

ISO 9001: 2000 Cert No. 17460

LAI GAMES NOTES

Dear Customer,

Keep up-to-date with any new Software release or Service Bulletins for this Game.

Check our Website at <u>www.laigames.com</u> click on Product Support, here you find links to all the Bulletins and Software Updates to keep your game in top working Order.

You can also subscribe to our Service Bulletin mail listing at techfix@laigames.com.

Thanks,



TABLE OF CONTENTS

SAFETY PRECAUTIONS	1
MACHINE INSTALLATION AND INSPECTION	2
INTRODUCTION	3
SPECIFICATIONS	4
HOW TO PLAY	5
FITTING PRIZES TO THE PRIZE ARM	6
PRIZE SELECTION AND PAYOUT ADJUSTMENT	8
OPERATION	9
OPERATIONAL DIAGRAM	9
ATTRACT MODE	9
PLAY MODE	9
TEST MODE	10
TEST MODE DIAGRAM	10
SOUND, LAMPS & DISPLAY TEST	11
SWITCH TEST	11
RUN TEST	13
PRIZE ARM LOCATION DIAGRAM	13
PROGRAMMABLE ADJUSTMENTS MODE	14
PROGRAMMABLE ADJUSTMENTS MODE DIAGRAM	14
PROGRAMMABLE ADJUSTMENTS PROCEDURE	14
PROGRAMMABLE ADJUSTMENTS QUICK REFERENCE TABLE	15
PROGRAMMABLE ADJUSTMENTS DETAILED	16
AUDITS MODE	20
AUDITS MODE DIAGRAM	20
AUDIT PROCEDURE	21
AUDITS QUICK REFERENCE TABLE	22
AUDITS DETAILED	23
GAME HISTORY MODE	
GAME HISTORY MODE DIAGRAM	25
GAME HISTORY QUICK REFERENCE TABLE	25
GAME HISTORY PROCEDURE	
ERRORS AND TROUBLESHOOTING	
ERROR CODE QUICK REFERENCE TABLE	27
TROUBLESHOOTING GAME ERRORS	
FUSE INFORMATION	
FUSE LOCATION DIAGRAM	

SECTION A: SERVICE INSTRUCTIONS
LOCATING AND ACCESSING PARTS
PARTS LOCATION DIAGRAM
PARTS DESCRIPTION
LAMPS
MAINTENANCE
INSTRUCTIONS TO FIT 90° T-HANDLE LOCK
TO NEW TYPE COIN DOORS
SECTION B: TECHNICAL DETAILS41
MAINS VOLTAGE ADJUSTMENT
3D PARTS EXPLODE
STACKER MAIN WIRING DIAGRAM
STACKER POWER WIRING DIAGRAM
STACKER OPTIONAL WIRING DIAGRAM51

SAFETY PRECAUTIONS

The following safety precautions and advisories are used throughout this manual and are defined as follows.

* WARNING! *

Disregarding this text could result in serious injury.

* CAUTION! *

Disregarding this text could result in damage to the machine.

* NOTE! *

• An advisory text to hint or help understanding.



BE SURE TO READ THE FOLLOWING



* WARNING! *

<u>Always</u> turn **OFF** Mains AC power and unplugged the game, before opening or replacing any parts.

<u>Always</u> when unplugging the game from an electrical outlet, grasp the plug, not the line cord.

<u>Always</u> connect the Game Cabinet to grounded electrical outlet with a securely connected ground line.

<u>Do Not</u> install the Game Cabinet outdoors or in areas of high humidity, direct water contact, dust, high heat or extreme cold.

<u>Do Not</u> install the Game Cabinet in areas that would present an obstacle in case of an emergency, ie. near fire equipment or emergency exits.

* CAUTION! *

<u>Always</u> use a Digital Multimeter, logic tester or oscilloscope for testing integrated circuit (IC) logic PC boards. The use of a continuity tester is not permitted.

<u>**Do Not**</u> Connect or disconnect any of the integrated circuit (IC) logic PC boards while the power is **ON**.

<u>Do Not</u> use any fuse that does not meet the specified rating.

<u>**Do Not</u>** Subject the game cabinet to extreme temperature variations. Reliability of electrical components deteriorates rapidly over $60^{\circ}C$.</u>

MACHINE INSTALLATION and INSPECTION

When installing and inspecting "*Stacker*", be very careful of the following points and pay attention to ensure that the players can enjoy the game safely.

■ Be sure to turn the power **OFF** before working on the machine.

* WARNING! *

<u>Always</u> Turn OFF mains power before removing safety covers and refit all safety covers when work is completed.

- Make sure the power cord is not exposed on the surface (floor, ground, etc.) where people walk through.
- Check that the rubber glide feet levelers are set evenly on the floor so that the game cabinet is unable to roll and is stable.
- Always make complete connections for the integrated circuit (IC) logic PC Boards and other connectors. Insufficient insertion can damage the electrical components.

* CAUTION! *

<u>Before</u> switching the machine on be sure to check that it has been set on the correct voltage for your area!

<u>**Refer**</u> to the mains voltage adjustment section of this manual on page 39. Machines are normally shipped on 220V AC unless otherwise specified.

- Only qualified personnel should inspect or test the integrated circuit (IC) logic PC Boards.
- If any integrated circuit (IC) logic PC Boards should need servicing. Please contact the nearest *LAI GAMES* distributor. (*Refer to the back page of this manual*)

INTRODUCTION

CONGRATULATIONS! You have just bought the "*Stacker*" prize redemption game, another great product from LAI GAMES.

With a bright and attractive display, simple but exciting game play and a real "Ahh! Just missed" feeling, "*Stacker*" will make a great addition to any location.

We hope you take the time to read this manual and learn about the many other features and user-friendly adjustments that can be made to "fine-tune" the game for maximum earning potential.

DESCRIPTION

■ The "*Stacker*" is a quick stop skill game that is simple and fast to play and learn. The player must press the start/stop button to stack the moving blocks on top of each other. Each time the player successfully builds another layer onto the pile of blocks, the next level is progressively harder.

Once the player reaches the Minor prize level, they get to choose between a minor prize or continue to play on for the major prize. Nearly all of your customers will try to the major prize level.

PACKAGING

■ At delivery, the machine should arrive in good condition. To move the packaged machine for transport or placement, use a forklift and take care not to hit the package or stack heavy objects on top, as this may cause damage to the machine.

CONTENTS

- The "Stacker" cabinet
- Keys: 2 x coin door keys
 - 2 x prize display keys
 - 2 x back door keys
 - 2 x ticket door key (optional)
- Operator's manual
- Quick Setup Booklet
- IEC Power Cord (In cash box)
- Parts & Accessories (In cash box)

SPECIFICATIONS

DIMENSIONS

- Weight: 163 kg (360lb)
- Height: 2000mm (78-1/2")
- Width: 730mm (28-3/4")
- Length: 770mm (30-1/2")
- Power: Maximum 300 W (220 V @ 1.4 A)(120 V @ 2.5 A)
 - Average 150 W (220V @ 0.7 A)(120V @ 1.5 A)

ELECTRIC SUPPLY

The game has the option to operate on a 110V, 120V, 220V or 240V AC 50/60Hz single phase mains electric supply.

The supply must be a three wire grounded supply.

* CAUTION! *

<u>Before</u> switching the machine on be sure to check that it has been set on the correct voltage for your area!

<u>Please</u> Refer to the mains voltage adjustment section of this manual on page 39. Machines are normally shipped on 220V AC unless otherwise specified.

LOCATION REQUIREMENTS

- Ambient temperature: between 5° C and 40° C.
- Ambient humidity: Low
- Ambient U.V. radiation: Very low
- Vibrations level: Low

HOW TO PLAY

PLAYERS AIM TO BUILD A VERTICAL STACK OF BLOCKS TO WIN PRIZES

- Insert coin/s. (*The exact amount of coins per play is dependant on Program settings P1 through to P6. See program settings, page 14 for details*).
- Press the Start/Stop button to start a game;
- Press the Start/Stop button to stop the moving blocks at the desired position;
- Build the stack of blocks by stopping each level of blocks on top of each other;
- Players win a prize when ether the *Minor* or *Major* level is reached;
- On a *Minor* prize win, players can elect to choose a *Minor* Prize or press the Continue button and try for the *Major* Prize Level.
 (*The player will not win any prizes if they choose continue & fail to reach the Major level*)
- Game ends any time the player fails to stop the moving blocks at the desired position, or they choose a Minor Prize.

Prize Selection

- Once you have won a prize, press the select button to step through the Prize Arms.
- If you won a minor prize, you can only select from the minor prize arms. If you won a major prize, you can select only from the major prize arms.
- Press the Start/Stop button to dispense a prize from the selected prize arm.



FITTING PRIZES TO THE PRIZE ARM

STEP ONE: Removal of Prize Locking Pin.



- 1. Unscrew the Prize Locking pin (**left-hand thread**), by turning it in a clockwise direction.
- 2. Remove the pin by pulling it all the way out.

* NOTE! * Stacker Giant is shipped from the factory with the Locking Pins in the Cashbox.

STEP TWO: Attachment of Hanging Ties.



STEP THREE: Loading of Prizes.

Attach the prizes securely to the Hanging Ties.

* NOTE! *

Be sure to allow a loose, 4-finger gap in the 'hanging tie' to ensure that the 'hanging tie' does not interfere with the operation of the Prize Arm mechanism.



Load the prize arm by sliding the Hanging Tie over the entire arm, as shown making sure that the prizes are facing towards the customer.

STEP FOUR: Correct positioning of prizes.



Position the Hanging Ties on the prize arm as shown. Space the prizes apart on the arms so they well presented, looking from the front. Ensure the prizes do not restrict the viewing of the LED display. Do not have the prizes spaced more than '2/3rd an arm' apart, or the prize arm will time out and display error Err4.

* NOTE! *

If completely filling the prize arm, start filling the prize arm from the back and work your way towards the front.

STEP FIVE: Reinsertion of Prize Locking Pin.



- Reinsert the Prize Locking pin by positioning it in the centre of the spiral making sure it <u>ALWAYS</u> stays <u>ABOVE</u> the hanging ties.
- 2. Re-fit and tighten the Prize Locking pin (**Left-hand thread**), by turning it in anti-clockwise direction.

STEP SIX: Correct positioning of Prize Locking Pin.



 Ensure the Prize Locking Pin <u>ALWAYS</u> remains <u>ABOVE</u> the Hanging Ties.

* NOTE! *

Correct fitting of the Prize Locking Pin prevents the prizes from falling of the arm by shaking or tilting the cabinet.

PRIZE SELECTION AND PAYOUT ADJUSTMENT

Please read the following guide as a good starting point for setting up of your new *"Stacker"* game. By testing different merchandise and fine-tuning the settings you can maximize your game earnings.

* NOTE! *

All the following recommendations are based on an approximate payout of **30%.** This payout is recommended for maximum earnings. **30%** payout means that approximately 30% of the game income will be paid out in prizes. **E.g. For** every \$100 in the cashbox, \$30 worth of prizes should be won.

■ The recommended game operation for maximum earnings, are as follows:

MAJOR WINS – Approximately '1' win every '400' games played.

MAJOR PRIZE VALUE – Approximately 200 times the price per play.

MAJOR PRIZES – Use good quality "IN DEMAND" Prizes

Use different types of prizes on each of the 4 Prize Arms to determine which prizes are most desired by the players. You can then use the game audits to check popularity and vary the stock accordingly. Varying the prize stock will also keep players interest in the game.

MINOR WINS – Approximately '1' win every '1 - 2' games played.

MINOR PRIZE VALUE – Approximately cost should be 20% of the price per play.

MINOR PRIZES – Use small cheap items, then use the game audits to check popularity and determine which prizes are most in demand.

PRICE PER PLAY	25¢	50¢	\$1.00	\$2.00
MINOR PRIZE VALUE	5¢ ~ 10¢	$10 \phi \sim 20 \phi$	$20 \phi \sim 30 \phi$	$40 \not e \sim 60 \not e$
Approximate number of Games per Minor Win	1 – 2	1-2	1-2	1-2
Skill Setting Minor Prize (P09)	1	1	1	1
MAJOR PRIZE VALUE	\$35.00	\$75.00	\$150.00	\$310.00
Approximate number of Games per Major Win	400	400	400	400
Skill Setting Major Prize (P10)	8	8	8	8

PRIZE PAYOUT QUICK REFERENCE TABLE

Based on an approximate payout of **30%**

OPERATION

The *"Stacker"* game has six operational modes: Attract mode, Play mode, Test Mode, Programmable Adjustments Mode, Audits Mode and Game History Mode.

OPERATIONAL DIAGRAM



ATTRACT MODE

The Attract mode provides a light and sound display, while the game is not being played. This feature is to attract potential customers to play the game. The attract mode sound can be turned on and off

(Refer to programmable adjustment P07, see page 14 of this manual).

PLAY MODE

■ The Stacker has two play modes. The Standard *Coin Play* mode, where a coin, or coins are inserted. Or *Free Play* where no coins are necessary.

COIN PLAY

■ The *Coin Play* mode is entered from Attract mode, by inserting coins in any of the two coin slots on the front of the machine cabinet, then following the instructions in the "How to Play" section of this manual.

FREE PLAY

- The free play mode is entered from attract mode by holding the Service button for longer than five second, **FrrE** will be displayed on the 4-digit LED display.
- To get back to normal game Play mode Switch Off and On the Machine.

TEST MODE

The Stacker Test mode has *Three Test Configurations* allowing you to test the function of the Sound, all Game Lamps, Displays, the Game Switches and the Prize Arm Motors. (*Refer to the Test Mode Diagram below*).

The Test mode is also used for Clearing Game Errors. If there is an active error, its code will be displayed. To try to clear the error code, press the red test button once. The error can be bypass by quickly pressing the red test button twice. (For Game Errors codes, refer to page 27).

* NOTE! *

- Entering Test Mode will CLEAR any CREDITS remaining in the game.
- If during test mode no ADJUSTMENTS or actions are made to the game for approximately four minutes, it will automatically RETURN to Attract Mode.

TEST MODE DIAGRAM



SOUND, LAMPS & DISPLAY TEST

• **ENTER** The Sound, Lamp & Display test is entered from Attract mode by pressing the test button once.

* NOTE! *

- If there is an active error displayed, press the red test button once to try and clear the error.
- If the error code will not clear, it can be bypass by quickly pressing the red test button twice.

DURING THE TEST:

- Game music and a voice over will be played.
- The Prize Arm Indicator LEDs will light up in sequence.
- The Credit display will count from 0000 to 9999 and then repeat.
- The LED Playfield Display panel will run a test pattern sequence.
- o The Continue, Start/Stop and Select button lamps will flash on and off
- **EXIT** The Sound, Lamp & Display test is exited by pressing the test button. The next test will be switch test.

SWITCH TEST

■ ENTER The Switch Test can be entered by pressing the Test button once while in the Sound, Light & display test or by pressing the Test button twice while in Attract mode, C.XX will be displayed on the 4-digit display where 'XX' is a number representing the switch that is active.

TESTING THE GAME SWITCHES

All game switches have a code from C1 to C10 as tabled below. By activating any of the switches, their code will be displayed on the 4-digit display. If no switches are active then $\Box = 0$ will be displayed.

CODE	DISPLAY	SWITCH FUNCTION	SWITCH LOCATION
C0	C - 0 0	No Switch Active	-
C1	C - 0 1	Ticket Notch Active	Ticket Door (if fitted)
C2	C - 0 2	Service Switch Active	Service Panel
C3	C - 0 3	Start/Stop Button Active	Control Panel
C4	C - 0 4	Coin 1 Switch Active	Coin Door
C5	C - 0 5	Coin 2 Switch Active	Coin Door
C6	C - 0 6	Select Button Active	Control Panel
C7	C - 0 7	Prize Sensor Active	Prize Box
C8	C - 0 8	Continue Button Active	Control Panel
C9	C - 0 9	Minor Prize Button Active	Not Used
C9	C - 10	Tilt Switch Active	Cabinet Back

Normal condition for the game is **C**-**OO**, no switches are active.

* NOTE! *

Several switches can be simultaneously activated in Switch test. The display will then consecutively show their codes, indicating which switches are active. However, it is much easier to test the game switches individually..

■ TICKET DISPENSER NOTCH

(If optional Ticket or Capsule dispenser is fitted)

The Ticket Notch Switch (C1) can be activated or deactivated from the Ticket Feed Button on the Ticket Dispenser PCB or by manually pushing the tickets from the ticket holder through the dispenser after pulling the ticket release rod upwards



- For more information on the servicing and testing the ticket or Capsule dispenser please look at the Dispenser Reference guide. (Only supplied if Optional Kit is fitted)
- **EXIT** The Switch Test is exited into Run Test Mode by pressing the Test Button once.

RUN TEST

- ENTER The Run Test can be entered by pressing the Test button once while in the Switch Test or by pressing the Test button three times while in Attract mode, **rrrrrr** will be displayed on the 4-digit display.
- **RUN** The Start/Stop Button will activate motor of the current selected prize arm as long as the button is held.
- **EXIT** The Run Test is exited into Programmable Adjustments Mode by pressing the Test Button once.

PRIZE ARM LOCATION DIAGRAM





PROGRAMMABLE ADJUSTMENTS MODE

The Stacker has twenty three programmable adjustments that can be changed in this mode. They are P01 to P23 and their codes and values are displayed alternatively during the adjustment procedure.

Example: Code **P01** (*Number of Coins Mech 1*) is displayed as $P \square 0 \square$ and its value of **1** as $\square \square \square \square$ on the 4-digit display.

PROGRAMMABLE ADJUSTMENTS MODE DIAGRAM



PROGRAMMABLE ADJUSTMENTS PROCEDURE

- ENTER The Programmable Adjustments Mode can be entered by pressing the Test button once while in the Run Test or by pressing the Test button four times while in Attract mode, PPPP will be displayed on the 4-digit credit display.
- SELECT The green Service button is pressed to step through each of the adjustment configurations, starting from the PPPP display, P01 being the first step, continuing through to P23, and then looping again from P01 to P23 until the mode is exited.
- CHANGE The Start/Stop button is pressed to change the displayed value. The value can only be stepped up by using the Start button, but the value will loop back to its minimum value the next step after its max value.

* NOTE! *

- Certain program adjustments have a fast adjustment feature. By holding the Start/Stop button down, the values step through quicker.
- **EXIT** The Programmable Adjustments mode is exited into Audits mode, by pressing the Test button once.

PROGRAMMABLE ADJUSTMENTS QUICK REFERENCE TABLE

CODE	PROGRAMMABLE ADJUSTMENTS	OPTIONAL VALUES	DEFAULT SETTINGS	FEATURES	
P01	1-10	1. 2. 310	1	Coin Slot 1 – Coins / Credit	
P02	1 - 10	1, 2, 310	1	Coin Slot 1 – Games / Credit	
D02	0 10	0 1 2 10	0	Coin Slot 1	
P05	0 - 10	0, 1, 210	0	1 Bonus Credit every X coin	
P04	1 – 10	1, 2,310	1	Coin Slot 2 – Coins / Credit	
P05	1 - 10	1, 2,310	1	Coin Slot 2 – Games / Credit	
P06	0 - 10	0, 1, 210	0	Coin Slot 2 1 Bonus Credit every X coin	
P07	ON or OFF	ON or OFF	ON	Attract sound	
P08	1-6	1. 2. 36	3	Cube Speed	
P09	1-4	1, 2, 34	1	Skill Setting (Minor Prize)	
		P09 - Skill Setti	ng (Minor P	rize)	
1 = App	orox. 1 Minor Prize in	1 Every Game	3 = Approx	. 1 Minor Prize in 3 Games	
2 = App	orox. 1 Minor Prize in	2 Games	4 = Approx	. 1 Minor Prize in 4 Games	
P10	1 – 10	1, 2, 310	8	Skill Setting (Major Prize)	
		P10 - Skill Setti	ng (Maior P	rize)	
1 = Easi	est (Appro	ex. 1 Win in 20 Games)	6 = Mediun	n to Hard (Approx. 1 Win in 200 Games)	
2 = Ver	y Easy (Appro	x. 1 Win in 30 Games)	7 = Hard	(Approx. 1 Win in 300 Games)	
3 = Easy	y (Appro	x. 1 Win in 40 Games)	8 = Very H	ard (Approx. 1 Win in 400 Games)	
4 = Easy	y to Medium (Appro	x. 1 Win in 50 Games)	9 = Very, V	Very Hard (Approx. 1 Win in 600 Games)	
5 = Mec	lium (Appro	x. 1 Win in 100 Games)	10 = Hardes	t (Approx. 1 Win in 800 Games)	
P11	0 – 2	0, 1, 2	0	Mercy System Mode Adjustment (Used if Optional Dispenser Fitted)	
P12	0 - 20	0, 1, 2, 320	0	Number of Capsules/Mercy Tickets	
P13	ON or OFF	ON or OFF	OFF	Prizes in free play	
P14	ON or OFF	ON or OFF	ON	Minor Prize Arm No.1 Status	
P15	ON or OFF	ON or OFF	ON	Minor Prize Arm No.2 Status	
P16	ON or OFF	ON or OFF	ON	Minor Prize Arm No.3 Status	
P17	ON or OFF	ON or OFF	ON	Minor Prize Arm No.4 Status	
P18	ON or OFF	ON or OFF	ON	Minor Prize Arm No.5 Status	
P19	ON or OFF	ON or OFF	ON	Minor Prize Arm No.6 Status	
P20	ON or OFF	ON or OFF	ON	Major prize Arm No.7 Status	
P21	ON or OFF	ON or OFF	ON	Major prize Arm No.8 Status	
P22	ON or OFF	ON or OFF	ON	Major prize Arm No.9 Status	
P23	ON or OFF	ON or OFF	ON	Major prize Arm No.10 Status	
P24	1 – 6	1, 2,36	2	Number of prize arm re-tries	
P25	SOFt or HArd	SOFt or Hard	SOFt	Error type for Minor Prize – Err7	
P26	ON or OFF	ON or OFF	ON	Attract Animation (strobing) display	

PROGRAMMABLE ADJUSTMENTS DETAILED

■ P01 = COIN MECH 1: NUMBER OF COINS PER CREDIT

(Default 01) (Adjustable 1 – 10)

This variable sets the number of coins that need to be inserted into coin mechanism 1, for each credit. It can be set to either of 1, 2, 3... to 10 coins for one credit.

■ **P02 = COIN MECH 1: NUMBER of PLAYS PER CREDIT** (Default 01) (Adjustable 1 – 10)

This sets the number of games for each credit inserted into coin mechanism 1. It can be set to either of 1, 2, 3... to 10 plays for each credit.

■ **P03 = COIN MECH 1: NUMBER of COINS for BONUS CREDIT** (Default 00) (Adjustable 0 – 10)

This variable sets the number of coins that need to be inserted into coin mechanism 1 for one bonus credit. It can be set to either of 0, 1, 2... to 10 coins for one bonus credit, (0 = No Bonus).

■ **P04 = COIN MECH 2: NUMBER OF COINS PER CREDIT** (Default 01) (Adjustable 1 – 10)

This variable sets the number of coins that need to be inserted into coin mechanism 2 for each credit. It can be set to either of 1, 2, 3... to 10 coins for one credit.

■ **P05 = COIN MECH 2: NUMBER of PLAYS PER CREDIT** (Default 01) (Adjustable 1 – 10)

This sets the number of games for each credit inserted into coin mechanism 2. It can be set to either of 1, 2, 3... to 10 plays for each credit.

■ **P06 = COIN MECH 2: NUMBER of COINS for BONUS CREDIT** (Default 00) (Adjustable 0 – 10)

This variable sets the number of coins that need to be inserted coin mechanism 2 for one bonus credit. It can be set to either of 0, 1, 2... to 10 coins for one bonus credit, (0 = No Bonus).

■ **P07 = ATTRACT MODE SOUND**

(Default ON) (Adjustable ON or OFF)

This adjustment turns the *attract mode sound* **ON** or **OFF**. This is the sound and music that the game generates to attract customers when it is not being played. The music will cycle approximately every 3 minutes.

$\blacksquare P08 = CUBE SPEED$

(Default 3) (Adjustable 1 - 6)

This option is for setting the *Cube Speed*. This affects the speed of the cube block movement as the player increases in levels. A setting of [1] is the easiest up to [6], the hardest.

■ **P09 = SKILL SETTING (Minor Prize)**

(Default 1) (Adjustable 1 - 4)

This option sets the *Skill level* for players to reach the Minor Prize level, as listed in the table below. These settings are made easy on purpose, players must still be skillful to get to this level, however very few players take the minor prize, most play on to try and win the major prize.

MINOR PRIZE SKILL SETTINGS		
1 = Approx. 1 Minor Prize in Every Game 3 = Approx. 1 Minor Prize in 3 Games		
2 = Approx. 1 Minor Prize in 2 Games	4 = Approx. 1 Minor Prize in 4 Games	

■ P10 = SKILL SETTING (Major Prize)

(Default 8) (Adjustable 1 – 10)

This option sets the *Skill level* for players to reach the Major Prize level, as listed in the table below. As this is a skill game the win rate is only the approximate rate for each difficulty setting.

MAJOR PRIZE SKILL SETTINGS			
1 = Easiest	(Approx. 1 Win in 20 Games)	6 = Medium to Hard	(Approx. 1 Win in 200 Games)
2 = Very Easy	(Approx. 1 Win in 30 Games)	7 = Hard	(Approx. 1 Win in 300 Games)
3 = Easy	(Approx. 1 Win in 40 Games)	8 = Very Hard	(Approx. 1 Win in 400 Games)
4 = Easy to Medium	(Approx. 1 Win in 50 Games)	9 =Very, Very Hard	(Approx. 1 Win in 600 Games)
5 = Medium	(Approx. 1 Win in 100 Games)	10 = Hardest	(Approx. 1 Win in 800 Games)

■ P11 = MERCY SYSTEM MODE ADJUSTMENT

(Default 0) (Adjustable 0-2)

This option adjusts the way that mercy tickets or capsules paid out if the optional ticket or capsule dispenser is fitted. See **P15** for setting the number of mercy tickets or capsules that will be dispensed.

- 0. Mercy System disabled, no ticket or capsules will be paid. This setting must be used if optional ticket or capsule dispenser is not fitted
- 1. Mercy tickets / capsules are paid if no Major or Minor prize is won. Optional ticket / capsule dispenser must be fitted
- 2. Mercy tickets / capsules are paid on every game credit, regardless if prizes are won or not. Optional ticket / capsule dispenser must be fitted

* NOTE! *

■ If no ticket or capsule dispenser is fitted to the machine, make sure **P11** and **P12** adjustments are set to [0].

■ P12 = NUMBER of MERCY TICKETS / CAPSULES ADJUSTMENT (default 0) (Adjustable 0 – 20)

This option adjusts the number of mercy tickets or capsules paid out if the optional ticket or capsule dispenser is fitted. See **P18** for setting Mercy System Mode payout options.

■ P13 = PRIZES IN FREE PLAY MODE

(Default OFF) (Adjustable ON or OFF)

This setting controls whether or not the *game dispenses prizes* in free play mode. The options are **ON** or **OFF**.

PRIZE ARM STATUS

Prize Arm Status adjustments P17 to P26 are used to disable Prize Arms that have been removed to allow larger prizes to be dispensed. Stacker comes with all prize arms installed as default.

* NOTE! *

■ Disabled Prize Arms are unable to be selected by Wining Players

P14 to P19 MINOR PRIZE ARM No.1 to 6 STATUS

(Default, see table below) (Adjustable ON or OFF)

This option is for enabling or disabling of Minor Prize Arms numbered 1 through to 6.

Default Table

■ P20 to P23

Prize Arm No.	Default	Prize Arm No.	Default
Minor Arm 1	ON	Minor Arm 4	ON
Minor Arm 2	ON	Minor Arm 5	ON
Minor Arm 3	ON	Minor Arm 6	ON

MAJOR PRIZE ARM No.7 to 10 STATUS (Default, *see table below*) (Adjustable ON or OFF)

This option is for enabling or disabling of Major Prize

PRIZE ARM NUMBER & LOCATION



Default Table

Arms numbered 7 through to 10.

Prize Arm No.	Default	Prize Arm No.	Default
Major Arm 7	ON	Major Arm 9	ON
Major Arm 8	ON	Major Arm 10	ON

* NOTE! * If all Minor and / or Major Prize Arms are set to [OFF] the error message [Err6] will be displayed in the credit display. See Error Codes on page 27 for more detail.

■ P24 = NUMBER OF PRIZE ARM RE-TRIES

(Default 02) (Adjustable 1 – 6)

This option controls the number of retries a user will get when a prize arm times out during the prize selection stage.

* NOTE! *

If the machine fails to detect a prize fall after set number of re-tries the error message [**Err4 or Err7**] will be displayed in the credit display. See Error Codes on page 27 for more detail.

■ P25 = ERROR TYPE FOR MINOR PRIZE – ERR7

(Default Soft) (Adjustable Soft or Hard)

This variable sets the type of action taken when there is a Minor Prize Arm deployment error 7 [Err7]. When set to Soft [SOFt] on an error 7 the game will automatically continue to play on for a Major Prize. If set to Hard [HArd] the game will stop and display Err7 in the Credit Display and sound "Please Call the Attendant"

* NOTE! *

For more information on [Err7] please see Error Codes on page 27.

P26 = ATTRACT ANIMATION (STROBING) DISPLAY (Default ON) (Adjustable ON or OFF)

This setting controls whether or not the game displays the strobing of the attract animation. When set to ON, the game will display the attract animation with strobing. If set to OFF, the game will skip the strobing part of the attract animation.

AUDITS MODE

The Audits Mode allows the operator to view statistics in all areas of the Game Play. This enables the operator to make calculated adjustments and "Fine Tune" the machine to maximize earning potential. The Audits mode stores bookkeeping of the games processed since the last game audits reset. While in this mode, the game audits can also be reset to zero.

The Stacker has thirty six Audits that can be viewed in this mode. They are A01 to A36 and their codes and values are displayed alternatively during the Audit Mode.

Example: Code A01 will be displayed as A 01 and a value of 421 as 421 on the 4-digit display.

Or it will display large values like 21589 as --- 2 and 1589 on the 4-digit display.

AUDITS MODE DIAGRAM



AUDIT PROCEDURE

- ENTER The Audits mode is entered from Programmable Adjustments mode by pressing the Test button once or from Attract mode by pressing the Test button five times. AAA will be displayed on the 4-digit display.
- SELECT The green Service button is pressed for advancing each step through the set of audits configurations, starting from the AAA display, A01 being the first step, continuing through to A36, and then looping again from A01 to A36 until the mode is exited.
- **RESET** The entire set of user audits can be reset during any of the audit configurations, by holding the Start button for longer than 5 seconds. The displays will be cleared while still holding the button pressed and will return to the same audit step after releasing the button. The value of all audits will be reset to "00 000".
- **EXIT** The Audits mode is exited into Game History mode, by pressing the Test button once.

* NOTE! *

- <u>ALL</u> Audits will <u>STOP INCREMENTING</u> when the "Total Number of Games Played", audit A-07, reaches 60,000.
- To restart the audits they must be reset to 00 000 by holding The Start button for longer than 5 seconds while in audits mode.

AUDITS QUICK REFERENCE TABLE

CODE	DISPLAY	AUDIT FUNCTION
A01	A - 0 1	Total Coins In Mechanism 1
A02	A - 0 2	Total Coins In Mechanism 2
A03	A - 0 3	Total Number of Service Credits
A04	A - 0 4	Total Number of Major Prize Wins
A05	A - 0 5	Total Number of Minor Prize Wins
A06	A - 0 6	Total Number of Skip Minor for Major Prize attempt
A07	A - 0 7	Total Number of Games Played
A08	A-08	Total number Games ending at level 1
A09	A-09	Total number Games ending at level 2
A10	A-10	Total number Games ending at level 3
A11	A-11	Total number Games ending at level 4
A12	A-12	Total number Games ending at level 5
A13	A - 1 3	Total number Games ending at level 6
A14	A-14	Total number Games ending at level 7
A15	A - 1 5	Total number Games ending at level 8
A16	A-16	Total number Games ending at level 9
A17	A-17	Total number Games ending at level 10
A18	A-18	Total number Games ending at level 11
A19	A-19	Total number Games ending at level 12
A20	A-20	Total number Games ending at level 13
A21	A-21	Total number Games ending at level 14
A22	A-22	Total number Games ending at level 15
A23	A - 2 3	No. of prize selections on Minor Prize Arm No.1
A24	A-24	No. of prize selections on Minor Prize Arm No.2
A25	A-25	No. of prize selections on Minor Prize Arm No.3
A26	A-26	No. of prize selections on Minor Prize Arm No.4
A27	A-27	No. of prize selections on Minor Prize Arm No 5
A28	A-28	No. of prize selections on Minor Prize Arm No.6
A29	A-29	No. of prize selections on Major Prize Arm No.7
A30	A - 30	No. of prize selections on Major Prize Arm No.8
A31	A-31	No. of prize selections on Major Prize Arm No.9
A32	A-32	No. of prize selections on Major Prize Arm No.10
A33	A - 3 3	Manufactures Audit only
A34	A - 34	Manufactures Audit only
A35	A - 3 5	Manufactures Audit only
A36	A - 36	Manufactures Audit only

AUDITS DETAILED

■ A01 = TOTAL COINS IN MECHANISM 1

This Audit displays the *total number of coins* inserted into coin mechanism 1 since the audits were last cleared.

■ A02 = TOTAL COINS IN MECHANISM 2

This Audit displays the *total number of coins* inserted into coin mechanism 2 since the audits were last cleared.

■ A03 = TOTAL NUMBER OF SERVICE CREDITS

This Audit displays the *total number of Service Credits* since the audits were last cleared. This records the number of credits given by pressing the Service Button on the service panel.

■ A04 = TOTAL NUMBER OF MAJOR PRIZE WINS

This Audit displays the *total number of Major Prize Wins* since the audits were last cleared.

■ A05 = TOTAL NUMBER OF MINOR PRIZE WINS

This Audit displays the *total number of Minor Prize Wins* since the audits were last cleared.

A06 = TOTAL NUMBER OF SKIP MINOR FOR MAJOR PRIZE ATTEMPT

This Audit displays the *total number of* times the *Minor Prize Win* was skipped for an attempt at a *Major Prize Win*, since the audits were last cleared.

■ A07 = TOTAL GAMES PLAYED

This Audit displays the *total number of Games Played* since the audits were last cleared.

* NOTE! *

- ALL Audits will <u>STOP INCREMENTING</u> when the "Total Number of Games Played", audit A-07, reaches 60,000.
- To restart the audits they must be reset to 00 000 by holding The Start button for longer than 5 seconds while in audits mode.

■ A08 to A22 **TOTAL NUMBER OF GAMES ENDING on LEVELS 1 to 15**

These Audits display the *total number of games ending on level* number 1 through to 15 on this machine since the audits were last cleared. Each level is a row of squares on the LED Playfield Display; row one starting at the bottom with row fifteen at the top.

■ A23 to A32 TOTAL NUMBER OF PRIZE SELECTIONS on PRIZE ARM **POSITION NUMBER 1 to 10**

These Audits display the total number of the prize selections on Prize Arm positions number 1 through to 10 on this machine since the audits were last cleared. Minor Prize Arms are A01 to A06 and Major Prize Arms are A07 to A10.



PRIZE ARM NUMBER

■ A33 to A36 = MANUFACTURE AUDITS ONLY

These are Manufacturer Audits only and serve no useful function for the operator of this game.

* NOTE! *

• Customer Support may request from the operator the values of these audits.

GAME HISTORY MODE

By using the Game History Mode the operator can view the results of the last 10 games played. This enables the operator to verify players game results and verify the win / lose pattern on the LED Playfield Display.

Example: The history results for the last Game Played. H01 shows Level 5 was where the game ended and the LED block stack pattern will be shown on the LED Playfield Display.

GAME HISTORY MODE DIAGRAM



 NOTE! *
 Score Histories will be erased if the game is switched off then on. Empty score histories show as - on the 4-digit display

GAME HISTORY QUICK REFERENCE TABLE

CODE	DISPLAY	HISTORY RESULTS
H01	H-01	Level Ending & LED Pattern for Very Last Game Played
H02	H-02	Level Ending & LED Pattern for 2 nd Last Game Played
H03	H-03	Level Ending & LED Pattern for 3 rd Last Game Played
H04	H-04	Level Ending & LED Pattern for 4 th Last Game Played
H05	H-05	Level Ending & LED Pattern for 5 th Last Game Played
H06	H-06	Level Ending & LED Pattern for 6 th Last Game Played
H07	H-07	Level Ending & LED Pattern for 7 th Last Game Played
H08	H-08	Level Ending & LED Pattern for 8 th Last Game Played
H09	H-09	Level Ending & LED Pattern for 9 th Last Game Played
H10	H-10	Level Ending & LED Pattern for 10 th Last Game Played

GAME HISTORY PROCEDURE

- ENTER The Game History mode is entered from Audits mode by pressing the Test button once or from Attract mode by pressing the Test button six times. HHHH will be displayed on the 4-digit display.
- SELECT The green Service button is pressed for advancing each step through the set of Game Histories, starting from the HHHH display, H01 being the first step, continuing through to H10, and then looping again from H01 to H10 until the mode is exited.
- **EXIT** The Game History mode is exited into Game Attract mode, by pressing the Test button once.

ERRORS AND TROUBLESHOOTING

If the microprocessor detects any problems with the operation of the game, an Error will be displayed on the 4-digit display and the machine will play a voice message. "Please Call the Attendant". Some error Messages will only be displayed when test mode is entered. Errors are displayed on the displays as [E][r][K], where 'X' is the error number. There are five error messages for Stacker, listed as follows:

ERROR CODE QUICK REFERENCE TABLE

CODE	ERROR DESCRIPTION	SOLUTION
		1. If the optional ticket/capsule
	TICKET DISDENSE EDDOD	D11 and D12 are ast to "0"
	IICKET DISPENSE ERROR	P11 and P12 are set to 0 .
Err1	Jammed tickets, no tickets or no	2. If the optional ticket/capsule
	ticket notch pulse for longer than	dispenser is fitted, clear
	3 seconds.	ticket/capsule dispenser jam or
		replenish tickets. After this, push
		Test button once to clear error.
	START/STOP BUTTON	
Err2	JAMMED, active for longer then	Check Button function using switch test
	30 seconds	
	EEPROM ERROR	The main MCU is getting errors reading
Err2	Problem with on board	the EEPROM (24C16 IC on MCU).
EIIJ		Send MCU PCB to the closest LAI
	EEI KOM	Games distributor for repair.
Eml	MAJOR PRIZE DEPLOYMENT	Refill Major Prize Arms or test sensor
E114	ERROR	using switch test.
Em 5	PRIZE SENSOR BLOCKED or	Clear Blockage from between prize
EIIS	PRIZE SENSOR FAULTY	sensors or test sensor using switch test.
		Check that at lest one Minor Prize Arm
Err6	All PRIZE ARMS STATUS are	(P14 to P19) and one Major Prize Arm
	DISABLED.	(P20 to P23) has been set active Prize
		Arms ON.
D7	MINOR PRIZE DEPLOYMENT	Refill Minor Prize Arms or test sensor
Err/	ERROR	using switch test.

TROUBLESHOOTING GAME ERRORS

■ CLEARING GAME ERRORS

Game errors can be cleared, by pushing the test button ONCE. The game will try and check if the error is fixed. If the reason for the error is fixed, the game will continue as normal. If the error is not fixed, the error will remain on the display.

■ Err1 – TICKET ERROR

This can occur if the optional capsule/ticket dispenser is <u>not</u> installed and **P14** and **P15** have <u>not</u> been set to zero. If your machine does <u>not</u> have theses optional fixtures installed, please set **P14** and **P15** to "0" (See *Programmable settings mode, page 14 for Details*).

Otherwise, if the optional ticket/capsule dispenser is fitted, this error usually occurs if the game has run out of tickets or there is a ticket/capsule jam. A less common reason is if the game PCB tries to dispense tickets/capsules but doesn't get a notch pulse for approximately three seconds. Use the Switch Test and test the notch pulse by passing a ticket in and out of the notch sensor or manually activating the micro-switch on the capsule dispenser, an active notch will be display as C1, (See Page 11 for Details).

If the game was out of tickets, replace the tickets, clear the ticket/capsule jam and then push the test button once to clear the error. The game will then payout any owed tickets/capsules.

■ Err2 – START/STOP BUTTON JAMMED

This error is usually displayed if the Start/Stop button is active for longer then 30 seconds Use the Switch Test and check the Stop/Start button, an active button will be display as **C3**, (*See Page 11 for Details*).

Err3 – EEPROM ERROR

This Error is only displayed in test mode and means that the CPU cannot read the EEPROM, or is receiving errors during communication with the EEPROM (The 23C16 IC on the main MCU PCB). This could cause problems with the game audits and program settings. If this error occurs, take your game to the nearest authorized LAI games dealer for repair.

Err4 – MAJOR PRIZE DEPLOYMENT ERROR

This error is usually displayed if an empty Major prize arm is selected by a Major prize-winner or if the game activates the Major prize arm and does not sense a prize dropping through the prize sensor. The Err4 error code and the Major Prize Arm location numbers are displayed alternatively.

The error can also occur if the Major prize arm **"TIMES OUT"** caused by taking to long to dispense a prize. This can happen if there is more than half a prize arm length between Major prizes on the Major prize arm, the Major prize arm is not turning or the prize sensor is not working.

Test the prize arm function using the Run Test, (See Page 13 for Details). Test the prize sensor using the Switch Test, (See Page 11 for Details). Pass your hand through the infrared beams in the prize chute. Blocking the invisible beams should display **C7** in switch test. Removing your hand from the beams should stop **C7** from being displayed.

■ Err5 – PRIZE SENSOR BLOCKED or PRIZE SENSOR FAULTY

This error usually occurs if the prize sensor is blocked or a prize is jammed in the prize chute, blocking the infrared beam of the prize sensor for longer then 5 seconds. This error can also occur if the sensor output pulses or "flickers" due to miss alignment for more then 20 times every 5 seconds.

The sensor can be tested using the switch test, (*See Page 11 for Details*). If the sensor is blocked **C7** will be displayed in this test. Clear what ever is blocking the sensor and the error will clear itself.

If you cannot find anything blocking the sensor, there could be faulty infrared sensors or receivers on the prize sensor. The sensor PCB's should be returned to your nearest LAI Games distributor for repair.

The Prize Sensor is designed around 12 pairs of infrared detectors and LEDs. Blocking the infrared path of any one of the 12 beams will trigger a common output. There are 6 orange LEDs on each Sensor PCB to help indicate the active pairs of infrared beams.

■ Err6 – All PRIZE ARMS STATUS are DISABLED.

This error will only be displayed if programmable adjustments **P17** to **P22** (Minor Prize Arm Status) and / or adjustments **P23** to **P26** (Major Prize Arm Status) are all set to **OFF** (Disabled).

There should be at lest one Minor Prize Arm and one Major Prize Arm set to Status to **ON**. Push the test button once to enter directly to **P17** or **P22** in adjustment mode, locate what prize arms need to be active and set that Prize Arm Status to **ON**, (*See Page 14 for Details*).

■ Err7 – MINOR PRIZE DEPLOYMENT ERROR

This error is usually displayed if an empty Minor prize arm is selected by a Minor prize-winner or if the game activates the Minor prize arm and does not sense a prize dropping through the prize sensor. The Err4 error code and the Minor Prize Arm location numbers are displayed alternatively.

The error can also occur if the Minor prize arm **"TIMES OUT"** caused by taking to long to dispense a Minor prize. This can happen if there is more than half a prize arm length between Minor prizes on the Minor prize arm, the Minor prize arm is not turning or the prize sensor is not working.

* NOTE! *

P25 setting will affect what the action the game will take on an error 7 [Err7]. Please see Program Adjustments on *page 14* for more information.

Test the prize arm function using the Run Test, (*See Page 13 for Details*). Test the prize sensor using the Switch Test, (*See Page 11 for Details*). Pass your hand through the infrared beams in the prize chute. Blocking the invisible beams should display **C7** in switch test. Removing your hand from the beams should stop **C7** from being displayed.

FUSE INFORMATION

* WARNING! *

<u>Always</u> turn OFF Mains power and unplugged the game, before replacing any fuses.

■ MAIN AC SUPPLY FUSE (1 x 6 AMP FAST BLOW, M205 TYPE) This fuse is for the main AC supply and is situated in the IEC mains input socket.

* NOTE! *

- The power cord must be removed before the fuse can be accessed.
- MCU POWER FUSE (1 x 1.5 AMP FAST BLOW, M205 TYPE) This fuse is for the power supply to the MCU PCB.
- MCU CONTROL FUSES (2 x 5 AMP FAST BLOW, M205 TYPE) These fuses are for the DC transistor drivers on the MCU PCB
- 3 LED PLAYFIELD DISPLAY CONTROLLER FUSES (3 x 2.5 AMP FAST BLOW, M205 TYPE) This fuse is for the +5VDC on the three LED Playfield Display PCBs
- **DOWN LIGHT FUSES (2 x 5 AMP FAST BLOW, 3AG TYPE)** This fuse is for the two 12VAC 20W Down Light Lamps

* **CAUTION!** * <u>**Do Not**</u> use any fuse that does not meet the specified rating.

FUSE LOCATION DIAGRAM

As viewed from rear MCU Power Fuse 0 0 1.5A QB M205 LED Controller Fuses \cap 0 2.5A QB M205 MCU Control Fuses 0 0 0 0 0 0 5A QB M205 Main AC Supply PRIZE SHUTE Fuse 6A QB M205 Down Light Fuses 5A QB 3AG

SECTION A: SERVICE INSTRUCTIONS







LOCATING AND ACCESSING PARTS

PARTS LOCATION DIAGRAM

As viewed from front



PARTS LOCATION DIAGRAM Cont.

As viewed from rear



PARTS DESCRIPTION

COIN MECHANISMS

The coin mechanisms can be accessed inside the Coin door to the right on the front of the machine cabinet.

CASH BOX

The cash box is located inside the coin door on the front of the machine cabinet.

■ **TICKET DOOR** (Optional)

The ticket mechanism can be accessed inside the ticket door to the lower Right on the front of the machine cabinet.

SPEAKERS

Two speakers are located to the front of the cabinet below the control. Access is through the rear door.

GAME CONTROLS:

Located in the center of the machine cabinet. The control panel can be Access through the rear door or via the coin door.

START/STOP BUTTON: The Start button is the large RED round illuminated button. This button is used to start / stop during a game and for test and program adjustments.

CONTINUE BUTTON: The Continue button is the rectangular illuminated button located at the left-hand side of the control panel.. This button is used to continue the game if player want to try for a Major prize.

SELECT BUTTON: The Select button is the rectangular illuminated button located at the right-hand side of the control panel. The select button is used to step through the prize arms if a prize is won

■ SERVICE CONTROLS:

Located on the service panel mounted on top of the cash box and accessed trough the Coin Door.

SERVICE BUTTON: Used to input credits to the game without activating the coin counter, and to perform test procedures in combination with the test button

TEST BUTTON: Used to perform the test mode, in combination with the Service button.

VOLUME KNOB: Used to adjust the speaker's sound level.



POWER CORD

The power cord is a standard IEC power cord (as used on computers) that is plugged in to the power inlet socket at the rear of the machine. The power cord can be removed for transport.

POWER INLET

The power inlet is located at the rear of the machine on the Left-hand side as viewed from the rear. It is a standard IEC inlet socket.

MAINS SWITCH

The mains switch is located on the power inlet assembly along with the mains fuse, and IEC inlet socket.

■ FUSES

For locations of all fuses refer to Fuses and Fuse location, page 30 of this manual.

* WARNING! *

<u>Always</u> turn OFF Mains power and unplugged the game, before replacing any fuses

<u>Always</u> use the correct rated fuse. Refer to page 30 for fuse information.

7-SEG DISPLAY

There is a 4-digit display located on the control panel. Access is through the back of the machine.

■ PCB's

For location of all game PCB's, refer to the Parts Location diagram page 32 of this manual.

POWER SUPPLY

The power supply is located at the back of the cabinet and is accessed from the rear of the machine. It is a 12V 13A switching power supply.

DOWN LIGHT TRANSFORMER

The down light transformer is located at the back of the cabinet and is accessed from the rear of the machine. It is 2 x 12VAC 5A supply output.

TILT SWITCH

The tilt switch is located to the left at the back of the cabinet and is accessed from the rear of the machine.

■ MAJOR & MINOR PRIZE ARMS

The prize arm mechanisms are located at the back of the cabinet and are accessed from the rear of the machine.

LAMPS

* WARNING! *

<u>Always</u> turn OFF Mains power and unplugged the game, before replacing any lamps.

<u>Always</u> allow time for cooling as Lamps that have been active for a time may still be too hot to touch.

• COIN DOOR LAMPS

The coin door lamps all are 12V/DC GE192 or equivalent and can be accessed through the coin door.

BUTTON LAMPS

The button lamps all are 12V/DC GE192 or equivalent and can be accessed through the coin door or back door.

HEADER LAMPS

There is one standard FL 15 fluorescent tube for the Header Display. Access is by the removing of the machine header cover and accessing the tube from the front.

PRIZE DISPLAY SIDE LAMPS

There are two standard FL 18 fluorescent tubes for side lighting the prize display. Access is by the removing of the Lamp Brackets and accessing the tubes from the back door.

PRIZE DISPLAY DOWN LAMPS

There are 2 x 12V 20W 36Dgr-halogen lamps mounted in the top of the prize display. These are standard dichroic lamps and are accessed from the prize display through the prize display door.

* CAUTION! *

<u>Always</u> replace the lamps with the same or equivalent size, wattage and voltage.

MAINTENANCE

CLEANING AND CHECK UP

EXTERIOR

<u>Regularly</u> dust and clean the external cabinet areas as required, using a soft water-damp cloth and mild soap. Check for blown bulbs and replace as required.

Any scratches or marks in the fiberglass or acrylic can be buffed out using car polish or cut and polish.

* CAUTION! *

<u>Do not</u> use solvents on the panels as it may affect the artwork.

■ INTERIOR

<u>Regularly</u> dust and vacuum the interior of the cabinet, taking care to remove any objects that may have fallen on the PCBs. Check and tighten all fixing hardware and fasteners as required.

* WARNING! *

<u>Always</u> turn **OFF** Mains power and unplugged the game, before cleaning the interior of the machine.

<u>Always</u> after cleaning the cabinet interior, check all harness connectors and restore all loose or interrupted connections.

<u>Regularly</u> check that all the Display and Button Lamps are operating through the Sounds, Lamps and Display Test (*See page 11*). Replace any globes that are not operational.

INSTRUCTIONS TO FIT 90° T-HANDLE LOCK TO NEW TYPE COIN DOORS

This document is to instruct in the fitting of a 90° T-Handle Lock to the new type coin doors for Lighthouse and Stacker.

How to Identify the New type Coin Doors

The new type coin doors can be identified by additions both to the door and to the door frame.

The Door will have an external stainless steel plate with two coach bolts as in the photo to the right.

This plate covers the T-Handle hole and provides the two coach bolts for mounting it.



The photo on the left shows the new lock points on the door frame.

Take note of the T-Handle Lock Cam hanging from the lock point metal. If this is missing you will need to order a replacement from your LAI GAMES distributor before fitting a T-Handle Lock.



You will only be able to fit T-Handle Locks to machines with these new types of Coin Doors & Frames. Machines with older door types are unable to use T-Handle Locks.

What is a T-Handle Lock and where to Purchase it

The "Pop-out" T-Handle Locks are commonly found on drink and snack vending machines. They provide a heavy duty tamper proof locking system with replaceable inner cylinders using a variety of key types.

The T-Handle lock to be used with our coin doors is a 90° Cam Rotation type. With the T-Handle popped out it will only turn a quarter turn. The inner cylinder key lock is not normally supplied with the T-Handle and will need to be ordered separately.

For the Inner Cylinder key lock you can order a generic type to fit the T-Handle. And if you are using a Master locking system on your machines, you can check with your lock supplier for a matching inner cylinder.



You can purch	ase the T-Handles and Inner Cylinders from:
Company	Betson Imperial Parts Co
Address	1000 Stevenson Court #109
	Roselle, IL. 60172
	USA
Phone	+1 (630) 295-8595
Fax	+1 (630) 295-9649
Website	http://www.betson.com

Part Number	Part Description
33-0250	Pop Out T-Handle with 90° Cam Rotation
33-0500	Inner Cylinder for Pop Out T-Handle (Keyed Differently)

Removing Original Lock & Cam

Open the Coin Door and remove the cam from the rear of the barrel lock.

Then remove the barrel lock from the front and rear cover plates.

Next undo the two Coach Bolts holding the front and rear cover plates in place.





Save these two Coach Bolts to mount the T-Handle.

Mounting the T-Handle Lock & Cam

Pop open the assembled T-Handle Lock unit and rotate the handle 90° counter clockwise.

Using the two Coach Bolts you saved, mount the T-Handle onto the Coin Door Keeping the T-Handle in the unlocked position, mount the Cam vertical on the end of the T-Handle.

Close the Coin Door and turn the T-Handle into the locked position. The Cam should move freely and easily into place.

Remove the Key from the T-Handle and press the handle to lock the Coin Door







Your Machine is now Securely Fitted with a Pop-out T-Handle Lock!

SECTION B: TECHNICAL DETAILS





It is advised that anybody using SECTION B for repairing or modifying any of the components of the game should be a qualified technician, having at least a basic knowledge of digital components, integrated circuits and electricity.





MAINS VOLTAGE ADJUSTMENT

POWER SUPPLY

The Switch Mode Power Supply has a switch to set the mains voltage range. It is located at the rear of the game cabinet, and is accessed via the back door. Use a thin blade screwdriver to move the selector switch to the desired mains voltage (See Diagram Below)



■ FLORESCENT TUBE BALLASTS AND STARTERS

Locate the florescent tube ballasts and starters in the back of the cabinet. If unsure of the location of any ballasts or starters, refer to Parts location diagram on page 32 of this manual. These have to be removed and replaced with an equivalent wattage at you local mains voltage level.

TRANSFORMER CONNECTORS

Locate the machine transformer(s) in the base of the cabinet. If unsure of the location of the transformer(s), refer to Parts location diagram on page 32 of this manual. Change the position of the 'ACTIVE' or 'HOT WIRE' input, (marked brown on the diagram), to the position for the desired mains voltage. (See Diagram Below)

PIN	FUNCTION
1	240VAC
2	220VAC
3	120VAC
4	110VAC
5	OVAV (NEUTRAL)
6	EARTH









3D PARTS EXPLODE

g	PART NO	DESCRIPTION	μ Σ
5	STC-FM-51-R1	COIN DOOR HINGE	
8	-	COIN DOOR ASSY 1DBA, 1 SLOT	
63	STC-SA-59-R0	CASH BOX	-
8	STC-SA-60-R0	HOUSING CASHBOX	- -
5	51C E008	CUIN COUNIER PANEL ASSEMBLY	
	510-FM-38-RU FA1252	COIN COUNTER BRACKET	- M
	EE0689	POTENSIO CARBON WITH KNOB	, -
	EP0602	KNOB VOLUME	-
90	STC A003	FRONT PANEL ASSEMBLY	1
	STC-SA-01-R0	FRONT PANEL METAL ONLY	-
	STC-FP-06-R0	ACRILLIC CONTROL PANEL	-
	STC-FM-37-R0	SPEAKER GRILL	-
	EA0533	PUSH BUTTON BLUE	
	EA0507	SWITCH RECT GREEN BUTTON WITH LAMP	
	DA2601	SWIICH RECIRED BUILDN WITH LAMP	
	AT 2014	FUED I ZETT & UNIT DISFLAT	
	FA1201	STICKER SIN FROM LONER CARRIEL	- ~
07	STC-FM-02-R0	PRIZE RECEIVAL BOX	-
g		DRIZE ROX ASSEMBLY	-
8	S STC ADDAA	PRIZE BOX VETAL ONLY	-
	EA2602	PCB59a SB PRIZE SENSOR MASTER	
	Ц BA2603	PCB596 SB PRIZE SENSOR SLAVE	-
	A STC A004B	PRIZE DOOR WITH STICKER	-
60	STC-SA-09-R0	PRIZE CHUTE ASSEMBLY	1
10	STC-FM-10-R0	PANEL LOWER RETAINER	-
Ξ	STC AD01	FRONT DOOR ASSEMBLY	-
12	STC-FM-56-R0	FRONT DOOR HINGE	1
13	STC A007	SIDE SKIN ASSEMBLY	1
14	HM0016	CASTOR 2" SWIVEL	4
15	CD A001	CAPSULE DISPENCER ASSEMBLY	-
16	STC E007	POWER ASSEMBLY	-
17	STC E005	DB BOX ASSEMBLY	-
	STC E005A	DB BOX METAL ONLY	-
	EA1356	BINDING POST	-
	EA1358	SPLIT CORE EMI FILTER FOR CE MACHINE	-
	EA0649	IEC TYPE NOISE EMY FILTER	
	TEN STC HOOL	DB BOX HARNES	
	E EAUBJO	POWER LEAU MOLDED IEC TO 3 PIN USA	
	PAR CO000	POWER LEAD MOLDED IEC TO 3 PIN AU	
	EA0639	POWER LEAD MOLDED IEC TO 3 PIN UK	-
38	STC A005	SIDE PANEL ASSY	1R, 1L
	STC-FW-06-R0	SIDE PANEL	
ę		SIICKEN SIN SIDE N/L	- -
20	STC-FM-22-BO	MYLAF FANEL ASSEMBLI MYLAP LOWER BRACKET	- -
3	ATTO13		-
3 6	CTC FORE	TOB LICHT STACKED	- -
7	JIC EUUO	IOF EIGHT STACKEN	
	EPO434	END CAP HOLDER MODEL 713 HS	- ^
	STC-FM-15-R0	TOP UL BRACKET	-
23	STC-FM-36-R0	MYLAR SIDE RETAINER	2
24	STC-FM-35-R0	MYLAR DIVIDER	-
25	STC-SA-19-R0	MYLAR BACK COVER	-
26	STC-FM-21-R0	MYLAR TOP RETAINER	-
27	STC E001	PRIZE ARM MEDIUM ASSY WITH PCB	9
28	STC E002	PRIZE ARM LONG ASSY WITH PCB	4
ī	STC H004	MAIN HARNES	-





1	NO	PART NO	DESCRIPTION	QTY
	10	STC E001	PRIZE ARM LONG ASSY WITH PCB	4
	02	STC E002	PRIZE ARM MEDIUM ASSY WITH PCB	9
	03	STC E004	NEON DISPLAY ASSEMBLY	2
I M RI	03A	EA0206	LAMPU NEON 18W COOL WHITE	2
	03B	EP0434	END CAP HOLDER MODEL 713-HS	4
4A4	03C	STC-FM-50-R1	UL NEON BRACKET	2
	04	STC E004	DISPLAY LICHTING ASSEMBLY	-
	04A	STC A006	DISPLAY BOX WITH SIDE ACRILLIC	~
	04B	STC-FP-02-R0	ACRILLIC DISPLAY BLUE	-
MEI	04C	BAFB82A	PCBFB820 RSL BLUE LED DISPLAY	-
। ।ਮ	04D	STC-FM-13-R0	PCB FRAME	2
∀Ч	I	I	STICKER STK CLUB MAJOR/MINOR DISPLAY	-
	I	EE2414	CUBE LED BLUE COLOR	60













Stacker POWER WIRING DIAGRAM



Stacker OPTIONAL WIRING DIAGRAM



WARRANTY

LAI GAMES warrants its manufactured products for a period of 3 months inclusive of parts and labor from the date of sale.

LAI GAMES exclusive obligation is to repair any item with any defects as a result of faulty workmanship or materials, providing the defective item or items of equipment are returned to the **LAI GAMES** distributor from which the machine was purchased.

LAI GAMES shall have no obligation to make repairs necessitated by negligence or interference to any component by any unauthorized personal. This will automatically void any existing warranty.

IF MAKING A WARRANTY CLAIM:

- (a) A Copy of the sales invoice must accompany the claim.
- (b) To and from Transport and freight costs are not covered by the warranty.
- (c) Warranty is not transferable with the sale of a machine from one owner to another.





INTERNATIONAL SALES & SERVICE

Sales/Enquires: Tech Support: Web site: sales@laigames.com techfix@laigames.com www.laigames.com

