OPERATOR'S MANUAL

STACKER

V 1.3

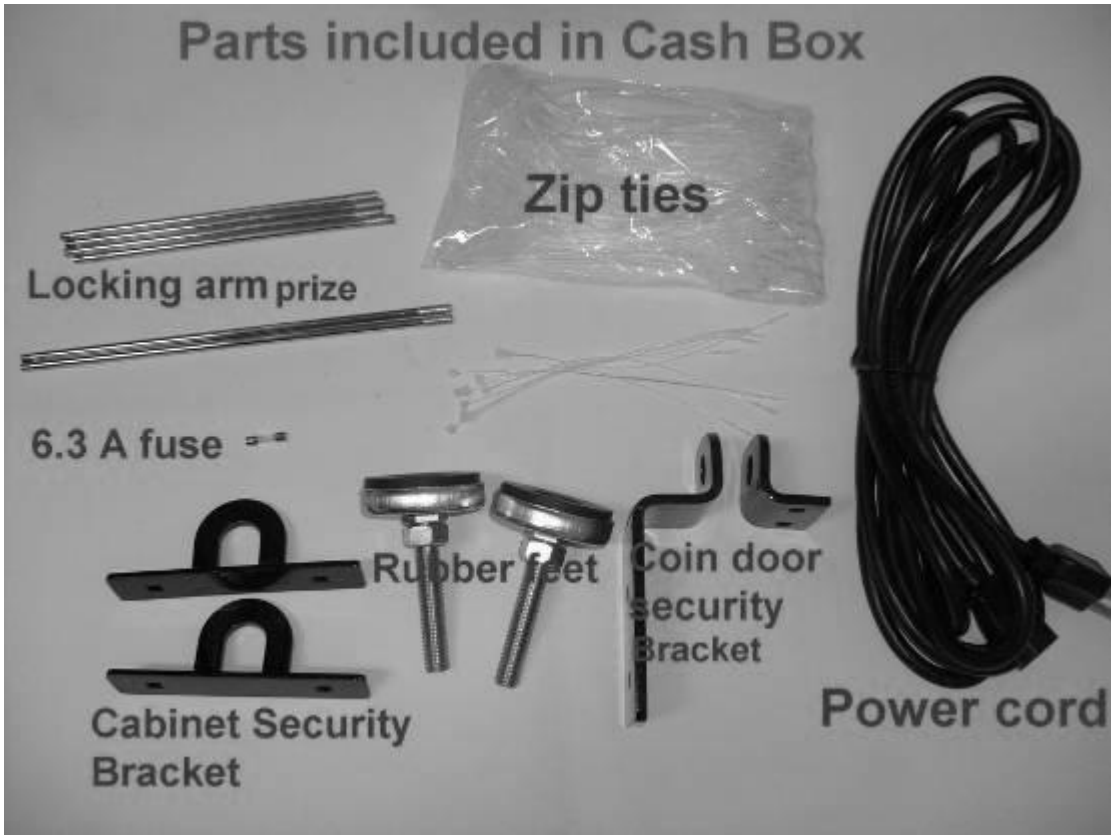
ISO 9001 CERTIFIED ORGANIZATION

URS UKAS QUALITY MANAGEMENT 043-A

ISO 9001: 2008 Cert No.17460

PARTS INCLUDED INSIDE THE CASH BOX

Please open the cash box to collect the parts shown on picture below,



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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! ***

Always *turn **OFF** Mains AC power and unplug the game, before opening or replacing any parts.*

Always *when unplugging the game from an electrical outlet, grasp the plug, not the line cord.*

Always *connect the Game Cabinet to grounded electrical outlet with a securely connected ground line.*

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

Do Not *install the Game Cabinet in areas that would present an obstacle in case of an emergency, i.e. near fire equipment or emergency exits.*

*** CAUTION! ***

Always *use a Digital Multi Meter, logic tester or oscilloscope for testing integrated circuit (IC) logic PC boards. The use of a continuity tester is not permitted.*

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

Do Not *use any fuse that does not meet the specified rating.*

Do Not *Subject the game cabinet to extreme temperature variations. Reliability of electrical components deteriorates rapidly over 60 ^{o}C.*

MACHINE INSTALLATION and INSPECTION

When installing and inspecting ***"Mini 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! ***

Always *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! ***

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

Refer *to the mains voltage adjustment section of this manual. Machines are normally shipped on 100V 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 ***"Mini Stacker"*** prize redemption game**,** another great product from LAI GAMES.

With a bright and attractive display, simple and exciting game play and a real "Ahh! Just missed" feeling, ***"Mini 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 ***"Mini 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 "Mini 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
- IEC Power Cord (In cash box)
- Parts & Accessories (In cash box)

SPECIFICATIONS

DIMENSIONS

- Weight: 90 kg (198.4lb)
- Height: 1780mm (48.2")
- Width: 540mm (13.7")
- Length: 610mm (24")
- Power: Maximum 150 W – (220V @ 0.7 A)(120V @ 1.5 A)
- Average 75 W – (220V @ 0.35 A)(120V @ 0.7A)

ELECTRIC SUPPLY

- The game operates on a 220V AC 50/60Hz single phase mains electric supply. **The supply must be a three wire grounded supply.**

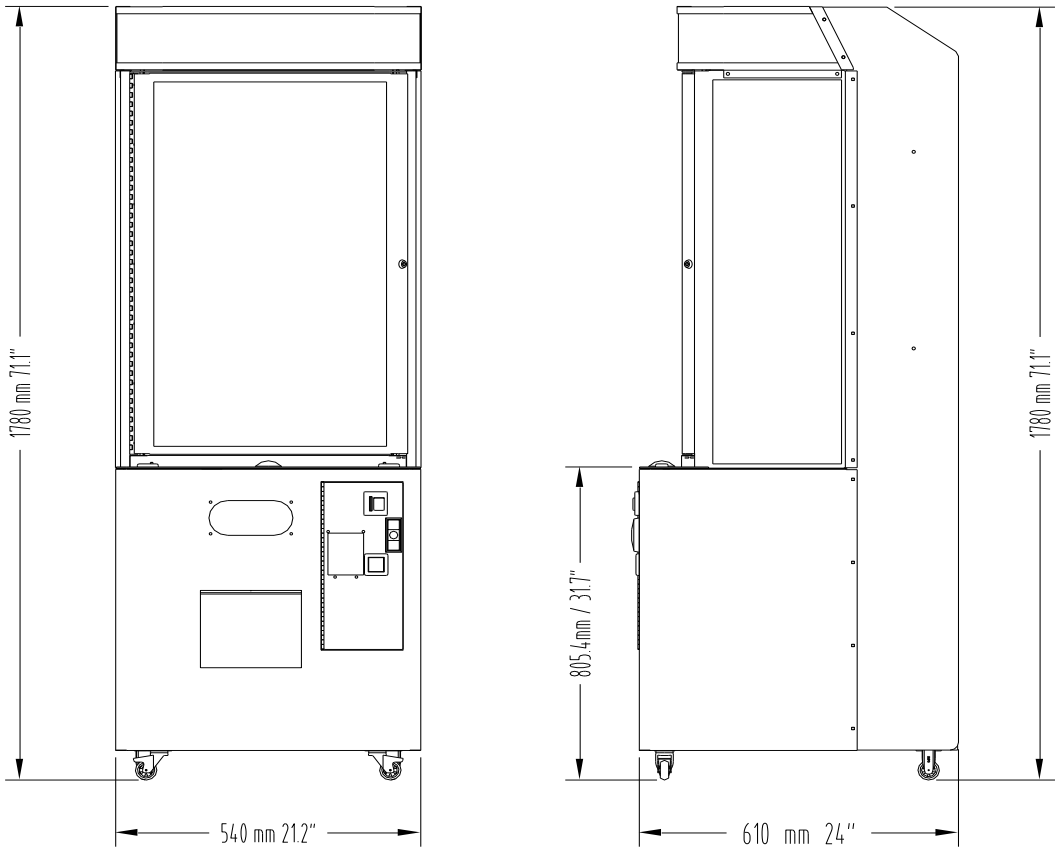
*** CAUTION! ***

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

Please *Refer to the mains voltage adjustment section of this manual. Machines are normally shipped on 100V 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



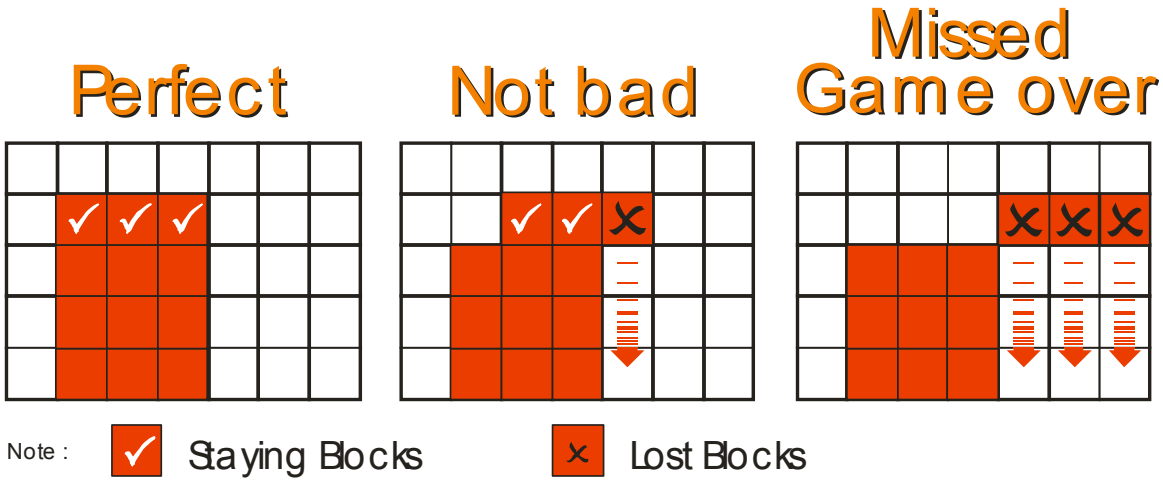
HOW TO PLAY

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

- Insert coin/s. *(The exact amount of coins per play is dependent on Program settings P1 through to P6).*
- 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 either 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.

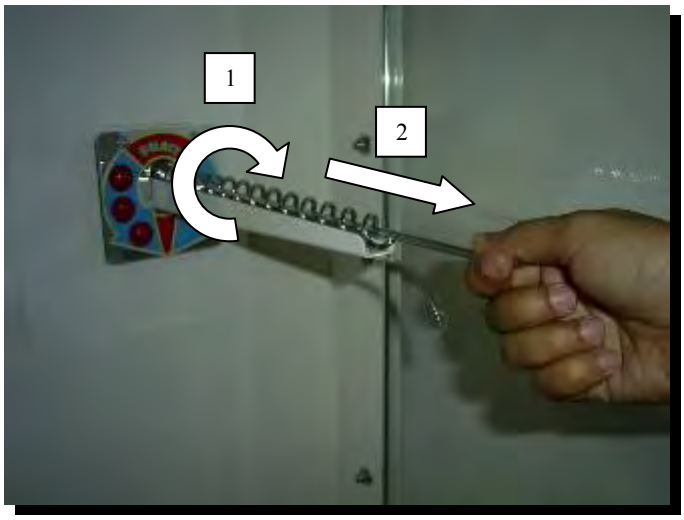
Prize Selection

- 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 Mini is shipped from the factory with the Locking Pins in the Cashbox.

STEP TWO: Attachment of Hanging Ties.

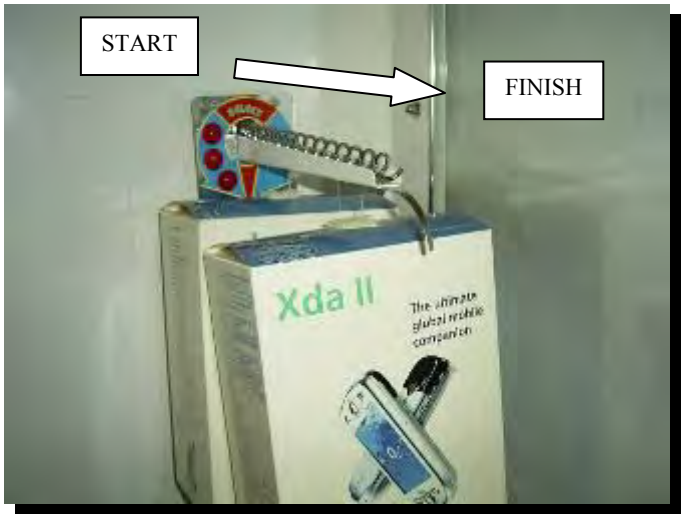
- Attach the prizes securely to the Hanging Ties.

*** 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.

STEP THREE: Loading of Prizes.

- 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.

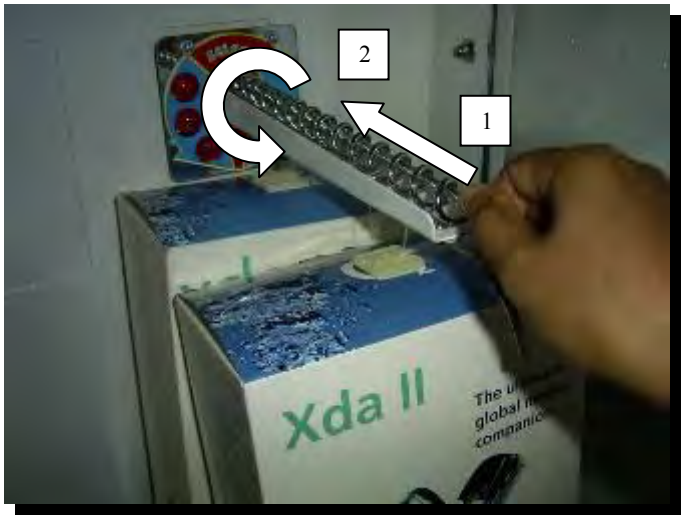
STEP FOUR: Correct positioning of prizes.



- 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.

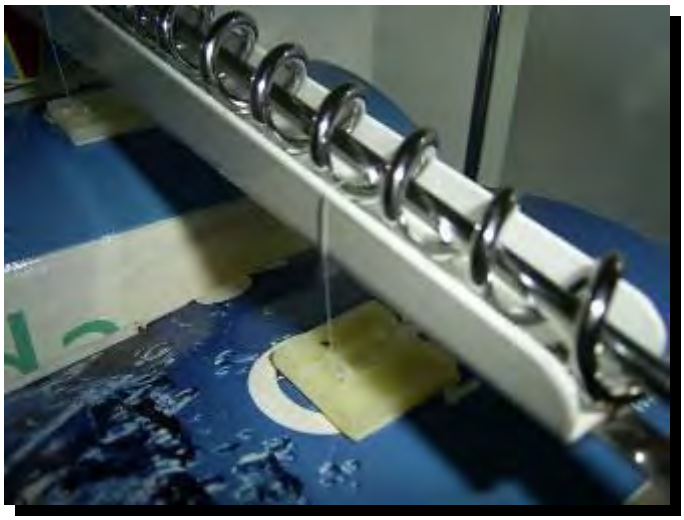
STEP FIVE: Reinsertion of Prize Locking Pin.



1. Reinsert the Prize Locking pin by positioning it in the center of the spiral making sure it **ALWAYS** stays **ABOVE** 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 Prize Locking Pin **ALWAYS** remains **ABOVE** 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.

*** NOTE! ***
Most of the small prize will work on this machine be sure to cover the smaller prize with plastic bag to ensure the sensor will pick the price when it fall.

PRIZE SELECTION AND PAYOUT ADJUSTMENT

Please read the following guide as a good starting point for setting up of your new ***" Mini 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.

Always remember that Stacker is 100% a <u>game of skill</u> so although it is very difficult, every single game can be a winning game, therefore all game settings are just a guide and give an approximate win ratio.

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

MAJOR WINS – Use the games difficulty settings to try to average approximately „1" major win every „400" games played.

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

MAJOR PRIZES – Use only good quality "*IN DEMAND*" Prizes to maximize game play. Use different types of prizes on each of the 2 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 – Try to achieve approximately „1" win every „1 – 2" games played although this can be difficult depending on the skill level of the players.

MINOR PRIZE VALUE – Approximate 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.

PRIZE PAYOUT QUICK REFERENCE TABLE

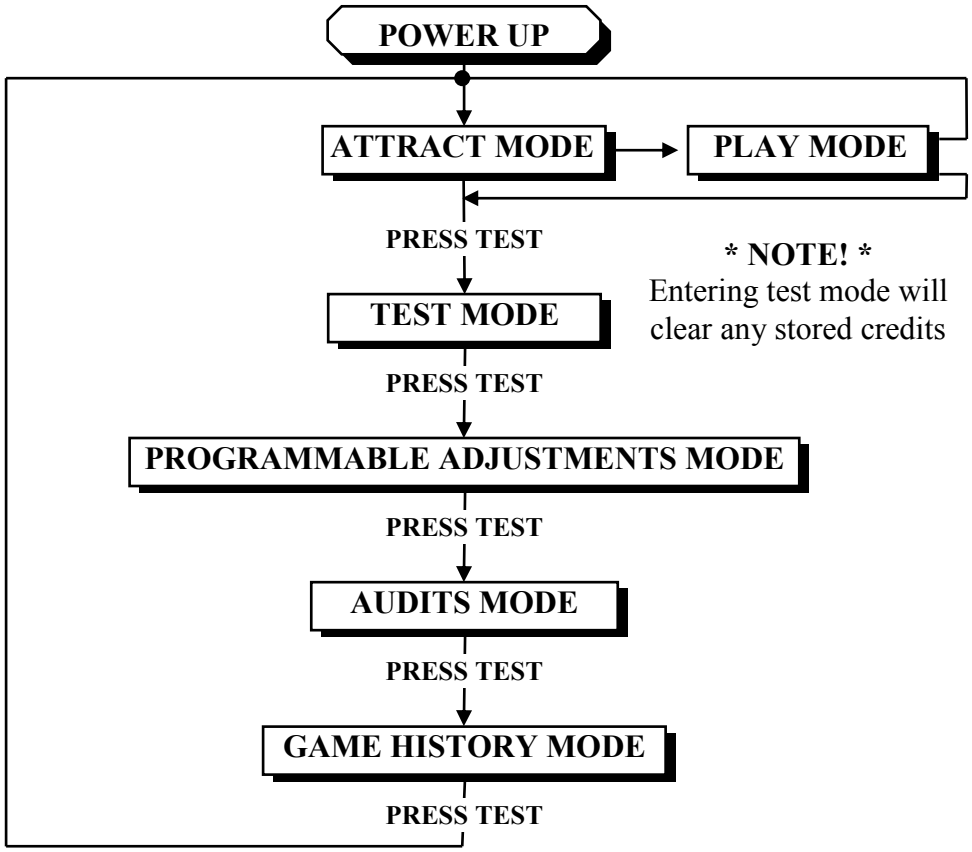
PRICE PER PLAY	**25¢**	**50¢**	**$1.00**	**$2.00**
MINOR PRIZE VALUE	5¢ ~ 10¢	10¢ ~ 20¢	20¢ ~ 30¢	40¢ ~ 60¢
Approximate number of Games per Minor Win	1 – 2	1 – 2	1 – 2	1 – 2
Skill Setting Minor Prize (P09)	1	1	1	1
MAJOR PRIZE VALUE	$35.00	$75.00	$150.00	$310.00
Approximate number of Games per Major Win	400	400	400	400
Skill Setting Major Prize (P10)	8	8	8	8

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

OPERATION

The ***"Mini 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

PLAY MODE

- The Mini 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 (Green 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

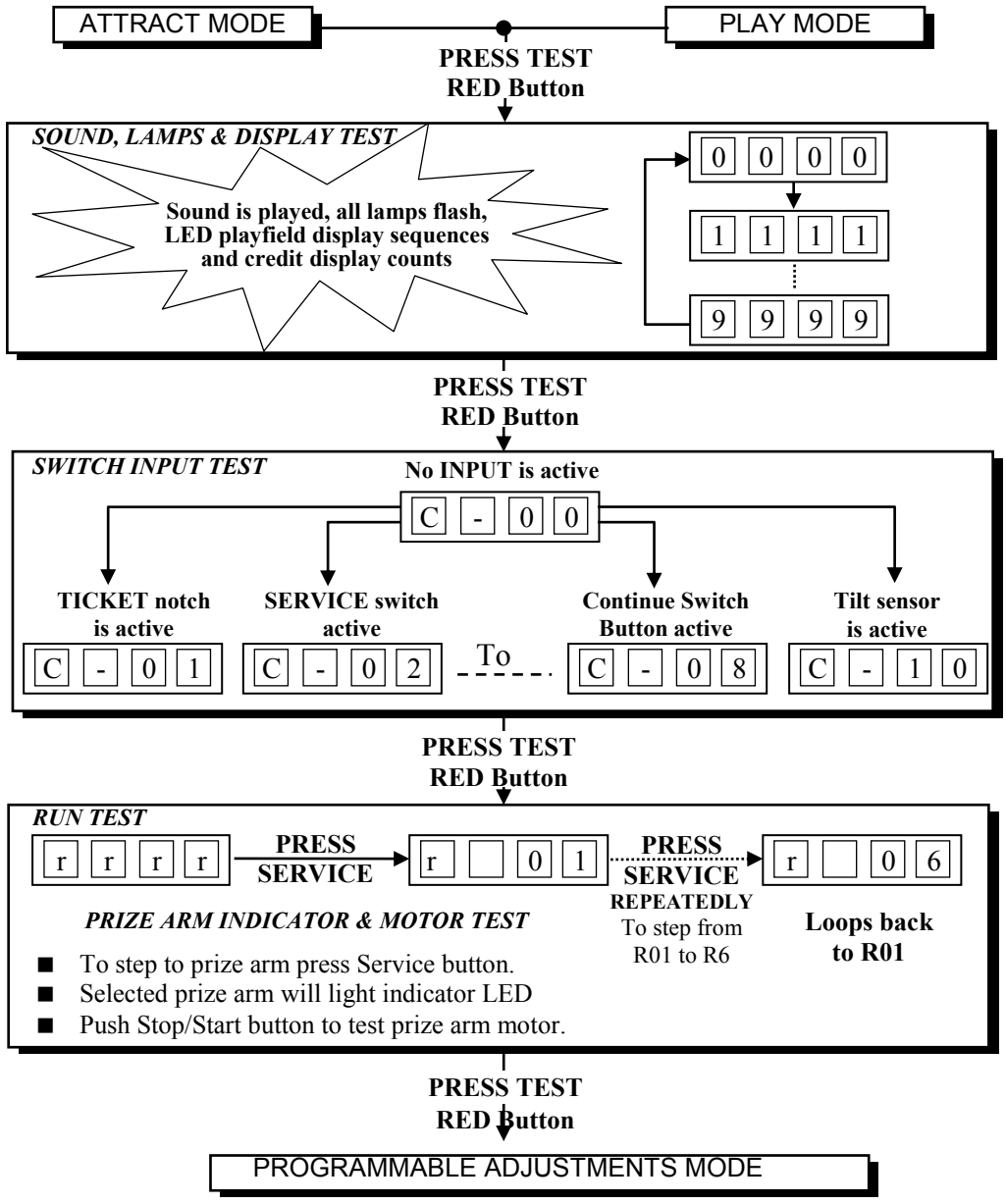
The *Mini Stacker* Test mode has *Three Test Configurations* allowing you to test the function of the Sound, all Game Lamps, Displays, the Game Switches and the Prize Arm Motors. *(Refer to the Test Mode Diagram below).*

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 test button (Red Button) once. The error can be bypassed by quickly pressing the test button (Red Button) twice.

*** 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 (Red Button) once.

*** NOTE! ***

- If there is an active error displayed, press the test button (Red Button) once to try and clear the error.
- If the error code will not clear, it can be bypass by quickly pressing the test button (Red 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.
- The Continue, Start/Stop and Select button lamps will flash on and off
- When Start Button press once the sequence will freeze and will continue the sequence by press the start button again.

- **EXIT** The Sound, Lamp & Display test is exited by pressing the test button (Red Button). The next test will be switch test.

SWITCH TEST

- **ENTER** The Switch Test can be entered by pressing the Test button (Red Button) once while in the Sound, Light & display test or by pressing the Test button (Red 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 C-00 will be displayed.

CODE	DISPLAY	SWITCH FUNCTION	SWITCH LOCATION
C0	C-00	No Switch Active	-
C1	C-01	Ticket Notch Active	Ticket Door (if fitted)
C2	C-02	Service Switch Active	Service Panel
C3	C-03	Start/Stop Button Active	Control Panel
C4	C-04	Coin 1 Switch Active	Coin Door
C5	C-05	Coin 2 Switch Active	Coin Door
C6	C-06	Select Button Active	Control Panel
C7	C-07	Prize Sensor Active	Prize Box
C8	C-08	Continue Button Active	Control Panel
C10	C-10	Tilt Switch Active	Cabinet Back

Normal condition for the game is C-00, 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..

RUN TEST

- **ENTER** The Run Test can be entered by pressing the Test button (Red Button) once while in the Switch Test or by pressing the Test button three times while in Attract mode, r r r r will be displayed on the 4-digit display.

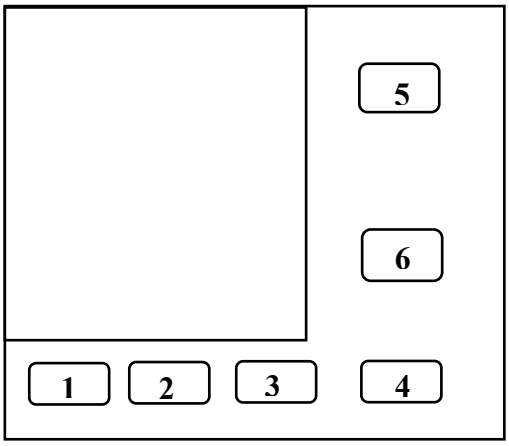
- **SELECT** The Service button (Green Button) is pressed once to start the run test mode. The credit display will indicate, r - 0 1 the first Minor Prize Arm and also flashing the indicator LED. The Service button is then pressed again to step through each prize arm, flashing the indicator LED of the current prize arm.

- **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 (Red Button)once.

PRIZE ARM LOCATION DIAGRAM

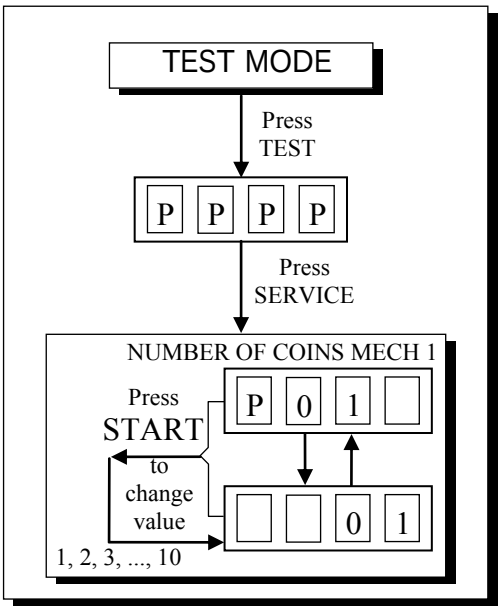
PRIZE ARM NUMBER & LOCATION



GAME ADJUSTMENTS

- The game has thirteen programmable adjustments that can be changed in this mode. They are P1 to P13 and their codes and values are displayed alternatively during the adjustment procedure.

  Example: displayed adjustment [P][0][1][ ] alternates with its value [ ][ ][0][1] .
  Refer to the diagram below:



- There is a range of values for each variable of the game, and any value in this range can be chosen for the game settings, using the change procedure.

ADJUSTMENT PROCEDURE

- **ENTER** The Programmable Adjustments mode is entered from Switch test by pressing the Test button once when in test mode , or from Attract mode by pressing the Test button 4 times. This will prompt the [P][P][P][P] code on the display indicating the program mode.
- **SELECT** The Service button is pressed to step through each of the adjustment codes, starting from the [P][0][1][ ] display, P01 being the first step, continuing through to P13, and then looping again from P01 to P13 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/Stop button, but the value will loop back to its min 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 Press the Test button once.

PROGRAMMABLE ADJUSTMENTS QUICK REFERENCE TABLE (V1.3)

CODE	**PROGRAMMABLE ADJUSTMENTS**	**OPTIONAL VALUES**	**DEFAULT SETTINGS**	FEATURES
P01	1 – 10	1, 2, 3…10	1	Coin Slot 1 – Coins / Credit
P02	1 – 10	1, 2, 3…10	1	Coin Slot 1 – Games / Credit
P03	ON or OFF	ON or OFF	OFF	Activate Multiple Bonus Pricing Coin slot 1
P03-1	OFF – 99	OFF,1,2,3,4…99	OFF	Coin slot 1 Number Coins for Bonus Pricing level 1
P03-2	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 1 Number of bonus credits on Pricing level 1
P03-3	OFF – 99	OFF,1,2,3,4….99	OFF	Coin slot 1 Number Coins for Bonus Pricing level 2
P03-4	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 1 Number of bonus credits on Pricing level 2
P03-5	OFF – 99	OFF,1,2,3,4….99	OFF	Coin slot 1 Number Coins for Bonus Pricing level 3
P03-6	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 1 Number of bonus credits on Pricing level 3
P04	1 – 10	1, 2, 3…10	1	Coin Slot 2 – Coins / Credit
P05	1 – 10	1, 2, 3…10	1	Coin Slot 2 – Games / Credit
P06	ON or OFF	ON or OFF	OFF	Activate Multiple Bonus Pricing Coin slot 2
P06-1	OFF – 99	OFF,1,2,3,4…99	OFF	Coin slot 2 Number Coins for Bonus Pricing level 1
P06-2	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 2 Number of bonus credits on Pricing level 1
P06-3	OFF – 99	OFF,1,2,3,4….99	OFF	Coin slot 2 Number Coins for Bonus Pricing level 2
P06-4	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 2 Number of bonus credits on Pricing level 2
P06-5	OFF – 99	OFF,1,2,3,4….99	OFF	Coin slot 2 Number Coins for Bonus Pricing level 3
P06-6	OFF – 99	OFF,1,2,3,4….99	OFF	Coin Slot 2 Number of bonus credits on Pricing level 3
P07	ON or OFF	ON or OFF	ON	Attract Mode sound
P08	1 – 6	1, 2, 3 …6	3	Cube Speed Adjustment (1=Slowest)
P09	1 – 4	1, 2, 3…4	1	Minor Prize Difficulty Setting (1=Easiest)
P10	1 – 10	1, 2, 3…10	8	Major Prize Difficulty Setting (1=Easiest)
P11	0 – 2	0, 1, 2	0	Capsule/Ticket Adjustment Mode
P12	0 – 20	0, 1, 2, 3…20	0	Number of Capsules/Mercy Tickets
P13	ON or OFF	ON or OFF	OFF	Prizes Dispensed when in Free play
P14	ON or OFF	ON or OFF	OFF	Minor Prize Arm No.1 Status
P15	ON or OFF	ON or OFF	OFF	Minor Prize Arm No.2 Status
P16	ON or OFF	ON or OFF	OFF	Minor Prize Arm No.3 Status
P17	ON or OFF	ON or OFF	OFF	Minor Prize Arm No.4 Status
P18	ON or OFF	ON or OFF	OFF	Major Prize Arm No.5 Status
P19	ON or OFF	ON or OFF	OFF	Major Prize Arm No.6 Status
P20	ON or OFF	ON or OFF	OFF	Prize Arm No. 4 Minor/Major Option
P21	1 – 6	1, 2,3 …6	2	Number of prize arm re-tries
P22	SOFt or HArd	SOFt or Hard	SOFt	Error type for Minor Prize – Err7
P23	ON or OFF	ON or OFF	ON	Attract Mode Display Animation (strobing)
P24	1 – 4	1,2,3,4	1	Error Message Option

PROGRAMMABLE ADJUSTMENTS DETAILED

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

(Default 01) (Adjustable 1 – 10)

This 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 GAME 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, the *default* setting is "1".

■ P03 = COIN MECH 1: ACTIVATE MULTIPLE BONUS PRICING

(Default OFF) (Adjustable ON – OFF)

This turns on the multiple bonus credit system and activates the settings for up to 3 bonus levels on coin mechanism 1. It can be set to ON or OFF. The *default* setting is "OFF" this mean the multiple bonuses is disabled, if the setting changed to ON the multiple bonus setting will be open the next sub-menu **P03-1** and so on.

The tables below shows some common bonus settings

Examples	(Base price $0.25c)	(Base Price $0.50c	(Base Price $0.50c)	(Base Price $1.00)
P Setting Adjustment	1 *play* **$ 0.25c** 3 *plays* **$ 0.50c** 7 *plays* **$ 1.00** ($0.25c coins or DBA set on $0.25c pulses)	1 *play* **$ 0.50c** 3 *plays* **$ 1.00** 7 *plays* **$ 2.00** ($0.25c coins or DBA set on $0.25c pulses)	1 *play* **$ 0.50c** 3 *plays* **$ 1.00** 8 *plays* **$ 2.00** 22 *plays* **$ 5.00** ($0.25c coins or DBA set on $0.25c pulses)	1 *play* **$ 1.00** 3 *plays* **$ 2.00** 8 *plays* **$ 5.00** 18 *plays* **$ 10.00** ($0.25c coins or DBA set on $0.25c pulses)
P01 / P04	1	2	2	4
P02 / P05	1	1	1	1
P03 / P06	ON	ON	ON	ON
P3-1 / P6-1	2	4	4	8
P3-2 / P6-2	1	1	1	1
P3-3 / P6-3	4	8	8	20
P3-4 / P6-4	3	3	4	3
P3-5 / P6-5	OFF	OFF	20	40
P3-6 / P6-6	OFF	OFF	12	8

■ P03 - 1 = COIN MECH 1: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 1

(Default OFF) (Adjustable OFF – 99)

This sets the number of coins that need to be inserted into coin mechanism 1 to reach the bonus credit level 1. It can be set to either OFF for no bonus or 1, 2… to 99 coins, (OFF=No bonus), the *default* setting is "OFF" this mean that the **P03-2** will not open.

■ P03 -2 = COIN MECH 1: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 1

(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 1 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonus credits; the *default* setting is "OFF" this mean that the **P03-3** will not open.

■ P03 – 3= COIN MECH 1: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 2

(Default OFF) (Adjustable OFF – 99)

This sets the number of coins that need to be inserted into coin mechanism 1 to reach the bonus credit level 2. It can be set to OFF for no bonus or 1, 2… to 99 coins, but the setting value must be higher than setting value of **P03-1**, the *default* setting is "OFF" and if set to OFF this mean that the **P03-4** will not open.

■ P03 -4 = COIN MECH 1: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 2

(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 2 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonuses per coin, *default* setting is "OFF"

■ P03 – 5= COIN MECH 1: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 3

(Default OFF) (Adjustable OFF – 99)

This sets the number of coins that need to be inserted into coin mechanism 1 to reach the bonus credit level 3. It can be set to OFF for no bonus or 1, 2… to 99 coins, but the setting value must be higher than setting value of **P03-3**, the *default* setting is "OFF" and if set to OFF this mean that the **P03-6** will not open.

■ **P03 -6 = COIN MECH 1: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 3**
(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 3 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonuses per coin, *default* setting is "OFF"

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

This sets the number of coins that need to be inserted into coin mechanism 2 for each credit. It can be set to 1, 2, 3… to 10 coins for one credit. The *default* setting is "1" - this means that 1 coin per credit.

■ **P05 = COIN MECH 2: NUMBER OF GAME 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 1, 2, 3… to 10 plays for each credit. The *default* setting is "1" this means that 1 credit per play.

■ **P06 = COIN MECH 2: ACTIVATE MULTIPLE BONUS PRICING**
(Default OFF) (Adjustable ON – OFF)
This turns on the multiple bonus credit system and activates the settings for up to 3 bonus levels on coin mechanism 1. It can be set to ON or OFF. The *default* setting is "OFF" this mean the multiple bonuses is disabled, if the setting changed to ON the multiple bonus setting will be open the next sub-menu **P06-1** and so on.

■ **P06 - 1 = COIN MECH 2: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 1**
(Default OFF) (Adjustable OFF – 99)
This sets the number of coins that need to be inserted into coin mechanism 1 to reach the bonus credit level 1. It can be set to either OFF for no bonus or 1, 2… to 99 coins, (OFF=No bonus), the *default* setting is "OFF" this mean that the **P06-2** will not open.

■ **P06 -2 = COIN MECH 2: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 1**
(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 1 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonus credits; the *default* setting is "OFF" this mean that the **P06-3** will not open.

■ P06 – 3= COIN MECH 2: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 2

(Default OFF) (Adjustable OFF – 99)

This sets the number of coins that need to be inserted into coin mechanism 1 to reach the bonus credit level 2. It can be set to OFF for no bonus or 1, 2… to 99 coins, but the setting value must be higher than setting value of **P06-1**, the *default* setting is "OFF" and if set to OFF this mean that the **P06-4** will not open.

■ P06 -4 = COIN MECH 2: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 2

(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 2 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonuses per coin, *default* setting is "OFF"

■ P06 – 5= COIN MECH 2: NUMBER OF COINS REQUIRED TO REACH BONUS CREDIT LEVEL 3

(Default OFF) (Adjustable OFF – 99)

This sets the number of **coins** that need to be inserted into coin mechanism 1 to reach the bonus credit level 3. It can be set to OFF for no bonus or 1, 2… to 99 coins, but the setting value must be higher than setting value of **P06-3**, the *default* setting is "OFF" and if set to OFF this mean that the **P06-6** will not open.

■ P06 -6 = COIN MECH 2: NUMBER OF BONUS CREDITS GIVEN AT BONUS LEVEL 3

(Default OFF) (Adjustable OFF – 99)

This sets the number of bonus credits that are given when credit Level 3 is reached. This Bonus amount is the **additional** number of credits required above the **base price**. It can be set to either OFF, 1, 2, 3… to 99 bonuses per coin; *default* setting is "OFF"

■ 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.

■ P08 = LED CUBE SPEED

(Default 3) (Adjustable 1 - 6)

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

■ P09 = MINOR PRIZE DIFFICULTY SETTING

(Default 1) (Adjustable 1 – 4)

This option sets the difficulty level for players to reach the Minor Prize level. These settings are made very easy on purpose, but as the game is purely skill, players must still be good enough to get to this level. Even though many players get to the Minor Prize Level most don"t take the prize as they choose to play on to try and win a major prize. A setting of [1] is the easiest up to [4], the hardest.
The Table below gives a guide as to approximate Minor Prize wins

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**

Note: This is approximate and the exact win rate varies depending on the skill level of the players.

■ P10 = MAJOR PRIZE DIFFICULTY SETTING

(Default 8) (Adjustable 1 – 10)

This option sets the difficulty level for players to reach the Major Prize level. A setting of [1] is the easiest up to [10], the hardest. The Table below gives a guide as to approximate Major Prize wins for each setting but please be aware that as this game is purely skill, the win rate is only an approximate guide for each difficulty setting and can vary depending on the skill level of players playing the game.

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)**

Note: This is approximate and the exact win rate varies depending on the skill level of the players.

■ P11 = OPTIONAL CAPSULE SYSTEM MODE ADJUSTMENT

(Default 0) (Adjustable 0 – 2)

Note: This Mode is only used if the optional Capsule Dispenser is fitted. Normally it should be set to the Default (0).

This option adjusts the way that capsules are paid out if the optional capsule dispenser is fitted. See **P12** for setting the number capsules that will be dispensed.

0. **Capsule System disabled:** No capsules will be dispensed. This setting must be used if optional capsule dispenser is not fitted
1. **Capsules are only dispensed if no Major or Minor prize is won**: Optional capsule dispenser must be fitted
2. **Capsules are dispensed on every game, regardless if prizes are won or not.** Optional capsule dispenser must be fitted

■ P12 = NUMBER of CAPSULES DISPENSED

(Default 0) (Adjustable 0 – 20)

This option adjusts the number of capsules dispensed if the optional capsule dispenser is fitted. See **P11** for setting Mercy System Mode payout options.

■ P13 = PRIZES DISPENSED 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**.

■ P14 to P17 = MINOR PRIZE ARM No.1 to 4 STATUS

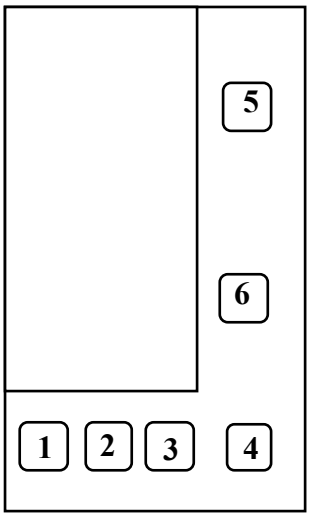
(Default for all is ON) (Adjustable ON or OFF)

This option is for enabling or disabling the Minor Prize Arms 1 through to 4

Default Table

Prize Arm No.	Default	Prize Arm No.	Default
P14-Minor Arm 1	ON	**P17**-Minor/Major Arm 4	ON
P15-Minor Arm 2	ON		
P16-Minor Arm 3	ON		

Prize Arm Locations in the Prize box



■ P18 to P19 = MAJOR PRIZE ARM No. 5 no 6 STATUS

(Default, ON) (Adjustable ON or OFF)

This option is for enabling or disabling of the Major Prize Arms numbered 5 and 6.

Prize Arm No.	Default
P18-Major Arm 5	ON
P19-Major Arm 6	ON

*** NOTES! ***

- Any Disabled Prize Arms are unable to be selected by Wining Players
- If **all** Minor and / or Major Prize Arms are set to **[OFF]** the error message **[Err6]** will be displayed in the credit display.

■ P20 = PRIZE ARM No 4 FUNCTION

(Default, OFF) (Adjustable ON or OFF)

This option is for changing the function of Prize Arm No 4. This arm is normally set as a Minor Prize Arm (default) but it can also be changed to a Major Prize arm by setting this option to ON. When sets to OFF means that this prize arm is position as Minor Prize Arm.
Note: If this Prize Arm is changed to the Major Prize Arm please change the artwork for this arm so that it is clear to the players.

■ P21 = NUMBER OF PRIZE ARM RE-TRIES

(Default 02) (Adjustable 1 – 6)

This option controls the number of retries a user will get if a prize arm times out when trying to dispense a prize during the prize selection. This could be if an empty prize arm is selected, a prize is not sensed by the prize sensors or the prize is mounted at the very back of the prize arm

*** 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.

■ P22 = ERROR TYPE FOR MINOR PRIZE – ERR7

(Default Soft) (Adjustable Soft or Hard)

This variable sets the type of action taken when is a Minor Prize Arm deployment error 7 **[Err7]** occurs. When set to Soft **[SOFt]** 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 page.

■ P23 = ATTRACT ANIMATION (STROBING) DISPLAY

(Default ON) (Adjustable ON or OFF)

This setting controls whether or not the game displays the strobing animation during the games attract mode. 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.

■ P24 = Error Message Option

(Default 2) (Adjustable 1 - 4)

This adjustment sets the way error messages are handled. The game can play a voice over error, or display the error on the small 4 digit display or both.

Setting	Voice Over	4 Digit Display
1	**Played**	**Displayed**
2	**Played**	**Error will display when test button press and the next test button will try clear the error**
3	**Not Played**	**Displayed**
4	**Not Played**	**Error will display when test button press and the next test button will try clear the error**

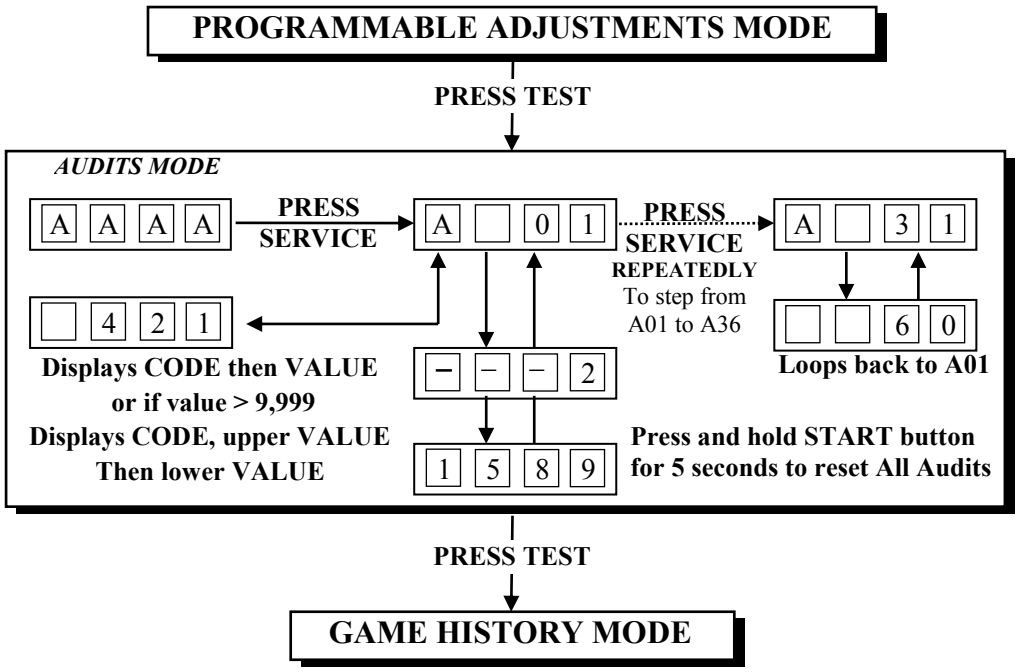
AUDITS MODE

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 A32 and their codes and values are displayed alternatively during the Audit Mode.

Example: Code **A01** will be displayed as A 0 1 and a value of **421** as 4 2 1 on the 4-digit display.
Or it will display large values like **21589** as - - - 2 and 1 5 8 9 on the 4-digit display.

AUDITS MODE DIAGRAM



*** NOTE! ***

- For Audit values that are greater than 4 digits the number will be displayed in two steps.
- The first number, which is displayed as - - - 2, has leading dash symbols
- The second value is displayed as 1 5 8 9, which has no dash symbols.
- In this example the final value is 21,589

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. A A A A 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 A A A A 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! ***

- **ALL** Audits will **STOP INCREMENTING** when the "Total Number of Games Played", audit A-07, reaches its Maximum limit of 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-01	Total Coins In Mechanism 1
A02	A-02	Total Coins In Mechanism 2
A03	A-03	Total Number of Service Credits
A04	A-04	Total Number of Major Prize Wins
A05	A-05	Total Number of Minor Prize Wins
A06	A-06	Total Number of Skip Minor for Major Prize attempt
A07	A-07	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-13	Total number Games ending at level 6
A14	A-14	Total number Games ending at level 7
A15	A-15	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	No. of prize selections on Minor Prize Arm No.1
A19	A-19	No. of prize selections on Minor Prize Arm No.2
A20	A-20	No. of prize selections on Minor Prize Arm No.3
A21	A-21	No. of prize selections on Minor Prize Arm No.4
A22	A-22	No. of prize selections on Major Prize Arm No 5
A23	A-23	No. of prize selections on Major Prize Arm No 6
A24	A-24	Minor Prize Counter (Non-resettable)
A25	A-25	Major Prize Counter (Non-resettable)
A26	A-26	Coin Counter 1 (Non-resettable)
A27	A-27	Coin Counter 2 (Non-resettable)
A28	A-28	Internal manufacturer audit
A29	A-29	Internal manufacturer audit
A30	A-30	Internal manufacturer audit
A31	A-31	Internal manufacture audit

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 **STOP INCREMENTING** 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.

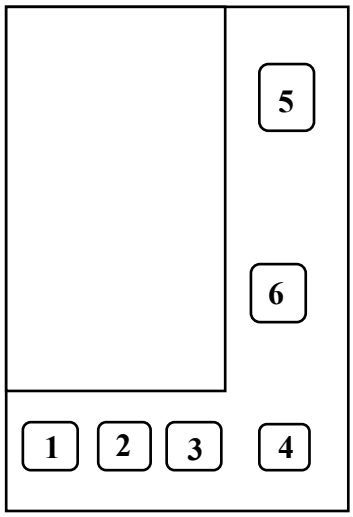
■ A08 to A17
TOTAL NUMBER OF GAMES ENDING on LEVELS 1 to 10

These Audits display the *total number of games ending on level* number 1 through to 10 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 ten at the top.

■ A18 to A23
TOTAL NUMBER OF PRIZE SELECTIONS on PRIZE ARM POSITION NUMBER 1 to 6

These Audits display the *total number of the prize selections on Prize Arm positions* number 1 through to 6 on this machine since the audits were last cleared. Minor Prize Arms are 1 to 4 and Major Prize Arms are 5 to 6.

PRIZE ARM NUMBER & LOCATION



■ A24 = MINOR PRIZE COUNTER

This is a non resettable counter the displays total number of Minor Prizes that have been dispensed from the game.

■ A25 = MAJOR PRIZE COUNTER

This is a non resettable counter the displays total number of Major Prizes that have been dispensed from the game.

■ A26 = COIN 1 COUNTER

This is a non resettable counter the displays total number of coins through Coin Mechanism 1

■ A27 = COIN 2 COUNTER

This is a non resettable counter the displays total number of coins through Coin Mechanism 2

■ A28 to A31 = MANUFACTURE AUDITS ONLY

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

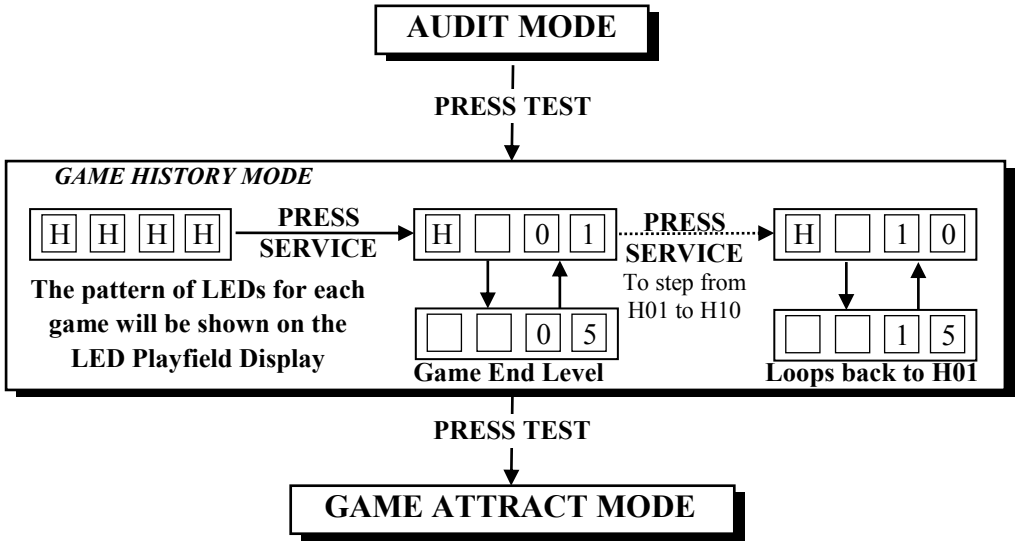
*** NOTE! ***

■ LAI Games Customer Support may request from the operator the values of these Manufacturers audits, to help with any service issues.

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. The display shows the level reached in each of the last 10 games.

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 2nd Last Game Played
H03	H-03	Level Ending & LED Pattern for 3rd Last Game Played
H04	H-04	Level Ending & LED Pattern for 4th Last Game Played
H05	H-05	Level Ending & LED Pattern for 5th Last Game Played
H06	H-06	Level Ending & LED Pattern for 6th Last Game Played
H07	H-07	Level Ending & LED Pattern for 7th Last Game Played
H08	H-08	Level Ending & LED Pattern for 8th Last Game Played
H09	H-09	Level Ending & LED Pattern for 9th Last Game Played
H10	H-10	Level Ending & LED Pattern for 10th 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. 🄷🄷🄷🄷 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 🄷🄷🄷🄷 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 Game Microprocessor detects any problems with the operation of the game, an Error Code will be displayed in 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 4-digit display as Err X, where „X" is the error number. There are seven error messages for Stacker, listed as follows:

ERROR CODE QUICK REFERENCE TABLE

CODE	ERROR DESCRIPTION	SOLUTION
Err1	**CAPSULE DISPENSER ERROR** Jammed capsules, no capsules or no capsule out pulse for longer than 3 seconds.	1. If the optional capsule dispenser is <u>not</u> fitted, make sure **P11** and **P12** are set to "0". 2. If the optional capsule dispenser is fitted, clear capsule dispenser jam or replenish capsules. After this, push Test button once to clear error.
Err2	**START/STOP BUTTON JAMMED**, or active for longer than 30 seconds	Check Start/Stop Button function using switch test
Err3	**EEPROM ERROR** Problem with on-board EEPROM	The main MCU is getting errors reading the EEPROM (24C16 IC on MCU).
Err4	**MAJOR PRIZE DEPLOYMENT ERROR**	Refill Major Prize Arms or test the Prize Sensor using switch test.
Err5	**PRIZE SENSOR BLOCKED** or **PRIZE SENSOR FAULTY**	Clear Blockage from between prize sensors or test the Prize Sensor using switch test.
Err6	**All PRIZE ARMS STATUS** are **DISABLED.**	Check that at least one Minor Prize Arm (**P14** to **P16**) and one Major Prize Arm (**P18** to **P19**) has been set active Prize Arms ON.
Err7	**MINOR PRIZE DEPLOYMENT ERROR**	Refill Minor Prize Arms or test the prize sensor 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 and you will need to continue to look for the problem causing the error.

■ Err1 – CAPSULE ERROR

This can occur if the optional capsule dispenser is **not** installed and **P11** and **P12** have **not** been set to zero. If your machine does **not** have these optional Capsule dispenser fixtures installed, please set **P11** and **P12** to **"0"**

Otherwise, if the optional capsule dispenser is fitted, this error usually occurs if the game has run out of capsules or there is a capsule jam. A less common reason is if the game PCB tries to dispense capsules but doesn"t get a Capsule out pulse for approximately three seconds. Use the Switch Test and test the notch pulse manually activating the micro-switch on the capsule dispenser, an active notch will be display as **C1**.

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

■ Err2 – START/STOP BUTTON JAMMED

This error is usually displayed if the Start/Stop button is active or jammed on for longer than 30 seconds. Check the mechanical operation of the Start/Stop button and also the micro switch. Lastly make sure the micro switch wiring is connected to the Normal Open and the Common contact of the micro switch. Use the Switch Test to help check the Stop/Start button, an active/pushed button will be display as **C3**.

■ 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. The first thing to do is trying to switch ON and OFF the machine in at least 2 cycles, if message still appear than replace the EEPROM IC Atmel 24C16 on the CPU PCB with the new EEPROM, If still Error massage, this could be a problems with the game audits and program. If this error occurs, send your main MCU PCB 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 too 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, if the Major prize arm is not turning or the prize sensor is not working.

Test the prize arm function using the Run Test. Test the prize sensor using the Switch Test. 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 than 5 seconds. This error can also occur if the sensor output pulses or "flickers" due to miss alignment for more than 20 times every 5 seconds.

  The sensor can be tested using the switch test. If the sensor is blocked **C7** will be displayed in this test. Clear whatever 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 and these indicator LEDS can be viewed from the rear of the game after opening the back door.

- **Err6 – All PRIZE ARMS STATUS are DISABLED.**

  This error will only be displayed if programmable adjustments **P14** to **P17** (Minor Prize Arm Status) and / or adjustments **P18** to **P19** (Major Prize Arm Status) are all set to **OFF** (Disabled).

  There should be at least one Minor Prize Arm and one Major Prize Arm set to Status to **ON**. Push the test button once to enter directly to **P14** or **P18** in adjustment mode, locate what prize arms need to be active and set that Prize Arm Status to **ON.**

- **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 Err7 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 too 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.
  Test the prize arm function using the Run Test. Test the prize sensor using the Switch Test. 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! ***

Always *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.

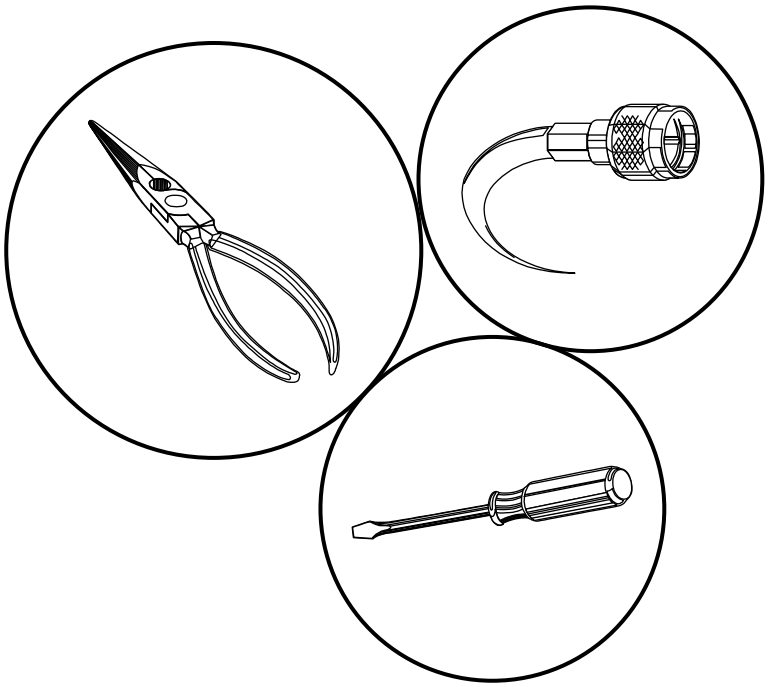
- **MCU CONTROL FUSES (2 x 5 AMP FAST BLOW, M205 TYPE)**
  These fuses are for the DC transistor drivers on the MCU PCB

- **2 LED PLAYFIELD DISPLAY CONTROLLER FUSES (2 x 2.5 AMP FAST BLOW, M205 TYPE)**
  This fuse is for the +5VDC on the two LED Playfield Display PCBs

*** CAUTION! ***

Do Not *use any fuse that does not meet the specified rating.*

SECTION A: SERVICE INSTRUCTIONS



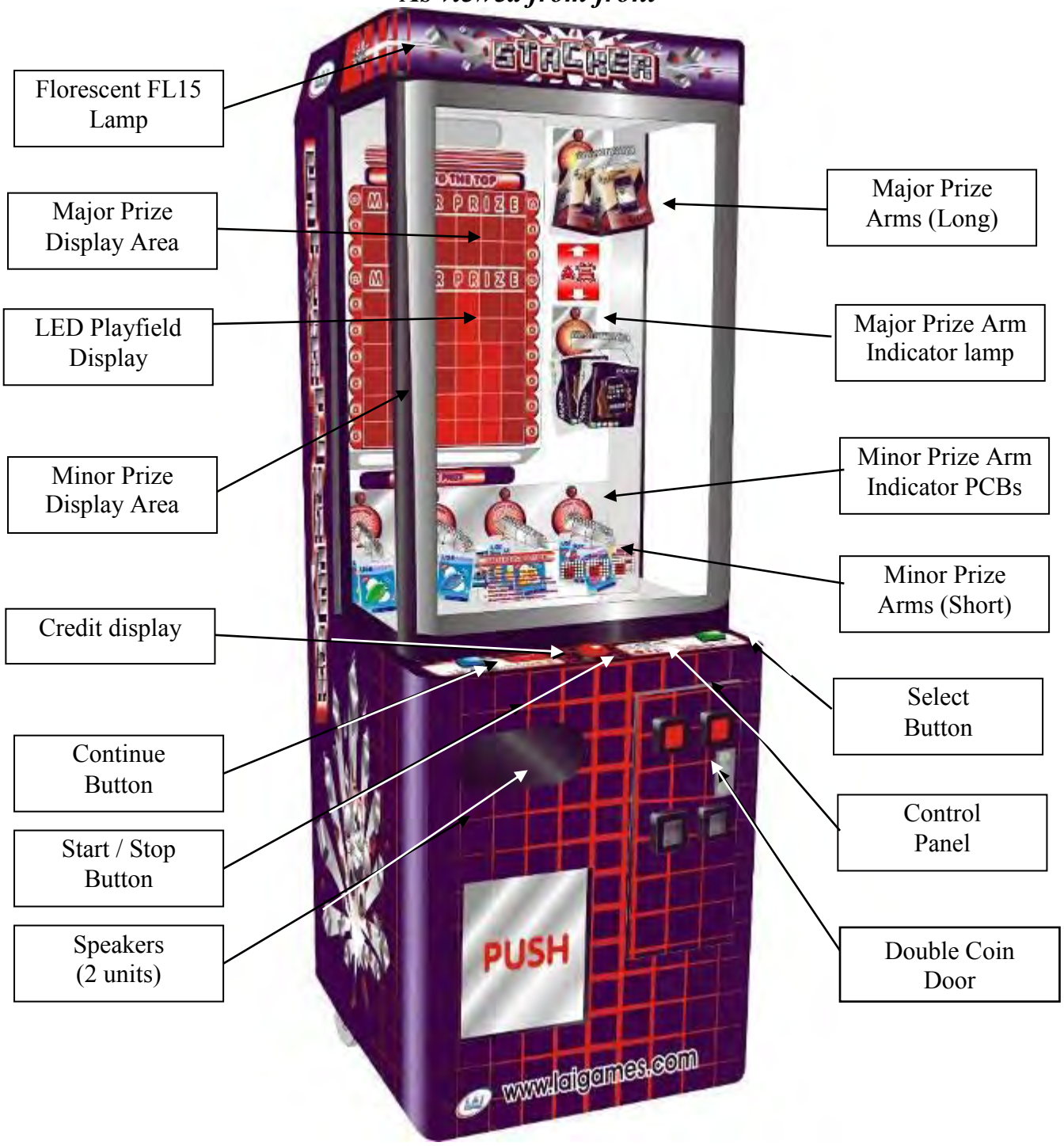
BE SURE TO READ THE FOLLOWING
Carefully before servicing this machine

A

LOCATING AND ACCESSING PARTS

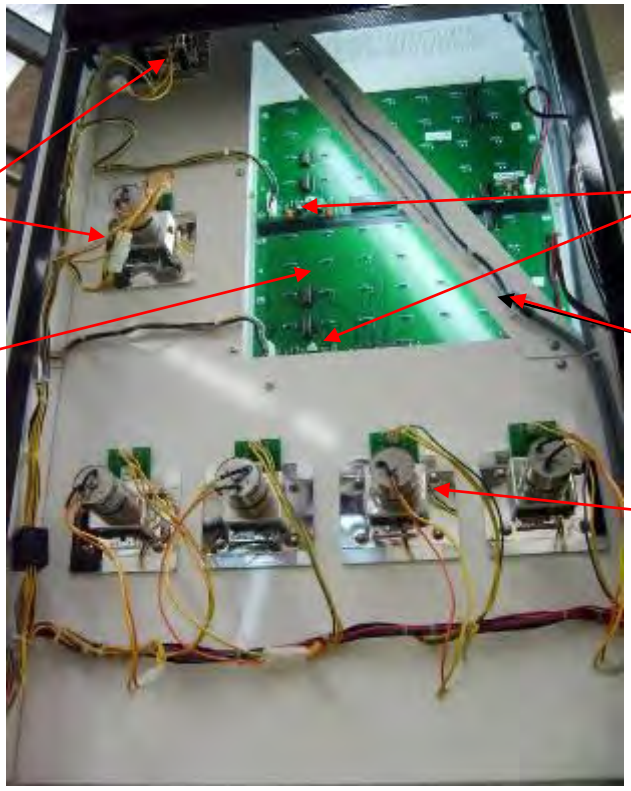
PARTS LOCATION DIAGRAM

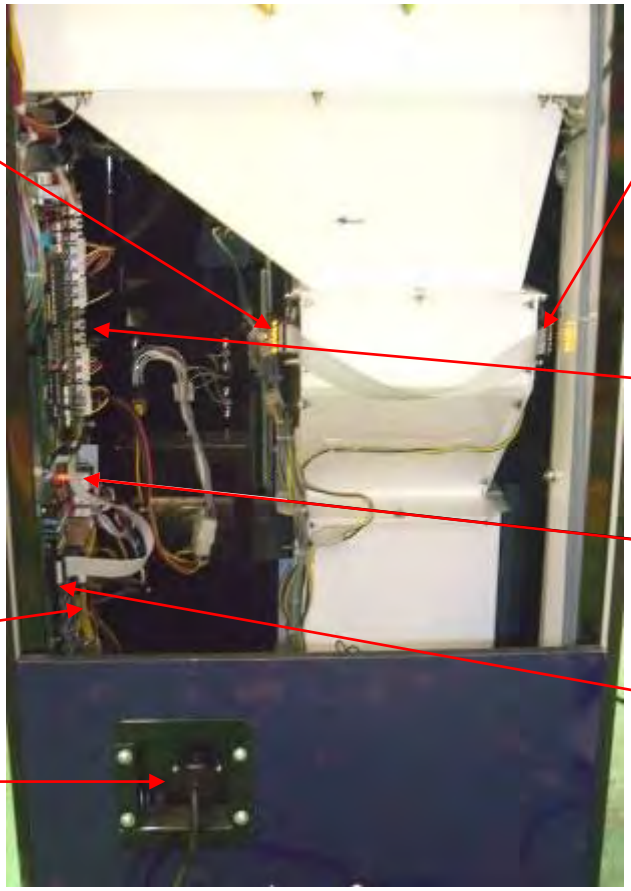
As viewed from front



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.

■ 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

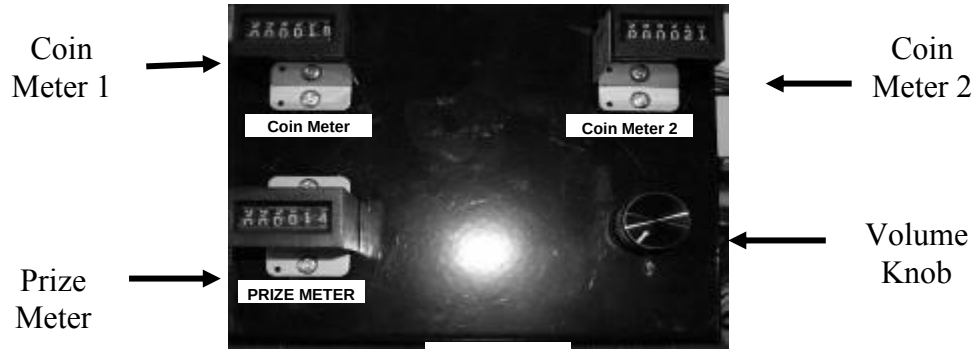
■ SERVICE CONTROLS:

Located on the service panel mounted on top of the cash box and accessed through 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, refer to page 38 on this manual.

*** WARNING! ***

Always *turn* ***OFF*** *Mains power and unplugged the game, before replacing any fuses*

Always *use the correct rated fuse.*

■ 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 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.

■ 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! ***

Always *turn* ***OFF*** *Mains power and unplugged the game, before replacing any lamps.*

Always *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 15 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.

*** CAUTION! ***

Always *replace the lamps with the same or equivalent size, wattage and voltage.*

MAINTENANCE

CLEANING AND CHECK UP

■ EXTERIOR

Regularly 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! ***

Do not *use solvents on the panels as it may affect the artwork.*

■ INTERIOR

Regularly 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.

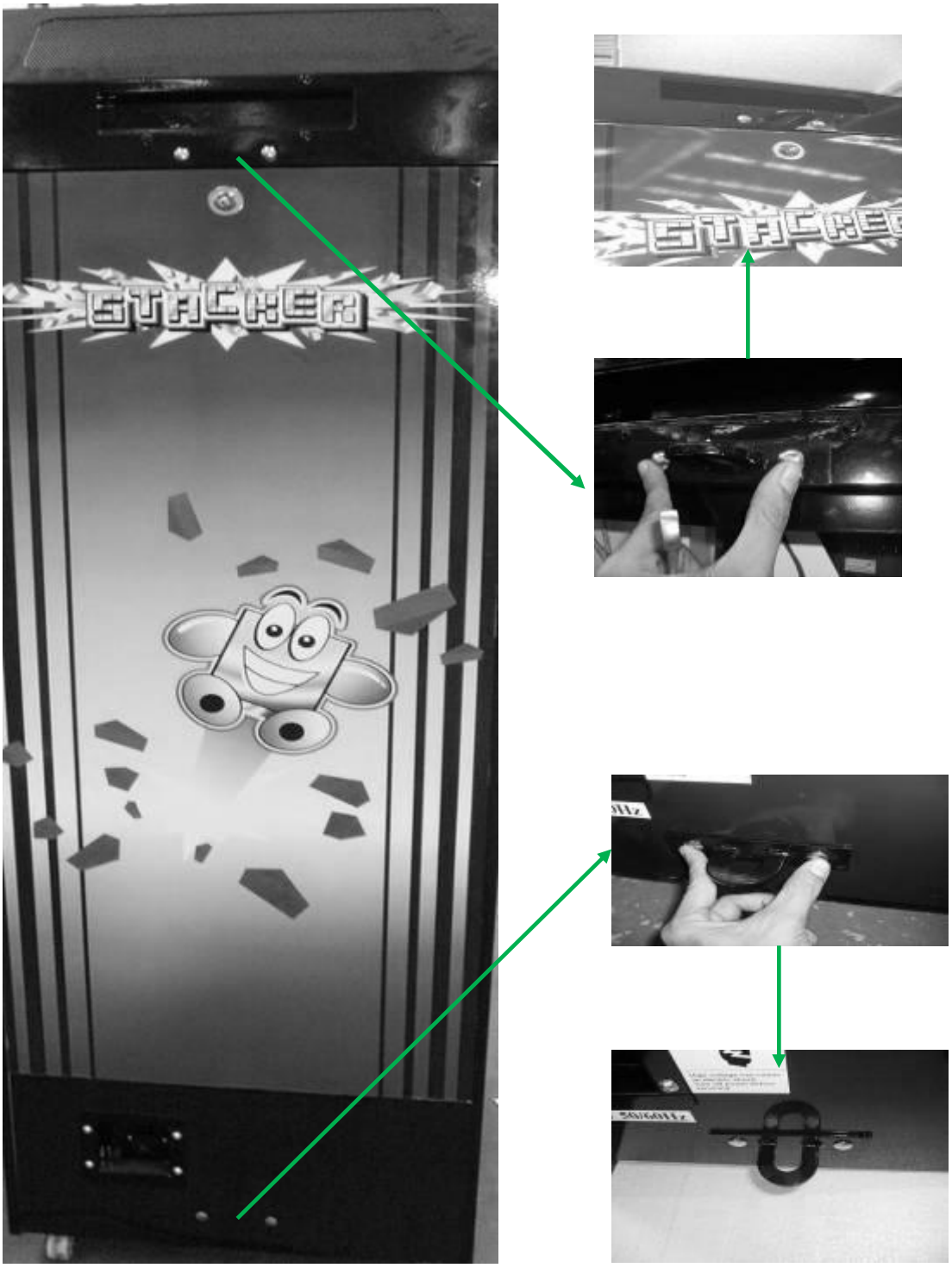
*** WARNING! ***

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

Always *after cleaning the cabinet interior, check all harness connectors and restore all loose or interrupted connections.*

Regularly check that all the Display and Button Lamps are operating through the Sounds, Lamps and Display Test. Replace any globes that are not operational.

BACK CABINET SECURITY BRACKET



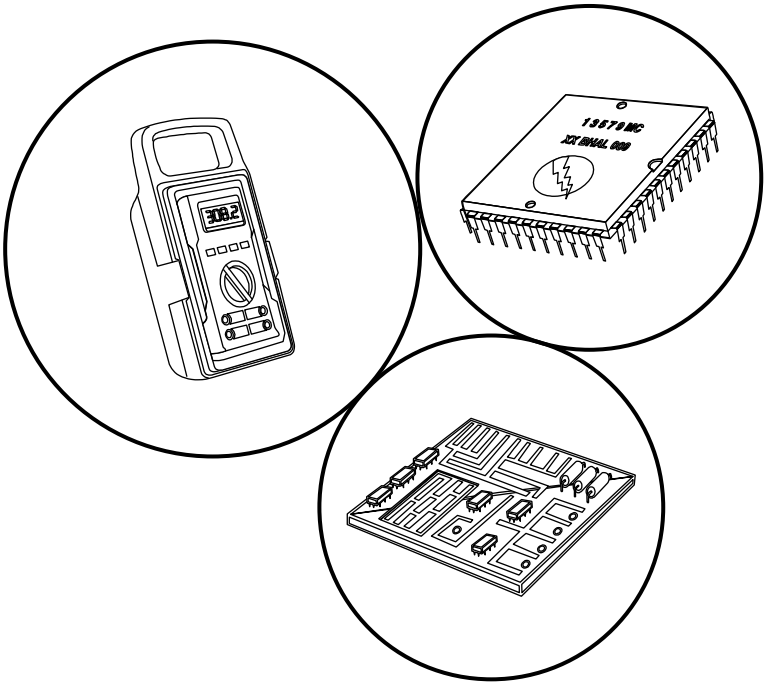
ADD COIN DOOR SECURITY

Security Bracket for Coin Door

Security bracket for Cabinet

4 x M6 CB bolt
4x M6 Flange Nut

SECTION B: TECHNICAL DETAILS



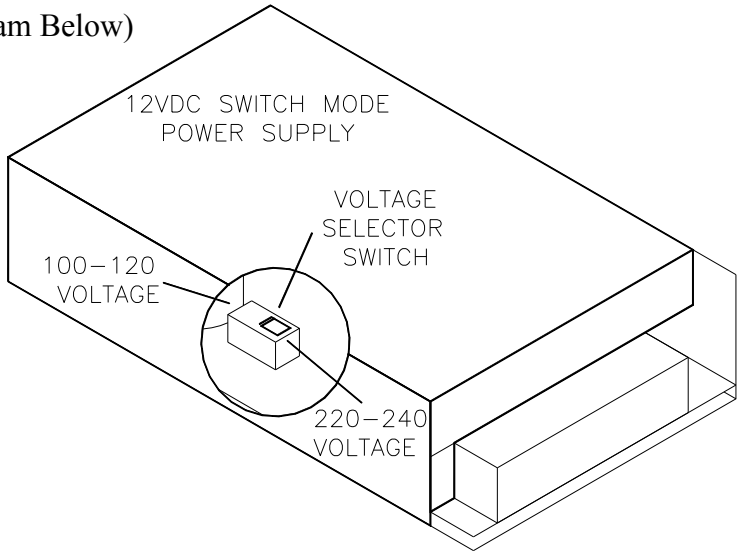
It is advised that anybody using SECTION B for repairing or modifying any of the components of the game should be a qualified technician, having at least a basic knowledge of digital components, integrated circuits and electricity.

B

MAINS VOLTAGE ADJUSTMENT

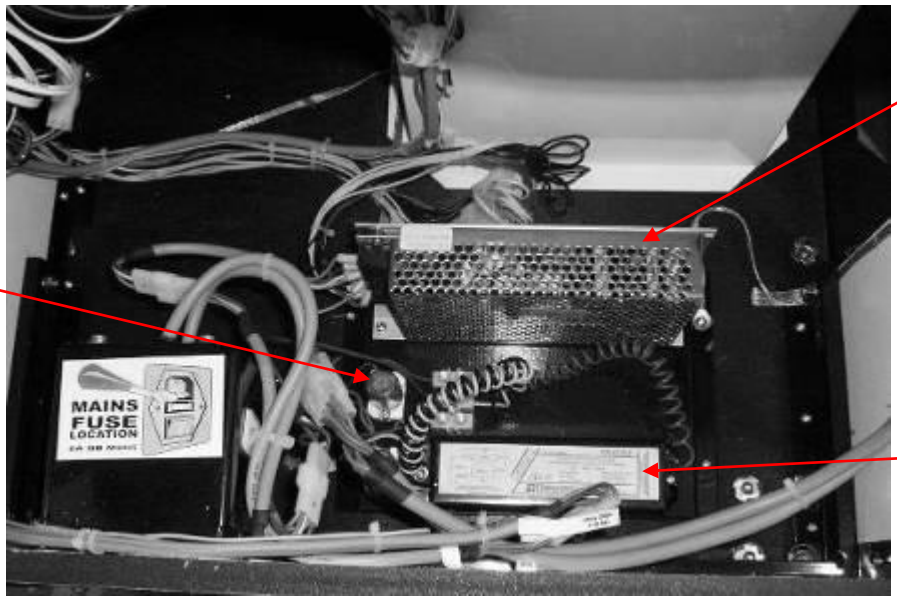
■ POWER SUPPLY

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 Shown on the picture below. These have to be removed and replaced with an equivalent wattage at your local mains voltage level.



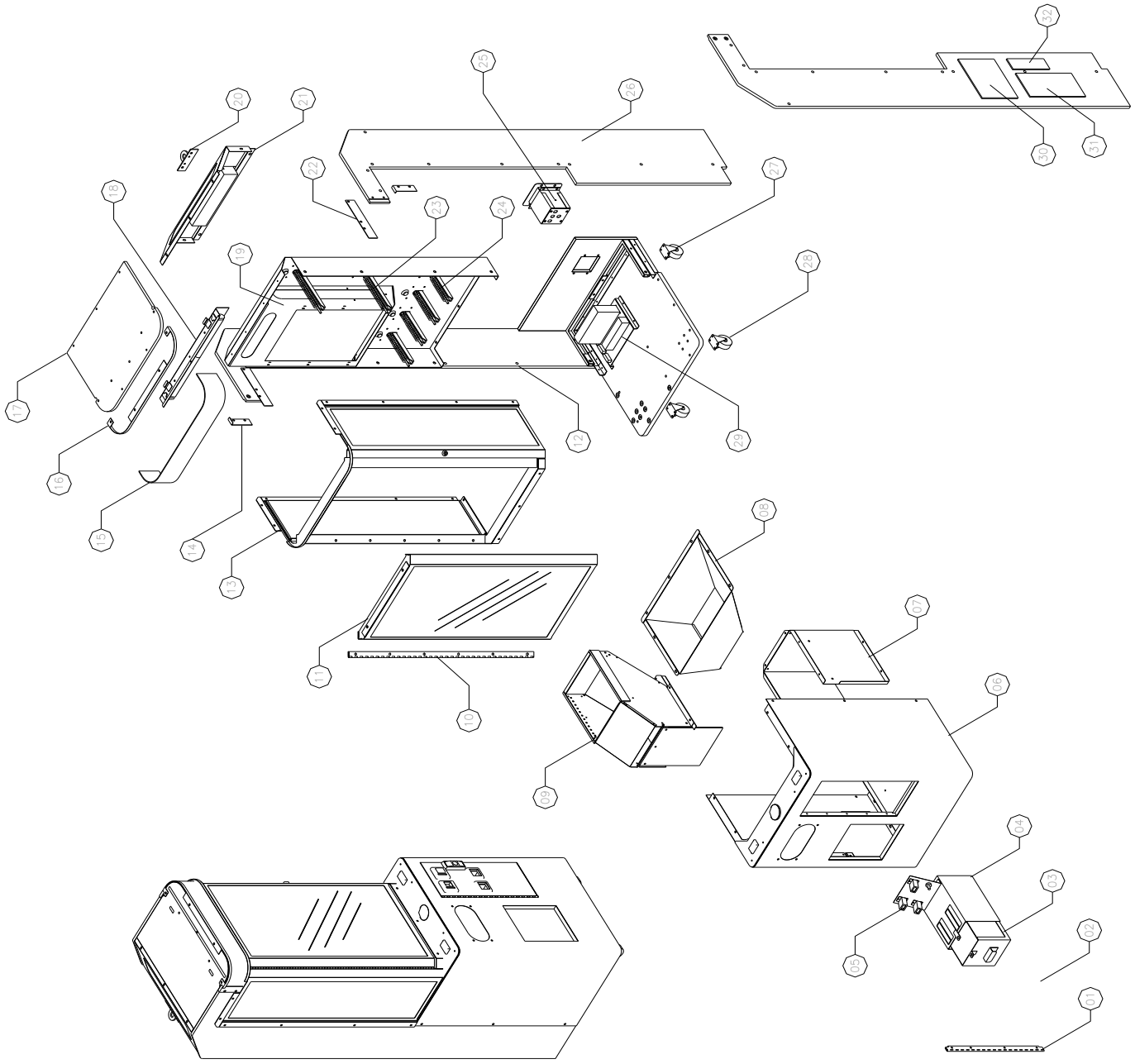
PSU
EA1003
MP20130A

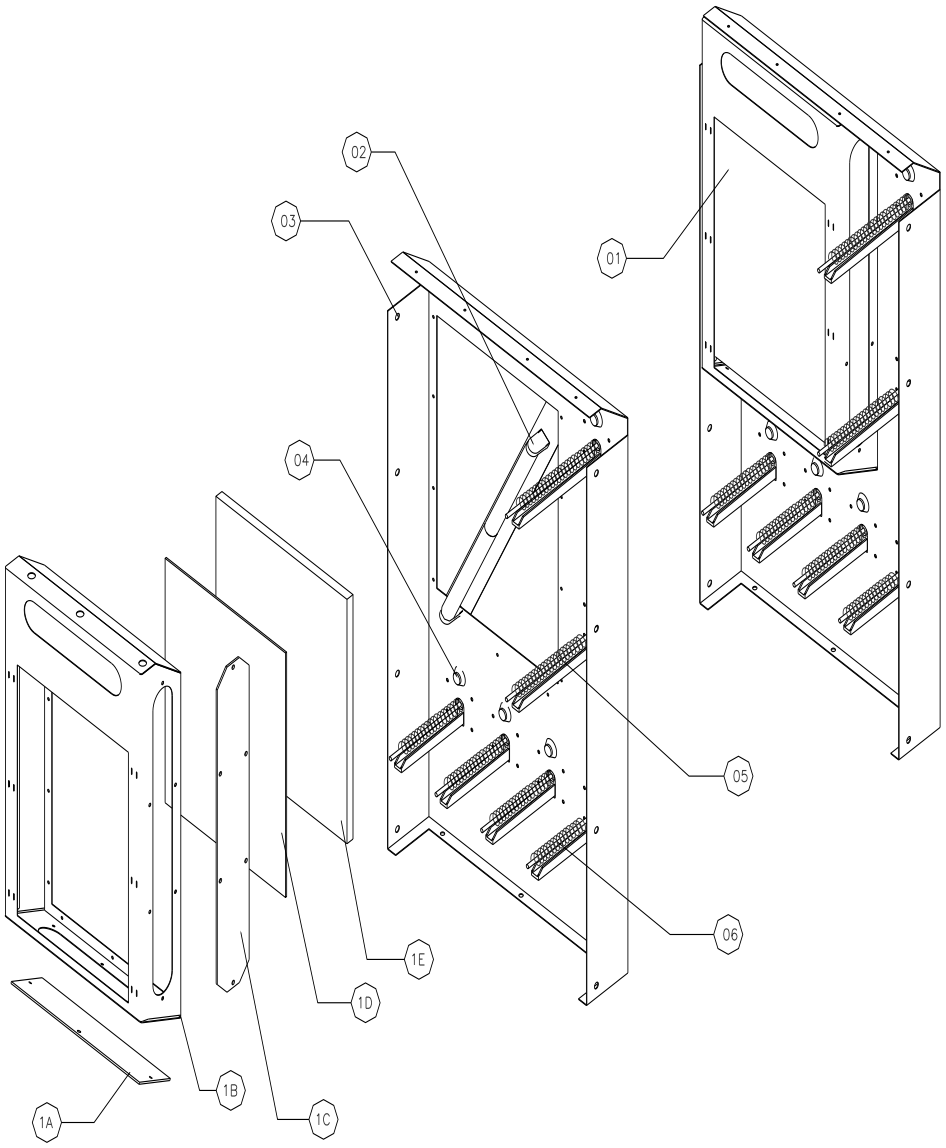
EA0317 S2
Phillips Starter

EA0330 Ballast
40 watt

3 D PARTS

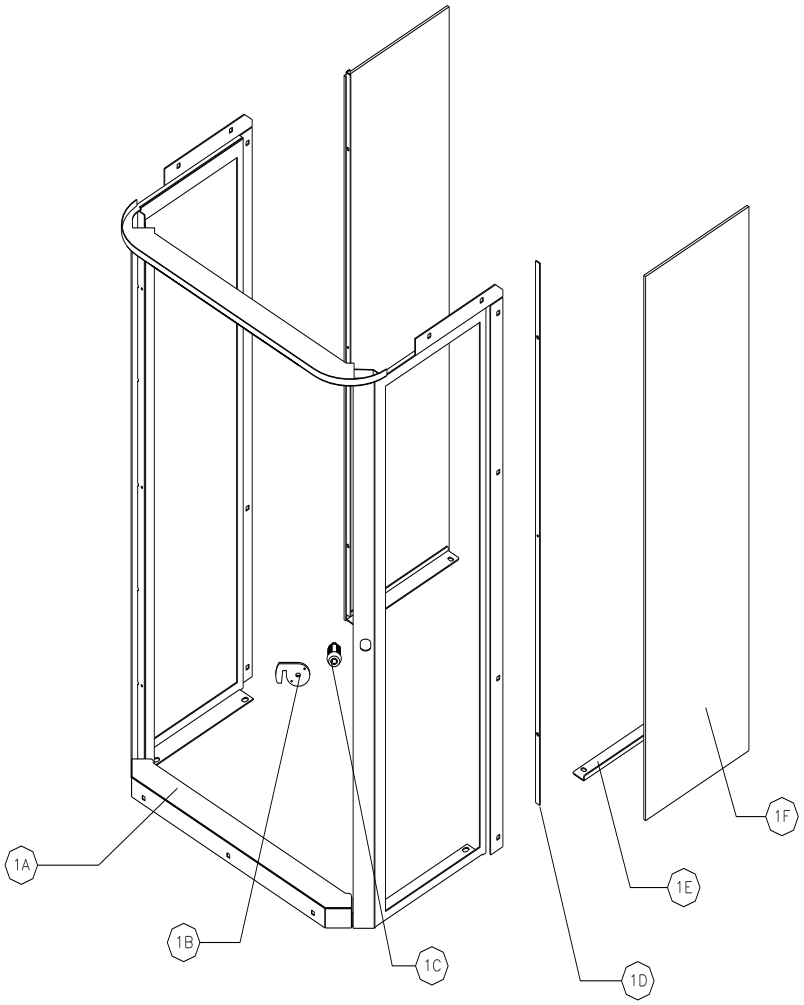
NO	PART NO	DESCRIPTION	QTY
01	SM-FM-29-R1	COIN DOOR HINGE	1
02	SM A008	COIN DOOR ASSY	1
03	SM-SA-40-R0	CASH BOX	1
04	SM-SA-39-R0	HOUSING CASHBOX	1
05	SM E001	SERVICE PANEL ASSEMBLY	1
	PART ITEM SM-FM-07-R0	COIN COUNTER BRACKET	1
	PART ITEM EA1252	COIN COUNTER 12V REAR MOUNTING	3
	PART ITEM EE0689	POTENSIO CARBON WITH KNOB	1
	PART ITEM EP0602	KNOB VOLUME	1
	PART ITEM SM H001	HARNESS SERVICE PANEL	1
06	SM A001	FRONT PANEL ASSEMBLY	1
	PART ITEM SM-SA-31-R0	FRONT PANEL METAL ONLY	1
	PART ITEM SM-FP-01-R0	ACRILLIC CONTROL PANEL	1
	PART ITEM SM-FM-27-R0	SPEAKER GRILL	1
	PART ITEM EA0563	PUSH BUTTON RED	1
	PART ITEM EA0507	SWITCH RECT GREEN BUTTON WITH LAMP	1
	PART ITEM EA0545	SWITCH RECT BLUE BUTTON WITH LAMP	1
	PART ITEM BA2601	PCB51 2cm 4 DIGIT DISPLAY	1
	PART ITEM AT3704	STICKER SM FRONT LOWER CABINET	1
	PART ITEM EA1201	SPEAKER 4" 8 OHM 40 W	2
07	SM-FM-01-R0	PRIZE RECEIVEL BOX	1
08	SM-SA-34-R0	PRIZE CHUTE ASSEMBLY	1
09	SM A002	PRIZE BOX ASSEMBLY	1
	PART ITEM SM A004A	PRIZE BOX METAL ONLY	1
	PART ITEM BA2602	PCB59a SB PRIZE SENSOR MASTER	1
	PART ITEM BA2603	PCB59b SB PRIZE SENSOR SLAVE	1
	PART ITEM SM A004B	PRIZE DOOR WITH STICKER	1
10	SM-FM-28-R0	FRONT DOOR HINGE	1
11	SM A003	FRONT DOOR ASSEMBLY	1
12	SM A004	SIDE PANEL ASSY	1R
	ITEM SM-FW-04-R0	SIDE PANEL RIGHT	1
	ITEM AT3211	STICKER STACKER MINI SIDE RIGHT	1
13	SM A005	SIDE SKIN ASSEMBLY	1
14	SM-FM-22-R0	MYLAR SIDE RETAINER	1R,1L
15	SM-FP-04-R0	ACRYLIC MYLAR FRONT PANEL	1
16	SM-FM-21-R0	MYLAR TOP RETAINER	1
17	SM-FW-06-R0	MYLAR TOP PANEL	1
18	SM E002	TOP LIGHT STACKER MINI ASSY	1
	ITEM EA0206	FLUORESCENT 18W COOL WHITE	1
	ITEM EP0434	END CAP HOLDER MODEL 713 HS	2
	ITEM SM-FM-20-R0	BRACKET FLUORESCENT	1
19	SM E003	DISPLAY PANEL ASSEMBLY	1
20	SM-SA-35-R0	REAR LOCKING BRACKET	2
21	SM-SA-30-R0	MYLAR BACK COVER ASSY	1
22	SM-FM-12-R0	SIDE GLASS UPPER CLAMP	2
23	EA1155H	PRIZE ARM MAJOR	2
24	EA1155K	PRIZE ARM MINOR	4
25	SM E004	DB BOX ASSEMBLY	1
	PART ITEM SM E005A	DB BOX METAL ONLY	1
	PART ITEM EA1356	BINDING POST	1
	PART ITEM EA1358	SPLIT CORE EMI FILTER FOR CE MACHINE	1
	PART ITEM EA0649	IEC TYPE NOISE EMY FILTER	1
	PART ITEM SM H001	DB BOX HARNES	1
	PART ITEM EA0635	POWER LEAD MOLDED IEC TO 3 PIN USA	1
	PART ITEM EA0636	POWER LEAD MOLDED IEC TO 2 PIN INDO	1
	PART ITEM EA0637	POWER LEAD MOLDED IEC TO 3 PIN AU	1
	PART ITEM EA0639	POWER LEAD MOLDED IEC TO 3 PIN UK	1
26	SM A006	SIDE PANEL ASSY	1L
	ITEM SM-FW-05-R0	SIDE PANEL LEFT	1
	ITEM AT3211	STICKER STACKER MINI SIDE LEFT	1
27	HW0065	CASTOR 2" FIX	2
28	HW0078	CASTOR 2" SWIVEL BRAKE	2
29	SM E005	POWER ASSEMBLY	1
30	BAFB66A	PCB FB66A MPU CONTROLER	1
31	BAFB52C	PCB FB52C 16 MHz Z80	1
32	BA0029	PCBFB29 STEREO AUDIOAMPLIFIER	1

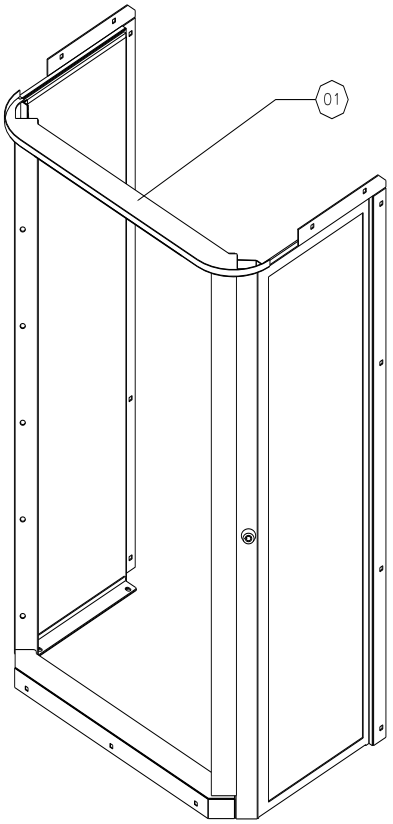




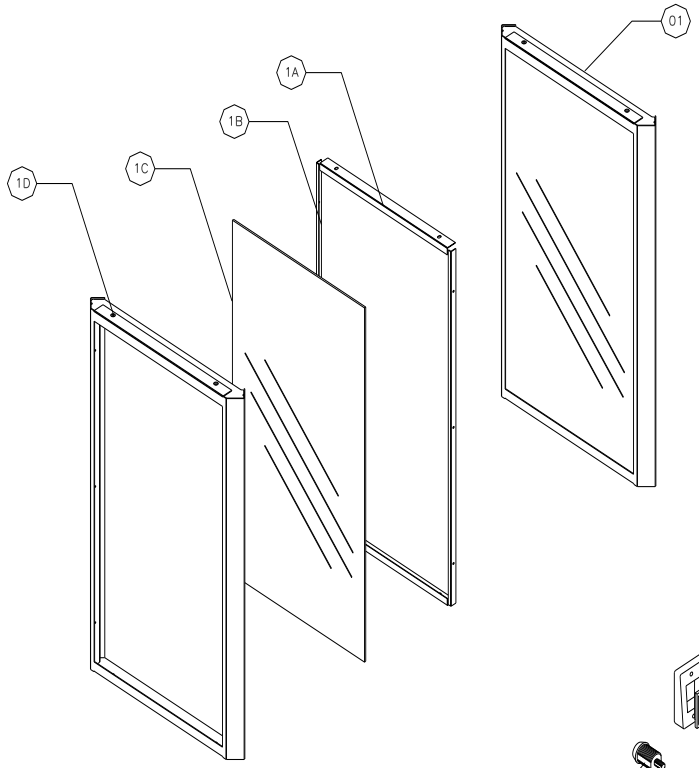
NO		PART NO	DESCRIPTION	QTY
01		SM E003	DISPLAY LIGHTING ASSEMBLY	1
SUB ASSY	01A	SM-FP-06-R0	ACRYLIC COVER BOTTOM DISPLAY	1
	01B	SM-SA-32-R0	DISPLAY PANEL METAL ONLY	1
	01C	SM-FP-05-R0	ACRILLIC COVER SIDE DISPLAY	1
	01D	SM-FP-03-R0	ACRYLIC DISPLAY RED	1
	01E	BAFB82A	PCBF82A RSL RED LED DISPLAY	2
	–	EE2414	CUBE LED RED COLOR	40
	–	AT3705	STICKER STACKER MINI MAJOR PRIZE	1
	–	AT3706	STICKER STACKER MINI MINOR PRIZE	1
02		SM E006	NEON DISPLAY ASSEMBLY	1
SUB ASSY	02A	EA0206	LAMPU NEON 18W COOL WHITE	1
	02B	EP0434	END CAP HOLDER MODEL 713-HS	2
	02C	SM-FM-14-R0	BRACKET NEON UL	1
03		SM A007	MAIN PANEL ASSY	1
ITEM		SM-FM-13-R0	MAIN PANEL METAL ONLY	1
		AT3707	STICKER MAIN PANEL	1 SET
04		BAFB146	PCB PRIZE LED INDICATOR STACKER MINI	6
05		EA1155H	PRIZE ARM MAJOR	2
06		EA1155K	PRIZE ARM MINOR	4

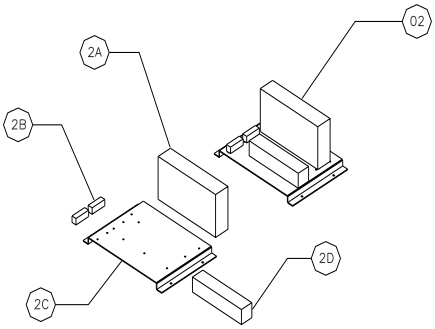
NO		PART NO	DESCRIPTION	QTY
01		SM A005	SIDE SKIN ASSY	1
SUB ASSY	01A	SM-FM-37-R0	SIDE SKIN ASSY METAL ONLY	1
	01B	SM-FM-17-R0	CAM LOCK	1
	01C	HM0004	EAGLE LOCK	1
	01D	SM-FM-18-R0	SIDE GLASS RIGHT&LEFT CLAMP	1R,1L
	01E	SM-FM-15-R0	SIDE GLASS LOWER&UPPER CLAMP	1R,1L
	01F	SM-FG-02-R0	SIDE GLASS	2

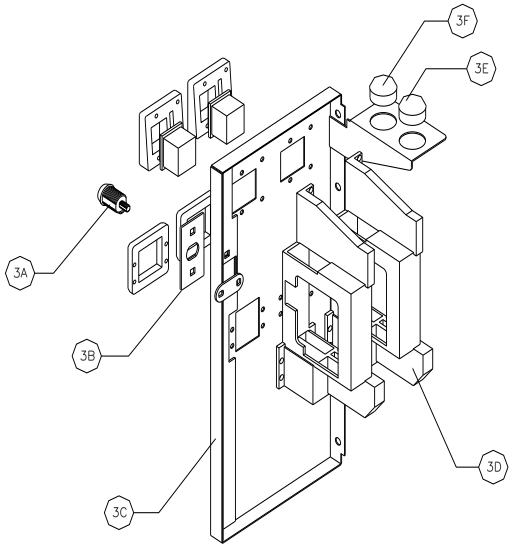


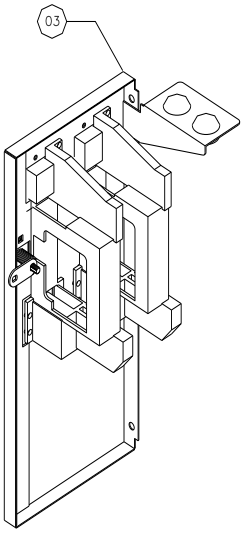


NO		PART NO	DESCRIPTION	QTY
01		SM A003	FRONT DOOR ASSEMBLY	1
SUB ASSY	01A	SM-FM-16-R0	FRONT GLASS LOWER&UPPER CLAMP	2
	01B	SM-FM-19-R0	FRONT GLASS RIGHT&LEFT CLAMP	2
	01C	SM-FG-01-R0	FRONT GLASS DOOR	1
	01D	SM-SA-36-R0	FRONT DOOR ASSY METAL ONLY	1
	–	AT3702	STICKER PLAY INSTRUCTION	1
02		SM E005	POWER ASSEMBLY	1 SET
SUB ASSY	02A	EA1003	POWER SUPLY +5V 15A +12V 4A -5V 1A	1
	02B	EA0311	STARTER BASE UL	2
	02C	SA-FM-06-R0	BRACKET BALLAST	1
	02D	EA0325	BALLAST 240V, 15W	1
		EA1359	BALLAST 110V, 15W	1
	–	SM E006	POWER HARNESS	1
03		SM A008	COINDOOR ASSY	1
SUB ASSY	03A	HM0004	EAGLE LOCK	1
	03B	SM-FM-41-R0	T HANDLE COVER	1
	03C	SM-SA-41-R0	COIN DOOR 2 COIN MECHANIC METAL ONLY	1
	03D	HM0014	COIN MECHANISM	2
	03E	EA0520	SWITCH SMALL ROUND GREEN BUTTON	1
	03F	EA0519	SWITCH SMALL ROUND RED BUTTON	1
	–	SM H002	HARNESS COIN DOOR 2 COIN MECHANIC	1

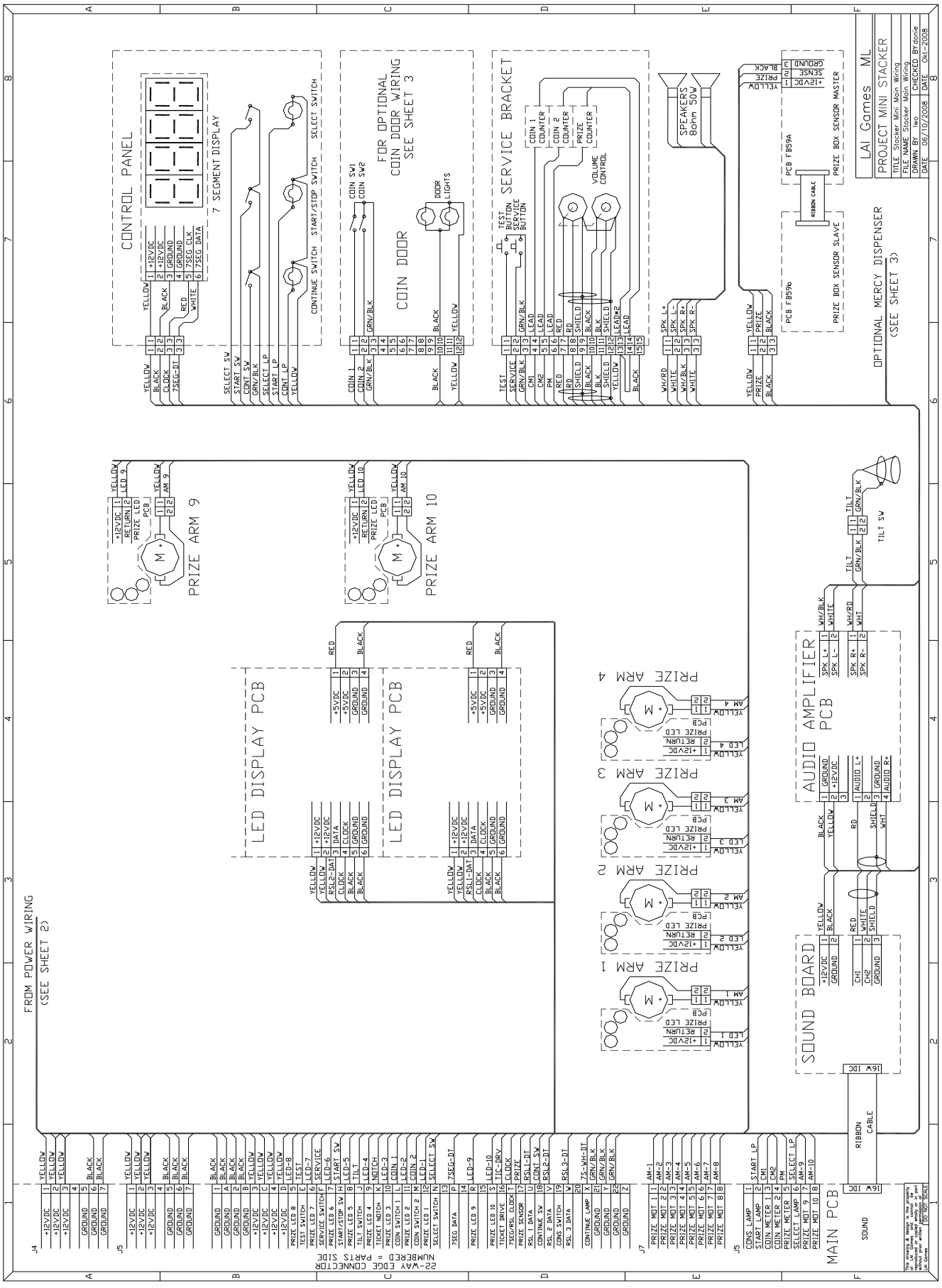








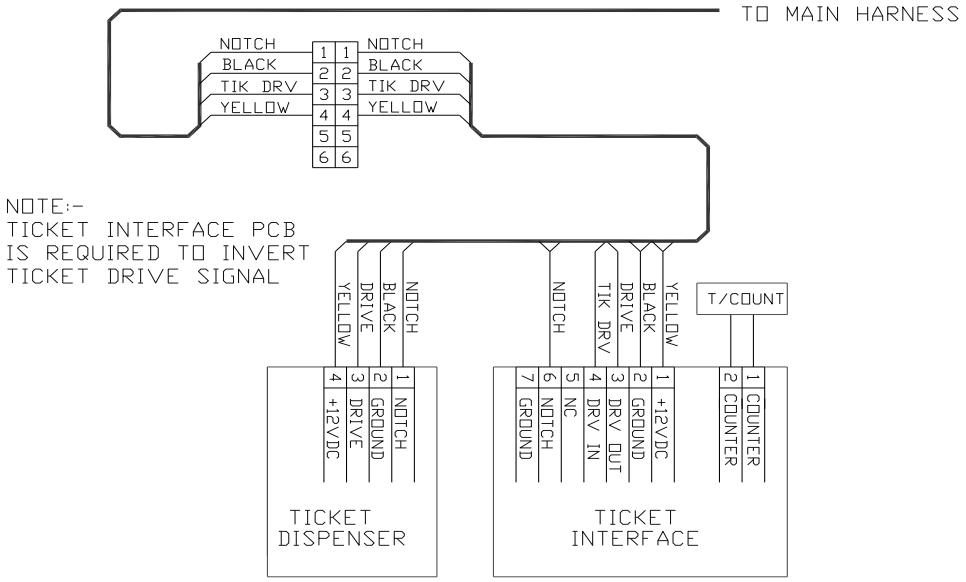
STACKER MINI MAIN WIRING DIAGRAM



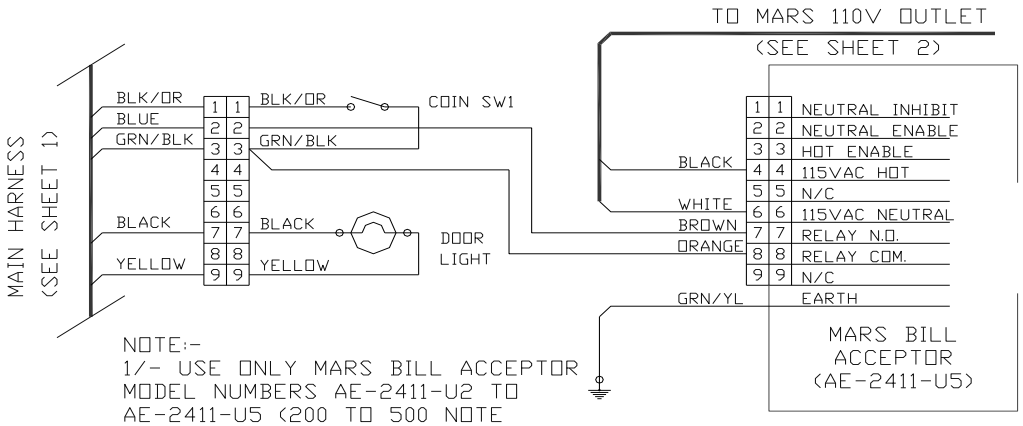
STACKER MINI OPTIONAL WIRING DIAGRAM

SHT No. 3

(OPTIONAL)
WIRING FOR MERCY TICKET KIT



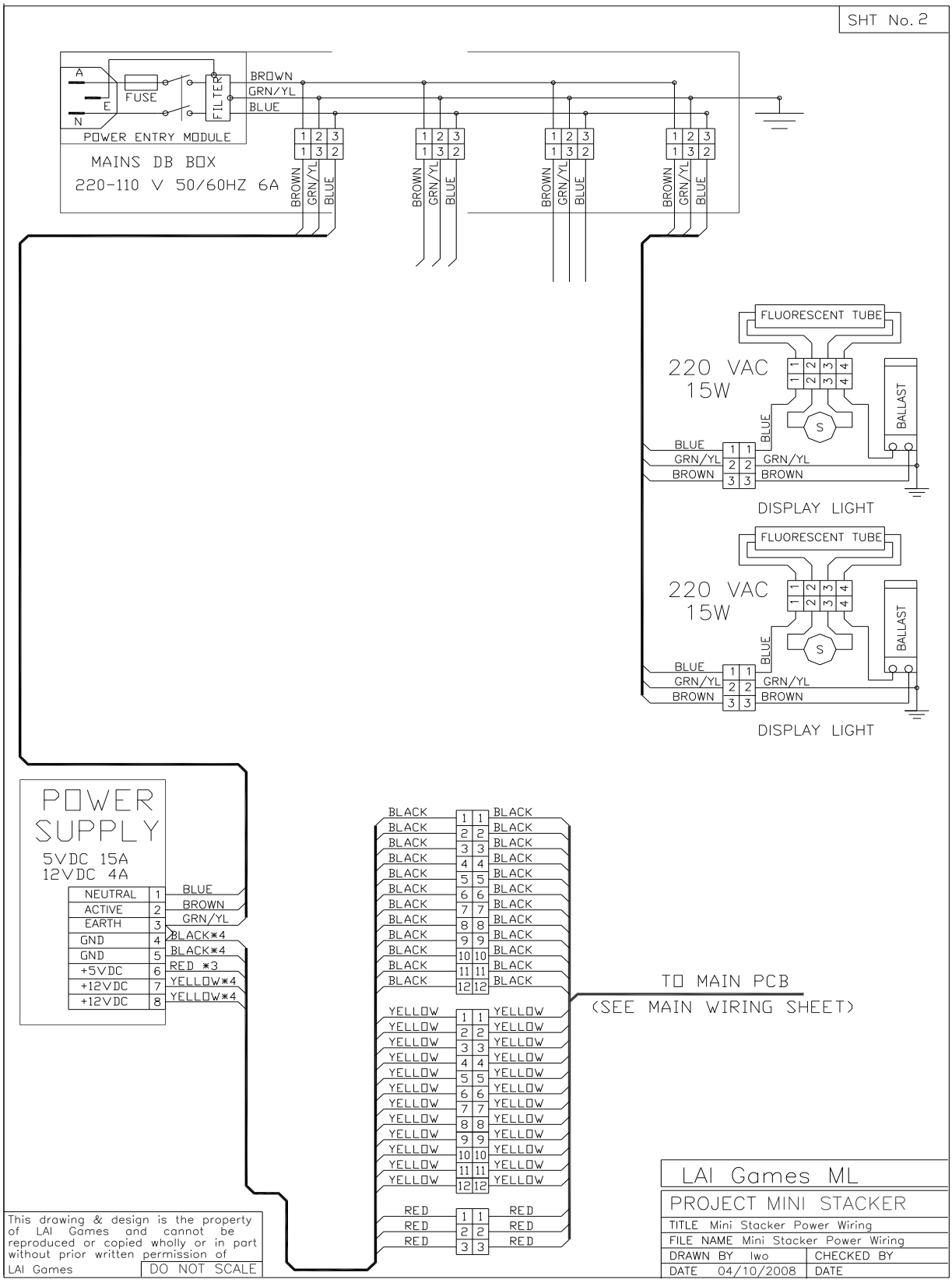
(OPTIONAL)
WIRING FOR COIN DOOR WITH
MARS BILL ACCEPTOR (AE-2411-U5)



NOTE:-
1/- USE ONLY MARS BILL ACCEPTOR MODEL NUMBERS AE-2411-U2 TO AE-2411-U5 (200 TO 500 NOTE MAGAZINES) TO ALLOW COIN DOOR TO CLOSE
2/- MARS BILL ACCEPTOR MUST BE SET TO LONG PULSE OUTPUT (SEE MARS USER MANUAL FOR COUPON PROGRAMMING)

LAI Games ML	
PROJECT MINI STACKER	
TITLE Mini Stacker Optional Wiring	
FILE NAME Mini Stacker Optional Wiring	
DRAWN BY Mr Techfix	CHECKED BY
DATE 06/10/06	DATE

STACKER MINI POWER WIRING



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(c) Any tampering with, changes to, or modifications of the licensed software that occur after the software leaves LAI GAMES‟ factory that is not made by authorized LAI GAMES personnel and that is directly or indirectly caused by Operator; and

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ANY IMPROPER AND UNAUTHORIZED USE SHALL COMPLETELY AND TOTALLY VOID ANY AND ALL WARRANTIES, BOTH EXPRESS AND IMPLIED, OF THE HARDWARE AND LICENSED SOFTWARE PROVIDED BY LAI GAMES.

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.