FIRST PRINTING OCTOBER 1996
MANUAL NO. DYNN-00635

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## Contents

INTRODUCTION OF THE OWNER'S MANUAL
SAFETY CERIFICATION AND GENERAL PRECAUTIONS ..... 2
HANDLING PRECAUTIONS ..... 2
INSTALLATION LOCATION PRECAUTIONS ..... 3
SPECIFICATIONS ..... 4
INSTALLATION ITEMS AND HARDWARE ..... 5
ASSEMBLING THE MACHINE ..... 6
LEG LEVELERS ..... 7
POWER-ON CHECKS ..... 8
EXPLANATION OF TEST. AND DATA DISPLAY ..... 10
SERVICE PANEL ..... 11
TEST MODES ..... 12
COIN/CREDIT TABLES ..... 18
COIN MECH ADJUSTMENTS AND CARE ..... 27
MONITOR ADJUSTMENT ..... 28
PERIODIC INSPECTION ITEMS ..... 30
TROUBLE SHOOTING ..... 31
GAME BOARD ..... 33
GAME BOARD SERVICE RECORD ..... 35
DESIGN RELATED PARTS ..... 36
PARTS IDENTIFICATION ..... 37
MANUAL COMMENTS ..... 45
WIRING DIAGRAM/SCHEMATIC ..... 46

## GAME REGISTRATION INFORMATION

Please take a moment to complete the following information about your new Sega game.
This information will be essential to you in the future, should you need to request parts or service information, or should you sell or transfer the machine.

Game Name:
DAYTONA USA SPECIAL EDITION
Serial Number:
Date of purchase:
Distributor:
Salesperson:
Phone number:
Game moved or sold (date):

NOTES:
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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 DAYTONA USA SPECIAL EDITION, a new SEGA product.

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

## SEGA ENTERPRISES, INC. (USA)

## Customer Service

45133 Industrial Drive
Fremont, CA 94538
Phone 415-802-1750
Fax 415-802-1754
7:30 am - 4:00 pm, Pacific Standard Time
Monday thru Friday

## General Precautions

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

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

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

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

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

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

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

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

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

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

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

[^0]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.

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.


GMUSEMENT MACHINE


Seat Assembly

|  | Width | Length | Height | Weight |
| :--- | :--- | :--- | :--- | :--- |
| Crated | $24.25 "$ | $42.5 "$ | $47 "$ | 140 lbs |
| Assembled | $21.25 "$ | $38 "$ | $44.5 "$ | 120 lbs |
|  |  |  |  |  |
| Monitor Assembly |  |  |  |  |
|  | Width | Length | Height | Weight |
| Crated | $35.5 "$ | $43.5 "$ | $73 "$ | 450 lbs |
| Assembled | $31.75 "$ | $39 "$ | $70 "$ | 430 lbs |

Monitor
26" Wells Gardner Monitor 25K5191
Power
AC 345W 3A

When transporting the machine, make sure that the following parts are supplied.
QTY. DESCRIPTION

2 Key, Coin Mech Door
2 Key, Cash Box (Behind Coin Mech Door)
2 Key, Rear Service Door (Behind Coin Mech Door)
1 Owners manual, Daytona
1 Fiber Optic Cable
1 Wrench, T-20 torx tamperproof
1 Wrench, T-27 torx tamperproof
1 Wrench, T-15 torx tamperproof

## PERFORM THE ASSEMBLY WORK BY FOLLOWING THE PROCEDURE STATED HEREIN. FAILURE TO COMPLY WITH THESE INSTRUCTIONS CAN RESULT IN ELECTRIC SHOCK. <br> WHEN ASSEMBLING, BE SURE THAT TWO OR MORE PERSONS ARE AVAILABLE TO PERFORM THE WORK. IN SOME CASES, ATTEMPTING THE ASSEMBLY WORK ALONE CAN RESULT IN INJURY OR DAMAGE TO THE GAME AND ITS PARTS.

When carrying out the installation instructions, follow the sequence outlined below.

1. Connect the cabinets.
2. Secure in place
3. Connect power supply
4. Perform the assembly check

Note that for installation work, a master key and other hardware are required. Refer to the preceding list of installation items.

## CONNECT THE CABINETS

The brackets for connecting the seat and monitor cabinets are shipped attached to the game. All hardware is attached to the brackets at the time of shipping.

To assemble the two cabinets, remove all retaining hardware and move the cabinets to their installation position.

Bring the seat and monitor cabinets together, at the installation position.
Align the connection bracket on the seat and monitor cabinets and fasten securely with the hardware provided.

To move the game, first disassemble the connecting bracket. Do not attempt to move the game with the cabinets connected. To do so can cause damage to the cabinets and bracket assembly.

This machine has 2 casters and 8 leg adjusters. When the installation position is determined, cause the leg adjusters to come into contact with the floor, and make adjustments so that the casters are raised approximately 5 mm . above the floor, and the machine is level.


CAUTION!

Make sure that all of the leg adjusters are in contact with the floor. If they are not, the cabinet can move causing an accident.

Move the machine to the installation position. When installing the machine against or close to a wall, be sure to secure a passage space to enable the player to take a ride in the machine.

Have the leg adjusters make contact with the floor. To keep the machine level, adjust the height of the leg adjuster upward using a wrench.

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


## (1) MEMORY TEST


(2) INPUT TEST

(3) OUTPUT TEST


## Assembly Check

In the Test mode, ascertain that the assembly has been made correctly and IC Board is satisfactory.

In the test mode, perform the following tests:

1. Memory Test

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 number shows GOOD.

## 2. Input Tesf

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

## 3. Output Test

In the Output Test mode, carry out the lamp test to ascertain that each lamp lights up satisfactorily.
(4) SOUND TEST

(5) C.R.T.TEST


## 4. Sound Test

In the Test mode, selecting Sound Test causes the scireen (on which sound-related board and wiring connections are tested) to be displayed.

Be sure to check if the sound is satisfactorily emitted from each speaker and the sound volume is appropriate.

## 5. C.R.T. Test

In the Test mode menu, selecting C.R.T. Test allows the screen (on which the monitor is tested) to be displayed. Although the monitor adjustments have been made at the time of shipment from the factory, color deviation, etc. may occur due to the effect caused by geomagnetism, the location building's steel frames and other game machines on the periphery. By watching the test mode screen, decide whether an adjustment is needed. If it is necessary, adjust the monitor by referring to the Monitor Adjustments section.

The weight of the machine is approximately 560 lbs. When moving the machine on the floor, be sure to retract the leg adjusters so that the casters make contact with the floor. Attempting to push the machine with leg adjusters extended can cause the machine to fall, causing injury and damage.

## 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 properly, perform checks in accordance with this section.

The following test modes should be utilized as applicable.

| Items | Description |
| :--- | :--- |
| Installation of Machine | $\begin{array}{l}\text { When the machine is installed, perform the following: } \\ \text { 1. Check to see that each setting is per standard setting } \\ \text { made at the time of shipment. }\end{array}$ |
|  | $\begin{array}{l}\text { 2. In the INPUT test mode, check each SW and VR. } \\ \text { 3. In the OUTPUT test mode, check each of the lamps. } \\ \text { 4. In the MEMORY test mode, check the IC's on the } \\ \text { PC board. }\end{array}$ |
| Memory | $\begin{array}{l}\text { Choose MEMORY test in the MENU mode to allow the } \\ \text { memory test to be performed. In this test, PROGRAM } \\ \text { RAMs, ROMs and IC s on the PC board are checked. }\end{array}$ |
| Monthly Servicing | $\begin{array}{l}\text { Monthly, perform the following: } \\ \text { 1. MEMORY test. }\end{array}$ |
|  | $\begin{array}{l}\text { 2. Ascertain each setting. } \\ \text { 3. In the INPUT test mode, test the CONTROL device. }\end{array}$ |
|  | 4. In the OUTPUT test mode, check each of the lamps. |$\}$| In the INPUT test mode, check each SW and VR. |
| :--- |
| Adjust or replace each SW or VR. |
| If the problem can not be solved yet, check the |
| CONTROL's moves. |

## Switch Unit

The tests or data check are performed when initially installing the machine, when collecting cash, or when the machine does not function correctly. The switch unit is used to access the various tests and modes listed below. Refer to the explanations given in this section to perform each type of test.


Open the coin chute door, and the switch unit will appear. The functioning of each switch is as follows:

| Test Button | For handling of the Test Button, refer to the following pages. |
| :--- | :--- |
| Service Button | Gives credits without registering on the coin meter. |
| Sound Volume | Adjusts the volume of the monitor's right-hand side and left- <br> hand side speakers. |
| Monitor Adjustment | Eliminates color unevenness from the screen. |

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

## Test Mode

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

- Press the Test Buiton to cause the following Test Menu to be displayed on the monitor.
- Press the Service Button until the arrow $\rightarrow$ is moved to the desired item to make a selection
- Bring the arrow $\rightarrow$ to the desired item and press the Test Button to enter the selected item's test.
- Choosing EXTT and pressing the Test Button will finish the test mode, and the game mode returns on the screen after network checking.


FGG. 8. 2 TEST MENU

When changes are made in the Game Assignments, Coin Assignments and Volume settings, be sure to exit from the test mode to return to game mode. If the power is turned off in test mode, the setting can not be re-written.

## BOOKKEEPING

Selecting bookkeeping in the menu mode causes the bookkeeping data up to the present to be displayed.

Press the test button or start button to return to the menu screen. Press the VR1 red button to proceed to the next page.


FIG. 8.3a BOOKKEEPING

| COIN CHUTE \# | Number of coins put in. As seen from the front of the cabinet, <br> the right hand side is \#1 and the left hand side is \#2. |
| :--- | :--- |
| TOTAL COINS | Total number of activations of coin chutes. |
| COIN CREDITS | Number of credits registered by inserting coins. |
| SERVICE CREDITS | Credits registered by service switch. |
| TOTAL CREDITS | Total number of credits (coin credits+service credits). |
| TOTAL TIME | The total energized time. |



FKO. 8. 36 BOOKKEEPING

| BEGINNER COURSE | Beginner course's game play frequency. |
| :--- | :--- |
| ADVANCED COURSE | Advanced course's game play frequency. |
| EXPERT COURSE | Expert course's game play frequency. |
| GOALS | Total number of goals each course. |

Press the Test SW or Start button to return to the menu mode screen. Press VR1 red button to proceed to the other page.

## Game System

Selecting the GAME SYSTEM (See Fig. 11) in the menu mode causes the present game settings to be displayed and allows setting changes to be made. Each GAME SYSTEM setting is explained below.

| GAME SYSTEM |  |
| :--- | :--- |
| LINK ID | SINGLE |
| CAR NUMBER | 1 |
| CABINET | STAND ALONE |
| COUNTRY | USA |
| DIFFICULTY | NORMAL |
| ADVERTISE SOUND | ON |
| GAME MODE | NORMAL |
| RIVAL ARROW | ON |
| > EXIT |  |
|  |  |
| GREEN $\quad:$ | CURSOR UP.. |
| RED | $:$ |
| YELLOW $\quad:$ | CURSOR DOWN |
| BLUE | $:$ |
| START | $:$ |
|  |  |
|  |  |

LINK ID: Standard setting is "SINGLE". For linked units, set one to "MASTER" and the rest of the seats to "SLAVE". The game setting and coin setting, etc. of the MASTER seat apply to all SLAVE seats. Changes made to SLAVE seats are not effective.

CAR NUMBER: For linked play between 2 or more machines, the machines are numbered in sequential order: No. 1, No. 2, No. 3, ... No. 8. Numbering is done starting from the left, facing the monitor screen. If the same number is used for 2 or more cabinets or if cabinets are numbered in an incorrect sequence, the onscreen display may be confused.

CABINET: Setting of cabinet type. Set to "STAND ALONE" for this machine.
COUNTRY: Message language. Choices are "USA", "EXPORT", and "JPN".
DIFFICULTY: The game difficulty is classified into 4 different categories from "EASY" to "HARDEST". The standard setting is "NORMAL".

ADVERTISE SND: Set to "OFF" to have machine silent during standby. Standard setting is "OFF."

GAME MODE: Selection of lap count ranges for BEGINNER, ADVANCED, and EXPERT courses. Allows lap count to be changed for specific attraction event pur poses. Ranges are: "NORMAL" (8, 4, 2 laps), "GRAND PRIX" (20, 10, 5 laps), and "ENDURANCE" (80, 40, 20 laps).

## SETTING CHANGE PROCEDURE

1. Press the SERVICE switch or VR1 (red) OR VR2 (green) to move the arrow ( $\gg$ ) to the desired item.
2. Choose the desired setting change item by using one of: VR2 (blue), VR3 (yellow), the TEST switch, or the START button.
3. To return to the MENU mode, move the arrow to EXIT and press the TEST switch or the START button.

## Coin Assignments

This 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 is not effective until Exiting. Be sure to Press test to Exit after setting change.



FIG. 8.5 COIN ASSIGNMENTS
Credit to Start Sets the number of credits required when starting the game.
Credit to Continue This sets the number of credits required to continue game.
Coin/Credit Setting How many coins correspond to how many credits. In this machine, selection as per the adjacent chart is possible.
Manual Setting Allows for finer settings. See chart.

1. Press the Service button or Shift button to bring the arrow to the desired change item.
2. Press the Test button or the Start button to select the setting change item.
3. Move the arrow to Exit and press the Test button or the Start button to return the menu mode to the screen.

TABLE 8. 10 a COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)


## Input Test

When Input Test is selected, the monitor will show the foliowing, allowing you to watch the status of each switch. On this screen, periodically check the status of each switch.

- By pressing each switch, if the display on the right-hand side of the name of each switch changes to ON from OFF, the switch and the wiring connections are satisfactory. When the Controller (Lever) is operated in the direction of the arrow, the right-hand side indication of the Switch name becomes ON.
- To check Coin Chute \#1 and Coin Chute \#2 Coin Switches, open the Coin Chute Door and insert coin(s) into the slot.
- To return to the Menu mode, press the Test button.


FIG. 8. 6 INPUT TEST

## Output Test

Selecting Output Test allows the status of each lamp to be viewed. Periodically check the status of each lamp on this screen.
<- Repeatedly displays sequentially in order of start lamp, view change and danger lamp. At this time lamp tests are performed in the manner corresponding to the item displayed.

This game does not have 7-SEG LED. During the display of 7-SEG, only the Start button flashes.

- While this screen is displayed, the Start button continues to flash.
- Press the Test button to return to the menu mode.

| OUTPUT TEST |  |
| :--- | :--- |
|  |  |
| START LAMP <br> VIEW CHANGE LAMP <br> DANGER LAMP | OFF <br> OFF <br> OFF |
| $\rightarrow$ EXIT |  |
| SELECT WITH SERVICE BUTTON |  |
| AND PRESS TEST BUTTON |  |

## CRT Test

Choose CRT Test to display the screen on which the Monitor adjustment is checked. By watching the screen, periodically check if adjustments are needed or not. For adjustment, refer to the Section of Monitor Adjustment stated herein.


In adjacent figure, check the Monitor's color adjustment. Perform color adjustment by watching this screen.

The color bar of 4 colors, i.e. red, green, blue and white is darkest at the left end and becomes brighter towards the right end.

Pressing the Test button will have the following crosshatch screen appear.


In this figure, check the Monitor size and position adjustment by watching the screen.

Adjust the Monitor in the manner so that the crosshatch lines do not go beyond the screen. Adjust the Monitor to ensure that crosshatch lines do not have distortions.

Press the Test button to return to the menu mode.

## DRIVE BOARD TEST

Choosing Drive Board Test allows the reaction mechanism of the steering wheel to be checked. Also, this enables the VR value for the steering wheel's drive board and the settings of the dip switches on the drive board to be checked.


FIG. 8. 8 DRIVE BD TEST

Bring the arrow $\rightarrow$ to the desired item by using the service switch or VR1 (red) or VR4 (green). The steering wheel functions to the setting selected by the arrow. Pressing VR2 (blue) or VR3 (yellow) allows the force transinitted to the steering wheel to increase or decrease.

SPRING . Status in which the motor and clutch are not activated. Centering of the handle is caused by only the spring inside the handle mechanism.

CLUTCH Status in which the clutch is activated. The handle is fixed.
CENTERING Status in which the handle returns to the center position by itself.
UNCENTERING Status in which the handle is caused not to be in the center.
ROLL LEFT Status in which the handle is rotated in the left hand direction.
ROLL RIGHT Status in which the handle is rotated in the right hand direction.
EXIT Returns to the menu mode.

HANDLE

DIP SW

Displays the Handle VR value. Make sure that the appropriate VR value is as follows:

| Under 2 DH | $<--7 D \sim 83 H$ |  |
| :--- | :--- | :--- |
| Left | Centering | Over D3H <br> Right |

Displays the setting status of dip switches on the drive bd.

Dip Switch Setting Table
The setting of the dip sw nos 1-4 on the drive board allows the handle's weigh (feeling) to be set and ON or OFF of the power on check to be selected. Dip sw nos 5 and 8 are to be off.
Note: Shaded portion refers to the settings at the time of shipment.
HANDLE'S MEIGHT

| 1 | 2 | 3 | FUNCTION |
| :---: | :---: | :---: | :---: |
| OFF | OFE | OFE | Light |
| ON | OFF | OFF | 4 |
| OFF | ON | OFF |  |
| ON | ON | OFF |  |
| OFF | OFF | ON |  |
| ON | OFF | ON | $\square$ |
| ON | ON | ON | Heavy |

POWER ON CHECK

| 4 | FUNCTION |
| :---: | :---: |
| Ornentan | Performed |
| ON | Not performed |

When dip sw changes are made, be sure to turn the power off and then back on again. The new setting will not be effective unless power is turned off then on.

The handle's reaction mechanism is subject to change. When the reaction becomes lighter, change the dip sw setting.

DRIVE BOARD ERROR DISPLAY
When malfunctioning occurs in the drive board, testing will not be performed even if the drive board test is selected. In this case, the error will not be displayed by the 7 -seg display on the drive board.

Also, when power on check error occurs, the 7 -seg display data repeatedly flashes. First, check the handle mecha's VR, the motor, clutch, etc.

## Sound Test

Selecting Sound Test allows sounds (sound effects, announcement, background music, etc.) to be chosen and heard. In this mode, check the sound-related IC Board and each speaker. Press the Service button to bring the arrow $\rightarrow$ to the desired sound item. Press the Test button to have the selected sound played. Each time the Test button is pressed, the next sound is played.


FIG. 8.9 SOUND TEST

## TGP TEST

The TGP test allows on-screen related ICs to be checked. As shown, GOOD is displayed for all if satisfactory. Press the test button or start button to return to the menu screen.


FIG. \& 10 TGP TEST

## MEMORY TEST

The memory test mode is for checking the on-board memory IC functions. GOOD is displayed for normal ICs and BAD for abnormal ICs.


FIG. 8. 11 MEMORY TEST
When the test is completed, if the results are as shown above, testing is satisfactory.
It takes approximately 30 seconds to complete the test. If the period exceeds thirty seconds, there may be a malfunction.

After finishing the test, pressing the test sw or start button allows the menu mode to return to the screen.

## BACK UP RAM CLEAR



EIG.8. 12 BACKUPRAM CLEAR

Clears the contents of bookkeeping.
When clearing, bring the arrow $-->$ to YES, when not clearing, to NO by using the service switch or VR1 (red) or VR4 (green) buttons, and then press the test switch or start button.

When the data has been cleared, COMPLETED will be displayed. Bring the arrow back to NO and press the test switch to return to the menu screen.

Also, note that the game setting contents are not affected by the back up clear operation.

## HANDLING THE COIN JAM

If the coin is not rejected even 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) Tum the power for the machine OFF. Open the coin chute door.
(2) Open the gate and dust off by using a soft brush (made of wool, etc.).
(3) Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then wrung.
(4) Remove the CRADLE.

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

STOP
IMPORTAN!
Never apply machine oil, etc. to the Coin Selector. After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the Selector correctly functions.

## COIN INSERTION TEST

Once every month, when performing the Coin SW Test, simultaneously check the following:Does the Coin Meter count satisfactorily?
Does the coin drop into the Cashbox correctly?
Is the coin rejected when inserted while keeping the Reject Button pressed down?


FIG. 10a


FIG. 10 b


FIG. 10 c

## CAUTIONS AND WARNINGS CONCERNING THE SAFETY FOR HANDLING THE MONITORS

Before handling the monitors, be sure to read the following explanations and comply with the caution/ waming instructions given below. Note that the caution/waming symbol marks and letters are used in the instructions.


WARNWIS

Indicates that handling the monitors erroneously by disregarding this warning may cause a potentially hazardous situation, which could result in death or serious injury.


Indicates that handling the monitors by disregarding this caution may cause a potentially hazardous situation, which could result in personal injury and or material damage.

Indicates that access to a specific part of the equipment is forbidden.


Indicates the instruction to disconnect a power connector or plug.

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

APrimary side and Secondary side The monitor's circuit which is divided into the Primary side and Secondary side, is insulated. Do not touch the primary side, or do not touch both the primary side and the secondary side simultaneously. Not following the instruction can cause shock and this is very dangerous. When making monitor adjustments, use a non-conductive driver and make adjustment without touching any part other than the Adjustment V. R. and knob. Also, be sure not to cause a short-circuit to the Primary side and Secondary side. If short-circuited, it may cause shock or malfunctioning, which is very dangerous.


## High-tension Voltuge

Some of the parts inside monitor are subject to high-tension voltage in excess of 20,000 volts and very dangerous. Therefore, be sure not to touch the monitor interior. Should soldering \& paper wastes, etc. be mixed in the monitor interior, tum 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 accumulatively charged as time elapses, generating hightension 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 is 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 adversely affect the human body.

## Installation and removal

Ensure that the Magnetizer Coil, FBT (Fly-Back Transfomer), 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 shock and malfunctioning. (For the name of parts, refer to the above Figures).

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

Be sure to clean the interior of the cabinet and inspect and clean the power supply plug once per year. Using the cabinet with dust accumulated can cause a malfunction or fire. Note that careless cleaning work can cause an accident and therefore, proper attention must be paid to ensure continued safe operation of this product.

| ITEMS | DESCRIPTION | PERIOD |
| :--- | :--- | :--- |
| Controller | Lamp Check <br> VR Value Check <br> Greasing | Monthly <br> Monthly <br> Quarterly |
| Coin Chute Tower | Check coin switches <br> Coin Insertion Test <br> Coin Selector Cleaning | Monthly <br> Monthly <br> Quarterly |
| Monitor | Check Adjustments | Monthly |
| Seat | Antistatic Measures | BiMonthly |
| Game Board | Memory Test <br> Setting Check | Monthly <br> Monthly |
| Interior | Cleaning | Annually |
| Power Plug | Inspection and Cleaning | Annually |

## TROUBLESHOOTING

The items listed below will assist in troubleshooting when a problem occurs. As a first step, check all wiring connector connections and verify AC power to the machine.

Troubleshooting

| PROBLEM | CAUSE | COUNTER MEASURE |
| :---: | :---: | :---: |
| When the main SW is turned ON, the machine is not activated. | The cord is not plugged in. Incorrect power source/voltage. <br> Primary or secondary fuse blown. | Firmly insert the plug into the outlet. Make sure that the power supply voltages are correct. <br> First, remove the cause of overcurrent, then replace the fuse. |
| MONITOR screen is blackened and the fluorescent lamp does not light up. | Primary or secondary fuse blown. | First, remove the cause of overcurrent, then replace the fuse. |
| MONITOR screen is all blue. | Defective connections between boards. | Make sure of correct connections between boards. |
| The color of image on MONITOR screen is incorrect. | Incorrect monitor adjustment. | Make appropriate adjustments. |
| The on-screen image of the monitor sways or shrinks. | The power source and voltage are not correct. | Make sure that the power supply voltages are correct. |
| Marquee lamp doesn't light up. | Fluorescent lamp needs replacement. <br> The connector is disconnected. <br> Primary fuse is blown. | Replace lamp. <br> Check connector connections in the marquee. <br> Replace fuse. |
| Sound is not emitted. | Sound volume adjustment is not correct. <br> Malfunctioning of sound board and/or memory. <br> Connector connection is incorrect. | Adjust the service panel volume control knob. <br> Perform the SOUND TEST. <br> Check connection from base to speaker. |
| Machine Gun and Missile firing operation is not satisfactory. | SW Malfunction. | SW rep lacement. <br> Gun trigger part no. 509-5457 <br> Missile Trigger part no. 509-5458 |
| Game makes sounds, but has no picture. | Secondary fuse blown. | Replace the secondary fuse. |



TROUBLESHOOTING CHART

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

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

## REMOVING THE GAME BOARD

To replace the IC boards, such as the game board, drive board, etc,, or to change the dip switch settings, take out the IC board using the following procedure.

Turn the main switch off.
At the rear of the unit, find the rear access door.
Remove the 2 tamperproof screws with the wrench provided.
Open the rear door using the back door key.

Take off the 3 screws to remove the case lid. The game board is contained in the shield case.


## GAME BOARD SERVICE RECORD

This page is provided for your use in tracking repairs or replacements of your Sega game PCBs and assemblies. This information can help provide a service history for your game should it ever be sold or transferred.

DATE BOARD ASSY NO. PCB SERIAL NO. RMA NO.

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ASSY VIRTUAL BUTTON
DYN0-1290


ASSY SPEAKER


ASSY HANDLE MECHA (DYN-1250)


| ITEM | PART NUMBER | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | DYN-1251 | HANDLE BASE |  |
| 2 | DYN-1252 | BASE LID |  |
| 3 | DYN-1253 | HANDLE SHAFT |  |
| 4 | DYN-124 | DRIVE PULLEY |  |
| 5 | DYN-1255 | HANDLE PULLEY |  |
| 6 | DYN-1256 | CLUTCH PULLEYA |  |
| 7 | DYN-1257 | CLUTCH PULLEY $B$ |  |
| 8 | DYN-1258 | MOTOR BRACKET |  |
| 9 | DYN-1259 | CLUTCH BRACKET |  |
| 10 | DYN-1260 | TENSIONER BRACKET |  |
| 11 | DYN-1261 | VR BRACKET |  |
| 12 | DYN-1262 | SWJNG ARM SHAFT |  |
| 13 | DYN-1263 | GUIDE HOLDERA |  |
| 14 | DYN-1264 | GUIDE HOLDER B |  |
| 15 | DYN-1265 | STOPPER RUSBER |  |
| 16 | DYN-1266 | STOPPER BCLT |  |
| 17 | DYN-1267 | HOUSING |  |
| 18 | DYN-1268 | SPRING HOOK |  |
| 19 | DYN-1269 | EXT SPRING |  |
| 20 | OYN-1270 | STOPPER KEY |  |
| 21 | DYN-1272 | SPACER RJNG |  |
| 22 | DYN-1273 | SWING ARM |  |
| 23 | BVG-1221 | GEAR HOLDER |  |
| 24 | BVG-1340 | FLT WSHR 8.1-12X2 |  |
| 25 | BVG-1341 | FLT WSHR 4.1-12X2 |  |
| 26 | SLC-1130 | ADIUST RING |  |
| 27 | SLC-1141X | WHITE CAM |  |
| 28 | SOR-2112 | BEARING SHAFT |  |
| 29 | SOR-2113 | SPACER |  |
| 30 | SOR-2115 | KEY 5×10 |  |
| 31 | DYN-1274 | GUARD BRKT |  |
|  |  |  |  |
| 101 | 100-5018 | BALL BEARING 88 (NSK 608Z2) |  |
| 102 | 100-5112. | BEARING 817 (NSK 6003ZZ) |  |
| 103 | 100-5041 | BEARING (NSK F688ZZ) |  |
| 104 | 220-5373 | VOL CONT B-5K OHM |  |
| 104 | 220.5484 | VOL CONT B-5K OHM |  |
| 105 | 350-5235 | MOTOR ACLOOV 1250/1550 rpm W/H |  |
| 105 | 350-5294 | MOTOR AC100V 60W |  |
| 106 | 601-6172 | GEAR 48 |  |
| 107 | 601-6959 | GEAR 64 |  |
| 108 | 60177487 | TIMING BELT ( 1505 M 550 ) |  |
| 109 | 601-7488 | TIMING BELT ( 100 5M 750) |  |
| 110 | 603-7489 | PARTICLECLUTCH BRAKE |  |
| 111 | 310-5029-F20 | SUMITJBE F F20MM |  |
| 112 | 603-0460 | PLASTIC TIE BELT 10 mm |  |
| 114 | 209-0023 | CONN CLOSED END | SMALL TYPE |
|  |  |  |  |
| 201 | 020-0004]0-H2 | HEX SKT CAP SCR BLK OZ M4X10 |  |
| 202 | 020-000512-HZ | HEX XKT CAP SCR BLK OZ M5X12 |  |
| 203 | (1)6-500400 | SPR WSHR M4 |  |
| 204 | 060-500500 | SPR WSHR M5 |  |


| ITEM | PART NUMBER | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 207 | 000-P00408-W | MSCR PHW/PS M4X8 |  |
| 208 | 000P00412-W | M SCR PH W/FS M $4 \times 12$ |  |
| 209 | 000-P00416.S | MSCRPHW/S M4X16 |  |
| 210 | 000-P001508-W | M SCR PHW/FS M5X8 |  |
| 211 | 060-F00600 | FLT WSHR M6 |  |
| 212 | 060-F10800 | FLT WSHR M8 |  |
| 213 | 065 -E00700 | E RING 7MM |  |
| 214 | 068-441616 | FLT WSHR 4.4-16×1.6 |  |
| 215 | 028-A00308-P | SET SCR HEX SKT CUP PM3X8 |  |
| 216 | 028-A00408-P | SET SCR HEX SKT CUP PM4X8 |  |
| 217 | 050-U00500 | U NUTM5 |  |
| 218 | 050-H00600 | HEX NUTM6 |  |
| 219 | 050-U00800 | UNUT M8 |  |
| 220. | OOO-PDOH0R-S | M SCR PH W/S M4X8 |  |
| 221 | 000-P00310 | M SCR PH M $3 \times 10$ |  |
| 222 | 060-500300 | FLT WSHR M3 |  |
| 223 | 060500300 | SPR WSHR M3 |  |
| 225 | 050-U00600 | U NUTM6 |  |



| ITEM | PART NUMBER | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | DYN1-1301 | PEDAL BASE |  |
| 2 | BVG-1402 | ACCEL PEDAL |  |
| 3 | BVG-1403 | BRAKE PEDAL |  |
| 4 | BVG. 1404 | PEDAL COVER |  |
| 5 | BVG4-1405 | SWING ARM A |  |
| 6 | BVG4-1406 | SWING ARM B |  |
| 7 | BVG-1407 | PUSHROD |  |
| 8 | BVG-1408 | PUSH PLATE |  |
| 9 | BVG-1418 | RUBBER DUMPER |  |
| 10 | BVG-1410 | PUSH ROD PIN |  |
| 11 | BVG-1411 | LINK ROD |  |
| 12 | BVG-1412 | TORSION SPRING ACCEL |  |
| 13 | BVG-1513 | TORSION SPRING B |  |
| 14 | BVG-1414 | RUBBER STOPPER |  |
| 15 | BVG1-1415 | PEDALSHAFT |  |
| 16 | BVG-1416 | SWING ARM STOPPER |  |
| 17 | BVG-1417- | SPACER |  |
| 16 | CLC-2122 | GEAR PLATE |  |
| 19 | RDM-1210 . . . | VR BRACKET .- |  |
|  |  |  |  |
| 101 | 220.5373 | VOL CONT B.5K OHM |  |
| 102 | $601-6005$ | ADIUSTGEAR |  |
| 112 | 601-5943 | GEAR 20815 | - |
|  |  |  | ${ }^{5}$ |
| 201 |  | SCREW MS ZN 08.32X06 PH PN |  |
| 203 |  | SCREW MS BO 06-32 $\times 12 \mathrm{PH} \mathrm{PN}$ |  |
| 205 |  | NUT HEX M6 |  |
| 2ns |  | WASHER FL $3011 / 16 \times 11 / 32 \times 3 / 32$ |  |
| 207 |  | WASHER SPLT LOCK $13 / 16 \times 1 / 2 \times 3 / 32$ |  |
| 206 |  | WASHER SPLIT LOCK $1 / 4$ |  |
| 209 |  | WASHER SPLIT LOCK |  |
| 210 |  |  |  |
| 211 |  | SCREW SET $30 \mathrm{M} 3 \times 0$ OMM |  |
| 212 |  | WASHER FL $801 / 2 \times 7 / 32 \times 1 / 16$ |  |
| 213 |  |  |  |
| 214 | DYN:1305 | FLT WSHR 12.2-22 0.5 |  |
| 215 |  | RING 'E" 05133-18 | . |


| $833-10651$ | GAME BOARD DAYTONA TWIN |
| :--- | :--- |
| $837-10539$ | IO BOARD DAYTONA |
| $837-10652$ | SOUND BOARD DAYTONA TWIN |
| $839-0683$ | FILTER BOARD MODEL 2 MAIN TWIN |
| $839-0657$ | FILTER BOARD DAYTONA IO A |
| $839-0658$ | FILTER BOARD DAYTONA IO B |
| $838-10018$ | AMP BOARD SERVO |
| $839-0542$ | AUDIO MIX BOARD |
| DYN-1222 | SHIFT COVER A |
| DYN-1223 | SHIFT COVER B |
| $601-7489$ | PARTICLE CLUTCH BRAKE |
| $350-5235$ | MOTOR AC 100V 1250/1550RPM W/H |
| $600-6275-0300$ | ASSY CABLE 05 0300CM |
| $600-6275-0500$ | ASSY CABLE o5 0500CM |
| $211-5479$ | CONN OPT JOINT |
| $000-100412-0 C$ | M SCR TH CRM M4X12 |
| $068-441616-0 C$ | FLT WSHR CRM 4.4-16X1.6 |
| $100-5170$ | BEARING |
| $100-5188$ | DERURING BEARING |
| $130-5156$ | SPEAKER BOX 8 OHM 20 WATT |
| $838-10646$ | DRIVE BD DAYTONA TWIN |

SEGA has made every effort to ensure that this manual is accurate. If you find any errors or omissions, or have other comments on the DAYTONA SPECIAL EDITION manual, please write them below, detach, and deliver this page by FAX or mail to:

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[^0]:    -.. Safety Check: Upon completion of any service or repairs to this product, ask the service technician to perform

