

# SERVICE MANUAL



**BAY★TEK**  
entertainment

**PLACE SERIAL NUMBER  
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# FACTORY CONTACT INFORMATION



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All games are proudly manufactured at our factory in Pulaski, Wisconsin, USA

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# WELCOME TO HYPERNOVA

## Congratulations on your purchase!

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 product as much as we do!

*Your Friends at Bay Tek Entertainment*

## GAME INSPECTION

Please inspect the game for any damaged, loose, or missing parts.

If damage is found, please contact your freight carrier first.  
Then, contact Bay Tek Entertainments' Service Department at  
(920) 822-3951 Ext. 1102  
Or email us at [service@baytekent.com](mailto:service@baytekent.com) for further assistance.

# GAME SPECIFICATIONS

## WEIGHT

NET WEIGHT	773 lbs	351 kg
------------	---------	--------

## GAME DIMENSIONS

WIDTH	33 1/2"	
DEPTH	74 1/2"	
HEIGHT	Variable (104 3/4" to 143")	

## OPERATING TEMPERATURE

FAHRENHEIT	45 - 80 F
CELSIUS	7.2 - 26.7 C

## SHIPPING DIMENSIONS

Upper Cabinet	50"L x 48"D x 93"H	450 lbs.
Lower Cabinet	80"L x 36"D x 82"H	440 lbs.
Marquee Sign (Optional)	50"L x 48"D x 31"H	135 lbs

## POWER REQUIREMENTS

INPUT VOLTAGE	110-120 VAC	220-240 VAC
INPUT FREQUENCY	60 Hz	50-60 Hz

## MAX OPERATING CURRENT

3.25 AMPS @ 115 VAC
1.625 AMPS @ 230 VAC

**Note:**

An optional Incredible Marquee can be added.

Height can be adjusted from 143" to 150".

For height restricted locations:  
The marquee artwork can be removed for a game height of 104 3/4"



# SAFETY PRECAUTIONS

<b>NOTICE</b>
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.
<b>DANGER</b>
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.
<b>WARNING</b>
Use of flammable substances can cause sever burns or serious injury. Always use NON-FLAMMABLE solvents for cleaning. DO NOT use gasoline kerosene or thinners.
<b>CAUTION</b>
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.
<b>ATTENTION</b>
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. <b>A shielded power cable must be used for the game to retain EU/EMC compliance.</b>
<b>IN CASE OF EMERGENCY</b>
UNPLUG THE POWER CORD. The power cord must be accessible at all times in case of an emergency.

# ADJUSTABLE MARQUEE

The optional Incredible Marquee itself is adjustable.

Game height with the marquee can be adjusted from 143" to 150".

Note: There are options available for low ceiling height, refer to previous page for options.

143" - 150"  
364 cm - 381 cm



# HYPERNOVA GAME SETUP

The game will arrive on 2 pallets. Please inspect the pallet for shipping damage and report immediately to the freight company if any damage is found.



## Important:

**Portions of this game are heavy bulky, and large. Assembly requires 2-3 people to lift heavy sections of the cabinet, and ladders that are tall, safe, and strong enough to position components to the top of the game.**

## Tools Needed:

1 step ladder (12-15 foot)	# 2 Square bit	5/32" Allen wrench	Philips Screwdriver
9/16" socket	3 people	1/4" Allen wrench	
7/16" wrench or socket			

**Note:** Refer to YouTube video at <https://youtu.be/4pK3kJwIOP4> for a game setup walk through.

Unbox lower cabinet and remove the keys from the front of the game.

Unlock and remove the console access door using a H95 key.

Remove the 1 front shipping bolt from the front of the cabinet using a 9/16" socket wrench. This bolt can be discarded.

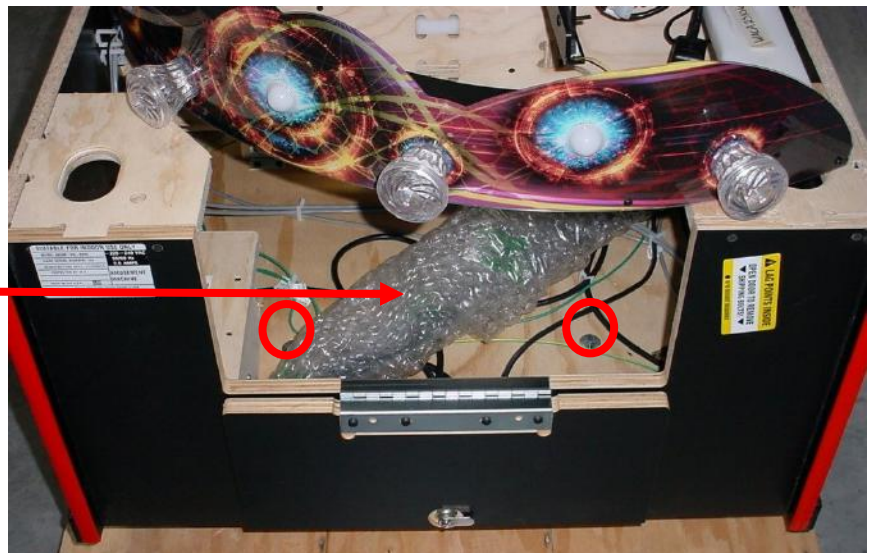


From the rear door, remove the 2 rear shipping bolts from the back of the cabinet using a 9/16" socket wrench.

These bolts can also be discarded.

Remove the propeller from the bottom of the game and unwrap. Save for later installation.

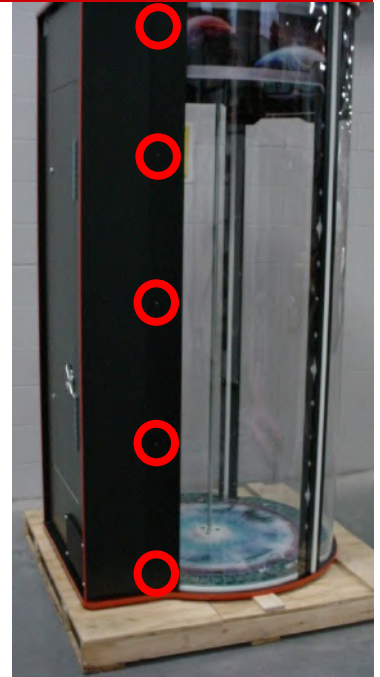
Remove the lower cabinet from the pallet.



# HYPERNOVA GAME SETUP

Unbox upper cabinet.

Remove the 5 Allen bolts from 1 side plexi window using a 5/32" Allen wrench. Save for later installation.



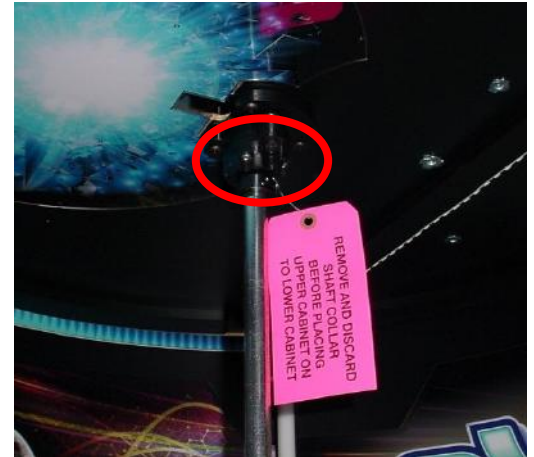
Remove the 2 shipping bolts from the bottom of upper cabinet using a 9/16" socket. These bolts can be discarded.



Remove the shaft collar from the top inside upper cabinet using a 5/32" Allen wrench.



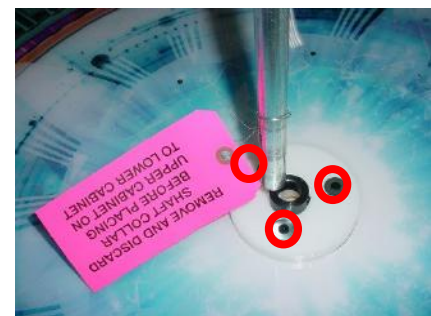
Slide the shaft collar and warning tag down the shaft to the bottom of the upper cabinet.



Lift the shaft upward and remove the collar and warning tag. These can be discarded, they are only used during shipping.

Remove the white plastic plug from the bottom of the upper cabinet by removing the 3 screws using a # 2 square bit.

This white plastic piece can be discarded. It is only used during shipping.



Before removing the upper cabinet from the pallet—re-install one of the screws back into the side plexi to keep the plexi side closed.

Remove the upper cabinet from the pallet and lay down on it's back near the game's final position.

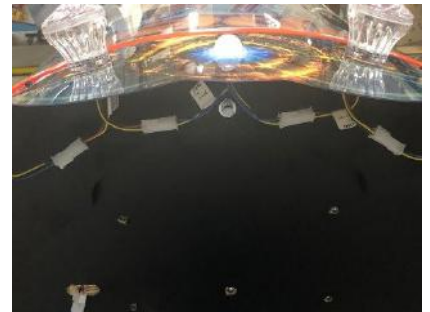
# HYPERNOVA GAME SETUP

Remove the crown from the lower cabinet by removing the 2 shipping screws using a # 2 square bit.

Since the top of the game is laying on its back, you can now install the crown to the top of the game easily.

Attach the crown to the top of the game by installing 3 of the 1/4" x 20 bolts, washer, & split washer with a 7/16" socket.

Plug the CE23041 cable into the crown lighting CE23028



If game is equipped with the optional marquee sign, this will now be removed from the lower cabinet and installed on the upper cabinet while it is still laying on it's back.

Remove the 2 nuts holding the marquee in place using a 7/16" socket and bring marquee to the top of the upper section. (which is still laying on its back)

Attach the optional large marquee (if purchased) to the top of the game by installing 4 of the 1/4" x 20 bolts, washer, & split washer with a 7/16" socket.

Plug the 4 cables into the marquee:

CE23026 to CE23063

CE23031 to CE23027

CE23032 to CE23020

AC power to AC plug

## Important!

Remove the small piece of wood and the white plastic piece from the lower cabinet. The small piece of wood can be discarded.

Install the white plastic piece onto the rear of the lower cabinet to assist as a pivot point when raising the upper cabinet up.

The top of the white plastic piece should be flush with the top wood of the lower cabinet. Install using the 4 screws removed earlier.

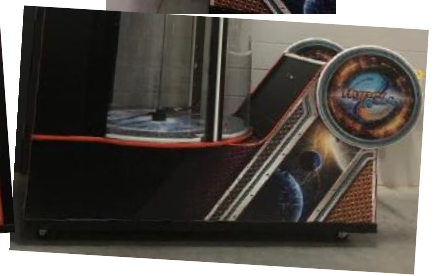


# HYPERNOVA GAME SETUP

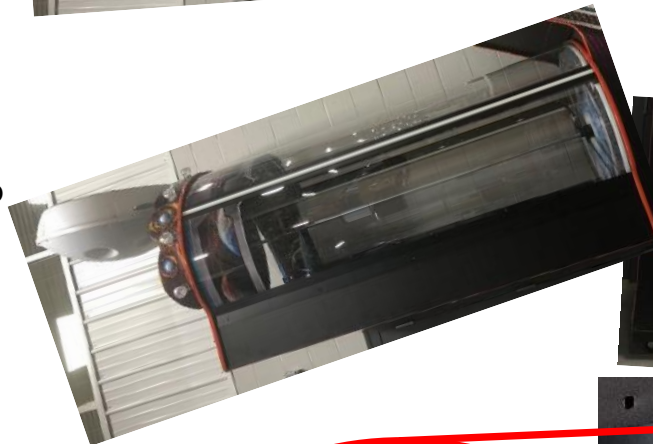
The upper cabinet will now be complete and laying down on it's back. To assembly the game, the assembled upper cabinet will be set up on the edge of the lower cabinet then lifted up into position.

Push the lower cabinet up against the wall near game final position. This will prevent the lower cabinet from moving away while the upper cabinet is lifted and stood upright on top of the lower cabinet.

With 2 people - position the upper cabinet near the lower cabinet.



Raise the lower section of the upper cabinet up on top of the lower cabinet as shown:



The upper cabinet must rest on the rear edge of the cabinet as shown.



Another view of it resting on the white plastic.

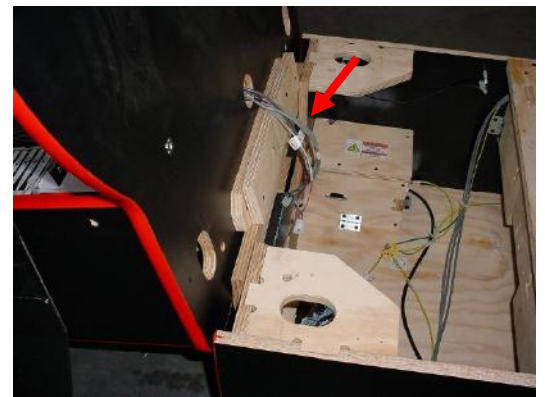


# HYPERNOVA GAME SETUP

The top end of the upper cabinet will be resting on the floor as shown.



Ensure the cables are clear of any pinch points before the big lift.



**Using 3 people** - Lift the top of the upper cabinet and raise into position on top of lower cabinet.

Once upright, the drive shaft will be in the center of the hole in the bottom of the upper section.

Slide upper section back if needed to allow drive shaft to protrude from the hole.



# HYPERNOVA GAME SETUP

Insert 4 black bolts from inside the plexi down into the lower cabinet using a 1/4" Allen wrench.



Open the rear bottom door.

Reach inside rear bottom door and insert 2 bolts, washers, and split washers upward into the top cabinet. Tighten using a 3/4" socket.



Use a rag to wipe the shaft from top to bottom. Residue may have accumulated during shipping.

Lift shaft and place the propeller onto shaft.

**Be sure to install with writing up.**



The shaft is meant to be free floating. Lower shaft back down into place in the hub.

Both front rails have LED lights that can now be plugged in.

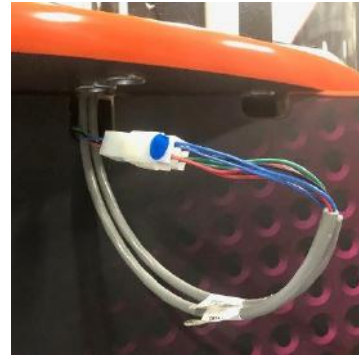
Feed the light cable down through the hole.



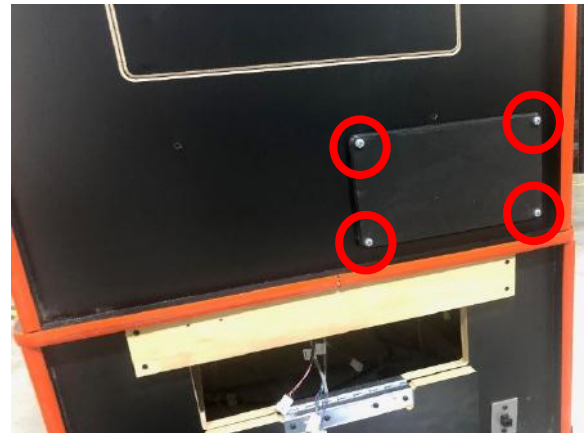
# HYPERNOVA GAME SETUP

Connect the CE23014 cable to the CE23043 cable as shown. Push the excess cable length back into the cabinet.

- Do the same to the other side.



Remove the black plastic access panel by removing the 4 screws using a Phillips screwdriver.



Reach inside and connect the 11 cables from the top section to the lower section:

CE23036 to CE23035

CE23005 to CE23004

CE23013 to CE23014

CE23012 to CE23002

CE23023 to CE23024

USB cable to USB cable

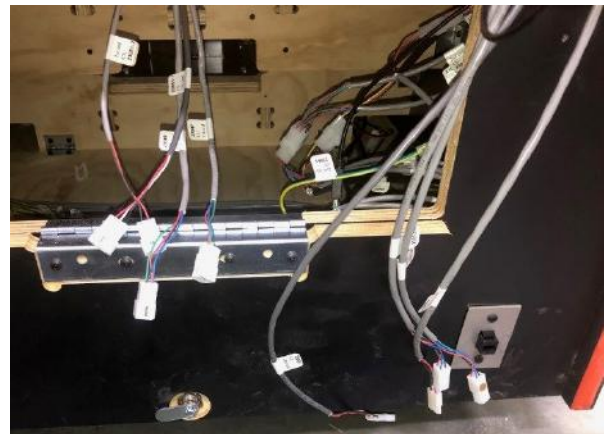
Ground Wire to Ground Wire

CE23006 to CE23051

CE23007 to CE23051

CE23013 (black connectors) to CE23049

CE23013 (gold connectors) to CE23047



Remove the white plastic piece and **store inside the cabinet** - just in case the top needs to be brought back down to move game or to gain access to lower section.



# HYPERNOVA GAME SETUP

Important! Reach into the access hole and lower the audio cable down into the bottom of the cabinet and connect to the waiting audio cable.



Re-install the 5 bolts into the plexi side panel using a 5/32" Allen wrench.



Remove the power cord from the bottom of the cabinet and feed back into the hole in the back of the cabinet or into the hole in the floor of the cabinet.



Plug the end into the "Power Box" in the bottom left of the rear of the game.



Plug the other end into a grounded outlet.

Power on game by opening the front door and turn on the rocker switch located on top of the coin box.

The game is now set up and ready for play!

Enter menu to adjust settings to your location specific price per play and ticket payout.

# CARD SWIPE SYSTEM INSTALLATION

The Hypernova game is pre-wired with a UCL (Universal Card Link) connector to accept Card Swipe systems from many different manufactures.

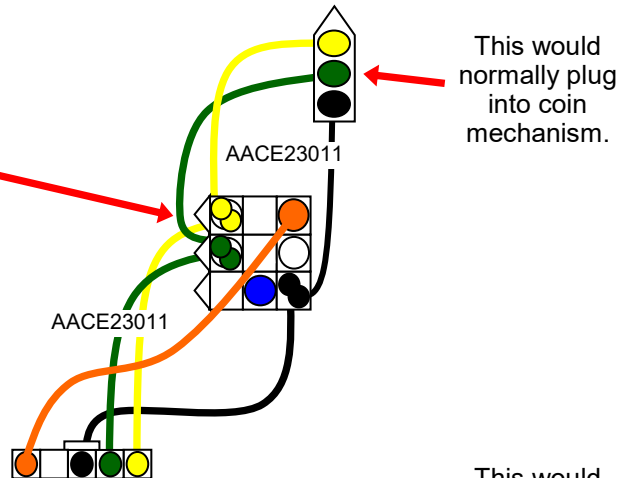
Please follow these instructions to make full use of this capability.

## Option #1:

Card swipe systems may come with a standard 9 pin Molex connector. This is the UCL connector. Simply plug this connector into your card swipe reader.

## Note:

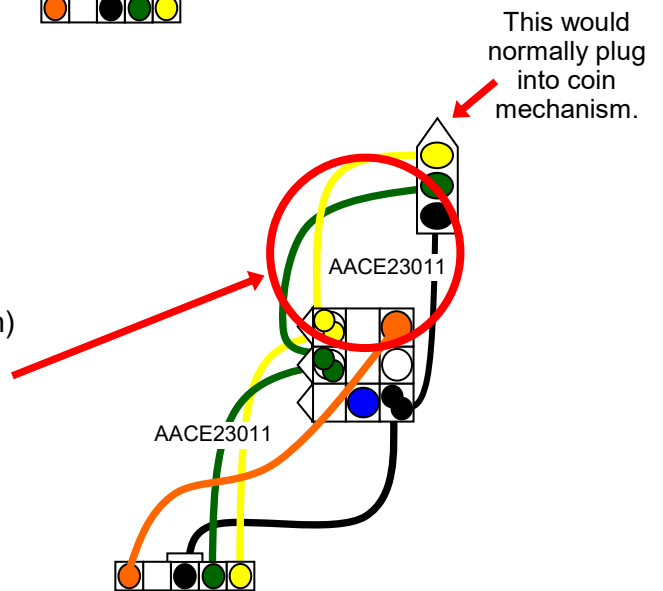
- Many card swipe systems have a voltage threshold that can be adjusted in the card swipe menu. Please set this "Game Drive Threshold" to 2 Volts.



## 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 AACE23011 harness.

Black wire is ground. (common)  
Green wire is coin signal.  
Yellow wire is +12 Volts DC



## Menu Changes

Enter menu, scroll to "Credit" Menu  
Verify "Credits" set to 1

Scroll to "Card Swipe" Menu  
Verify set to "1"

Check dipswitches on the I/O Aux Board in the front of game. Verify Dipswitch # 5 ON

# HOW TO PLAY

Players push the handle down to skillfully spin the propeller, giving it just enough force to try to land on a big bonus!

Collect tickets and play again!

## Game Theory of Operation:

The game is designed to give tickets after the player lifts, then pushes down on the plunger handle.

Upon coin up, the solenoid will engage and provide a mechanical link from the plunger handle to the propeller drive assembly.

As the plunger is pushed down, the propeller drive assembly will spin the propeller. The propeller will then rise due to the pressure difference created by the spinning airfoil.

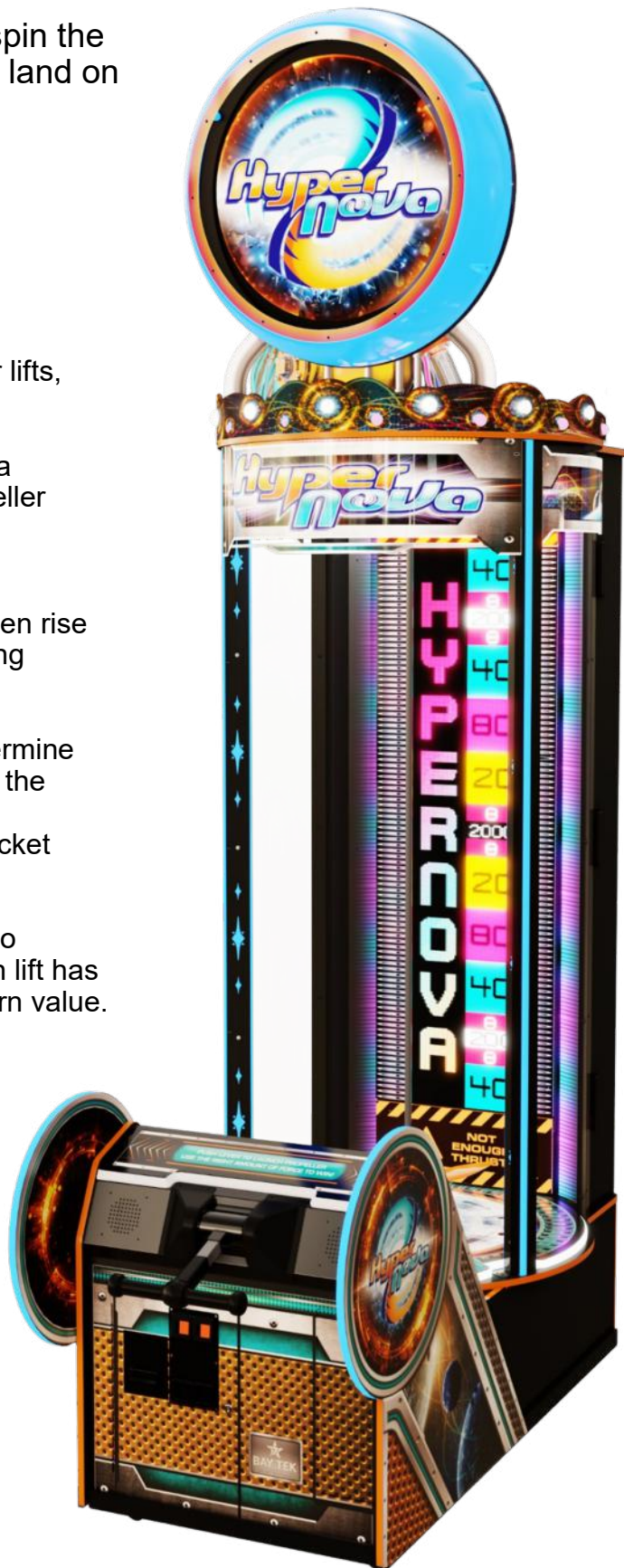
The proximity sensor in the top of the game will determine the height reached by the propeller and display it on the screen.

Tickets will then be awarded as determined by the ticket pattern.

The solenoid will stay engaged, allowing the player to plunge again to spin the propeller faster until enough lift has been created for the propeller to reach a ticket pattern value.

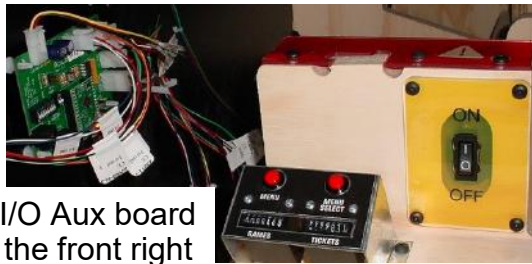
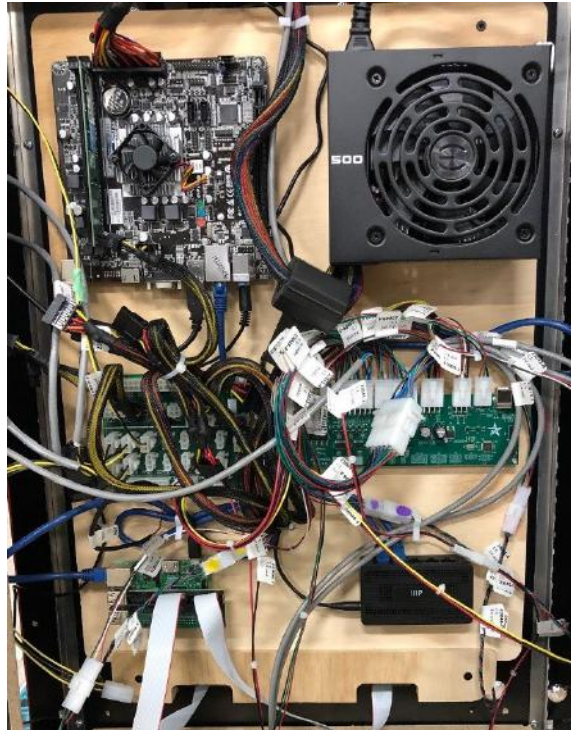
Once a ticket value has been reached, the solenoid will disengage.

If the player pushes the handle hard and spins the propeller all the way to the top, the player will receive the value shown on the top segment of the display.



# HOW TO LOCATE CIRCUIT BOARDS

Most circuit boards can be accessed from the back door of the game.



The I/O Aux board is in the front right side of cabinet.



The sound amplifier board is in the front right side of cabinet.

# AVAILABLE BLANKING PLATES



A5PL4200 DBA Plate for 12V Upstacker Bill Acceptor



A5PL9998 Plate used instead of Coin Mechanisms



A5PL8900 Plate used for Bill Validator



A5PL9995 Plate used instead of ticket dispenser

# MENU SETTINGS

Menu buttons are located inside the front door.  
 Hold the "MENU" button down to enter the menu.  
 Scroll through the options by pressing the "MENU" button.  
 Change selection with the "SELECT" button.  
 Scroll through the menu to the end to exit the menu.  
 Default settings are highlighted in yellow below.



## CLEAR CREDITS

Press the "Menu Select" button 4 times to clear credits and tickets owed.

## GAME VOLUME

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Sets the game volume on a sliding scale from 0 to 10. 0 means no volume.

## ATTRACT VOLUME

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Sets the attract volume on a sliding scale from 0 to 10. 0 means no volume.

## CREDITS

0	1	2	3	4	5	6	7	8	9	...	18	19	20
---	---	---	---	---	---	---	---	---	---	-----	----	----	----

Sets the amount of credit pulses needed to start a game.

## CARD SWIPE

0	1
---	---

"1" will show "Swipe Card to Play" verbiage on the screen. Low tickets will not show on screen.

## TIMEOUT

0	1	2	3	4	5
---	---	---	---	---	---

Amount of minutes the game will allow player to spin propeller before game ends and gives the value shown on the top segment of the display.  
 0 means the game will never timeout.

# MENU SETTINGS

## TICKET PATTERN

1	2	3	4	5	6
---	---	---	---	---	---

Sets the ticket pattern for game play. Available patterns are described below.

**PLEASE NOTE:**

The minor and major value spaces are controlled by the corresponding setting in the menu.

For example:  
In ticket pattern 1:

500 is recommended for the Major value

50 is recommended for the Minor values.

These must be configured in the menu below as these values do not automatically change when you change the ticket pattern.

	\$\$.50 Pattern	\$1.00 Pattern	\$1.50 Pattern	\$2.00 Pattern	\$2.50 Pattern	\$3.00 Pattern
	# 1	# 2	# 3	# 4	# 5	# 6
	10	20	30	40	50	60
	2	4	6	8	10	12
	500	1000	1500	2000	2500	3000
	2	4	6	8	10	12
	10	20	30	40	50	60
	20	40	60	80	100	120
	5	10	15	20	25	30
	2	4	6	8	10	12
	50	100	150	200	250	300
	2	4	6	8	10	12
	5	10	15	20	25	30
	20	40	60	80	100	120
	10	20	30	40	50	60
	2	4	6	8	10	12
	50	100	150	200	250	300
	2	4	6	8	10	12
	10	20	30	40	50	60
	10-15	30-35	45-50	60-70	80-85	95-105
	Avg Tix/ Game	Avg Tix/ Game	Avg Tix/ Game	Avg Tix/ Game	Avg Tix/ Game	Avg Tix/ Game

## MINOR VALUES

50	100	150	200	250	...	700	750	800	850	900
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Sets the 2 Minor values on the Ticket Pattern. Used for fine-tuning payout.

## MAJOR VALUES

100	200	300	400	...	1200	1300	1400	1500	1600	1700	...	5000	5100
-----	-----	-----	-----	-----	------	------	------	------	------	------	-----	------	------

Sets the 1 Major value on the Ticket Pattern. Used for fine-tuning payout.

# MENU SETTINGS

Scroll through the options by pressing the “MENU” button.

Change selection with the “SELECT” button.

Scroll through the menu to the end to exit the menu.

## GAME VERSION

1.21

## DOOR VERSION

1.5

## CB23000 VERSION

1.07

## TOTAL GAMES

Shows total games played since the last time the statistics were cleared.

## TOTAL TICKETS

Shows total tickets awarded since the last time the statistics were cleared.

## TOTAL JACKPOTS

Shows total number of large jackpot scores won since the last time the statistics were cleared.

## CLEAR STATISTICS

Press the “Menu Select” button 4 times to clear statistics.

## DIST DIAG

0

This enables the propeller solenoid and will display the height of propeller spin on the display. Values shown are height of the propeller. From 0 to 187.

# MENU SETTINGS

Scroll through the options by pressing the “MENU” button.

Change selection with the “SELECT” button.

Scroll through the menu to the end to exit the menu.

## CAL LOW

-10	-9	-8	...	-2	-1	0	1	2	...	8	9	10
-----	----	----	-----	----	----	---	---	---	-----	---	---	----

Rarely used option to fine tune the propeller location in the low section of travel.

Refer to “How to Fine Tune Propeller Calibration” section of manual.

## CAL MID

-10	-9	-8	...	-2	-1	0	1	2	...	8	9	10
-----	----	----	-----	----	----	---	---	---	-----	---	---	----

Rarely used option to fine tune the propeller location in the middle section of travel.

Refer to “How to Fine Tune Propeller Calibration” section of manual.

## CAL UPR

-10	-9	-8	...	-2	-1	0	1	2	...	8	9	10
-----	----	----	-----	----	----	---	---	---	-----	---	---	----

Rarely used option to fine tune the propeller location in the upper section of travel.

Refer to “How to Fine Tune Propeller Calibration” section of manual.

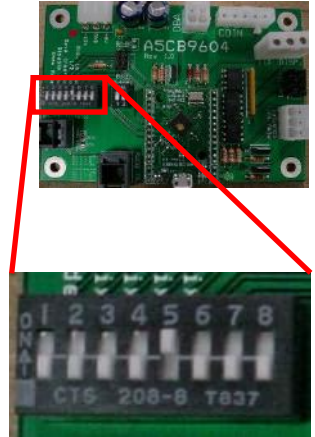
## Important !

Do not attempt to adjust any of these calibration settings without first understanding the principles of the propeller sensor.

Refer to the “How to Fine Tune Propeller Calibration” section

# DIPSWITCH SETTINGS

SWITCH	DESCRIPTION	ON	OFF
1	<b>SHOW GAME</b> Does not dispense tickets and clears all accumulated credits		X
2	<b>AMUSEMENT ONLY</b> Does not dispense tickets		X
3	<b>NJ LOCKOUT</b> Saves tickets owed and unused credits after a power loss		X
4	<b>1/2 TICKET PAYOUT</b> Dispenses 1/2 the amount of tickets as shown on screen. It will round up odd amounts of tickets		X
5	<b>DISABLES LOW TICKET INPUT</b> Disables the low ticket message on screen. This option should be enabled when using a card swipe system		X
6	<b>NOT USED</b>		
7	<b>NOT USED</b>		
8	<b>NOT USED</b>		



**Note:**  
**UP is ON**

# I/O AUX BOARD PINOUT



- = +12 VDC
- = +5 VDC
- = Ground
- = Output
- = Input

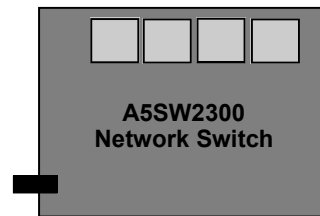
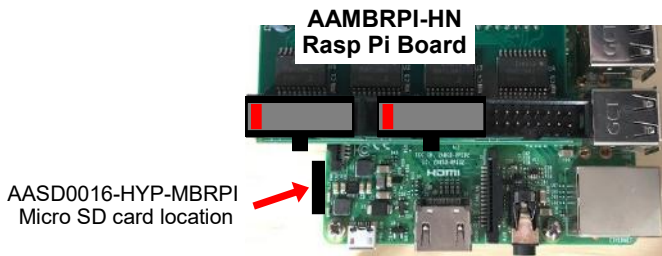
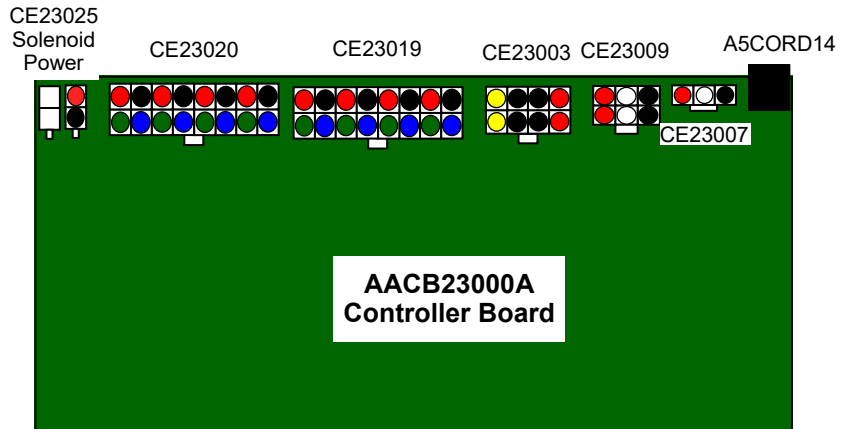
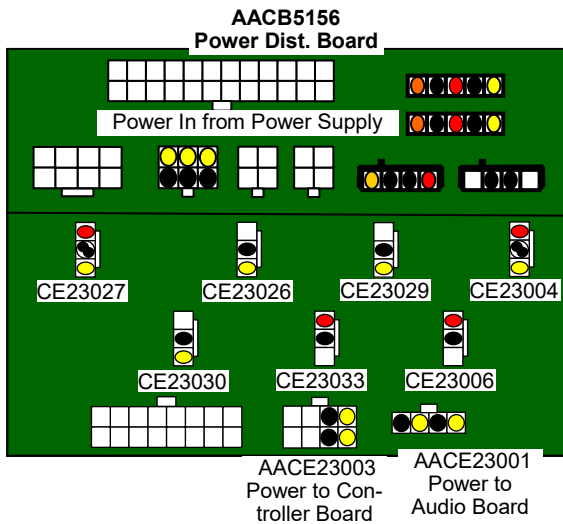
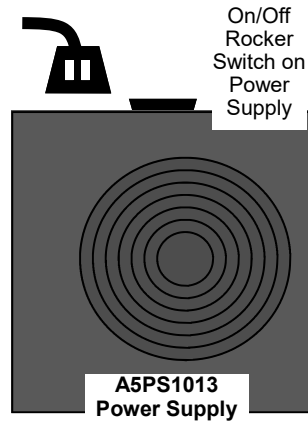
### Outputs:

- Q1 (PD1) Game counter
- Q2 (PD0) Tickets counter
- Q3 (PD6) Coin Lockout
- PE6 Ticket Enable

### Inputs:

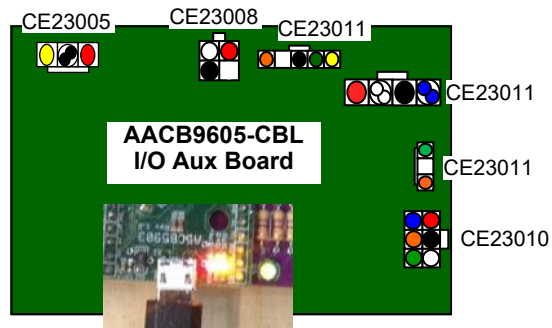
- PD4 Menu Button
- PC6 Select Button
- PD7 Ticket Notch
- PB4 Coin In
- PB5 DBA In
- D15 (A1) Low Ticket Switch Input

# CIRCUIT BOARD LAYOUT



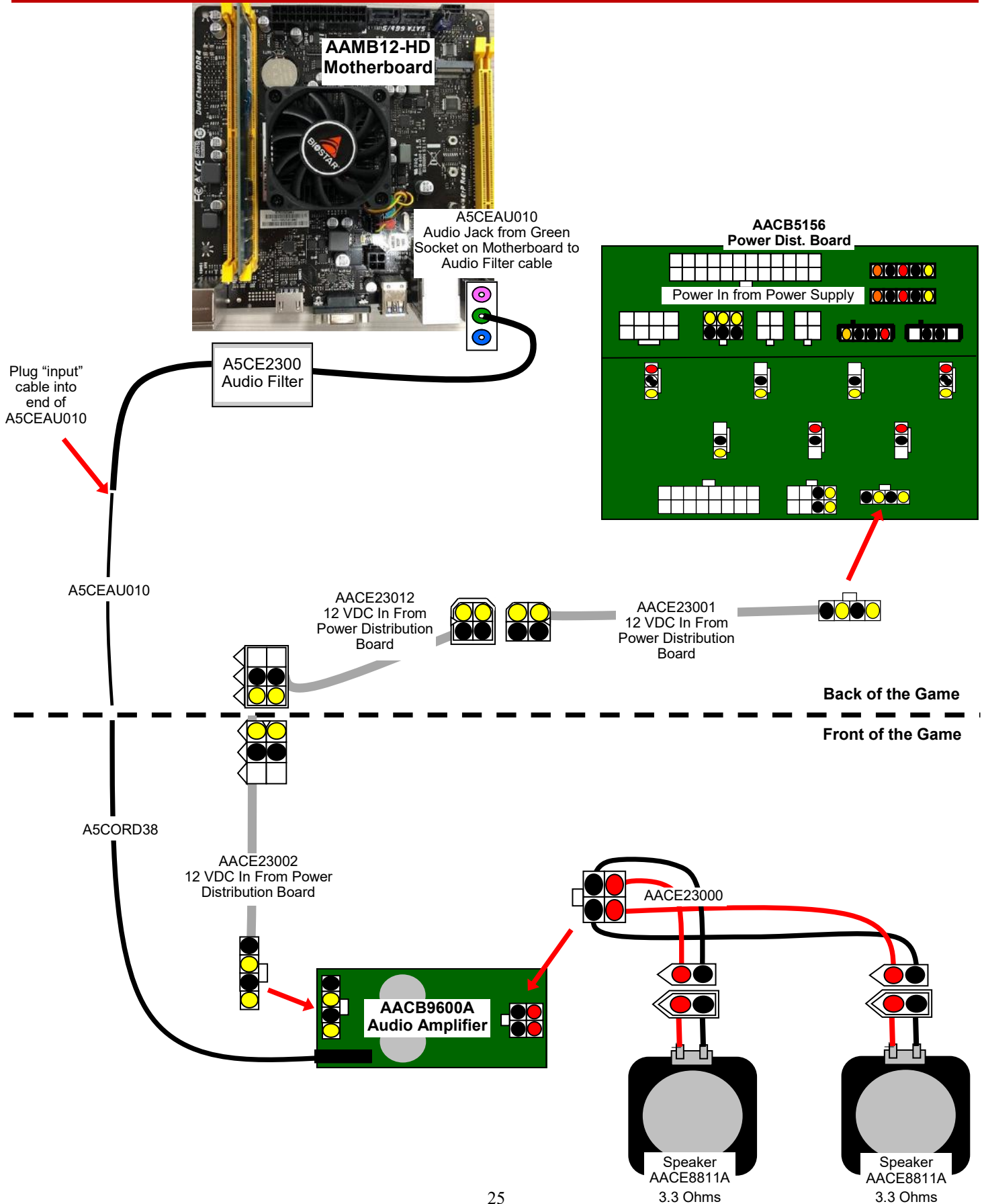
Back of the Game

Front of the Game





# SPEAKERS AND MOTHERBOARD COMMUNICATION



# COMMUNICATION WIRING DIAGRAM



A5CB23003A  
Lidar to USB

A5CORD14  
USB cable from Motherboard  
to Communication board

Top of the Game

Back of the Game



AAMB12-HD  
Motherboard

A5CE6601

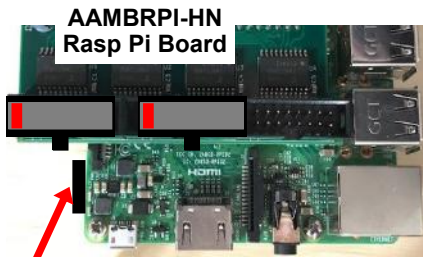
A5CORD14  
USB Communication  
to Motherboard



AACB23000A  
Controller Board

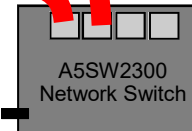
A5CE6601

A5CORD39  
Network Cable



AAMBRPI-HN  
Rasp Pi Board

A5CORD39  
Network Cable



A5SW2300  
Network Switch

Back of the Game

Front of the Game

AASD0016-HYP-MBRPI  
Micro SD card location

A5CORD13000  
USB Communication  
to Motherboard



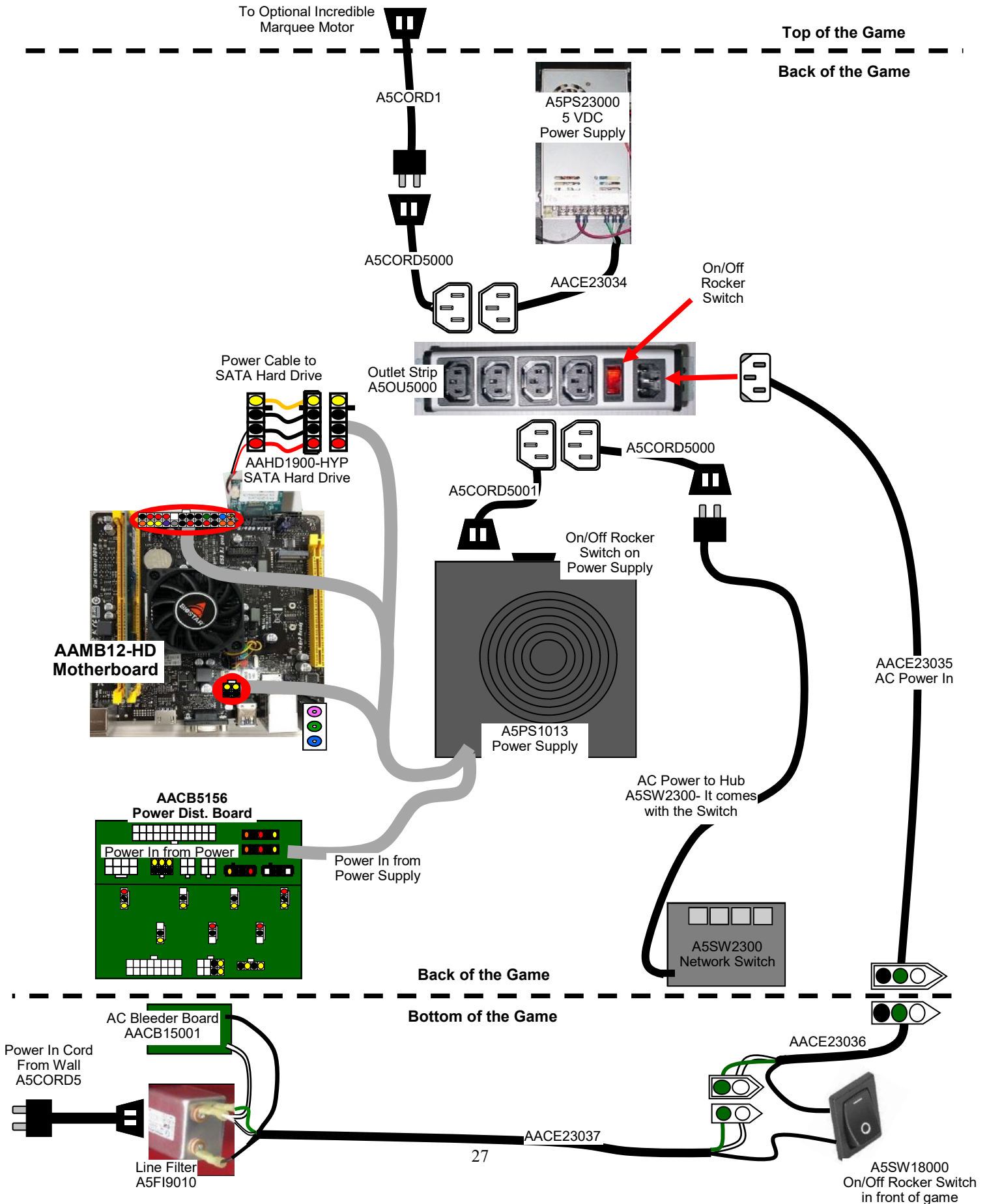
AACB9605-CBL  
I/O Aux Board

Red and  
Yellow  
LEDs

Green  
Power  
LED

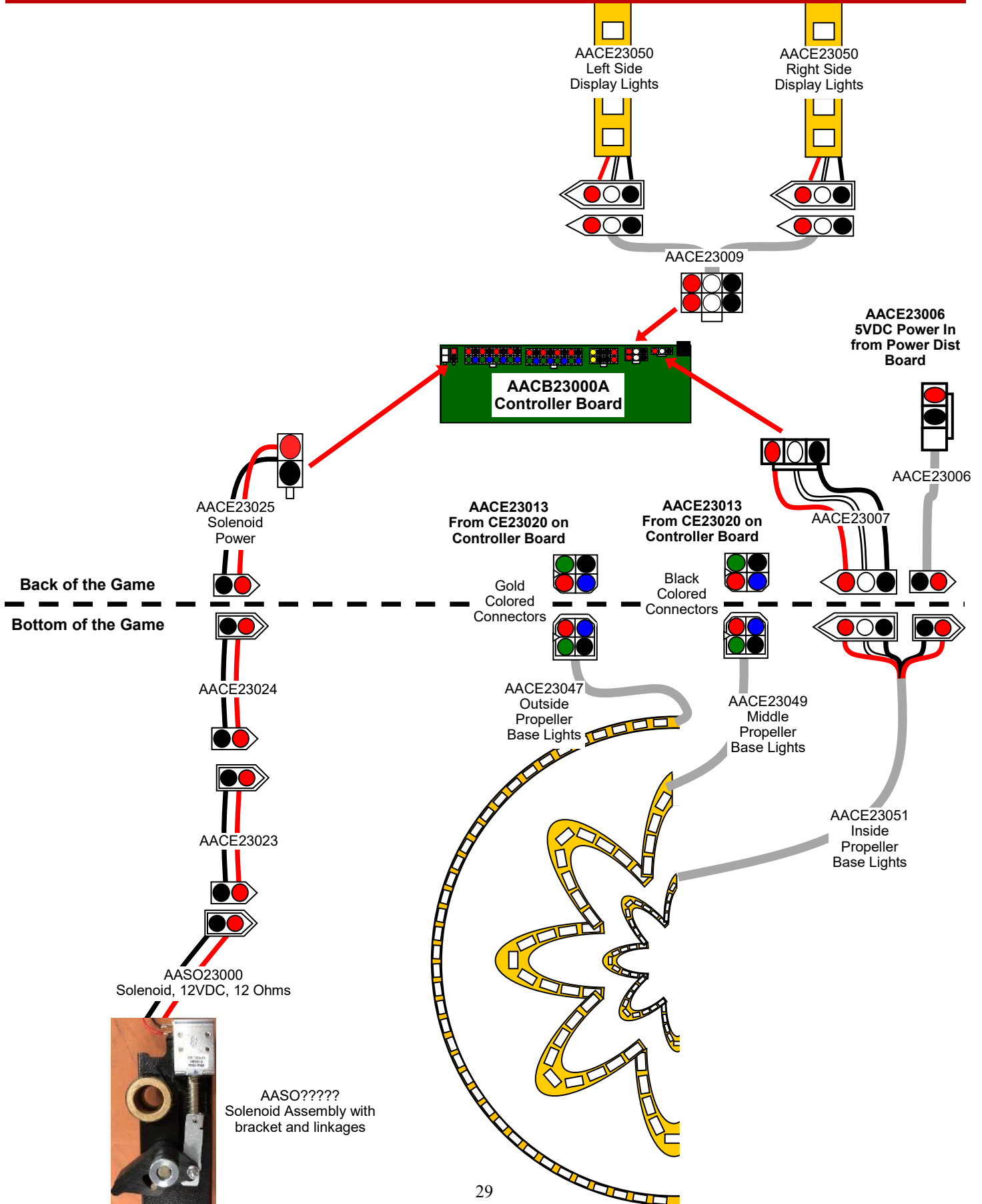
Red and yellow LEDs  
are normally flashing all  
the time.

# AC POWER IN WIRING DIAGRAM



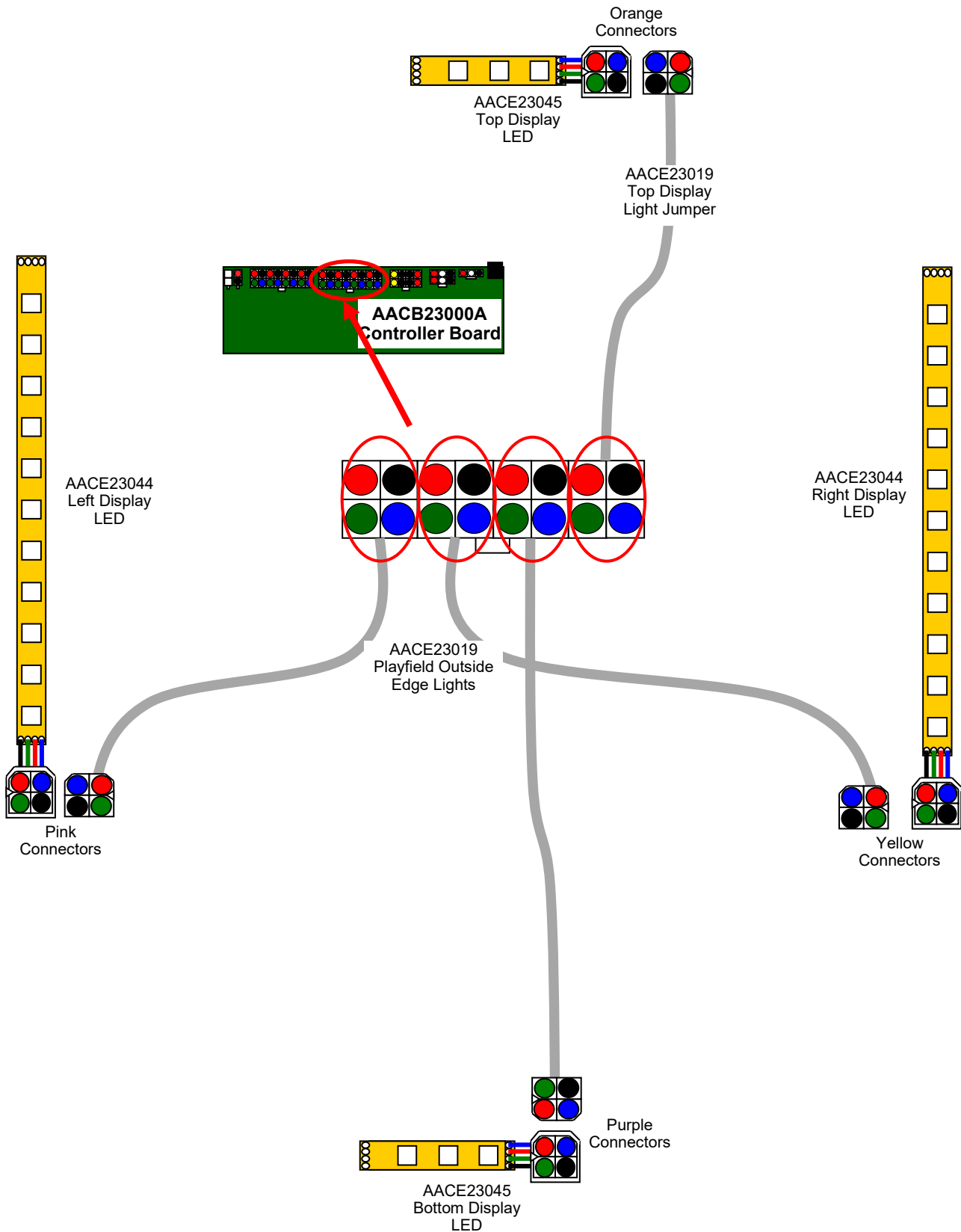


# SOLENOID, PROPELLER BASE, & SIDE LIGHTS WIRING DIAGRAM





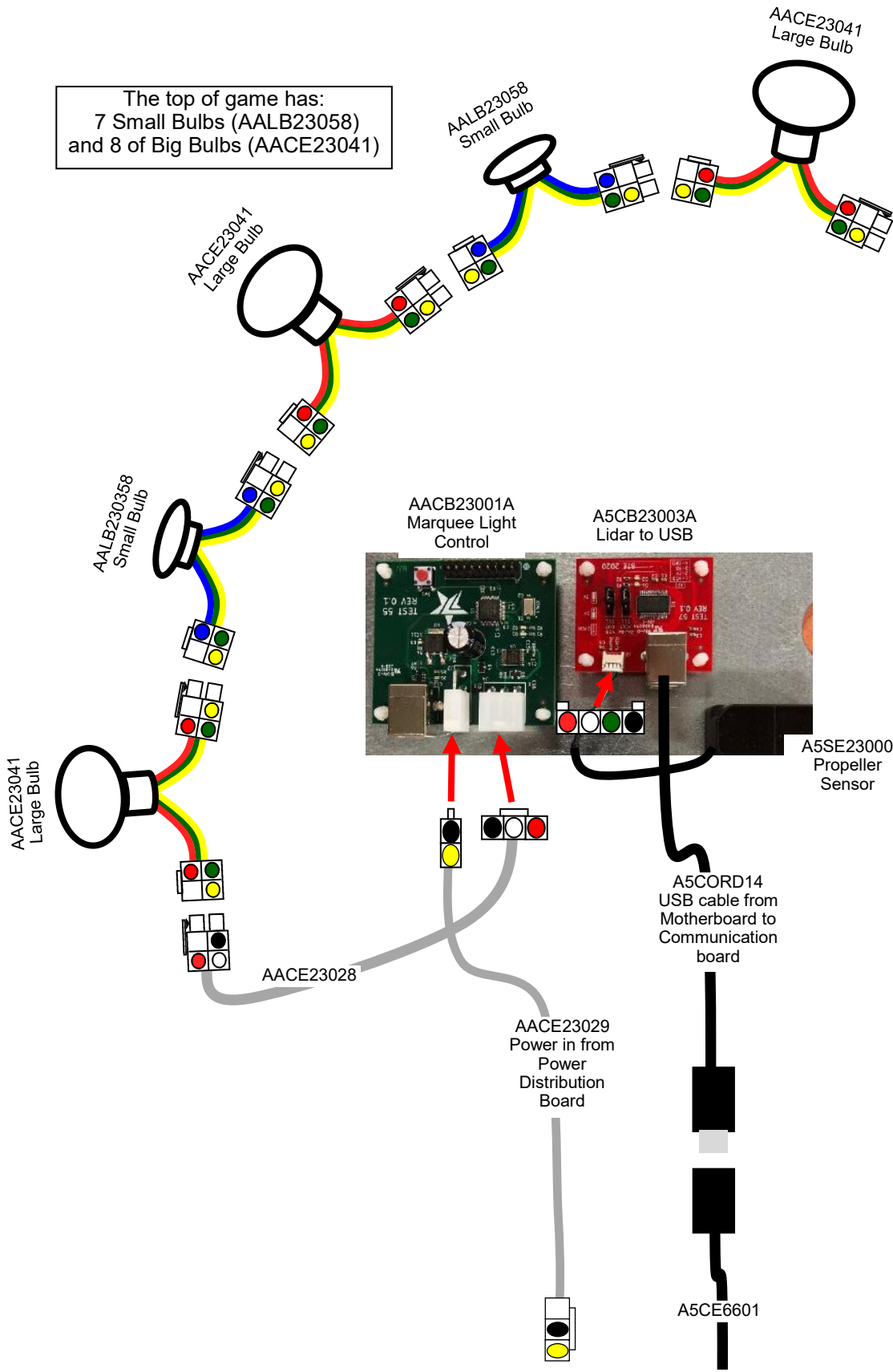
# DISPLAY EDGE WIRING DIAGRAM





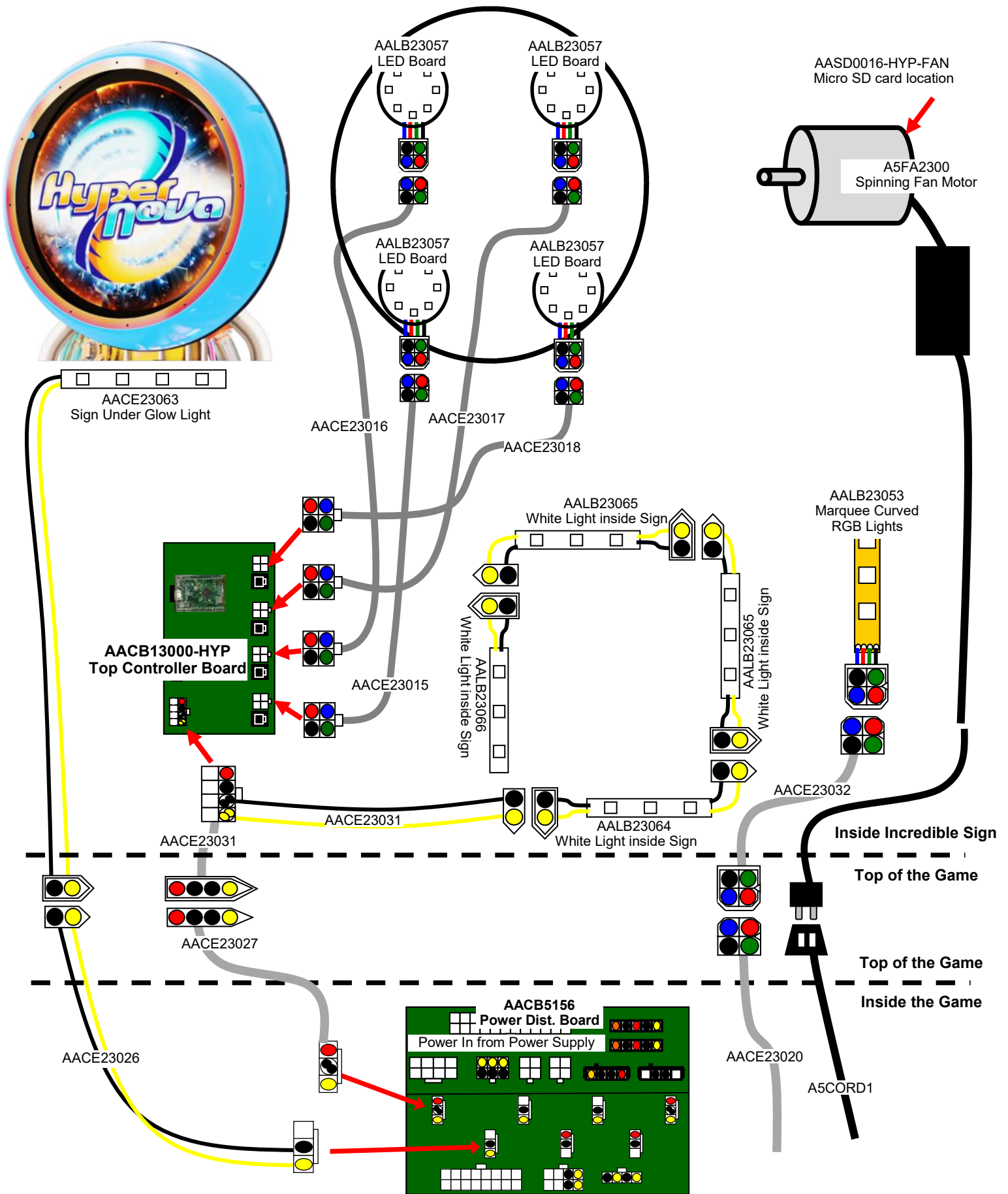
# TOP OF GAME WIRING DIAGRAM

The top of game has:  
7 Small Bulbs (AALB23058)  
and 8 of Big Bulbs (AAACE23041)



Red LED is Power.  
Yellow LED is ON  
when board is  
communicating to  
the motherboard  
via USB cable


# OPTIONAL INCREDIBLE SIGN WIRING DIAGRAM



# TROUBLESHOOTING GUIDE

## Troubleshooting Strategy

Use common sense and a systematic method of troubleshooting to determine the exact problem, probable cause and remedy. Use the process of elimination to find the faulty component. Always check for the simple and obvious causes first such as unplugged, loose or broken wires and bad sensors, bent, pinched, stuck or jammed components.

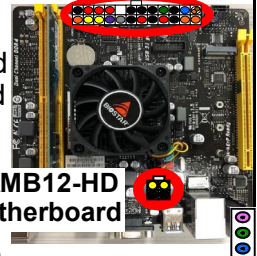
Troubleshooting Chart		
Problem	Probable Cause	Remedy
<p><b>No power to the game</b> <b>No lights on at all</b></p>	<p>Unplugged. Circuit breaker tripped.  Line Filter Faulty. Power strip faulty.  Front Rocker Switch OFF Faulty cable/power supply</p>	<p>Check wall outlet. Reset power strip breaker switch or building circuit breaker. Replace Line Filter (Part # A5FI9010) Swap positions, ensure rocker switch on power supply is ON, replace if needed A5OU5000 Ensure rocker switch in the front of game is ON Refer to wiring diagram. Check cables CE26024 &amp; CB15001 board. Refer to Power Supply diagnostic section</p>
<p><b>AC Power to Power Strip is ok, but everything is off</b>  <b>(Power Supply not ON)</b></p>	<p>Power supply unplugged.  Rocker Switch.  Power supply shutting down because of 12 V overload. Faulty power supply. Faulty Power Dist Board</p>	<p>Ensure unit is plugged into power strip. Make sure rocker switch on power supply is set ON.  Refer to power supply diagnostics to isolate bad component. A bad solenoid or 12 volt short would cause this. Refer to Power Supply Diagnostic section. Replace Power Distribution Board (AACB5156)</p>
<p><b>Dollar Bill Acceptor not functioning</b> Ensure Bill Acceptor is set to "Always Enable" <b>Important : Only 12 Volt DBA is to be installed.</b>  Model # AE 2454 U5E Part # A5AC9101</p>	<p>Check for power to Bill Acceptor. Dirt or debris in acceptor slot.  Pinched, broken, or disconnected wiring.  Bill acceptor problem. Part # A5AC9101</p>	<p>Acceptor should cycle stacker at game power up. If not, check cable connections. Refer to "How to Clean Bill Acceptor" Or clean with bill reader cleaning card. (A5CC9000)  Check wiring from bill acceptor to NewGen Board. (CE23008) Repair or replace wiring harness. Check connector on I/O Aux Board Make sure wires are secure in connectors. Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.</p>
<p><b>Meters do not work</b> Game meter will click at the start of the game. Ticket meter will click as tickets come out of game and notch is "seen" by dispenser.</p>	<p>Ensure correct number of tickets are being dispensed Disconnected, loose or broken wires. Faulty counter.</p>	<p>Check ticket values in menu. Refer to Tickets not dispensing troubleshooting section. Check connections to I/O board. Cables # CE23010 and AACO1020 Replace counter. AACO1020.</p>

# TROUBLESHOOTING GUIDE

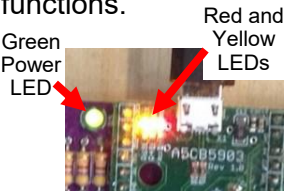

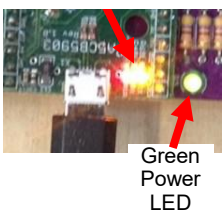
Problem	Probable Cause	Remedy
<p><b>Game Lighting does not work.</b></p>	<p>Most game lighting is controlled by the “Main Board” Part # AACB23000</p> <p>Faulty USB Communication to Motherboard.</p> <p>Faulty LED cable.</p> <p>Faulty Main Board</p>	<p>Check power into Main Board from Power Distribution Board. CE23003.</p> <p>Check USB communication from Main Board to Motherboard. A5CORD14.</p> <p><b>Refer to “Marquee Wiring Diagram”</b> for wire paths, connections, and LED light cable part #'s.</p> <p>Replace Main Board. (AACB23000)</p>
<p><b>Game not coining up</b></p> <p>If installing a card swipe reader, refer to Card Swipe System Installation page in front of manual.</p>	<p>Check for I/O board USB cable communication.</p> <p>Ensure game makes sound when coin switch is triggered.</p> <p>Game set to large amount of credits per game.</p>	<p>Refer to “I/O Aux Board Issue” diagnostic Section. Cables A5CE6601 &amp; A5CORD13000</p> <p>Check coin switches—both should be wired normally open. If one switch is “closed” the other will not work either. Check wiring to I/O Board. (AACBL4A-DOORA, CE23011)</p> <p>Check 12 Volt power in from Power Dist Board.</p> <p>Check Game Setup Menu. Ensure Credits in menu is set.</p>
<p><b>No Sound</b></p> <p>Motherboard creates sound, Audio board amplifies it.</p>	<p>Volume set to zero in menu.</p> <p>Disconnected, loose or broken wires.</p> <p>Faulty speaker.</p>	<p>Enter Menu and verify: Game Volume &amp; Attract Volume are not zero</p> <p>Check connections and reseal audio cable from motherboard to Audio Amplifier board to speakers. Refer to “Speakers and Motherboard Communication Wiring Diagram” Cables # A5CE2300 from green socket on motherboard, A5CEAU010, connection to A5CORD38 in the lower section. Ensure 12 volts at CE23002, CE23012, &amp; CE23001 from Power Distribution Board.</p> <p>Unplug audio jack cable (A5CE2300) from motherboard, plug into MP3 player and see if music is amplified and comes out of speaker.</p> <p>If Yes - then motherboard is faulty.</p> <p>If No - then Audio Amplifier Board (AACB9600A) or cable path is faulty.</p> <p>Replace speaker. AACE8811</p>
<p><b>Menu Buttons do not work</b></p>	<p>Swap connectors at the 2 buttons.</p> <p>Pinched, broken, or disconnected wiring</p> <p>I/O Aux board faulty.</p>	<p>Replace button if problem stays with button.(AAPB2700)</p> <p>Inspect crimp to ensure good connection.</p> <p>Check connections from menu buttons to I/O Aux board.</p> <p>Check continuity on wires. (AAPB2700, CE23010)</p> <p>Replace I/O Aux Board. (AACB9605-CBL)</p>
<p><b>Low Tickets message on monitor</b></p> <p>Will not show Low Tickets if set to swipe in the menu.</p>	<p>Tickets are empty in ticket tray</p> <p>Faulty cable. Disconnected, loose or broken wires.</p> <p>Faulty low ticket switch.</p> <p>Faulty I/O Aux Board</p>	<p>Load tickets into tray. Ensure tickets hold down micro switch wire.</p> <p>Check connectors from low ticket switch to I/O Aux board.</p> <p>Check for continuity. (CE23056)</p> <p>Inspect switch and replace if needed. (AASW200)</p> <p>Check dipswitches on I/O Board, Replace I/O Aux Board if needed. AACB9605-CBL</p>

# TROUBLESHOOTING GUIDE





Problem	Probable Cause	Remedy
<b>Tickets do not dispense or Wrong amount dispensed</b>  Check for the correct amount of tickets showing on Monitor	Tickets shown on monitor does <b>not</b> match tickets coming out of game.	Opto Sensor on ticket dispenser dirty. Faulty ticket dispenser. Notch on tickets cut too shallow. Faulty cable. Disconnected, loose or broken wires. Enter Diagnostic menu and test Dispenser Check dipswitches on I/O Aux Board Faulty I/O Aux Board
	Tickets on Monitor match tickets coming out of game.	Settings in Menu are incorrect. Propeller Sensor not working properly.
<b>Propeller values are a bit off target</b>	The top sensor is dirty. Top Sensor needs calibration.	Open the side plexi and wipe off the top sensor. Refer to "How to Fine Tune Propeller Calibration" section.
<b>Propeller Sensor not working properly</b>	Clean sensor. Disconnected, loose or broken wires. Test Sensor. Check Communication Board Faulty sensor.	The sensor is in the top of the game. Check connections from sensor to the motherboard. Refer to wiring diagram. (Cable # CE23057, A5CORD14, A5SE6601) Enter Diagnostic Menu to see if game recognizes sensor. Two LED's on the Communication Board in the top of the game will flash rapidly when communicating with motherboard. Replace sensor if needed.
<b>Display not working</b>  Power down, wait <b>5 minutes</b> and power up again.	Display is on, but not showing correctly.	Check network cable from motherboard to hub to Rasp Pi Board Faulty or loose RAM on motherboard Large power connector unplugged on motherboard Small power connector unplugged on motherboard Faulty power supply - Refer to Power Supply diagnostic section Faulty Hub. Swap sockets on hub. Check 5 VDC power into Rasp Pi board. CE23040 Check Micro SD card in Rasp Pi Board. Part # AASD0008A-HYP Faulty Rasp Pi Board. Replace if needed. Part # AAMBRPI-HYP
	Display has nothing at all on power up.	No power to 5 V supply among display panels. Faulty display module.



# TROUBLESHOOTING GUIDE

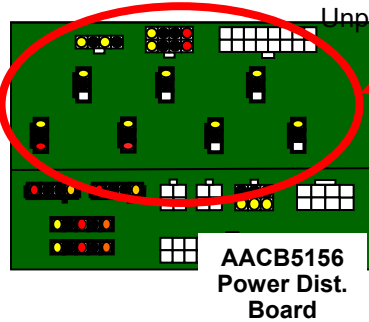
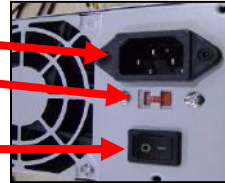
Problem	Probable Cause	Remedy
<p><b>I/O Aux Board Issue</b> Game does not coin up, and has no other functions.</p>  <p>Green Power LED Red and Yellow LEDs</p>	<p>Green power LED should be flashing.</p> <p>Red and Yellow LED's should be flashing.</p> <p>Faulty I/O Aux Board</p>	<p>If it is off, then check 12 &amp; 5 Volts DC coming into board on cable CE23004 &amp; CE23005 from Power Distribution Board. If solid on, then it is not communicating with the motherboard. Check A5CORD13000 &amp; A5CE6601 USB cables.</p> <p>If they are off, it is not communicating with the motherboard. Check A5CORD13000 &amp; A5CE6601 USB cables.</p> <p>Replace I/O Aux Board if needed. Part # AACB9605-CBL</p>
<p><b>Top Controller Board Issue</b> Lights around top of game do not flash properly.</p>  <p>Red and Yellow LEDs</p>	<p>Red power LED should be on.</p> <p>Yellow LED is normally off, and only flashes when communicating.</p> <p>Faulty Wheel Board</p>	<p>If it is off, then check 12 &amp; 5 Volts DC coming into board on cable CE23053 from Power Distribution Board. If solid on, then it is not communicating with the motherboard. Check A5CBL5900 &amp; A5CE6601 USB cables.</p> <p>Watch while coining up and see if it flashes for a short time. Check A5CBL5900 &amp; A5CE6601 USB cables.</p> <p>Replace Top Controller Board if needed. Part#AACB13000-HN</p>
<p><b>Pushing plunger does not spin wheel</b></p>	<p>Inspect assembly for physical obstruction</p> <p>Solenoid is not engaging.</p>	<p>The solenoid assembly should pivot as handle is pushed down. The wheel will only turn if the solenoid is engaged. Refer to "Pivot Assembly Exploded View" to identify worn parts to replace.</p> <p>Refer to "Solenoid does not activate"</p>
<p><b>Solenoid does not activate</b></p>  <p>Red and Yellow LEDs Green Power LED</p>	<p>Inspect assembly for physical obstruction</p> <p>Disconnected, loose or broken wires.</p> <p>Test solenoid.</p> <p>Faulty solenoid.</p> <p>Main Board communication: Green power LED should be flashing.</p> <p>Red and Yellow LED's should be flashing.</p>	<p>The solenoid assembly will only activate at game start, or in the test menu. Ensure assembly is loose and moves freely.</p> <p>Check connections from solenoid to Main Board. Refer to wiring diagram. (Cable #'s AASO23000 CE23039, &amp; CE23041)</p> <p>Enter Diagnostic Menu and select "Dist Diag". The solenoid should now receive 12 Volts DC.</p> <p>Replace solenoid assembly if needed. AASO23000</p> <p>If it is off, then check 12 &amp; 5 Volts DC coming into board on cable CE23003 from Power Distribution Board. If solid on, then it is not communicating with the motherboard. Check A5CORD14 USB cable. Swap cable with the light board.</p> <p>If they are off, it is not communicating with the motherboard. Check A5CORD14 USB cable.</p>
<p><b>Solenoid is on all the time</b></p>	<p>Inspect assembly for physical obstruction</p> <p>Check for 12 Volts DC on solenoid cable CE26000</p>	<p>The solenoid assembly should only activate at game start, or in the test menu. Ensure assembly is loose and moves freely.</p> <p>If 12 Volts DC is always present, the Main Board AACB23000 is faulty and will need to be replaced.</p> <p>If no 12 Volts DC and solenoid is still engaged, the solenoid assembly AASO23000 is faulty and will need to be replaced.</p>

# TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
<p><b>Game stuck on loading screen</b></p> 	<p>This loading screen should appear at game power on. It will take about 30 seconds for the game to boot fully and launch into the attract mode sound. If it stays on this screen, there is no communication between the motherboard and Raspberry Pi board through the switch box.</p>	
	<p><b>CAB23000 Error</b></p>	<p>There is no communication between the CB23000 board and the motherboard.</p> <p>Check or replace the USB cable A5CORD14.</p> <p>Ensure good power in on AACE23003 cable.</p> <p>Faulty Motherboard or Controller Board</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p><b>AAMB12-HD Motherboard</b></p> </div> <div style="text-align: center;">  <p><b>AACB23000 Controller board</b></p> </div> </div>

# POWER SUPPLY DIAGNOSTICS

- 1.) Verify AC power to game. Check power strip in front door. The rocker switch should be illuminated.
- 2.) Check 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.
- 5.) Ensure fan is turning.
  - If power supply fan is turning and there is no 12 Volt out:  
Check power supply cables to the Power Distribution Board.  
This board takes the power in, and directs it to the different 12 volt loads.



Unplug all power out connectors from the top of the Power Distribution Board.  
Turn on game and if it boots correctly, plug one cable in at a time until the issue is found.

Replace power supply if this board is not receiving 12 volts. (A5PS1013)

- If power supply fan is not turning, then continue to "Verify Power to Motherboard"

## Verify Power to Motherboard

The motherboard will turn on the power supply.

If your game has no 12 volts, it may be the motherboard not turning on.

Also - there may be a 12 volt short somewhere in cabinet that is not allowing the power supply to turn on.

## Minimize load on power supply and isolate short

Unplug the power supply cables going to the Power Distribution Board.

This will leave the power supply, motherboard, and monitor left plugged in together.

If power supply, motherboard, and monitor now turn on:

Plug in the Power Distribution Board to power supply, but unplug all of the outputs from the board.

Turn on game and verify the 12 volts is good.

Then plug in one component at a time to power supply to locate short.

If power supply still does not power on, then replace power supply (A5PS1013), or replace motherboard. (AAMB10E-SHD)

# 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 # AE2454-U5E Part # A5AC9101 **Only use 12 Volt DC Bill Acceptor**

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:

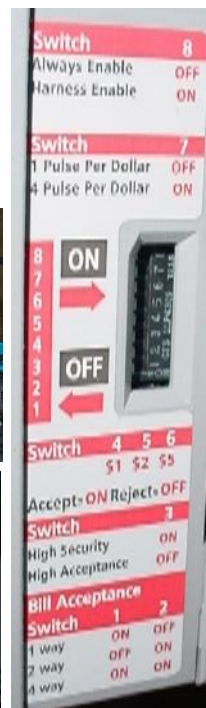
Use meter to measure 12 VDC voltage at cable going into Bill Acceptor from front I/O Aux Board

If power is OK:

Clean Bill Acceptor path to make sure there is nothing jamming unit.

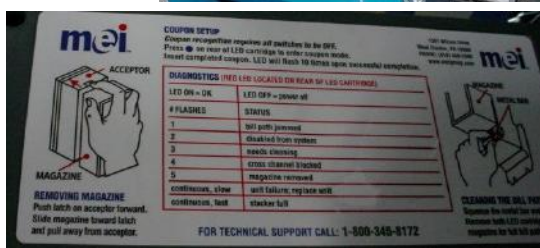
Check dipswitch settings on side of acceptor.

**Make sure switch # 8 is OFF for Always Enable**



## ERROR CODES

Count the number of flashes on front bezel of Bill Acceptor and follow on Bill Acceptor chart for repair instructions.



# HOW TO UPDATE SOFTWARE

## New Software Installation:

**Warning!** The hard drive contains all the information about the game: Propeller calibration settings, Credits per play, ticket pattern, etc. Be sure to write down these original settings, then re-enter them into the menu after installing new software. Refer to "Propeller/Sensor Calibration" if the calibration can not be read from old software.

Turn off game by flipping the power switch on the power strip.

Locate hard drive on motherboard.

Press tab on far side of hard drive and gentle remove from motherboard.

Unplug power supply jumper connector and remove old hard drive from unit.

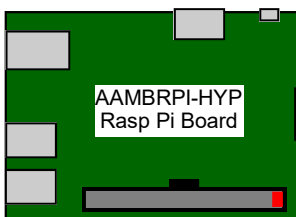


Install new hard drive by gently pushing straight onto motherboard until it "clicks".

Turn the game back on by flipping the power switch on the power strip.

## The software is programmed onto a SD Card

There is separate software for the game main board and the Marquee Sign main board.



Micro 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 AASD0016-HYP-MBRPI

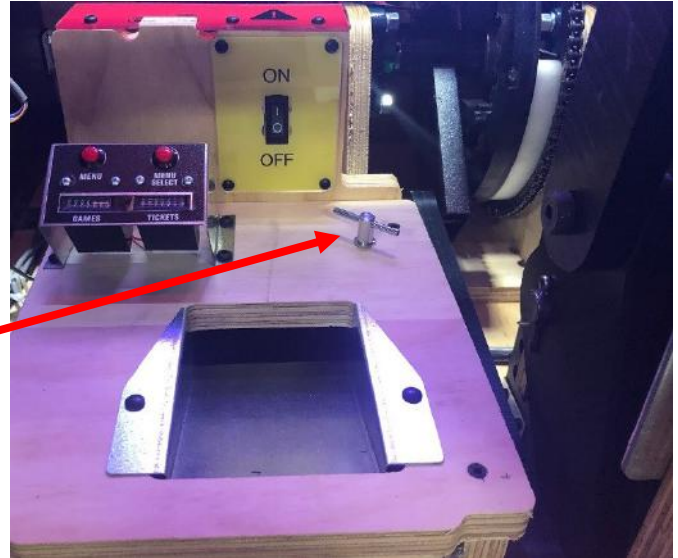
# HOW TO INSTALL SAFETY BOLT

## Important !!

There are many parts inside the front of the game that move when the handle is moved.

To prevent pinched fingers, we recommend using the safety bolt (Part # A5PI23000) any and all times that the front door is open.

This safety bolt is located inside a hole in the top of the coin box.



## To lock out handle movement:

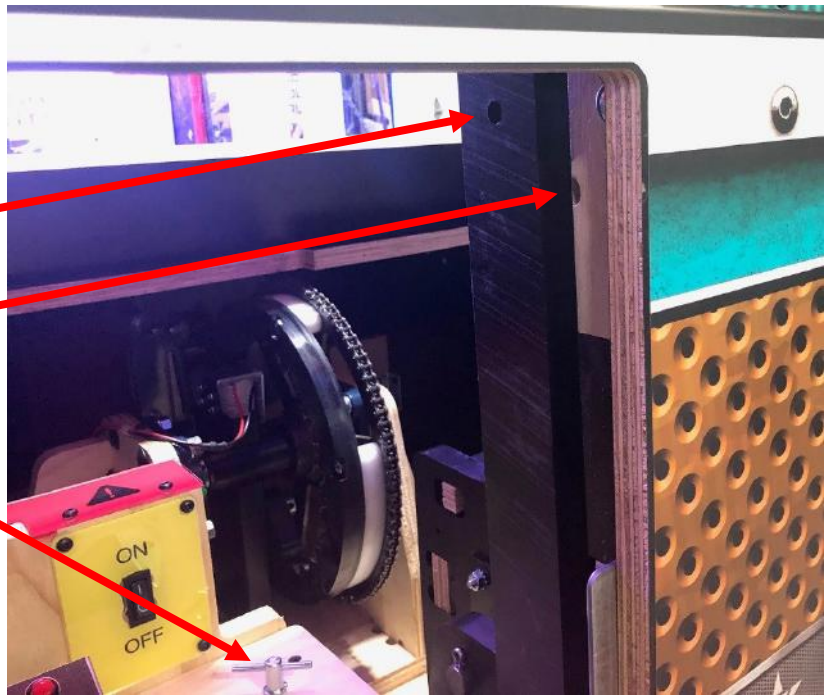
Locate the 2 holes that the safety pin will be installed into:

One hole is in the black plastic arm attached to the handle.

One hole is in the wood frame of door.

Remove the safety pin from its location on top of the coin box.

Lift the handle until the 2 holes line up and insert the safety pin.



# HOW TO FINE TUNE PROPELLER CALIBRATION

The sensor that determines the position of the propeller is calibrated by our factory. However, if the motherboard or the sensor is replaced, it may be necessary to fine tune the sensor using the options in the menu.

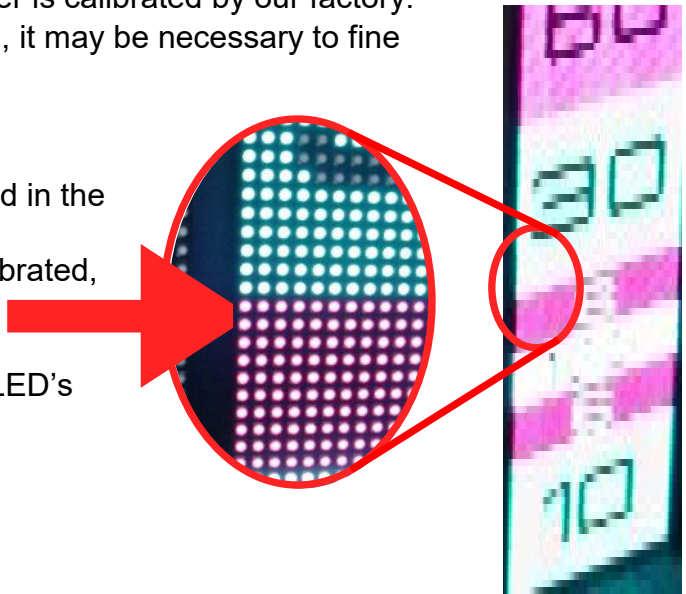
## Theory of Operation:

The "Win Location" is determined by a sensor mounted in the roof of the cabinet.

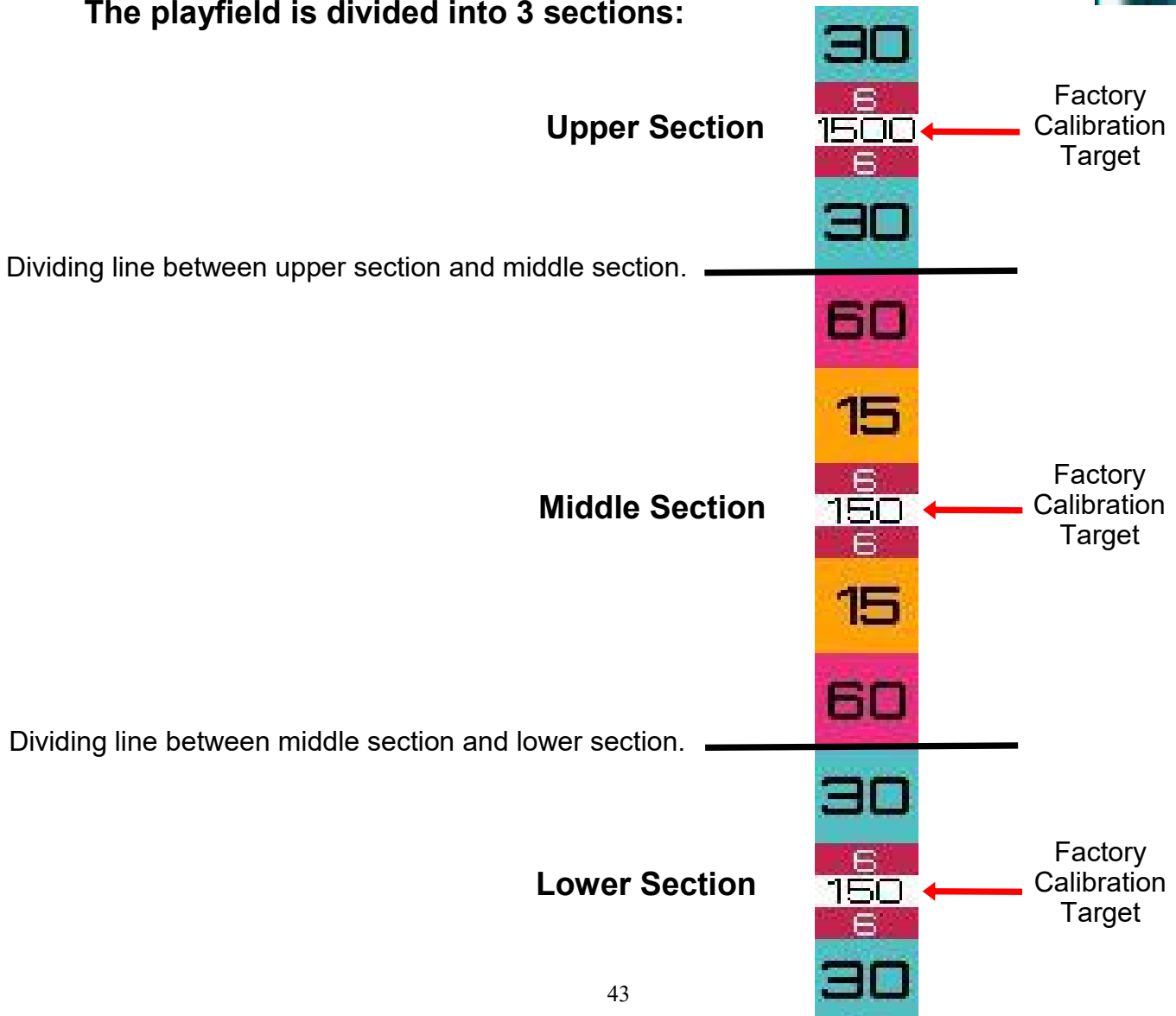
Once the highest point of the spinning propeller is calibrated, the software will place a pointer on the display board.

This pointer is 2 LED's thick.

The placement on the display board will always be 2 LED's thick and never span a ticket value dividing line.



## The playfield is divided into 3 sections:



# HOW TO FINE TUNE PROPELLER CALIBRATION

Be aware that players observation of the height reached by the propeller can vary greatly depending on the height of the observer.

Do not make changes to the calibration on the advise of customers.

**Upper Section**

If the game seems to show the propeller incorrectly in this Upper Section:  
Enter the menu and scroll to "Cal Up"

The arrow will move 2 LED's width up with every increased value.  
It will move 2 LED's width down with every decreased value.

**Middle Section**

If the game seems to show the propeller incorrectly in this Middle Section:  
Enter the menu and scroll to "Cal Mid"

The arrow will move 2 LED's width up with every increased value.  
It will move 2 LED's width down with every decreased value.

**Lower Section**

If the game seems to show the propeller incorrectly in this Lower Section:  
Enter the menu and scroll to "Cal Low"

The arrow will move 2 LED's width up with every increased value.  
It will move 2 LED's width down with every decreased value.

The diagram consists of three vertical columns of LED indicators. The top column is labeled 'Upper Section' and has a value of 1500. The middle column is labeled 'Middle Section' and has a value of 150. The bottom column is labeled 'Lower Section' and has a value of 150. Each column has a value of 30 above and below the main value, and a value of 6 between the main value and the 30s. A horizontal line is drawn across the middle of the diagram, passing through the 60 LED indicator in the middle section.

**Note: The adjusting on this page is only a quick estimate of propeller height.**

**To scientifically calibrate the propeller height,  
Refer to the next section "Propeller/Sensor Calibration"**

# PROPELLER/SENSOR CALIBRATION

To scientifically calibrate the propeller height, you must open the side plexi and place a physical stop on the shaft.

Then as you play the game, the propeller will spin up to that stop and you can adjust the placement of the win arrow in the game menu.

## Tools needed:

5/32" Allen wrench

Blue or Green non-stick Painters Tape

## Instructions:

Open one of the plexi side panels by removing the 5 bolts using a 5/32" Allen wrench.

**Important:** Only reach into the propeller area before or after hours to ensure a guest does not coin up the game and try to play.

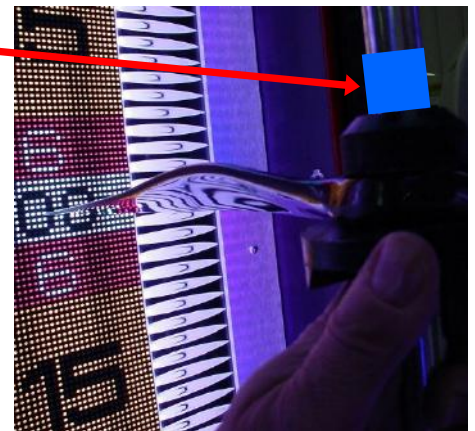
Be very aware that the propeller spins very fast and may cause injury if misused.



Raise the propeller up by hand and position in the middle of one of the large ticket bonus locations.

Wrap the non-stick painters tape around the shaft directly above the propeller assembly.

This will stop the propeller in the exact middle of the ticket area when the game is played.



Coin the game up and push the handle hard and the propeller will stop at the painters tape.

The game will then place a red arrow on the display.

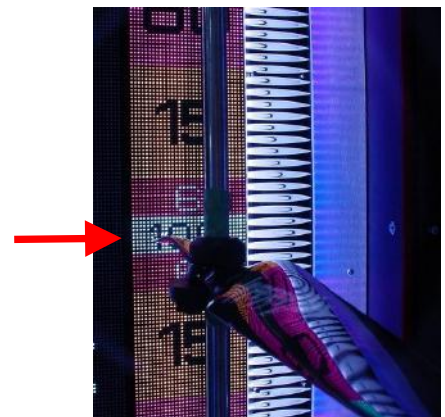
If the arrow is not placed in the correct position, enter the menu and go to the calibration mode for that section.

(Either lower, middle or upper)

If arrow is too high, reduce the value in the menu.

If the arrow is too low, increase the value in the menu.

Do this same process for all 3 of the large ticket bonus locations.

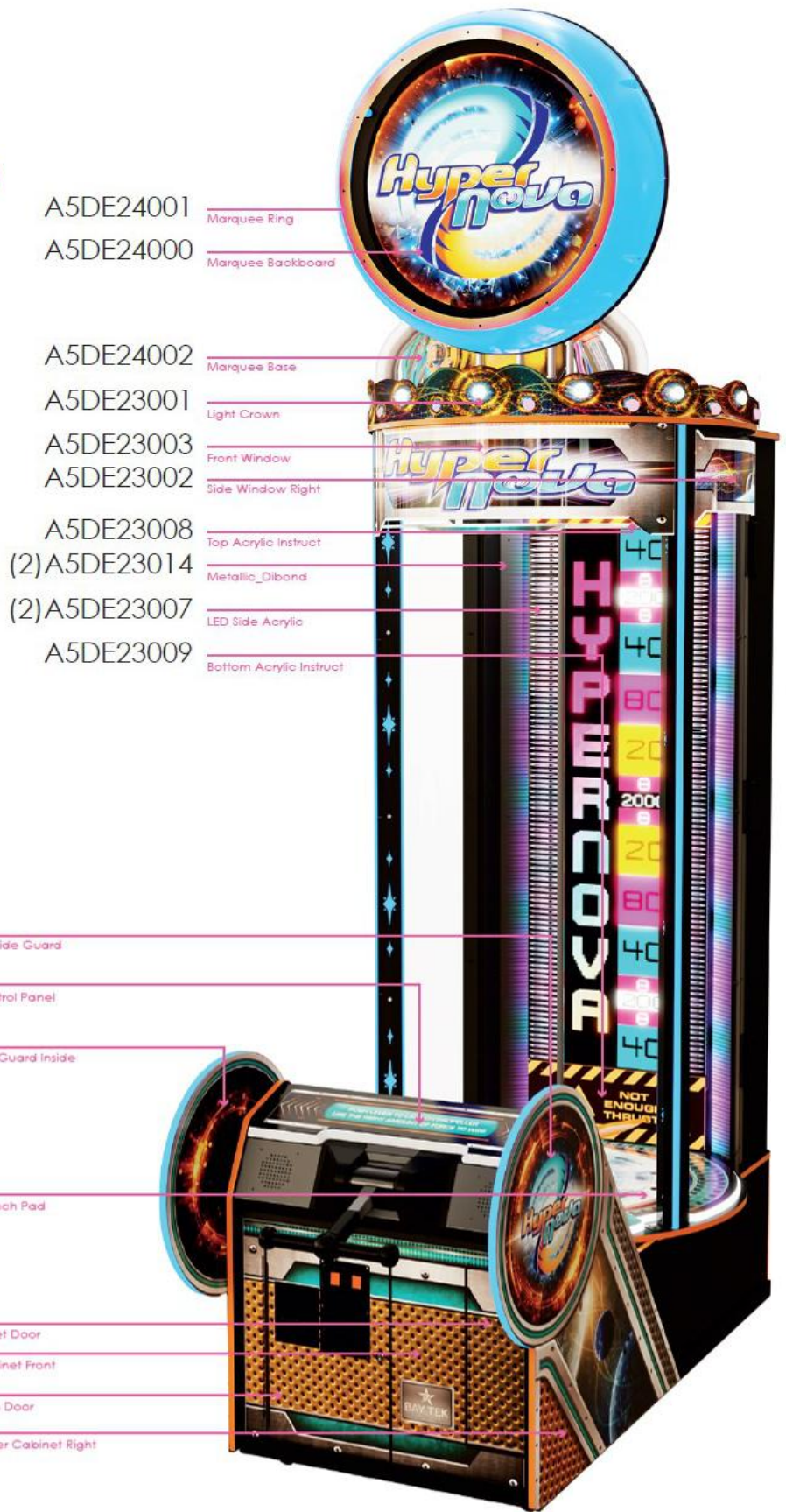


# DECAL DIAGRAM



Not Pictured:

- A5DE23004 Side Window Left
- A5DE23012 Lower Cabinet Left
- A5DE23016 Right Guard Inside
- A5DE23017 On/Off Switch
- A5DE23018 Danger Cover
- A5DE23019 Ceiling Star



# PARTS LIST

<b>PART #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>DESCRIPTION</b>
A5BR1001	Bearing,UCF-205-16	A5DE23011	Decal, Front Door
A5BURU040	Bumper,1-1/2" Dia X 3/4"H	A5DE23012	Decal, Left Lower Cabinet
A5BURU050	Bumper,1 1/16 X 1 1/16	A5DE23013	Decal, Right Lower Cabinet
A5CA1005	Caster,250# Load, Swivel/Lock	A5DE23014	Dibond, Playfield Back
A5CB2020	Cash Box	A5DE23015	Decal, Left Inside Side Guard
A5CH1007	Chain,#35,148 Links Riveted Endless	A5DE23016	Decal, Right Inside Side Guard
A5FA2300	Fan, Holo 3d,65cm Ultra Definition	A5DE23017	Decal, On_Off
A5FI9010	Filter, Inline	A5DE23018	Decal, High Voltage
AAGR BX23000	Gearbox, 1:1 Right Angle	A5DE23019	Decal, Ceiling Star
A5GU9040	Guard, Fan	A5DE23020	Decal, Ticket Door
A5LD1052	LED Display Module	A5DE24000	Decal, Marquee Backboard
A5LK2001	Lock, Cash Box, A05/E00 Key Code	A5DE24001	Decal, Marquee POV Display Ring
A5LK5002	Lock, 7/8", H95 Key Code	A5DE24002	Decal, Marquee Clouds
A5LU23000	Lubricant,80w-90 Gear Oil	A5BK9999	Bracket, Power Supply Mounting
A5MUNY010	3/4" X 3/4" Sticky Tabs	A5ME23000	Metal, Playfield Led Light Mount 68"
A5PROP23000	Propeller	A5ME23001	Metal, Playfield Bus Bar
A5RVNY010	Rivet, Nylon, .148" Hole Dia	A5ME23002	Metal, Playfield Acrylic Lgt Support 63"
A5SE23000	Lidar Sensor	A5ME23003	Metal, Upper-Lower Light Mount 21 1/2"
A5SF0010	Stand Off, Non Lock	A5ME23004	Metal, Travel Rod
A5SFNY040	#8 X 5/16" Od X 1/4" H	A5ME23005	Metal, Window Rail Assembly
A5SP1011	Sprocket,#35 X 15t X 1.000 Shaft	A5ME23006	Metal, Front Window Rail Assembly
A5SP1012	Sprocket,#35 X 15t X .500 Shaft Idler	A5ME23007	Metal, Anchor Bracket
A5SP1013	Sprocket,#35x20tx0.5 Shaft Bb Idler	A5ME23008	Lidar PCB Mount Plate
A5SP5021	Spring, Compression	A5ME23009	Metal, Drive Wheel Axle
A5SW18000	Switch, Rocker 20a 250v	A5ME23011	Metal, Drive Assembly
A5TWN Y010	4" Black Wire Ties	A5ME23012	Metal, Drive Hub Shaft
A5VF23000	Grand Marquee Front Vac Form	A5ME23013	Metal, Sprocket Weldment
A5VF23001	Grand Marquee Rear Vac Form	A5ME23014	Metal, Wheel Shaft Bracket
A5VF4153	Vacuum Form, Handle Cover	A5ME23015	Metal, Control Panel Assembly
AASW200	Low Ticket Switch	A5ME23016	Gearbox Mount Weldment
A5DE0042	Decal, Menu/Volume Decal	A5ME23017	Metal, Chain Tensioner Brkt
A5DE23000	Decal, Launch Pad	A5ME23018	Chain Tensioner Arm
A5DE23001	Decal, Light Strip	A5ME23019	Horizontal Chain Tensioner Arm
A5DE23002	Decal, Side Windows	A5ME4161	Metal, Handle Pivot Assembly
A5DE23003	Decal, Front Window	A5ME4167	Metal, Solenoid Link
A5DE23004	Decal, Left Side Guard	A5ME4171	Metal, T-Handle Assy
A5DE23005	Decal, Right Side Guard	A5ME4172	Metal, Handle Bracket
A5DE23006	Decal, Control Panel	A5ME4180	Metal, Right Tkt Tray Bracket
A5DE23007	Decal, Side Acrylic	A5ME4182	Metal, Cashbox Guide
A5DE23008	Decal, Top Acrylic	A5PL4200	Upstacker Bill Acceptor Plate
A5DE23009	Decal, Bottom Acrylic	A5PL8900	Plate, Bill Validator Blanking Plate
A5DE23010	Decal, Lower Cabinet Front	A5PL9995	Ticket Dispenser Blanking Plate

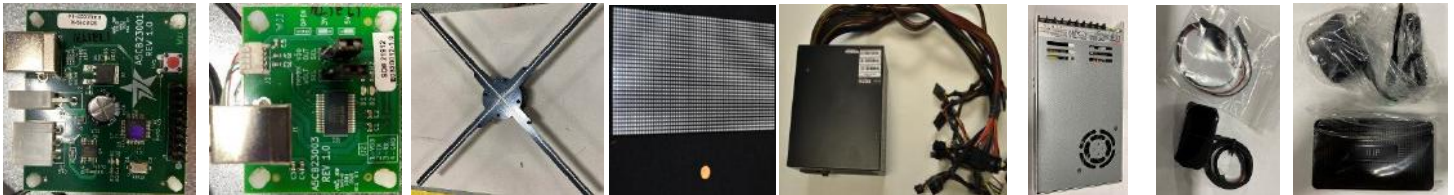
# PARTS LIST

PART #	DESCRIPTION	PART #	DESCRIPTION
A5PL9998	Coin Mech Blanking Plate	AACE23015	#1 Marquee RGB Light Board Power
A5TT4101	Ticket Tray	AACE23016	#2 Marquee RGB Light Board Power
W5HG1015	Hinge,5",Double Bend	AACE23017	#3 Marquee RGB Light Board Power
W5HG1025	Hinge,16",Double Bend	AACE23018	#4 Marquee RGB Light Board Jumper
W5HG1050	Hinge,8",Double Bend	AACE23019	Right Side RGB Lights Power
W5HG1065	Hinge, 5-75, Single Bend	AACE23020	Left Side Window Rail Split Jumper
W5KE5000	Keeper, Lock	AACE23021	Handle Ground
W5TM2300	T-Molding, 7/8", Orange, 978" per game	AACE23022	Front Door Hinge To Ground Stud
AABK1013	Bracket, Pushbutton/Counters	AACE23023	Solenoid To Split Wire
AAME23010	Metal, #35 X 96T Sprocket	AACE23024	Board To Solenoid Split Wire
A5OU5000	Outlet Strip	AACE23025	Solenoid Power From Board
A5CE1052	Display 5 Volt Power Jumper	AACE23026	Marquee Acrylic White Light Power
A5CE2300	Cable, Audio Isolator	AACE23027	Marquee Power
A5CE6601	Cable,USB,6",Extension	AACE23028	Addressable Board To Crown Lights
A5CE9736	Ribbon Cable Jumper	AACE23029	Power To Crown Board
A5CEAU010	Cable, Audio Stereo,3.5mm , M-M 2ft	AACE23030	Top Stick Light Power
A5CORD1	Cord,Power,10'	AACE23031	Top Stick Light And Light Board Power
A5CORD13000	Cord, USB-A To Micro B 2.0 Cable, 6.0ft	AACE23032	RGB Marquee Light Power
A5CORD14	Cord,3' USB R Angle, Bto A Male	AACE23033	Power To Raspberry Pi Board
A5CORD38	Cord,3.5mm Male to Female 6'	AACE23034	Power To 5 Volt Power Supply
A5CORD39	Cable,Cat6 Ethernet 550mhz,24AWG,1'	AACE23035	Power Strip To Power Switch
A5CORD5	Cord, AC Computer Cord, 6.5'	AACE23036	Power Switch To Power Strip
A5CORD5000	Cord, Power Adapter, 1ft.	AACE23037	Line Filter To Power Switch
A5CORD5001	Cord, Extension, 2ft.	AACE23038	5 Volt Power Supply To Display Bar
AAPB2700	Push Button Assembly	AACE23039	5 Volt Power Supply Ground To Display
AACBL4A-DOORA	Door Cable With Bulbs	AACE23040	Display Ribbon
AACE1710	Cable, 4" Door Ground Cable	AACE23041	Marquee Addressable Bulb Lights
AACE1715	Cable, Door Ground Cable	AACE23043	Side Rail Light
AACE23000	Speaker Power From Audio Board	AACE23044	Side Display RGB Light
AACE23001	Power Distribution To Audio Board Split	AACE23045	Top And Bottom Display RGB Lights
AACE23002	Audio Board To Power Distribution Split	AACE23046	Front Guard Light
AACE23003	Power Distribution To CB23000	AACE23047	Outer Propeller Base RGB Light
AACE23004	Power Distribution To Door Board Split	AACE23048	Front Panel Light
AACE23005	Door Board To Power Distribution Split	AACE23049	Middle Propeller RGB Light
AACE23006	5volt Power To Inside Propeller Led	AACE23050	Side Display Addressable Lights
AACE23007	Power To Inside Propeller Led	AACE23051	Inside Propeller Addressable Light
AACE23008	DBA Wires From Door Board	AACE23059	Propeller Metal Bracket Ground
AACE23009	Main Board To Side Display Addressable	AACE23060	Top Sensor Bracket Ground
AACE23010	Menu/Counters Button	AACE23061	Ground Stud To Top Sensor Ground
AACE23011	Coin Door Wires	AACE23062	Power Distribution To Power Box Grnd
AACE23012	Power Distribution To Audio Board Split	AACE23063	Marquee Art Underglow Light
AACE23013	Propeller Base, Guardrail Light Power	AACE3219	Cable, Tkt Disp/Low Tkt
AACE23014	Underglow/Guardrails/Panel RGB Pwr	AACE8811A	Cable Assy, Speaker

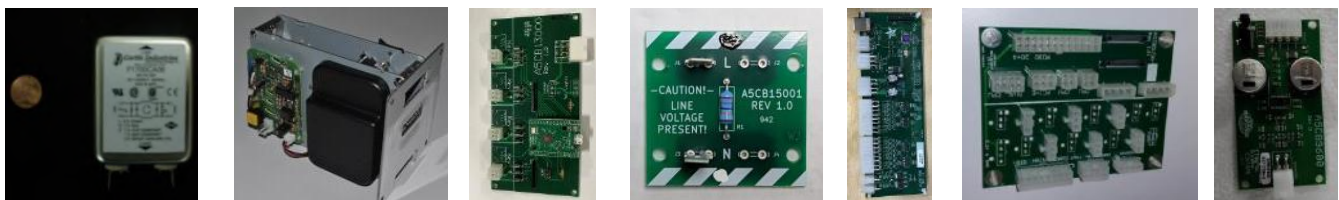
# PARTS LIST

PART #	DESCRIPTION	PART #	DESCRIPTION
AACO1020	Counter Assy, No Feet	A5SW2300	Switch, 5 Port 10/100 Mbps Ethernet
AALB23053	Marquee Curved RGB Light	A5TD1	Ticket Dispenser, Entropy
AALB23054	Underglow Stick Light	AACB23000A	Controller Board
AALB23055	Underglow Stick Light	A5CB23001A	Marquee Light Control
AALB23056	Playfield White Stick Light	A5CB23003A	Lidar To USB Board
AALB23057	RGB Marquee Back Lights	AACB9600A	Audio Amplifier Board
AALB23058	Addressable Marquee Egg Lights	AAMB12-HD	Motherboard, MB 12 With Hard Drive
AALB23064	Marquee Inside Channel White Light	AAHD1900-HYP	SATA Hard Drive Software
AALB23065	Marquee Inside Channel White Light	AAMBRPI-HN	Raspberry Pie Complete W/Software
AALB23066	Marquee Inside Channel White Light	AACB13000- HYP	Marquee Back Lights Control
AASO23000	Solenoid For Handle	AACB15001	Bleed Resistor Board
A5PS1013	Power Supply, Evga 500	AACB5156	Power Dist. Board
A5PS23000	Power Supply, 5v Ac/Dc Converter, 300w	AACB9605-CBL	Door Interface Board
A5PI23000	Safety Pin for Handle Lockout	AASD0016-HYP-MBRPI	Micro SD Card Software for Rasp Pi Board
		AASD0016-HYP-FAN	Micro SD Card Software for Fan

# PARTS PICTURES



**A5CB23001A    A5CB23003A    A5FA2300    A5LD1052    A5PS1013    A5PS23000    A5SE23000    A5SW2300**



**A5F19010    A5TD1    AACB13000-HYP    AACB15001    AACB23000A    AACB5156    AACB9600A**

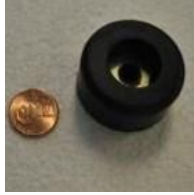


**AACB9605-CBL    AAHD1900-HYP    AAMB12-HD    AAMBRPI-HN    AASO23000**

# PARTS PICTURES



A5BR1001



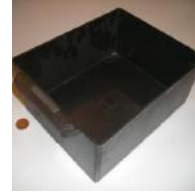
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A5BURU050



A5CA1005



A5CB2020



A5GU9040



A5LK2001



A5LK5002



A5PI23000



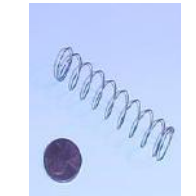
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A5SP1012



A5SP1013



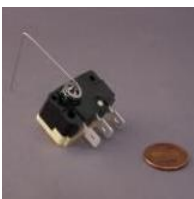
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A5SW18000



AAGR BX23000



AASW200



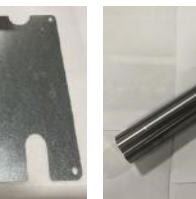
W5TM2300



A5BK9999



A5ME23007



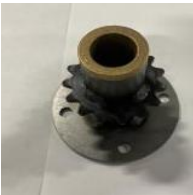
A5ME23008



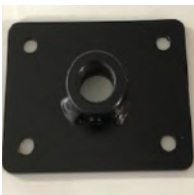
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A5ME23012



A5ME23013



A5ME23014



A5ME23015



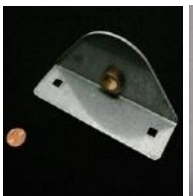
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A5ME4161



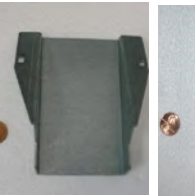
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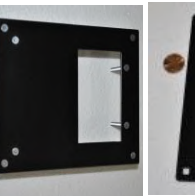
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A5ME4180



A5ME4182



A5PL4200



A5PL8900



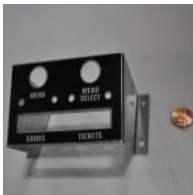
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A5PL9998



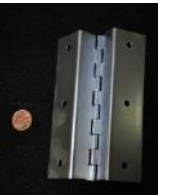
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AABK1013



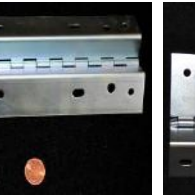
AAME23010



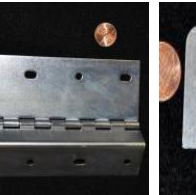
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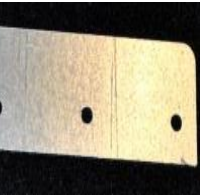
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W5HG1050



W5HG1065



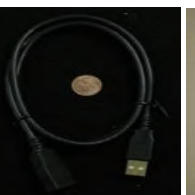
W5KE5000



A5DE1052



A5CE2300



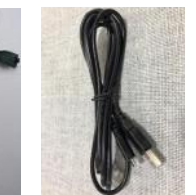
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A5CE9736



A5CEAU010



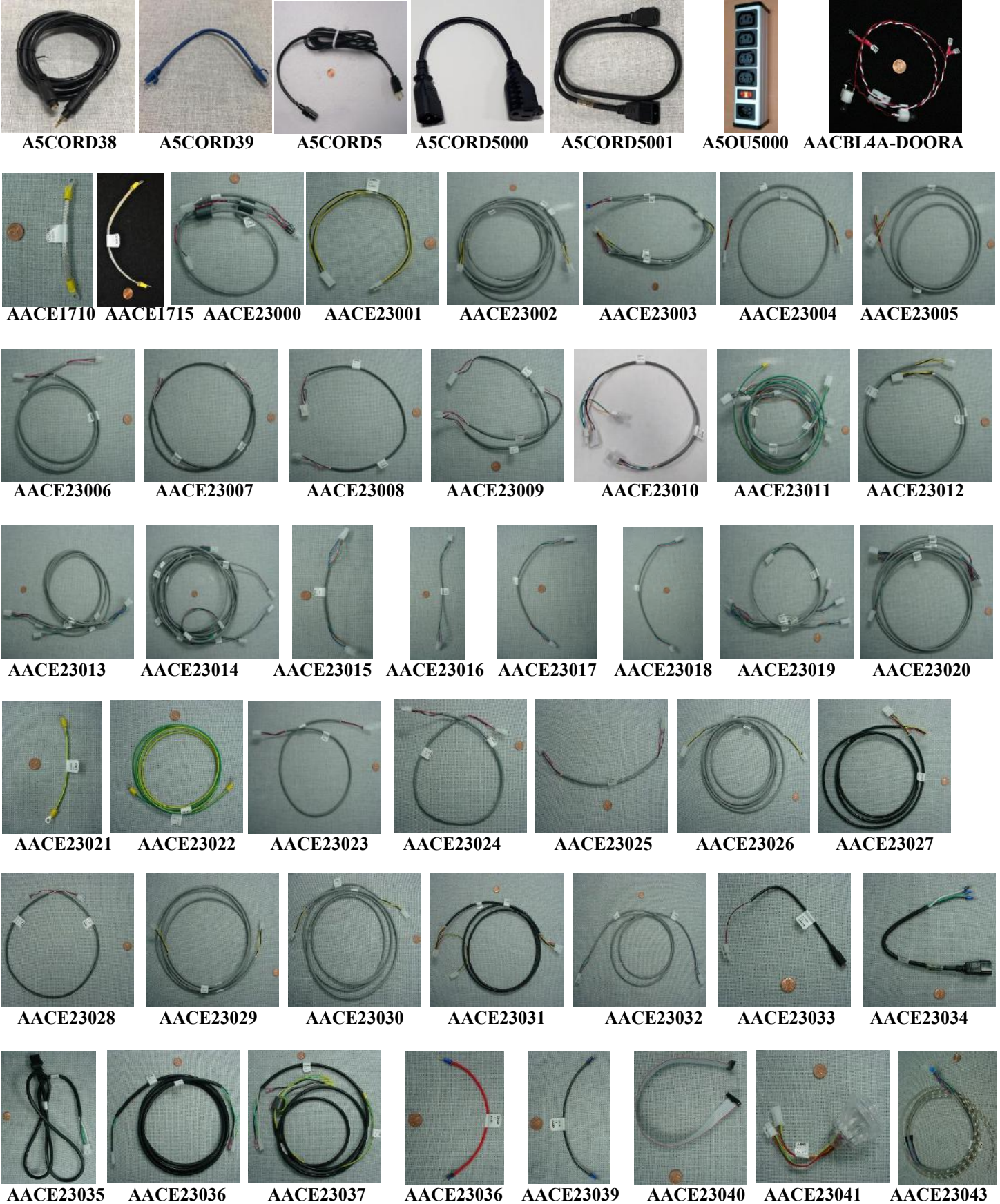
A5CORD1



A5CORD13000

A5CORD14

# PARTS PICTURES



# PARTS PICTURES



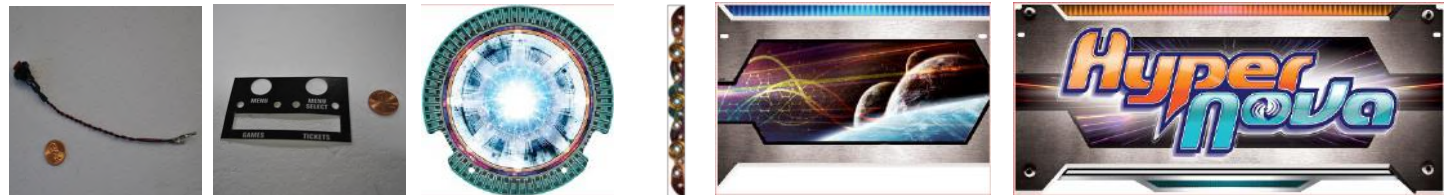
AACE23044 AACE23045 AACE23046 AACE23047 AACE23048 AACE23049 AACE23050 AACE23051



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AALB23053 AALB23054 AALB23055 AALB23056 AALB23057 AALB23058 AALB23064 AALB23065 AALB23066



AAPB2700A A5DE0042 A5DE23000 A5DE23001 A5DE23002 A5DE23003



AADE23004 A5DE23005 A5DE23006 A5DE23007 A5DE23008 A5DE23009



AADE23010 A5DE23011 A5DE23012 A5DE23013 A5DE23014 A5DE23015 A5DE23016 A5DE23017 A5DE23018



AADE23019 A5DE23020 A5DE24000 A5DE24001 A5DE24002 A5VF23000 A5VF23001 A5VF4153



# TECHNICAL SUPPORT

Excellent customer service is very important to Bay Tek Entertainment! 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. When you do need us, it's important that you know what to expect.  
We offer options that fit your needs.

## Electronics / Circuit Boards:

· **Repair & Return** – If you have Circuit Board issues with your Bay Tek product 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 product, 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.  
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:

Sometimes the issue isn't what it seemed to be. If you chose the Advance Replacement option and now need to return that circuit board, just give us a call to get Return Authorization. You will be credited for the cost of the board and charged only the bench fee for our processing and retesting that board. If you choose the Repair and Return option, we'll test your board before we begin. If no problems are found, you will only be charged the bench fee.  
*Note: Bench fees apply regardless of whether the repair was your choice or a recommendation from a Bay Tek Entertainment technician.*

*It's a small price to pay for troubleshooting the issues with your game.*

**[You can count on our Technical Support Team for service and support!](#)**



# WARRANTY OPTIONS

Bay Tek Entertainment warrants to the original purchaser that the game will be free of defects in workmanship and materials for a period of 6 months from the date of installation.

**Register your new game for an extra 3 months on your warranty.**

Log on to : <http://www.baytekent.com> Then click on the Register tab.

Bay Tek Entertainment will, without charge, repair or replace at it's option defective product or component parts upon notification to the parts/service department.

Warranty replacement part(s) will be shipped immediately via ground service, along with a Return Material Authorization (RMA) number for the return of defective part(s). Defective part(s) must be shipped back to Bay Tek Entertainment unless otherwise instructed.

***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 the serial number decal is altered, defaced, or removed from it's original position.***

Should you need your game serviced, determine the serial number from the decal on the back of the game cabinet or main board, and call **920.822.3951 Ext. 1102**  
or e-mail to: [service@baytekent.com](mailto:service@baytekent.com)

# REPAIR OF NON-WARRANTY PARTS

Should your game need servicing, determine the serial number from the decal on the back of the game cabinet, inside front door, or the cover of this manual and call **920.822.3951 Ext. 1102**

or e-mail to: [service@baytekent.com](mailto:service@baytekent.com)

An estimate of the repair charges will be quoted to you for approval.

You may now proceed in one of two ways.

Option 1:

Request immediate shipment of advance replacement part(s).

You will receive the part(s) with  
an **RMA** for the return of the faulty part(s).

***You must return the faulty part(s) in 14 days to avoid additional charges.***

Option 2:

Call the Service Dept at (920) 822-3951 Ext. 1102 to receive a RMA to send the  
faulty part(s) in for repair

Please include the following information

**NAME**

**ADDRESS**

**PHONE #**

**SERIAL #**

**PURCHASE ORDER NUMBER** or  
**AUTHORIZATION** to perform service.

Repaired part(s) will be shipped back using the same method in which they were received.

Repairs are warranted for 30 days from the date of installation.