

1ST PRINTING
MAY 1997

SEGA™

TOP SKATER

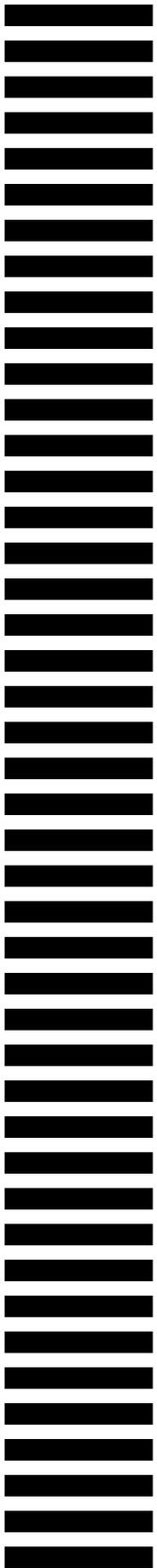
SEGA SKATEBOARDING

OWNER'S MANUAL



SEGA ENTERPRISES, USA

MANUAL NO. 4201-6308-01



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:	106.5 in.(L) x 46 in.(W)
Height:	89 in.
Weight:	Approx. 963 lbs.
Power maximum current:	7 Amp AC 120V 60 Hz
MONITOR:	50 INCH 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 TOP SKATE, 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 415-802-1750

Fax 415-802-1754

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 benzene, thinner, etc.

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

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

INSTALLATION PRECAUTIONS

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

REGULATORY APPROVALS

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

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

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



1 . PRECAUTIONS TO BE HEDED FOR OPERATION

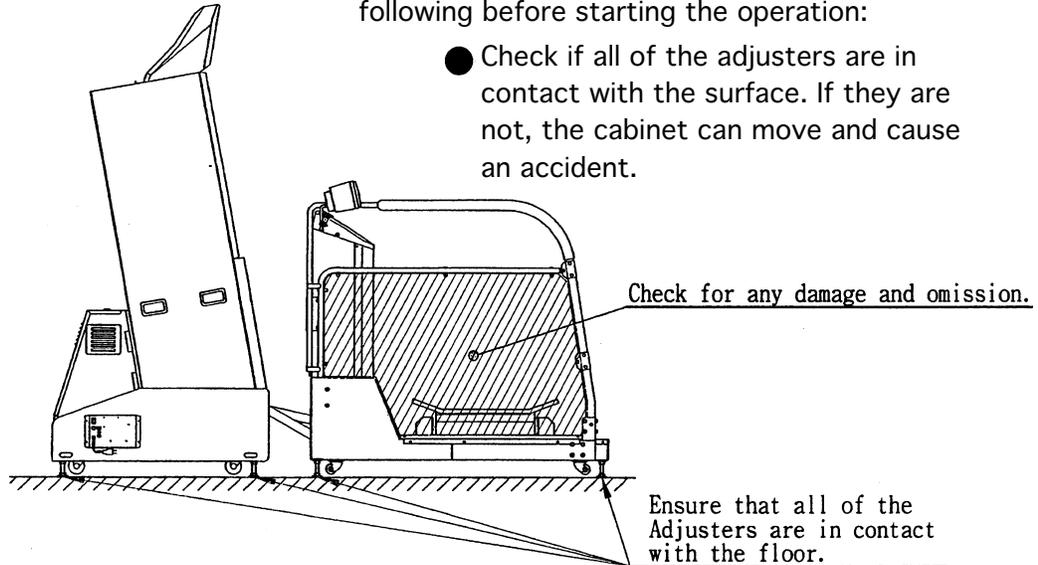
This product allows the game to be played by operating the SKATE BOARD. In order to prevent accidents, be sure to comply with the following points before and during operation.

PRECAUTIONS TO BE HEDED FOR OPERATION BEFORE STARTING THE OPERATION

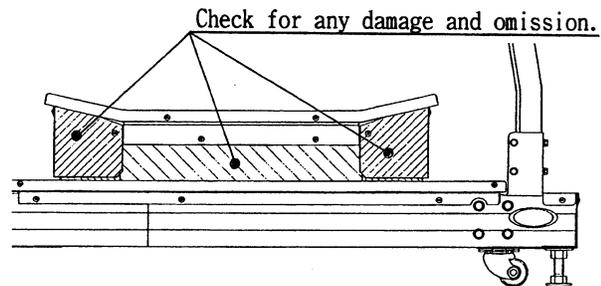


In order to avoid accidents, check the following before starting the operation:

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



- Check to see if hazard preventive parts are damaged or omitted. Operating the product with the hazard preventive parts as is left in an irregular status will cause accidents.



- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step.
- To avoid electric shock, check to see if door & cover parts are 508.5
- To avoid electric shock, short circuit and or parts damage, do not put the following items on or in the periphery of the product:

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



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

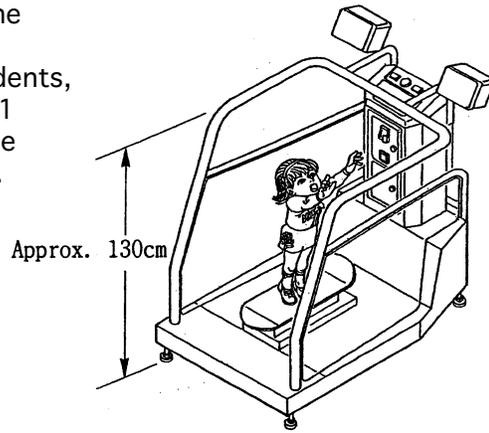
PRECAUTIONS TO BE HEADED DURING OPERATION

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



- To avoid injury and accidents, those who fall under the following categories are not allowed to play the game.
 - > Intoxicated persons.
 - > Pregnant women or those who are in the likelihood of pregnancy.
 - > Those who need assistance such as the use of apparatus when walking.
 - > Those who have high blood pressure or a heart condition.
 - > Those who have experienced muscle convulsion or loss of consciousness when exposed to intensive light stimulus due to watching television, playing video games or water surface flickering.
 - > Persons susceptible to motion sickness.
 - > Persons whose actions runs counter to the product's warning displays.

- The player should be able to get on the skate board and hold on firmly to the safety bar. To avoid falling down accidents, instruct those who are shorter than 51 inches not to play, as the height of the safety bar is approximately 51 inches.

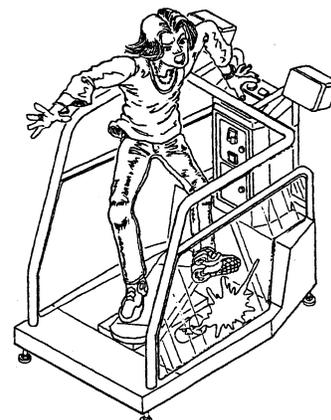


- Instruct those who wear high heel shoes to refrain from playing the game by explaining that playing game with high-heeled shoes is very like to cause potentially hazardous situation.



- Do not allow players to put any heavy items or beverages on the product. Falling items can cause accidents and spilled beverages can cause electric shock.

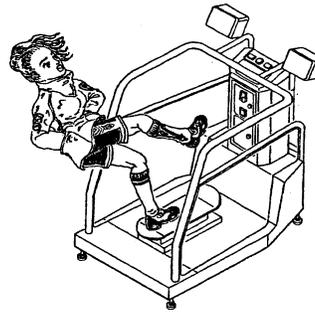
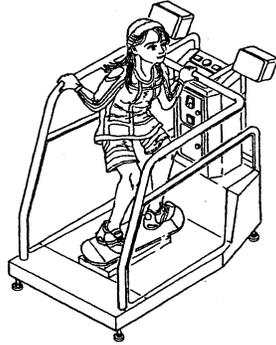
- To avoid injury from potential falling down accidents, be sure to that only one person is allowed to play at a time.



- To avoid electric shock and short circuit, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.
- To avoid falling down and injury resulting from falling down, immediately stop the customer's leaning against or climbing on the product, etc.
- To avoid electric shock and short circuit, do not allow the customers to unplug the power plug without justifiable reason.

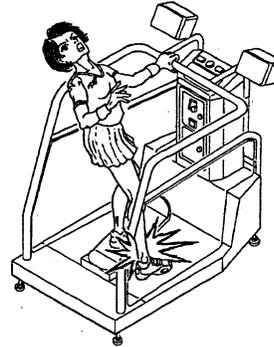
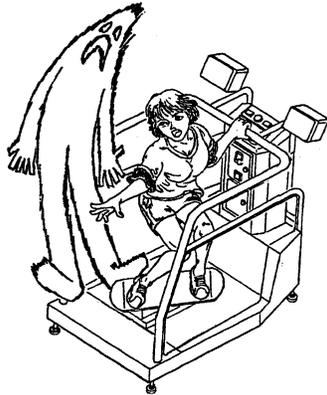


- Instruct the player to hold firmly to the Safety Bar during game. Caution the customers who are most likely to cause injury by playing without holding the Safety Bar, for example.



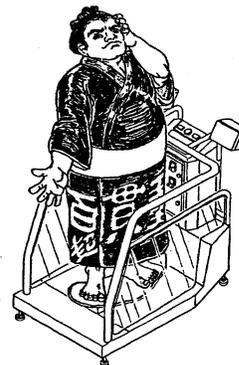
- To avoid injury, do not allow persons other than the player access to the mechanism base during game play.

- Instruct the player to play by standing on both feet. Standing on one leg to play can cause injury.



- Instruct the player not to put baggages, etc. on the mechanism base to avoid damaging such items.

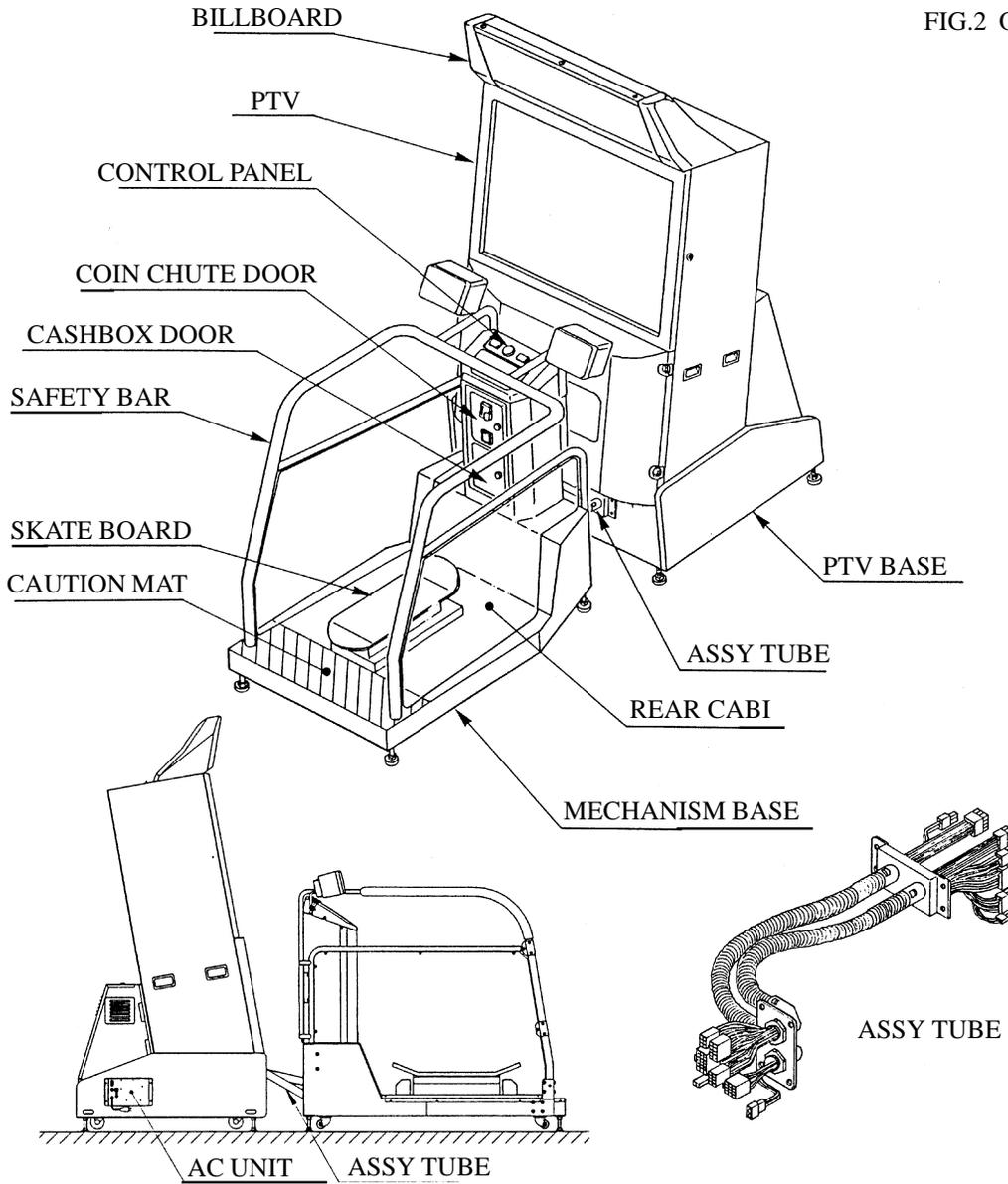
- Regarding this product, the weight of the player is limited to 330 lbs. To avoid machine damage and injury due to machine damage, playing by those who are as heavy as 330 lbs. or heavier is strictly prohibited.



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

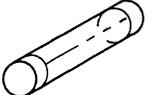
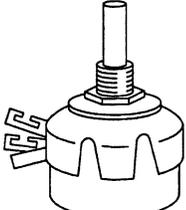
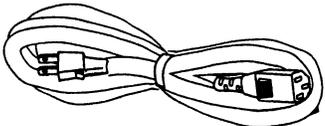
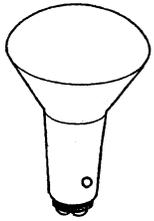
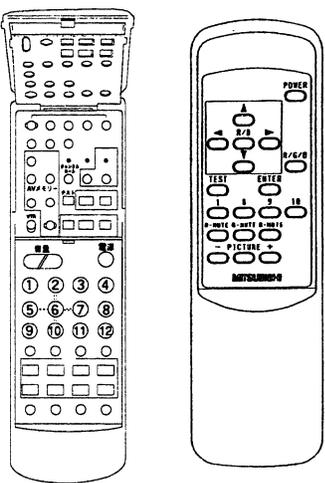
2 . NAME OF PARTS

FIG.2 OVERVIEW



GAME SPECIFICATIONS	WIDTH	LENGTH	HEIGHT	WEIGHT
DURING SHIPPING				1597 LBS.
All measurements are in inches				
REAR CABINET	63"	X 44.5"	X 64"	748 LBS.
PTV	55"	X 37.5"	X 77"	462 LBS.
PTV BASE/BILLBOARD	54"	X 48"	X 43.5"	387 LBS.
BILLBOARD	46"	X 18"	X 12"	33 LBS.
REAR CABINET	38"	X 58"	X 56"	508.5 LBS.
PTV	46"	X 22"	X 67"	263 LBS.
PTV BASE	47"	X 41"	X 31.5"	158.5 LBS.
WHEN ASSEMBLED	47"	X 108"	X 90"	963 LBS.

3. ACCESSORIES

<p>DESCRIPTION OWNERS MANUAL Part No. (Qty.) 4201-6308-01 (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.</p>	<p>KEY MASTER 220-5381 (2) For opening/closing the doors</p>	<p>KEY (2) For the CASHBOX DOOR</p>
<p>FUSE 4 A slow blow 2 A slow blow FUSE 7 A slow blow For spare, refer to Section 13 FUSE 2@5 A slow blow local purchase only</p> 	<p>VOL CONT B-5K OHM 220-5573 (2) 220-5484 For spare, refer to Section 8</p> 	
<p>Power Cord 600-6724 (1) : for countries other than USA 600-6729 (1) : for USA 600-6695 (1) : for USA Used for installation, see 4 of Section 4</p> 	<p>Lamp 110V 25W 390-5705 (2) Spare, see Section 11</p> 	
<p>MITSUBISHI Remote Control for Projector Used for adjustment. See Sec. 10 200-5298(1) 200-5532(1)</p> 		

4 . ASSEMBLING AND INSTALLATION



WARNING!

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

When carrying out the assembly work, follow the procedure in the following 6-item sequence:

- 1 ASSY OF PTV
- 2 WIRING CONNECTIONS BETWEEN CABINETS
- 3 SECURING IN PLACE (ADJUSTER ADJUSTMENT)
- 4 POWER SUPPLY
- 5 TURNING POWER ON
- 6 ASSEMBLING CHECK

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



ASSY OF PTV



CAUTION!

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



WARNING!

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

- ① By using the specified screws, secure the 2 Mask Holders to the Projection Display ceiling. (Fig. 4.1a)
- ② Insert the TV Mask from the underside as shown and secure with a total of 6 screws.
- ③ While supporting the Billboard by 2 persons, another person using a step is to insert the Billboard Connector into the Terminal Board of Projection Display ceiling. (Fig. 4.1b)
- ④ Insert the Billboard From the front as shown and secure with 2 screws (Fig. 4.1a)

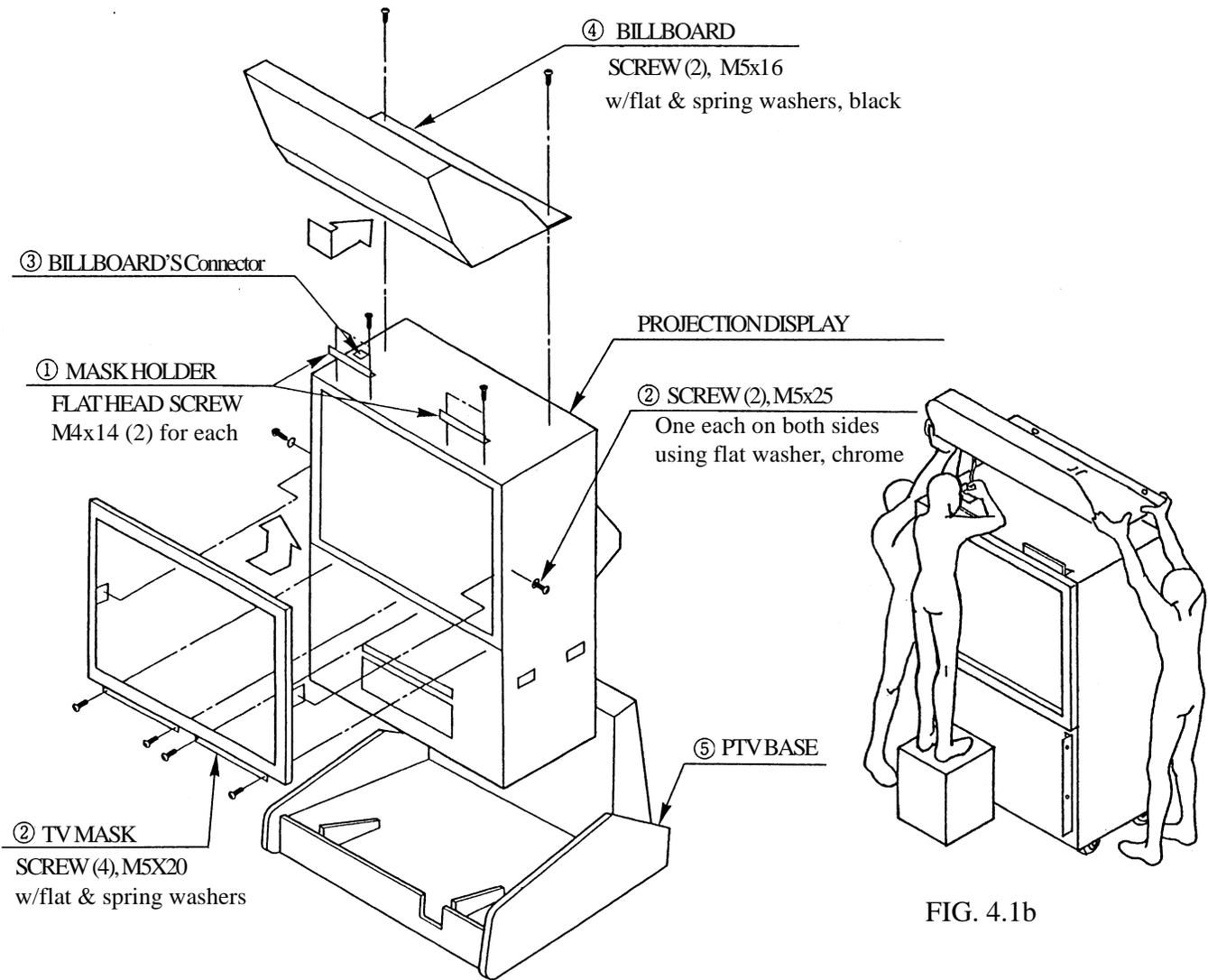


FIG. 4.1a

FIG. 4.1b

5 In order to prevent accidents during assembly work, have all of the leg adjusters of the PTV Base make contact with the surfaces to secure the PTV Base.

6 Mount the assembled PTV on the PTV Base. After mounting the PTV, move it to the rear part of the PTV Base. When performing this work, be sure to use 4 or more persons.(Fig. 4.1c)

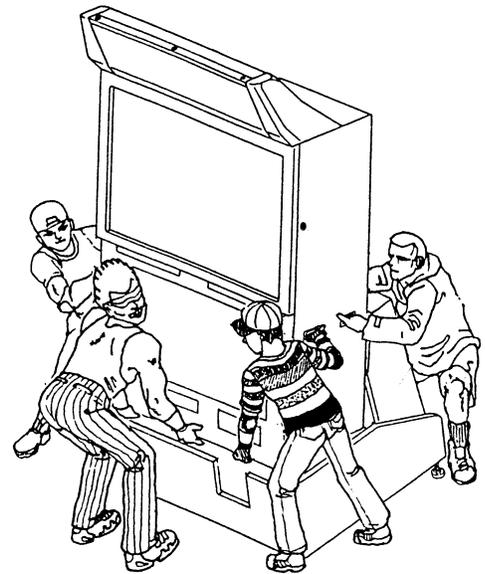


Fig. 4.1c

7 Connect the wires wired to the PTV Base to the PTV Connector Panel. Insert the wiring connectors, each of which wire covering is red, green, and blue, to the corresponding one of R.G.B. terminals as per connector panel display inside the PTV, and insert the remaining wire connector to the SYNC terminal. The connector's insertion angle is predetermined. Inserting the connector in a forcible manner will damage the connector. Check for the correct inserting direction and then insert the connector. After insertion of the connector, turn the connector's ring clockwise to lock the connection.

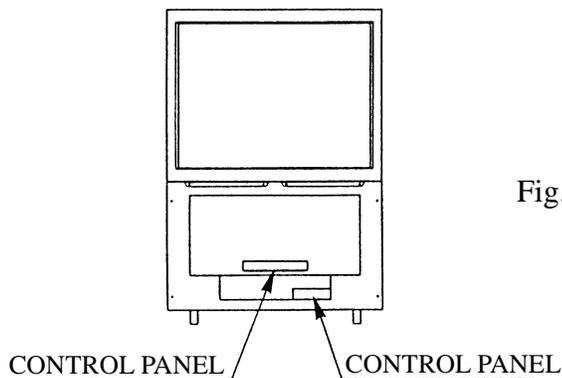
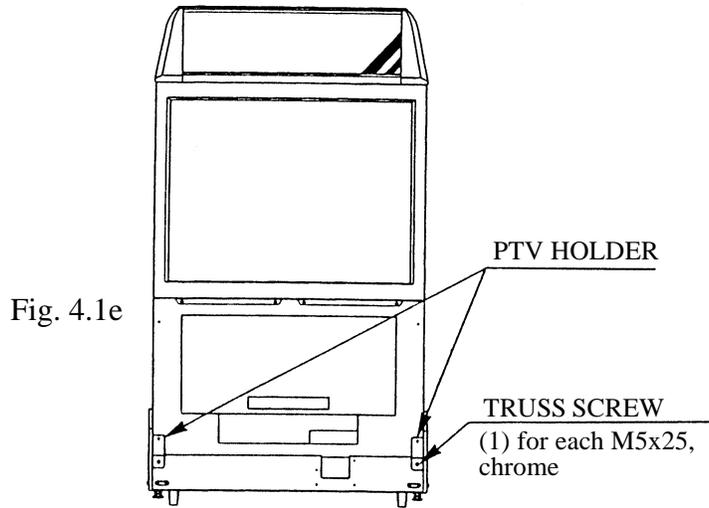


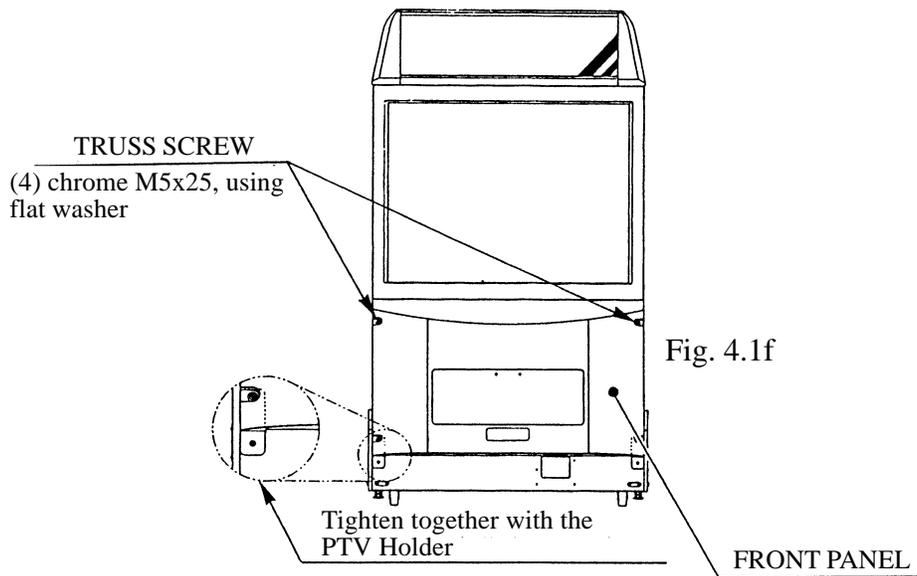
Fig. 4.1d

8 The connector panel has 3p white connector in addition to the connectors displayed as R.G.B. and SYNC. Connect the wiring coming from the PTV Base power supply unit to the 3p white connector.

- 9) Temporarily fasten the PTV Holders to the PTV Base with a screw for each Holder (Fig. 4.1e)



- 10) Secure the Front Panel to the front of the PTV with 4 screws. At this time, by using the underside 2 screws, tighten together with the PTV Holder. (Fig. 4.1f)



2 WIRING CONNECTIONS BETWEEN THE CABINETS

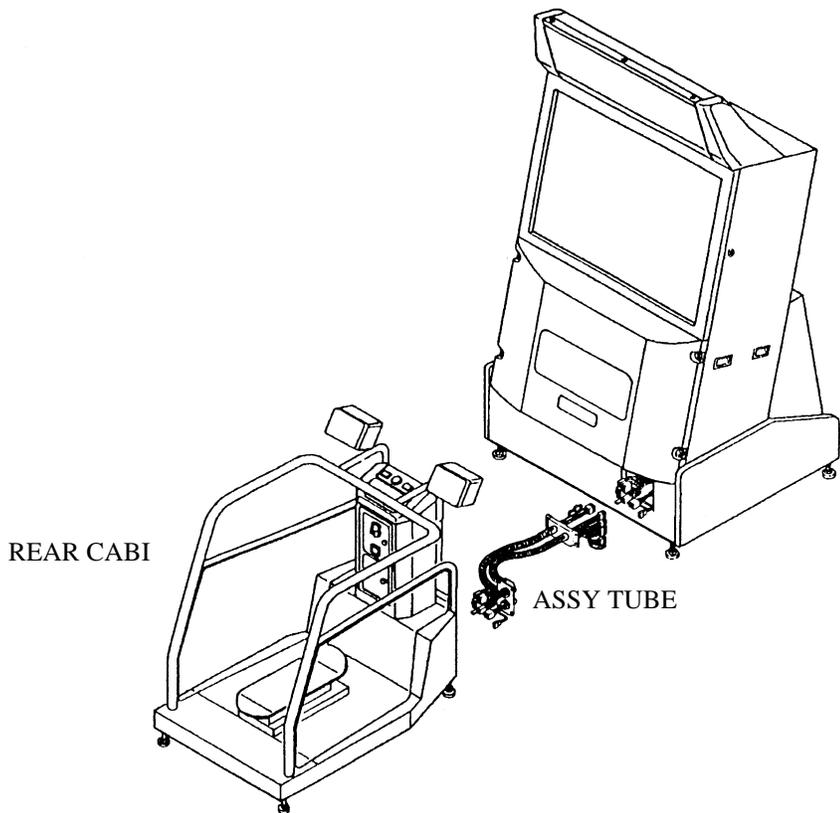


Fig. 4.2a

Install the ASSY TUBE to the Front Cabinet which is assembled as per 1 and the Rear Cabinet, and perform wiring connection in between both cabinets.

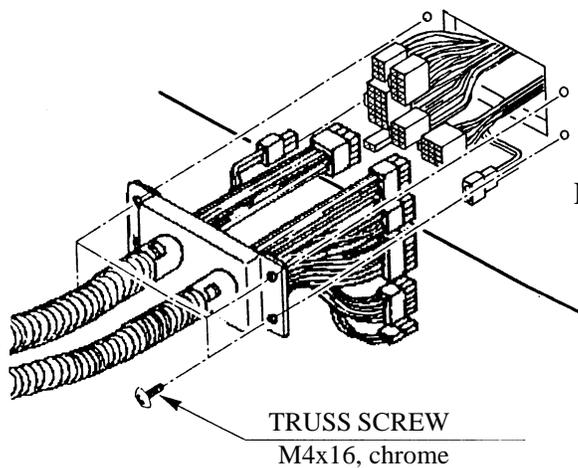


Fig. 4.2b

- ① The ASSY TUBE's box side is to the Front Cabinet. Connect all of the wiring connectors coming from the Front Cabinet and the box side wiring connectors. Be sure to connect the connectors of identical color and number of pins.
- ② Secure the box to the Front Cabinet with 4 screws. at this time, be very careful so that wires are not caught and damaged. (Fig. 4.2b)

- ③ Connect all of the Rear Cabinet side Wiring Connectors and ASSY Tube Wiring Connectors. Ensure that connectors of identical color and number of pins are connected with each other.
- ④ By using the 4 screws, secure the ASSY Tube Plate parts to the Rear Cabinet. At this time, use care so that wirings are not caught and damaged. (Fig. 4.2c)

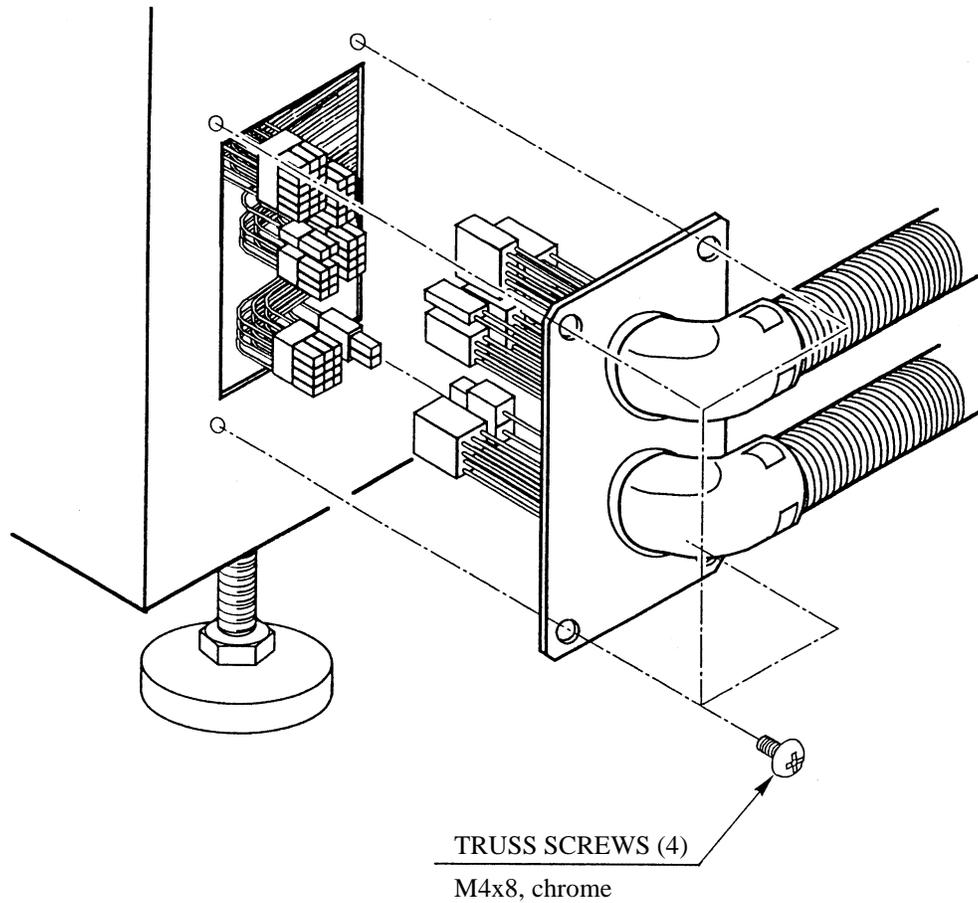


Fig. 4.2c

3

SECURING IN PLACE (ADJUSTER ADJUSTMENT)



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

This machine has 8 each of casters and adjusters (FIG. 3. 2 a). When the installation position is determined, cause the adjusters to come into contact with the floor directly, make adjustments in a manner so that the casters will be raised approximately 5mm. from the floor and make sure that the machine position is level.

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

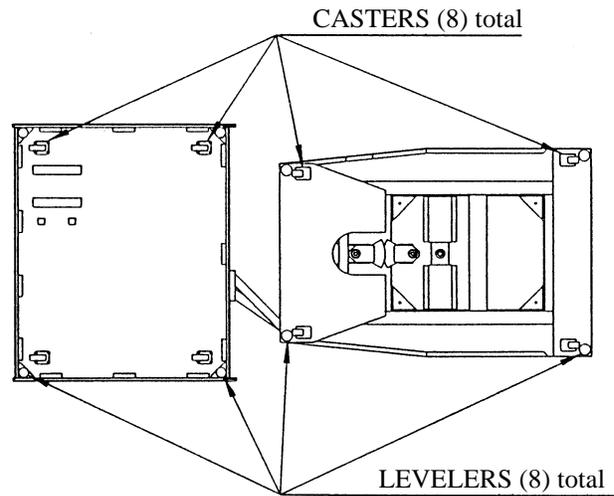


Fig. 4.3a

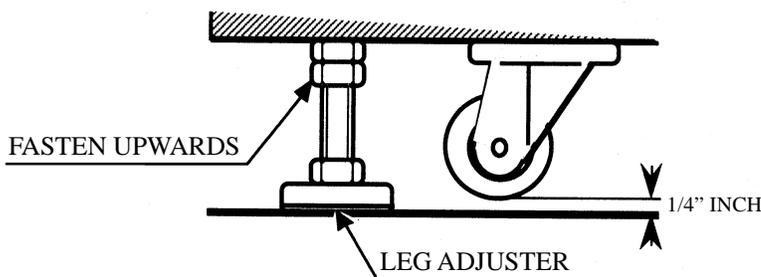


Fig. 4.3b

4

POWER SUPPLY



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

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

- ① Ensure that the Main SW is OFF.

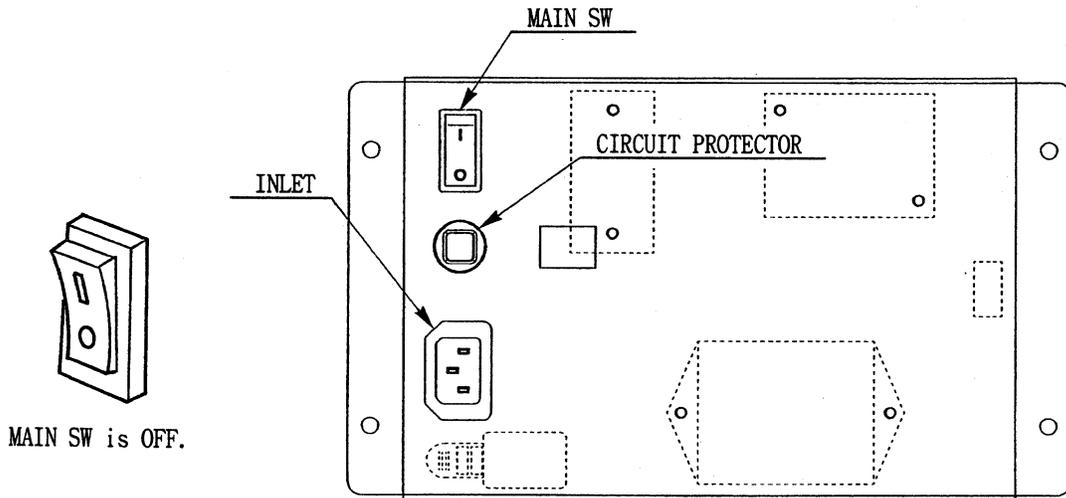


Fig. 4.4a

5

TURNING POWER ON

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

The Billboard's Fluorescent Lamp lights up and images will be outputted on the projector. The lamps on the right sides of the Coin Chute Tower alternate lighting up by halves.

Background music (BGM) is outputted during ADVERTISE from the speaker. However, this BGM is not emitted if "No BGM output during ADVERTISE" is set. Since the Skate Board is locked unless the game is started, it can not be moved in the right/left directions.

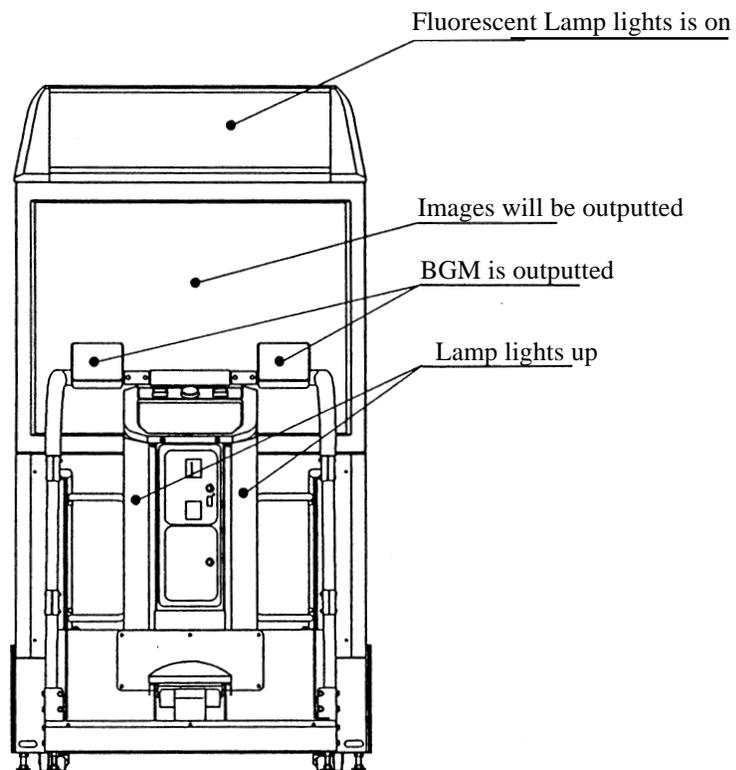


Fig. 4.5a

4

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:

MEMEORY TEST		
IC 09	GOOD	
IC 10	GOOD	
IC 11	GOOD	
IC 12	GOOD	
IC 15	GOOD	
IC 16	GOOD	
IC 79	GOOD	
IC 80	GOOD	
IC 81	GOOD	
IC 82	GOOD	
IC 83	GOOD	
IC 84	GOOD	
IC 88	GOOD	
IC 89	GOOD	

PRESS TEST BUTTON TO EXIT

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

INPUT TEST	
CURVING SLIDE	80H
JUMP FRONT	OFF
JUMP TAIL	OFF
START	OFF
SELECT LEFT	OFF
SELECT RIGHT	OFF
COIN CHUTE#1	OFF
COIN CHUTE#2	OFF
SERVICE (ON BOARD)	OFF
TEST(OB BOARD)	OFF
SERVICE TEST	OFF

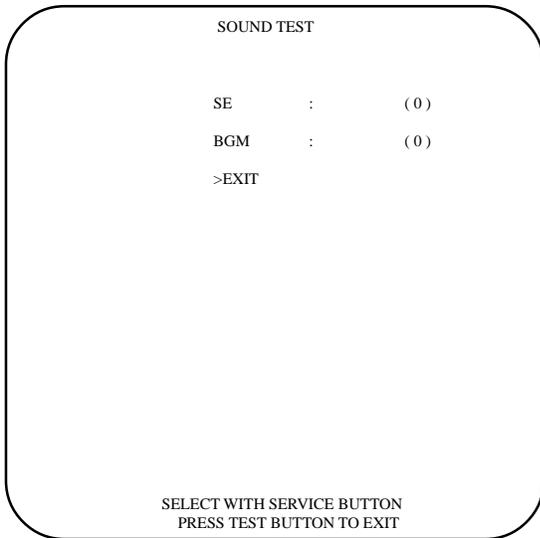
PRESS TEST BUTTON TO EXIT

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

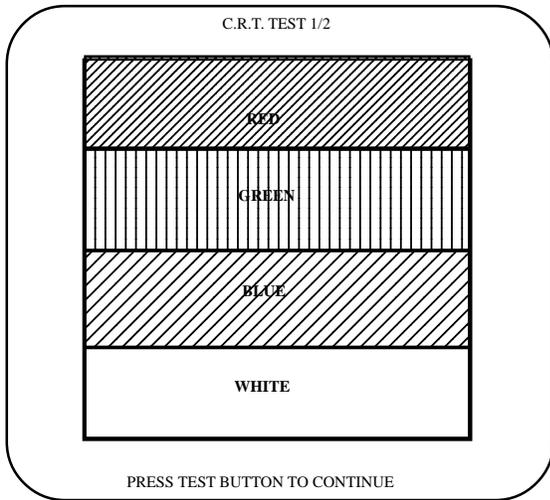
OUTPUT TEST	
START LAMP	OFF
SELECT LEFT	OFF
SELECT RIGHT	OFF
LAMP 1	ON
LAMP 2	OFF
LAMP 3	OFF
LAMP 4	OFF
LAMP 5	OFF
LAMP 6	OFF

PRESS TEST BUTTON TO EXIT

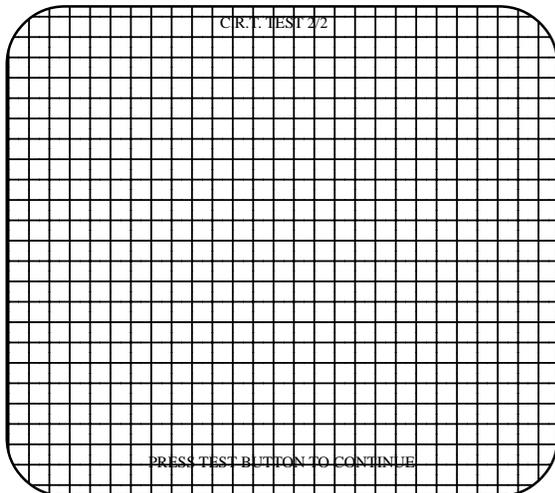
In the output test mode, carry out lamp test to ascertain that each lamp lights up satisfactorily.



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.



In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the projector is tested) to be displayed. Although the projector adjustments have been made at the same time of shipment from the factory, color deviation, etc., may occur due to the effect caused by geomagnetism, 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 necessary, adjust the projector by refering to Section 9.



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

5 . PRECATIONS TO BE HEDED WHEN MOVING THE MACHINE



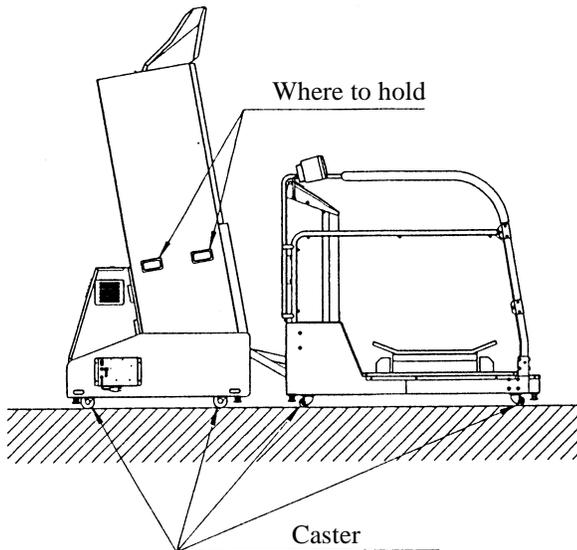
WARNING!

- 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.

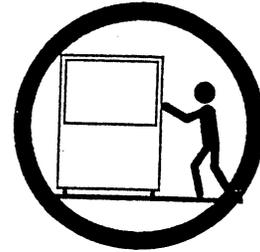


CAUTION!

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

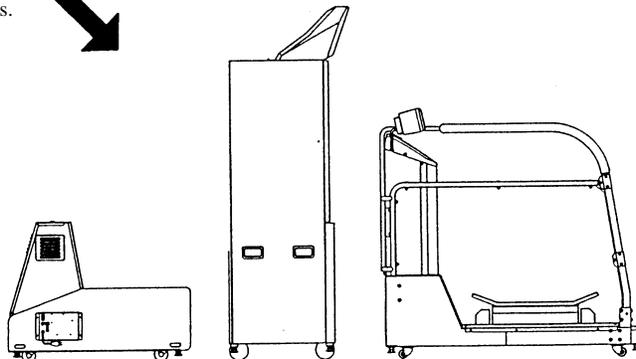


On level surfaces, move the machine by causing the casters to make contact with the surfaces.



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.

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

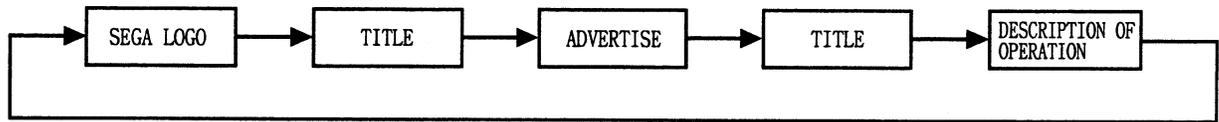


6 . CONTENTS OF GAME

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

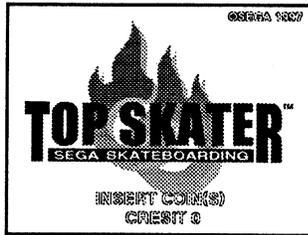
HOW TO PLAY

The on screen ADVERTISE before the commencement of game is comprised of the following:

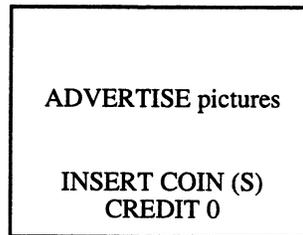


During ADVERTISE LOOP, a total of 12 Lamps on both sides of the Coin Chute Tower are always flashing

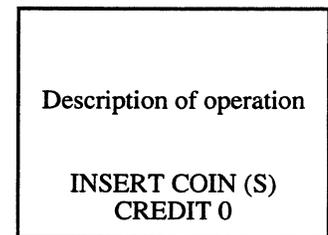
TITLE



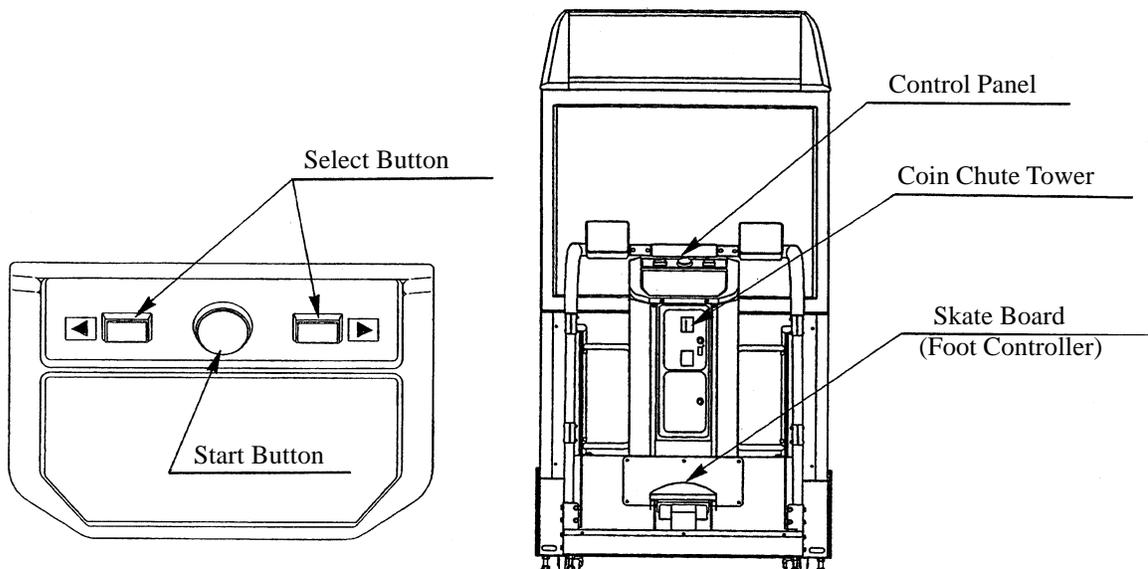
ADVERTISE



DESCRIPTION OF OPERATION



- ① Get on the Skate Board (Foot Controller).
- ② The Coin Chute Tower is located in the center of the Cabinet. Insert one play worth of coins to have the Start Button light up. Press the Start Button to display the Course Select Screen. When in the Course Select Mode, credits are not displayed. The maximum number of credits countable at a time is 9. Coins inserted after counting 9 credits are not counted or rejected.



③ The course Select Screen allows the play course (event) to be selected. On the Select Screen, the Select Button and Start Button alternately light up. Use the Select Button to choose the course and decide (the selection) with the Start Button.

SKATERS SESSION (NOVICE):
This is the beginner's course in the daytime mainly comprised of the Jumping Board and Half Pipe.

STUNTTRACKERS TROPHY (EXPERT)
The skilled player's course in the night mainly comprised of complex elements as rails, etc. in addition to the Jumping Board and Half pipe.

④ Decide the course to display the Character Select Screen. At this time, also, the Select Button and Start Button alternately light up. Use the Select Button to choose and press the Start Button to decide the selection.

Ash
A born skater, an unyielding type.

Keith
A man of few words and a cool type. He is an avid fan of Skate Board and bass instruments.

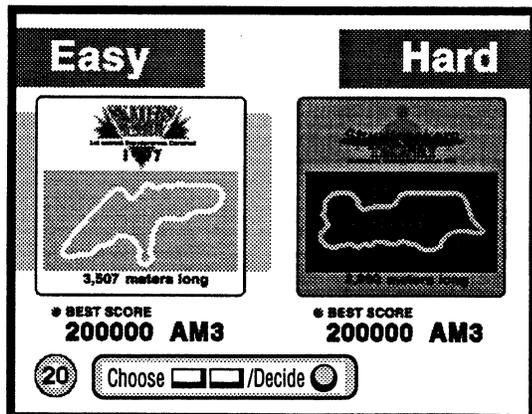
Kenta
A self-concieted boy who likes Skate Boarding and outshining others.

J
An audacious, rough and powerful type.

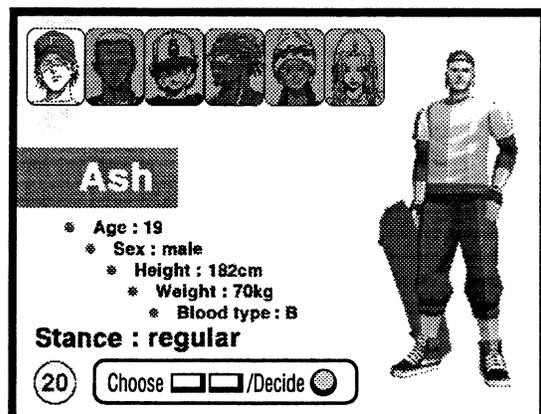
Cookie
An attractive female skater whose technique is comparable with that of a man.

Jill
An attractive skater who is cool and sexy.

Course Select screen

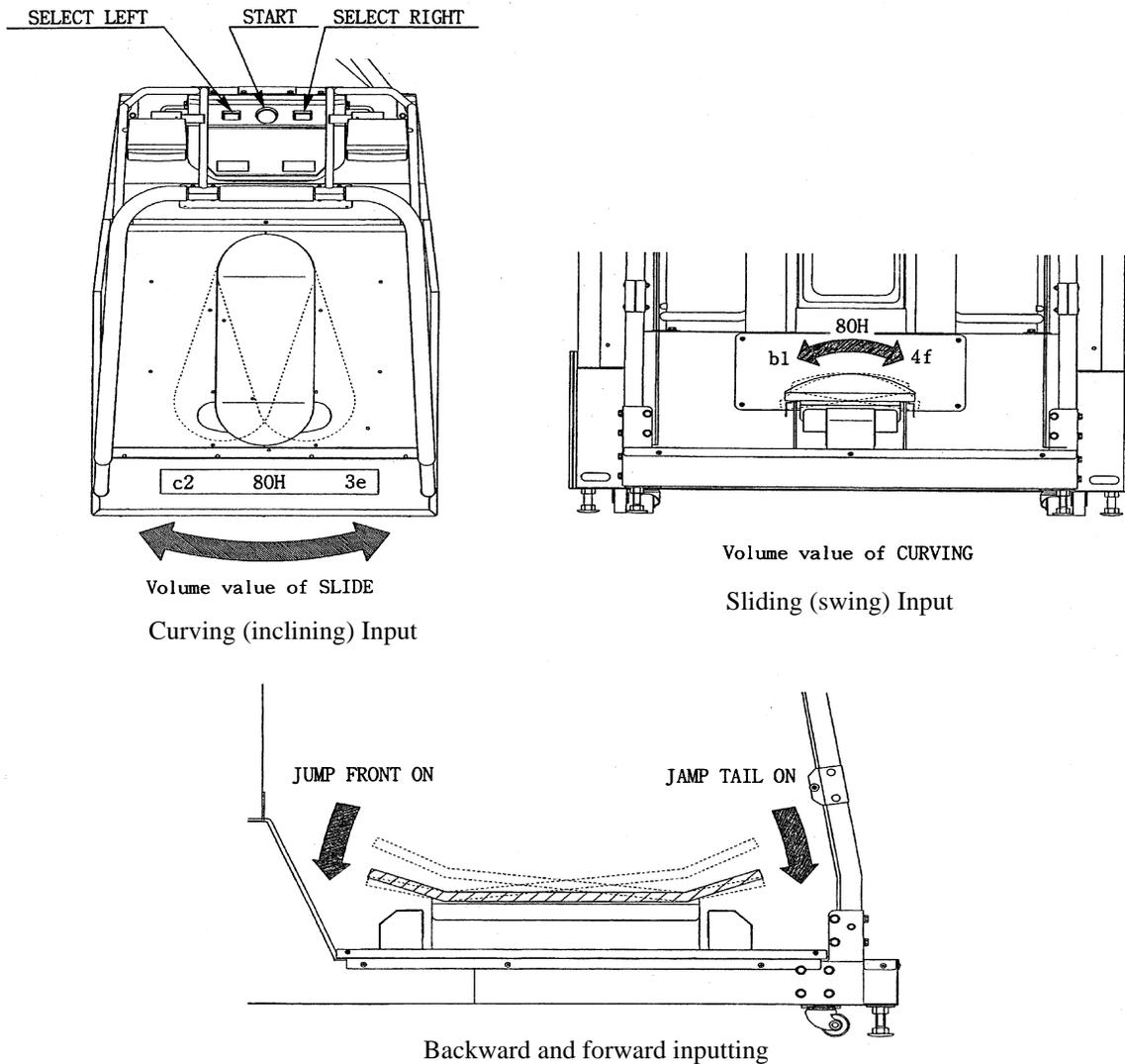


Character Select screen



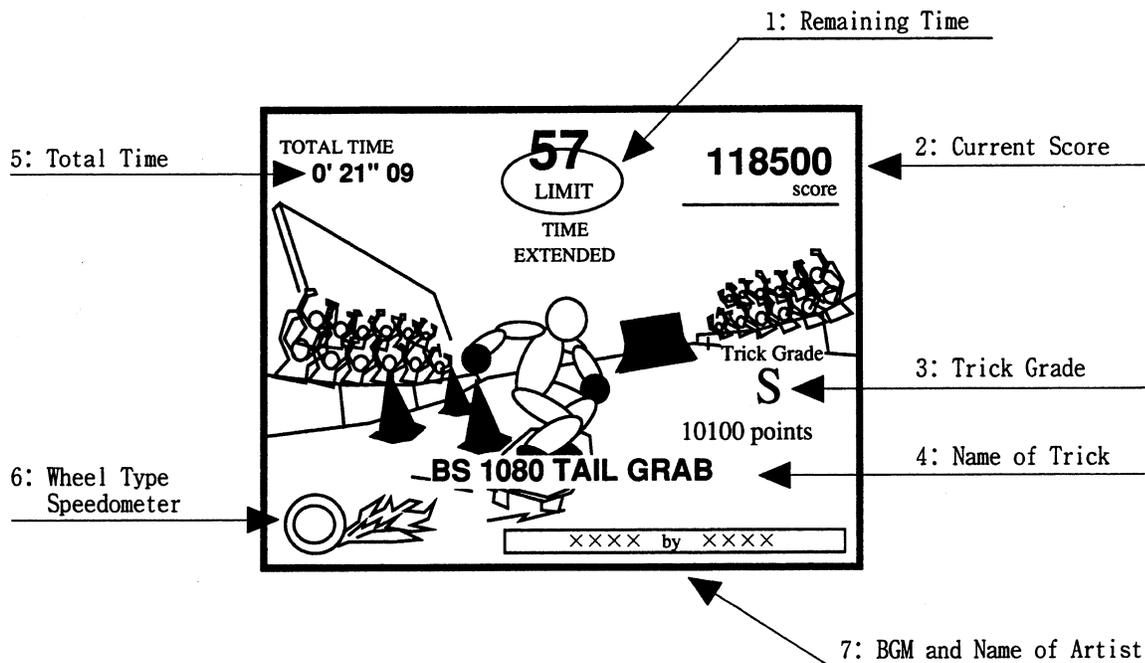
- ⑤ The Course Select Screen and Character Select Screen display the Remaining Time for selection on the lower left part. Failing to press the Select Button within the time limit automatically decides the NOVICE Course and Ash for the Character. While the Select Mode is displayed, all of the lamps on both sides of Coin Chute Tower are off.
- ⑥ When the character is decided, the game starts. The "FOOT CONTROLLER IS UNLOCKED" message is displayed and after the display is finished, the Skate Board is unlocked. Then, Skate Board slide operation can be performed.

In the similar manner as in the actual Skate Board, the Board can be turned in the desired direction by inclining it. Furthermore, sliding the Skate Board allows for even more sharp turns.



Backward inputting while running allows for high jumping (OLLIE) and forward inputting, low jumpng (NOLLIE).

⑤ During game, the following screen is displayed.



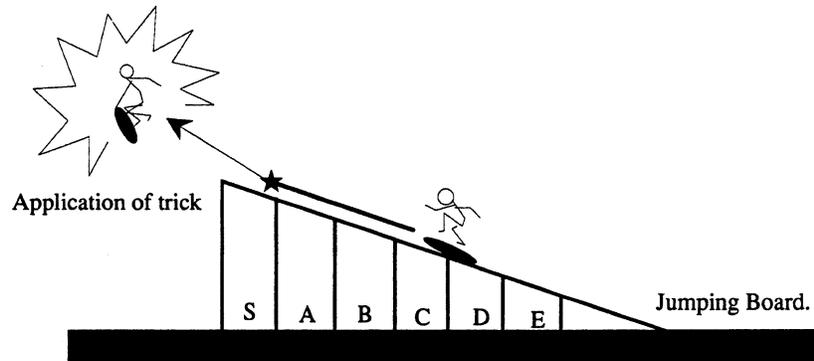
- 1: Remaining Time
When 0 is displayed, the game is over.
Passing the checkpoint allows TIME EXTENDED to be displayed under the Remaining Time.
- 2: Current Score
Displays the total points of trick scored up to the present.
- 3: Trick Grade
Displays the difficulty level of the trick applied (6 categories, i.e.,S~E) and the score.
- 4: Name of Trick
Displays the name of trick applied.
When failing to accomplish the trick, TRICK MISS is displayed in the center of the screen.
- 5: Total Time
- 6: Wheel Type Speedometer
The faster the running speed is, the faster the wheel's revolution.
Furthermore, as the speed nears the maximum, the flame will blow up from the wheel.
- 7: BGM and Name of Artist
Displays the name of the BGM being played, and the name of Artist who is singing.

In the Course, a checkpoint is set. Passing the checkpoint within the time limit allows the remaining time to be extended, and game play can be continued. Also, note that earning the Time Bonus scattered in the course enables you to extend the remaining time.

This product is aimed at earning high score by applying trick(s). Basically, the player can apply the trick at three places, i.e., Jumping Board, Bank (Half Pipe) and Rail (Handrail).

APPLYING THE JUMP TRICK:

The Jump trick is applied by inputting the Foot Controller on the Jump Board. Due to variation of inputting, the type of tricks will vary. The closer the inputting position is to the edge of the Jumpin Board, the higher the difficulty level of the trick (6 catagories, i.e., S~E) will be. Inputting the Foot Controller after passing the Jumping Board results in a Trick Miss.



HOW TO APPLY BANK (HALF PIPE) TRICK

The BANK TRICK occurs when you come out of the BANK. Inputting the Foot Controller at the very moment you come out of the BANK allows the varied type of trick to be applied. The faster you come out from the BANK and closer the coming-out angle is to the vertically, the higher the difficulty level (6 categories, i.e., S~E) of trick will be. In case of BANK, there will be no TRICK MISS.

HOW TO APPLY RAIL TRICKS

Jumping on to such rail shaped portion as the handrail enables you to apply the SLIDE based trick.

Lamps on both sides of Coin Chute Tower light up and flash in the manner matching the trick.

When the remaining time comes to an end in the middle of Course or each course is cleared completely, the game is over.

When the game is completely finished, the total score of the trick(s) and the Bonus Score based on the remaining time when reaching the finishing line are comprehensively added, and thus evaluation in 6 categories, i.e., S~E is performed.

If total score ranks 20th or higher, the player can enter his/her name as a record holder.

After the game is finished, the Skate Board is Locked.

After finishing one game, if one play worth of credits or more still remain, the PRESS THE START BUTTON message will be displayed.

7 . EXPLANATION OF TEST AND DATA DISPLAY

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

TABLE 7 EXPLANATION OF TEST MODE

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

7 - 1 SWITCH UNIT AND COIN METER



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



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

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

SWITCH UNIT

- 1 SOUND VOLUME**
Controls the speaker volume of the right/left speakers on the coin chute tower.
- 2 SUPER WOOFER VOLUME**
Controls the sound volume of the super woofer underneath the coin chute tower.
- 3 TEST BUTTON (TEST SW)**
For the handling of the TEST BUTTON, refer to the section on test mode.
- 4 SERVICE BUTTON (SERVICE SW)**
Gives credits without registering on the coin meter.

COIN METER

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

COIN METER

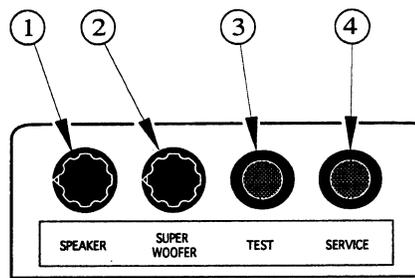
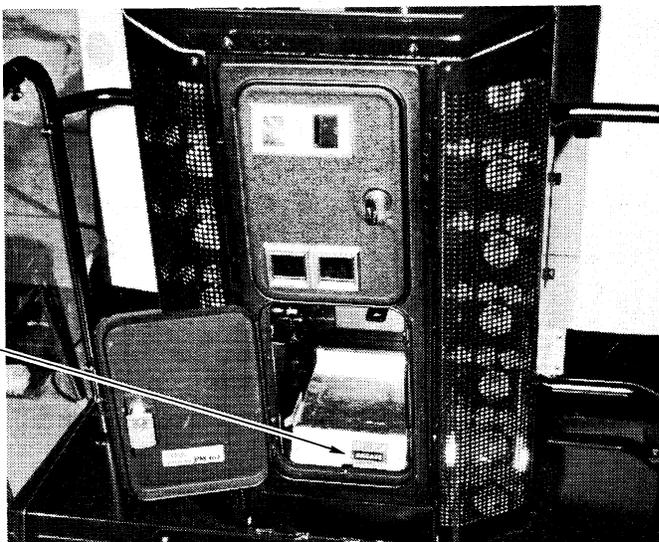


Fig. 7.1

Photo 7.1 COIN METER



7 - 2 TEST MODE

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

SELECTION OF TEST ITEMS

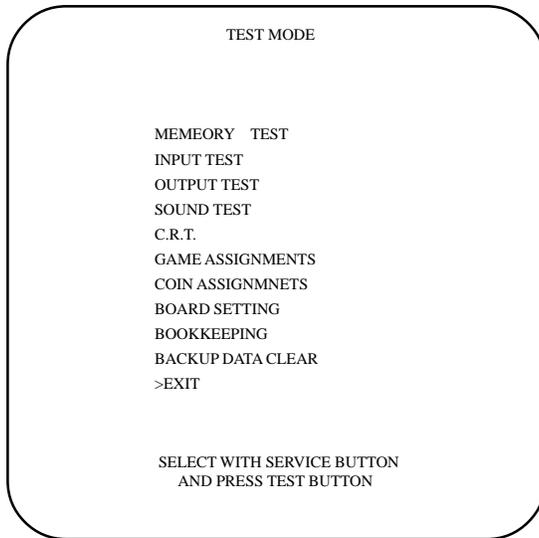


FIG. 7.2 TEST MENU

- ① Push the TEST BUTTON to cause the following TEST MENU to appear:
- ② By pushing the SERVICE BUTTON, bring the “>” mark to the desired item and press the TEST BUTTON. This will select the item’s test.
- ③ After the test is complete, move the “>” mark to “EXIT” and press the TEST BUTTON to return to game mode.

7 - 3 MEMEORY TEST

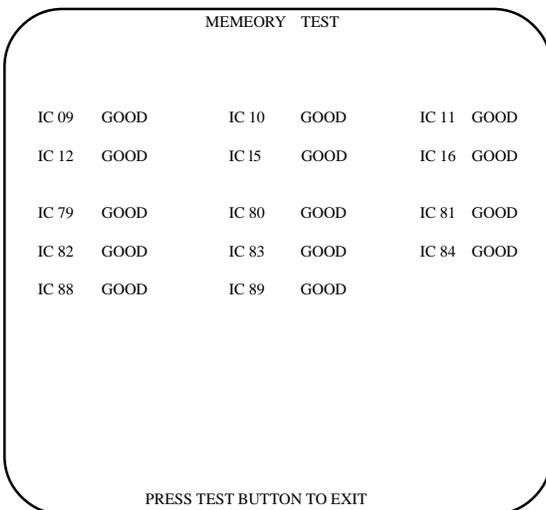


FIG. 7.3 MEMEORY TEST

The MEMEORY TEST mode is for checking the on-BD memeory 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.

IF THE TEST TIME FOR THE MEMORY TEST EXCEEDS 5 MINUTES THE IC BOARD MAY BE DEFECTIVE.

7 - 4 INPUT TEST

When INPUT TEST is selected, the MONITOR will show the following, allowing you to watch the status of each switch and the value of each V.R. of the cabinet to be viewed
On the screen, periodically check the status of each switch & V.R.

INPUT TEST	
CURVING	80H
SLIDE	80H
JUMP FRONT	OFF
JUMP TAIL	OFF
START	OFF
SELECT LEFT	OFF
SELECT RIGHT	OFF
COIN CHUTE#1	OFF
COIN CHUTE#2	OFF
SERVICE (ON BOARD)	OFF
TEST (ON BOARD)	OFF
SERVICE TEST	OFF
PRESS TEST BUTTON TO EXIT	

FIG. 7.4a INPUT TEST

- CURVING indicates the value of the volume which detects the inclination of the Foot Controller's horizontality. SLIDE refers to the value of the volume which detects the right/left swing of the Skate Board (Fig 7.4b)
- JUMP FRONT and JUMP TAIL indicate the status of the Sensor which detects the stepping on the backward/forward parts of the Skate Board (Fig. 7.4c).
- 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 simultaneously causes the menu to return to the screen.

At the time of Centering the Volume (the Skate Board is level and faces the front), the Volume value is set to 180+/-8, and if the Volume value varies in a natural manner matching the operation of the Skate Board and meeting the operation in the right/left direction evenly, then the product allows for satisfactory play.

If the Volume value is widely deviated from the 180+/-8 which is set at the time of centering, or the value does not vary evenly in the right/left operation, the game can not be played satisfactorily, and also this causes Volume damage. Adjust the Volume by referring to 7-10, or adjust the gear engagement of the Volume by referring to section 8, or replace the Volmue.

7 - 5 OUTPUT TEST

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

OUTPUT TEST	
START	OFF
SELECT LEFT	OFF
SELECT RIGHT	OFF
LAMP1	ON
LAMP2	OFF
LAMP3	OFF
LAMP4	OFF
LAMP5	OFF
LAMP6	OFF
PRESS TEST BUTTON TO EXIT	

FIG. 7.5a OUTPUT TEST

- This mode allows each lamp to be tested automatically. Approximately every other second, the display at the right of the name of lamp changes from OFF to ON in order. When ON is displayed, if the corresponding lamp is lit, it is satisfactory.
- Press the test Button to return to the MENU MODE.

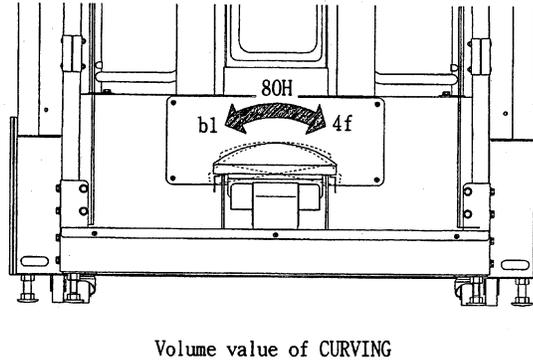
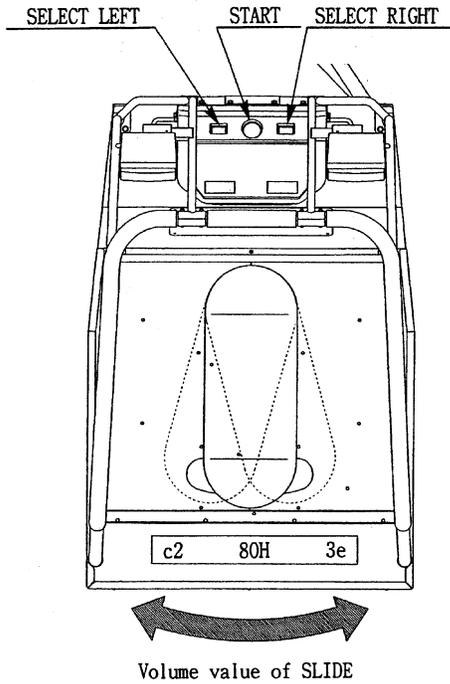


Fig. 7.4b

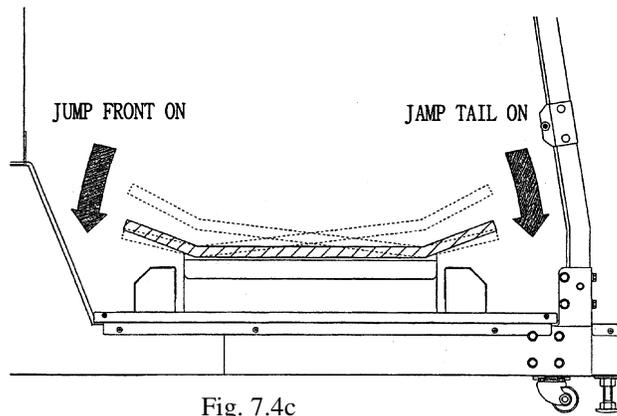


Fig. 7.4c

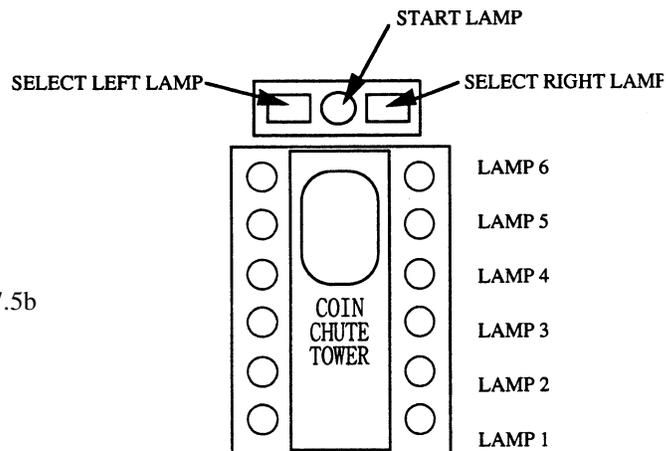


Fig. 7.5b

7 - 6 SOUND TEST

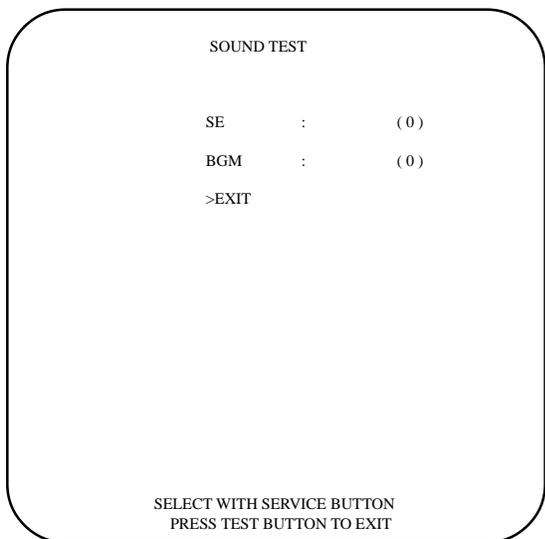


FIG. 7.6 SOUND TEST

- This enables sound used in the game to be checked. Sound related memory and each speaker are checked.
- Press the SERVICE BUTTON to bring the arrow to the desired sound item to be tested. SE refers to sound effects and BGM refers to background music.
- Each time the SERVICE BUTTON is pressed, the numeral displayed on the screen counts up and sound is admitted.
- Bring the “>” to EXIT and press the TEST BUTTON to return to the MENU MODE.

7 - 7 C.R.T. TEST

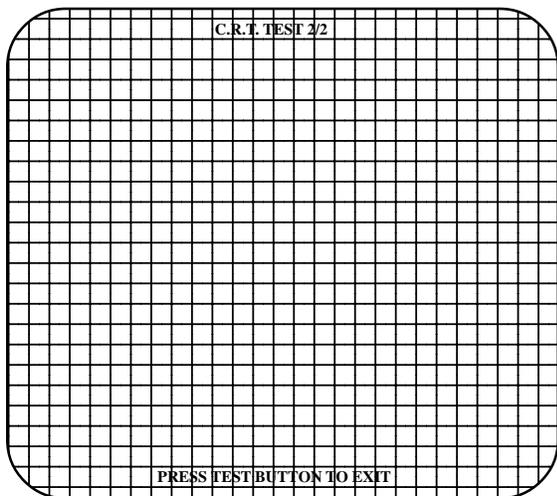
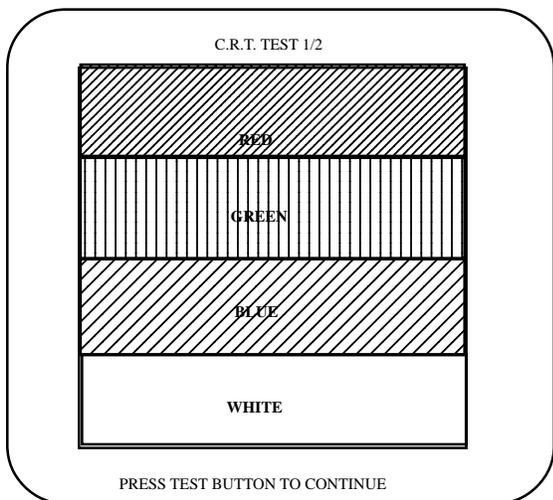


FIG. 7.7 C.R.T. TEST

- Select C.R.T. TEST to cause the MONITOR to display the screen shown left, allowing MONITOR adjustment status to be checked.
- Periodically check the MONITOR adjustment status on this screen.
- The screen (1/2) enables color adjustment check to be performed. The color bar of each of the 4 colors, i.e., red, green, blue, and white, is the darkest at the extreme left and becomes brighter towards the extreme right.
- Press the TEST BUTTON to shift to the next screen (2/2).
- The screen (2/2) allows screen size and distortion to be tested.
- Check if the CROSSHATCH FRAME LINE goes out of the screen and if the crosshatch lines are distorted.
- Press the TEST BUTTON to return to the MENU mode. (FIG. 6.2)

7 - 8 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



IMPORTANT!

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

- ① Press the SERVICE BUTTON to move the “>” to the desired item.
- ② Choose the desired setting change item by using the TEST BUTTON.
- ③ To return to the MENU mode, move the arrow to EXIT and press the TEST BUTTON.



- **ADVERTISE SOUND**
Determines whether ADVERTISE SOUND is to be emitted or not by the setting to ON when emitting it and to OFF when not emitting it.
- **GAME DIFFICULTY**
Sets the Game Difficulty in 8 categories from 1 to 8. The greater the number is, the higher the difficulty level becomes.

The Following FIGURES/TABLES show the factory recommended settings.

7 - 9 COIN ASSIGNMENTS

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

SETTING CHANGE PROCEDURE



IMPORTANT!

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

- ① Press the SERVICE BUTTON to move the arrow to the desired item.
- ② Choose the desired setting change item by using the TEST BUTTON.
- ③ To return to the MENU mode, move the arrow to EXIT and press the TEST BUTTON.

COIN ASSIGNMENTS			
COIN CHUTE TYPE	COMMON		
CREDIT TO START	2 CREDITS		
CREDIT TO CONTINUE	1 CREDIT		
COIN/CREDIT SETTING	#1		
CHUTE#1	1 COIN	1 CREDIT	
CHUTE#2	1 COIN	1 CREDIT	
MANUAL SETTING			
>EXIT			
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON			

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

COMMON:
Coins are accepted in common for both players.

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

- **CREDIT TO START**
Number of credits required for starting game (1~5 credits are selected.)
- **CREDIT TO CONTINUE**
Number of credits required for continuing game (1~5 credits are selected.)
- **COIN/CREDIT SETTING**
Sets the CREDITS increase increment per coin insertion. There are 27 settings from #1 to #27, expressed in XX CREDIT as against XX COINS inserted. (TABLE 7.9a, 7.9b) #27 refers to FREE PLAY.
When the COIN CHUTE TYPE is set to INDIVIDUAL, there are some setting numbers not displayed as indicated in TABLE 7.9b.
- **MANUAL SETTING**
This allows credit increase setting as against coin insertion to be further set in the manner finer than COIN/CREDIT SETTING (refer to TABLE 7.9c).

TABLE 7.9a 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 2 COINS	1 CREDIT 3 CREDITS
SETTING #16	1 COIN	3 CREDITS
SETTING #17	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT
SETTING #19	1 COIN 2 COINS 3 COINS 4 COINS	1 CREDIT 2 CREDITS 3 CREDITS 5 CREDITS
SETTING #20	1 COIN	5 CREDITS
SETTING #21	5 COINS	1 CREDIT
SETTING #22	1 COIN	2 CREDITS
SETTING #23	2 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS
SETTING #24	1 COIN	3 CREDITS
SETTING #25	1 COIN 2 COINS 3 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS 4 CREDITS 6 CREDITS
SETTING #26	1 COIN	1 CREDITS
SETTING #27	FREE PLAY	

MANUAL SETTING

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

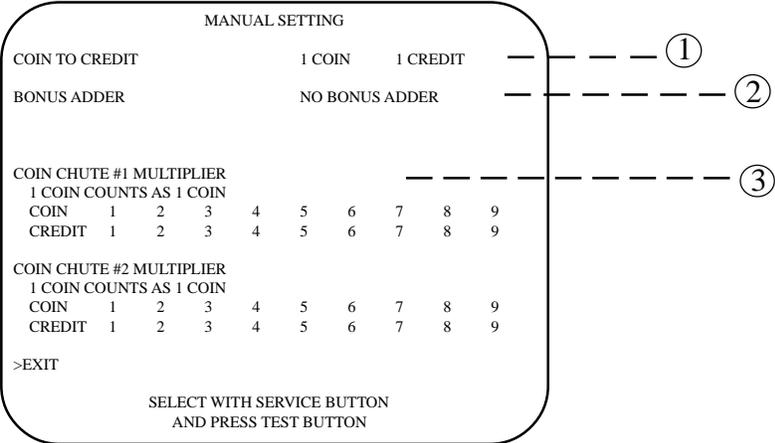


FIG. 7.9b MANUAL SETTING

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

Table 7.9c MANUAL SETTING

COIN TO CREDIT	1 COIN	1 CREDIT
	2 COINS	1 CREDIT
	3 COINS	1 CREDIT
	4 COINS	1 CREDIT
	5 COINS	1 CREDIT
	6 COINS	1 CREDIT
	7 COINS	1 CREDIT
	8 COINS	1 CREDIT
	9 COINS	1 CREDIT
BONUS ADDER	NO BONUS ADDER	
	2 COINS GIVE 1 EXTRA COIN	
	3 COINS GIVE 1 EXTRA COIN	
	4 COINS GIVE 1 EXTRA COIN	
	5 COINS GIVE 1 EXTRA COIN	
	6 COINS GIVE 1 EXTRA COIN	
	7 COINS GIVE 1 EXTRA COIN	
	8 COINS GIVE 1 EXTRA COIN	
	9 COINS GIVE 1 EXTRA COIN	
COIN CHUTE MULTIPLIER	1 COIN COUNTS AS 1 COIN	
	1 COIN COUNTS AS 2 COINS	
	1 COIN COUNTS AS 3 COINS	
	1 COIN COUNTS AS 4 COINS	
	1 COIN COUNTS AS 5 COINS	
	1 COIN COUNTS AS 6 COINS	
	1 COIN COUNTS AS 7 COINS	
	1 COIN COUNTS AS 8 COINS	
	1 COIN COUNTS AS 9 COINS	

7 - 10 BOARD SETTING

In the Board setting, the value for each of CURVING AND SLIDE Volumes (which detects the operation of the Skate Board) can be set.

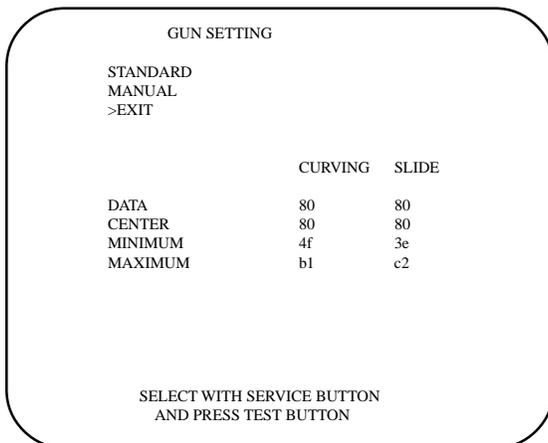


Fig. 7.10a BOARD SETTING

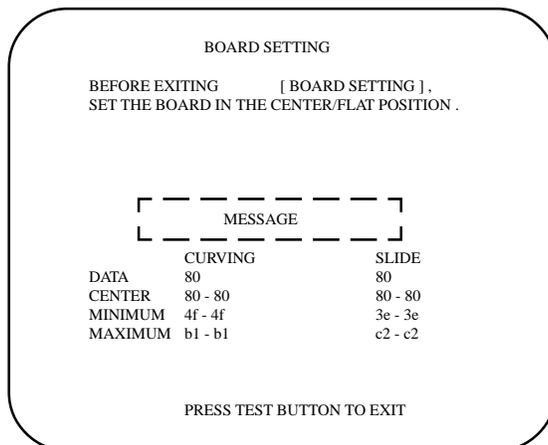


Fig. 7.10b STANDARD SETTING

In the MENU MODE, selecting the BOARD SETTING displays the screen shown left. This mode allows for setting the centering position value and in-out range of the Volume which detects the operation of the Skate Board. The Skate Board Volume value differs depending on the specific machine and also, can be deviated during transportation. After installation and assembling, check the Volume value and its variations in this mode. If the Value is widely varies from the recommended value, set the Volume value in the following procedure:

These are two setting methods, i.e., STANDARD and MANUAL.

STANDARD

Setting the value set at the time of centering automatically determines the input range.

MANUAL

Manually sets both of the value set at the time of centering and the input range (maximum and minimum).

DATA

Indicates the Skate Board's present Volume value. When the Skate Board is operated, the value varies.

CENTER

Present Volume value set at this time of centering the Skate Board.

MINIMUM

The Volume's Minimum value set at present.

MAXIMUM

The Volume's Maximum value set at present.

If the Skate Board can not be operated satisfactorily even after the Volume setting is performed in this mode, adjust or replace the Volume by referring to Section 8.

- Enter the BOARD SETTING mode.
- Select STANDARD and press the TEST BUTTON. The screen changes to Fig. 7.10b.
- Set the Skate Board in the center/flat position. The Value obtained at this time is the CENTER value.
- Press the TEST BUTTON to exit from BOARD SETTING, display the BOARD SETTING DATA HAS BEEN DISPLAYED message, and change the setting. The screen returns to the menu mode.

MANUAL SETTING

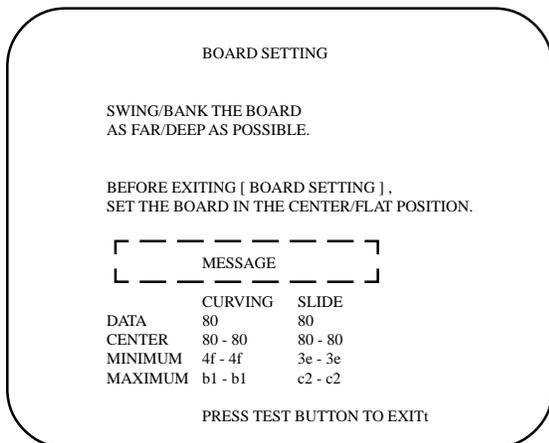


Fig. 7.10c MANUAL SETTING

- Enter the BOARD SETTING mode.
- Select MANUAL and press the TEST BUTTON. the screen changes to 7.10c.
- Get on the Skate Board, operate for right/left CURVING and inclination SLIDE evenly in both directions to set the minimum/maximum Volume values. At this time, setting a wider input range makes turning more difficult in actual play and setting a narrower input makes turning easier.
- Set the Skate Board in the center direction and level position. What is set at this time is the CENTER value.
- Press the TEST BUTTON to exit from BOARD SETTING to display BOARD SETTING DATA HAS BEEN UPDATED message and change the setting. The screen returns to the MENU MODE.
- If the Board is not operated and settings are not changed, the message of “THE BOARD SETTINGS HAS NOT BEEN CHANGED. BACKUP DATA HAS NOT BEEN UPDAED” is displayed.
- When exiting from the BOARD SETTING screen without setting the Skate Board to the center position, the machine will determine the inclination and angle of the Skate Board at that time as the center position and therefore, the game can not be played satisfactorily.
When the Skate Board is set to the center postion, if the Volume value is not within the range of 80H-/+8, then the Volume gear engagement fault an Volume malfunctioning may be considered. By referring to section 8, take appropriate countermeasures.

7 - 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.

BOOKKEEPING		PAGE1/2
COIN REPORT		
COIN CHUTE #1		XXXXXXXXXX
COIN CHUTE #2		XXXXXXXXXX
TOTAL COINS		XXXXXXXXXX
COIN CREDITS		XXXXXXXXXX
SERVICE CREDITS		XXXXXXXXXX
TOTAL CREDITS		XXXXXXXXXX
NUMBER OF GAMES		
1 P GAMES		XXXXXXXXXX
2 P GAMES		XXXXXXXXXX
NUMBER OF CONTINUE		
1 P GAMES		XXXXXXXXXX
2 P GAMES		XXXXXXXXXX
TOTAL	TIME	XXXXXXXXXX
PLAY	TIME	XXXXXXXXXX
AVERAGE PLAY	TIME	XXMXXS
LONGEST PLAY	TIME	XXMXXS
SHORTTEST PLAY	TIME	XXMXXS

PRESS TEST BUTTON TO CONTINUE

FIG. 7.11a BOOKKEEPING (1/2)

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

BOOKKEEPING		PAGE 2/2
TIME HISTOGRAM		
0M00S ~ 0M29S		XXXXXXXXXX
0M30S ~ 0M39S		XXXXXXXXXX
0M40S ~ 0M49S		XXXXXXXXXX
0M50S ~ 0M59S		XXXXXXXXXX
1M00S ~ 1M09S		XXXXXXXXXX
1M10S ~ 1M19S		XXXXXXXXXX
1M20S ~ 1M29S		XXXXXXXXXX
1M30S ~ 1M39S		XXXXXXXXXX
1M40S ~ 1M49S		XXXXXXXXXX
1M50S ~ 1M59S		XXXXXXXXXX
4M00S ~ 4M09S		XXXXXXXXXX
4M10S ~ 4M19S		XXXXXXXXXX
4M20S ~ 4M29S		XXXXXXXXXX
4M30S ~ 4M39S		XXXXXXXXXX
4M40S ~ 4M49S		XXXXXXXXXX
4M50S ~ 4M59S		XXXXXXXXXX
5M00S ~		XXXXXXXXXX

PRESS TEST BUTTON TO EXIT

FIG. 7.11b BOOKKEEPING (2/2)

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

When in the PAGE 2/2 mode, press the TEST BUTTON to return to the MENU mode (FIG.7.2).

7 - 12 BACKUP DATA CLEAR

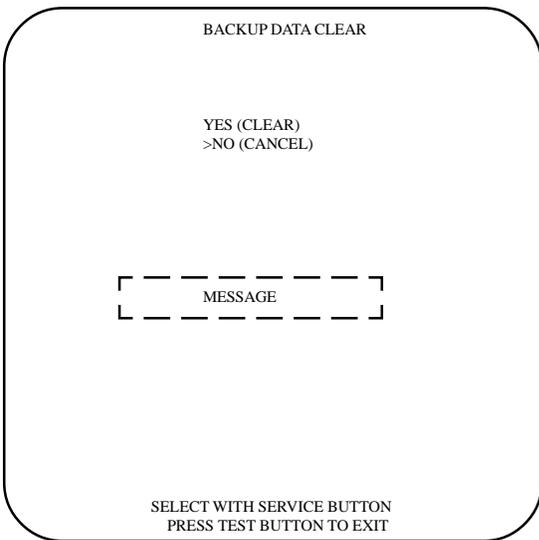


FIG. 7.12 BACKUP DATA CLEAR

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

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

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

8. MAINTENANCE OF MECHANISM UNIT



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

8 - 1 ADJUSTMENT AND REPLACEMENT OF SLIDE VOLUME

- ① Turn the power OFF.
- ② Take out the 6 screws and remove LID FRONT (photo 8.1a)
- ③ The mechanism part of the SLIDE Volume can be viewed (photo 8.1b)
- ④ Loosen the 2 screws which secure the Volume bracket to move the Volume Bracket
- ⑤ Move the Volume Bracket to adjust gear engagement.
- ⑥ Fasten the 2 screws to secure the Volume Bracket.
- ⑦ Perform Volume setting as per the Board setting procedure (7-10) in the TEST MODE.
- ⑧ If the Volume is malfunctioning, first disconnect the connector which is connected to the Volume, remove the 2 screws which secure the Volume Bracket, and remove the Volume Bracket together with the Volume as is attached
- ⑨ Remove the gear from the Volume Shaft and replace the Volume.

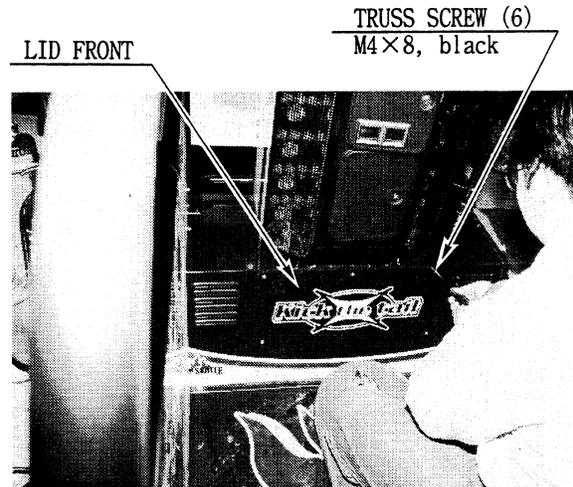


Photo 8.1a

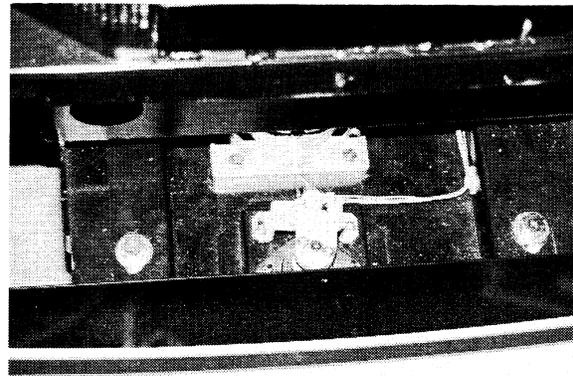


Photo 8.1b

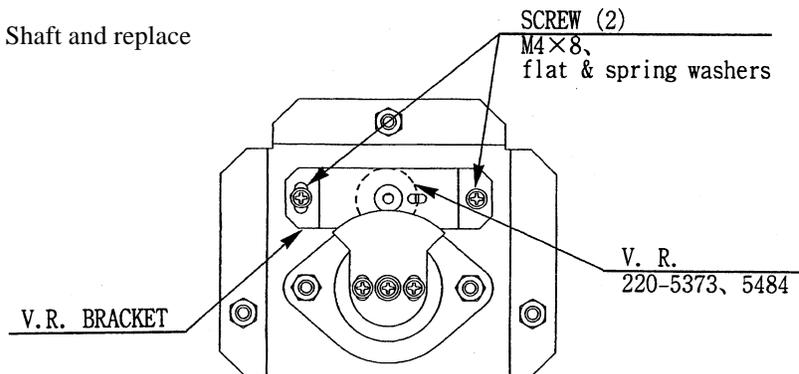


Fig. 8.1

8 - 2 ADJUSTMENT AND REPLACEMENT OF CURVING VOLUME

- ① Turn the power SW OFF.
- ② Take out the 5 Truss screws and remove Rubber Upper A (photo 8.2a).
- ③ Take out the 3 Truss screws and remove Rubber Lower (photos 8.2b & 8.2c).
- ④ Take out the 2 screws and remove blind box A (photo 8.2d).
- ⑤ Loosen the 2 screws, which secure the Volume Bracket, to move the Volume Bracket (Fig. 8.2).

TRUSS SCREW (5) black
M4×8,
flat washer used.

RUBBER UPPER A

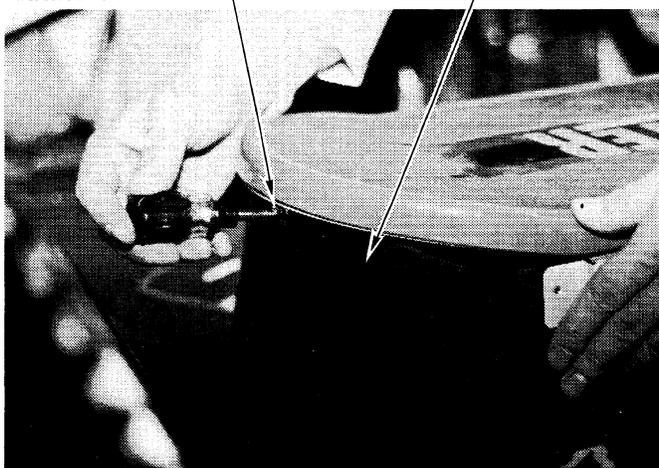


Photo 8.2a

- ⑥ Move the Volume Bracket to adjust gear engagement.
- ⑦ Fasten the 2 screws to secure the Volume Bracket.
- ⑧ Perform Volume setting as per BOARD SETTING (7-10) in the TEST MODE.
- ⑨ When the Volume is malfunctioning, first disconnect the connector which is connected to the Volume, take out the 2 screws which secure the Volume Bracket, together with the Volume as is attached.

TRUSS SCREW (3) black
M4×8,
flat washer used.

RUBBER LOWER

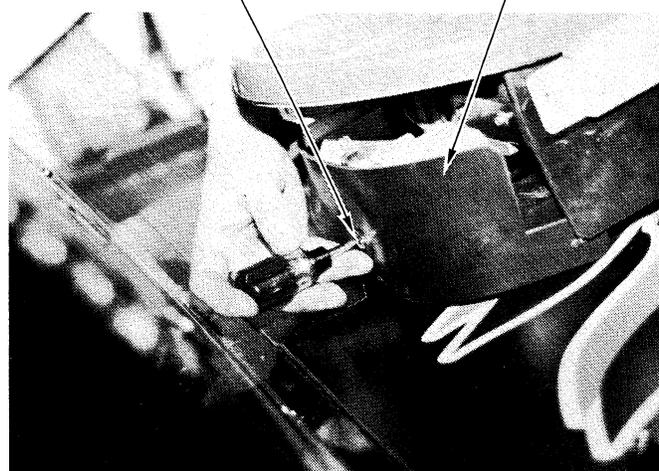


Photo 8.2b

- ⑩ Disengage the gear from the Volume shaft and replace the Volume.

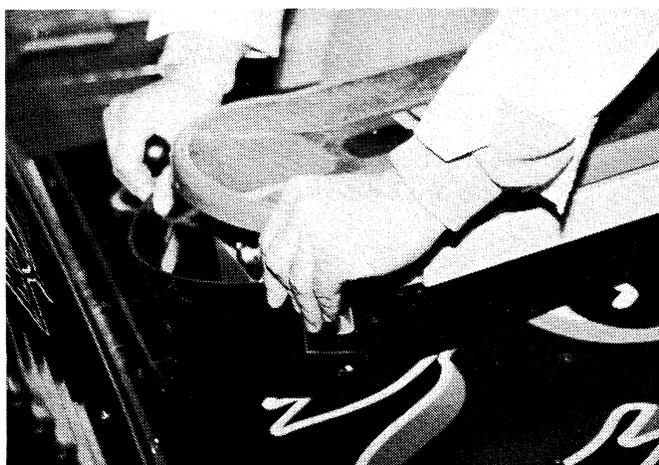
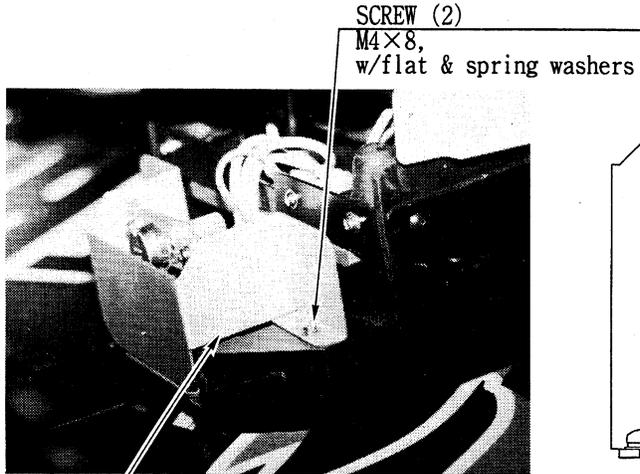


Photo 8.2c



BLIND BOX A

Photo 8.2d

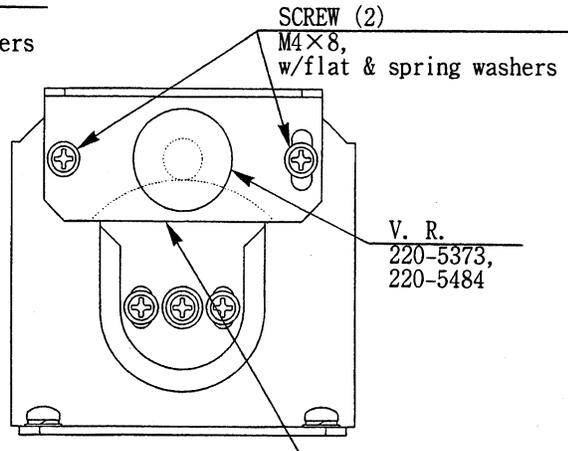


Fig. 8.2

8 - 3 GREASING



IMPORTANT!

- Besure to use designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to places other than those specified. Greasing to undesignated places can cause malfunctioning and the qualitative deterioration of parts.

Once every 3 months, apply greasing to the Volume gear mesh portion and the R guide. For spray greasing, use GREASE MATE (PART No. 090-0066).

GREASING TO SLIDE VOLUME

Remove LID FRONT to apply greasing to the Volume gear portion (photo 8.3a).

GREASING TO CURVING VOLUME

Remove Rubber Upper A and Rubber Lower to apply greasing to the Volume gear portion (photo 8.3b).

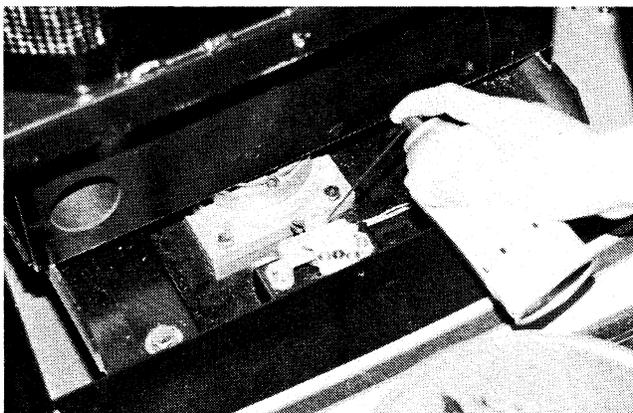


Photo 8.3a

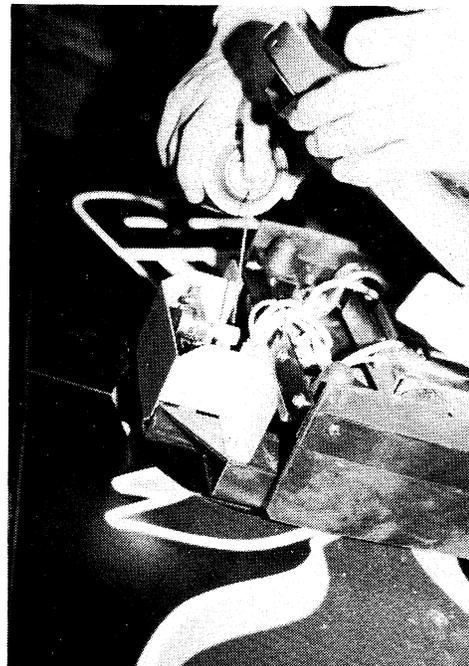


Photo 8.3b

GREASING TO R GUIDE

- ① Remove Rubber Upper A and Rubber Lower from the rear part of the Skate Board.
- ② The hole (through which greasing is applied) is located inside Blind Box A.
- ③ Insert the spray grease nozzle into the hole used for greasing, and perform spray greasing (photo 8.3c and Fig 8.3a).



Photo 8.3c

- ④ Move the Skate Board right&left and ensure that the R Guide is lubricated smoothly and satisfactorily all over.

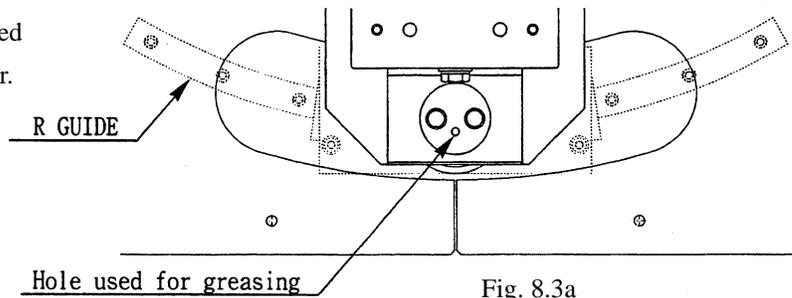


Fig. 8.3a

GREASING TO BRAKE GEAR

Move either right or left REAR LID of the Rear Cabinet to apply greasing to the Brake Gear.

- ① Take out the 4 screws which secure the Rear Lid (Fig. 8.3b).
- ② Take out the 3 screws to remove the Sash Part on the side to be removed (photo 8.3d).

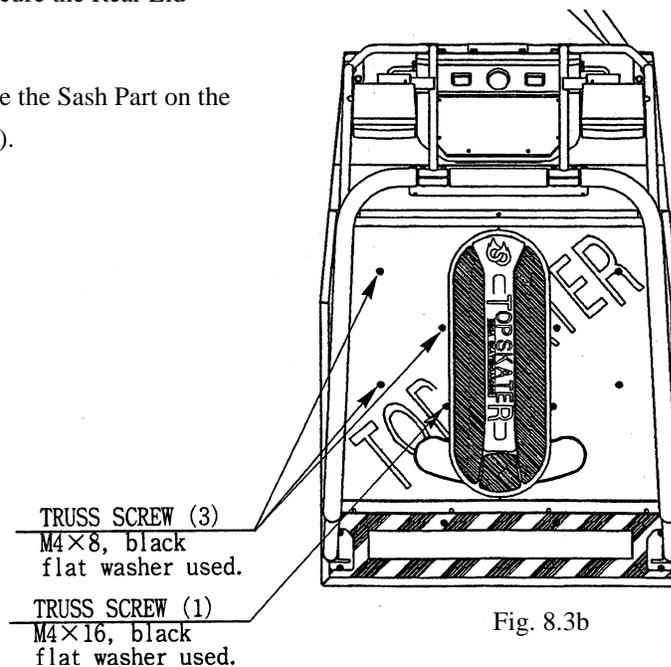


Fig. 8.3b

- ③ Loosen the screw which secures the Rear Lid (photo 8.3e).
- ④ Move the Rear Lid so as to have the square hole used for greasing appear (photo 8.3f).
- ⑤ It the spray grease nozzle into the square hole, and apply greasing to the Brake Gear engagement portion (photo 8.3g).

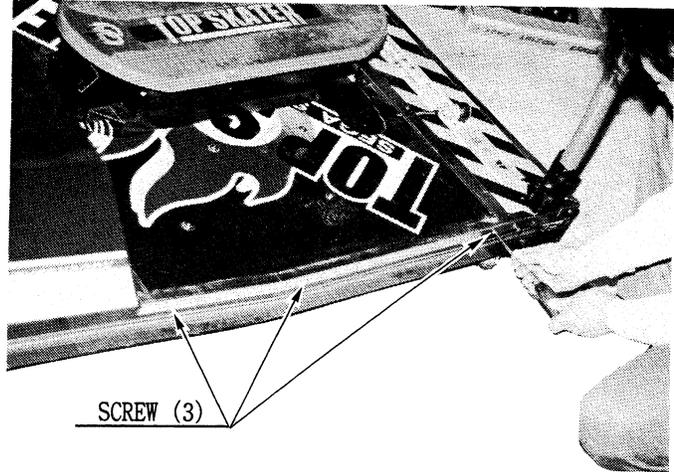


Photo 8.3d



Photo 8.3e

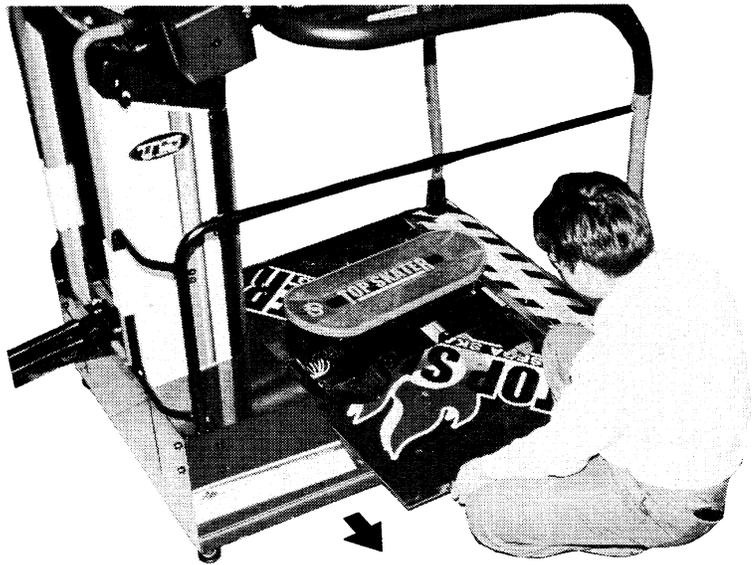


Photo 8.3f

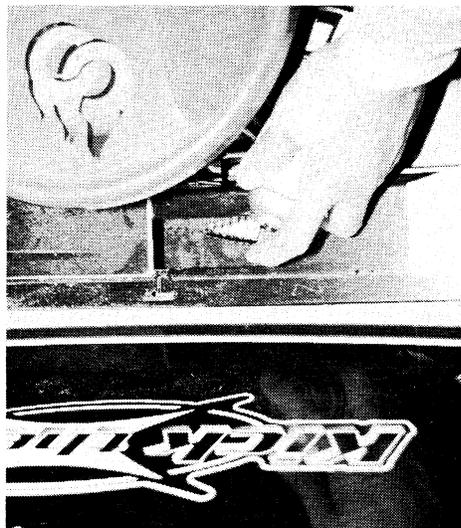


Photo 8.3g

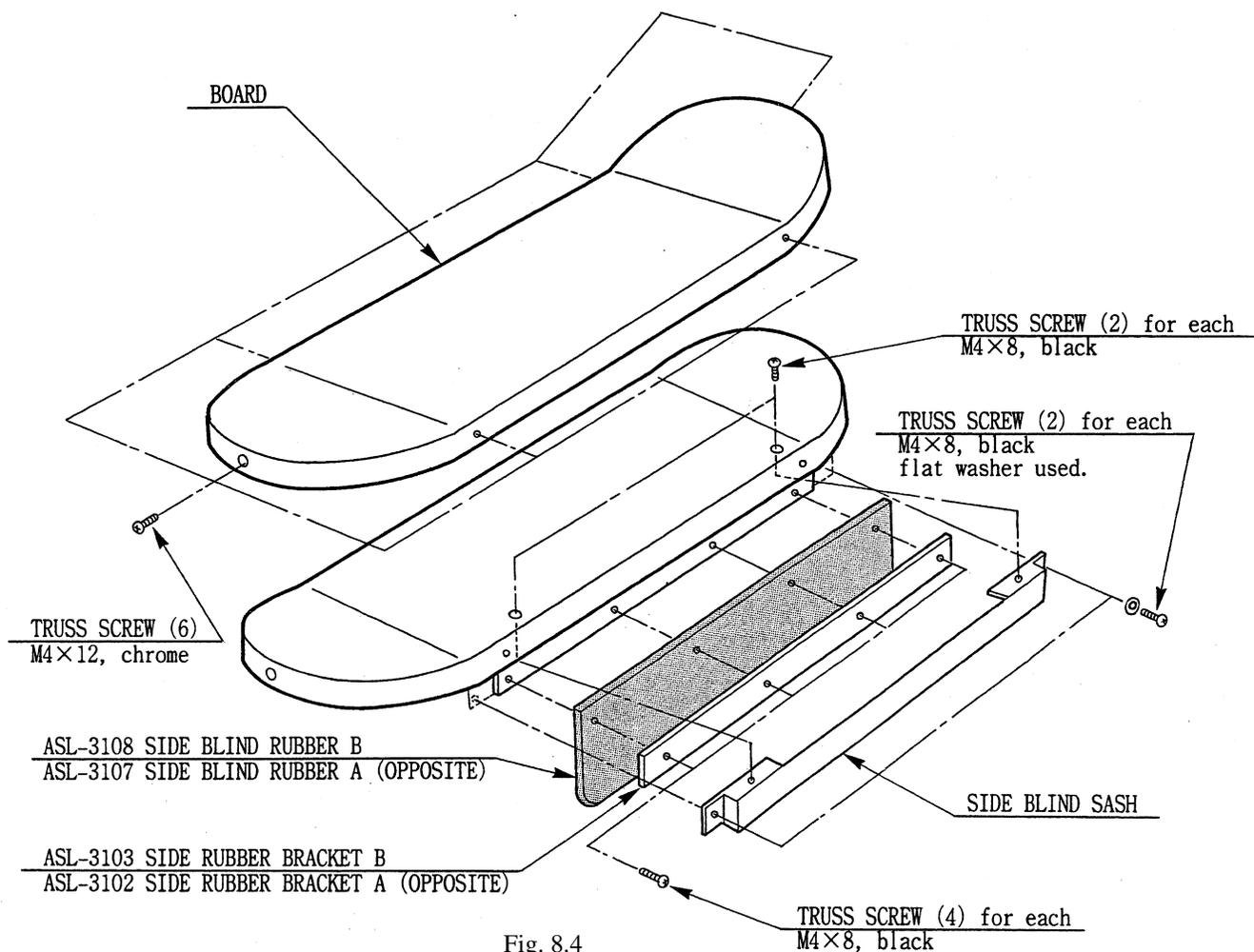
8 - 4 REPLACEMENT OF HAZARD PREVENTIVE PARTS



If the hazard preventive parts have any irregularity, be sure to replace the part(s) immediately. Operating with the part(s) damaged or omitted can cause injury.

For the replacement of Rubber Upper A and Rubber Lower, refer to 8 - 2.

- ① Take out the 6 screws to remove the Skate Board.
- ② Take out the 4 screws to remove Side Blind Sash Fasten the 2 screws on the side portion together with Rubber Upper A.
- ③ Take out the 4 screws, remove Side Rubber and Side Rubber Bracket to replace the Side Rubber.



9 . COIN SELECTOR

HANDLING THE COIN JAM

If the coin is not rejected when the REJECT BUTTON is pressed, open the coin chute door and open the selector gate. After removing the jamed coin, put a normal coin in and check to see that the selector correctly functions.

CLEANING THE COIN SELECTOR

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

- ① Turn the power for the machine OFF.
Open the coin chute door.
- ② Open the gate and dust off by using a soft brush (made of wool, etc.).
- ③ Remove and 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.

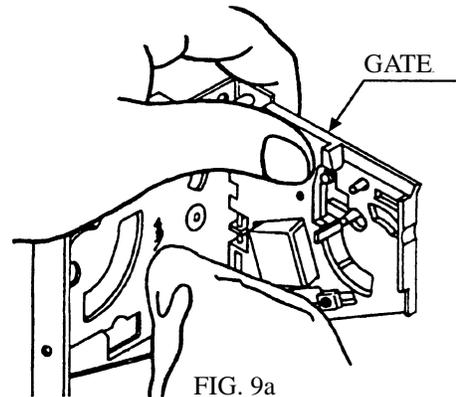


FIG. 9a

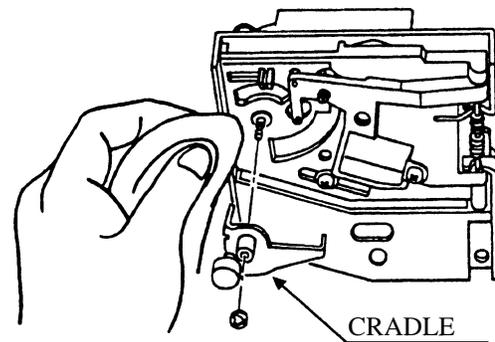


FIG.9b



IMPORTANT!

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

COIN INSERTION TEST

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

- Does the Coin Meter count satisfactorily?
- Does the coin drop into the Cashbox correctly?
- Is the coin rejected when inserted while keeping the REJECT BUTTON is pressed down?

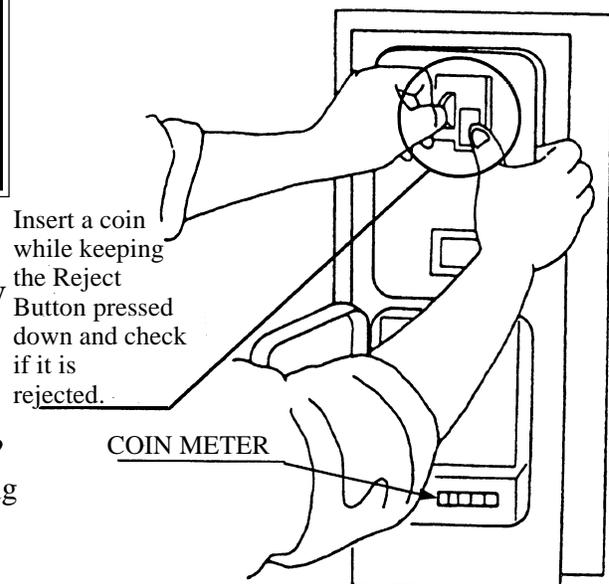


FIG. 9c

OPTIONAL DOLLAR BILL ACCEPTOR

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

● THE COIN DOOR CAN ACCCOMMODATE THE FOLLOWING VALIDATORS:

HOLE POSITION#1
(FORWARD-MOST POSITION)

VFM5 (MARS)
AL4 (MARS)

HOLE POSITION#2

VFM2 (MARS)
VFM4 (MARS)
DBV45 (JCM)

HOLE POSITION #3

CURRENTLY NOT USED

HOLE POSITION #4

DSI01*

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

10 . PROJECTOR



CAUTION!

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



IMPORTANT!

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

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

10 - 1 CLEANING THE SCREEN



CAUTION!

Since the Projector screen is susceptible to damage, pay careful attention to it's handling. When cleaning, refrain from using water or volatile chemical.

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

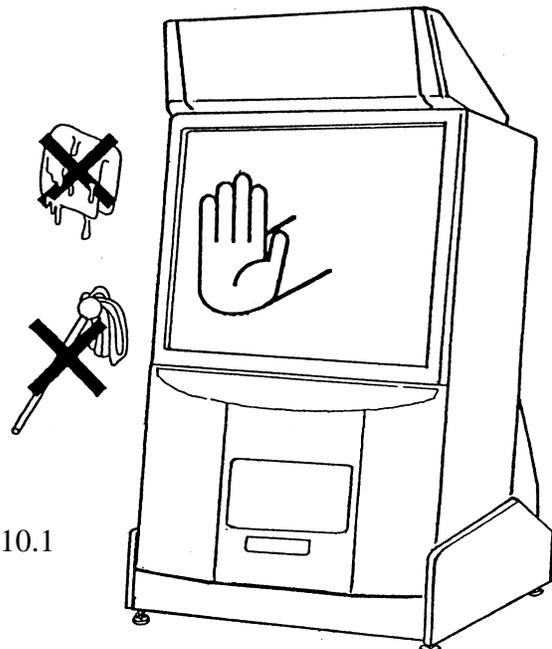
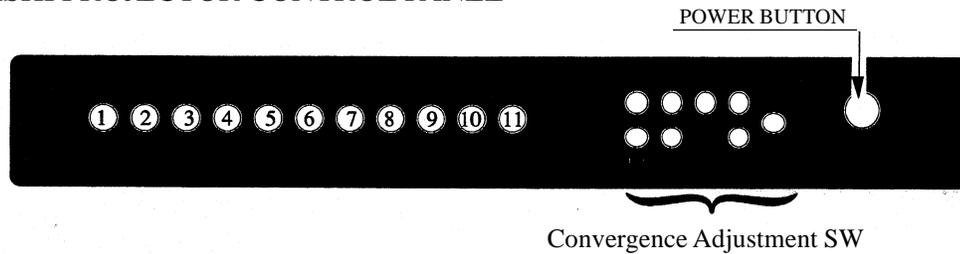


Fig. 10.1

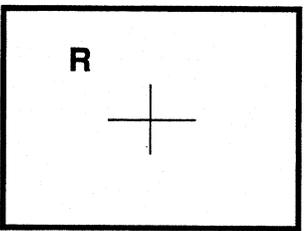
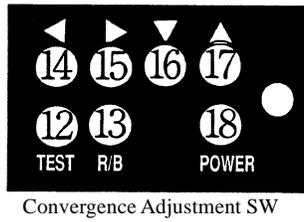
10 - 2 MITSUBISHI PROJECTOR

□ MITSUBISHI PROJECTOR CONTROL PANEL



- | | | | | |
|----------|---|----------|----------|----------|
| 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
(red or blue) are made. | | | |
| ⑪ B.H.L. | | | | |

STATIC CONVERGENCE ADJUSTMENT



- | | |
|---------|----------------------|
| ⑫ TEST | Test mode on/off key |
| ⑬ R/B | R/B key |
| ⑭ ◀ | Left shift key |
| ⑮ ▶ | Right shift key |
| ⑯ ▽ | Lower shift key |
| ⑰ ▲ | Upper shift key |
| ⑱ POWER | Power button |

- ① For the Convergence adjustment mode, press the test mode on/off key. ⑫
- ② Ensure that “R” is displayed on the screen.
- ③ Make adjustments so as to cause the red cross pattern to match with the green cross pattern by using Left shift key ⑭, Right shift key ⑮, Lower shift key ⑯, and Upper shift key ⑰.
- ④ By using R/B shift key ⑬, cause the red adjustment “R” to shift to blue adjustment “B” and make sure that “B” is displayed on the screen.
- ⑤ In the same manner as in 3 above, cause the blue cross pattern to match with the green cross pattern.
- ⑥ After making adjustment, press the test mode on/off key ⑫ to cancel the convergence adjustment mode.

STATIC CONVERGENCE ADJUSTMENT METHOD WITH REMOTE CONTROL



- Although Remote Control Buttons other than those specified below do not function even if pressed during Convergence Adjustment, do not press them during adjustment work so as to avoid causing malfunctioning.
- Operate the Remote Control towards the PTV screen. If directed other than to the PTV screen, the Remote Control does not function.

BEFORE USING REMOTE CONTROL:

First make sure that the main SW on the Projector's control panel is ON (the LED adjacent to the main SW is lit).

The Remote Control has 2 different types. Depending on the type, the Adjustment procedure is different.

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

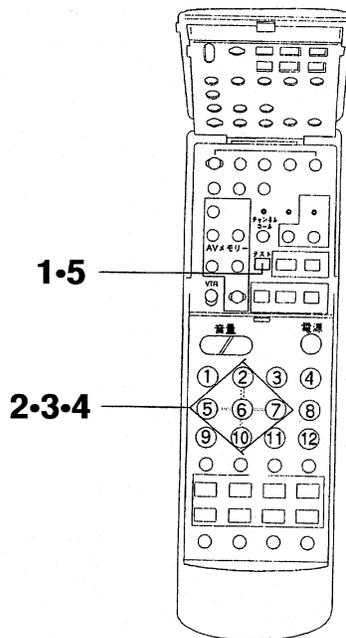
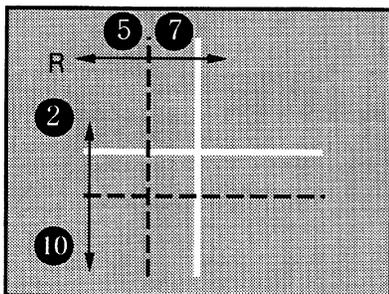
- ① For the Convergence Adjustment mode, press the test button. Ensure that "R" is displayed on the screen.
- ② Make adjustment so as to cause the red cross pattern to match with the green cross pattern. When the red cross matches the green cross, the green cross turns yellow or white.

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

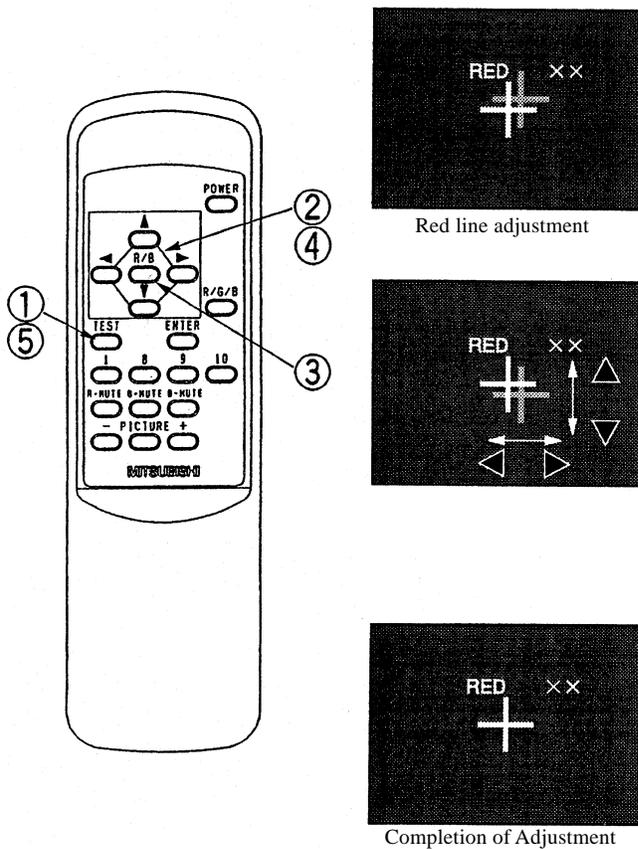
- Button
- ⑤ ————— to the left
 - ⑦ ————— to the right
 - ② ————— Upward
 - ⑩ ————— Downward

- ③ Use Remote Control button 6 to shift "R" to "B". Make sure that "B" is displayed on the screen. Each time Button ⑥ is pressed, red and blue adjustments are shifted.
- ④ In the same manner as in ② above, cause the blue cross to match the green cross. When the blue cross matches the green cross, the green cross turns white.
- ⑤ After adjustment is made, press the test button to cancel the Convergence Adjustment mode.

*When 2 minutes or more elapses in the Convergence mode screen without taking any action, the on-screen adjustment mode will disappear.



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



- ① Press the TEST KEY to have the red line adjustment screen appear.
- ② Superimpose the red cross on the green cross at the center of the screen.
Move the red cross to the left, right, up, and down respectively with the corresponding buttons of the remote control.
When the red cross is superimposed on the green cross, the green cross turns into yellow or white.
- ③ Press the R/B Key to have the blue line adjustment screen appear. Each time R/B Key is pressed, the red line and blue line will be alternated.
- ④ In the manner similar to ② above, press each key to superimpose the blue cross on the green cross. When it is superimposed, the cross in the center will become white.
- ⑤ Press the TEST KEY to exit from the adjustment mode.

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

11 . REPLACEMENT OF FLUORESCENT LAMP AND LAMPS



WARNING!

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

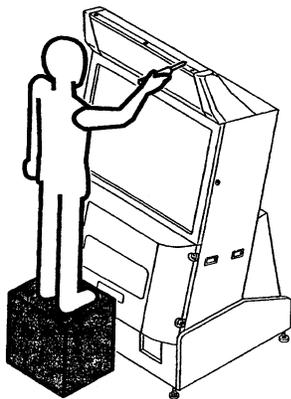


CAUTION!

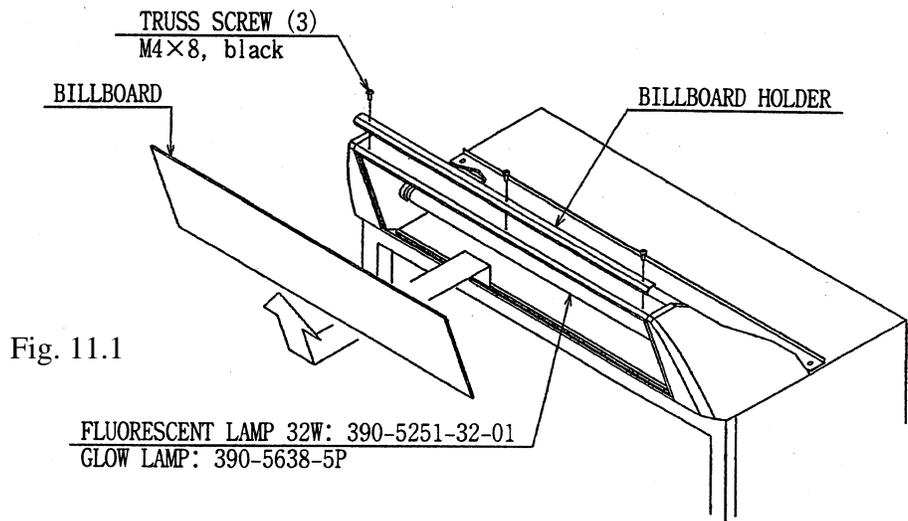
To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Not using a step or using an unstable step can cause a violent falling down accidents.

11 -1 REPLACEMENT OF FLUORESCENT LAMP

- ① Take off the 3 screws which secure the Holder on the upper part of Billboard.
- ② Take out the billboard from the cabinet and replace the fluorescent lamp (20W)



When performing work, prepare a step.



11 -2 REPLACEMENT OF LAMP

As shown in photo 11.2, take out 2 screws from each "lamp net" to replace the lamp.

TRUSS SCREW (2) for each
M4x8, black

LAMP NET

LAMP
390-5705

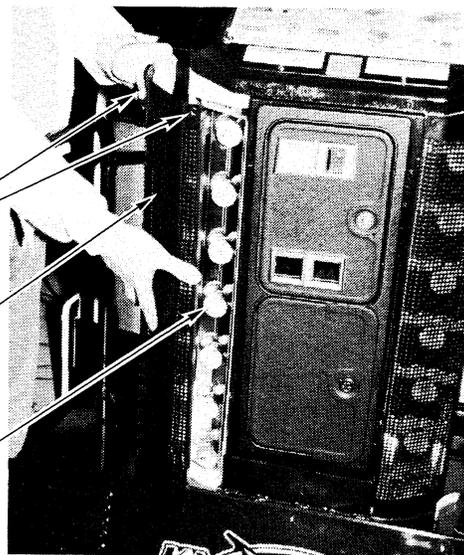


Photo 11.2

12 . PERIODIC INSPECTION TABLE

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



- Be sure to check once a year to see if Power Cords are damaged, the plug is securely inserted, dust is accumulated between the Socket Outlet and the Power Plug, etc. Using the product with dust as is accumulated can cause a fire or electrical shock.
- Periodically once a year, request the place of contact herein 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
CABINET	Ensure that adj. are in contact with floor	Daily	1
	Check hazard preventive parts	Daily	1
SKATE BOARD	Check volume and sensor	Monthly	7
	Apply greasing to volume gear, R guide and brake gear	Trimonthly	7
COIN SELECTOR	Check COIN SW	Monthly	7
	COIN SELECTOR cleaning	Trimonthly	9
PROJECTOR	Screen cleaning	Weekly	10
	Check adjustments	Monthly	4, 7, 10
GAME BD	Setting check,	Monthly	7
INTERIOR	Cleaning	Annually	see above.
POWER PLUG	Inspection and cleaning		
CABINET SURFACE	Cleaning	As necessary	see below

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 squeezed 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.

13 . TROUBLESHOOTING



WARNING!

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

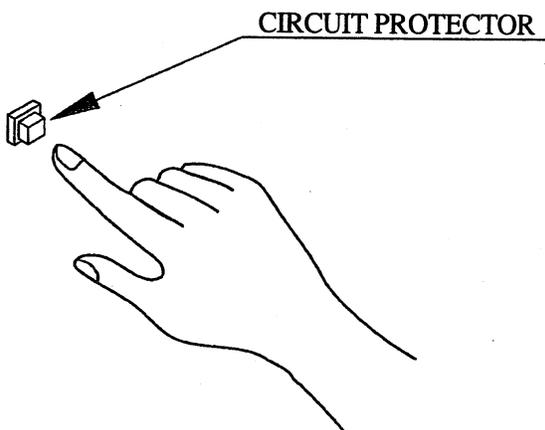
Should trouble occur, first check connector connections.

PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation	<p>Power is not supplied.</p> <p>Power supply/voltage is not correct.</p> <p>AC main fuse causes the power to be cut off due to momentary overload.</p> <p>The Circuit Protector functioned due to momentary overcurrent.</p>	<p>Plug in correctly</p> <p>Make sure that power supply/voltage is correct.</p> <p>Check fuse. Remove the cause of overload and replace fuse</p> <p>Remove the cause of overload and reset Circuit Protector</p>



WARNING!

After removing the cause of the functioning of the Circuit protector, reinstate the Circuit Protector. Depending on the cause of the functioning, using the Circuit Protector as is without removing the cause could result in generation of heat and fire.



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

13 - 1 REPLACEMENT OF FUSE



WARNING!

- In order to prevent an electric shock, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident
- After eliminating the cause of the blowing of fuse, replace the fuse.
Depending on the cause of the fuse blowing, using the fuse as is blown can cause generation of heat resulting in fire.

POWER SUPPLY UNIT

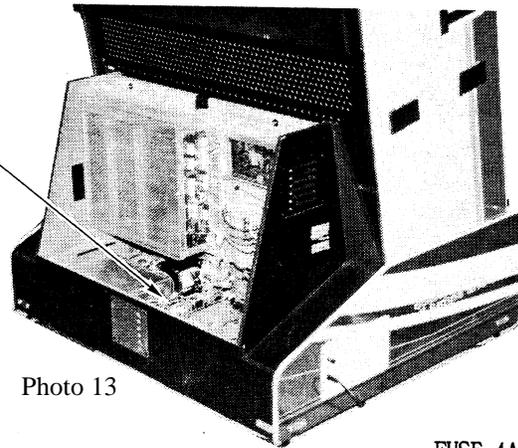
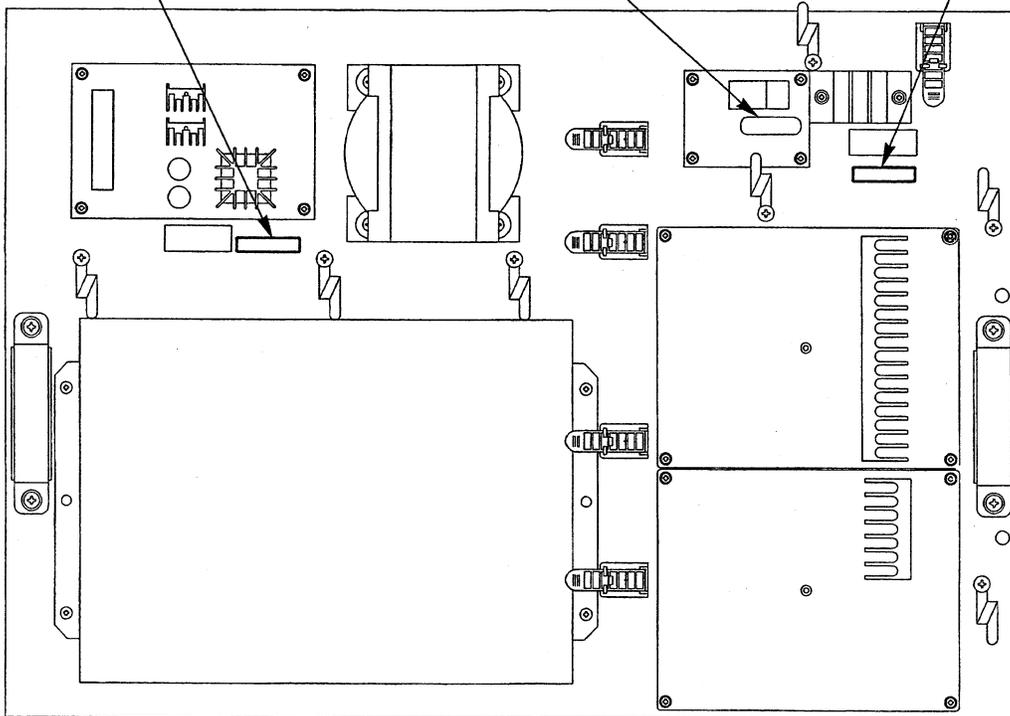


Photo 13

FUSE 2A
514-5086-2000

FUSE 7A
514-5036-7000

FUSE 4A
514-5086-4000



REAR VIEW

Fig. 13 POWER SUPPLY UNIT

14 . GAME BOARD



- 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.



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.

14 -1 REMOVING THE IC BOARD

Remove the Back Door from the rear part of the PTV Base to have the Power Supply Unit appear. There are three types of fuses on the Power Supply Unit.

- ① Take out the 2 Truss screws, unlock with the Master Key, and remove the Back Door from the rear part of the Front Cabinet. (photo 14.1a)

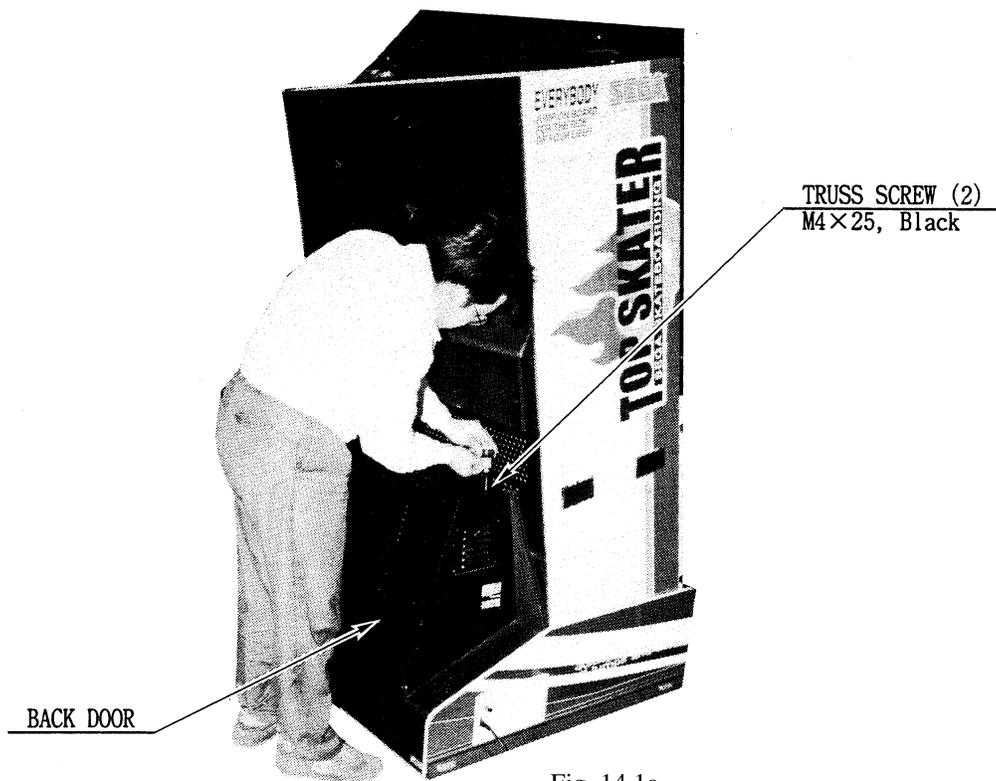
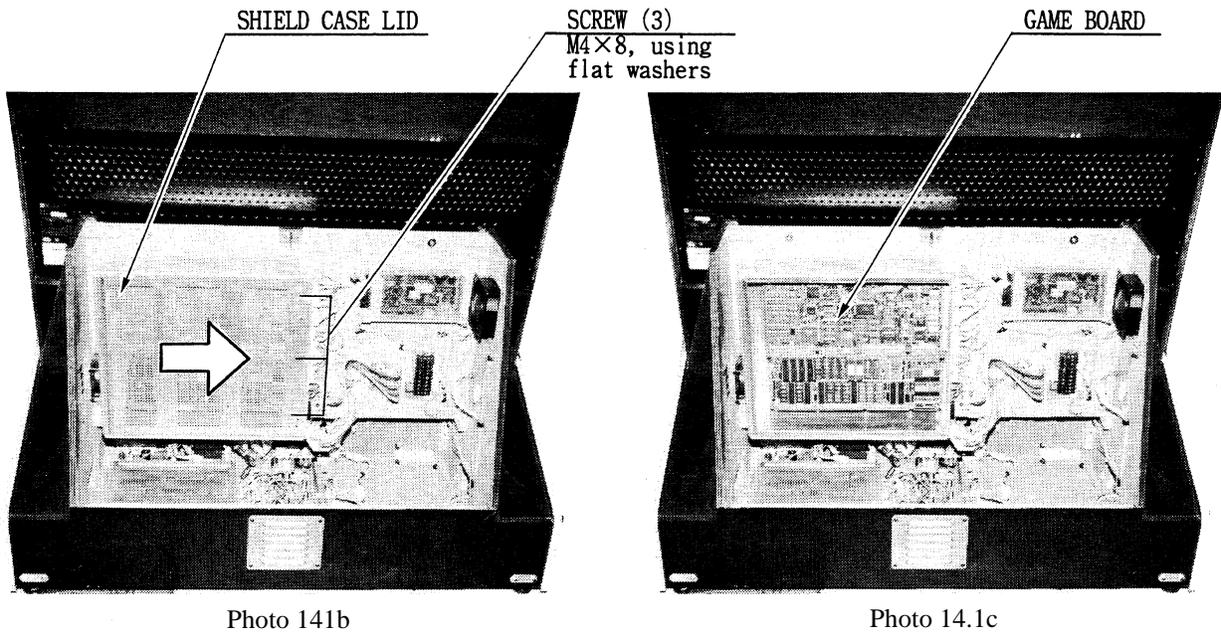


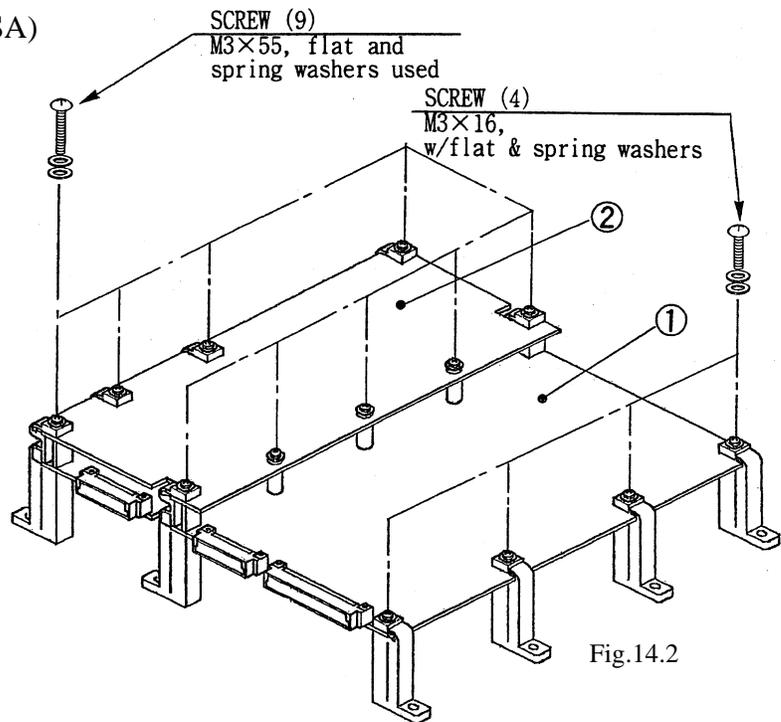
Fig. 14.1a

- ② Take out the 3 screws and remove Shield Case Lid to have the Game Board appear.
 (photo 14.1b,c)

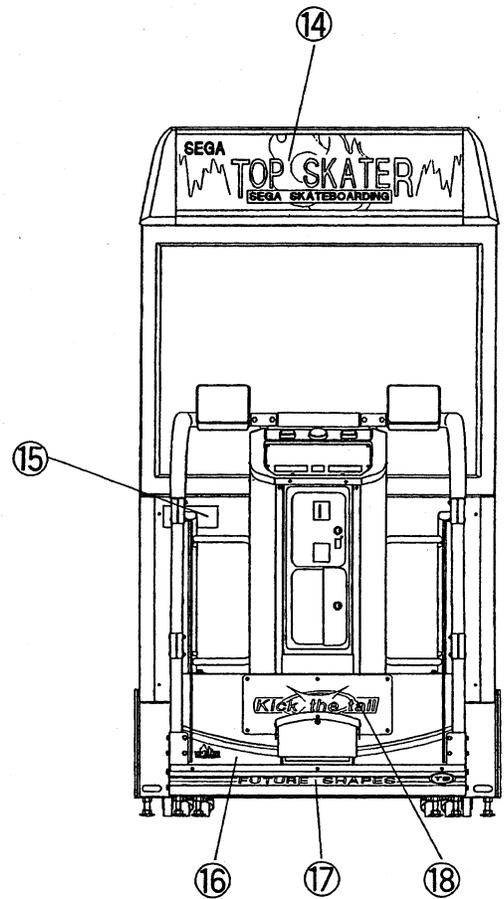
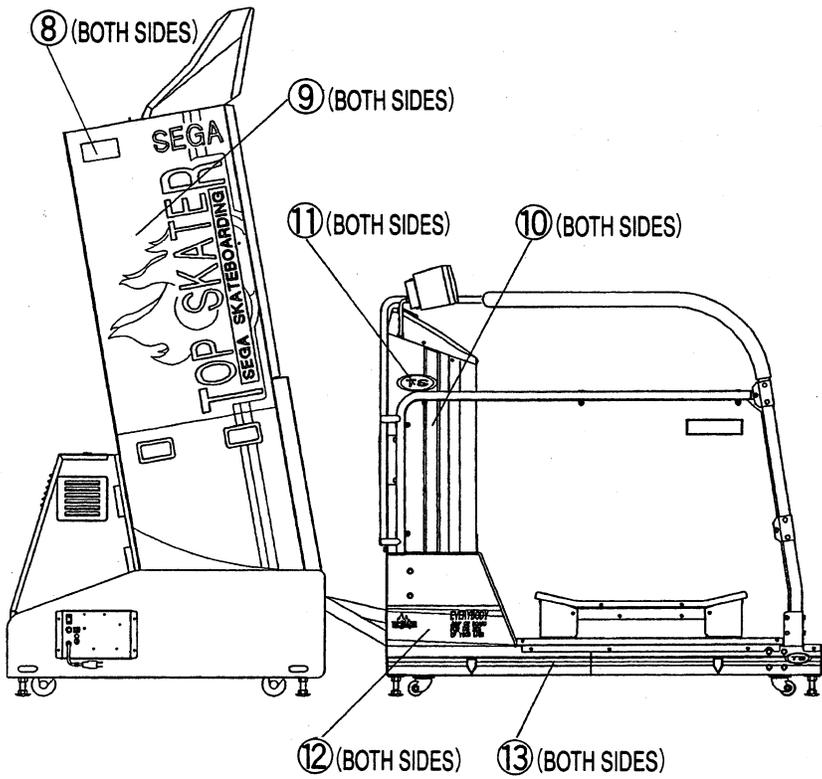
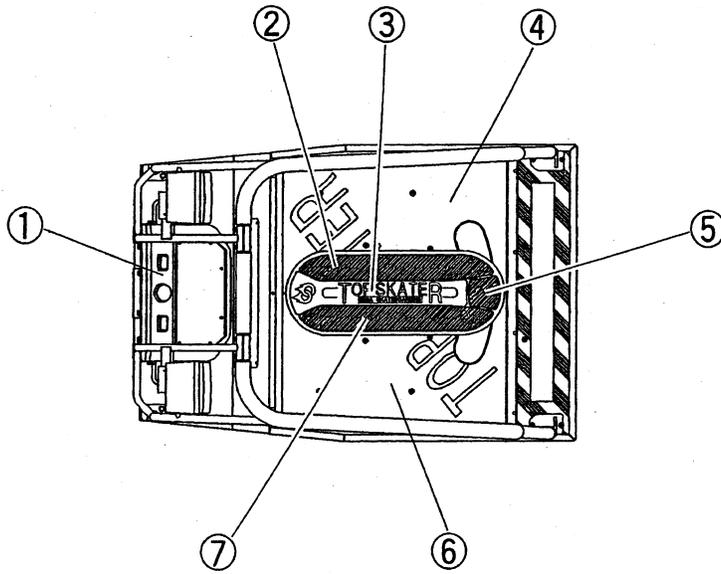


14 - 2 COMPOSITION OF GAME BOARD

GAME BD ASL
 (833-13080)
 (833-13080-01 : USA)



15. DESIGN RELATED PARTS

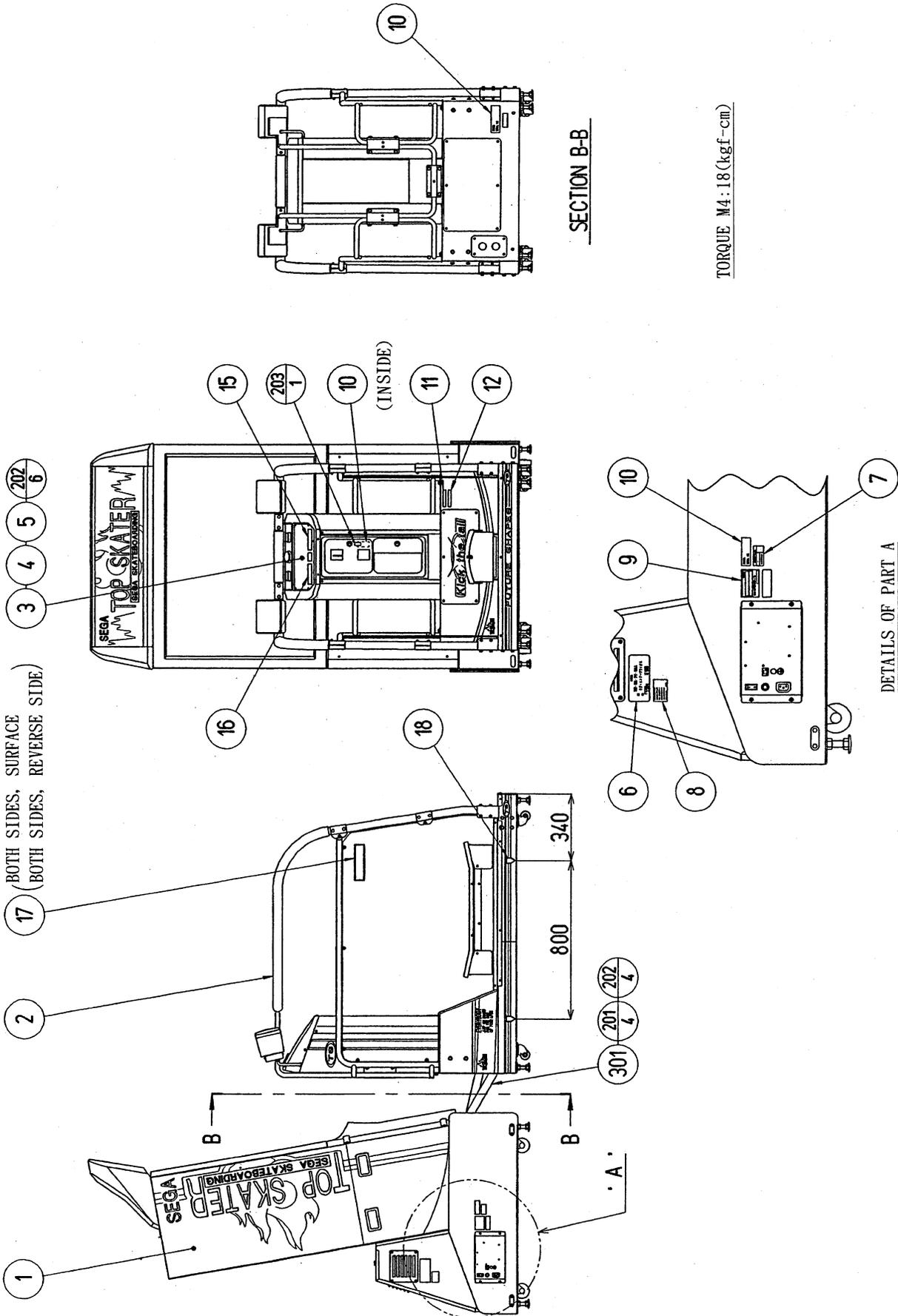


NO.	PART No.	DESCRIPTION
①	ASL-3451-B	STICKER SELECT BUTTON
②	ASL-3101-B	NON SLIP MAT A
③	ASL-3101-D	DESIGN SHEET SKATEBOARD
④	ASL-3016-B	DESIGN SHEET R
⑤	ASL-3101-C	NON SLIP MAT B
⑥	ASL-3015-B	DESIGN SHEET L
⑦	ASL-3101-B	NON SLIP MAT A
⑧	421-9517	STICKER PTV SIDE UPPER L
	421-9519 (OPPOSITE SIDE)	STICKER PTV SIDE UPPER R (OPPOSITE SIDE)
⑨	421-9518	STICKER PTV SIDE LOWER L
	421-9520 (OPPOSITE SIDE)	STICKER PTV SIDE LOWER R (OPPOSITE SIDE)
⑩	ASL-3501-B	STICKER LAMP BOX LINE L
	ASL-3601-B (OPPOSITE SIDE)	STICKER LAMP BOX LINE R (OPPOSITE SIDE)
⑪	ASL-3501-C	STICKER TS MARK
⑫	ASL-3034	STICKER BASE TOP SKATER L
	ASL-3035 (OPPOSITE SIDE)	STICKER BASE TOP SKATER R (OPPOSITE SIDE)
⑬	ASL-3030	STICKER BASE LINE L
	ASL-3031 (OPPOSITE SIDE)	STICKER BASE LINE R (OPPOSITE SIDE)
⑭	423-0295	BILLBOARD PLATE ASL
⑮	ASL-1304	STICKER FRONT PANEL
⑯	ASL-3001-C	STICKER BASE TOP SKATER FRONT
⑰	ASL-3032	STICKER BASE LINE REAR
⑱	ASL-3017-B	STICKER KICK THE TAIL

16. PARTS LIST

① TOP ASSY TOP SKATER

(D-1/2)

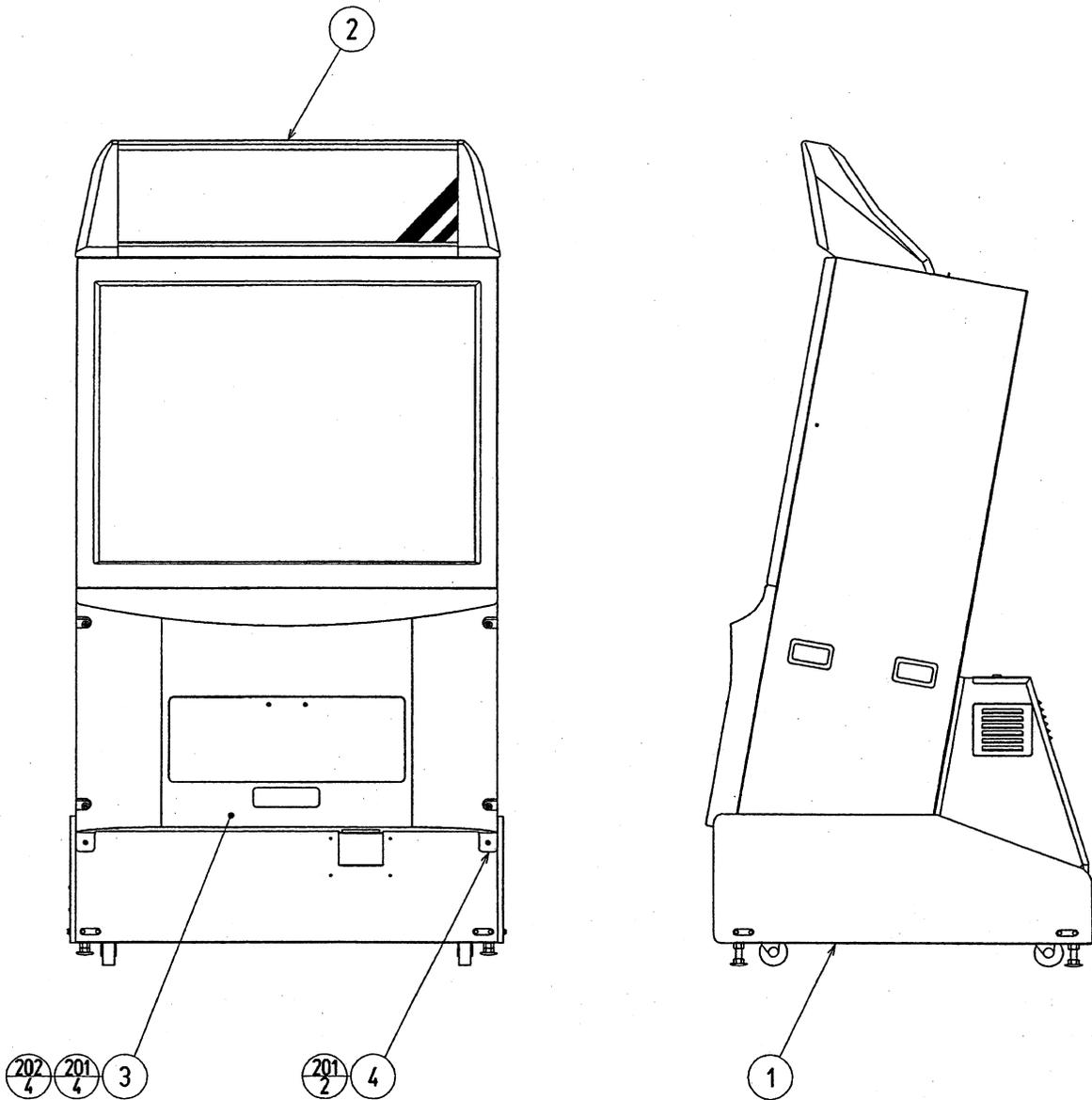


① TOP ASSY TOP SKATER

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1000	ASSY FRONT CABI	
2	ASL-3000	ASSY REAR CABI	
3	ASL-0001	CONT PNL PLATE	
4	421-7308- ~	DENOMINATION SHEET 1GAME ~	
5	422-0610-01	PLAY INSTR SH ASL ENG	
7	421-6594-91	STICKER CERTIFICATE	
9	421-7987	STICKER ELEC SPEC	OTHERS
	421-8408	STICKER ELEC SPEC FOR TAIWAN	TAIWAN
10	421-7988-91	STICKER SERIAL NUMBER	
13	SGM-4306	POLYE COVER 1100×1200×1000	
14	SGM-4425	POLY COVER 1100×1400×1600	
15	440-CS0115-EG	STICKER CAUTION ASL ENG	
16	440-CS0116-EG	STICKER CAUTION PLAYER ASL ENG	
17	440-CS0117-EG	STICKER C SAFETY PANEL ENG	
18	421-8885	STICKER CAUTION FORK	
201	000-T00408-0C	M SCR TH CRM M4×8	
202	000-T00416-0C	M SCR TH CRM M4×16	
203	008-T00408-0B	TMP PRF SCR TH BLK M4×8	
301	600-6897-037	WIRE HARN ASSY TUBE	
401	601-6604-70	CARTON BOX 70	
402	420-6308-01	OWNERS MNL TOP SKATER ENG	
403	SGM-2675	POLYETHYLENE BAG 240×370	
404	220-5381	KEY MASTER FOR 220-5380	
405	SGM-4111	KEY BAG	
407	220-5373	VOL CONT B-5K	
	220-5484	VOL CONT B-5K OHM	
408	514-5036-7000	FUSE 6.4×30 7000mA 125V	
410	600-6729	AC CABLE CONNECT TYPE 15A	} AC 110V AREA
	600-6724	AC CABLE CONNECT TYPE 15A	
	600-6618	AC CABLE CONNECT TYPE FOR EXP	OTHERS
	600-6695	AC CABLE CONNECT TYPE USA 15A	USA
411	390-5705	LAMP 110V25W SINGLE AR	
412	514-5086-4000	FUSE S. B 4000mA 250V HBC CE	
413	514-5086-2000	FUSE S. B 2000mA 250V HBC CE	
/	GPD-0002X	SHIPPING BRACKET	
/	030-000825-S	HEX BLT W/S M8×25	
/	060-F00800	FLT WSHR H8	
/	421-6690-06	STICKER 110V	AC 110V AREA
/	421-6690-03	STICKER 220V	AC 220V AREA
/	421-6690-01	STICKER 120V	
/	421-6119-91	STICKER FCC	} USA
/	421-6120-91	SEGA USA	

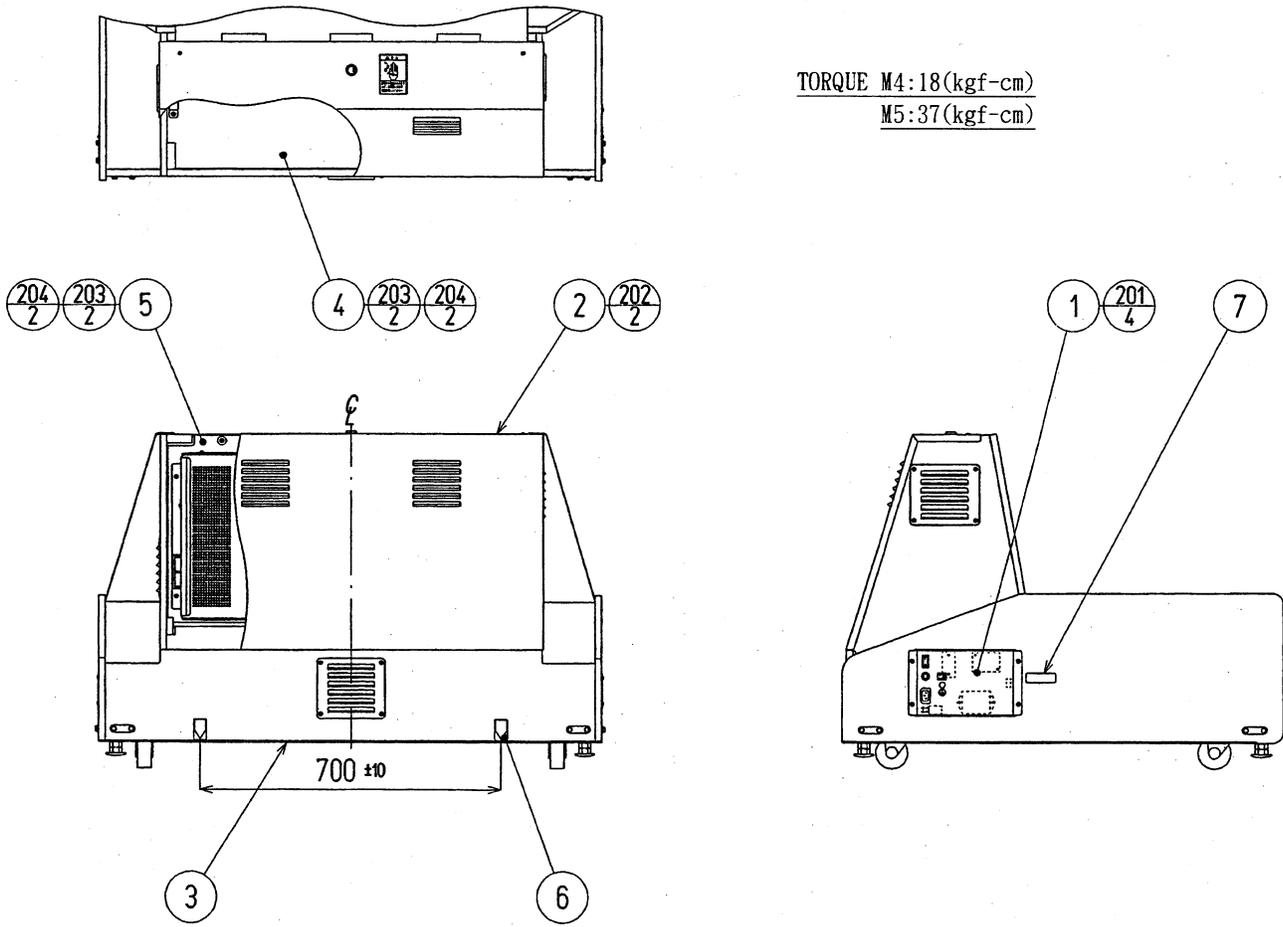
② ASSY FRONT CABI (ASL-1000)



TORQUE M5:25(kgf-cm)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1100	ASSY BASE CABI	
2	ASL-1200	ASSY PTV	
3	ASL-1300	ASSY FRONT PANEL	
4	ASL-1001	PTV HOLDER	
201	000-T00525-0C	M SCR TH CRM M5×25	
202	068-552016-0C	FLT WSHR CRM 5.5-20×1.6	

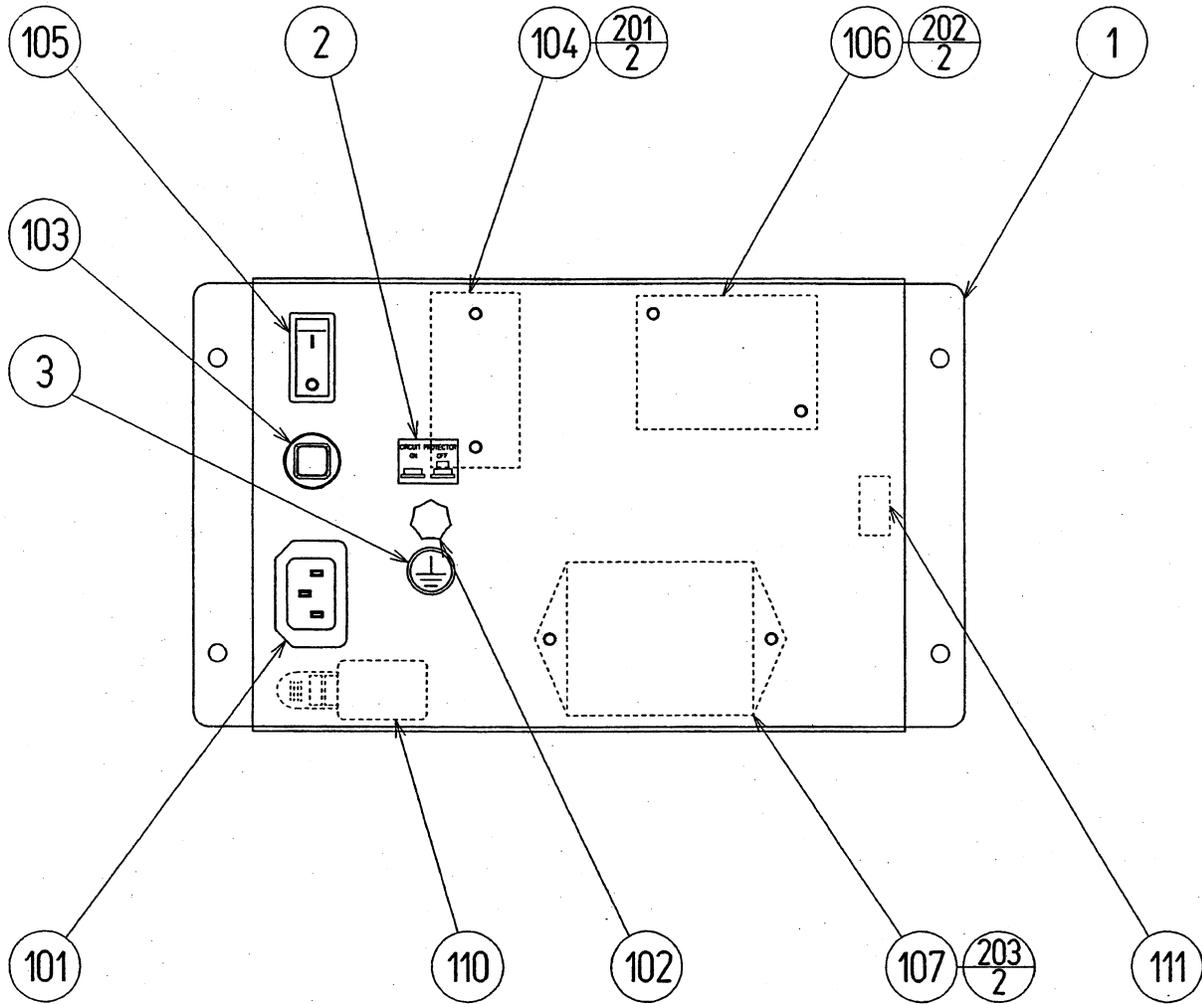
③ ASSY BASE CABI (ASL-1100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1120	AC UNIT	
2	ASK-1140	ASSY BACK DOOR	
3	ASL-1150	ASSY SUB BASE CABI	
4	ASL-4000	ASSY ELEC	
5	ASL-4100	ASSY MAIN BD	
6	421-8885	STICKER CAUTION FORK	
7	421-9107-072	STICKER UNIT WEIGHT 72KG	
201	000-T00416-0C	M SCR TH CRM M4×16	
202	000-T00425-0B	M SCR TH BLK M4×25	
203	000-P00530-S	M SCR PH W/S M5×30	
204	068-552016	FLT WSHR 5. 5-20×1.6	
/	600-6897-068	WIRE HARN TRANS P EXP	
/	600-6897-069	WIRE HARN TRANS S EXP	
/	030-000616-S	HEX BLT W/S M6×16	
/	060-F00600	FLT WSHR M6	
/	560-5353	PWR XFMR 200-240V 100V 15A IEC	AC 220V AREA
/	560-5357	PWR XFMR 100-120V 100V 15A	AC 110~120V AREA

④ AC UNIT (ASL-1120)

(D-1/2)



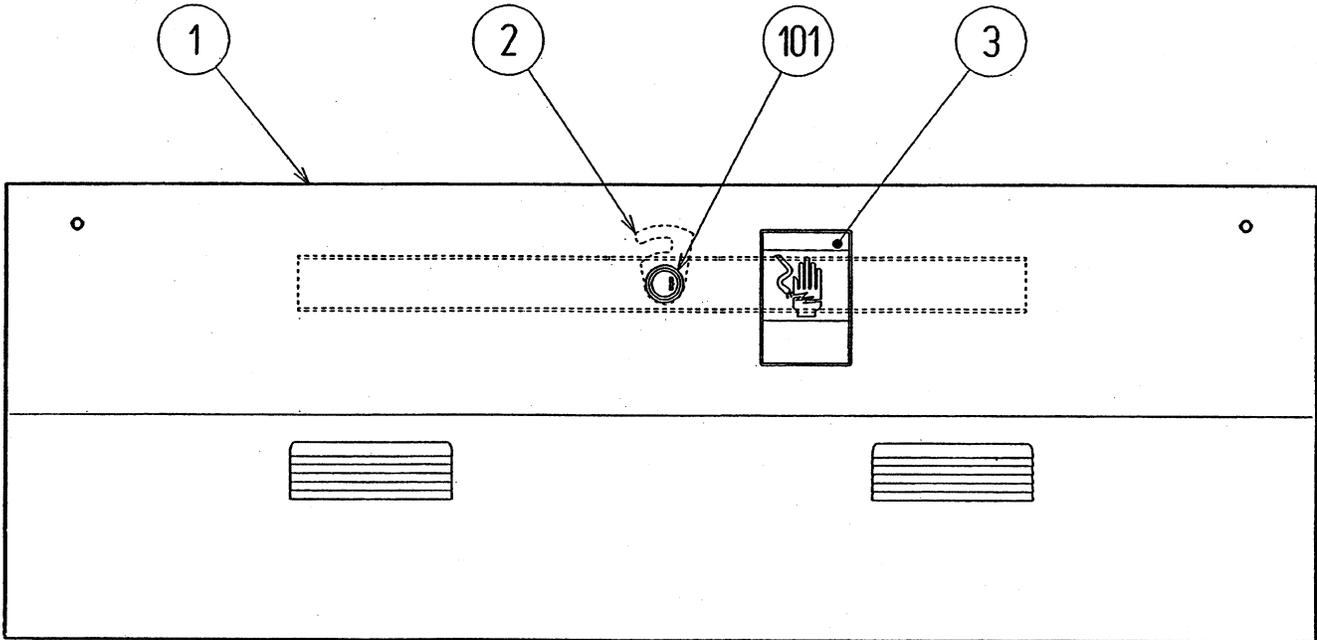
TORQUE M4:18(kgf-cm)

④ AC UNIT (ASL-1120)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1121	AC BRKT	
2	421-7468-02	STICKER C. P W/PIC	
3	421-8202	STICKER EARTH MARK	
101	214-0202	AC INLET PANEL TYPE	
102	280-0417	TERMINAL BINDING POST BLACK	
103	512-5046-8000	C. P 8000mA CE UL	AC 110~120V AREA
	512-5046-5000	C. P 5000mA CE UL	AC 220V AREA
104	117-5225	TERMINAL 3P 20A	
105	509-5453-V-B	SW ROCKER J8 V-B	
106	450-5126	MAGNET CONTACT S-NIOCX	AC 110V 60HZ AREA
	450-5133	MAGNET CONTACT S-NIOCX AC 200V	AC 220V 60HZ AREA
	450-5134	MAGNET CONTACT S-NIOCX AC 230V	AC 220V 50HZ AREA
	450-5135	MAGNET CONTACT S-NIOCX AC 120V	AC 120V 60HZ AREA
107	270-5115	NOISE FILTER 15A GT-215J	
108	601-0460	PLASTIC TIE BELT 100MM	
109	310-5029-G20	SUMITUBE F G 20MM	
110	280-5009-01	CORD CLAMP 21	
111	280-5275-SR10	CORD CLAMP SR10	
201	000-P00412-S	M SCR PH W/S M4×12	
202	000-P00416-W	M SCR PH W/FS M4×16	
203	000-P00408-W	M SCR PH W/FS M4×8	
301	600-6897-001	WIRE HARN AC UNIT IN	
302	600-6897-002	WIRE HARN ROCKER SW	
303	600-6897-003	WIRE HARN MAG. CONT	
304	600-6897-004	WIRE HARN NOISE FILTER	
305	600-6897-005	WIRE HARN AC UNIT OUT	

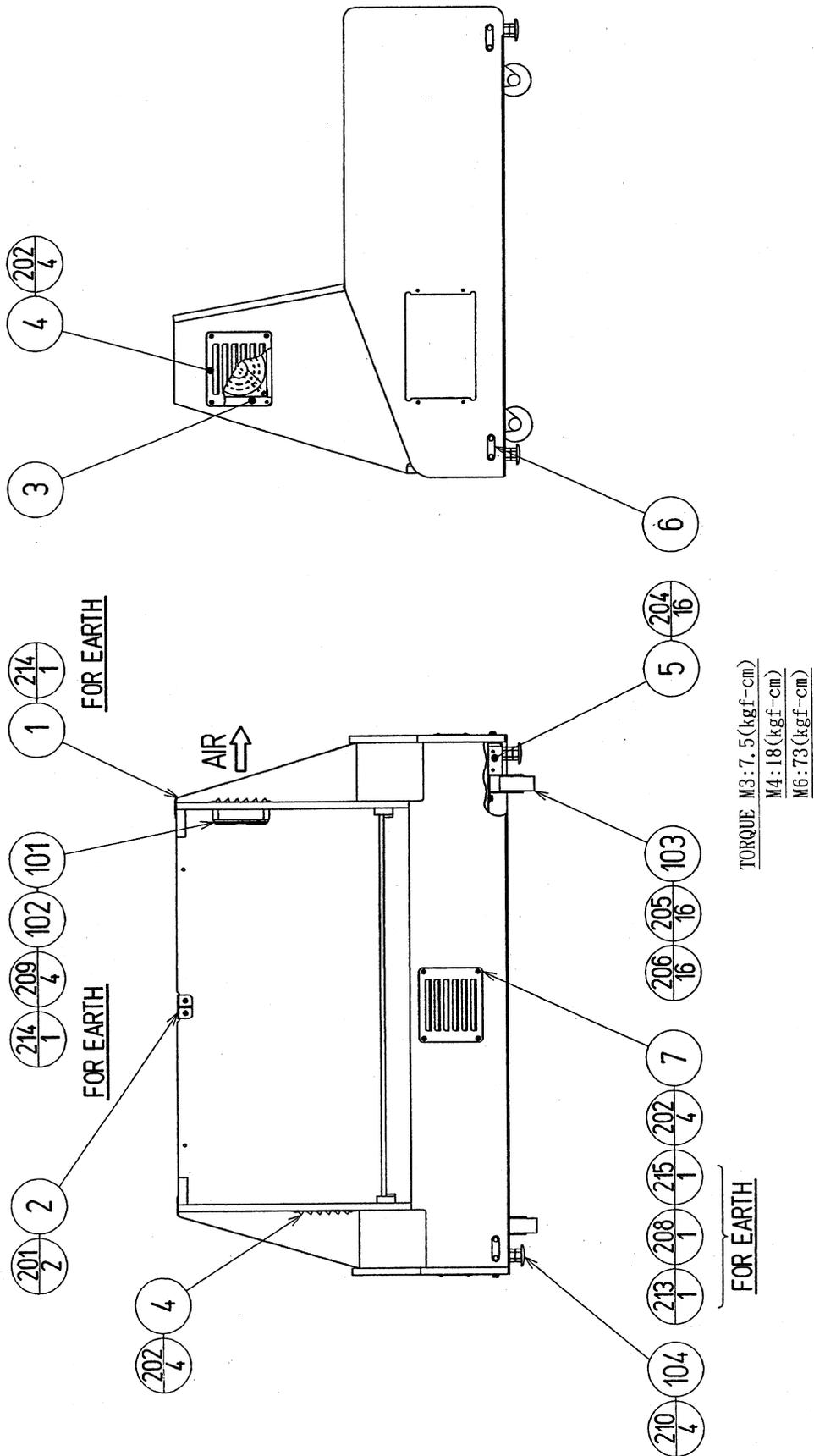
⑤ ASSY BACK DOOR (ASK-1140)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASK-1141	BACK DOOR	
2	TH-1015	LOCKING TONGUE	
3	440-WS0002XJP	STICKER W POWER OFF	
101	220-5380	MAGNETIC LOCK MASTER W/O KEY	

⑥ ASSY SUB BASE CABI (ASL-1150)

(D-1/2)

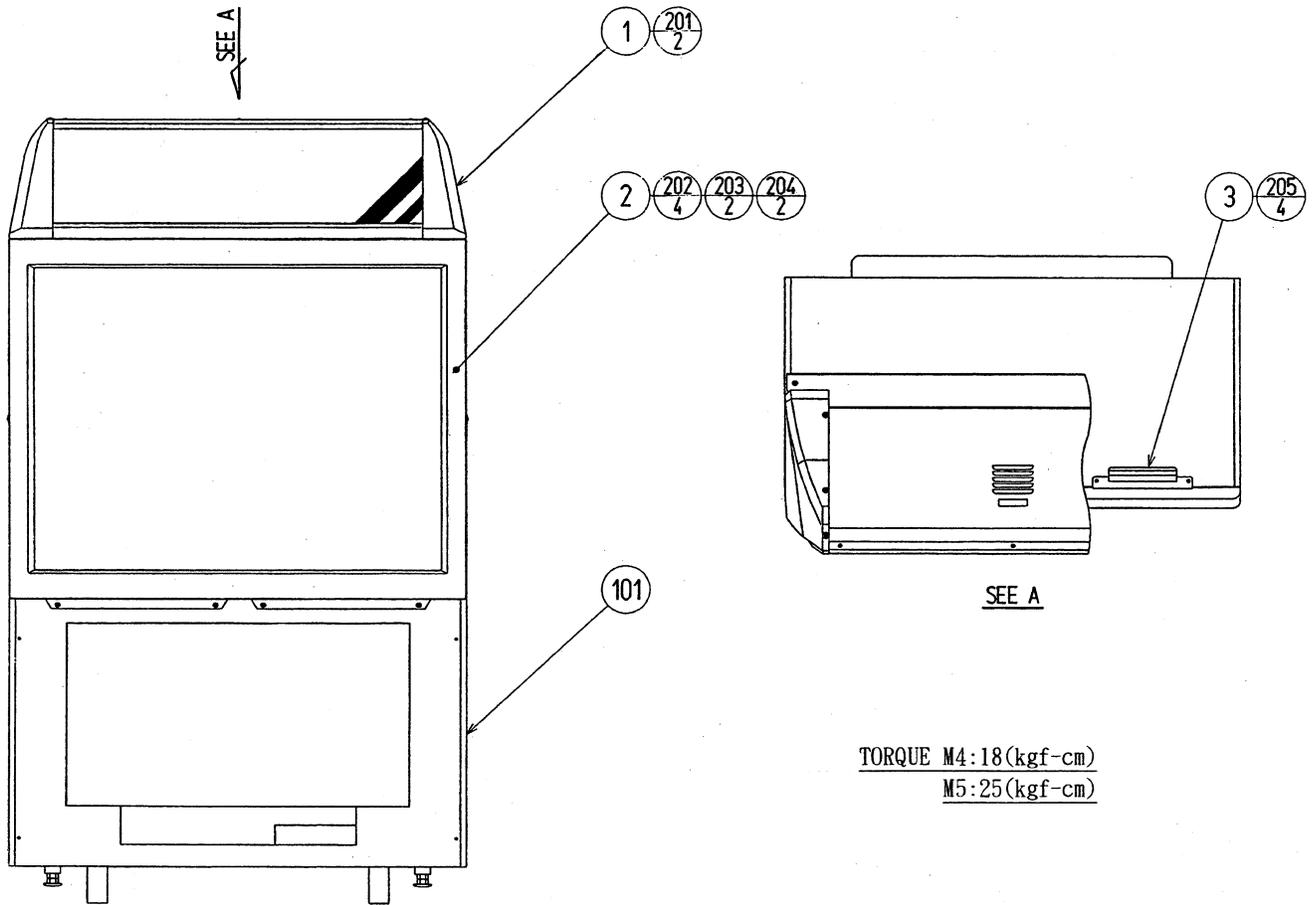


⑥ ASSY SUB BASE CABI (ASL-1150)

(D-2/2)

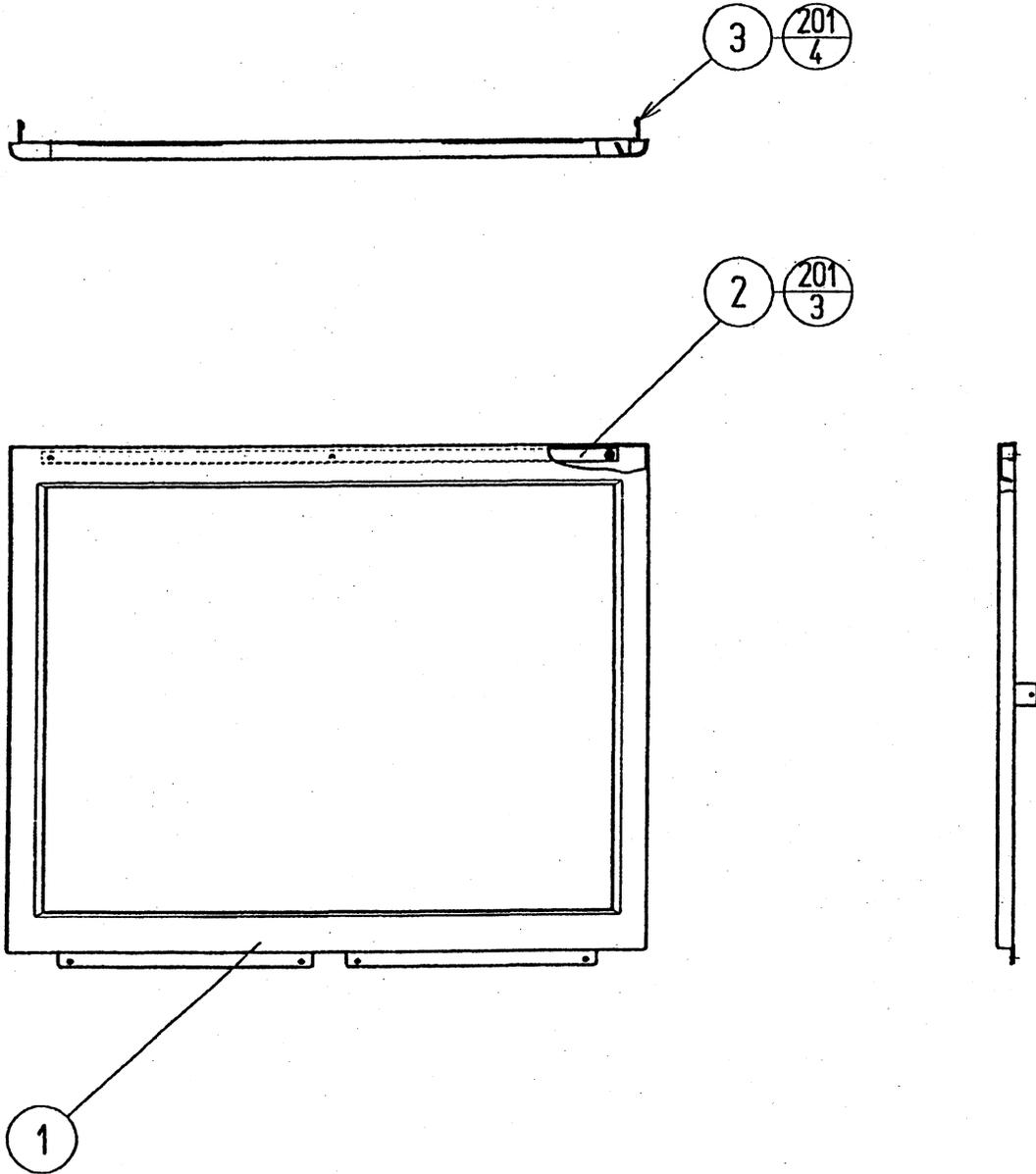
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1151	BASE CABI	
2	ASK-1152	LOCK BRKT	
3	105-5238	FAN BRKT	
4	UP-1018	AIR VENT	
5	ARC-1006	LEG BRACKET	
6	117-5191	PLATE	
7	UP-1018-01	AIR VENT W-M4STUD	
101	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
102	601-8543	FAN GUARD	
103	601-8704	CASTER 75	
104	601-5699X	LEG ADJUSTER BOLT M16×75	
105	280-5009-01	CORD CLAMP 21	
106	280-0419	HARNESS LUG	
107	601-0460	PLASTIC TIE BELT 100MM	
201	000-P00416-W	M SCR PH W/FS M4×16	
202	000-T00416-0B	M SCR TH BLK M4×16	
203	000-T00425-0B	M SCR TH BLK M4×25	
204	030-000630-SC	HEX BLT W/S CRM M6×30	
205	030-000830-S	HEX BLT W/S M8×30	
206	060-F00800	FLT WSHR M8	
207	011-F00310	TAP SCR FH 3×10	
208	050-H00400	HEX NUT M4	
209	000-P00312-W	M SCR PH W/FS M3×12	
210	050-H01600	HEX NUT M16	
212	011-T03512	TAP SCR TH 3.5×12	
213	060-S00400	SPR WSHR M4	
214	000-P00406-W	M SCR PH W/FS M4×6	
215	060-F00400	FLT WSHR M4	
301	600-6897-006	WIRE HARN FROM AC UNIT	
303	600-6897-023	WIRE HARN EXT. F TO MAIN	
304	600-6897-024	WIRE HARN EXT. F MIDI	
305	600-6897-025	WIRE HARN EXT. F TO REAR	
306	600-6897-026	WIRE HARN EXT. F LAMP	
307	600-6897-027	WIRE HARN EXT. F SPEAKER	
308	600-6897-028	WIRE HARN EXT. F TO CLUTCH	
309	600-6897-036	WIRE HARN BNC	

⑦ ASSY PTV (ASL-1200)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1220	ASSY BILLBOARD	
2	MGL-1150	ASSY MASK	
3	RAL-0501	MASK HOLDER	
101	200-5315-01-ASL 200-5639-ASL	ASSY PROJECTION DISPLAY ASL ASSY PROJECTION DISPLAY US ASL	OTHERS USA
201	000-P00516-WB	M SCR PH W/FS BLK M5×16	
202	000-P00520-W	M SCR PH W/FS M5×20	
203	000-T00525-OC	M SCR TH CRM M5×25	
204	068-552016-OC	FLT WSHR CRM 5.5-20×1.6	
205	000-F00414	M SCR FH M4×14	

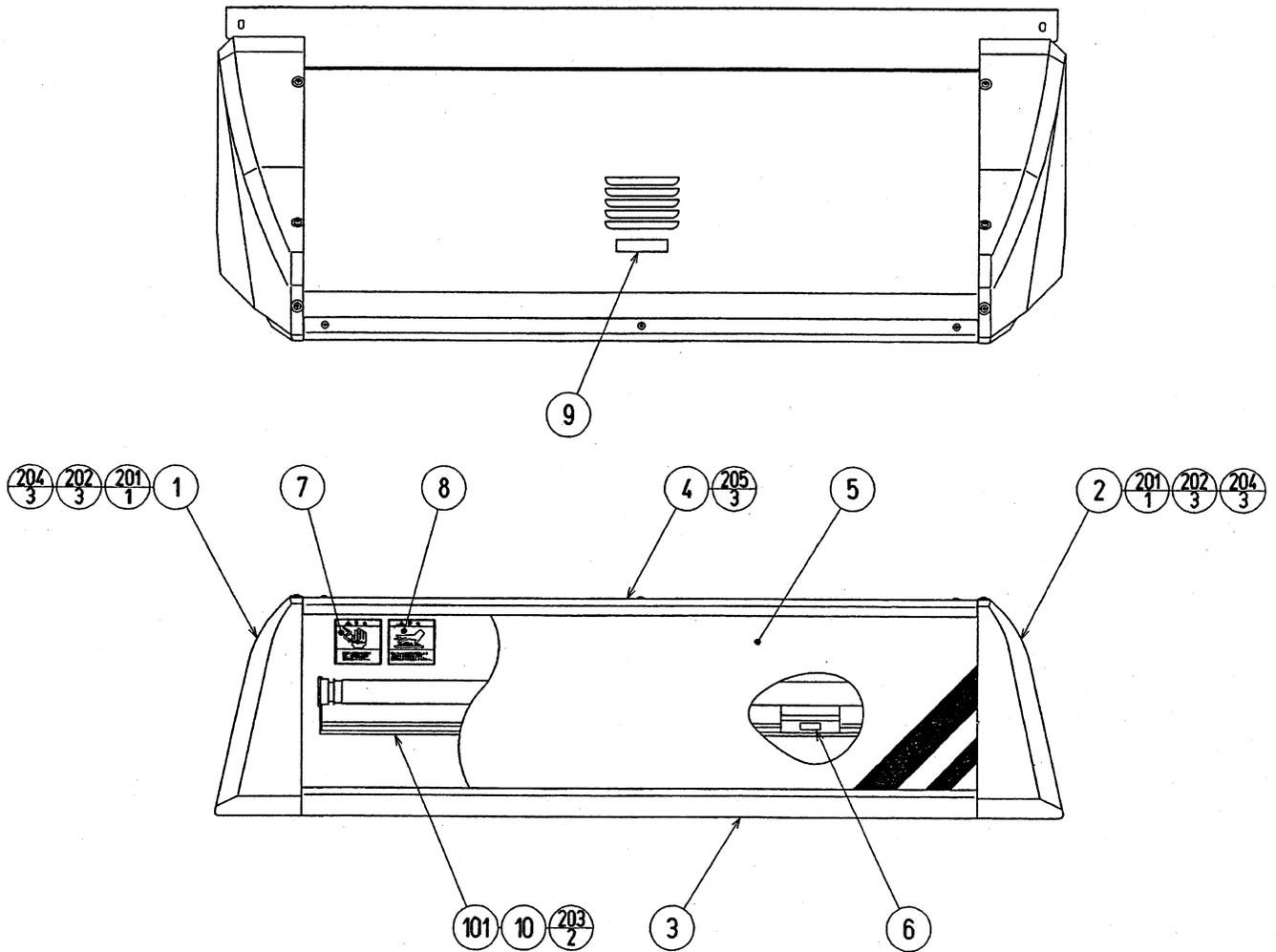
⑧ ASSY MASK (MGL-1150)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	MGL-1102	TV MASK	
2	MGL-1151	SLIT PLATE	
3	MGL-1152	MASK SIDE HOLDER	
201	012-F00408-0B	TAP SCR FH BLK 4×8	
202	000-F00410	M SCR FH M4×10	

9 ASSY BILLBOARD (ASL-1220)

(D-1/2)



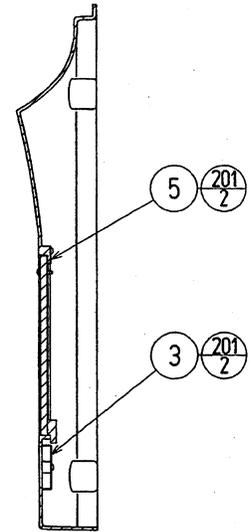
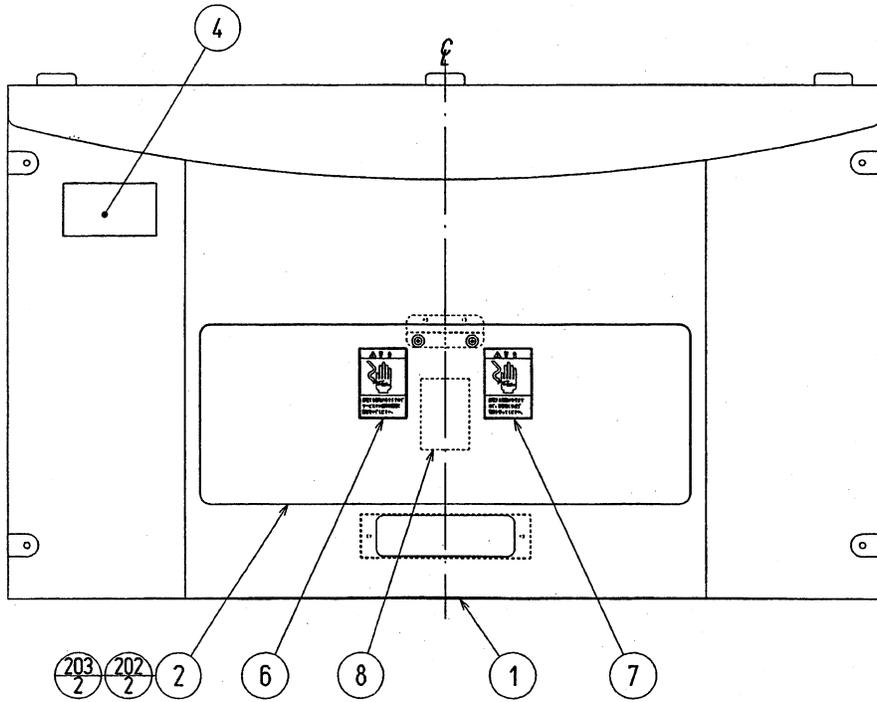
TORQUE M4:18(kgf-cm)

⑨ ASSY BILLBOARD (ASL-1220)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-1221	LEFT COVER	
2	ASL-1222	RIGHT COVER	
3	ASL-1223	BILLBOARD BOX	
4	ASL-1224	BILLBOARD HOLDER	
5	423-0295	BILLBOARD PLATE ASL	
6	421-7501-18	STICKER FL32W	
7	440-WS0002XEG	STICKER W POWER OFF ENG	
8	440-WS0012XEG	STICKER W HIGH TEMP ENG	
10	280-5308	SPACER 4.5-12×2	
101	LOCAL PURCHASE	ASSY FL20W EX W/CONN HIGH T CE	
102	280-5009	CORD CLAMP 21	
201	000-F00410	M SCR FH M4×10	
202	000-T00408-0C	M SCR TH CRM M4×8	
203	000-P00416-W	M SCR PH W/FS M4×16	
204	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
205	000-T00408-0B	M SCR TH BLK M4×8	
301	600-6790-089	WIRE HARN EXT FL	

⑩ ASSY FRONT PANEL (ASL-1300)



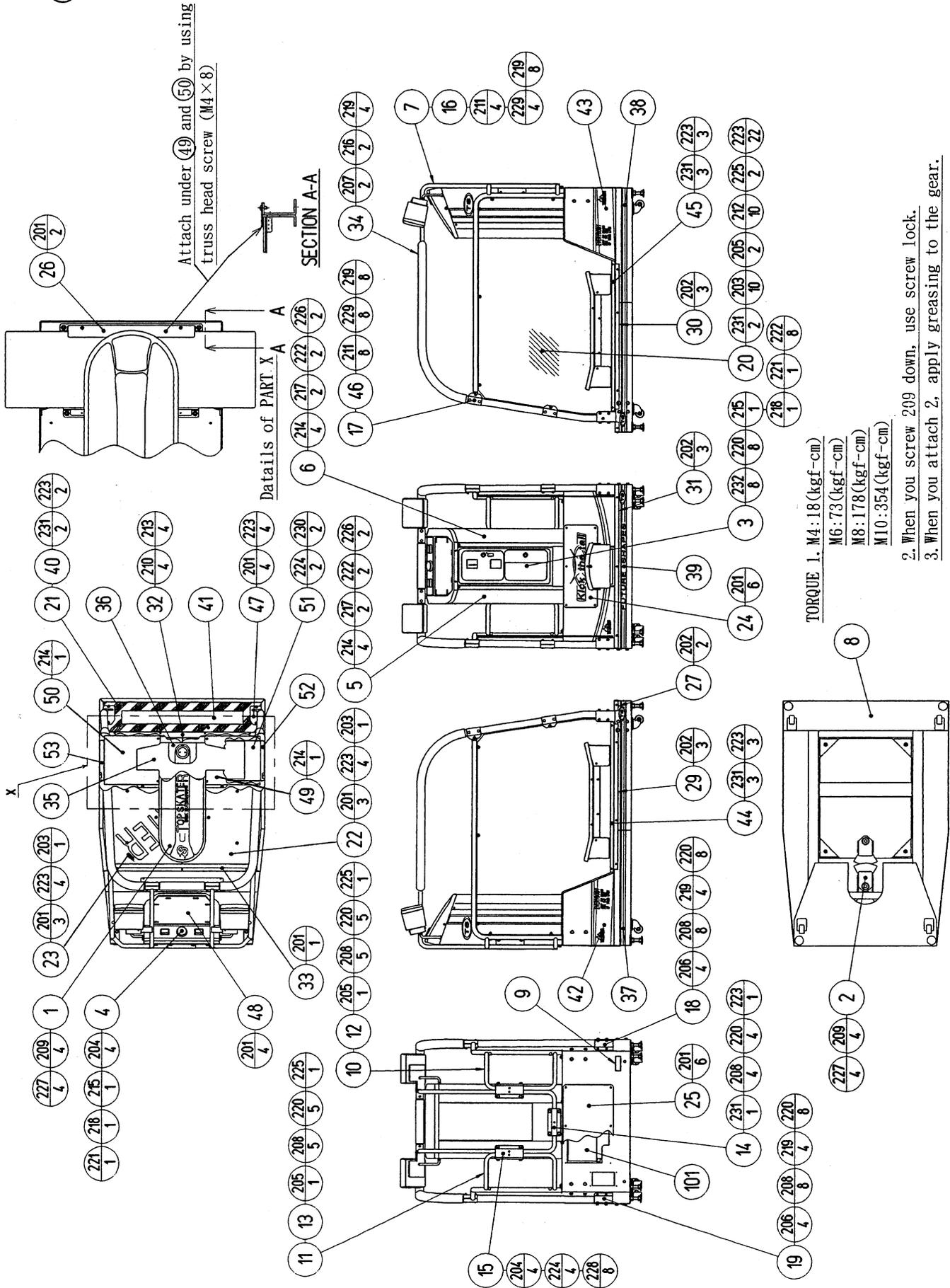
SECTION AT C. L.

TORQUE M4:18(kgf-cm)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASK-1301	FRONT PANEL	
2	ASK-1302	PTV LID	
3	ASK-1303	HOLE COVER	
4	ASL-1304	STICKER FRONT PANEL	
5	ASK-1304	LID BRKT	
6	440-WS0001XEG	STICKER W NOT OPEN DOOR ENG	
7	440-WS0002XEG	STICKER W POWER OFF ENG	
8	440-CS0032-EG	STICKER C NOT TOUCH W/O KNOB ENG	
201	012-P00410	TAP SCR #2 PH 4×10	
202	000-T00416-0C	M SCR TH CRM M4×16	
203	068-441616-0C	FLT WSHR CRM 4. 4-16×1.6	

11 ASSY REAR CABI (ASL-3000)

(D-1/3)



① ASSY REAR CABI (ASL-3000)

(D-2/3)

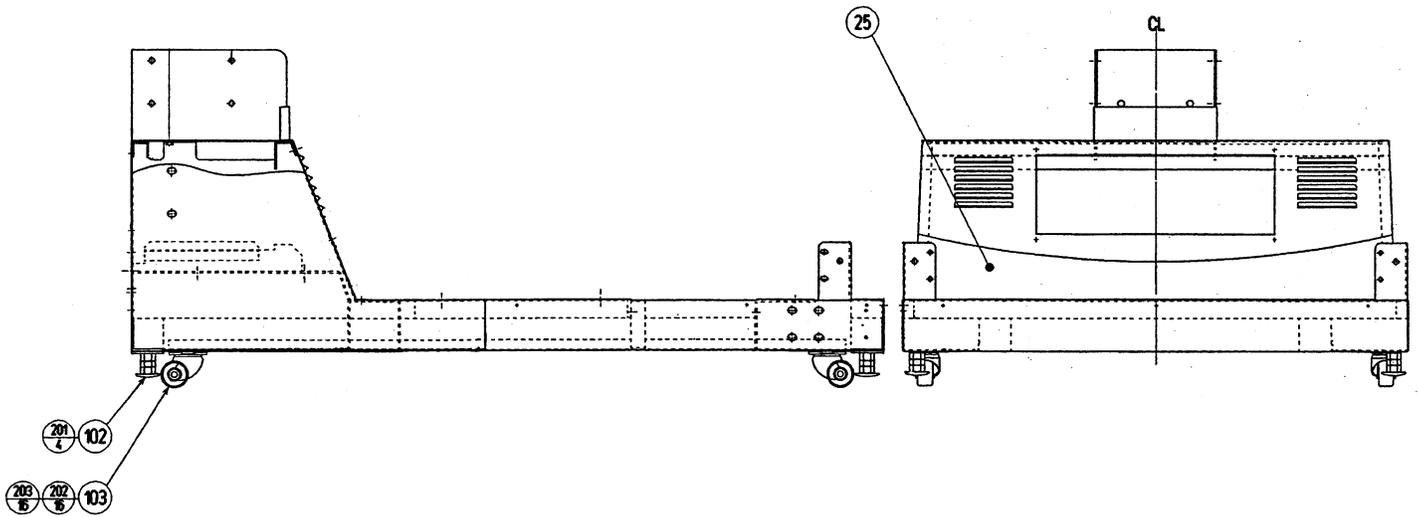
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3100	ASSY MECHA	
2	ASL-3300	ASSY BRAKE	
3	ASL-3400	ASSY COIN CHUTE TOWER	
4	ASL-3450	ASSY CONT PNL	
5	ASL-3500	ASSY LAMP BOX L	
6	ASL-3600	ASSY LAMP BOX R	
7	ASL-3700	ASSY SPEAKER	
8	ASL-3001	REAR FRAME	
9	421-9107-231	STICKER UNIT WEIGHT 231KG	
10	ASL-3003	SIDE PIPE HOLDER L	
11	ASL-3004	SIDE PIPE HOLDER R	
12	ASL-3005	SIDE PIPE L	
13	ASL-3006	SIDE PIPE R	
14	ASL-3007	PIPE HOLDER LOWER	
15	ASL-3008	PIPE HOLDER UPPER	
16	ASL-3009	PIPE SUPPORT BRKT	
17	ASL-3010	SIDE PIPE BRKT	
18	ASL-3011	PIPE HOLDER REAR L	
19	ASL-3012	PIPE HOLDER REAR R	
20	ASL-3013	SIDE GUARD PANEL	
21	ASL-3014	REAR LID A	
22	ASL-3015	REAR LID B	
23	ASL-3016	REAR LID C	
24	ASL-3017	LID FRONT	
25	ASL-3018	LID REAR	
26	ASL-3019	EDGE GUIDE PLATE	
27	ASL-3020	SASH REAR SIDE	
29	ASL-3022	SASH SIDE L	
30	ASL-3023	SASH SIDE R	
31	ASL-3024	SASH	
32	ASL-3025	CENTER SASH	
33	ASL-3026	SASH FRONT	
34	ASL-3027	STAND PIPE	
35	ASL-3115X	SLIDE PLATE A	
36	ASL-3116X	SLIDE PLATE B	
37	ASL-3030	STICKER BASE LINE L	
38	ASL-3031	STICKER BASE LINE R	
39	ASL-3032	STICKER BASE LINE REAR	
40	ASL-3033	CAUTION MAT	
41	440-CS0114-EG	CAUTION SHEET ENG	
42	ASL-3034	STICKER BASE TOP SKATER L	
43	ASL-3035	STICKER BASE TOP SKATER R	
44	ASL-3036	GUARD PANEL HOLDER L	
45	ASL-3037	GUARD PANEL HOLDER R	
46	ASL-3038	SIDE PIPE BRKT B	
47	ASL-3039	PIPE LID	
48	ASL-3451-A	CNT PNL COVER BLANK	
49	ASL-3117	STEP HOLDER A	
50	ASL-3118	STEP HOLDER B	
51	ASL-3119	GUIDE REAR A	
52	ASL-3126	SLIDE CUSHION RUBBER	
53	ASL-3127	SLIDE CUSHION RUBBER B	

⑪ ASSY REAR CABI (ASL-3000)

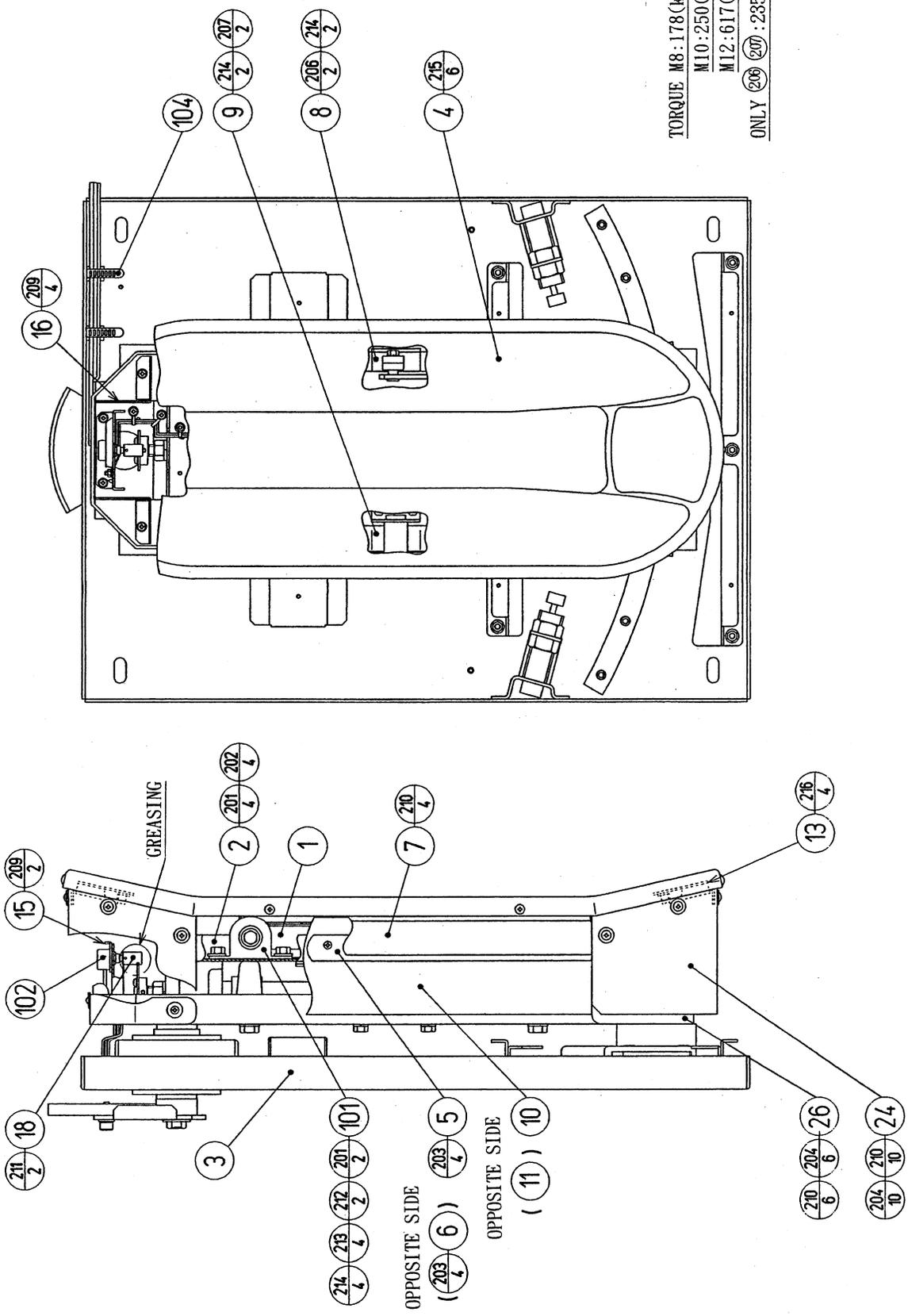
(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
101	130-5097	SPEAKER BOX SUPER WOOFER	
102	280-5008	CORD CLAMP 15	
103	209-0023	CONN CLOSED END	
104	601-0460	PLASTIC TIE BELT 100MM	
201	000-T00408-OB	M SCR TH BLK M4×8	
202	000-T00408-OC	M SCR TH CRM M4×8	
203	000-T00416-OB	M SCR TH BLK M4×16	
204	000-T00416-OC	M SCR TH CRM M4×16	
205	000-T00616-OB	M SCR TH BLK M6×16	
206	030-000616-SB	HEX BLT W/S BLK M6×16	
207	030-000650-SB	HEX BLT W/S BLK M6×50	
208	030-000816-SB	HEX BLT W/S BLK M8×16	
209	030-001020-S	HEX BLT W/S M10×20	
210	031-000410-OC	CRG BLT CRM M4×10	
211	031-000650-OC	CRG BLT CRM M6×50	
212	050-C00400-3B	CAP NUT TYPE3 BLK M4	
213	050-F00400	FLG NUT M4	
214	050-F00600	FLG NUT M6	
215	050-H00400	HEX NUT M4	
216	050-H00600-OB	HEX NUT BLK M6	
217	050-H00800	HEX NUT M8	
218	060-F00400	FLT WSHR M4	
219	060-F00600-OB	FLT WSHR BLK M6	
220	060-F00800-OB	FLT WSHR BLK M8	
221	060-S00400	SPR WSHR M4	
222	060-S00800	SPR WSHR M8	
223	068-441616-OB	FLT WSHR BLK 4. 4-16×1. 6	
224	068-441616-OC	FLT WSHR CRM 4. 4-16×1. 6	
225	068-652016-OB	FLT WSHR BLK 6. 5-20×1. 6	
226	068-852216	FLT WSHR 8. 5-22×1. 6	
227	068-A52820	FLT WSHR 10. 5-28×2	
228	FAS-300001	HEX BLT CRM W/FS M8×20	
229	FAS-500013	CAP NUT CRM M6	
230	000-P00412-W	M SCR PH W/FS M4×12	
231	000-T00412-OB	M SCR TH BLK M4×12	
232	FAS-290001	HEX SKT SCR BH BLK M8×20	
301	600-6897-040-91	WIRE HARN EXT. R LAMP	
302	600-6897-041-91	WIRE HARN EXT. R COIN	
303	600-6897-042-91	WIRE HARN EXT. R START	
304	600-6897-043-91	WIRE HARN EXT. R SPEAKER	
305	600-6897-044-91	WIRE HARN EXT. R PHOT	
306	600-6897-045-91	WIRE HARN EXT. R CLUTCH	
307	600-6897-046	WIRE HARN WOOFER	
308	600-6897-066	WIRE HARN EARTH REAR CABI	

⑫ REAR FRAME (ASL-3001)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
25	ASL-3001-C	STICKER BASE TOP SKATER FRONT	
102	601-5882	LEG ADJUSTER ϕ 60	
103	601-6056-01	CASTER ϕ 50	
201	050-H01600-3	HEX NUT TYPE 3 M16	
202	030-000620-S	HEX BLT W/S M6 \times 20	
203	060-F00600	FLT WSHR M6	

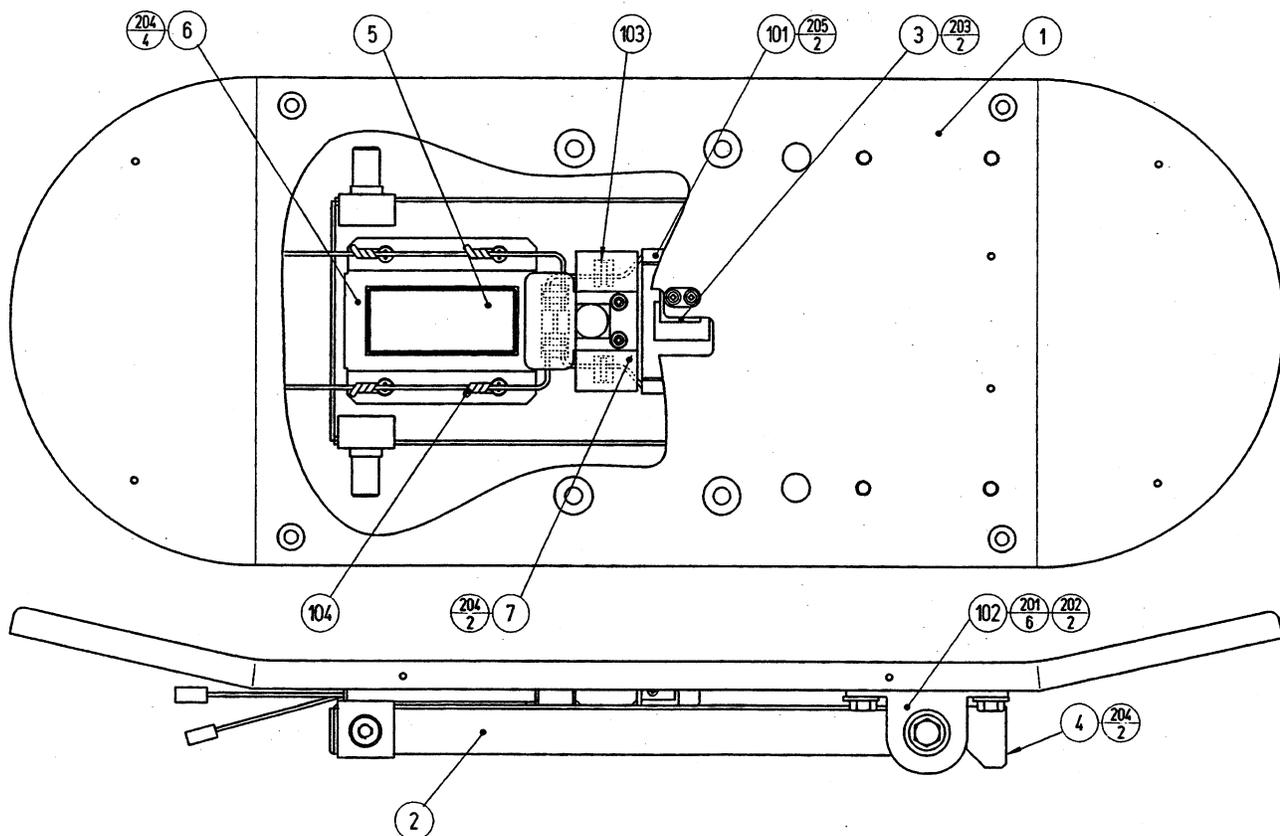


⑬ ASSY MECHA (ASL-3100)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3150	ASSY BOARD	
2	ASL-3200	ASSY ROLLING BASE	
3	ASL-3250	ASSY SWING MECHA	
4	ASL-3101	BOARD	
5	ASL-3102	SIDE RUBBER BRKT A	
6	ASL-3103	SIDE RUBBER BRKT B	
7	ASL-3104	SIDE BLIND SASH	
8	ASL-3105	HOOK	
9	ASL-3106	STOPPER UPPER HOLDER	
10	ASL-3107	SIDE BLIND RUBBER A	
11	ASL-3108	SIDE BLIND RUBBER B	
13	ASL-3110X	BLIND RUBBER BRKT A	
15	ASL-3112	VR BRKT	
16	ASL-3113	BLIND BOX A	
18	601-7944	GEAR 15	
24	ASL-3123	RUBBER UPPER A	
26	ASL-3125	RUBBER LOWER	
101	100-5275	BEARING 15 (ASPP202)	
102	220-5373	VOL CONT B-5K	
	220-5484	VOL CONT B-5K OHM	
103	310-5029-F20	SUMITUBE F F 20MM	
104	280-5009-01	CORD CLAMP 21	
201	030-000816-S	HEX BLT W/S M8×16	
202	060-F00800	FLT WSHR M8	
203	000-T00412-0B	M SCR TH BLK M4×12	
204	068-441616-0B	FLT WSHR BLK 4.4-16×1.6	
206	FAS-200014	HEX SKT H CAP SCR BLK M8×40	
207	020-000820-0Z	HEX SKT H CAP SCR BLK M8×20	
208	050-F00400	FLG NUT M4	
209	000-P00408-W	M SCR PH W/FS M4×8	
210	000-T00408-0B	M SCR TH BLK M4×8	
211	028-A00306-P	SET SCR HEX SKT CUP P M3×6	
212	068-852216	FLT WSHR 8.5-22×1.6	
213	050-H00800	HEX NUT M8	
214	060-S00800	SPR WSHR M8	
215	000-T00408-0C	M SCR TH CRM M4×8	
216	000-P00410-W	M SCR PH W/FS M4×10	
217	050-H00400	HEX NUT M4	
218	060-S00400	SPR WSHR M4	
219	060-F00400	FLT WSHR M4	
301	600-6897-054	WIRE HARN ROLL	
303	600-6897-062	WIRE HARN EARTH MECHA2	
304	600-6897-063	WIRE HARN EARTH MECHA3	
305	600-6897-064	WIRE HARN EARTH MECHA4	

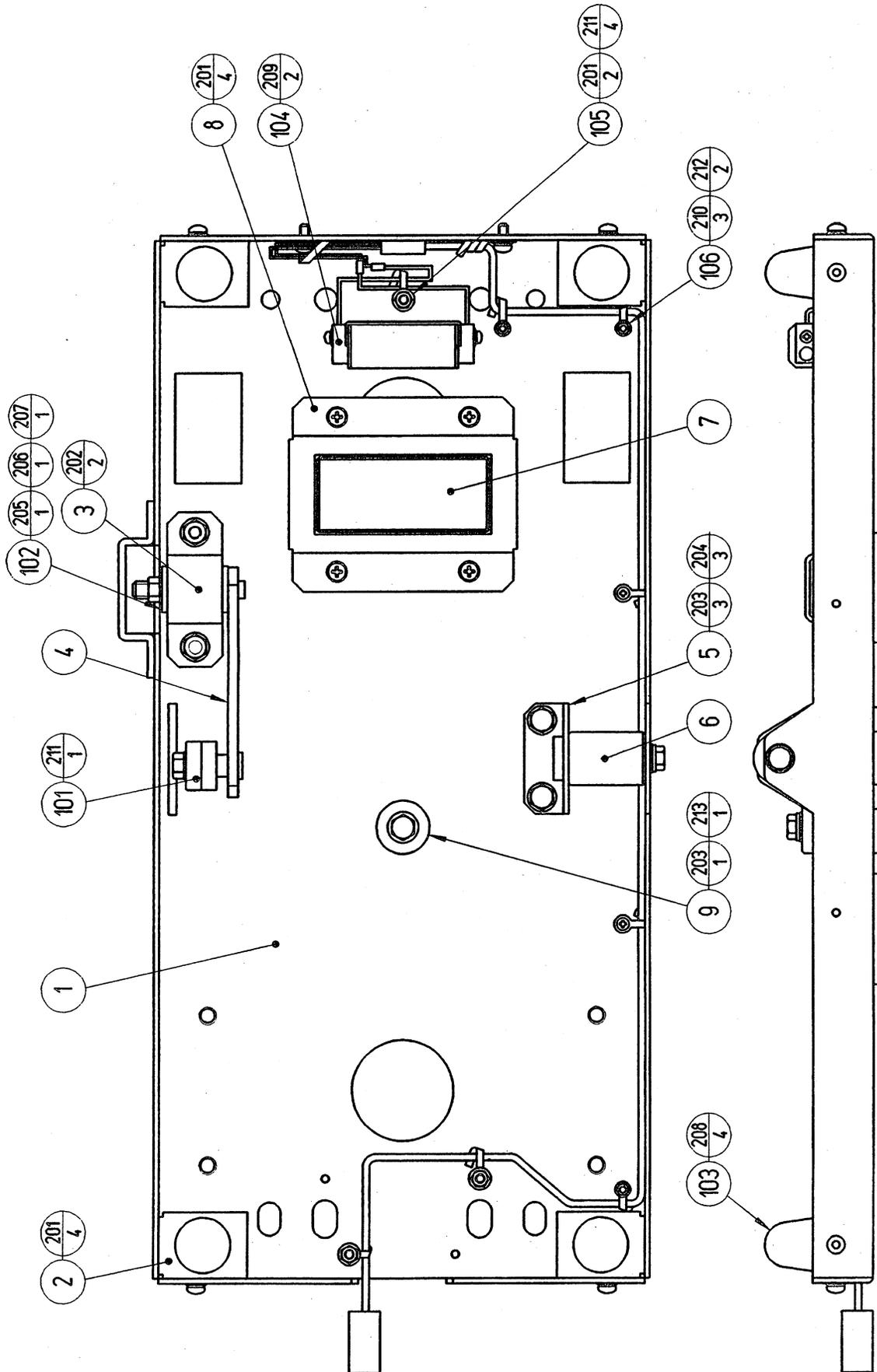
14 ASSY BOARD (ASL-3150)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3151X	BOARD BASE	
2	ASL-3152	UPPER BASE	
3	ASL-3153	SW PLATE A	
4	ASL-3154	SW PLATE B	
5	ASL-3155	STOPPER B	
6	ASL-3156	STOPPER BRKT B	
7	ASL-3157	WIRE COVER	
101	370-5138-01	SENSOR ASL	
102	100-5275	BEARING 15	
103	280-5275-SR10	CORD CLAMP SR10	
104	280-5207	HARNES LUG CC-1005	
201	030-000816-S	HEX BLT W/S M8×16	
202	068-852216	FLT WSHR 8.5-22×1.6	
203	000-P00308-W	M SCR PH W/FS M3×8	
204	000-P00408-W	M SCR PH W/FS M4×8	
205	000-P00312-W	M SCR PH W/FS M3×12	
301	600-6897-053	WIRE HARN PHOT REAR	
302	600-6897-065	WIRE HARN EARTH MECHA5	

⑮ ASSY ROLLING BASE (ASL-3200)

(D-1/2)



TORQUE M8:178(kgf-cm)

⑮ ASSY ROLLING BASE (ASL-3200)

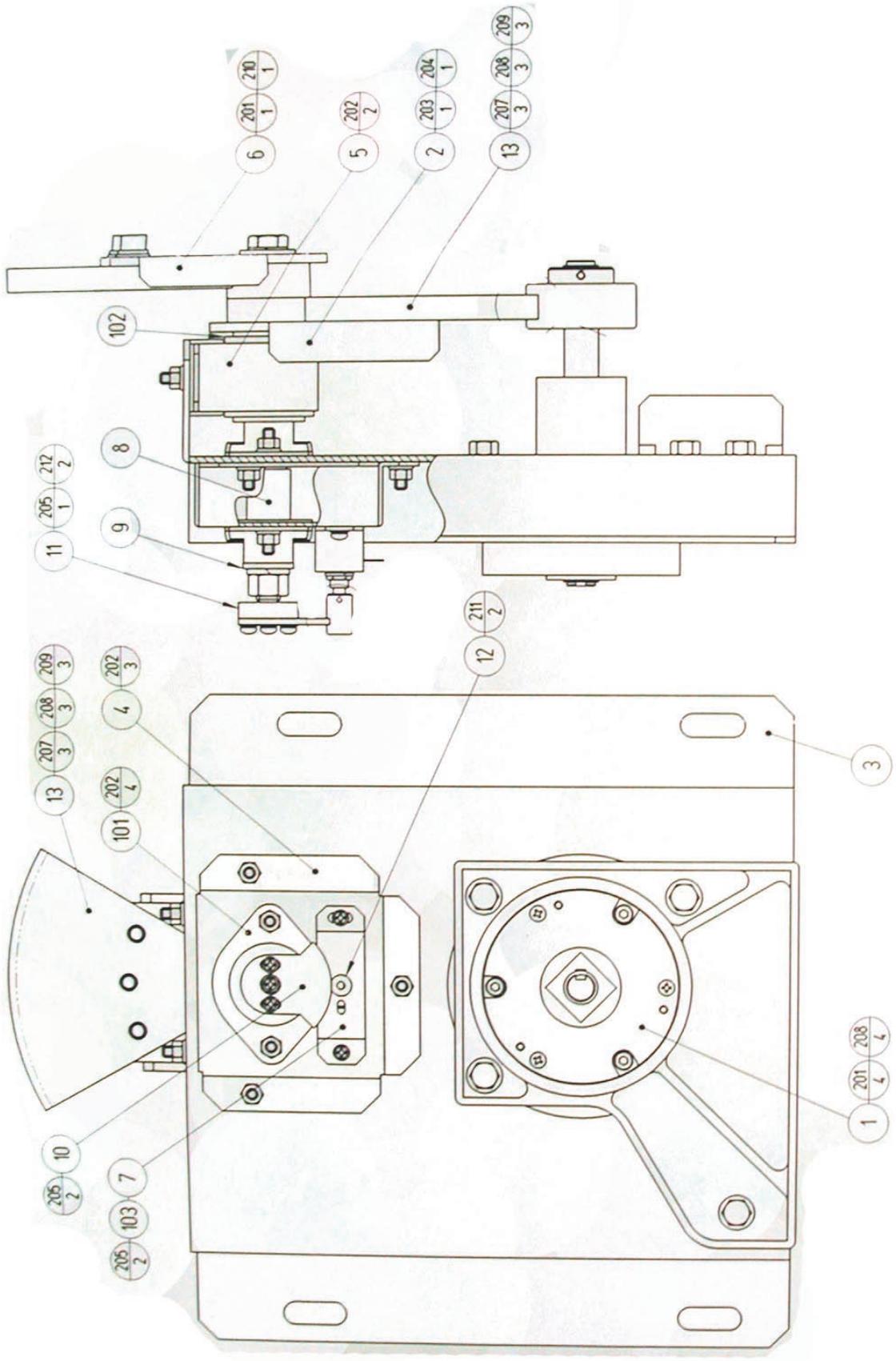
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3201	ROLLING BASE	
2	ASL-3202	BRKT STOPPER A	
3	ASL-3204	UPPER ROSTA HOLDER	
4	ASL-3205	ROSTA ARM	
5	ASL-3206	HOLDER UPPER	
6	ASL-3207	STOPPER UPPER	
7	ASL-3208	STOPPER A	
8	ASL-3209	STOPPER BRKT A	
9	ASL-3210	SWING STOPPER RUBBER	
101	100-5018	BEARING BALL 8	
102	601-9354	ROSTA	
103	601-5564	STOPPER	
104	370-5138-01	SENSOR ASL	
105	280-5207	HARNESS LUG CC-1005	
106	280-5288	HARNESS LUG CC-1003	
201	000-P00408-W	M SCR PH W/FS M4×8	
202	050-F00600	FLG NUT M6	
203	030-000612-S	HEX BLT W/S M6×12	
204	060-F00600	FLT WSHR M6	
205	050-H00800	HEX NUT M8	
206	060-S00800	SPR WSHR M8	
207	060-F00800	FLT WSHR M8	
208	050-H00600	HEX NUT M6	
209	000-P00312-W	M SCR PH W/FS M3×12	
210	050-U00300	U NUT M3	
211	050-F00400	FLG NUT M4	
212	000-P00308	M SCR PH M3×8	
213	068-652016	FLT WSHR 6.5-20×1.6	
301	600-6897-052	WIRE HARN PHOT FRONT	
302	600-6897-073	WIRE HARN FRONT SENSOR	

① ASSY SWING MECHA (ASL-3250)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3251	MOUNT BLOCK	
2	ASL-3252	JOINT HOLDER	
3	ASL-3253	SWING BASE	
4	ASL-3254	SLIDE BASE	
5	ASL-3255	ROLLING ROSTA HOLDER	
6	ASL-3256	SLIDE GUIDE L	
7	ASL-3257	SLIDE GUIDE R	
8	ASL-3258	MAIN SHAFT	
9	ASL-3259	COLLAR 17.2	
10	ASL-3260	COLLAR ROLLING	
11	ASL-3261	VR HOLDER ROLLING	
12	ASL-3305	BRAKE GEAR HOLDER	
13	ASK-3309	SWING GEAR 130	
14	601-6005	ADJUST GEAR	
15	TTR-2009	GEAR HOLDER 80	
16	ASL-3308	SPL WASHER M12	
17	ASL-3262	COLLAR SWING	
101	601-5564	STOPPER	
102	601-8458	ROSTA 22 DR-S27×100	
103	100-5274	BEARING 20	
104	100-5277	R GUIDE R500	
105	100-5052	BEARING 6007ZZ	
106	100-5273	BEARING 35	
107	601-8918	SHOCK ABSORBER RH	
108	280-5207	HARNESS LUG CC-1005	
201	050-H01200	HEX NUT M12	
202	060-S01200	SPR WSHR M12	
203	FAS-290001	HEX SKT SCR BH BLK M8×20	
204	FAS-290002	HEX SKT SCR BH BLK M10×16	
205	068-A52820	FLT WSHR 10.5-28×2	
206	030-000820-S	HEX BLT W/S M8×20	
207	060-F00800	FLT WSHR M8	
208	050-F00600	FLG NUT M6	
209	000-P00408-W	M SCR PH W/FS M4×8	
210	020-000820-OZ	HEX SKT H CAP SCR BLK OZ M8×20	
211	060-S00800	SPR WSHR M8	
212	028-A00406-P	SET SCR HEX SKT CUP P M4×6	
213	050-H00600	HEX NUT M6	
214	020-000625-HZ	HEX SKT CAP SCR BLK OZ M6×25	
215	060-S01000	SPR WSHR M10	
216	FAS-300015	HEX BLT W/S M12×20	

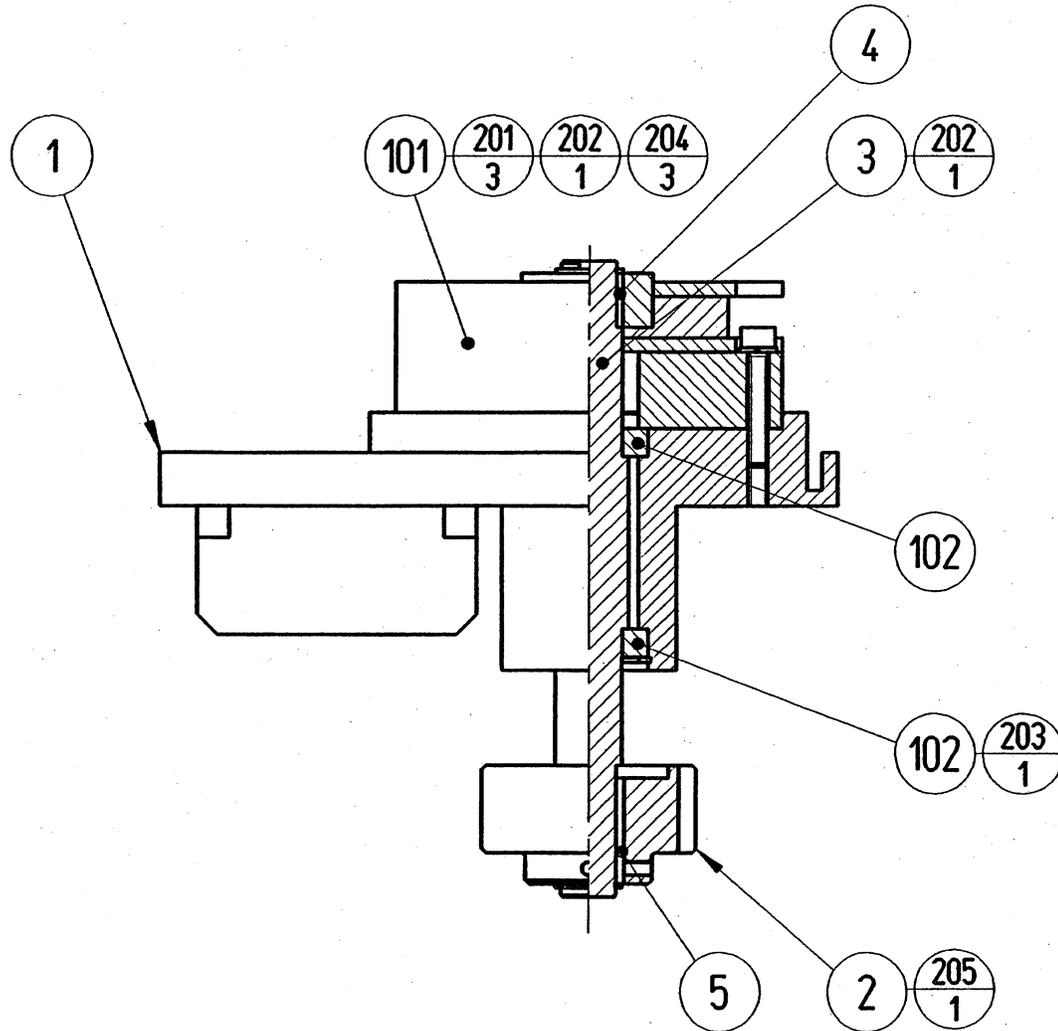


①7 ASSY BRAKE (ASL-3300)

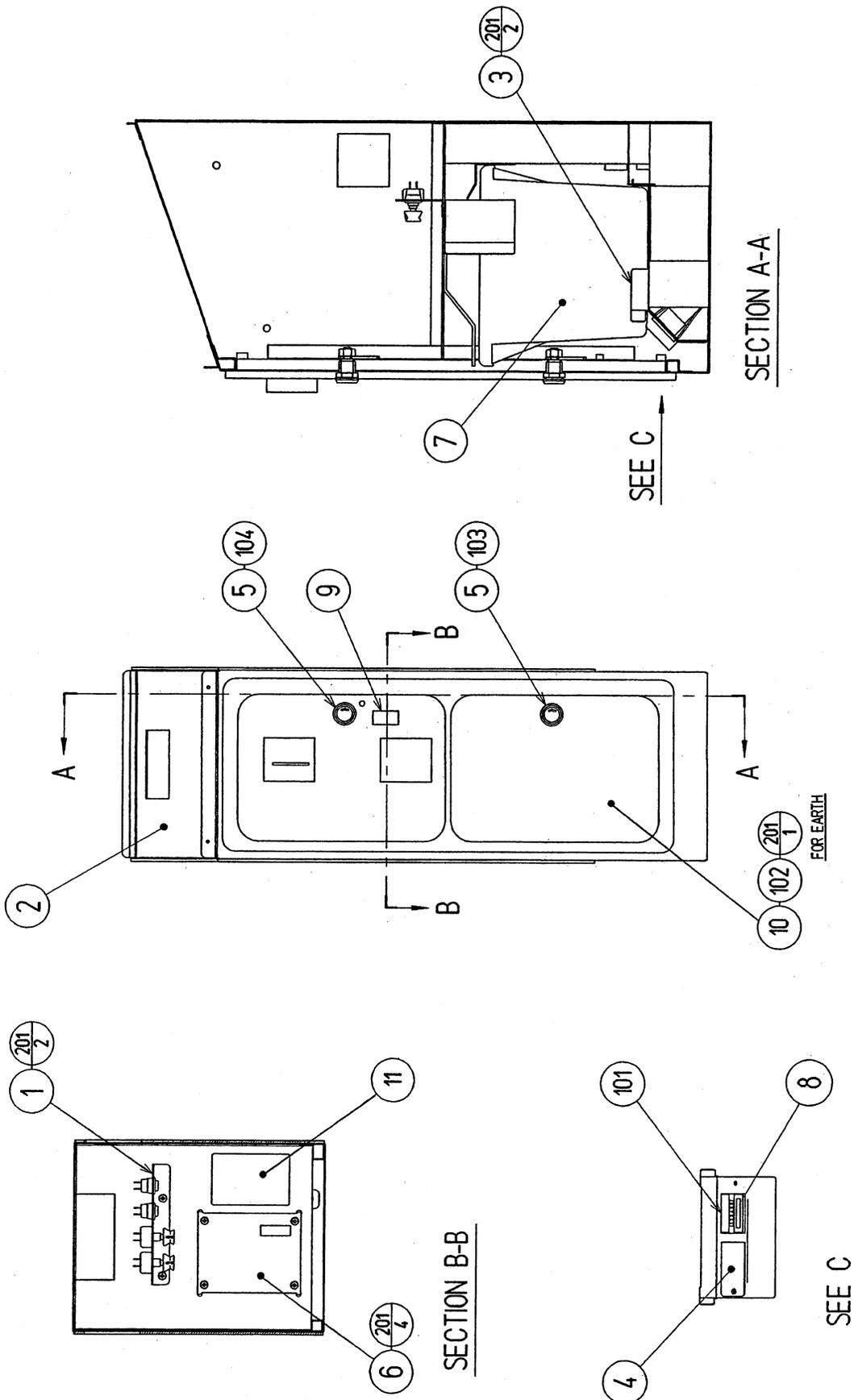
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3350	BRAKE UNIT	
2	ASL-3301	SHAFT	
3	ASL-3302	BRAKE BASE	
4	ASL-3303	BRAKE BASE UPPER	
5	ASL-3304	SWING ROSTA HOLDER	
6	ASL-3305	BRAKE GEAR HOLDER	
7	ASL-3306	VR BRKT SWING	
8	ASL-3307	COLLAR BRAKE SHAFT	
9	ASL-3308	SPL WASHER M12	
10	601-6005	ADJUST GEAR	
11	TTR-2009	GEAR HOLDER 80	
12	601-7944	GEAR 15	
13	ASK-3309	SWING GEAR 130	
101	100-5096	BEARING 17	
102	601-8917	ROSTA 22	
103	220-5373	VOL CONT B-5K	
	220-5484	VOL CONT B-5K OHM	
104	310-5029-F20	SUMITUBE F F 20MM	
105	280-5275-SR10	CORD CLAMP SR10	
201	030-000820-S	HEX BLT W/S M8×20	
202	050-F00600	FLG NUT M6	
203	050-H01200	HEX NUT M12	
204	060-S01200	SPR WSHR M12	
205	000-P00408-W	M SCR PH W/FS M4×8	
207	020-000820-OZ	HEX SKT H CAP SCR BLK OZ M8×20	
208	060-F00800	FLT WSHR M8	
209	060-S00800	SPR WSHR M8	
210	068-852216-OC	FLAT WSHR CRM 8.5-22×1.6	
211	028-A00306-P	SET SCR HEX SKT CUP P M3×6	
212	028-A00406-P	SET SCR HEX SKT CUP P M4×6	
301	600-6897-047	WIRE HARN SWING	

⑱ BRAKE UNIT (ASL-3350)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3351	BRAKE BASE	
2	ASK-3603	PINION GEAR 25	
3	ASL-3353	BRAKE SHAFT	
4	ASK-3606	KEY 5×5-10.5	
101	601-8982	BRAKE BXH	
102	100-5229	BEARING 17	
201	060-S00500	SPR WSHR M5	
202	065-S014S0-Z	STP RING BLK OZ S14	
203	065-A030H0-Z	STP RING BLK OZ H30	
204	020-000530-OZ	HEX SKT H CAP SCR BLK OZ M5×30	

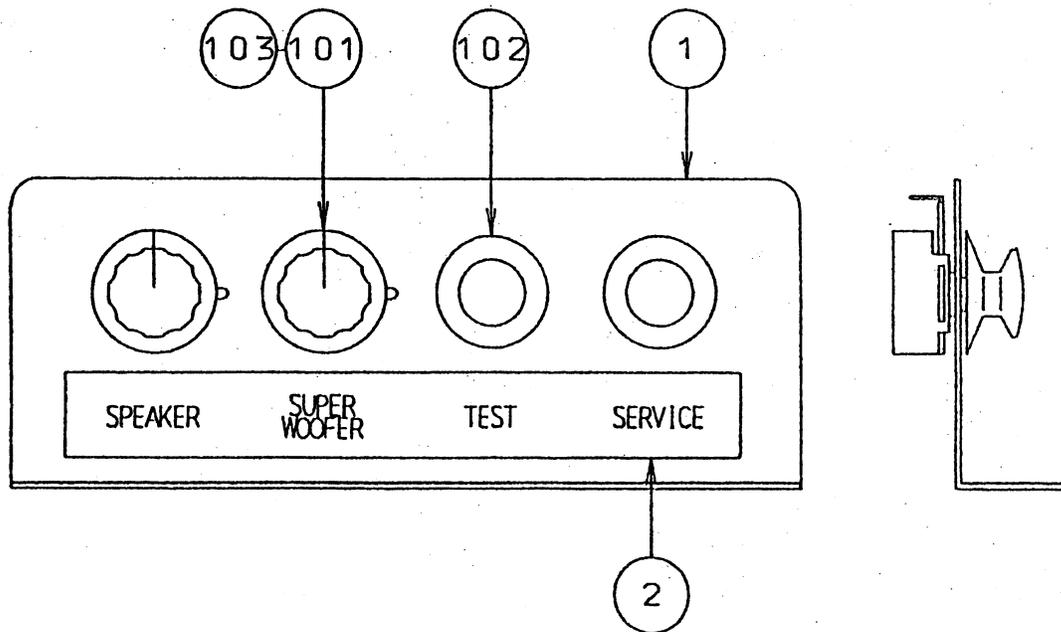


①9 ASSY COIN CHUTE TOWER (ASL-3400)

(D-2/2)

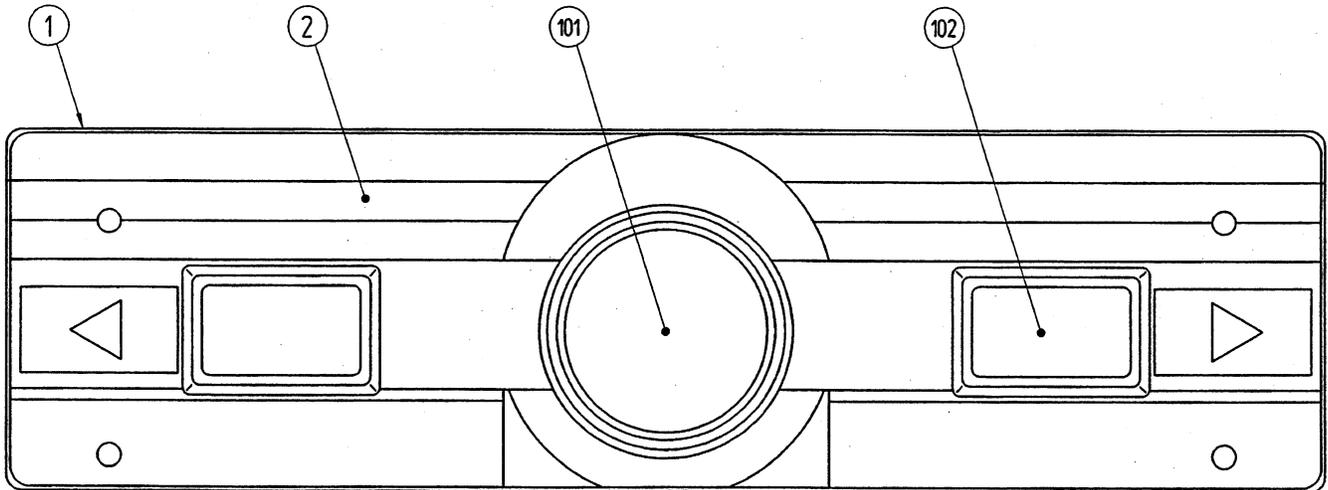
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	INY-1180	SW UNIT	
2	ASL-3401	COIN CHUTE TOWER	
3	INY-1162	METER BRKT	
4	INY-1163	METER HOLE LID	OTHERS
		NOT USED	USA
5	DP-1167	TNG LKG	
6	105-5171	CHUTE PLATE SINGLE	OTHERS
	105-5172	CHUTE PLATE DOUBLE	USA
7	253-5366	CASH BOX	
8	421-6591-01	STICKER COIN METER	
10	421-7501-02	STICKER 6.3V 0.15A	
11	440-WS0002XEG	STICKER W POWER OFF ENG	
101	220-5412	MAG CNTR W/CONN	
102	220-5237-92- ~	ASSY C. C 2DOOR ~	
103	220-5046-91	MAGNETIC LOCK W/KEYS	
104	220-5380	MAGNETIC LOCK MASTER W/O KEY	
105	280-5008	CORD CLAMP 15	
106	280-5009-01	CORD CLAMP 21	
107	280-5275-SR10	CORD CLAMP SR10	
108	310-5029-F20	SUMI TUBE F F 20MM	
109	601-0460	PLASTIC TIE BELT 100MM	
110	601-6231-B098	EDGING NEW TYPE	
201	000-P00408-W	M SCR PH W/FS M4×8	
301	600-6897-048	WIRE HARN EXT. C COIN	
302	600-6897-049	WIRE HARN EXT. C START	
303	600-6897-050	WIRE HARN EXT. C SPEAKER	
304	600-6897-051	WIRE HARN EXT. C LAMP	
305	600-6897-060	WIRE HARN EARTH COIN CHUTE	
306	600-6455-02	WIRE HARN C. C DOOR SINGLE	OTHERS
	600-6455-01	WIRE HARN C. C DOOR TWIN	USA
307	600-6709-52	WIRE HARN EARTH 400MM	
308	600-6709-54	WIRE HARN EARTH 150MM	
309	600-6897-074	WIRE HARN EARTH CONT PNL	
/	220-5412-01	MAG CNTR W/CONN BLACK	USA

② SW UNIT (INY-1180)



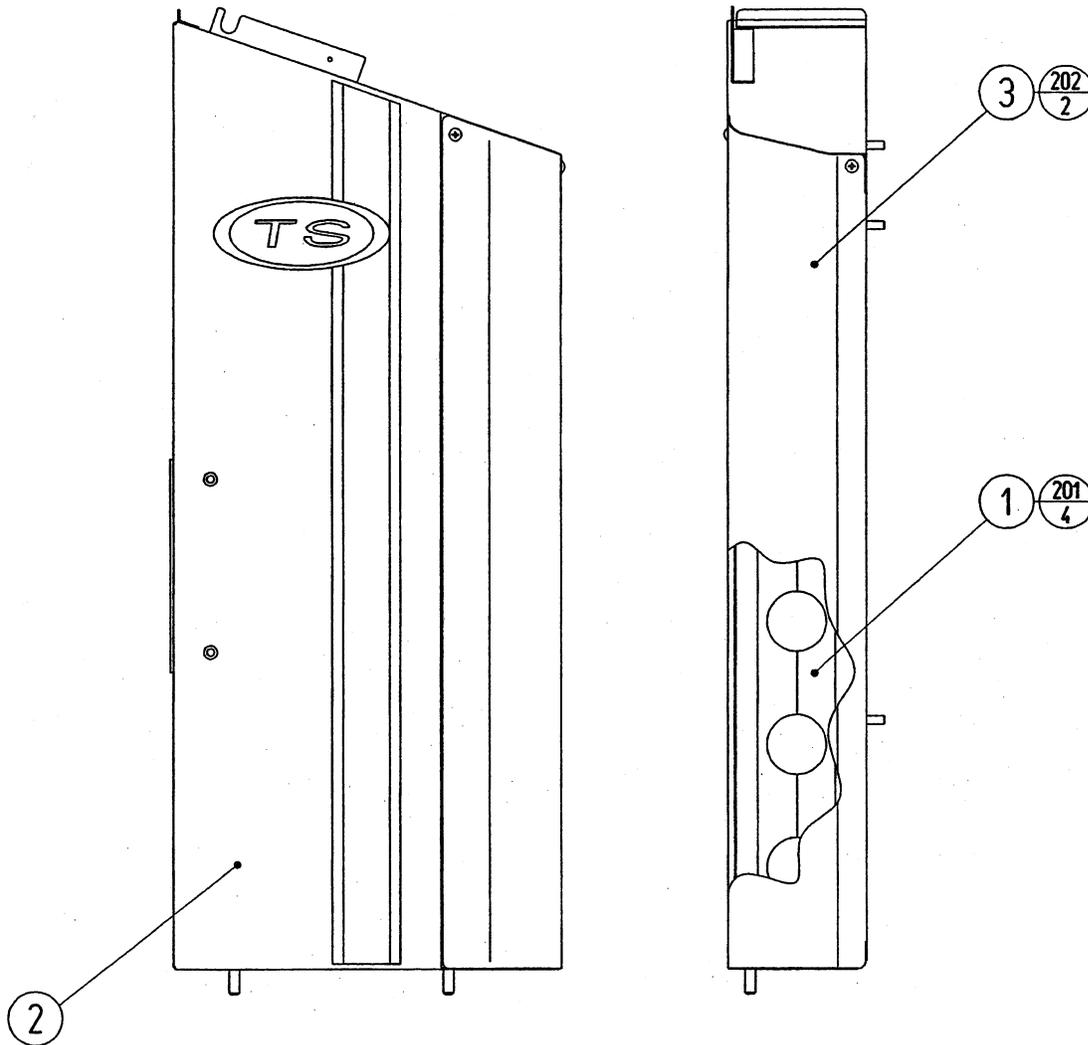
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	INY-1181	SW BRKT	
2	421-8911	STICKER SW UNIT	
101	220-5179	VOL CONT B-5K OHM	
102	509-5028	SW PB 1M	
103	601-0042	KNOB 22MM	
104	310-5029-F20	SUMITUBE F F20MM	
105	601-0460	PLASTIC TIE BELT 100MM	
301	600-6609-32	WIRE HARN TEST & SERVICE	
302	600-6609-33	WIRE HARN VOLUME A	
303	600-6609-34	WIRE HARN VOLUME B	

②① ASSY CONT PNL (ASL-3450)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3451-C	STICKER SELECT BUTTON ENG	
2	ASL-3452	SELECT BUTTON PLATE	
101	509-5547-91-02	SW PB 60M RED W/L	
102	509-5795-03	SW PB 45K W/L 12V3W YELLOW	
103	280-5009-01	CORD CLAMP 21	
301	600-6897-055	WIRE HARN START	

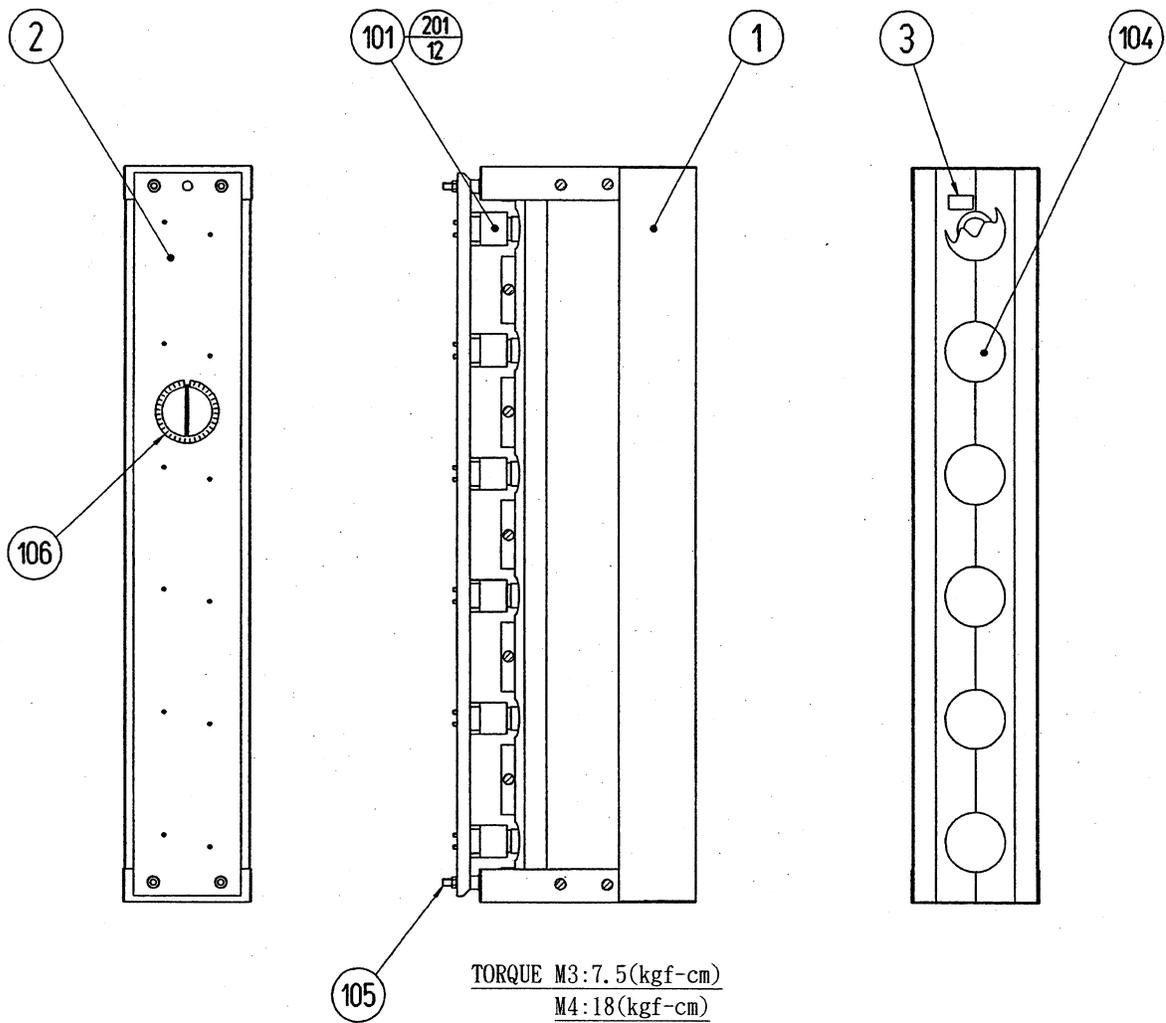
②② ASSY LAMP BOX L (ASL-3500)



TORQUE M4:18(kgf-cm)

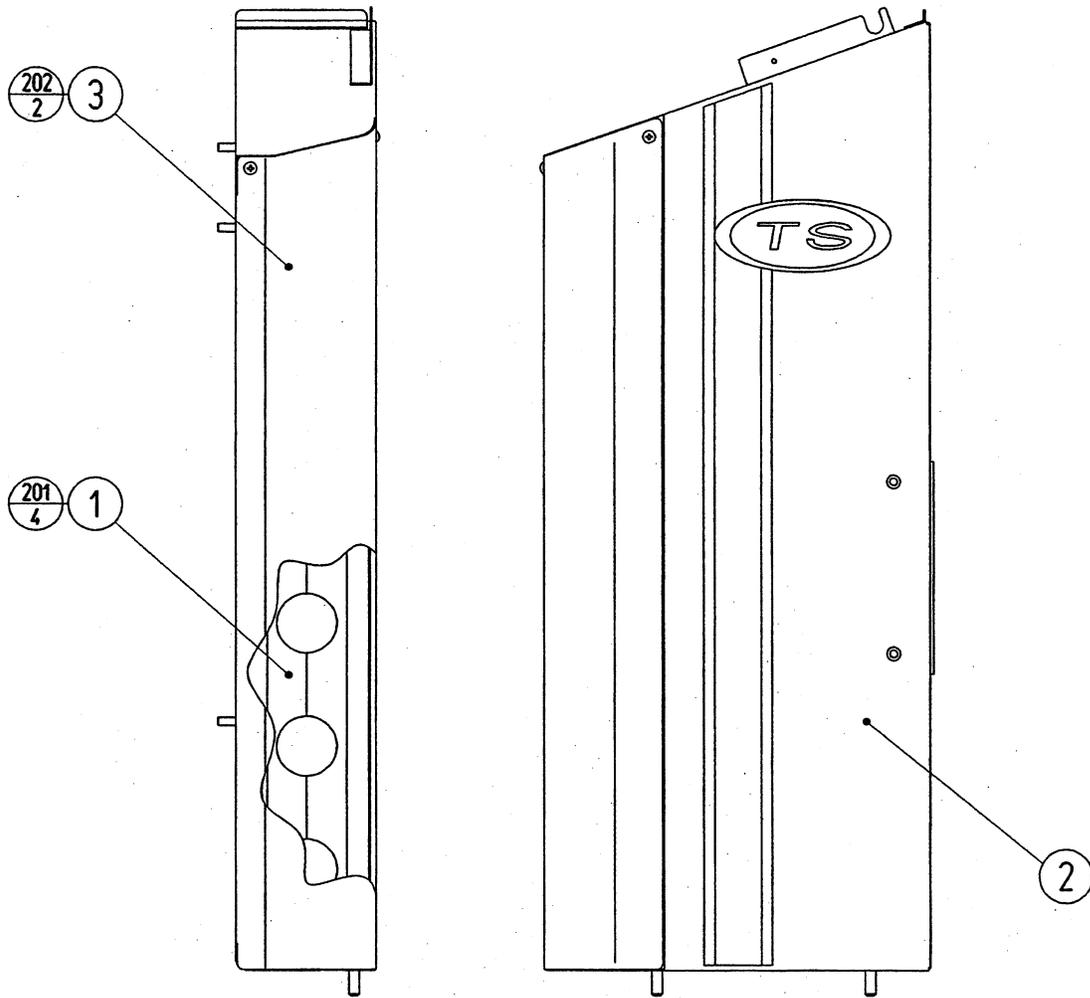
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3550	LAMP UNIT L	
2	ASL-3503	ASSY SUB LAMP BOX L	
3	ASL-3502	LAMP NET L	
201	000-T00408-0C	M SCR TH CRM M4×8	
202	000-T00408-0B	M SCR TH BLK M4×8	

②③ LAMP UNIT L (ASL-3550)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3551	REFLECTOR	
2	ASL-3552	LAMP BASE	
3	421-7501-48	STICKER 110V 25W×6	
101	214-0216	SWAN SOCKET	
102	280-5009-01	CORD CLAMP 21	
103	280-5275-SR10	CORD CLAMP SR10	
104	390-5705	LAMP 110V25W SINGLE AR	
105	601-8288	RUBBER DUMPER	
106	601-5525-120	BUSH 1.2T	
201	000-P00316-S	M SCR PH W/S M3×16	
301	600-6897-058	WIRE HARN LAMP I.	

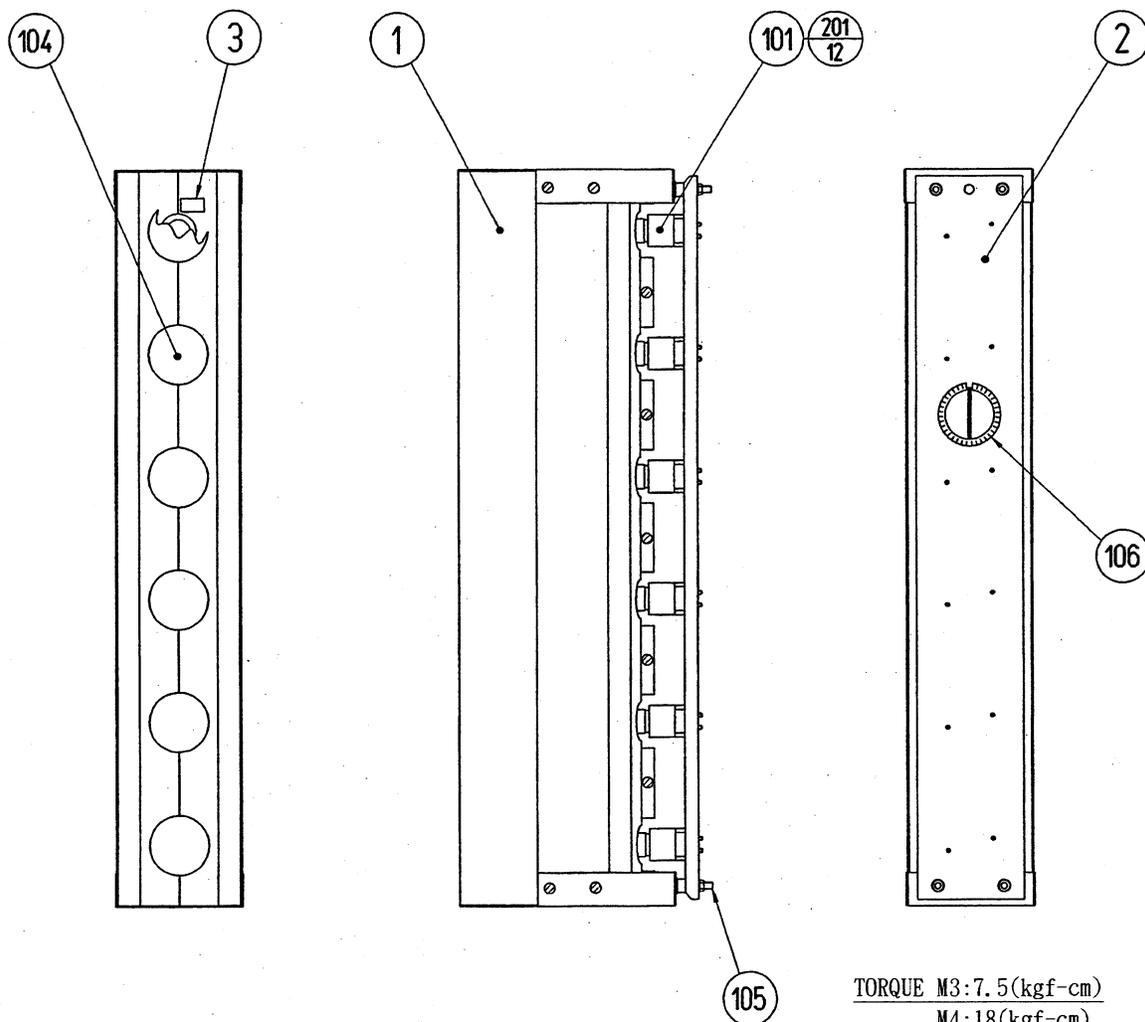
②④ ASSY LAMP BOX R (ASL-3600)



TORQUE M4:18(kgf-cm)

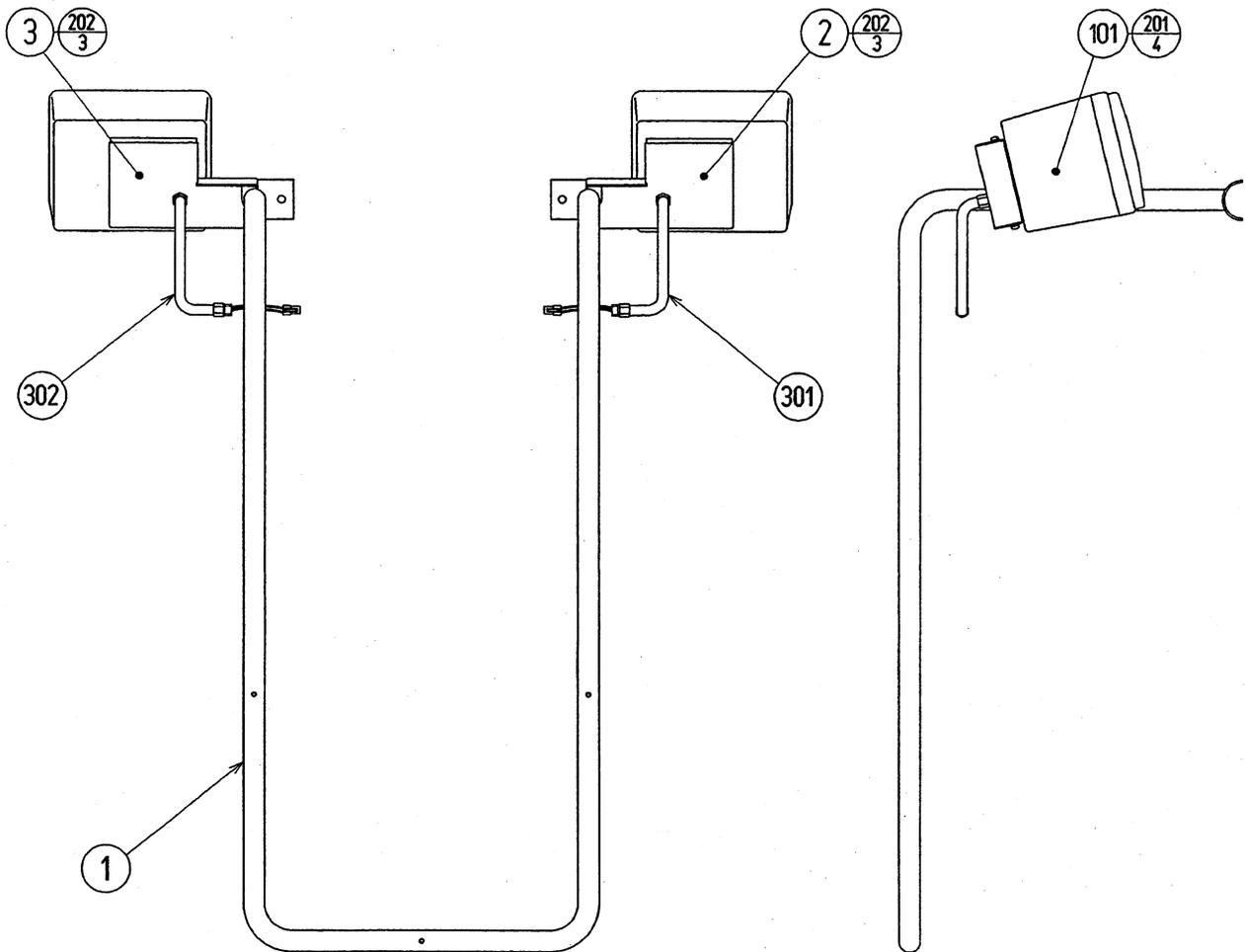
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3650	LAMP UNIT R	
2	ASL-3603	ASSY SUB LAMP BOX R	
3	ASL-3602	LAMP NET R	
201	000-T00408-0C	M SCR TH CRM M4×8	
202	000-T00408-0B	M SCR TH BLK M4×8	

②⑤ LAMP UNIT R (ASL-3650)



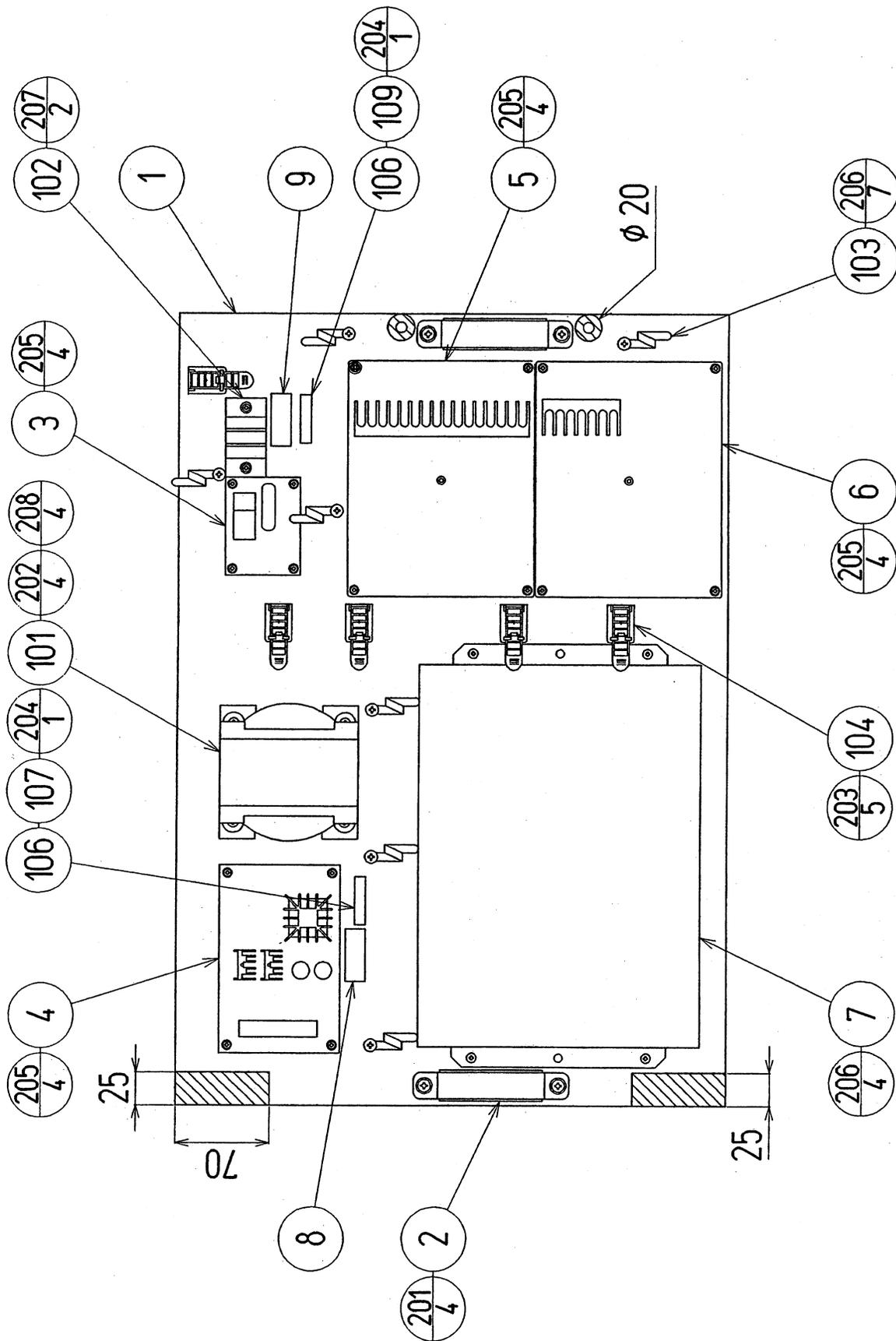
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3551	REFLECTOR	
2	ASL-3552	LAMP BASE	
3	421-7501-48	STICKER 110V 25W×6	
101	214-0216	SWAN SOCKET	
102	280-5009-01	CORD CLAMP 21	
103	280-5275-SR10	CORD CLAMP SR10	
104	390-5705	LAMP 110V25W SINGLE AR	
105	601-8288	RUBBER DUMPER	
106	601-5525-120	BUSH 1.2T	
201	000-P00316-S	M SCR PH W/S M3×16	
301	600-6897-059	WIRE HARN LAMP R	

②⑥ ASSY SPEAKER (ASL-3700)



TORQUE M4:18(kgf-cm)
M5:37(kgf-cm)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-3701	SUPPORT PIPE	
2	ASL-3702	SPEAKER COVER L	
3	ASL-3703	SPEAKER COVER R	
101	130-5096	ASSY SERVO SPEAKER BOX	
102	280-5275-SR10	CORD CLAMP SR10	
201	000-P00512-W	M SCR PH W/FS M5×12	
202	000-T00408-0B	M SCR TH BLK M4×8	
301	600-6897-056	WIRE HARN SPEAKER L	
302	600-6897-057	WIRE HARN SPEAKER R	



Make sure that there is no wiring, etc. in the slash mark portions.

TORQUE M4:18(kgf-cm)

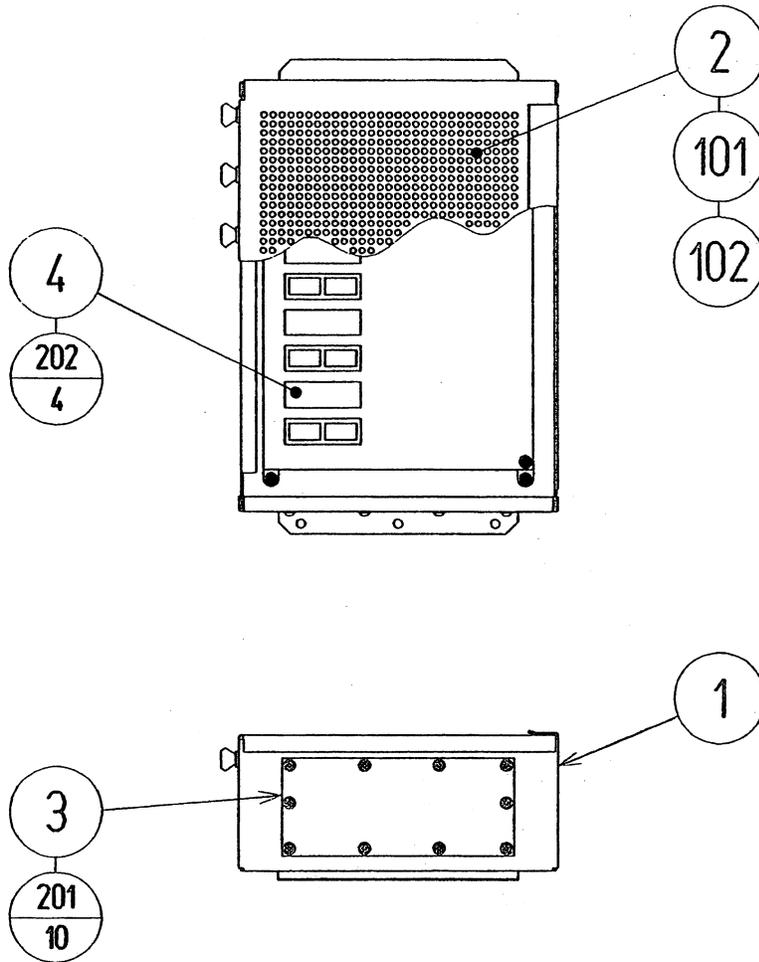
M5:37(kgf-cm)

②7 ASSY ELEC (ASL-4000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASL-4001	WOODEN BASE ELEC	
2	GBN-4002	HANDLE	
3	838-10801-01	CONN BD B	
4	839-0451-01	LIGHT CONTROL BD TTR	
5	838-11650-25	EQ. PWR AMP ASL	
6	838-10141-09	MIXER & EQ. AMP FOR S. WOOFER ASL	
7	ASL-4002	ASSY SHIELD CASE SOUND	
8	421-7914-1002	STICKER AC 100V 2A	
9	421-7914-1004	STICKER AC 100V 4A	
101	560-5362	PWR XFMR 19V2A 12. 8V6A×2	
102	117-5225	TERMINAL 3P 20A	
103	280-0419	HARNESS LUG	
104	280-5009-01	CORD CLAMP 21	
105	601-0460	PLASTIC TIE BELT 100MM	
106	514-5084	FUSE HOLDER F-60B W/F-60	
107	514-5086-2000	FUSE S. B 2000mA 250V HBC CE	
108	310-5029-F20	SUMI TUBE F F 20MM	
109	514-5086-4000	FUSE S. B 4000mA 250V HBC CE	
201	000-P00516-W	M SCR PH W/FS M5×16	
202	000-P00416-W	M SCR PH W/FS M4×16	
203	011-F00310	TAP SCR FH 3×10	
204	011-P00312	TAP SCR PH 3×12	
205	011-P00325	TAP SCR PH 3×25	
206	011-T03512	TAP SCR TH 3. 5×12	
207	011-T03516	TAP SCR TH 3. 5×16	
208	068-441616	FLT WSHR 4. 4-16×1. 6	
301	600-6897-008	WIRE HARN ELEC IN	
302	600-6897-009	WIRE HARN PWR XFMR IN	
303	600-6897-010	WIRE HARN AMP IN	
304	600-6897-011	WIRE HARN L. C. BD IN	
305	600-6897-012	WIRE HARN CONN BD OUT	
306	600-6897-013-91	WIRE HARN DS2 IN	
307	600-6897-014-91	WIRE HARN L. C. BD SIGNAL IN	
308	600-6897-015-91	WIRE HARN DS2 MIDI IN	
309	600-6897-016-91	WIRE HARN DS2 TO MIXER	
310	600-6897-017	WIRE HARN MIXER TO AMP	
311	600-6897-018-91	WIRE HARN SPEAKER OUT	
312	600-6897-019	WIRE HARN VOL. THROUGH	
313	600-6897-020	WIRE HARN VOL. SPEAKER	
314	600-6897-021	WIRE HARN VOL. WOOFER	
315	600-6897-022-91	WIRE HARN LOCK OUT	

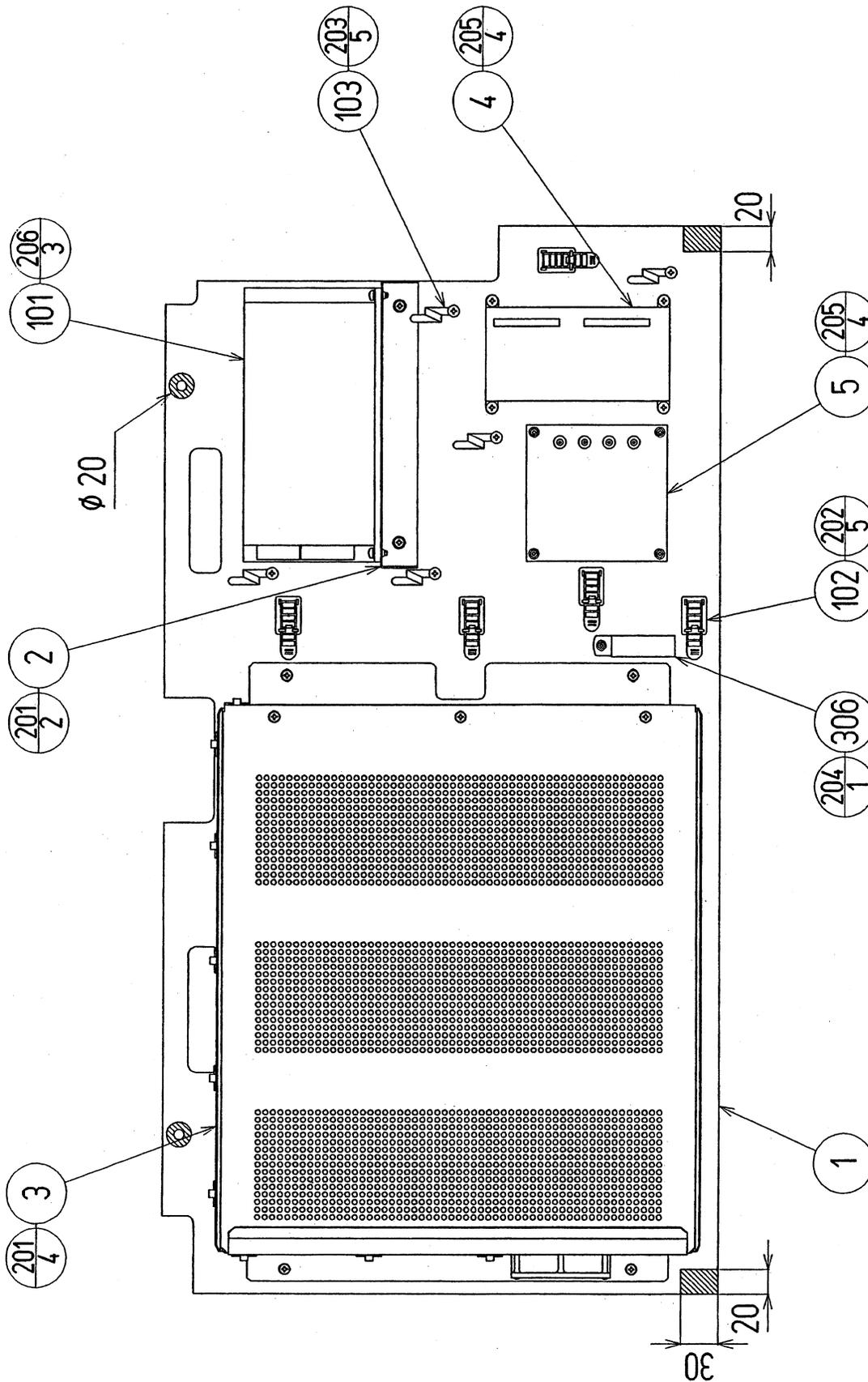
②⑧ ASSY SHIELD CASE SOUND (ASL-4002)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	SDC-4303X	SHIELD CASE FOR SOUND	
2	SDC-4304	SHIELD COVER FOR SOUND	
3	839-0876	FLT BD WYT SOUND	
4	837-13083	DIGITAL SOUND BD 2 ASL	
101	280-5258-91	ALLATCH PLUNGER NIKKO	
102	280-5259-91	ALLATCH GROMMET NIKKO	
201	010-P00308-F	S-TITE SCR PH W/F M3×8	
202	000-P00312-W	M SCR PH W/FS M3×12	
301	600-6897-070	WIRE HARN DS2 JST RA10P	
302	600-6897-071	WIRE HARN DS2 JST NH6P	
303	600-6897-072-91	WIRE HARN DS2 JST NH5P CN7	

29 ASSY MAIN BD (ASL-4100)

(D-1/2)



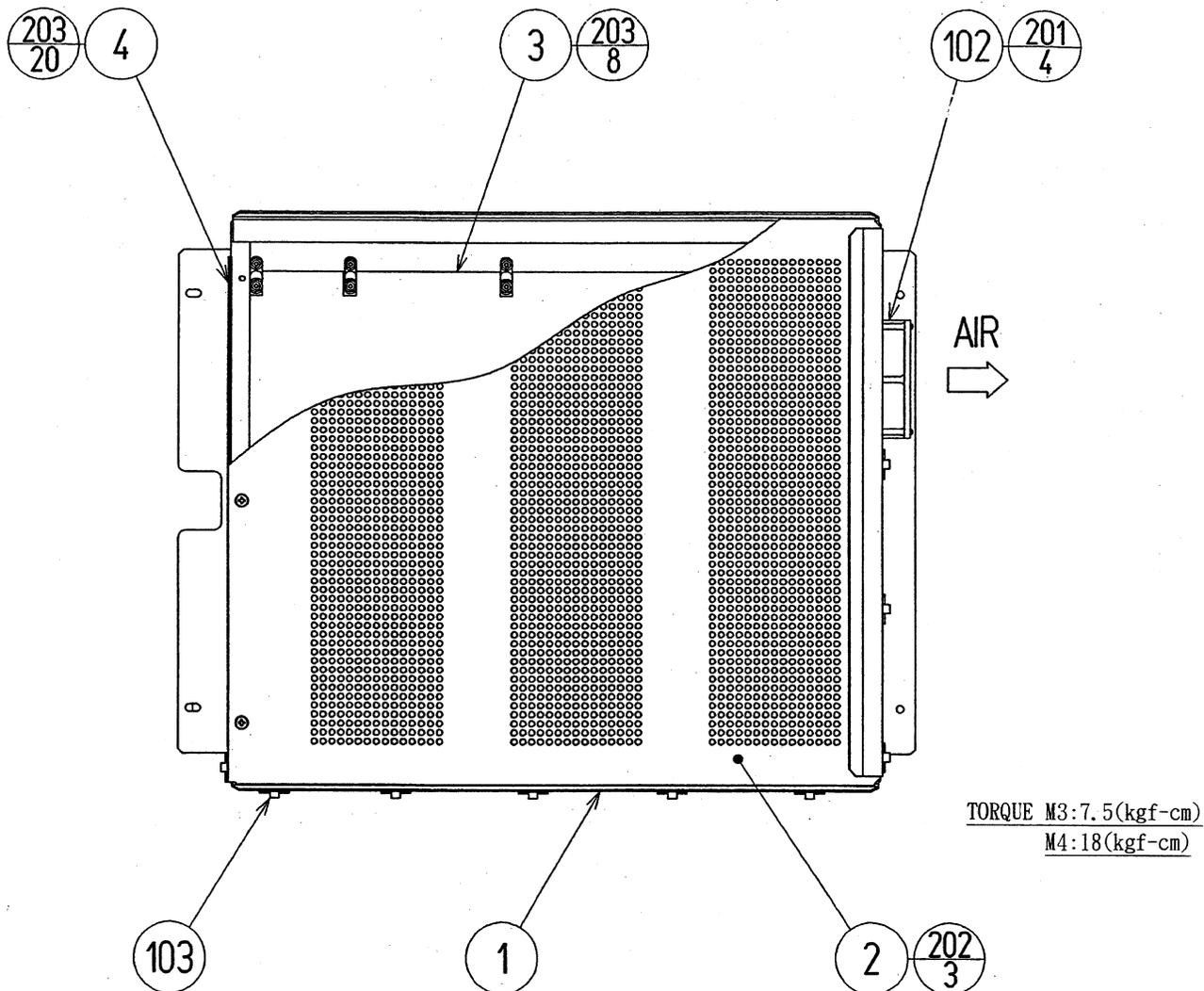
Make sure that there is no wiring, etc. in the slash mark portions.
 TORQUE M4:18(kgf-cm)

②9 ASSY MAIN BD (ASL-4100)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	ASK-4101CE	WOODEN BASE MAIN BD CE	
2	GBN-4102	SW REGU BRKT	
3	ASL-0100	ASSY SHIELD CASE	
4	839-0619-02	SSR BD 6	
5	839-0582	VPM BUFFER BD	
101	400-5306-01	SW REGU +5V12A12V1. 5A-5V1A	
102	280-5009-01	CORD CLAMP 21	
103	280-0419	HARNES LUG	
104	601-0460	PLASTIC TIE BELT 100MM	
201	000-P00416-W	M SCR PH W/FS M4×16	
202	011-F00310	TAP SCR FH 3×10	
203	011-T03512	TAP SCR TH 3.5×12	
204	011-T03516	TAP SCR TH 3.5×16	
205	011-P00325	TAP SCR PH 3×25	
206	000-P00412-S	M SCR PH W/S M4×12	
301	600-6897-029	WIRE HARN SW REGU IN	
302	600-6897-030	WIRE HARN 12V OUT	
303	600-6897-031	WIRE HARN MIDI OUT	
304	600-6897-032	WIRE HARN SWITCH OUT	
305	600-6897-033	WIRE HARN MAIN TO SSR	
306	600-6897-034	WIRE HARN RGB	
307	600-6897-035	WIRE HARN LAMP OUT	
308	600-6897-067	WIRE HARN MAIN BD IN	

③⑩ ASSY SHIELD CASE (ASL-0100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5218	SHIELD CASE	
2	105-5219-91	SHIELD CASE LID	
3	833-13080-01	GAME BD ASL USA	USA
4	839-0949	FLT BD C-CRX ASL	
101	209-0023	CONN CLOSED END	
102	260-0055	FAN MOTOR DC5V	
103	280-5275-SR10	CORD CLAMP SR10	
104	601-0460	PLASTIC TIE BELT 100MM	
201	000-P00330-W	M SCR PH W/FS M3×30	
202	000-P00408-W	M SCR PH W/FS M4×8	
203	010-P00308-F	S-TITE SCR PH W/F M3×8	
301	600-6502-13	WIRE HARN DC FAN	

17 . WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

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

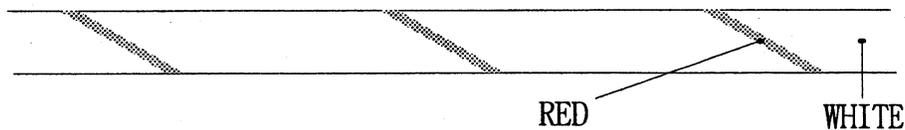
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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

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

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

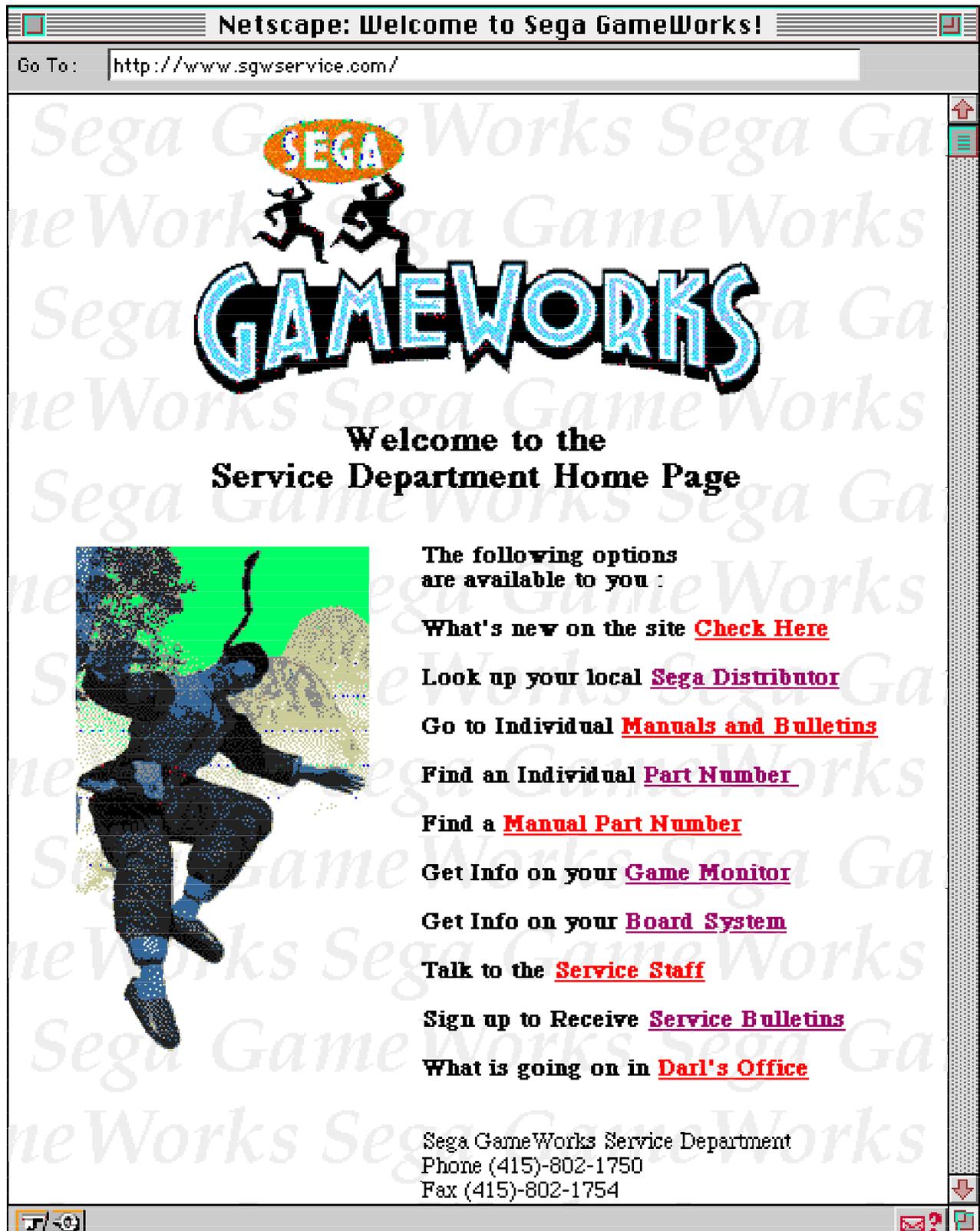
<Example> 51 WHITE / RED



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

K:	AWG18, UL1015
L:	AWG20, UL1007
None:	AWG22, UL1007

Come see Sega GameWorks Service Department's Homepage



The screenshot shows a Netscape browser window with the title "Netscape: Welcome to Sega GameWorks!". The address bar contains "http://www.sgwservice.com/". The main content area features the Sega GameWorks logo, which includes the word "SEGA" in a red oval above two stylized figures, and the word "GAMEWORKS" in large, blue, outlined letters. Below the logo is the text "Welcome to the Service Department Home Page". To the left of the text is a pixelated image of a character in a blue and black outfit, possibly a Sega character, in a dynamic pose. To the right of the image is a list of links: "The following options are available to you :", "What's new on the site [Check Here](#)", "Look up your local [Sega Distributor](#)", "Go to Individual [Manuals and Bulletins](#)", "Find an Individual [Part Number](#)", "Find a [Manual Part Number](#)", "Get Info on your [Game Monitor](#)", "Get Info on your [Board System](#)", "Talk to the [Service Staff](#)", "Sign up to Receive [Service Bulletins](#)", and "What is going on in [Darl's Office](#)". At the bottom right of the page, the contact information is listed: "Sega GameWorks Service Department", "Phone (415)-802-1750", and "Fax (415)-802-1754". The browser's status bar at the bottom shows a file icon, a search icon, and a mail icon.

Netscape: Welcome to Sega GameWorks!

Go To:

SEGA
GAMEWORKS

**Welcome to the
Service Department Home Page**

The following options
are available to you :

- What's new on the site [Check Here](#)
- Look up your local [Sega Distributor](#)
- Go to Individual [Manuals and Bulletins](#)
- Find an Individual [Part Number](#)
- Find a [Manual Part Number](#)
- Get Info on your [Game Monitor](#)
- Get Info on your [Board System](#)
- Talk to the [Service Staff](#)
- Sign up to Receive [Service Bulletins](#)
- What is going on in [Darl's Office](#)

Sega GameWorks Service Department
Phone (415)-802-1750
Fax (415)-802-1754