

# SERVICE MANUAL

# SEGA®

# Kick '4' Cash

## CASH CUBE



IMPORTANT

Before using this product, read this SERVICE MANUAL carefully to understand the contents stated herein. After reading this manual, be sure to keep it available nearby the product or somewhere convenient in order to be able to refer to it whenever necessary.

Manufactured in the UK by

# SEGA®



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# 1. BEFORE USING THIS PRODUCT

To ensure the safe usage, be sure to read the following before using the product. The following instructions are intended for the use of QUALIFIED SERVICE PERSONNEL ONLY.

If any activity is carried out on the product, this should be done only after carefully reading and sufficiently understanding the instructions.

Only qualified service personnel should carry out maintenance on the product.

Depending on the potential risk, terms such as "WARNING!" "CAUTION" and "IMPORTANT!" are used where an explanation is given that requires special attention. SEGA is not responsible for injury or damage caused by use in a manner contrary to the instructions given in this document.

In order to prevent accidents warning stickers and printed instructions are applied in the places where a potentially hazardous situation relating to the product could arise. Be sure to comply with these warnings.



Indicates that mishandling the product by disregarding this warning will cause a potentially hazardous situation that can result in death or serious injury.



Indicates that mishandling the product by disregarding this caution will cause a potentially hazardous situation that can result in personal injury and or material damage.



This is cautionary information that should be complied with when handling the product. Indicates that mishandling the product by disregarding this will cause a potentially hazardous situation that may not result in personal injury but could damage the product.

Be sure to turn off the power and disconnect from the mains supply before working on the machine.

Ensure that the correct fuses are fitted to the machine. Details of these are enclosed in the Service Manual.

Ensure that only qualified Service Engineers perform any maintenance work on the machine.

Specification changes, removal of equipment, conversion and/or additions not designated by SEGA are not permitted and will invalidate this product's CE conformity.

Warning labels or safety covers for personal protection etc, are component parts of the product. A potential hazard will be created if the machine is operated while any parts have been removed. Do not operate the product if any doors, lids or protective covers become damaged or lost. SEGA is not liable in any whatsoever for any injury and/or damage caused by specification changes not designated by SEGA.

Before installing the product, check for the Electrical Specification Sticker, SEGA products have a sticker on which the electrical specifications are detailed. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location in which the machine is to be installed.

Install and operate the machine only in places where appropriate lighting is available, allowing warning stickers to be clearly read.

To ensure maximum safety for customers and operators, stickers and printed instructions describing potentially hazardous situations are applied to potentially hazardous locations. Ensure that the product's operating location has sufficient lighting to allow any warnings to be read. If any sticker or printed warning is removed or defaced, do not operate the machine until an identical item has replaced it.

Exercise great care when handling the monitor (applies only to product with monitor). Some of the monitor (TV) parts are subject to high-tension voltage. Even after turning the power off some components are liable to high-tension voltage. Only qualified service engineers should perform monitor repair and replacement.

In cases where commercially available monitors and printers are used, only the items relating to this product are contained in this manual. Some commercially available equipment will have functions and reactions not referred to in this manual. This manual should be read in conjunction with the specific manufacturer's manual for such equipment.

Descriptions contained herein may be subject to change without prior notification.

The contents described herein are fully prepared with due care. However, should any question arise or errors be found please contact **SEGA AMUSEMENTS EUROPE LTD.**



This machine **MUST** be EARTHED before use.

## 1.1. **INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION**



- Only QUALIFIED SERVICE PERSONNEL should carry out inspection.

Normally, at the time of shipment, SEGA products are in a state to allowing usage immediately after transporting to the location. Nevertheless, an irregular situation may arise during transportation preventing this. Before turning on the power, check the following points to ensure that the product has been transported safely.

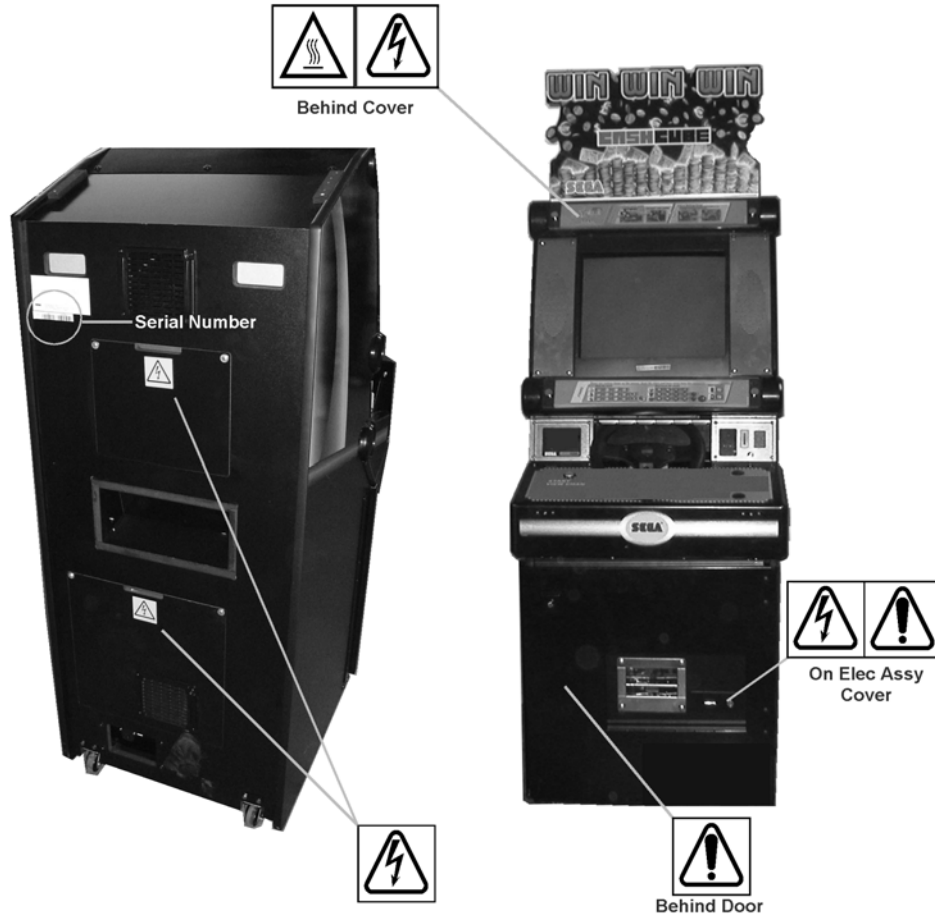
- Are there any dented parts or defects (cuts, etc.) on the external surfaces of the product?
- Are castors and leg adjusters present and undamaged?
- Do the power supply voltage and frequency requirements meet with the local supply?
- Are all wiring connectors correctly and securely connected? Unless connected in the correct direction, connector connections cannot be made successfully. Do not insert connectors forcibly.
- Are all IC's of each IC BD firmly inserted?
- Does the power cord have any cuts or dents?
- Do fuses meet the specified rating?
- Are such units such as monitors, control equipment, IC BD, etc. firmly secured?
- Are all earth wires connected?
- Are all accessories available?
- Can all doors and lids be opened with the accessory keys and/or tools?

### CONCERNING THE STICKER DISPLAY

SEGA product has stickers describing the product manufacture number (Serial Number) and electrical specification. If you require service assistance you will require the Serial Number. Identical machines may have different parts fitted internally. Only by quoting the Serial Number will the correct parts be identified.

### CONCERNING WARNING STICKERS

SEGA product has warning displays on stickers, labels or printed instructions adhered/attached to or incorporated in the places where hazardous situations can arise. The warning displays are intended for the accident prevention of customers and service personnel.



### SPECIFICATIONS

Installation Space (mm): 650 (W) 840 (D)

Height (mm): 1576

Height with Pop Panel (mm): 1916

Weight (kg): 100 Kg (approx.)

Rated Voltage (VAC): 220 - 240

Rated Current (A): 1

Note: Descriptions in this manual are subject to change without prior notice.

## **2. INTRODUCTION TO THIS SERVICE MANUAL**

SEGA ENTERPRISES LTD., supported by its experience in electronic high technology of VLSI's, microprocessors etc. and with a wealth of experience, have for more than 30 years been supplying various innovative and popular games to the world market. This Service Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electro-mechanicals, servicing controls, spare parts, etc. as regards this new SEGA product. This manual is intended for those who have knowledge of electricity and technical expertise especially in IC's, CRT's, microprocessors etc. Carefully read this manual to acquire sufficient knowledge before working on the machine. Should there be any malfunction, non-technical personnel should under no circumstances touch the internal systems. Should such a situation arise contact the nearest branch listed below, or our head office.

### **SEGA AMUSEMENTS EUROPE LTD./ SEGA SERVICE CENTRE**

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Fax: +44 (0) 1372 731849

### 3. INSTALLATION AND MAINTENANCE INSTRUCTIONS



- Only QUALIFIED SERVICE PERSONNEL should carry out installation and maintenance.

#### 3.1. HANDLING AND INSTALLATION PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.

**The game must NOT be installed under the following conditions:**

- Outside, the game is designed for indoor use only.
- In areas directly exposed to sunlight, high humidity, dust, excessive heat or extreme cold.
- In locations that would present an obstacle in the case of an emergency i.e. near fire equipment or emergency exits.
- On unstable surfaces or surfaces subject to vibration.
- Where liquids, other than routine cleaning, may come into contact with the game.

**Important:**

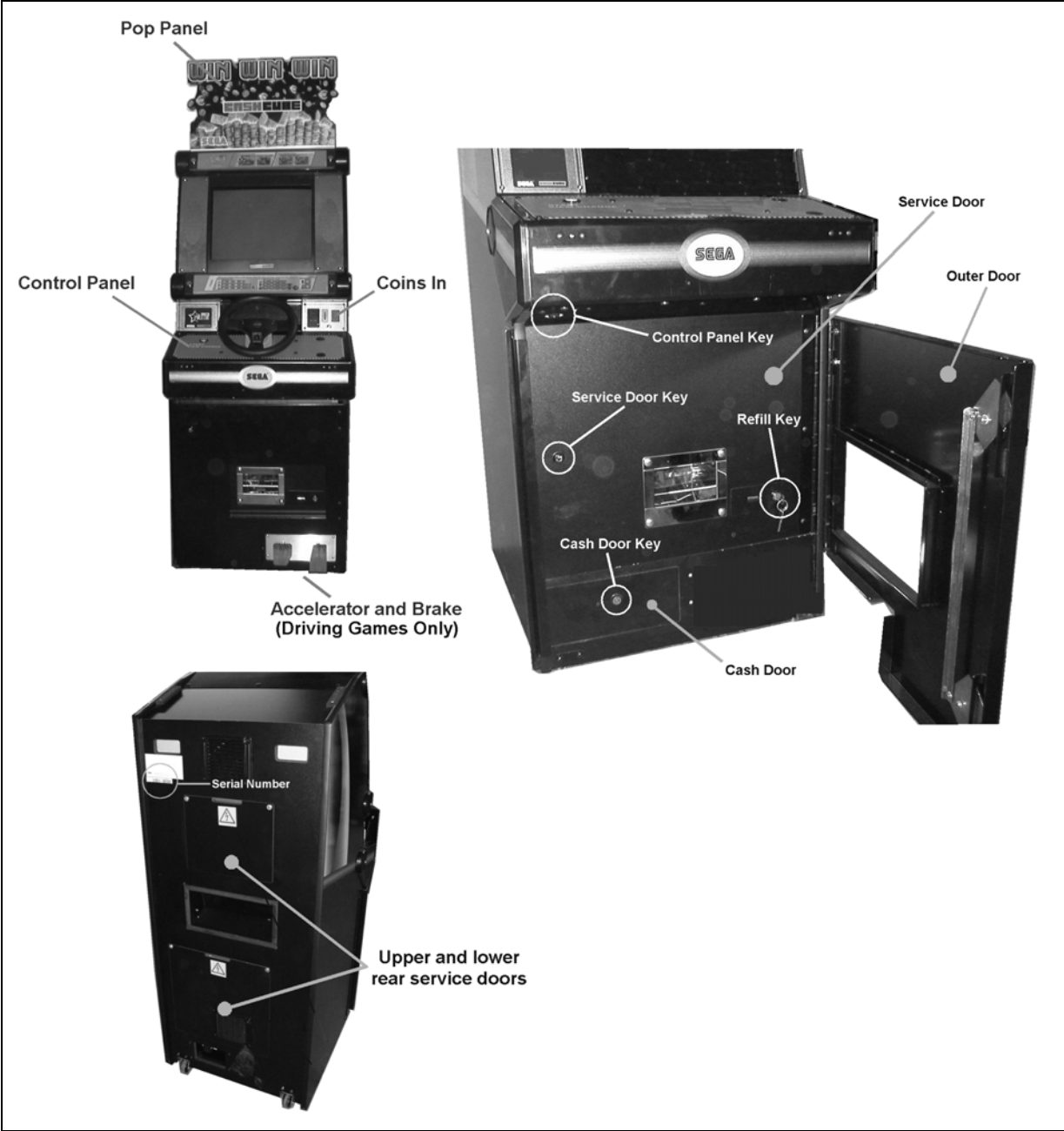
- Only Qualified Service Personnel should install this machine.
- Be sure to switch the supply power OFF and remove the mains supply plug from the machine before any work is carried out on the machine.
- Do not attempt to repair the PCB's (Printed Circuit Boards) yourself. This will void the warranty. The PCB's contain static sensitive devices that could be damaged.
- Always return a faulty part to your distributor with adequate packaging and protection.
- When removing the plug from the mains always grasp the plug not the cable.
- Do not use a fuse that does not meet the specified rating.
- Make sure all connections are secure before applying power.

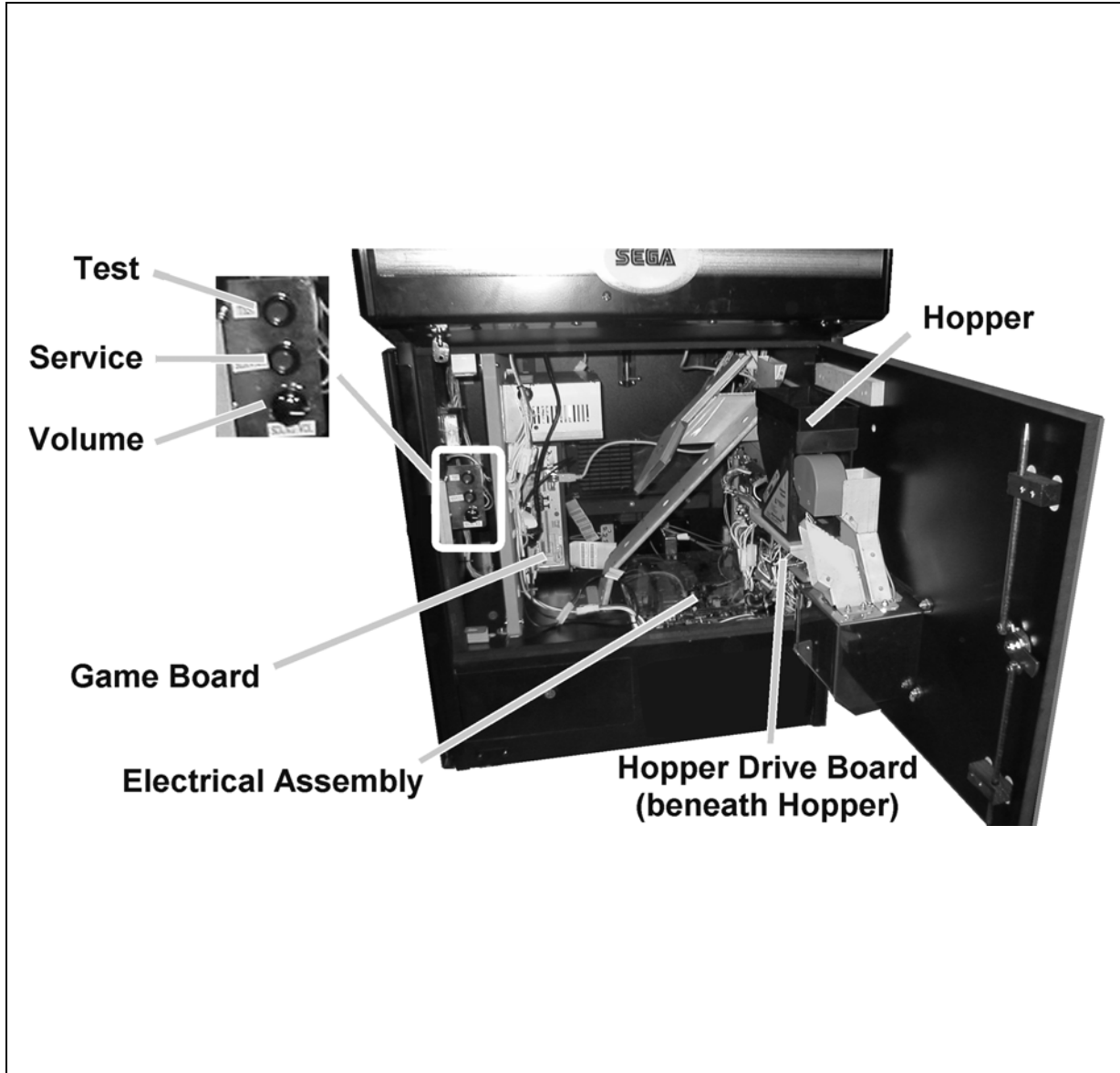


- Ensure that the mains lead is not damaged. If the mains lead is damaged in any way there could be a danger of electric shock or a fire hazard.
- Ensure that the power supply is fitted with circuit protection. Using the power supply without circuit protection is a fire hazard.



**3.2. NAME OF PARTS**





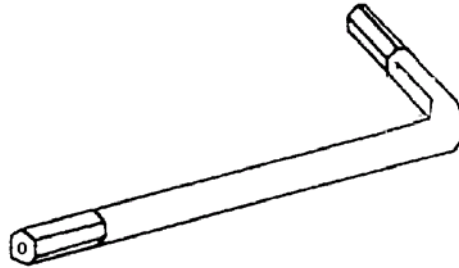
### 3.3. ACCESSORIES

The machine is supplied with an installation kit. Please ensure the following parts are supplied:



- The Installation Kit will be placed in the Cashbox. However larger items (e.g. the Pop Panel) will be placed in the recess beneath the Test and Service buttons inside the cabinet body.
- You must ensure that these items are removed before the machine is powered up.

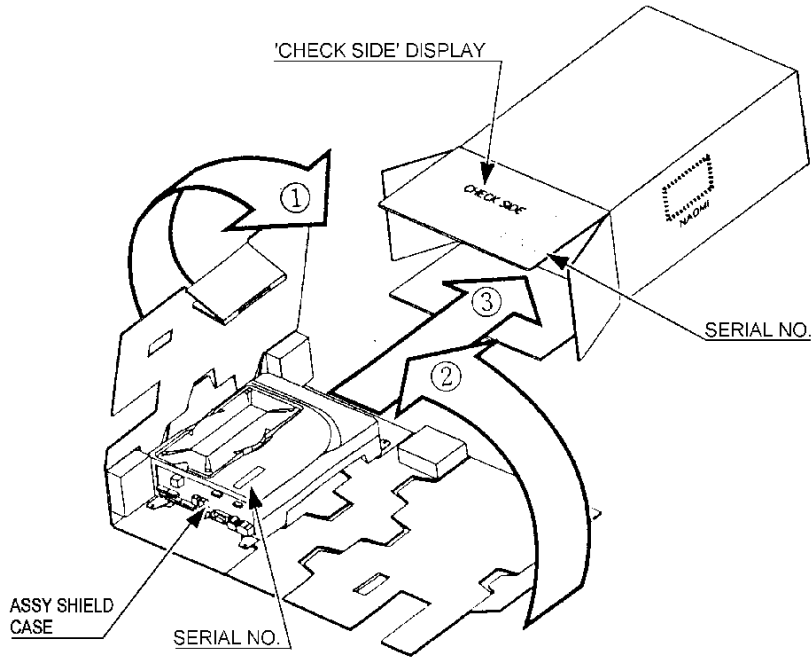
No.	PART NUMBER	QTY	DESCRIPTION	COMPONENT REFERENCE
1	PUB-5006	1	POP CASHCUBE	
3	SAECE-126	1	DECLARATION OF CONFORMITY K4C	
4	PUB-1056-BUK	1	DECAL COIN ENTRY	
101	514-5078-3150	1	FUSE 3.15X20 CERAMIC SB 3150mA	
401	RND-0051	1	SERVICE MANUAL K4C PUB SWP	
402	OS1019	1	SELF SEAL BAG 9X12.3/4	
404	PK0061	0.025	BUBBLE WRAP LARGE 1.5M X 45M	
405	540-0006-01	1	WRENCH M4 TMP PRF	
406	540-0015-01	1	WRENCH M6 TMP PRF	



Items 405 & 406 - Tamperproof TORX wrench.



- When returning the GAME BOARD for repair or replacement, be sure to package the entire ASSY SHIELD CASE in the original card transit box - THERE ARE NO USER-SERVICEABLE PARTS INSIDE.
- Failure to return the GAME BOARD in this manner may invalidate the warranty.



Wrap the ASSY SHIELD CASE with the packaging material and put it in the original transit box as shown. Putting it upside down or packing other than as shown can damage the GAME BOARD and parts.

### 3.4. ASSEMBLY INSTRUCTIONS



- Perform the assembly by following the procedure herein stated. Failure to comply with the instructions, for example, inserting the plug into an outlet at a stage not mentioned in this manual can cause an electric shock
- Assembling should be performed as per this manual. Since this is a complex machine, erroneous assembling can cause damage to the machine, or malfunction to occur.
- Do not attempt to complete this work alone, a minimum of 2 people are required.

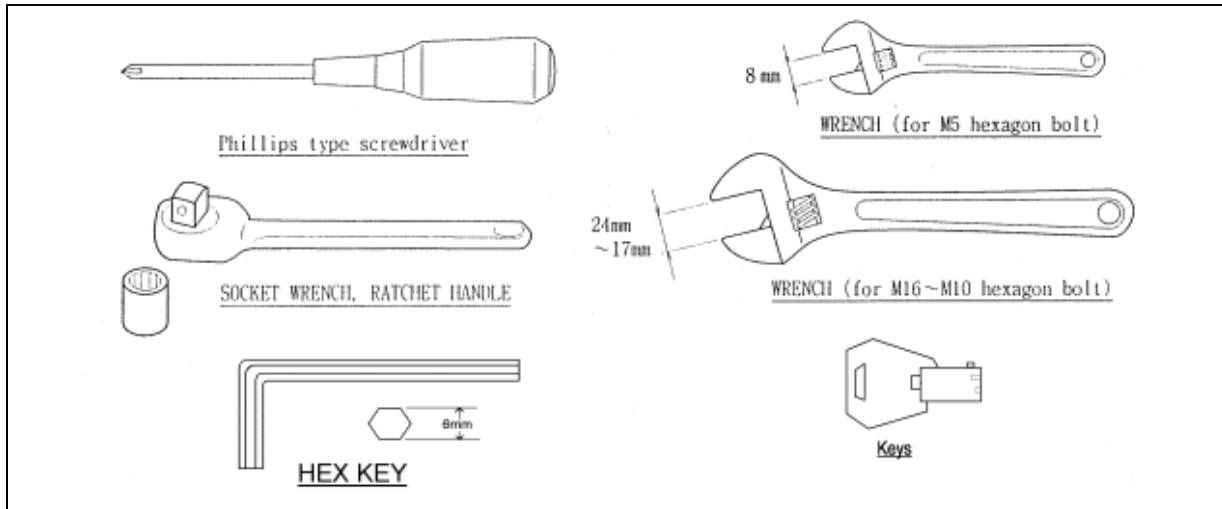


- Only QUALIFIED SERVICE PERSONNEL should carry out assembly.

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

- STEP 1**      INSTALLING THE POP PANEL
- STEP 2**      SECURING IN PLACE (LEG ADJUSTER ADJUSTMENT)
- STEP 3**      CONNECTION TO THE POWER SUPPLY

Note that the parts contained within the installation kit are required for the assembly work.  
The following tools will be required when installing this machine:



### 3.4.1. INSTALLING THE POP PANEL.(PUB-5006)

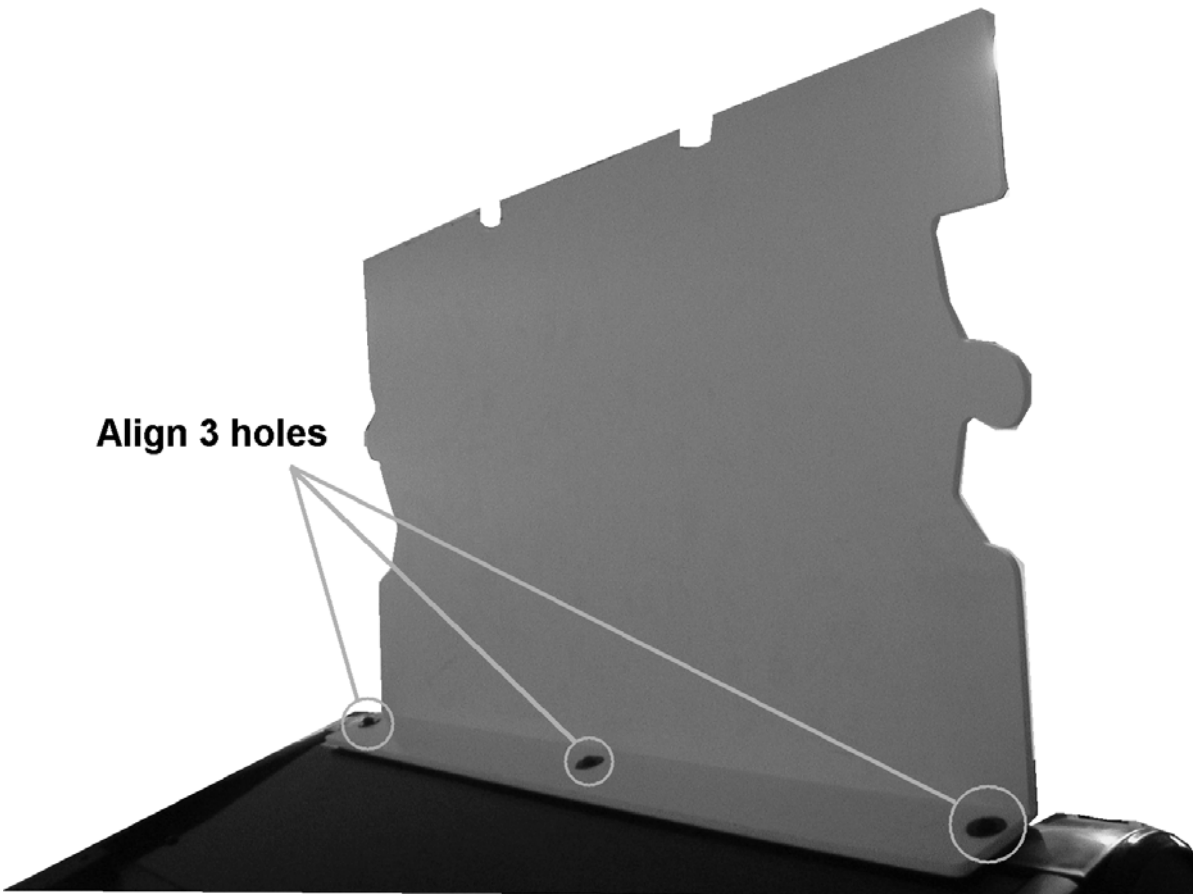


- QUALIFIED SERVICE PERSONNEL should only carry out this operation.

The Pop Panel picks up on the three top fixings of the Monitor Mask Moulding.

To fit:

- 1 Remove the three screws and washers on top of the Monitor Mask Moulding.
- 2 Offer up the Pop Panel and align over three fixing holes.
- 3 Re-fix the screws and washers.
- 4 Ensure the Monitor Mask Moulding is pushed back and seated properly to the cabinet.



### 3.4.2. SECURING IN PLACE (LEG ADJUSTER ADJUSTMENT)



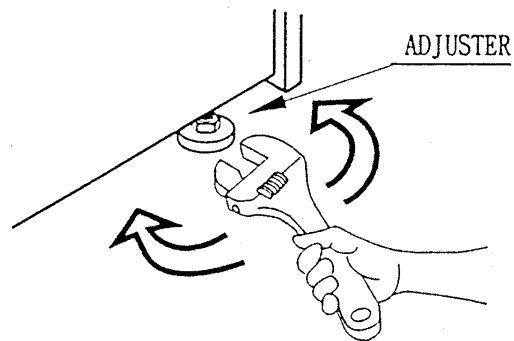
- *The nominal position for the leg adjusters is fully retracted. Only extend them if the machine is sited on an uneven surface.*

- Only QUALIFIED SERVICE PERSONNEL should carry out this operation.

This machine has two castors (at rear) and two leg adjusters (at front). Where the installation is flat and level, the adjuster should not need to be extended. Only extend the adjusters to prevent the machine from rocking.

To extend the leg adjusters:

1. Use a wrench to turn them until the machine is stable and level.



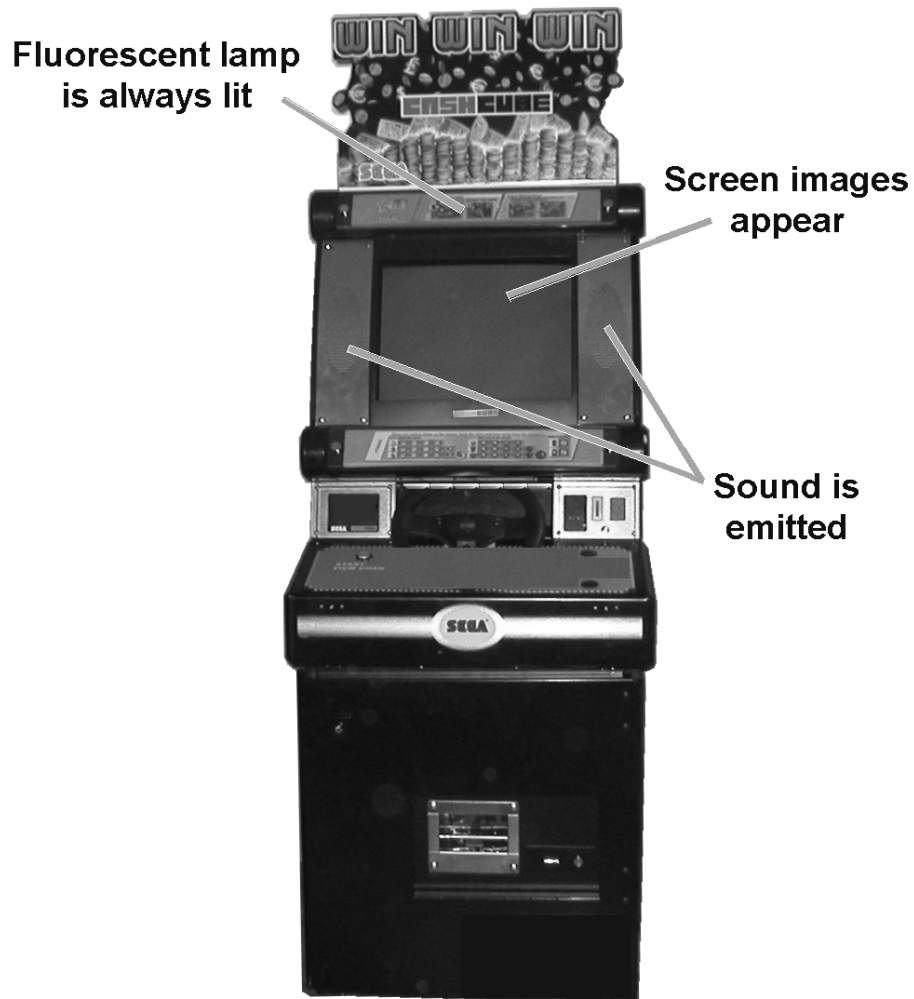
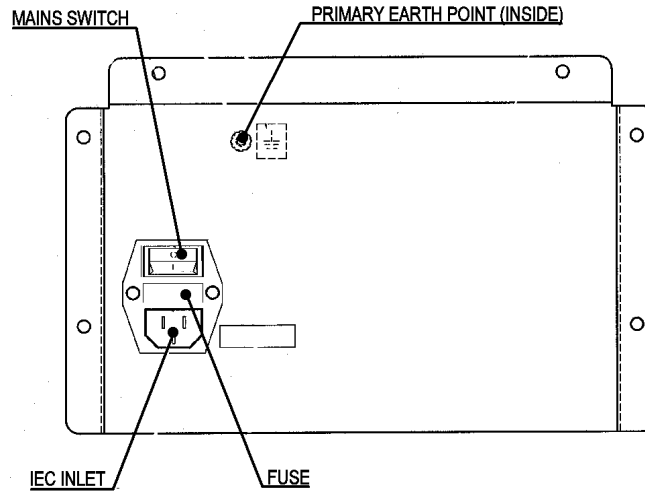
Ensure that all of the Adjusters are in contact with the floor.

**Ensure adequate ventilation is maintained by ensuring there is at least a 150mm gap between the back on the machine and any wall.**

### 3.4.3. CONNECTION TO THE POWER SUPPLY

To connect the machine to the power supply:

1. With the Mains Switch in the 'O' position, insert the IEC mains lead plug into the IEC socket.
2. Turn the machine on by switching the Mains Switch to the 'I' position.





### 3.5. MOVING THE MACHINE



- When moving the machine, be sure to remove the plug from the power supply. Moving the machine with the plug inserted can cause the power cord to be damaged, resulting in a fire or electric shock.
- When moving the machine, retract the leg adjusters fully. During movement pay careful attention so that the casters or leg adjusters do not damage any other cabling laid on the floor. Such damage could result in a fire or electric shock.
- Do not push the upper part of the cabinet. Failure to observe this can cause the cabinet to fall forwards and result in accidents.

- When transporting the machine, be sure to hold the handles on the rear of the cabinet. Inclining the machine by holding portions other than the handles can damage the cabinet and/or the floor surface.
- Do not push the pop panel. Failure to observe this may damage the installation portions and may cause unexpected accidents.

- The machine weighs approximately 100Kg and should only be moved by a minimum of 2 people..



To move the machine:

1. Using the handles at the back of the cabinet, tilt the cabinet back until it is balanced safely on the rear casters. **EXTREME CARE SHOULD BE TAKEN DURING THIS OPERATION TO AVOID INJURY OR DAMAGE TO THE MACHINE.**
2. Carefully roll the machine to the desired position.
3. Tilt cabinet forward until front legs are in contact with the ground – **CAUTION, THE MACHINE MAY PULL FORWARDS.**
4. Adjust the leg adjusters to ensure cabinet is square and steady if required.

### 3.6. ELECTRICAL ASSEMBLY

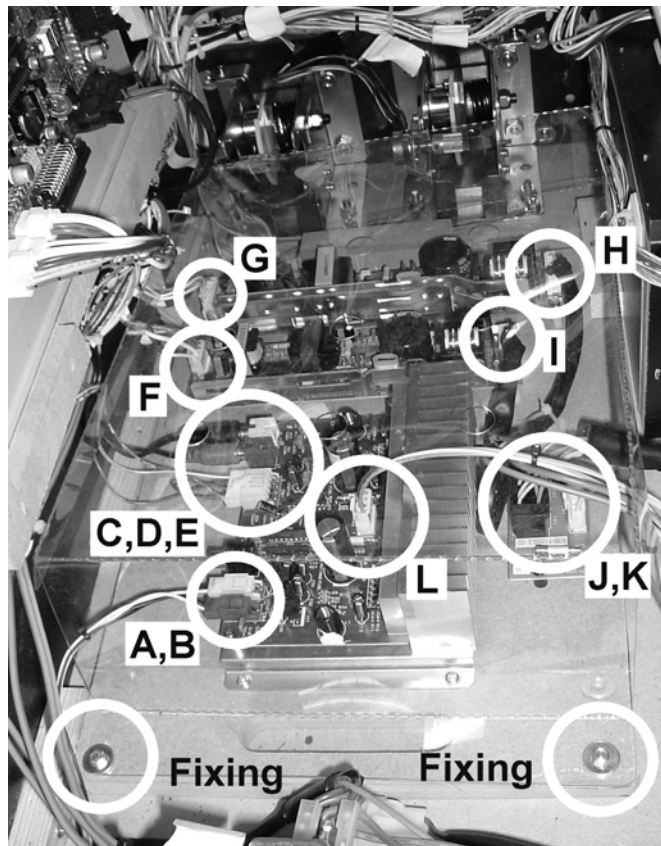


- Before performing work, be sure to turn power off. Working with power on can cause an electric shock or short circuit.
- Use care to ensure the wiring is not damaged. Damaged wiring can cause electric shock or short circuit.
- Touching parts of the machine other than those specified here can cause electric shock or short circuit.



- This procedure to be carried out only by QUALIFIED SERVICE PERSONNEL.

#### 3.6.1. REMOVING THE ELECTRICAL ASSEMBLY



1. Remove the two fixings (bolt m4x30 and washer) securing the board.
2. Remove the plastic board cover.
3. Uncouple the loom connectors A to L.
4. Carefully slide the board out from the rear of the cabinet ensuring no damage takes place to the board.

### 3.7. CONTROL PANEL

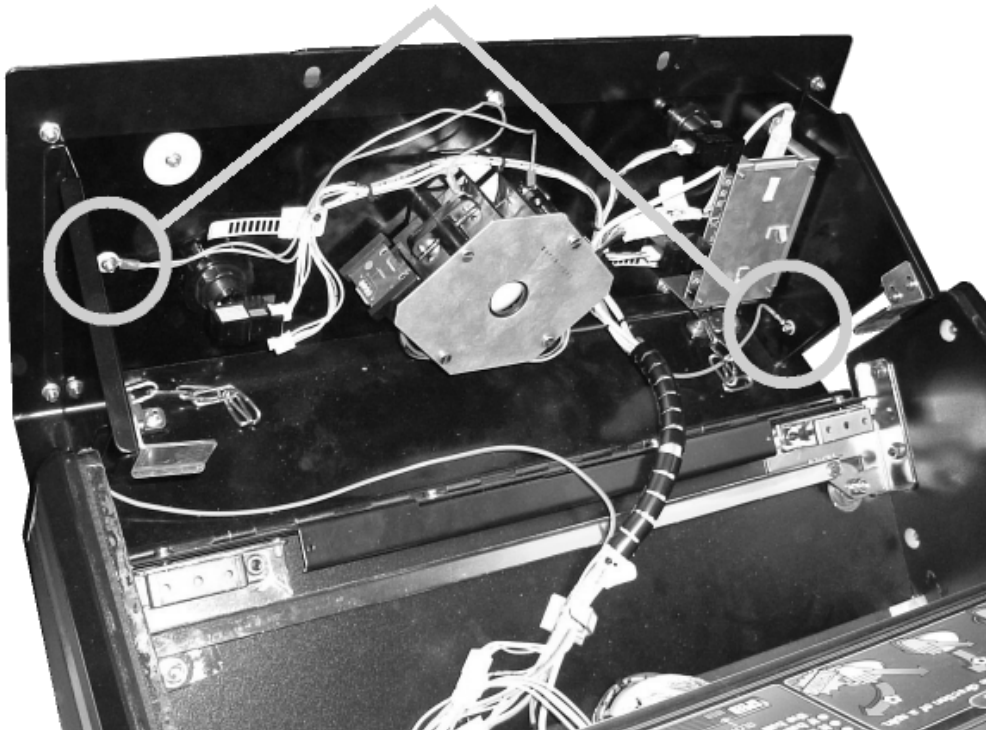


- Before starting work, ensure that the cabinet is isolated from the mains by switching off and removing the IEC mains lead from the wall outlet.
- Be careful not to damage wiring. Damaged wiring can cause electric shock and short circuits.

#### 3.7.1. REPLACING THE CONTROL PANEL

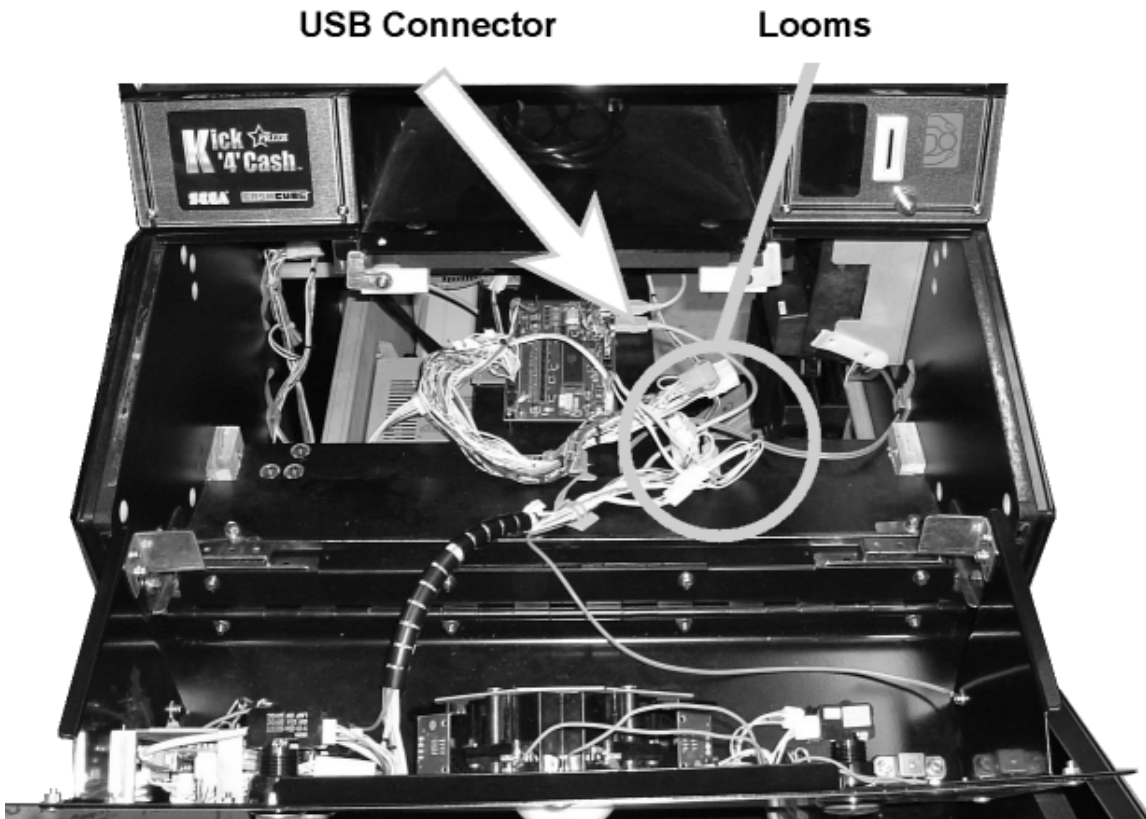
1. Power OFF the machine and remove the IEC lead from the wall outlet.
2. Remove the 2 M6 security screws in the top of the Panel.
3. Unlock the Control Panel using the Control Panel Key and open the Panel.
4. Disconnect the earth tags on the control panel.

#### Earth Tags



Note: This illustration may not reflect the actual control panel shipped.

5. Disconnect the front USB connector and looms.



6. Remove the 6 bolts that secure the Control Panel in place.



Be sure to support the weight of the control panel when doing this!

**Control Panel Bolts  
(2 hidden)**



Note: This illustration may not reflect the actual control panel shipped.

7. Remove the Control Panel

### 3.8. GAME BOARD

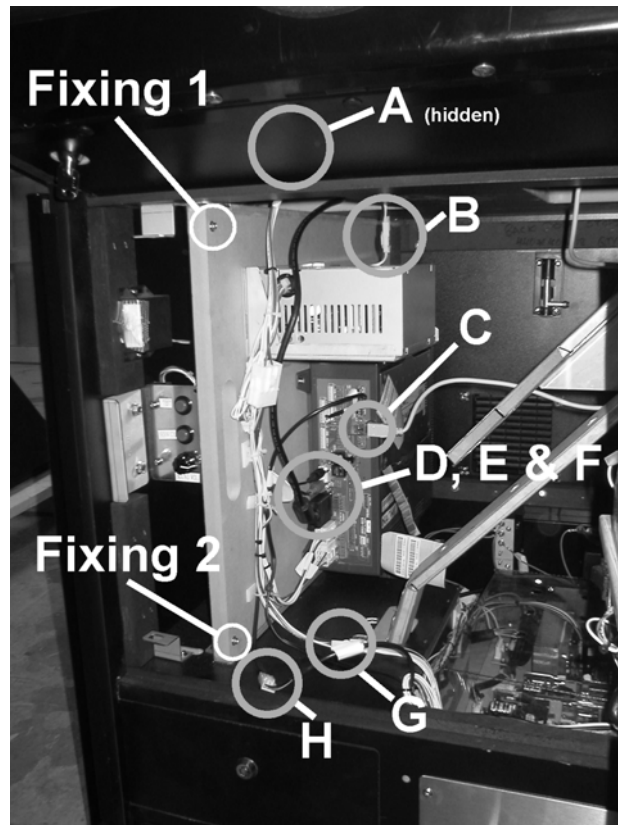


- When performing work, be sure to turn power off. Working with power on can cause an electric shock or short circuit.
- Be careful not to damage wiring. Damaged wiring can cause an electric shock or short circuit.
- The voltage/amperage ratings for the Game Board are 3.3V 12A, 5.0V 10A and 12V 2A. To avoid risk of fire, never use any board with supply requirements exceeding the above.
- When replacing the Game Board with one not of JAMMA standard, be sure to use only the harness supplied by the manufacturer of the Game Board. Using other harnesses constitutes a fire risk.

#### 3.8.1. TAKING OUT THE GAME BOARD

To take out the game board, remove together with the wooden base on which the Game Board is mounted.

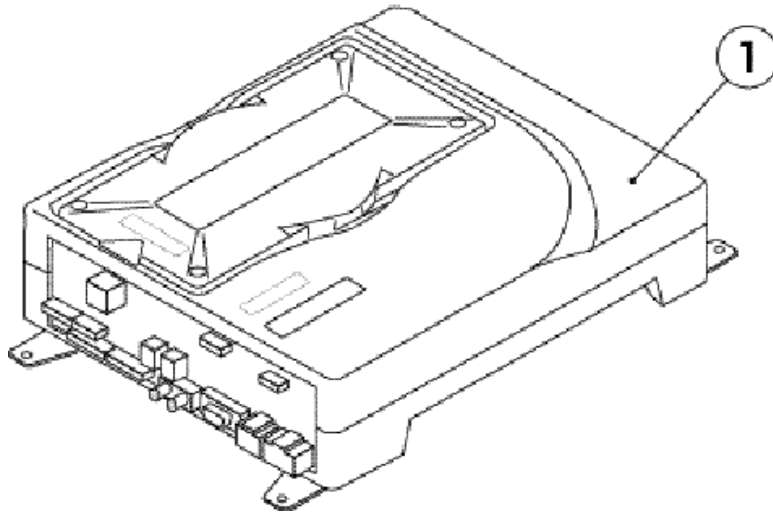
1. Turn power OFF by removing the IEC lead from the wall socket.
2. Disconnect all of the connectors A to H as shown below.



3. Remove fixings 1 and 2.
4. Slide the board assembly out from the cabinet being careful to avoid any damage during removal.



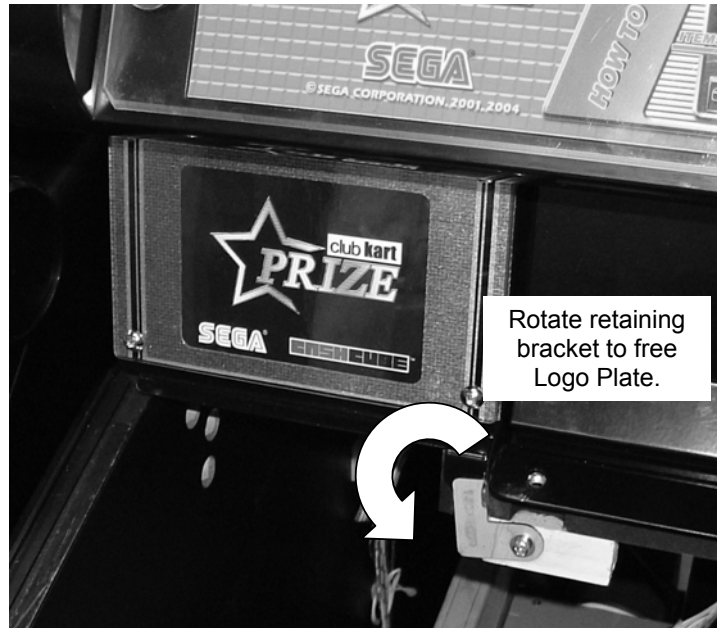
### 3.8.2. COMPOSITION OF GAME BOARD



	PART NO.	DESCRIPTION
1	840-0140D-02	ASSY CASE NAO K4C PUB EXP

### 3.9. MONITOR ADJUSTMENT

The monitor adjustment pcb is located behind the logo plate on the opposite side to the coin entry bezel.



To gain access to the pcb:

1. Open the control panel after removing the two M6 security screws and using the Control Panel key (see 3.7.1).
2. Loosen the retaining bracket held on with 1 M4 screw to the lower right of the Logo Plate. This allows the bracket to rotate enabling the Logo Plate to be removed.
3. The Monitor Adjustment pcb is located directly behind this plate.





**Note:**

Problems with the monitor that cannot be corrected by simple adjustment using the pcb are beyond the scope of this manual. Please refer to the monitor manufacturer for further information.

Pentranic Limited.  
4 Michaelson Square  
Kirkton Campus  
Livingston  
Scotland  
UK  
EH54 7DP  
[www.pentranic.com](http://www.pentranic.com)

### 3.10. TROUBLESHOOTING



- Only QUALIFIED SERVICE PERSONNEL should carry out these procedures.

If a problem occurs, first check the wiring connections.

PROBLEMS	CAUSE	COUNTERMEASURES
When the main switch is turned ON, the machine is not activated	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	AC Unit CIRCUIT PROTECTION DEVICE (i.e.; fuse) was activated due to an instantaneous overcurrent.	First, remove the cause of overcurrent and reinstate the circuit protection device to its original status. Then identify the cause of the fault on the item which caused the overcurrent & fix.
The colour image on the screen is incorrect	Incorrect monitor adjustment.	Make appropriate adjustments. Refer to section 3.9.
The on-screen image of the monitor sways and/or shrinks	The power source and voltage are not correct.	Make sure that the power supply and voltage are correct.
Sound is not emitted	Sound volume adjustment is not correct.	Adjust the volume setting located near the Test and Service switches.
	Malfunctioning BD and Amp.	Perform Sound Test to check it.
	Connector connection is incorrect	Check connector connection from Base to Speaker
The fluorescent lamp does not light up	Fluorescent lamp needs replacement	Replace the fluorescent lamp.
	The connector is disconnected	Check connector connections behind the monitor mask.
No coin recognition. Or Poor coin acceptance rate	Coin mech dirty.	Clean mech.
	Coin mech faulty.	Replace coin mech.
	Bad loom connections.	Check all harness connections for loose wires and fitments.
	Mech not programmed.	Replace mech.
	Payout Gameboard faulty.	Replace Payout Gameboard.
Machine not paying out.	No coins or coins jammed in Hopper.	Add coins or clear jam.
	Faulty Hopper or Hopper drive PCB	Replace hopper or drive PCB
	Faulty Hopper internal or external loom to motherboard or drive PCB	Check connectors.
	24V DC fuse blown on hopper drive board.	Check fuse.
	Payout Gameboard faulty.	Replace Payout Gameboard.

### **3.11. HOPPER ASSEMBLY**

The machine uses a Coin Controls 24V DC hopper assembly.

#### **3.11.1.HOPPER OPERATION**

Each disc contains a number of holes in which coins are held in short stacks. The motor drives the disc via a gear train. As the disc rotates, the coin at the bottom of one of the stacks will make contact with the ejector fingers and start to push the fingers back. Further rotation of the disc will cause the coin to start to move outwards into the exit slot. At this point the spring will be free to pull the ejector fingers forward and push the coin through the exit slot.

A LED transmitter and opto-receiver form an optical detector. The infrared light beam is routed across the exit slot via a light guide. When coin passes through the exit the light beam will be broken and coin output signal will be generated.

The hopper will automatically brake when power is interrupted, or machine placed in the off state, thus preventing overrun and excessive coin payout.

An over current detection circuit reverses the hopper momentarily in the event of a coin jam, and then attempts to continue payout. This oscillation of the disc will continue until either the coins are freed, the hopper is switched off, or the overload trip switches. Should the latter occur the hopper supply must be disconnected, the fault condition must be corrected and the trip be allowed time to cool (Approx. 30 seconds) before the hopper will start.

#### **3.11.2.HOPPER ASSEMBLY FAULT FINDING**

##### **Coins fail to unjam**

1. Ensure coin exit clear.
2. Ensure no incorrect coins or foreign objects are in the hopper.
3. Ensure no badly bent coins in hopper.

##### **Clearing a coin jam**

1. Open the Outer and Service doors to gain access to the Hopper area..
2. Detach the metalwork surrounding the hopper by removing the 2 screws and 3 nuts that hold it in place.
3. Remove all coins from bowl.
4. Remove motor assembly from base.
5. Clear the jammed coin by either:
  - a. Rotating the disc manually first anti-clockwise then clockwise to free the coin.
  - b. Push the coin back in using the edge of similar coin.

O  
R

NB. Common cause is damaged or bent coins. Do not return damaged coins to bowl.

6. Remove any debris from the disc bed assembly.
7. Clean the exit window opto with a clean dry cloth.
8. Reassemble as described earlier.
9. Refill and test the hopper.

##### **Motor fails to run.**

1. Check 24v 5A fuse on the Hopper Drive Board.
2. Hopper over-current protective device tripped (Wait 30 seconds while supply off).

##### **Over payout of coins**

1. Check opto area/coin exit for dirt.

##### **Under Payout of coins**

1. Ensure hopper contains sufficient coins.
2. Poor connection (check common return wires) to hopper.

### **Dismantling the Hopper**

1. Gently pull outwards the securing clips on the back of the base.
2. Tilt the bowl forward until it is clear of the clips.
3. Slide the bowl forward until the locating lugs, at the front of the bowl, are clear of the slots in the base.
4. Lift the motor assembly out of the base.
5. Disconnect the cable from the motor assembly.

### **Hopper Assembly**

1. Connect the cable to the motor assembly, ensuring that the 4-pin connector is the correct way round.
2. Lower the motor assembly into the base, ensuring that the coin exit is in the rear exit position. (Towards Coin exit position).
3. Locate the lugs, on the front of the bowl, into the slots at the front of the base.
4. Gently press down until the securing clips, on the base, click into the slots in the bowl.

### **Routine cleaning:**

All accessible parts of the coin route should be cleaned periodically using a mild detergent on a damp cloth. No spray solvents should be used. Particular attention should be paid to the opto sensor at the coin exit to remove any build up of dirt.

### 3.12. COIN MECHANISMS

The machine uses a Coin Controls SR5 Coin Mechanism.

#### 3.12.1.COIN MECHANISM OPERATION (FOR UK MACHINES).

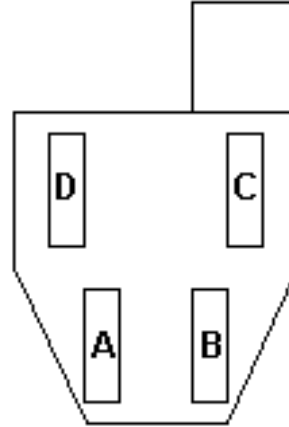
COINS ACCEPTED: 5P, 10P, 20P, 50P, £1, £2

##### COIN ROUTING

The coin mech automatically routes all coins other than £1 coins to the cash box (exit C). £1 coins are routed to the hopper (exit A) until the float is achieved, afterwards they are diverted to the cash box (exit B). The float is maintained by software counting the number of £1 coins entered.

The coin mech exits are as follows:

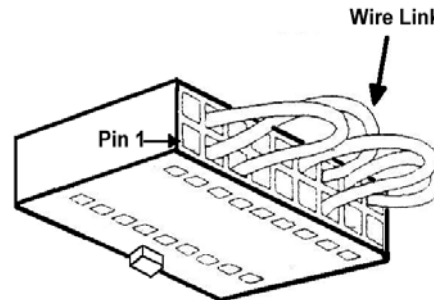
- A Hopper
- B Cash Box
- C Cash Box
- D Not Used.



SR5 – COIN CONTROL  
ROUTING PLUG: 18 WAY  
Pt No PUB-64101UK  
5-7,8-15,1→13, 10→13, 12→13, 16→13, 17→13,  
18→13

The diode direction is shown as '→'.

*Note: Cash Payout - £1 Hopper only fitted.*



#### 3.12.2.COIN MECHANISM FAULT FINDING

There is a green diagnostic LED used to provide a visual indication of the mechanisms current operation and error condition.

1. LED ON = Power ON
2. LED OFF = Power OFF
3. LED will flash OFF once when Coins or Tokens are accepted or if reject Lever is pressed.
4. LED will flash OFF twice if Coin or Token is unrecognised.
5. LED will flash OFF three times if validator or machine has inhibited Coin or Token.
6. LED will flash continuously when in Token Teaching Mode.

For further information on the operation of the coin mechanism, please refer to the Money Controls website:  
[www.moneycontrols.com/support/](http://www.moneycontrols.com/support/)

### 3.13. FUSES



- Never touch places other than those specified. Touching places other than those specified can cause electric shock and short circuit. Disconnect the machine from the supply before attempting the replacement of any fuse.



- Only QUALIFIED SERVICE PERSONNEL should replace FUSES.
- Only replace fuses with ones of the same value and type.

There are a number of fuses used on this machine to protect the user and the machine from damage. Only replace the fuse once you have removed the cause of its failure. Detailed below is a list of the fuses used, their location and if relevant PCB reference:

PART NUMBER	LOCATION	TYPE & DETAILS	QTY
514-5078-3150	STEREO AMP REF. F1, F2	5x20mm CERAMIC SB 3.15A	2
514-5078-4000	SWITCH REG REF. F1	5x20mm CERAMIC SB 4A	1
514-5078-3150	IEC INLET REF. F1	5x20mm CERAMIC SB 3.15A	1
514-5078-6300	CONN. BD. REF. F1	5x20mm CERAMIC SB 6.3A	1

There are also fuses located on the Monitor PCB. Refer to the monitor manufacturer for further information.

## 4. REFILL MODE

### 4.1. WHAT IS REFILL MODE?

The REFILL MODE is used to refill the Hopper with coins or to pay out coins from the Hopper. To enter REFILL MODE, hold the Key Switch in the "ON" position for around one second. Setting the Key Switch back to "OFF" will then exit REFILL MODE. Except during game play or in Test Mode, REFILL MODE can be accessed at any time. However, it is possible to enter REFILL MODE during game play if a "HOPPER EMPTY" error occurs.

There are two different submodes used in REFILL MODE, depending on the status of the machine doors. When the doors are closed, "LANDLORD REFILL" is used, and when the front door or cash door are open, "COLLECTOR REFILL" is used.

### 4.2. LANDLORD REFILL

During LANDLORD REFILL, a screen like the one below will be displayed.



LANDLORD REFILL Screen

Display	Meaning
LAST WIN	The number of wins in the last game.
FLOAT	The number of coins in the Hopper. (current number / maximum number) Any coins inserted beyond the maximum number will be diverted to the Cash Box.

During LANDLORD REFILL, the Hopper coin stock can be replenished by inserting coins into the coin slot. It is possible to fill the Hopper up to the FLOAT maximum value setting (shown as 70 in the above table). LAST WIN and FLOAT values will not be displayed under the default settings. To display these values, change the display option in the MEMORY SETTING section of the HOPPER BOARD TEST Menu.

### 4.3. COLLECTOR REFILL

During COLLECTOR REFILL, a Screen like the one below will be displayed.



COLLECTOR REFILL Screen

Display	Meaning
IN	Total number of coins inserted.
OUT	Total number of coins paid out.
REFILL	Total number of coins refilled.
LAST WIN	Same as LAST WIN in LANDLORD.
FLOAT	Same as FLOAT in LANDLORD.
DUMP	Number of coins paid out with Dump Switch.

In COLLECTOR REFILL mode, the Hopper coin stock can be replenished just like in LANDLORD, only in COLLECTOR REFILL mode, coins can be added directly into the Hopper.

After refilling coins directly into the Hopper, be sure to press the Top Up Switch and set the FLOAT current coin number to the maximum coin number. Neglecting to set the current coin number could result in a coin overflow.

Also note that pressing the Dump Switch will release the entire Hopper coin stock.



#### 4.4. DEALING WITH A HOPPER EMPTY ERROR

Following is the procedure for dealing with a HOPPER EMPTY/JAM error:

1. Get a WIN in the game.
2. Payout will commence.
3. The error occurs (as shown in the figure below).
4. Set the Key Switch to ON and enter REFILL MODE.
5. Refill the coin stock.
6. Setting the Key Switch to OFF will exit REFILL MODE and return to payout.
7. End the game.



HOPPER EMPTY / JAM Error Occurrence 1



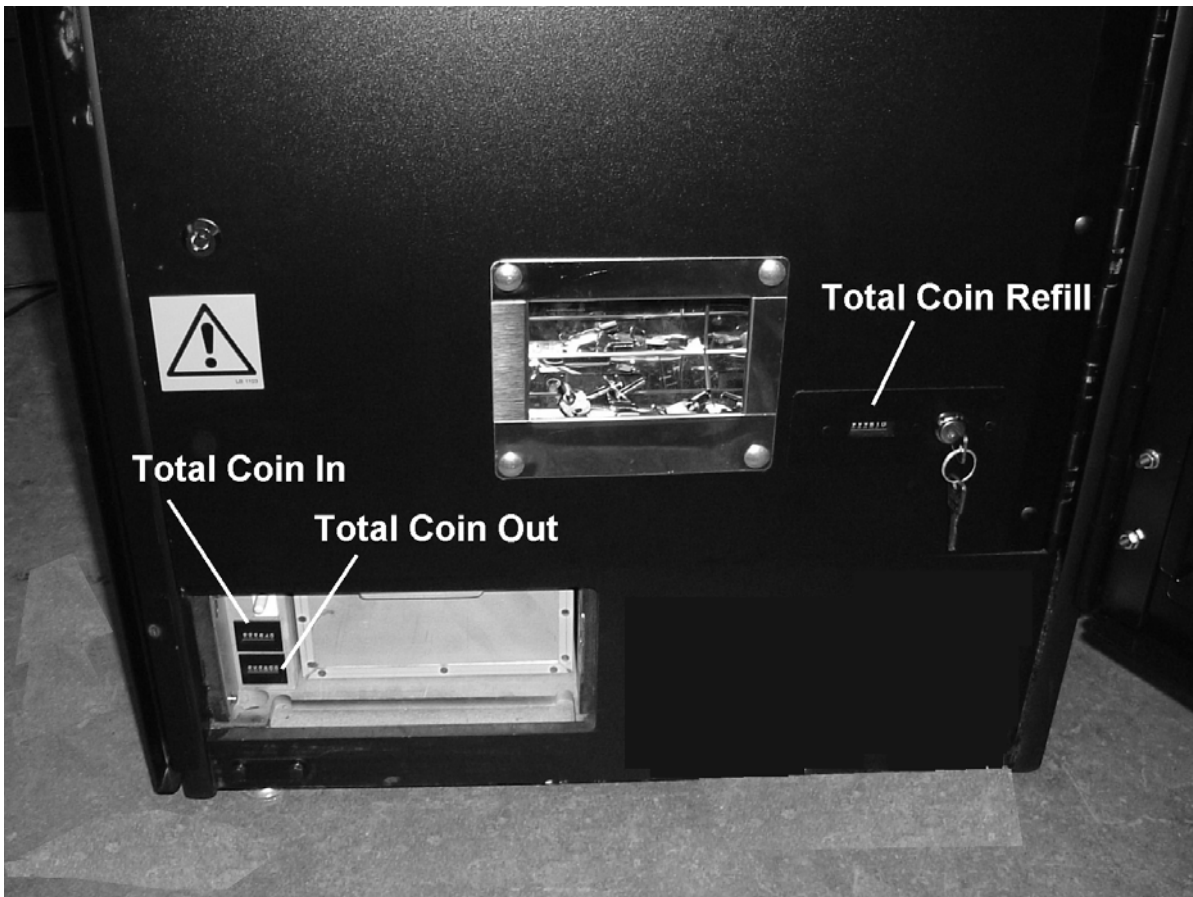
HOPPER EMPTY / JAM Error Occurrence 2

#### 4.5. METERS

The machine is fitted with three mechanical meters that record the following information:

- Total Coin In  
Total of all the coins fed in through the coin mechanism.
- Total Coin Out  
Total of all the coins paid out from the hopper.
- Total Coin Refill  
Total of all the coins refilled through the coin mechanism

*Note: These meters cannot be reset and therefore record the totals since the machine was delivered.*



## 5. DATAPORT

### 5.1. WHAT IS THE DATAPORT?

The DATAPORT is a data organization device used to aid U.K. AWP/SWP income collection. The DATAPORT, when connected to the game unit, can exchange information with the HOPPER BOARD machine regarding settings and states, coin IN/OUT quantities, etc. via serial data transfer.

The DATAPORT and HOPPER BOARD share information, and typically when there is no response from the DATAPORT an error will occur, but settings can be changed to prevent this from happening.

This change is made in the DATAPORT SETTING of the HOPPER BOARD TEST Menu (see section **Error! Reference source not found.**). The Menu item, however, is not normally displayed among the other setting selection items. Displaying the Menu item requires a special dongle, explained in the next section (SETTING PROCEDURE).



DATAPORT SETTING Menu.

### 5.2. SETTING PROCEDURE

The following procedure explains how to use a dongle to access the DATAPORT SETTING Menu and change the aforementioned error display setting:

1. Make sure power is off and connect dongle.
2. Turn on power.
3. Enter HOPPER BOARD TEST Menu.
4. Change setting in DATAPORT SETTING.
5. Turn off power.
6. Disconnect dongle.
7. Turn on power.

### 5.3. DATAPORT SETTING

In the DATAPORT SETTING Menu, two setting values can be changed. The OPTION setting determines whether or not the HOPPER BOARD watches over communications from the DATAPORT, and the CONDITION setting controls whether the OPTION setting is active perpetually or temporarily.

Menu Item	Content	Setting Type
OPTION	PROTOCOL setting	PROTOCOL (watches over DATAPORT) / NON-PROT (does not watch over DATAPORT)
CONDITION	OPTION setting type	FOREVER (perpetual) / TEMP (temporary)

Setting the CONDITION to TEMP will not eliminate the DATAPORT SETTING Menu item, however setting CONDITION to FOREVER will render it hidden. The Menu item will remain hidden until connecting the dongle as mentioned above.



DATAPORT SETTING Menu

Setting CONDITION to TEMP will result in the following screen (blue window) coming up whenever restarting an application. Turning the Key Switch ON and OFF again will allow the application to startup.



Startup Screen with TEMP Setting

#### 5.4. ERROR

With CONDITION set to PROTOCOL, an error (#202) will result when there is no response from the DATAPORT. This error will be cancelled when there is a normal response from the DATAPORT.



Error #202 Screen

## 6. PERIODIC CHECK AND INSPECTION

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



- Be sure to check annually to see if the power cords are damaged, the plug is securely inserted and that there is no dust in the interior of the machine or between the socket and the power cord. Using the product in an unclean condition may cause a fire or electric shock.

DESCRIPTION	WHAT TO CHECK	INTERVAL
CABINET	Check Adjusters' contact with surface	Daily
MONITOR	Cleaning CRT face	Weekly
	Check settings	Monthly
GAME BD	Setting check	Monthly
CONTROL PANEL	Input test	Monthly
Speaker, sound	Sound test, check volume adjustment	Monthly
COIN SELECTOR	Coin insertion test	Monthly
	Cleaning	Tri-Monthly
POWER SUPPLY CORD	Check condition	Annually
INTERIOR	Clean ( <b>Do Not</b> use water jet)	Annually
CABINET SURFACE	Clean ( <b>Do Not</b> use water jet)	As required

### 6.1. CLEANING THE CABINET SURFACES

When the cabinet surfaces are badly soiled, remove stains with a soft cloth dipped in water or chemical detergent (diluted with water) and squeezed dry. To avoid damaging surface finish, do not use such solvents as thinner, benzene, etc. (other than ethyl alcohol), abrasives or bleaching agents. **DO NOT USE A WATER JET.**

## 7. CONTENTS OF GAME

### 7.1. HOW TO PLAY

#### 7.1.1. OBJECTIVE



Each round sets up a free kick, taken by the player. Hit the targets and score goals in increasingly difficult rounds to win increasingly big cash prizes. You have one shot per round. If you fail to score, the game ends and you lose everything.

#### Tutorial

After you insert money, hit [start] to begin. A tutorial will play. You can skip this by pushing [start].

#### 7.1.2. STAGE SELECT



Each round, you select from three randomly chosen stages.

Roll the trackball and hit [start] to select.

The prize for scoring is displayed on the right.

There are ten rounds. Complete them all to win the £40 Jackpot.

#### 7.1.3. CONTROL PANEL



- View Change - See the shot from an alternate angle.
- Start - Use to select or confirm an action.
- Chance - Activate the Bonus Chance.
- Trackball - Use to aim and kick the ball.



## 7.1.4. GAME SCREEN



Once you have selected a stage, you are taken to the game screen.

Use the track ball to aim and shoot.

### 7.1.4.1.STEP ONE

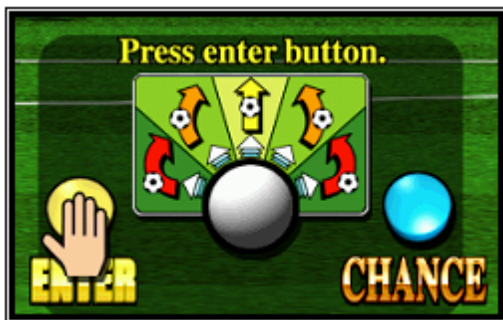


Aim the shot.

Gravity and curve will curl the ball away from the direction the arrow is pointing.

Hit [Start] when you are happy with the aim.

### 7.1.4.2.STEP TWO



Spin the trackball to kick.

- Spinning faster will make the ball fly higher and faster.
- Faster shots may go over the bar.
- Spinning at an angle will make the ball curve, but go slower.



Slower shots are easier for the keeper to save.



### 7.1.5. BONUS MONEY



Hit the floating target coins with the ball to get bonus money.

Avoid the skull coin. It drains 50p from your bonus money.

### 7.1.6. CONTINUE, COLLECT OR GAME OVER



**If you score**

You can choose either to stop and collect your winnings so far (if you have won enough), or continue on to the next stage. The minimum payout is £1. Only complete pound coins will be paid out.



**If you miss**

You can insert another coin and try again. You can only do this once!

### 7.1.7. SECOND SHOT



Sometimes, if you miss, you will be given an extra shot for free!

### 7.1.8. CHANCE



During the game, you get one Bonus Chance, activated by pressing the chance button. This will let you choose a bonus for the current shot.

Activate it by pressing [Chance]



#### **Double Coins**

Doubles the value of any target coins you hit.

#### **Insurance**

Gives you a second chance if you miss the goal.

#### **Small Defenders**

Makes the defenders easier to get around

## 8. EXPLANATION OF TEST AND DATA DISPLAY

Use the switches on the VTS to enter the TEST MODE. This will allow you to carry out post installation and periodic checks and adjustments. The following section details the function of each of the tests:

ITEM	DESCRIPTION	INTERVAL
INSTALLATION OF THE MACHINE	When the machine is installed perform the following checks: <ul style="list-style-type: none"> <li>• Check to see that each setting is as per the standard settings input at the time of shipment.</li> <li>• In the INPUT TEST mode, check each switch and V.R.</li> <li>• In the OUTPUT TEST mode, check each of the lamps.</li> <li>• In the MEMORY TEST mode check all of the IC's on the IC BD.</li> </ul>	Monthly
MEMORY	<ul style="list-style-type: none"> <li>• On the TEST MENU screen choosing the MEMORY TEST allows self-test to be performed. In this test RAM &amp; ROM are tested.</li> </ul>	Monthly
PERIODIC CHECKS	Periodically perform the following <ul style="list-style-type: none"> <li>• MEMORY TEST.</li> <li>• Ascertain each setting.</li> <li>• In the INPUT TEST mode, test the control devices.</li> <li>• In the OUTPUT TEST mode, check each of the lamps.</li> </ul>	Monthly
CONTROL SYSTEM	<ul style="list-style-type: none"> <li>• In the INPUT TEST mode, check each switch and V.R.</li> <li>• Adjust or replace each switch and V.R.</li> </ul>	Monthly
MONITOR	<ul style="list-style-type: none"> <li>• In the C.R.T. TEST mode, check to ensure the monitor is adjusted correctly</li> <li>• Clean screen (switch off machine and remove the plug)</li> </ul>	Monthly Weekly
IC BOARD	MEMORY TEST <ul style="list-style-type: none"> <li>• In the SOUND TEST mode, check the sound related ROMs</li> </ul>	Monthly
DATA CHECK	<ul style="list-style-type: none"> <li>• Check such data as held in the bookkeeping screens, relating to number and length of plays</li> </ul>	Monthly
EXTERIOR MAINTENANCE	<ul style="list-style-type: none"> <li>• Clean surfaces</li> <li>• Lubricate seat sliders</li> </ul>	Monthly
COIN MECHANISM	<ul style="list-style-type: none"> <li>• Check switch operation (if fitted)</li> </ul>	Monthly

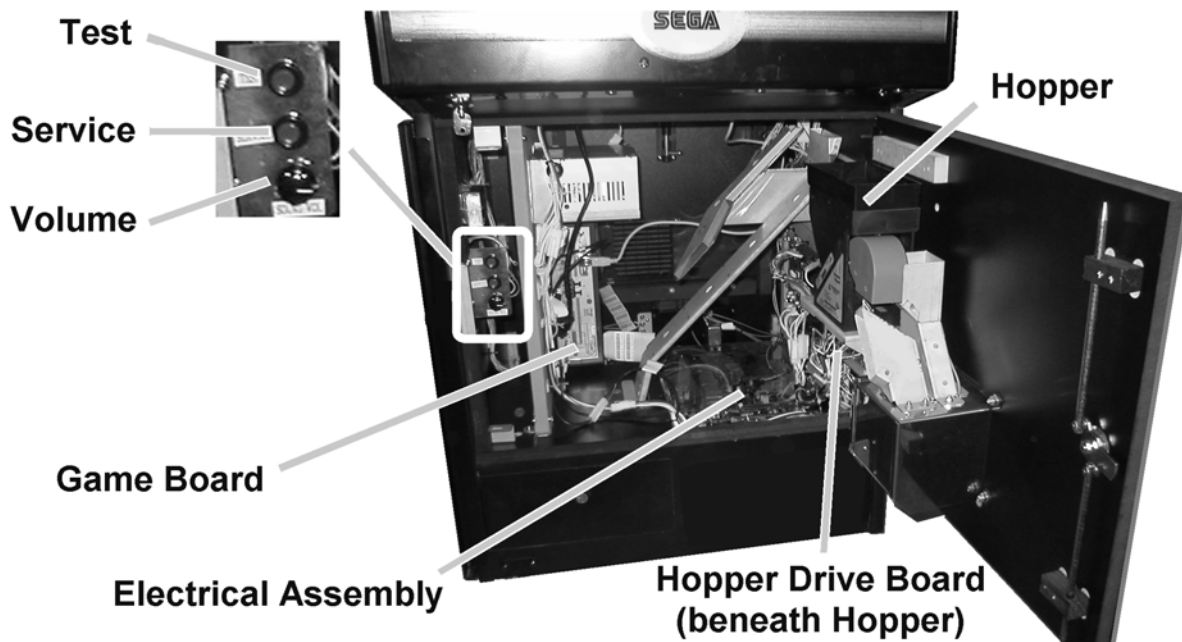
## 8.1. SYSTEM TEST MODE



- Setting changes made in SYSTEM ASSIGNMENTS, COIN ASSIGNMENTS and GAME TEST MODE are stored only when the TEST mode is exited properly. If the power is turned off before exiting, and changes made will be ineffectual.
- Do not activate any system test mode while the system is reading the GD-ROM (if fitted), otherwise error messages may appear.
- Only QUALIFIED SERVICE PERSONNEL should carry out these procedures.

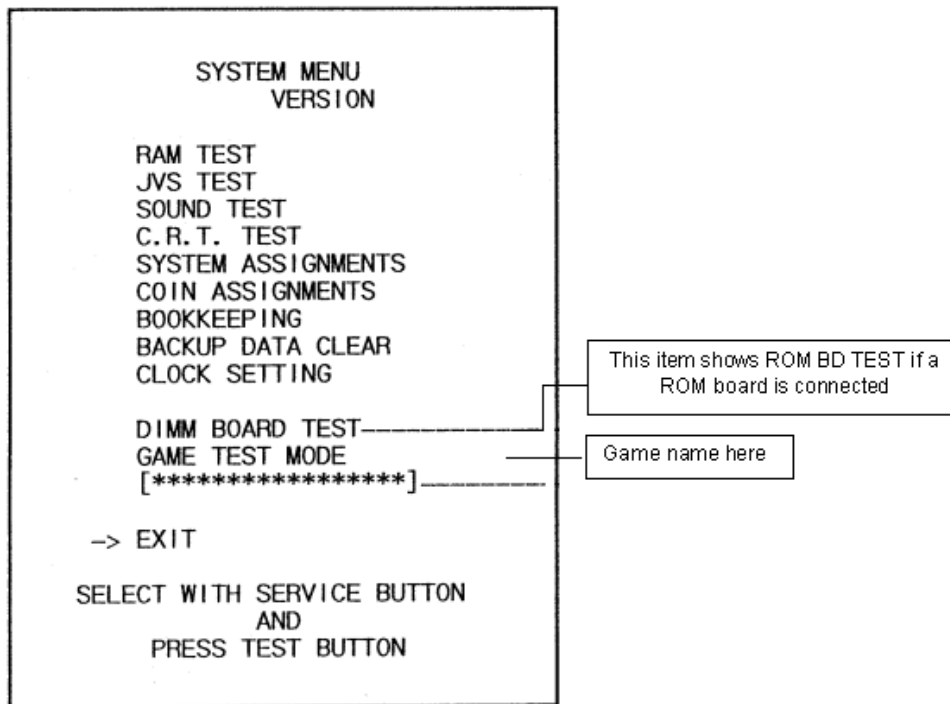
The SYSTEM TEST MODE allows the IC Board to be checked for correct operation, monitor colour to be adjusted, and COIN and GAME ASSIGNMENTS to be adjusted.

The Test and Service button are located on the left-hand side of the cabinet behind the service door.



To enter the Test mode:

1. After turning power ON, press the TEST Button to display the following menu:

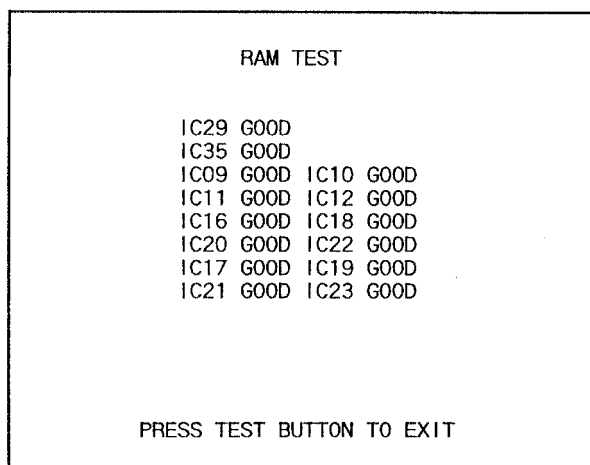


2. Press the SERVICE Button to move the arrow to the desired item, and press TEST to select.
3. Select GAME TEST MODE to display the test menu for that specific game. For further information about GAME TEST MODE, refer to the service manual for the game.
4. Upon finishing the test, select EXIT to return to the game.

### 8.1.1. RAM TEST

This screen carries out a test on the RAM on the NAOMI Main Board. The test begins immediately that the screen appears.

TESTING NOW is displayed while the system is testing.



GOOD should appear next to each IC number if the RAM is satisfactory. BAD will appear next to abnormal IC's. The test takes about two and a half minutes to complete testing on all IC's.

After testing, press TEST to return to the system menu screen.

### 8.1.2. JVS TEST

Use this test to check specifications of the I/O Board connected to the NAOMI Main Board, while INPUT TEST can be performed on the input switches. First, I/O Board specifications are displayed.

```
JVS TEST
INPUT TEST
NEXT NODE
-> EXIT
NODE      1/1
NAME      SEGA ENTERPRISES, LTD.
          1/0 838-18683
          VER 1.04
          98/12
CMD VER   1.1
JVS VER   2.0
COM VER   1.0
SWITCH    2PLAYER(S) 11BITS
COIN      2SLOT
ANALOG    8CH
ROTARY    0CH
KEYCODE   0
SCREEN    X:0 Y:0 CH:0
CARD      0SLOT
HOPPER OUT 0CH
DRIVER OUT 8SLOT
ANALOG OUT 0CH
CHARACTER CHARA:0 LINE:0
BACKUP    0

SELECT WITH SERVICE BUTTON
          AND
PRESS TEST BUTTON
```

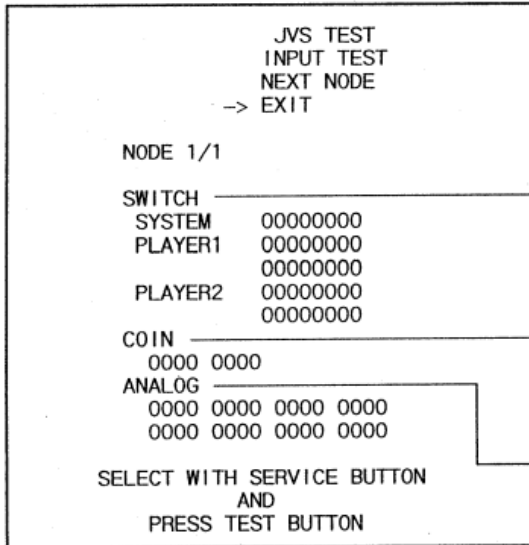
Select from the following:

INPUT TEST: Proceed to the INPUT TEST of the I/O BOARD displayed.

NEXT NODE: In the case of more than two I/O Boards being connected, this proceeds to the next I/O Board.

EXIT: Returns to the Menu Mode.

### 8.1.3. INPUT TEST SCREEN



When the control panel switches, etc., are actuated the display changes from 0 to 1.

If the Coin SW is actuated, the counter starts. When TEST mode is exited the display returns to 0000.

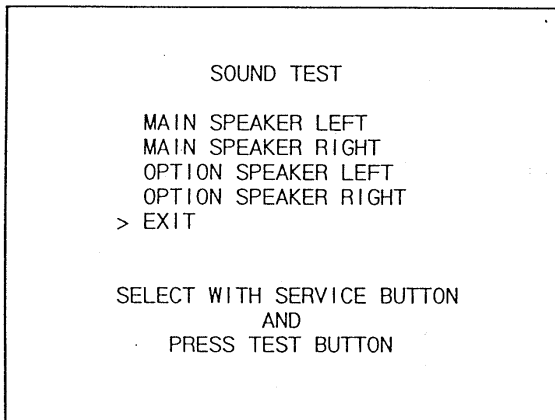
Analogue values are displayed between 0000 and FF00.

### 8.1.4. SOUND TEST

Select the sound test to check the status of the amplifiers, sound boards and speakers.

Press the SERVICE button or view change button to move the arrow to the desired test item.

Press TEST button to output the sound.

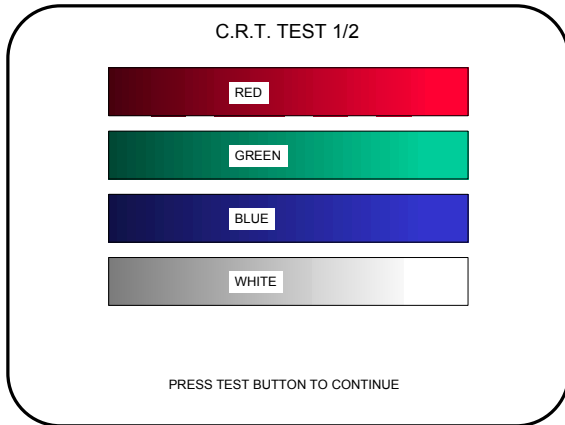


- Select the sound source with SERVICE.
- On pressing TEST, the test sound is emitted from the selected source.

Front speakers are located on the Control Panel.  
Rear speakers are located in the seat back.

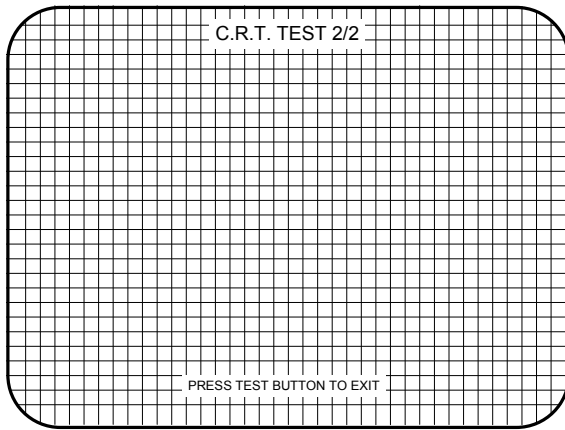
Select EXIT to return to MENU screen.

### 8.1.5. CRT TEST



Selecting CRT test allows the projector adjustment to be checked for colour and distortion.

Press the test or start button to have the second CRT test screen appear.





## 8.1.6. SYSTEM ASSIGNMENTS



- If the settings of CABINET and MONITOR TYPE are not suitable for the connected game, an ERROR message is displayed when the game is turned on and TEST mode has finished, and the game cannot be played. Refer to the game's service manual for the correct settings, or enter settings corresponding to the cabinet and control panel specifications.
- Only QUALIFIED SERVICE PERSONNEL should carry out these procedures.

This mode configures the cabinet and board settings. For settings relating to game difficulty, etc., refer to the dedicated service manual for the game software.

1. Select the setting to be changed using SERVICE and TEST.
2. Select EXIT after settings have been performed.

```
SYSTEM ASSIGNMENTS

CABINET TYPE      2PLAYER(S)
ADVERTISE SOUND  ON
MONITOR TYPE     HORIZONTAL
SERVICE TYPE    COMMON
-> EXIT

SELECT WITH SERVICE BUTTON
      AND
PRESS TEST BUTTON
```

- CABINET TYPE [1PLAYER(S), 2PLAYER(S), 3PLAYER(S), 4PLAYER(S)]  
Sets the number of players between one and four.
- ADVERTISE SOUND (ON, OFF)  
Sets whether ADVERTISE sound is emitted or not.
- MONITOR TYPE (HORIZONTAL, VERTICAL)  
Sets the on-screen display according to the orientation of the monitor.
- SERVICE TYPE (COMMON, INDIVIDUAL)  
If several SERVICE buttons exist, this setting decides the function.  
COMMON: Service credit is obtained for all players when any SERVICE button is pressed.  
INDIVIDUAL: Service credit is obtained for the player corresponding to the SERVICE button used.

## 8.1.7. COIN ASSIGNMENTS

```
COIN ASSIGNMENTS
COIN CHUTE TYPE      COMMON
COIN/CREDIT SETTING #1
COIN CHUTE #1
    1COIN 1CREDIT

COIN CHUTE #2
    1COIN 1CREDIT

MANUAL SETTING
SEQUENCE SETTING
> EXIT

SELECT WITH SERVICE BUTTON
    AND
PRESS TEST BUTTON
```

Ensure machine is set to 1 Coin 1 Credit.  
Go to Game Test menu for further coin test settings.

### 8.1.8. BOOKKEEPING

```
BOOKKEEPING PAGE#1

TOTAL TIME      55H27M13S
COIN1           16 SERVICE1      5
COIN2           4 SERVICE2      0
CREDIT          10

TOTAL COIN      20
COIN CREDIT     10
SERVICE CREDIT 5
TOTAL CREDIT    15

PRESS SERVICE BUTTON TO ANOTHER PAGE
PRESS TEST BUTTON TO EXIT
```

This mode consists of 2 pages that allow the data relating to credit and game play time to be checked. In page 1 mode press SERVICE to proceed to page 2, in page 2 mode press TEST to return to the test menu.

- Total time is displayed as XXH XXM XXS and no date will be displayed after exceeding 24 hours.
- The displays for number of coin and number of service vary depending on the CABINET TYPE set in SYSTEM ASSIGNMENTS. Number of credit displays 1 if COIN CHUTE TYPE is set to COMMON in COIN ASSIGNMENTS. If COIN CHUTE TYPE is set to INDIVIDUAL, the applicable number in CABINET TYPE setting will be displayed.

```
BOOKKEEPING 2/2

P1 SEQ 1      0
P1 SEQ 2      0
P1 SEQ 3      0
P1 SEQ 4      0
P1 SEQ 5      0
P1 SEQ 6      0
P1 SEQ 7      0
P1 SEQ 8      0
```

- On the second screen, each sequence displays the frequency of functioning.

### 8.1.9. BACKUP DATA CLEAR

```
BACKUP DATA CLEAR

YES (CLEAR)
> NO (CANCEL)

SELECT WITH SERVICE BUTTON
AND
PRESS TEST BUTTON
```

Clears the contents of bookkeeping. When clearing bring the arrow to "YES (CLEAR)" and press the test button. When the data has been cleared "COMPLETED" will be displayed. Bring the arrow to "NO (CANCEL)" and press the test button to return to the menu mode.

Note that this does not clear the contents of BOOKKEEPING in GAME TEST MODE. For this, use the BACKUP DATA CLEAR in GAME TEST MODE (see dedicated service manual for the game software).

### 8.1.10.CLOCK SETTING

YEAR, MONTH, DAY, HOUR and MINUTE are changed in this mode. Select the desired item with SERVICE button and press TEST to increase the value. Select EXIT to return to MENU mode.

```
CLOCK SETTING

2000  7/ 7  7: 7  7  FRI

YEAR
MONTH
DAY
HOUR
MINUTE
SECOND

-> EXIT
CANCEL
2000  7/ 7  7: 7  ** FRI

SELECT WITH SERVICE BUTTON
AND
PRESS TEST BUTTON
```

### 8.1.11.DIMM BOARD TEST

This mode appears only if a DIMM Board is connected to the NAOMI. If not, ROM BOARD TEST will appear.

In this test, the DIMM memory and IC's are checked. If GOOD is displayed, it is satisfactory. Press TEST to exit.

```
DIMM BOARD TEST

PROGRAM VER : 1.02
DIMM SLOT 0 : GOOD
DIMM SLOT 1 : GOOD
DIMM STATUS : GOOD

CHECKING DIMM BD
DIMM0 - GOOD
DIMM1 - GOOD
IC34,35S - GOOD
IC10,11S - GOOD
GD DRIVE - GOOD
--- COMPLETE ---

PRESS TEST BUTTON TO EXIT
```

## 8.2. GAME TEST DESCRIPTION MODE

Test menu Flow is: System test → Game test → Hopper Board test

Select GAME TEST MODE from the System Menu screen to display the Game Test Menu screen as shown below. Use the SERVICE Button to move the cursor to the desired test item. Press the TEST Button to enter the selected item.

The default settings are shown below. Pressing the TEST Button will enter the selected item, displaying the possible setting choices. Select DEFAULT SETTING and press the TEST Button to return all items to their default settings.

After making changes, be sure to select EXIT and press the TEST Button in order to enable the new settings.

### 8.2.1. GAME TEST MENU SCREEN

```
-----  
KICK' 4' CASH TEST MENU  
INPUT TEST  
OUTPUT TEST  
GAME ASSIGNMENTS  
DIFFICULTY SETTING  
PAYOUT SETTING  
CREDIT SETTING  
HOPPER BOARD TEST  
BOOKKEEPING  
BACKUP DATA CLEAR  
-> EXIT  
  
NOW DATE [****/**/** (***):**:**]**  
  
SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON  
-----
```

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen. (Current Date and Time recorded within backup data will be shown).

### 8.2.2. INPUT TEST SCREEN

Used to check current status for input functions used within the game. Please check for input functions regularly by this command.

```
-----  
INPUT TEST  
  
DECIDE/START [OFF] (ON)  
VIEW [OFF] (ON)  
CHANCE [OFF] (ON)  
TRACKBALL Y [0000H](0000HからFFFFHまで)  
TRACKBALL X [0000H](0000HからFFFFHまで)  
  
TEST [OFF] (ON)  
SERVICE [OFF] (ON)  
  
PRESS TEST AND SERVICE BUTTON TO EXIT  
-----
```

1. When pressing each input buttons, screen should reflect OFF to ON. Also when spinning the trackball, screen value should alter between 000H to FFFH.

### 8.2.3. OUTPUT TEST SCREEN

Used to check lamp lighting.

```
-----  
                OUTPUT TEST  
  
DECIDE/START  [OFF] (ON)  
VIEW          [OFF] (ON)  
CHANCE        [OFF] (ON)  
  
-> EXIT  
  
                SELECT WITH SERVICE BUTTON  
                AND PRESS TEST BUTTON  
-----
```

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

### 8.2.4. GAME ASSIGNMENTS SCREEN

Used to do setting of uniform colour, and resetting of ranking.

```
-----  
                GAME ASSIGN SETTING  
  
KICKER UNIFORM NO. [04] (1,2,...,24)  
DEFENSE UNIFORM NO. [05] (1,2,...,24)  
  
RANKING INITIAL MAX [15] (03,04,...,40)  
RANKING INITIAL MIN [05] (03,04,...,40)  
  
->  DEFAULT SETTING  
    EXIT  
  
                SELECT WITH SERVICE BUTTON  
                AND PRESS TEST BUTTON  
-----
```

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

KICKER UNIFORM NO.: To set a uniform colour for offensive characters. 01 to 24 settings(initial setting 04)

DEFENCE UNIFORM NO.: To set a uniform colour for defensive characters. 01 to 24 settings(initial setting 05)

RANKING INITIAL MAX: To set a default max value for ranking 1 when power on. 03 to 40 settings(initial setting 15)

RANKING INITIAL MIN: To set a default min value for ranking 1 when power on. 03 to 40 settings(initial setting 5)

DEFAULT SETTING: Return to default value settings.

## 8.2.5. DIFFICULTY SETTING SCREEN

To set difficulty level, and payout amount when round clear.

---

DIFFICULTY SETTING

DIFFICULTY TABLE NO. [03] (1,2,3,4,5)  
GOAL BONUS TABLE NO. [06] (1,2,3,4,5,6)

ROUND10	40.00
ROUND 9	6.00
ROUND 8	5.00
ROUND 7	4.00
ROUND 6	3.00
ROUND 5	1.50
ROUND 4	1.00
ROUND 3	0.50
ROUND 2	0.20
ROUND 1	0.00

FREEPLAY DIFFICULTY [ 1] (1,2,....,99,100)

DEFAULT SETTING  
-> EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

DIFFICULTY TABLE NO.: Set difficulty level. Setting between 1 to 5 in ascending order(initial setting 3)

GOAL BONUS TABLE NO.: Set goal bonus when stage clear. Setting between 1 to 10 in descending order(initial setting 6)

FREEPLAY DIFFICULTY : Set a fixed difficulty level during freeplay mode. Setting between 1 to 100 in ascending order.

DEFAULT SETTING: Return to default value settings.

## 8.2.6. CREDIT SETTING SCREEN

Used to set credit related settings (min bet, max bet attendant pay).

### POUND setting

---

FREE PLAY [ OFF ]  
BET [ 1.00 ]

DEFAULT SETTING  
-> EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

### DOLLAR, EURO, TOKEN – ANY CASH Setting

---

FREE PLAY [ OFF ]  
BET [ 1.00 ]  
MAX PAY [ 100 ]

DEFAULT SETTING  
-> EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

### TOKEN Setting

---

FREE PLAY [ OFF ]  
BET BUTTON [ USED ]  
BET [ 1 ]  
MIN BET [ 1 ]  
MAX BET [ 100 ]  
ADD BET [ 1 ]  
AUTOMATIC PAYOUT [ OFF ]  
MAX PAY [ 19999 ]  
MAX CREDIT [ 19999 ]  
HOPPER SIZE [ 399 ]

DEFAULT SETTING  
-> EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

FREE PLAY: Set FREEPLAY mode, ON enables to play without coin in.  
BET BUTTON: Enable or Disable usage of BET BUTTON, Not shown when set to POUND,  
DOLLAR, EURO, ANY CASH modes.



BET: Bets required for game start( when BET BUTTON is set on NOT USED)  
 MIN BET: Min bets required for game start( when BET BUTTON is set on USED)  
 MAX BET: Max bets required for game start( when BET BUTTON is set on USED)  
 ADD BET: Bets required for extra bets( when BET BUTTON is set on USED)  
 AUTOMATIC PAYOUT: Setting of credit win going to payout, or credit.  
 MAX PAY: Max payout qty.  
 MAX CREDIT: Max credit qty.  
 HOPPER SIZE: Setting qty for attendant pay without hopper activation.  
 DEFAULT SETTING: Return to default value settings.

### 8.2.7. HOPPER BOARD TEST MENU SCREEN

Setting for hopper.

-----  
 HOPPER BOARD TEST

INPUT TEST  
 OUTPUT TEST  
 COIN TEST  
 TROUBLE LOG  
 MEMORY SETTING

EXIT

SELECT WITH SERVICE BUTTON  
 AND PRESS TEST BUTTON  
 -----

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

INPUT TEST: Activate INPUT TEST  
 OUTPUT TEST: Activate OUTPUT TEST  
 COIN TEST: Activate hopper and coin test.  
 MEMORY SETTING: Activate MEMORY SETTING.

Enter below screen by selecting INPUT TEST, to check status of each switches.

POUND, DOLLAR, EURO, ANY CASH Settings

-----  
 INPUT TEST

```

RESET KEY SW      [ OFF ]( ON )
COIN ACCEPT #1   [ OFF ]( ON )
COIN ACCEPT #2   [ OFF ]( ON )
COIN ACCEPT #3   [ OFF ]( ON )
COIN ACCEPT #4   [ OFF ]( ON )
COIN ACCEPT #5   [ OFF ]( ON )
COIN ACCEPT #6   [ ON ]( OFF )
TOKEN IN SW      [ OFF ]( ON )
HOPPER COUNT SW  [ ON ]( OFF )
HOPPER TOP UP SW [ OFF ]( ON )
DUMP SW          [ OFF ]( ON )
FRONT DOOR SW    [ CLOSE ]( OPEN )
BACK DOOR SW     [ CLOSE ]( OPEN )
CASH DOOR SW     [ CLOSE ]( OPEN )
  
```

-----  
 PRESS TEST AND SERVICE BUTTON TO EXIT  
 -----

TOKEN IN SW: Coin mech switch signal, not shown when POUND setting.

## TOKEN Setting

---

### INPUT TEST

RESET KEY SW [ OFF ](ON)  
PAYOUT SW [ OFF ](ON)  
COIN ACCEPT #1 [ OFF ](ON)  
COIN ACCEPT #2 [ OFF ](ON)  
COIN ACCEPT #3 [ OFF ](ON)  
COIN ACCEPT #4 [ OFF ](ON)  
COIN ACCEPT #5 [ OFF ](ON)  
COIN ACCEPT #6 [ ON ](OFF)  
TOKEN IN SW [ OFF ](ON)  
HOPPER COUNT SW [ ON ](OFF)  
HOPPER TOP UP SW [ OFF ](ON)  
DUMP SW [ OFF ](ON)  
FRONT DOOR SW [ CLOSE ](OPEN)  
BACK DOOR SW [ CLOSE ](OPEN)  
CASH DOOR SW [ CLOSE ](OPEN)

PRESS TEST AND SERVICE BUTTON TO EXIT

---

1. Check for display switching from OFF to ON, when pressing a switch.
2. Return to HOPPER BOARD TEST menu screen by pressing TEST and SERVICE buttons together.

Enter below screen by selecting OUTPUT TEST, to check status of each switches.

---

### OUTPUT TEST

COIN INHIBIT [ INHIBIT ](INHIBIT,ACCEPT)  
DIVIDER [ HOPPER ](CASHBOX,HOPPER)  
PAYOUT SW LAMP [ OFF ](ON)  
COIN IN LAMP [ OFF ](ON)  
REFILL METER LAMP [ OFF ](ON)

->EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

Enter below screen by selecting COIN TEST, to check status of a hopper.

### POUND setting

---

COIN TEST

- HOPPER -  
HOPPER OUT LAP = 0  
HOPPER OUT TOTAL = 0

- HOPPER COUNT SWITCH -  
MAX ACTIVE TIME = 0 [msec]  
MIN ACTIVE TIME = 0 [msec]  
ERROR COUNT = 0

- COIN IN COUNT -  
COIN 0.05 = 0  
COIN 0.10 = 0  
COIN 0.20 = 0  
COIN 0.50(N) = 0  
COIN 0.50(O) = 0  
COIN 1.00 = 0  
COIN 2.00 = 0  
TOKEN = 0

PAY 1 COIN [ STOP ]  
DIVERT TO [ CASHBOX ] ( CASHBOX,HOPPER )  
COIN IN [ ACCEPT ] ( INHIBIT,ACCEPT )

->EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

### DOLLAR, EURO, ANY CASH Settings

---

COIN TEST

- HOPPER -  
HOPPER OUT LAP = 0  
HOPPER OUT TOTAL = 0

- HOPPER COUNT SWITCH -  
MAX ACTIVE TIME = 0 [msec]  
MIN ACTIVE TIME = 0 [msec]  
ERROR COUNT = 0

- COIN IN COUNT -  
COIN 0.05 = 0  
COIN 0.10 = 0  
COIN 0.20 = 0  
COIN 0.25 = 0  
COIN 0.50 = 0  
COIN 1.00 = 0  
COIN 2.00 = 0  
TOKEN = 0

PAY 1 COIN [ STOP ]  
DIVERT TO [ CASHBOX ] ( CASHBOX,HOPPER )  
COIN IN [ ACCEPT ] ( INHIBIT,ACCEPT )

->EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

## TOKEN Settings

---

### COIN TEST

- HOPPER -  
HOPPER OUT LAP = 0  
HOPPER OUT TOTAL = 0

- HOPPER COUNT SWITCH -  
MAX ACTIVE TIME = 0 [msec]  
MIN ACTIVE TIME = 0 [msec]  
ERROR COUNT = 0

- COIN IN COUNT -  
TOKEN = 0

PAY 1 COIN [ STOP ]  
DIVERT TO [ CASHBOX ] ( CASHBOX,HOPPER )  
COIN IN [ ACCEPT ] ( INHIBIT,ACCEPT )

->EXIT

SELECT WITH SERVICE BUTTON  
AND PRESS TEST BUTTON

---

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

HOPPER OUT LAP: Number of paid coins with recent game.  
HOPPER OUT TOTAL: Total number of paid coins  
MAX ACTIVE TIME: Max length of time when hopper switch activated.  
MIN ACTIVE TIME: Min length of time when hopper switch activated.  
ERROR COUNT: Count of error occurred  
COIN IN COUNT: Total coin in qty, Display will alter depending on setting in DOLLAR, EURO, ANY CASH  
PAY 1 COIN: Payout 1 coin  
DIVERT TO: Coin divert test.  
COIN IN: Coin in test.

Enter below screen by selecting TROUBLE LOG, to check status of a error data.

---

### TROUBLE LOG (1/2)

NO ERROR

PRESS TEST BUTTON TO NEXT PAGE

---

### TROUBLE LOG (2/2)

#002= 0 #101= 0  
#003= 0 #102= 0  
#004= 0 #103= 0  
#005= 0 #104= 0  
#105= 0  
#106= 0  
  
#202= 0 #302= 0  
#203= 0 #303= 0  
#304= 0

PRESS TEST BUTTON TO EXIT

---

1. Return to HOPPER BD TEST when pressing TEST BUTTON.

#002	LOW BATTERY	Backup battery is low, replace lithium battery on I/O bd.
#003	ROM HAS CHANGED	Rom has been changed to new version. If ROMs are not compatible, backup data will be cleared.
#004	RAM DATA IS BAD	Error on Backup ROM data. Backup data will be cleared.
#005	I/O ERROR	Error on key switch, Check for key switch.
#101	COIN IN JAM(HOPPER)	Coin jam or error on coin entry, check for coin sensor.
#102	COIN IN JAM(GAME)	Coin jam or error on hopper coin entry, check for coin sensor.
#103	HOPPER OVER PAID	Overpaid from hopper, check for hopper.
#104	HOPPER RUNAWAY	Abnormal hopper activation, check for hopper/
#105	HOPPER EMPTY/JAM	Coin not paid within set time, refill coins within a hopper when empty.
#106	HOPPER SENSOR IS BAD	faulty hopper sensor, check for hopper.
#202	COM DTIME OUT(DATAPORT)	No response from data port, check for dataport or connections.
#203	COM DERROR(DATAPORT)	Abnormal data port response, check for connections.
#302	COUNTER OUT OF ORDER(IN)	coin meter(in) fault, or not connected.
#303	COUNTER OUT OF ORDER(OUT)	coin meter(out) fault, or not connected.
#304	COUNTER OUT OF ORDER(REFILL)	coin meter(refill) fault, or not connected.

Enter below screen by selecting MEMORY SETTING, to set hopper bd functions.

-----  
MEMORY SETTING

SHOW HOPPER FLOAT [ OFF ](ON)  
 SHOW LAST WIN [ OFF ](ON)  
 MAX HOPPER FLOAT [ 200 ]( 50,60,70,,,200 )

DEFAULT SETTING  
 ->EXIT

SELECT WITH SERVICE BUTTON  
 AND PRESS TEST BUTTON  
 -----

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

SHOW HOPPER FLOAT Set display of HOPPER FLOAT.  
 SHOW LAST WIN Set display of LAST WIN  
 MAX HOPPER FLOAT Set coin level of hopper when pressing HOPPER TOP UP SW, Not shown when POUND setting.

## 8.2.8. BOOKKEEPING SCREEN

Enter below screen by selecting BOOKKEEPING, to set BOOKKEEPING.

-----  
BOOKKEEPING

BOOKKEEPING  
OTHER DATA -

EXIT  
-----

1. Cursor will scroll, when pressing service button.
2. Set cursor to required command and press test button, enter each test screen.
3. When completing test, scroll cursor to EXIT and press test button, return to system menu screen.

BOOKKEEPING:        Display performance data on site.  
OTHER DATA :        Display other data within the game.

Enter below screen by selecting BOOKKEEPING, page will alter by pressing TEST BUTTON.

-----  
Display performace data on site.  
-----

BOOKKEEPING 1/\*    MAIN GAME DATA

NUMBER OF GAMES	=	0
TOTAL PLAY TIME	=	0D 0H 0M 0S
LONGEST PLAY TIME	=	0H 0M 0S
SHORTEST PLAY TIME	=	1H 0M 0S
AVERAGE PLAY TIME	=	0H 0M 0S

PRESS TEST BUTTON TO CONTINUE  
-----

TOTAL NUMBER OF GAMES  
TOTAL PLAY TIME  
LONGEST PLAY TIME  
SHORTEST PLAY TIME        (shown as 1 hour until first game played.)  
AVERAGE PLAY TIME

Display histogram of length of game played.

-----  
BOOKKEEPING 2/\*    TIME HISTOGRAM

[ 0M00S - 0M29S ]*	0
[ 0M30S - 0M59S ]*	0
[ ...            ]*	0
[ 9M30S - 9M59S ]*	0
[ OVER -10M00S ]*	0

PRESS TEST BUTTON TO CONTINUE  
-----

TIME HISTOGRAM shows games played between game length.  
\* shows spread situation.

**Display income data(1/2)**

BOOKKEEPING 3/\* INCOME DATA (1/2)

PLAYED GAMES = 0  
FROM START = 0  
FROM CONTINUE = 0

BET = 0.00  
WIN = 0.00  
P/O = 0.00%

SETUP PAYOUT RATIO = \* [%]  
DIFFERENCE FROM SETUP = ± \* [%]

AVERAGE BET = 0.00  
AVERAGE WIN = 0.00

PRESS TEST BUTTON TO CONTINUE

PLAYED GAMES  
FROM START games played from start.  
FROM CONTINUE games played with continue.  
TOTAL BET  
TOTAL WIN  
P/O Payout ratio  
SETUP PAYOUT RATIO Actual payout ratio  
DIFFERENCE FROM SETUP  
AVERAGE BET  
AVERAGE WIN

**Display income data(2/2)**

POUND, DOLLAR, EURO, ANY CASH setting

BOOKKEEPING 4/\* INCOME DATA (2/2)

COIN IN ( 0.05) = 0  
COIN IN ( 0.10) = 0  
COIN IN ( 0.20) = 0  
COIN IN ( 0.50) = 0  
COIN IN ( 1.00) = 0  
COIN IN ( 2.00) = 0

CASH IN = 0.00  
CASH OUT = 0.00  
ATTENDANT OUT = 0.00  
SERVICE CREDITS = 0.00

PRESS TEST BUTTON TO CONTINUE

COIN IN  
CASH IN  
CASH OUT  
ATTENDANT OUT  
SERVICE CREDITS

TOKEN Setting

---

BOOKKEEPING 4/\*  
- INCOME DATA (2/2) -

COIN IN               = 0  
COIN OUT             = 0

ATTENDANT OUT       = 0

PRESS TEST BUTTON TO CONTINUE

---

COIN IN  
COIN OUT  
ATTENDANT OUT

games played between start bet qty.

POUND, DOLLAR, EURO, ANY CASH setting

---

BOOKKEEPING 5/\*  
- START BET DISTRIBUTION -

BET   WIN    BET   PAYOUT%

---

0.5   0/    0/    0.00%

1.0   0/    0/    0.00%

PRESS TEST BUTTON TO EXIT

---



TOKEN setting

---

BOOKKEEPING 5/\* START BET DISTRIBUTION

BET WIN BET PAYOUT%

---

1: 0/ 0/ 0.00%  
2: 0/ 0/ 0.00%  
.....  
20: 0/ 0/ 0.00%

PRESS TEST BUTTON TO CONTINUE

---

BOOKKEEPING 6/\* START BET DISTRIBUTION

---

BOOKKEEPING 7/\* START BET DISTRIBUTION

---

BOOKKEEPING 9/\* START BET DISTRIBUTION

BET WIN BET PAYOUT%

---

81: 0/ 0/ 0.00%  
82: 0/ 0/ 0.00%  
.....  
100: 0/ 0/ 0.00%

PRESS TEST BUTTON TO EXIT

---

Return to BOOKKEEPING when pressing TEST BUTTON.

\* shows total pages number, 5 on POUND, DOLLAR, EURO, ANY CASH settings, 9 on TOKEN setting.

Enter below screen by selecting OTHER DATA, page will alter by pressing TEST BUTTON.

OTHER DATA (1/42 to 16/42) will display played qty and win qty between each stages.

-----  
OTHER DATA 1/42 RESULT DISTRIBUTION

1st Round @ STAGE DISTRIBUTION

STAGE	WIN	PLAY
101	0	0
102	0	0

.....  
115 0 0  
PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 2/42 RESULT DISTRIBUTION

1st Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
116	0	0
117	0	0

.....  
120 0 0  
  
TOTAL 0 0  
PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 3/42 RESULT DISTRIBUTION

2nd Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
201	0	0
202	0	0

.....  
215 0 0  
PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 4/42 RESULT DISTRIBUTION

2nd Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
216	0	0
217	0	0

.....  
220 0 0  
  
TOTAL 0 0  
PRESS TEST BUTTON TO NEXT  
-----

-----  
OTHER DATA 5/42 RESULT DISTRIBUTION

3rd Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
301	0	0
302	0	0
.....		
315	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 6/42 RESULT DISTRIBUTION

3rd Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
316	0	0
317	0	0
.....		
320	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 7/42 RESULT DISTRIBUTION

4th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
401	0	0
402	0	0
.....		
415	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 8/42 RESULT DISTRIBUTION

4th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
416	0	0
417	0	0
.....		
425	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 9/42 RESULT DISTRIBUTION

5th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
501	0	0
502	0	0
.....		
515	0	0

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 10/42 RESULT DISTRIBUTION

5th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
516	0	0
517	0	0
.....		
525	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 11/42 RESULT DISTRIBUTION

6th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
601	0	0
602	0	0
.....		
615	0	0

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 12/42 RESULT DISTRIBUTION

6th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
616	0	0
617	0	0
.....		
620	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 13/42 RESULT DISTRIBUTION

7th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
701	0	0
702	0	0
-----		
710	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 14/42 RESULT DISTRIBUTION

8th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
801	0	0
802	0	0
-----		
807	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 15/42 RESULT DISTRIBUTION

9th Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
901	0	0
902	0	0
-----		
915	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 16/42 RESULT DISTRIBUTION

Final Round STAGE DISTRIBUTION

STAGE	WIN	PLAY
001	0	0
002	0	0
-----		
006	0	0
TOTAL	0	0

PRESS TEST BUTTON TO NEXT

-----  
STAGE:  
WIN:  
PLAY:  
TOTAL

OTHER DATA (17/42) will display average win coins, payout coins, payout amount between each rounds.

POUND, DOLLAR, EURO, ANY CASH Setting

-----  
OTHER DATA 17/42 RESULT DISTRIBUTION

ROUND	COIN	AVR	PAYCOUNT	PAYOUT
1st	0.00	0	0.00	
2nd	0.00	0	0.00	
3rd	0.00	0	0.00	
4th	0.00	0	0.00	
5th	0.00	0	0.00	
6th	0.00	0	0.00	
7th	0.00	0	0.00	
8th	0.00	0	0.00	
9th	0.00	0	0.00	
FINAL	0.00	0	0.00	

PRESS TEST BUTTON TO NEXT

-----  
TOKEN Setting

-----  
OTHER DATA 17/42 RESULT DISTRIBUTION

ROUND	COIN	AVR	PAYCOUNT	PAYOUT
1st	0.00	0	0	
2nd	0.00	0	0	
3rd	0.00	0	0	
4th	0.00	0	0	
5th	0.00	0	0	
6th	0.00	0	0	
7th	0.00	0	0	
8th	0.00	0	0	
9th	0.00	0	0	
FINAL	0.00	0	0	

PRESS TEST BUTTON TO NEXT

-----  
ROUND:  
COIN AVR:  
PAYCOUNT:  
PAYOUT:

OTHER DATA (18/42) will show record of previous 10 games.

POUND, DOLLAR, EURO, ANY CASH setting

-----  
OTHER DATA 18/42 LAST GAME DATA

GAME	CHANCE	DIFF	BET	WIN	TIME
TYPE RD					
1	--- -	0 0.00	0	0M0S	
2	--- -	0 0.00	0	0M0S	
3	--- -	0 0.00	0	0M0S	
4	--- -	0 0.00	0	0M0S	
5	--- -	0 0.00	0	0M0S	
6	--- -	0 0.00	0	0M0S	
7	--- -	0 0.00	0	0M0S	
8	--- -	0 0.00	0	0M0S	
9	--- -	0 0.00	0	0M0S	
10	--- -	0 0.00	0	0M0S	

PRESS TEST BUTTON TO NEXT

-----  
TOKEN Setting

-----  
OTHER DATA 18/42 LAST GAME DATA

GAME	CHANCE	DIFF	BET	WIN	TIME
TYPE RD					
1	--- -	0 0 0	0	0M0S	
2	--- -	0 0 0	0	0M0S	
3	--- -	0 0 0	0	0M0S	
4	--- -	0 0 0	0	0M0S	
5	--- -	0 0 0	0	0M0S	
6	--- -	0 0 0	0	0M0S	
7	--- -	0 0 0	0	0M0S	
8	--- -	0 0 0	0	0M0S	
9	--- -	0 0 0	0	0M0S	
10	--- -	0 0 0	0	0M0S	

PRESS TEST BUTTON TO NEXT

-----  
GAME: Games played, 1 being latest.  
CHANCE TYPE: Chances used (SML.x2, INS)  
CHANCE RD: Rounds when chance is used.  
DIFF: Difficulty level when games played.  
BET:  
WIN:  
TIME:

OTHER DATA (19/42) will display chances used between rounds, and win games

-----

OTHER DATA 19/42 CHANCE DATA			
ROUND	DOUBLE	INSURANCE	SMALL
1st <input type="checkbox"/> @WIN	0	0	0
PLAY	0	0	0
2nd	0	0	0
	0	0	0
3rd	0	0	0
	0	0	0
4th	0	0	0
	0	0	0
5th	0	0	0
	0	0	0
6th	0	0	0
	0	0	0
7th	0	0	0
	0	0	0
8th	0	0	0
	0	0	0
9th	0	0	0
	0	0	0
FINAL	0	0	0
	0	0	0

PRESS TEST BUTTON TO NEXT

-----

ROUND (1st to FINAL)  
WIN:  
PLAY:  
DOUBLE:  
INSURANCE:  
SMALL:

OTHER DATA (20/42) will show payout qty and payout amount after usage of CHANCE.

-----

OTHER DATA 20/42 CHANCE DATA

AFTER USING CHANCE

PAYCOUNT  
PAYOUT 0.00

PRESS TEST BUTTON TO NEXT

-----

PAYCOUNT  
PAYOUT



OTHER DATA (21/42) RETRY DATA will display games played after failure and wins.

-----  
OTHER DATA 21/42 RETRY DATA

ONE MORE CHANCE

WIN 0

PLAY 0

INSURANCE

WIN 0

PLAY 0

1BET CONTINUE

WIN 0

PLAY 0

PRESS TEST BUTTON TO NEXT

-----  
ONE MORE CHANCE:

INSURANCE:

1BET CONTINUE:

WIN:

PLAY:

OTHER DATA (22/42 to 37/42) GET COINS will display average payout qty, and max payout qty.

-----  
OTHER DATA 22/42 GET COINS

(each stage)

1st Round

STAGE	COIN AVR	MAX
-------	----------	-----

101	0.00	0.00
-----	------	------

102	0.00	0.00
-----	------	------

.....  
115 0.00 0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 23/42 GET COINS

(each stage)

1st Round

STAGE	COIN AVR	MAX
-------	----------	-----

116	0.00	0.00
-----	------	------

117	0.00	0.00
-----	------	------

.....  
120 0.00 0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 24/42 GET COINS  
(each stage)

2nd Round

STAGE	COIN AVR	MAX
201	0.00	0.00
202	0.00	0.00

.....  
215 0.00 0.00

PRESS TEST BUTTON TO NEXT  
-----

-----  
OTHER DATA 25/42 GET COINS  
(each stage)

2nd Round

STAGE	COIN AVR	MAX
216	0.00	0.00
217	0.00	0.00

.....  
220 0.00 0.00

PRESS TEST BUTTON TO NEXT  
-----

-----  
OTHER DATA 26/42 GET COINS  
(each stage)

3rd Round

STAGE	COIN AVR	MAX
301	0.00	0.00
302	0.00	0.00

.....  
315 0.00 0.00

PRESS TEST BUTTON TO NEXT  
-----

-----  
OTHER DATA 27/42 GET COINS  
(each stage)

3rd Round

STAGE	COIN AVR	MAX
316	0.00	0.00
317	0.00	0.00

.....  
320 0.00 0.00

PRESS TEST BUTTON TO NEXT  
-----

-----  
OTHER DATA 28/42 GET COINS  
(each stage)

4th Round

STAGE	COIN AVR	MAX
401	0.00	0.00
402	0.00	0.00
.....		
415	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 29/42 GET COINS  
(each stage)

4th Round

STAGE	COIN AVR	MAX
416	0.00	0.00
417	0.00	0.00
.....		
425	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 30/42 GET COINS  
(each stage)

5th Round

STAGE	COIN AVR	MAX
501	0.00	0.00
502	0.00	0.00
.....		
515	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 31/42 GET COINS  
(each stage)

5th Round

STAGE	COIN AVR	MAX
516	0.00	0.00
517	0.00	0.00
.....		
525	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 32/42 GET COINS  
(each stage)

6th Round

STAGE	COIN AVR	MAX
601	0.00	0.00
602	0.00	0.00
.....		
615	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 33/42 GET COINS  
(each stage)

6th Round

STAGE	COIN AVR	MAX
601	0.00	0.00
602	0.00	0.00
.....		
620	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 34/42 GET COINS  
(each stage)

7th Round

STAGE	COIN AVR	MAX
701	0.00	0.00
702	0.00	0.00
.....		
710	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 35/42 GET COINS  
(each stage)

8th Round

STAGE	COIN AVR	MAX
801	0.00	0.00
802	0.00	0.00
.....		
807	0.00	0.00

PRESS TEST BUTTON TO NEXT

-----

-----  
OTHER DATA 36/42 GET COINS  
(each stage)

9th Round

STAGE	COIN	AVR	MAX
901	0.00	0.00	
902	0.00	0.00	
.....			
906	0.00	0.00	

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 37/42 GET COINS  
(each stage)

Final Round

STAGE	COIN	AVR	MAX
001	0.00	0.00	
002	0.00	0.00	
.....			
006	0.00	0.00	

PRESS TEST BUTTON TO NEXT

-----  
STAGE:  
COIN: average payout coin qty.  
MAX: max payout coin qty.

OTHER DATA (38/42 to 42/42) PAYOUT LOG will display previous 50 payout records.

-----  
OTHER DATA 38/42 PAYOUT LOG

	PAYOUT	DIFF
NEW 1	0.00	0
2	0.00	0
.....		
OLD 10	0.00	0

PRESS TEST BUTTON TO NEXT

-----  
OTHER DATA 39/42 PAYOUT LOG

-----  
OTHER DATA 40/42 PAYOUT LOG  
-----

OTHER DATA 41/42 PAYOUT LOG

OTHER DATA 42/42 PAYOUT LOG

	PAYOUT	DIFF
NEW 41	0.00	0
42	0.00	0
.....		
OLD 50	0.00	0

PRESS TEST BUTTON TO EXIT

NEW, OLD:

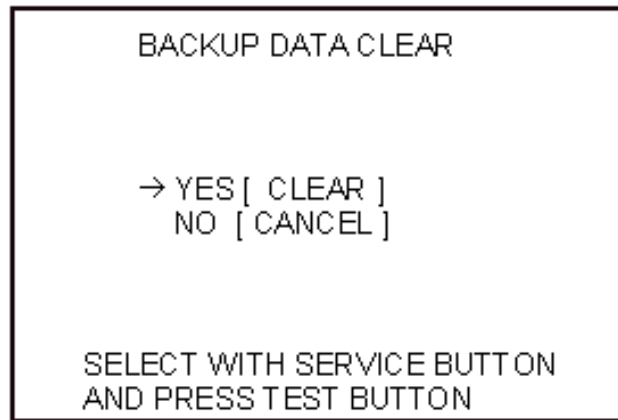
PAYOUT :

DIFF:

Return to BOOKKEEPING, when pressing TEST BUTTON.

## 8.2.9. BACKUP DATA CLEAR SCREEN

Clear BOOKKEEPING data.



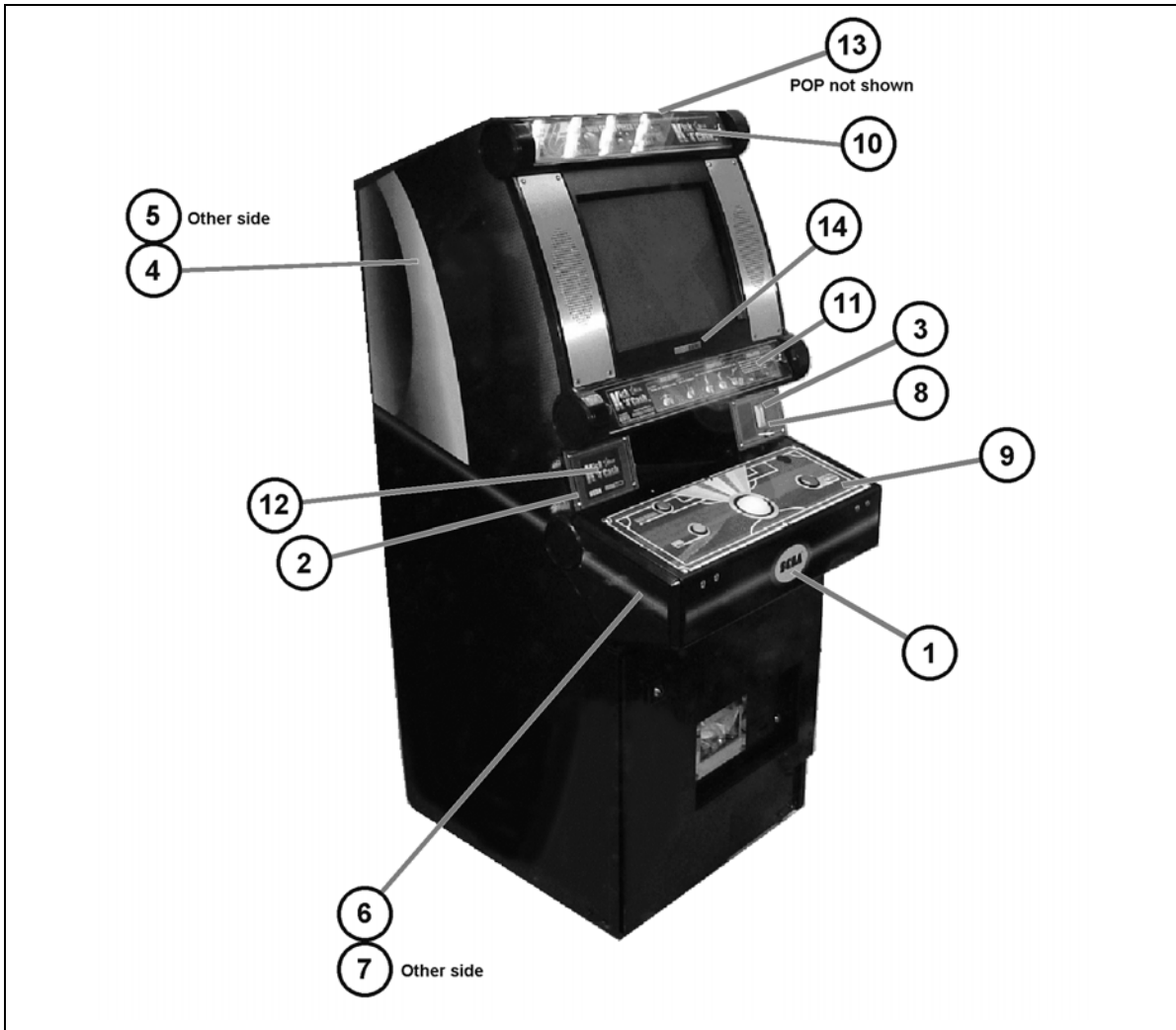
1. Cursor will scroll when pressing SERVICE BUTTON.
2. BACKUP DATA will be cleared if set to cursor to YES and press SERVICE BUTTON. COMPLETED is shown on screen when completed.

Return to GAME TEST MENU when pressing TEST BUTTON.

**Caution!**

**Values within [] is default setting, value will alter when set.**

## 9. DESIGN RELATED PARTS



ITEM	PART NO,	QTY	DESCRIPTION
1	PUB-5005	1	STICKER CNTRL PNL FRONT
2	PUB-1055UK	1	INSTR PLATE L
3	PUB-1056UK	1	INSTR PLATE R
4	PUB-5001	1	STICKER CABI SIDE L
5	PUB-5002	1	STICKER CABI SIDE R
6	PUB-5003	1	STICKER SIDE COVER L
7	PUB-5004	1	STICKER SIDE COVER R
8	PUB-1056-01BUK	1	DECAL COIN ENTRY ENG
9	PUB-2031UK	1	CTRL PNL SH K4C PRIZE
10	PUB-5032-01	1	INSTR SH UPPER K4C
11	PUB-5033-01	1	INSTR SH LOWER K4C
12	PUB-5012	1	LOGO SH K4C
13	PUB-5006	1	POP CASHCUBE
14	PUB-1176	1	EMBLEM PUB



## 10. PARTS LIST

### 10.1. Assembly Structure

PUB-00003UK ~ CASH CUBE KICK 4 CASH PRIZE
PUB-1000UK ~ ASSY CABI
PUB-1001UK ~ ASSY SUB CABI
PUB-1100UK ~ ASSY AC UNIT
PUB-1110UK ~ ASSY METER UNIT
PUB-1120UK ~ ASSY CASH DOOR
PUB-1130UK ~ ASSY SW UNIT
PUB-1140UK ~ ASSY FRONT DOOR
PUB-1160UK ~ ASSY SELECTOR
PUB-1170UK ~ ASSY MASK
PUB-4100UK ~ ASSY ELEC
PUB-4200UK ~ ASSY XFMR
PUB-20003UK ~ ASSY CTRL PNL K4C EXP
PUB-40003UK ~ ASSY MAIN BD K4C EXP
K4C-INST-PUB ~ ASSY INST KIT K4C PUB SWP

**10.2. PUB-00003UK ~ CASH CUBE KICK 4 CASH PRIZE**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1000UK	1	ASSY CABI	
2	PUB-20003UK	1	ASSY CTRL PNL K4C EXP	
3	PUB-40003UK	1	ASSY MAIN BD K4C EXP	
6	PUB-0002	1	FRONT PLATE	
7	PUB-0009	1	HOLE GUARD L	
8	PUB-0010	1	HOLE GUARD R	
9	PUB-5032-01	1	INSTR SH UPPER K4C	
10	PUB-5033-01	1	INSTR SH LOWER K4C	
11	PUB-5012	1	LOGO SH K4C	
12	PUB-0031UK	1	POST BOX BRKT	
20	K4C-INST-PUB	1	ASSY INST KIT K4C PUB SWP	
21	421-7987-K4CPUB	1	STICKER ELEC SPEC K4C PUB SWP	
22	421-7988-91UK	4	STICKER SERIAL NUMBER UK	
23	421-7020UK	2	STICKER CAUTION FORK	
26	LB1046	1	LABEL TESTED FOR ELEC. SAFETY	
27	SGM-4426	1	POLY COVER 800X750X900	
201	031-000512-0B	6	M5X12 CRG BLT BLK	(2)-6
202	050-F00500	6	M5 NUT FLG SER PAS	(2)-6
203	032-000425	2	M4X25 W/BLT PAS	(3)-2
204	060-F00600	2	M6 WSHR FORM A FLT	(3)-2
205	000-T00420-0B	4	M4X20 MSCR TH BLK	(6)-4
206	000-P00420-W	4	M4X20 MSCR PAN W/FS PAS	(12)-4
207	000-T00430-0B	4	M4X30 MSCR PAN W/FS BLK	(7)-2,(8)-2
301	600-7141-100	1	CABLE JVS TYPE A-B 100CM	
302	PUB-63001UK	1	WH SERIAL NAOMI I/F BD	
303	PUB-63002UK	1	WH SERIAL I/F TO EURO	
305	PUB-63004UK	1	WH DC POWER ENC BRD	
306	PUB-63021UK	1	WH CONTROL PANEL	
307	PUB-63022UK	1	WH ENCLOSURE AND POWER	
401	290209	2	FOAM GLASS WRAP-CC131015	
402	290241	1	C-BUFFER-MK2-UNIVERSAL	BANDING PROTECTION
403	PK0061	0.1	BUBBLE WRAP LARGE 1.5M X 45M	

### 10.3. PUB-1000UK ~ ASSY CABI

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1001UK	1	ASSY SUBCABI	
2	PUB-1100UK	1	ASSY AC UNIT	
3	PUB-1110UK	1	ASSY METER UNIT	
4	PUB-1120UK	1	ASSY CASH DOOR	
5	PUB-1130	1	ASSY SW UNIT	
6	PUB-1140UK	1	ASSY FRONT DOOR	
7	PUB-1160UK	1	ASSY SELECTOR	
8	PUB-1170UK	1	ASSY MASK	
9	PUB-4100UK	1	ASSY ELEC	
10	PUB-4200UK	1	ASSY XFMR	
11	230162/1	2	(A)COVER/MNTG(MLD)- ISOL.SW'(2)	DOOR SW BRKT FRONT & BACK
13	PUB-1042UK	1	SECURITY HINGE	
14	PUB-1043	1	SIDE COVER L	
15	PUB-1044	1	SIDE COVER R	
16	PUB-1045	2	SIDE CIRCLE	(14)-1,(15)-1
17	PUB-1046UK	1	LAMP BRKT	
18	PUB-1047UK	2	MONITOR HOLDER UK	
23	PUB-1050	1	BD BRKT	
24	PUB-1051UK	1	CASH CHUTE	
25	PUB-1052UK	1	REJECT CHUTE A	
26	PUB-1053UK	1	ENTRY BASE L	
27	PUB-1054UK	1	ENTRY BASE R	
28	PUB-1055UK	1	INSTR PLATE L	
29	PUB-1056UK	1	INSTR PLATE R	
30	220-5167-27	1	COIN ENTRY 32X3.2T	
31	250-5687	1	ASSY REJECT BTN L83	
32	PUB-1057	1	ENTRY PLATE HOLDER L	
33	PUB-1058	1	ENTRY PLATE HOLDER R	
34	PUB-1059	1	HOPPER BD BASE	
35	PUB-1060	1	HOPPER BD COVER	
36	PUB-1061UK	1	BASE BD COVER	
37	PUB-1062	1	CASH BOX	
38	PUB-1063UK	1	LOCK BRKT FRONT	
39	PUB-1064	1	SECURITY HOLDER	
40	PUB-1065UK	1	SECURITY DOOR	
41	PUB-1066UK	1	SECURITY TNG A	
42	PUB-1067UK	1	SECURITY TNG B	
43	PUB-1068UK	1	SECURITY ARM	
45	PUB-1086UK	1	FL HOLDER BRKT	
46	837-14438	1	CASH CUBE CONTROL BD	
47	837-13551-92	1	I/O CONTROL BD FOR JVS	
48	PUB-1055-AUK	1	INSTR PLATE L BLANK	
49	PUB-1056-AUK	1	INSTR PLATE R BLANK	

Cont.

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
50	PUB-5001	1	STICKER CABI SIDE L	
51	PUB-5002	1	STICKER CABI SIDE R	
52	PUB-5003	1	STICKER SIDE COVER L	
53	PUB-5004	1	STICKER SIDE COVER R	
54	PUB-1056-01BUK	1	DECAL COIN ENTRY ENG	ADHERE WITH TAPE
55	LB1102	5	STICKER DANGEROUS VOLTAGE	FRONT & BACK DOORS (UPP & LOWER), FLO' TUBE, ELEC COVER
56	LB1103	2	STICKER CAUTION	NR. XMFR, NR. CNTRL PNL
57	LB1104	2	STICKER CAUTION, HOT SURFACE	FLO' TUBE, ELEC COVER
101	510069	1	(A)SWITCH,UF79-00AB-IMPACT	
102	580029	2	SPEAKER ELIPTICAL YDT59-8SB	
103	390-5637-15AUK	1	FL TRAY 15W 100V	LOCAL TUBE
104	451057	1	19" PENTRANIC FLAT MONITOR	
107	LT1001	1	TUBE FLUORESCENT 15W	
109	280-5009-01UK	5	CORD CLAMP 21	ELEC BD COVER
110	220-5574UK-X4	1	LOCK QUAD SET 4KA SET KD	SECURITY DOOR
111	280-N02310-0B	0.5	SLIT HARN WRAP 23mm DIA 1M BLK	ACROSS CNTRL PNL & FRONT DOOR HINGES
112	280-A00964-WX	4	ROUTER TWIST D09 SO6.4 WOOD X	
113	280-A01264-WX	20	ROUTER TWIST D12 SO6.4 WOOD X	
114	280-A02064-WX	10	ROUTER TWIST D20 SO6.4 WOOD X	
201	031-000425-0B	4	M4X25 CRG BLT BLK	(2)-4
202	050-F00400	14	M4 NUT FLG SER PAS	(2)-4,(24)-2,(48)-4,(49)-4
203	000-P00412-W	6	M4X12 MSCR PAN W/FS PAS	(3)-2,(16)-4
204	000-P00420-W	22	M4X20 MSCR PAN W/FS PAS	(5)-2,(11)-4,(23)-2,(24)-2,(25)-4,(32)-1,(33)-1,(34)-2,(35)-2,(45)-2
205	031-000630-0B	8	M6X30 CRG BLT BLK	(6)-4,(38)-2,(39)-2
206	050-F00600	13	M6 NUT FLG SER PAS	(6)-4,(38)-2,(39)-2,(40)-4,(42)-1
207	320054	5	5/8" POZIPAN HEAD NO14 SCREW	(7)-3,(103)-2
208	008-T00430-0B	3	M4X30 TMP PRF TH BLK	(8)-3 TOP
209	000-T00420-0B	3	M4X20 MSCR TH BLK	(8)-3 BOTTOM
210	068-441616-0B	6	M4 WSHR 16OD FLT BLK	(8)-6
211	000-P00430-W	2	M4X30 MSCR PAN W/FS PAS	(9)-2
212	330184M	2	WASHER MUDGUARD 3/16"X1"	(9)-2
213	030-000530-W	4	M5X30 BLT W/FS PAS	(10)-4
214	068-551616	4	M5 WSHR 16OD FLT PAS	(10)-4
215	000-P00416-W	6	M4X16 MSCR PAN W/FS PAS	(14)-3,(15)-3
216	000-P00410-W	4	M4X10 MSCR PAN W/FS PAS	(17)-2,(107)-2
217	050-F00800	4	M8 NUT FLG SER PAS	(18)-4
218	000-P00310-W	2	M3X10 MSCR PAN W/FS PAS	(30)-2
219	060-F00600	5	M6 WSHR FORM A FLT	(39)-2,(42)-1,(43)-2
220	065-E00500	2	DIA5 E RING	(43)-2
221	012-P03512-F	20	N6X1/2" S/TAPP FLG PAS	(102)-8,(109)-12
222	050-F00800	4	M8 NUT FLG SER PAS	(104)-4
223	060-F00800	4	M8 WSHR FORM A FLT	(104)-4

Cont.

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
224	031-000620-0B	4	M6X20 CRG BLT BLK	(40)-4
225	031-000410-0C	8	M4X10 CRG BLT CRM	(48)-4,(49)-4
226	050-U00700	1	M7 NUT NYLOK PAS	(110)-2
227	060-F00400	2	M4 WSHR FORM A FLT	(24)-2
302	PUB-60004UK	1	WH AC IN & CRT	
303	PUB-60202UK	1	WH AUDIO POWER	
304	PUB-61002UK	1	WH AC 100V	
305	PUB-61003UK	1	WH POWER EXT & 232C	
306	PUB-61004UK	1	WH SPEAKER	
307	PUB-61005UK	1	WH AC100V SW MODES	
308	PUB-61006UK	1	WH I/O EURO BRD	
309	PUB-61007UK	1	WH COMPACT HOPPER	
310	PUB-61008UK	1	WH REFILL KEY SW	
311	PUB-61009UK	1	WH SR5	
312	PUB-61010UK	1	WH CASH DOOR & DUMP SW	
313	600-7158-0100	1	CA AUD RCA-RCA 2CH 100CM A114	
314	PUB-62002UK	1	WH VTS	
315	PUB-62003UK	1	WH I/O CONTROL	
316	PUB-62004UK	1	WH POWER I/O & I/F	
317	PUB-62005UK	1	WH POWER NAOMI & EURO	
318	PUB-62006UK	1	WH POWER I/O BRD	
319	PUB-62007UK	1	WH INPUT A/D	
320	PUB-64101UK	1	WH ROUTING PLUG	
321	PUB-64102UK	1	WH EARTH SW MODES	
322	PUB-64103UK	1	WH EARTH CONT PAN	
323	PUB-64104UK	1	WH EARTH PO TRAY	
324	PUB-64105UK	1	WH EARTH AC BRKT	
325	NOB-60201UK	1	WIRE HARN FL NOB	
326	600-9040-45K	1	WIRE HARN EARTH 400MM M4/M5 K	
327	PUB-64106UK	1	WH EARTH SM PSU	
328	PUB-64107UK	1	WH EARTH AC BRKT TO MON	
329	600-9020-44K	1	WIRE HARN EARTH 200MM M4/M4 K	

#### 10.4. PUB-1001UK ~ ASSY SUBCABI

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-10002UK	1	ASSY WOODEN PUB CABI	
8	PUB-1009UK	4	MONITOR BRKT	
9	PUB-1010UK	1	ROOF	
10	PUB-1011UK	1	HINGE HOLDER	
11	PUB-1012UK	1	CHAIN HOLDER L	
12	PUB-1013UK	1	CHAIN HOLDER R	
14	PUB-1014UK	1	LOCKING TONGUE A	
15	PUB-1015UK	1	LOCKING TONGUE B	
16	PUB-1016	1	KEY ARM	
17	PUB-1017UK	1	CTRL PNL BASE	
18	PUB-1018UK	1	CTRL PNL HINGE	
19	PUB-1019UK	1	LOCKING BRKT A	
20	PUB-1020UK	1	LOCKING BRKT B	
21	PUB-1021UK	4	CHAIN BRKT	
22	PUB-1022UK	2	CHAIN CNTRL PNL PUB	
24	PUB-1024	2	ROD GUIDE FRONT	
26	PUB-1026UK	1	BD HOLDER UPPER	
27	PUB-1027UK	1	BD HOLDER LOWER	
28	PUB-1028	1	CTRL PNL HOLDER	
33	117-0062	1	PLATE LOCK RETAINER	
35	PUB-5005	1	STICKER CNTRL PNL FRONT	
36	PUB-1089UK	1	LOCK BRKT REAR	
37	DP-1167UK	1	TNG LKG UK	BACK DOOR LOWER
102	220-5574UK-X4	0	LOCK QUAD SET 4KA SET KD	CTRL PNL & BACK DOOR LWR
201	000-T00420-0B	3	M4X20 MSCR TH BLK	(9)-3
202	060-F00400-0B	3	M4 WSHR FORM A FLT BLK	(9)-3
206	300055M	12	M6X30 COACH CSK BLT	(8)-4,(11)-4,(12)-4
207	050-F00600	14	M6 NUT FLG SER PAS	(8)-4,(11)-4,(12)-4,(36)-2
208	031-000625-0B	3	M6X25 CRG BLT BLK	(10)-1,(28)-2
209	060-F00600	4	M6 WSHR FORM A FLT	(10)-1,(15)-1,(16)-2?
210	050-U00600	1	M6 NUT NYLOK PAS	(15)-1
211	065-E00500	2	DIA5 E RING	(16)-2
212	031-000512-0B	8	M5X12 CRG BLT BLK	(17)-4,(21)-4
213	000-P00408-W	2	M4X8 MSCR PAN W/FS PAS	(17)-2 EARTH
214	050-F00500	8	M5 NUT FLG SER PAS	(17)-4,(21)-4
215	008-T00625-0C	2	M6X25 TMP PRF TH CRM	(17)-2
216	030-000516	4	M5X16 BLT PAS	(18)-4
217	060-S00500	4	M5 WSHR SPR PAS	(18)-4
218	060-F00500	4	M5 WSHR FORM A FLT	(18)-4
219	000-P00412-W	4	M4X12 MSCR PAN W/FS PAS	(19)-2,(20)-2
220	000-P00616-W	4	M6X16 MSCR PAN W/FS PAS	(21)-4
221	000-P00420-W	10	M4X20 MSCR PAN W/FS PAS	(24)-4,(26)-3,(27)-3
229	050-U00700	2	M7 NUT NYLOK PAS	(102)-2
302	600-7141-100	1	CABLE JVS TYPE A-B 100CM	

### 10.5. PUB-1100UK ~ ASSY AC UNIT

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1101UK	1	AC BRKT	
3	LB1096	1	STICKER PROTECTIVE EARTH	NEXT TO EARTH STUD ON INSIDE
4	LB1126-3150-250	1	FUSE LABEL 3.15A 250V	NEXT TO IEC INLET ON OUTSIDE
101	EP1381	1	FILTER IEC & SW 6A ROXBURGH	
111	514-5078-3150	1	FUSE 3.15X20 CERAMIC SB 3150mA	
202	050-F00400	2	M4 NUT FLG SER PAS	EARTH - 2
204	000-F00316	2	M3X16 MSCR CSK PAS	(101)-2

**10.6. PUB-1110UK ~ ASSY METER UNIT**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1111UK	1	METER BRKT	
101	220-5643-01	1	MAG CNTR DC5V 6P WH MZ-674-D04	
102	220-5643-02	1	MAG CNTR DC5V 6P YE MZ-674-D05	
103	510069	1	(A)SWITCH,UF79-00AB-IMPACT	
104	510074	1	(A)ROCKER SWITCH C1501 ATY	HOPPER DUMP



**10.7. PUB-1120UK ~ ASSY CASH DOOR**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1121UK	1	CASH DOOR	
2	PUB-1122UK	1	CENTER TNG	
3	PUB-1123	2	ROD CASH	
101	220-5574UK	1	LOCK KEYED DIFFERENT	
201	065-E00300	2	DIA3 E RING	(3)-2
202	060-F00400	2	M4 WSHR FORM A FLT	(3)-2
203	050-U00700	1	M7 NUT NYLOK PAS	(101)-1

### 10.8. PUB-1140UK ~ ASSY FRONT DOOR

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1141UK	1	FRONT DOOR	
2	PUB-1142UK	1	FRONT DOOR HINGE	
3	PUB-1143UK	1	FRONT DOOR SASH	
4	PUB-1144	1	LID	
5	PUB-1145	1	WINDOW	
6	PUB-1146UK	1	METER PLATE	
7	PUB-1147UK	1	BOWL UK	
8	PUB-1148UK	1	HOPPER CHUTE	
9	PUB-1149UK	1	REJECT CHUTE B	
10	PUB-1150UK	1	HOPPER BASE	
11	PUB-1151UK	1	HOPPER ENCLOSURE	
12	PUB-1152	2	ROD FRONT	
13	CAL-1126UK	1	TANG	
14	PUB-1157UK	1	HOPPER ENC FRONT	
101	460044	1	INLINE KEYSWITCH.2K/D.501501-4	
102	220-5643-01	1	MAG CNTR DC5V 6P WH MZ-674-D04	
103	420921	1	COMP HOP £1 R/ANG - HCOMBBGB00305	
104	045361/1	1	SINGLE HOPPER BOARD SEGA	
105	510074	1	(A)ROCKER SWITCH C1501 ATY	FILL
106	220-5574UK-X4	0	LOCK QUAD SET 4KA SET KD	FRONT DOOR
107	460040/2	1	(A)LOCK NUT, INLINE KEYSWITCH	(101)-1
201	050-F00400	13	M4 NUT FLG SER PAS	(2)-2,(4)-2,(5)-2,(8)-2,(9)-2,(11)-3
202	031-000630-0B	3	M6X30 CRG BLT BLK	(3)-3
203	050-F00600	7	M6 NUT FLG SER PAS	(3)-3,(7)-4
204	060-F00400	6	M4 WSHR FORM A FLT	(4)-2,(5)-2,(12)-2
205	012-P03512-F	2	N6X1/2" S/TAPP FLG PAS	(6)-2
206	031-0S0630	4	M6X30 CRG BLT STNLS	(7)-4
207	060-F00600	4	M6 WSHR FORM A FLT	(7)-4
208	000-P00420-W	6	M4X20 MSCR PAN W/FS PAS	(10)-4,(11)-2
209	065-E00300	2	DIA3 E RING	(12)-2
210	000-P00410-W	3	M4X10 MSCR PAN W/FS PAS	(103)-3
211	FA000009	4	A RICHCO BHL-3-01	(104)-4
212	050-U00700	1	M7 NUT NYLOK PAS	(106)-1
213	320054	3	5/8" POZIPAN HEAD NO14 SCREW	(14)-3

**10.9. PUB-1160UK ~ ASSY SELECTOR**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1161UK	1	SELECTOR BRKT SR5	
2	PUB-1162UK	1	ENTRY CHUTE	
3	CFB-1683	1	REJECT SHAFT	
4	PUB-1163UK	1	LEVER	
101	420793	1	TOP ENTRY-SR5-B502ITGB00035	
102	420467	2	CLIP,COIN MECH MARS.33-11-3782	(101)-2
201	000-P00410-W	2	M4X10 MSCR PAN W/FS PAS	(2)-2
202	050-F00500	1	M5 NUT FLG SER PAS	(3)-1
203	060-F00500	1	M5 WSHR FORM A FLT	(3)-1
204	065-E00300	1	DIA3 E RING	(3)-1

**10.10. PUB-1170UK ~ ASSY MASK**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-1171	1	MASK	
2	PUB-1172UK	2	INSTR HOLDER	
3	PUB-1173UK	1	UNDER PLATE	
4	PUB-1174UK	4	INSTR SCREW	(2)-4
5	PUB-1175UK	2	NET	
6	PUB-1045	4	SIDE CIRCLE	
7	PUB-1176	1	EMBLEM PUB	
8	PUB-1179UK	8	TAPE 50MM X 19MM	(6)-8
201	050-F00400	12	M4 NUT FLG SER PAS	(2)-4,(5)-8
202	068-441616	12	M4 WSHR 16OD FLT PAS	(2)-4,(5)-8
203	031-000416-0C	8	M4X16 CRG BLT CRM	(5)-8
204	000-P00412-W	8	M4X12 MSCR PAN W/FS PAS	(6)-8

**10.11. PUB-4100UK ~ ASSY ELEC**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-4101UK	1	WOODEN BASE ELEC	
101	400-5421-07524W	1	SW REGU LCA75S-24-HY	
102	400-5421-05012Y	1	SW REGU LCA50S-12-Y	
103	838-13616	1	AUDIO POWER AMP 2CH	
104	838-11856CE-02	1	CONNECT BD W/FUSE 6.3A CE	
105	280-L00716-OS	8	STANDOFF 7OD 4ID 16L	(101)-4,(102)-4
201	012-P00325	8	N4X1" S/TAP PAN PAS	(101)-4,(102)-4,(104)-2
202	012-P03512-F	4	N6X1/2" S/TAPP FLG PAS	(103)-4

**10.12. PUB-4200UK ~ ASSY XFMR**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-4201UK	1	WOODEN BASE XFMR	
101	560-5422UK	1	XMFR NOB	
201	000-P00420-W	4	M4X20 MSCR PAN W/FS PAS	(101)-4
202	068-441616	4	M4 WSHR 16OD FLT PAS	(101)-4

**10.13. PUB-20003UK ~ ASSY CTRL PNL K4C EXP**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-2030UK	1	CTRL PNL BASE K4C	
2	PUB-2031UK	1	CTRL PNL SH K4C PRIZE	
1	PUB-2031-AUK	1	CTRL PNL SH K4C PRIZE BLANK	
4	PUB-2004	2	BLIND LID	
5	PUB-2005	2	BLIND WSHR	(4)-1
13	PUB-2035UK	1	TRACKBALL 3" HAPP 56-0100-11HL	
15	PUB-2032UK	1	REINFORCE PLATE	(13)-1
16	NOA-2006	1	I/O BD BRKT	
101	509-6038-91	1	SW OBSA-45UM-Y-1F6V3W	
102	509-6051	1	SW OBSA-45UM-B-1F6V3W	
103	837-13938	1	I/O CONTROL BD FOR JVS ENC	
104	509-6067	1	SW OBSA-30UM-R-1F6V3W	
201	050-F00400	7	M4 NUT FLG SER PAS	(1E)-1,(4)-2,(16)-4
202	000-P00570-W	4	M5X70 MSCR PAN W/FS PAS	(15)-4
203	000-P00320-W	4	M3X20 MSCR PAN W/FS PAS	(103)-4

**10.14. PUB-40003UK ~ ASSY MAIN BD K4C EXP**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-4001UK	1	WOODEN BASE MAIN	
2	840-0140D-02	1	ASSY CASE NAO K4C EXP	
3	DGT-0204	1	SW REGU HOLDER	
4	838-14361	1	SERIAL I/F BD MKG	
101	400-5397-01	1	SW REGU FOR JVS VA	
201	000-P00416-W	8	M4X16 MSCR PAN W/FS PAS	(2)-4,(3)-4
202	000-P00410-W	4	M4X10 MSCR PAN W/FS PAS	(101)-4



**10.15. K4C-INST-PUB ~ ASSY INST KIT K4C PUB SWP**

ITEM	PART NO.	QTY	DESCRIPTION	COMPONENT REF.
1	PUB-5006	1	POP CASHCUBE	
3	SAECE-126	1	DECLARATION OF CONFORMITY K4C	
4	PUB-1056-BUK	1	DECAL COIN ENTRY	
101	514-5078-3150	1	FUSE 3.15X20 CERAMIC SB 3150mA	
401	RND-0051	1	SERVICE MANUAL K4C PUB SWP	
402	OS1019	1	SELF SEAL BAG 9X12.3/4	
404	PK0061	0.025	BUBBLE WRAP LARGE 1.5M X 45M	
405	540-0006-01	1	WRENCH M4 TMP PRF	
406	540-0015-01	1	WRENCH M6 TMP PRF	

## 11. APPENDIX A - ELECTRICAL SCHEMATIC

### 11.1. WIRE COLOURS

THE WIRE COLOUR CODE IS AS FOLLOWS:

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

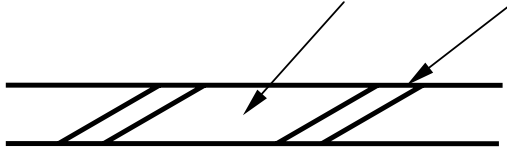
Wires other than those of any of the colours listed above will be displayed by 2 alphanumeric characters:

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

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

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

[Example] 51----- WHITE/RED = WHITE wire with RED stripes



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

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

### 11.2. ELECTRICAL SCHEMATIC

The following pages contain the electrical schematic for this machine.

**11.3. SCHEMATIC DRAWING 1**

SCHEMATIC DRAWING 1 HERE

**11.4. SCHEMATIC DRAWING 2**

SCHEMATIC DRAWING 2 HERE

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