1ST PRINTING OCT 01

Virtua Tennis 2™

— SEGA PROFESSIONAL TENNIS —

Universal Kit

Kit Installation Instructions &
Service Manual for
ROM & GD ROM SYSTEMS

Switchable *FROM* High Resolution 31K
TO Standard (Low) Resolution 15.75K.

1 - 2 PLAYER GAME

SEGA ENTERPRISES, INC. USA

MANUAL NO. 999-1311

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Virtua Tennis 2
Sega Naomi System
Kit Contains List

Part #	Desc	Qty
400-5397-01	NAOMI POWER SUPPLY	1
838-13616	AUDIO POWER AMP 2 CH	1
560-5407-UL	AUDIO XFORMER 120V	1
838-13683-93CV1	JAMMA I/O BD (NAOMI)	1
600-7141-200	USB CABLE	1
600-7009-2500	VGA VIDEO CABLE	1
840-0080D-01	ASSY CASE PC1 DIMM BD	1
600-7247-500	CABLE SCSI TYPE 2 500MM	1
999-1348	SERVICE SWT BRKT ASSY	1
999-1326	JOYSTICK, COMP. BLUE	2
999-1325	BUTTON, COMP. GREEN	2
999-1329	SWITCH, PB LARGE	2
999-1327	BUTTON, COMP. BLUE	2
999-1341	CNTRL PNL (METAL PLT)	1

Virtua Tennis 2
Sega Naomi System
Kit Contains List

Part #	Desc	Qty
999-1343	CNTRL PANEL (NAOMI)	1
999-1344	CNTRL PANEL (STANDARD)	1
999-1347	DECAL SIDE ART	2
999-1345	INSTRUCTION SHT (PLAYER)	1
999-1346	INSTRUCTION SHT (BUTTON)	1
999-1342	MARQUEE ART	1
999-1349	DECALS (BTTNS -TOP SPIN)BL	2
999-1350	DECALS (BTTNS-SLICE SPN)GR	2
999-1351	DECALS (BTTNS-LOB SHT)WHT	2

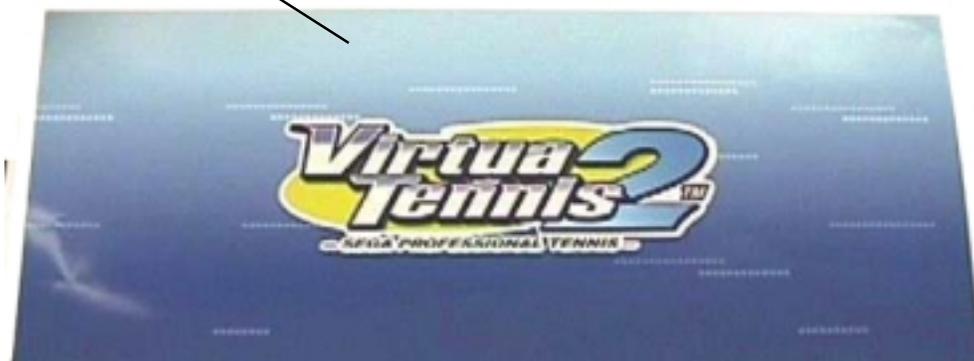# DESIGNED RELATED PARTS

Marquee Art ---- 999-1342

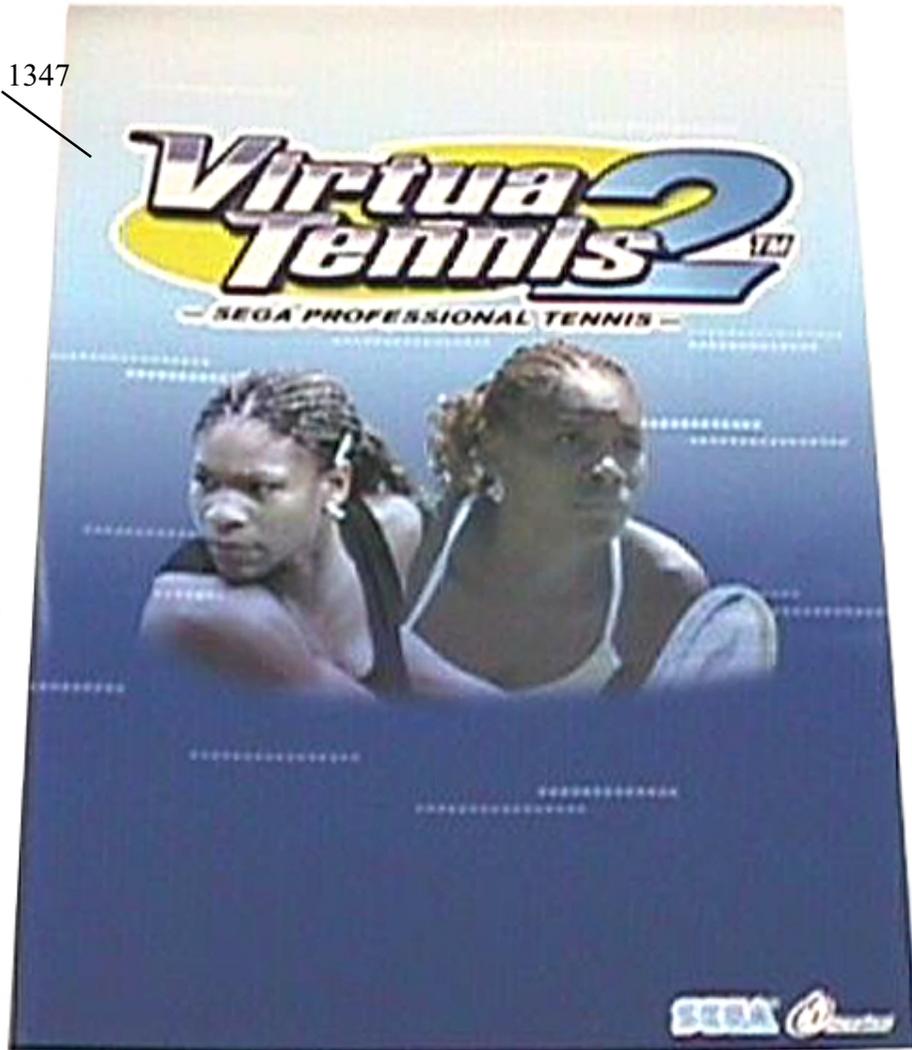Instruction Sheet (Player) ---- 999-1345

Instruction Sheet (Button Controls) ---- 999-1346

Control Panel Overlay ---- 999-1344

Decals Side Art ---- 999- 1347

Control Panel Overlay ----- 999-1343

Decals-Buttons -Top Spin (Blue) 999-1349
Decals-Buttons - Slice Spin (Green) 999-1350
Decals-Buttons - Lob Shot (White) 999-1351

NOT PICTURED

SERVICE BULLETIN

SPECIAL NOTICE FOR
ALL SEGA NAOMI KITS

PROBLEM:

The SEGA Naomi Game kits are actually 'JAMMA Dependent'. What this means exactly is they will only install into existing JAMMA Cabinets. If an operator tries to install these kits into a Non-JAMMA cabinet, they will first have to bring the wiring up to JAMMA Standards.

SOLUTION:

° Step 1 Disconnect the games original DC Power Supply. You may only use the power supply provided with your kit. Be sure to set the voltages going to your Game BD to 5.1 and 3.3 volts DC to assure proper operation (Measure on Square Connector at Game BD. Yellow = 5vdc / Brown = 3.3vdc / White = Gnd)

° Step 2 You MUST USE THE COIN METER SUPPLIED WITH YOUR KIT to assure proper Coin acceptance. A minimum 18 Gauge wire should be used from the Coin Meter 1 output line on your JAMMA Harness. The 5vdc (Yellow) wire found in the wiring bag of your kit MUST BE USED for the supply voltage to the meter.

STOP
IMPORTANT!

Not following the directions provided herein may cause your game to malfunction.
All electrical work should be performed by the site's Serviceman or Technician.

⚠
WARNING!

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

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

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

If you have any questions please contact the SEGA Service Department at the numbers given above.

INSTALLATION INSTRUCTIONS

1) First. Remove all access panels from the game. Locate the original game Logic PCB's & Power Supply and remove from the Cabinet by first disconnecting all harnesses from the boards. (You need only to splice in the Main Power (110v AC) into the 3-Pin Connector (GRN/WHT/BLK).)

2) Remove all existing game harnesses (we suggest using New Jamma Harnesses (*NOT contained in the kit*) to ensure reliability).

3) Locate the most convenient and open area of the cabinet to mount the **Virtua Tennis 2** Naomi System Assembly. Make sure this area is free and clear of all cable harnesses and grounds, cable clamps, etc.

Vacuum out or clean bottom of cabinet of dirt & miscellaneous parts (e.g. screws, loose coins / tokens, etc.).

Good Idea!

Good Idea!

Remove all exterior decals and repair any cabinet damage. Repaint cabinet if necessary. Remove the Monitor Plexi or if your game plexi has Silk-screened artwork, you will need to strip it off.

4) Connect the JAMMA Harnesses to the JVS-JAMMA Interface Boards. Separate the wires from each other (i.e. Control Panel, Video, Speaker, Power Supply). Run the various harnesses to the part of the cabinet they go to ensuring they are dressed properly & secured to the cabinet. Locate the Volume/Speaker/Coin Meter Cable and connect to your existing **Switch Bracket** or use the new one included with the kit. **Note:** *If you are using a VGA Compatible Monitor you can run your VGA Cable directly to the monitor or connect it to your JVS JAMMA Interface for RGB Conversion to your JAMMA Cables.*

5) Remove Marquee from cabinet and cut to fit the new **Virtua Tennis 2** Marquee in place.

REPLACE old Joysticks & Buttons with the **NEW** ones supplied in Kit.

Good Idea!

6) First remove all Joystick and Button assemblies from the Control Panel. Remove Lexan and Control Panel Overlay. Proceed to clean surface of the Control Panel by removing all adhesive and dirt. Fill in or plug up existing button holes to set up a blank work area for your new controls.

7) Install the new Control Panel Overlay by carefully peeling off the paper backing and laying down on the panel. Smooth it out, starting in the center and working your way to the edges (removing all of the trapped air pockets). If necessary, cut the edges of the overlay excess and fold under panel.

8) Cut out the button and Joystick Holes. Install Joystick and buttons from kit into the Control Panel and tighten down. Connect all game harness wires to switches and buttons.

INSTALLATION INSTRUCTIONS

9) Proceed to place new decals on the sides of the cabinet. Locate a new monitor bezel, if needed, and replace glass, if required (due scratches). Install Instruction Placard to the back of the Monitor Glass.

NOTE: As a precaution, disconnect the JAMMA Harness from the I/O Boards and turn power on. With a Multi-Meter, measure the 5v and 3.3v. Adjust if necessary to 5.15v DCand 3.3vDC. Measure the +12 to ensure the wires and voltages are in the correct position. Turn power off. Plug in the JAMMA Harness once again to the I/O Boards. The Attract Mode should appear on the screen.

Adjust the **SIZE**, **CONTRAST**, **BRIGHTNESS**, and **COLORS** on the Monitor for optimum appearance. Adjust **VERTICAL/HORIZONTAL** Hold to get a stable picture, if required.

Good Idea!

Good Idea!

Enter **DIAGNOSTICS** and adjust the Volume Level, test all Buttons & Joystick for proper operation & wiring. Adjust Pricing. Coin-Up and test out a game to ensure proper play functions are as they should be.

Sega Naomi System Switch
Bracket and Speaker
Installation Diagrams
(Figure 3)

To CN1 of
Amplifier Board

Pin 1

Pin 4

Pin 5

JAMMA Pin 8

Yellow Wire from Extra
Harness (+5v)

YEL/RED GRN/RED WHT/RED

− +

Coin Meter

Test Service

Volume

JAMMA Pin   R
JAMMA Pin   1
JAMMA Pin   15

From CN2 of
Amplifier Board

GRY/RED

ORG/RED

Left
Speaker

From CN4 of
Amplifier Board

GRY/BLUE

ORG/BLUE

Right
Speaker
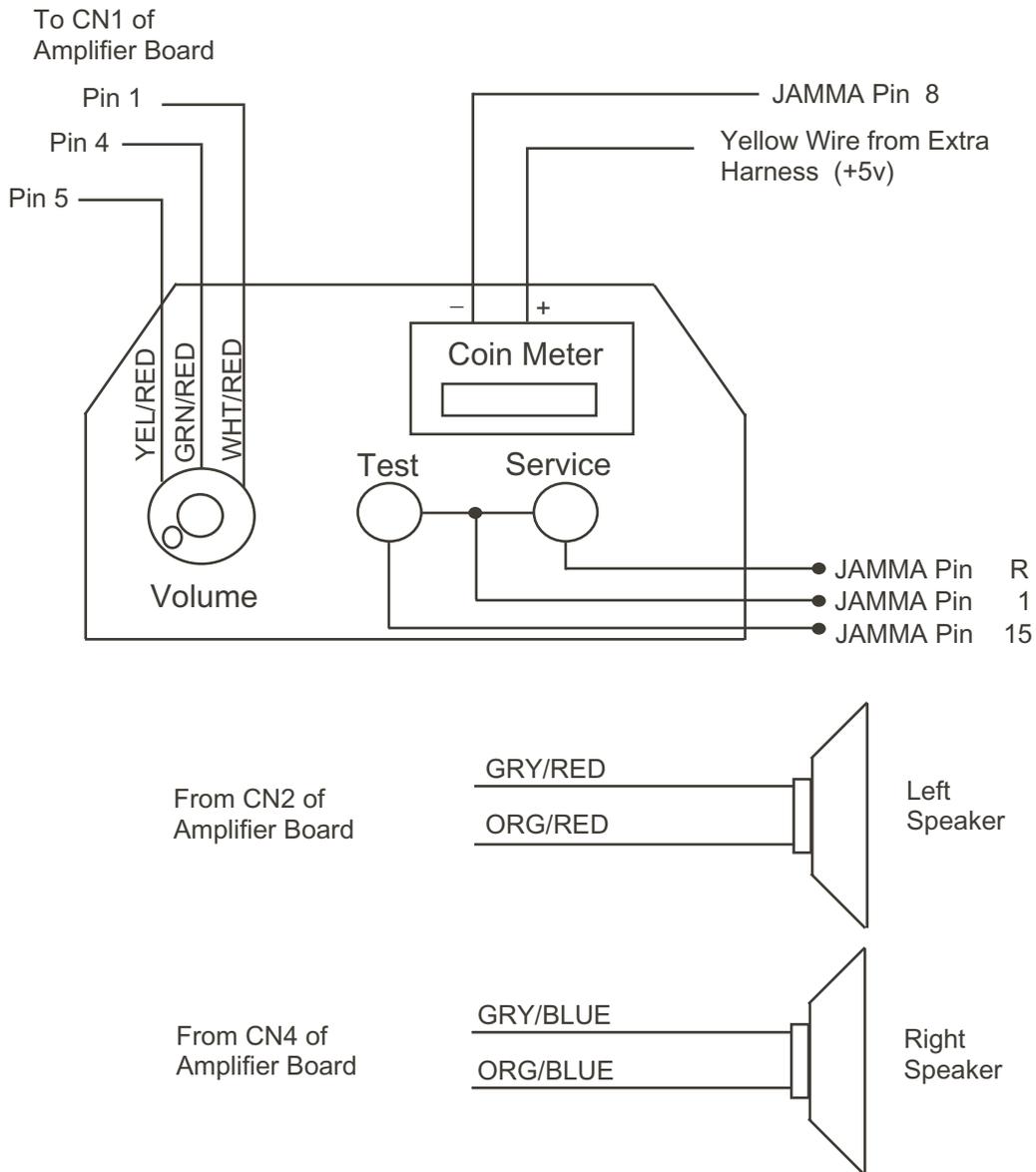
Sega Naomi System
JAMMA Harness Wiring
(JAMMA I/O BD)
(Figure 4)

Left	Pin	Pin	Right
Ground	1	A	Ground
Ground	2	B	Ground
+5v (Not Used)	3	C	+5v (Not Used)
+5v (Not Used)	4	D	+5v (Not Used)
(Not Used)	5	E	(Not Used)
+12v (Not Used)	6	F	+12v (Not Used)
Key	7	H	Key
Coin Meter 1	8	J	Coin Meter 2
(Not Used)	9	K	(Not Used)
(Not Used)	10	L	(Not Used)
(Not Used)	11	M	(Not Used)
Video Red	12	N	Video Green
Video Blue	13	P	Video Sync
Video Ground	14	R	Service
Test	15	S	(Not Used)
Coin 1	16	T	Coin 2
1P Start	17	U	2P Start
1P UP	18	V	2P UP
1P Down	19	W	2P Down
1P Left	20	X	2P Left
1P Right	21	Y	2P Right
Attack 1P (1P SW1)	22	Z	Attack 2P (2P SW1)
Grapple 1P (1P SW2)	23	a	Grapple 2P (2P SW2)
Support 1P (1P SW3)	24	b	Support 2P (2P SW3)
(Not Used)	25	c	(Not Used)
(Not Used)	26	d	(Not Used)
Ground	27	e	Ground
Ground	28	f	Ground

Sega Naomi System
Filter Board Information
Connector Description etc.

PSW2 PSW1   DIPSW1

Service
Switch

Test
Switch

CN4

CN3

CN2

CN1

Preamp Level
Audio Out

VGA Level
Video Out

Power Connectors

| 1 | 2 | 3 | 4 |

Setting for High
Resolution 31KHZ
1 -4 off

| 1 | 2 | 3 |

Setting for Standard
Resolution 15KHZ
1 on 2-4 off.
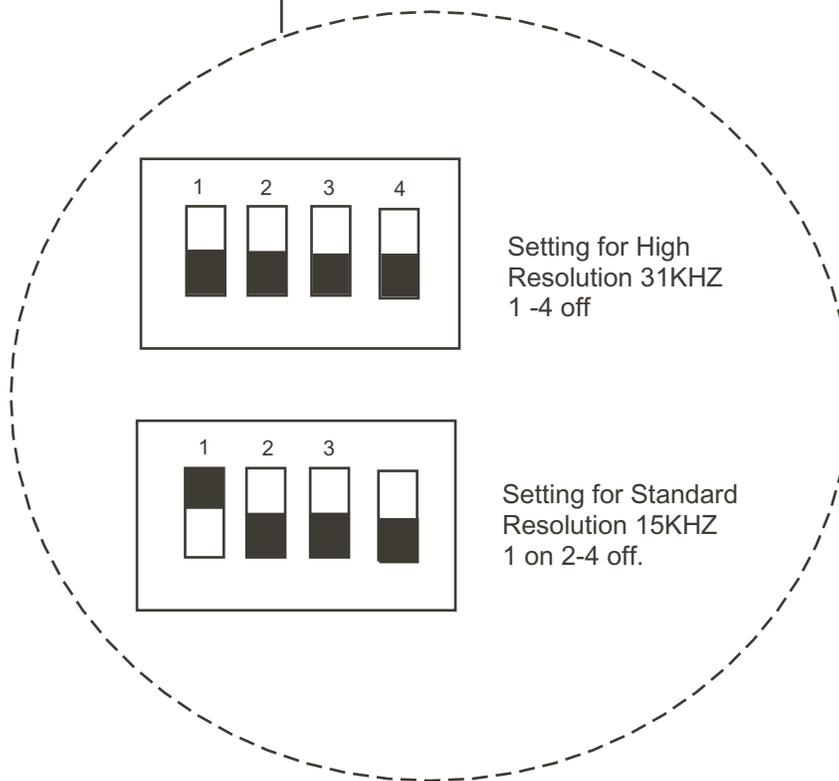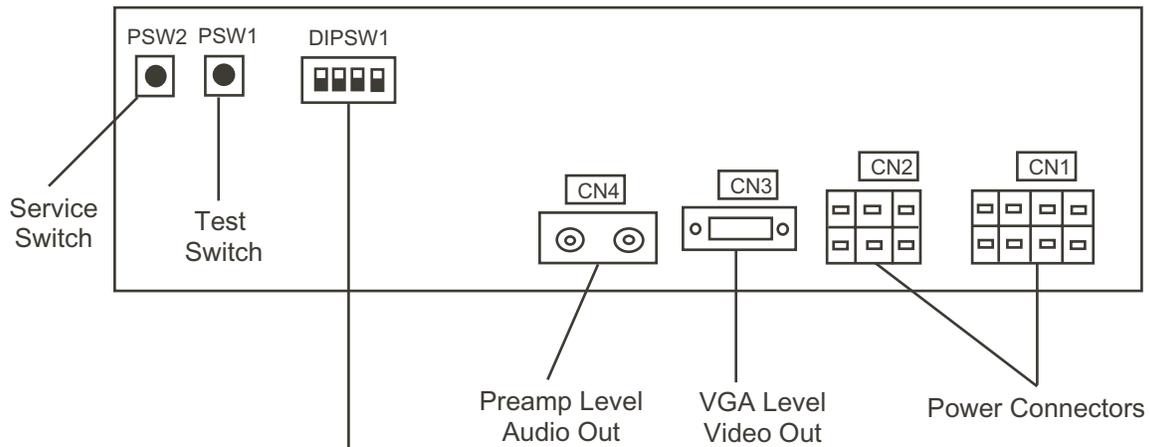
1. HANDLING PRECAUTIONS

⚠ WARNING!

- To prevent electric shock or IC Board malfunctioning, be sure to turn off the power for the cabinet when installing or removing the IC Board.

- Extraneous matter such as dust on the IC Board can cause the IC Board to generate heat and result in a fire due to short circuit, etc. Ensure the IC Board surfaces are always kept clean.

- Use NAOMI for the cabinets compatible with JVS. Using NAOMI for the cabinet other than those compatible with JVS can cause generation of heat and a fire.

STOP

IMPORTANT

- Be sure to connect the IC Board and connectors completely. Insufficient insertion can damage IC Board, etc.

- For the IC Board circuit inspection, only the use of Logic Tester is permitted.
  The use of ordinary testers is not permitted as these can damage the IC Board.

- Do not subject the IC Board to static electricity when installing the IC Board in the cabinet or when connecting wire harness connectors to the IC Board.

- When soldering buttons, etc. to the wire harnesses, be sure to remove the wire harnesses from the IC Board so as not to subject the IC Board to heat.

- Using NAOMI without the Shield Case can cause electric wave trouble. Be sure to use NAOMI together with the accessory Shield Case.

- The monitor frequency corresponding to NAOMI is 15kHz or 31kHz. NAOMI can not be used for the cabinet incorporating a monitor or projector not corresponding to 15kHz or 31kHz.

- Concerning the display of JAMMA VIDEO STANDARD:
  JAMMA VIDEO STANDARD adopted by NAOMI is referred to as JVS. As against this Standard, the conventional JAMMA STANDARD which employs 56P Edge Connectors adopted by ST-V, etc. is displayed as Old JAMMA STANDARD.

  The specific Manual attached to each game sometimes displays JVS as JV STANDARD, New JAMMA STANDARD, or JAMMA 2 STANDARD AGAINST OLD JAMMA STANDARD as JAMMA STANDARD, JS, etc.

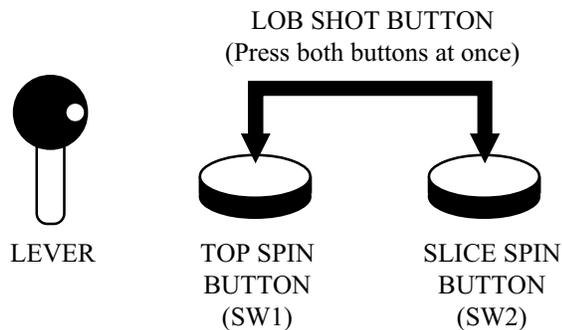- The contents herein described are subject to change without notice.

2. SPECIFICATIONS

① ON-SCREEN DISPLAY

Monitor Position

HORIZONTAL

Horizontal Synchronous Frequency
15/31 kHz

② CONTROL PANEL

8WAYS		SW2		1P	2P	8WAYS		SW2

SW1

START SW

SW1

PLAYER 1   PLAYER 2

LOB SHOT BUTTON
(Press both buttons at once)

LEVER

TOP SPIN
BUTTON
(SW1)

SLICE SPIN
BUTTON
(SW2)
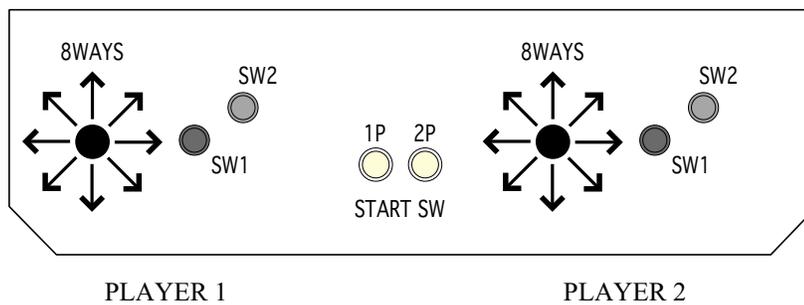
- LEVER: Character movement or shot direction
- TOP SPIN BUTTON: Top spin shot (ground stroke or volley automatically chosen by CPU)
- SLICE SPIN BUTTON: Slice spin shot (ground stroke or volley automatically chosen by CPU)
- LOB SHOT BUTTON: Lob shot (Hits a ball highly.)

(Note 1)   Top spin is the shot that applied order rotation (vertical rotation) to the ball. A ball flies quickly and bounds highly; an orbit is high.

(Note 2)   Slice spin is the shot that applied reverse rotation to the ball. A ball flies late as it floated and bounds low; an orbit is low.

(Note 3)   Lob is the shot of a high arch that passes over a partner's head.
It's effective when passing the head top of the partner approaching the net.

Lob shot

Top spin

Slice spin
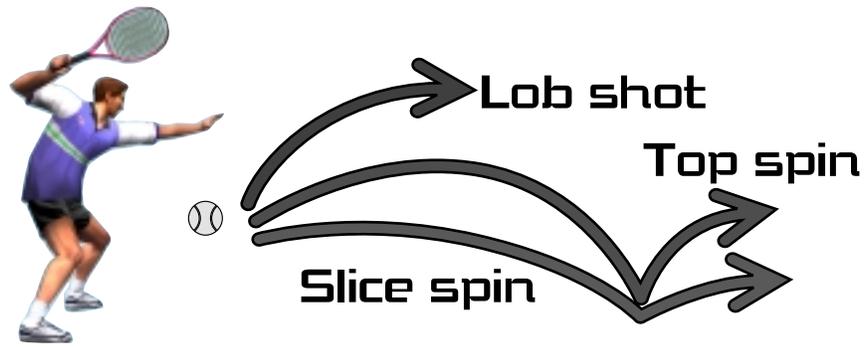
③ Minimum DIMM Memory Capacity

256 MB

A versus type tennis game featuring the 16 actual professional tennis players.
The type of game played is men's/women's singles and also men's/women's/mixed doubles.
Max two players can play this game in versus competition singles (SINGLES: VERSUS), or collaborated doubles (DOUBLES: TEAM PLAY).

HOW TO PLAY

① Insert a coin(s), and the credit display on the monitor counts up.
When the one credit equivalent coins are inserted, the display changes to "PRESS START BUTTON" from "INSERT COIN (S)".

② Press the START Button while "PRESS START BUTTON" is displayed, and the character selection screen appears. Bring the arrow to the desired character and press Top Spin Button (SW1) or Slice Spin Button (SW2) to decide the character being selected.

③ To win the game, you have got to take first the number of games that have been set in the GAME ASSIGNMENT (default setting is 2 games). If you win, you can proceed to the next stage. There are a total of 5 stages in this game, and wining the game results in proceeding to the ending screen and game over.

④ When you wish to intrude into a versus game, insert coin(s) and press the START Button anytime in the game play. If the DOUBLES setting is ON, the select screen of versus competition singles (SINGLES: VERSUS) or collaborated doubles (DOUBLES: TEAM PLAY) appears.

GAME SCREEN
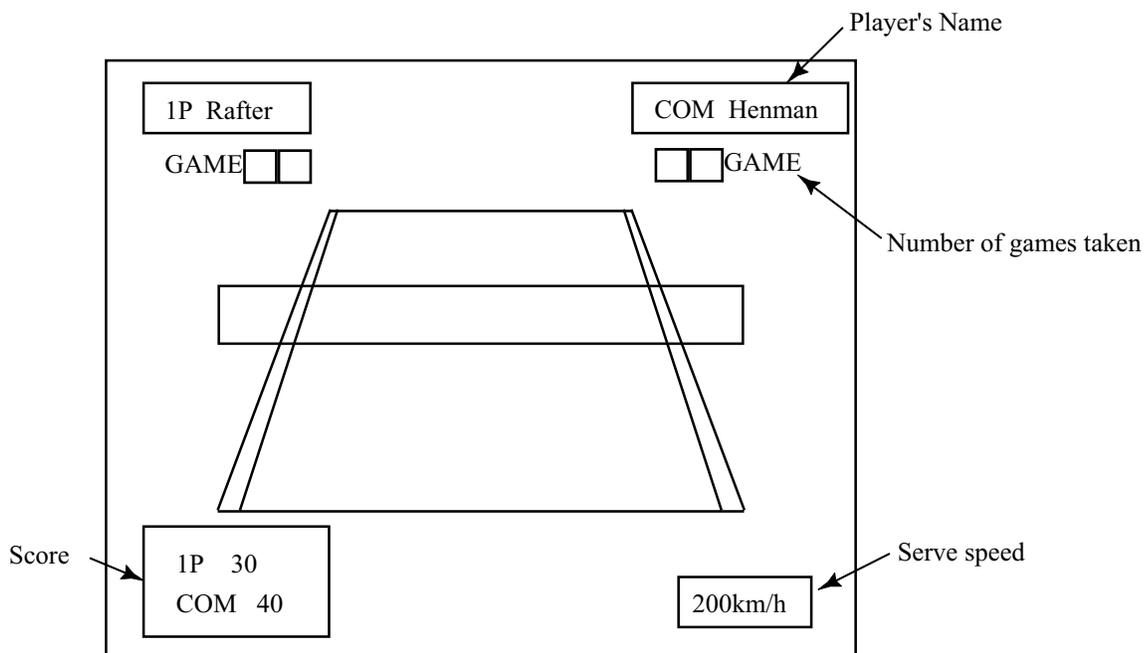
Male pro tennis players:

- Patrick Rafter (Australia)
- Tim Henman (Germany)
- Cedric Pioline (France)
- Yevgeny Kafelnikov (Russia)

- Tommy Haas (Germany)
- Thomas Enqvist (Sweden)
- Magnus Norman (Sweden)
- Carlos Moya (Spain)

Female pro tennis players:

- Venus Williams (U.S.A.)
- Serena Williams (U.S.A.)
- Lindsay Davenport (U.S.A.)
- Monica Seles (U.S.A.)

- Mary Pierce (France)
- Arantxa Sanchez-Vicario (Spain)
- Jelena Dokic (Yugoslavia)
- Alexandra Stevenson (U.S.A.)

VENUES

SINGLES: A total of 5 stages (CPU randomly selects stage from 1 to 4, and the final stage is fixed.)

DOUBLES: A total of 3 stages (CPU randomly selects stage from 1 to 2, and the final stage is fixed.)

VERSUS COMPETITION (VS): CPU randomly selects stages.

■ Australia Stage (Hard court)

■ France Stage (Clay court)

■ U.S.A. Stage (Hard court)

■ England Stage (Grass court)

■ Tokyo Stage (Carpet court/Final stage)

3. TEST MODE

A. SYSTEM MENU

STOP

IMPORTANT

When settings are changed in SYSTEM ASSIGNMENTS, COIN ASSIGNMENTS, and GAME ASSIGNMENTS of GAME TEST MODE, be sure to exit from the test mode of SYSTEM MENU screen. The contents of setting changes are stored in the IC on the BOARD when exiting from the Test Mode. If the power is turned off in the Test Mode (before exiting), the contents of setting changes are ineffective. In this case, the settings remain unchanged.

This test mode mainly allows the IC Board to be checked for accurate functioning, monitor color to be adjusted as well as COIN ASSIGNMENTS and GAME ASSIGNMENTS to be adjusted.

1) After turning power on, press the TEST Button to have the following SYSTEM MENU displayed.

```
SYSTEM MENU


RAM TEST
JVS TEST
SOUND TEST
C.R.T. TEST
SYSTEM ASSIGNMENTS
COIN ASSIGNMENTS
BOOKKEEPING
BACKUP DATA CLEAR
CLOCK SETTING

DIMM BOARD TEST
  GAME TEST MODE
 [ X X X X X X X X X ]

-> EXIT

SELECT WITH SERVICE
BUTTON
          AND
  PRESS TEST BUTTON
```

In the SYSTEM ASSIGNMENTS,
CABINET TYPE is set to 2 PLAYER(S),
MONITOR TYPE is set to HORIZONTAL,
and SERVICE TYPE is set to COMMON.

COIN ASSIGNMENTS initial settings as follows:
COIN CHUTE TYPE: COMMON
COIN/CREDTI SETTING: #1
COIN CHUTE #1 (#2): 1 COIN 1 CREDIT
SEQUENCE SETTING of COIN ASSIGNMENTS func-
tions as follows:
SEQUENCE 1: Number of credits required for game start
        (initial value = 1 CREDIT).
SEQUENCE 2: Number of credits required for CON-
TINUE
        (initial value = 1 CREDIT)
SEQUENCE 3 ~ 8: NOT USED.

MEANING OF DISPLAY IN BOOKKEEPING 2/2
P1 (P2) SEQ 1: Play frequency of Player 1 (Player 2)
P1 (P2) SEQ 2: Frequency of CONTINUE by Player 1
(Player 2).
P1 (P2) SEQ 3 ~ 8: NOT USED.

2) Press the SERVICE Button to move the arrow. Bring the arrow to the desired item and press the TEST Button.

3) Press the TEST Button in the GAME TEST MODE to display the GAME TEST MODE peculiar to this game. See the next page onward.

4) Upon finishing the test, bring the arrow to EXIT and press the TEST Button to return to the Game mode.

For detailed explanations as regards the SYSTEM TEST MODE, refer to NAOMI SERVICE MANUAL (420-6620-01).

B. GAME TEST MODE

Bring the arrow to the GAME TEST MODE in the SYSTEM MENU and press the TEST
Button to display the TEST MENU screen peculiar to Virtua Tennis 2.

```
               <<GAME TEST MODE>>

                 INPUT TEST
                 OUTPUT TEST
                 GAME ASSIGNMENTS
                 BOOKKEEPING
                 BACKUP DATA CLEAR

              -> EXIT


            SELECT WITH SERVICE BUTTON
              AND PRESS TEST BUTTON
```
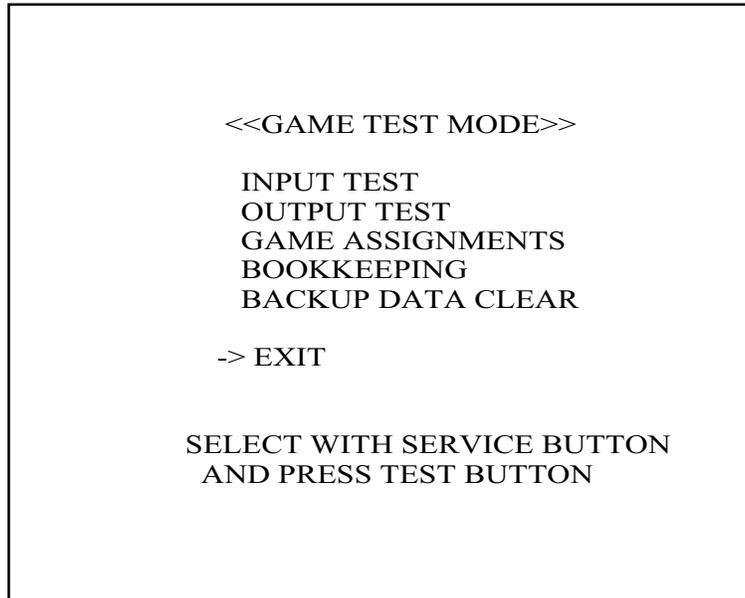
TEST MENU

- Bring the arrow to the desired item with the SERVICE Button and press the TEST
  Button to confirm.

- Bring the arrow to EXIT and press the TEST Button to return to the SYSTEM MENU
  screen.

a. INPUT TEST

This test displays the state of each switch & button. If the display goes ON when the switch or button is activated, the connection is satisfactory.

```
                <<INPUT TEST>>

            PLAYER       1P     2P
            UP           OFF    OFF
            DOWN         OFF    OFF
            RIGHT        OFF    OFF
            LEFT         OFF    OFF
            SHOT1        OFF    OFF
            SHOT2        OFF    OFF
            START        OFF    OFF


         PRESS TEST BUTTON TO EXIT
```
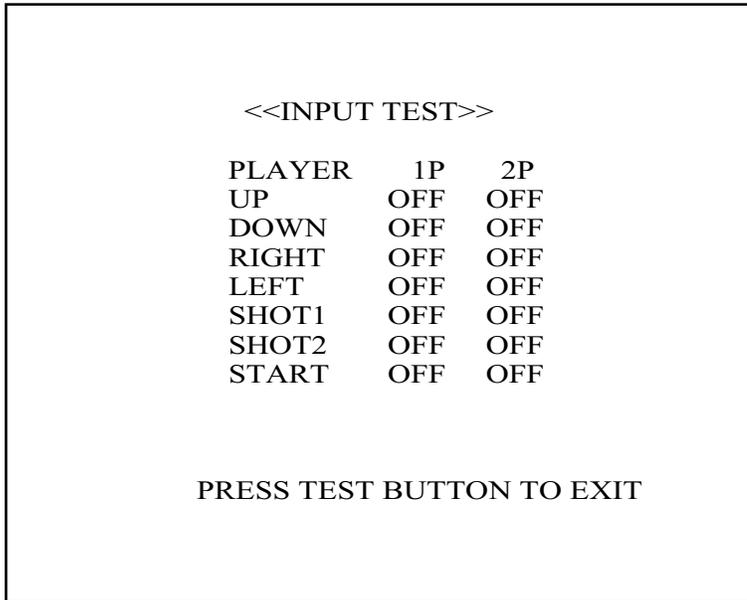
- UP: Changes to ON when inclining the LEVER towards the monitor.
- DOWN: Changes to ON when inclining the LEVER towards you.
- RIGHT: Changes to ON when inclining the LEVER towards the right.
- LEFT: Changes to ON when inclining the LEVER towards the left.
- SHOT 1:   Changes to ON when pressing the SHOT1 (TOP SPIN) Button.
- SHOT 2:   Changes to ON when pressing the SHOT2 (SLICE SPIN) Button.
- START: Changes to ON when pressing the START Button.

Press the TEST Button to return to the TEST MENU screen.

CONTROL PANEL

b. OUTPUT TEST

In this test, each winner lamp of 1P/2P and 7 SEG display in the Sega versus cabinet's billboard can be checked.
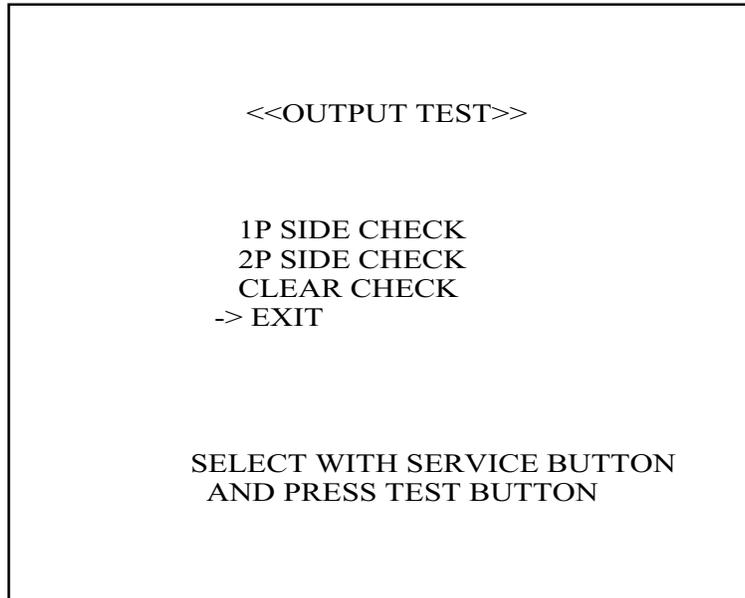
```
                    <<OUTPUT TEST>>



            1P SIDE CHECK
            2P SIDE CHECK
            CLEAR CHECK
         -> EXIT



         SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

- Bring the arrow to the desired item with the SERVICE Button and press the TEST Button to have the selected item checked.

- When "1P (2P) SIDE CHECK" is selected, various messages are indicated in the 7 SEG display while the Winner Lamp of 1P/2P is flashing. To stop the test, bring the arrow to "CLEAR CHECK" and press the TEST Button.

- Bring the arrow to EXIT and press the TEST Button to return to the TEST MENU screen.

c. GAME ASSIGNMENTS

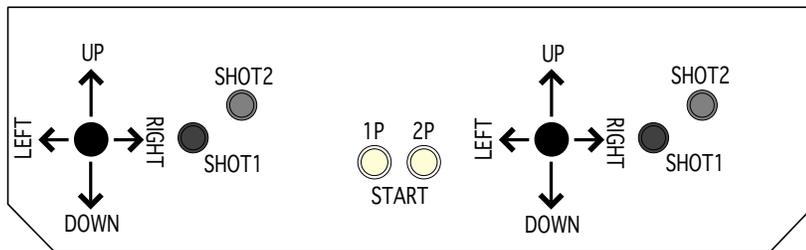In this test mode, setting for the difficulty, the number of games to take first, etc. can be changed. Select the item with the SERVICE Button and press the TEST Button to change the setting.

```
            <<GAME ASSIGMENTS>>

        DOUBLES              [ ON ]
        DIFFICULTY           [NORMAL]
        MATCH COUNT(CPU)     [  2 ]
        MATCH COUNT(V S)     [  2 ]
        MATCH COUNT(DBL)     [  2 ]
        TIE BREAK  (V S)     [ OFF ]
        DEUCE                [ ON ]
     -> EXIT

        SELECT WITH SERVICE BUTTON
         AND PRESS TEST BUTTON
```
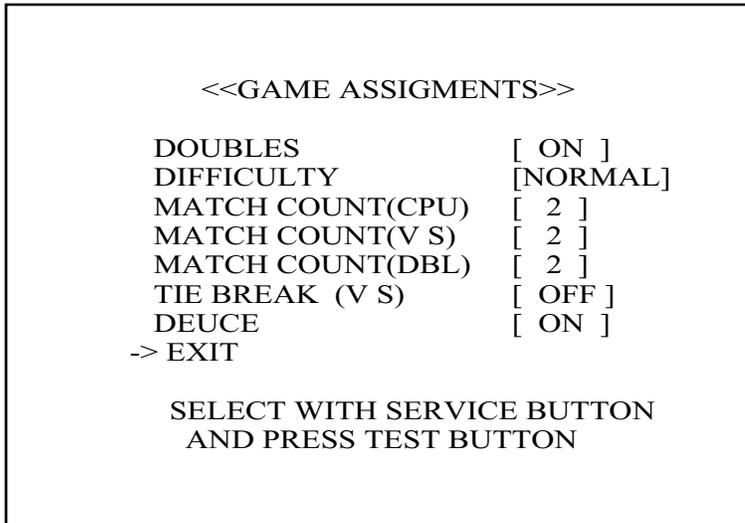
- DOUBLES: Can be set to play the collaborated doubles game. If it is set to ON, you can select versus competition singles (SINGLES: VERSUS) or collaborated doubles (DOUBLES: TEAM PLAY) when you intruding into the game. When Sega versus cabinets such as VERSUS CITY etc. are used, it recommends to be set to OFF.

- DIFFICULTY: Game difficulty setting for CPU versus mode. Selects from EASY, NORMAL, HARD and VERY HARD.

- MATCH COUNT (CPU):   Sets the number of games to win when playing in 1P mode against the CPU. Range is from 1 to 6.

- MATCH COUNT (VS): Sets the number of games to win when playing in versus mode against another player. Range is from 1 to 6.

- MATCH COUNT (DBL):   Sets the number of games to win when playing in doubles mode. Range is from 1 to 6.

- TIE BREAK (VS): It is the rule which attaches last one game when the difference of two or more games does not appear within the number of setting games, one game is added and a score is in a line, last one game is decided by the tie-break system.
  The tie-break system counts numerically (5-6 etc.), and the player, which gains seven points or more and two points or more separated, serves as a winner. In addition, two serves at a time by turns. Although this rule differs from an actual tennis rule a little, it recommends using it in convention events as a fairer judgment rule.

- DEUCE: Selects from ON, 9TIMES and OFF. If it is set to "9 TIMES", DEUCE will continue to 9 times, and will be displayed on the 10th time as "40-40", and the next point scored wins the game. If set to "OFF", even if it becomes the score of 40-40, it will not be set to DEUCE, the next point scored wins the game.

- EXIT: Returns to the TEST MENU screen.

d. BOOKKEEPING

PLAY DATA (PAGE 1/3)

This mode displays the playtime related data.

```
        <<BOOKKEEPING>>     PAGE1/3
          PLAY DATA

     PLAY TIME            **D **H **M **S
     AVERAGE TIME         **H **M **S
     LONGEST TIME         **H **M **S
     SHORTEST TIME        **H **M **S
     VS AVERAGE TIME      **H **M **S
     VS LONGEST TIME      **H **M **S
     VS SHORTEST TIME     **H **M **S
     DBL AVERAGE TIME     **H **M **S
     DBL LONGEST TIME     **H **M **S
     DBL SHORTEST TIME    **H **M **S

     PRESS TEST BUTTON TO CONTINUE
```
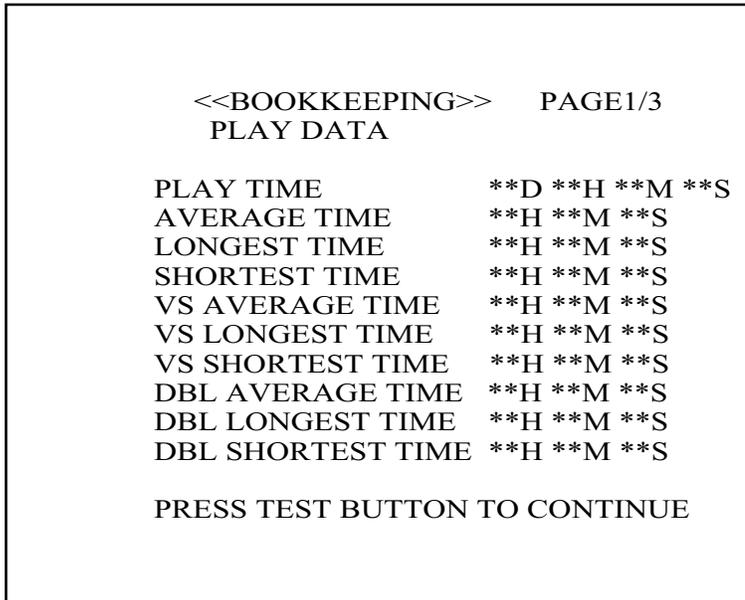
- PLAY TIME: Displays game playtime.
- AVERAGE TIME: Displays the average game time.
- LONGEST TIME: Displays the longest game time.
- SHORTEST TIME: Displays the shortest game time.
- VS AVERAGETIME: Displays the average versus game time.
- VS LONGEST TIME: Displays the longest versus game time.
- VS SHORTEST TIME: Displays the shortest versus game time.
- DBL AVERAGE TIME: Displays the average doubles game time.
- DBL LONGEST TIME: Displays the longest doubles game time.
- DBL SHORTEST TIME: Displays the shortest doubles game time.

• Press the TEST Button to migrate to the next page (2/3).

TIME HISTOGRAM (PAGE 2/3)

By-playtime play frequency is displayed.

```
┌─────────────────────────────────────────────────────┐
│         <<BOOKKEEPING>>      PAGE2/3                  │
│              TIME HISTOGRAM                           │
│                                                       │
│         00M00S - 00M29S        ***                    │
│         00M30S - 00M59S        ***                    │
│         01M00S - 01M29S        ***                    │
│         01M30S - 01M59S        ***                    │
│         02M00S - 02M29S        ***                    │
│         02M30S - 02M59S        ***                    │
│         03M00S - 03M29S        ***                    │
│         03M30S - 03M59S        ***                    │
│         04M00S - 04M29S        ***                    │
│         04M30S - 04M59S        ***                    │
│         05M00S - 05M29S        ***                    │
│         05M30S - 05M59S        ***                    │
│         06M00S - 06M29S        ***                    │
│         06M30S - 06M59S        ***                    │
│         07M00S - 07M29S        ***                    │
│         07M30S - 07M59S        ***                    │
│         08M00S - 08M29S        ***                    │
│         08M30S - 08M59S        ***                    │
│         09M00S - 09M29S        ***                    │
│         09M30S - 09M59S        ***                    │
│         OVER    10M00S         ***                    │
│                                                       │
│         PRESS TEST BUTTON TO CONTINUE                 │
└─────────────────────────────────────────────────────┘
```
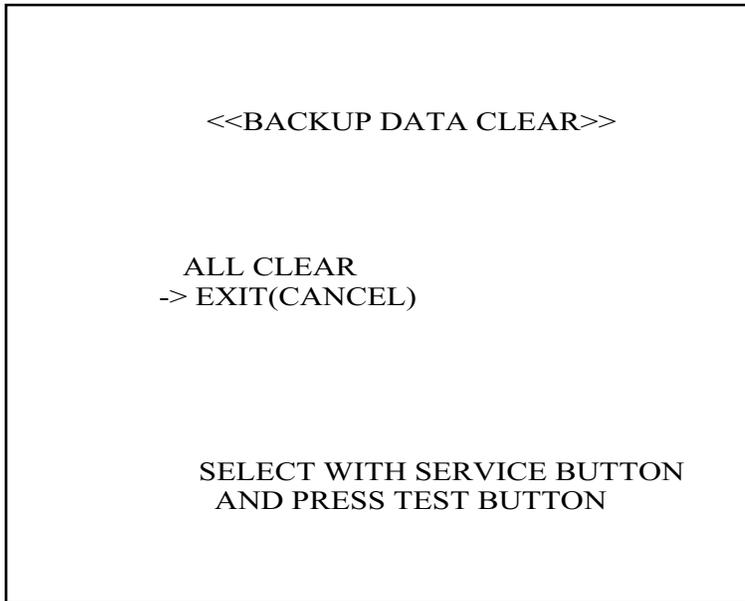
- Press the TEST Button to migrate to the next page (3/3).

CHARACTER DATA (PAGE 3/3)

By-character select frequency, and the number of wins/loses in versus mode are displayed.

```
┌─────────────────────────────────────────────────────┐
│         <<BOOKKEEPING>>     PAGE3/3                   │
│              CHARACTER DATA                           │
│                                                       │
│                    SELECT    VS WIN    VS LOSE        │
│    RAFTER (AUS)      ***       ***        ***         │
│    HENMAN (GBR)      ***       ***        ***         │
│    PIOLINE(FRA)      ***       ***        ***         │
│    KAFELNIKOV(RUS)   ***       ***        ***         │
│    HAAS(GER)         ***       ***        ***         │
│    ENQVIST(SWE)      ***       ***        ***         │
│    NORMAN(SWE)       ***       ***        ***         │
│    MOYA(ESP)         ***       ***        ***         │
│                                                       │
│    V WILLIAMS (USA)  ***       ***        ***         │
│    S WILLIAMS (USA)  ***       ***        ***         │
│    DAVENPORT(USA)    ***       ***        ***         │
│    SELES(USA)        ***       ***        ***         │
│    PIERCE(FRA)       ***       ***        ***         │
│    SANCHEZ(ESP)      ***       ***        ***         │
│    DOKIC(YUG)        ***       ***        ***         │
│    STEVENSON(USA)    ***       ***        ***         │
│                                                       │
│         PRESS TEST BUTTON TO EXIT                     │
└─────────────────────────────────────────────────────┘
```

- Press the TEST Button to return to the TEST MENU screen.

e. BACKUP DATA CLEAR

This allows the contents of BOOKKEEPING to be cleared.

```
┌──────────────────────────────────────────┐
│                                          │
│                                          │
│         <<BACKUP DATA CLEAR>>            │
│                                          │
│                                          │
│                                          │
│           ALL CLEAR                      │
│        -> EXIT(CANCEL)                   │
│                                          │
│                                          │
│                                          │
│                                          │
│      SELECT WITH SERVICE BUTTON          │
│        AND PRESS TEST BUTTON             │
│                                          │
│                                          │
└──────────────────────────────────────────┘
```

- When clearing, bring the arrow to "ALL CLEAR" with the SERVICE Button and press the TEST Button. When the data has been cleared, "COMPLETED" is displayed.

- Bring the arrow to "EXIT" and press the TEST Button to return to the TEST MENU.

According to your DIMM BD type, attach the correct sticker as follows.

442-00084B-01 (STICKER 840-0084B-01)
Attached place
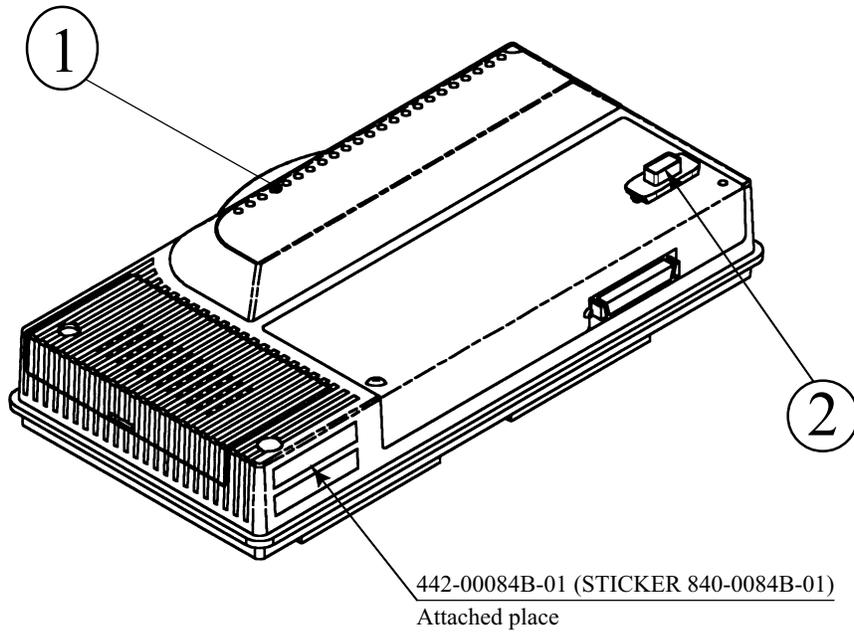
	PART NO.	DESCRIPTION
①	840-0001F	ASSY CASE NAO DIMM BD COM
②		KEY CHIP
①+②	840-0084B-01	DIMM BD NAO VT2

442-00084B-02 (STICKER 840-0084B-02)
Attached place
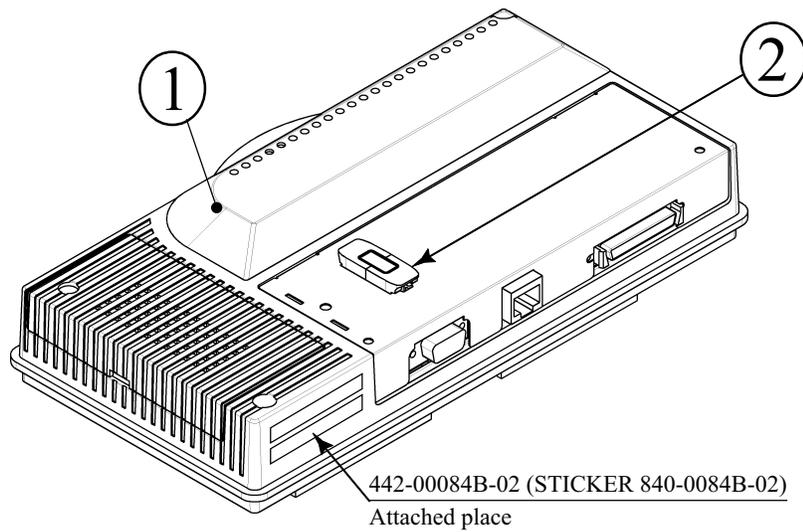
	PART NO.	DESCRIPTION
①	840-0004F	ASSY CASE NAO DIMM BD COM RTOS
②		KEY CHIP
①+②	840-0084B-02	RT DIMM BD NAO VT2

4. SOFT KIT

STOP

IMPORTANT

Handling the GD-ROM Disc

- Do not contaminate the discs with your fingerprints or dust particles. Contaminated discs may lower audio and video quality.
- When cleaning the discs, do not use volatile chemicals (benzine, thinner, etc.), cleaning sprays, and antistatic agents.
- Do not use cracked, warped, or damaged discs. Do not attach papers or seals onto the discs; do not scratch the discs.
  Do not use the discs with a sign of peeled seals, tapes, etc.
  Observing these instructions, do not insert such a non-usable disc into the GD-ROM drive. Otherwise the inserted disc can not be ejected.
- When cleaning a heavily contaminated disc, use clean cloth that has been soaked in water and squeezed. Then remove moisture with dry cloth.
- When holding a disc, be careful not to contaminate it with your fingerprints.

Use clean cloth to wipe the disc gently and into a radial direction.

How to Hold a Disc

With both hands:
Put your thumbs and forefingers of both hands on the disc's 4 circumference tips.

With one hand:
Insert your forefinger into a central hole and at the same time put your thumb and middle finger on the disc's 2 circumference tips.

How to Handle the Key Chip

- The key chip is a precision device. Handle it carefully because it may be damaged by heat, shock, and static electricity.
- Use the key chip with the GD-ROM disc of the corresponding game that has been shipped together with the key chip.
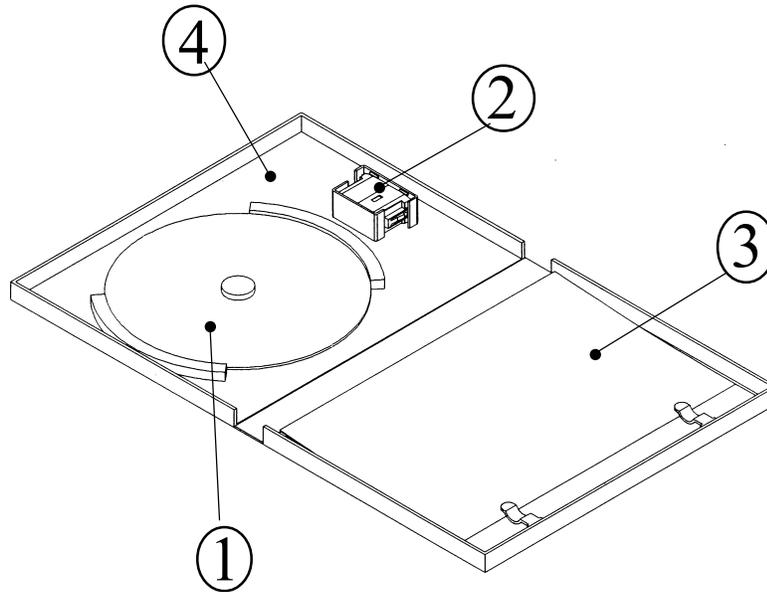
When you order the GD-ROM disc only, please mention the Part No. 610-0625-∗∗∗∗.

	PART NO.	DESCRIPTION
①+②+③+④	610-0630-0015	GD SOFT KIT VT2 ENG
①		NAOMI GDROM VT2
②		KEY CHIP
③	420-6621-0015E	SERVICE MANUAL VT2 ENG
④	253-5507	DISC CASE WITH IC HOLDER
①+④	610-0625-0015	GD SOFT VT2

5. GAME BOARD

⚠️ CAUTION!

- Do not expose the Game Board so as to avoid causing an accident or malfunctioning.
- Static electricity discharge can damage electronic parts on the IC Board. Before starting work by opening the Shield Case Lid, be sure to touch grounded metallic surfaces to discharge physically charged static electricity.
- When replacing the Game Board, refer to the CVT Manual and Instruction Manual.
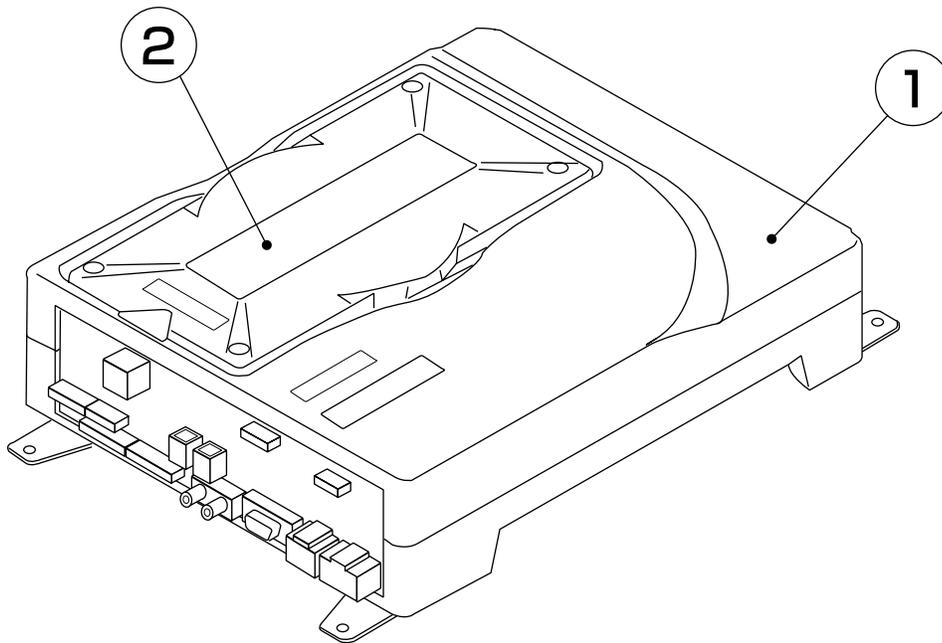
|	PART NO.	DESCRIPTION
ASSY CASE (①+②)	840-0084D-01 840-0084D-02 840-0084D-03 840-0084D-04	ASSY CASE NAO VT2 USA :USA ASSY CASE NAO VT2 EXP :OTHERS ASSY CASE NAO VT2 KOR :KOREA ASSY CASE NAO VT2 AUS :AUSTRALIA
① ASSY CASE NAOMI MAIN BOARD	840-0001A-01 840-0001A-02 840-0001A-03 840-0001A-04	ASSY CASE NAOMI MAIN BD USA :USA ASSY CASE NAOMI MAIN BD EXP :OTHERS ASSY CASE NAOMI MAIN BD KOR :KOREA ASSY CASE NAOMI MAIN BD AUS :AUSTRALIA
② ROM CASE	840-0084C	ROM CASE NAO VT2

NAOMI KIT UNIVERSAL
WIRING DIAGRAM (1/1)
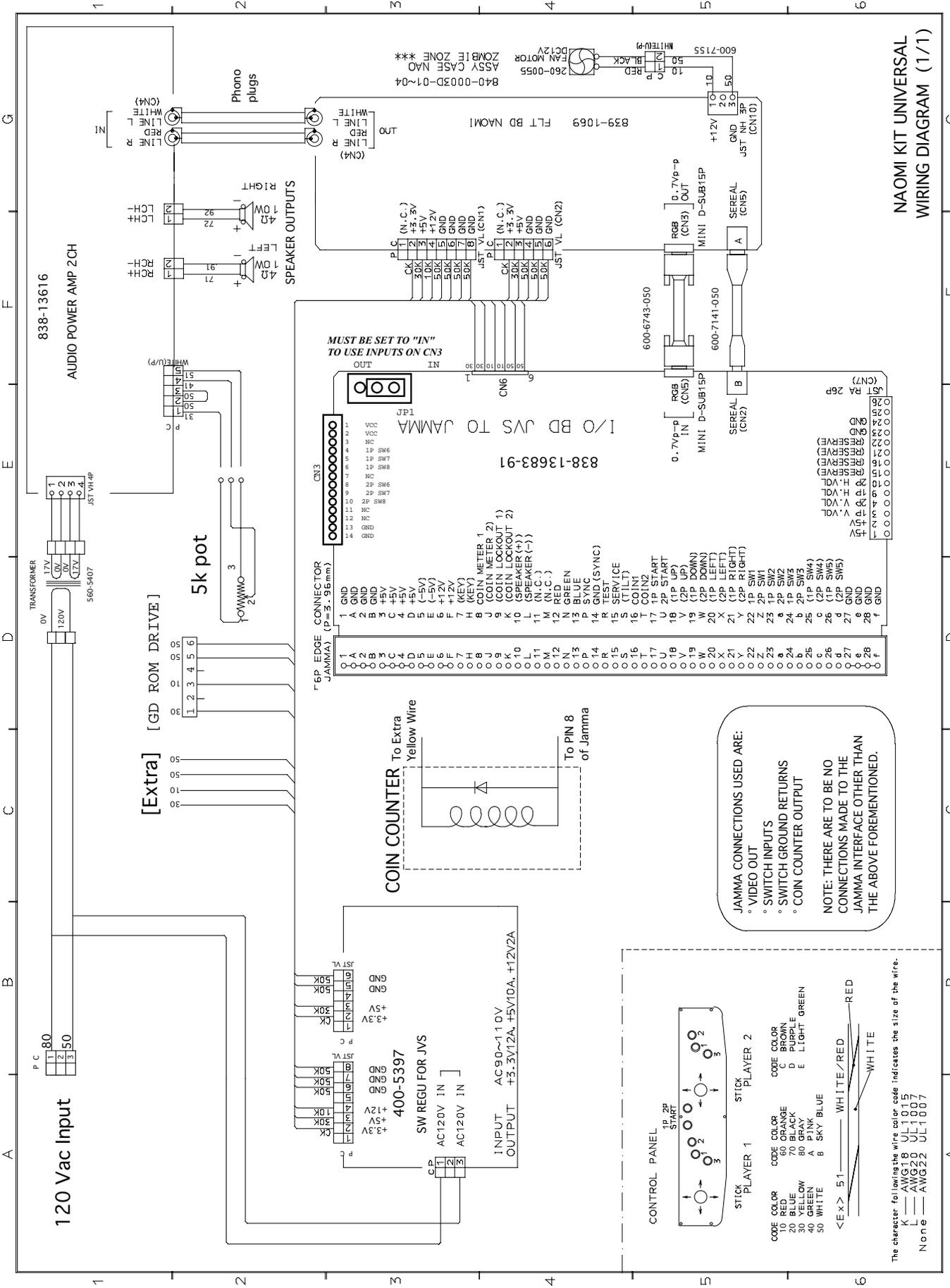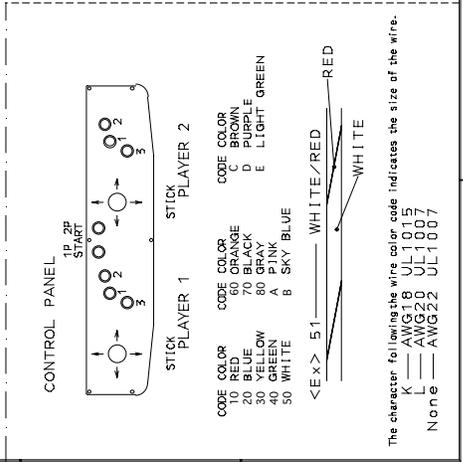
Warranty

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.

SEGA

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