

SEGA ENTERPRISES, USA

MANUAL NO. 4200-6374-03

TABLE OF CONTENTS

INTRODUCTION OF THE OWNERS MANUAL	1
GENERAL PRECAUTIONS	2~3
1. PRECAUTIONS TO BE HEEDED FOR OPERATION	4~5
2. NAME OF PARTS	6
3. ACCESSORIES	7~8
4. ASSEMBLY AND INSTALLATION	9~15
5. PRECAUTIONS TO BE HEEDED WHEN MOVING MACHINE	16
6. CONTENTS OF GAME	17~21
7. EXPLANATION OF TEST AND DATA DISPLAY	22~32
7-1 SWITCH UNIT AND COIN METER	23
7-2 TEST MODE	24
7-3 MEMORY TEST	24
7-4 STEERING REACTION TEST	25
7-5 INPUT TEST	26
7-6 OUTPUT TEST	26
7-7 SOUND TEST	27
7-8 C.R.T. TEST	27
7-9 GAME ASSIGNMENTS	28
7-10 COIN ASSIGNMENTS	29~31
7-11 BOOKKEEPING	32
7-12 BACKUP DATA CLEAR	32
8. HANDLE MECHA	33
8-1 REMOVING THE CONTROL PANEL	33
8-2 REPLACING AND ADJUSTING THE HANDLE'S VR	34
8-3 GREASING	35
9. SHIFT LEVER	36~37
9-1 REMOVING THE SHIFT LEVER	36
9-2 SWITCH REPLACEMENT	37
10. ACCEL & BRAKE(S)	38~40
10-1 ADJUSTING AND REPLACING THE VR	38
10-2 GREASING TO FOOT BRAKE AND ACCEL	39
10-3 GREASING TO HAND BRAKE	40
10-4 REPLACING THE MICROSWITCH ON HAND BRAKE	40
11. COIN SELECTOR	41~43
12. MONITOR	44~46
13. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS	47~48
13-1 REPLACEMENT OF FLUORESCENT LAMP	47
13-2 REPLACEMENT OF LAMPS	48
14. PERIODIC INSPECTION TABLE	49
15. TROUBLESHOOTING	50
16. GAME BOARD	51~55
16-1 REMOVING THE GAME BOARD	51 55
16-2 REPLACMENT OF FUSE	52
16-3 COMPOSITION OF THE GAME BOARD	53
16-4 ERROR DISPLAY	54~55
17. COMMUNICATION PLAY	56~59
17-1 INSTALLATION PRECAUTIONS	56
17-2 CONNECTING THE COMMUNICATION CABLES	56~58
17-2 CONTRECTING THE COMMUNICATION CABLES	59
18. DESIGN RELATED PARTS	60~61
19. PARTS LIST	62~103
20. WIRING DIAGRAMS	XXX
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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.

SPECIFICATIONS		
Installation space:	68 in.(L) x 66 in.(W)	
Height:	85 in.	
Weight:	Approx. 1171 lbs.	
Power maximum current:	7.9 Amp AC 120V 60 Hz	
MONITOR:	29" NANAO MONITOR (X2)	

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 RALLY 2 TWIN VERSION, a new SEGA product.

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

SEGA ENTERPRISES, INC. (USA)

Customer Service

45133 Industrial Drive
Fremont, CA 94538
Phone 650-802-1750
Fax 650-802-1754
7:30 am - 4:00 pm, Pacific Standard Time
Monday thru Friday

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

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

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

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

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

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

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

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

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

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

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

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

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

f) When the product exhibits a distinct change in performance; this indicates a need for service.

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

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

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

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

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

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

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

INSTALLATION PRECAUTIONS

• Verify the amperage of the branch circuit outlet before plugging in the power plug. Do not overload the circuit.

• Avoid using an extension cord. If one is required, use an extension cord of type SJT, 16/3 AWG rated min. 120 VAC, 7A.

- Moving this unit requires a minimum clearance (of doors, etc.) of 32" (W) by 77" (H).
- For the operation of this machine, secure a minimum area of 32" (W) by 42"(D).

REGULATORY APPROVALS

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

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

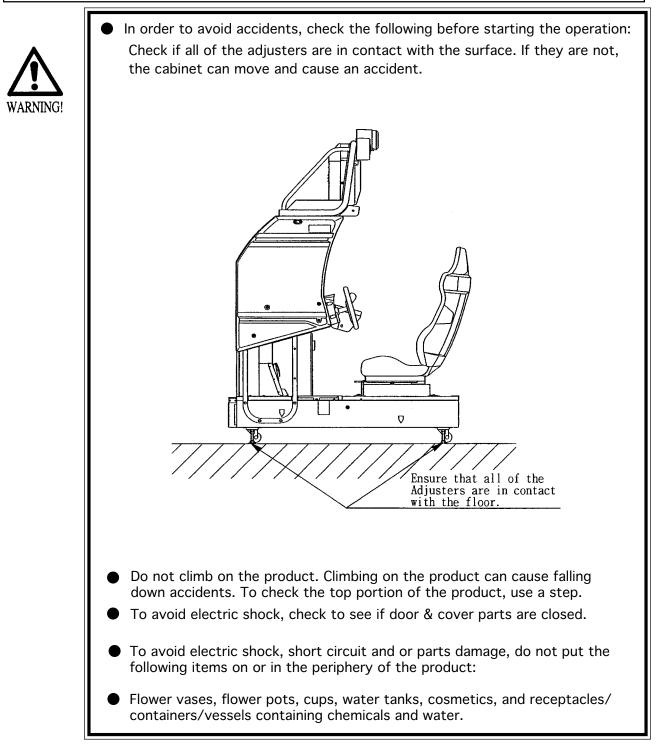
This game has been tested and listed by Underwriters Laboratories, Inc., to ANSI/UL22.



1. PRECAUTIONS TO BE HEEDED FOR OPERATION

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

PRECAUTIONS TO BE HEEDED FOR OPERATION BEFORE STARTING THE OPERATION





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

PRECAUTIONS TO BE HEEDED DURING OPERATION



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

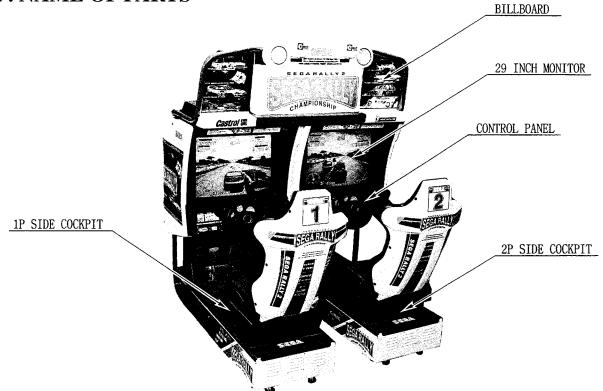
- * Intoxidated persons
- * Those who have high blood pressure or heart problems.
- * Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
- * Persons susceptible to motion sickness.
- * Persons whose acts runs counter to the products warning displays.
- * Instruct those who wear high-heeled shoes to refrain from

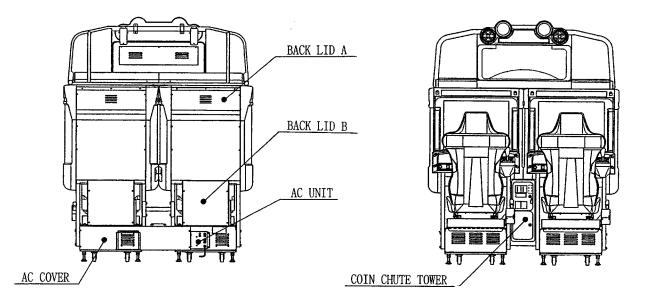
playing the game by explaining that playing the game with highheeled showes is very dangerous and likely to cause a potentially hazardous situation.



- To avoid electric shock and short circuit, do not allow customers to put hands and fingers or extraneous matter in openings of the product or small openings in or around doors.
- To avoid electric shock and short circuit, do not allow the customers to unplug the power plug without a justifiable reason.
- Although this product has the accident preventive covering attached to potentially hazardous places where hand and fingers could be caught, small children are unable to perceive hazards. Use care so that small children do not come close to the product when in play.
- Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage and/or falling down, resulting in injury due to fragments and falling down.

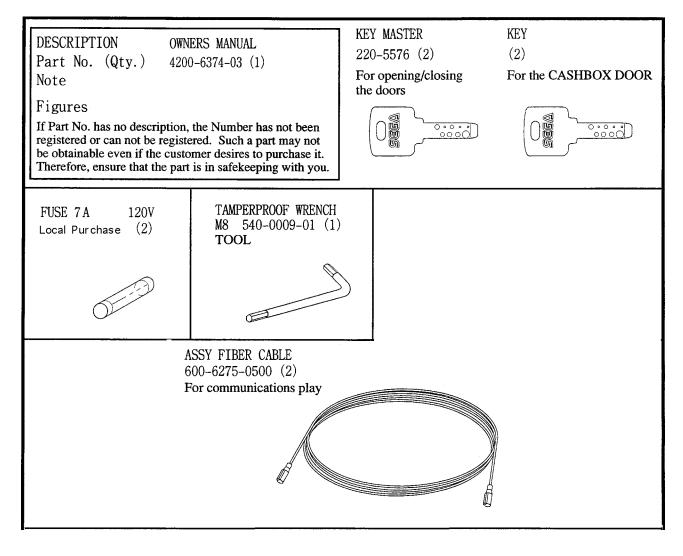
2. NAME OF PARTS





GAME SPECIFICATIONS	WIDTH	L	ENGTH	HI	EIGHT	WEIGHT
Weight-DURING SHIPPING	A	ll measu	rements are	in inche	S	~ 1250 LBS.
BILLBOARD	64"	Х	27"	Х	24"	105 LBS.
COCKPIT (PER SEAT)	33"	Х	66"	Х	61"	514 LBS.
COIN CHUTE TOWER	12.5"	Х	18"	Х	23"	33 LBS.
WHEN ASSEMBLED	66"	Х	68"	Х	85"	1172 LBS.

3. ACCESSORIES

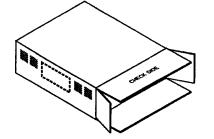




THE SHIPMENT METHOD DESCRIBED BELOW ONLY APPLIES TO 'MODEL 3' BOARDS CONTAINED IN THE FOLLOWING GAMES:

LOST WORLD, VIRTUA FIGHTER 3, SUPER GT, SEGA BASS FISHING, STRIKER 2 HARLEY DAVIDSON, RALLY 2

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



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

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

FILTER BOARD

"CHECK SIDE" Display



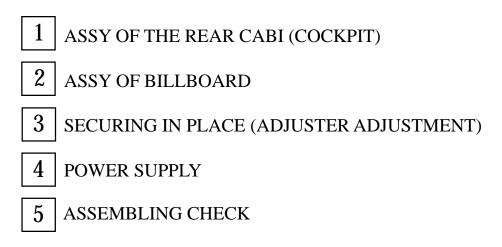
NO OTHER GAMES BOARDS ARE TO BE SHIPPED IN THE CAGE AS THEY MAY BE DAMAGED BEYOND REPAIR. PLEASE SHIP THEM WITHOUT CAGE PROPERLY PROTECTED DURING SHIPPING.

4. ASSEMBLING AND INSTALLATION



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

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



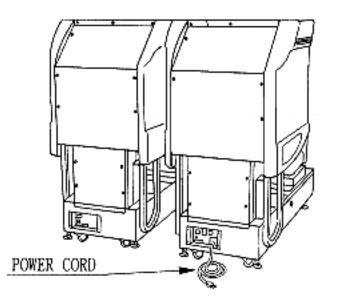
Note that the tools such as a phillips screwdriver and wrench for M16 hexagon bolt w/24 mm width across flats are required for the assembly work



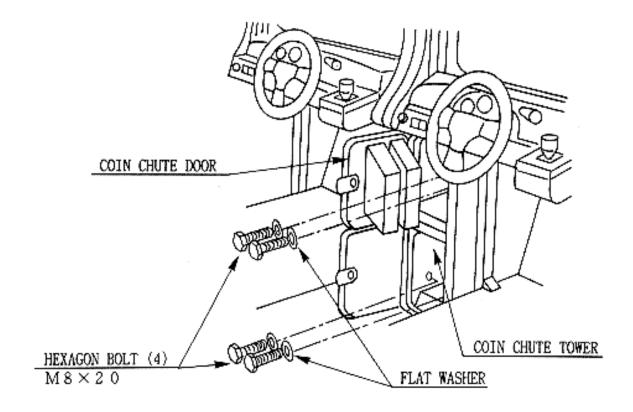
ASSY OF REAR CABI (COCKPIT)



Permanantly tightening the hex bolts should not be completed until the leg levelers are adjusted properly.



- 1 Place the two cockpits side by side. Position the 1P cabinet, which has the power cord at the left hand side, as shown in the diagram.
- (2) Install the coin chute tower in between the two cabinets. Open the coin chute door and cashbox door to secure with the 4 hex bolts from are fastened temporarily.



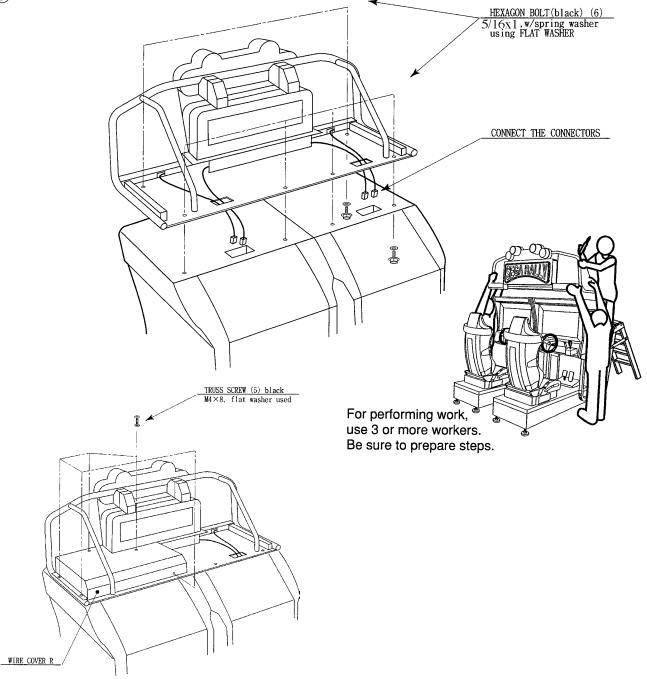


ASSY OF THE BILLBOARD



Due to its large size, it is very difficult for one person alone to install the billboard, Make sure 2 or more persons are available to perform this work. Attempting to perform the installation alone can cause an accident.

- (1) Mount Billboard on tbothcabinets and secure with the 4 hexgaonal bolts for each cabinet.
- (2) Connect all of the 4 connectors inside the Billboard box.
- (3) Install Wire Cover L&R with 5 screws for each.





SECURING IN PLACE (ADJUSTER ADJUSTMENT)



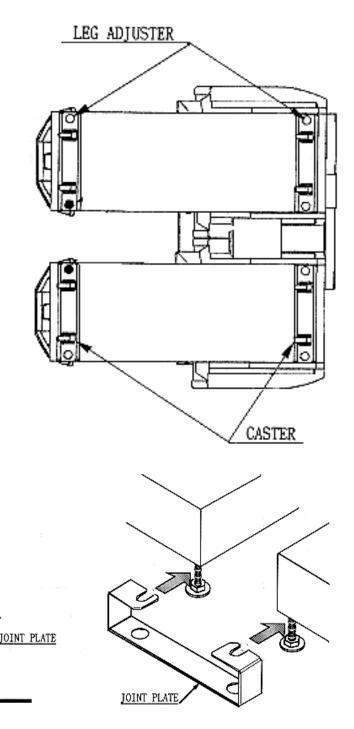
Be sure to have all the Adjusters make contact with the surface. Unless the Adjusters come into contact with the surface, the Cabinet can move of itself, causing an accident.

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

- 1) Move the machine to the installation position.
- 2 Attach the joint plate for the two internal leg adjusters prior to causing 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.

Secure the joint plate by fastening the nuts and the bottoms of leg

adjusters.







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.

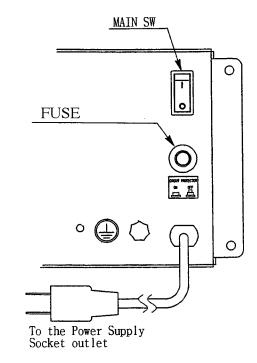
Connect the game to the power supply and turn on power to the game. Before connecting power supply be sure that power switch is off

Turning the AC unit's main switch on will cause the machine to start the power check and network check automatically. In the Power On check, the steering wheel turns left and right, and then returns to the centering position and stops. In this check, the values of the VR inside the control panel are corrected.

Until this check is finished, and the steering wheel stops, do not touch the steering wheel or play the game.

If you do, the steering reaction during the game (reaction at the time of course-out or crash) can not be obtained correctly. In the case of an abnormal reaction during the game, turn power on again from the beginning and complete the power on check.

During Network checking, "NETWORK CHECKING" flashes on the screen. When network checking is finished, the demo mode will appear on the monitor screen. After 10 seconds, if the network check is not finished, check the communications connections.



ASSEMBLING CHECK

5

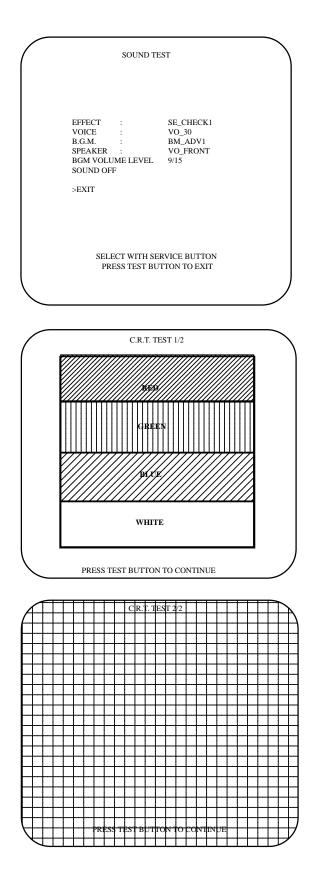
The TEST MENU allows for each part of the cabinet to be checked, the Monitor to be adjusted, and the coin and game related various functions to be performed.

(MEMORY TES	ST X
IC ** GOOD IC ** GOOD	IC ** GOOD IC ** GOOD	IC ** GOOD IC ** GOOD
IC ** GOOD	IC ** GOOD	
IC ** GOOD IC ** GOOD	IC ** GOOD IC ** GOOD	IC ** GOOD IC ** GOOD
IC ** GOOD	IC ** GOOD	IC ** GOOD
IC ** GOOD	IC ** GOOD	IC ** GOOD
IC ** GOOD	IC ** GOOD	
l	PRESS TEST BUTTON 1	TO EXIT
\mathbf{X}		/
	INPUT TEST	
(ind of fills i	
STE	ERING WHEEL	**H
GAS	PEDAL	**H
BRA	KE PEDAL	**H
	TUP	OFF
	T DOWN V 1 (ZOOM IN)	OFF OFF
	W 2 (ZOOM OUT)	OFF
STAI	RT	OFF
		0.777
	N CHUTE #1 N CHUTE #2	OFF
	11.00 A.11.	0.777
	VICE-SW F-SW	OFF OFF
110		011
	PRESS TEST BUTTON	TO EXIT
(OUTPUT T	EST
0.00	MD.	OFF
START LA VIEW 1 (7	AMP COOM IN) LAMP	OFF OFF
	COOM OUT) LAMP	OFF
LEADER	LAMP	OFF
CENTERI	NG LEVEL	OFF
>EXIT		
>EXII		
	SELECT WITH SERVIC	CE BUTTON
\	PRESS TEST BUTTO	
\mathbf{X}	1 KE55 1E51 DUITU	

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

Selecting the INPUT TEST on the 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 ?

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 geomagnitism, the location building's steel frames and other game machines in the periphery. By watching the test mode screen, make judgement as to whether an adjustment is needed. If it is neccessary, adjust the projector by refering to Section 9.

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

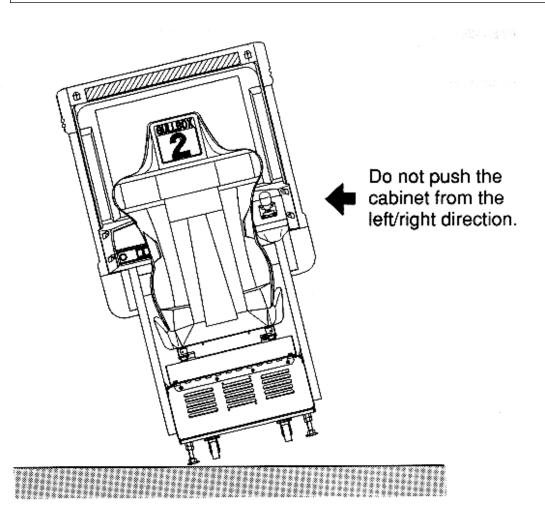
5. PRECATIONS TO BE HEEDED WHEN MOVING THE MACHINE



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



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

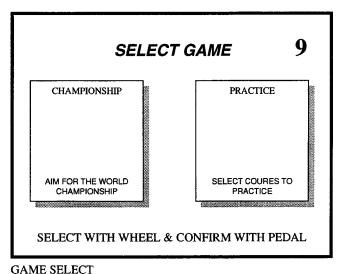


6. CONTENTS OF GAME

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 occured. Immediately look into the cause of the fault and eliminate the cause thereof to ensure satisfactory operation. During the Advertise mode, the Billboard's Decoration Lamp lights up periodically. When the machine is energized, the Billboard's Fluorescent Lamp is always lit. The Steering Wheel repeats centering action periodically. Automatic centering will apply to the Steering Wheel if it is not centered. During the Advertise Mode, sound is emitted fromt e Speaker beside the Monitor.

HOW TO PLAY

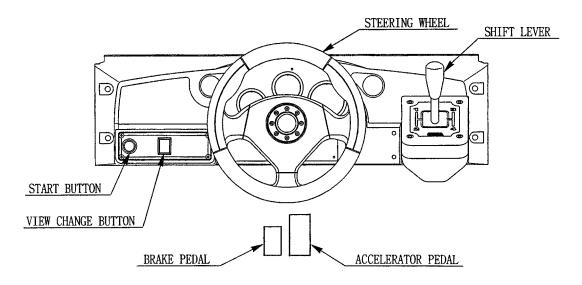
- Get in the machine. the seat position is adjustable forward and backward. Facing the monitor, you will find the Lever on the lower right-hand side. Pull the Lever to adjust the seat position.
- (2) Insert a coin(s). Insert one play worth of coins to have the Select Mode appear. Up to 9 credits can be counted at a time. Coins inserted after counting 9 will not be counted or rejected. Credits will not be displayed after Select Mode.
- (3) When a coin is inserted in one of the linked seats, the monitor(s) of the other seat(s) will be in the entry acceptance mode and countdown starts. For entry, insert a coin during countdown.



(4) In the case of 1P play, in the SELECT mode, choose either of CHAMPIONSHIP MODE or PRACTICE MODE. Turn the Steering Wheel to select and confirm by stepping on the Accelerator. In the communication play, PRACTICE MODE is selected compulsorily.

When the SELECT mode is displayed, countdown starts. When countdown reaches 0, the course and car being selected will automatically be decided.

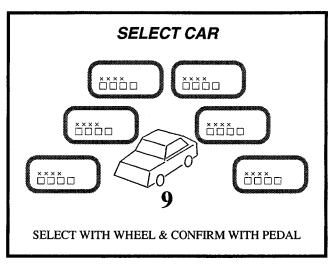
After stepping on the Accelerator to confirm, you will proceed to the next SELECT mode in the middle of the countdown by further stepping on the Accelerator.



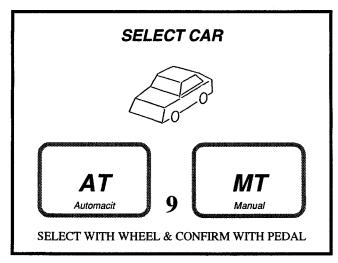
WHEN PLAYING IN TH ECHAMPIONSHIP MODE

Note: In the interactive play, CHAMPIONSHIP MODE can not be selected.

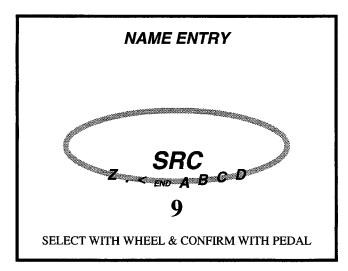
- The car select mode appears. Select from among 6 types. Depending on the type of car, your operating sensation may somewhat vary. Choose the desired car by turning the Steering Wheel, and confirm with the Accelerator Pedal.
- (2) TRANSMISSION SELECT mode appears. Turn the Steering Wheel and select either AT (AUTO-MATIC) or MT (MANUAL, 4 SHIFTS), and confirm with pedal.
- (3) The NAME ENTRY MODE appears. Turn the Steering Wheel to choose input characters, and confirm with pedal. After inputing the 3 characters, game starts.



CAR SELECT (1)

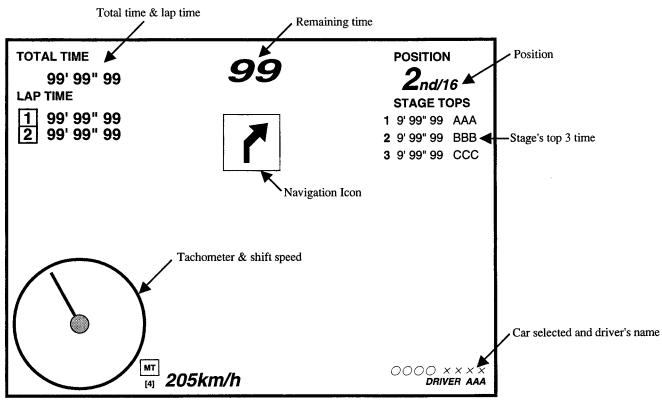


CAR SELECT (2)



NAME ENTRY

(4) On the upper left portion of the screen, total time & lap time are displayed. The remaining time is shown at the top center and navigation icon is seen at the loer part of the top center. on the upper right-hand side, the present player's position as well as the stage's top 3 times are displayed. the lower left portion shows tachometer and shift speed. the lower right-hand portion indicates the selected car and the driver's name entered.



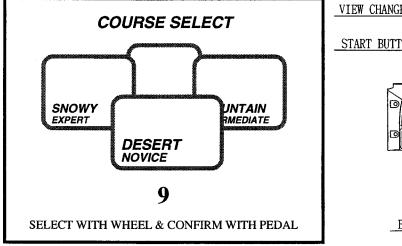
IN-PLAY MODE

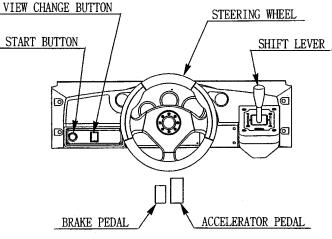
- (5) After game start, time decreases. Passing a mid-course checkpoint increases time and game continues. Failing to pass the checkpoint within the time limit causes game over. Finishing the GOAL in each stage will let you proceed to the next stage.
- (6) In the Championship mode, you proceed starting from DESERT (novice) sequentially to MOUNTAIN (intermediate), SNOWY (expert) with one lap for each, and RIVIERA (expert) with 2 laps.
- (7) Finishing the RIVIERA (expert) course results in GAME CLEAR and the game ends.

The Steering Wheel and the Cabinet will react depending on the road surface status and car condition during play. Press the View Change Button to shift to a different view.

WHEN PLAYING IN THE PRACTICE MODE

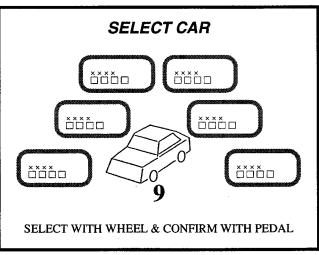
(1) The Course Select mode appears. Turn the Steering Wheel to select and confirm with pedal. In case of communication play, the course is selected by majority.



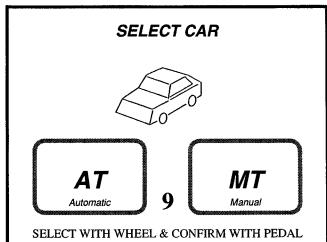


COURSE SELECT

(2) The Car Select Mode appears. Select from among the 6 types. Depending on the type of car, your operating sensation may somewhat vary. Select the desired car with the Steering Wheel. Step on the Accelerator to confirm.

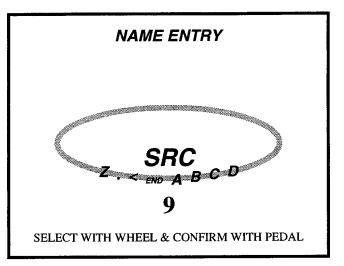


CAR SELECT (1)



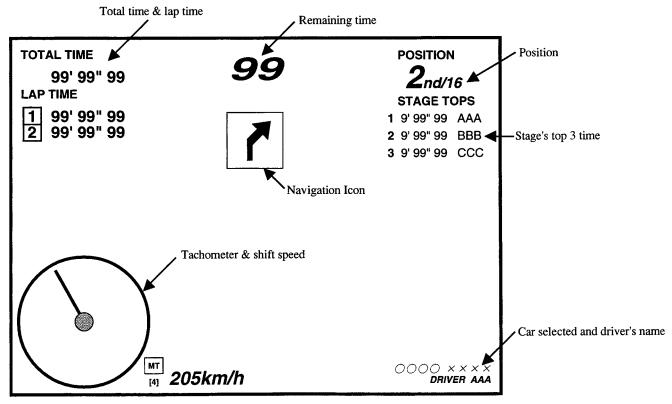
CAR SELECT (2)

 (3) The Transmission Select Mode appears. Turn the Steering Wheel to choose either of AT (AUTOMATIC) or MT (MANUAL, 4 SHIFTS), and confirm with the Accelerator Pedal. (4) The NAME ENTRY MODE appears. Turn the Steering Wheel to choose input characters, and confirm with pedal. After inputing the 3 characters, game start



NAME ENTRY

(5) On the upper left portion of the screen, total time & lap time are displayed. The remaining time is shown at the top center and navigation icon is seen at the loer part of the top center. on the upper right-hand side, the present player's position as well as the stage's top 3 times are displyed. the lower left portion shows tachometer and shift speed. the lower right-hand portion indicates the selected car and the driver's name entered.



IN-PLAY MODE

(6) After game start, time decreases. Passing a mid-course checkpoint increases time and game continues. Failing to pass the checkpoint within the time limit causes game over. Finishing the GOAL in each stage will let you proceed to the next stage.

In the Championship mode, you proceed starting from DESERT (novice) sequentially to MOUNTAIN (intermediate), SNOWY (expert) with 3 laps for each, and RIVIERA (expert) with 5 laps.
 Finishing the RIVIERA (expert) course results in GAME CLEAR and the game ends.

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.



When you enter the test mode, the Handlebar and Bike Body are unlocked. Do not lean against the BikeBody when you press the test button. Failure to observe this can cause violent falling down accidents as the Bike Body will bank. When you finish the test mode, the handlebar and Bike Body will be locked.

CAUTIONS TO BE HEEDED WHEN USING THE TEST MODE:



In the case where plural machines are linked for communication play, if even one seat enters the test mode, all of the linked seats will enter the test mode. Therefore, if any one of the linked machines is in play, use care so as not to use the test mode.

The contents of the setting changes made will not be effective unless the test mode is finished in the test mode. When the setting is changed, be sure to "EXIT" in the menu mode. Do not press the TEST BUTTON during network check at the time of turning the power on or exiting from the test mode. If anyone of the linked machines uses the test mode during network check, all other Seats will continue network checking. Cause all of the Seats to reenter the test mode and then have all of the Seats exit from the test mode simultaneously.

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 - 10, 7 - 11 7 - 6 7 - 7 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.	7 - 3, 7 - 4
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 - 10, 7 - 11 7 - 6 7 - 7
CONTROL SYSTEM	 In the INPUT TEST mode, check each SW and VR. Adjust or replace each SW and VR. If the problem can not be solved yet, check the CONTROL's moves. 	7 - 6 8
MONITOR	In the MONITOR ADJUSTMENT mode, check to see if the MONITOR adjustment is appropriately made.	8
IC BOARD	 MEMORY TEST In the SOUND TEST mode, check the sound related ROMs. 	7 - 9 7 - 8
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc	7 - 15

TABLE 7 EXPLANATION OF TEST MODE

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:

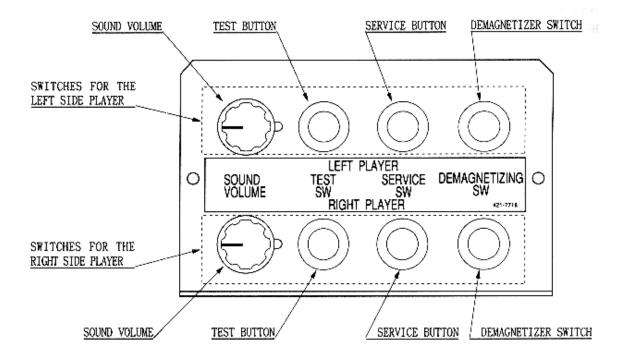
SWITCH UNIT



SOUND VOLUME Controls the speaker volume

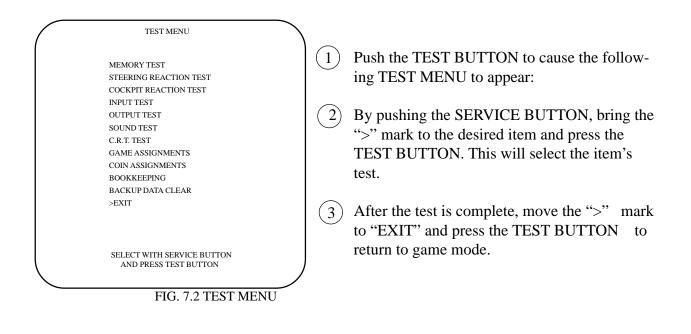
of the right/left speakers on the coin chute tower.

- 2 TEST BUTTON (TEST SW) For the handling of the TEST BUTTON, refer to the section on test mode.
- 3 SERVICE BUTTON (SERVICE SW) Gives credits without registering on the coin meter.



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

The Following FIGURES/TABLES show the factory recommended settings.



7 - 3 MEMORY TEST MEMORY TEST IC ** GOOD IC ** GOOD

<u> </u>		N/TEOT
	PRESS TEST BUTTON TO EXIT	
10 0000	10 0000	
IC ** GOOD	IC ** GOOD	
IC ** GOOD	IC ** GOOD	IC ** GOOD
IC ** GOOD	IC ** GOOD	IC ** GOOD
IC ** GOOD	IC ** GOOD	IC ** GOOD
IC ** GOOD	IC ** GOOD	IC ** GOOD

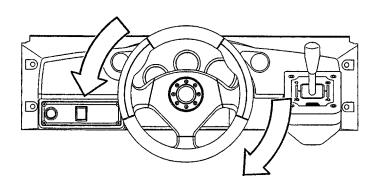
FIG. 7.3 MEMORY TEST

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

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

7 - 4	STEERING REA	CTION TEST	This test allows Steering Wheel reaction mechanism to be
$\left(\right)$	STEERING REACTI	ION TEST	tested and eaction force to be set. Press the Service Button to
			bring the arrow to the desitred item to be selected, and press the
	CENTERING	OFF	Test Button to enter the selected item.
	RIGHT LEFT	OFF OFF	CENTERING
	FORCE >EXIT	OFF	Press the Test Button or the Start Button to apply automatic
			centering to Steering Wheel.
			RIGHT
			The Steering Wheel turns up to the RIGHT maximum value.
			LEFT
			The Steering Wheel turns up to the LEFT maximum value.
PRESS TEST BUTTON TO CONTINUE	FORCE Adjusts the Steering Wheel's reaction force.		
	0/15 (minimum)<>15/15 (maximum)		
	FIG. 7.4 STEERIN	IG REACTION TEST	

This on-screen adjustment will be effective whent he Test Mode is exited. Turning power off while the on-screen display is shown will have the pre-adjustment reaction force remain as it is.

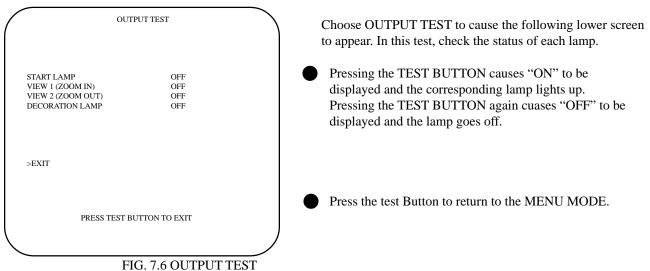


7-5 INPUT TEST

Select INPUT TEST to have the screen shown below appear and to observe the status of each switch and the Control Panel's each V.R. Value. Periodically check the status of each switch and V.R. on this screen.

INPUT TES	т		n, if the display onthe right-hand side itch changes to ON from OFF, the SW ons are satisfactory.
STEERING WHEEL GAS PEDAL BRAKE PEDAL	**H **H **H		CHUTE 2 coin switches, open the and insert a coin(s) in the slot.
SHIFT UP SHIFT DOWN VIEW 1 (ZOOM IN) VIEW 2 (ZOOM OUT)	OFF OFF OFF OFF	-	BUTTON or the START BUTTON + TON to return to the test menu.
START HAND BRAKE GEAR POSITION	OFF OFF N	• GEAR POSITION indivision in the interval of	cates which shift and SHIFT LEVER l.
COIN CHUTE #1 COIN CHUTE #2 SERVICE-SW TEST-SW	OFF OFF OFF		-
PRESS TEST BUTTO	DN TO EXIT		
THE APPROPRIATE VA			
STEERING:	Under 30H left	← $80H\pm 2H$ → (Centering position)	Over DOH) right
GAS:	Under 30H	>	Over COH
BRAKE:	Under 30H (the pedal released)		Over COH (the pedal stepped)

7 - 6 OUTPUT TEST



7 - 7 SOUND TEST

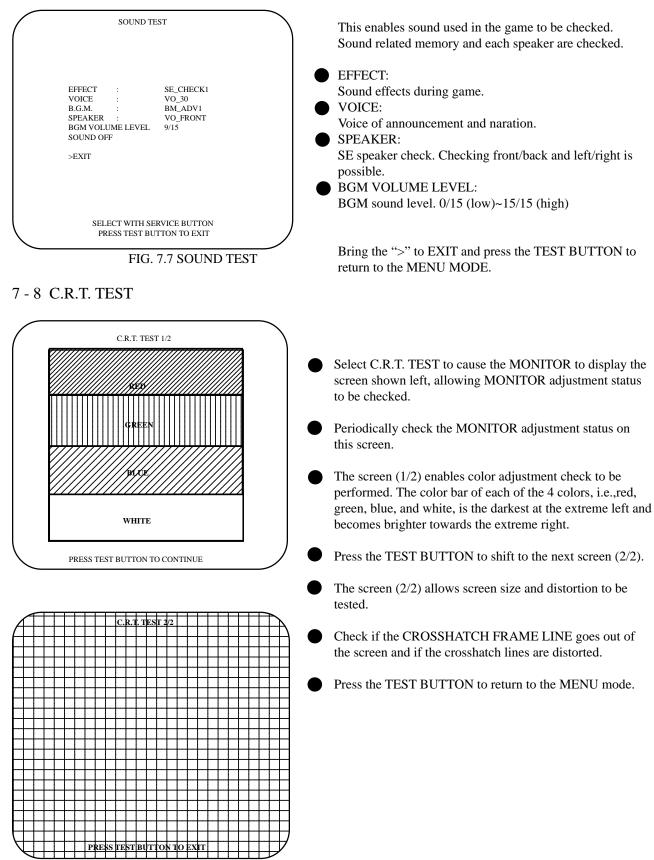


FIG. 7.8 C.R.T. TEST

7-9 GAME ASSIGNMENTS

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

SETTING CHANGE PROCEDURE



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.

INMENTS
ON
NORMAL
NORMAL
DRIVER
KM/H
OFF
TWIN
MASTER (CAR1)
RVICE BUTTON
EST BUTTON

CAME ACCIONMENTS

ADVERTISE SOUND

Determines wether ADVERTISE SOUND is to be emitted or not by the setting to ON when emitting it and to OFF when not emitting it.

GAME DIFFICULTY

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

DISPLAY URL Web Page Address indication during advertise.

ENGINE VOLUME Engine Volume adjustment

CABINET TYPE

Set to DELUXE or STANDARD as applicable. Setting to wrong type can causefailure be sure to set correctly. (i.e. In communication Play Race Leader Lamp does not light up/flash/light out. The Cabinet appearing in the operation explanation mode differs from the type used.)

GAME MODE

Setting of Laps. NORMAL (normal lap setting) SPECIAL (special setting for more laps-A long-time game mode for for events etc..)

The Following FIGURES/TABLES show the factory recommended settings.

7 - 10 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



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.

\bigcap		COIN ASSIC	GNMENTS	
	COIN/CRED	IT SETTING	#12	
		CHUTE#1	1 COIN	1 CREDIT
		CHUTE#2	1 COIN	1 CREDIT
	MANUAL S	ETTING		
	>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.

COIN/CREDIT SETTING

Sets the CREDITS increase increment per coin insertion. There are 27 setings from #1 to #27, expressed in XX CREDIT as against XX COINS inserted. (TABLE 7.11a, 7.11b) #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 7.11b.

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 7.11c).

TABLE 7.10a COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

SETTING	FUNCTION	ING OF CHUTE#1
SETTING #1	1 COIN	1 CREDIT
SETTING #2	1 COIN	2 CREDITS
SETTING #2	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 #10	1 COIN	6 CREDITS
SETTING #12	2 COINS	1 CREDIT
SETTING #12 SETTING #13	1 COIN	1 CREDIT
SETTING #14	1 COIN	2 CREDITS
SETTING #15	1 COIN	1 CREDIT
	2 COINS	3 CREDITS
SETTING #16	1 COIN	3 CREDITS
SETTING #17	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT
SETTING #19	1 COIN	1 CREDIT
	2 COINS	2 CREDITS
	3 COINS	3 CREDITS
	4 COINS	5 CREDITS
SETTING #20	1 COIN	5 CREDITS
SETTING #21	5 COINS	1 CREDIT
SETTING #22	1 COIN	2 CREDITS
SETTING #23	2 COINS	1 CREDIT
	4 COINS	2 CREDITS
	5 COINS	3 CREDITS
SETTING #24	1 COIN	3 CREDITS
SETTING #25	1 COIN	1 CREDIT
	2 COINS	2 CREDITS
	3 COINS	3 CREDITS
	4 COINS	4 CREDITS
	5 COINS	6 CREDITS
SETTING #26	1 COIN	1 CREDITS
SETTING #27	FRE	E PLAY
	1	

MANUAL SETTING

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

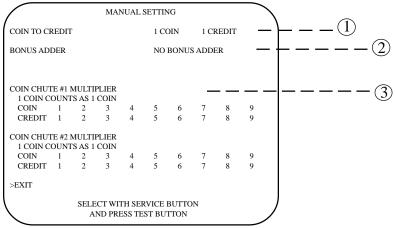


FIG. 7.10sb MANUAL SETTING

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 7.10c MANUAL SETTING	
COIN TO CREDIT	1 COIN 1 CREDIT
	2 COINS 1 CREDIT
	3 COINS 1 CREDIT
	4 COINS 1 CREDIT
	5 COINS 1 CREDIT
	6 COINS 1 CREDIT
	7 COINS 1 CREDIT
	8 COINS 1 CREDIT
	9 COINS 1 CREDIT
BONUS ADDER	NO BONUS ADDER
	2 COINS GIVE 1 EXTRA COIN
	3 COINS GIVE 1 EXTRA COIN
	4 COINS GIVE 1 EXTRA COIN
	5 COINS GIVE 1 EXTRA COIN
	6 COINS GIVE 1 EXTRA COIN
	7 COINS GIVE 1 EXTRA COIN
	8 COINS GIVE 1 EXTRA COIN
	9 COINS GIVE 1 EXTRA COIN
COIN CHUTE MULTIPLIER	1 COIN COUNTS AS 1 COIN
	1 COIN COUNTS AS 2 COINS
	1 COIN COUNTS AS 3 COINS
	1 COIN COUNTS AS 4 COINS
	1 COIN COUNTS AS 5 COINS
	1 COIN COUNTS AS 6 COINS
	1 COIN COUNTS AS 7 COINS
	1 COIN COUNTS AS 8 COINS
	1 COIN COUNTS AS 9 COINS

Table 7.10c MANUAL SETTING

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.

	COIN CUILITE#*.
BOOKKEEPING PAGE1/2	 COIN CHUTE#*: Number of coins put in each Coin Chute.
COIN CHUTE #1 XXXXXXXXXX	Number of coms put in each Com Chute.
COIN CHUTE #2 XXXXXXXXXX TOTAL COINS XXXXXXXXX	• TOTAL COINS:
	Total number of activations of Coin Chutes.
COIN CREDITS XXXXXXXXX SERVICE CREDITS XXXXXXXXX	Total number of activations of Com Chutes.
TOTAL CREDITS XXXXXXXXX	COIN CREDITS:
NUMBER OF GAMES XXXXXXXXXX	Number of credits registered by inserting coins.
TOTAL TIME XDXXHXXMXXS	
PLAY TIME XDXXHXXMXXS	SERVICE CREDITS:
AVERAGE PLAY TIME XXMXXS LONGEST PLAY TIME XXMXXS	Credits registered by the SERVICE BUTTON.
SHORTEST PLAY TIME XXMXXS	
TIME HISTOGRAM	TOTAL CREDITS:
0M 0S - 1M59S>XXXXXXX	Total number of credits (COIN CREDITS+SERVICE
2M 0S - 2M59S>XXXXXXX	CREDITS).
OVER 6M30S>XXXXXXX	,
PRESS TEST BUTTON TO CONTINUE	TOTAL TIME:
FIG. 7.11a BOOKKEEPING (1/2)	The total energized time.
BOOKKEEPING PAGE 2/2	
CAR SELECT	
IMPREZA XXXXXXX	On page $(2/2)$, each play frequency is displayed. When
STRATIOS XXXXXXX	setting difficulty levels, the frequency can be referred to as a
COROLLA XXXXXX ESCORT XXXXXXX	standard.
LANCER XXXXXXX	Stundard.
PEUGEOT XXXXXXX	When in the PAGE 2/2 mode, press the TEST BUTTON to
TRANSMISSION SELECT	*
AUTOMATIC XXXXXXX	return to the MENU mode.
AUTOMATIC XXXXXX MANUAL XXXXXX	
PRESS TEST BUTTON TO EXIT	
FIG. 7.11b BOOKKEEPING (2/2)	
7 - 12 BACKUP DATA CLEAR	
BACKUP DATA CLEAR	Clears the contents of BOOKKEEPING and high
BACKUF DAIA CLEAK	score player ranking entry.
YES (CLEAR)	• When clearing, bring the arrow to "YES" and when
>NO (CANCEL)	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,
OF FORMATI OF MARCE DUMPON	COIN SETTING, and BOARD SETTING are not
SELECT WITH SERVICE BUTTON PRESS TEST BUTTON TO EXIT	
	affected by BACKUP DATA CLEAR operation.
FIG. 7.12 BACKUP DATA CLEAR	

8. HANDLE MECHA

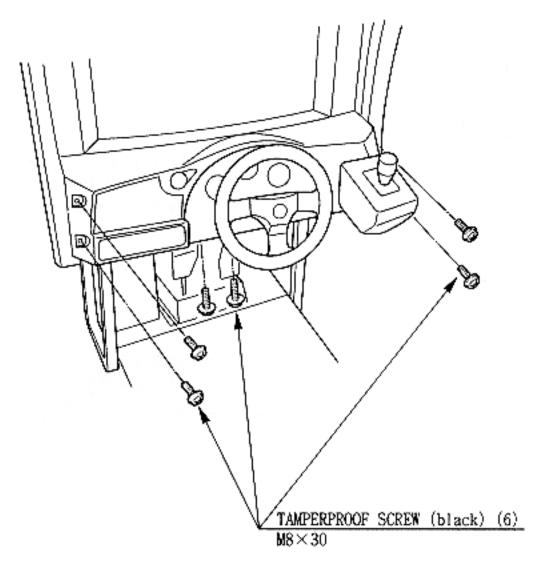


In order to prevent an electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product.
Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.

In the test mode, if the steering whell's VR variations are not within the allowable range, the VR installation position adjustments or VR replacement is needed. Also, be sure to apply grease to the VR gear portion once every 3 months.

8 - 1 REMOVING THE CONTROL PANEL

- (1) Turn the power switch off.
- (2) Remove a total of 4 tamperproof screws from both sides of the control panel's front.
- (3) Remove the two tamperproof screws from the underside of the control panel.
- (4) Wiring connectors are connected inside the control panel. Carefully draw the control panel in a mnner so as not to damage wiring.
- (5) Disconnect the wiring connector.



8 - 2 REPLACING AND ADJUSTING THE HANDLE'S VR



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

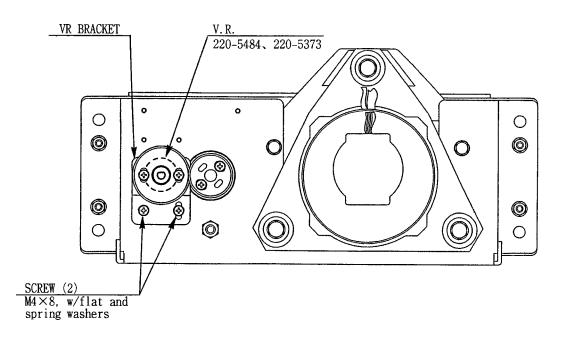
After the replacement or adjustment of the VR, be sure to set the variable value of the VR in the test mode's Volume Setting.

REPLACING THE VOLUME

- \bigcirc 1 Turn off the power.
- (2) Disconnect the connector.
- (3) Take out the 2 screws which secure the volume Bracket and remove the Volume Bracket.
- (4) Take out the 2 screws to remove the Volume Gear and replace the Volume.
- (5) After replacing the Volume, perform Volume setting in the Volume Setting Mode.

ADJUSTING THE VOLUME

- (1) In the Test Mode, have the Volume value indicating screen displayed.
- (2) Loosen the 2 screws which secure the Volume Bracket to disengage Gear Mesh.
- (3) With the Steering Wheel in the centering position, cause gears to be engaged in the manner so that the Volume Shaft is in the status shown below.
- (4) Fasten screws which secure the Volume Bracket.
- (5) Perform Volume setting as per the Volume Setting Mode.



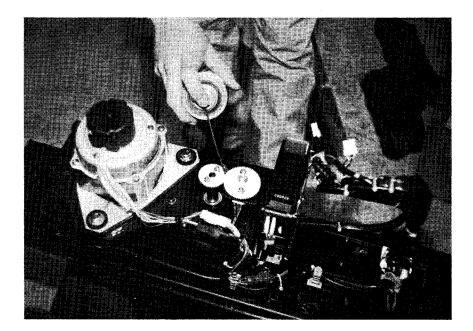
8 - 3 GREASING



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

After the replacement or adjustment of the VR, be sure to set the variable value of the VR in the test mode's Volume Setting.

Apply greasing to the Volume gear mesh portion every 3 months. For spray greasing, use Grease Mate (Part No. 090-0066).



9. SHIFT LEVER



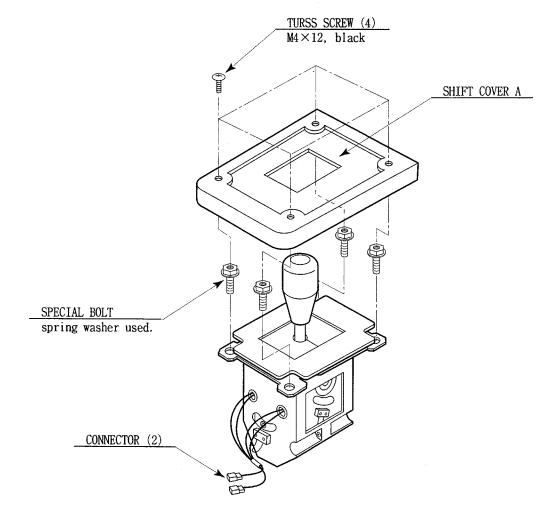
In order to prevent electric shock and short circuit, be sure to turn off the power before performing work on the interior parts of the product.

- Be careful not to damage wiring. Damaged wiring can cause electric shock or short circuit.
- Do not touch places other than those specified. Touching places other than those specified can cause an electric shock or short circuit accident.

If the Shift Lever operation is not satisfactory, remove the Shift Lever in the following procedure and replace the microswitch.

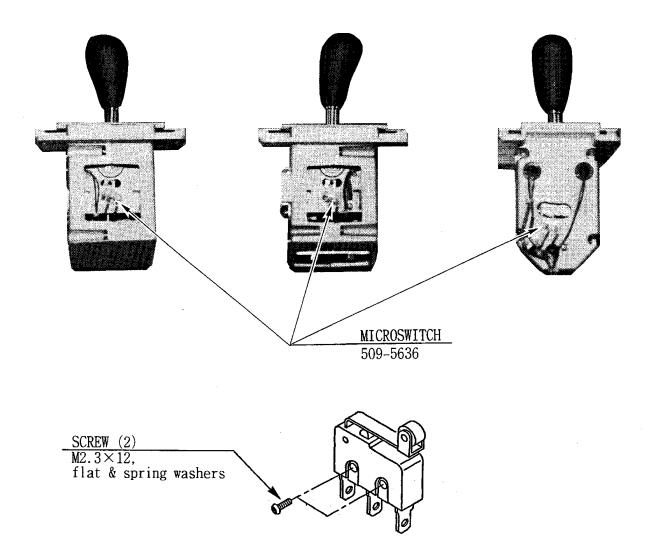
9 - 1 REMOVING THE SHIFT LEVER

- (1) Turn Power off.
- (2) Take off the 4 screws and remove SHIFT COVER A.
- (3) Take out the 4 SPECIAL BOLTS and pull the SHIFT LEVER UNIT upward by paying careful attention so as not to damage the wiring.
- (4) Disconnect the 2 connectors to allow the unit to be removed.



9 - 2 SWITCH REPLACEMENT

Each microswitch is secured with 2 screws. Remove the 2 screws and replace the Microswitch.



After replacing the Switch, check to see if the switch is inputted as per Shift Lever operation in the Test Mode.d

10. ACCEL & BRAKE(S)



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

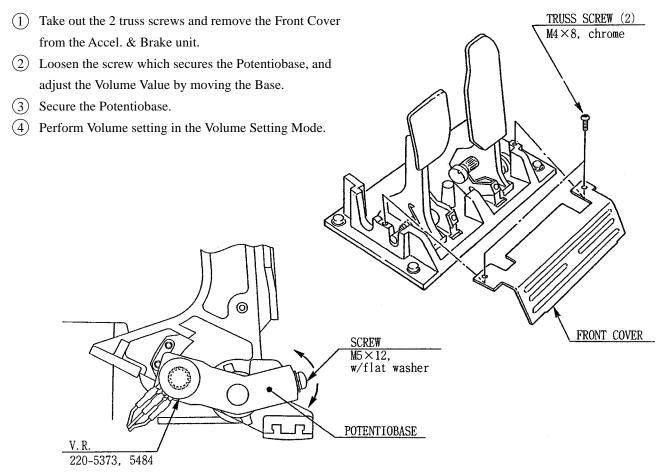
If Accel and Brake operation is not satisfactory, adjustment of Volume installation position or Volume replacement is needed. Also, be sure to apply greasing to the gear mesh portion once every three months.

10 - 1 ADJUSTING AND REPLACING THE V.R.

	When released:		When stepped on:
ACCEL. :	Under 30 H	← →	Over C0H
BRAKE :	Under 30 H	← →	Over C0H

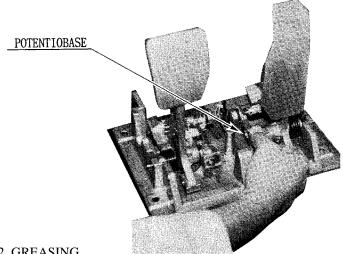
Check Volume values in the Test Mode.

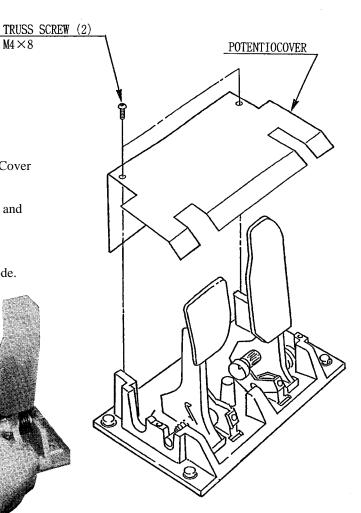
Since work is performed inside the energized cabinet, be very careful so as not to touch undesignated portions. Touching places not specified can cause an electric shock or short circuit.



Check Volume values in the Test Mode. Since work is performed inside the energized cabinet, be very careful so as not to touch undesignated portions. Touching places not specified can cause an electric shock or short circuit.

- (1) Take out the 2 truss screws and remove the Front Cover from the Accel. & Brake unit.
- (2) Loosen the screw which secures the Potentiobase, and adjust the Volume Value by moving the Base.
- (3) Secure the Potentiobase.
- (4) Perform Volume setting in the Volume Setting Mode.





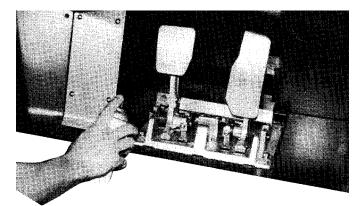
10 - 2 GREASING



Be sure to use designated grease. Using undesignated grease can cause parts damage.

Once every 3 months, apply greasing to the Spring and Gear Mesh portion. For spray greasing, use GREASE MATE (PART No. 090-0066).

 $M4 \times 8$





In order to prevent an electric shock and short circuit, be sure to turn power off before performing work byt ouching 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 touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.



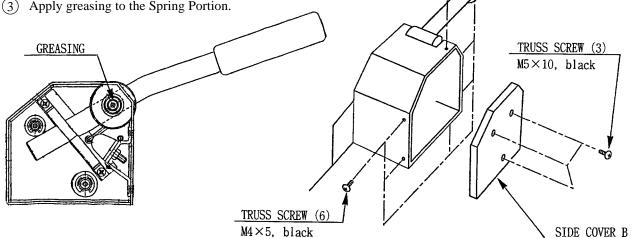
Be sure to use designated grease. Using undesignated grease can cause parts damage.

IMPORTANT!

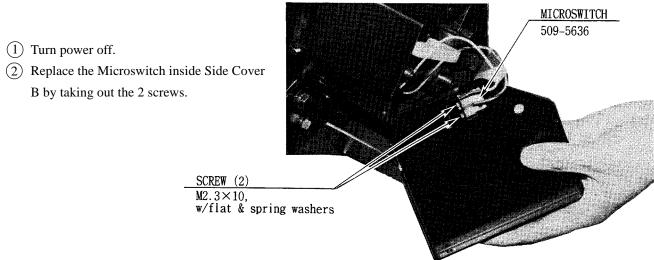
10 - 3 GREASING TO THE HANDBRAKE

Once every 3 months, apply greasing to the Spring inside the Hand Brake. For spray greasing, use GREASE MATE (PART No. 090-0066)

- (1) Turn power off.
- (2)Take out the 9 screws and remove the Side Cover B.
- Apply greasing to the Spring Portion.



10 - 4 REPLACING THE HAND BRAKE MICROSWITCH



11. COIN SELECTOR

HANDLING THE COIN JAM

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

CLEANING THE COIN SELECTOR

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

- ① Turn the power for the machine OFF. Open the coin chute door.
- (2) Open the gate and dust off by using a soft brush (made of wool, etc.).
- (3) Remove and cleen smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- 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.

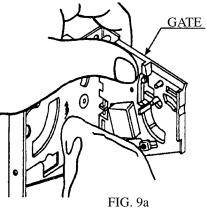


- Never apply machine oil, etc. to the coin selector
- After cleaning the Coin Selecting, Insert a regular coin in the normal working status and ensure that the Selector correctly functions.

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?



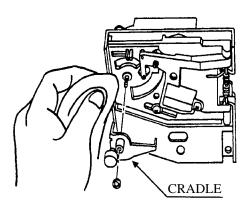
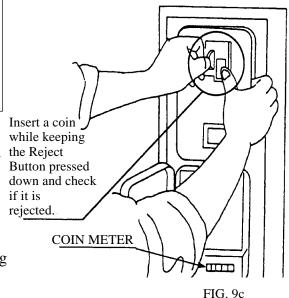


FIG.9b

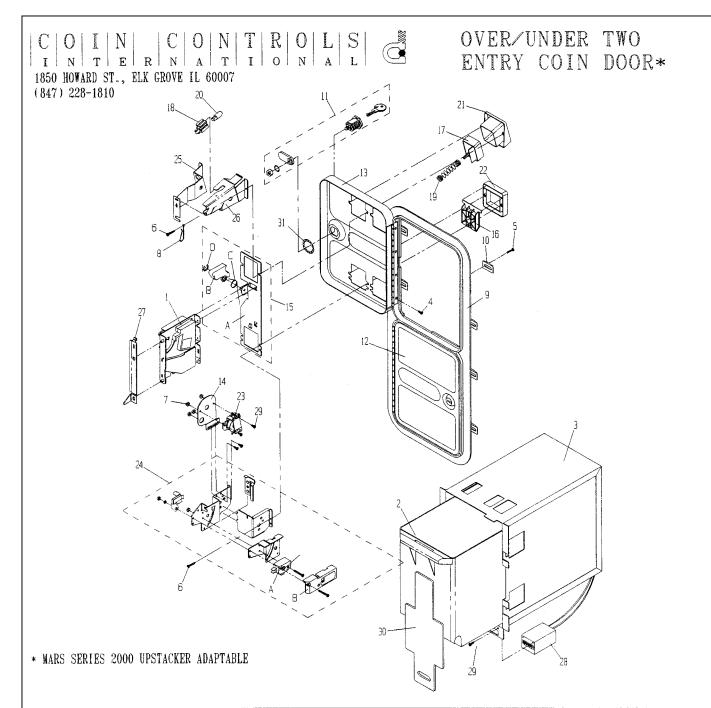


41

OPTIONAL DOLLAR BILL ACCEPTOR

THE COIN DOOR ASSEMBLY USED ON RALLY 2 Twin Version COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL NEEDED WIRING CONNECTIONS ARE CONVIENENTLY LOCATED INSIDE THE GAME FOR THIS APPLICATION.			
THE COIN DOOR CAN ACCCOMM VALIDATORS:	ODATE THE FOLLOWING		
HOLE POSITION#1 (FORWARD-MOST POSITION)	Mars 2000 series		
HOLE POSITION#2	Mars 2000 series DBV45 (JCM)		
HOLE POSITION #3	CURRENTLY NOT USED		
HOLE POSITION #4	DSI01*		
*The back flange on the chute can be removed for hold position #4. If the flange is not removed, it may interfere with the back of the cabinent.			

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



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

JAN. 1998

FORM 92-1003-05

12. MONITOR



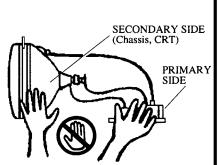
When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from monitor, be sure to disconnect the power connector (plug) before starting work. Proceeding the work without following this instruction can cause electric shock of malfunctioning.

Using the monitor by converting it without obtaining a prior permission is not allowed. SEGA shall not be liable for any malfunctioning and accident caused by said conversion.

WARNING!

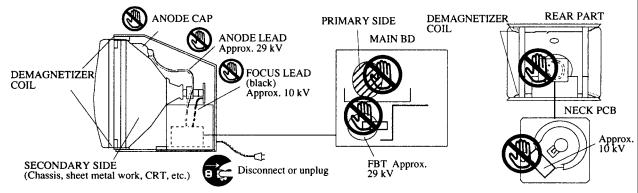
Primary side and secondary side

The monitor's circuit which is divided into the Primary side and secondary side, is electrically isolated. Do not touch the primary side and the secondary side simultaneously. Failing to observe the instruction can cause electric shock, and this is very dangerous. When making monitor adjustments, use a nonconductive driver and make adjustment without touching any other part other than the Adjustment V.R. and Knob. Also, be sure not to cause a shortcircuit to the Primary side and the Secondary side. If short-circuited, it can cause electric shock or malfunctioning, which is very dangerous.



High tension Voltage

Some of the parts inside the monitor are subject to high-tension voltage in excess of 20,000 volts and very dangerous. Therefore, do not touch the monitor interior. Should soldering & paper wastes, etc. be mixed in the monitor, turn the power off so as not to cause malfunctioning or fire hazard.



Connecting the CRT and PCB

For combining the CRT and PCB, use the specified part No. to maintain the status of adjustments made at the factory. The anode of the CRT itself will be accumulitavly charged as time elapses, generating high tension voltage which is very dangerous. The monitor should be used with the Chassis, CRT and PCB assembled. When repair, etc. is required at the time of malfunctioning, be sure to send it in an "as assembled" condition. If these are dissassembled, what's charged to said high tension voltage can be discharged, cuasing a very hazardous situation. Therefore, under no circumstances should it be dissasembled.

Static Electricity

CAUTION!

Touching the CRT surface sometimes cuases you to slightly feel electricity. this is because the CRT surfaces are subject to static and will not adversly affect the human body. Installation and removal Ensure that the Magnetizer Coil, FBT (Fly-Back Transformer), Anode Lead and Focus Lead are

Ensure that the Magnetizer Coil, FBT (Fly-Back Transformer), Anode Lead and Focus Lead are not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as no to cause an electric shock and malfunctioning. (For the name of parts, refer to the above figures.)

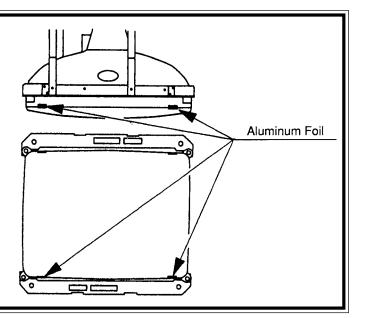


For the purpose of static prevention, special coating is applied to the CRT face of this product. To protect the coating, pay attention to the following points. Damaging the coating film can cause electric shock to the customers. For the caution to be heeded when clearing, refer to the Section of Periodic inspection Table.

Do not apply or rub with a hard item (a rod with pointed edge, pen, etc.) to or on C.R.T. surfaces.

Avoid applying stoickers, seals, etc. on the C.R.T. face.

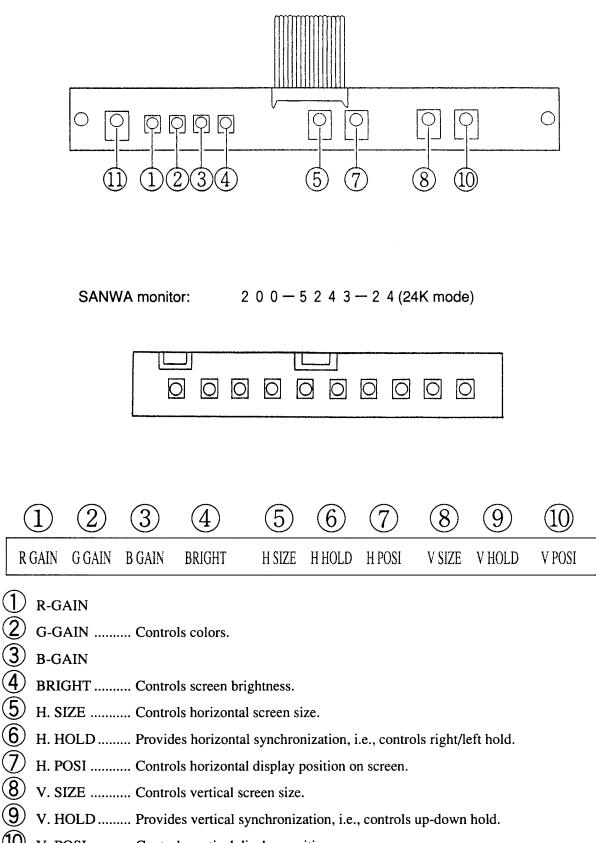
Do not remove aluminum foils from the C.R.T. corners. Removing the aluminum foils can cause static prevention effects to be lowered.





Monitor adjustments have been made at the time of shipment. Therefore do not make further adjustment without a justifiable reason. Adjusting the monitor which contains high tension parts is dangerous work. Also, an erroneous adjustment can cause deviated synchronization and image fault, resulting in malfunctioning.

When making adjustment, utilize a resinous Alignment Rod. Servicing with bare hands or using conductive tools can cause electric shock.



- **(10)** V. POSI Controls vertical display position on screen.
- CONTRAST Adjusts image contrast. (1)

2

(4)

13. REPLACEMENT OF FLUORESCENT LAMP AND LAMPS

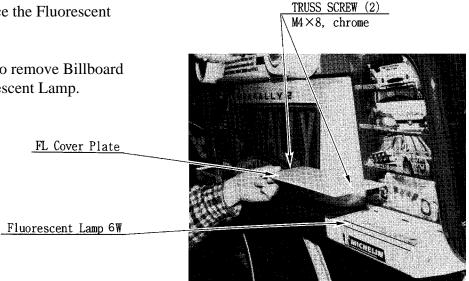


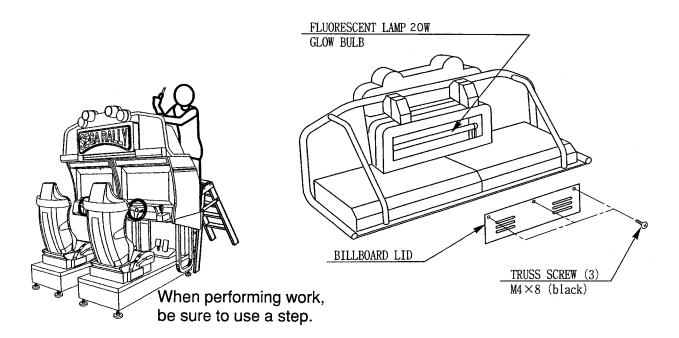
- When performing the work, be sure to turn power off. Working with power on can cause an electric shock or short circuit accident.
- The Fluorescent Lamp, when it gets hot, can cause burns. Be very careful when replacing the Fluorescent Lamp.



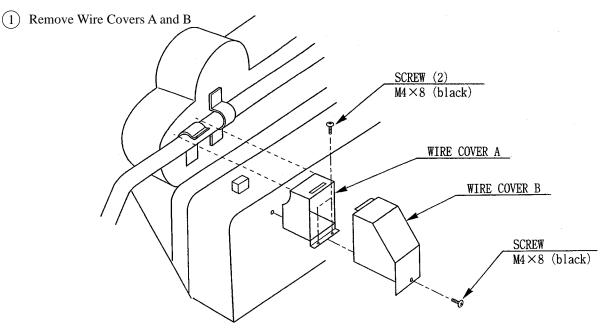
To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Not using a step or using an unstable step can cause violent falling down accidents.

- 13 -1 REPLACEMENT OF FLUORESCENT LAMP
- 1 Take out the 2 screws to remove the FL Cover Plate, and replace the Fluorescent Lamp. (FRONT)
- Take out the 3 screws to remove Billboard Lid, and replace Fluorescent Lamp. (REAR)

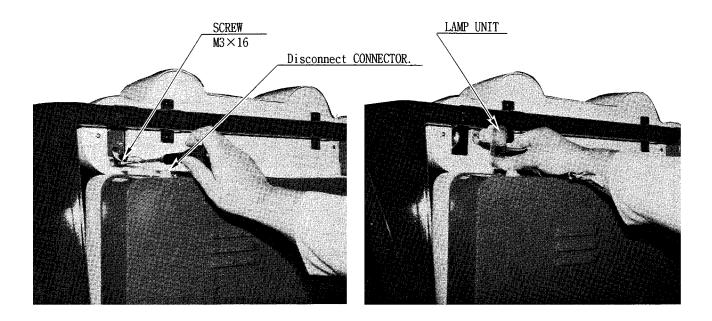


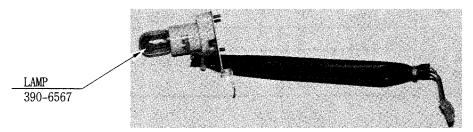


13 - 2 LAMP REPLACEMENT



2 Disconnect the connector, take out the screw to remove the Lamp Unit, and replace the lamp.





LAMP UNIT

14. 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 securley inserted, dust is accumulated between the Socket Outlet and the Power Plug, etc. Using the product with dust as is accumulated can cause a fire or electrical shock.

Periodically once a year, request the place of contact herin stated or the Distributer, etc. where the product was purchased from, as regards to the interior cleaning. Using the product with dust as is accumulated in the interior without cleaning can cause a fire or short circuit accident. Note that cleaning the interior parts can be performed on a pay-basis.

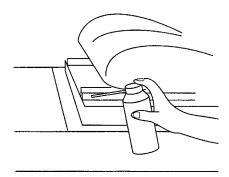
	Item	Interval	Reference
CABINET	Check Adjusters' contact with surface.	Daily	4
HANDLE MECHA	Check lamp.	Monthly	8
	Check VOLUME VALUE.	Monthly	8
	Check ADJUST GEAR engagement.	Trimonthly	9
	Greasing of GEAR.	Trimonthly	9
ACCEL. & BRAKE	Check VOLUME value.	Monthly	10
	Check ADJUST GEAR engagement.	Trimonthly	10
	Gear and Spring portion greasing.	Trimonthly	10
HAND BRAKE	Greasing.	Tri-monthly	10
	Check switches.	Monthly	10
SHIFT LEVER	Check switches.	Monthly	9
COIN CHUTE TOWER	Check COIN SW.	Monthly	4
Coin insertion test.		Monthly	11
	Cleaning of COIN SELECTOR.	Trimonthly	11
MONITOR	Check adjustments.	Monthly or when moving.	12
	Cleaning of CRT surfaces.	Weekly	12
SEAT	Antistatic measures	Bimonthly	Newtown
	Applying grease to Seat Rail	Trimonthly	Next page
GAME BD	MEMORY TEST.	Monthly	7
	Check settings.	Monthly	7
Cabinet surfaces	Cleaning	As occasion arises.	Next page
INTERIOR	Cleaning	Annually	See above.
POWER SUPPLY PLUG Inspection and cleaning			

CLEANING CABINET SURFACES

If the cabinet is badly stained, use a cloth which is dipped in the chemical detergent liquid diluted with water and then squezzed dry. Do not use thinner, benzine, alcohol or chemical dustcloth as these can damage Cabinet surfaces.

SEAT (Greasing to Seat Rail Portion)

Move the Seat to the rearmost portion and apply spray greasing to the portion shown at the right once every 3 months by using NOK KLUBER L60 or GREASE MATE SEGA PART No. 090-0066. After greasing, move seat a few times forward and backward so as to allow the grease to be applied all over uniformly. Be sure to wipe grease which attaches to the surfaces of the PROTECT RUBBER on the seat Rail, or any excess grease.



15. TROUBLESHOOTING Should trouble occur, first check connector connections.

PROBLEMS	CAUSE	COUNTERMEASURES
With Main SW ON, no activation	Power is not supplied.	Plug in correctly
On, no activation	Power supply/voltage is not correct.	Make sure that power supply/voltage is correct.
	AC main fuse causes the power to be cut off due to momentary overload.	Check fuse. Remove the cause of overload and replace fuse
Operation is unsatisfactory	Volume Setting Failure	Perform Volume setting Adjust or replace V.R.
unsuistactory	Poor mesh of V.R. gear.	
	Spring failure due to secular change of Accelerator and Brake Mecha.	Adjust Gear mesh Replace the Spring.
Irregular sound emitted from inside Rear Cabinet	Greasing to gear mesh portion is not satisfactory, or extraneous matter mixed in.	Apply greasing or eliminate extraneous matter.
The color of the image on PROJ. screen is incorrect.	Connector connections are defective.	Check the connection for the RGB and SYNC connectors of the PROJ. TERM. BD and VPM BUFFER BD.
The image on PROJ. screen has color deviation.	Affected by the magnetic field of installation location.	Make CONVERGENCE adjustment. (Refer to Section 9.)
No sound is emitted.	Sound Volume adjustment is not appropriate.	Adjust sound volume. (see Section 6).
	Sound BD and speaker are malfunctioning.	Perform sound test to find and replace defective parts.(Refer to Section 6).
NETWORK check will not finish.	Communication cable's connection failure.	Perform V.R. setting, Adjustment.
Communication play is not possible.	Communication cable's connection failure. Communication Play setting is wrong.	Check for Communication cable disconnection Correctly set in test mode.
No sound from Cockpit.	In correct Cabinet Type Setting.	Correct Cabinet Type Setting.
The Fluorescent lamp does not light up.	The Fluorescent tube is burnt out.	Replace the Fluorescent tube (Refer to Section 10).
Shift operation is not is not satisfactory in Manual transmission.	Shift SW malfunctioning.	Replace SW

16. 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.

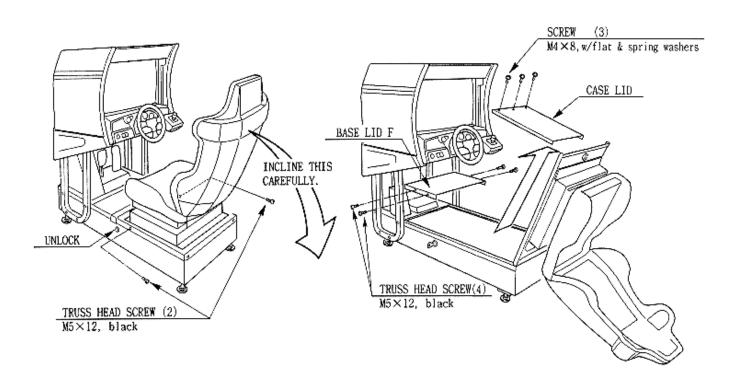


Do not expose the Game BD, etc. without a good reason. In this product, setting changes are made during the test mode. The Game BD need not be operated. Use the Game BD, etc. as is with the same setting made at the time of shipment.

16-1 REMOVING THE GAME BOARD

To replace the IC Board or to change dip switch settings, take out the IC board using the following procedure;

- 1) Turn main switch off.
- (2) Unlock the base, and remove the 2 truss screws from the side of the base.
- (3) Turn the knob to unlock. The seat can be inclined in the direction shown. When inclining the seat, be careful not to damage seat parts. Carefully rest the backrest portion of the seat on the ground.
- (4) If neccessary, protect the seat from damage by using a cloth or blanket on the floor.
- (5) Take off the 3 screws to remove the case lid. The game board is inside the shield case.
- (6) Take off a total of 4 screws from both sides with the seat being inan inclined state and remove the base lid F. Removing base lid F allows the elec base to be seen.



16 - 2 REPLACEMENT OF FUSE

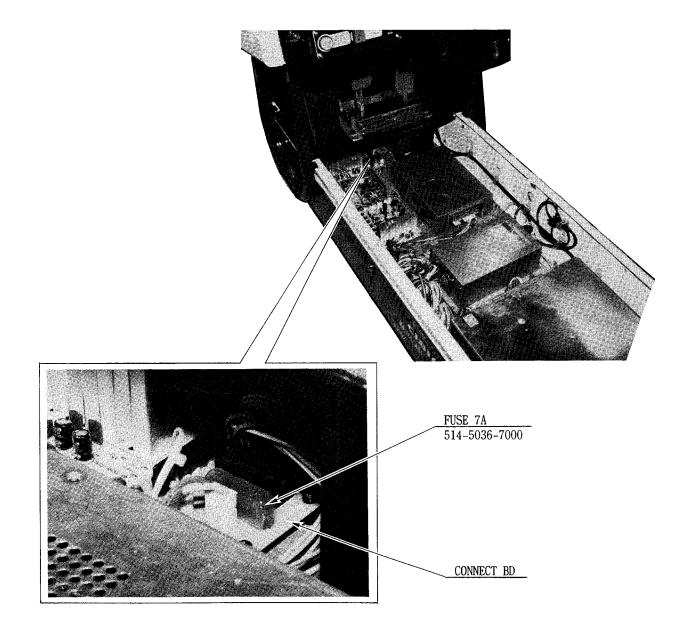


In order to prevent an electric shock, be sure to turn power off before performing work by touching the interior parts of the product.

Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circiut accident

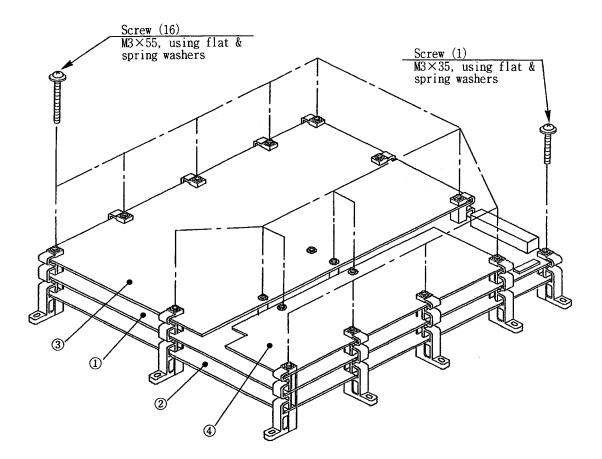
After eliminating the cause of the blowing of fuse, replace the fuse. Depending on the cause of the fuse blowing, using the fuse as is blown can cause generation of heat resulting in fire.

Incline the Seat and remove the Base Lid to view the Base interior. The composition of the Base interior is as shown below. There is a fuse on each of the Connect BD. and Motor Drive BD. When replacing the fuse, be sure to use the specified one.



16 - 3 COMPOSITION OF GAME BOARD

GAME BD SRT TWIN (833-13373)



No.	PART No	DESCRIPTION
1	837-12715-91	MODEL3 STEP2 CPU BOARD
2	837-12716	MODEL3 STEP2 VIDEO BOARD
3	834-13374	ROM BD SRT TWIN
4	837-11861-91	MODEL3 COMM BD COM

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



Be Careful so as not to damage wirings. Damaged wirings can cause an electric shock or short circuit accident.

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

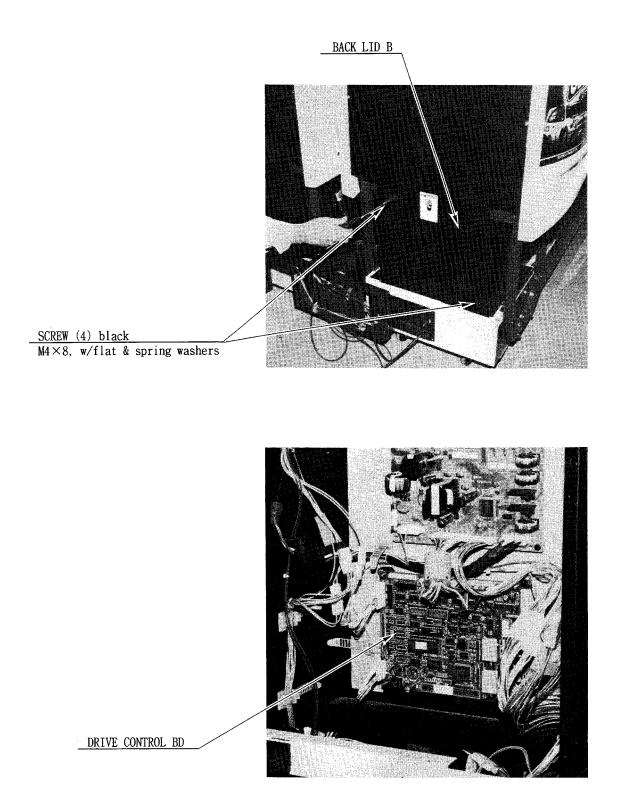
If an irregularity occurs in the Drive Control Board, etc., the ERROR message is shown on the screen and the 7-SEG display on the Drive Control Board. Take countermeasures in the manner corresponding to the ERROR message. Note that even at the time of error occurence, game play is possible without Steering Wheel reaction.

Among the ERROR display as per the Table listed below, each Er 01, 02, 20, and 22 is displayed if an irregularity is found during initialization setting movements when power is turned on and at the time Test Mode is finished.

From among error displays as per the Table shown below, Er 23, 24, and 25 indicate On-Board 7-SEG error display when an irregularity is found during game and ADVERTISE MODE. If an irregularity is found during game, game play can be continued without Steering Wheel reaction.

7-SEG display on Drive Control BD.	ERROR	CAUSE/COUNTERMEASURES
Er 01	ROM ERROR	Malfunctioning of Drive Control Board. Replace Drive Control Board.
Er 02	RAM ERROR	Replace Drive Control Board.
Er 20	Initialization setting irregular- ity of motor	Irregularity during initialization setting movement. Finish initialization setting movement by turning power off and then on. Note that when ERROR is displayed,the malfunctioning relates to the Motor System (Motor, Drive Control BD which controls the Motor, Drive BD., wirings in between, etc.)
Er 22	Steering Wheel's centering error	Malfunctioning during initial setting movement. Finish initialization setting movement by turning power off and then on . Note that when ERROR is displayed,the malfunctioning relates to the Steering Wheel Volume system.
Er 23	ERROR of the Encoder incorpo- rated in the motor.	Malfunctioning which occurs during operation. First turn the power off and after 10 min., turn it back on again. Note that when this Error is displayed, the malfunctioning relates to the Motor System.
Er 24	Overcurrent ERROR	
Er 25	Overheat Overload	

If ERROR display is shown on the screen, incline the Seat WITHOUT TURNING POWER OFF, and remove Back Lid B to check the 7-SEG display ont he Drive Control Board. At this time, if the power is turned off, each of the Er 23, 24, and 25 which could have occured during operation may not be displayed.



17. COMMUNICATION PLAY



- Before performing between-cabinets connection work, be sure to turn the Power SW OFF and unplug the power plug from the wall socket. Failure to observe this can cause electric shock and/or short circuit accidents.
- Perform assembling as shown in this manual. Erroneous assembling can cause electric shock accidents and malfunctioning.

By linking 4 machines, up to 4 persons can play simultaneously. Although accessory parts are to be installed for communication play, some of the parts will remain as spares.

17 - 1 INSTALLATION PRECAUTIONS

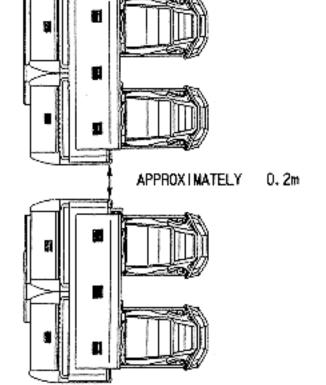
- Simple multiple machines are to be linked, sufficient power corresponding to the number of machines used need to be supplied. As standard, amperage is 15A (AC100~110~120V area).
- (2) Due to the parts used for communication play, interval between machines is 20 cm. If parts are not installed, adjascent players will come into contact with each other and this can cause accidents and trouble.

17 - 2 CONNECTING THE COMMUNICATION CABLES

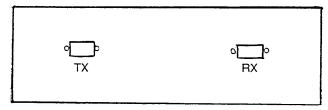


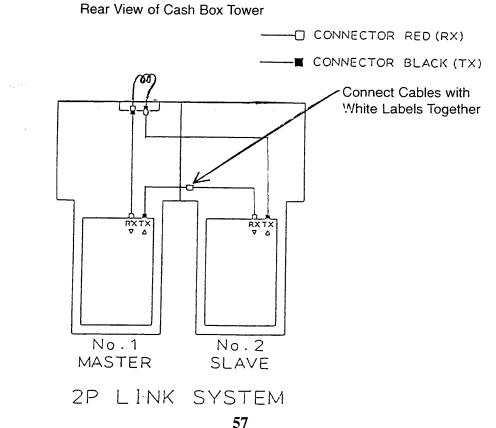
The Communication Cable is optic-fiber made and will break if excessively bent. Handle with care.

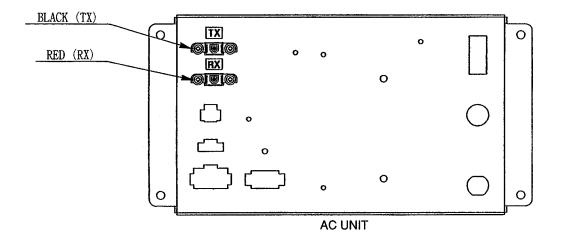
The Protect Tube is used to link plural machine units and the communication cables are caused to pass through the Protect Tube. Depending on the number of machine units to be linked, connect the communication cables in the manner described on page 58.

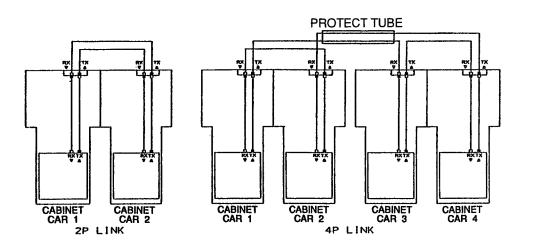


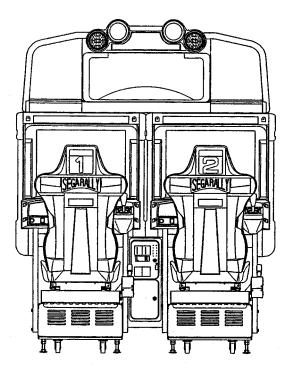
- (1) To assemble your Rally 2 Twin Game locate the Left Cabinet (side with on/off switch), Cash Box Tower, and Right Side Cabinet. In the parts bag located in the cash box, locate the Opto Cable. this will be needed later, to connect together the opto connections on the rear of the Cash Box Tower. The hardware needed to assemble your Rally 2 Twin game has been threaded into the proper holes. This was done to insure the bolts thread properly into the T nuts in the Cabinet.
- (2) At this time remove the rear cover of the Cash Box Tower.
- (3) Notice the wire harness taped to both sides of the cabinets and Cash Box Tower. On the wireharness connections Black is for the left side, yellow is for the right side viewed from the front. Locate left side cabinet (on/off switch) and Cash Box Tower. Connect the 15, 4 and 2 position connectors together. At this time connect the Opto cable (without white lable) to the Opto connection nearest to the left side of cabinet (viewed from the front). These Opto connections are in the rear of the Cash Box Tower.
- (4) You may elect no to connect the connector at this time, but carefully push connectors in the hole so they are still accessible from the outside of the cabinet.
- (5) There are 4 bolts in the NON SLOTTED HOLES, on the side of the cabinet, the 2 on top under the the ledge must be removed. The 2 on the bottom must be loosened about 1/4 inch. Lift up the Cash Box Tower and using the 2 lower slotted holes on the bottom of the Cash Box slip them over the lower protruding bolts and slide the cash box into place. Open the Coin Door and install the 2 upper bolts through the cash box into the cabinet. tighten all 4 bolts.
- (6) The Right side of the cabinet gets installed the same way as the left side.

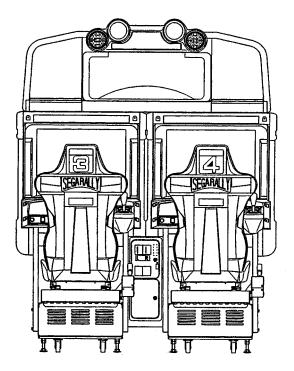














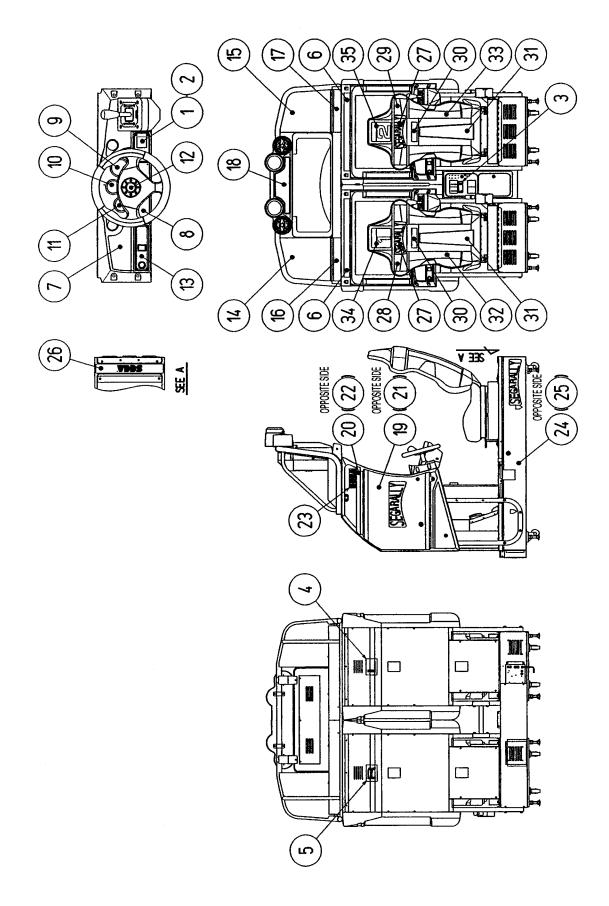
During communication play, if communication is interrupted due to a certain cause, ERROR MESSAGE will be displayed, then NETWORK check mode appears on the screen automatically.

Cause all of the seats to enter the Test Mode and change the GAME ASSIGNMENTS of each seat for communication play. Refer to the section on Explanation of Test and Data display for changing procedure.

- 1 Press the TEST button to enter the test mode and choose "GAME ASSIGNMENTS".
- (2) Bring the arrow to LINK TYPE and press the TEST BUTTON and set plural number of machines sequentially to CAR 1, CAR2, CAR3 and CAR4 as applicable starting from the extreme left facing the monitor's front side. I f the same number is set for 2 or more cabinets, or if the sequential order is incorrect, the game display, etc. will be confused (different from the actual status). Therefore, be careful of this point.
- (3) In case of communication play, only the settings of GAME DIFFICULTY and GAME MODE need to be performed by the MASTER seat. All other seats (SLAVE) are subject to the setting made by the MASTER CAR1 seat. The above setting change made by any SLAVE seat is not effective and will not be reflected on the game.

	GAME ASSIGNMENTS				
	ADVERTISE SOUND	ON			
	DIFFICULTY	NORMAL			
	GAME MODE	NORMAL			
	DEFAULT VIEW	DRIVER			
	SPEED	KM/H			
	DISPLY URL	OFF			
	CABINET TYPE	TWIN			
	LINK TYPE	MASTER (CAR1)			
	>EXIT				
SELECT WITH SERVICE BUTTON					
	AND PRESS TEST BUTTON				

18. DESIGN RELATED PARTS

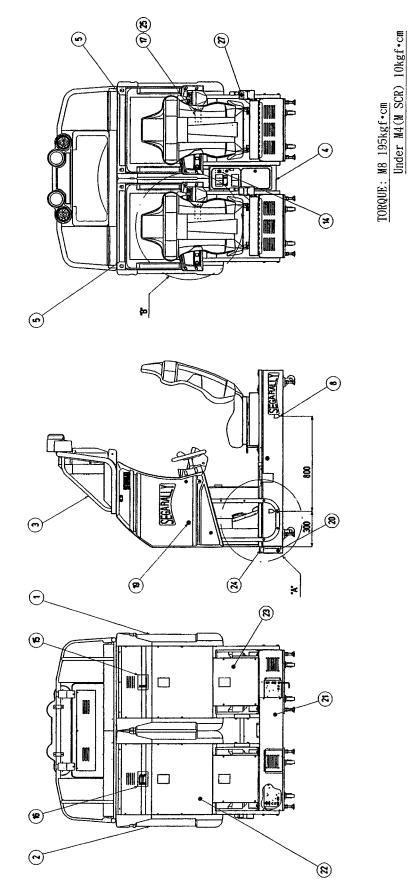


DESIGN RELATED PARTS

No.	PART No.	DESCRIPTION
1	DYN-0011	DENOMI PLATE W/O ORIGINAL
2	421-7308-~	DENOMINATION SHEET 1GAME \sim
3	DYN-0303X	STICKER COIN ENTRY
4	421-8543	STICKER CABINET L
5	421-8544	STICKER CABINET R
6	422-0663-01	SUB INSTR SH SRT TWIN ENG
7	422-0673-01	PLAY INSTR SH SRT TWIN ENG
8	SPG-1201-E	METER PANEL
9	DYN-1214-C	DESIGN PL TACO MTR TWIN
10	DYN-1214-D	DESIGN PL OIL METER TWIN
11	DYN-1214-E	DESIGN PL WATER MTR TWIN
12	SPG-2002	STEERING EMBLEM
13	RAL-1292X	SHEET START SW
14	SRT-0201-B	STICKER BILL L
15	SRT-0201-D	STICKER BILL R EXP
16	SRT-0216-B	STICKER FL CASTROL
17	SRT-0220-A	STICKER FL MICHELIN
18	SRT-0207-B	STICKER LIGHT COVER
19	SRT-1031-B	STICKER SIDE 1P L
20	SRT-1031-C	STICKER BLOW LINE L
21	SRT-1046-D	STICKER SIDE 2P R EXP
22	SRT-1046-C	STICKER BLOW LINE R
23	421-9749-02	STICKER SEGA LOGO BLOW WHITE
24	SRT-1501-B	STICKER BASE L
25	SRT-1501-C	STICKER BASE R
26	SRT-1511-A	STICKER BASE LID
27	SRT-1601-B	STICKER SEAT LOGO
28	SRT-1601-C	STICKER COVER WORKS L
29	SRT-1601-D	STICKER COVER WORKS R
30	SRT-1601-E	STICKER COVER 4MAKER
31	SRT-1601-F	STICKER COVER C
32	SRT-1601-G	STICKER SEAT LOWER L
33	SRT-1601-H	STICKER SEAT LOWER R
34	SRT-1601-J	STICKER CAR NO. 1
35	SRT-1701-A	STICKER CAR NO.2

19. PARTS LIST

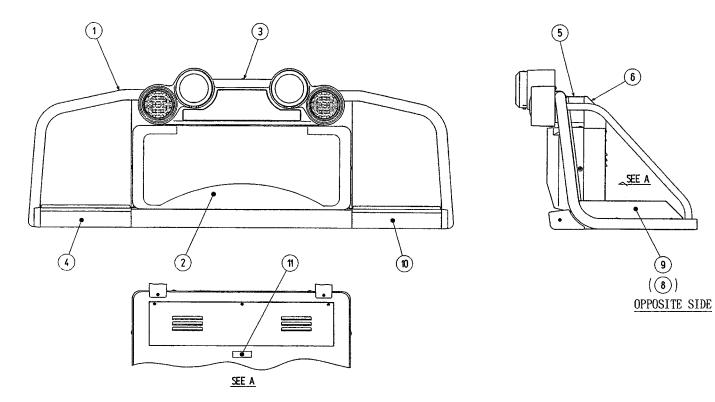
TOP ASSYSEGA RLLY 2 TWIN



TOP ASSY SEGA RALLY2 TWIN

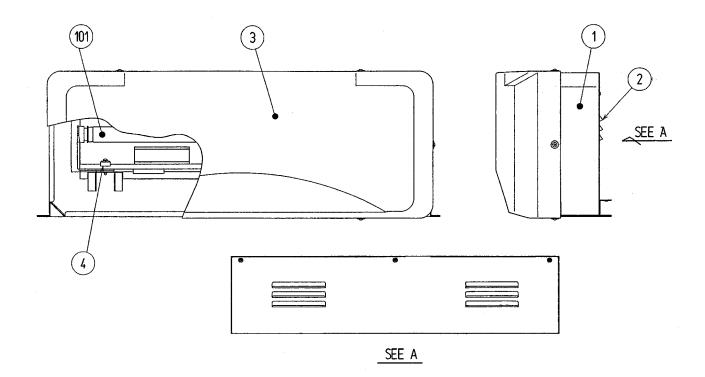
ITEM NO.	PART NO.	DESCRIPTION
1	SRT-10001	ASSY COCKPIT 1P
2	SRT-11001	ASSY COCKPIT 2P
3	SRT-0200	ASSY BILLBOARD
4	SRT-0300	ASSY COIN CHUTE TOWER
5	422-0663-01	SUB INSTR SH SRT TWIN ENG
15	421-8543	STICKER CABINET L
16	421-8544	STICKER CABINET R
17	421-7308~	DENOMINATION SHEET 1GAME~
19	RAL-0006	BLIND CAP
20	SPG-0006	AC COVER A
21	DYN-0006X	AC COVER B
22	INY-0004	BACK LID INY
23	DYN-0008	BACK LID B
24	DYN-0009	HOLE LID
25	DYN-0011	DENOMI PLATE W/O ORIGINAL
101	600-6275-0500	ASSY FIBER CABLE 5 0500CM

ASSY BILLBOARD (SRT-0200)



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0201-01	BILLBOARD FRAME EXP
2	SRT-0202	ASSY BILLBOARD BOX
3	SRT-0206	ASSY LIGHT COVER
4	SRT-0215	ASSY FL BOX L
5	SRT-0218	WIRE COVER A
6	SRT-0219	WIRE COVER B
8	SRT-0221	WIRE COVER L
9	SRT-0222	WIRE COVER R
10	SRT-0227	ASSY FL BOX R

ASSY BILLBOARD BOX (SRT-0202)

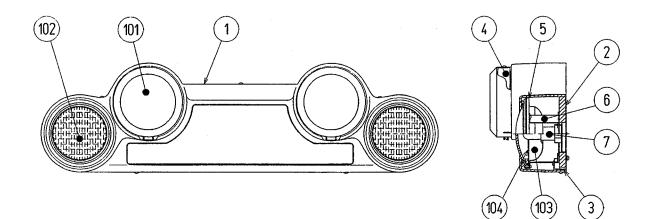


PART NO.

1	SRT-0203
2	SRT-0204
3	SRT-0205
4	253-5457
101	LOCAL PURCHASE

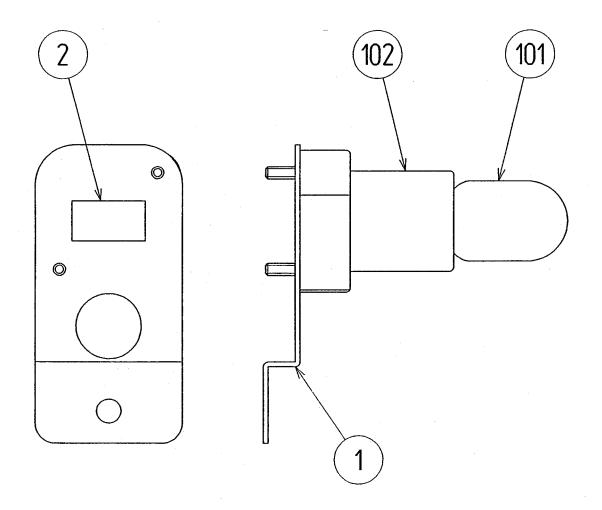
DESCRIPTION

BILLBOARD CASE BILLBOARD LID BILLBOARD FL HOLDER ASSY FL 20W EX W/CONN HIGH S

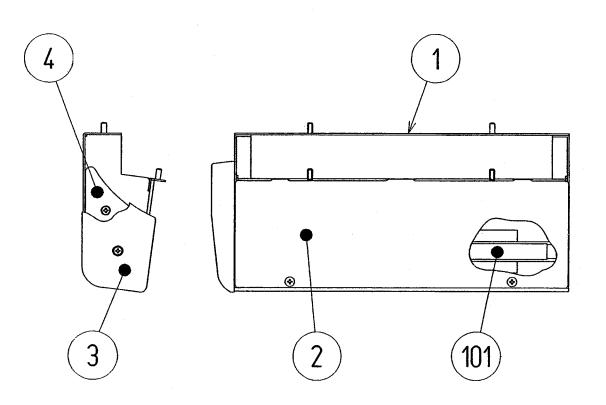


ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0207	LIGHT COVER
2	SRT-0208	LIGHT COVER BASE
3	SRT-0209	L BRKT
4	SRT-0210	LIGHT COVER BRKT
5	SRT-0211	LENS HOLDER
6	SRT-0212	LIGHT BRKT
7	SRT-0213	LAMP UNIT
101	253-5461	LIGHT COVER CIBIE
102	275-0134	LENS
103	105-5325	REFLECTOR
104	280-5328	RUBBER PACKING

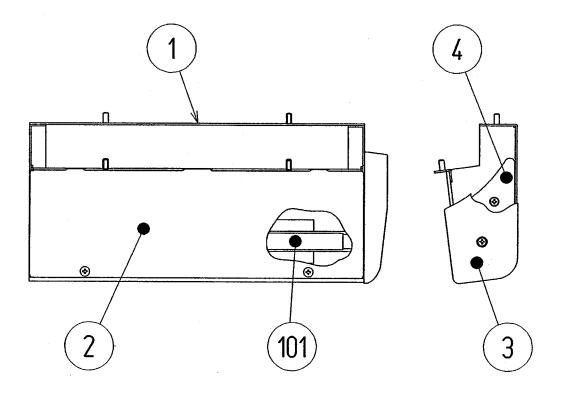
LAMP UNIT (SRT-0213)



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0214	LAMP BRKT
101	390-6567	LAMP 110V 15W YELLOW
102	214-0110	BULB SKT



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0216	FL BOX L
2	SRT-0217	FL COVER PLATE
3	SRT-0223	SIDE COVER L
4	SRT-0225	SIDE COVER BRKT L
101	LOCAL PURCHASE	ASSY FL 6W SD W/CONN S

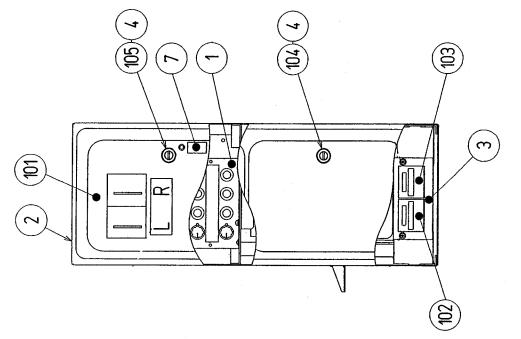


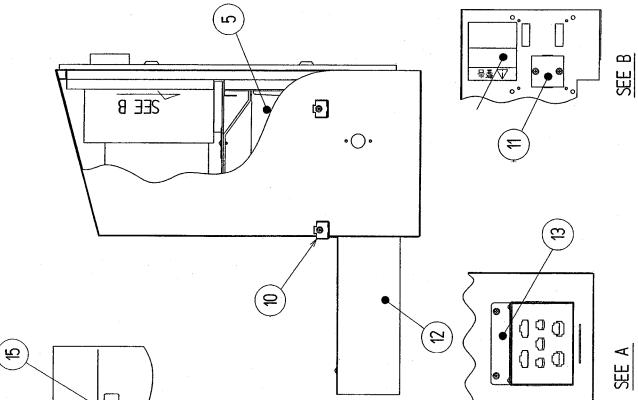
ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0220	FL BOX R
2	SRT-0217	FL COVER PLATE
3	SRT-0224	SIDE COVER R
4	SRT-0226	SIDE COVER BRKT R
101	LOCAL PURCHASE	ASSY FL 6W SD W/CONN S

69

ASSY COINCHUTE TOWER (SRT-0300)

•



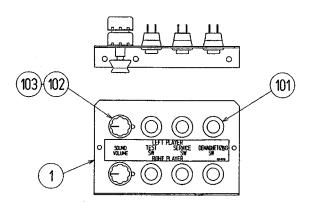


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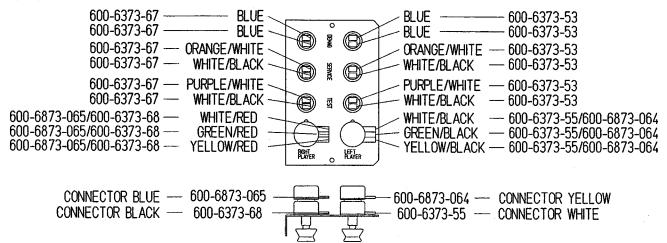
SEE A

ASSY COINCHUTE TOWER (SRT-0300)

ITEM NO.	PART NO.	DESCRIPTION
1	SRT-0350	SW UNIT
2	SPG-0301	COIN CHUTE TOWER
3	DYN-0302Y	COIN METER BRKT
4	DP-1167	TNG LKG
5	BOX-CASH	CASH BOX
10	DYN-0305	TOWER BRKT
11	105-5202	HOLE COVER
12	SPG-0302	WIRE BOX
13	SPG-0303	WIRE BOX LID
101	220-5237-92	ASSY C.C. 2DR
102	220-5412	MAG CNTR W/CONN
103	220-5412-01	MAG CNTR W/CONN BLACK
104	220-5574	CAM LOCK W/KEYS
105	220-5575	CAM LOCK MASTER W/O KEY

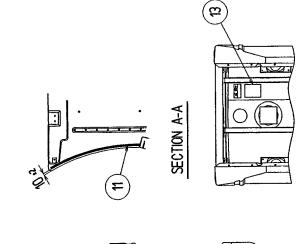


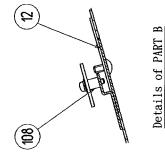
Wire Adjustment

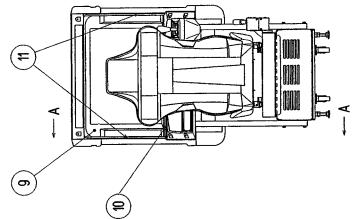


ITEM NO.	PART NO.	DESCRIPTION
1	UCQ-1035	SWITCH BRKT
101	509-5028	SW PB 1M
102	220-5296	VOL CONT 5KOHMx2 +/-10% RV24G
103	601-0042	KNOB 22MM

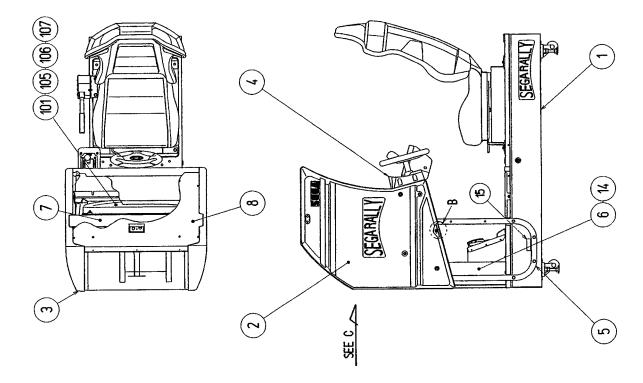
ASSY COCKPIT 1P (SRT-10001) ASSY COCKPIT 2P (SRT-11001)





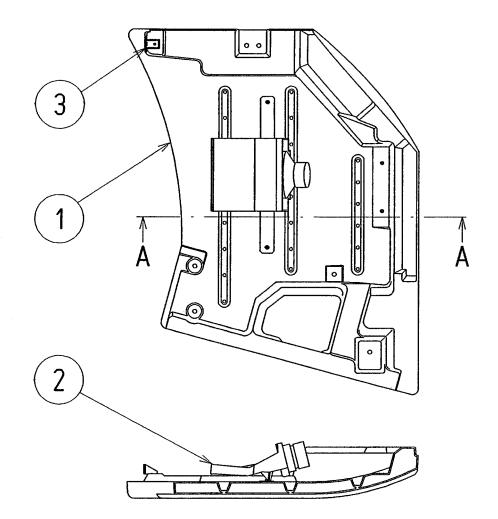


SEE C



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-20001	ASSY MAIN BASE 1P
	SRT-21001	ASSY MAIN BASE 2P
2	SRT-1030	ASSY MONITOR COVER L 1P
	SRT-1040	ASSY MONITOR COVER L 2P
3	SRT-1035	ASSY MONITOR COVER R 1P
	SRT-1045	ASSY MONITOR COVER R 2P
4	SRT-12001-01	ASSY CONTROL PANEL TWIN EXP
5	SRT-1001	MONITOR STAND
6	SRT-1002	WIRE COVER BOX
7	INY-1016	MONITOR SUPPORT
8	SPG-1008	ROOF LID
9	TTR-1067X	MONITOR MASK
10	SPG-1005	MASK HOLDER
11	DYN-1025	RUBBER CUSHION
12	INY-1015	CRT ADJUST PANEL
14	SRT-4550	ASSY DRIVE BD TWIN
101	200-5242-24-04	ASSY CLR DSPL 29 TYPE 100V
	200-5243-24	ASSY CLR DSPL 29 TYPE 24K 100V
105	280-5112	BUSH FOR TV
106	280-5113	COLLAR FOR TV
107	280-5114	SPACER 6.4-25x2
108	280-5185-6	SPACER TUBE L=6
109	601-6231-C100	EDGING NEW TYPE

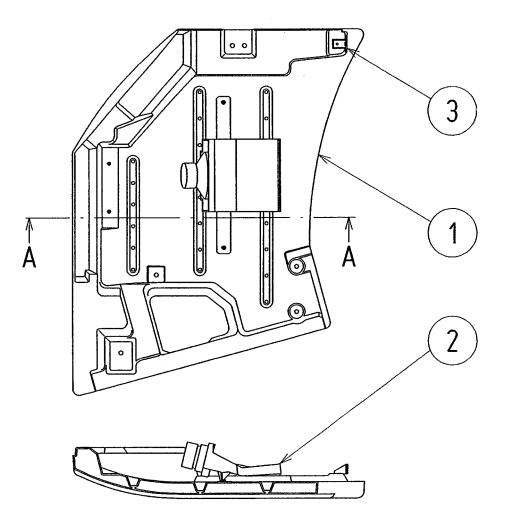
ASSY MONITOR COVER L 1P (SRT-1030) ASSY MONITOR COVER L 2P (SRT-1040)



SECTION A-A

ITEM NO.	PART NO.	DESCRIPTION
1	SRT-1031	COVER PANEL L 1P
	SRT-1031-A	COVER PANEL L BLANK
2	SPG-1100	ASSY SPEAKER
3	DYN-1032	MASK BRKT

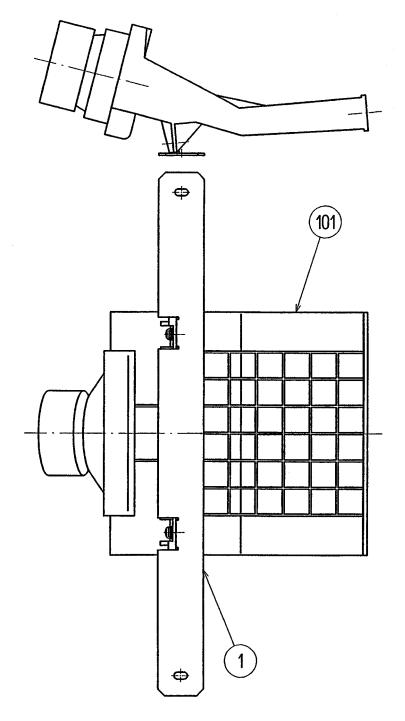
ASSY MONITOR COVER R 1P (SRT-1035) ASSY MONITOR COVER R 2P (SRT-1045)



SECTION A-A

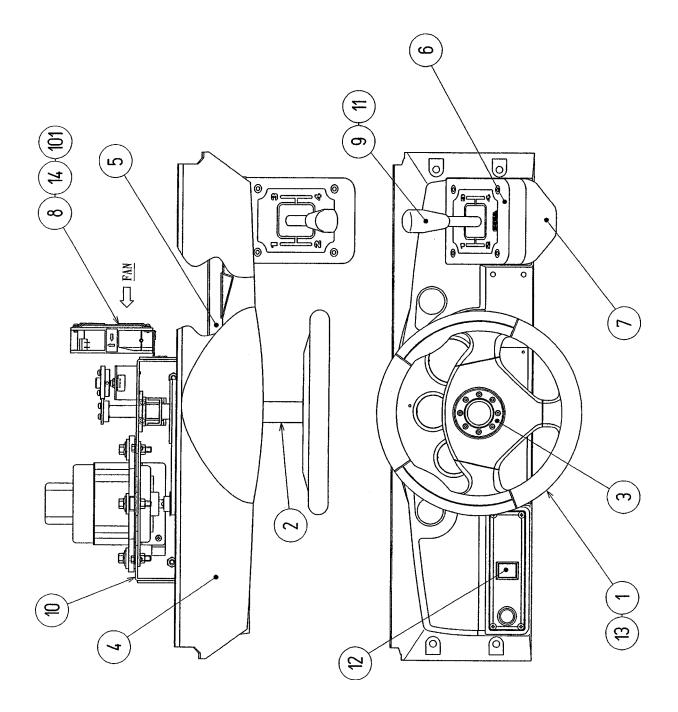
ITEM NO.	PART NO.	DESCRIPTION
1	SRT-1046-A	COVER PANEL R BLANK
	SRT-1046-01	COVER PANEL R 2P EXP
2	SPG-1100	ASSY SPEAKER
3	DYN-1032	MASK BRKT

ASSY SPEAKER (SPG-1100)



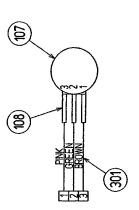
ITEM NO.	PART NO.	DESCRIPTION
1	INY-1701	SPEAKER BRKT
101	130-5152	SPKR BOX MINI DOME 12W

ASSY CONTROL PANEL TWIN EXP (SRT-12001-01)

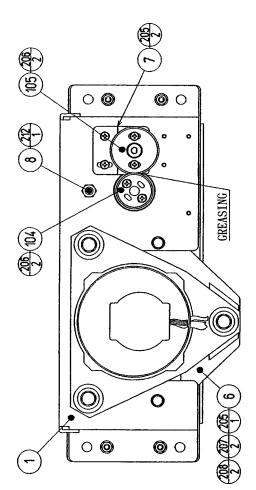


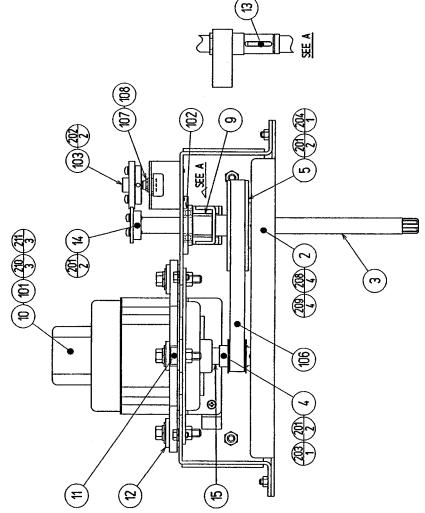
ASSY CONTROL PANEL TWIN EXP (SRT-12001-01)

ITEM NO.	PART NO.	DESCRIPTION
1	SPG-2001	STEERING WHEEL
2	DYN-1209X	HANDLE COLLAR
3	SPG-2002	STEERING EMBLEM
4	SRT-1201-01	CONTROL PANEL COVER ENG
5	SPG-1205	CONTROL PANEL BRKT
6	DYN-1222	SHIFT COVER A
7	DYN-1223X	SHIFT COVER B
8	SPG-1203	FAN BRKT
9	SPG-1204	SPL BLT M8
10	SPG-2500	ASSY HANDLE MECHA
11	SPG-2150	ASSY 4 SPEED SHIFTER
12	SRT-1290	ASSY VIRTUAL BUTTON TWIN
13	SPG-2039	SPACER RING
14	601-8543	FAN GUARD
101	260-0011-02	AXIAL FLOW FAN AC 100V 50-60HZ



SCREW FASTENING N3: 7. 5kgf•cm M4: 18kgf•cm M6: 57kgf•cm
[32]

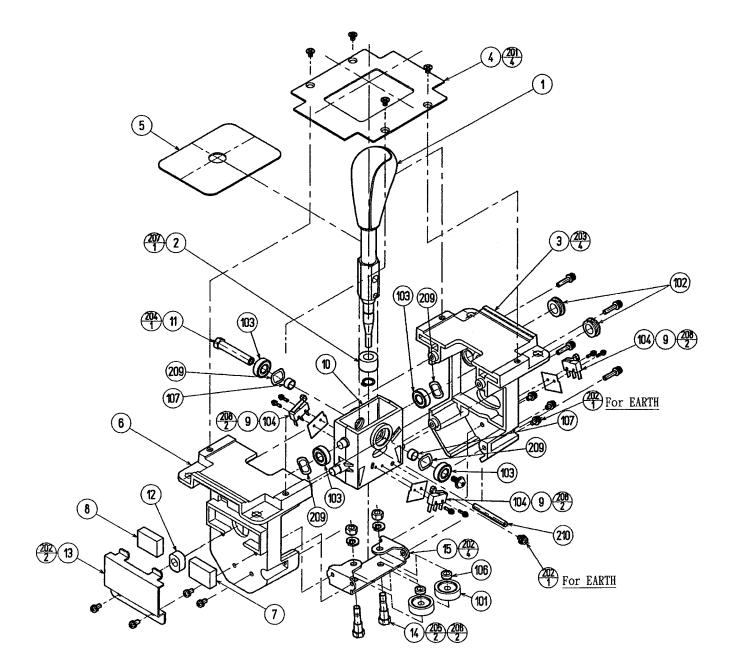




ASSY HANDLE MECHA (SPG-2500)

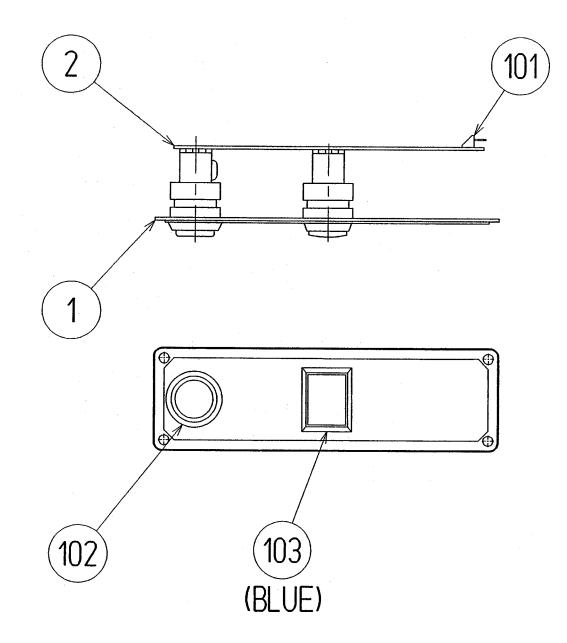
ITEM NO.	PART NO.	DESCRIPTION
1	SPG-2501	HANDLE BASE
2	SPG-2502	BASE LID
3	SPG-2503	HANDLE SHAFT
4	SPG-2504	PULLEY 20 S5M
5	SPG-2505	PULLEY 60 S5M
6	SPG-2506	MOTOR BRKT
7	SPG-2507	VR BRKT
8	SPG-2108	STOPPER BOLT
9	SPG-2109	STOPPER RUBBER
10	SPG-2453	KEY 4X4X40
11	ASK-3502	MOTOR SPACER
12	ASK-3503	MOTOR COLLAR
13	DYN-1270	STOPPER KEY
14	SLC-1130	ADJUST RING
15	SPG 2454	MOTOR SHAFT COLLAR
101	350-5448-01	SERVO MOTOR 500W NEW
102	100-5112	BEARING 17
103	601-8966	GEAR HOLDER
104	601-6172	GEAR 48
105	601-6959	GEAR 64
106	601-9173	TIMING BELT
107	220-5484	VOL CONT B-5K OHM
108	310-5029-F20	SUMITUBE F F 20MM

ASSY 4 SPEED SHIFTER (SPG-2150)

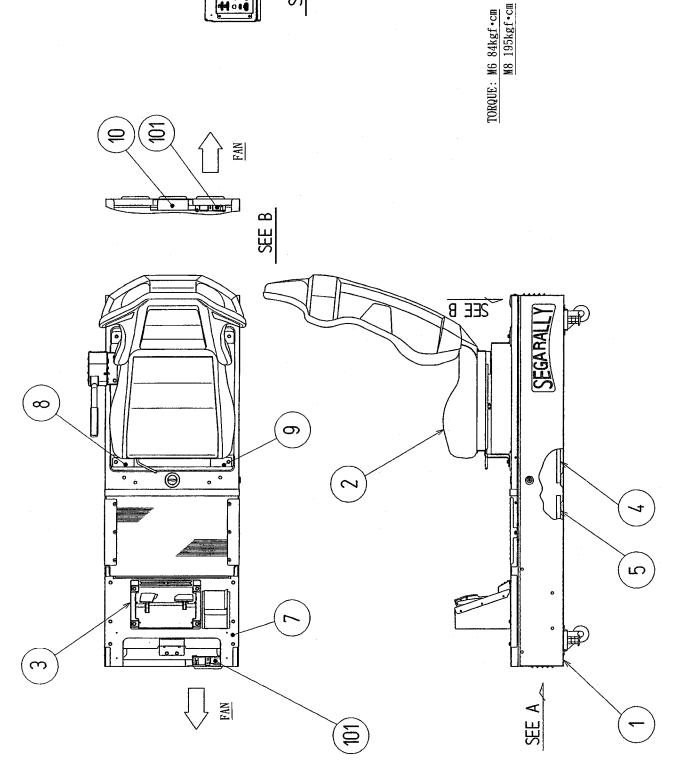


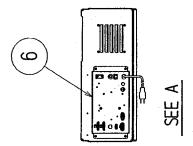
ITEM NO.	PART NO.	DESCRIPTION
1	SPG-2151	SHIFT KNOB
2	SPG-2152	STOPPER RUBBER
3	SPG-2153	FRONT BASE
4	SPG-2154	SLIDE COVER
5	SPG-2155	SLIDE PLATE
6	SPG-2156	REAR BASE
7	SPG-2157	RUBBER BLOCK 45
8	SPG-2158	RUBBER BLOCK 65
9	SPG-2159	INSULATOR SHEET
10	SPG-2160	SHAFT CASE
11	SPG-2161	SHAFT BOLT
12	SPG-2162	CENTERING BLOCK
13	SPG-2163	RUBBER CASE
14	SPG-2164	ROLLER BOLT
15	SPG-2165	ROLLER SUPPORT
101	100-5252	BEARING ROLLER 25
102	100-5193	GROMMET 11
103	100-5170	BEARING 8
104	509-5636	SW MICRO TYPE SS-5GL2T
106	280-5306	SPACER FAI 6X30
107	280-5307	SPACER FAI 8X55
201	000-F00406	M SCR FH M4X6
202	000-O00410-W	M SCR PH W/FS M4X10
203	000-P00420-W	M SCR PH W/FS M4X20
204	000-P00508-W	M SCR PH W/FS M5X8
205	050-H00600	HEX NUT M6
206	060-S00600	SPR WSHR M6
207	065-S010S0-Z	STP RING BLK OZ S10
208	FAS-00033	M SCR PH W/FS M2.3X12
209	FAS-650008	WAVE WSHR 12.7-18.1X2.5
210	FAS-450006	SPR PIN WAVE STN 5X45

ASSY VIRTUAL BUTTON TWIN (SRT-1290)



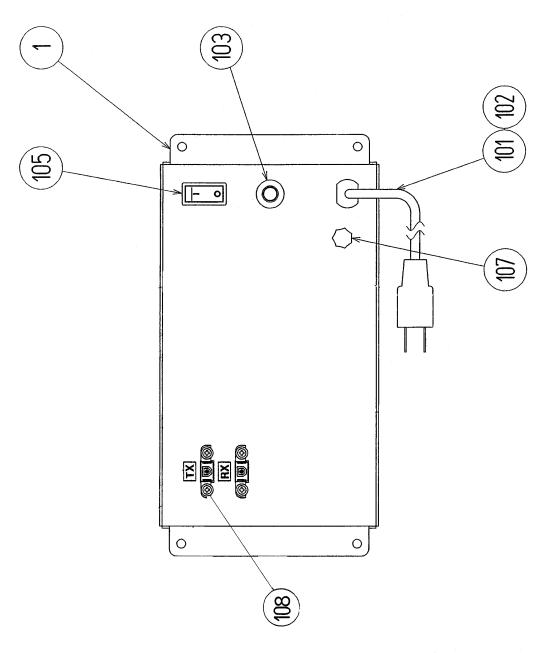
ITEM NO.	PART NO.	DESCRIPTION
1	RAL-1291	VR BUTTON BRKT
2	171-6478B	PC BD LIGHTING SWX5
101	212-5205-12	CONN JST M 12P RTA
102	509-5205-Y	PB SW W/L 6V 1L Y
103	509-5561-S	PB SW W/L 6V 5L S





ASSY MAIN BASE 1P (SRT-20001) ASSY MAIN BASE 2P (SRT-21001)

ITEM NO.	PART NO.	DESCRIPTION
1	SRT-1500	ASSY BASE BOX
2	SRT-1600	ASSY SEAT TWIN 1P
	SRT-1700	ASSY SEAT TWIN 2P
3	SPG-2200	ASSY ACCEL&BRAKE
4	SRT-4400	ASSY MAIN BD BASE
5	SRT-4500	ASSY ELEC BASE
6	SRT1-0400-01	AC UNIT MAIN EXP (1P)
7	SPG-1502	PEDAL BASE
8	RAL-2007	RUBBER HOLDER R TWIN
9	RAL-2008	RUBBER HOLDER L TWIN
10	SPG-1503	FAN BRKT
101	260-0011	AXIAL FLOW FAN AC100V 50-60 HZ
102	600-6275-0150	ASSY FIBER CABLE 5 0150CM



TEM NO.

 1
 SPG-0401X

 101
 600-5843-25

 102
 280-5134-6N34

 103
 LOCAL PURCHASE

 105
 509-5453-91-V-B

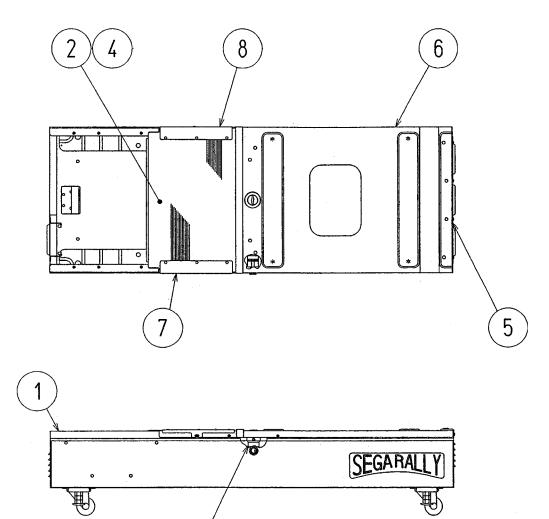
 107
 280-0417

 108
 211-5479

PART NO.

DESCRIPTION

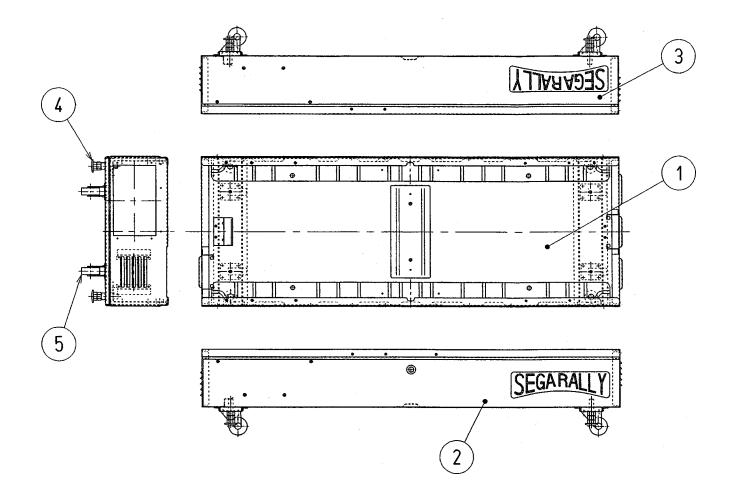
AC BRKT CA & PLUG ASSY 15A W/F-L=2.5M BUSHING STRAIN RELIEF 6N34 FUSE 7A Slo SW ROCKER J8 V-B TERMINAL BINDING POST BLACK CONN OPT JOINT



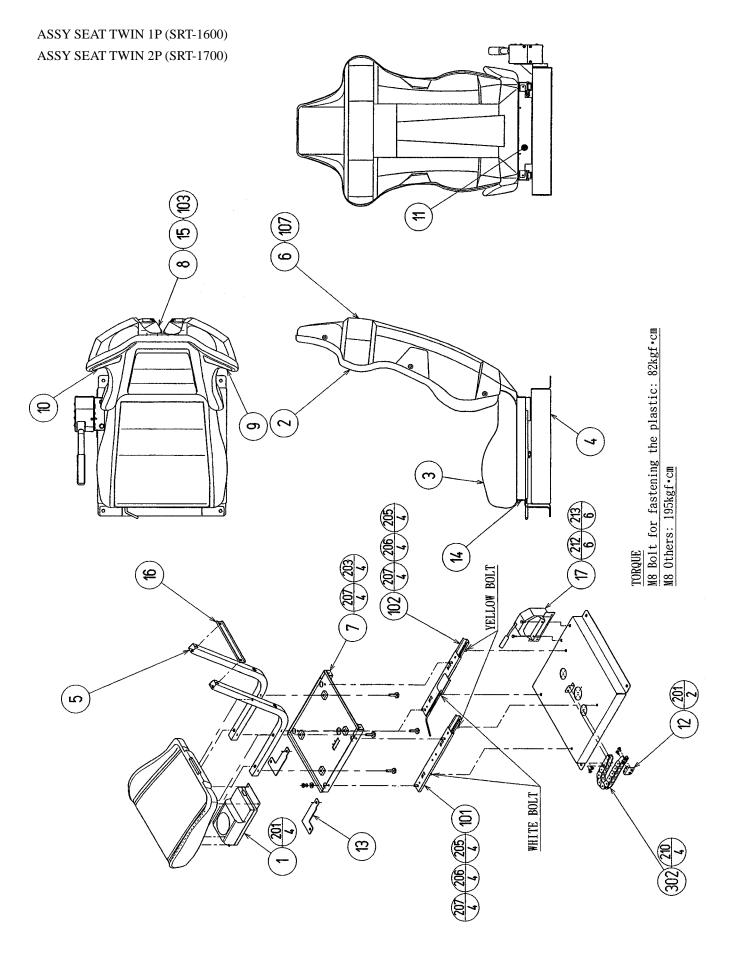
ITEM NO.	PART NO.	DESCRIPTION
1	DYN1-2002	MAIN BASE
2	DYN1-2003	BASE LID F
3	DYN1-2004	LOCK TNG
4	DYN1-2005	FLOOR MAT
5	DYN1-2006	HINGE 480
6	DYN1-2010	BASE LID R
7	DYN1-2007	LID EDGE L
8	DYN1-2008	LID EDGE R
101	999-0168	CAM LOCK MASTER W/O KEY

(101)

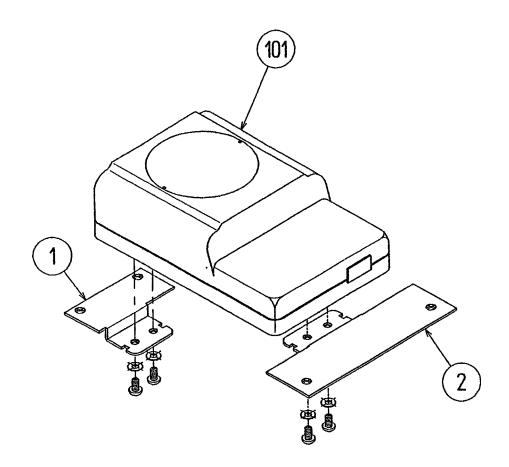
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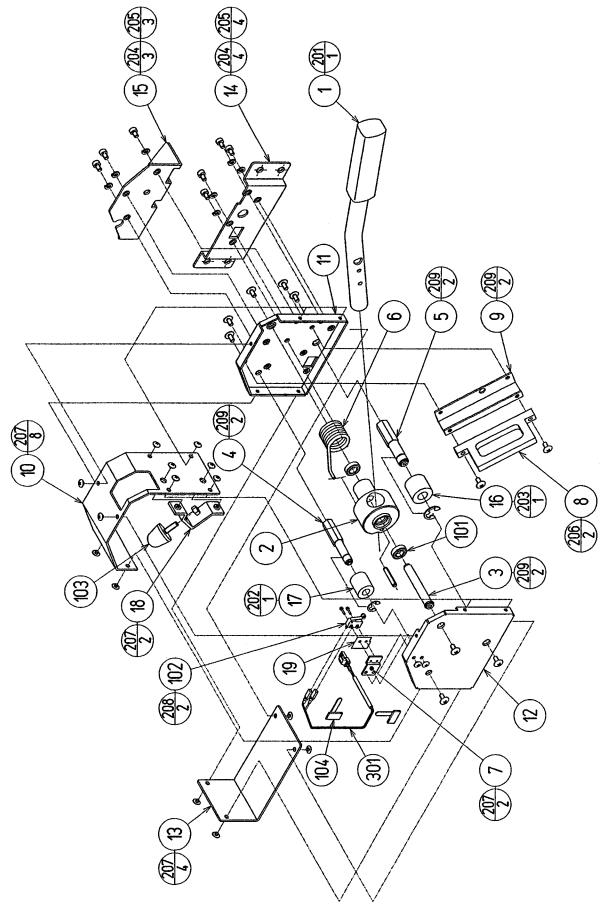
ITEM NO.	PART NO.	DESCRIPTION
1	SRT-1501-A	MIAN BASE BLANK
2	SRT-1501-B	STICKER BASE L
3	SRT-1501-C	STICKER BASE R
4	999-0167	LEG ADJUSTER BOLT 1/2X13X3
5	999-0169	CASTER 2 1/2"



ITEM NO.	PART NO.	DESCRIPTION
1	STC-1650	ASSY WOOFER
2	SPG-2401	UPPER SEAT
3	SPG-2402	LOWER SEAT
4	SRT-1604	SEAT BASE
5	STC-1604	SEAT FRAME
6	SRT-1601	SEAT REAR COVER 1P
	SRT-1701	SEAT REAR COVER 2P
7	STC-1606	SEAT MOUNT TRAY
8	STC-1607	SP MOUNT BRKT
9	STC-1608	SPEAKER NET L
10	STC-1609	SPEAKER NET R
11	STC-1610	SAFETY GUARD
12	STC-1611	CABLE BEAR BRKT
13	STC-1612	PROTECT RUBBER
14	STC-1613	SAFETY GUARD F
15	INY-1302-B	MASK CUSHION SIDE
16	SPG-2404	SEAT FRAME BRKT
17	SRT-2200	ASSY HAND BRAKE
101	601-9059	SEAT RAIL L
102	601-9060	SEAT RAIL R
103	130-5159	GULL BOX SPEAKER 800HM 5W
105	601-6563-188	BUSH 2.4T
106	601-6563-100	BUSH 2.4T
107	280-5297	SCRIVET 8 1K31
201	000-P00410-W	M SCR PH W/FS M4X10
203	030-000816-S	HEX BLT W/S M8X16
205	050-H00800	HEX NUT M8
206	060-S00800	SPR WSHR M8
210	000-T00616-0B	M SCR TH BLK M6X16
212	030-000820-SB	HEX BLT W/S BLK M8X20
213	060-F00800-0B	FLT WSHR BLK M8



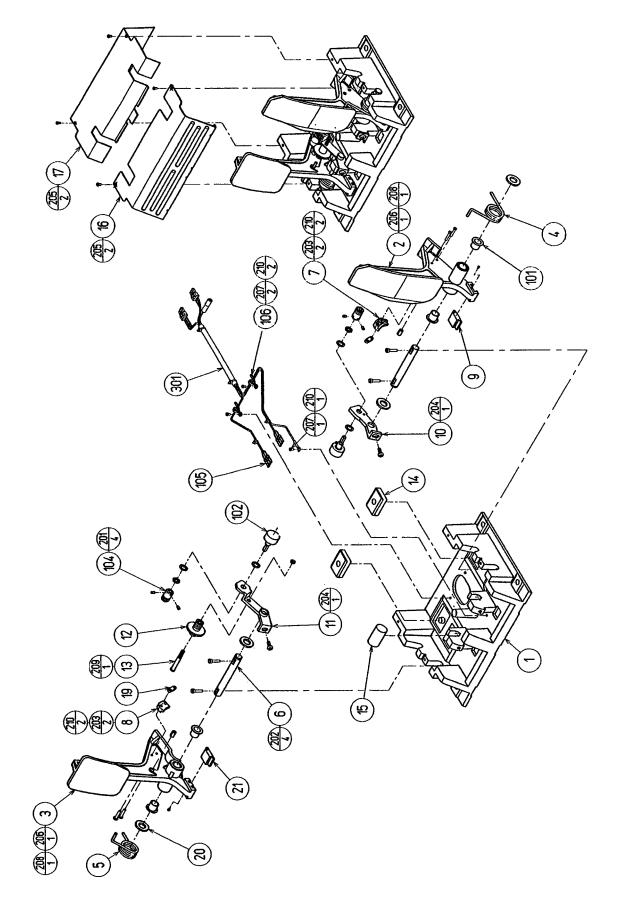
ITEM NO.	PART NO.	DESCRIPTION
1	STC-1651	WOOFER BRKT F
2	STC-1652	WOOFER BRKT R
101	130-5160	SUB WOOFER 4 OHM 30W



ITEM NO. PART NO.

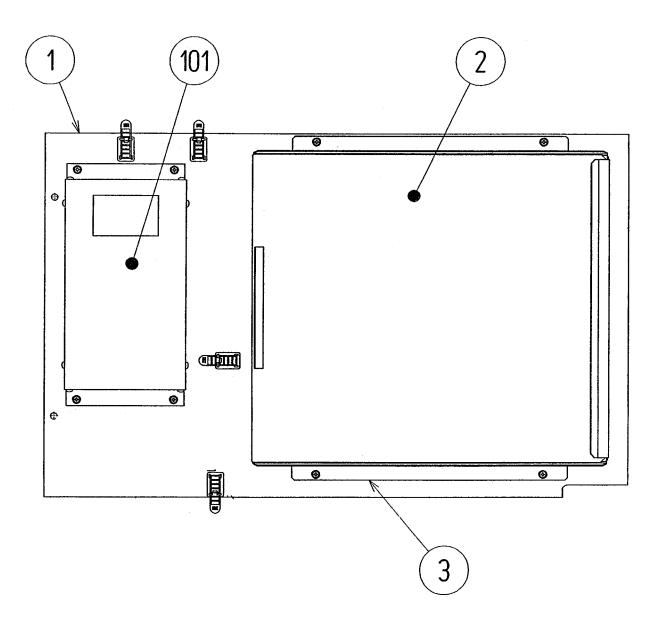
1	SRT-2201	PIPE SHAFT
2	SRT-2202	PIPE HOLDER
3	SRT-2203	HOLDER SHAFT
4	SRT-2204	STOPPER SHAFT N
5	SRT-2205	STOPPER SHAFT
6	SRT-2206	SPRING
7	SRT-2207	SENSOR STAY
8	SRT-2208	PIPE GUIDE
9	SRT-2209	GUIDE BRKT
10	SRT-2210	FRONT COVER
11	SRT-2211	SIDE COVER A
12	SRT-2212	SIDE COVER B
13	SRT-2213	UNDER COVER
14	SRT-2214	MECHA BRKT
15	SRT-2215	STAY
16	SRT-2216	STOPPER RUBBER
17	SRT-2217	STOPPER RUBBER N
18	SRT-2218	DAMPER STAY
19	SRT-2219	INSULATOR SHEET
101	100-5319	BEARING 10
102	509-5636	SW MICRO TYPE SS-5GL2T
103	601-5564	STOPPER
104	280-5029-F15	CORD CLAMP SR10
201	FAS-450012	SPR PIN BLK OZ 5X30
202	065-E00800	E RING 8MM
203	065-E01000	E RING 10MM
204	020-000508-OZ	HEX SKT H CAP SCR BLK M5X8
205	060-S00500-OB	SPR WSHR BLK M5
206	000-P00516-S	M SCR PH W/S M5X16
207	FAS-000049	M SCR TH BLK M4X5
208	FAS-000050	M SCR PH W/FS M2.3X10
209	FAS-000051	M SCR TH BLK M5X10

ASSY ACCEL&BRAKE (SPG-2200)

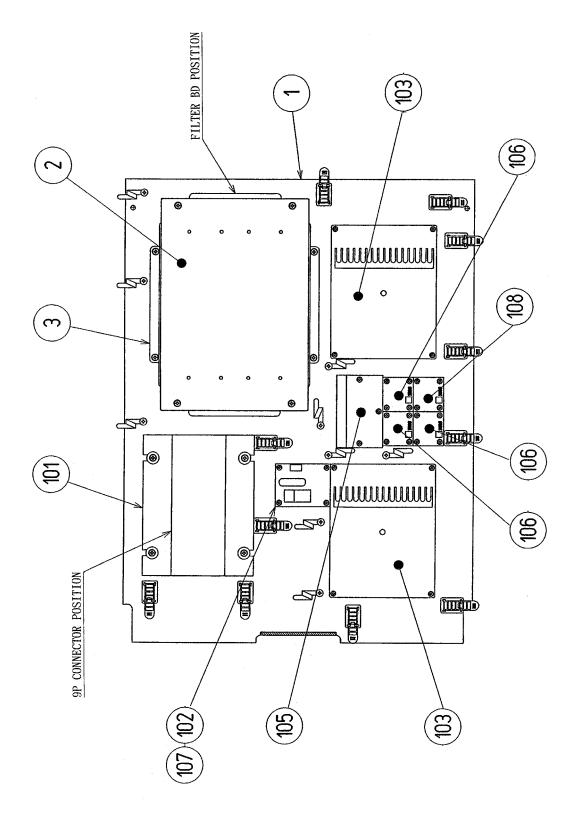


ITEM NO.	PART NO.	DESCRIPTION
1	SPG-2201	BASE
2	SPG-2202	ACCEL PEDAL
3	SPG-2203	BRAKE PEDAL
4	SPG-2204	ACCEL SPRING
5	SPG-2205	BRAKE SPRING
6	SPG-2206	SHAFT
7	SPG-2207	ACCEL GEAR
8	SPG-2208	BRAKE GEAR
9	SPG-2209	NUETRAL STOPPER
10	SPG-2210	VR PLATE ACCEL
11	SPG-2211	VR PLATE BRAKE
12	SPG-2212	AMPL GEAR
13	SPG-2213	GEAR SHAFT
14	SPG-2214	STOPPER
15	SPG-2215	RUBBER CUSHION
16	SPG-2216	COVER
17	SPG-2217	VR COVER
19	SPG-2219	GEAR STAY
20	SPG-2220	WSHR
21	SPG-2221	NUETRAL STOPPER
101	100-5263	BEARING 12
102	220-5484	VOL CONT B-5K OHM
104	601-7944	GEAR 15
105	310-5029-F15	SUMI TUBE F F 15MM
106	280-0419	HARNESS LUG
201	028-A00304-P	SET SCR HEX SKT CUP P M3X4
202	020-000520-0Z	HEX SKT H CAP SCR BLK M5X20
203	000-P00420	M SCR PH M4X20
204	000-P00508-W	M SCR PH W/FS M5X8
205	000-T00408-0C	M SCR TH CRM M4X20
206	FAS-450005	SPR PIN BLK OZ 6X10
207	000-P00405	M SCR PH M4X5
208	FAS-000001	M SCR TH CRM M3X6
209	050-H00500	HEX NUT M5
210	060-F00400	FLT WSHR M4

ASSY MAIN BD BASE (SRT-4400)



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-4401	WOODEN BASE
2	SRT-4600	ASSY SHIELD CASE
3	105-5241	SHIELD CASE BRKT
101	400-5330-02-91	SW REGU FOR MODEL 3

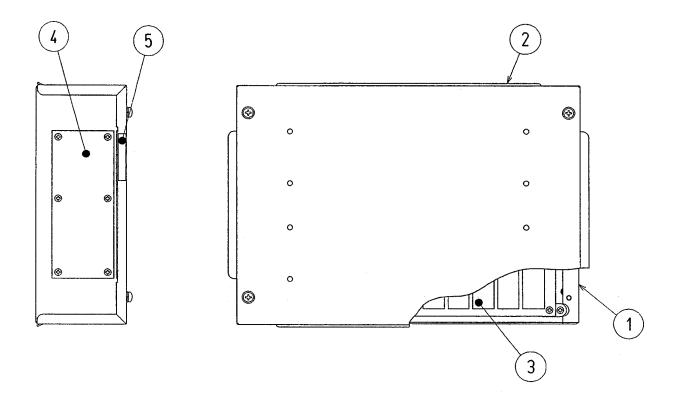


NOTE: ITEM #103 MAY BE INSTALLED PERPENDICULAR TO THIS BOARD TO ALLOW ROOM FOR DRIVE BOARDS.

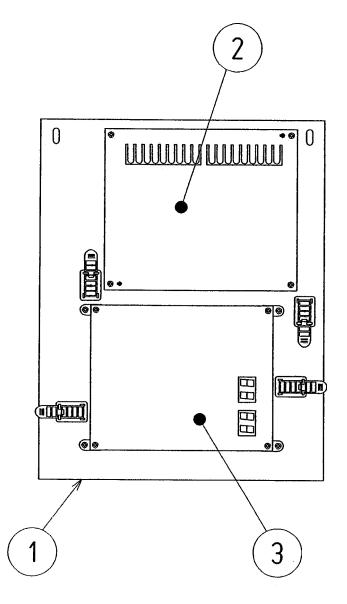
ASSY ELEC BASE (SRT-4500)

ITEM NO.	PART NO.	DESCRIPTION
1	SRT-4501	WOODEN BASE ELEC
2	SRT-4700	ASSY SHIELD CASE MPEG
3	105-5317	SHIEDL CASE BRKT MPEG
101	560-5359	PWR XFMR 100V 6.5A 12.5V 6Ax2
102	838-10801	CONN BD B
103	838-11650-38	EQ. PWR AMP SRT TWIN F
105	838-11651-91	LOWPASS AMP
106	839-0542	AUDIO MIX BD
107	LOCAL PURCHASE	FUSE 7A SLO
108	839-0542-02	AUDO MIX BD R

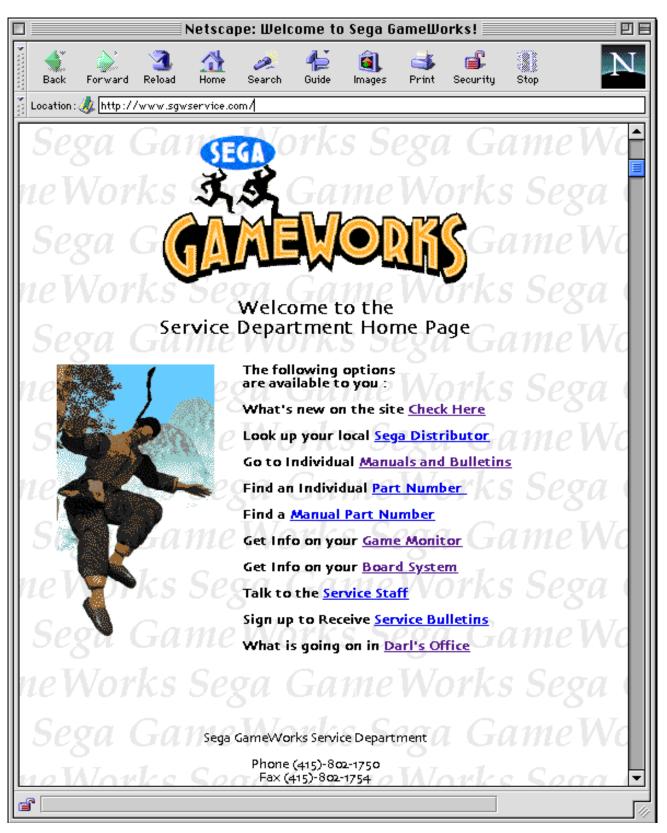
ASSY SHIELD CASE MPEG (SRT-4700)



ITEM NO.	PART NO.	DESCRIPTION
1	105-5315	SHIELD CASE MPEG
2	105-5316	SHIELD CASE LID MPEG
3	837-13376	SOUND BD SRT TWIN
4	839-1021	FLT BD DIGITAL SOUND



ITEM NO.	PART NO.	DESCRIPTION
1	SRT-4551	WOODEN BASE DRIVE TWIN
2	838-12912-01	SERVO MOTOR DRIVE BD NEW
3	838-13366	DRIVE BD SRT



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