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# IMPORTANT: DO NOT USE ABRASIVE CLEANERS ON ANY OF THE GLASS OR ARTWORK.

# **General Operation**

# **How Slam-A-Winner plays**

A player can insert as many tokens as he wishes before he starts dropping balls. Most players prefer this feature.

A player tries to time a ball drop to go thru a desired hole on the rotating wheel.

Note: A player can play as fast as he wants. He will never lose any ticket values because of 3 or 4 balls on wheel at one time.

Halogen ball lamp turns on when there is 1 or more credits. 10 seconds after the last credit is used, the ball lamp turns off (in standby the lamp is off).

# How the wheel scores

A magnet is located under the wheel at the home position. When this magnet passes over the wheel hall effect sensor the home position is identified. When a ball falls thru a hole in the wheel it triggers the ball opto sensor. Since we know the position of the wheel at all times, we know the value of that hole the ball fell through and pay tickets accordingly.

Note: There is a ball opto sensor for the outside row of holes and a sensor for the inside row.

# How ball lift works

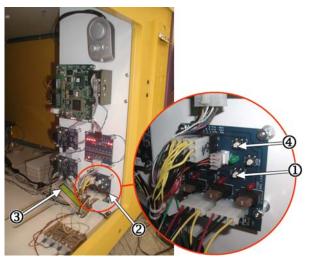
5 balls are installed at the factory, more than 5 may jam ball lift.

When a ball is dropped, the ball drop switch closes telling the ball lift motor to run until another ball opens the ball drop switch.

# **Programming Options**

## 1.) Entering Programming Mode

To enter program mode, press and hold the <u>left button (SW1)</u> (1) located on the <u>Power</u> <u>Distribution Board</u> (2). After 2 seconds, "TOTALS" will appear on the <u>LCD</u> <u>Display</u> (3). At this time, release the button. "COINS IN" with the number of coins received will be displayed. The game is now in Program Mode. **PLEASE NOTE** that from this point forward, the <u>left button (SW1)</u> (1) and the <u>right button (SW3)</u> (4) on the <u>Power</u> <u>Distribution Board</u> (2) are the buttons used. These buttons are referred to on the LCD display as Button 1 and Button 2 respectively.



Each programming option is displayed on the LCD Display, with the functions shown for Button 1 and Button 2.

# 2.) COINS IN

The total coins received through the coin mechanism are displayed. The total will rollover to zero when it reaches 1,000,000. Depressing button 2 will display "TICKETS OUT".

## **3.) TICKETS OUT**

The total tickets dispensed are displayed. The total will rollover to zero when it reaches 1,000,000. Depressing button 2 will display "BILLS IN".

#### 4.) BILLS IN

The total bills received are displayed. The total will rollover to zero when it reaches 1,000,000. Depressing button 2 will display one of two options:

If there are tickets that have not been dispensed, the Display will show "CLEAR TICKETS OWED?", otherwise it will display "ENTER PROGRAM MODE?"

# 5.) "CLEAR TICKETS OWED?"

This option is displayed if there are tickets that are owed that have not been dispensed, and will show the number of tickets. Depressing Button 1 will clear these tickets from the system, and "TICKETS CLEARED" will be displayed. Depressing Button 2 will display "ENTER PROGRAM MODE?"

# 6.) "ENTER PROGRAM MODE?"

Depressing Button 1 at this time will enter the area of Program Mode where parameters may be changed. Depressing Button 2 will return the game to Run Mode.

# 7.) "ENTER PASSCODE"

To be able to change programming parameters or reset the counters, a 4-digit passcode must be entered. The default passcode is 0000. To enter the passcode, Depress Button 1 to change the digit from 0 to 9, then press Button 2 to move to the next digit. After all digits have been entered correctly, depressing button 2 will Display the first programming option, "CHANGE PASSCODE?".

#### 7.) "CHANGE PASSCODE?"

Depressing Button 1 will allow for changing the passcode. Depressing Button 2 will move to "DISPLAY CONTRAST".

#### IMPORTANT!!! ONCE THE PASSCODE IS CHANGED, THE DEFAULT OF 0000 WILL NO LONGER WORK! BE SURE TO SAVE THE PASSCODE IN A SAFE PLACE!

Entering the new passcode is accomplished in the same way that entering the passcode is done, as explained in **6**.).

#### 8.) DISPLAY CONTRAST

This option sets the contrast for the LCD Display. Depress and hold Button 1 until the desired contrast is reached, then release Button 1. Depressing Button 2 will move to the next option, "PLAY MODE VOLUME".

#### 9.) PLAY MODE VOLUME

This option sets the speaker volume during game play. When this option is entered, the game's background music will play continuously. Depressing Button 1 will increase/decrease the volume. As long as Button 1 is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold Button 1 until the desired volume is reached. Depressing Button 2 will display the next option, "ATTRACTION MODE VOLUME".

#### **10.) ATTRACTION MODE VOLUME**

This option sets the speaker volume during Attraction Mode. When this option is entered, the game's background music will play continuously. Depressing Button 1 will increase/decrease the volume. As long as Button 1 is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold Button 1 until the desired volume is reached. Depressing Button 2 will display the next option, "JACKPOT VOLUME".

#### **10.) JACKPOT VOLUME**

This option sets the speaker volume during a Jackpot Event. When this option is entered, the game's background music will play continuously. Depressing Button 1 will increase/decrease the volume. As long as Button 1 is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold Button 1 until the desired volume is reached. Depressing Button 2 will display the next option, "ATTRACTION FREQUENCY".

#### **11.) ATTRACTION FREQUENCY**

This option sets the frequency at which the attraction mode occurs. The settings are from OFF to every 30 minutes. Depressing Button 1 will change the settings in 1-minute increments from OFF to 30 minutes, then back to OFF. Depressing Button 2 displays the next option, "COINS PER CREDIT".

#### **12.) COINS PER CREDIT**

This option sets the number of coins required for a credit. The settings are from 1 to 8 coins per credit. Depressing Button 1 will change the setting from 1 to 8, then back to 1. Depressing Button 2 displays the next option, "BALLS PER CREDIT"

#### **13.) BALLS PER CREDIT**

This option sets the number of balls per credit. The settings are from 1 to 3 balls per credit. Depressing Button 1 will change the setting from 1 to 3, then back to 1. Depressing Button 2 displays the next option, "JACKPOT INCREMENT".

#### **14.) JACKPOT INCREMENT**

Every time a credit is logged on the game, the jackpot value is incremented by this amount. The setting is from an increment of 5 to 15. Depressing Button 1 will change this setting from 5 to 15, and then revert back to 5. Depressing Button 2 will display the next option, "SET WHEEL TYPE".

## **15.) SET WHEEL SPEED**

This option sets the speed of the wheel rotation. Depressing button 1 will increase the wheel speed from 0 to 5 units over the base speed. Depressing Button 2 displays the next option, setting the "JACKPOT START VALUE".

#### **16.) JACKPOT START VALUE**

This option sets the starting value for the jackpot. Depressing button 1 will increase the start value from 400 to 600 in increments of 100, then back to 400. Depressing Button 2 displays the next option, resetting the total for COINS IN

#### **17.) RESETTING TOTALS**

The totals displayed at the beginning of Program Mode (COINS IN, TICKETS OUT, BILLS IN) may be reset to zero here. The total number for each will be displayed. Depressing Button 1 will clear the total, and zero will be displayed, confirming that the count has been cleared. Depressing Button 2 will display the next total. Depressing Button 2 after all of the totals have been displayed will display the next option, "ENTER FREE PLAY MODE?"

#### 19.) "ENTER FREE PLAY MODE?"

If Button 1 is depressed, the game will enter free play mode. This mode is for diagnostic purposes. In this mode, there is always a credit present on the game, without coins being inserted.

NOTE: The only way to exit this mode is to turn the power off to the game, or to reenter Program Mode and select "NO" for this option. In addition, music plays continuously in this mode.

When this option is displayed, depressing Button 2 will display the next option, "ENTER PROGRAM MODE?"

#### 20.) "ENTER PROGRAM MODE?"

This option gives the opportunity to re-enter program mode if it is necessary to change any options again. Depressing Button 2 leaves Program Mode and the game returns to normal, Run Mode.

#### **DEFAULT SETTINGS**

PASSCODE	0000
PLAY MODE VOLUME	42
ATTRACTION MODE VOLUME	42
JACKPOT VOLUME	52
ATTRACTION FREQUENCY	5 Minutes
COINS PER CREDIT	1 Coin
BALLS PER CREDIT	1 Ball
JACKPOT INCREMENT	5 points
WHEEL SPEED	+0
JACKPOT START VALUE	600

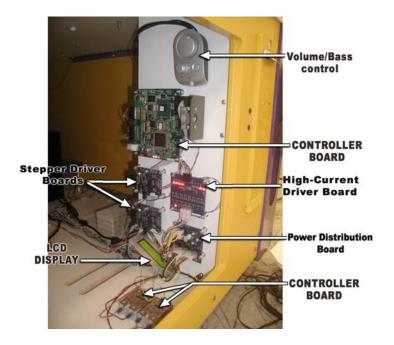
Problem         Wheel runs briefly, stops, and restarts over and over again         Image: Start over agai	<ul> <li>What to Check</li> <li>1. Check <u>hall effect sensor</u><sup>①</sup> operation; wheel <u>opto light</u><sup>②</sup> should flash once per wheel revolution when magnet (pressed into the bottom of the wheel) passes over sensor. If light does not flash: <ul> <li><u>Hall effect sensor</u><sup>③</sup> may not be close enough to the wheel to activate the sensor</li> <li>Power may not be connected to hall effect sensor</li> </ul> </li> <li>2. Check sensor output; sensor output should transition from +5V to 0V when magnet passes over the pcb. If hall effect sensor pcb has power but there is not transition on the output, the hall effect pcb is bad. If signal transitions all the way back to the Controller board, controller board may be bad.</li> <li>3. Check wheel motor drive. Make sure rubber drive wheel is not slipping against play wheel.</li> <li>1. Check <u>ball ramp switch</u> adjustment</li> <li>2. Make sure the output wire is connected to the NC (normally closed) side of the ball ramp switch.</li> </ul>
Ball does not drop when ball drop ball         button is pressed and ball drop button         does illuminate when credits are available	<ol> <li>Check for out of round or oversized balls. Check ball size by inserting them into the Jackpot hole in the wheel. They should pass</li> </ol>
	through the holes without interference.

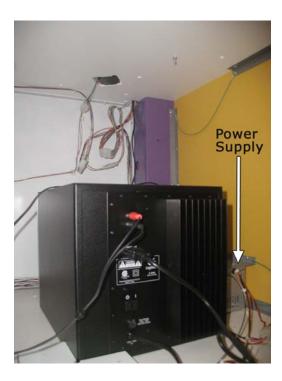
# **Troubleshooting Guide**

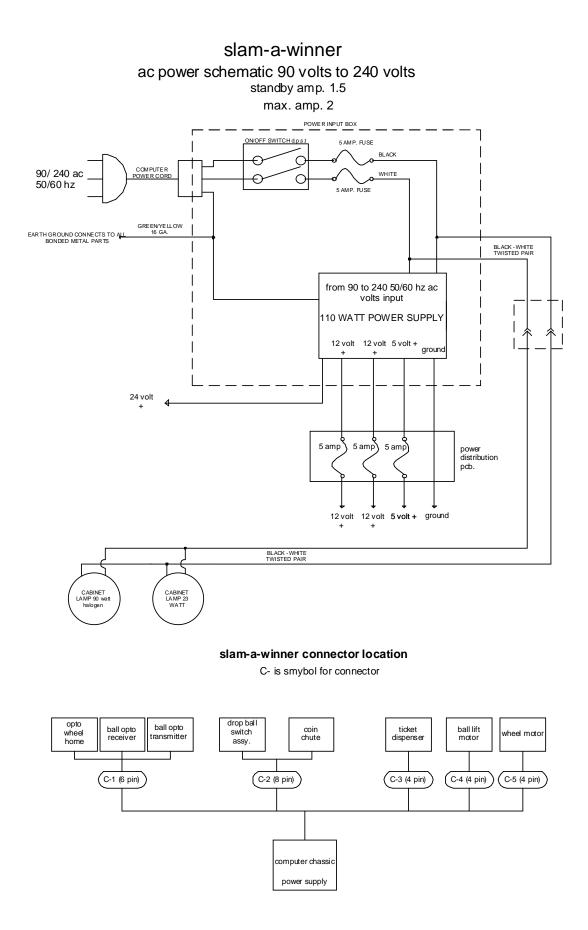
	<ol> <li>Check <u>ball drop solenoid</u> and <u>ball release</u> <u>arm</u><sup>®</sup> (if solenoid does not move at all, it is most likely the ball ramp switch)</li> <li>Check wire connection to <u>ball ramp switch</u>, <u>ball drop solenoid</u>, and <u>ball release</u> <u>button</u></li> </ol>
Ball Lift Jams	1. Too many balls in machine. There should be 5 balls loaded in the machine.
	<ol> <li>Check that all of the ball lift cradles are</li> </ol>
	not crooked on the belt.
Ball lift runs forward, then backward,	1. No ball on <u>Ball ramp switch</u>
then forward again over and over and/or	2. <u>Ball ramp switch</u> (1) is out of adjustment
Balls build up on ball ramp	or not working. Switch output should be
	connected to NC terminal.

<image/>	<ol> <li>Check ball sensing opto sensors to see if <u>ball</u> <u>opto light</u> goes on when opto beam is blocked. If light does not go on:         <ul> <li>Check power to <u>opto receiver</u> sensor pcb's</li> <li>Check output signal from the <u>opto receiver</u> pcb's blocked. If not, the opto receiver should transition from +5V to 0V when opto beam is blocked. If not, the opto receiver should be replaced.</li> </ul> </li> <li>If <u>ball opto light</u> is always on:         <ul> <li>Check to be sure that the <u>opto transmitters</u></li> <li>Check to be sure that the <u>opto transmitters</u> and receivers are in alignment.</li> </ul> </li> <li>If <u>ball opto light</u> does go on and the output transition from the opto receiver pcb is detected all the way to the controller board, then the controller board is bad. Note: You will need to remove the <u>ball cover</u> by removing the <u>cotter pins</u> to access transmitter side of opto sensors and to block opto path for testing.</li> </ol>
Game does not power on	1. Check that <u>power switch</u> <sup>①</sup> is in the "ON"
	<ul> <li>position</li> <li>2. Check that power cord is good</li> <li>3. Check power input fuses: <ul> <li>a. With a small flat head screwdriver, pull the <u>fuse holder</u><sup>®</sup> out. Fuse holder is located next to the <u>power input plug</u><sup>3</sup>.</li> <li>b. Tilt the fuse holder cover to the side to access <u>fuses</u><sup>4</sup></li> <li>c. Replace fuses (5 Amp) if necessary and push fuse holder back into place.</li> </ul> </li> </ul>

# **Parts Identification**

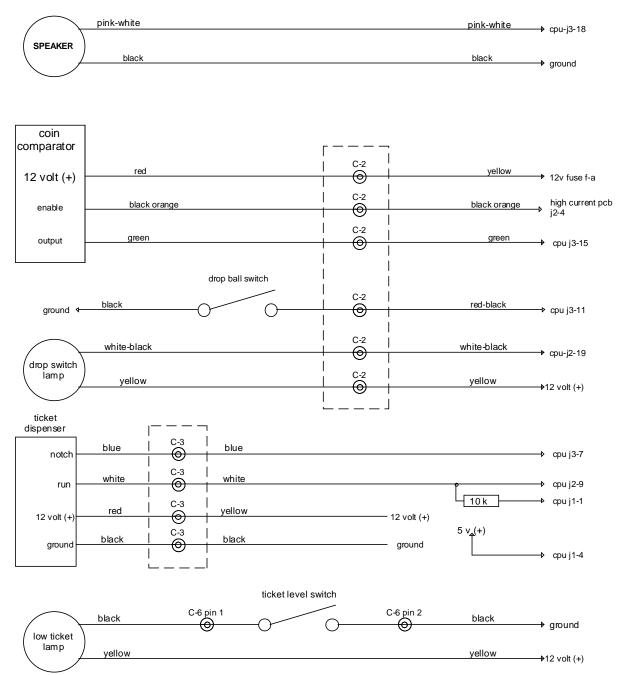


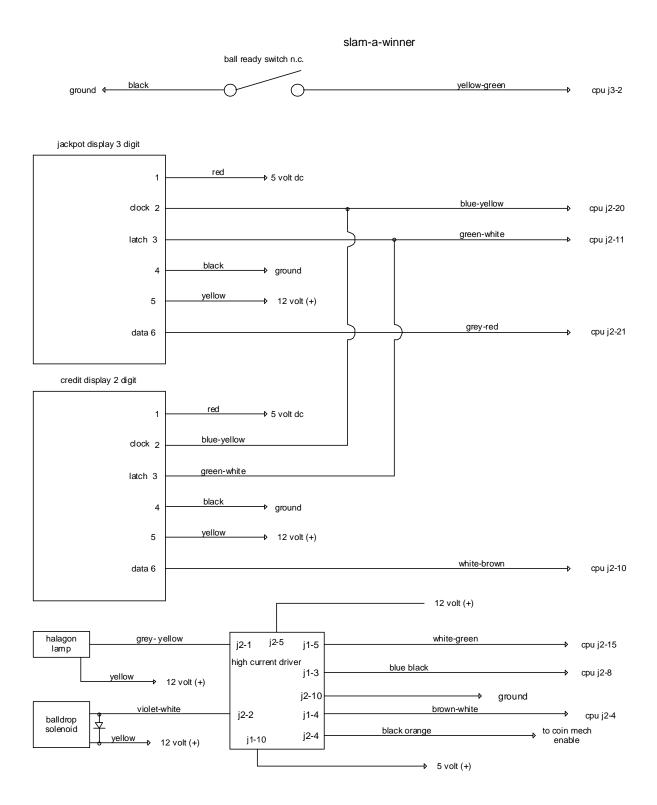




# slam-a-winner

front door





#### slam-a-winner

