

# **namco®**

# **ROLLERBALL**



## **OPERATORS MANUAL**

IT IS THE RESPONSIBILITY OF THE OPERATOR TO MAINTAIN CUSTOMER SAFETY  
AT ALL TIMES, AND IT IS IMPERATIVE THAT THE DETAILS SET OUT IN THIS MANUAL  
ARE FOLLOWED PRECISELY

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While the information contained in this manual is given in good faith and was accurate at the time of printing, NAMCO EUROPE LIMITED reserve the right to make changes and alterations without notice.

This equipment has been manufactured in accordance with European Directives, and has been tested and complies with the directives 89/336/EEC and 72/23/EEC by the application of EN55014-1, EN55014-2 and EN60335-2-82 standards and as such bears the CE marking. Any changes or modifications to this equipment must be in accordance with the European Directives. Any unauthorised changes to this equipment may contravene such directives.

Under some conditions of extreme external interference, e.g. radio transmissions, electrostatic discharge or mains born transients, some degradation of performance may occur. However the equipment will recover normal performance once the source of interference has ceased or been removed.

Following abnormally high surges on the mains supply, the video monitor may need to be manually reset by turning the equipment OFF and back ON.

If the game processor resets due to an interruption of the mains voltage, any credits established will be lost.

This equipment is not a machine as defined by the machinery directive 89/392/EEC.

## SAFETY WARNING

In order to use this equipment safely, be sure to read this Operators Manual carefully before installation, adjustment or use of this equipment.

Whenever the owner of this equipment entrusts dis-assembly, installation, adjustment or routine maintenance to another person, the owner should ensure that that person read the appropriate precautions and relevant sections of this manual before starting work.

**In order that no accidents occur when the equipment is in operation, strictly follow the notes on safety as described below.**

This manual along with the Installation Manual (where applicable) form an integral part of the equipment and must be available to the operating or service personnel at all times.

This equipment is for indoor use only and should only be used for the purpose intended.

Namco Europe Ltd. bears no responsibility for accidents, injury or damage resulting from unauthorized changes to, or improper use of this equipment.

## SAFETY NOTES

The following safety notes are used throughout this manual. Familiarize yourself with each of these notes and it's meaning before installing, servicing or making adjustments to this equipment.

**WARNING** ⚠ Warning denotes a hazard that could result in injury or death. Do not proceed beyond a warning note until the indicated conditions are fully understood and met.

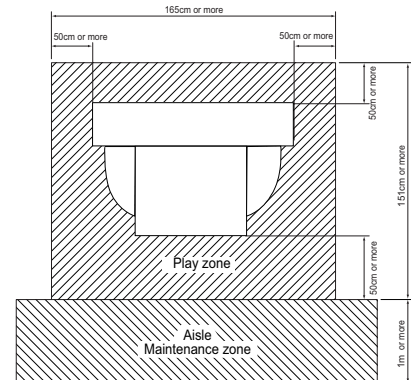
**CAUTION** ⓘ Caution denotes a hazard that could result in damage to the equipment. Do not proceed beyond a caution note until the indicated conditions are fully understood and met.

## GENERAL SAFETY CONSIDERATIONS

- ⚠ **Only operate this equipment after checking that it has been installed correctly and in accordance with this manual.**
- ⚠ **The warning notices must always be kept in good condition and replaced if worn, so that customers can read them clearly.**
- ⚠ **Installation, service, adjustment or routine maintenance should be carried out by suitably qualified persons only.**
- ⚠ **For continued protection against fire hazard, replace fuses with the same type and rating. The use of other fuses or material is prohibited.**
- ⚠ **The power supply inside the monitor will remain hot and have areas of high voltage even though the equipment has been turned OFF, and there is the possibility of burns or electric shock. Be careful not to touch these areas.**
- ⚠ **To prevent possible electric shock due to failure, this equipment **MUST** be fitted with a securely connected EARTHED plug.**
- ⚠ **If at any time the mains lead becomes damaged, it must be replaced immediately.**
- ⚠ **Do not turn the power switch ON until the equipment has ben installed correctly.**
- ⓘ **Before connecting the machine to the mains supply, ensure that the equipment is set for the correct voltage and that the correct fuses are fitted.**

## NOTES ON INSTALLATION

- ⚠ NEVER turn the power to the machine ON until installation has been completed.**
  - ⚠ In order to prevent possible electric shocks, be sure that the equipment is connected to the mains with a securely connected earthed plug.**
  - ⚠ So that customers are not injured by the movement of the equipment, ensure that there is at least 500mm separation between other equipment or walls.**
  - i In order to avoid damage to the equipment due to mis-operation, ensure that the voltage of the mains supply is 230volts AC.**
- Note:** If the location of this equipment has a polished floor, it is recommended that rubber pads are fitted under the level adjusters to prevent the equipment sliding on the floor when in use.
- Note:** In order to gain access to the Power Supply and CPU assemblies, ensure that the rear of the equipment is separated from a wall or other equipment by at least 500mm



## MOVING THE EQUIPMENT

- ⚠ This equipment is fitted with castors to make it easier to move. Take care when moving the equipment on an inclined surface.**

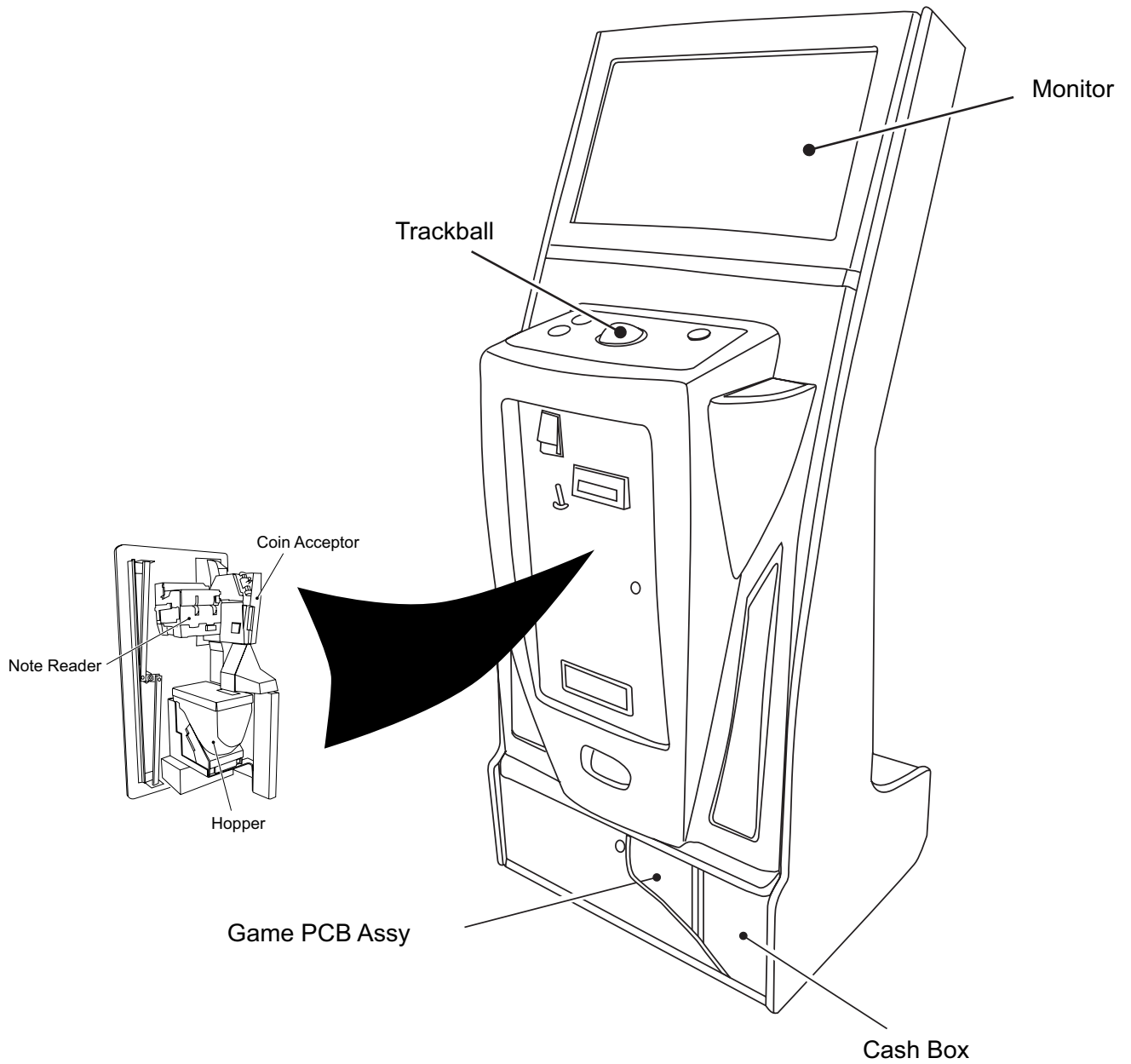
## REMOVING AND REPLACING PARTS

- ⚠ Adjustments or maintenance on this equipment should be carried out by suitably qualified personnel only.**
- ⚠ Do not make any alteration to this equipment without prior approval. Doing so could cause unforeseeable danger.**
- ⚠ Only parts specified by Namco Europe Ltd. should be used when replacing parts. (Including screws)**
- ⚠ Ensure that the power to the equipment is turned OFF before commencing any maintenance work. (Trouble shooting, repairs etc.)**
- ⚠ If performing work not described in this manual, contact your distributor for instructions, as no responsibility will be accepted for damage or injury.**
- ⚠ Parts of the Power Supply and Monitor remain hot and carry high voltage even after switching OFF and could cause burns or electric shock. Take care not to touch these parts accidentally.**
- ⚠ Make sure that the equipment is switched OFF before connecting or disconnecting any plugs or connectors.**
- ⚠ When moving the mains connector from the equipment, or the mains plug from the wall outlet, always grasp the plug and not the cable.**

## 1. SPECIFICATIONS

<b>POWER SUPPLY:-</b>	230volt 150watts AC
<b>AMBIENT OPERATING TEMPURATURE</b>	+5°C to +25°C
<b>MONITOR:-</b>	Pentranic 23" Microtouch 16x9 LCD
<b>COIN ACCEPTOR:-</b>	Mars 9524 with Seperator
<b>NOTE ACCEPTOR:-</b>	Money Controls Luminar
<b>HOPPER:-</b>	Money Controls Compact
<b>DIMENSIONS:-</b>	650(w) x 515(d) x1550(h)
<b>WEIGHT:-</b>	73kg
<b>ACCESSORIES:-</b>	Keys: (Coin Door) .....2 (Lower Door) .....2 (Cash Door) .....2 (Back Door) .....2  IEC Mains Lead ..... 1  Operators Manual ..... 1

## 2. MAIN COMPONENTS



### 3. INSTALLATION




This machine is designed for **INDOOR USE ONLY**.  
Do not install in the following places.


1. **Outdoors**
2. **Direct Sunlight, places with excessive humidity or dust, places where there is water leakage, near air-conditioning or heating equipment, places with excessive heat or cold temperature.**
3. **Places where it would be in the way of emergency exits or fire extinguishing equipment.**
4. **Unstable places or places with excessive vibration.**
5. **Places that are not level.**
6. **This machine must not be cleaned with a water jet, or installed in an area where a water jet could be used.**

#### Notes on Installation

 **NEVER turn the power to the machine ON until installation has been completed**

 **In order to prevent possible electric shocks, be sure that the machine is connected to the mains supply with a securely connected earthed plug.**

 **So that customers are not injured, ensure that there is at least 500mm separation between other machines or walls.**

 In order to avoid damage to the machine due to mis-operation, ensure that the voltage of the mains supply is 230volts AC.

**NOTE** • In order to gain access to the rear of the Cabinet, ensure that the rear of the machine is separated from a wall or other machine by at least 500mm

### 3-1 Machine Set-Up

Before customer use ensure that the following procedures are carried out.

1. Fill the Hopper with £70 of £1 coins.
2. Enter Test Mode ([see 4-1 page 10](#))
3. Select Test Coins test and touch the 'Hopper Full' button on the screen. This will set the hopper value to 70.
4. Touch the 'Back' button on the screen to return to the Main Settings screen, then touch the 'Game Set-Up' button on the screen.
5. Touch the '£1per Prize Game' button on the screen. This will reset the running payout percentage to factory default. **Failure to do this may result in initial extra high or low wins.**
6. Set the price of play for both the single and two player games by touching the relevant '<' or '>' buttons on the screen.
7. Touch the 'Back' button on the screen to return to the Main Settings screen.
8. Touch the 'Back' button on the screen to return to Game Mode.



## 4. ADJUSTMENTS



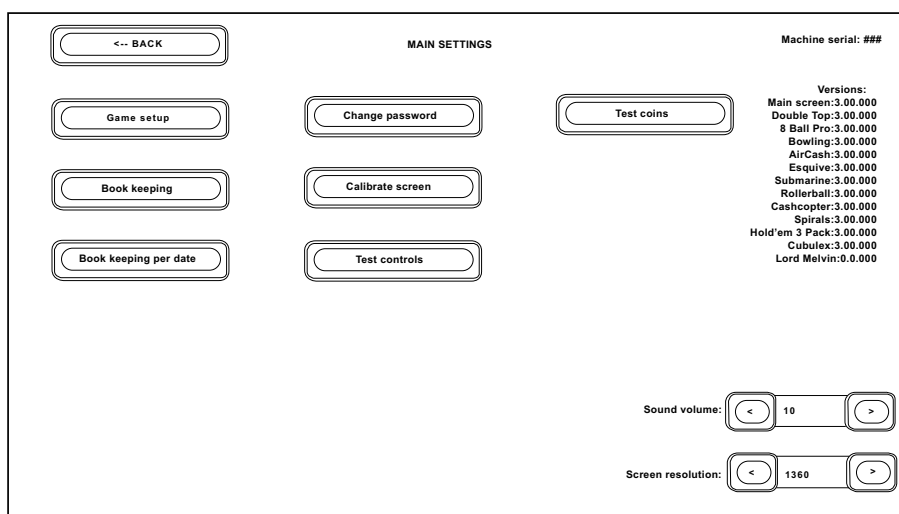
Adjustment or maintenance on this machine should be carried out by qualified personnel only.

### 4-1 Test

The game will only enter TEST or CALIBRATION when the main screen (the screen that allows you to select the different games) is showing. It will not enter test when a demo screen is displayed.

If a demo screen is displayed, touch the screen and wait for the game to load and then touch the Return to Main Screen button.

Press the 'TEST' button, located inside the Coin Door. The following screen is displayed.



1. Touch the relevant button on the screen to enter the required test.
2. Touch the 'BACK' button on the screen to return to Game Mode.

BACK	Returns to Game Mode
Game Setup	Set price of play, clear high scores and allows games to be disabled
Book Keeping	Displays short term and long term book keeping data.
Book Keeping per date	Displays book keeping data by specific date
Change Password	Not used on this game
Calibrate Screen	Calibrates the Touch Screen
Test Controls	Tests the Play Panel Buttons
Test Coins	Tests the Coin Acceptor, Note Reader and Hopper
Sound Volume	Set the volume output from the game PCB Adjustable from 0 (no sound) to 10
Screen Resolution	Sets the resolution of the monitor (should be set to 1360)
Versions	Displays the version of each game available.

#### 4-1-1 Game Setup

This screen allows games to be turned on or off, set the Price of Play and clear High Scores. Touch the 'Game Setup' button on the Main Settings screen. The following screen is displayed.

- 1 Press the '<' or '>' buttons on the screen to change the displayed item / value.
2. Touch the 'BACK' button on the screen to return to Main Settings menu screen .

The screenshot shows the 'Game Setup' screen with the following elements:

- Top Left:** A button labeled '<--Back'.
- Left Column:**
  - Current game:** A row with '<' and '>' buttons flanking the text 'Rollerball'.
  - Single player:** A row with '<' and '>' buttons flanking the text 'ENABLED'.
  - Two player:** A row with '<' and '>' buttons flanking the text 'N/A'.
  - Play for cash:** A row with '<' and '>' buttons flanking the text 'Enabled:'.
  - Protocol:** A button labeled 'Protocol'.
- Right Column:**
  - Single player price:** A row with '<' and '>' buttons flanking the text '£0.50'.
  - Two player price:** A row with '<' and '>' buttons flanking the text '£1.00'.
  - £1 per prize game:** A button labeled '£1 per prize game'.
  - 50p per prize game:** A button labeled '50p per prize game'.
  - £1.00:** A button labeled '£1.00'.
  - No. of weeks to reset score:** A row with '<' and '>' buttons flanking the text '0'.
  - Last scores reset on:** A row with two buttons labeled '14-12-2006' and '19:38'.
  - Clear high scores:** A button labeled 'Clear high scores'.

**Note:**The Protocol button is not used on this game.

## 4-1-2 Test Coins

This test checks the Coin Acceptor, Note Reader and Hopper. Select by touching the 'TEST COIN' button on the Main Settings screen. The following screen is displayed.

The screenshot shows the 'TEST COINS' interface. At the top left is a '<--BACK' button. The title 'TEST COINS' is at the top center. On the left, there is a vertical list of coin denominations with their respective counts: £1: 0, 50p: 0, 5p: 0, 20p: 0, 10p: 0, £1: 0, £5: 0, £10: 0, and £20: 0. A bracket on the left side of this list is labeled with a '1'. To the right of the denominations is a 'Divert:' section with '<' and '>' buttons and the text 'Cash Box'. This is labeled with a '2'. Below that is a 'Coins in hopper:' section with '<' and '>' buttons and the number '70'. This is labeled with a '3'. Further right are five buttons: 'DUMP HOPPER' (labeled 4), 'PAY ONE COIN' (labeled 5), 'HOPPER FULL' (labeled 6), and 'CLEAR COINS' (labeled 7). At the bottom left, there is a 'CASHBOX AMOUNT:' label with a note '(this value automatically becomes 0 when the books are reset)' and a display showing '£0.00'. At the very bottom, it says 'Last hopper message: Button pressed: 0' and 'Coins dumped: 0'.

- 1 Each time a coin is accepted by the Coin Acceptor, or a note is accepted by the Note Acceptor, the corresponding coin/note value number increments by 1.
- 2 Divert: Touch the '<' or '>' button on the screen to change the divert between Hopper or Cashbox.
- 3 Coins in Hopper: Displays the number of coins in the hopper. This can be increased or decreased by touching the '<' or '>' button on the screen.
- 4 Dump Hopper: Touch this button on the screen to empty the hopper.
- 5 Pay one Coin: One coin will be dispensed from the hopper each time this button is touched on the screen.
- 6 Hopper Full: Touching the 'HOPPER FULL' button on the screen will set the 'Coins in hopper' value to 70.
- 7 Clear Coins: Touching the 'CLEAR COINS' button on the screen will reset all tested coin values to 0.

Touch the 'BACK' button on the screen to return to the Test Main Settings screen.

### 4-1-3 Book Keeping

Touch the 'Book Keeping' button on the Main Settings screen. The following screen will be displayed.

(Note: Only short term book keeping can be reset.)

<-- BACK

Add one free credit

Clear short term books

Clear long term books

BOOK KEEPING AND PRICES

Payout summary for each game:

	PFC games:	Money IN:	Money OUT:
Double Top:	0	£0.00	£0.00
8 Ball Pro:	0	£0.00	£0.00
Cash Strike Bowling:	0	£0.00	£0.00
Air Cash:	0	£0.00	£0.00
Esquive:	0	£0.00	£0.00
Submarine:	0	£0.00	£0.00
Rollerball:	0	£0.00	£0.00
CashCopter:	0	£0.00	£0.00
Spirals:	0	£0.00	£0.00
Hold'em 3 Pack:	0	£0.00	£0.00
Cubulex:	0	£0.00	£0.00

Credit: £0.00  
Last Reset: 21:31, Thursday, December 14, 2006

	SHORT	LONG
£1:	0	0
50p	0	0
5p:	0	0
20p:	0	0
10p:	0	0
£2:	0	0
£5:	0	0
£10:	0	0
£20:	0	0
Total:	£0.00	£0.00
Coins out:	0	0
Profit:	£0.00	£0.00
Free cred.	£0.00	£0.00

Reset all for £1

Reset all for 50p

Touch the 'BACK' button on the screen to return to the Test Main Settings screen.

### 4-1-4 Book Keeping per Date

This test allows Book Keeping data to be viewed by specific date. Select by touching the 'Book Keeping per Date' button on the Main Settings screen. The following screen is displayed.

<-- BACK

Day: < 14 >

Month: < December 20 >

Credit: £0.00

	SHORT	LONG
£1:	0	0
50p	0	0
5p:	0	0
20p:	0	0
10p:	0	0
£2:	0	0
£5:	0	0
£10:	0	0
£20:	0	0
Total:	£0.00	£0.00
Coins out:	0	0
Profit:	£0.00	£0.00
Free cred.	£0.00	£0.00

Game title	Money IN:	Money OUT:	Money IN LT:	Money OUT LT
Double Top:	£0.00	£0.00	£0.00	£0.00
8 Ball Pro:	£0.00	£0.00	£0.00	£0.00
Cash Strike Bowling:	£0.00	£0.00	£0.00	£0.00
Air Cash:	£0.00	£0.00	£0.00	£0.00
Esquive:	£0.00	£0.00	£0.00	£0.00
Submarine:	£0.00	£0.00	£0.00	£0.00
Rollerball:	£0.00	£0.00	£0.00	£0.00
CashCopter:	£0.00	£0.00	£0.00	£0.00
Spirals:	£0.00	£0.00	£0.00	£0.00
Hold'em 3 Pack:	£0.00	£0.00	£0.00	£0.00
Cubulex:	£0.00	£0.00	£0.00	£0.00

- 1 Press the '<' or '>' buttons on the screen to select the required date.
- 2 Touch the 'BACK' button on the screen to return to Main Settings menu screen

#### 4-1-5 Calibrate

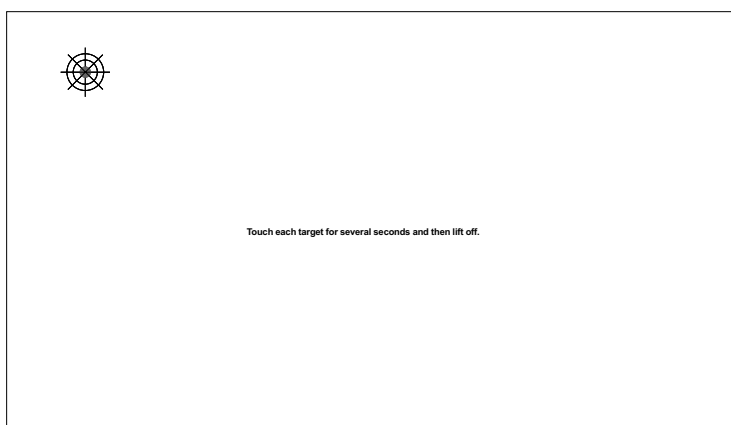
This test allows the Monitor Touch Screen to be calibrated. Select by touching the 'Calibrate Screen' button on the Main Settings screen. The following screen is displayed.



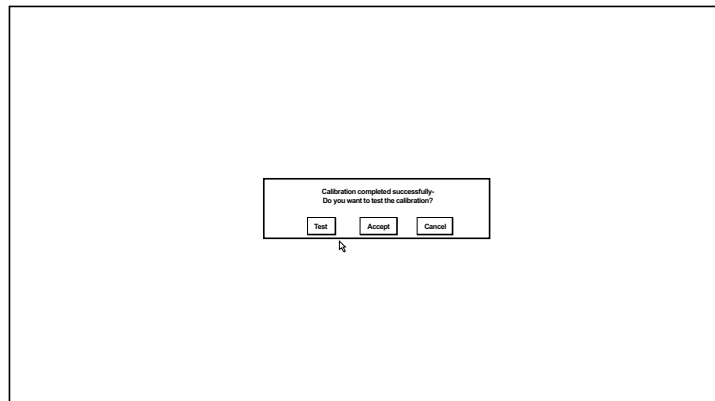
1. Touch and hold your finger on the target, displayed on the screen, for a few seconds. (target changes from green to red). On removing your finger the following screen will be displayed.



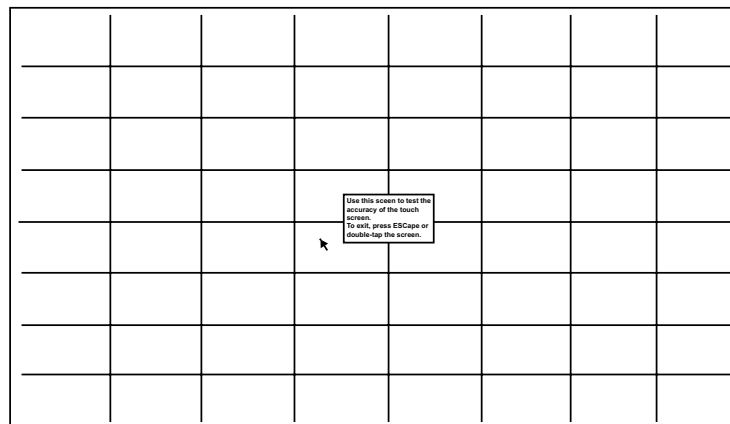
2. Repeat step 1 above, the following screen will be displayed.



3. Repeat step 1 above, the following screen will be displayed.



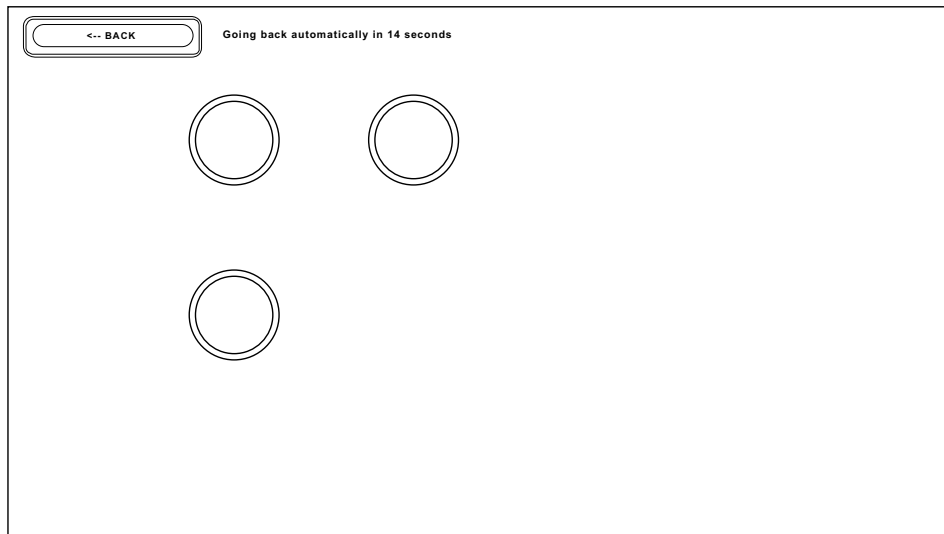
4. The screen will return to the Game Mode when you touch the 'Accept' button on the screen.  
 Touching the 'Cancel' button on the screen will return the monitor calibration to the level before the test began.  
 If you touch the 'Test' button on the screen, the following screen will be displayed.



5. Moving your finger on the screen will draw a line on the screen to ensure that the calibration is correct.
6. Double-tap the screen, when testing is completed, to return to the Calibration Completed screen.
7. Touch the 'Test' or 'Accept' button on the screen to re-calibrate or return to the Game Mode.

#### 4-1-6 Test Controls

This test allows the Play Panel Pushbutton operation to be checked. Select by touching the 'Test Controls' button on the Main Settings screen. The following screen is displayed.



The corresponding colour button on the screen will illuminate each time a Play Panel Button is pressed.

Touch the 'BACK' button on the screen to return to Main Settings menu screen

#### 4-1-7 Change Password

**Note: This test is not used on this game.**

## 5. MAINTENANCE

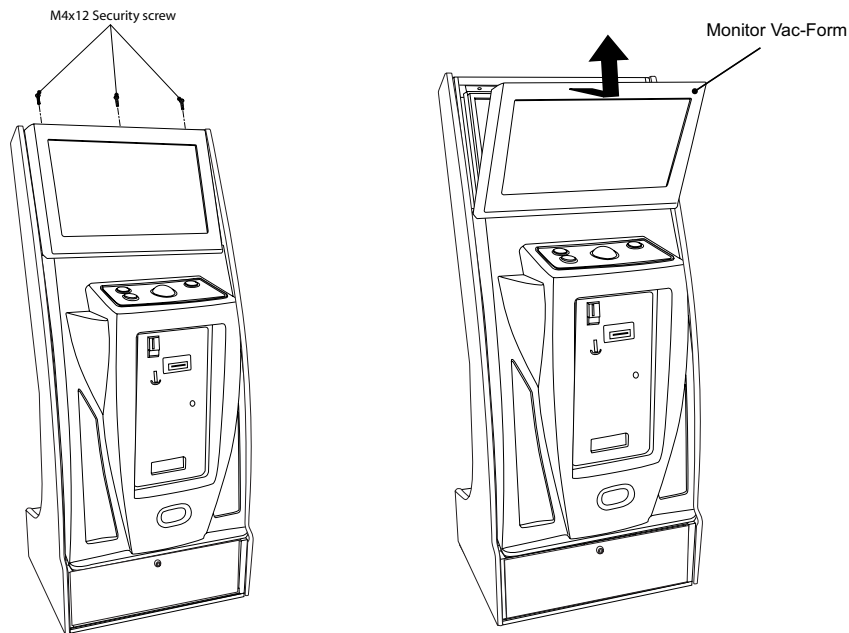


Adjustment or maintenance on this machine should be carried out by qualified personnel only.

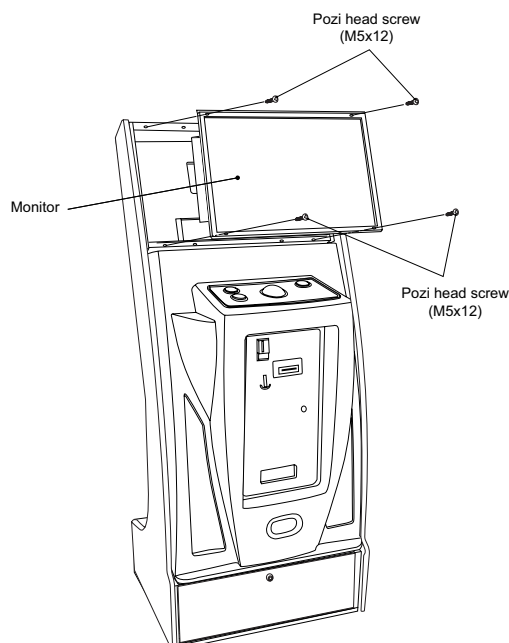
Ensure that the **POWER** to the machine is turned **OFF** before commencing any maintenance work. (Trouble shooting, service or repairs etc.)

### 5-1 Replacing the Monitor

1. Remove 3 off security screw (M4x12) and remove the Monitor Vac-Form, by tilting it forward from the top and lifting upwards.



2. Remove the Cabinet Rear Door and disconnect the Power Connector and Video Connector from the Monitor.
3. Remove 4 off pozi head screws (M5x12) and remove the Monitor.

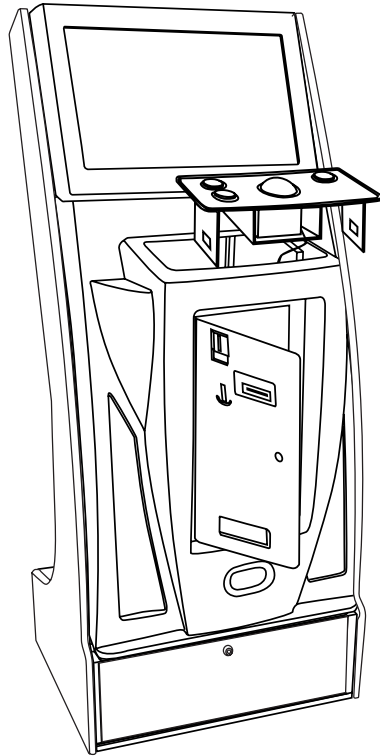


4. Reassemble in reverse order.



## 5-2 Replacing the Play Panel Assy

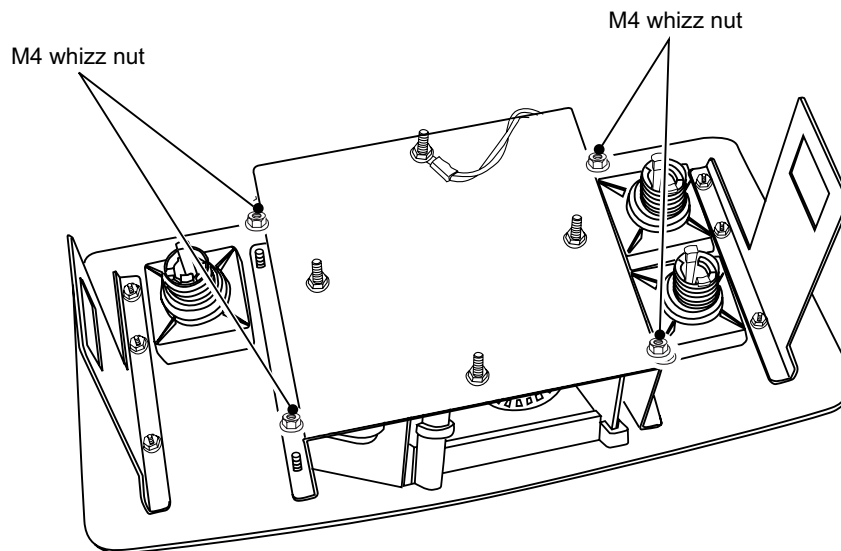
1. Open the Lower Front Door and disconnect the connector from the Game PCB Assy
2. Release the Play Panel Retaining Clips, accessed through the Front Door
3. Remove the Play Panel Assy.



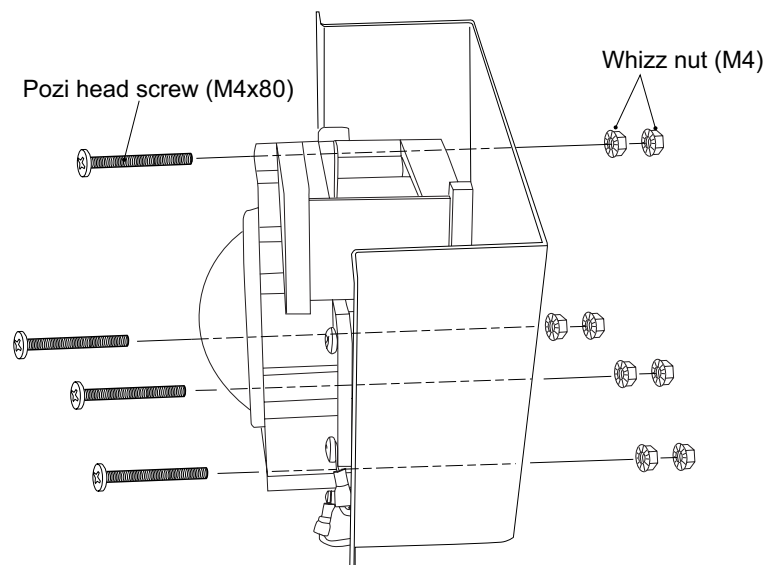
4. Reassemble in reverse order.

### 5-3 Replacing the Track Ball Assy

1. Remove the Play Panel Assy ([see 5-2 page 18](#))
2. Remove 4 off whizz nuts M5 and remove the Track Ball Mounting Plate complete with the Track Ball.



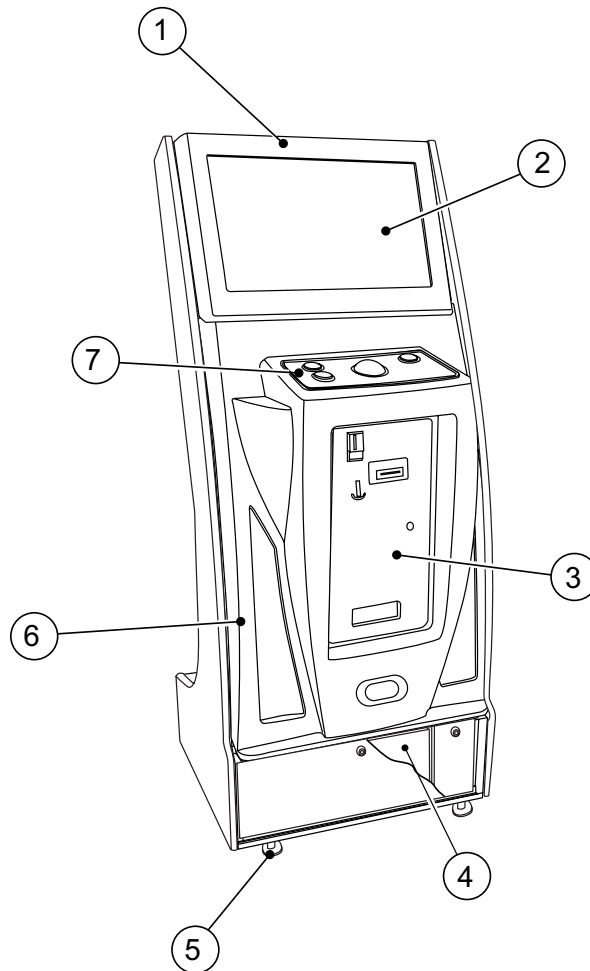
3. Remove 4 off pozi head screws (M4x80), 8 off whizz nuts (M4) and remove the Track Ball Assy from the Mounting Plate.



4. Reassemble in reverse order ensuring that the Trackball is the correct way round.  
(The word *HAPP* on the trackball outer ring should be nearest the screen).

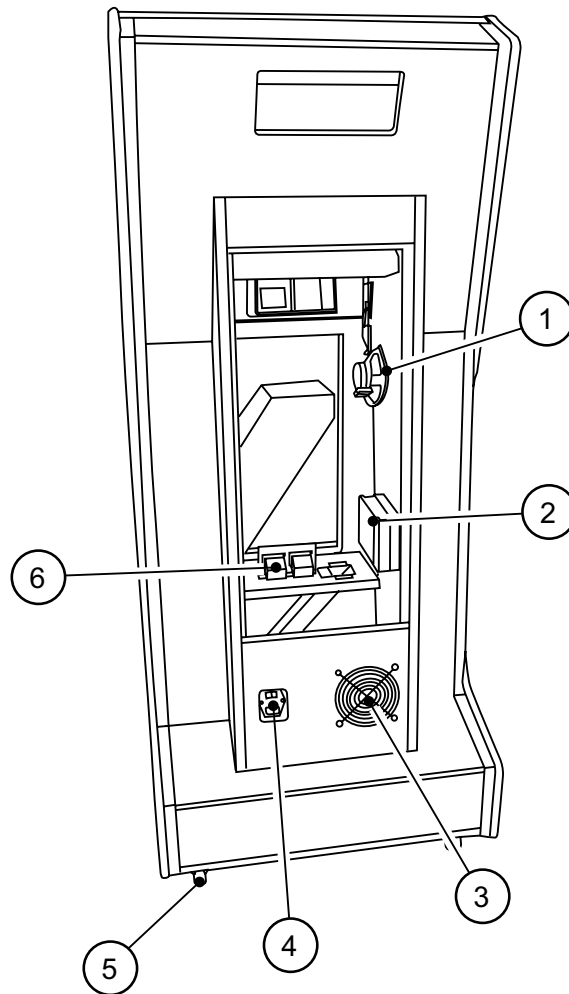
## 6. PARTS

### 6-1 Cabinet Front



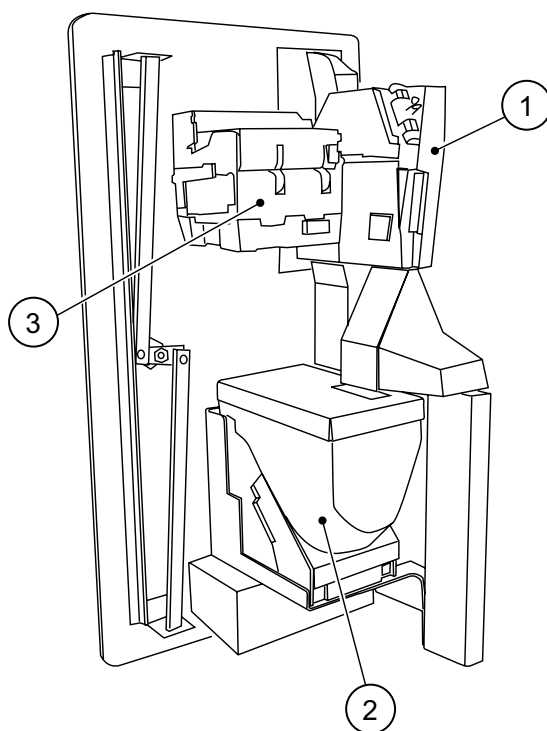
Item	Description	Part No
1	Play Panel Plastic - Top	47000839
2	Pentranic 23" Microtouch 16x9 LCD Monitor	84000201
3	Cash Door Decal	40000870
4	Game PCB Assy	
5	Adjustable Foot M16x95	88300079
6	Play Panel Plastic - Bottom	47000838
7	Play Panel Decal	40000869

## 6-2 Cabinet Rear



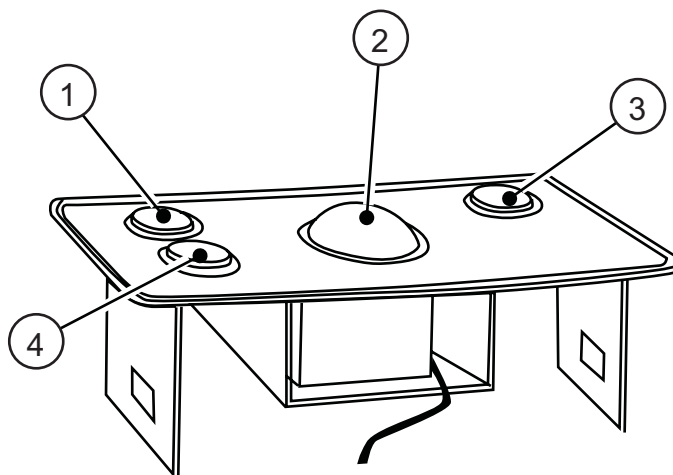
Item	Description	Part No
1	Elliptical Speaker	62000169
2	Amplifier	AF100
3	4¼" 230Volt Fan	67000015
4	Schaffner Mains-In Filter Assy	62500010
	Schaffner Boot	66000017
	Fuse 20mm 5A Q/B	63500600
5	75mm Fixed Castor	59000010
6	3.5-6v Panel Meter	65000002

## 6-3 Coin Door



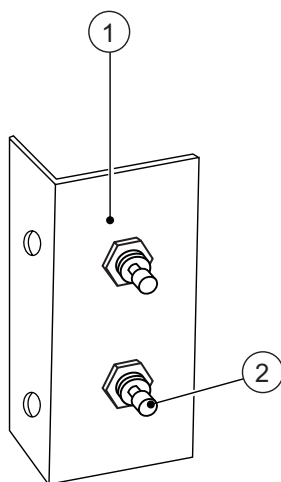
Item	Description	Part No
1	Mars 9524 Coin Acceptor	65500764
2	Coin Controls Compact Hopper	65500791
3	Coin Controls 'Lumar' Note Reader	65510318

**6-4      Play Panel**



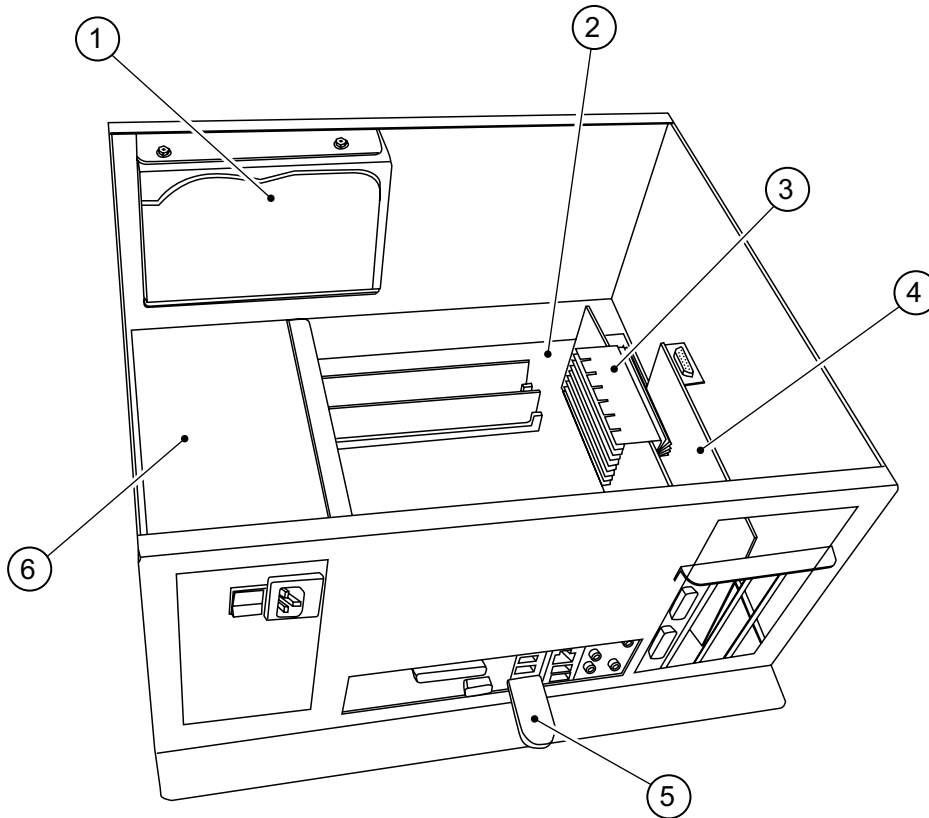
Item	Description	Part No
1	Starpoint Switch MCPBL - Yellow	60200288
2	Happ 3" Trackball with PS2/USB Connection	61500002
3	Starpoint Switch MCPBL - Green	60200291
4	Starpoint Switch MCPBL - Red	60200290

**7-5      Service Bracket**



Item	Description	Part No
1	Service Switch Bracket	
2	Pushbutton Switch - 7mm Red F424	60000059

## 6-6 Game PCB Assy



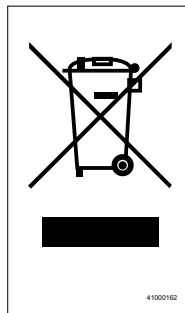
Item	Description	Part No
1	Hard Drive	88600302
2	Mother Board	88600304
3	Video Card	88600305
4	I/O Card	88600306
5	Security Dongle	
6	SMPSU - ATX300PNF	83000025

## 7. DISPOSAL

### NOTICE

Directive 2002/96/EC  
(Waste Electrical and Electronic Equipment - WEEE)  
Information for users

This product complies with the EU Directive 2002/96/EC.  
The crossed out wheelie bin symbol on this product means that at the end of its useful lifespan, the product must be disposed of separately from ordinary household wastes.



Appropriate separate collection to permit recycling, treatment and environmentally compatible disposal helps prevent negative impact on the environment and human health.

For areas not in the EEC please ensure that disposal of this product complies with all local legislation or requirements in force.





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