



# OPERATOR'S MANUAL

**STACK IT**



V 3.0

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ISO 9001 CERTIFIED ORGANIZATION



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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 Multimeter, 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 °C.*



## MACHINE INSTALLATION and INSPECTION

When installing and inspecting “**Stack It**”, 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! \***

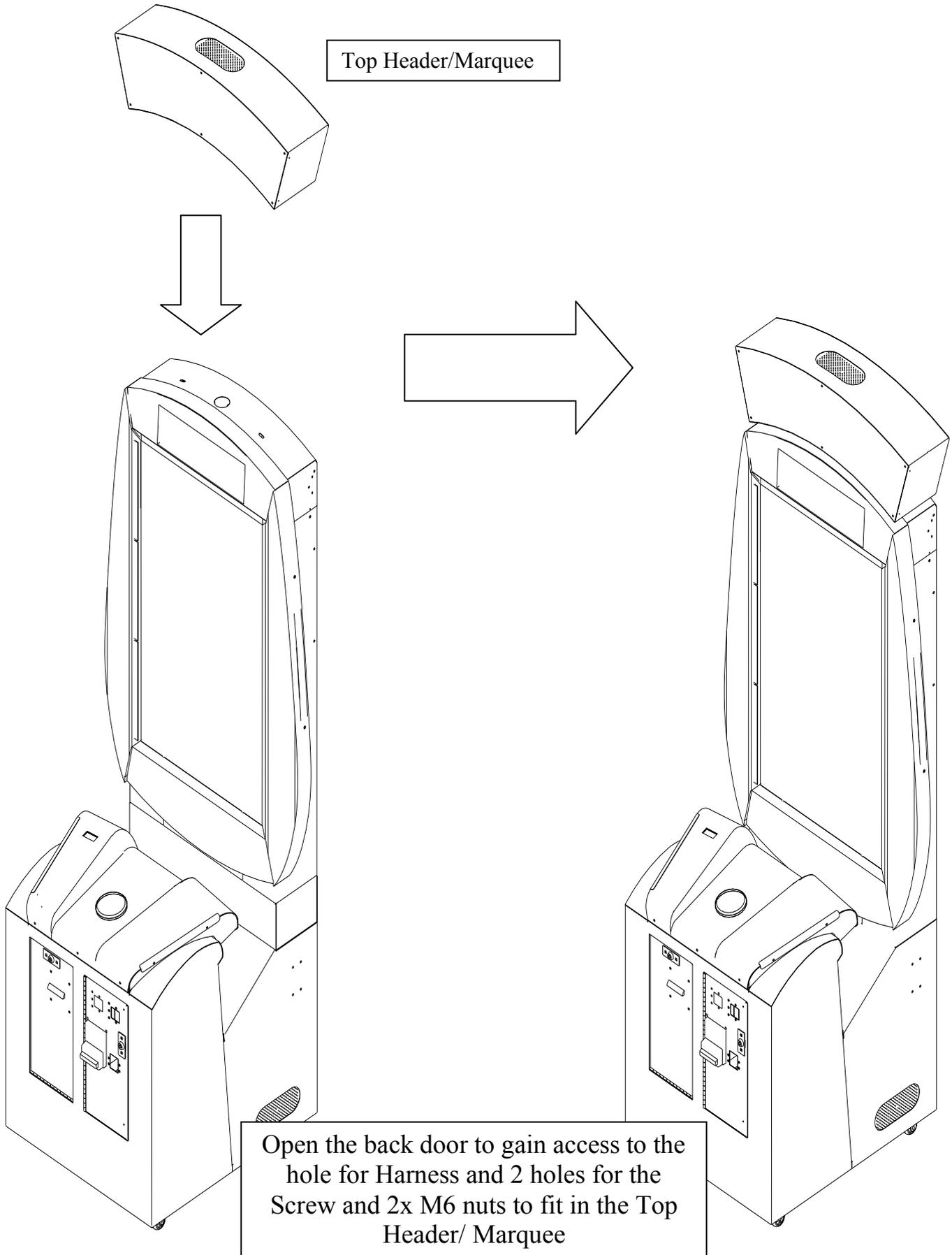
**Before** switching the machine on be sure to check that it has been set on the correct voltage for your area!

**Refer** to the mains voltage adjustment section of this manual on.  
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)

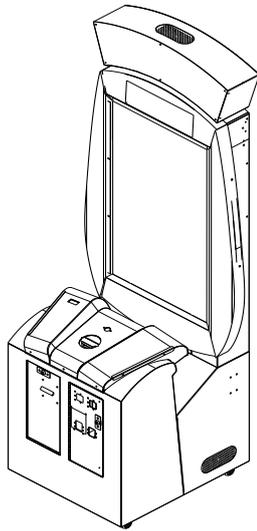


# TOP HEADER ASSEMBLY

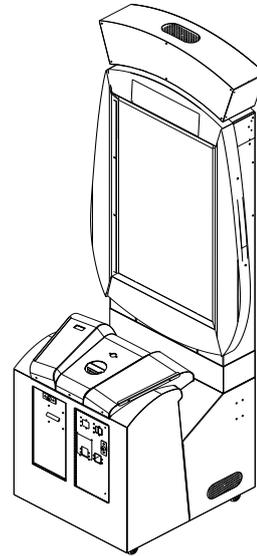
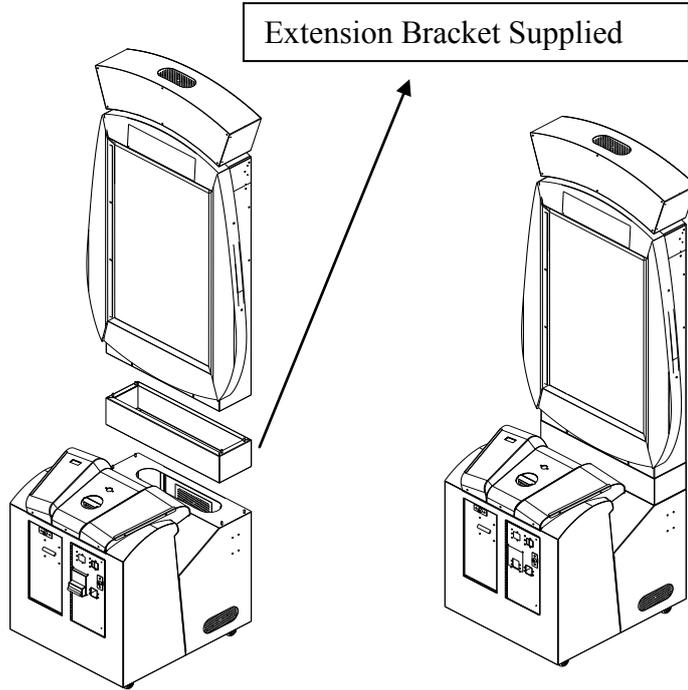




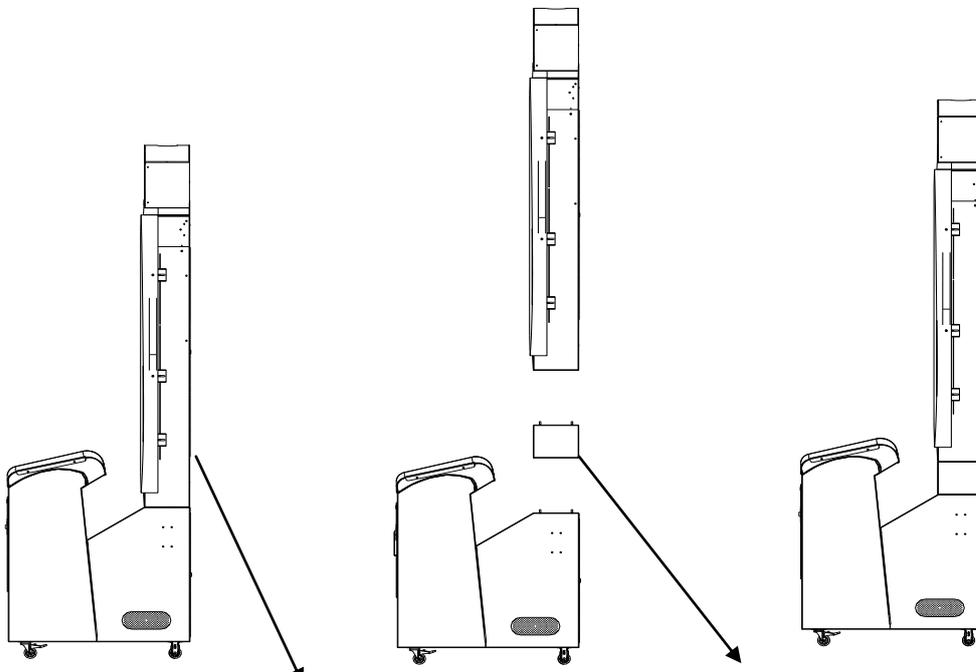
# HEIGHT EXTENSION INSTALLATION



Standard Version



Height Extension Version



Open the back door and unscrew 4 M6 nuts on the bottom of the display

Step 1

Insert the bracket on top of the bottom cabinet

Step 2



## INTRODUCTION

**CONGRATULATIONS!** You have just bought the “*Stack It*”, another great product from LAI GAMES. This is a ticket redemption game with a quick stop skill that is simple and fast to learn and play. With choices of safe levels for the player and ability for the operator to preset minimum ticket values for each level, we feel that *Stack It* will make a great addition at any location, on or off site. The bright red and blue playfield makes it an attractive, intuitive but exciting game with challenges at every level.

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

### DESCRIPTION

*Stack It* substantially changes the game play and also makes it very easy to operate and set for the operator. The game now plays and works just like the famous Stacker prize vending game where the object is initially to stack the blocks to the “Win Level” which is level 9 and previously the Double Up level. At this level the player must make a choice to either take the “Win Level” tickets they have won or risk these tickets to try and win the “Super Bonus”. If the player loses prior to winning the “Super Bonus” or loses prior to reaching the “Win Level” they will only receive a number of mercy tickets based on the P-09 setting.

The Game settings are extremely easy and all automatic if left on default and therefore it is very simple to set up with the key to the game with only one important setting: **P-08** where you set the average number of tickets (ATG) that you want the game to pay out. From this one setting all the other game settings are automatically set. They can be “tweaked” and fine tuned slightly if required by the operator but basically based on the P-08 setting the game will control the ticket payout simply, seamlessly and most importantly accurately for the operator.

Please read through the settings below. The P01 through to P06 are just coin settings so the game settings are P07 thru to P15



## **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 “Stack It” cabinet
- Keys:       2 x coin door keys  
              2 x back door keys  
              2 x ticket door key
- Operator’s manual
- IEC Power Cord               (In cash box)
- Parts & Accessories         (In cash box)



## DIMENSIONS

- Weight: 128 kg (282.11lb)
- Height: 2300 mm (78-2")
- Width: 770 mm (26-18")
- Length: 800 mm (27-2")
- Power: Maximum 220 W – (220V @ 1.0A)(120V @ 1.5A)

### 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.**

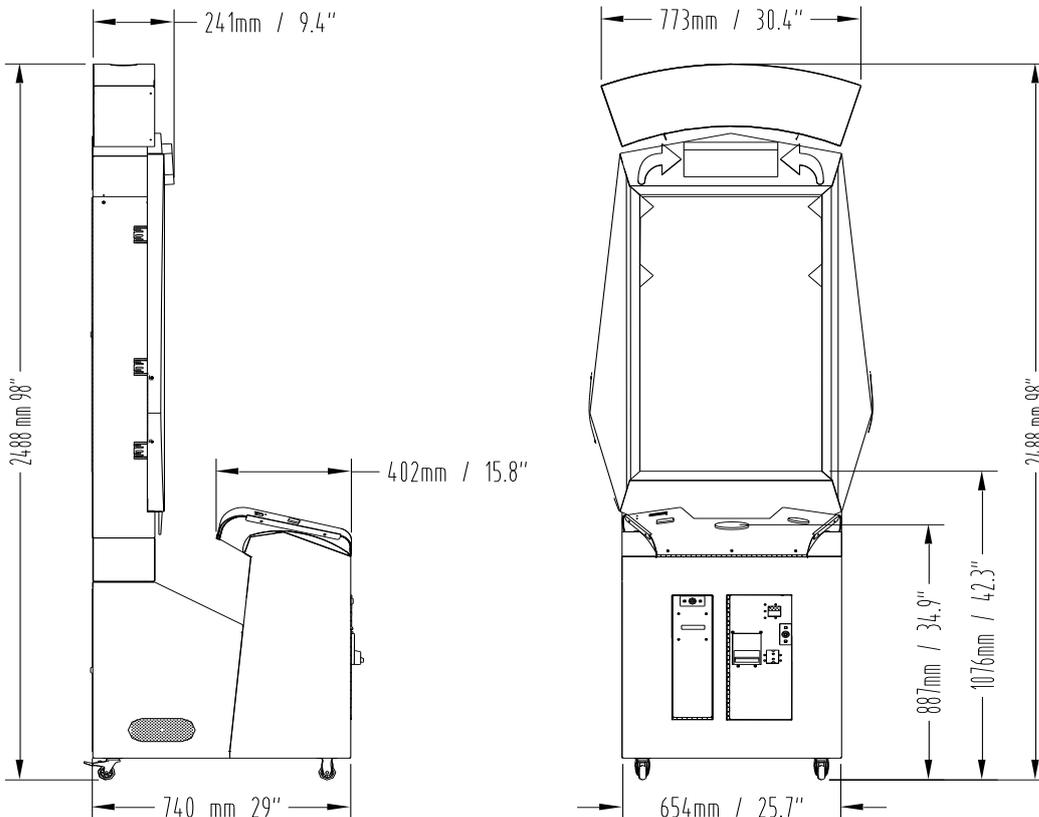
**\* CAUTION! \***

**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 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



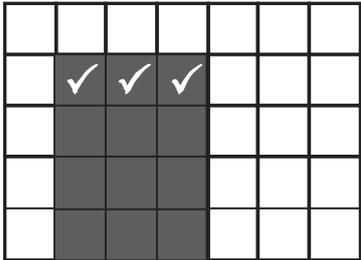


# HOW TO PLAY

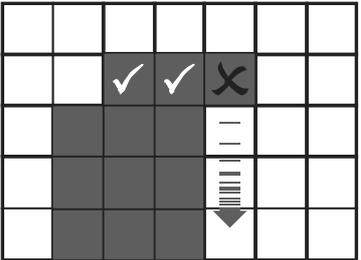
## Players AIM to BUILD A VERTICAL STACK OF BLOCKS TO WIN TICKETS

- Insert coin/s.
- 
- Press Start/Stop button to start a game;
- Press Start/Stop button to stop the moving blocks at desired position;
- Build the stack of blocks by stopping each level of blocks on top of each other;
- Players win a set number of tickets.
- Reaching the win level, players can select to get a ticket payout or press the Continue button and try for Super Bonus zone.
- Game ends any time the player fails to stop the moving blocks at the desired position, or they choose to get a ticket payout.

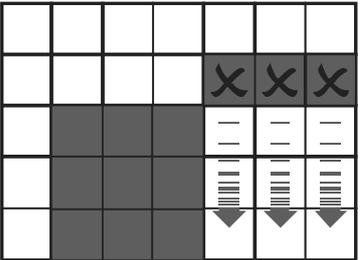
### Perfect



### Not bad



### Missed Game over



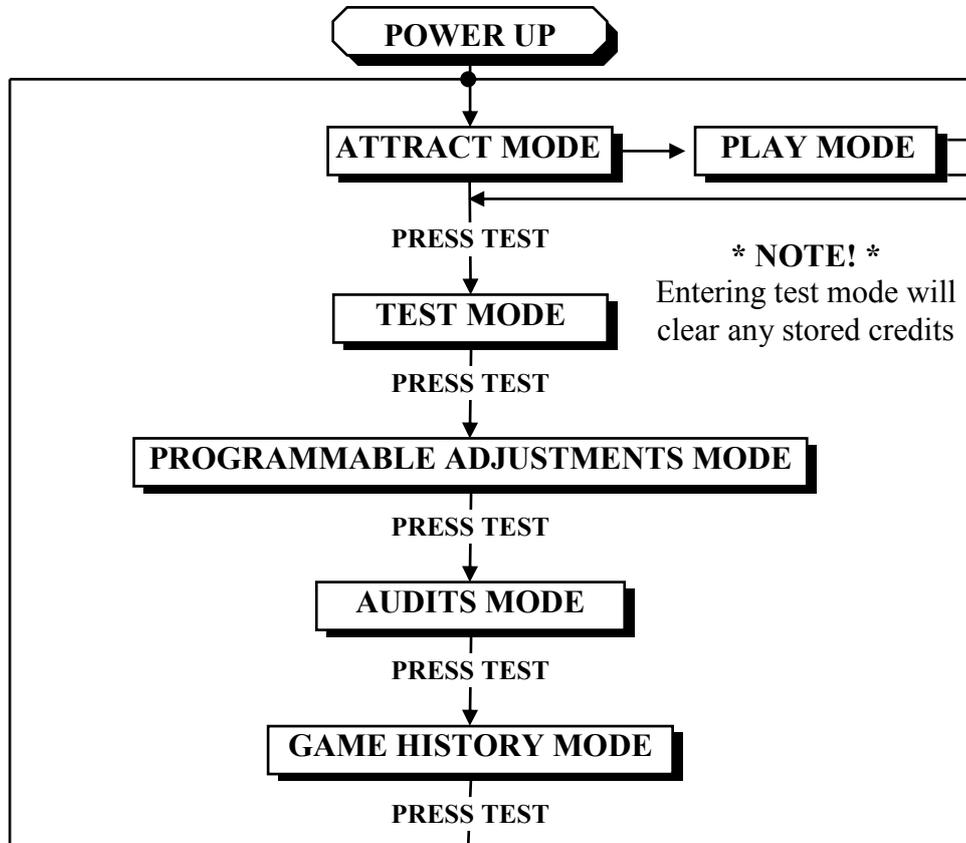
Note : ✓ Staying Blocks      ✗ Lost Blocks



# OPERATION

The “*Stack It*” 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 or off.

### PLAY MODE

- The *Stack It* 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 in front of the machine / cabinet and then following the instructions in “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, **F r E E** will be displayed on the 4-digit LED display.
- For a single free game, just press the Service button once. When issuing single free games in this manner, Tickets can be won as normal.



# TEST MODE

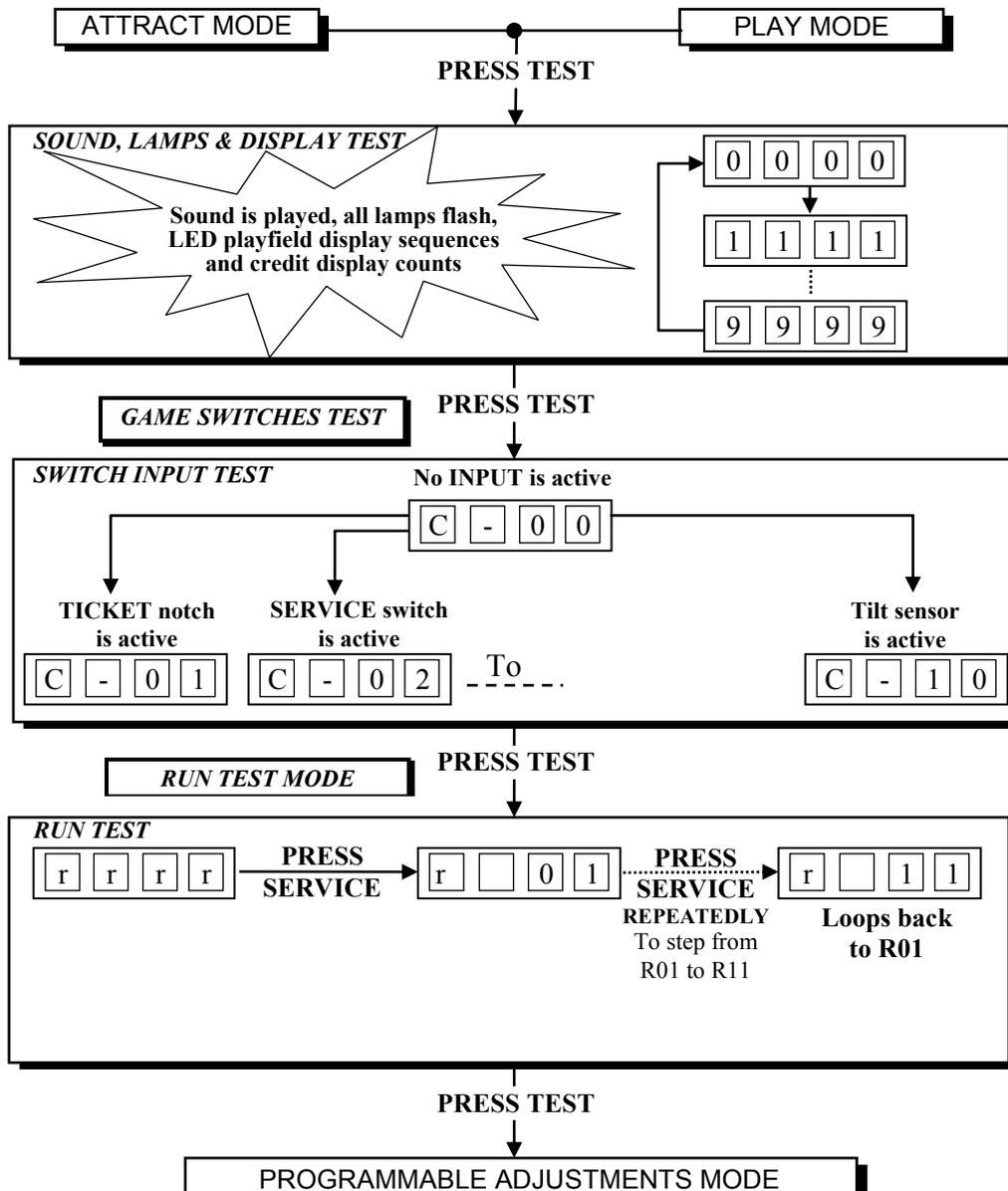
The **Stack It** Test mode has *Three Test Configurations* allowing you to test the function of Sound, Lamps, Displays, Game Switches, and Ticket Dispenser Motor. (Refer to the Test Mode Diagram below).

The Test mode is also used for Clearing Game Errors. If there is an active error, its code will be displayed. To clear the error code, press the red test button once. The error can be bypassed quickly by pressing the red test 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 once.

**\* NOTE! \***

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

### ***DURING THE TEST:***

- Game music and a voice over will be played.
  - 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
- **EXIT** The Sound, Lamp & Display test is exited by pressing the test button. The next test will be the switch test.

## SWITCH TEST

- **ENTER** The Switch Test can be entered by pressing the Test button once while in the Sound, Light & display test mode or by pressing the Test button twice while in Attract mode, **C-XX-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 there are no switches are active then **C-00-00** will be displayed.

| CODE | DISPLAY        | SWITCH FUNCTION          | SWITCH LOCATION  |
|------|----------------|--------------------------|------------------|
| C0   | <b>C-00-00</b> | No Switch Active         | -                |
| C1   | <b>C-00-01</b> | Ticket Notch Active      | Ticket Dispenser |
| C2   | <b>C-00-02</b> | Service Switch Active    | Service Panel    |
| C3   | <b>C-00-03</b> | Start/Stop Button Active | Control Panel    |
| C4   | <b>C-00-04</b> | Coin 1 Switch Active     | Coin Door        |
| C5   | <b>C-00-05</b> | Coin 2 Switch Active     | Coin Door        |
| C6   | <b>C-00-06</b> | Payout Button Active     | Control Panel    |

Normal condition for the game is **C-00-00**, no switches are active.

**\* NOTE! \***

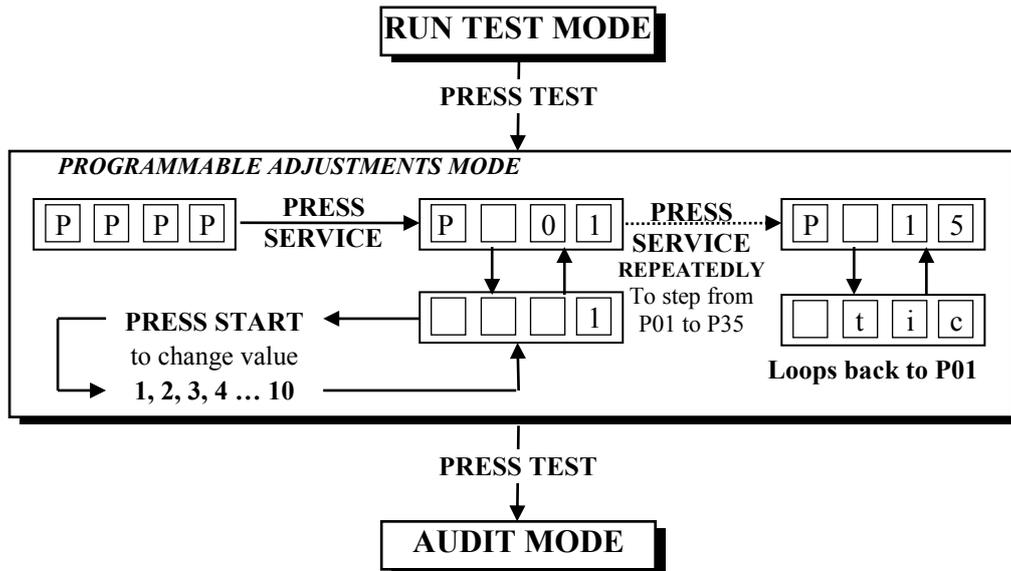
- Several switches can be simultaneously activated in the Switch test. The display will then consecutively show their codes, indicating which switches are active. However, it is much easier to test the game switches individually.

## PROGRAMMABLE ADJUSTMENTS MODE

The Stack It has fifteen programmable adjustments that can be changed in this mode. They are P01 to P15 and their codes and values are displayed alternatively during the adjustment procedure.

**Example:** Code **P01** (*Number of Coins Mech 1*) is displayed as **P□□01** and its value of **1** as **□□□1** 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, **P P P P** 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 **P P P P** display, P01 being the first step, continuing through to P34, and then looping again from P01 to P 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 as 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 (V3.0)

| No   | Description   | Range         | Default    |
|------|---|---------------|------------|
| P01  | Coin Slot 1: Coins/Credit                               | 1..10         | 1          |
| P02  | Coin Slot 1: Games/Credit                               | 1..10         | 1          |
| P03  | Activate Multiple Bonus Pricing Coin Slot 1             | On/Off        | Off        |
| P3-1 | Coin Slot 1: Number Coins for Bonus Pricing level 1     | Off...99      | Off        |
| P3-2 | Coin Slot 1: Number of bonus credits on Pricing level 1 | Off...99      | Off        |
| P3-3 | Coin slot 1: Number Coins for Bonus Pricing level 2     | Off...99      | Off        |
| P3-4 | Coin Slot 1: Number of bonus credits on Pricing level 2 | Off...99      | Off        |
| P3-5 | Coin slot 1: Number Coins for Bonus Pricing level 3     | Off...99      | Off        |
| P3-6 | Coin Slot 1: Number of bonus credits on Pricing level 3 | Off...99      | Off        |
| P04  | Coin Slot 2: Coins/Credit                               | 1..10         | 1          |
| P05  | Coin Slot 2: Games/Credit                               | 1..10         | 1          |
| P06  | Activate Multiple Bonus Pricing Coin Slot 2             | On/Off        | Off        |
| P6-1 | Coin Slot 2: Number Coins for Bonus Pricing level 1     | Off...99      | Off        |
| P6-2 | Coin Slot 2: Number of bonus credits on Pricing level 1 | Off...99      | Off        |
| P6-3 | Coin slot 2: Number Coins for Bonus Pricing level 2     | Off...99      | Off        |
| P6-4 | Coin Slot 2: Number of bonus credits on Pricing level 2 | Off...99      | Off        |
| P6-5 | Coin slot 2: Number Coins for Bonus Pricing level 3     | Off...99      | Off        |
| P6-6 | Coin Slot 2: Number of bonus credits on Pricing level 3 | Off...99      | Off        |
| P07  | Attract Sound   | On/Off        | On         |
| P08  | Average Ticket per Game (ATG)                           | 1..50         | 25         |
| P09  | Number of Mercy Tickets (maximum 40% of ATG)            | 0,1,2,3,...,8 | 1          |
| P10  | Game Difficulty 1=easy, 2= medium 3=Hard                | 1..3          | 2 (medium) |
| P11  | Blocks Strobing During Attract Mode                     | On/Off        | On         |
| P12  | Enable Ticket on Free Mode                              | On/Off        | OFF        |
| P13  | Common Coin Input Enable                                | On/Off        | OFF        |
| P14  | Auto/Manual Ticket payout for Super bonus               | On/Off        | On         |
| P15  | Fixed (Off) or incrementing(On) Super Bonus Tickets     | On/Off        | On         |

Note: Standard setting using .50¢/50p base price and 30 – 40 % Payout ratio.



■ **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)

**Note: Settings P 03 and P 03-1 to P03-6 are only used for the setting of bonus credit levels e.g. \$0.50c/1 play, \$1/3plays, \$2/7plays, \$5/20 plays**

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.

Table 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 <b>\$ 0.25c</b><br>3 plays <b>\$ 0.50c</b><br>7 plays <b>\$ 1.00</b><br>(\$0.25c coins or DBA set on \$0.25c pulses) | 1 play <b>\$ 0.50c</b><br>3 plays <b>\$ 1.00</b><br>7 plays <b>\$ 2.00</b><br>(\$0.25c coins or DBA set on \$0.25c pulses) | 1 play <b>\$ 0.50c</b><br>3 plays <b>\$ 1.00</b><br>8 plays <b>\$ 2.00</b><br>22 plays <b>\$ 5.00</b><br>(\$0.25c coins or DBA set on \$0.25c pulses) | 1 play <b>\$ 1.00</b><br>3 plays <b>\$ 2.00</b><br>8 plays <b>\$ 5.00</b><br>18 plays <b>\$ 10.00</b><br>(\$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 (or Bill Acceptor pulses) that is needed 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.

**Note:** The **Base Price** is the normal price setting for one game.

**e.g.** If the game is set for \$0.25c/1play then the base price is \$0.25c, if the game is set for \$0.50c/1play then the base price is \$0.50c, if the game is set for \$1.00/1play then the base price is \$1.00, if the game is set for \$2.00/1play then the base price is \$2.00

■ **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 (or Bill Acceptor pulses) that is needed 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 (or Bill Acceptor pulses) that is needed 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 either 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)

**Note: Settings P 06 and P 06-1 thru to P06-6 are only used for the setting of bonus pricing levels e.g. \$0.50c/1 play, \$1/3plays, \$2/7plays, \$5/20 plays**

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 (or Bill Acceptor pulses) that is needed 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.

**Note:** The **Base Price** is the normal price setting for one game.

e.g. If the game is set for \$0.25c/1play then the base price is \$0.25c, if the game is set for \$0.50c/1play then the base price is \$0.50c, if the game is set for \$1.00/1play then the base price is \$1.00, if the game is set for \$2.00/1play then the base price is \$2.00

### ■ **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 (or Bill Acceptor pulses) that is needed 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** (or Bill Acceptor pulses) that is needed 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 = AVERAGE TICKETS PER GAME (ATG)**

(Default 25) (Adjustable 1 – 50)

This option allows you to set the Average Ticket Per Game (ATG) that you would like the game to pay out. After this ATG setting is done the game sets all the other game settings automatically based on this setting to achieve the correct payout.

***SOME COMMON TICKET PAYOUT SETTINGS***

\*Note: these Average Tickets per Game settings are based on an normal payout of 35-40%

| Code (ATG) | 10¢ / 10p – Game 1c or 1p Tickets | 25¢ / 30p – Game 1c or 1p Tickets | 50¢ / 50p - Game 1c or 1p Tickets | 75¢/75 – Game 1c or 1p Tickets | US\$1 /£1-Game 1c or 1p Tickets |
|------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|---------------------------------|
| P08        | 3– 4                              | 10-12                             | 18- 20                            | 26- 30                         | 35-40                           |

■ **P09 = NUMBER OF MERCY TICKETS**

(Default 1) (Adjustable 0,1,2,3,...,8)

This option allows you to set the Mercy Tickets that are paid out to the player. Mercy tickets are paid out to any player that loses before they reach the Win Level at Level 9 or to any player that loses after the Win Level at Level 9 and doesn't win the Super Bonus.

The default numbers of Mercy tickets are automatically set based on the P-08 ATG setting at 20% of this setting but the number of Mercy Tickets can be adjusted from 0 up to a maximum of 8 or 40% of the ATG.

■ **P10 = GAME DIFFICULTY SETTING**

(Default 2) (Adjustable 1 – 3)

This option sets the game difficulty level and changing it varies the number of blocks that are in the paying area during the game play. The more blocks there are the easier the game to play. A setting of (1) is the easiest (2) is Medium and (3) the hardest.

■ **P11 = ATTRACT MODE ANIMATION (STROBING) DISPLAY**

(Default ON) (Adjustable ON or OFF)

These 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.

■ **P12 = TICKETS DISPENSED IN FREE PLAY MODE**

(Default OFF) (Adjustable ON or OFF)

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



### ■ **P13 = COMMON COIN SYSTEM**

(Default OFF) (Adjustable ON or OFF)

This setting controls whether a common coin system is active or not, when sets to OFF this means both coin inputs operate separately and different settings can be made for each coin input and both coin inputs act separately. When sets to ON this mean both coin inputs will act like one coin input. This can be used when a DBA (set on 4 pulses per \$1) and a 25c coin mech is used.

### ■ **P14 = AUTOMATIC/ MANUAL PAYOUT OF SUPER BONUS TICKETS**

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

The Setting allows the operator to choose whether the Super Bonus tickets are automatically (On) dispensed as normal from the ticket dispenser or Manually (Off) paid by an attendant and cleared manually. If set to Manual the player is prompted to “Please Call Attendant” and the attendant can manually play the player the number of Tickets displayed in the Super Bonus display. To reset the game and clear the Super Bonus display the Attendant needs to push the test button and the Start/Stop button.

### ■ **P15 = FIXED OR INCREMENTING SUPER BONUS TICKETS**

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

The setting allows the operator to choose whether the amount of Super Bonus tickets is fixed (Off) or increments (On) higher each game. The starting Super Bonus amount is automatically set at 15 times the P-08 ATG settings, if it is fixed it will stay constantly at this value. If it is set to Increment the Super Bonus ticket amount will increase every game played. The amount that it increments is automatically set based on the P-08 ATG setting





## 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 A47, and then looping again from A01 to A47 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-01, 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**

| <b>CODE</b> | <b>DISPLAY</b> | <b>AUDIT FUNCTION</b>   |
|-------------|----------------|---|
| A01         | A - 0 1        | Total Played Game (not resetable)                                   |
| A02         | A - 0 2        | Total current Played Game ( resetable)                              |
| A03         | A - 0 3        | Total Coin Mech. 1  |
| A04         | A - 0 4        | Total Coin Mech. 2  |
| A05         | A - 0 5        | Total Service Credits   |
| A06         | A - 0 6        | Average Ticket / Game   |
| A07         | A - 0 7        | Average Level / Game  |
| A08         | A - 0 8        | Total Super bonus wins  |
| A09         | A - 0 9        | Total Mercy Ticket  |
| A10         | A - 1 0        | <b>Total Pay Out on level 9</b>                                     |
| A11         | A - 1 1        | <b>Total player reach level 12</b>                                  |
| A12         | A - 1 2        | <b>Total player reach level 11</b>                                  |
| A13         | A - 1 3        | <b>Total player reach level 10</b>                                  |
| A14         | A - 1 4        | <b>Total player reach level 9</b>                                   |
| A15         | A - 1 5        | <b>Total player reach level 8</b>                                   |
| A16         | A - 1 6        | <b>Total player reach level 7</b>                                   |
| A17         | A - 1 7        | <b>Total player reach level 6</b>                                   |
| A18         | A - 1 8        | <b>Total player reach level 5</b>                                   |
| A19         | A - 1 9        | <b>Total player reach level 4</b>                                   |
| A20         | A - 2 0        | <b>Total player reach level 3</b>                                   |
| A21         | A - 2 1        | <b>Total player reach level 2</b>                                   |
| A22         | A - 2 2        | <b>Total player reach level 1</b>                                   |
| A23         | A - 2 3        | Manufacture Audit ( <i>Total Stack It won</i> )                     |
| A24         | A - 2 4        | Manufacture Audit ( <i>Total Super Bonus won</i> )                  |
| A25         | A - 2 5        | ( <i>total game play</i> ) Manufacture Audit                        |
| A26         | A - 2 6        | ( <i>checksum for game audit</i> ) Manufacture Audit                |
| A27         | A - 2 7        | ( <i>coin 1 counter</i> ) Manufacture Audit                         |
| A28         | A - 2 8        | ( <i>coin 2 counter</i> ) Manufacture Audit                         |
| A29         | A - 2 9        | ( <i>checksum for coin counter</i> ) Manufacture Audit              |
| A30         | A - 3 0        | ( <i>ticket counter for average calculation</i> ) Manufacture Audit |
| A31         | A - 3 1        | ( <i>level counter for average calculation</i> ) Manufacture Audit  |
| A32         | A - 3 2        | ( <i>total game for average calculation</i> ) Manufacture Audit     |
| A33         | A - 3 3        | ( <i>checksum for average calculation</i> ) Manufacture Audit       |
| A34         | A - 3 4        | Manufacture Audit ( <i>Main Jackpot counter</i> )                   |
| A35         | A - 3 5        | Manufacture Audit ( <i>Bonus Jackpot counter</i> )                  |
| A36         | A - 3 6        | Manufacture Audit ( <i>Checksum for Jackpot counter</i> )           |



## AUDITS DETAILED

### ■ A01 = TOTAL GAME PLAYED

This Audit displays the *total number of games played* since the machine was switched on. This is a non reset able audit.

### ■ A02 = TOTAL PLAYED GAME

This Audit displays the *total number total game played* since the audits were last cleared, this is a reset able audit.

### ■ A03 = TOTAL COINS IN MECHANISM 1

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

### ■ A04 = TOTAL COINS IN MECHANISM 2

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

### ■ A05 = 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.

### ■ A06 = AVARAGE TICKET / GAME

This audit displays the *average tickets / game* that has been dispense during the game played since the audits were last cleared.

### ■ A07 = AVARAGE LEVEL / GAME

This audit displays the *average level game* the players has been reach during the game played since the audits were last cleared.

### ■ A08 = TOTAL SUPER BONUS WINS

This audit displays the total of Super Bonus wins since the audits were last cleared.

### ■ A09 = TOTAL MERCY TICKET GAMES

This audit displays the total player win the Mercy ticket since the audits were last cleared.



■ **A10 = TOTAL PAY OUT LEVEL 9**

This audit displays the *total mercy tickets (Level 9)* dispense since the audits were last cleared.

■ **A11 to A22 = TOTAL PLAYER REACH LEVEL 12 to 1**

This audit displays the total player reach level 12 to level 1 since the audits were last cleared.

■ **A23 to A36 = MANUFACTURE AUDITS ONLY**

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

**\* 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.

**\* NOTE! \***

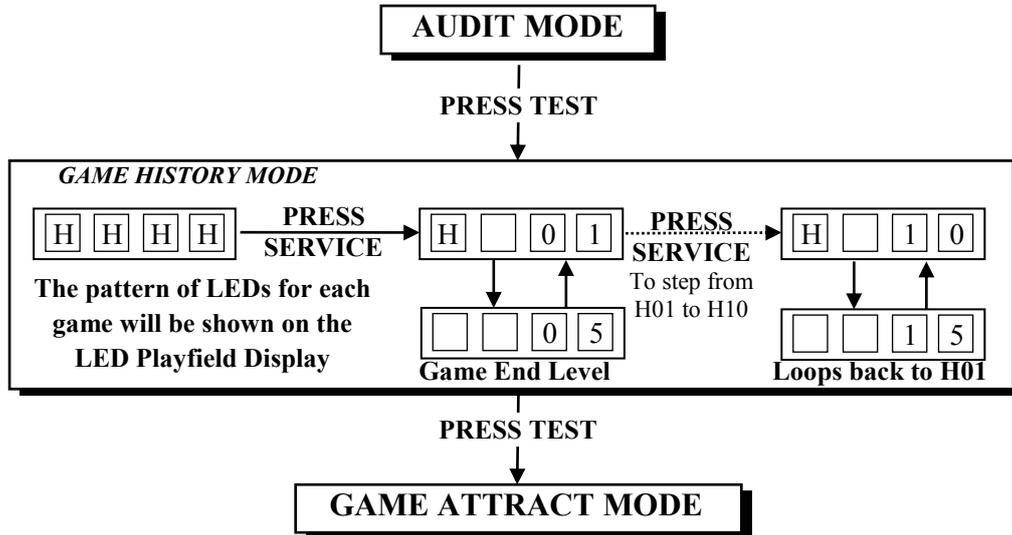
- LAI Games Customer Support may request from the operator the values of these Manufacturers audits, to help with any service issues.



## 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 player's game results and verify the win / lose pattern 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  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">1</span> | 1 <sup>st</sup> recent number of tickets pay out |
| H02  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">2</span> | 2 <sup>nd</sup> last number of tickets payout    |
| H03  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">3</span> | 3 <sup>rd</sup> last number of tickets payout    |
| H04  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">4</span> | 4 <sup>th</sup> last number of tickets payout    |
| H05  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">5</span> | 5 <sup>th</sup> last number of tickets pay out   |
| H06  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">6</span> | 6 <sup>th</sup> last number of tickets pay out   |
| H07  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">7</span> | 7 <sup>th</sup> last number of tickets pay out   |
| H08  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">8</span> | 8 <sup>th</sup> last number of tickets pay out   |
| H09  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">9</span> | 9 <sup>th</sup> last number of tickets pay out   |
| H10  | <span style="border: 1px solid black; padding: 2px;">H</span> <span style="border: 1px solid black; padding: 2px;">-</span> <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">0</span> | 10 <sup>th</sup> last number of tickets pay out  |



## 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 Game 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 r X**, where „X“ is the error number. There are eight error messages for Double Up, listed as follows:

### ERROR CODE QUICK REFERENCE TABLE

| CODE | ERROR DESCRIPTION  | SOLUTION   |
|------|--|--|
| Err1 | TICKET ERROR<br>Jammed tickets or no ticket notch pulse for longer than 3 seconds. | Clear ticket dispenser jam, replenish tickets. The push test button once to clear error. |
| Err2 | START/STOP BUTTON<br>JAMMED, active for longer than 30 seconds                     | Check Button function using switch test  |
| Err3 | EEPROM ERROR<br>Problem with on-board EEPROM                                       | The main MCU is getting errors reading the EEPROM (24C16 IC on MCU).                     |



## 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 error usually occurs if the game has run out of tickets or there is a ticket jam when the machine tries to dispense tickets. A less common reason is if the game PCB tries to dispense tickets but doesn't get a notch pulse for approximately three seconds.

Use the Switch Test and test the notch pulse by manually activating the micro-switch on the ticket/capsule dispenser, an active notch will be display as C1.

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

### ■ Err2 – START/STOP BUTTON JAMMED

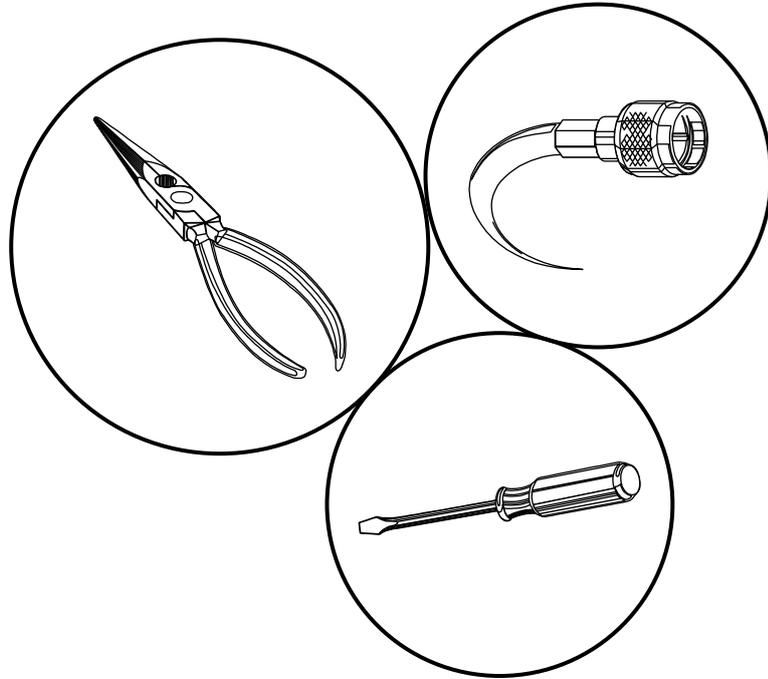
This error is usually displayed if the Start/Stop button is active for longer than 30 seconds. Use the Switch Test and check the Stop/Start button, an active button will be displayed as C3.

### ■ 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 24C16 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 message, 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.



## SECTION A: SERVICE INSTRUCTIONS



**BE SURE TO READ THE FOLLOWING**  
Carefully before servicing this machine



# A



# LOCATING AND ACCESSING PARTS



BAFB96B  
GNT Display Red/Yellow

BAFB45A 4 digit  
4" display

Ticket value  
(BAFB144 Ticket display PCB)

BAFB96  
GNT Display Blue

BAFB51  
4 Digit Display

Rectangular  
Green Button

EA0523 Large  
Red Mega Button

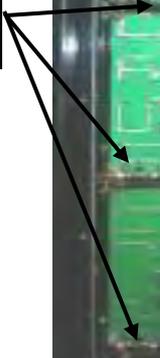


# PARTS LOCATION DIAGRAM Cont.

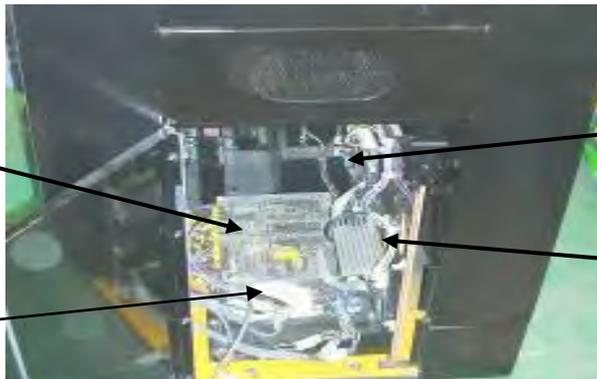
*As viewed from rear*



M305 5 A Slow Blow Fuses



3x Switching PSU  
1x 12 VDC output 150 watt  
2x 5 VDC output 100 watt



Ballast for Fluorescent Header



BAFB66A Main CPU PCB

BAFB106 Sound PCB



**Control Panel Open to gain Access to Buttons and Speakers**



## PARTS DESCRIPTION

### ■ COIN MECHANISMS

The coin mechanisms can be accessed from the front door of the machine cabinet.

### ■ CASH BOX

The cash box can be accessed from the front door of the machine cabinet.

### ■ SPEAKERS

Two speakers are located right under control panel and can be accessed from the front of the machine through coin door.

### ■ SERVICE CONTROLS:

Can be found on, the service panel mounted on top of the cash box and accessed through the front door of the machine cabinet.

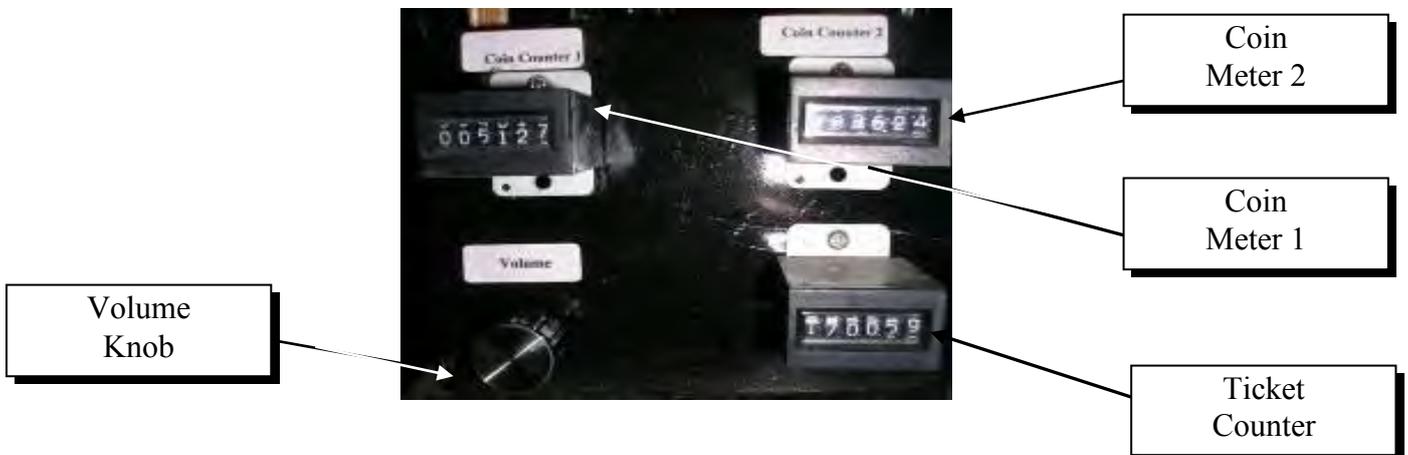
**SERVICE BUTTON:** Used to input credits to the game without activating the coin counter, and to perform adjustment procedures in combination with the test button.

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

**UP BUTTON:** Used to increase values in the adjustment mode, in combination with the Service & Test buttons.

**DOWN BUTTON:** Used to decrease values in the adjustment mode, in combination with the Service & Test buttons.

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



**Control Button on Coin Door**



## GAME CONTROLS:

Located on the control panel in the center of the machine cabinet. The control panel can be accessed by removing the two bolts from inside the control panel and lift the control panel to gain access from top.

### ■ 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, of this manual.

**\* WARNING! \***

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

***Always** use the correct rated fuse. Refer to page for fuse information.*

### ■ 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 multi voltage switching power supply.



## 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 GE194 or equivalent and can be accessed through the front door.

■ **BUTTON LAMPS**

The button lamps are 12V/DC GE194 or equivalent and can be accessed through the front door.

■ **CONTROL PANEL LAMPS**

The control panel lamps all are 12V/DC GE906 or equivalent and can be accessed through the front 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.

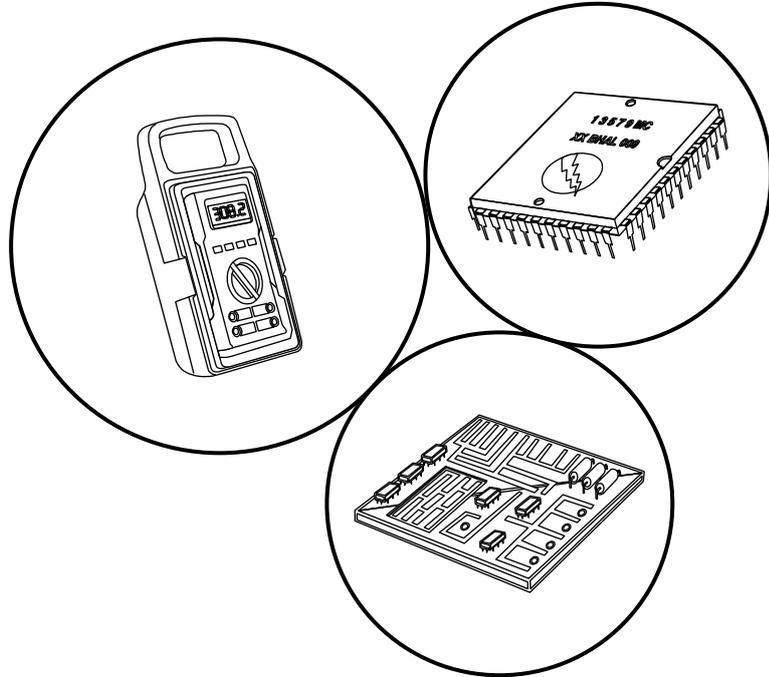
**\* WARNING! \***

***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.



## 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.

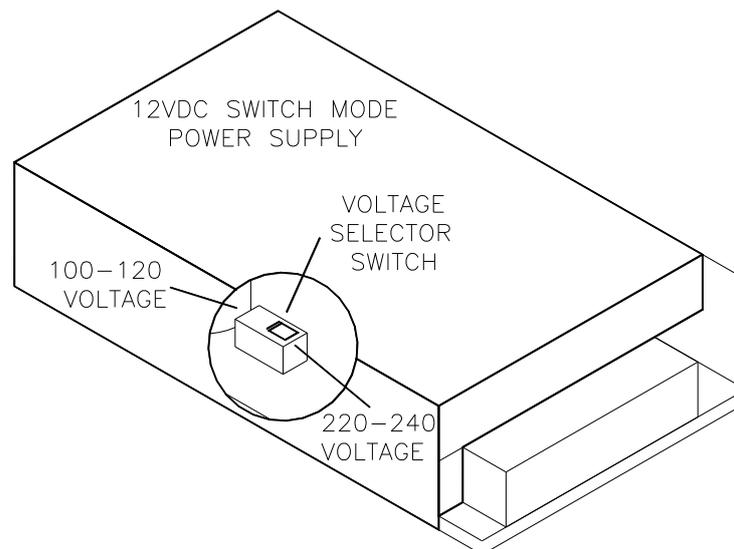


# B

## 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)

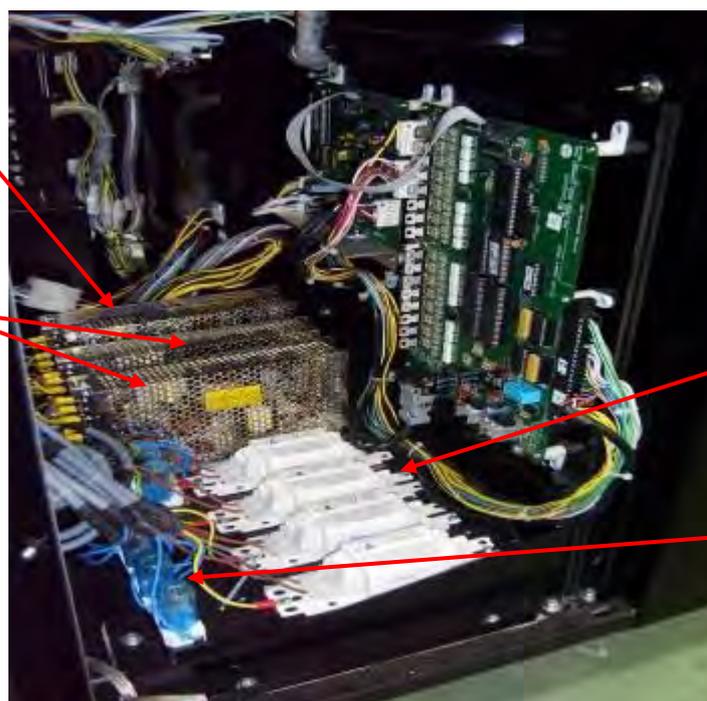


### ■ FLORESCENT TUBE BALLASTS AND STARTERS

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.

EA1015 S-150-12  
+ 12 VDC  
PSU Single Out put

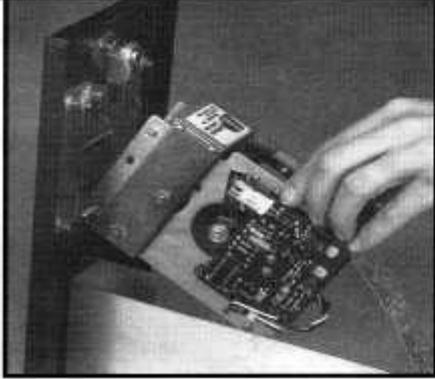
EA1013 S-100F-5  
+5 VDC PSU Single  
Out Put





# TICKET DISPENSER REFERENCE GUIDE

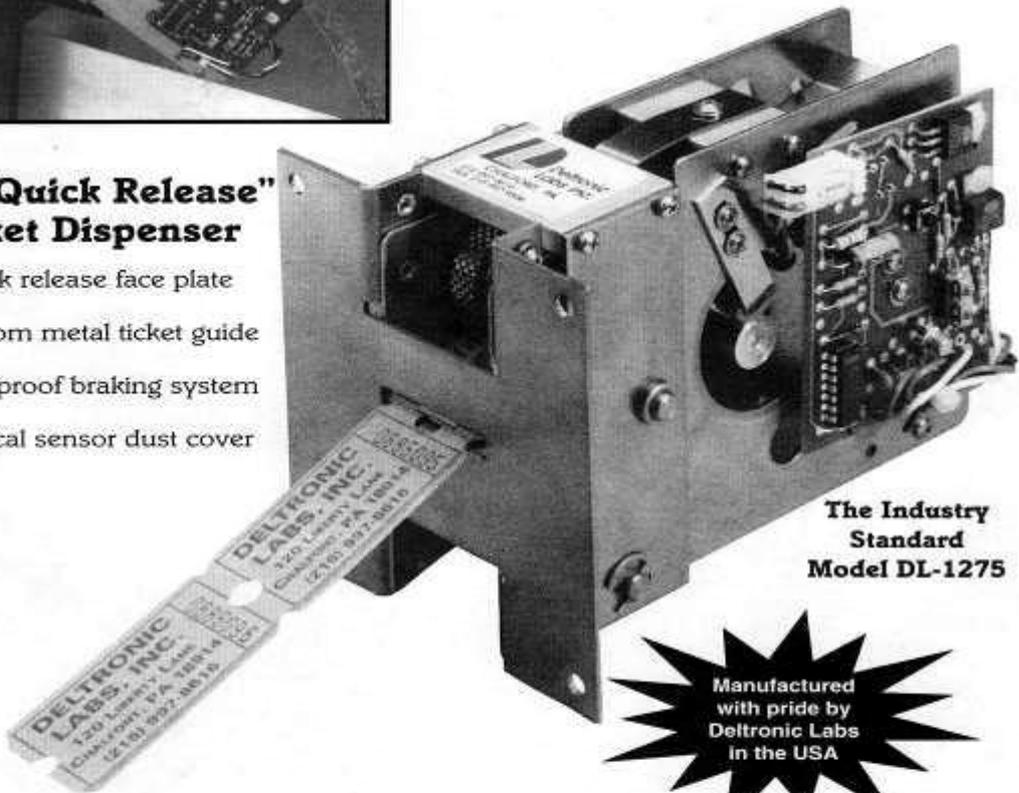
## “Quick Release” Ticket Dispenser Manual



U.S. Patent 5833104  
Additional Patents Pending

### The “Quick Release” Ticket Dispenser

- Quick release face plate
- Bottom metal ticket guide
- Foolproof braking system
- Optical sensor dust cover



The Industry  
Standard  
Model DL-1275



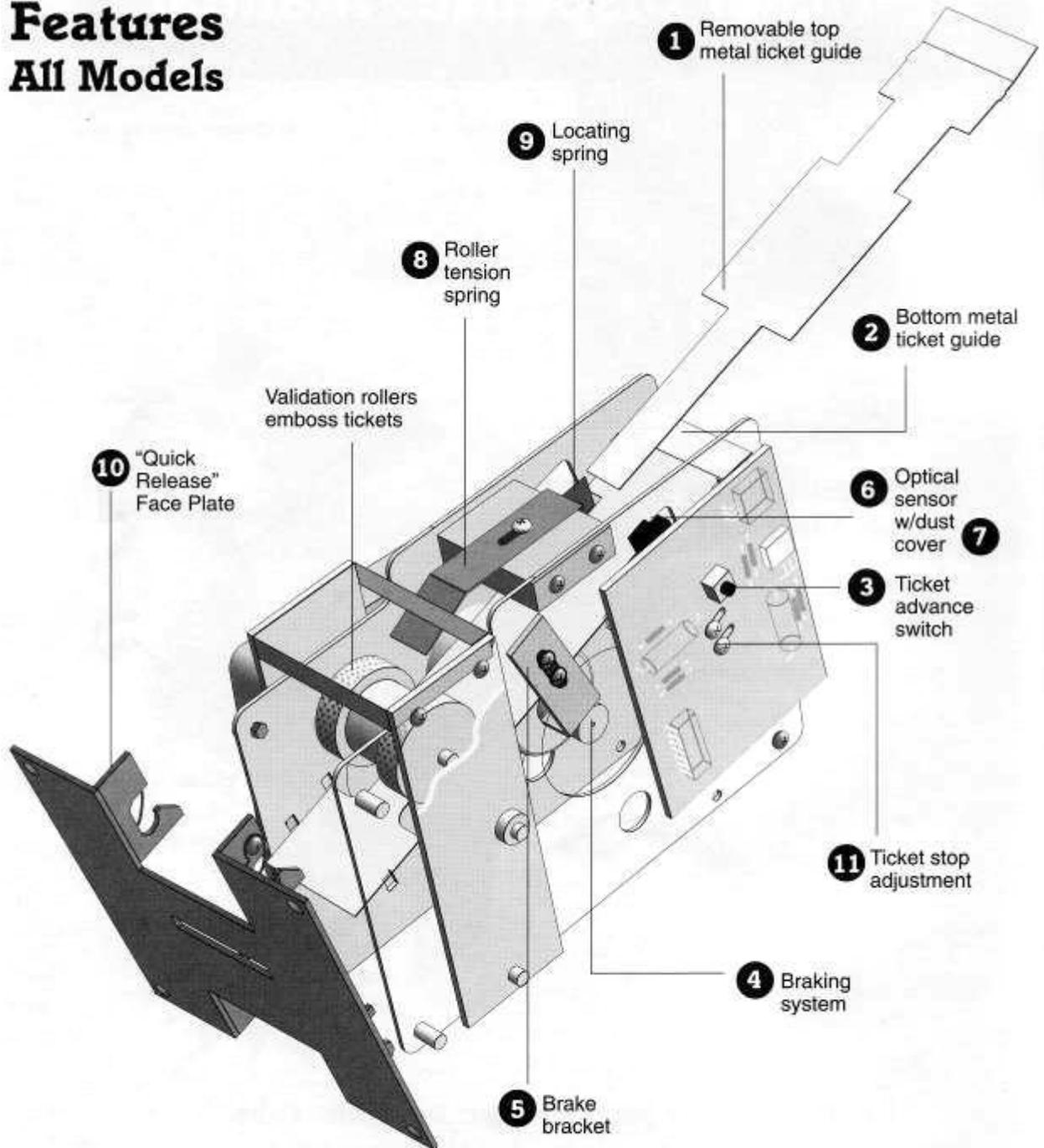
Another quality product from Deltronic Labs . . .  
the industry leader in ticket dispensers.



**Deltronic Labs, Inc.** 120 Liberty Lane, Chalfont, PA 18914  
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# “Quick Release” Ticket Dispenser

## Features All Models

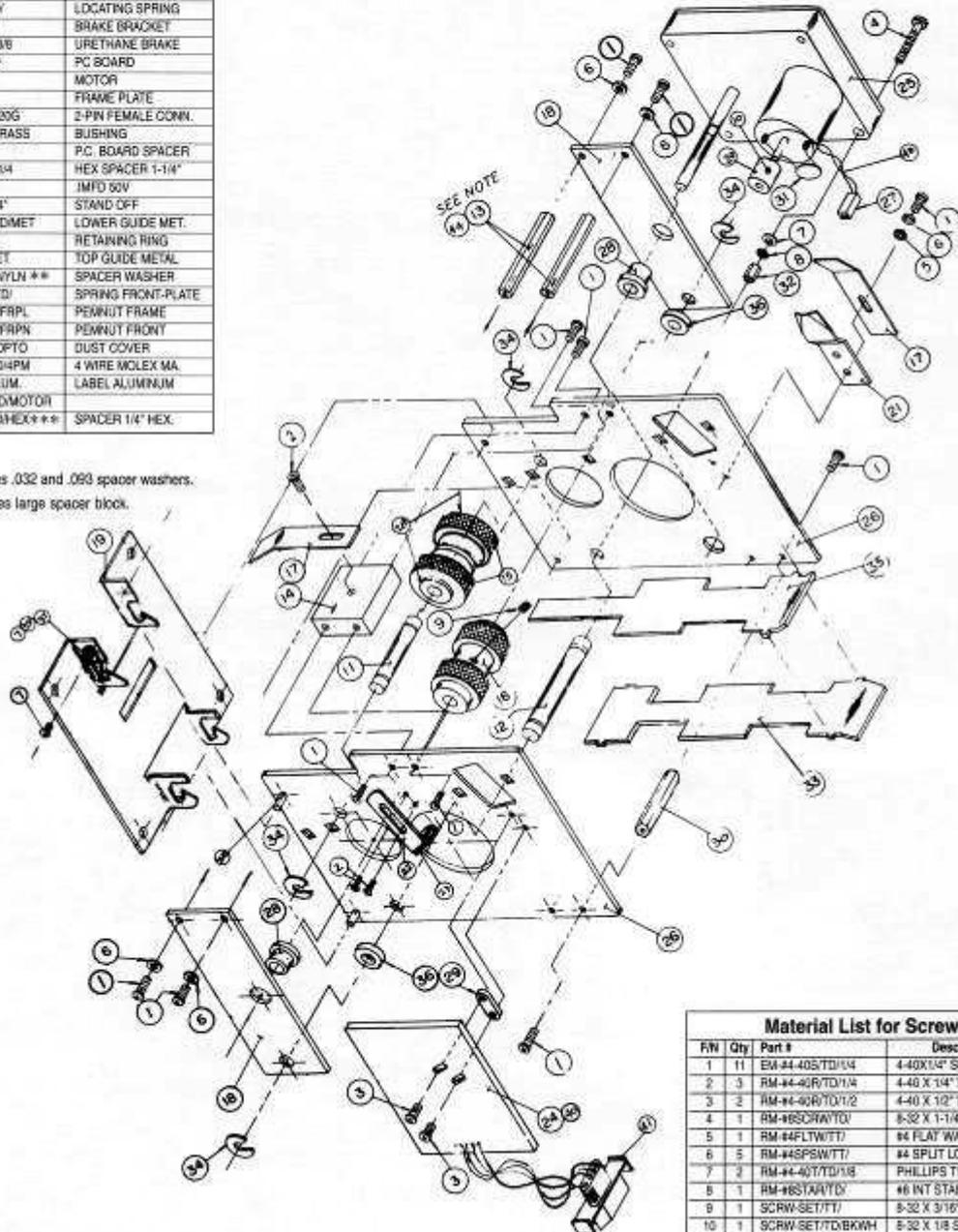


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# Ticket Dispenser Assembly

| Details of Parts |     |                       |                    |
|------------------|-----|-----------------------|--------------------|
| F/N              | Qty | Deltronic Labs P/N    | Name               |
| 11               | 1   | SHFT-IDLRLR/TD/       | IDL. ROLLER SHAFT  |
| 12               | 1   | RM-SFTMTR/TD/         | MOTOR PIVOT SHAFT  |
| 13               | 1   | SPAC-PIVBLK/TD/HOL    | PIVOT BRACKET SPAC |
| 14               | 1   | RM-SPCPB/TD/          | SPACER BLOCK       |
| 15               | 2   | RM-PLRID/TD/VALD      | IDLER ROLLER       |
| 16               | 1   | RM-PLRDRV/TD/VALD     | DRIVE ROLLER       |
| 17               | 2   | SPRG-TENSNT/D/        | TENSION SPRING     |
| 18               | 2   | RM-BKTPVT/TD/         | MTR PIVOT BKT.     |
| 19               | 1   | RM-PANLFT/TD/NOPM     | FRONT PANEL        |
| 20               | 1   | RM-WHLBRK/TD/         | BRAKE WHEEL        |
| 21               | 1   | SPRG-LOCAT/TD/        | LOCATING SPRING    |
| 22               | 1   | RM-BKTBRK/TD/         | BRAKE BRACKET      |
| 23               | 1   | RM-BKTLUB/TD/3/8      | URETHANE BRAKE     |
| 24               | 1   | PCBD-1275/TD/+        | PC BOARD           |
| 25               | 1   | RM-MOTOR/TD/          | MOTOR              |
| 26               | 2   | RM-PLATFR/TD/         | FRAME PLATE        |
| 27               | 1   | RM-CONN2PTE/20G       | 2-PIN FEMALE CONN. |
| 28               | 4   | BRNG-F312TT/BRASS     | BUSHING            |
| 29               | 1   | SPAC-PC90/TD/         | P.C. BOARD SPACER  |
| 30               | 1   | SPAC-HEX/TD/1-1/4     | HEX SPACER 1-1/4"  |
| 31               | 1   | RM-1M/TD/50V          | 1MFD 50V           |
| 32               | 1   | SPAC-HEX/TD/1/4"      | STAND OFF          |
| 33               | 1   | GUID-BOTTOM/TD/MET    | LOWER GUIDE MET.   |
| 34               | 4   | RING-E25RT/TT/        | RETAINING RING     |
| 35               | 1   | GUID-TOP/TD/MET       | TOP GUIDE METAL    |
| 36               | 2   | PULY-SP212TE/NYLN **  | SPACER WASHER      |
| 37               | 2   | SPRG-FRONT/TD/        | SPRING FRONT-PLATE |
| 38               | 4   | RM-PEMNU/TD/FRPL      | PEWNUIT FRAME      |
| 39               | 2   | RM-PEMNU/TD/FRPN      | PEWNUIT FRONT      |
| 40               | 1   | COVR-H21A/TD/OPTO     | DUST COVER         |
| 41               | 1   | CONN-MOLEX/TD/4PM     | 4 WIRE MOLEX MA.   |
| 42               | 1   | RM-LABEL/TD/ALUM.     | LABEL ALUMINUM     |
| 43               | 1   | WIRE-REDBLK/TD/MOTOR  |                    |
| 44               | 2   | SPAC-PIVBRK/TD/HEX*** | SPACER 1/4" HEX.   |

\* Order by Model #  
\*\* Note: F/N #36 replaces .032 and .093 spacer washers.  
\*\*\* Note: F/N #44 replaces large spacer block.



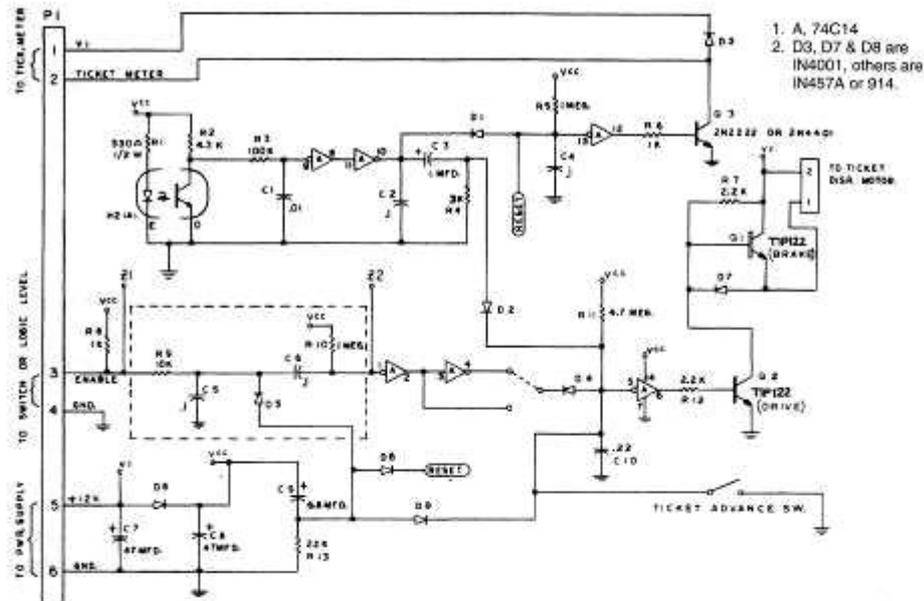
| Material List for Screws |     |                  |                         |
|--------------------------|-----|------------------|-------------------------|
| F/N                      | Qty | Part #           | Description             |
| 1                        | 11  | EM-44-40S/TD/1/4 | 4-40X1/4" SCREW         |
| 2                        | 3   | RM-44-40R/TD/1/4 | 4-40 X 1/4" WASHER HEAD |
| 3                        | 2   | RM-44-40R/TD/1/2 | 4-40 X 1/2" WASHER HEAD |
| 4                        | 1   | RM-#6SCRW/TD/    | 6-32 X 1-1/4"           |
| 5                        | 1   | RM-#4FLTW/TT/    | #4 FLAT WASHER          |
| 6                        | 5   | RM-#4SPSW/TT/    | #4 SPLIT LOC. WASHER    |
| 7                        | 2   | RM-44-40T/TD/1/8 | PHILLIPS TRUSSHEAD      |
| 8                        | 1   | RM-#6STAR/TD/    | #6 INT STAR WASHER      |
| 9                        | 1   | SCRW-SET/TT/     | 6-32 X 3/16" SET SCREW  |
| 10                       | 1   | SCRW-SET/TD/BKWH | 6-32 X 1/8 SET SCREW    |

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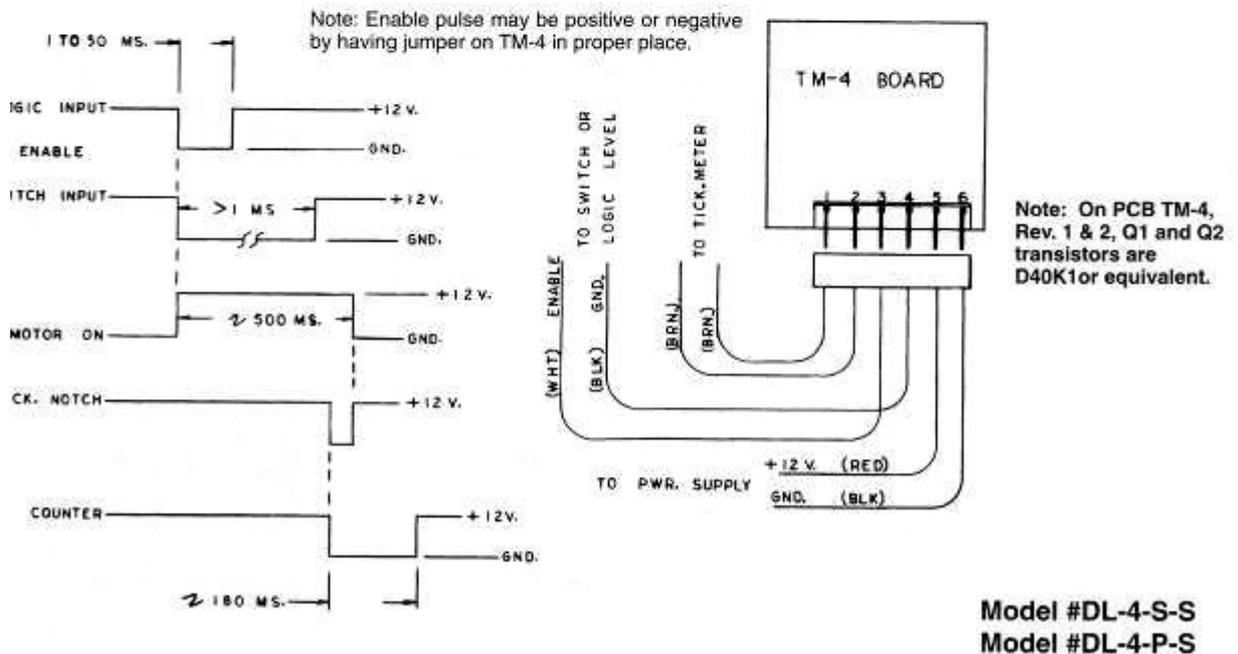
# Control Board

## Models DL-4-S-S DL-4-P-S



Model #DL-4-S-S, SW Input  
Model #DL-4-P-S, Logic Input.

Note: With logic input components and dotted lines are omitted and Z1 is jumpered to Z2.



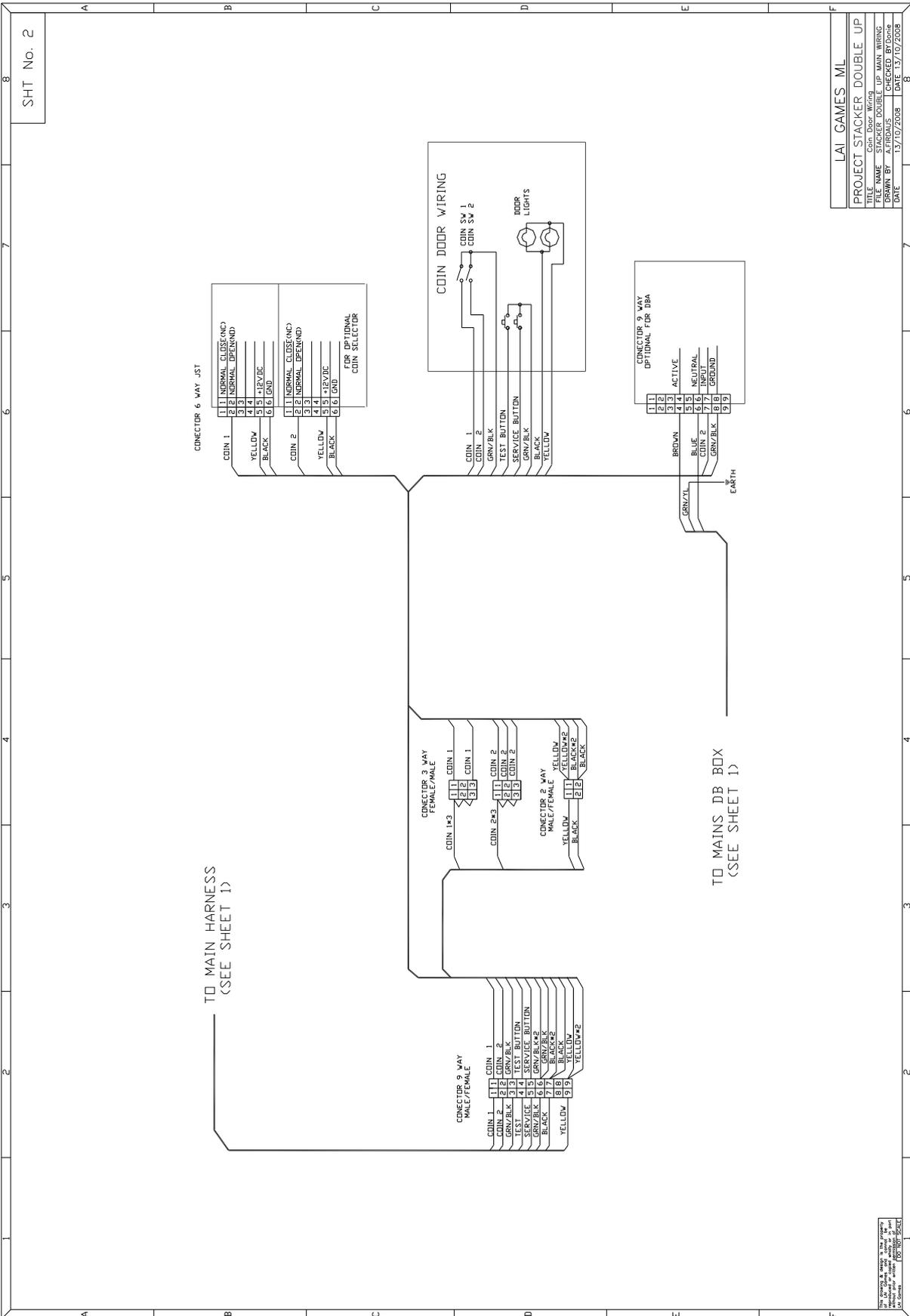
Model #DL-4-S-S  
Model #DL-4-P-S





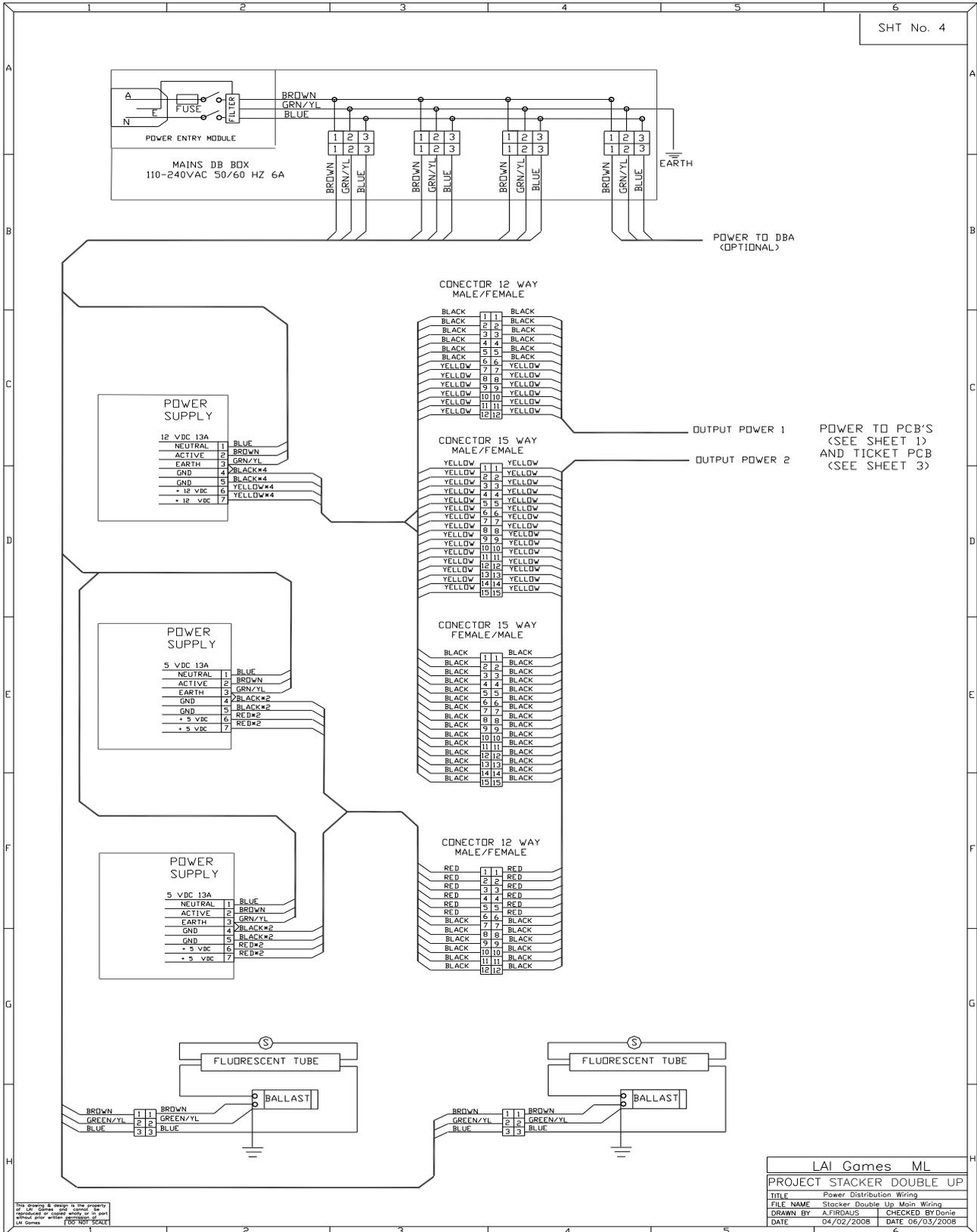


# STACK IT COIN WIRING





# STACK IT POWER WIRING



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- (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.

