

NAOMI CABINET VERSION
OWNER'S MANUAL


SEGA ENTERPRISES, INC. USA

## Warranty

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

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

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

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

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

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## SPECIFICATIONS

```
Installation space: }58\mathrm{ in.(L) x 30 in.(W)
Height:
    88 in.
Weight: Approx. }379\mathrm{ lbs.
Power maximum current: 3.4 Amp AC 120V 60 Hz
MONITOR: 29" COLOR MONITOR
```


## 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 JAMBO SAFARI Naomi Cabinet type, 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

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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. $120 \mathrm{VAC}, 7 \mathrm{~A}$.
- 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.


## AMUSEMENT MACHINE

## 1 . PRECAUTIONS TO BE HEEDED FOR OPERATION

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

## PRECAUTIONS TO BE HEEDED FOR OPERATION BEFORE STARTING THE OPERATION

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

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


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

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

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

* Intoxicated 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 shoes 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 in. |  | LENGTH |  | HEIGHT in. | WEIGHT lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DURING SHIPPING | 40" | X | 70" | X | 100" | $\sim 425$ LBS. |
| CABINET | 30" | X | 41" | X | 71" | 325 LBS. |
| FLOOR | $25 "$ | X | $28 "$ | X | $6 "$ | 42 LBS . |
| BILLBOARD | $30^{\prime \prime}$ | X | $6.5 "$ | X | 12" | 13 LBS. |
| WHEN ASSEMBLED | $30 "$ | X | 58" | X | 88" | 380 LBS. |

## 3. ACCESSORIES

| DESCRIPTION <br> Part No. (Qty.) <br> Note <br> Figures <br> If Part No. has no description registered or can not be regist be obtainable even if the custo Therefore, ensure that the par | KEY MASTER <br> 220-5576 (2) <br> For opening/closing the doors | KEY <br> (2) <br> For the CASHBOX DOOR |
| :---: | :---: | :---: |
| TAMPERPROOF WRENCH M8 540-0009-01 (1) TOOL |  |  |

## THE SHIPMENT METHOD DESCRIBED BELOW APPLIES TO ALL ‘MODEL 3' OR ‘NAOMI' BOARDS CONTAINED IN THE FOLLOWING GAMES:

LOST WORLD, VIRTUA FIGHTER 3, SUPER GT, SEGA BASS FISHING, STRIKER 2, HARLEY DAVIDSON, RALLY 2, DAYTONA 2, DIRT DEVILS, HOUSE OF THE DEAD 2, OCEAN HUNTER, STAR WARS TRILOGY, ZOMBIE REVENGE, CRAZY TAXI, JAMBO SAFARI, VIRTUA STRIKER 2000, VIRTUA NBA, VIRTUA TENNIS

## !!NEVER SHIP MODEL 3 / NAOMI GAME BOARDS OUTSIDE OF CAGE!!



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

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


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

## 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 person $\$$. Depending on the assembly work, there are some cases in which performing the work by a single person can cause personal njury or parts damage.

When carrying out the assembly work, follow the procedure in the following 5-item sequence:

1 ASSY OF THE FLOOR
2 ASSY OF BILLBOARD
3 SECURING IN PLACE (ADJUSTER ADJUSTMENT)
4 POWER SUPPLY
5 ASSEMBLING CHECK

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

1 ASSY OF REAR FLOOR

CAUTION!
Perform conector connection securely. Insufficient insertin ce electrical shock or short circuit.
Be careful so as not to damage wirings. Damaged wiring can electric shock or short circuit.
(1) Unlock and remove the SERVICE DOOR from the front of the cabinet.
(2) Remove the Plastic nut of the Connector at the end of ASSY FLOOR's Fexible Tube.
(3) Insert the Connector at the end of the Flexible Tube into the round hole on the bottom of cabinet from the underside, and secure by fastening the plastic nut. At this time, be careful so as not to damage the wire passing through the flexible tube.

(4) Connect the Connector at the end of the wires passing through the Flexible Tube to the Connector inside the cabinet.
(5) Secure the wires with a Cord Clamp.

(7) Slightly lower the 2 Adjusters of the cabinet and install the JOINT BRACKET L \& R as applicable by inserting from the rear, and secure to ASSY FLOOR with a hexagon bolt for each.
(8) After lowering the Adjuster fully downward, raise the adjuster's hexagon nut fully upward.


## 2 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 cabinet by ensuring the front lip of the Billboard is securely placed under the mounting bracket already installed on the cabinet. Fasten with the 3 hexagon bolts.
(2) Connect all of the 4 connectors inside the Billboard box (This needs to be done prior to final installation of (120ard Assy)


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

This machine has 4 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 5 mm . from the floor and make sure that the machine position is level.
(1) Move the machine to the installation position.
(2) Cause all of the leg levelers 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.

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


- 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
(1) Turning the AC unit's main switch on will cause the machine to start the power check and network check automatically.


## 5 ASSEMBLING CHECK

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

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


| INPUT TEST |  |
| :---: | :---: |
| DRIVE GEAR |  |
| REVERSE GEAR | OFF |
| OFF |  |
| START | OFF |
| COIN CHUTE \#1 | OFF |
| SERVICE $\# 2$ | OFF |
| TEST | OFF |
| HANDLE | OFF |
| ACCEL | $80 H$ |
| BRAKE | $30 H$ |
|  | $30 H$ |
| PRESS TEST AND SERVICE BUTTON TO EXIT |  |

Selecting the INPUT TEST on the Test Mode menu screen causes the screen (on Which each switch adnV.R. are tested) to be displayed. Press each switch. For the coin switch test, insert a coin from the coin inlet with the coin chute door being open. If the display beside each switch indicates "ON", the switch and wiring connections are satisfactory. Check the display of V.R. value for steering wheel and accelerator \& brake. If the V.R. values are not satisfactory, make adjustments as neccesary.

## OUTPUT TEST

START LAMP ON
In the OUTPUT TEST mode, carry out lamp test to ensure that each lamp lights up satisfactory.


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 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 Ad and ensure that Casters make contact with the floor. transportation, pay careful attention so that Casters
usters uring tread power 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

CAUTION!


## 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.
The 2 Fluorescent Lamps of the product are always lit when the product is energized. During Advertise, the 2 Speakers and SUB-WOOFER output Advertise sounds, and Advertise images are outputted on the monitor. Note that setting to NO SOUND OUTPUT during Advertise is possible.

## OUTLINE OF GAME

The player as a Ranger who captures wild animals in Africa for investigation rides in a jeep and captures animals with a rope and net. Capturing an animal increases the ranger point (displayed on the upper left of screen) and the time.
Divided into 6 investigation areas, the varioous kinds of animals to capture as the norm set for the player (displayed on the upper center) and the time limit (displayed on the upper right) are provided in each area.

When the player fullfils the above average norm within the time limit, the investigation in that area is finished and he/she can proceed to the next area. finishing the investigation in all areas results in clearing the game. When the time limit becomes zero, the game is over.

## HOW TO OPERATE

The operation of Steering Wheel, and Accelerator \& Brake pedals are similiar to an actual car.

## SHIFT LEVER/ROPE-NET LEVER

Throw a rope with the monitor (the rear) side input unit and cast a net when the animal is caught by the rope. Draw in the rope passed around the animal with the front side input unit.


## HOW TO PLAY

(1) Insert a coin.

Coin insertion causes credit(s) to be displayed on the screen. For example, in the case of 2 coins one credits setting, "INSERT MORE COIN(S) CREDIT(S) $1 / 2 "$ is displayed when one coin is inserted.
(2) Inserting one play worht of coin(s) causes "PRESS START BUTTON" to be displayed and START button to flash. Press START button to have the Mode Select Screen appear on the monitor.
(3) Select the play mode from either BEGINNER or EXPERT Mode in the Mode Select Screen. BEGINNER mode consisits of 2 areas. In this mode, "instructions" is given during the game play. BEGINNER Mode is suitable for those who first play this game. EXPERT Mode consists of 4 areas, and is suitable for those who have played this game before. "Instructions" is not given during the game in the EXPERT Mode.

To select the mode, turn ther Steering Wheel left or right to shift the frame attached to the mode. Step on the Acelerator Pedal to decide on the mode with the frame being attached.

While the Mode Select is displayed, countdown is executed. Counting down to 0 causes the mode with frame being attached to be selected automatically.

In case BEGINNER is selected, the monitor proceeds tothe confirmation screen and the play mode to be selected again. Deciding the play mode causes the Character Select Screen to appear.
(4) In the Character Select Mode, select on-screen player character. Turn the Steering Wheel left or right to shift each character. Press START button or step on the Accelerator Pedal to decide on the character being displayed.

While the Character Select Mode is displayed, countdown is executed. Counting down to 0 causes the character being displayed to be selected automatically. Character ability is identical.
(5) When the character is determined, the game starts.

By driving the jeep, move on the field and look for the animal you wish to catch. When you find the animal to aim at, approach to the animal until sight is appeared on the monitor and throw a rope by inclining the lever to the back. Zero-in on the animal unitl the rope captures the animal.

(6) When the rope is passed around the animal, pull the rope by inclingin the Lever towards you and approach the animal.

Time is increased by at least onesecond each time the player get s the ring attached to the rope.
When the rope flashes red and the tension gauge displays "ATTENTION", release the Lever to loosen the rope.
Otherwise the rope will be broken.
(7) Throw the net over the animal. When the player's view changes and the screen displays the sight, throw the net by inclining the Lever backward. Zero-in on the animal unitl the animal is captured by the net with the net. When the player succeeds to capture the animal without spending much time, the on-screen replay scene of capturing the animal is displayed.

## GRAPPLING MODE


(8) When the animal is captured, the on-screen image changes to the evaluation mode. Operation is not allowed during this time.
In the evaluation mode, the animals are taken into the cage after the dsescriptions and the rank (number of *) of animals captured, the time earned, and the points earned are displayed.
The evaluation is based on the rank of ther animals the playeer captured. The higher the rank, the more time and points the player can earn.
However, capturing the identical animals decreases the amount of time and points the player casn earn
EVALUATION MODE

(9) Upon completion of the Evaluation Mode, the monitor shifts to the Binoculars Mode. In the Binoculars Mode, various kinds of animals around the player and the distance to the animals are shown. In this mode, when the Steering Wheel is turned, the view point is also shifted to the same direction. Step on the Accelerator pedal whe the animal aimed at appears, and the screen shifts to the Searching for animals mode from thr Binoculars Mode and displays the arrow pointing to the animal on the ground.

The time limit counts down more slowly while the Binoculars mode is displayed

> BINOCUIARS MODE

(10) After finishing the investigation, the screen shifts to the Report of Investigation Mode. The toal point and the rank intechnique are displayed in this mode.

TOTAL POINT: The sum of the points that the player has earned so far and that the remaining time in the area is converted to .

TECHNICAL LEVEL: Levels in accordance with the TOTAL POINT.
(11) When the time limit becomes zero, the game is over. Total Level, Total Point, and the Total Ranking are displayed. The Total Ranking is the point ranking based on the data of 99 players who have played the game on the machine. then the screen proceeds to the "GAME OVER" screen. If any credit(s) which is one play worth or more remians, the START LAMP unlit during the game will then flash.

## KNACK OF PLAY

(1) Always keep the animal on the center of the screen when drawing in the rope.

If you operate the Steering Wheel keeping the this in mind, you can smoothly get close to the animal.
(2) Don't chase the animal too far.

If it seems to take too much time to ge the animal you aim at, change to the animal of lower rank. Know your technical level and pay attention to the time.
(3) Use Commands.

DASH:
With the Steering Wheel in the centering position, quickly step on the Accelerator pedal twice. Speed can be greatly increased for a while. Effective for getting close to animals who run fast or who are away from here.

DRIFT: Turn the Steering Wheel to the direction you wish and step on the Accelerator Pedal again. This increases the turning ability without reducing speed. Efective for getting animals who have high turning ability.

## 7. EXPLANATION OF TEST AND DATA DISPLAY

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

TABLE 7 EXPLANATION OF TEST MODE

| ITEMS | DESCRIPTION | SECTIONS |
| :--- | :--- | :---: |
| INSTALLATION |  |  |
| OF MACHINE | When the machine is installed, perform the following: <br> 1. Check to see that each setting is as per standard setting made <br> at the time of shipment. | $7-10,7-11$ <br> 2. In the INPUT TEST mode, check each SW and VR. <br> 3. In the OUTPUT TEST mode, check each of lamps. <br> 4. In the MEMORY TEST mode, check ICs on the IC Board. |
| MEMORY | Choose MEMORY TEST in the MENU mode to allow the <br> MEMORY test to be performed. In this test, PROGRAM <br> RAMs, ROMs, and ICs on the IC Board are checked. | $7-3,7-4$ |
| PERIODIC <br> SERVICING | Periodically perform the following: <br> 1. MEMORY TEST <br> 2. Ascertain each setting. <br> 3. In the INPUT TEST mode, test the CONTROL device <br> 4. In the OUTPUT TEST mode, check each of lamps. | $7-3,7-4$ |
| CONTROL <br> SYSTEM | 1. In the INPUT TEST mode, check each SW and VR. <br> 2. Adjust or replace each SW and VR. <br> 3. If the problem can not be solved yet, check the CONTROL's moves. | 8 |
| MONITOR | In the MONITOR ADJUSTMENT mode, check to see if the <br> MONITOR adjustment is appropriately made. | $7-72$ |
| IC BOARD | 1. MEMORY TEST <br> 2. In the SOUND TEST mode, check the sound related ROMs. | $7-7-11$ |
| DATA CHECK | Check such data as game play time and histogram to adjust the <br> difficulty level, etc | $7-15$ |

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

Adjust to the optimum sound volume by considering the environmental requirements of the installation location.

- If the COIN METER and the game board are electrically disconnected, game play is not possible.

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

## SWITCH UNIT


(1) SPEAKER VOLUME: Sound Volume can be adjusted for the 2 Speakers.
(2) WOOFER VOLUME: Sound Voume can be adjusted for the WOOFER.
(3) TEST BUTTON: For the handling of the TEST BUTTON, refer to the following pages.
(4) SERVICE BUTTON: Gives credits without registering on the coin meter.
(5) DEMAG. SWITCH: Eliminates the on-screen color unevenness due to magnetization of CRT. First use this SW before performing the monitor's color adjustment.

## 7-2 SYSTEM TEST MODE

IMPORTANT!
The contents of setings chnaged in the TEST mode are stored when the TEST mode is finished from EXIT in the MENU mode. If the power is turned off before the TEST mode is finished, the contents of setting chnage become ineffective.
Executing "BACKUP DATA CLEAR" in the SYSTEM TEST MODE does not clear the BOOKKEEPING data in the GAME TEST MODE.
Entering the TEST mode clears fractional number of coins less than one credit and BONUS ADDER data.

The SYSTEM TEST mode mainly allows for IC Board functioning check, monitor adjustment, coin assignments, etc. For details, refer to NAOMI SERVICE MANUAL. The following assignments, however, should be designated for this product.

CABINET TYPE: 1 PLAYER (S)
MONITOR TYPE: HORIZONTAL
COIN CHUTE TYPE: COMMON

## 7-3 GAME TEST MODE

MENU MODE


SYSTEM TEST MODE MENU


GAME TEST MODE MENU

- Press the TEST button to display the SYSTEM TEST MODE MENU.
- By pressing the SERVICE button, move the arrow ( $->$ ) to select the GAME TEST MODE.
- Press the TEST button to enter GAME TEST MODE. The screen displays the GAME TEST MODE MENU.
- By pressing the SERVICE button, move the arrow ( $->$ ) to select the desired item. Press the TEST button to execute the selected item.
- Select EXIT and press the TEST button to exit from the GAME TEST MODE and return to the SYSTEM TEST MODE MENU. Further, select EXIT and press the TEST button to finish SYSTEM TEST MODE and return to the normal mode.


## 7 -4 INPUT TEST

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


FIG. 7.4 INPUT TEST

## 7-5 OUTPUT TEST

| OUTPUT TEST |
| :---: |
| START LAMP ON |
| PRESS TEST BUTTON TO EXIT |

FIG. 7.5 OUTPUT TEST

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

To check CHUTE $1 \&$ CHUTE 2 coin switches, open the COIN CHUTE DOOR and insert a coin(s) in the slot.

Press either the TEST BUTTON and the START BUTTON to return to the test menu.

As a standard, refer to the following for each of the Volume's adjustment. By operating the Handle (Steering Wheel) and Pedal, if the V of each Volume guage smoothly moves as the corresponding value varies ina natural manner, then it is satisfactory.

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

The right-hand side "ON" \& "OFF" display of START LAMP automatically alternates. The lamp lights up when "ON" is displayed and goes off when "OFF" is displayed. Check to ensure that the lamp lights up and goes off in consistency with the display of "ON" and "OFF".

Press the TEST button to return to the TEST MENU.

## 7-6 SOUND TEST

| Sound test |
| :---: |
| vocce |
| вffect |
| в.,.м |
| exxt |
|  |

FIG. 7.6 SOUND TEST

## 7-7 C.R.T. TEST




FIG. 7.7 C.R.T. TEST

This test mode allows each sound related board and speaker to be checked.

Press the Service Button to select the sound to be tested, and press the Test Button to have the selected Sound Test screen appear.

- Select EXIT and press the Test Button to return to the Test Menu.

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

Periodically check the MONITOR adjustment status on this screen.

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

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

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

Press the TEST BUTTON to return to the MENU mode.

## 7-8 VOLUME SETTING

When VOLUME SETTING is selected, the following appears on the screen and each operating unit's Volume can be set.
If the operability is unsatisfactory, or when the Volume is adjusted or replaced, set the Volume in this mode. The 3 kinds of Volume Settings for HANDLE, ACCEL, and BRAKE are to be set. The Max. value, Min. value for each and the HANDLE'S CENTER value are to be set as applicable.

(1) Press the SERVICE button to select the Volume value to be changed.
(2) Press the TEST button to cause the characters of the selected Volume value to turn red.
(3) Input the value in the manner corresponding to the selected item.
(4) Press the SERVICE buton to select EXIT, and press the TEST button to return to the MENU mode. At the same time the VOLUME SETTING is finished, the input values are stored as the Max. and Min. values.
FIG. 7.8 VOLUME SETTING

## 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

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

| GAME ASSIGNMENTS |  |
| :---: | :---: |
| START TIME | 50 |
| TIME DIFICULTY | 4/8 |
| GAME DIFFICULTY | 4/8 |
| >EXIT |  |
| SELECT WITH SERVICE BUTTON <br> AND PRESS TEST BUTTON TO EXIT |  |

- START TIME

This is the time alloted at the time of game start. Setting is possible starting from the shortest time sequentially in order of $35,40,45,50,55,-60,65$, and 70 .

- TIME DIFFICULTY

Refers to the amount of BONUS TIME to be added when the taxi picks up the Customer. This can be set from $1 / 8$ to $8 / 8$ in 8 steps. The difficulty increases sequentially in order starting from $1 / 8$.

- GAME DIFFICULTY

Sets the difficulty level in 4 categories, i.e., EASY, NORMAL, HARD, and HARDEST.

## 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.

IMPORTANT!
(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.

7-10 COIN ASSIGNMENTS

| COIN ASSIGNMENTS |  |  |
| :---: | :---: | :---: |
| COIN/CREDIT SETTING | \#1 |  |
| CHUTE\#1 | 1 COIN | 1 CREDIT |
| CHUTE\#2 | 1 COIN | 1 CREDIT |
| ADDITIONAL SETTING <br> MANUAL SETTING |  |  |
| >EXIT |  |  |
| SELECT WITH SERVICE BUTTON |  |  |
| AND PRESS TEST BUTTON |  |  |

- 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 7.10a, 7.10b) \#27 refers to FREE PLAY.

When the COIN CHUTE TYPE is set to INDIVIDUAL, there are some setting numbers not displayed as indicated in TABLE 7.10b.

- MANUAL SETTING

This allows credit increase setting as against coin insertion to be further set in the manner finer than COIN/CREDIT SETTING (refer to TABLE 7.10c).

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

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

## MANUAL SETTING

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


FIG. 7.11b 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 |

## 7-11 BOOKKEEPING

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

| BOOKKEEPING | PAGE1/3 |
| :---: | :---: |
| NUMBER OF GAMES <br> NUMBER OF CONTINUE <br> AVERAGE PLAY TIME | XXXXXXXXXXXX <br> XXXXXXXXXXX |
|  |  |
| PRESS TEST BUTTON TO CONTINUE |  |

FIG. 7.11a BOOKKEEPING (1/3)

| BOOKKEEPING PAGE $2 / 3$ TIME HISTOGRAM |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  | BEGINNER | ADVANCED | EXPERT |
| 00M00S~00M59S | 0 | 0 | 0 |
| 01M00S $\sim 01 \mathrm{M} 59 \mathrm{~S}$ | 0 | 0 | 0 |
| 02M00S~02M59S | 0 | 0 | 0 |
| 03M00S~03M59S | 0 | 0 | 0 |
| 04M00S~04M59S | 0 | 0 | 0 |
| 05M00S~05M59S | 0 | 0 | 0 |
| 06M00S~06M59S | 0 | 0 | 0 |
| 07M00S~07M59S | 0 | 0 | 0 |
| 08M00S~08M59S | 0 | 0 | 0 |
| 09M00S~09M59S | 0 | 0 | 0 |
| 10M00S~10M59S | 0 | 0 | 0 |
| 11M00S ~11M59S | 0 | 0 | 0 |
| 12M00S~12M59S | 0 | 0 | 0 |
| 13M00S~13M59S | 0 | 0 | 0 |
| 14M00S~14M59S | 0 | 0 | 0 |
| OVER~15M59S | 0 | 0 | 0 |
| PRESS TEST BUTTON TO CONTINUE |  |  |  |

FIG. 7.11b BOOKKEEPING (2/3)

## 7-12 BACKUP DATA CLEAR

- COIN CHUTE\#*:

Number of coins put in each Coin Chute.

- TOTAL COINS:

Total number of activations of Coin Chutes.

- COIN CREDITS:

Number of credits registered by inserting coins.

In Page 2/3, Histogram of Number of Play as against Play Time is displayed. For setting the DIFFICULTY, refer to this histogram.

Page $3 / 3$ displays the character's selected frequency at the time of Game Start.


FIG. 7.11c BOOKKEEPING (3/3)

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

- When clearing, bring the arrow to "YES" and when not clearing, to "NO", by using the SERVICE BUTTON, and push the TEST BUTTON.
- When the data has been cleared, "COMPLETED" will be displayed. Bring the arrow to "NO" and press the TEST BUTTON to cause the MENU mode to return on to the screen.
- Note that the contents of the GAME SETTING, COIN SETTING, and BOARD SETTING are not affected by BACKUP DATA CLEAR operation.


## 8. CONTROL PANEL (HANDLE MECHA)

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

- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.
- Do not touch undesignated areas. Touching undesignated areas can cause electrical shock or short circuit.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock hazard.

When closing the Control Panel, be very careful so as not to have hand and fingers pinched in.

CAUTION!

In cases the Steering operabilty is poor and adjustment of VOLUME SETTING in the TEST mode is ineffective, the causes may be the Volume Gear's mesh failure and or Volume malfunctioning. By using the following procedure, adjust Volume gear mesh, or replace the Voume.
In this product, when the Steering Wheel is moved fully left/right, if the Volume Shaft is rotating within the movable range, the Volume is not feared to be damaged. Secure the Volume in the manner the Volume Shaft is oriented as shown and the gears are appropriately engaged when the steering wheel is in the centering position allowing the car to go straight forward.

8-1 ADJUSTING AND REPLACING THE VOLUME
(1) Turn power OFF by using the Main SW of AC Unit or SUB PWR SPLY SW inside the SERVICE DOOR.
(2) Take out the 3 Tamperproof screws and open the Control Panel.


Loosen the 2 screws and adjust the angle and appropriateness of gear mesh by moving the VR Bracket.

(4) Adjust to an appropriate mesh by securing the Steering Wheel in the direction allowing the car to advance straight forward and ensuring the "D" CUT FACE of the Volume Shaft is oriented as shown.

## HOW TO REPLACE

(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.

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

- 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).


## 8-3 REPLACEMENT OF SPRING

In case of spring damage, open the Control Panel and replace the spring.


## 9. SHIFT LEVER

CAUTION!

- 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 out the 4 SPECIAL BOLTS and pull the SHIFT LEVER UNIT upward by paying careful attention so as not to damage the wiring.
(3) Disconnect the 2 connectors to allow the unit to be removed.
(4) When reinstalling, follow the procedure oppisite as when removing. At this time, ensure that "DOWN" display appears on the upper part as shown.


## 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.

## 9-3 GREASING

Apply greasing once in 3 months to the specified portions.
For spray grease, use NOK KLUBER L 60 or Grease Mate (P\# 090-0066)

## 10. ACCEL \& BRAKE

WARNING!

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

In cases the operability of Accelerator and Brake Pedals is poor and adjustment in the VOLUME SETTING of the TEST mode is ineffective, the cause may be the Volume Gear's mesh failure and or Volume malfunctioning. By using the following procedure, adjust the Volume Gear Mesh, or replace the Volume.

In this product, when the Pedals are fully steppen on, if the Volume Shaft is rotating within the movable range, the Volume is not feared to be damaged. Secure the Volume in the manner the Volume Shaft is oriented as shown and the gears are appropriately engaged when the Pedals are not stepped on.

## 10-1 REMOVING THE ACCELERATOR AND BRAKE

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) Turn power OFF by using the Main SW of AC Unit, or SUB PWR SW inside the SERVICE DOOR.
(2) Take out the 4 Truss screws and remove the Floor Lid.

(3) Take out the 6 Hexagon Nuts to remove the Accelerator (Brake) Unit.
(4) Disconnect the connector and remove the Accelerator (Brake) Unit.


## ADJUSTMENT

Loosen the 2 screws, move the VR Bracket, and adjust the angle and appropriateness of gear mesh.


## REPLACEMENT

(1) Take out the 2 screws and remove the Volume together with the V.R. Bracket.
(2) After replacing the Voume, engage the gears at the angle shown, and fix the V.R. Bracket.
(3) Install the Accelerator (Brake) Unit and connect the Connector.
(4) Turn Power ON and set the Volume value in the TEST MODE.

Be sure to use designated grease. Using undesignated grease can cause parts damage.
Do not apply grease to undesignated areas. Failure to observe this can cause malfunctioning or quality deterioration of parts. Before starting work, ensure the Power SW is OFF. Failure to observe this can cause electric shock and short circuit hazards.

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


## 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.
(4) Remove the CRADLE.

When removing the retaining ring(Ering), be very careful so as not to bend the shaft.
(5) Remove stain from the shaft and pillow portions by wiping off with a soft cloth, etc.
(6) After wiping as per \#5 above, further apply a dry cloth, etc. to cause the coin selector to dry completely.


FIG. 11a


FIG.11b

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?
$\square$ Does the coin drop into the Cashbox correctly?
$\square$ Is the coin rejected when inserted while keeping the REJECT BUTTON is pressed down?


- THE COIN DOOR ASSEMBLY USED ON JAMBO SAFARI COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL NEEDED WIRING CONNECTIONS ARE CONVIENENTLY LOCATED INSIDE THE GAME FOR THIS APPLICATION.
- the coin door can acccommodate the following VALIDATORS:

HOLE POSITION\#1
(FORWARD-MOST POSITION)
HOLE POSITION\#2
Mars 2000 series

Mars 2000 series
DBV45 (JCM)
HOLE POSITION \#3
CURRENTLY NOT USED
HOLE POSITION \#4
DSIO1*
*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.

It should also be noted that this unit comes equipped with security hasp that surrounds the two bottom doors where the cash box is located. This is to ensure that the monies within are not tampered with, except by the operator.


## 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.

## Primary side and secondary side

0The 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 accumulitavely 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 disassembled, what's charged to said high tension voltage can be discharged, causing a very hazardous situation. Therefore, under no circumstances should it be disassembled.


Static Electricity
Touching the CRT surface sometimes causes 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 not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as not to cause an electric shock and malfunctioning. (For the name of parts, refer to the above figures.)

CAUTION!
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 stickers, 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
CAUTION! 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.


SANWA monitor: $\quad 200-5243-24$ ( 24 K mode)

(1) R-GAIN
(2) G-GAIN .......... Controls colors.
(3) B-GAIN
(4) BRIGHT .......... Controls screen brightness.
(5) H. SIZE ........... Controls horizontal screen size.
(6) H. HOLD ......... Provides horizontal synchronization, i.e., controls right/left hold.
(7) H. POSI ........... Controls horizontal display position on screen.
(8) V. SIZE ........... Controls vertical screen size.
(9) V. HOLD ......... Provides vertical synchronization, i.e., controls up-down hold.
(10) V. POSI ........... Controls vertical display position on screen.
(11) CONTRAST .... Adjusts image contrast.

## 13. REPLACEMENT OF FLUORESCENT LAMP

WARNING!
When performing the work, be sure to turn power off. Working with power on can cause an electric shock or short circuit accident.

- The Fluorescent Lamp, when it gets hot, can cause burns. Be very careful when replacing the Fluorescent Lamp.

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.
CAUTION!
When handling plastic parts, be very careful. The plastic parts, if damaged, may cause injury due to breakage or fractions.

## 13-1 REPLACEMENT OF FLUORESCENT LAMP

## INTERIOR OF FRONT PANEL

(1) Turn power OFF by using the Main SW or the SUB PWR SPLY SW inside the SERVICE DOOR.
(2) Open the Control Panel.
(3) Take out the 2 Truss screws and open the Entry panel.

(4) By using a Flat-blade screwdriver, etc.remove the 4 Screw Caps from the Front Panel.

(4) Take out the 4 Tamperproof screws and 2 screws, and remove the Front Panel to replace the Fluorescent Lamp.


## INTERIOR OF BILLBOARD

(1) Take out the 4 screws and remove the Plate Holder.
(2) Remove the Billboard Plate and replace the Fluorescent Lamp.


When performing work, be sure to use a step.

## 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 | 3 |
| CONTROL PANEL | Check lamps. | Monthly | 9 |
|  | Check VOLUME value. | Monthly | 9 |
|  | Greasing | Trimonthly | $10-2$ |
|  | Check VOLUME value. | Monthly | 9 |
|  | Greasing | Trimonthly | $12-3$ |
| COIN SELECTOR LEVER | Check switches. | Monthly | 9 |
|  | Greasing | Trimonthly | $11-3$ |
|  | Check COIN SW. | Monthly | 9 |
|  | Coin insertion test. | Monthly | 13 |
|  | Cleaning of COIN SELECTOR. | Trimonthly | 13 |
| GAME BD | Check adjustments. | Monthly or when moving. | $6,9,14$ |
|  | Cleaning of CRT surfaces. | Weekly | $14-2$ |
| Cabinet surfaces | MEMORY TEST. | Monthly | SERVICE MANUAL |
|  | Check settings. | Monthly | 9 |
| INTERIOR | Cleaning | As necessary. | See below. |
| POWER SUPPLY PLUG | Inspection and cleaning | Annually | See above. |

## 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.

## 15. TROUBLESHOOTING

Should trouble occur, first check connector connections.

| PROBLEMS | CAUSE | COUNTERMEASURES |
| :--- | :--- | :--- |
| With Main SW <br> ON, no activation | Power is not supplied. |  |
| Power supply/voltage is not correct. | AC main fuse causes the <br> power to be cut off due to momentary <br> overload. | Plug in correctly <br> Make sure that power supply/voltage is <br> Check fuse. Remove the cause of <br> overload and replace fuse |
| Operation is <br> unsatisfactory | Volume Setting Failure <br> Poor mesh of V.R. gear. <br> Spring failure due to secular change <br> of Accelerator and Brake Mecha. | Adjust Gear mesh.. <br> Replace the Spring. |
| Sound from <br> Speakers and <br> woofer not emitted | Incorrect volume adjustment <br> Malfunctioning bd and AMP. | Adjsut SW UNIT's sound adjsutment <br> volume. <br> Perform Sound test. |
| The image on MON.. <br> screen has color <br> deviation. | Affected by the magnetic field of <br> installation location. | Make CONVERGENCE adjustment. <br> (Refer to Section 12.) |
| No sound is emitted. | Sound Volume adjustment is not <br> appropriate. | Adjust sound volume. (see Section 7). |
| Sound BD and speaker are <br> malfunctioning. | Perform sound test to find and replace <br> defective parts.(Refer to Section 7). |  |
| SHIFT LEVER <br> does not operate. | Switch malfunctioning. | Replace the SW. |
| The Fluorescent <br> lamp does not <br> light up. | The Fluorescent tube is burnt out. | Replace the Fluorescent tube <br> (Refer to Section 11). |

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

CAUTION!

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

## 16-1 REMOVING THE GAME BOARD

(1) Turn main switch off.
(2) When the power is turned OFF with the Main SW, unlock and remove the SERVICE DOOR.
(3) Disconnect the Connector conected at the time of FLOOR installation.
(4) Disconnect all of the Connectors connected to the Filter Board at the front of the Shield Case, 3 connectors on the left hand side facing the Shield Case and the right-hand side Connector.
(5) Take out the thumbscrew securing the Base, and remove the Base from the cabinet with the Shield Case as is mounted. When removing the Base first withdraw the Base towards you up to the notch portions allowing for evading the fitting which secures the Base. From that position, lift up and remove the Base. At this time, be very careful so as not to damage wiring.
(6) Take out the 4 screws and remove the Shield Case.


## 16-3 COMPOSITION OF GAME BOARD

Ensure that the DIP SW setting is performed as designated as designated. Failure to observe this may cause functioning not suitable for the operation, or malfunctioning.

ASSY CASE NAO JBA USA (840-0013D-01) :USA


## DIP SW SETTING

In the product, set all of the DIP SW's to OFF.


## 17. DESIGN RELATED PARTS



## ITEM NO.

1
2
3
4

## PART NO.

422-0783-01
422-0784-01
422-0785-01
429-0675
JBA-1012
JBA-1013
JBA-1015
JBA-1016
NOA-1507
JBA-1401
JBA-1402
JBA-1403
JBA-1404
INY-1203
JBA-2003-B
JBA-2003-C
JBA-2003-D
421-11165
421-11164
421-11176
421-11177

DESCRIPTION

PLAY INSTRUCTION SH JBA A PLAY INSTRUCTION SH JBA B
PLAY INSTRUCTION SH JBA C POP JBA STD STICKER SIDE L STICKER SIDE R STICKER SIDE L B STICKER SIDE R B EMBLEM NAOMI STICKER FRONT UPPER STICKER FRONT LOWER STICKER FRONT TOP STICKER FRONT LOGO STEERING EMBLEM STICKER START
GUARD PLATE CENTER STICKER ROPE DESIGN PLATE THROW DESIGN PLATE PULL STICKER THROW STICKER PULL

## 18. PARTS LIST

## TOP ASSY JAMBO SAFARI



## ITEM NO.

1
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12
14
15
16

201
202

PART NO.
JBA-10001
JBA-1200
CTA-0001
CTA-0002
JEY-0005
421-7907-~
422-0783-01
422-0784-01
422-0785-01
030-000820-SB
068-852216-0B

## DESCRIPTION

ASSY U/R CABI
ASSY FLOOR
JOINT BRKT L JOINT BRKT R DENOMI PLATE DENOMI SH ~ PLAY INSTR SH JBA A PLAY INSTR SH JBA B PLAY INSTR SH JBA C

HEX BLT W/S BLK M8X20
FLT WSHR BLK 8.5-22X1.6
(27) (35)
(2)

(2) 4

| $\theta$ |
| :---: |
| 0 |


(8)
(1) (18) (102)
(다)(96)(4)(101) (60)

(®) © (5) ©

## ITEM NO.

## PART NO.

CTA-1100
NOA-1200
JBA-1300
JBA-1400
CTA-1150
NOA-4000
NOA-1750
NOA-1801
NOB-1001
NOB-1002
NOA-1003
NOA-1004
JBA-4300
LOCAL PURCHASE
280-5112
280-5113
280-5114
CTA-1006
NOC-1700
NOA-1116
JBA-20001
JBA-1150
CTA-1001
CTA-1002
JBA-1014
837-13551-92
CTA-1011
NOA-1011
CTA-1007
CTA-1008
JBA-1012
JBA-1013
RCR-1019

200-5787
LOCAL PURCHASE
601-6231-01

008-T00625-0C
030-000620-S 010-P00408-F

008-T00412-0C
008-T00412-0C
050-F00600
000-P00430-W
000-P00320
032-000425
068-441616
008-B00820-0C

DESCRIPTION

ASSY FRAMEWORK UR ASSY CRT COVER
ASSY BILLBOARD
ASSY FRONT PANEL ASSY CC BOX WW ASSY ELEC
ASSY SERVICE DOOR REAR HATCH
FRAME COVER U/R R
FRAME COVER U/R L ENDCAP R ENDCAPL ASSY MAIN BD

## FL HOLDER

BUSH FOR TV
COLLAR FOR TV
SPACER 6.4-25X2
SCR CAP AC UNIT UL
LID COMMUNI PORT
ASSY CNTRL PNL ASSY WOOFER CONTROL BOX WIRE COVER ENTRY COVER
I/O CONTROL BD FOR JVS
REAR COVER UPPER UL FL BRKT BILLBOARD HOLDER HOLE LID
STICKER SIDE L STICKER SIDE R CHAIN HOLDER

ASSY CLR DSPL 29TYPE 31K 100V
ASSY FL 20W W/CONN HIGH EDGING NEW TYPE

TMP PRF SCR TH CRM M6X25 HEX BLT W/S M6X20
S-TITE SCR PH W/F M4X8
TMP PRF SCR TH CRM M4X12
TMP PRF SCR TH CRM M4X12 FLG NUT M6
M SCR PH W/FS M4X30 M SCR PH M3X20
WING BLT M4X25
FLT WSHR 4.4-16X1.6
TMP PRF SCR BH CRM M8X20


## ITEM NO.

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## PART NO.

NOA-1601
NOB-1101
NOB-1102
NOA-1111
NOA-1112
NOA-1113
NOA-1114
HOT-1200
253-5366
NOA-11115
220-5643-01
601-5699X
601-10461
601-10462
220-5575

050-F00600
030-000620-S
068-652016
050-F00400
010-P00408-F
000-F00310
050-HO1600
010-P00306-F
060-F00600

## DESCRIPTION

BASE BOX
MAIN FRAME UR R
MAIN FRAME UR L LOWER BEAM
UPPER BEAM
HOOF R HOOF L
ASSY CASH BOX DOOR CASHBOX TNG REAR HATCH
MAG CNTR DC5V 6P WH MZ-674-D04
LEG ADJUSTER BOLT M16X75
CASTER D51H66 FREE
CASTER D51H73 FIX
CAM LOCK MASTER W/O KEY

FLG NUT 6
HEX BLT W/S M6X20
FLT WSHR 6.5-20X1.6
FLG NUT M4
S-TITE SCR PH W/F M4X8
M SCR FH M3X10
HEXNUT M16
S TITE-SCR PH W/F M3X6
FLT WSHR M6


| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | HOT-1201 | CASH BOX DOOR |
| 3 | $220-5574$ | CAM LOCK W/KEYS |
| 4 | HOT-1203 | CENTER TNG |
| 5 | HOT-1204 | SIDE TNG |
| 202 | $065-E 00300$ | E RING 3MM |



ITEM NO.
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101
102

PART NO.

CTA-1151
DP-1167
CTA-1153
CTA-1160

97-1003-05
220-5575

DESCRIPTION
CC BOX WW TNG LKG CHUTE W SW UNIT

ASSY C.C.CHUTE DOOR CAM LOCK MASTER W/O KEY


ITEM NO.
1

101
102
104

PART NO.
CTA-1161
220-5179
601-0042
509-5028

DESCRIPTION
SW BRKT
VOL CONT B-5K OHM KNOB 22MM SW PB 1M


## ITEM NO.

1

101

201
203

PART NO.
NOA-1201
NOA-1202

130-5205
000-P00410-W 000-P00412-W

## DESCRIPTION

## CRT COVER <br> SPEAKER BOX

SPEAKER 4OHM 10W 100 W/SHIELD
M SCR PH W/FS M4X10
M SCR PG W/FS M4X12


## ITEM NO.

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PART NO.

JBA-1301
JBA-1302
CTA-1303
CTA-1304
423-0335
LOCAL PURCHASE

000-T00412-0C
000-P00340-W
050-H00400
060-S00400
060-F00400

DESCRIPTION
BILLBOARD COVER L
BILLBOARD COVER R
BILLBOARD BASE
PLATE HOLDER
BILLBOARD PLATE JBA FL HOLDER

M SCR TH CRM M4X12
M SCR PH W/FS M4X30 HEX NUT M4
SPR WSHR M4 FLT WSHR M4


## ITEM NO.

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NOA-1501-01
NOA-1502-01
NOA-1503
NOA-1504
NOA-1505
NOA-1506
NOA-1507
JBA-1401
JBA-1402
JBA-1403
JBA-1404
000-P00412-W
012-P00416

DESCRIPTION
FRONT PANEL MASK MS9
LIGHT COVER PRISM PLATE

LID GCS
LID VMS
EMBLEM NAOMI
STICKER FRONT UPPER STICKER FRONT LOWER STICKER FRONT TOP STICKER FRONT LOGO

M SCR PH W/FS M4X12
TAP SCR \#2 PH M4X16


## ITEM NO.

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PART NO.
NOB-1701
509-5876
214-0202
512-5046-5000
000-P00308-W 050-H00400
060-F00400
060-S00400

DESCRIPTION
AC BRKT

LOCKER SW JW-L21RKK
AC INLET PANEL TYPE
C.P. 5000MA CE UL

M SCR PH W/FS M3X8
HEX NUT M4
FLT WSHR M4
SPR WSHR M4


ITEM NO.

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## PART NO.

JBA-2001
CTA-2002
CTA-2003
CTA-2100
610-0408-01
DYN-1201
DYN-1209X
INY-1203
OUT-2026
421-11165
421-11164
CTA-2006
RCR-1019

509-5610-03YE
050-U00800
060-F00800
008-T00512-0B
050-F00500
020-000830-0Z
060-S00800
008-T00412-0C
000-P00512-W
050-HOO500
060-S00500
060-F00500

## DESCRIPTION

CONTROL PANEL COVER
CONTROL PANEL BRKT HINGE 456
ASSY HANDLE MECHA
UP/DOWN SHIFTER AL STEERING WHEEL HANDLE COLLAR STEERING EMBLEM

SPACER
DESIGN PLATE THROW
DESIGN PLATE PULL CHAIN 220
CHAIN HOLDER

SW PB 30M YELLOW W/L WH 5V 3W

U NUT M8<br>FLT WSHR M8<br>TMP PRF SCR TH BLK M5X12<br>FLG NUT M5<br>HEX SKT H CAP SCR BLK OZ M8X30<br>SPR WSHR M8<br>TMP PRF SCR TH CRM M4X12<br>M SCR PH W/FS M5X12<br>HEX NUT M5<br>SPR WSHR M5<br>FLT WSHR M5



## ITEM NO.

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PART NO.
CTA-2101
CTA-2101
CTA-2103
CTA-2104
CTA-2105
CTA-2106
CTA-2107
DYN-1262
DYN-1269
DYN-1273
BVG-1340
BVG-1341
SLC-1130
SLC-1141X
SOR-2112
SOR-2113
SOR-2115
SPG-2109
$601-6172$
$601-6959$
$601-8966$
SLC-1108

$100-5018$
$100-5112$
$100-5041$
$220-5484$

028-A00408-P 028-A00308-P
FAS-650011
000-P00408-W
000-P00412-W
060-F00600
050-U00600
060-F00800
050-U00800
065-E00700
060-S00800

## DESCRIPTION

HANDLE BASE BASE LID
HANDLE SHAFT
STOPPER BOLT
SPRING HOOK
SPACER RING
VR BRKT
SWING ARM SHAFT
EXT SPRING
SWING ARM
FLT WSHR 8.1-12X2
FLT WSHR 4.1-12X2
ADJUST RING
WHITE CAM
BEARING SHAFT SPACER
KEY 5X10
STOPPER RUBBER
GEAR 48
GEAR 64
GEAR HOLDER
WIRE HOLDER
BEARING BALL 8 BEARING 17
BEARING NSK F688 ZZ
VOL CONT B-5K OHM
SET SCR HEX SKT CUP P M4X8
SET SCR HEX SKT CUP P M3X8
STP RING BLK OZ S17
M SCR PH W/FS M4X8
M SCR PH W/FS M4X12
FLT WSHR M6
U NUT M6
FLT WSHR M8 U NUT M8
E RING 7MM
SPR WSHR M8


ITEM NO.
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PART NO.
423-0336
CTA-2202
CTA-2203
CTA-2204
CTA-2205
JBA-1151
JBA-1152
130-5208
000-P00520-WB 000-T00560-0В

DESCRIPTION
WOOFER PLATE JBA STD
WOOFER BRKT L
WOOFER BRKT R
WOOFER BRKT UPPER
WOOFER BRKT LOWER
WOOFER CUSHION H WOOFER CUSHION V

WOOFER BOX 2OHM 75W
M SCR PH W/FS BLK M5X20 M SCR TH BLK M5X60


ITEM NO.

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101

PART NO.

NOA-4001

400-5397
560-5407-UL 838-13616
838-11856-UL
509-5876
601-6231-B60

010-P00406-F
010-P00306-F
010-P00320-F

## DESCRIPTION

ELEC BASE

SW REGU FOR JVS
AUDIO XFMR 120V 17V2.1AX2
AUDIO POWER AMP 2 CH
CONNECT BD UL
LOCKER SW JW-L21RKK
EDGING NEW TYPE L=60

S-TITE SCR PH W/F M4X6
S-TITE SCR PH W/F M3X6
S-TITE SCR PH W/F M3X20
 in the slash mark portions.

ITEM NO.

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101

PART NO.
DESCRIPTION

WOODEN BASE MAIN
ASSY CASE NAO JBA USA

LOWPASS AMP CTA
RECT BD CTA
XFMR 100V 12.8V6.3A

M SCR PH W/FS M4X8
TAP SCR TH 3X25
M SCR PH W/FS M4X14
TAP SCR FH 3X10
TAP SCR TH 3.5X12


## ITEM NO.

1
2

PART NO.
840-0001A-01 840-0013C

## DESCRIPTION

SHIELD CASE JBA NAO USA ROM CASE JBA NAO


ITEM NO.

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PART NO.

CTA-1501X
CTA-1600
CTA-1650
CTA-1502
JBA-1201
CTA-1504
CTA-1505
CTA-1507
CTA-1508
000-T00408-0C 050-H00600
050-H01000
060-S00600
FAS-000057
050-H00400
060-S00400
060-F00400
000-P00408-W

## DESCRIPTION

FLOOR BASE
ACCEL UNIT
BRAKE UNIT
LEVEL ADJUSTER
FLOOR MAT
CORNER PROTECTOR
SASH SIDE
SASH REAR
FLOOR LID
M SCR TH CRM M4X8
HEX NUT M6
HEX NUT M10
SPR WSHR M6
M SCR TH STN M6X20
HEX NUT M4
SPR WSHR M4
FLT WSHR M4
M SCR PH W/FS M4X8


| ITEM NO. | PART NO. |
| :---: | :---: |
|  |  |
| 1 | CTA-1601 |
| 2 | CTA-1602 |
| 3 | CTA-1603 |
| 4 | CTA-1604 |
| 5 | CTA-1605 |
| 6 | CTA-1606 |
| 7 | CTA-1607 |
| 8 | HLD-2805 |
| 9 | HLD-2808 |
| 10 | $601-6450$ |
| 11 | $601-7944$ |
| 12 | CTA-1608 |
|  |  |
| 101 | $220-5373$ |
|  |  |
| 201 | $000-\mathrm{P} 00412-\mathrm{W}$ |
| 202 | $000-\mathrm{P} 00408-\mathrm{W}$ |
| 203 | $050-\mathrm{U} 00800$ |
| 204 | $060-\mathrm{F} 00800$ |
| 205 | $028-\mathrm{A} 00308-\mathrm{P}$ |
| 206 | $020-000416-0 Z$ |
| 207 | $060-$ S00400 |
| 208 | $050-\mathrm{F} 00400$ |
| 209 | $020-000408-0 Z$ |
| 210 | $060-\mathrm{F} 00400$ |

DESCRIPTION

PEDAL BASE
ACCEL PEDAL
PEDAL SHAFT
STOPPER BLOCK RUBBER PLATE RUBBER CASE

VR BRKT TORSION SPRING RUBBER HOLDER GEAR 110
GEAR 15 SUPPORT BRKT

VOL CONT B-5K

M SCR PH W/FS M4X12
M SCR PH W/FS M4X8
U NUT M8
FLT WSHR M8
SET SCR HEX SKT CUP P M3X8
HEX SKT H CAP SCR BLK 0Z M4X16
SPR WSHR M4
FLG NUT M4
HEX SKT H CAP SCR BLK 0Z M4X18
FLT WSHR M4


## ITEM NO.

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PART NO.

CTA-1601
CTA-1651
CTA-1603
CTA-1604
CTA-1605
CTA-1606
CTA-1607
HLD-2805
HLD-2808
601-6450
601-7944
CTA-1608

220-5373
000-P00412-W
000-P00408-W
050-U00800
060-F00800
028-A00308-P
020-000416-0Z
060-S00400
050-F00400
020-000408-0Z 060-F00400

DESCRIPTION

PEDAL BASE
BRAKE PEDAL
PEDAL SHAFT
STOPPER BLOCK
RUBBER PLATE
RUBBER CASE
VR BRKT
TORSION SPRING
RUBBER HOLDER
GEAR 110
GEAR 15
SUPPORT BRKT

VOL CONT B-5K
M SCR PH W/FS M4X12
M SCR PH W/FS M4X8
U NUT M8
FLT WSHR M8
SET SCR HEX SKT CUP P M3X8
HEX SKT H CAP SCR BLK 0Z M4X16
SPR WSHR M4
FLG NUT M4
HEX SKT H CAP SCR BLK 0Z M4X18
FLT WSHR M4


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

ITEM NO.

1

101
102
103

201
202
203

PART NO.
NOB-4101

560-5426-V
514-5093
LOCAL PURCHASE

000-P00416-W
011-T03512
011-P00312

DESCRIPTION
XFMR BASE

XFMR 100-120V 100V5.5A
FUSE HOLDER F-64AB COVER FUSE 5000MA

M SCR PH W/FS M4X16
TAP SCR TH 3.5X12
TAP SCR PH 3X12



