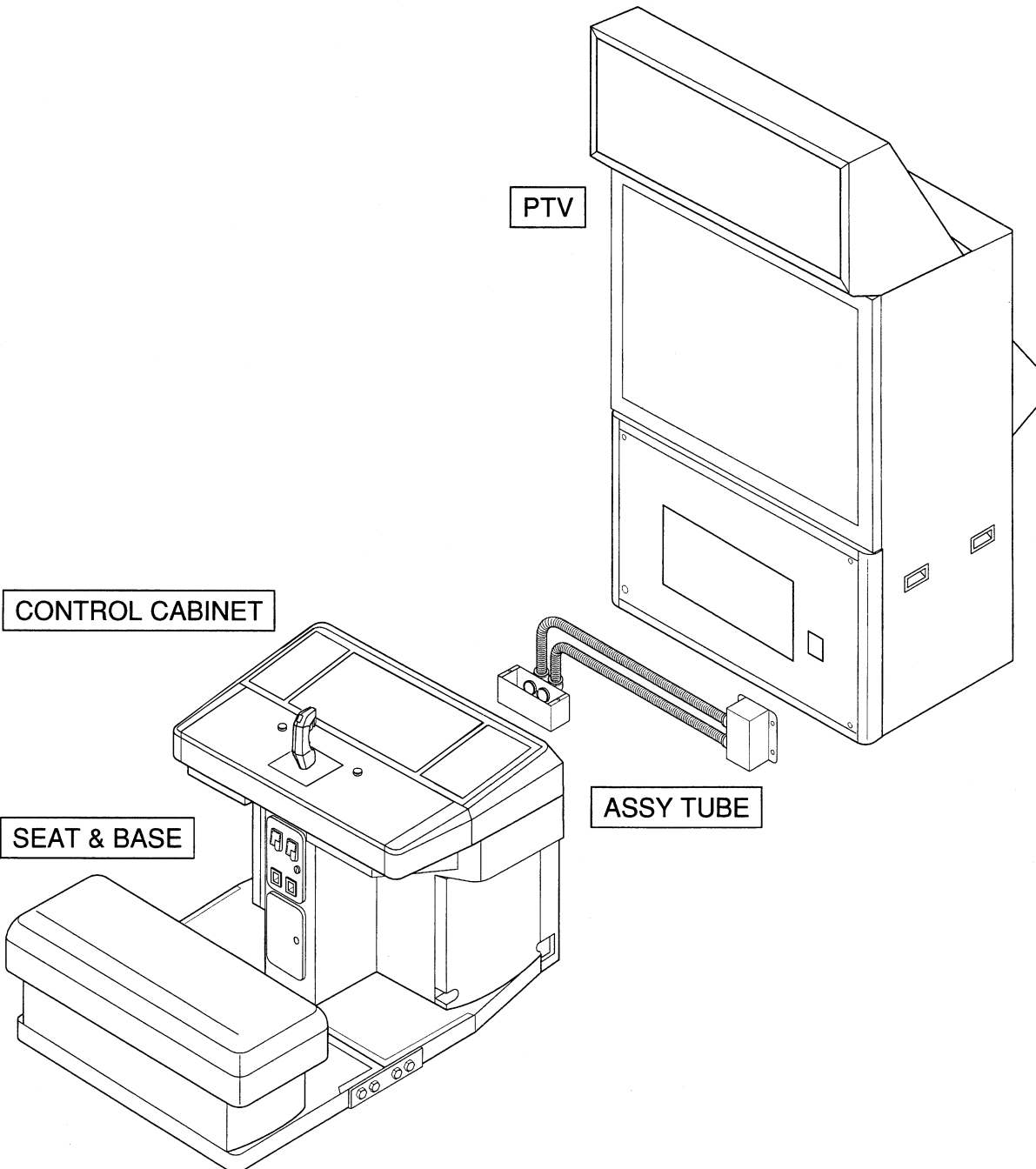
ASSY TUBE

① Take out the 2 screws and unlock the Service Door to remove it from the front of the PTV.

TRUSS SCREW (2)
M4×30, chrome

UNLOCK

SERVICE DOOR
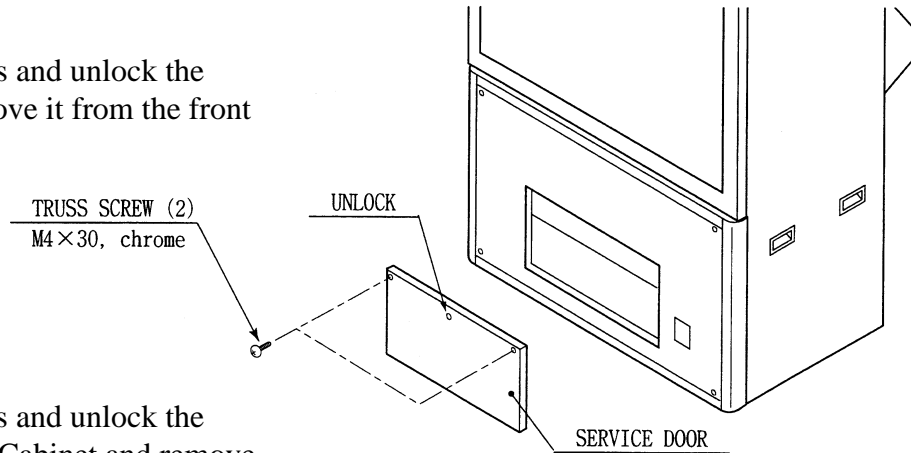
② Take out the 2 screws and unlock the Back Lid of Control Cabinet and remove the Back Lid.

UNLOCK

TRUSS SCREW (2)
M4×16, chrome,
flat washer used.
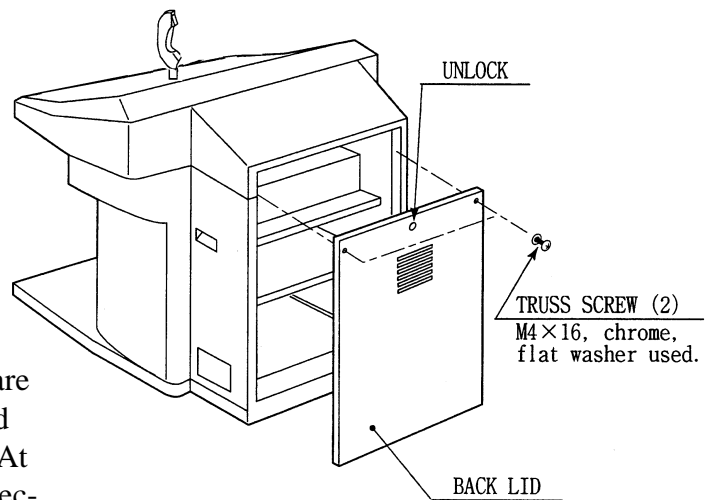
③ Insert ASSY TUBE wires in the square hole beside the PTV's Front Door and connect all of the wiring connectors. At this time, be sure to connect the connector to the corresponding one which has an identical color and number of pins.

BACK LID

④ Secure the ASSY TUBE box part with 4 screws. At this time, use care so that the wires are not caught and damaged. Reinstall the Service Door.

Connect wiring.

ASSY TUBE

TRUSS SCREW (4)
M4×20, black

11
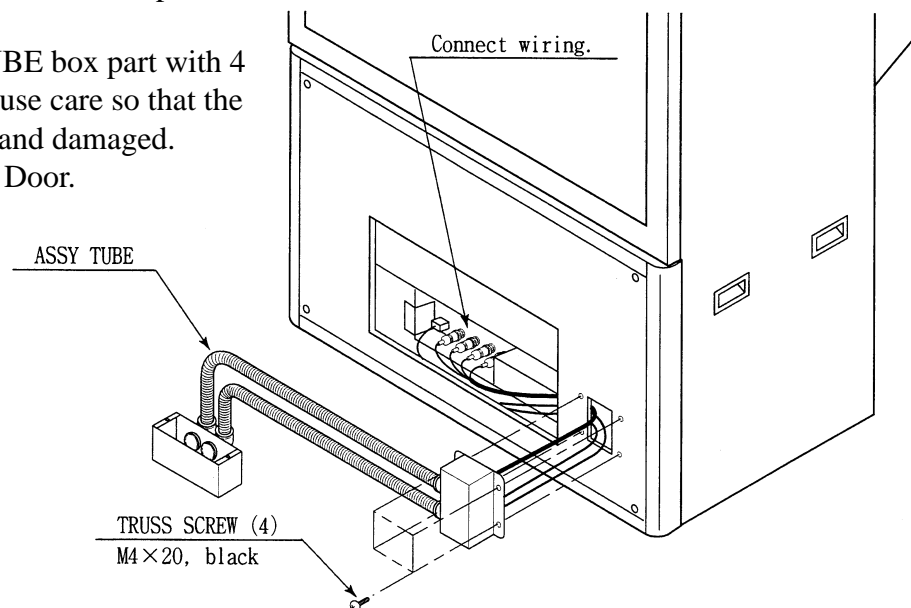
⑤ Pass the ASSY TUBE wire to the square hole at the lower of Control Cabinet, install 2 Ferrite Covers to the bottom of cable, and secure with Plastic Tie Belt.

⑥ Insert the cable forementioned in #5 above to the top of the Filter Board and secure with the screws.

⑦ Connect the remaining connectors, and install ASSY TUBE box part to the Control Cabinet with 2 screws. At this time, use care so that the wiring will not be caught and damaged.

⑧ Reinstall the Back Lid.

FERRITE CORE

Secure with
Plastic Tie Belt.

Connect the connector.

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

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

Connect the connector.

EARTH WIRE
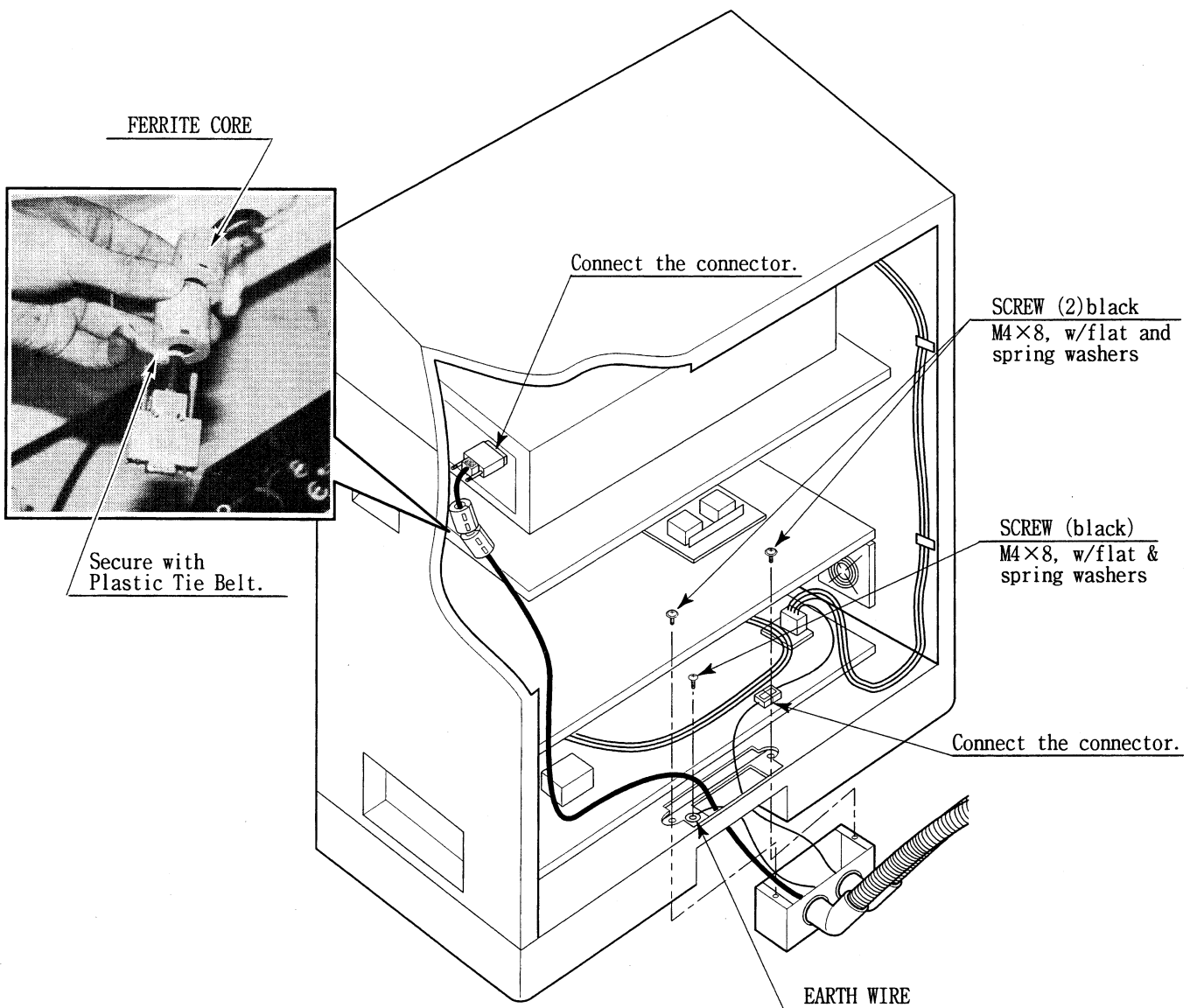
4 | SECURING IN PLACE (ADJUSTER ADJUSTMENT)

⚠️ **WARNING!**

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

This machine has 12 each of casters and adjuster (See 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.

ADJUSTER

CASTER

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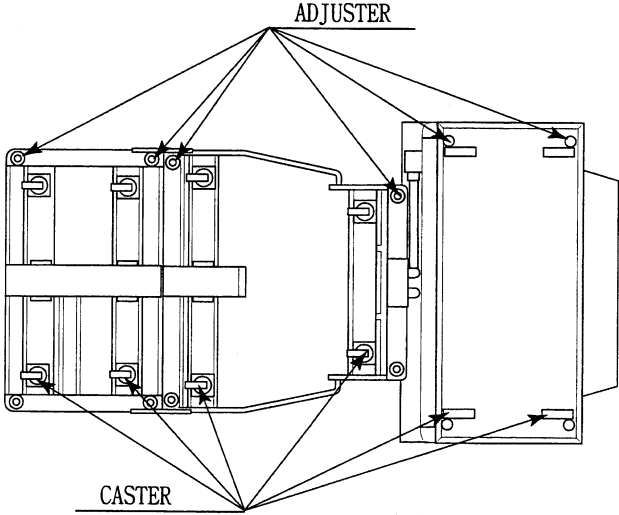
● Ensure that the power cord is not exposed on the surface (passage, etc.). If exposed, they can be caught and are susceptible to damage. If damaged, the cord can cause an electric shock or short circuit. Ensure that the wiring position is not in the customer's passage way or the wiring has protective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

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

① Ensure that the Main SW is OFF.

② The AC unit is located on the left side of the Cabinet. The Ac unit incorporates the Main SW, and power cord.
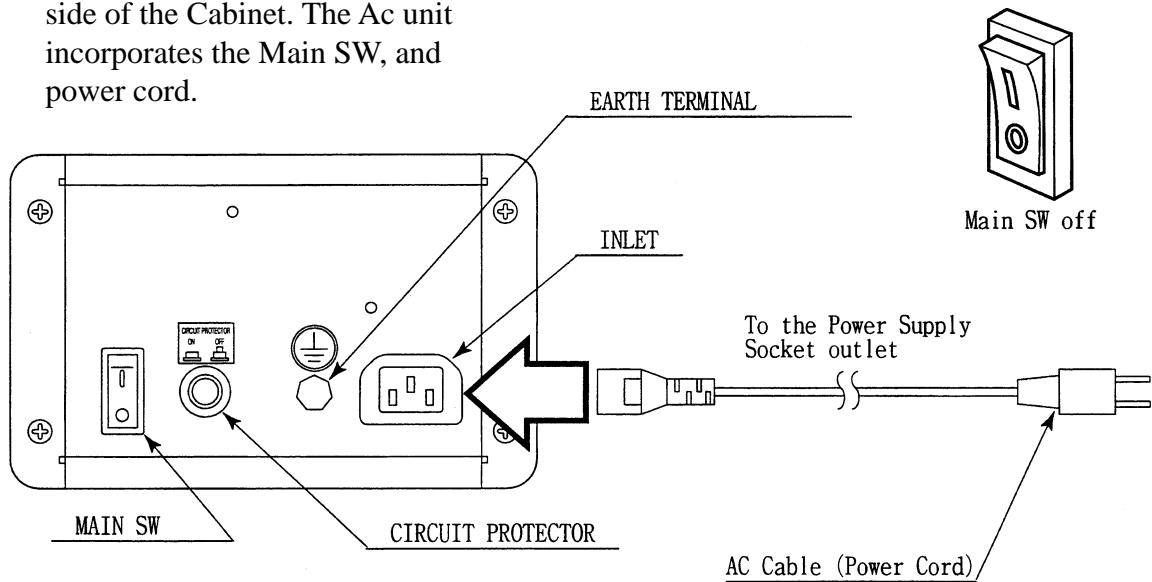
EARTH TERMINAL

INLET

Main SW off

To the Power Supply Socket outlet

CIRCUIT PROTECTOR
ON   OFF

MAIN SW

CIRCUIT PROTECTOR

AC Cable (Power Cord)

CAUTIONS TO BE HEEDED WHEN TURNING THE POWER ON

⚠ WARNING!

First make sure that no one is in the periphery of the bike body and turn the Main SW on. When the power is turned on, the bike body motion starts automatically. The presence of a person(s) in the periphery of the bike can cause an accident. Turning the AC Unit's Main SW on will cause the machine to start the POWER ON check automatically. In the POWER ON check, the bike body banks left and right, then returns to the centering position and stops. During this check, do not touch the bike body. If you do, the body reaction (at the time course-out or crashing) can not be obtained correctly. The Advertise mode is displayed at the same time the checking is finished. An ERROR display is indicated if irregularity is found in the POWER ON check. In case of an irregular reaction during game, turn power off and turn it back on again to finish the POWER ON check.

6   ASSEMBLING CHECK

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

(1) MEMORY TEST

```
         CPU  ROM  TEST

   GOOD (CROM13    MASK)  IC.   5  XXXX
   GOOD (CROM12    MASK)  IC.   6  XXXX
   GOOD (CROM11    MASK)  IC.   7  XXXX
   GOOD (CROM10    MASK)  IC.   4  XXXX
   GOOD (CROM23    MASK)  IC.   9  XXXX
   GOOD (CROM22    MASK)  IC.  10  XXXX
   GOOD (CROM21    MASK)  IC.  11  XXXX
   GOOD (CROM20    MASK)  IC.  12  XXXX
   GOOD (CROM33    MASK)  IC.  13  XXXX
   GOOD (CROM32    MASK)  IC.  14  XXXX
   GOOD (CROM31    MASK)  IC.  15  XXXX
   GOOD (CROM30    MASK)  IC.  16  XXXX
   GOOD (CROM3    EPROM)  IC.  17  XXXX
   GOOD (CROM2    EPROM)  IC.  18  XXXX
   GOOD (CROM1    EPROM)  IC.  19  XXXX
   GOOD (CROM0    EPROM)  IC.  20  XXXX

   PRESS  TEST  BUTTON  TO  CONTINUE
```

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

```
     CPU  RAM  TEST


   GOOD (SDRAM)          IC. 13  IC. 14  IC. 15  IC. 16
   GOOD (BACKUP  SRAM)  IC. 21  IC. 22
   GOOD (SCROLL  SDRAM) IC. 54
   GOOD (SCROLL  SRAM)  IC. 17  IC. 18




   PRESS  TEST  BUTTON  TO  CONTINUE
```

```
       VIDEO  BOARD  ROM  TEST

      GOOD (VROM01)  IC. 26
      GOOD (VROM00)  IC. 27
      GOOD (VROM03)  IC. 28
      GOOD (VROM02)  IC. 29
      GOOD (VROM05)  IC. 30
      GOOD (VROM04)  IC. 31
      GOOD (VROM07)  IC. 32
      GOOD (VROM06)  IC. 33
      GOOD (VROM11)  IC. 34
      GOOD (VROM10)  IC. 35
      GOOD (VROM13)  IC. 36
      GOOD (VROM12)  IC. 37
      GOOD (VROM15)  IC. 38
      GOOD (VROM14)  IC. 39
      GOOD (VROM17)  IC. 40
      GOOD (VROM16)  IC. 41

   PRESS  TEST  BUTTON  TO  CONTINUE
```

15

```
VIDEO BOARD RAM TEST


                  GOOD




     PRESS TEST BUTTON TO EXIT
```

(2) INPUT TEST

```
          INPUT  TEST

  VOLUME  1P  PITCH    00
  VOLUME  1P  YAW      00
  VOLUME  2P  PITCH    00
  VOLUME  2P  YAW      00

  1P  LEFT   SHOT    OFF
  1P  RIGHT  SHOT    OFF
  2P  LEFT   SHOT    OFF
  2P  RIGHT  SHOT    OFF

  1P  START           OFF
  2P  START           OFF

  COIN #1             OFF

  SERVICE             OFF
  TEST                OFF

PRESS SERVICE+TEST BUTTON TO EXIT
```

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

(3) OUTPUT TEST

```
             OUTPUT  TEST


  1P  START  LAMP              OFF
  2P  START  LAMP              OFF
  1P  CONTROLLER  REACTION  OFF
  2P  CONTROLLER  REACTION  OFF

  EXIT




SELECT WITH SERVICE BUTTON
  AND PRESS TEST BUTTON
```

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.

(4) SOUND TEST

```
          SOUND  TEST


    ROM             0 0 0
    S F             0 0 0

  → E X I T



  SELECT  WITH  SERVICE  BUTTON
    AND  PRESS  TEST  BUTTON
```
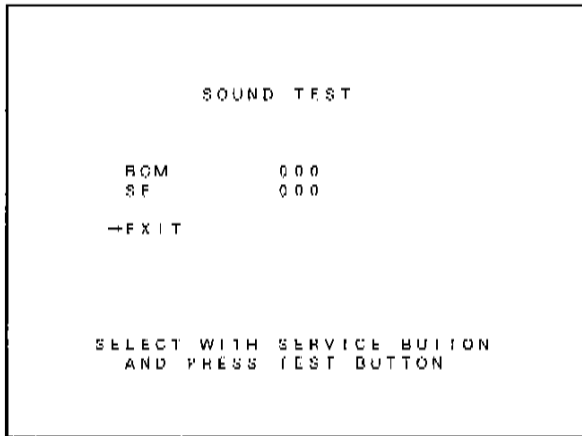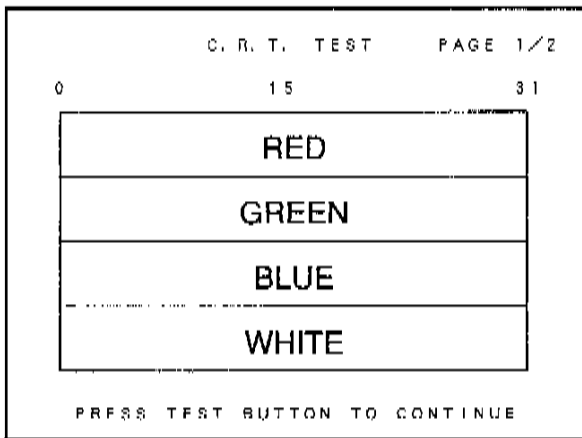
In the TEST mode, selecting SOUND TEST causes the screen (on which sound related BD and wiring connections are tested) to be displayed. Be sure to check if the sound is satisfactorily emitted from each speaker and the sound volume is approprate.

(5) C.R.T. TEST

```
       C. R. T.  TEST      PAGE  1/2
  0              1 5                3 1

  ┌─────────────────────────────┐
  │            RED              │
  ├─────────────────────────────┤
  │           GREEN             │
  ├─────────────────────────────┤
  │            BLUE             │
  ├─────────────────────────────┤
  │           WHITE             │
  └─────────────────────────────┘

  PRESS  TEST  BUTTON  TO  CONTINUE
```

In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the monitor is tested) to be displayed. Although the monitor adjustments have been made at the 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 monitor by refering to Section 9.

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




  PRESS  TEST  BUTTON  TO  EXIT
```
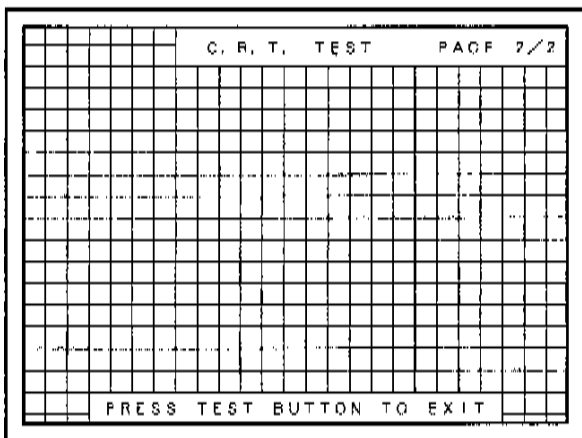
4. PRECATIONS TO BE HEEDED WHEN MOVING THE MACHINE

 WARNING!

- 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.

 CAUTION!

Since this machine is a heavy structure of approximately 1000+lbs. its leg adjusters should be retracted when moving the machine over the floor. When moving the machine on the floor with slanted surfaces or step like differences, ensure that the PTV, Front Cabinet and Rear Base are seperated. Lifting the Cabinet with those items as is joined can cause the joint portions to be damaged.
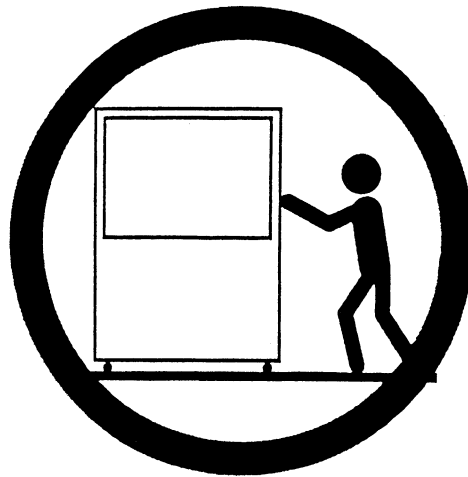
Do not push the PTV from the rear side. Pushing the PTV from the rear side can cause the PTV to fall down. Push it from the side.

5. CONTENTS OF GAME

The following explanations apply to the case the product is functioning satisfactoriliy. Should there be any moves different from the following contents, some sort of faults may have occurred. Immediately look into the cause of the fault and eliminate the cause thereof to ensure satisfactory operation.
The left/right lamps inside the Control Panel light up during game only.
The EVENT/START button (red buton, one each on the left/right side of LEVER) lights up in particular screens only.

① After inserting one play worth of coin(s), press the EVENT/START button to start, and the STAGE SELECT screen appears.

② At the time of starting the game, only the 3 stages, i.e., "YAVIN," "HOTH," and "ENDOR FOREST" are displayed. By moving the LEVER left/right, select one from among the 3 stages and pull the trigger to decide. (execute the selection).
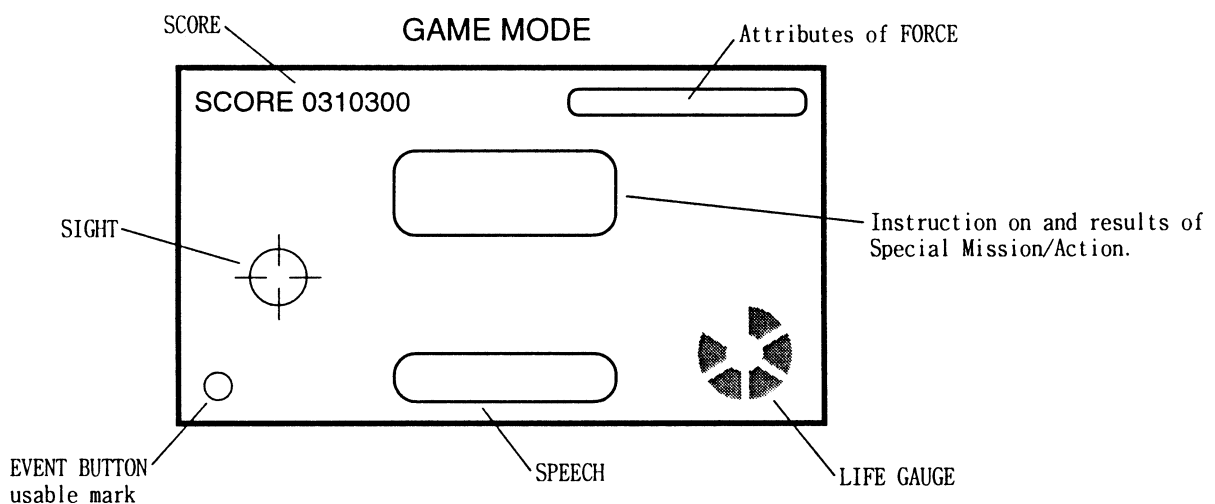
   NOTE: The player's flight machine used during game is predetermined per STAGE.

③ After the STAGE is determined, the still screen for loading the game data appears for several seconds (this cannot be skipped). Next, Movie Demo based on that particular STAGE's story setting appears for several seconds (this can be skipped by using the EVENT button).

④ Move the SIGHT by moving the LEVER up/down and left/right, aim at the target and press either the trigger with the forefinger or the thumbs switch with thumb to attack (the function of the trigger at the position corresponding to the forefinger and that of the Thumb SW. at the position corresponding to a thumb identical). It is not necessary to operate the flight machine. In the stage where the player fights while boarding the flight machine, he can continually shoot by keeping the trigger pressed.
The up/down movements of the SIGHT as against the up/down movements of LEVER can be set oppisite each other within the TEST mode.

STAGE SELECT
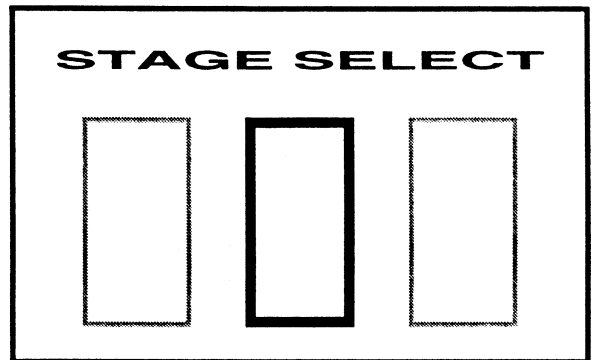
⑤ During game, instruction on Special Mission/Action or hints on play may be displayed at the center of the screen. The player can obtain good results by following the instruction.
During game, SPEECH sound may be emitted on the lower part of the screen. Although hints on play are included sometimes, basically the SPEECH expressions are intended for presentation effects and do not affect game proceeding.

SCORE   GAME MODE   Attributes of FORCE

SCORE 0310300

SIGHT

Instruction on and results of Special Mission/Action.

EVENT BUTTON usable mark

SPEECH

LIFE GAUGE

⑥ If the LIFE GAUGE on the lower right side of the screen is depleted, on-screen movements stop and CONTINUE YES or NO is questioned. to continue, insert the necessary number of coins, select YES by moving the LEVER left/right, and then press the EVENT/START button. In case the count becomes 0 (zero), or if NO is selected and EVENT /START button is pressed, continue play is not possible. If CONTINUE is not selected, the present on-stage results are displayed, then the game is over.

(On the still screen for CONTINUE confirmation, the background of screen may become red sometimes, but this is only for presentation effects shown momentarily at the time of being subject to damage and does not mean any irregularity. The status will be restored to the normal background at the same time game restarts.

⑦ If all of the 3 STAGES shown at first in the STAGE SELECT screen are cleared, the 4th (FINAL) stage appears. When all of the above stages are cleared, game results are shown and then credits-to-staff are displayed. Credits-to-staff can skipped by using the EVENT/START button.

GAME FLOW

```
┌─────────────────────────────────────────────┐
│   2-STAGE CLEAR (in a free sequential order)  │
└─────────────────────────────────────────────┘
                      │
┌─────────────────────────────────────────────┐
│          BONUS STAGE (LIGHT SABER)            │
└─────────────────────────────────────────────┘
                      │
┌─────────────────────────────────────────────┐
│              THIRD STAGE CLEAR                │
└─────────────────────────────────────────────┘
                      │
┌─────────────────────────────────────────────┐
│          BONUS STAGE (LIGHT SABER)            │
└─────────────────────────────────────────────┘
                      │
┌─────────────────────────────────────────────┐
│                 FINAL STAGE                   │
└─────────────────────────────────────────────┘
                      ▼
┌─────────────────────────────────────────────┐
│       TOTAL RESULTS & CREDITS-TO-STAFF        │
└─────────────────────────────────────────────┘
```
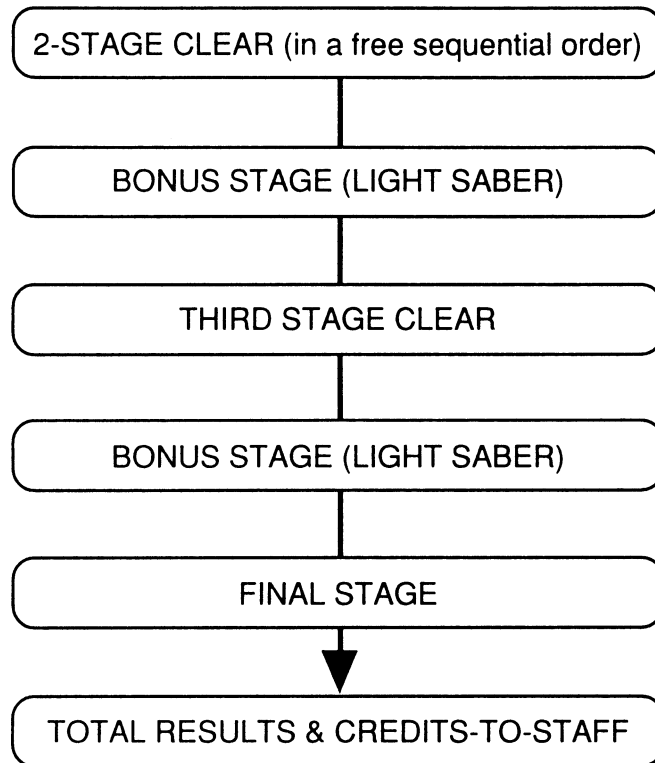
EVENT BUTTON

In a specific scene, the on-screen message may insruct you to press the EVENT button. Press either the left/right EVENT buttons as these have the same function.
Even when no particular insruction is given, if a mark is indicated on the lower left side of the screen, or when the Cabinet's EVENT buton is lit, some sort of effects can be obtained (for example, a covering fighter appears) by pressing the button. The type of the effects differs depending on the specific scene and stage.
There will be no adverse effect on the proceeding of game play if the button is not pressed. This feature is intended for enabling the player to enjoy playing the game better.
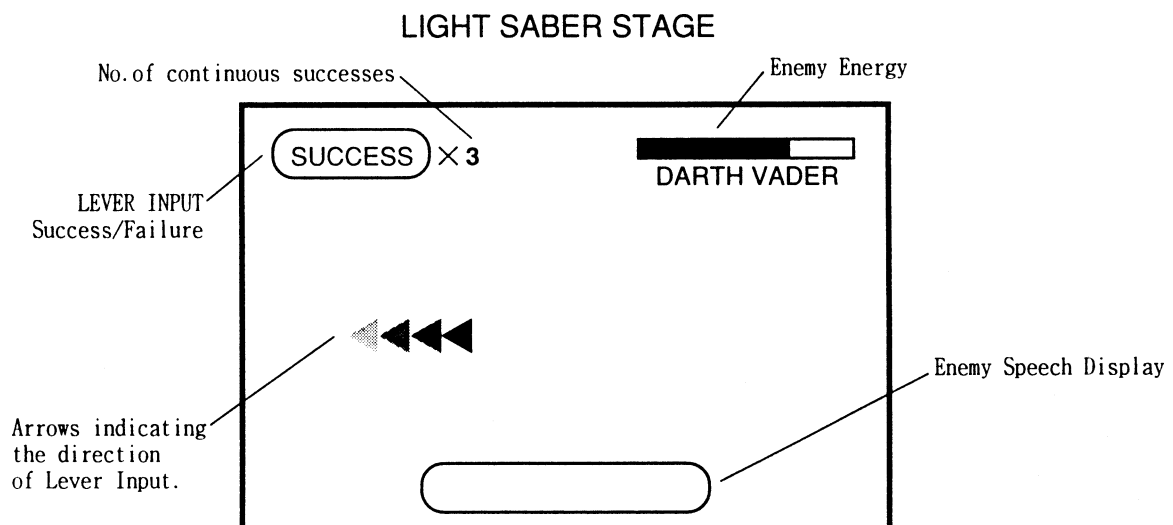
ATTRIBUTES BUTTON

The features of FORCE vary in 6 catagories depending on the actions taken during the game, and influence the performance of score, attack, and defense. Taking actions favorable to friends (by saving them for example) causes LIGHT LEVEL to vary from 1 up to 3. On the contrary, doing things unfavorable to friends (by attacking them for example) causes DARK LEVEL to vary from 1 up to 3. The conditions of variation are not displayed in details. The features are intended to allow players to enjoy playing game fully in depth.

LIGHT SABER STAGE

In the LIGHT SABER STAGE (a breif stage in which the player uses a LIGHT SABER), keep inputting the Lever in the direction of the on-screen arrow to proceed with game play.

This is completely a BONUS STAGE and there will be no game over in the middle of play.

The LIGHT SABER STAGE appears once when 2 of the 3 stages are cleared in a free sequential order, and once again when the remaining stage is cleared. (Not displaying at the time of game start).

LIGHT SABER STAGE

No.of continuous successes
Enemy Energy
SUCCESS ✕ 3
DARTH VADER
LEVER INPUT Success/Failure
Enemy Speech Display
Arrows indicating the direction of Lever Input.

6. EXPLANATION OF TEST AND DATA DISPLAY

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

TABLE 6   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.	6 - 8, 6 - 9, 6 - 10
	2. In the INPUT TEST mode, check each SW and VR.	6 - 4
	3. In the OUTPUT TEST mode, check each of lamps.	6 - 7
	4. In the MEMORY TEST mode, check ICs on the IC Board.	6 - 3
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.	6 - 3
PERIODIC SERVICING	Periodically perform the following: 1. MEMORY TEST	6 - 3
	2. Ascertain each setting.	6 - 8, 6 - 9
	3. In the INPUT TEST mode, test the CONTROL device	6 - 4
	4. In the OUTPUT TEST mode, check each of the lamps.	6 - 7
CONTROL SYSTEM	1. In the INPUT TEST mode, check each SW and VR.	6 - 4
	2. Adjust or replace each SW and VR.	7
	3.If the problem hasn't been solved yet, check the CONTROL's moves.	7
PROJECTOR	In the PROJECTOR ADJUSTMENT mode, check to see if the PROJECTOR adjustment is appropriately made.	9
IC BOARD	1. MEMORY TEST	6 - 3
	2. In the SOUND TEST mode, check the sound related ROMs.	6 - 5
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc	6 - 11

CAUTIONS TO BE HEEDED WHEN USING THE TEST MODE

STOP
IMPORTANT!

In case where multiple units are linked for communication play, exiting from the test mode causes the unit to perform the network check automatically. During this time, all of the linked units will not allow the game to be played in the normal status. Therefore, be sure not to enter the test mode if any one of the units is in play. On the other hand, if even one unit is in the test mode, make sure that other machines are not in play.

6 - 1 SWITCH UNIT AND COIN METER

WARNING!

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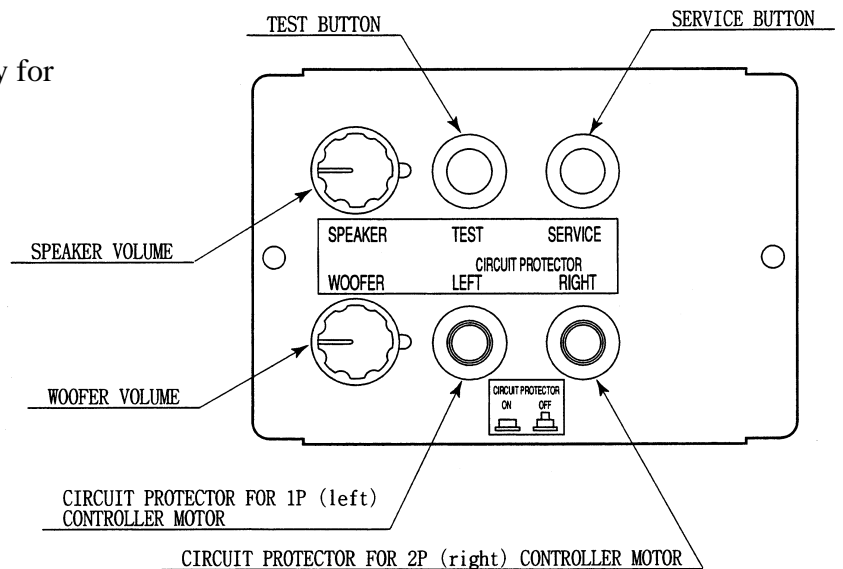
STOP
IMPORTANT!

● 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:

① SOUND VOLUME SPEAKER
Controls the speaker volume ofall of the machines speakers.

② SOUND VOLUME WOOFER
Controls the speaker volume only for SEAT & BASE Woofer.

③ TEST BUTTON (TEST SW)
For the handling of the TEST BUTTON, refer to the section on test mode.

④ SERVICE BUTTON (SERVICESW)
Gives credits without registering on the coin meter.

TEST BUTTON
SERVICE BUTTON
SPEAKER VOLUME
SPEAKER   TEST   SERVICE
WOOFER   LEFT   RIGHT
CIRCUIT PROTECTOR
WOOFER VOLUME
CIRCUIT PROTECTOR
ON   OFF
CIRCUIT PROTECTOR FOR 1P (left) CONTROLLER MOTOR
CIRCUIT PROTECTOR FOR 2P (right) CONTROLLER MOTOR
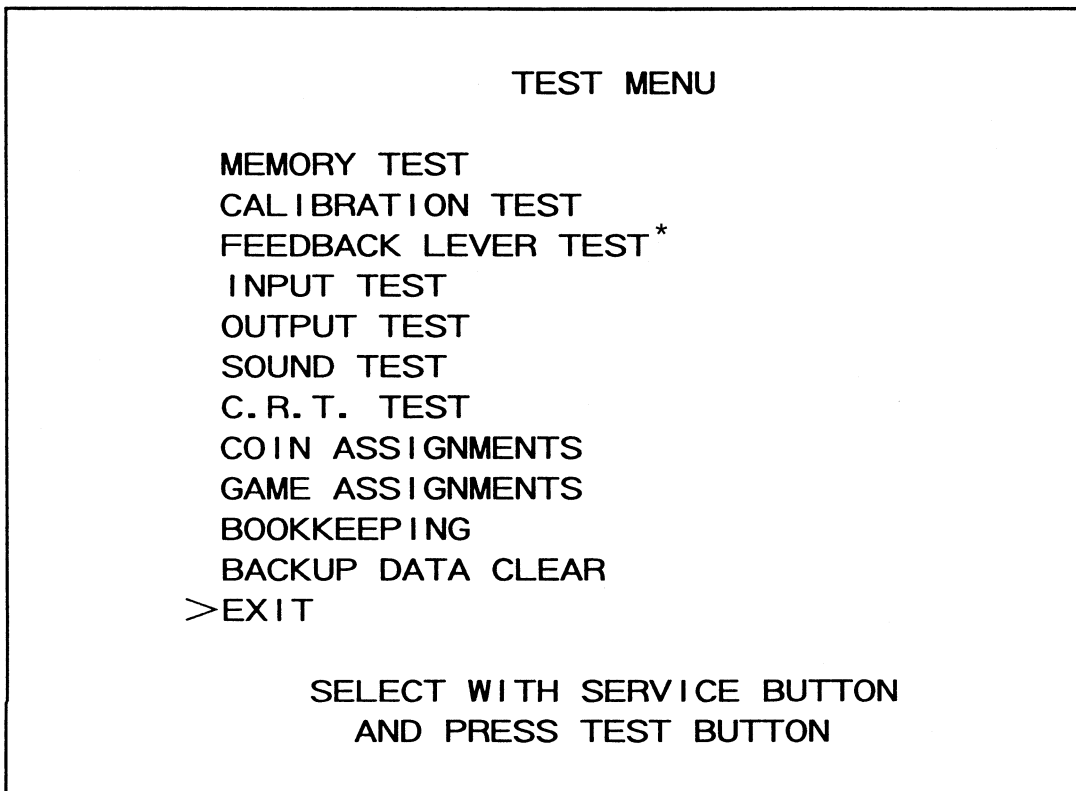
In case settings are changed in GAME ASSIGNMENTS, COIN ASSIGNMENT the setting changes are not effective unless the test mode is exited and the game mode returns to the screen. The setting changes are ineffective if the power is turned off in the test mode.

STOP

IMPORTANT!

The TEST MODE allows the functioning of each part of the Cabinet to be checked, the monitor to be adjusted, and the coins and game related various settings to be performed.

SELECTION OF TEST ITEMS

```
                    TEST MENU

        MEMORY TEST
        CALIBRATION TEST
        FEEDBACK LEVER TEST*
         INPUT TEST
        OUTPUT TEST
        SOUND TEST
        C.R.T. TEST
        COIN ASSIGNMENTS
        GAME ASSIGNMENTS
        BOOKKEEPING
        BACKUP DATA CLEAR
      ＞EXIT

          SELECT WITH SERVICE BUTTON
            AND PRESS TEST BUTTON
```

* This option only appears when the cabinet style is set to DLX. This unit however should be set to U/R.

Press the TEST BUTTON to have the menu displayed on the screen.

Press the SERVICE BUTTON until the pointer is moved to the desired item to make a selection.

Bring the pointer to the desired item and press the TEST BUTTON to enter the selected item's test.

```
                    MEMORY  TERST

    IC27 GOOD    IC26 GOOD    IC29 GOOD    IC28 GOOD
    IC31 GOOD    IC30 GOOD    IC33 GOOD    IC32 GOOD
    IC35 GOOD    IC34 GOOD    IC37 GOOD    IC36 GOOD
    IC39 GOOD    IC38 GOOD    IC41 GOOD    IC40 GOOD
    IC4  GOOD    IC3  GOOD    IC2  GOOD    IC1  GOOD
    IC8  GOOD    IC7  GOOD    IC6  GOOD    IC5  GOOD
    IC12 GOOD    IC11 GOOD    IC10 GOOD    IC9  GOOD
    IC20 GOOD    IC19 GOOD    IC18 GOOD    IC17 GOOD

    IC16 GOOD    IC15 GOOD    IC14 GOOD    IC13 GOOD
    IC94 GOOD    IC18 GOOD    IC17 GOOD


              PRESS TEST BUTTON TO EXIT
```

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

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

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

```
              CALIBRATION TEST

  FLIP LEVER              Up→Down,  Down→Up
  SETUP CALIBRATION
> EXIT




          X MIN ___ CENTER ___ MAX ___
          Y MIN ___ CENTER ___ MAX ___
          X CURRENT VALUE ___
          Y CURRENT VALUE ___



        SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

Selecting CALIBRATION TEST causes the following screen to appear and allows the CONTROLLER's sight tobe set.

● By pressing the SERVICE BUTTON, move the arrow (>) to the desired test item.

● Press the TEST BUTTON to select test item.

● FLIP LEVER
Used to intentionially reverse the movements of SIGHT up/down as against LEVER up/down.

● SETUP CALIBRATION
Refer to the following screen and explanations.

Move the arrow (>) to SETUP CALIBRATION and then press the TEST BUTTON to display the following message: "To set the Center position for the controller, leave the controller centered and press the service button."
Leave the Lever centered, press the service button CALIBRATION TEST (3), move the Lever fully up/down & left/right, and then press the service button (CALIBRATION(2)). Select EXIT and press the TEST BUTTON to returnt o the Menu Mode.

```
              CALIBRATION TEST

  FLIP LEVER              Up→Up,  Down→Down
> SETUP CALIBRATION
  EXIT

  To set the center position for the controller
  leave the controler centered
  and press the service button.

          X MIN ___ CENTER ___ MAX ___
          Y MIN ___ CENTER ___ MAX ___
          X CURRENT VALUE ___
          Y CURRENT VALUE ___
```

```
              CALIBRATION TEST

  FLIP LEVER              Up→Up,  Down→Down
> SETUP CALIBRATION
  EXIT

  To set the center range of motion,
  move the left, right, up and down.
  Then press the service button.

          X MIN __ CENTER __ MAX __
          Y MIN __ CENTER __ MAX __
          X CURRENT VALUE __
          Y CURRENT VALUE __
```

```
              CALIBRATION TEST

  FLIP LEVER              Up→Up,  Down→Down
> SETUP CALIBRATION
  EXIT

          X CALIBRATION VALUE __
          Y CALIBRATION VALUE __


          X MIN ___ CENTER ___ MAX ___
          Y MIN ___ CENTER ___ MAX ___
          X CURRENT VALUE ___
          Y CURRENT VALUE ___



          PRESS TEST BUTTON TO EXIT
```

6 - 5 INPUT TEST

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

```
                INPUT  TEST

        X                     ---H
        Y                     ---H

        EVENT0                OFF
        EVENT1                OFF
        FIRE0                 OFF
        FIRE1                 OFF

        COIN CHUTE  #1        OFF
        COIN CHUTE  #2        OFF
        SERVICE               OFF
        TEST                  OFF

     PRESS TEST AND SERVICE BUTTON TO EXIT
```

● By pressing each switch, if the display on the righthand side of the name of each switch changes to ON from OFF, the SW and the wiring connections are satisfactory.

● Open the COIN CHUTE DOOR and insert a coin from the COIN ENRTY to check the COIN CHUTE SW.

In the INPUT test, pressing the TEST BUTTON causes the menu to return to the screen.

6 - 6 OUTPUT TEST

```
                OUTPUT  TEST


        >  EVENT0
           EVENT1
           PANEL








           PRESS TEST BUTTON TO EXIT
```

Choose OUTPUT TEST to have the MONITOR screen shown left to appear. This screen allows lamp status to be checked.Periodically check the lamp status in this mode.
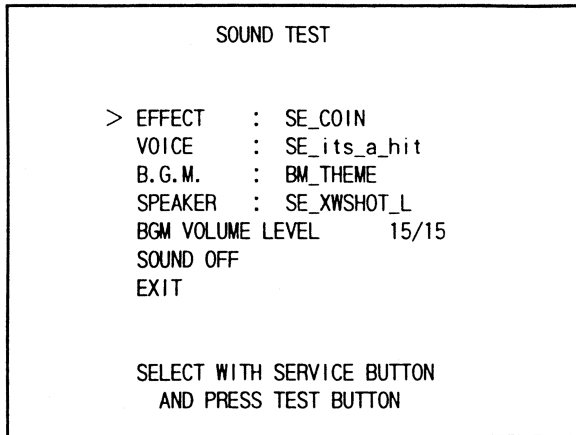
Press the SERVICE BUTTON to move the arrow to the desired lamp test item.

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

Choose EXIT and press the TEST BUTTON to return to MENU mode (FIG. 6.2).
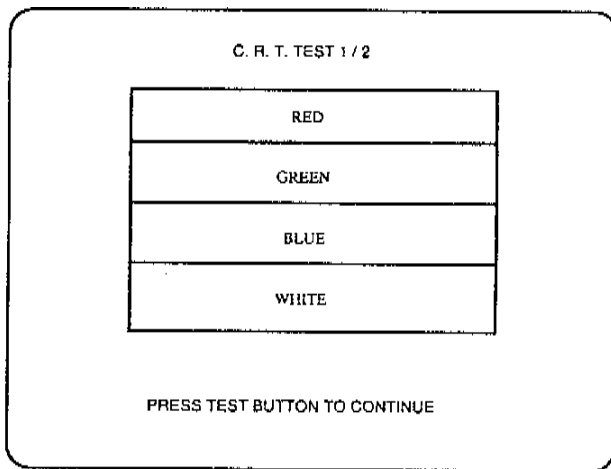
6 - 7 SOUND TEST

```
              SOUND TEST


  >  EFFECT    :   SE_COIN
     VOICE     :   SE_its_a_hit
     B.G.M.    :   BM_THEME
     SPEAKER   :   SE_XWSHOT_L
     BGM VOLUME LEVEL      15/15
     SOUND OFF
     EXIT



       SELECT WITH SERVICE BUTTON
         AND PRESS TEST BUTTON
```

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

● Press the SERVICE BUTTON to bring the arrow to the desired sound item to be tested. Pressing the TEST BUTTON causes the desired sound test to appear.
Each time the SERVICE BUTTON is pressed, the numeral displayed on the screen counts up and sound is emitted.

6 -8 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 page (2/2).

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






       PRESS TEST BUTTON TO EXIT
```
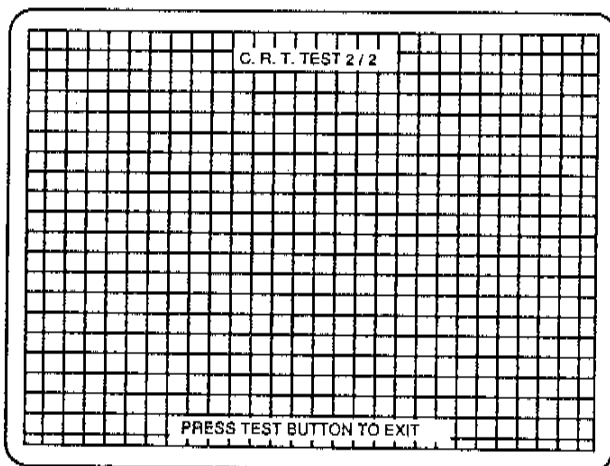
The screen (2/2) allows screen size and distortion to be tested.

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

Press the TEST BUTTON to return to the MENU mode.

6 - 9 GAME ASSIGNMENTS

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

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

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

```
                GAME ASSIGNMENTS


    >  COUNTRY              EXPORT
       ADVERTISE SOUND      ON
       DIFFICULTY           NORMAL
       CABINET TYPE         DX
       FEED BACK LEVER      ENABLE
       EXIT






          SELECT WITH SERVICE BUTTON
            AND PRESS TEST BUTTON
```

These FIGURES/ TABLES show the factory recommended settings.

● GAME DIFFICULTY
This game allows by-course difficulty level to be set in 4 levels. Depending on the difficulty level set, the intial time varies.

● ADVERTISE SOUND
Setting of sound during Advertise. ON(sound to be emitted), OFF(sound not to be emitted).

● CABINET TYPE
Setting of cabinet. Set to U/R for this machine.

● FEED BACK LEVER
Sets the Controller's vibration strength and off for no vibration. NOT USED.

● COUNTRY
Message language. Set to EXPORT.

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

            CREDIT TO START    1 CREDIT
                    CONTINUE  1 CREDIT

         >  COIN/CREDIT SETTING #1

            COIN CHUTE #1  1COIN 1CREDIT

            COIN CHUTE #2  1COIN 1CREDIT


            MANUAL SETTING
            EXIT


               SELECT WITH SERVICE BUTTON
                AND PRESS TEST BUTTON
```

● 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 6.10a, 6.10b) #27 refers to FREE PLAY.
   When the COIN CHUTE TYPE is set to INDIVIDUAL, there are some setting numbers not displayed as indicated in TABLE 6.10b.

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

30

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

SETTING	FUNCTIONING OF CHUTE#1	
SETTING #1	1 COIN	1 CREDIT
SETTING #2	1 COIN	2 CREDITS
SETTING #3	1 COIN	3 CREDITS
SETTING #4	1 COIN	4 CREDITS
SETTING #5	1 COIN	5 CREDITS
SETTING #6	1 COIN	2 CREDITS
SETTING #7	1 COIN	5 CREDITS
SETTING #8	1 COIN	3 CREDITS
SETTING #9	1 COIN	4 CREDITS
SETTING #10	1 COIN	5 CREDITS
SETTING #11	1 COIN	6 CREDITS
SETTING #12	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	6 CREDITS
SETTING #27	FREE PLAY	

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

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

MANUAL SETTING

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

```
              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
```
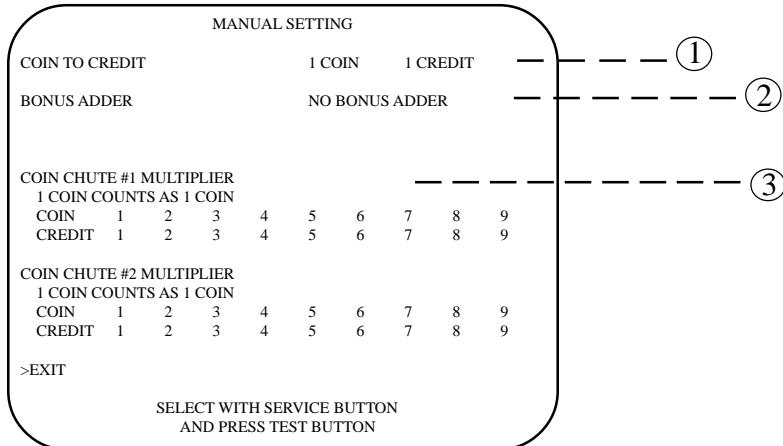
FIG. 6.10b MANUAL SETTING

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 6.10c 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

6 - 11 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.

```
                    B O O K K E E P I N G

        COIN CHUTE #1              1
        COIN CHUTE #2              0
        TOTAL COIN                1

        COIN      CREDIT      1
        SERVICE CREDIT        0
        TOTAL     CREDIT      1
        NUMBER OF GAMES       1

    TOTAL  TIME                  0D  2H  0M  0S
    PLAY  TIME                       0H  3M30S
    AVERAGE  PLAY  TIME              0H  3M30S
    LONGEST  PLAY  TIME              0H  3M30S
    SHORTEST  PLAY  TIME             0H  3M30S

                    TIME  HISTOGRAM

      0M  0S~1M59S              ---->        0
      2M  0S~2M29S              ---->        0
      2M30S~2M59S              ---->        0
      3M  0S~3M29S              ---->        0
      3M30S~3M59S              ---->        0
      4M  0S~4M29S              ---->        0
      4M30S~4M59S              ---->        0
      5M  0S~5M29S              ---->        0
      5M30S~5M59S              ---->        0
      6M  0S~6M29S              ---->        0
      OVER6M30S                ---->        0

            PRESS  TEST  BUTTON  TO  EXIT
```

● **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.

● **NUMBER OF GAMES:**
Total number of games since played before DATA CLEAR

● **PLAY TIME: ALL SUB CATAGORIES**
Refers to the sum total time of GAME PLAY. Average PLAY TIME, as well as the longest PLAY TIME, and shortest PLAY TIME's are displayed.

6 - 12 BACKUP DATA CLEAR

```
        B A C K U P    D A T A    C L E A R




            Y E S    ( C L E A R  )
        >   N O      ( C A N C E L )






        SELECT  WITH  SERVICE  BUTTON
            AND  PRESS  TEST  BUTTON
```

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 and sighting adjustment are not affected by BACKUP DATA CLEAR operation.

7. CONTROL MECHA

⚠️ **WARNING!**

Before starting to work, ensure that the power SW is OFF. Failure to observe this can cause electric shock and short circuit accident.
Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
Do not touch undesignated places. Touching places other than those specified can cause electric shock and short circuit accidents.

In the test mode, if the controller V.R. value movements are irregular, adjust or replace the V.R. in the following procedure.

7 - 1 ADJUSTING/REPLACING THE VOLUME

Take out the 4 screws and remove the PANEL LID LOWER

SCREW (4)
M5×10,
w/flat and spring washers

ADJUSTING THE VOLUME

① In the Test Mode, have the Volume value indicating screen displayed.

② Loosen the 4 screws which secure the Volume Bracket to disengage the gear mesh.

③ Adjust the gear mesh in the manner so that the D-CUT face of volume shaft is in the status shown in the picture on right. when the controller is positioned straight.

④ Fasten the 4 screws and secure the Volume Bracket.

⑤ After adjustment, be sure to perform Volume Settings in "CALIBRATION ADJUSTMENTS" in the Test Mode.

VOLUME
220-5485

REPLACING THE VOLUME

① Turn the power off.
② Disconnect the connector.
③ Remove the Volume Bracket by taking out the 4 screws which secure the Volume Bracket.
④ Remove the Volume Gear from the Volume Shaft and replace the Volume.

SCREW(4)

⑤ After replacement, adjust the Volume as per the proceeding page.

⚠️ WARNING!
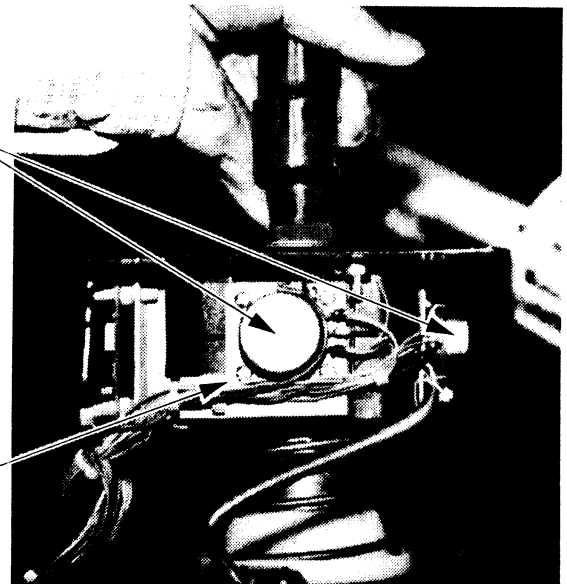
> The Controller has some small parts. When dissassembling, be very careful so as not to lose parts.

When the Trigger SW is pushed, if the INPUT TEST screen does not display "ON", the switch inside the GRIP may be malfunctioning and in this case, switch replacement is needed.

① Remove the GRIP by first reffering to the section on replacement/adjustment of pitch volume.

TRUSS SCREW
M3

GRIP

② Remove the screw and disassemble the GRIP

TAMPERPROOF SCREW(2)
M4, BOTH SIDES
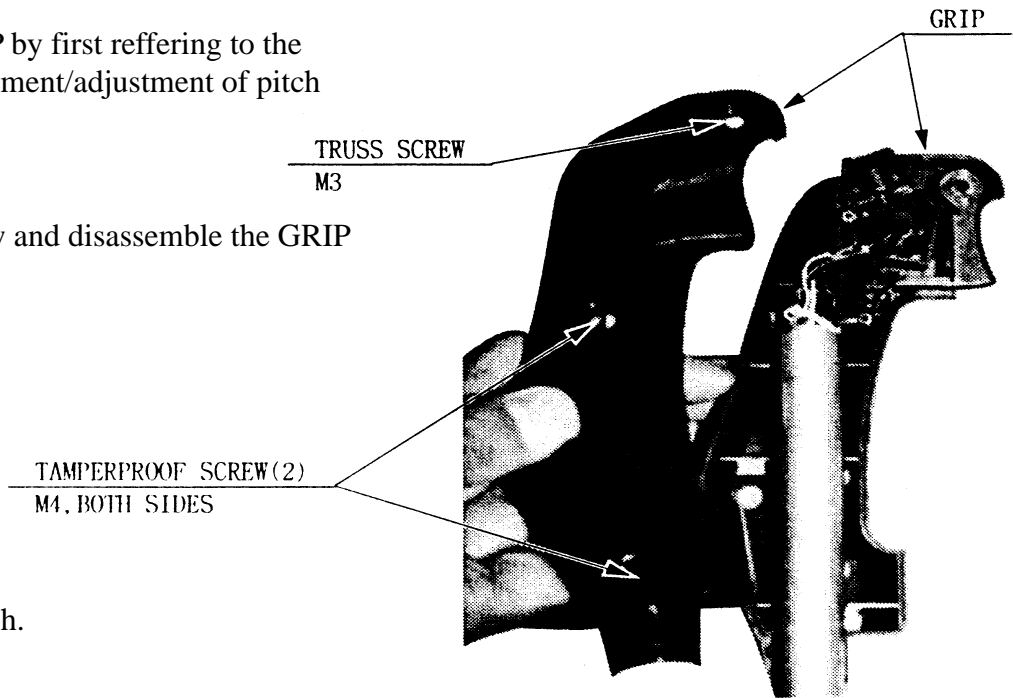
③ Replace the Switch.

THUMB SW
509-5677

TRIGGER SW
509-5664
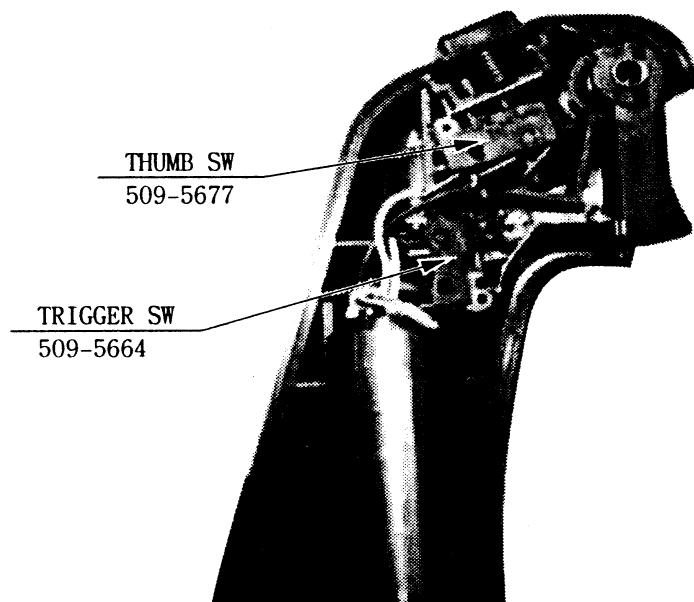
⚠️ CAUTION!	Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident. Be sure to use the designated grease. Using undesiganted grease can cause parts damage. Do not apply greasing to undesignated places. Failure to observe this can cause malfunctioning or quality deterioration of parts.

Apply spray greasing once every 6 months to the 2 places shown in the figure below, where the spring and gear are engaged. For spray grease, use NOK KLUBER L60 or GREASE MATE.
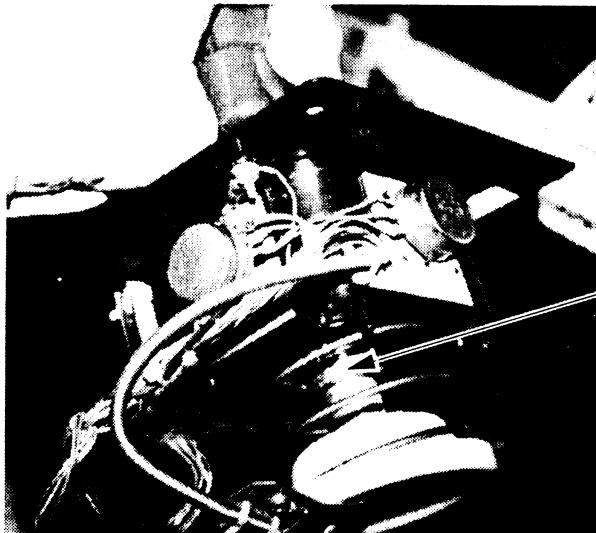
SHAFT'S MOVABLE PORTION

8. 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:

GATE

FIG. 8a

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

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

③ Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.

④ Remove the CRADLE. When removing the retaining ring(E-ring), be very careful so as not to bend the 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.

CRADLE

FIG.8b

STOP
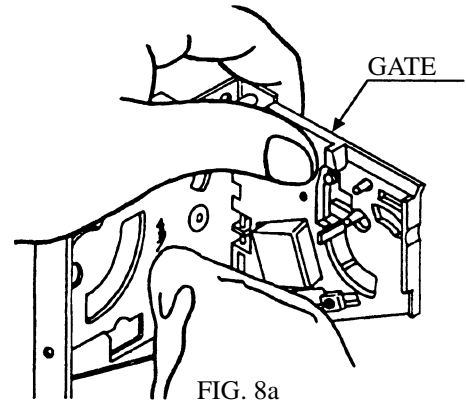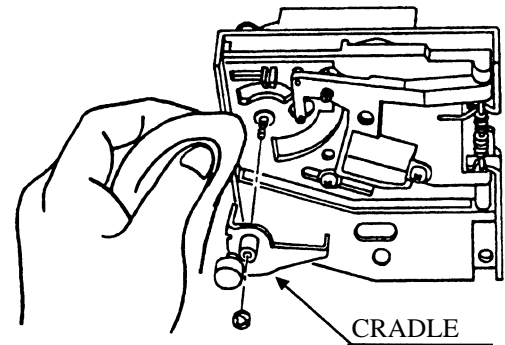
IMPORTANT!

- 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 pressed down?

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

COIN METER
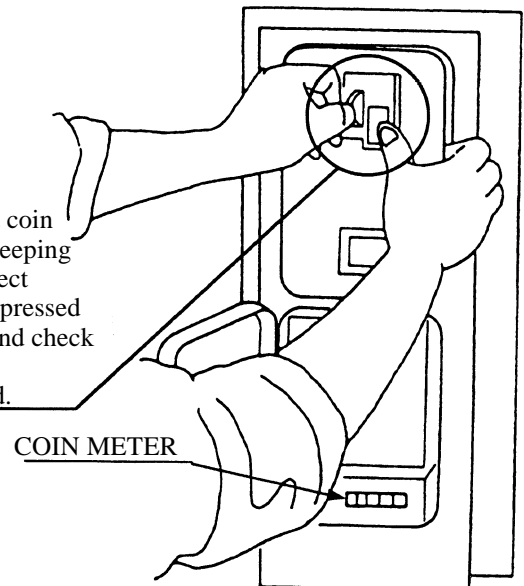
FIG. 8c

OPTIONAL DOLLAR BILL ACCEPTOR

● THE COIN DOOR ASSEMBLY USED ON **STAR WARS TRILOGY** COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL NEEDED WIRING CONNECTIONS ARE CONVIENENTLY LOCATED INSIDE THE GAME FOR THIS APPLICATION.

● THE COIN DOOR CAN ACCCOMMODATE THE FOLLOWING VALIDATORS:

HOLE POSITION#1   MARS 2000 SERIES
(FORWARD-MOST POSITION)

HOLE POSITION#2   MARS 2000 SERIES
                                         DBV45 (JCM)

HOLE POSITION #3   CURRENTLY NOT USED

HOLE POSITION #4   DSI01*

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

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

C O I N C O N T R O L S

I N T E R N A T I O N A L

1850 HOWARD ST., ELK GROVE IL 60007
(847) 228-1810

OVER/UNDER TWO
ENTRY COIN DOOR*
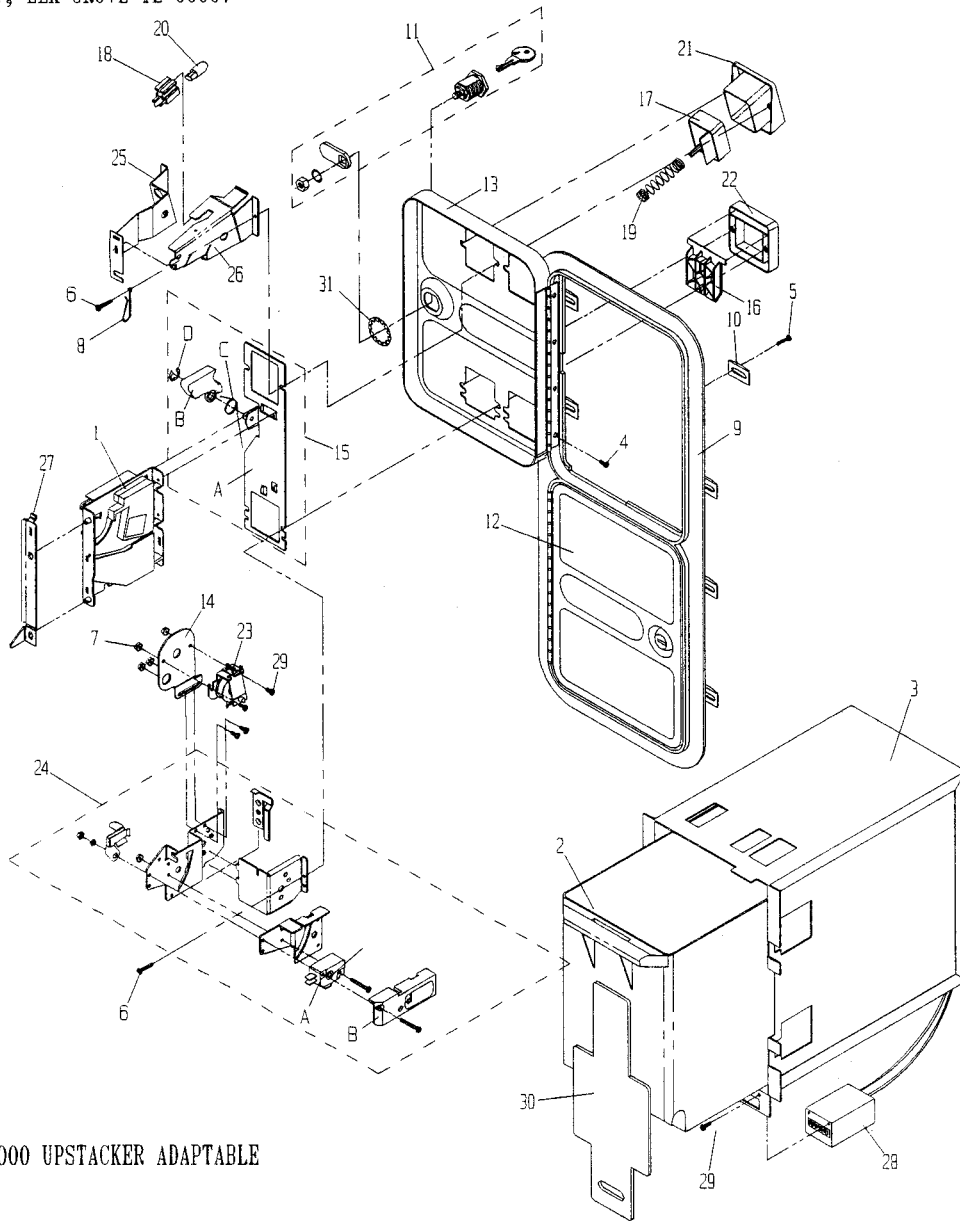
* MARS SERIES 2000 UPSTACKER ADAPTABLE

PART #	DESCRIPTION	COST	PART #	DESCRIPTION	COST	PART #	DESCRIPTION	COST
1) 12-4050-XX	S-10 ACCEPTOR	19.50	16) 91-1109-16	REJECT FLAP NYLON, BLACK	2.70	28) 23-1011-00	12V DC METER	8.50
12-4150-011	S-7 US $.25	12.00	17) 91-1113-01	ENTRY/REJECT BUTTON 25c	4.45	23-1103-00	4.5V DC METER	8.50
2) 20-4177-00	PLASTIC CASHBOX	7.40	18) 91-1117-00	LAMPHOLDER	1.40	29) 90-1032-01	METER & LOCKOUT SCREW	.25
3) 20-4189-00	ENCLOSURE, Z2000	27.50	19) 91-1121-00	E/R BUTTON SPRING	.80	30) 22-1400-00	LOCKING BAR	7.00
4) 90-1002-00	HINGE SCREW	.25	20) 91-1118-00	6V LAMP WEDGE BASE	.95	31) 90-1019-00	3/4" LOCKWASHER	.25
5) 90-1003-00	CLAMP SCREW	.95	21) 91-1311-16	BUTTON BEZEL BLACK	2.70			
6) 90-1017-00	SCREW BEZEL NYLON	.25	22) 91-1312-16	REJECT BEZEL BLACK	2.70			
7) 90-1206-02	#4-40 KEP NUT	.25	23) 91-2125-00	12V LOCKOUT COIL ASSEMBLY	12.85			
8) 90-1300-00	KEYHOOK	.35	24) 91-2216-16	MICROSWITCH ASSEMBLY	15.00			
9) 91-0508-16	FRAME	30.00	24A) 91-1116-16	MICROSWITCH BLACK	5.40			
10) 91-0506-00	CLAMP	.45	91-1116-11	MICROSWITCH WHITE	5.40			
11) 91-0547-00	DOUBLE D CAM LOCK	5.25	91-1116-10	MICROSWITCH RED	5.40			
12) 91-0603-16	BLACK MINI DOOR	8.40	24B) 91-1125-00	MICROSWITCH PLASTIC COVER	.85			
13) 91-0604-16	2 ENTRY UPPER DOOR	10.00	25) 92-1002-01	COIN INLET LAMP SIDE	1.80			
14) 91-1008-039	LOCKOUT BRACKET	4.30	26) 92-1002-021	COIN INLET COVER SIDE	1.80			
15) 91-1008-107	BASEPLATE ASSEMBLY	5.00	27) 92-1002-10	HOLD DOWN BRACKET	1.50			

9. PROJECTOR

> ⚠ **CAUTION!**
>
> Since the projector screen is susceptible to damage, pay careful attention to its handling. When cleaning, freain from using water or volatile chemicals.
> Since the Projector has been adjusted at the time of shipment, avoid making further adjustments without good reason.

Fine adjustments are stored inthe 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, immediatley tren 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 the adjustment by remote control. Note that there are two PROJECTOR makes (HITACHI and MITSUBISHI) and the adjustment method is different between the two. When checking the Adjustment Control Knob, remove the PTV's service door. For the HITACHI PROJECTOR, open the cover in front of the control panel. For the MITSUBISHI PROJECTOR, remove the cover.

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

9 - 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 benzene and thinnerspill onto 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 with a hard material or using a duster.

SERVICE DOOR
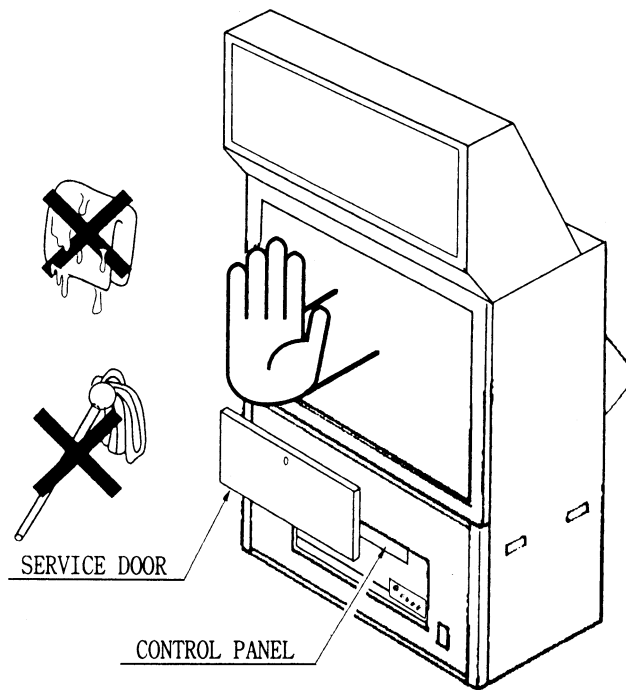
CONTROL PANEL

⚠ CAUTION!

> Never touch places other than those specified. Otherwise, hazardous electric shock or short circuit can be caused.

There are 2 types of HITACHI PROJECTORS. As shown below, the Control's Panel's layout differs from each other. The lower layout allows Static Convergence to be adjusted merely by operating the Remote Control.

☐ **HITACHI PROJECTOR CONTROL PANEL**

POWER BUTTON (this does not function)

① ② ③

④ ⑤

CONVERGENCE ADJUSTMENT SW
CAUTION! Do not touch the right-hand side switch.

CONVERGENCE ADJUSTMENT SW
CAUTION! Do not touch the left-hand side switch.

⑤ ④ ③ ② ①

| DYNAMIC | STATIC | V | H | CONTRAST | | V. HOLD |
| | CONVERGENCE | POSITION | | | BRIGHT. | |
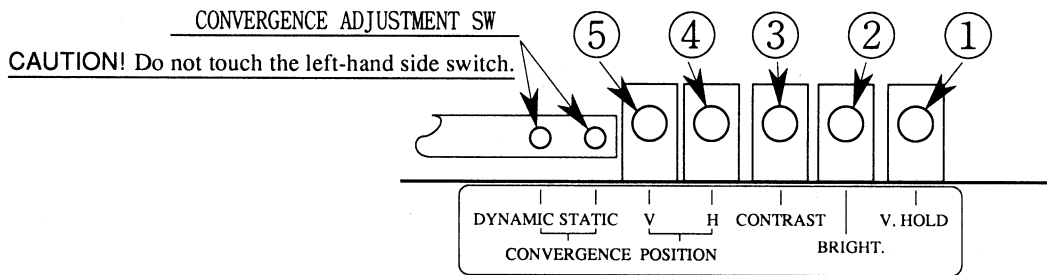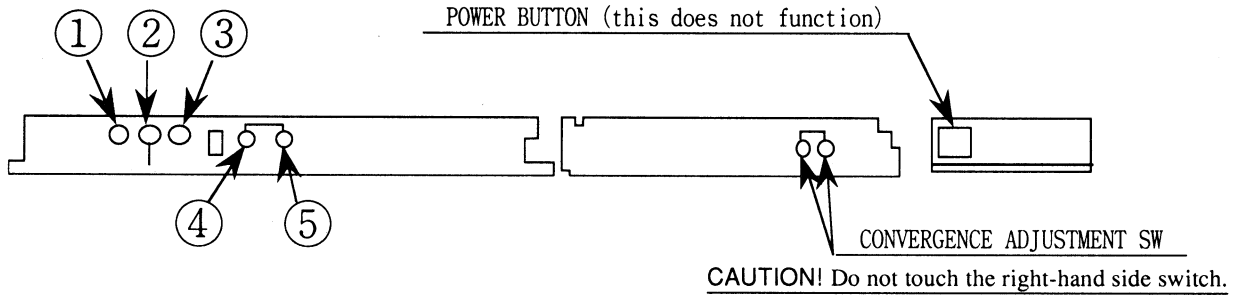
① V.HOLD   ② BRIGHT
③ CONTRAST   ④ H. POSITION
⑤ V. POSITION

🛑 STOP
IMPORTANT!

> Do not touch Dynamic Convergence Adjustment Switch. Although dynamic Convergence adjustment is not needed for this product, should it be pressed by error, turn power off and then turn it back on again.

CROSS PATTERN
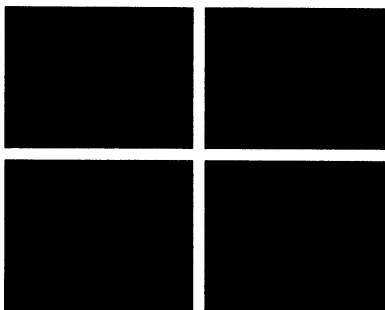
Press the Static Convergence Adjustment SW which is on the Control Panel to cause the cross pattern to appear.
Use the Remote control to make static adjustment.
For the operation of the Remote Controller, refer to the following pages.
Press the Static Convergence SW. At this time, static adjustment results ar ewritten and the PTV screen will return to the original screen code.

In Case of Remote Controller (Part No. 200-5297):

REMOTE CONTROL
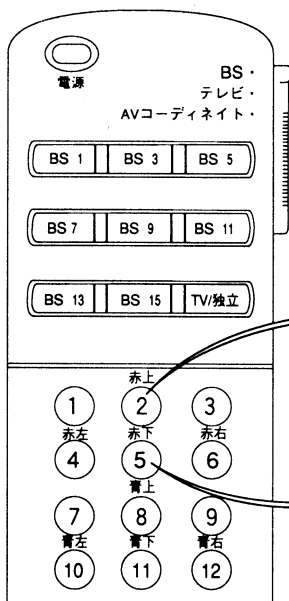
Entering Projector's Convergence Adjustment Mode allows the Crosshatch to be displayed on the screen. At this time, if the horizontal and vertical lines (of the cross) are not blurred and displayed in white, the convergence status is correct. If red or blue color is blurred from the line, the convergence is incorrect. In this case, make adjustment in the following Adjustment Procedure to return to the correct convergence status.
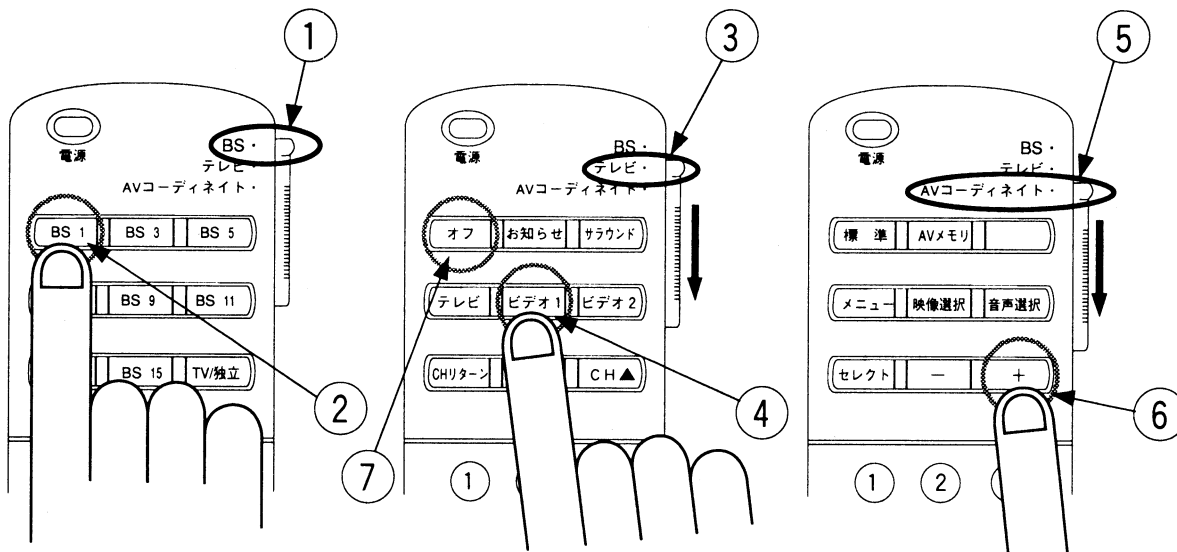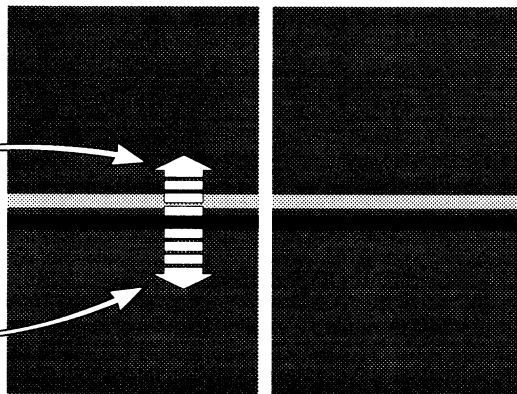
① Make sure that the slide portion of the Remote Control is positioned as per ① above.

② Press BS1.

③ Position the slide portion of the Remote Control to ③ in the above Figure.

④ Press VIDEO 1.

⑤ Position the Remote Control's slide portion to the above ⑤ .

⑥ Press " + " to have the cross pattern appear.

⑦ Use the remote cotroller to make static adjustment.

Remote control [2],[5] .... Causes the red horizontal line to match with the green horizontal line.

Remote control [4],[6] .... Causes the red vertical line to match with the green vertical line.

Remote control [8],[11] .... Causes the blue horizontal line to match with the green horizontal line.

Remote control [10],[12] .... Causes the blue vertical line to match with the green vertical line.

⑧ Position the Remote Control's slide portion to ③ in the above Figure and push "OFF" 5 times to return to the normal mode.

If Convergence Adjustment is deviated, after the crosshatch pattern appears, the cross pattern will not be white, with red or blue color being blurred from the lines. In this case, move the red or blue line by operating the Remote Controller. When the line is superimposed on the reference line (green) to avoid blurring, the cross lines will become white.
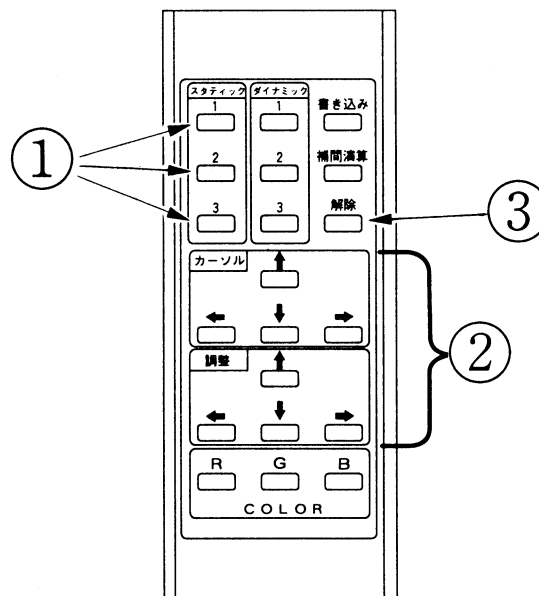
① Have the Remote Controller face the Projector screen and press Key 1, 2, and 3 (Portion ① shown) for Static Convergence Adjustment sequentially in order, causing the cross pattern to be displayed.

② Press the following arrow keys (Portion ② shown) to make adjustments.

Cursor	↑↓	Causes the red horizontal line to match with the green horizontal line.
Cursor	→←	Causes the red vertical line to match with the green vertical line.
Adjustment	↑↓	Causes the Blue horizontal line to match with the green horizontal line.
Adjustment	→←	Causes the Blue vertical line to match with the green vertical line.

③ Press the CANCEL Key (Portion ③ shown) 5 times. This operation allows for returning to the original screen and at the same time storing the adjustment data.

☐ MITSUBISHI PROJECTOR CONTROL PANEL

POWER BUTTON

Convergence Adjustment SW
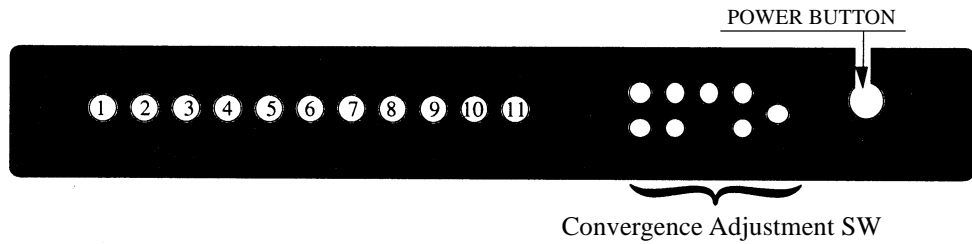
① V.POS   ② H.POS   ③ R-GAIN   ④ G-GAIN   ⑤ B-GAIN

⑥ CONT   ⑦ BRI   ⑧ V.W   ⑨ H.W

⑩ R.H.L.   }   Linearity adjustments in horizontal directions

⑪ B.H.L.   (red or blue) are made.

STATIC CONVERGENCE ADJUSTMENT
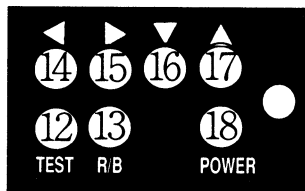
Convergence Adjustment SW
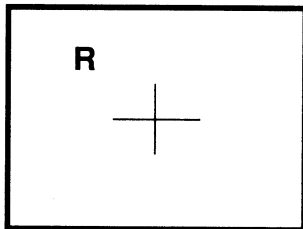
⑫ TEST   Test mode on/off key

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

R

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.

● 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 adjascent 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

46
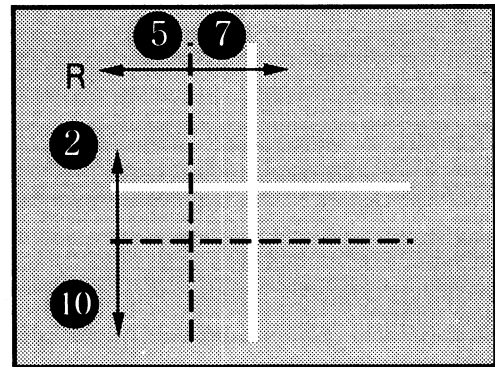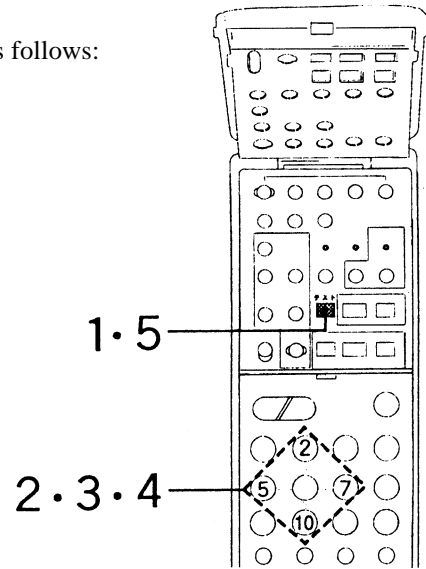
10. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS
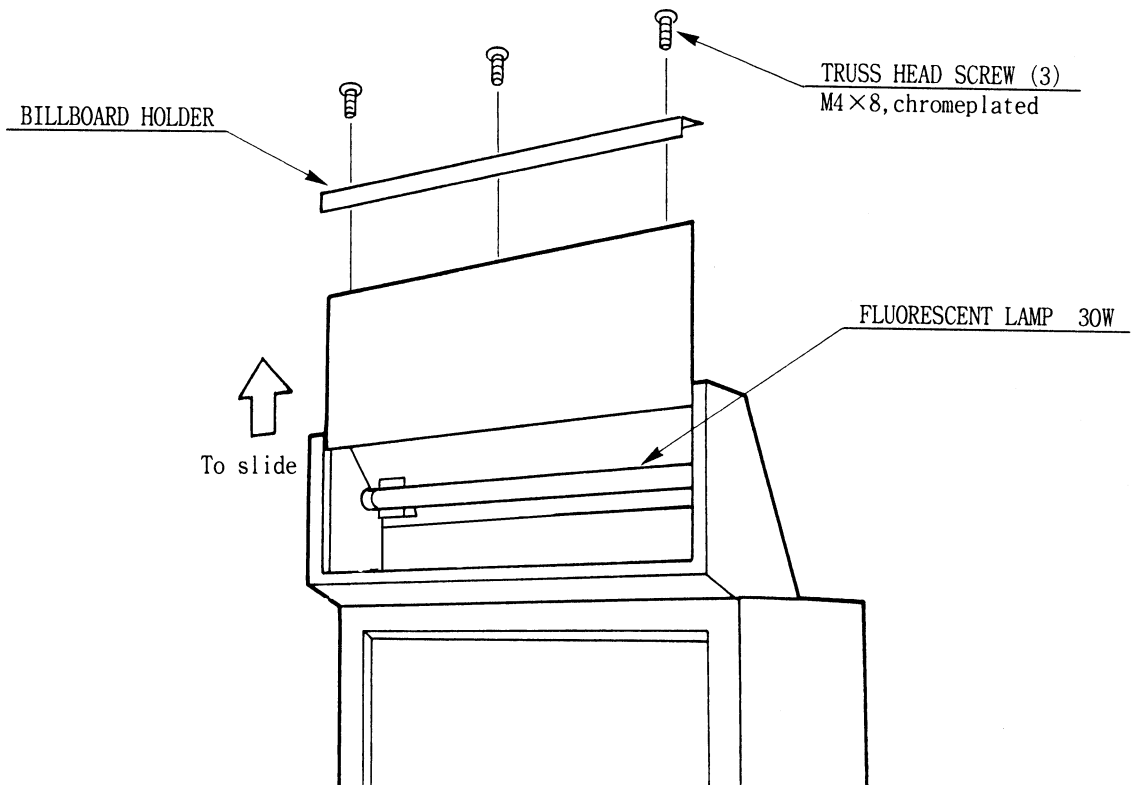
⚠️ **WARNING!**

● 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 accident.

## 10 - 1 REPLACING THE FLUORESCENT BULB

Remove the Billboard Holder and pull out the Billboard to replace the Fluorescent Lamp, and Lamps.

TRUSS HEAD SCREW (3)
M4×8,chromeplated

BILLBOARD HOLDER

FLUORESCENT LAMP 30W

To slide

TAMPERPROOF SCREW (4)
M4×10, black

10 - 2 REPLACING THE LAMPS

Remove the START SW PLATE ont op of the Control Panel by taking off the 4 screws.

Pull the switch portion and pull to remove it

START SW PLATE

LAMP 5V 3W
390-5160
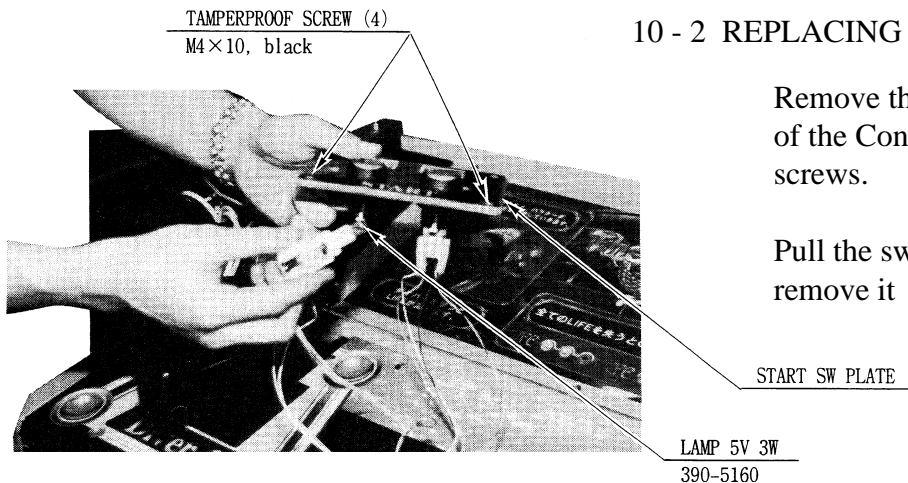
11. PERIODIC INSPECTION TABLE

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

⚠️ **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	REFERENCE
CONTROL MECHA	Check Volume Value and SW		as required
	Grease to gear portion	Weekly	6
	Check Adj. Gear engagement	Monthly	6
COIN SELECTOR	Check COIN SW	Monthly	6
	COIN SELECTOR cleaning	Trimonthly	8
PROJECTOR	SCREEN cleaning	Weekly	9
	Check adjustments	Monthly	3, 6, 9
GAME BD	Setting check	monthly	6
INTERIOR	Cleaning	Annually	see above.
POWER PLUG	Inspection and cleaning		
CABINET SURFACE	Cleaning	As necessary	see below
CABINET	Ensure that adjusters are in contact with the floor	As necessary	3

CLEANING CABINET SURFACES

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

12. TROUBLESHOOTING

Should trouble occur, first check connector connections.

PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation	Power is not supplied. Power supply/voltage is not correct. AC main fuse causes the power to be cut off due to momentary overload.	Plug in correctly Make sure that power supply/voltage is Check fuse. Remove the cause of overload and replace fuse
Irregular sound is emitted from the inside Rear Base.	Poor mesh of mechanism gear inside Rear Base Greasing to gear mesh portion is not satisfactory, or extraneous matter mixed in.	Adjust gear mesh Apply greasing or eliminate extraneous matter.
During game , no bike body reaction and irregular functioning. Game start does not unlock bike.	POWER ON check is not satisfactory Poor connection or malfunctioning of Motor driver and Drvie BD Overheat of Motor	1> Redo power input and complete POWER 2> Perform drive BD test. 3> Check for connection between motor Motor driver, Driver Bd and Game BD. 4.> Wait a while turn power back on.
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).
HANDLE MECHA and Bike Body not functioning corectly	V.R. deviation or malfunctioning Poor mesh of Adjust Gear Spring Fault in throttle /brake	Perform V.R. setting Adjust or replace V.R. Replace the Spring
The Fluorescent lamp does not light up.	The Fluorescent tube is burnt out.	Replace the Fluorescent tube (Refer to Section 10).
Bike Body is not locked.	Wing Bolts for maintenance are not removed.	Remove the Wing bolts.
Bike body centering incorrect.	V.R. setting fault V.R. deviation or malfunctioning.	Perform V.R. setting Adjust or replace V.R.

13. GAME BOARD

⚠️ **WARNING!**

● 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.
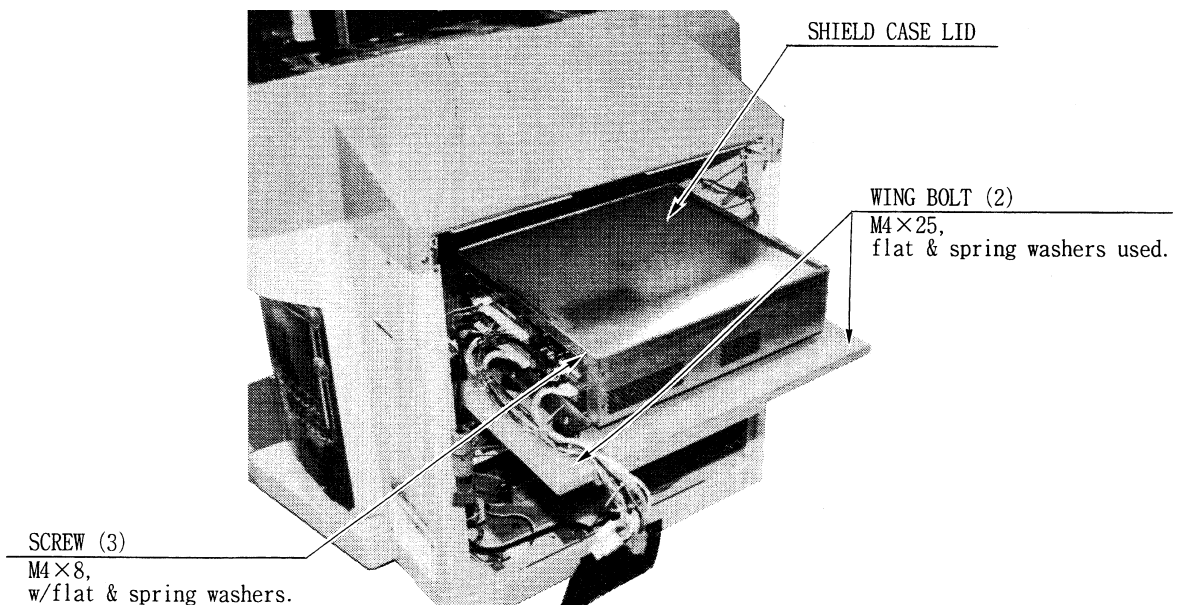
⚠️ **CAUTION!**

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. The electronic parts on the IC Board could be damaged due to human static electricity.

13 - 1 GAME BOARD

① When replacing or inspecting the Game BD, take out the Game BD by using the following procedure:

② Turn the AC unit's Main SW OFF.

③ Remove the 2 Truss screws (black) from the upper face of the Front Cabinet, unlock with the Master Key to open the Service Lid.

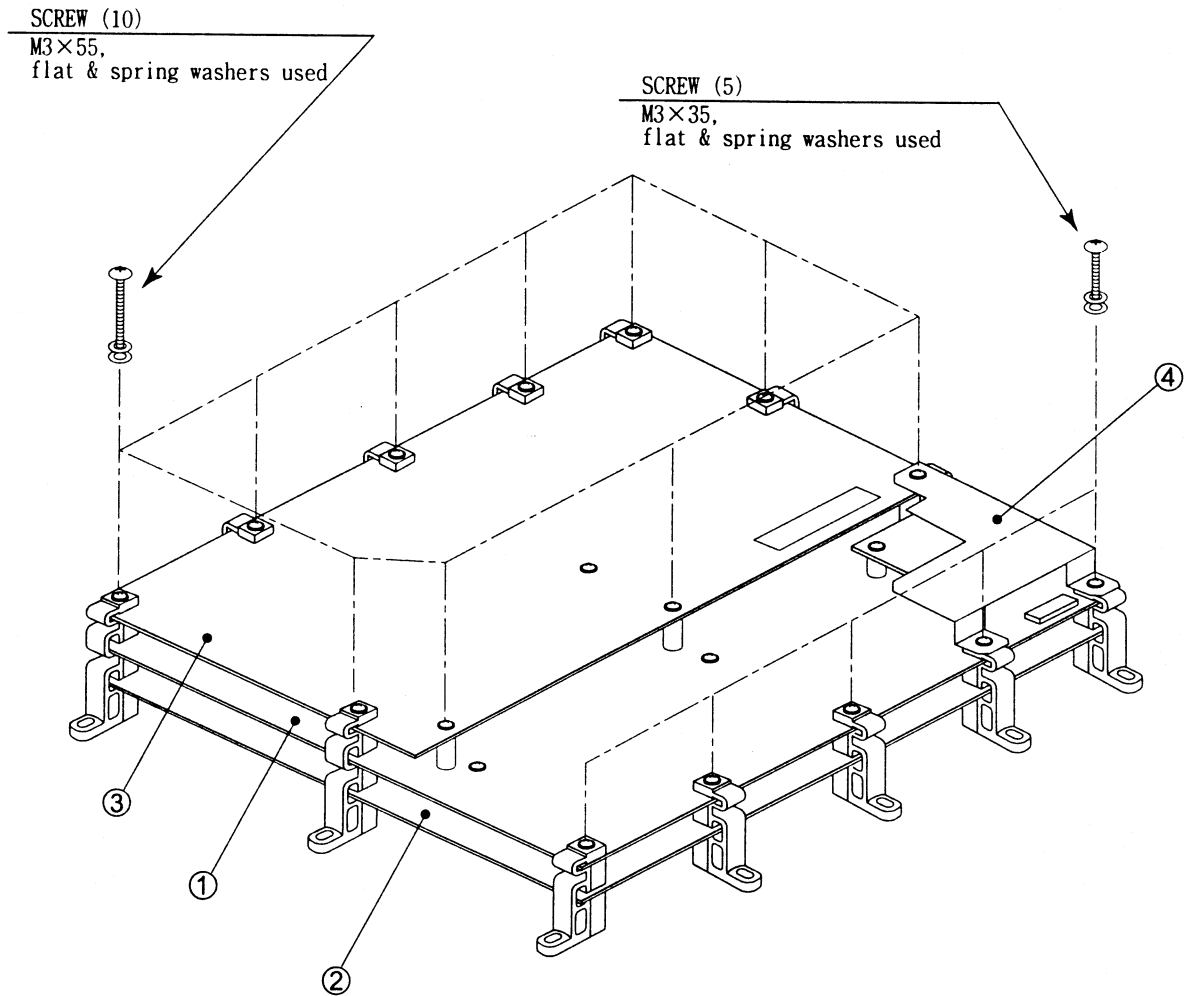④ Take out the 2 screws shown to remove a total of 6 connectors.

  Hold the catch of the Shield case Base and pull out upward.

⑤ Take out the 3 screws to remove the Case Lid from the Shield Case.
 The Game Board can be viewed.

SHIELD CASE LID

WING BOLT (2)
M4×25,
flat & spring washers used.

SCREW (3)
M4×8,
w/flat & spring washers.

GAME BD STAR WARS TRILOGY (833-13586)

SCREW (10)
M3×55,
flat & spring washers used

SCREW (5)
M3×35,
flat & spring washers used

④

③

①

②

No.	PART No.	DESCRIPTION
1	837-12715-91	MODEL3 STEP2 CPU BOARD
2	837-13368	MODEL3 STEP2.1 VIDEO BD
	837-12716-91	MODEL3 STEP2 VIDEO BDARD
3	834-13587	ROM BD STAR WARS TRILOGY
4	837-13588-COM	PFSB SEC BD STW COM

14. DESIGN RELATED PARTS
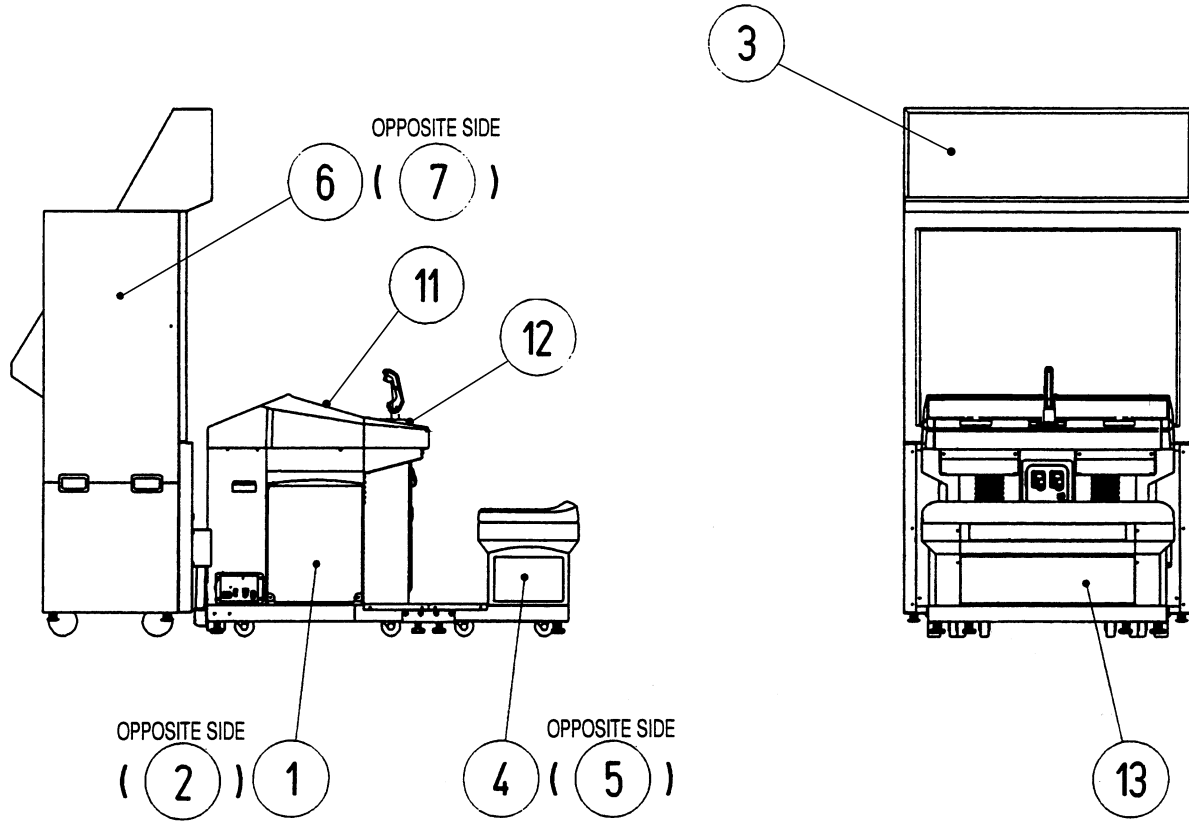
ITEM NO.	PART NO.	DESCRIPTION
1	999-0801	POD DECAL LEFT
2	999-0802	POD DECAL RIGHT
3	999-0793	MARQUEE STW DLX BENCH
4	999-0799	SEAT DECAL LEFT
5	999-0800	SEAT DECAL RIGHT
6	999-0796	SIDE DECAL LEFT
7	999-0797	SIDE DECAL RIGHT
11	999-0794	INSTR SHEET STW BENCH DLX
12	999-0795	CNTRL PNL DECAL STW BENCH DLX
13	999-0798	SEAT REAR

15. PARTS LIST

TOP ASSY STAR WARS TRILOGY BENCH DX
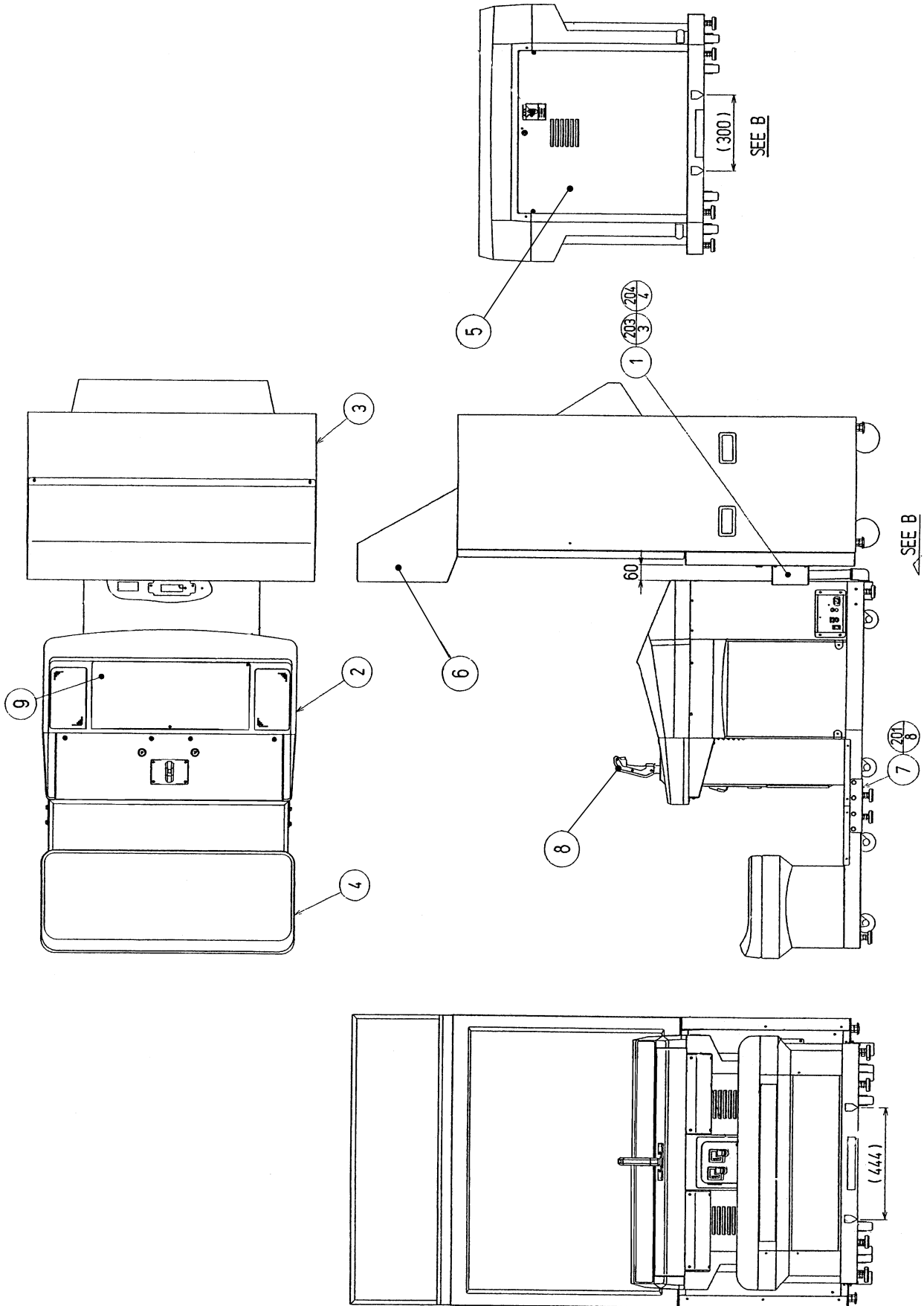
TOP ASSY STAR WARS TRILOGY BENCH DX

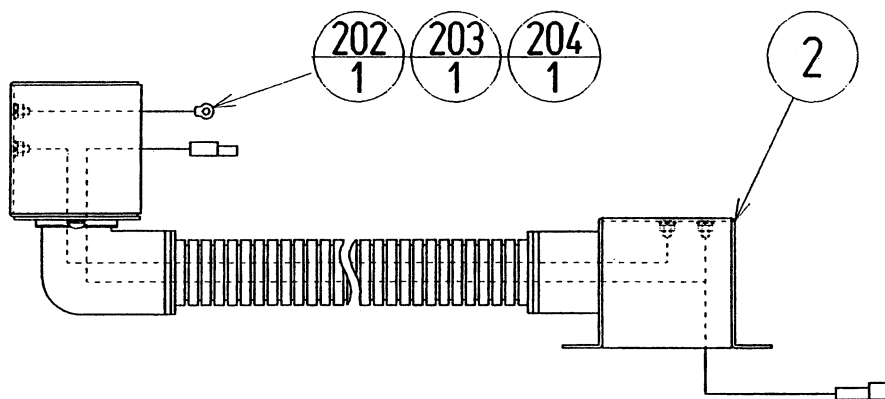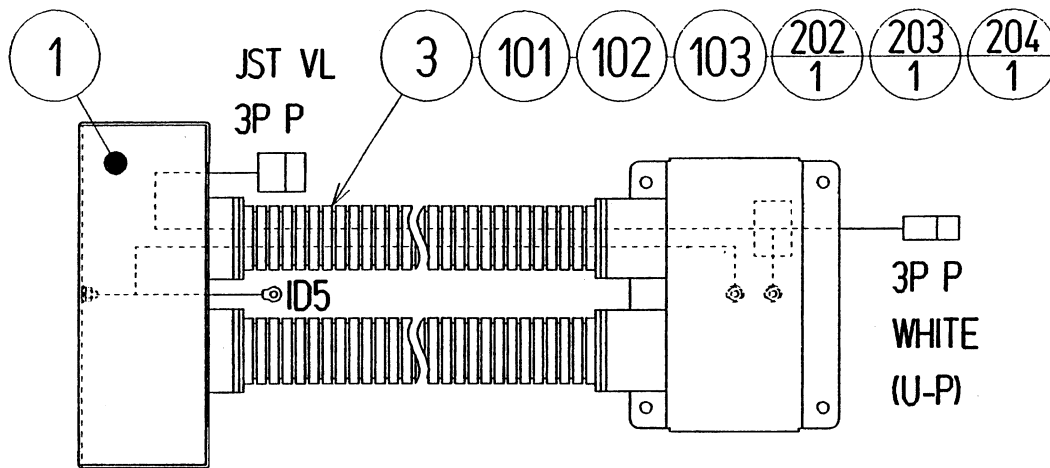| ITEM NO.	PART NO.	DESCRIPTION
1	OCN-0300	ASSY TUBE
2	OCN1-1000	ASSY CNTRL CABI
3	OCN1-1100	ASSY PTV
4	OCN1-3000	ASSY SEAT&BASE
5	OCN-1060	BACKLID
6	OCN1-1200	ASSY BILLBOARD
7	MGL-0001	JOINT BRKT
8	95-0065-00	ASSY CONTROLLER
9	999-0794	PLAY INSTR SH STW DX
201	FAS-300001	HEX BLT CRM W/FS M8X20
203	000-P00408-WB	M SCR PH W/FS BLK M8X25
204	000-P00420-WB	M SCR PH W/FS BLK M4X20
205	080-T00412-0B	TMP PRF SCR TH BLK M4X12

ASSY MAIN BD (STW-4600)
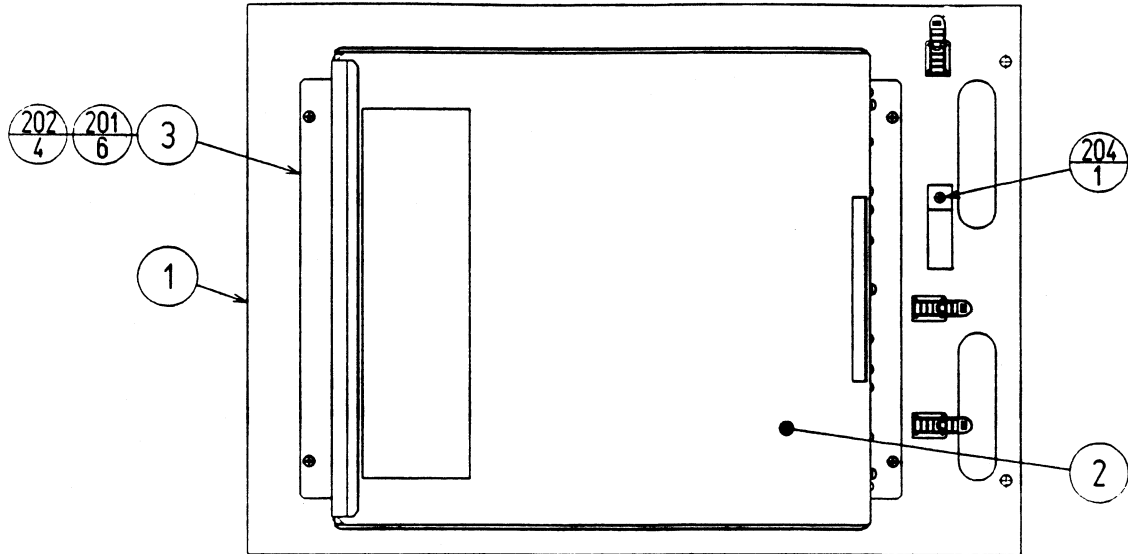
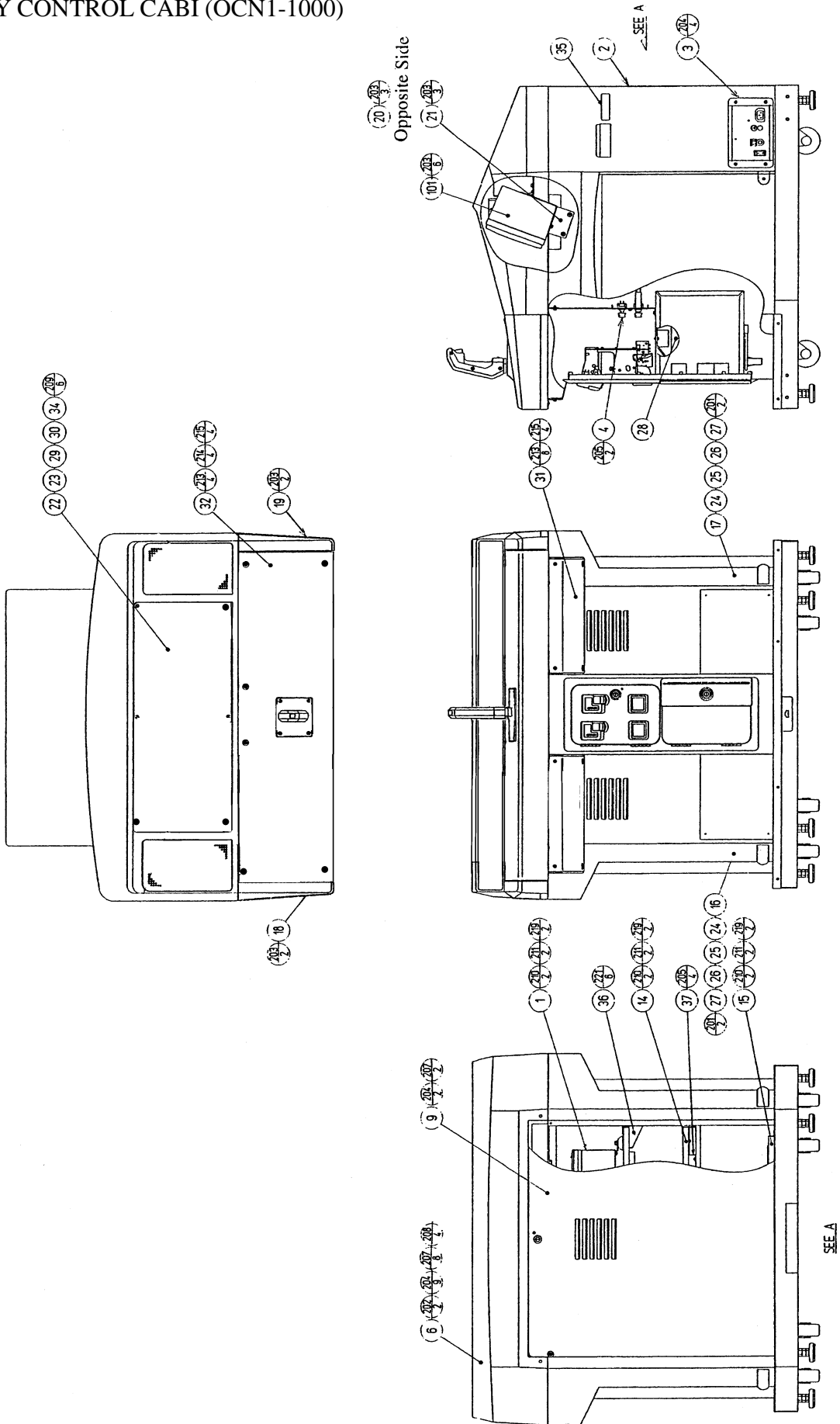| ITEM NO.	PART NO.	DESCRIPTION
1	NOT AVAILABLE	WOODEN BASE MAIN BD
2	STW-0100	ASSY SHIELD CASE MAIN
3	105-5241	SHIELD CASE BRKT
201	000-P00408-W	M SCR PH W/FS M4X8
202	000-P00412-W	M SCR PH W/FS M4X12
204	011-T03512	TAP SCR TH 3.5X12

ASSY SHIELD CASE (STW-0100)
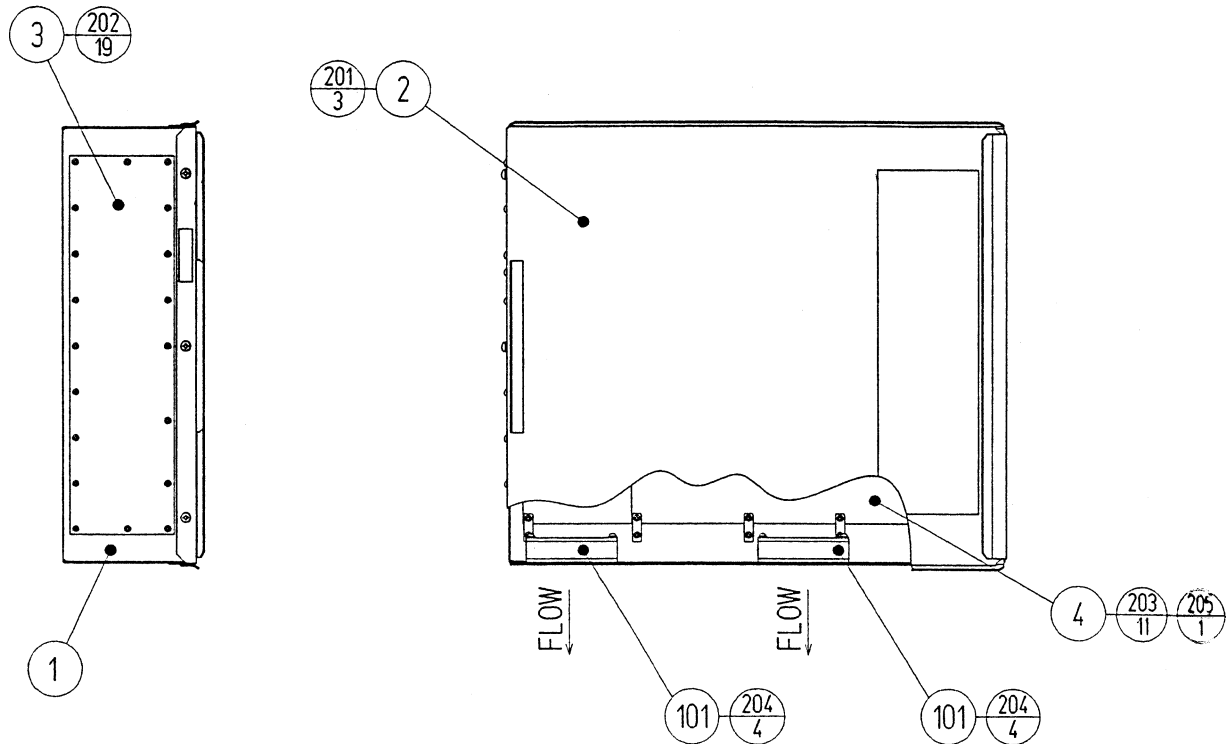
ITEM NO.	PART NO.	DESCRIPTION
1	105-5245X	SHIELD CASE MODEL3 MVS
2	105-5242X	SHIELD CASE LID MODEL3
3	839-0951	FILTER BD MODEL3 JPT
4	833-13586	GAME BD STAR WARS TRILOGY
101	260-0064	FAN MOTOR DC12V
201	000-P00408-W	M SCR PH W/FS M4X8
202	010-P00308-F	S-TITE SCR PH W/F M3X8
203	010-P00310-F	S-TITE SCR PH W/F M3X10
204	000-P00320-W	M SCR PH W/FS M3X20
205	010-P00365-F	S-TITE SCR PH W/F M3X65

JST VL
3P P

ID5

3P P
WHITE
(U-P)

ITEM NO.	PART NO.	DESCRIPTION
1	OCN-0301	TUBE BOX
2	DUT-0102	TUBE BOX FRONT
3	601-10360-29	STOPPER RING 29
101	310-5285-290070	FLEX TUBE* 29-0070CM
102	310-5286-29	CONN 29
103	310-5287-29	CONN L 29
202	065-H00400	HEX NUT M4
203	060-S00400	SPR WSHR M4
204	060-F00400	FLT WSHR M4

ASSY CONTROL CABI (OCN1-1000)

ASSY CONTROL CABI (OCN1-1000)

ITEM NO.	PART NO.	DESCRIPTION
1	STW-4600	ASSY MAIN BD
2	OCN1-1001	ASSY SUBCABI CTRL
3	OCN-1030	AC UNIT
4	OCN-1035	SW UNIT
6	OCN-1045	ASSY TOP PANEL
9	OCN-1060	ASSY BACK LID
10	95-0065-00	ASSY CONTROLLER
14	OCN-4000	ASSY PWR SPLY
15	OCN-4100	ASSY ELEC
16	OCN-1003	SIDE COVER L
17	OCN-1004	SIDE COVER R
18	OCN-1005	CP SIDE COVER L
19	OCN-1006	CP SIDE COVER R
20	MGL-1008	SPEAKER HOLDER L
21	MGL-1009	SPEAKER HOLDER R
22	OCN-1007	INSTR BASE
23	MGL-1016	INSTR COVER
24	MGL-1023	SHOULDER BLT
25	MGL-1024	HOLDER BUTTON
26	MGL-1025X	BUSH
27	MGL-1026	FLT WSHR 5.2-11X2.0
28	BOX-CASH	CASH BOX
29	COP-1213	WATER GUARD A
30	COP-1214	WATER GUARD B
31	OCN-1008	PANEL LID LOWER
32	OCN1-2002	CNT PNL BASE
33	OCN1-2003	CNT PNL LID
34	OCN-1018	INSULATOR SHEET
36	MGL-1011	BD BASE BRKT UPPER
37	MGL-1012	BD BASE BRKT LOWER
38	OCN-2558	RING PLATE
101	130-5096	ASSY SERVO SPEAKER BOX
102	280-0419	HARNES LUG

ASSY CONTROL CABI (OCN1-1000)

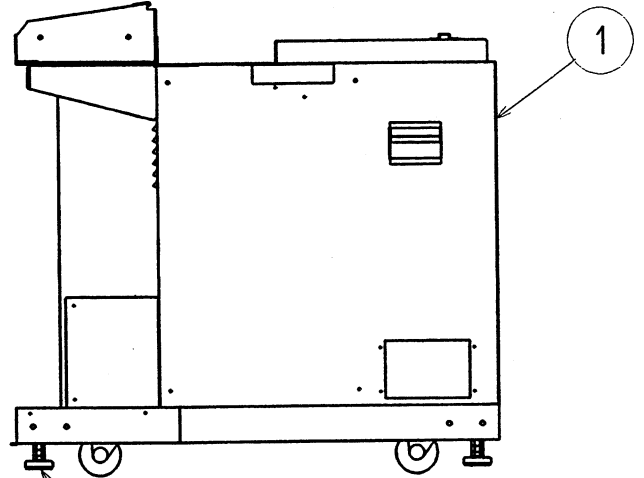| ITEM NO.	PART NO.	DESCRIPTION
201	000-T00512-0C	M SCR TH CRM M5X12
202	000-T00525-0C	M SCR TH CRM M5X25
203	000-P00512-0C	M SCR PH W/FS M5X12
204	000-T00416-0C	M SCR TH CRM M4X16
205	000-P00408-W	M SCR PH W/FS M4X8
207	068-441616-0C	FLT WSHR CRM 4.4-16X1.6
208	050-F00400	FLG NUT M4
209	008-T00416-0C	TMP PRF SCR TH CRM M4X16
210	032-000425	WING BLT M4X25
211	068-441616	FLT WSHR 4.4-16X1.6
213	000-P00408-WB	M SCR PH W/FS BLK M4X8
214	000-T00408-0B	M SCR TH BLK M4X8
215	068-441616-0B	FLT WSHR BLK 4.4-16X1.6
219	060-S00400	SPR WSHR M4
220	060-F00400	FLT WSHR M4
221	030-000612-S	HEX BLT W/S M6X12
222	020-00412-0Z	HEX SKT H CAP SCR BLK OZ M4X12
223	008-T00410-0C	TMP PRF SCR TH CRM M4X10
224	030-000820-S	HEX BLT W/S M8X20
225	060-F00800	FLT WSHR M8

ASSY SUBCABI CTRL (OCN1-1001)

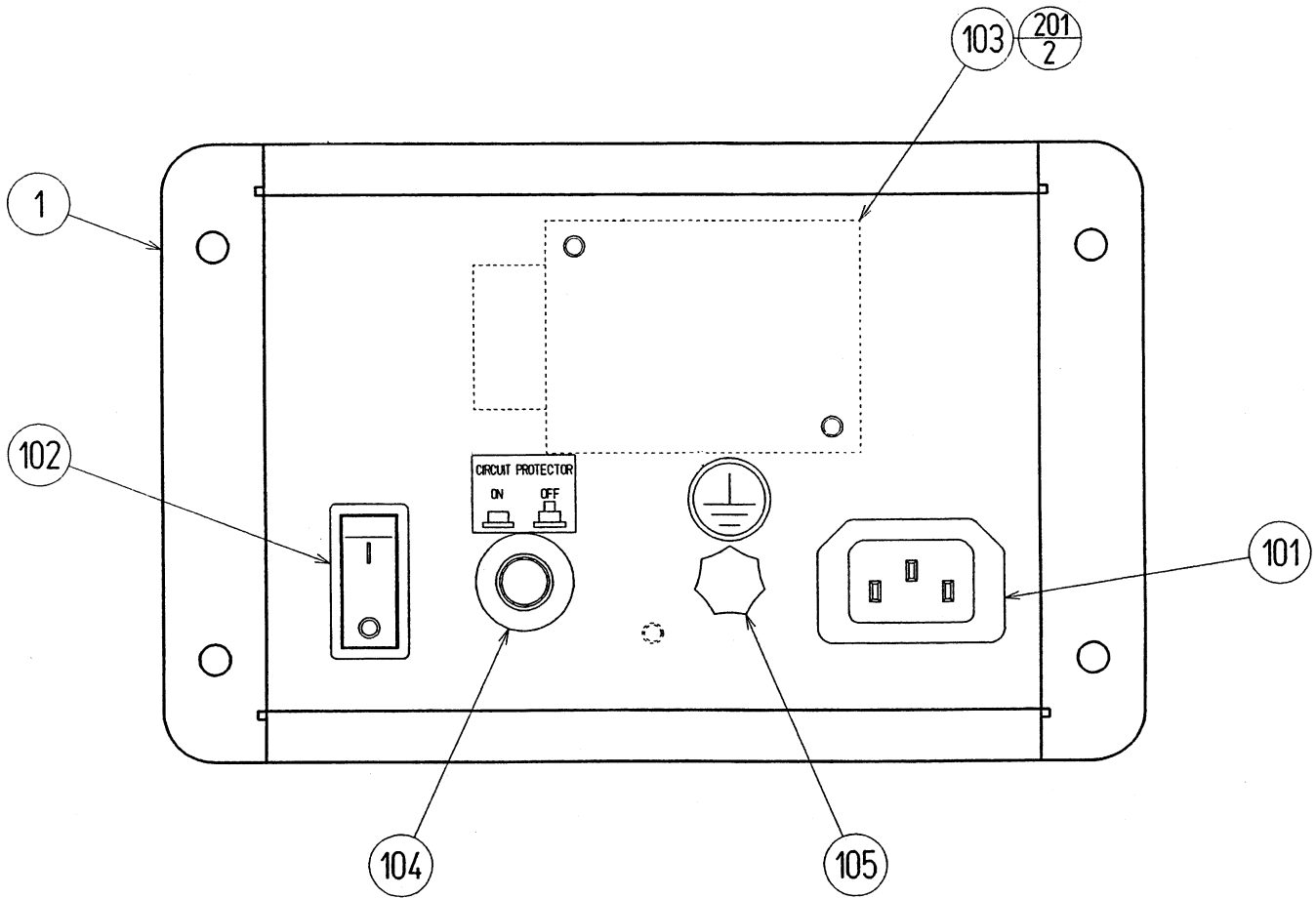| ITEM NO.	PART NO.	DESCRIPTION
1	OCN1-1002	CRTL CABI
2	MGL-1022	TOP SPACER
3	MGL-1013	FLOOR MAT CRTL
4	MGL-1014	EDGE GUARD
5	MGL-1017	CASH BOX COVER
6	MGL-1018X	WIRE COVER CRTL
7	HN-1042X	FAN BRKT
8	105-5107	CHUTE
9	DP-1167	TNG LKG
10	105-5170	LOCK BRACKET S
11	105-5188	HOLE COVER
13	BY-4102	FAN MOTOR BRACKET
14	OCN-1009	SW PANEL
15	OCN-1010	PANEL BRKT
101	92-1003-05	ASSY C.C. 2 DOOR
102	220-5575	CAM LOCK MASTER W/O KEY
103	220-5574	CAM LOCK W/KEYS
104	260-0011-02	AXIAL FLOW FAN
105	601-8543	FAN GUARD
107	280-5172-15021	STANDARD BUSHING MP 15021
108	280-5187-26	OPEN LOCK BUSH 26
109	601-5526-084	BUSH 1.6T (L=84MM)
201	000-P00408-W	M SCR PH W/FS M4X8
202	000-T00408-0C	M SCR TH CRM M4X8
203	000-F00308	M SCR FH M3X8
204	000-P00345-W	M SCR PH W/FS M3X45
205	050-F00400	FLG NUT M4
206	FAS-P00416-W	M SCR PH W/FS M4X50
207	000-P00416-W	M SCR PH W/FS M4X16
208	000-P00406-W	M SCR PH W/FS M4X6

CTRL CABI (OCN-1002)
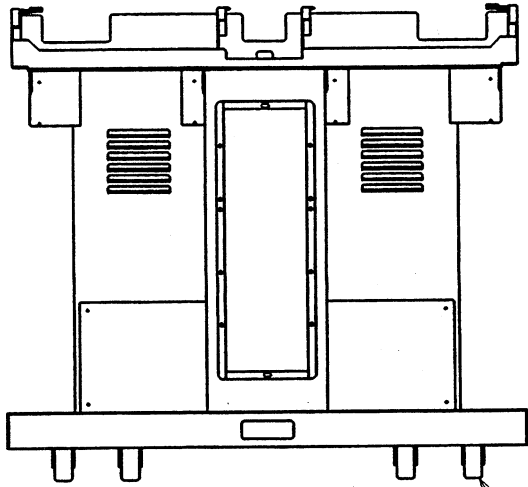
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1002-A	CRTL CABI BLANK
101	601-9377	CASTER FAI=75
102	601-6063	LEG ADJ 50
201	030-000620-S	HEX BLT W/S M6X20
202	050-H01200	HEWX NUT M12

AC UNIT (OCN-1030)

ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1031	AC BRKT
101	214-0202	AC INLET PANEL TYPE
102	509-5453-91-V-B	SW ROCKER J8 V-B
103	450-5135	MAGNET CONTACT S-NIOCX AC 120V
104	512-5046-10000	C.P.10000MA CE UL
	512-5046-5000	C.P.5000MA CE UL
105	280-0417	TERMINAL BINDING POST BLACK
201	000-P00416-W	M SCR PH W/FS M4X16

ASSY TOP PANEL (OCN-1045)
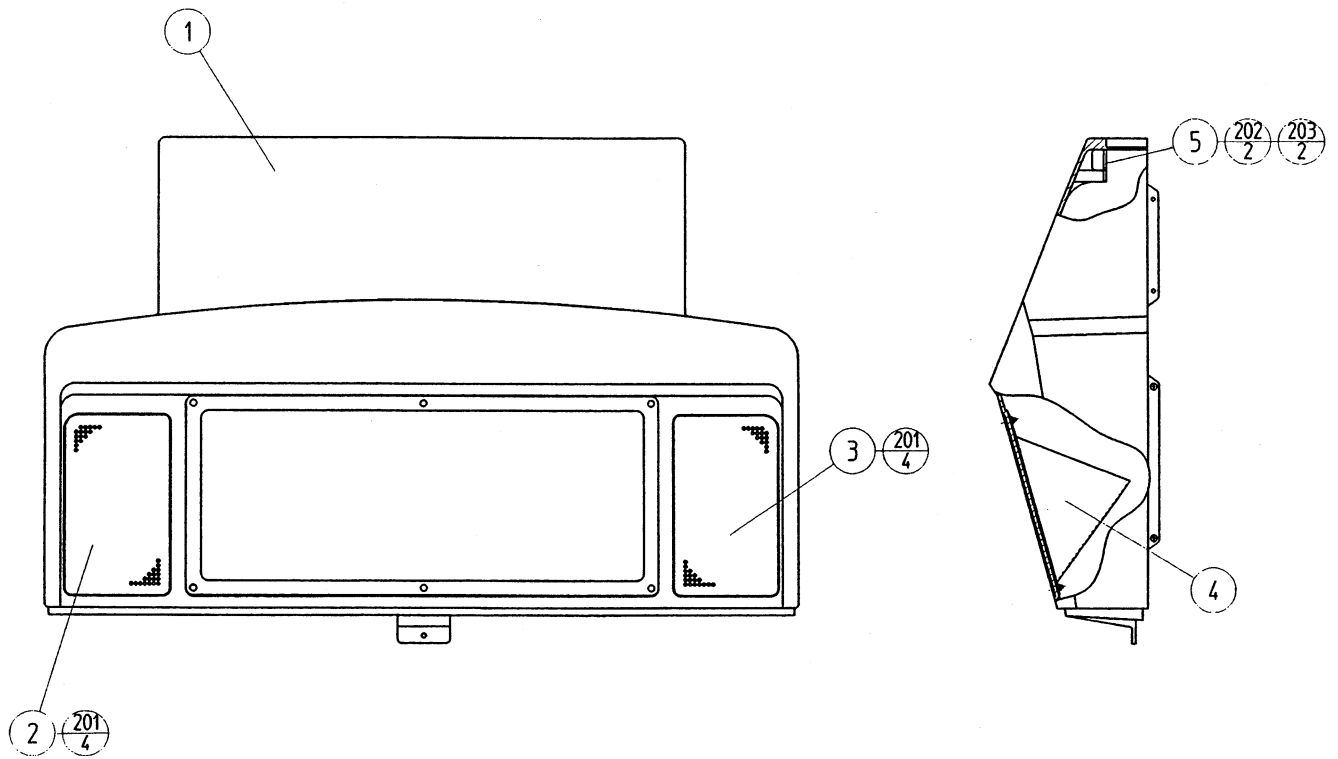
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1046	TOP PANEL
2	OCN-1047	SPEAKER NET L
3	OCN-1048	SPEAKER NET R
4	MGL-1053	DIFFUSER
5	MGL-1054	LOCK BRKT
201	050-F00400	FLG NUT M4
202	012-P00410	TAP SCR #2 PH 4X10
203	060-F00400	FLT WSHR M4

SW UNIT (OCN-1035)
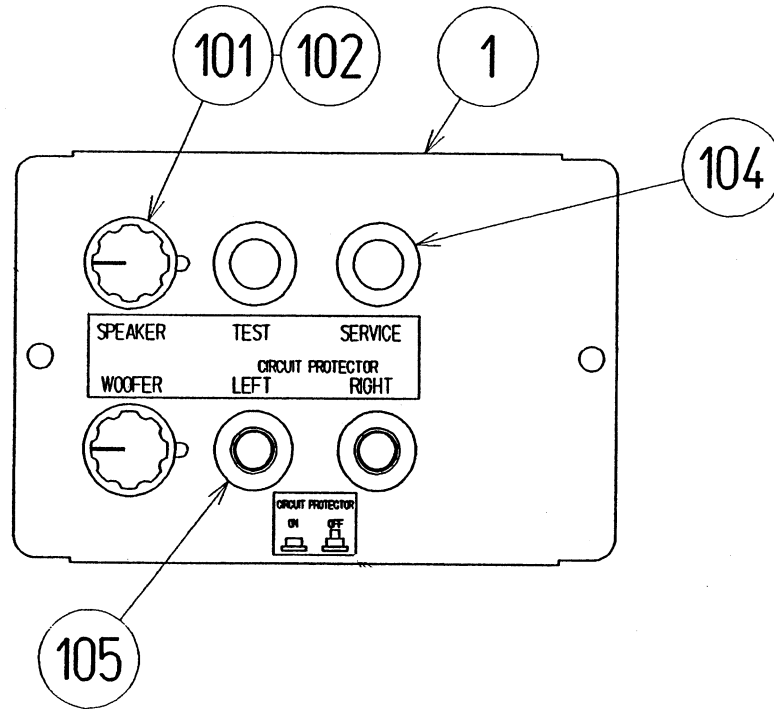
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1036	SW BRKT
101	220-5179	VOL CONT B-5K OHM
102	601-0042	KNOB 22M
104	509-5028	SW PB 1M (MIYAMA DS-412R)
105	512-5033-1000	CIRCUIT PROTECTOR 1000MA

ASSY METER UNIT (OCN-1040-01)
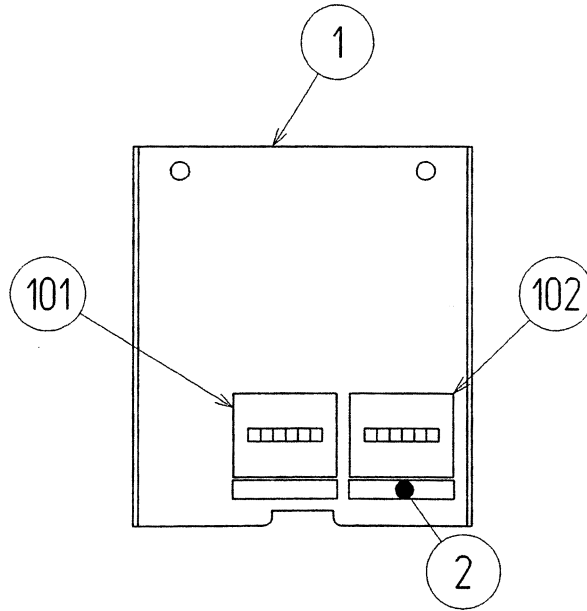
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1042	METER BRKT TWIN
101	220-5643-01	MAG CNTR DC5V 6P WH MZ-674-D04
102	220-5643-02	MAG CNTR DC5V 6P YE MZ-674-D05

ASSY BACK LID (OCN-1060)
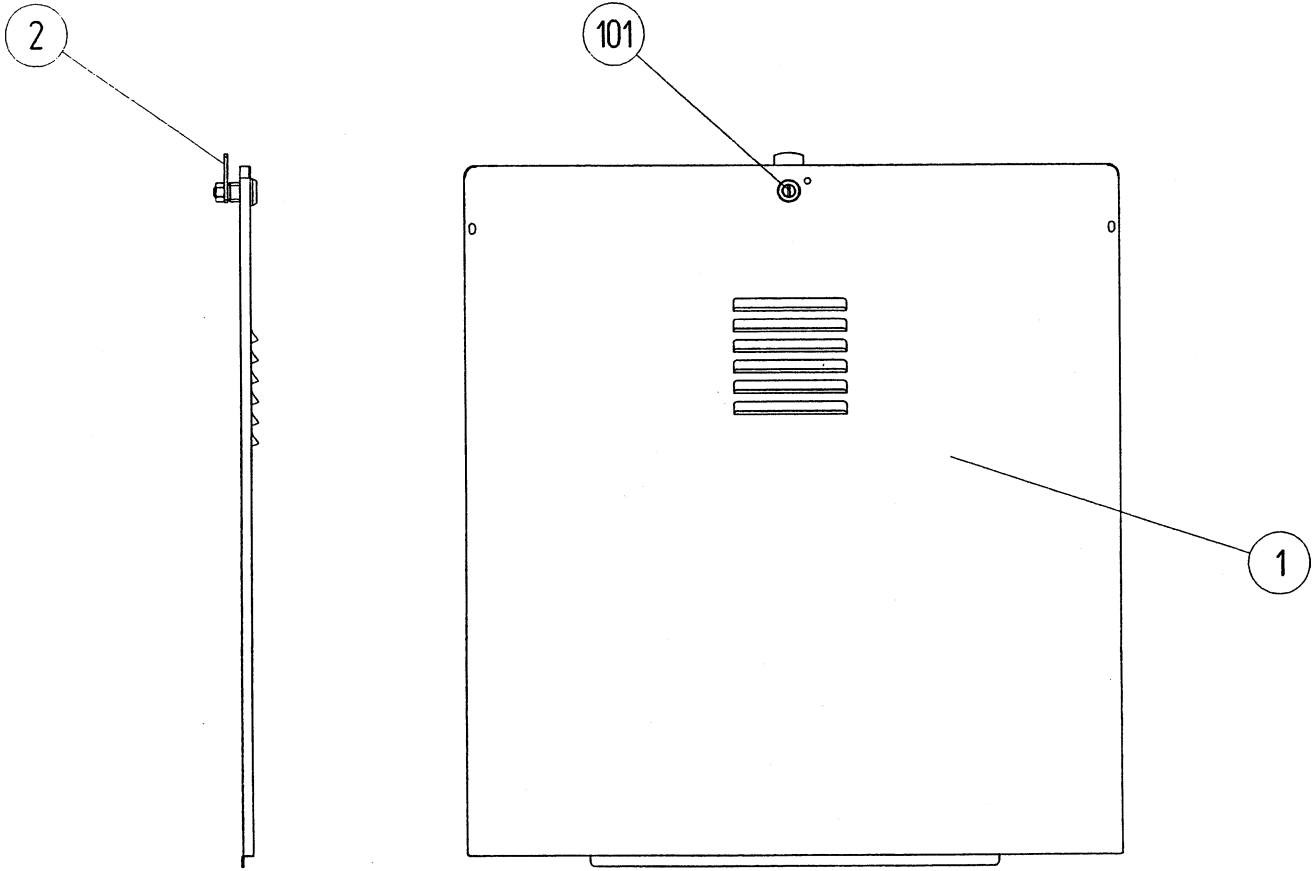
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1061	BACK LID
2	DP-1167	TNG LKG
101	220-5575	CAM LOCK MASTER W/O KEY

ASSY PTV (OCN1-1100)
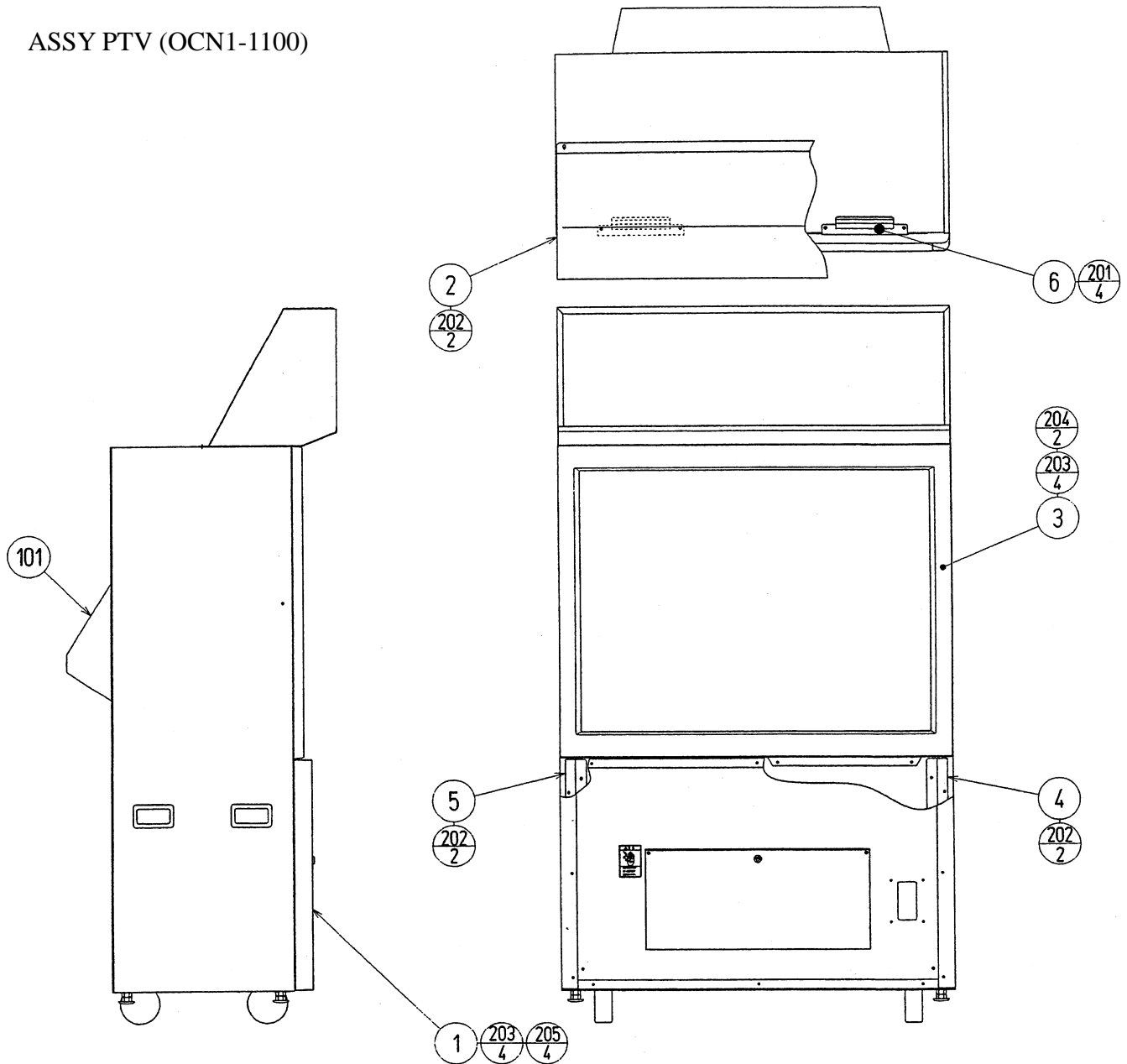
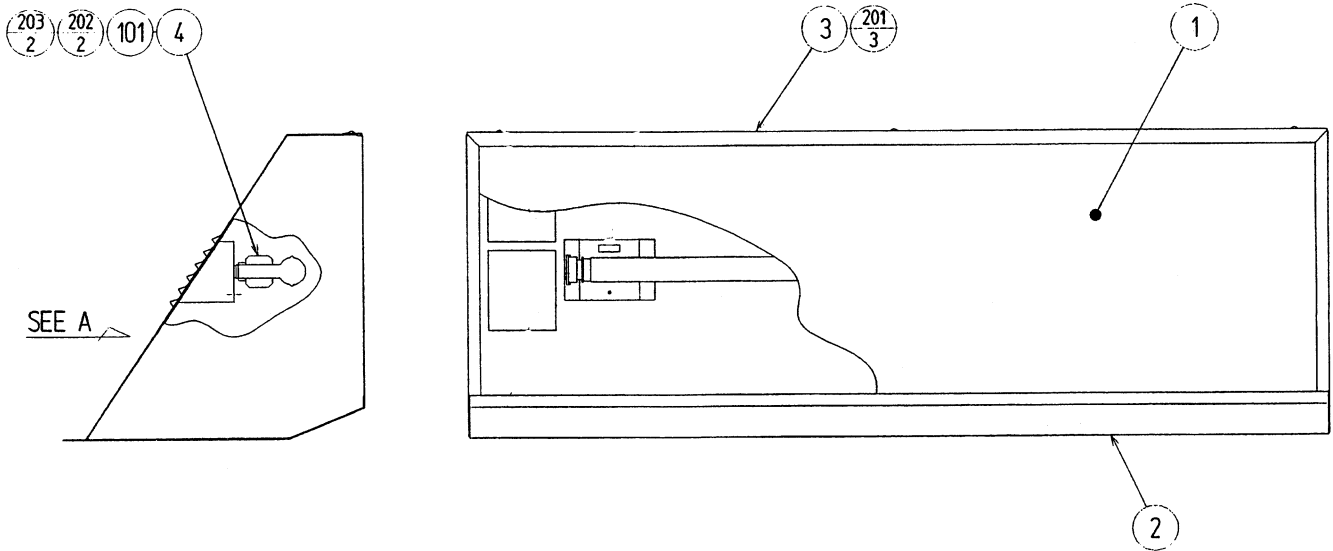| ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1150	ASSY FRONT PANEL
2	OCN1-1200	ASSY BILLBOARD
3	MGL-1150	ASSY MASK
4	DYN-0501	PANEL MOUNT BRKT L
5	DYN-0502	PANEL MOUNT BRKT R
6	RAL-0501	MASK HOLDER
101	200-5315-01-OCN	ASSY PROJECTION DISPLAY OCN
201	000-F00414	M SCR FH M4X14
202	000-P00516-WB	M SCR PH W/FS BLK M5X16
203	000-T00520-0C	M SCR TH CRM M5X20
204	000-T00525-0C	M SCR TH CRM M5X25
205	068-552016-0C	FLT WSHR CRM 5.5-20X1.6

ASSY FRONT PANEL (OCN-1150)
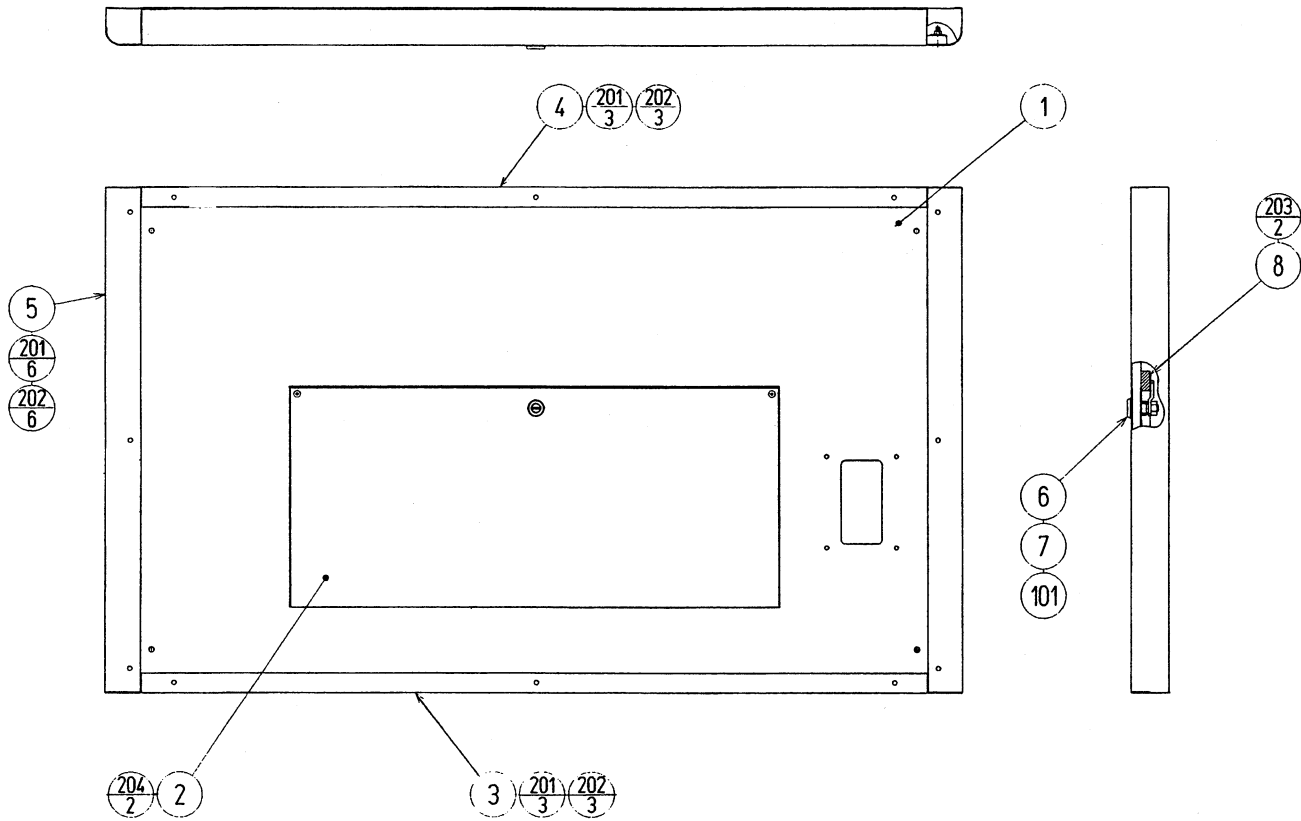
ITEM NO.	PART NO.	DESCRIPTION
1	OCN-1151	FRONT PANEL
2	OCN-1152	SERVICE DOOR
3	CPT-1205	BRKT LOWER
4	CPT-1204	BRKT UPPER
5	CPT-1203	SIDE BRKT
6	DP-1148X	LKG TNG
7	117-0062	PLATE LOCK RETAINER
8	117-5098	TNG RETAINER PLATE
101	220-5575	CAM LOCK MASTER W/O KEY
201	068-552016	FLT WSHR 5.5-20X1.6
202	050-F00500	FLG NUT M5
203	011-T00312	TAP SCR TH 3X12
204	000-T00430-0C	M SCR TH CRM M4X30

ASSY MASK (MGL-1150)
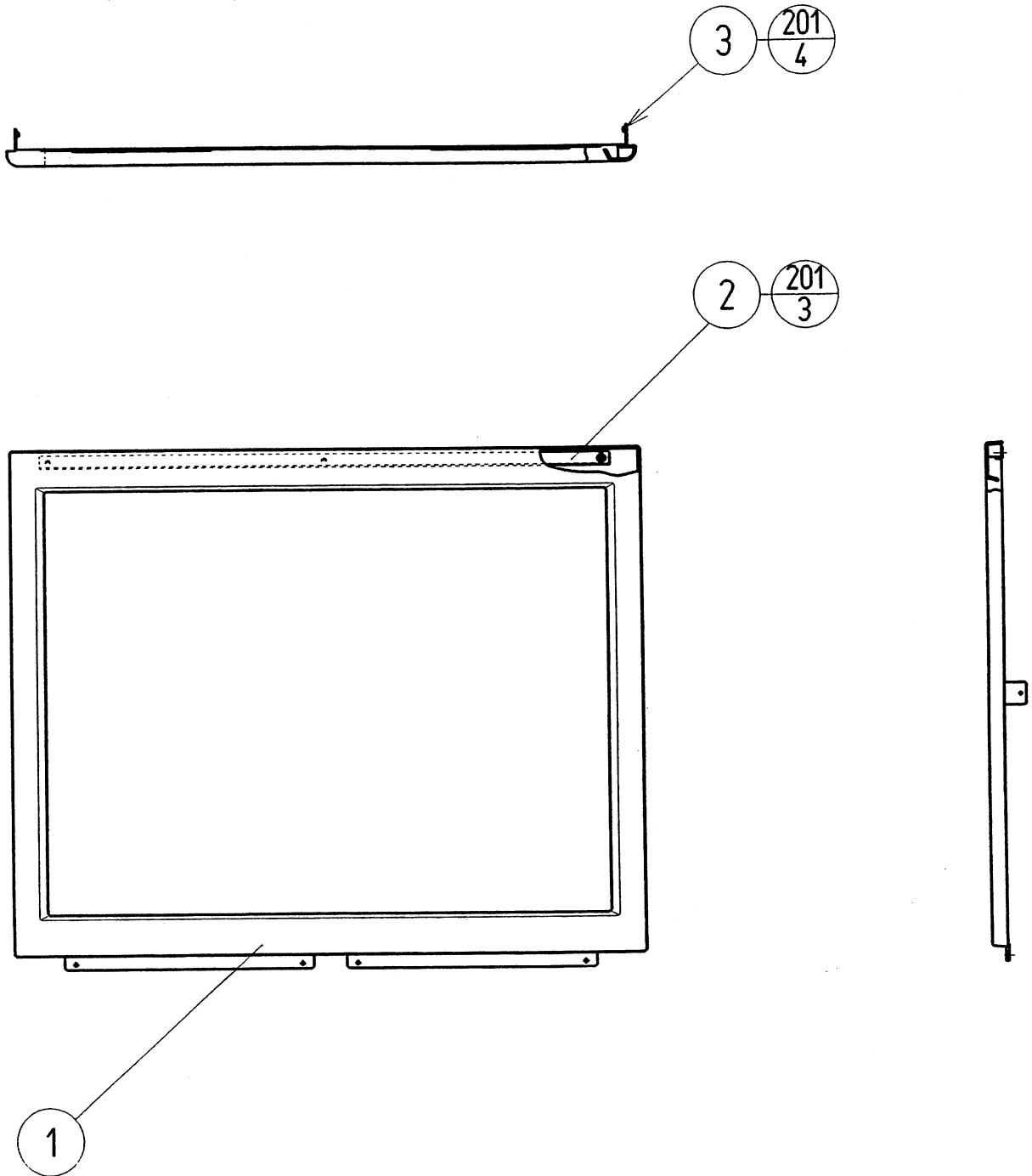
ITEM NO.	PART NO.	DESCRIPTION
1	MGL-1102	TV MASK 50"
2	MGL-1151	SLIT PLATE
3	MGL-1152	MASK SIDE HOLDER
201	012-F00408-0B	TAP SCR #2 FH BLK 4X8
202	000-F00410	M SCR FH M4X10

ASSY BILLBOARD (OCN1-1200)

ITEM NO.	PART NO.	DESCRIPTION
1	999-0793	STW MARQUEE 50" BENCH DLX
2	OCN-1202	BILLBOARD BOX
3	OCN-1203	BILLBOARD HOLDER
4	LOCAL PURCHASE	FL HOLDER
101	LOCAL PURCHASE	ASSY FL30W EX W/COMM HIGH T CE
102	280-5275-SR10	CORD CLAMP SR1
201	000-T00408-0C	M SCR TH CRM M4X8
202	000-P00430-S	M SCR PH W/S M4X30
203	068-441616	FLT WSHR 4.4-16X1.6

ASSY SEAT & BASE (OCN-3000)
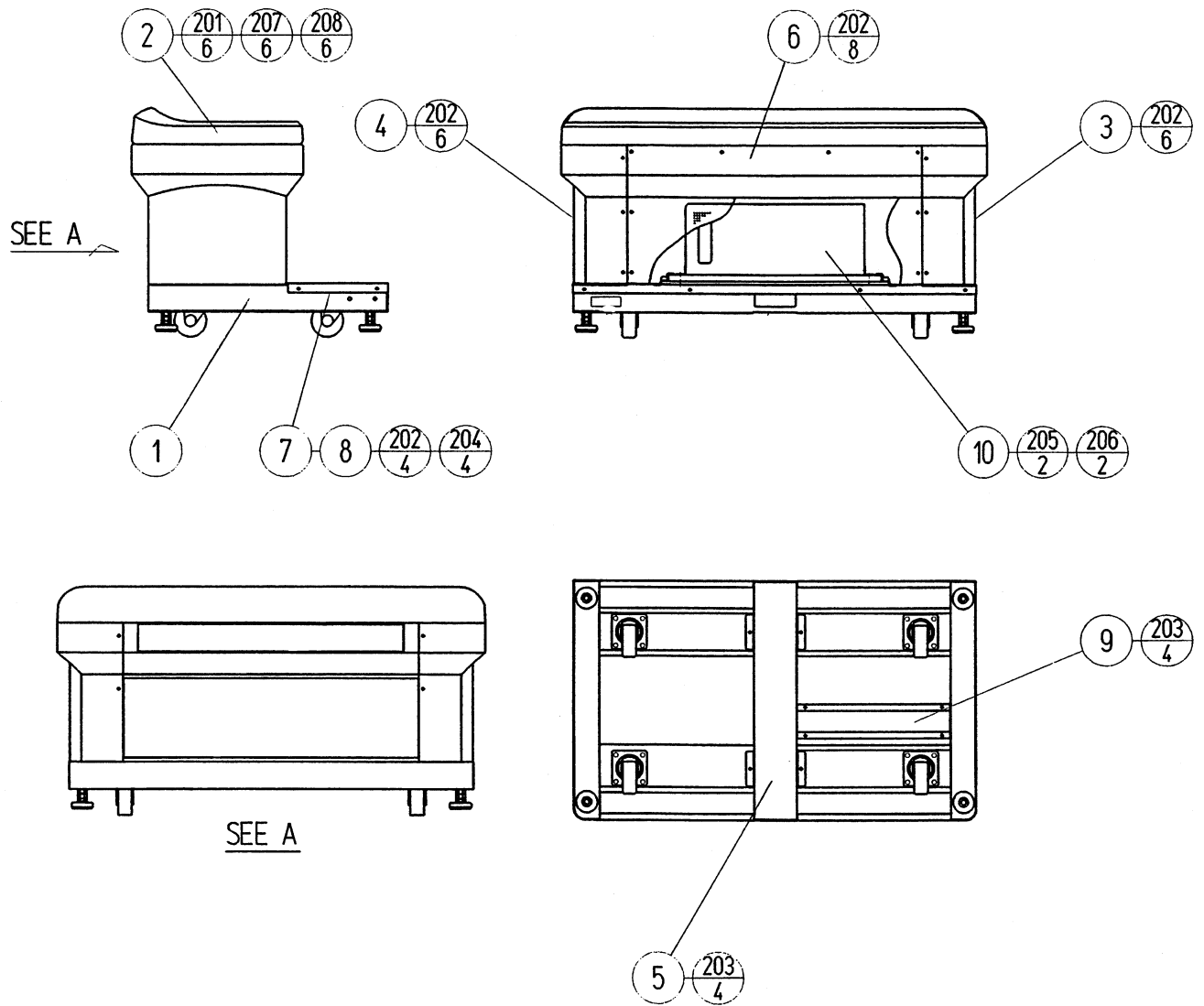
ASSY SEAT & BASE (OCN-3000)

ITEM NO.	PART NO.	DESCRIPTION
1	OCN-3001	BASE
2	OCN-3002	SEAT
3	OCN-3003	SEAT SIDE COVER L
4	OCN-3004	SEAT SIDE COVER R
5	MGL-3004	WIRE COVER
6	MGL-3007	SPEAKER LID
7	MGL-3008	FLOOR MAT REAR
8	MGL-3009	EDGE GUARD
9	MGL-3010	WIRE COVER S
10	GFR-3004	ASSY SUPER WOOFER
101	280-5187-26	OPEN LOCK BUSH 26
201	000-P00618	M SCR PH M6X18
202	000-T00410-0C	M SCR TH CRM M4X10
203	000-P00408-W	M SCR PH W/FS M4X8
204	000-F00308	M SCR FH M3X8
205	032-000425	WING BLT M4X25
206	068-441616	FLT WSHR 4.4-16X1.6
207	060-S00600	SPR WSHR M6
208	068-652016	FLT 6.5-20X1.6

BASE (OCN-3001)
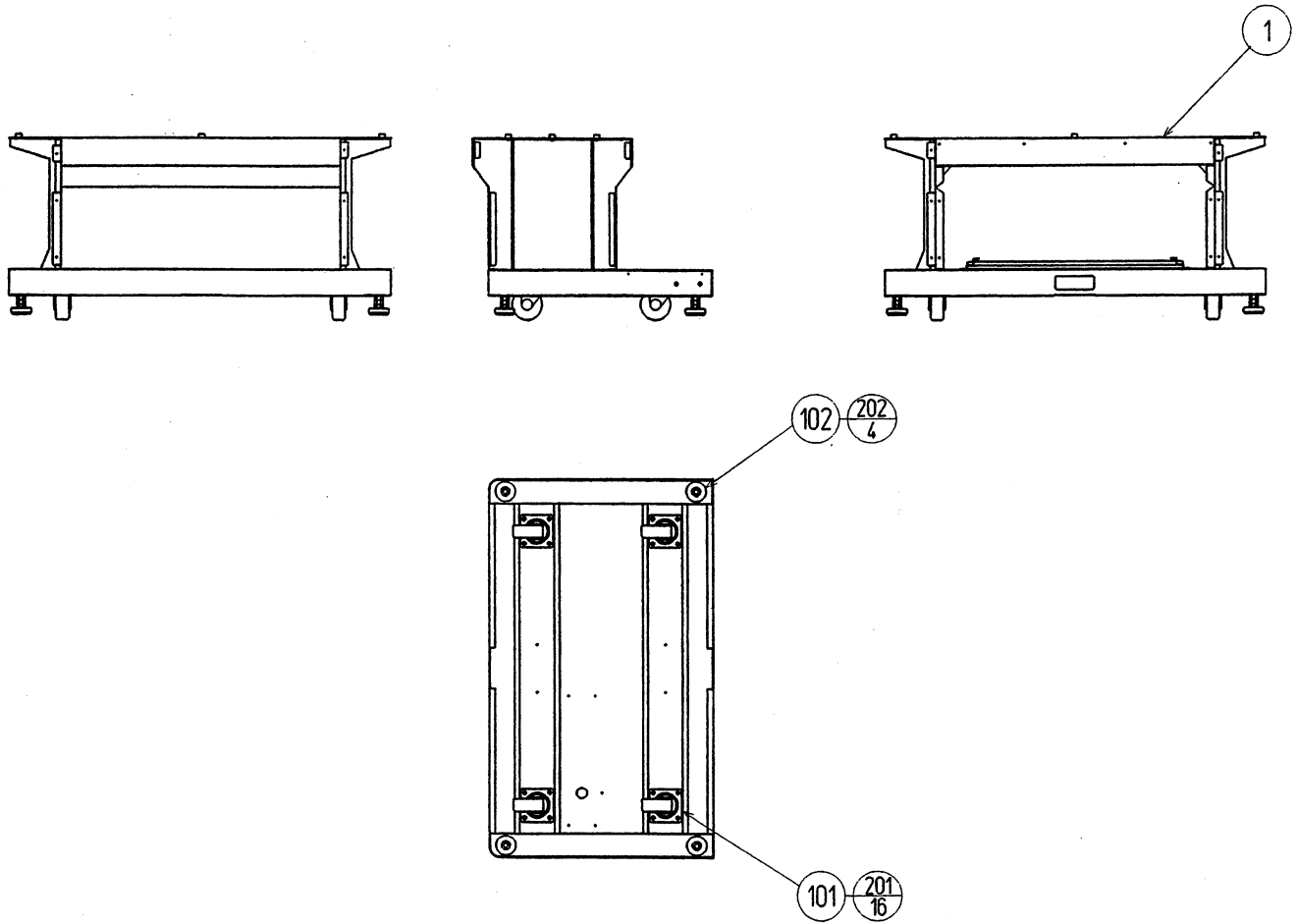
ITEM NO.	PART NO.	DESCRIPTION
1	MGL-3001X-A	BASE BLANK
101	601-9377	CASTER FAI=75
102	601-6063	LEG ADJ 50
201	030-000620-S	HEX BLT W/S M6X20
202	050-H01200	HEX NUT M12

ASSY SUPER WOOFER (GFR-3004)
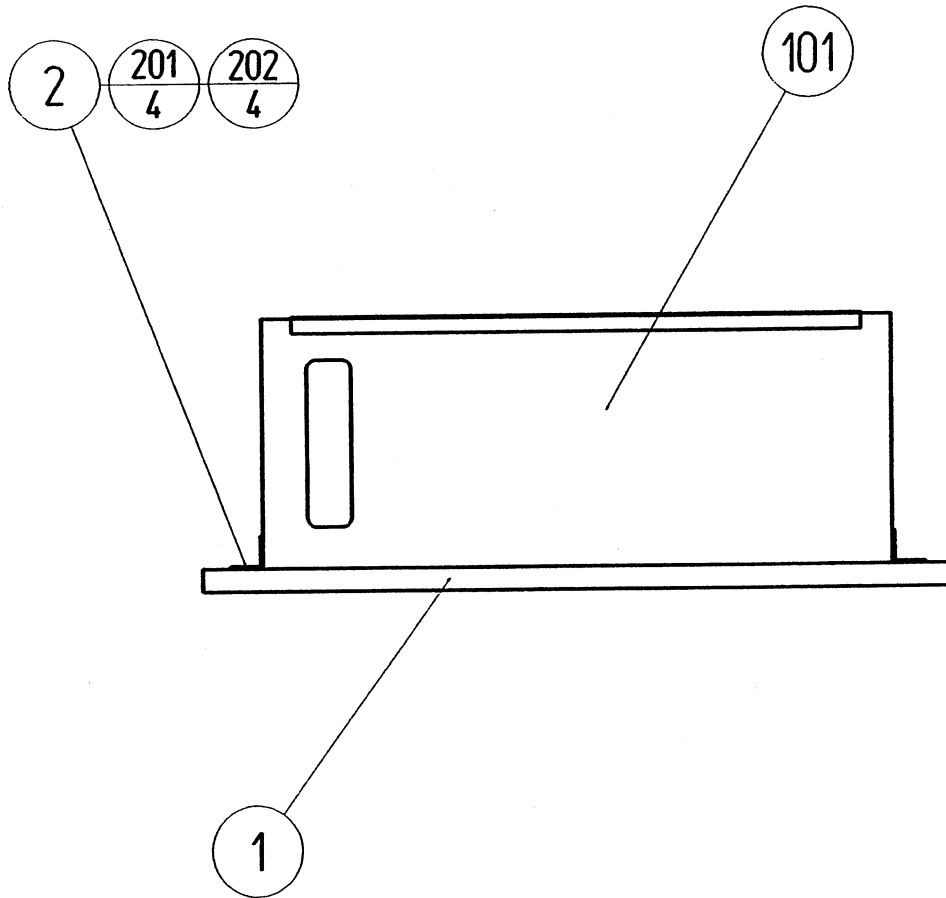
ITEM NO.	PART NO.	DESCRIPTION
1	MGL-3005	SPEAKER BASE
2	MGL-3006	SPEAKER BRKT
101	130-5097	SPEAKER BOX SUPER WOOFER
201	011-T00312	TAP SCR TH 3X12
202	000-P00516-W	M SCR PH W/FS M5X16