JEWEL MINE

PLACE SERIAL NUMBER LABEL HERE

BAY TEK GAMES

passion in ★ fun out

FACTORY CONTACT INFORMATION

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1077 East. Glenbrook Drive
Pulaski, WI 54162 USA

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WELCOME TO: Jewel Mine

Congratulations on your Jewel Mine purchase!

Strike it rich with the new and innovative wheel family game, Jewel Mine! Pull up and push down on the handle to spin the wheel, sending your mining cart down the track and into the mining cave! Use just enough force to stop the spinning wheel on the highest amount of sparkling gems to win the most tickets!

Please take a moment to read through this manual and be sure to contact our factory if you have any questions, or would like some more information.

Thank you for your purchase! Your business is important to us and we hope you enjoy this game as much as we do!

Your Friends at Bay Tek Games

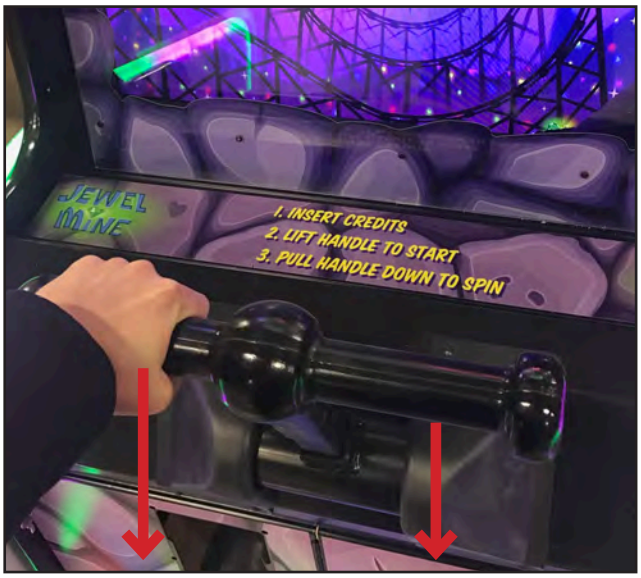
GAME INSPECTION

Inspect the game for any damaged, loose, or missing parts.
If damage is found, please contact your freight carrier first.
Then, contact Bay Tek Games' Service Department at 920.822.3951
or e-mail them at service@baytekgames.com for further assistance.

HOW TO PLAY

Lift handle up.

Pull the handle down, using just the right amount of force to win big!



Win the ticket value displayed on the space that stops under the arrow!

GAME SPECIFICATIONS

WEIGHT	
NET WEIGHT	580 LBS.
SHIP WEIGHT	630 LBS.
DIMENSIONS	
WIDTH	34”
DEPTH	69.75”
HEIGHT	79.25” (100” with marquee)
OPERATING TEMPERATURE	
FAHRENHEIT	80-100
CELSIUS	26.7-37.8

POWER REQUIREMENTS			
INPUT VOLTAGE RANGE	100 to 120 VAC	/	220 to 240 VAC
INPUT FREQUENCY RANGE	50 HZ	/	60 HZ

MAX OPERATING CURRENT
1.4 AMPS @ 115 VAC
.8 AMPS @ 230 VAC

SAFETY PRECAUTIONS

NOTICE

Modifications to the mechanical, electrical and structural components of this game may void its compliance certifications.

This appliance is suitable for INDOOR, DRY locations only.

DANGER

DO NOT perform repairs or maintenance on this game with the power ON.
Unplug the unit from the wall outlet or shut off the power strip located inside the cabinet.

WARNING

Use of flammable subtances can cause sever burns or serious injury.
Always use NON-FLAMMABLE solvents for cleaning. DO NOT use gasoline kerosene or thinners.

CAUTION

Lifting heavy objects can cause back, neck or other injuries. Be sure adequate lifting and moving devices are available when unloading, unpacking and moving this game.

ATTENTION

Be sure the electrical power matches the game requirements. See the serial number located on the back of the game cabinet. Always plug into a grounded circuit. If the supply cord is damaged, it must be replaced by an approved cord or assembly provided by the manufacturer.
A shielded power cable must be used for the game to retain EU/EMC compliance.

IN CASE OF EMERGENCY

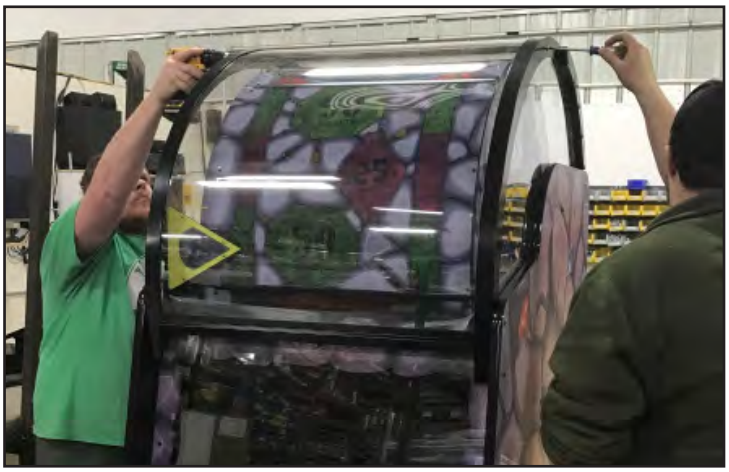
UNPLUG THE POWER CORD.
The power cord must be accessible at all times in case of an emergency.

SET UP GUIDE

Using a snips, cut off the zip tie from the cables (9622-1, 9622-2 and the red ethernet cable) bundled on the top left of the game.

From the front of the cabinet, remove the second bolt on each side rail.

SET UP GUIDE CONT.

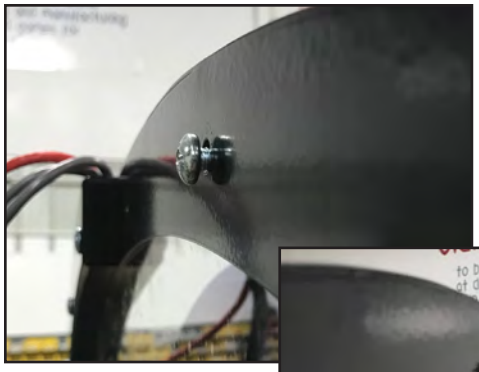


With help from someone else - from the front of the cabinet, loosen the first bolt on each side rail.

One person can use a drill with a phillips bit on one side, and the other person can use a phillips head screw driver on the other side.

This will prevent the rod/bolts from spinning once one bolt is loosened.

Loosen both bolts approx 1/4”.



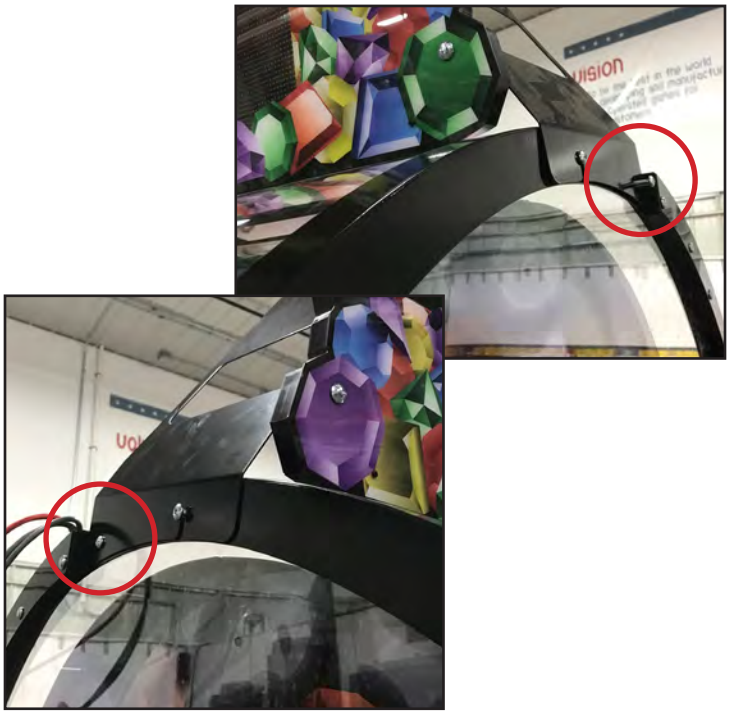
Each person will need one of the two bolts that were removed from the side rails earlier.

Carefully lift the marquee up to the top of the game and set onto the bolts on each side that were backed out 1/4”.

SET UP GUIDE CONT.

When the marquee is up and in position, start to rethread in the bolts into the open holes. You will still want to hold the marquee as it is not secured yet.

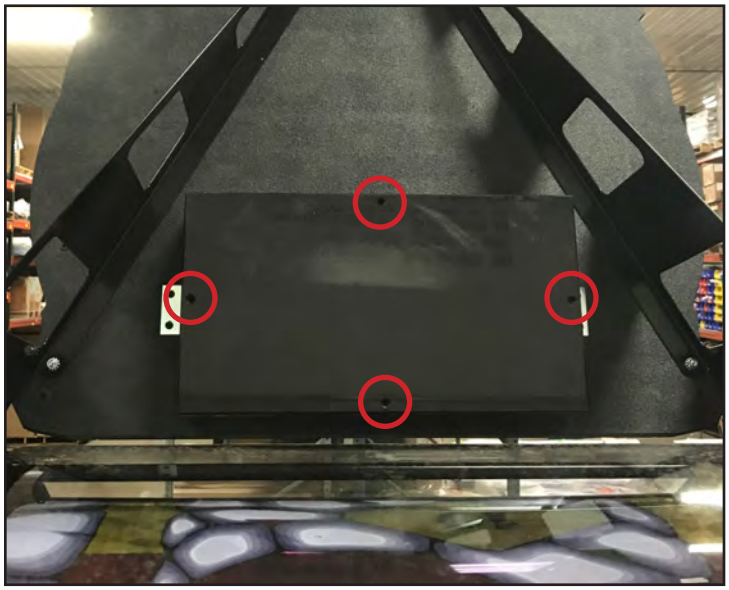
Tighten both back bolts - leaving the front ones loose yet.



Lift or push up on the front of the marquee. Make sure the marquee is level across the top of the game. When in a level position, use a drill to tighten the front bolts in place.

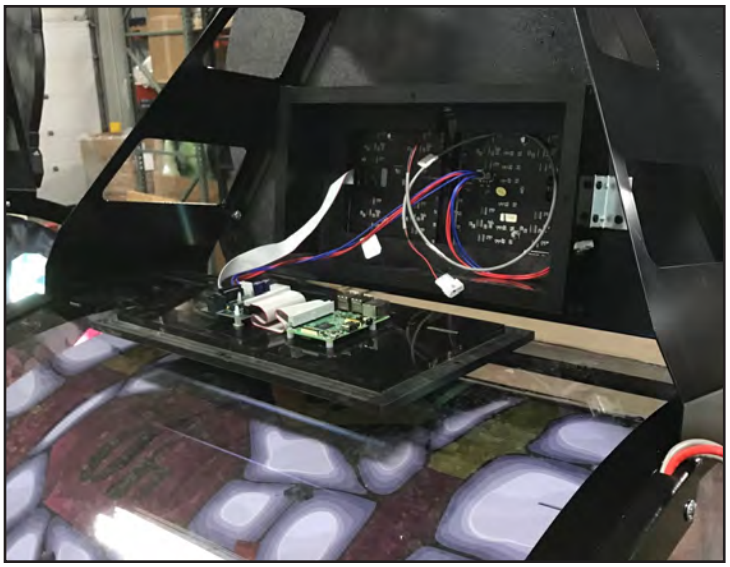
SET UP GUIDE CONT.

From the cashbox, remove the piece of black wire loom.



Place a #2 square bit on the drill. Carry the drill and the wire loom up a step ladder to the back of the game.

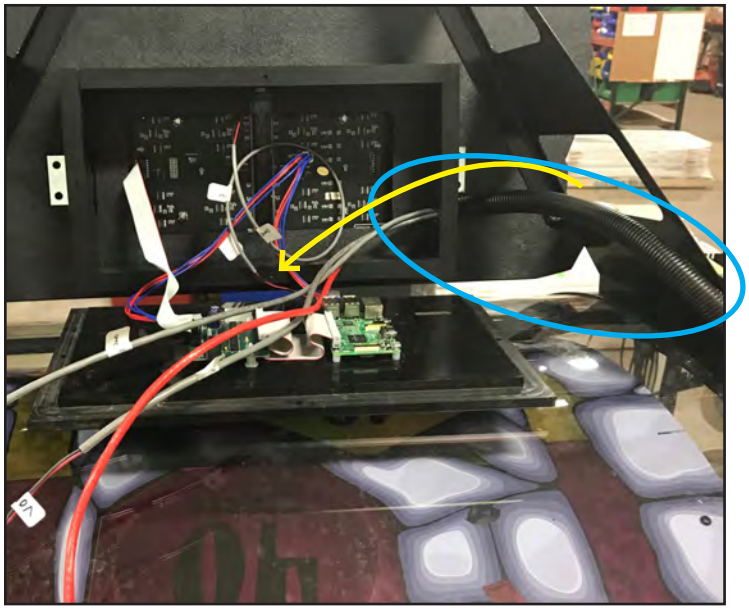
Using the drill, remove the four screws from the cover on the back of the marquee.



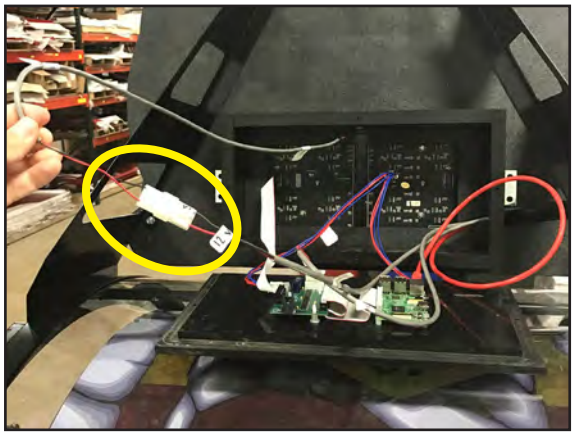
SET UP GUIDE CONT.

Route the three cables (9608-1, 9608-2 and the red ethernet cable) through the cut out on the right side of the marquee box. Pull all excess slack through the cut out.

Place the wire loom over the cables still outside of the marquee box.

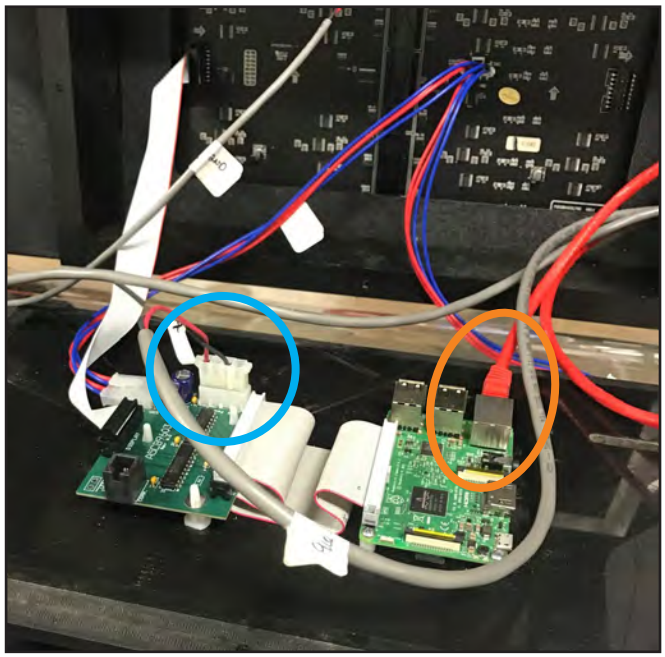


Plug cable 9608-1 to the marquee cable: 9612 (circled in yellow).

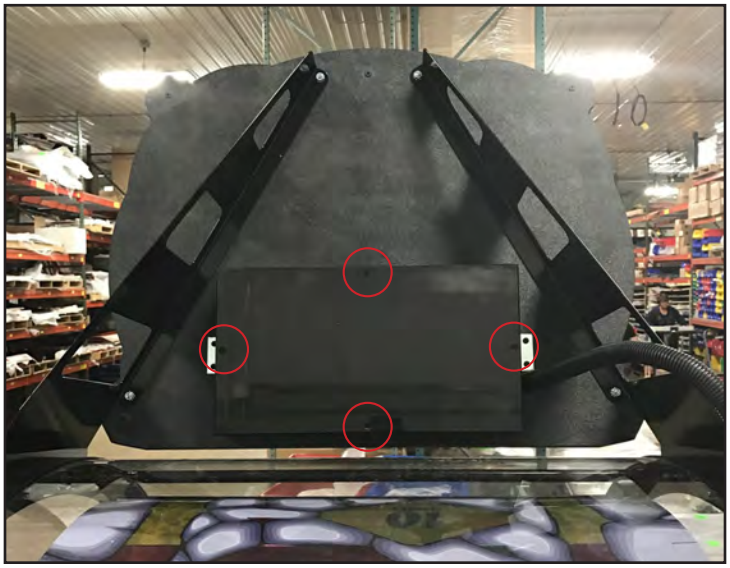


Plug cable 9608-2 to the raspberry pi board (circled in blue).

Plug in the red ethernet cable to the phone port on the main board (circled in orange).



SET UP GUIDE CONT.



Replace and secure the cover to the marquee box, using the four screws you removed earlier.

***Be cautious not to pinch any cables!**

Get power cable from the cashbox and plug into the line filter at the bottom rear of the game.

Plug the remaining end of the power cable into a standard power outlet.

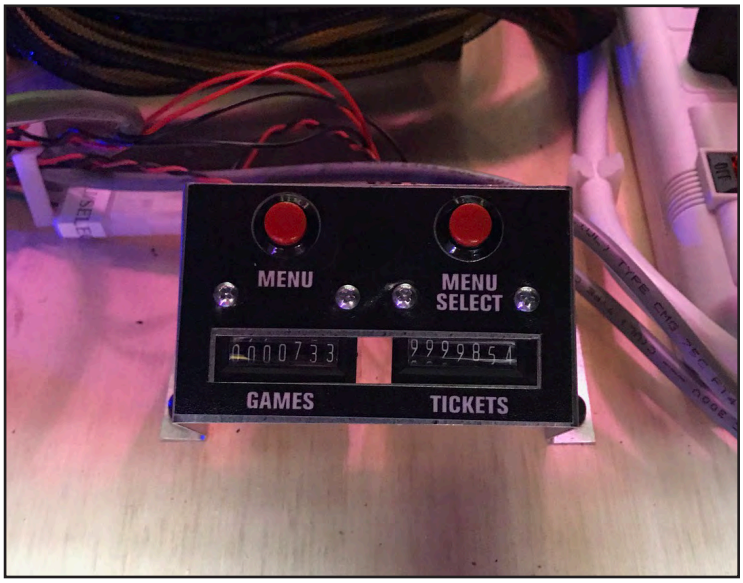
YOU ARE READY TO PLAY!

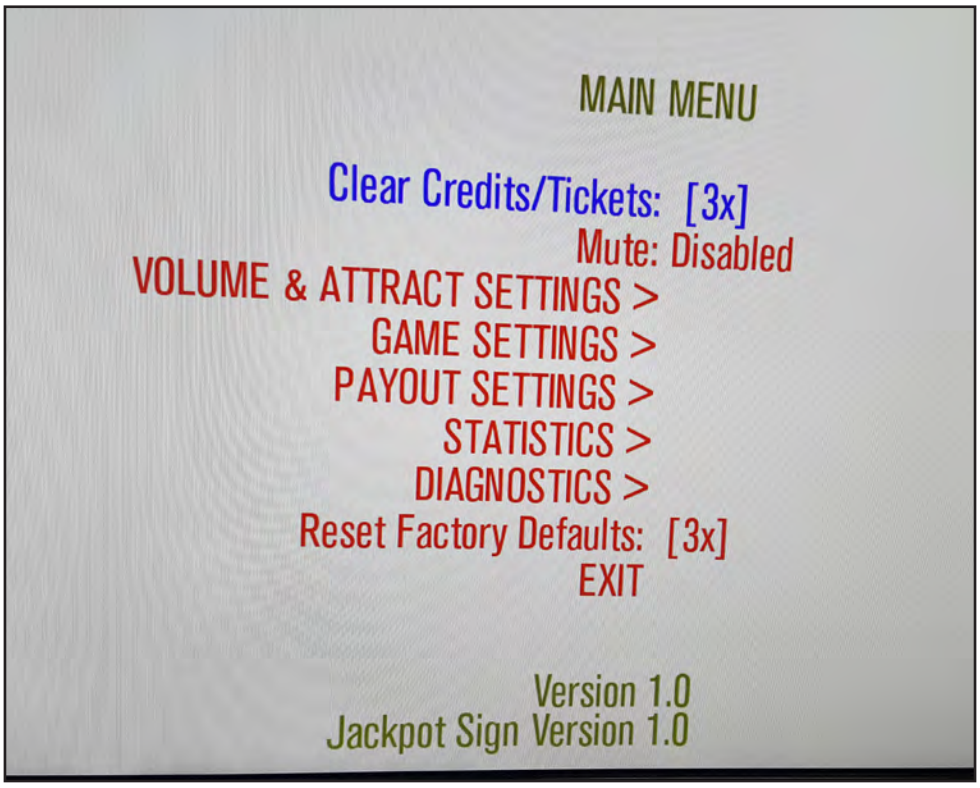
MAIN MENU FUNCTIONS

Press and hold the MENU button located inside the front door to access the main menu.

Scroll through the options with the MENU button.

Make your selections with the MENU SELECT button.

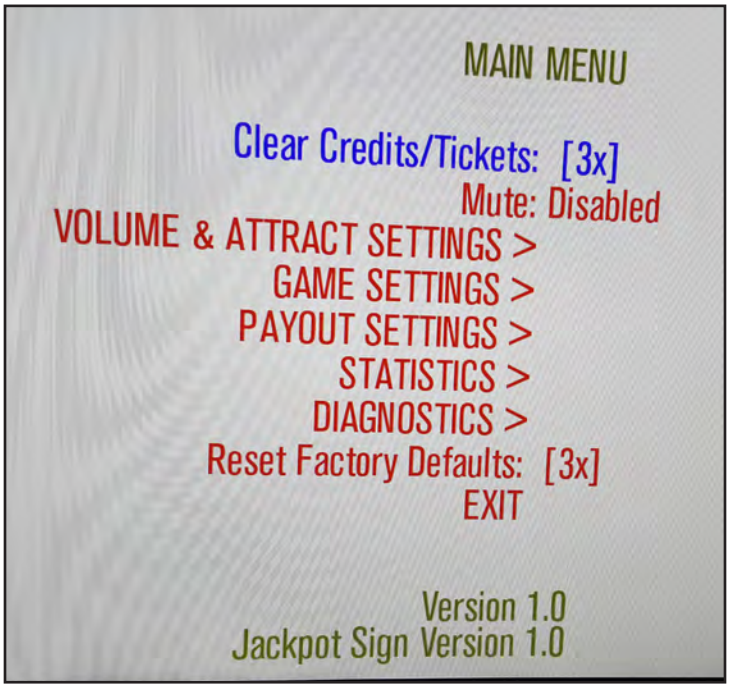




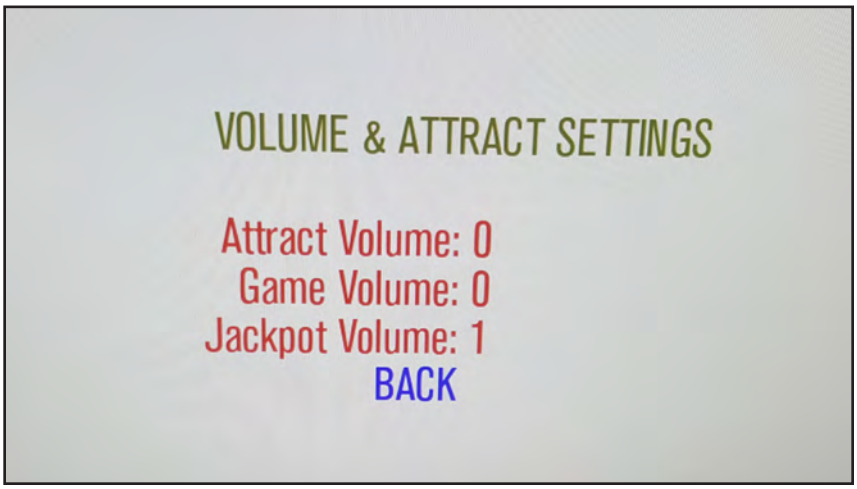
Mute Option	DISABLED	ENABLED

CLEAR CREDITS/TICKETS

Press the MENU SELECT button 3 times to clear any owed tickets or credits stored on the game.



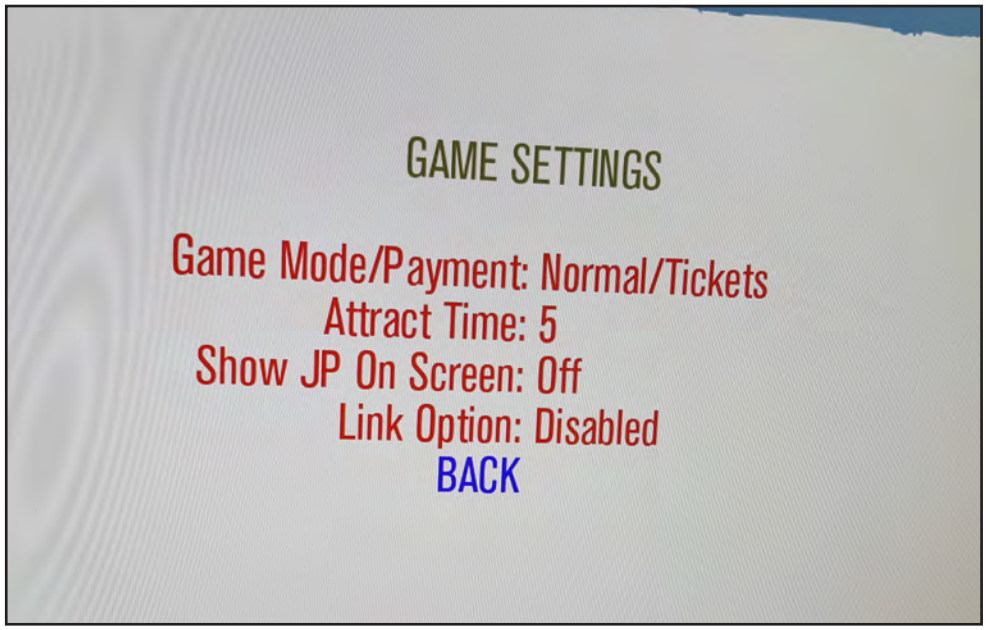
VOLUME & ATTRACT SETTINGS



Factory defaults are highlighted below.

Attract Volume	0	1	2	3	4	5	6	7	8	9	10
Game Volume	0	1	2	3	4	5	6	7	8	9	10
Jackpot Volume	0	1	2	3	4	5	6	7	8	9	10

GAME SETTINGS

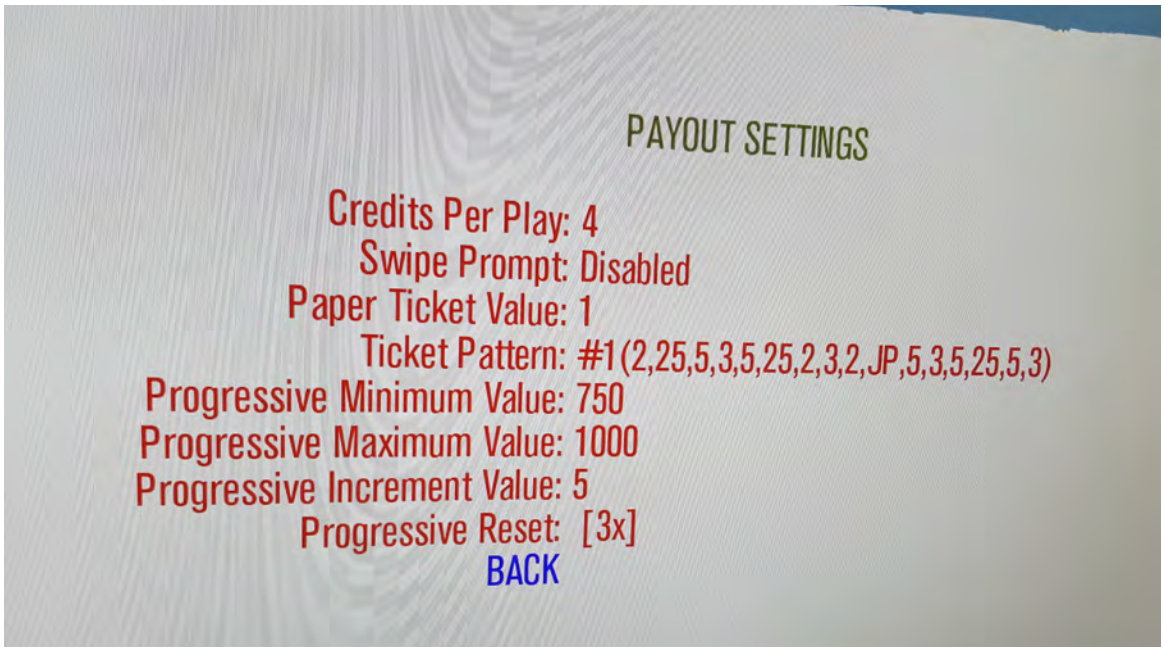


Factory defaults are highlighted below.

Game Mode/ Payment	NORMAL/ TICKETS	NORMAL/ POINTS	SHOW MODE	
Attract Time (in minutes)	0 (disabled)	TO	30	DEFAULT: 5
	ADJUSTABLE IN INCREMENTS OF 5			
Show JP on Screen	OFF		ON (NO MARQUEE OPTION)	
Link Option*	DISABLED		ENABLED	

* this gives the marquee notification that it should be looking for the jackpot value from an external device. The link option also allows the marquee to display error messages for bad communication issues or no communication at all.

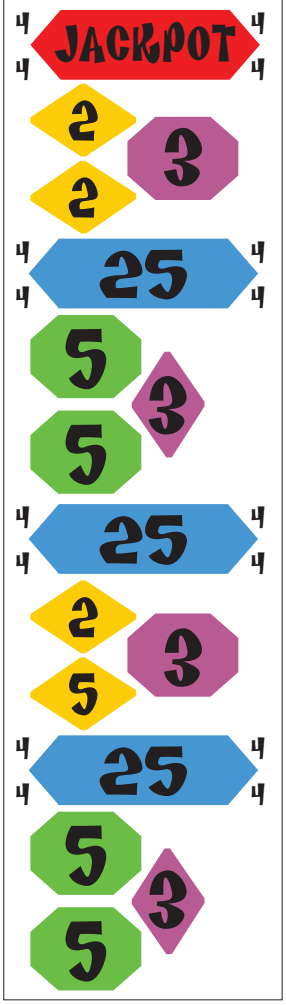
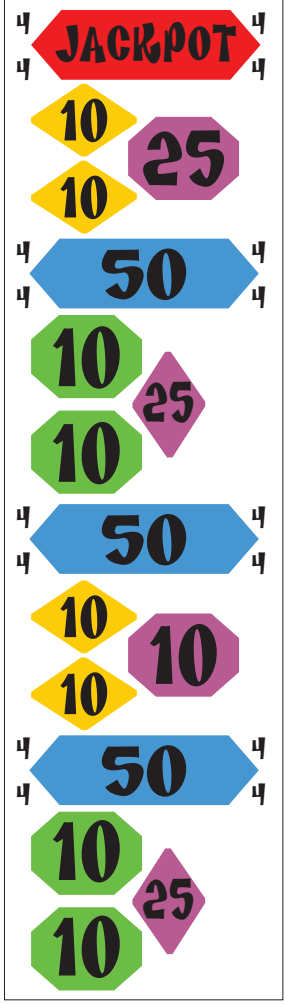
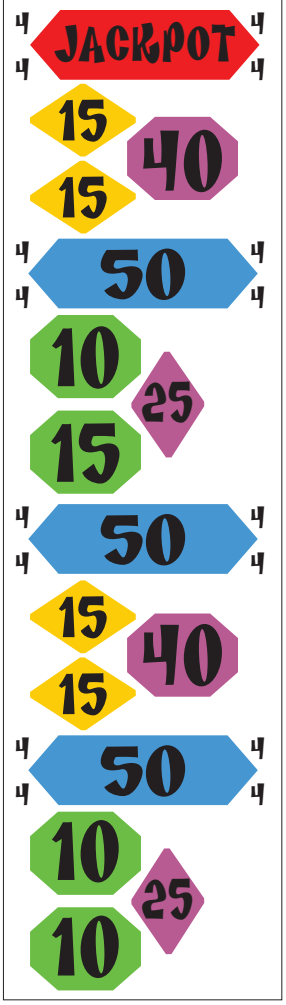
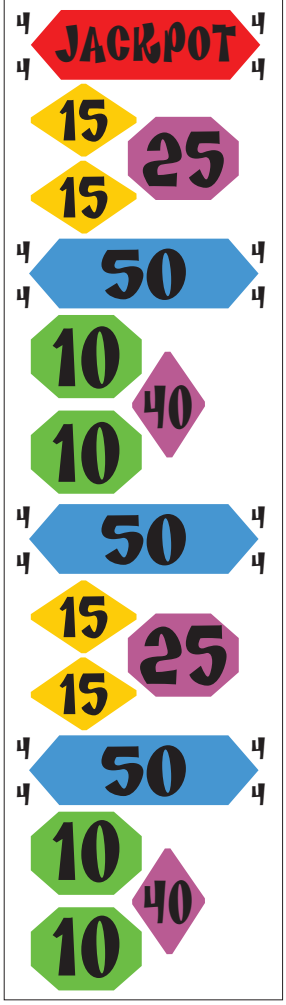
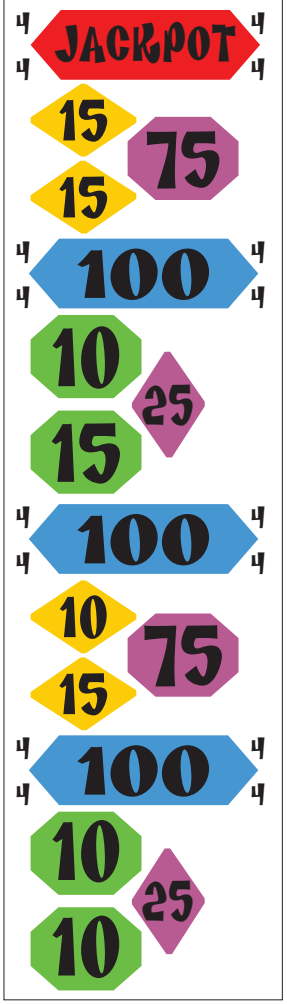
PAYOUT SETTINGS



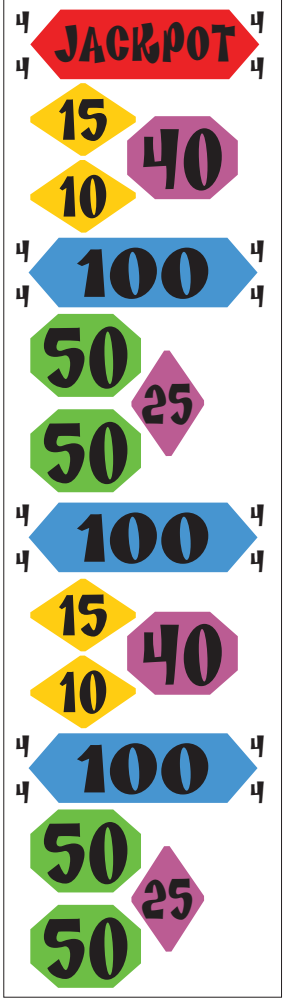
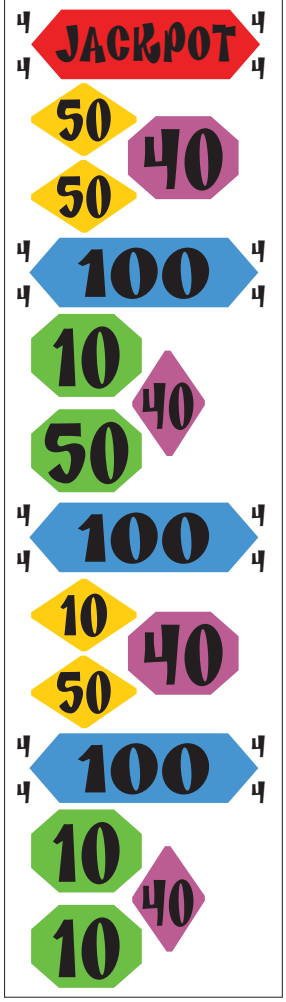
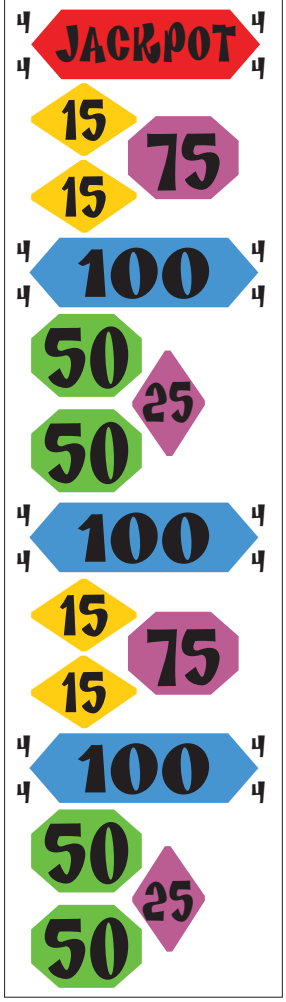
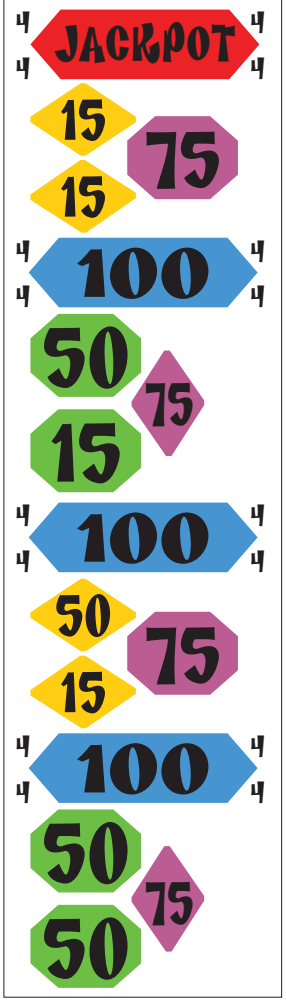
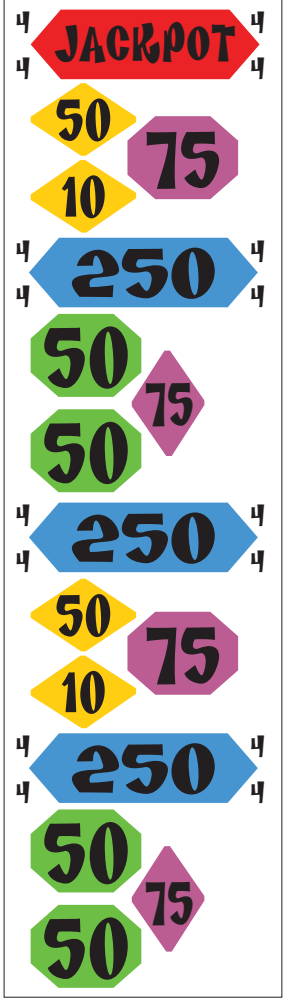
Factory defaults are highlighted below.

Credits Per Play	0		TO			20				4	
	ADJUSTABLE IN INCREMENTS OF 1										
Swipe Prompt	ENABLED					DISABLED					
Paper Ticket Value	1					2					
Ticket Pattern	See pages 17-19 for ticket patterns.										
Progressive Minimum Value	25	50	100	250	500	750	1000	1250	1500	1800	2000
Progressive Maximum Value	50	100	250	500	750	1000	1500	2000	4000	5000	9999
Progressive Increment Value	0 (disabled)	1	2	3	4	5	6	7	8	9	10
Progressive Reset	Press the MENU SELECT button 3 times to reset progressive jackpot										

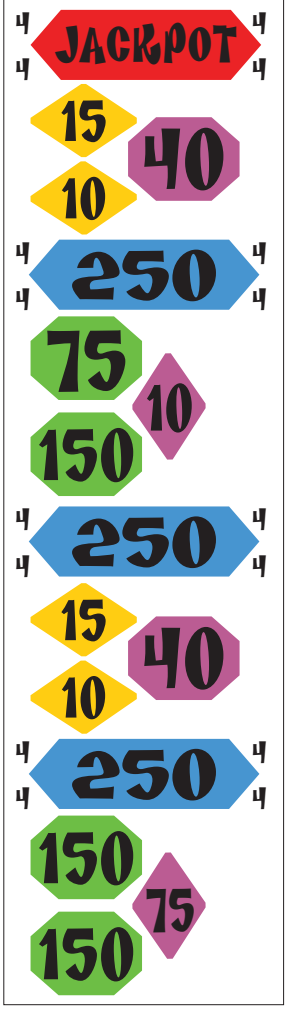
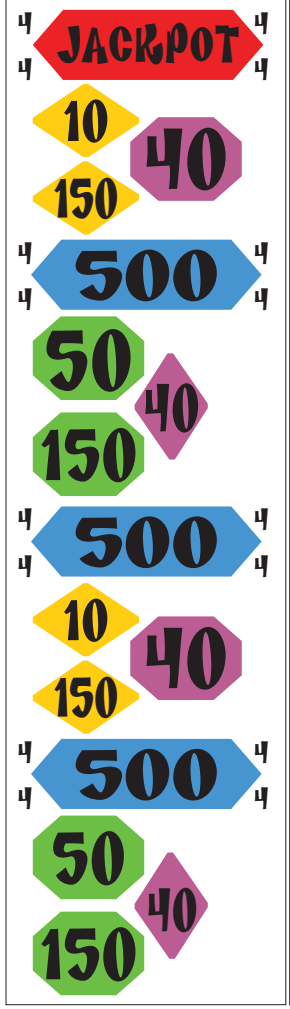
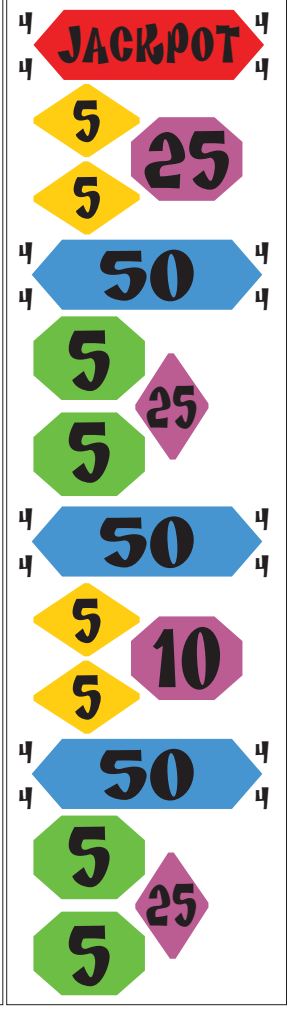
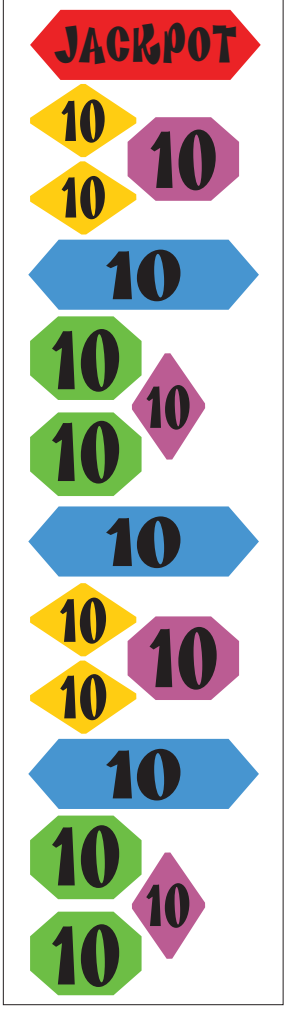
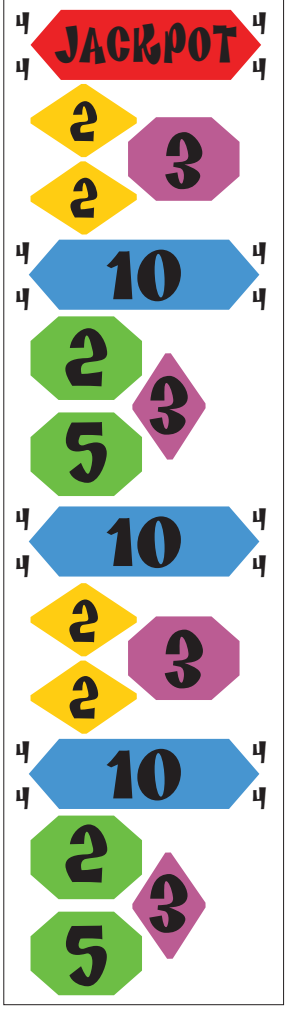
TICKET PATTERNS

A5DE9627-1	A5DE9627-2	A5DE9627-3	A5DE9627-4	A5DE9627-5
P1	P2	P3	P4	P5
				
6-8 TICKETS PER GAME	14-17 TICKETS PER GAME	19-22 TICKETS PER GAME	23-26 TICKETS PER GAME	27-30 TICKETS PER GAME

TICKET PATTERNS

A5DE9627-6	A5DE9627-7	A5DE9627-8	A5DE9627-9	A5DE9627-10
P6	P7	P8	P9	P10
				
32-35 TICKETS PER GAME DEFAULT	32-35 TICKETS PER GAME (2 Point Ticket)	38-41 TICKETS PER GAME	42-45 TICKETS PER GAME	50-53 TICKETS PER GAME

TICKET PATTERNS

A5DE9627-11	A5DE9627-12	A5DE9627-13	A5DE9627-14	A5DE9627-15
P11	P12	P13	P14	P15
				
60-63 TICKETS PER GAME	74-77 TICKETS PER GAME	10-13 TICKETS PER GAME	10 TICKETS PER GAME	4-6 TICKETS PER GAME

STATISTICS

Total Games Played	Number of games played since last statistics reset
Total Tickets Won	Number of tickets dispensed since last statistics reset
Total Jackpot Winners	Number of jackpots won since last statistics reset
Average Tickets	Average amount of tickets dispensed per game played
Clear Statistics	Press the MENU SELECT button 3 times to clear all statistics. [DONE] will display when successful.

HOW TO: REMOVE HANDLE

Tools Needed:

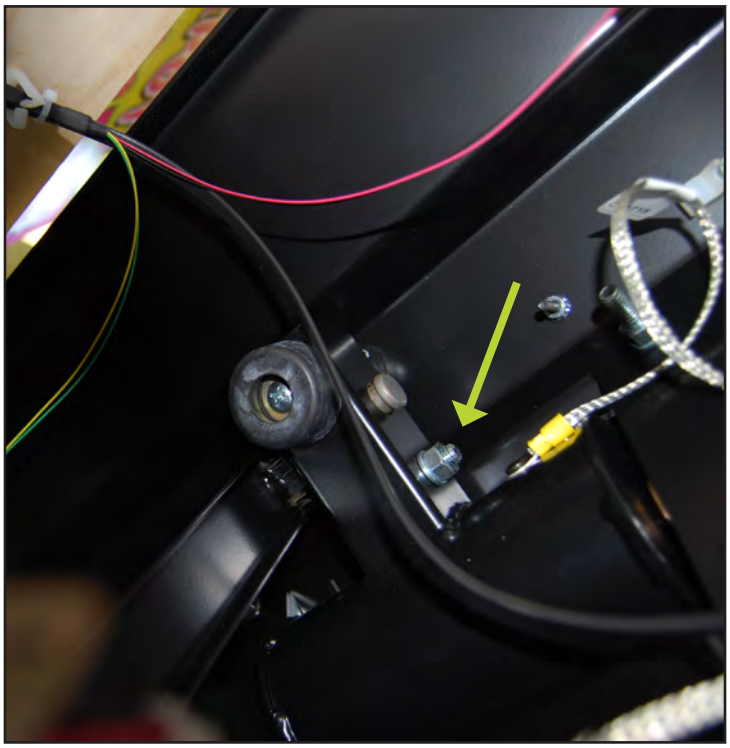
1/2” Socket & rachet

1/2” Wrench

Located on the underside of the metal front panel, there is a bolt, split washer, and locknut holding the handle into the square pipe attached to the linkage.

Remove the bolt by turning the rachet on the locknut and holding the bolt still with the wrench.

Pull the handle out from the front of the game.



HOW TO: TIGHTEN ARM BRACKET

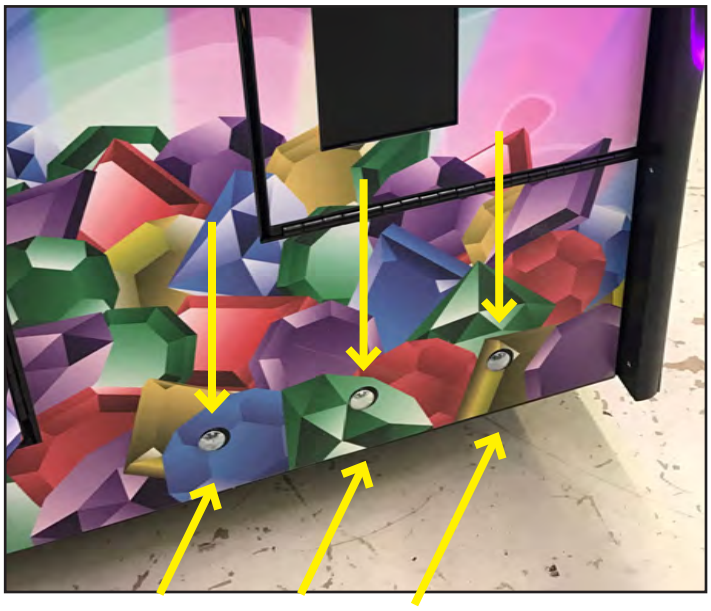
It is important to keep the arm bracket securely tightened;
failure to do so may cause injury to players or damage to the game.

We recommend checking the bolts monthly,
and more often if the game accumulates a high volume of play.

Open the right front door and remove the acrylic shield using a 90 degree drill and square bit.

Check the 6 bolts holding the bracket in place - 3 on the front surface and 3 on the bottom - tighten all nuts with a 7/16” socket.

Replace acrylic shield.

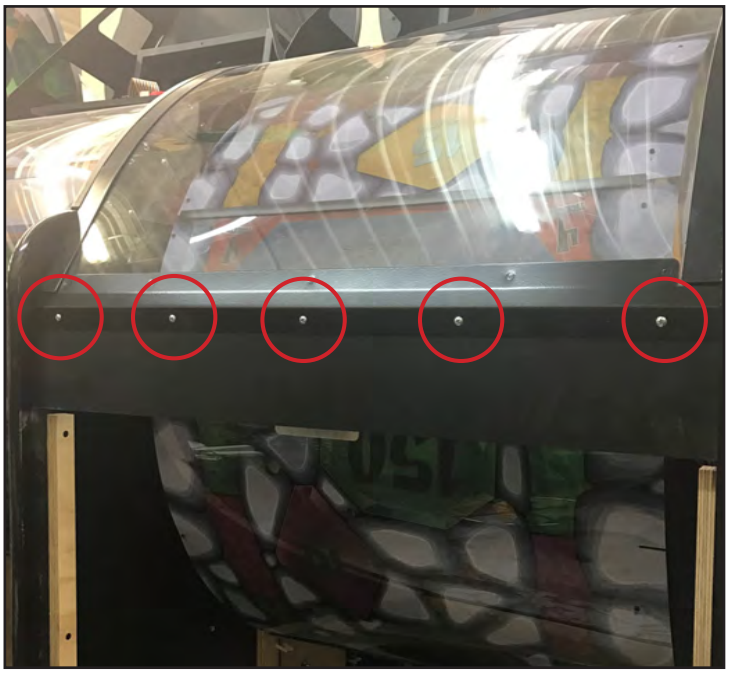


HOW TO: OPEN WHEEL WINDOW

Remove the five screws located on the back of the game on the metal window rail.

From the front of the game, push up on the window - it will slide like a roll top desk.

Push the window up into the game.

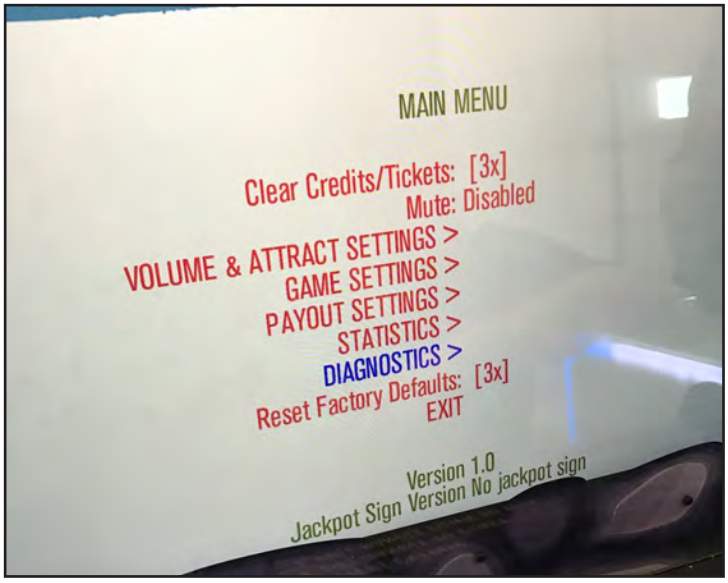


HOW TO: ADJUST BRAKE

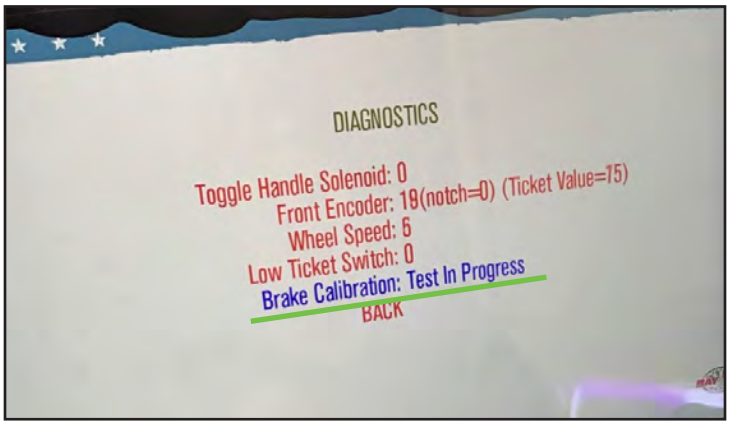
Enter the main menu then scroll to “diagnostics.”

In the diagnositcs menu, change the “Toggle Handle Solenoid” to 1 by pressing the SELECT button - this will turn the solenoid on.

Scroll down to “Brake Calibration” and hit the SELECT button to begin brake test.



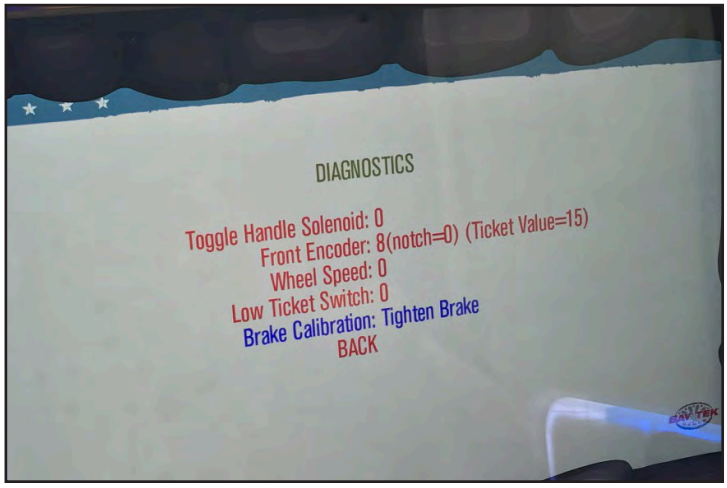
Pull down on the handle to spin the wheel and begin the brake test. “Test in Progress” will display on the screen when the wheel is spinning.



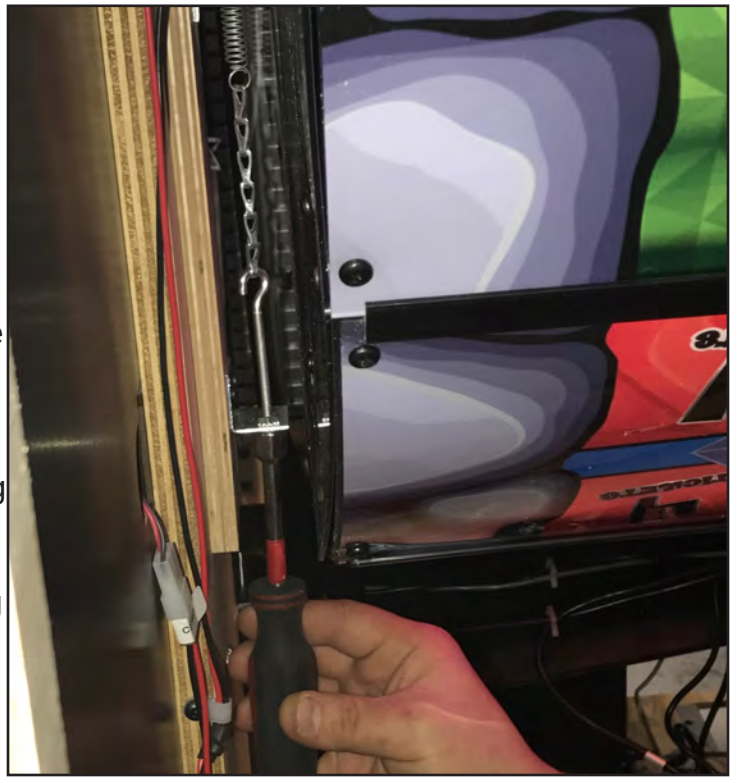
Once the wheel stops, the brake status will come up in the diagnostics.

Brake status will show one of three options:

- Brake Good (no adjustment needed)
- Tighten Brake
- Loosen Brake



HOW TO: ADJUST BRAKE



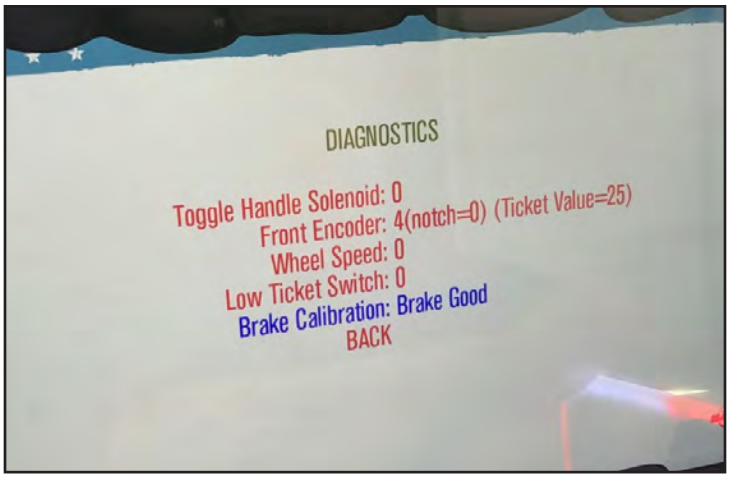
Remove the back door of the game and set aside.

Locate the brake on the left side if the wheel.

Using a 3/8” nut driver, adjust the lock nut on the i-bolt as nessesary. Move in 2-turn increments; the brake is sensitive and needs very little adjustment to make a difference.

To tighten the brake, tighten the lock nut by turning to the right.

To loosen the brake, loosen the lock nut by turning to the left.



Perform another brake test and check the brake status. Repeat the previous steps until the brake calibration status reads GOOD.

HOW TO: CALIBRATE ENCODER SENSOR

The Encoder Sensor communicates the position of the wheel in comparison to the lighted arrow, telling the game how many tickets the player has won.
There is a small margin between scoring spaces that allows for slight miscalibration of the encoder sensor. If the arrow lands between spaces, the game will always award the player with the higher ticket value. This also applies on the bonus spaces.

Enter the main menu then scroll to “diagnostics.”

In the diagnositcs menu, change the “Toggle Handle Solenoid” to 1 by pressing the SELECT button - this will turn the solenoid on.

Open the wheel window (see page 21).

Manually turn the wheel downward and make sure the ticket value displayed on the screen matches the space on the wheel the arrow is pointing to. Make sure the turn the wheel one complete revolution so the game can find the home position.

Turn the wheel as it approaches a jackpot section. Watch the display closely and stop the wheel as soon as it turns from 4 to the jackpot value. The arrow should be right on the line between 4 and the jackpot space.

HOW TO: CALIBRATE ENCODER SENSOR CONT.

If the pointer is more than 1/2” off:

If the arrow is too high on the space before it registers, loosen the screw located behind the arrow.

If the arrow is too low on the space before it registers, tighten the screw located behind the arrow.

Repeat as necessary.

HOW TO ACCESS: LIGHT BULBS IN WHEEL

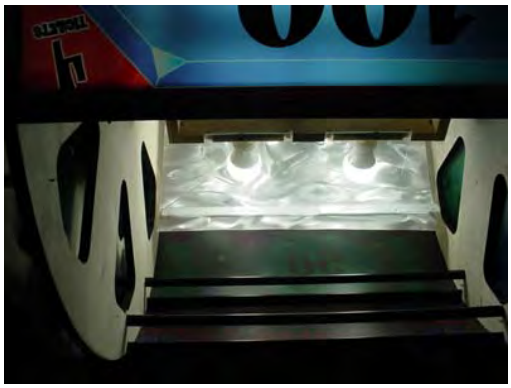
Unplug game,

Unlock and remove the back door of game.

Remove the small Phillips screws from any large plexi panel.

Carefully bend plexi out of slots and remove plexi from game.

Light bulbs can now be accessed for replacement.
Part # A5LI0003



To re-install the plexi panel:
Bend the plexi and insert it into the grooves in the black plastic divider.

Carefully align the left and right edges with the existing score plexi on the wheel.

The holes in the plexi should line up with the holes in the wood - insert the small Phillips screws and tighten gently.

HOW TO: REMOVE WHEEL ASSEMBLY

This will be necessary for the replacement of wheel solenoid, and monitor replacement.
We estimate about 2 hours to complete.

Tools Needed:
Small Phillips Bit
#2 Square bit
1/2" Socket wrench
3/8" socket wrench
3/16" Allen wrench

Unplug game,
Unlock and remove the back door of game.

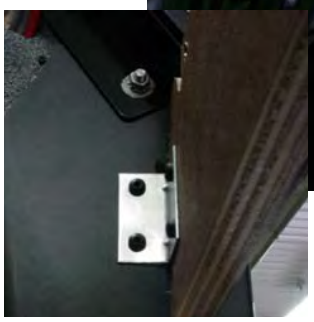
Remove 4 Phillips screws from rear black rail.

Slide window out the back of game.
Remember which direction it will go back in for installation.

Remove both rear side wood pieces from sides of cabinet using # 2 square bit.

Remove L bracket screws from both sides of cabinet using # 2 square bit.

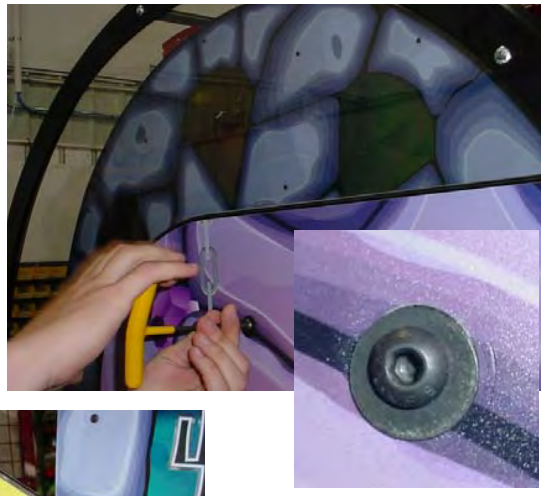
Spread sides of cabinet apart a bit to remove the rear wood piece.



Remove 4 nuts (using 1/2" socket) and washers from inside cabinet. Remove bolts from cabinet.

HOW TO: REMOVE WHEEL ASSEMBLY CONT.

Remove 2 bolts from left and right side of upper cabinet using 3/16” Allen wrench.



Remove the 2 nuts using 3/8” socket from front arrow sensor.

Remove 4 small Phillips screws from any small bonus plexi panel.

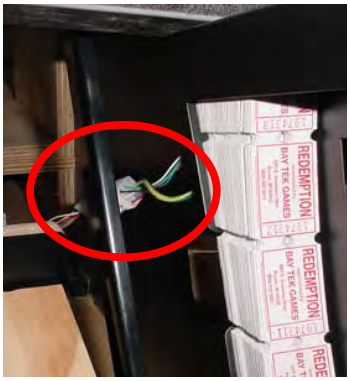
Carefully bend plexi out of slots and remove plexi from game.

Rotate wheel so that the empty space is in front of arrow sensor and remove the metal assembly from side of cabinet and leave hanging in front of wheel.

Open front right side door.

Using # 2 square bit, remove 2 of screws in the clear safety plexi and remove plexi from game.

Unplug the ticket tray molex connector.

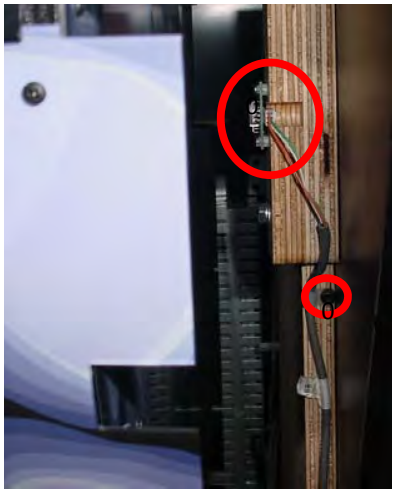


HOW TO: REMOVE WHEEL ASSEMBLY CONT.

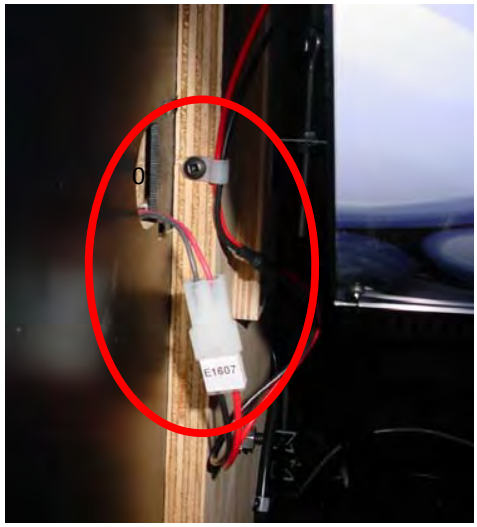
Remove cotter pin from long wheel link and push link off of the peg.

Unplug the Home Sensor. Remove the cable clamps on the wood

(if present) and tuck the cable up into the side hole of the cabinet so the wheel wood can clear the cable.

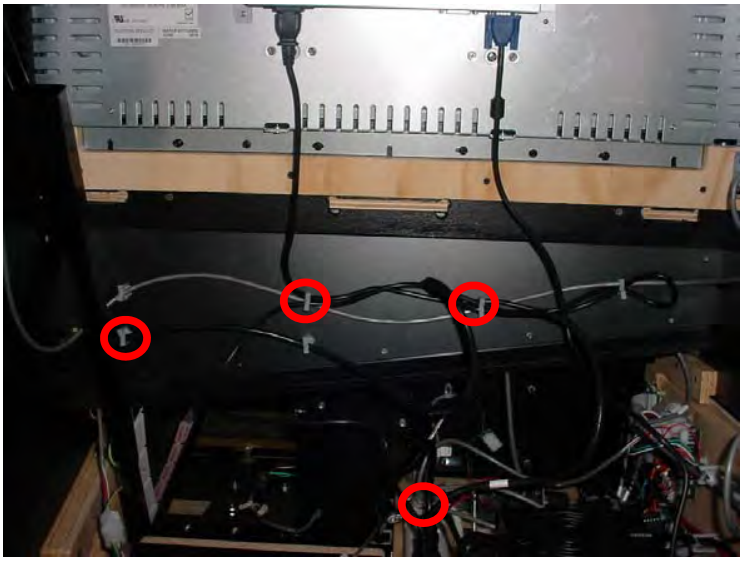


Unplug the Solenoid Cable and tuck the cable up into the side hole of the cabinet so the wheel wood can clear the cable.



The AC cable that goes to the center of the wheel must be disconnected from the power strip.

Remove the cable from the cable clamps, and unplug from the power strip.



HOW TO: REMOVE WHEEL ASSEMBLY CONT.

Turn the wheel so that the open panel is in the rear of the cabinet.

Reach through this opening to grab the center shaft and tilt the top of the wheel out toward the back of the cabinet,

2 people may be needed for this step.

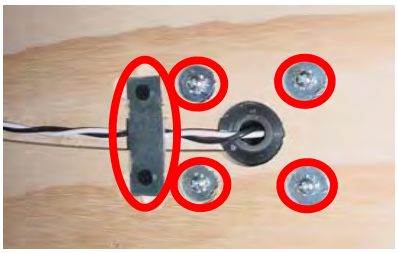
Push in at the bottom of the wood assembly to help the wheel to pivot.

Place wheel assembly on floor behind game

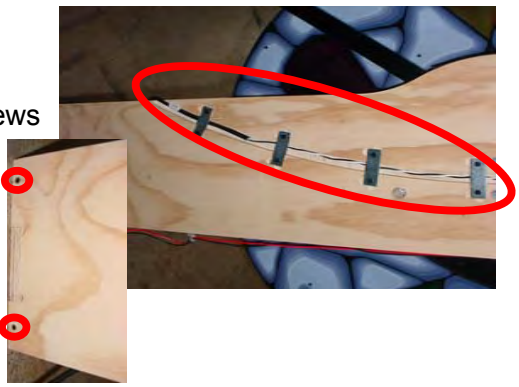
To Replace Solenoid:

Place the wheel on it's side with the solenoid assembly and bar toward top of the assembly.

Remove 4 Phillips screws in the center of wheel.



Remove protecting brackets along the side by removing # 2 square screws

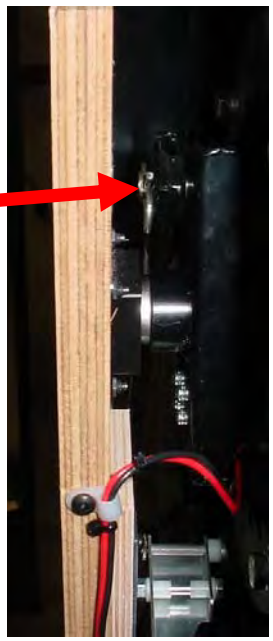


Remove the 2 square head screws in the bottom of wood.

Remove the top wood section and solenoid assembly can be removed from shaft.

HOW TO: REMOVE WHEEL ASSEMBLY CONT.

To re-install wheel:



When ready to install wheel assembly back into the game, move wheel assembly to the back of the cabinet, and position the arm so that it will turn the wheel in the correct direction:

Position bar on the top of the solenoid assy.

Position the wheel so that the opening is toward the rear of assembly.

With 2 people - grab the center rod through the opening and lift assembly.

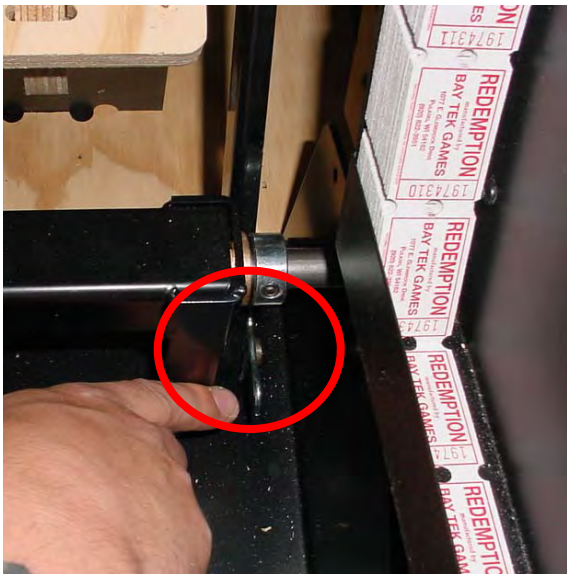
Place the bottom wood assembly into cabinet first.

Then rock wheel carefully forward and place in position so that the bolt holes in cabinet line up with the assembly.

Re– install AC cable into cable clamps and power strip.

Plug Solenoid Cable back together.

Plug Home Sensor cable carefully into sensor. It will help to rotate wheel so the opening is next to sensor to make more room for your hand.

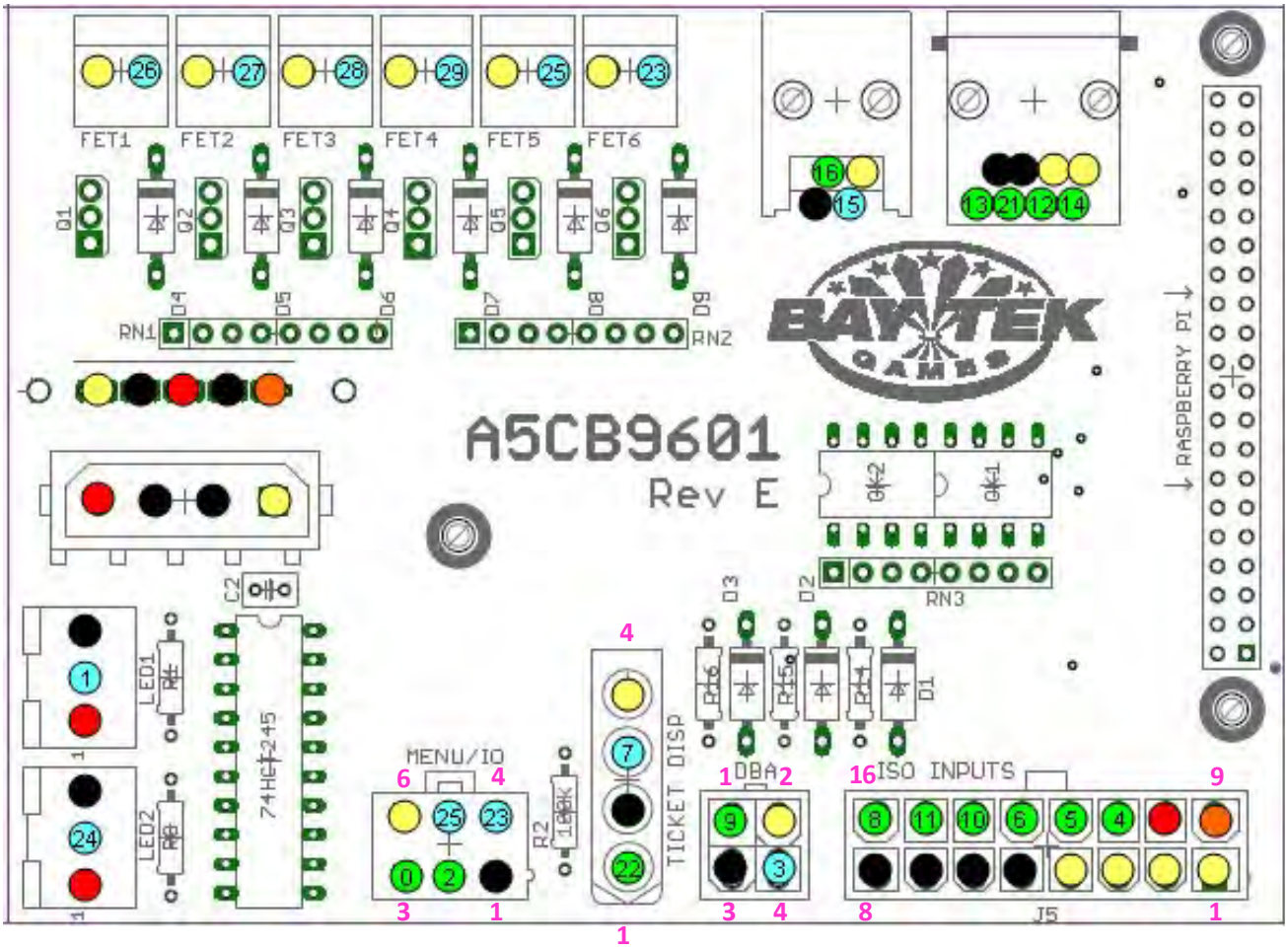


Go to front of cabinet and re-connect long wheel link to pivot mechanism. Re-insert cotter pin.

Re-install clear safety plexi.

Reconnect ticket tray molex connector.

MAIN BOARD PINOUT



= Ground

= +5

= Output

= +12

= +3.3V

= Input

NOTE:
FET5 & FET6 also run to the MENU header to control mechanical counters. Therefore, you CANNOT use both at the same time

MAIN BOARD PINOUT GUIDE

MENU IO	
1	GND
2	MENU BUTTON 1
3	MENU BUTTON 2
4	GAME COUNTER
5	TICKET COUNTER
6	+12V

DBA	
1	CREDIT INPUT
2	+12V
3	GND
4	JERSEY LOCKOUT

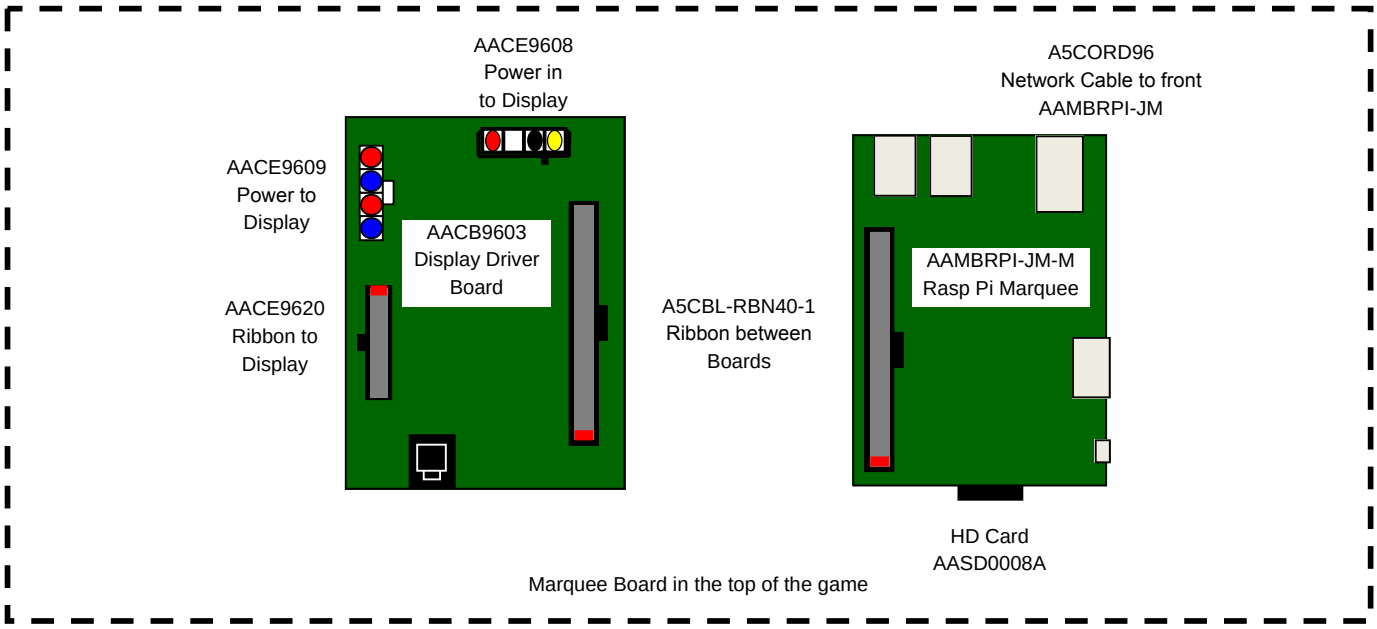
TICKET DISPENSER	
1	NOTCH
2	GND
3	ENABLE
4	+12

FET	
1	GROUND LIGHT - R
2	WHEEL SOLENOID
3	GROUND LIGHT - G
4	GROUND LIGHT - B
5	
6	

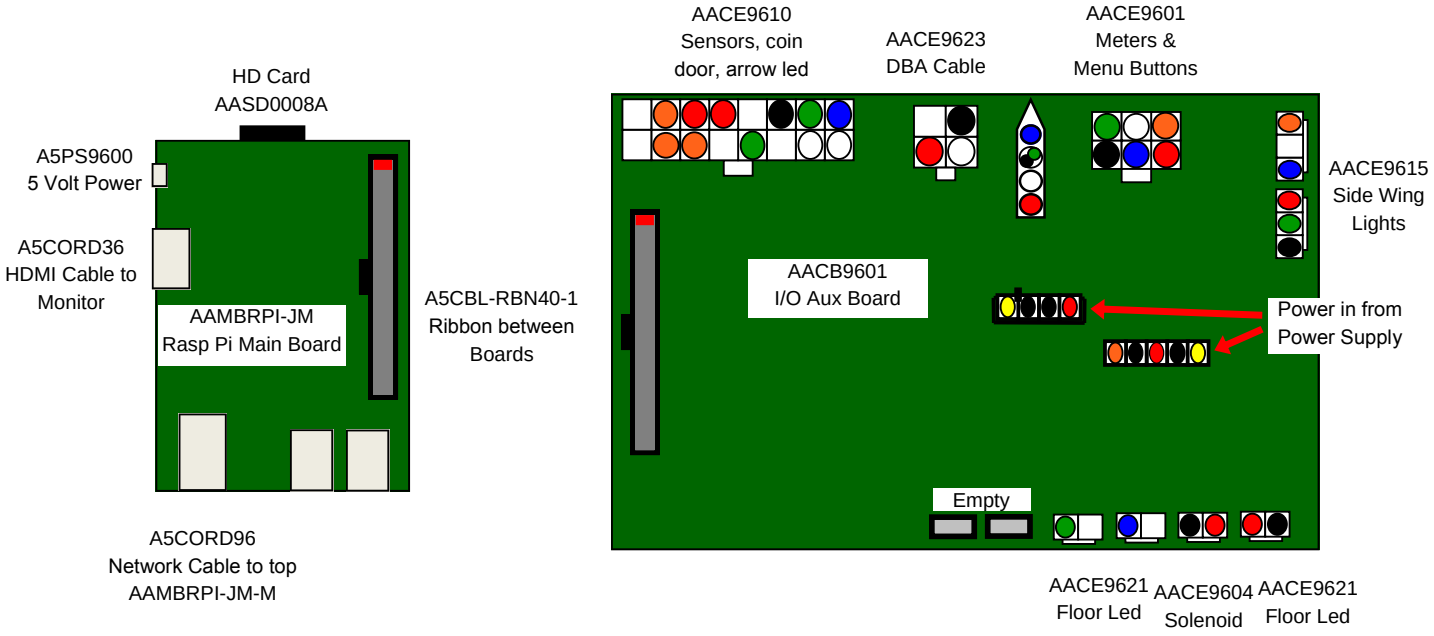
LED 1	AD. CABINET LIGHTS
LED 2	

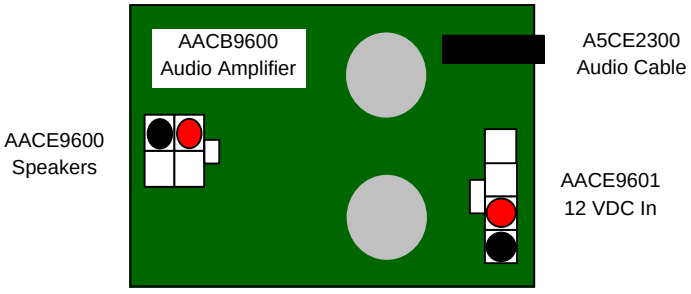
ISO INPUTS	
1	+12V
2	+12V
3	+12V
4	+12V
5	GND
6	GND
7	GND
8	GND
9	+3.3V
10	+5V
11	LOW TICKET SWTICH
12	
13	COIN INPUT
14	
15	HOME SENSOR
16	ENCODER SENSOR 1

CIRCUIT BOARD WIRING

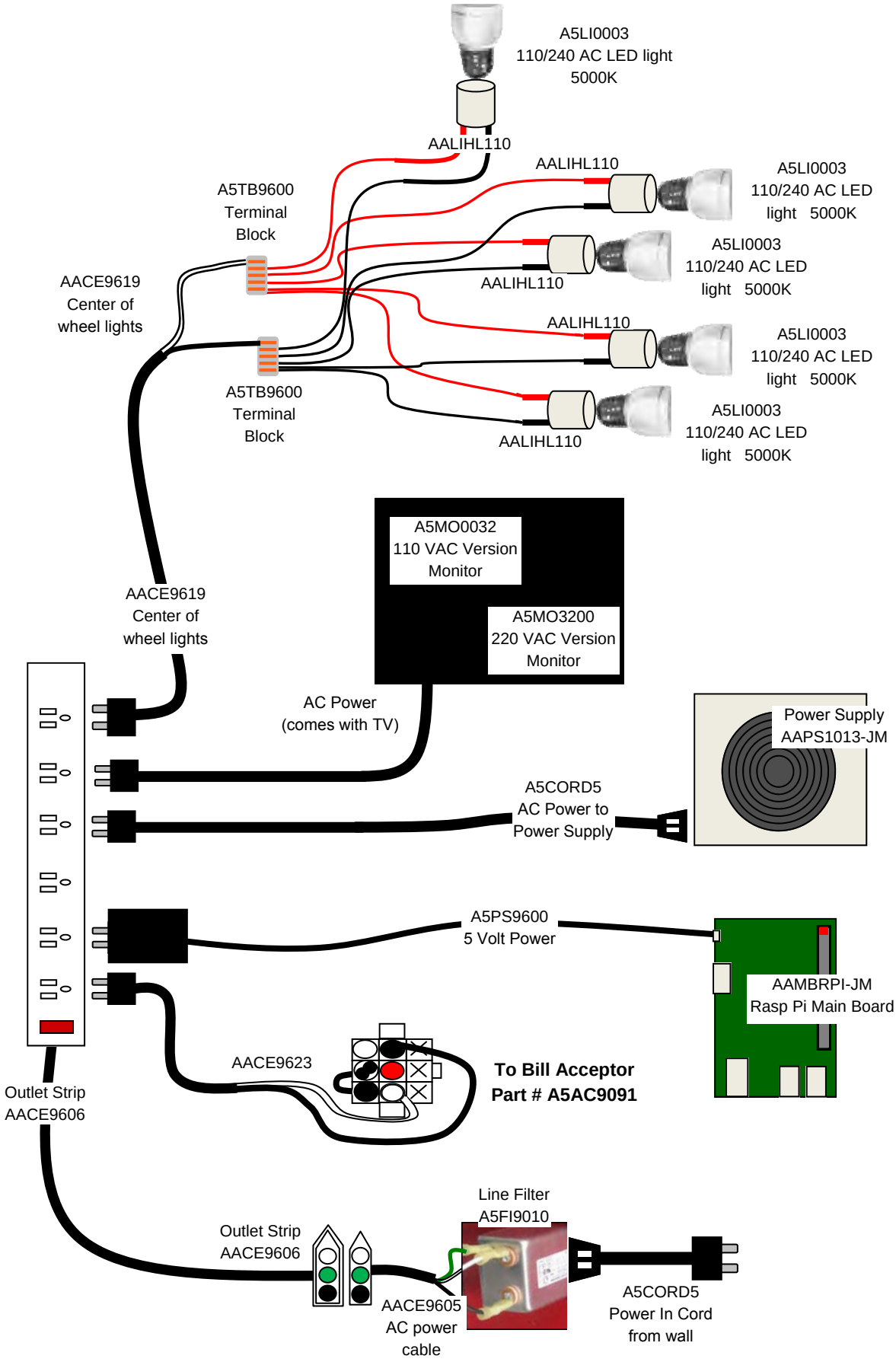


Boards in the bottom of the game

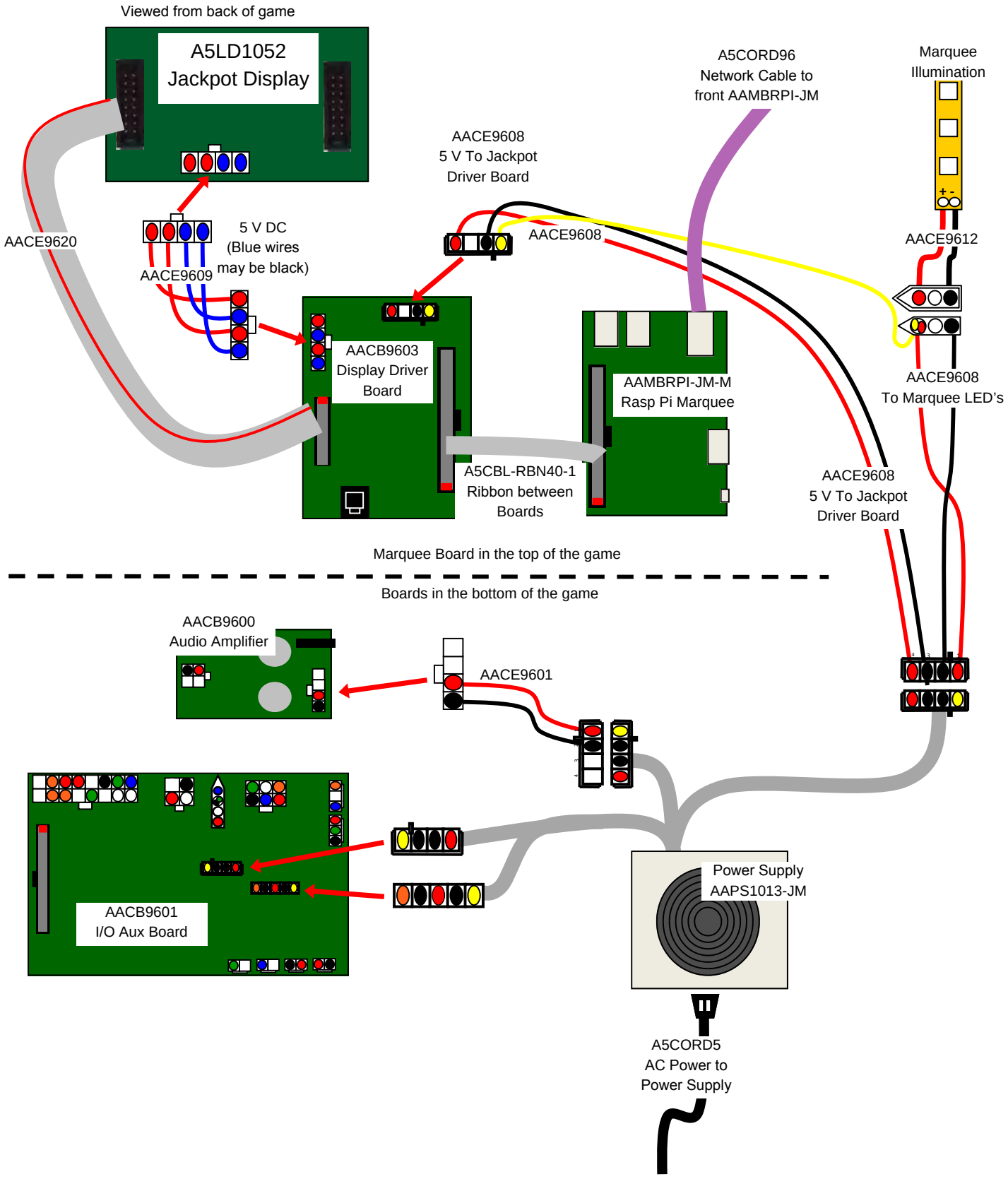




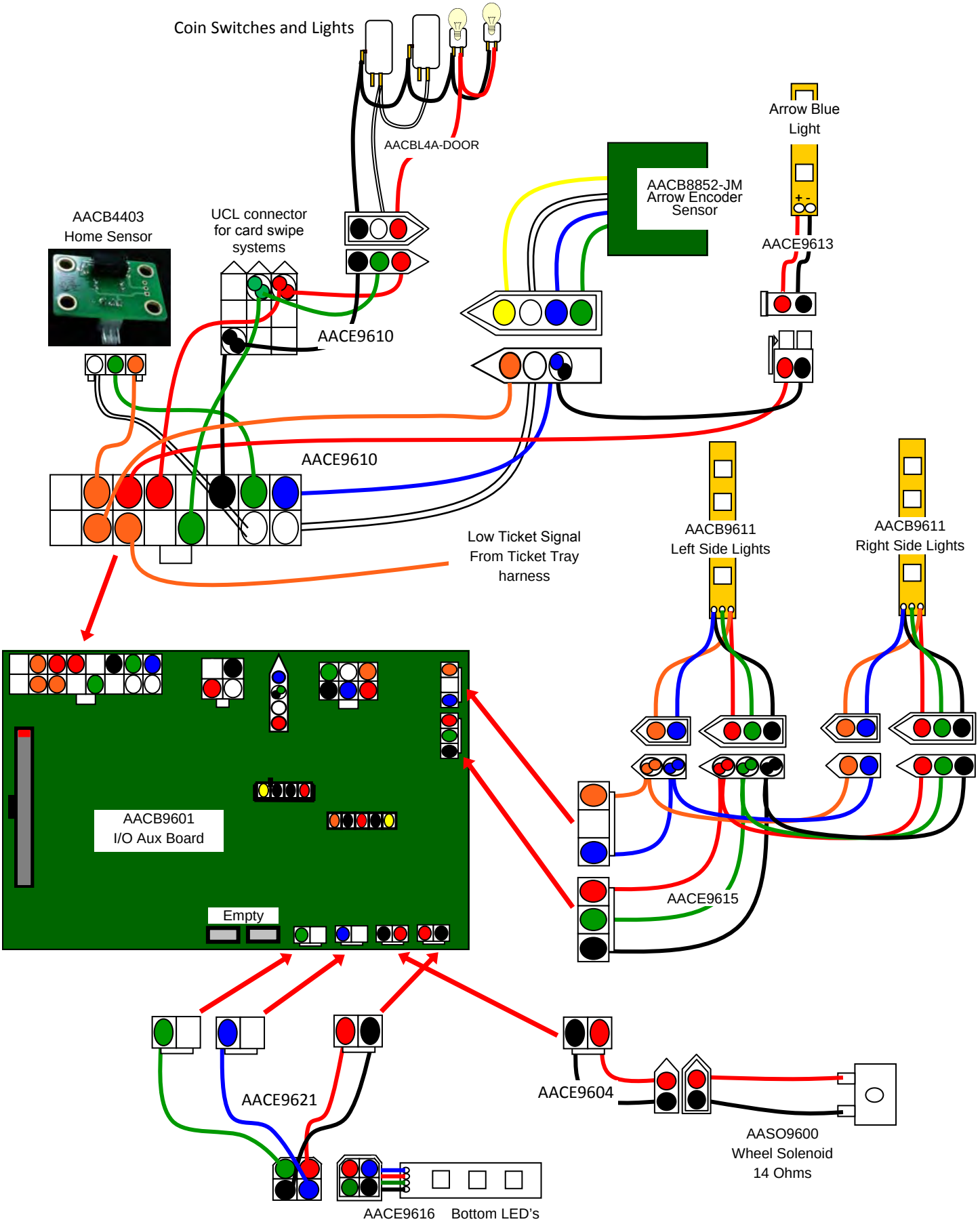
AC VOLTAGE IN WIRING DIAGRAM



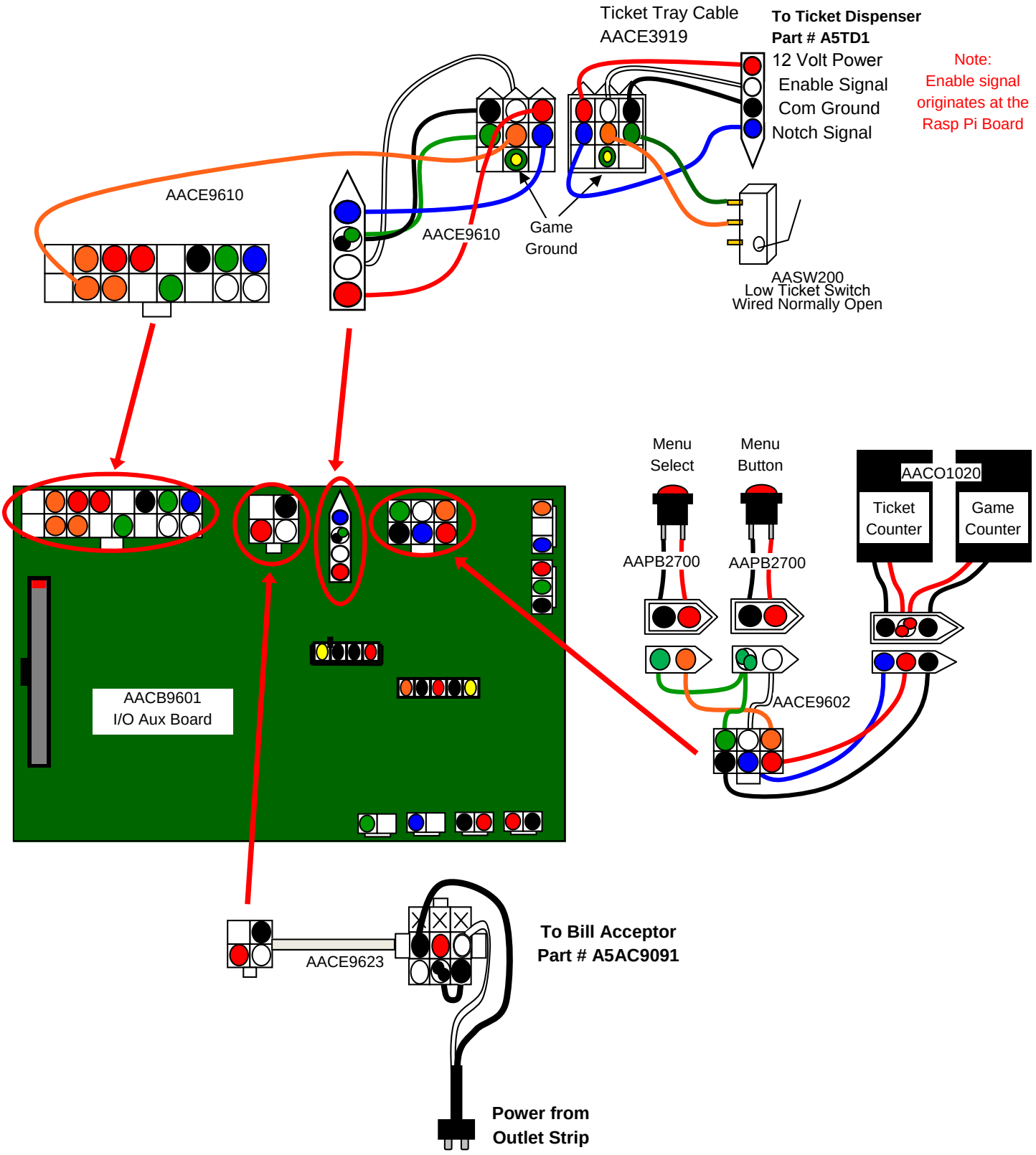
POWER SUPPLY & JACKPOT DISPLAY WIRING



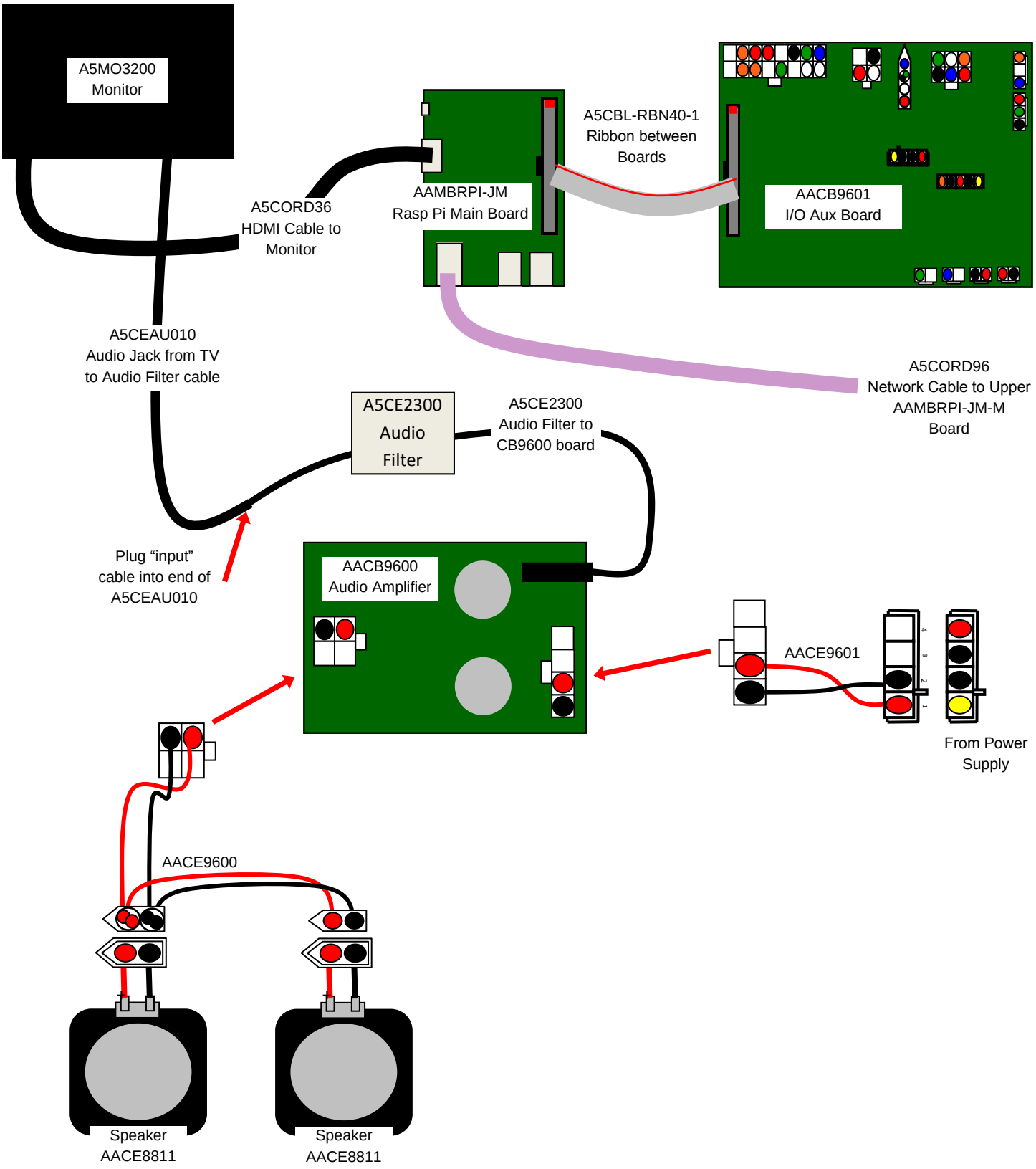
COIN MECHS, SENSORS, SOLENOID & LED WIRING



TICKET DISPENSER, MENU BUTTONS, COUNTERS & BILL ACCEPTOR WIRING



VIDEO AND SOUND WIRING DIAGRAM



CARD SWIPE SYSTEM INSTRUCTIONS

Option #1:

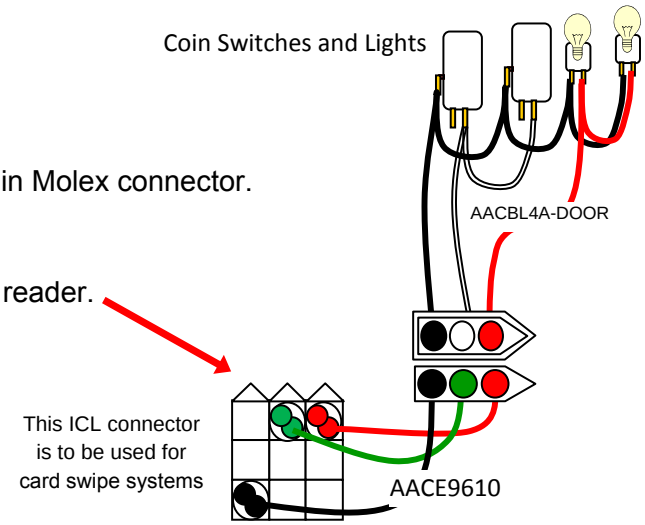
New card swipe systems may come with a standard 9 pin Molex connector.

Simply plug this connector and plug into your card swipe reader.

In "Payout Settings" menu:

Set "Credits Per Play" to 1

Set "Swipe Prompt" to Enabled



Option #2:

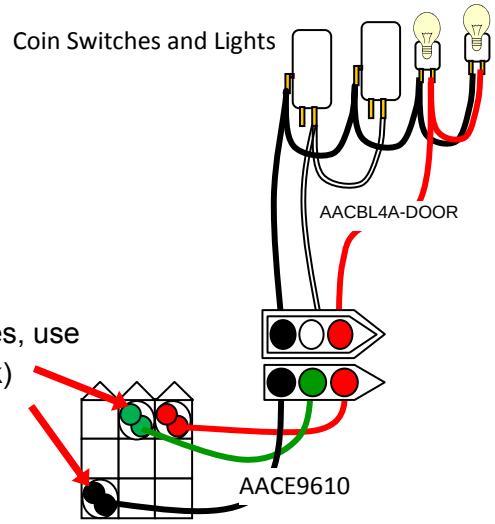
If your card swipe systems does not have a standard 9 pin Molex connector, then you will have to splice wires into the AACE9610 harness.

In "Payout Settings" menu:

Set "Credits Per Play" to 1

Set "Swipe Prompt" to Enabled

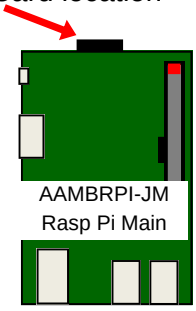
If you have to splice the wires, use these two. (Green and Black) for coin signal.

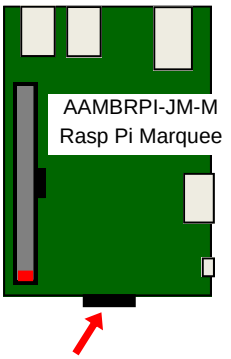


HOW TO UPDATE SOFTWARE

The software is programmed onto a SD Card
There is separate software for the game main board and the Marquee Sign main board.

Game main board SD Card location





Marquee Sign main board SD card location

To remove: Push gently into board and let it pop back out - remove from board.
To install: Push gently into board until it clicks.
SD Card part number is AASD0008A - please specify game location when ordering.

POWER SUPPLY DIAGNOSTICS

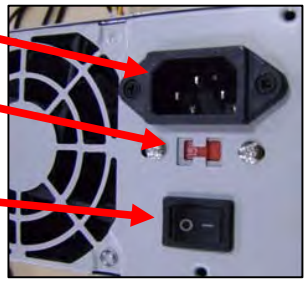
1.) Verify AC power to front of game. Check power strip in bottom front. Check for illuminated power switch.

2.) Check AC power connection to power supply.

3.) Ensure Power Supply switch is set to 115V (or 230V)

(Some model power supplies may not have this)

4.) Ensure Power switch is on.



No 12 Volts (Power Supply Fan is not turning), but AC to power supply is OK

This means that either:

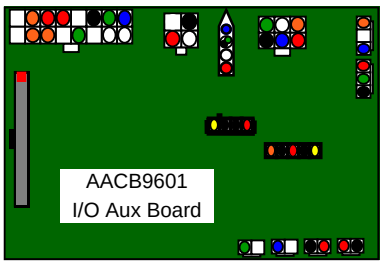
1.) Power supply is faulty.

2.) There is a 12 volt short in cabinet causing power supply to remain off to protect itself.

Turn game power OFF. Disconnect all connectors from power supply. Turn power ON.

- Power supply fan comes ON.
- Power supply fan remains OFF. → Replace Power Supply. Part # AAPS1013-JM

Turn power OFF. Unplug all outputs from I/O Aux Board. Reconnect both connectors from Power Supply to I/O Aux Board. Turn power ON.



- Power supply fan comes ON.
- Power supply fan remains OFF. → Short in I/O Aux Board. - Replace.

Turn power OFF. Reconnect the outputs at the Main Circuit Board one at a time. Wait 3 minutes between tests to turn power ON.

- Power supply fan comes ON. → This cable is OK. Plug in next cable.
- Power supply fan remains off. → This cable or component on this cable such as a motor is causing an overload. See Cable Pin-Outs in manual to see which component might be at fault.

TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
No power to the game.	Unplugged.	Check wall outlet cable (A5CORD5) to line filter in back of game. (A5FI9010)
	Power strip turned off, or plugs unplugged.	Check rocker switch on power strip. Ensure power cords are pushed up into power strip securely.
	Circuit breaker tripped.	Reset power strip breaker switch or building circuit breaker. Attempt to determine cause.
	Line filter faulty.	Replace line filter. (A5FI9010)
	Bad or overloaded power supply.	Refer to Power Supply Diagnostics
Bill Acceptor on, but everything else off. (Power Supply not ON)	Power supply unplugged.	Insure power supply is plugged into power strip.
	Rocker Switch on power supply is Off.	Make sure rocker switch is set ON.
	Power supply shutting down because of 12 V overload.	See power supply diagnostics to isolate bad component. A bad solenoid or 12 volt short would cause this.
	Faulty power supply.	Refer to Power Supply Diagnostics section.
Marquee LED lights are not working.	LED strip faulty	Remove marquee and examine LED strip. (AACE9612)
	Faulty Cable	Check cables from LED strip to power supply. (AACE9612, AACE9608)
Left or Right Side Guard Wing LED's not working.	LED strip faulty	Remove side guard and examine LED strip. Plug the LED strip into the cable from the other side guard. Replace if needed. (AACE9611)
	Faulty Cable	Check cables from LED strip to I/O Aux Board (AACE9611, AACE9615)
	Faulty I/O Aux Board	Replace I/O Aux Board. (Part # AACB9601)
Blue LED inside arrow not working.	LED strip faulty	Slide open front plexi (Refer to: How to Open Front Plexi) and examine LED strip. There should always be 12 Volts present. Replace LED strip if needed. (AACE9613)
	Faulty Cable	Check cables from LED strip to I/O Aux Board (AACE9613, AACE9610)
	Faulty I/O Aux Board	Replace I/O Aux Board. (Part # AACB9601)
Lighting inside wheel not working. **(AC Voltage)**	One of 5 light bulbs out.	Inspect light bulbs. Refer to "How to Access Light Bulbs inside the Wheel" Replace if needed. (A5LI0003)
	Socket faulty	Swap light bulb from one socket to another. Replace socket if needed. (AALIHL110)
	Faulty Terminal Block	Inspect Terminal Block and replace if needed. (A5TB9600)
	Faulty Cable	Check cables from Light Bulbs to power strip. (AALIHL110, AACE9619
	Faulty socket on power strip.	Plug the AACE9619 into a different outlet strip socket. Replace if needed. (AACE9606)

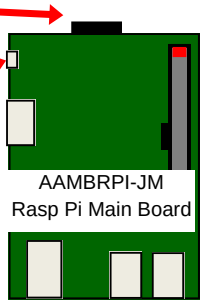
TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
Game does not coin up Game should have an audio doink sound from speakers when coin switch is triggered.	Card Swipe System Special Instructions- Pinched, broken, or disconnected wiring. Faulty Coin Mechanism. Swap coin mech to verify. Faulty I/O Aux Board	Set “Game drive voltage threshold” to 2 volts. Coin signal wires are green and black wires. Refer to wiring diagram Check connections from coin switches to I/O Aux Board. Check continuity on wires. (AACBL4A-DOOR, AACE9610) Replace coin mech if faulty. Replace I/O Aux Board . (AACB9601)
Tickets do not dispense.	Ticket tray empty due to faulty low ticket switch or broken/ loose wires. Switch stuck or switch wire bent out of position. Faulty cable to dispenser. Dirty opto-sensor or paper dust buildup in ticket dispenser Notch on tickets too shallow. Ticket dispenser faulty. Main circuit board malfunction.	Fill ticket tray. Replace low ticket switch(AASW200). Repair wiring. Clean ticket tray of dirt, loose tickets or debris. Bend switch wire to correct position under tickets. Check wiring continuity from dispenser to I/O Aux Board (AACE3949, AACE9610) Check for pinched, broken or disconnected wires. Replace as necessary. Clean with compressed air and if necessary wipe sensor with isopropyl alcohol on a cotton swab. Flip tickets and load upside-down to have large cut notch toward opto sensor. Replace dispenser with spare working dispenser (A5TD1) Replace main board if possible to isolate the problem to the I/O Aux Board. (AACB9601)
Tickets dispensing all the time.	Ticket enable signal comes from the Rasp Pi Main Board	Replace Rasp Pi Board. (AAMBRPI-JM)
Wrong number of tickets dispensed.	Ticket Pattern set wrong. Sensor Issue Spring Tension Dirty opto-sensor on ticket dispenser. Notch on tickets cut too shallow. Faulty ticket dispenser. Main circuit board malfunction.	Enter “Payout Settings” menu and verify correct settings for Ticket Pattern Refer to “Wheel Does Not Score Properly” section. If the brake spring is too loose, the wheel may rock back-ward and confuse the sensor and score wrong. Clean with compressed air or wipe with isopropyl alcohol on a cotton swab. Flip tickets and load upside-down to have large cut notch toward opto sensor. Replace with spare working dispenser (A5TD1). Replace main board if possible to isolate the problem to faulty I/O Aux Board. (AACB9601)
Low tickets	Stack of tickets not resting properly on low ticket switch. Faulty switch. Faulty wire or connection. Faulty I/O Aux Board	Adjust stack of tickets so they hold both the switch actuators down. Replace low ticket switch. (AASW200) Check for proper connection from switch to main board. Check continuity. (AACE3949, AACE9610) Replace I/O Aux Board. (AACB9601)

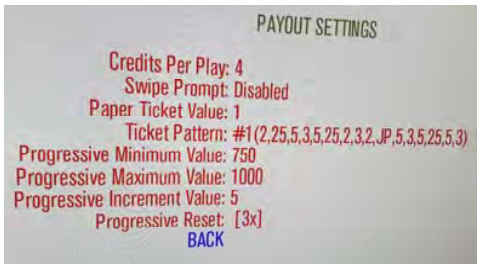
TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
Wheel does not Spin	Solenoid not getting power	Check for 12 volts DC at solenoid. The game must be coined up, or enter diagnostic menu and select “Toggle Handle Solenoid” so 12 volts is supplied to solenoid.
	Mechanical issue with linkages inside cabinet.	Inspect bushing and linkage arms from the handle to the solenoid assembly. The assembly should pivot and move at all times, and only turn the wheel when 12 VDC is applied to the solenoid.
	Pinched, broken, or disconnected wiring	Check connections from menu buttons to I/O Aux Board. Check continuity on wires. (AASO9600, AACE9604)
	Faulty Solenoid Assy.	Replace solenoid assembly. (AASO9600)
	Faulty I/O Aux Board.	Replace I/O Aux Board. (AACB9601)
Wheel spins all the time	Mechanical issue on solenoid assembly.	Inspect solenoid assembly and ensure the springs keep the toggle away from the wheel when voltage is not applied.
	Solenoid receiving 12 VDC all of the time.	Faulty I/O Aux Board. Replace I/O Aux Board. (AACB9601)
No Audio or Loud Audio Sound originates from TV and goes to speakers.	Volume too low.	Increase the volume by pressing Menu button, go to “Volume & Attract Settings” and increase Attract volume, Game Volume & Jackpot Volume
	Sound has static.	Use remote control and turn the volume down on the TV.
	Loose wire.	Check audio cable connections from TV through audio amplifier board to speakers. (A5CEAU010, A5CE2300, AACE9600, AACE8811)
	No 12 VDC power to Audio Amplifier board.	Check 12 VDC power in on cable AACE9601
	Use MP3 or Phone to isolate problem.	Unplug phono jack from audio filter and plug into the MP3 or phone. Then the sound from your device will play through the game speakers.
Dollar Bill Acceptor not func-tioning.	Ensure bill acceptor has 110 Volts AC.	Acceptor should cycle stacker at game power up. If not, check cable connections to power strip. **Caution – 110 Volts AC**
	Dirt or debris in acceptor slot.	Clean with bill reader cleaning card. (A5CC9000)
	Ensure acceptor dipswitch is set to “always enable”	There are dips on side of acceptor. Set to “always enable” (not harness enable)
	Pinched, broken, or disconnected wiring.	Check wiring from bill acceptor to main board. Repair or replace wiring harness. (AACE9623)
	Bill acceptor problem.	Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.

TROUBLE SHOOTING GUIDE

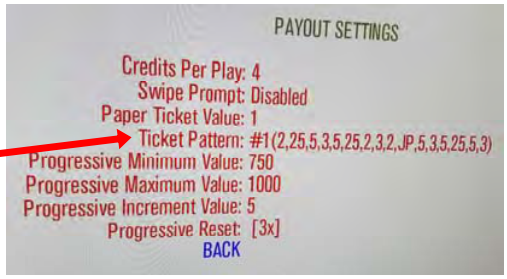
Problem	Probable Cause	Remedy
Monitor not working. Power down, wait **5 minutes** and power up again.	Monitor shows “No Signal Detected”	Faulty SD card. Reseat SD Card Replace if needed. (AASD0008A) Small power connector unplugged on Main Board Replace power supply if needed (A5PS9600) Monitor HDMI cable unplugged. Faulty main board - Replace main board. (AAMBRPI-JM)  AAMBRPI-JM Rasp Pi Main Board
	Monitor has nothing at all on power up.	Power cable unplugged from monitor. TV is off. Faulty monitor.	Ensure power is plugged into back of monitor, down to power strip. Use remote control to turn TV on. Replace monitor. (A5MO0032 or A5MO3200)
	Error on screen at power up. Re-Boot game to see if problem still exists.	Check fan on power supply to make sure it is turning. Low Power message on screen means the Ras Pi board is not getting 5 V power in. Faulty main board	Refer to Power Supply Diagnostics. Replace power Supply AAPS1013-JM if needed. Rasp Pi Main Board is not getting 5 Volts DC power in. Check A5PS9600 plugged into power strip. Replace main board. (AAMBRPI-JM)
Game not booting up.	Monitor shows some boot wording, but then nothing else Pinched, broken, or disconnected wiring Faulty main board	Check power supply to ensure 12 volts to main boards. Ensure there are 2 plugs from powers supply into the Aux Board. (AACB9601) Replace main board. (AAMBRPI-JM)

TROUBLE SHOOTING GUIDE

Problem	Probable Cause	Remedy
Marquee Jackpot Display not working	Refer to wiring diagram - ”Marquee & 12 V Wiring” 5 Volt DC power In is missing. Communication cable issue. Pinched, broken, or disconnected wiring Faulty board.	Jackpot display receives signals and 5 Volt DC power in from Display Driver Board. Display Driver board provides power to, and receives signals from Rasp Pi Marquee Board. Check cables from power supply to displays. (AACE9608) Check ribbon cables from display driver to display. (AACE9620) Check ribbon cables from display driver to Ras Pi Board (A5CBL-RBN40-1) Check power cable from Driver Board to display. (AACE9609) It could be any of the 2 circuit boards in the system: Display Board (A5LD1052) Display Driver Board (AACB9603) Rasp Pi Marquee Board (AAMBRPI-JM-M)
Marquee Jackpot not incrementing. **Jackpot will increment when the game is over.**	Communication network cable issue. 	Ensure the Network cable is connected from front Rasp Pi board to the marquee Rasp Pi Board. (A5CORD96) Enter the “Payout Settings” menu and ensure the Minimum value and Maximum value is set correctly. If the game is at the maximum value, it will not increment higher. 
Menu Buttons do not work.	Swap connectors at the 2 buttons Pinched, broken, or disconnected wiring I/O Aux Board faulty.	Replace button if problem stays with button.(AAPB2700) Inspect crimp to ensure good connection. Check connections from menu buttons to main board. Check continuity on AAPB2700, AACE9602 Replace I/O Aux Board. (AACB9601)
Meters do not work Game counter clicks at start of each game. Ticket counter clicks as tickets come out of game.	The 2 crimped wires may be faulty Pinched, broken, or disconnected wiring I/O Aux Board faulty.	Inspect crimps on AACO1020 to ensure good connection. Check connections from counters to main board. Check continuity on wires.(AACO1020, AACE9602) Replace I/O Aux Board. (AACB9601)

WHEEL NOT SCORING PROPERLY

The game determines the score by:
1.) Ticket pattern selected in the menu.
2.) Reading 2 sensors that are watching the wheel spin.



How to diagnose:

1.) Ticket pattern selected in the menu.

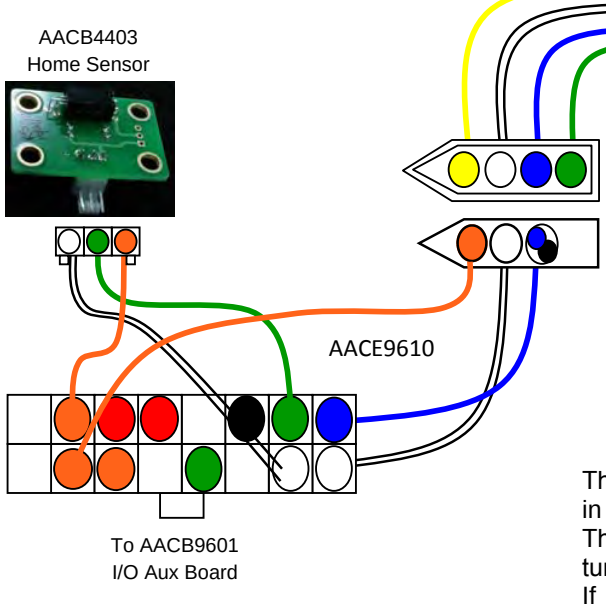
Enter “Payout Settings” menu and verify Ticket Pattern set.
Default pattern is # 6
It will show you the numbers that are on the wheel.
If your numbers are different, then change ticket pattern selection to the one that matches your wheel.

2.) Reading 2 sensors that are watching the wheel spin.

Home Sensor:
This sensor watches a silver tab that is mounted to the side of the wheel.
The tab is reflective and should be 1/2 inch away from the sensor.

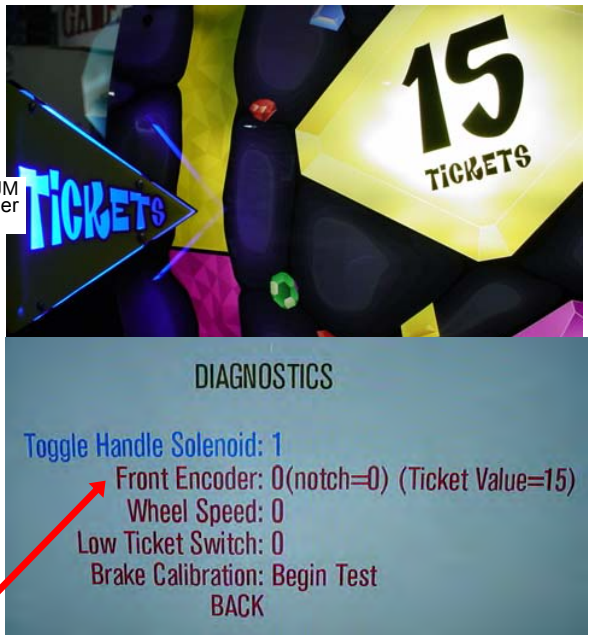
Between Green and Orange wires = 12 Volts DC input voltage all the time.

Between White and Green wires =3.3 volts normally Drops to 0 volts when in front of silver tab. Make sure it drops all the way to zero.



Encoder Sensor:
This sensor reads the notches in the side of the wheel.
It is located behind the “Ticket Arrow”

Note: Make sure the side plexi is not bending up and interfering with the sensor.

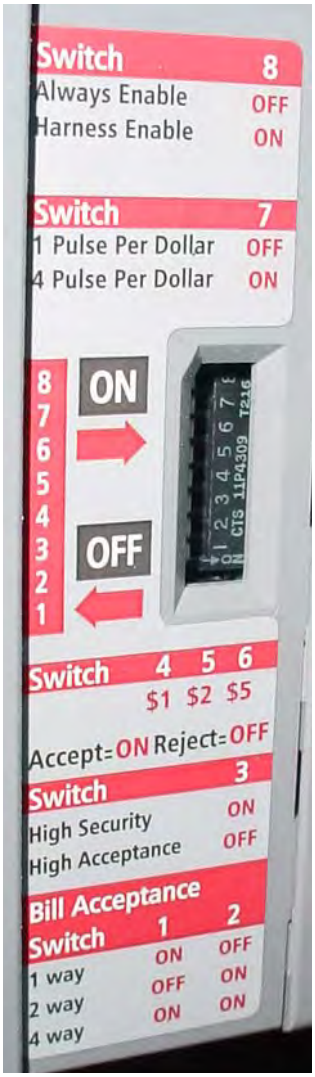


This Encoder Sensor (AACB8852-JM) will show results in the diagnostic menu.
The “Front Encoder” value will go from 0 to 20 as you turn the wheel downward.
If it does not go to 0 after 20, then the Home Sensor AACB4403) is dirty or faulty.

BILL ACCEPTOR DIAGNOSTICS

Note: There are many different models and brands of Bill Acceptors that are used on redemption games. Your Bill Acceptor may differ from the unit shown.

Standard DBA is MEI # AE2451-U5E Part # A5AC9091

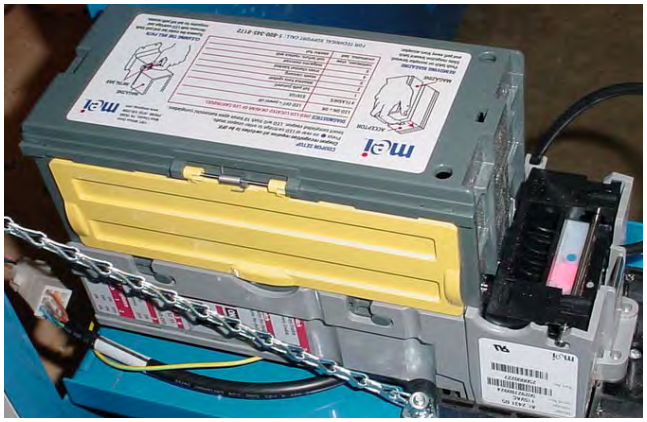


Determine if Bill Acceptor has power:

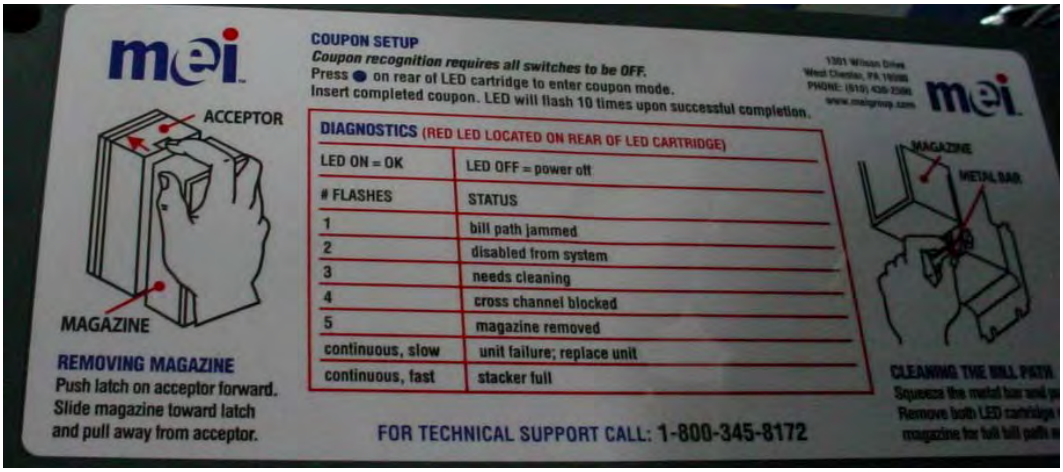
Turn game ON—The bill acceptor should make noise as stacker cycles and green lights on outside bezel should flash.

If NO power:

Use meter to measure 110 AC voltage at cable going into Bill Acceptor from power strip.



ERROR CODES



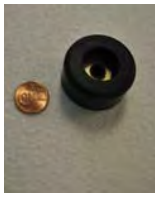
PARTS LIST

PART #	DESCRIPTION
A5CB8020	Cash Box
W5TM4000	13/16 Black T-Molding
A5PICZ001	Bow Tie Fastener (Long Wheel Link to Solenoid)
A5BURU040	Rubber Bumper Inside of A5BURU075
A5BURU050	Rubber Bumper For Handle Pivot
A5BURU075	Rubber Bumper For Cushion of Handle
W5HG1065	Single Bend Hinge
AACO1020	Counters
AASW200	Low Ticket Switch
AABK1013	Push Buttons/Counter Bracket with Decal
A5CA1005	Caster
A5EB9000	Electrical Box
A5FI9010	Inline Filter
A5SP5021	Compression Spring
A5LK2000	Lock (631)
A5LK5002	Lock with keys, 7/8", C15 Key Code
A5EX9600	Art Holder Plastic
A5EX9601	Wheel Spacer Plastic
A5LI0003	Cabinet Light Bulbs (5 Per Game)
AALIHL110	Light Holder Assembly
A5TT4101	Right Ticket Tray
A5BK9999	Power Supply Mounting Bracket
A5PL9097	Blanking Plate (Replaces Bill Acceptor)
AAGU9600	Left Side Guard Assembly
AAGU9601	Right Side Guard Assembly
A5ME4156	Metal Short Wheel Link
A5ME4157	Metal Rocker Arm Bracket
A5ME4159	Metal Top Front Bracket (With Speaker Holes)
A5ME4161	Metal Handle Pivot Assembly
A5ME4169	Metal Bottom Front Guard
A5ME4171	Metal T-Handle
A5ME4172	Metal Handle Bracket
A5ME4174	Metal Rocker Arm
A5ME4177	Metal Front Glass Brace
A5ME4178	Metal Rocker Shaft
A5ME4180	Metal Right Ticket Tray Bracket
A5ME4181	Metal Bottom Front Guard
A5ME4182	Metal Coin Box Guide
A5ME4183	Metal Right Front Door
A5ME4430	Metal Slip Clutch Bracket
A5ME8818	Metal Pointer Cover Bracket
A5ME8819	Metal Pointer Sensor Bracket
A5ME9605	Metal Long Wheel Link
A5ME9610	Metal Wheel Shaft
A5ME9611	Metal Bottom Rail
A5ME9615	Metal Left Window Rail
A5ME9616	Metal Front Top Window Bracket
A5ME9620	Metal Left Front Door
A5ME9621	Metal Back Top Window Bracket
A5ME9622	Metal Arrow
A5ME9624	Metal Wheel Mounting Brcket
A5ME9626	Metal Wheel Solenoid Bracket
A5ME9628	Metal Inside Light Bracket
A5ME9629	Metal Right Window Rail
A5ME9630	Metal Left Marquee Mount
A5ME9631	Metal Right Marquee Mount

PART #	DESCRIPTION
A5CORD36	8' HDMI Cord
A5CORD96	Cat 6 Ethernet Cord
A5CE2300	Audio Isolator Cable
A5CEAU010	Audio Stereo Cable
AACE1710	Ground Cable
AACE1715	Ground Cable
AACE3219	Ticket Display to Low Ticket Switch
AACE9418	Display Jumper Cable
AACE9600	Speaker Cable Assembly
AACE9601	Power Jumper AudioCable
AACE9602	Button &Counter Cable
AACE9604	Solenoid Jumper
AACE9605	Line Filter Cable
AACE9606	Outlet Strip Cable
AACE9608	Display Light Sign Power
AACE9609	Marquee Display Power Jumper
AACE9610	Sensor Main Cable
AACE9611	Side Wing Light Cables
AACE9612	Marquee LED Cable
AACE9613	Arrow Light Cable
AACE9615	Side Light Jumper
AACE9616	Under game light
AACE9619	ACLight Power Cable
AACE9620	Ribbon to Display Cable
AACE9621	Floor Light Jumper
AACE9624	Front Weldment Ground Cable
AACE9625	Ticker Tray Jumper
AACE9626	Communication Cable
AACE9627	Power Cable
AAPB2700	Push Button
AACBL4A-DOORA	Door Cable
AACE8811	Speaker Assembly
AABK9600	Brake Assembly
AAAR9600	Arrow Assembly With Metal/Sensor
AASO9600	Solenoid Assembly
A5PS9600	Power Supply That Runs Raspberry Pie
AAPS1013-JM	Game Power Supply
A5TD1	Ticket Dispenser
A5VF4153	Vacuum Form Black Handle Covers
WARR0009-JMP	Set of 3 Wire Covers
WARR0002-JMP	Side Window
AAAC9600	Front Window Assembly
A5MO0032	32" Monitor
A5LD1052	Display Board
A5CB9600	Audio Amplifier Board
AACB9601	Game Aux Board
AACB9603	Marquee Aux Board/Driver Board
AACB4403	Home Sensor
AACB8852-JM	Arrow Sensor With Cable
AASD0008A	Programmed SD Card (No Discount)
AAMBRPI-JM	Raspberry Pi Main Board W Software
AAMBPRI-JM-M	Raspberry Pi Main Board W Software for Marquee

PARTS PICTURES


A5BK9999


A5BURU040


A5BURU050


A5BURU075


A5CA1005


A5CB8020


A5CE2300


A5CEAU010

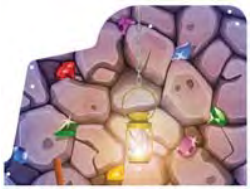

A5CORD5


A5CORD36


A5CORD96


A5DE9600


A5DE9601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A5DE9603


A5DE9604


A5DE9605


A5DE9606

A5DE9607

A5DE9614

A5DE9615

A5DE9616

A5DE9617

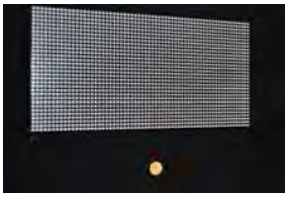
A5DE9617-P


A5DE9618


A5DE9619


A5EX9600


A5EX9601


A5LD1052


A5LI0003


A5ME4178


A5EB9000


A5FI9010


A5LK2000


A5LK5002


A5ME4156

PARTS PICTURES CONT.

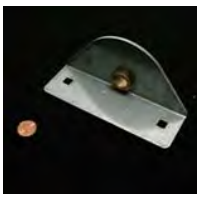

A5ME4157


A5ME4159


A5ME4161


A5ME4169


A5ME4171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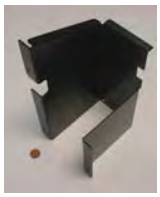
A5ME4174


A5ME4177


A5ME4180


A5ME4181


A5ME8818

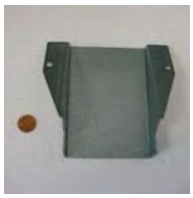

A5ME8819


A5ME9610


A5ME9622

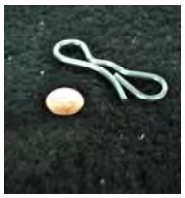

A5ME9624


A5ME9628


A5ME4182


A5ME4183


A5ME4430


A5PICZ001


A5PL9097


A5SP5021


A5VF4153


A5TT4101


AABK1013


AACBL4A-DOOR


AACE3219


AACE8811


AACE9600


AACE9601


AACE9602


AACE9604


AACE9605


AACE9606


AACE9608


AACE9609


AACE9610


AACE9611


AACE9612


AACE9613

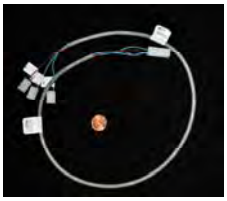
AACE9615

PARTS PICTURES CONT.

AACE9616

AACE9619

AACE9620



AACE9621

AACE9623

AACE9624

AACO1020

AALIHL110

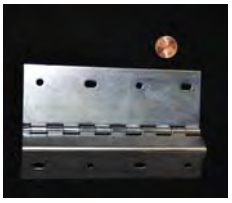
AAPB2700

AAPS1013-JM

AASW200

A5TD1

W5TM4000



W5HG1065

AAMBRPI-JM

AAMBRPPI-JM-M

AASO9600

A5CB9600

AACB4403

AACB8852--JM

AACB9601

AACB9603

DECAL DIAGRAM

NOT VISIBLE:
A5DE9600 (QTY 1) Left Top Cab
A5DE9601 (QTY 1) Left Bottom Cab
A5DE9606 Full Side Wheel (QTY 1) (Same as above)
A5DE9616 Left Side Guard (QTY 1)
A5DE9610 (QTY 1) Jackpot Jewel
A5DE9608 Yellow Purple Jewels (QTY 1) (Same as above)
A5DE9609 Green Purple Jewels (QTY 1) (Same as above)
A5DE9611 Large Value Jewel (QTY 2) (Same as above)

MAINTENANCE LOG

If repairs are necessary, it is good practice to keep a log of repairs done and parts ordered. The chart below will assist you in tracking your game's maintenance.

DATE	MAINTENANCE PERFORMED	PARTS ORDERED	INITIALS

TECHNICAL SUPPORT

Excellent customer service is very important to Bay Tek Games!
We know that keeping your games in great operating condition is important to your business. When you need us, we are here to help. You can call us for free technical assistance, and you can count on us to have parts on-hand to support your game. We offer options that fit your needs.

Electronics / Circuit Boards - Repair Options

Repair & Return – If you have Circuit Board issues with your Bay Tek game, you can send the board to us and we'll repair it right away. Most items sent to us are repaired and returned to you within two days. This option is your best value as we offer this fast turn-around service at the most reasonable price.

Advance Replacement – If you have Circuit Board issues with your Bay Tek game, but you don't have time to send in your board in for repair, give us a call and ask for an Advance Replacement. We'll send you a replacement board that same day (pending availability). When you get your new board, just repackage the defective board in the same box and send it back to us. We make it easy by including a UPS Return Shipping label for you to put on the box (not available for international shipments). This is your best option when you need to get your game up and running as quickly as possible!

Spare Parts – Take matters into your own hands and purchase new spare Circuit Boards for your Bay Tek games. Many of our games share the same main-board electronics. This means you can buy one set of spare electronics to support many of your Bay Tek games. Spare boards allow you to get your game up and running the quickest and provide you a valuable troubleshooting option. Call our technicians to get recommendations for what you should keep on hand for spare parts!

Technical Support:

"You" are the best tool for troubleshooting! Your abilities to understand the game and your skills to repair the game are invaluable to us! If you need help, you know you can call us. It's not easy to diagnose a game remotely by phone, but our technicians do a great job. They'll need your help to perform some troubleshooting steps and convey to them exactly what's happening with your game.

Returns, Credits, & Fees:

NOTICE! ALL ITEMS being sent to Bay Tek Games for repair or return, etc. require prior Return Authorization! Bay Tek Games will provide a Product Return Form with an authorizing Ticket Number for each item to be returned. Please be certain to include this document with all shipments!

Late Fees and Non-Return Fees - Advance Replacement and Warranty Replacement items require the defective items to be returned by Bay Tek games promptly to avoid Late Fees. We expect items to be returned with 10 working days. Late fees are invoiced monthly. Late fees are non-refundable under any circumstance! Any item not returned within 90 days will be invoiced in full as a replacement part.

Bench Fees - Bench fees will apply for each electronic item returned to Bay Tek Games (this includes unused Advance Replacement items). This charge covers our cost to inspect, evaluate and retest each item. Please note that returned items that do not pas our tests will be charged accordingly as replacement items or advance replacements.

Restocking Fees - Unused items returned for credit will be credited minus a restocking fee. Items must be returned with in 30 days of purchase in order to qualify for any credit amount. No shipping charges will be credited.

WARRANTY

Bay Tek Games warrants to the original purchaser that all game components will be free of defects in workmanship and materials for a period of 6 months from the date of purchase. If you fill out the registration card in the cashbox of the game, Bay Tek will add another 3 months to your warranty, free of charge.

Bay Tek Games will, without charge, repair or replace defective component parts upon notification to the parts/service department while the game is under warranty.

Warranty replacement parts will be shipped immediately, via ground service, along with a Product Return Form for the return of defective parts.

Defective parts must be shipped back to Bay Tek Games unless otherwise instructed. Items not returned to Bay Tek Games will be invoiced as replacement parts.

This warranty does not apply in the event of any misuse or abuse to the product, or as a result of any unauthorized repairs or alterations. The warranty does not apply if any serial number decal is altered, defaced, or removed from its original position.

ATTENTION

In order to maintain the safety & compliance certifications of this game, ONLY approved parts may be used. For approved replacement parts, refer to the parts list in this manual.

Should you need your game serviced, determine the serial number from the decal placed on the front of this manual, or locate it on the back of the game. Then contact our Service Department at: 920.822.3951 or e-mail: service@baytekgames.com

NON-WARRANTY

Options and estimated charges will be provided to you for your approval.
Please remember that any items being sent to Bay Tek Games must include prior return authorization from our Parts & Service Department.
This approval will include a Product Return Form which is required to be included with any incoming shipments. Repaired parts will be shipped back using the same method in which they were received.
Repairs are warranted for 30 days from the date of return shipment.