

SERVICE MANUAL



BAY★TEK®
entertainment

PLACE SERIAL NUMBER LABEL HERE

FACTORY CONTACT INFORMATION



BAY TEK ENTERTAINMENT
Pulaski Industrial Park
1077 East Glenbrook Drive
Pulaski, WI 54162 USA

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WELCOME TO TOILET BOWL TOSS

Congratulations on your purchase!

Please take a moment to read through this manual and be sure to contact us if you have any questions, or would like 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 Entertainment

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 for further assistance.

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 substances 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.		
	WARNING	
This unit is capable of producing sound levels hazardous to human hearing. Consult local sound regulations and adjust volume accordingly.		

GAME SPECIFICATIONS

WEIGHT

NET WEIGHT	875 lbs.	397 kg
SHIP WEIGHT	1001 lbs.	454 kg

POWER REQUIREMENTS

INPUT VOLTAGE RANGE	110 to 240 VAC
INPUT FREQUENCY RANGE	50/60 Hz

GAME DIMENSIONS

WIDTH	40 inches	101 cm
DEPTH	102 inches	259 cm
HEIGHT	118 inches	299 cm

MAX OPERATING CURRENT

6 Amps @ 115 VAC / 3 Amps @ 230 VAC

OPERATING TEMPERATURE

FAHRENHEIT	45 - 80 F
CELSIUS	7.2 - 26.7 C

SHIPPING DIMENSIONS

PALLET	90"L x 45"W x 1 93" H
--------	-----------------------



TOILET BOWL TOSS GAME SETUP

The game will arrive on 1 pallet. Please inspect for shipping damage and report immediately to the freight company if any damage found.

Tools Needed:

# 2 Square head bit	5/32" Allen Hex bit
7/16" Wrench	T-30 Torx Bit
2 people	Wire Snips
	1 step ladder (6-8 foot)

Important:

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

Instructions:

- Remove the cardboard surround, and plastic wrapping.
- Remove the 2 side windows from the pallet and set aside for later use.



- Use wire snips to cut the banding straps on cabinet, and 1 banding strap on toilet seat.

- Remove the 4 lag screws using a T-30 Torx bit. The lag bolts can be discarded.

- Using 2 people, slide the game backwards off of the pallet, and place in final game room position.



- Remove the big box and set aside for later use.



- Remove the box from inside the cabinet.

Open box and remove the hardware kit to be used in assembling the cabinet.



- Remove the bag of game keys and use as needed.



- Remove the 2 screws holding down the marquee using a # 2 square bit.

- Remove the marquee from the cabinet and set aside for later installation.

Note: This marquee is top heavy and must be set aside something so that it will not tip over.



- The cabinet can now be tipped down onto the wheels, off the pallet, and brought to the game location - in front of the back section of the game.

Unload the big box:

- Open the big box previously removed from the pallet and verify the following parts are included:

- 2 Plunger Assy with lights (Left & Right)
- 2 Side Wall Arches (Left & Right)
- 1 Top Cabinet Wood
- 2 Large Connection Plates (A5ME14004)
- 2 Medium Connection Plates (A5ME14008)
- 2 Small Connection Plates (A5ME14009)



Attach cabinet sections together:

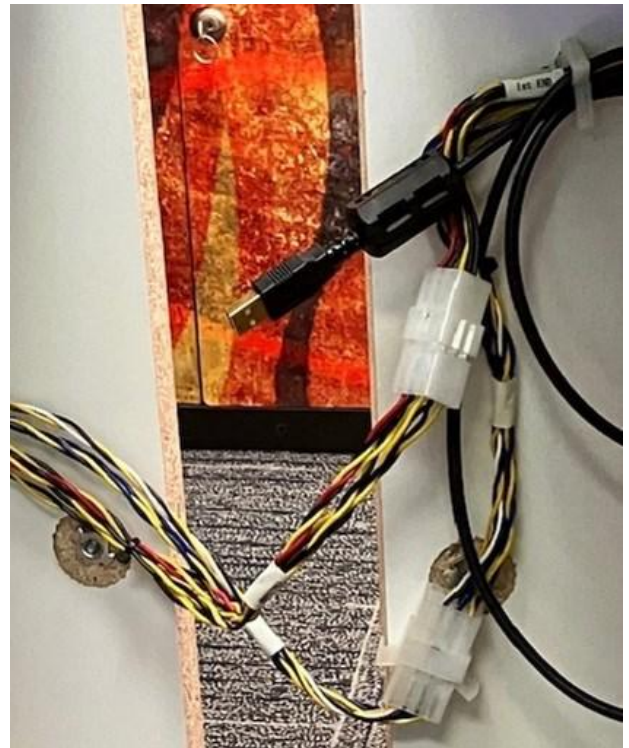
- Push the 2 cabinet sections close together and plug in the 2 connections on the right side of cabinet.

CE14014 to CE14012

CE14004 to CE14002

- Plug in the 2 pin connectors on the left side of cabinet.

CE14037 to CE14038



- Uncoil the USB cable and bring to the rear of cabinet and plug into any open USB socket on the motherboard.

- Push cabinets up tight against each other.

- Locate 8 of bolts (A5SCHX025) from the hardware kit.



A5SCHX025

- Locate 1 large connector plate (A5ME14004)



- Position large connector plate on the left side of cabinet as shown with high angled top to back.

- Hand thread all 8 bolts into plate.

Note: If some holes do not line up, the front of the cabinet may have to be raised slightly.

- Tighten all 8 bolts using a 5/32 hex bit.

- Repeat this process for the right side cabinet.



Attach side walls:

- The medium connector plate (A5ME14008) with curve and angle following cabinet outline will be already attached to your cabinet.

- Locate 6 of bolts (A5SCHX025) from the hardware kit.



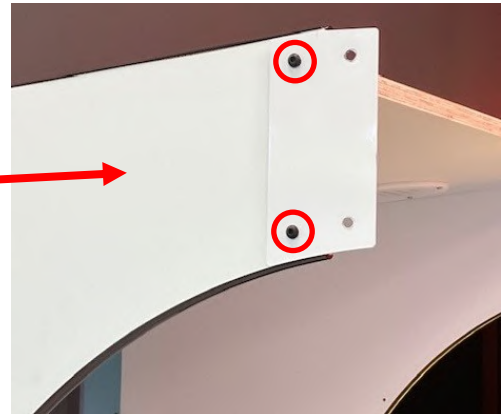
A5SCHX025

- Locate 1 small connector plate (A5ME14008)



- Position small connector plate on top as shown with curve and angle following cabinet outline.

- Hand thread 2 bolts into left edge of plate.



- Locate Left Side Wall Arch and place in position as shown.

- Hand thread 2 bolts into the top connector plate, and hand thread 2 bolt into the bottom connector plate.

- Tighten all 6 bolts using a 5/32 hex bit.

- Repeat this process for the right side cabinet.





A5WASI020

Attach top wood piece:

To attach components to the inside and top of the game, you must carefully climb inside the cabinet.

Most surfaces are strong and will support the weight of a person, we ask that you avoid stepping on this center plexi.

It is the least supported section of the cabinet.

- Locate 4 of bolts from the hardware kit.
- Locate the top wood piece and place on the top of the cabinet as shown.



A5SCHX025

Ensure the center T nuts are on the bottom of the board.

- Hand thread 4 bolts from under, up into the top wood piece.
- Tighten all 4 bolts using a 5/32 hex bit.



Attach marquee:

- Locate 2 bolts, 2 lock nuts, 2 washers.



A5BOHH060



A5WASI020



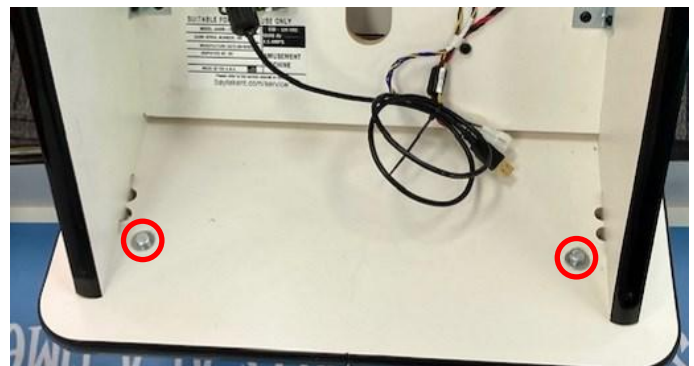
A5WAFL060

- While the marquee is on the floor, place the bolts, lock washers, and washers into the 2 mounting holes. This will help in mounting by guiding the bolts in place when it is on top of the game.

- Using 2 people, carefully lift the marquee to the top of the cabinet.

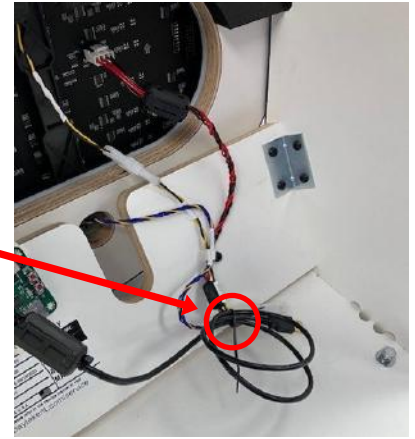
- Position the marquee so that the 2 bolts fall into the 2 mounting holes. Hand thread both bolts into the top of the game.

- Tighten both bolts using a 7/16" wrench.

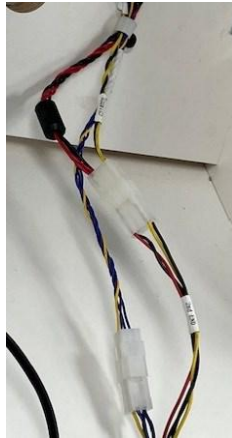


Connect Marquee Cables:

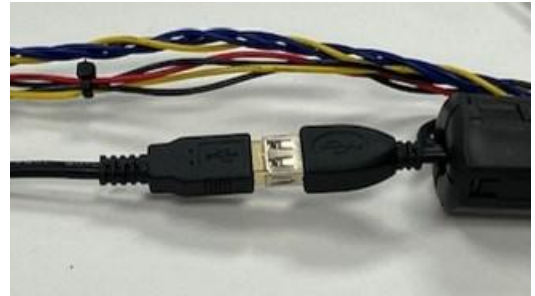
- Place a 6 - 8 foot ladder on the right side of the cabinet.
- Carefully snip plastic cable tie using a wire snips.



- Connect the 2 cables together:
CE14006 to CE14005
CE14020 to CE14013



- Connect the 2 USB cables together.



Attach Side Windows:

- Locate 12 of black 8 screws.



A5SCPH151

- Locate left side window. It is the one with the notch cutout on the left side of center.



- Bring the left side window inside the cabinet and place in position. Ensure the notch cutout lines up with the T-nuts on the inside of the cabinet.



- Install all 12 screws using a # 2 square bit drive.

- Repeat this process for the right side cabinet.



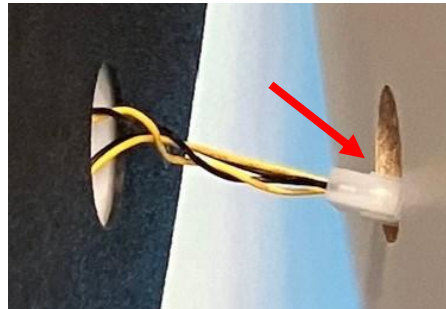
Attach Plunger Plexi with Lights:

- Locate 2 bolts and 2 washers from hardware kit.



- Locate left side plunger plexi assembly. It follows the curve of the cabinet.

- Lift the plunger plexi assembly into place and feed the light cable into the hole in the main cabinet.



- Hand thread the 2 bolts in place, and tighten with a # 2 square bit.

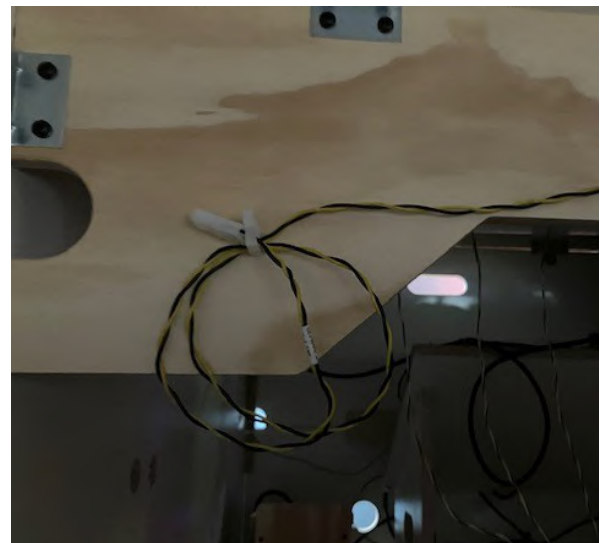
- Repeat this process for the right side cabinet.

Plug in Plunger Light Cables under cabinet:

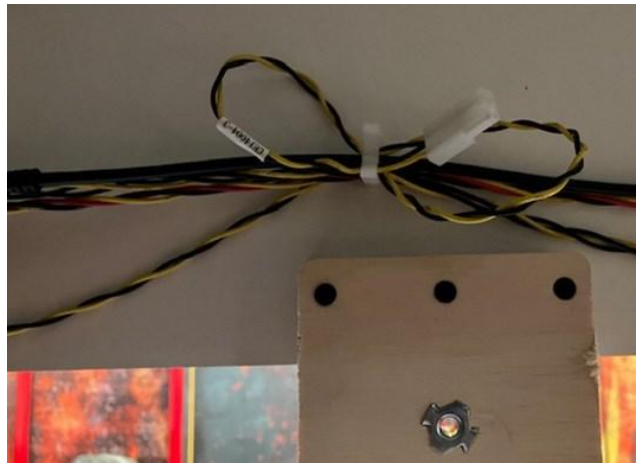
- Locate the access panel on the right side of game.
- Remove the 5 bolts using a # 2 square bit drive.



- Locate the CE14004 cable, uncoil and plug into the left side plunger.



- Locate the other CE14004 cable, uncoil and plug into the right side plunger.



The cabinet is now fully assembled!

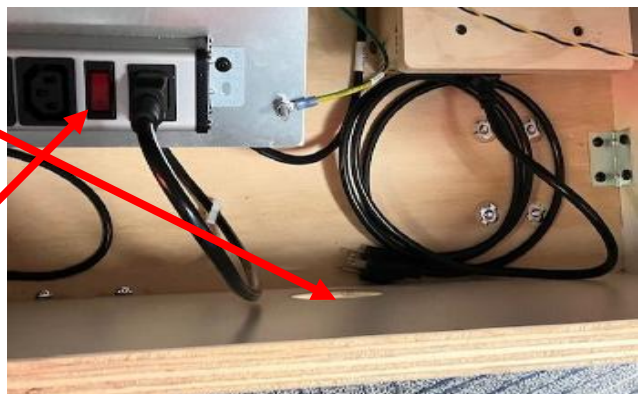
Turn on game:

- Remove the lower back door by unlocking the 2 locks.



- Route the power cable out the hole in the back of game and plug into the wall.

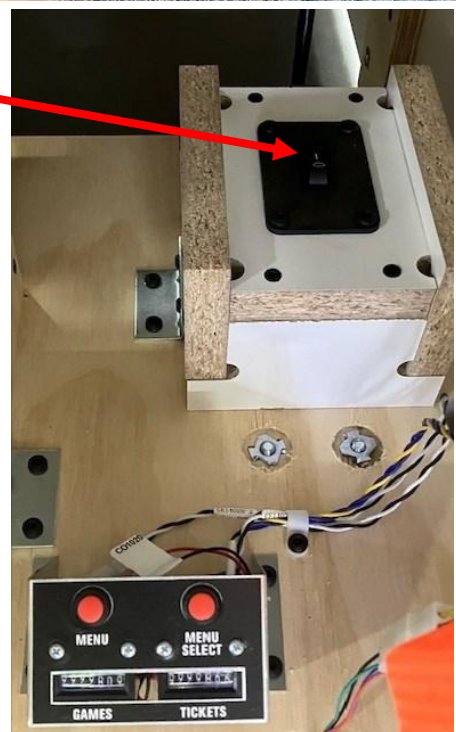
- Flip the rocker switch on power switch ON in the back of the game.



- Flip the rocker switch ON in the front of the cabinet and allow game to boot up.

- Remove the box of 30 balls and toss up into the cabinet. (There are 20 spare balls to keep until needed)

The game is now set up and ready to play!
Enter the menu to adjust settings to your specific location. Price per play / Ticket Settings / etc..



CARD SWIPE SYSTEM INSTALLATION

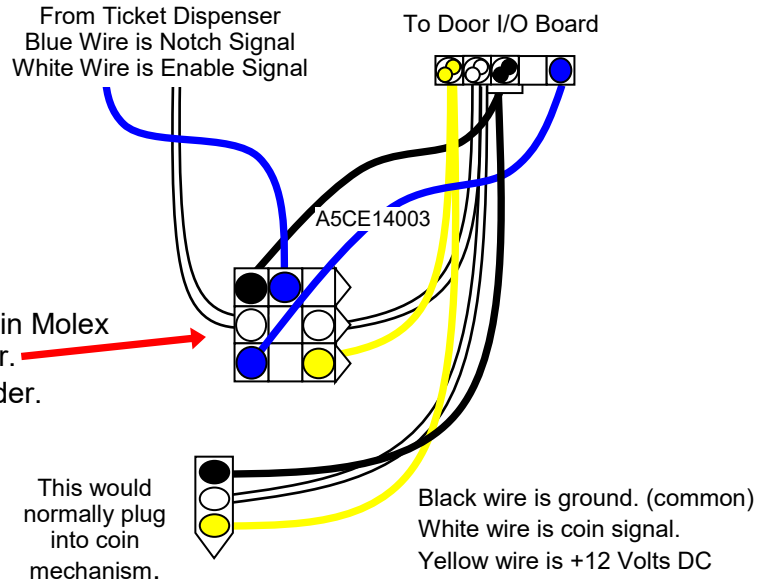
The Toilet Bowl Toss game is pre-wired with a UCL (Universal Card Link) connector to accept Card Swipe systems from many different manufactures.

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

Option #1:

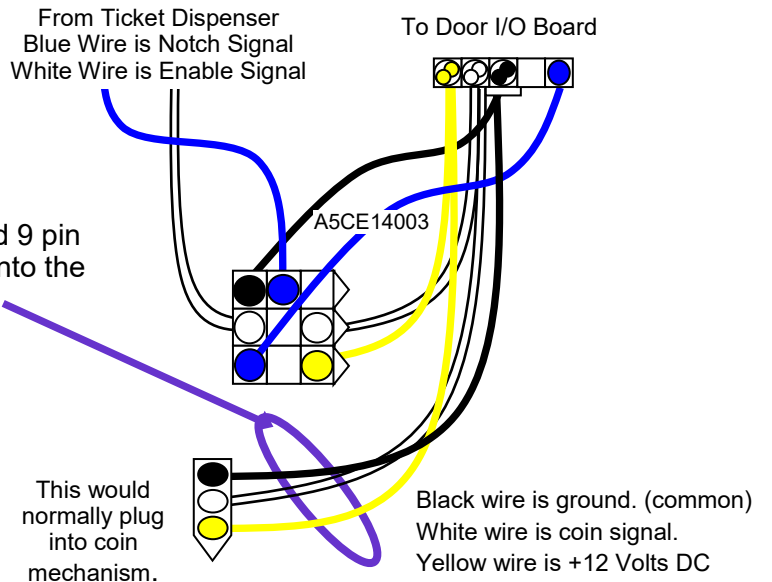
Card swipe systems may come with a standard 9 pin Molex connector. This is the UCL connector.

Simply plug this connector into your card swipe reader.



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 A5CE14003 harness.



Notes:

1.) 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.

Menu Changes

Enter menu, Go to "Payout Settings" Menu

Change "Credits" to Swipe or Tap

Change "Redemption Type" to Tickets, Points, or Coupons

HOW TO PLAY

Toilet Bowl Toss is ball toss game that combines the fun and frenzy of throwing lots of balls, along with the skill and accuracy of throwing individual balls into a small target.

The goal is to get 50 balls scored and win the bonus!

The game time is adjustable in the game menu.

The bonus is adjustable and increments per game played.

The bowl is open at the start of the game which allows many balls to be scored.



After an operator adjustable amount of time (or score) the bottom toilet lid slams down and the player has to be more accurate to score more points.



After an operator adjustable amount of time (or score) the top toilet lid slams down and the player has to be extremely accurate to score more points for the remaining game time.



When the game is over, tickets will be awarded depending on the balls scored. (adjustable in the game menu)

Refer to “Toilet Lid Process” section for more information on game theory and timing.

MAIN MENU FUNCTIONS

The Menu and Menu Select buttons are located inside the front door.



Hold the MENU button down for 1 second to open the main menu on the display.

Press MENU to scroll through the options, and MENU SELECT to change the settings.

Default settings are highlighted in yellow below.



MAIN MENU		
Clear Credits & Tickets	Press the Menu Select button 5 times to clear any accumulated credits and tickets	
Mute	OFF	ON Set to "ON" and exit menu to Mute entire game
Attract and Volume	Press the Menu Select button to enter the Attract and Volume Menu	
Payout Settings	Press the Menu Select button to enter the Payout Menu	
Game Settings	Press the Menu Select button to enter the Game Settings Menu	
Statistics	Press the Menu Select button to enter the Statistics Menu	
Diagnostics	Press the Menu Select button to enter the Diagnostics Menu	
Exit	Press the Menu Select button to exit the menu.	

Software version is shown on the display as you enter the menu.

If it shows **Not Found**, then the circuit board is not communicating to motherboard.

Software Version 1.0.2
Main Board Version 1.2
Door Board Version 1.7

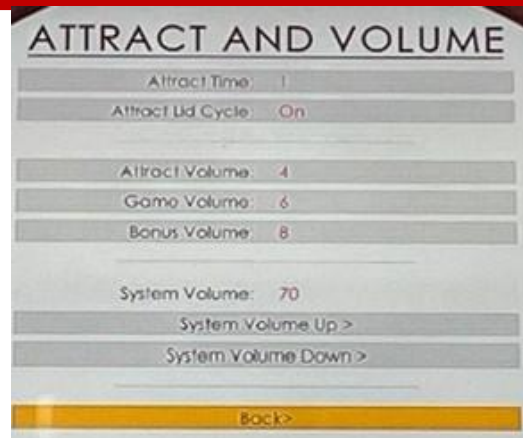
ATTRACT AND VOLUME MENU

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Default settings are highlighted in yellow below.



Attract Time

Disabled	1	2	3	4	5	10	11	15	20
----------	---	---	---	---	---	----	----	----	----

Sets the amount of time (in minutes) between attract sound cycles during non-play periods.

Attract Lid Cycle

Off	On
-----	----

Lids will cycle 1 time between game plays according to attract time selected.

Attract Volume

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

Sets the volume level of the attract sounds when the game is not being played.

Game Volume

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

Sets the volume level of the sounds when the game is being played.

Bonus Volume

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

Sets the volume level of the sounds when the games bonus has been won.

System Volume

0	10	20	30	40	50	60	70	80	90	100
---	----	----	----	----	----	----	----	----	----	-----

Shows the current amplification percentage of motherboard system sound level capacity.

System Volume Up and System Volume Down will adjust this master volume level.

PAYOUT SETTINGS MENU

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Default settings are highlighted in yellow below.



Credits

Swipe	Tap	Free Game	1	2	3	...	19	20
-------	-----	-----------	---	---	---	-----	----	----

Sets the amount of credit pulses needed to start a game. “SWIPE” will display “Swipe Card to play” on the monitor. “TAP” will display “Tap Card to Play” on the monitor.

“Free Game” means the game will play continuously.

Redemption Type

Tickets	Points	Coupons
---------	--------	---------

Sets the wording on the screen used to describe the tickets won.

Fixed Tickets

Disabled	1	2	3	4	...	23	24	25
----------	---	---	---	---	-----	----	----	----

This option will over rule any other options set and give the same amount of tickets for each game.

Score 0-10 Tickets

0	1	2	3	...	8	9	10	11	...	18	19	20	25	30
---	---	---	---	-----	---	---	----	----	-----	----	----	----	----	----

Sets the amount of Tickets won for final game scores ending between 0 and 10 points.

Score 11-20 Tickets

0	1	2	3	...	19	20	25	30	35	40	45	50	60	70	80	90	100
---	---	---	---	-----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Sets the amount of Tickets won for final game scores between 11 and 20 points.

PAYOUT SETTINGS MENU

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Default settings are highlighted in yellow below.

PAYOUT	
Credits:	Swipe Card
Redemption Type:	Tickets
Fixed Tickets:	Disabled
Score 0-10 Tickets:	10
Score 11-20 Tickets:	20
Score 21-30 Tickets:	30
Score 31-40 Tickets:	40
Score 41-49 Tickets:	50
Minimum Bonus:	750
Maximum Bonus:	1500
Bonus Increment:	2
Back>	

Score 21-30 Tickets

0	1	2	3	...	19	20	25	30	35	40	45	50	60	70	80	90	100
---	---	---	---	-----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Sets the amount of Tickets won for final scores between 21 and 30 points.

Score 31-40 Tickets

0	1	2	...	19	20	25	30	35	40	45	50	60	...	90	100	125	150	175	200
---	---	---	-----	----	----	----	----	----	----	----	----	----	-----	----	-----	-----	-----	-----	-----

Sets the amount of Tickets won for final game scores between 31 and 40 points.

Score 41-49 Tickets

0	1	2	...	19	20	25	30	...	45	50	55	...	60	70	...	90	100	125	150	175	200	250	...	500
---	---	---	-----	----	----	----	----	-----	----	----	----	-----	----	----	-----	----	-----	-----	-----	-----	-----	-----	-----	-----

Sets the amount of Tickets won for final game scores between 41 and 49 points.

Minimum Bonus

0	50	55	60	...	90	95	100	150	200	...	700	750	800	...	1000	1500	...	5000
---	----	----	----	-----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	-----	------

Sets the minimum value that the Bonus will reset to after won.

Maximum Bonus

0	50	55	60	...	90	95	100	150	200	...	950	1000	1500	...	5000
---	----	----	----	-----	----	----	-----	-----	-----	-----	-----	------	------	-----	------

Sets the maximum value that the Bonus will increase up to.

Bonus Increment

Off	1	2	3	4	5	...	48	49	50
-----	---	---	---	---	---	-----	----	----	----

Sets the ticket amount that bonus value will increase with every game played.

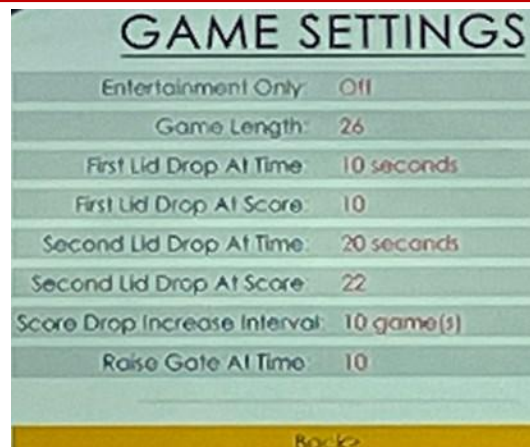
GAME SETTINGS

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Default settings are highlighted in yellow below.



Entertainment Only

OFF	ON
-----	----

“Entertainment Only” will not pay out tickets, and not mention tickets on screen.

Game Length

10	11	12	...	24	25	26	27	28	29	30
----	----	----	-----	----	----	----	----	----	----	----

Sets the amount of time (in seconds) of the total play time.

First Lid Drop at Time

10	11	12	13	14	15	16	17	...	25	26
----	----	----	----	----	----	----	----	-----	----	----

Sets the amount of time (in seconds) that the bottom lid will drop after game start.

Note: These options will change depending on the value set for “Game Length”

First Lid Drop at Score

10	11	12	13	14	15	16	17	...	29	30
----	----	----	----	----	----	----	----	-----	----	----

Sets the score value at which the bottom lid will drop.

Second Lid Drop at Time

10	11	12	...	20	21	22	23	24	25	26
----	----	----	-----	----	----	----	----	----	----	----

Sets the amount of time (in seconds) that the top lid will drop after game start.

Note: These options will change depending on the value set for “Game Length”

Second Lid Drop at Score

10	11	12	...	20	21	22	23	...	49	50
----	----	----	-----	----	----	----	----	-----	----	----

Sets the score value at which the top lid will drop.

GAME SETTINGS

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Default settings are highlighted in yellow below.

GAME SETTINGS	
Entertainment Only:	Off
Game Length:	26
First Lid Drop At Time:	10 seconds
First Lid Drop At Score:	10
Second Lid Drop At Time:	20 seconds
Second Lid Drop At Score:	22
Score Drop Increase Interval:	10 game(s)
Raise Gate At Time:	10
Back	

Score Drop Increase Interval

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

The amount of games played before the “Second Lid Drop at Score” will increase by 1. This will hinder repeat bonus wins. If a bonus is won, this timer will reset.

Raise Gate at Time

5	6	...	9	10	11	...	28	29	30
---	---	-----	---	----	----	-----	----	----	----

Sets the amount of time (in seconds) that the ball gate will raise after game start.

The upper limit of this will truncate down according to game time. This setting is very important as it will limit the amount of balls left in the ball trough at the end of the game.

Recommended Ticket Payout Table

Cost per play		1-10 balls	11-20 balls	21-30 balls	31-40 balls	41-49 balls	50 balls	
~33%	AVG Tix Target	Bucket 1	Bucket 2	Bucket 3	Bucket 4	Bucket 5	BONUS	Progressive
	5	1	2	3	4	5	100	0
\$0.25	10	2	4	6	8	10	100	2
\$0.50	15	2	4	6	10	20	250	1
	20	2	5	10	20	30	250	1
\$0.75	25	5	10	15	20	30	350	1
\$1	35	5	10	15	30	50	500	1
\$1.25	45	5	10	20	40	50	500	5
\$1.50	50	10	20	30	40	50	750	2
\$2	65	10	20	30	50	100	750	5
\$2.50	80	20	30	40	50	100	1000	10
\$3	100	20	30	40	50	100	1500	10
\$4	125	20	30	40	50	100	2000	25
\$5	150	20	40	60	80	100	2500	25

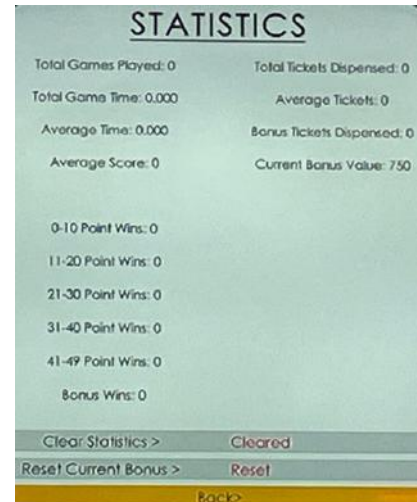
Note: This is an average sampling over time, results may vary depending on customer skill.

STATISTICS MENU

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.



Total Games Played: 0	Total Tickets Dispensed: 0
Total Game Time: 0.000	Average Tickets: 0
Average Time: 0.000	Bonus Tickets Dispensed: 0
Average Score: 0	Current Bonus Value: 750
0-10 Point Wins: 0	
11-20 Point Wins: 0	
21-30 Point Wins: 0	
31-40 Point Wins: 0	
41-49 Point Wins: 0	
Bonus Wins: 0	
Clear Statistics >	Cleared
Reset Current Bonus >	Reset
Back>	

Overall Summary

Total Games Played - Shows the total number of games played.

Total Game Time - Shows the total time played in seconds.

Average Time - Shows the average game length in seconds.

Average Score - Shows the average score of games played.

Total Tickets Dispensed - Shows the total number of tickets won.

Average Tickets - Shows average number of tickets per game.

Bonus Tickets Dispensed - Shows the total number of tickets won via the Bonus only.

Current Bonus Value - Displays the current bonus value. Settable in the “Payout Settings” Menu

Game Summary

Shows the total number of games played which ended in the following categories:

0-20 Point games

21-30 Point games

31-40 Point games

41-45 Point games

46-49 Point games

Bonus Win games

CLEAR STATISTICS

Press the “SELECT” button 5 times to reset all statistics.

RESET CURRENT BONUS

Press the “SELECT” button 5 times to reset the bonus to the minimum value.

GAME DIAGNOSTIC MENU

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

Change selection with the “SELECT” button.

Scroll to “BACK” and press the “SELECT” button to go back to the main menu.

Cycle Lids: Press Menu Select to cycle both the Top Lid Motor and the Bottom Lid Motor

Drop Next Lid: Press Menu Select to cycle the Lid Drop Motor 1/2 turn.

Drop Both Lids: Press Menu Select to cycle the Lid Drop Motor one full revolution.

Raise Ball Gate: Press Menu Select to cycle the Ball Gate Motor up.

Lower Ball Gate: Press Menu Select to cycle the Ball Gate Motor down.

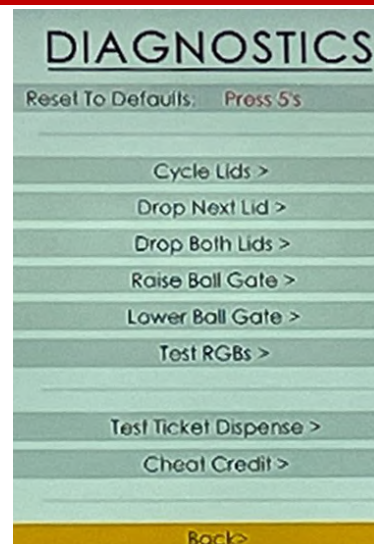
Test RGB's: Press Menu Select to change the color of the lights on the sides of the game.

Colors will cycle through: Red, Green, Blue, White.

Test Dispense Ticket: Press Menu Select to dispense 1 ticket from the ticket dispenser.

Cheat Credit: Press Menu Select to add a credit to the game.

Back: Press Menu Select to return to the main menu.



Sensors:

Top Lid Home Sensor: Will be checked when the top lid home sensor is blocked.

Top Lid Raised Sensor: Will be checked when the top lid raised sensor is blocked.

Bottom Lid Home Sensor: Will be checked when the bottom lid home sensor is blocked.

Bottom Lid Raised Sensor: Will be checked when the bottom lid raised sensor is blocked.

Bottom Lid Drop Sensor: Will be checked when the bottom lid dropped sensor is blocked.

Top Lid Drop Sensor: Will be checked when the top lid dropped sensor is blocked.

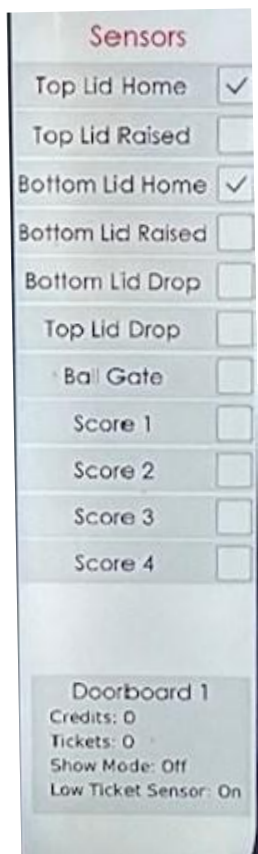
Ball Gate Sensor: Will be checked when the ball gate sensor is blocked.

Score 1: Will flash when far left Lane Sensor is activated.

Score 2: Will flash when second from left Lane Sensor is activated.

Score 3: Will flash when second from right Lane Sensor is activated.

Score 4: Will flash when far right Lane Sensor is activated.



Door Board: Shows the credits and tickets owed. Displays the status of the “Show Mode” dipswitch, and the status of the Low Ticket Switch.

TOILET LID PROCESS

1.)
Top Lid Motor cycles forward until it hits the Top Lid Raised Sensor.

2.)
Bottom Lid Motor cycles forward until it hits the Bottom Lid Raised Sensor.

3.)
Both of these motors then cycle backwards to home sensors.

AACB5190A
Top Lid
Home Sensor

AACB4401
Top Lid Raised
Sensor

AACB5190A
Bottom Lid
Home Sensor

AACB4401
Bottom Lid
Raised Sensor

A5MO14000
Top Lid Motor
1.8 - 3.5 Ohms
11.5-12Volts DC
when raising lid

A5MO14000
Bottom Lid Motor
1.8 - 3.5 Ohms
11.5-12Volts DC
when raising lid

AACB3850A
Top Lid Drop Sensor

AACB3850A
Bottom Lid Drop Sensor

A5MO5800
Lid Drop Motor
4.5 - 6.5 Ohms
11.5 - 12 Volts DC
when turning.

5.)
After a menu settable amount of time or points, the Lid Drop Motor rotates again until the Top Lid Sensor is triggered.

4.)
After a menu settable amount of time or points, the Lid Drop Motor rotates until the Bottom Lid Sensor is triggered.

Top Lid Release

Bottom Lid Release

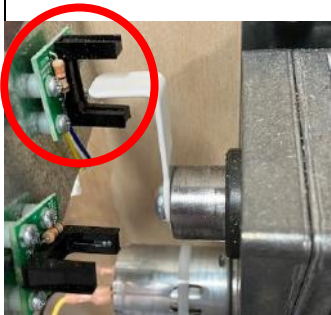


SENSOR DETAILS

At Game Power On: No motors turn. The game just boots up into the program.

Top Lid Home Sensor:

If blocked - Nothing different at game power on and game play.

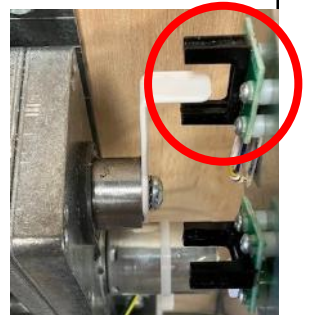


If unplugged - Nothing different at power on, but during game play the top lid will not slam down, it will force the motor backwards closing slowly.

Sensor normally is blocked with 3.3 VDC on White and Blue wires.
0 VDC when blocked and top lid down.

Bottom Lid Home Sensor:

If blocked - Nothing different at game power on and game play.

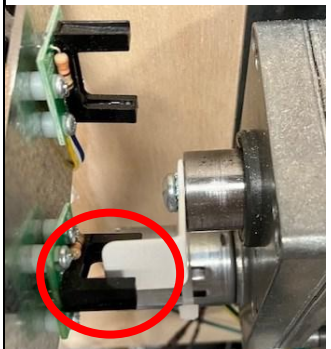


If unplugged - Nothing different at power on, but during game play the bottom lid will not slam down, it will force the motor backwards closing slowly.

Sensor normally is blocked with 3.3 VDC on White and Blue wires.
0 VDC when blocked and bottom lid down.

Top Lid Raised Sensor:

If blocked - Nothing different at game power on, but after the top lid is raised, the bottom lid does not raise. The rest of game plays normally.



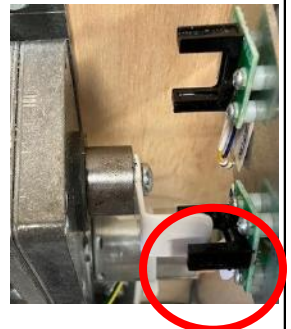
If unplugged - Nothing different at game power on, but after the top lid is raised, the bottom lid does not raise. The rest of game plays normally.

Sensor normally is not blocked with 0 VDC on White and Blue wires.
3.3 VDC when blocked as top lid is raised.

Top Lid Raised Sensor:

If blocked - Nothing different at game power on and game play.

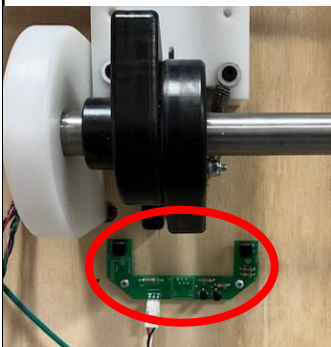
If unplugged - Nothing different at power game on and game play.



Sensor normally is not blocked with 0 VDC on White and Blue wires.
3.3 VDC when blocked as bottom lid is raised.

Top Lid Drop Sensor:

If blocked - Lid Drop Motor runs continuously at game power on.



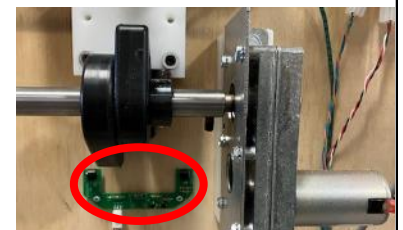
If unplugged - Lid Drop Motor runs continuously at game power on.

Sensor normally is not blocked with 3.3 VDC on White and Blue wires.
0 VDC when blocked and LED light is on.

Bottom Lid Drop Sensor:

If blocked - Nothing different at game power on, but after the game is over the Lid Drop Motor runs continuously.

If unplugged - Nothing different at power on, but after the game is over the Lid Drop Motor will run for 20 seconds, pause, then turn again for 1 revolution.



Sensor normally is not blocked with 3.3 VDC on White and Blue wires.
0 VDC when blocked and LED light is on.

TROUBLESHOOTING GUIDE

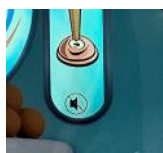
Troubleshooting Strategy

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
No power to the game No lights on at all. There are 2 power switches in the game. One in the front of the cabinet and one in the back of the cabinet.	Unplugged. Circuit breaker tripped. Line Filter Faulty. Power strip faulty. Disconnected, loose or broken wires.	Check wall outlet. Reset power strip breaker switch or building circuit breaker. Replace Line Filter (Part # A5FI9012) Change plug position, replace power strip if a section does not work. Part # A5OU5000 Check rocker switch on power strip. Refer to wiring diagram. Check connections and reseal cables from line filter to outlet strip. Cables # CE14000 and A5CORD5 If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
Monitor is on But everything else off (Power Supply not ON)	Power supply unplugged. Rocker Switch. Power supply shutting down because of 12 V overload. Faulty power supply. Faulty Power Dist Board	Insure power supply is plugged into power strip Make sure rocker switch is set ON.  Refer to Power Supply Diagnostics to isolate bad component. A bad motor or 12 volt short would cause this. Refer to Power Supply Diagnostic section. Replace Power Distribution Bd. (A5CB5156B)
Dollar Bill Acceptor not functioning Ensure Bill Acceptor is set to "Always Enable" Important : Only 12 Volt DC DBA is to be installed. Model # AE 2454 U5E Part # A5AC9101	Check for power to Bill Acceptor. Dirt or debris in acceptor slot. Pinched, broken, or disconnected wiring. Bill acceptor problem. Part # A5AC9101	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 I/O Aux Board. (A5CE14027) Repair or replace wiring harness. 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.
Meters does not work Game meter will click as the game starts. Ticket meter will click as tickets are being dispensed.	Ensure correct number of tickets are being dispensed Disconnected, loose or broken wires. Faulty counter.	Check ticket values in menu. Refer to Tickets not dispensing troubleshooting section. Refer to wiring diagram. Check connections and reseal cables from meters to I/O Aux Board Cables # AACO1020 and CE14026 Replace counter. AACO1020.

TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
Game not coining up Enter Diagnostic Mode to see if Credits Increment when coin is inserted.	Look for communication and power on the I/O Aux Board for that player. Ensure game makes sound when coin switch is triggered. Game set to large amount of credits per game. Coin Input stuck ON	Refer to "I/O Aux Board Issue" diagnostic section. 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 Aux Board. (AACBL4A-DOORA, CE14003) Check Game Setup Menu. Ensure Credits is set to proper value. Ensure only 5 volts on coin switch green and black wires. Replace I/O Aux board if needed. Part # AACB9605A-TBT
No Sound Motherboard creates sound, the Audio Amplifier boards amplifies it.	Volume set to mute in menu or game volume/attract volume set to zero. Disconnected, loose or broken wires. Verify 12 Volts DC to Audio Amplifier Boards on CE27519 Faulty speaker.	Enter Main Menu and verify: Game Volume & Attract Volume is not zero. Mute is set to OFF Refer to wiring diagram. Check connections and reseal audio cable from motherboard to speakers. Cables # A5CE2321, A5CEAU010, CE14008, CE27500, CE14007, AACE8811A Unplug audio cable (A5CE2321) from motherboard, plug into MP3 player or phone and see if music is amplified and comes out of speaker. If Yes - then motherboard is faulty. If No - then cable or amplifier board is faulty Replace speaker. AACE8811A
I/O Aux Board Issue Game does not coin up, and has no other functions.	Green power LED should be flashing. Red and Yellow LED's should be on solid, with yellow LED randomly blinking. Faulty I/O Aux Board.	If it is off, then check 12 & 5 Volts DC coming into board on cable CE14005 from Power Distribution Board. If not on, then it is not communicating with the motherboard. Check A5CORD59 USB cable. If they are off, check power into board on CE14005 cable. Replace board if needed. Replace if needed. Part # AACB9605A-TBT
Low Tickets message on monitor	Tickets are empty in ticket tray Faulty cable. Disconnected, loose or broken wires. Faulty low ticket switch. Dipswitch on I/O Aux Board. Faulty I/O Aux Board.	Load tickets into tray. Ensure tickets hold down the micro switch wire. Check connectors from low ticket switch to Newgen board. Check for continuity. (A5CE14028) Inspect switch and replace if needed. (AASW200) Check dipswitch settings on the I/O Aux board. If the game has a card swipe system, Dipswitch # 5 should be ON. Replace I/O Aux Board. Part # AACB9605A-TBT



Red and Yellow LEDs

Green Power LED

TROUBLESHOOTING GUIDE

Problem		Probable Cause		Remedy
Tickets do not dis-pense or Wrong amount dispensed Check for the correct amount of tickets showing on Monitor 	Tickets on monitor does not 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. Faulty I/O Aux Board.	Blow dust from sensor and clean with isopropyl alcohol. Replace with working dispenser to isolate the problem. (A5TD1) Flip tickets and load upside-down to have large cut notch toward opto sensor. Check connectors from ticket dispensers to I/O Aux board. Check for continuity.(A5CE14003) Ensure issue is not with a card swipe system - Replace I/O Aux Board. Part # AACB9605A-TBT	
	Tickets on monitor do match tickets coming out of game	Settings in Menu are incorrect.	Enter Menu and check certain areas: Entertainment Only to Off Score Bucket Settings Door Board Dipswitch Settings: 1/2 Ticket Fixed tickets	
Menu Buttons do not work. The menu buttons are located in the Left Side Coin Door		Swap connectors at the 2 buttons. Pinched, broken, or disconnected wiring I/O Aux board faulty.	Replace button if problem stays with button.(AAPB2700A) Inspect crimp to ensure good connection. Check connections from menu buttons to I/O Aux Board. Check cables (AAPB2700A, A5CE14026) Replace I/O Aux Board if needed. Part# AACB9605A-TBT	
All LED Color Strips are not Working Controller Board issue	Ensure Controller Board is receiving voltage from Power Distribution Board. Ensure USB cable has good communication to the motherboard. Faulty LED		Refer to wiring diagram. Check connections & reseal cables from Power Distribution Board to Light Board. CE14001 Refer to wiring diagram. Check connections and reseal USB cable from Motherboard to Light Board.. Cable # A5CORD42 Refer to wiring diagram. All color changing light cables plug into the Controller Board.	
LED Lights in the Toilet Tank are not Working	Loose or bad connection. Test LED's in Diagnostic Menu Faulty LED		Refer to wiring diagram. Check multiple connections and reseal cables from Controller Board to Tank. Cables # CE14021, CE14022, CE14014, CE14012 Enter menu, scroll to Diagnostic Menu & "Test RGB's" Replace faulty LED. Part # A5CE14021 or A5CE14022	
LED Lights in the Toilet Bowl are not Working	Loose or bad connection. Test LED's in Diagnostic Menu Faulty LED		Refer to wiring diagram. Check multiple connections and reseal cables from Controller Board to Toilet Bowl. Cables # A5CE14023, A5CE14024, A5CE14015 Enter menu, scroll to Diagnostic Menu, & "Test RGB's" Replace faulty LED. Part # A5CE14023 or A5CE14024	
LED Lights in front Trough are not Working	Loose or bad connection Test LED's in Diagnostic Menu Faulty LED		Refer to wiring diagram. Check multiple connections, reseal cables from Controller Board to Trough. CE14031 CE14032, CE14004 & CE14002 Enter menu, scroll to Diagnostic Menu, & "Test RGB's" Replace faulty LED. Part # A5CE14025	

TROUBLESHOOTING GUIDE

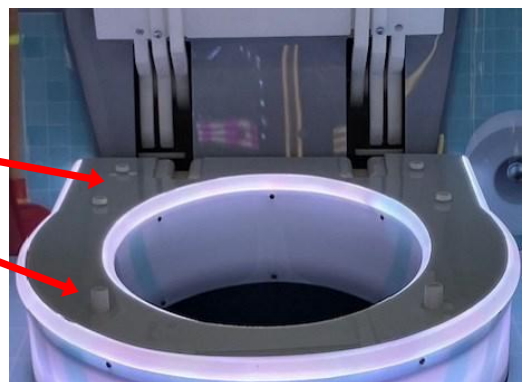
Problem		Probable Cause		Remedy	
LED Lights in Marquee under the front of the cabinet are not Working		Loose or bad connection		Refer to wiring diagram. Check multiple connections, re-seat cables from Controller Board to Lights. CE14004 & CE14002	
		Test LED's in Diagnostic Menu		Enter menu, scroll to Diagnostic Menu, & "Test RGB's"	
		Faulty LED		Replace faulty LED. Part # A5CE14032	
LED Lights in Left and Right Plunger are not Working		Loose or bad connection		Refer to wiring diagram. Check multiple connections, re-seat cables from Controller Board to Side Plungers. CE14004 & CE14002	
		Test LED's in Diagnostic Menu		Enter menu, scroll to Diagnostic Menu, & "Test RGB's"	
		Faulty LED		Replace faulty LED. Part # A5CE14018 or A5CE14019	
LED Lights in Marquee back-ground are not Working		Loose or bad connection		Refer to wiring diagram. Check multiple connections, re-seat cables from Power Distribution Board to Marquee. CE14005 & CE14006	
		Check for 12 Volts DC		12 VDC should be on yellow and black wires.	
		Faulty LED		Replace faulty LED. Part # A5CE14029	
Monitor not working. Power down, wait 5 minutes and power up again. Game will load and play with the monitor unplugged.	Screen shows "No Signal Input" Note: Motherboard will boot up without the monitor plugged in.	Monitor HDMI cable unplugged. Part # A5CORD43			
		 Small power connector unplugged on motherboard Faulty or loose RAM Large power connector unplugged on motherboard			
	Screen has nothing at all on power up.	Power cable unplugged from Monitor.		Ensure power is plugged into back of monitor, down to power strip. There are multiple power cords from Monitor, A5CORD5003	
		Turn on Monitor. Faulty monitor.		Install batteries in remote control and try using remote control to power on monitor. Replace monitor. (A5MO0032C)	
		Error on screen at power up. Re-Boot game to see if problem still exists.		Faulty or loose RAM, faulty software, faulty Motherboard.	
Display shows "Kernel panic – unable to mount root" Display stuck on "Mother-board" Bios		Bad M.2 drive in motherboard. Reseat or replace M.2 Part # AAHD0032-TBT			

TROUBLESHOOTING GUIDE

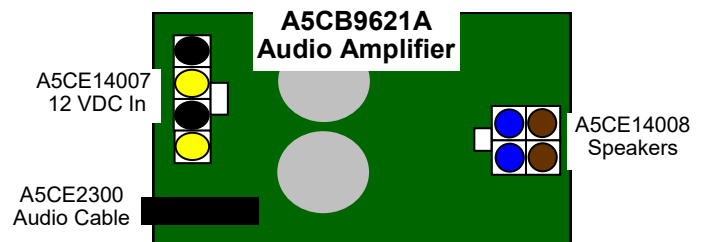
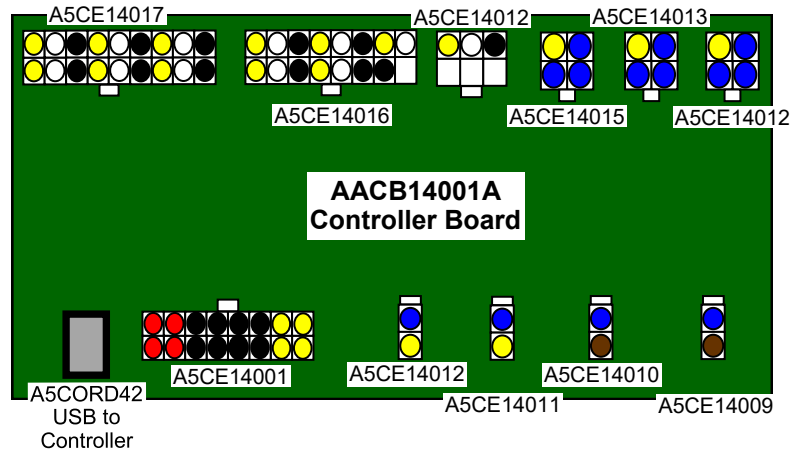
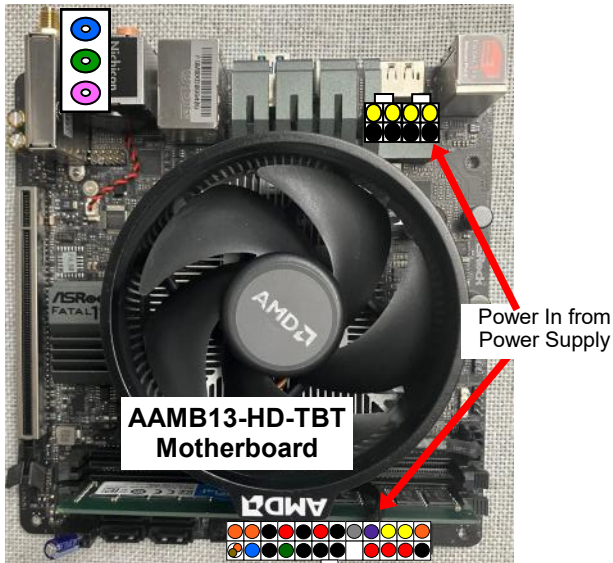
Problem	Probable Cause	Remedy
TPM/PSP Error on screen during boot up.		The program has crashed. Plug a USB keyboard into the motherboard and press the Y key.
The game coins up, but does not play. Can not exit menu.	Loose or bad connection on USB cable between motherboard and Controller Board Check for 12 & 5 Volts DC into Controller Board Faulty USB Cable	Refer to wiring diagram. Check connection, reseal cable from Controller Board to Motherboard Cable # A5CE14001: 12 VDC should be on yellow and black wires, 5 VDC should be on red and black wires. Replace faulty USB Cable. A5CORD42
Game Error Please See Attendant 	Loose or bad connection on USB cable between motherboard and Door Board Check for 12 & 5 Volts DC into Door Board Faulty LED	Refer to wiring diagram. Check connections, reseal cable from Door Board to Motherboard A5CORD59 Cable # A5CE14004: 12 VDC should be on yellow and black wires, 5 VDC should be on red and black wires. Replace faulty LED. Part # A5CE14029
"Connecting" showing on marquee display. 	Loose or bad connection on USB cable between motherboard and Display Controller Board Faulty Display Controller Board Faulty USB Cable	Refer to wiring diagram. Check connection, reseal cable from Display Controller Board to Motherboard Power cycle game off and on. Replace Display Controller Board (AACB14000A) Replace faulty USB Cable. A5CORD23 & A5CORD33
Linked Games not showing the same Bonus Ticket Value		Link Cables between the 2 games must plug into the "A" & "B" sockets on the controller boards. One game plugs into "A" One game plugs into "B" Note: They must not be in the same letter socket.

To help quiet the lids slamming shut, the seat uses:
4 of A5BURU080 with 4 of A5BOPH115 bolts

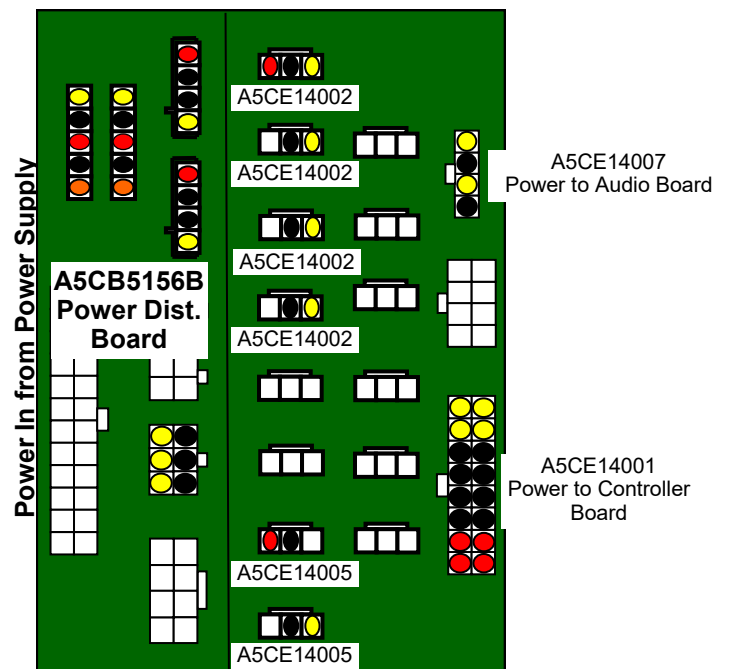
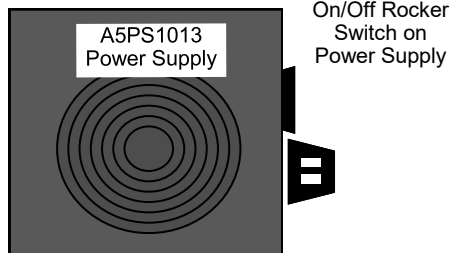
2 of A5BURU085 with 2 of A5BOPH125 bolts



CIRCUIT BOARD LAYOUT



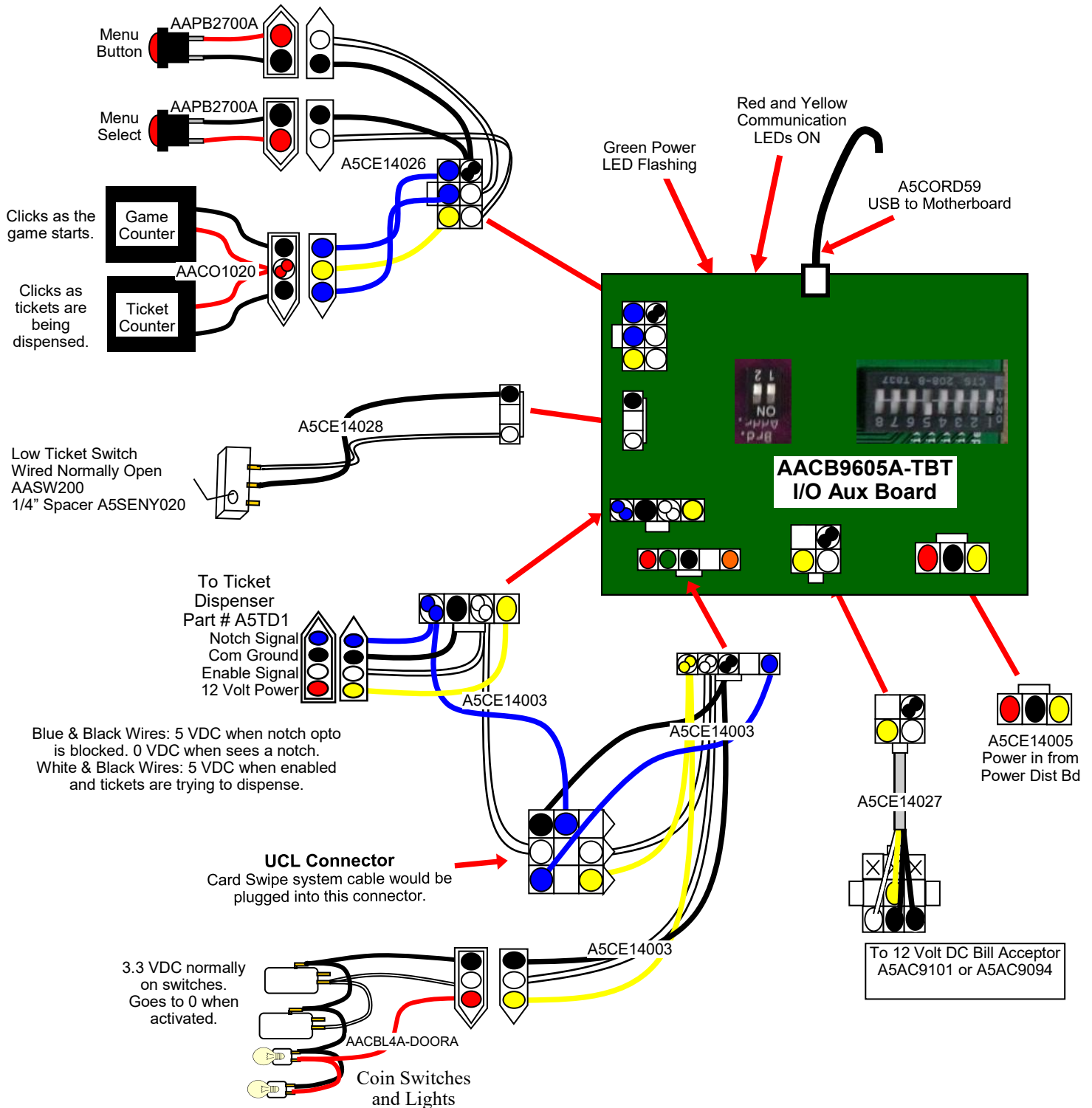
AAHD0032-TBT M2 Hard Drive
Located on the bottom, underneath the motherboard



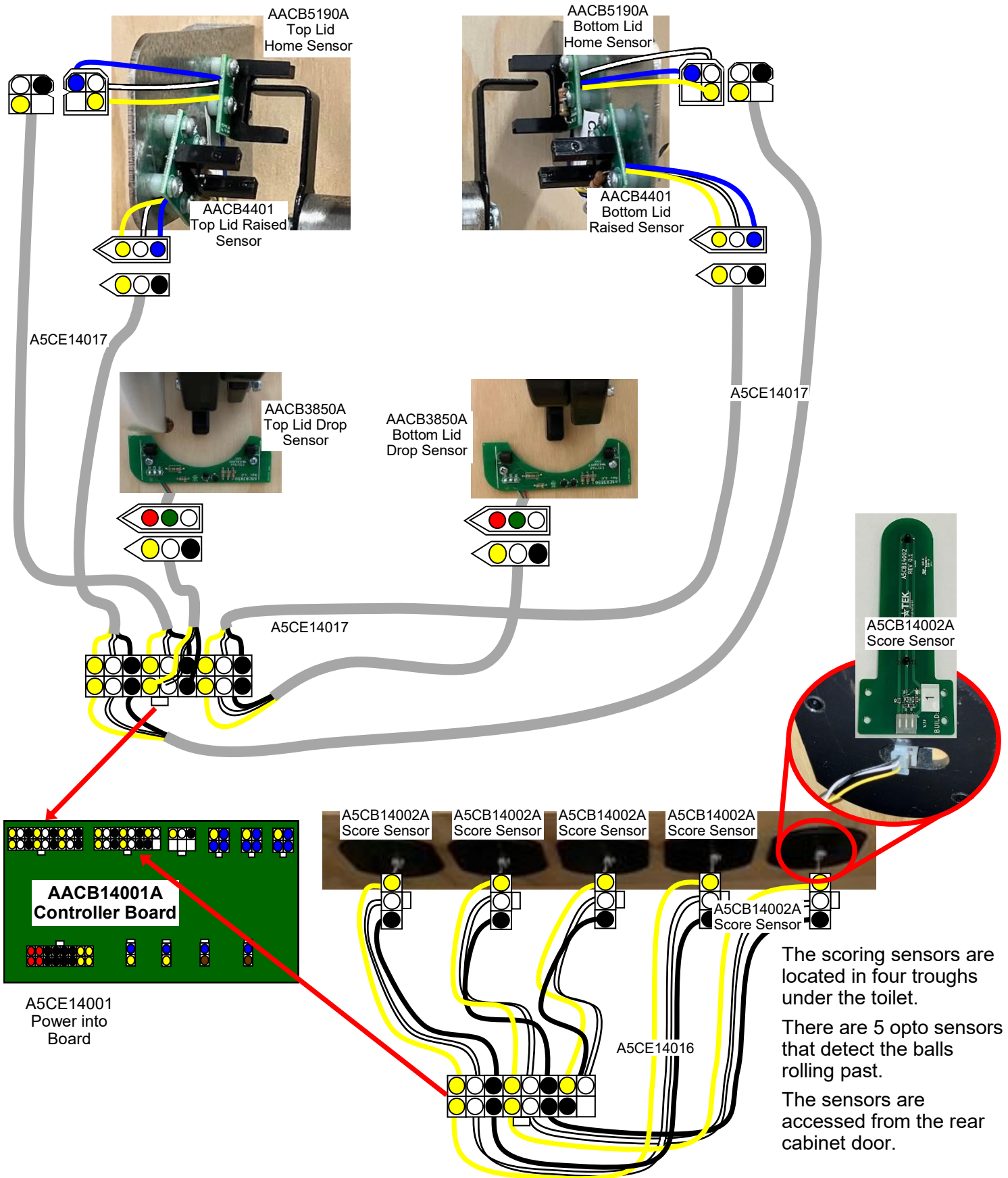
Boards are located inside the rear door, remove the lower rear door to access.

DOOR BOARD WIRING DIAGRAM

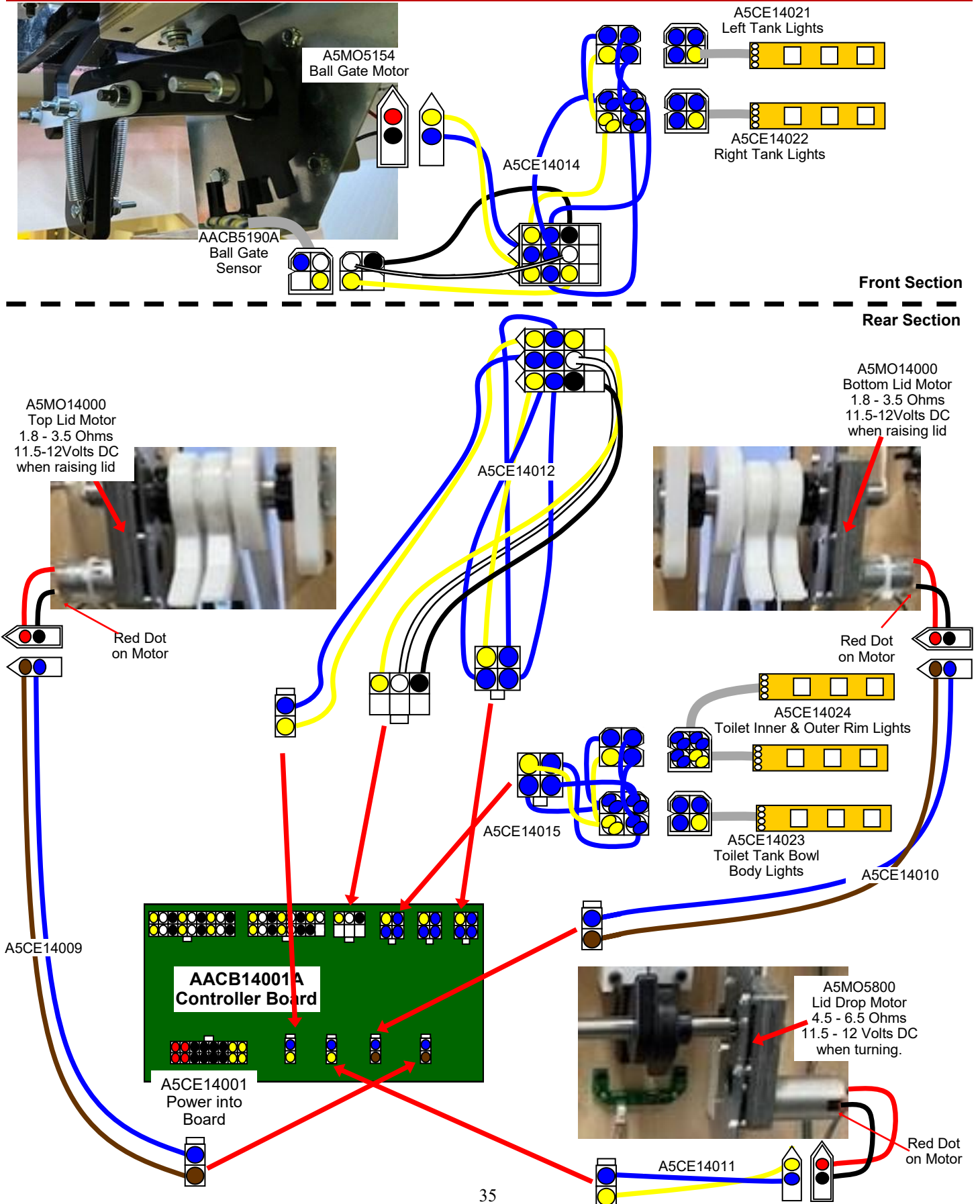
Board is located inside the front door, on the right side wall of cabinet.



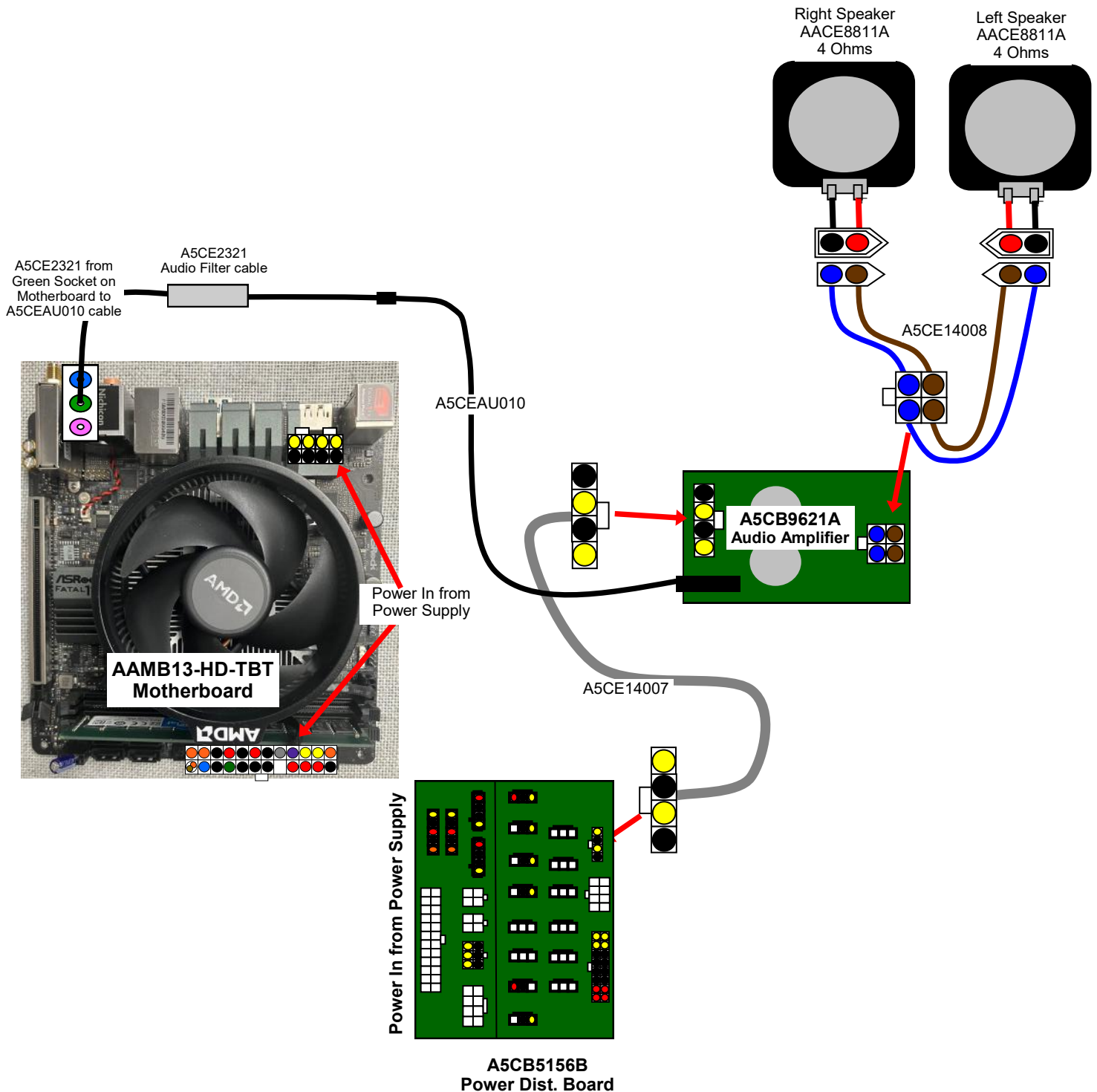
SENSOR WIRING DIAGRAM



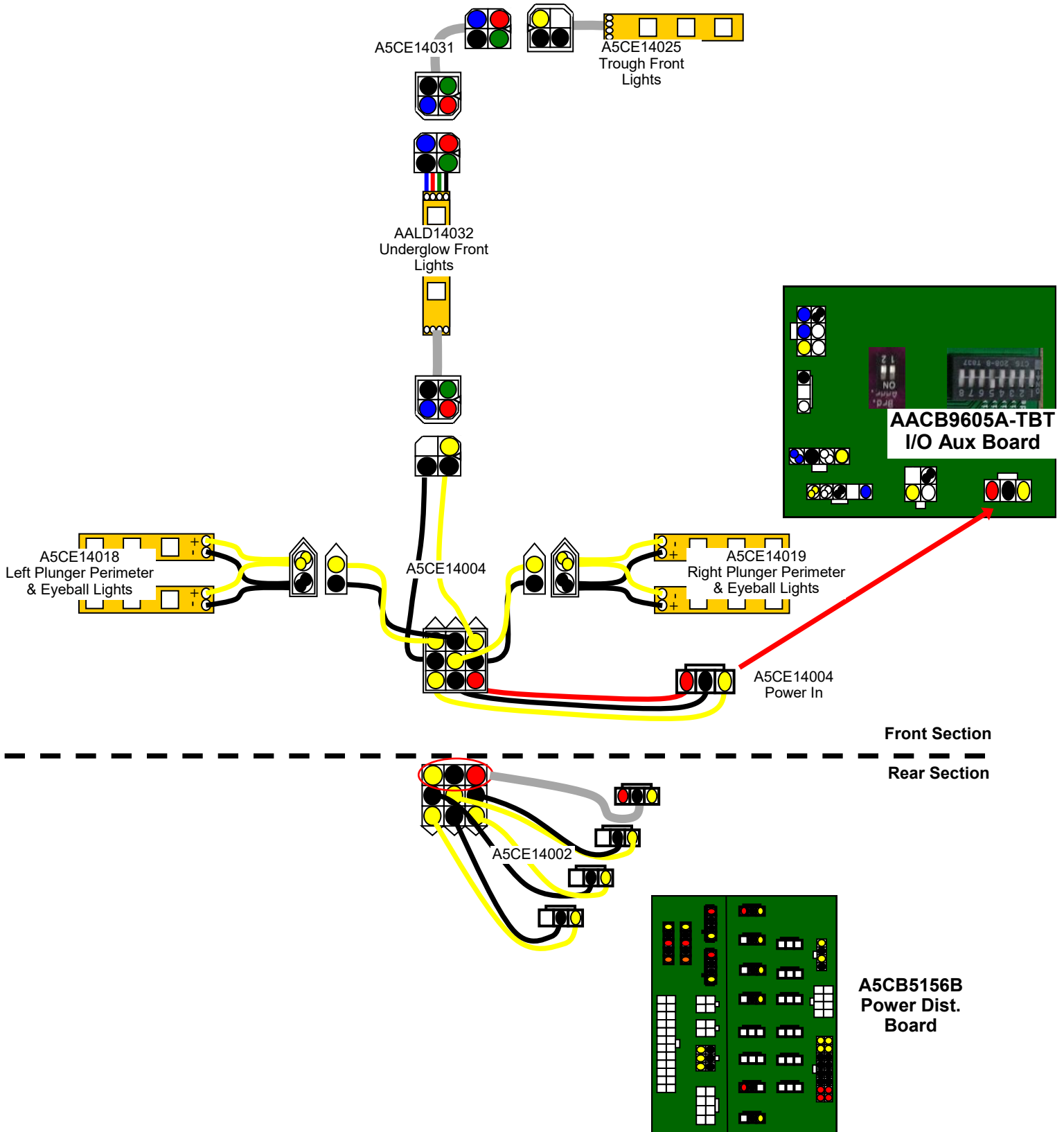
MOTOR WIRING DIAGRAM



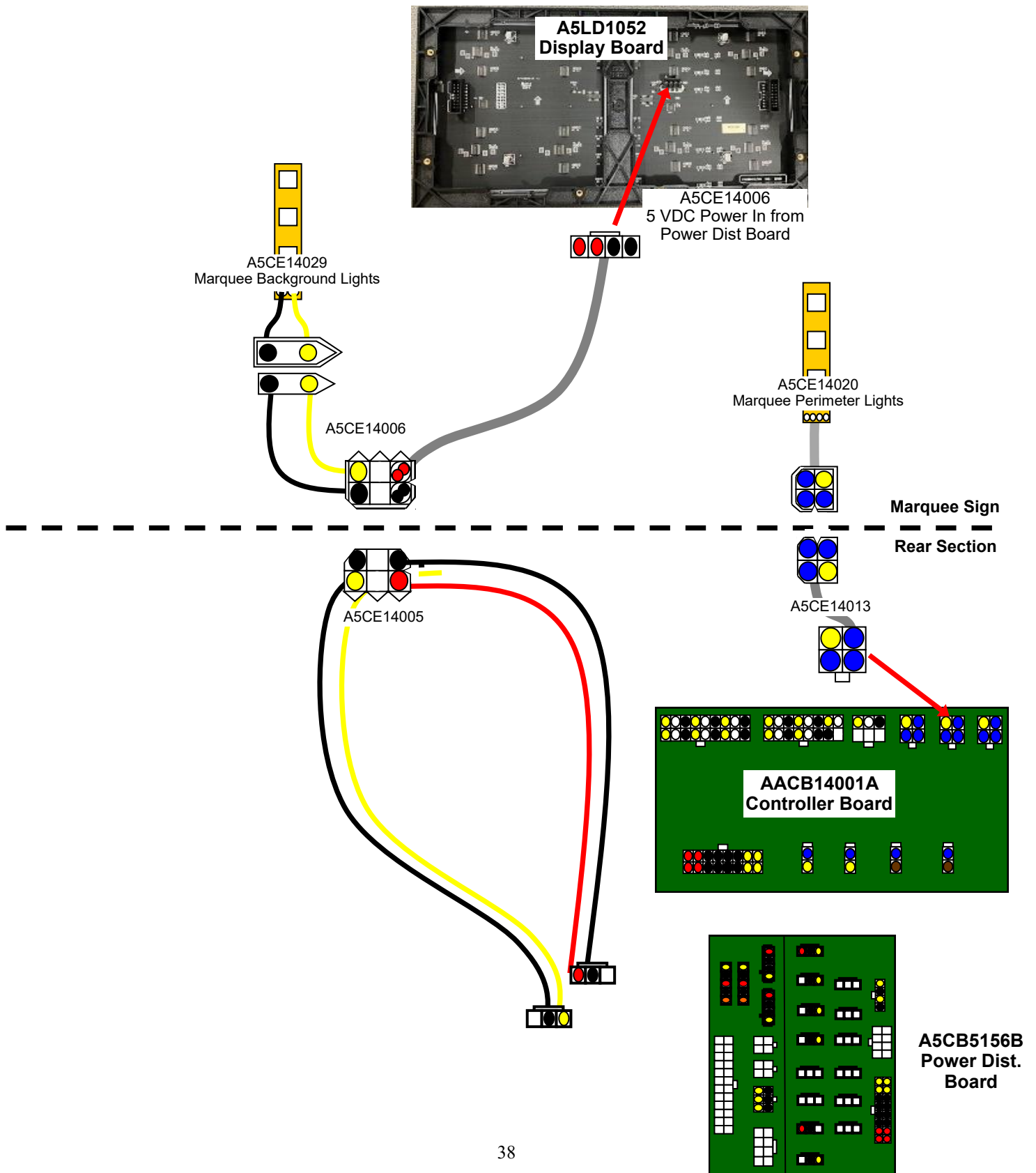
SOUND WIRING DIAGRAM



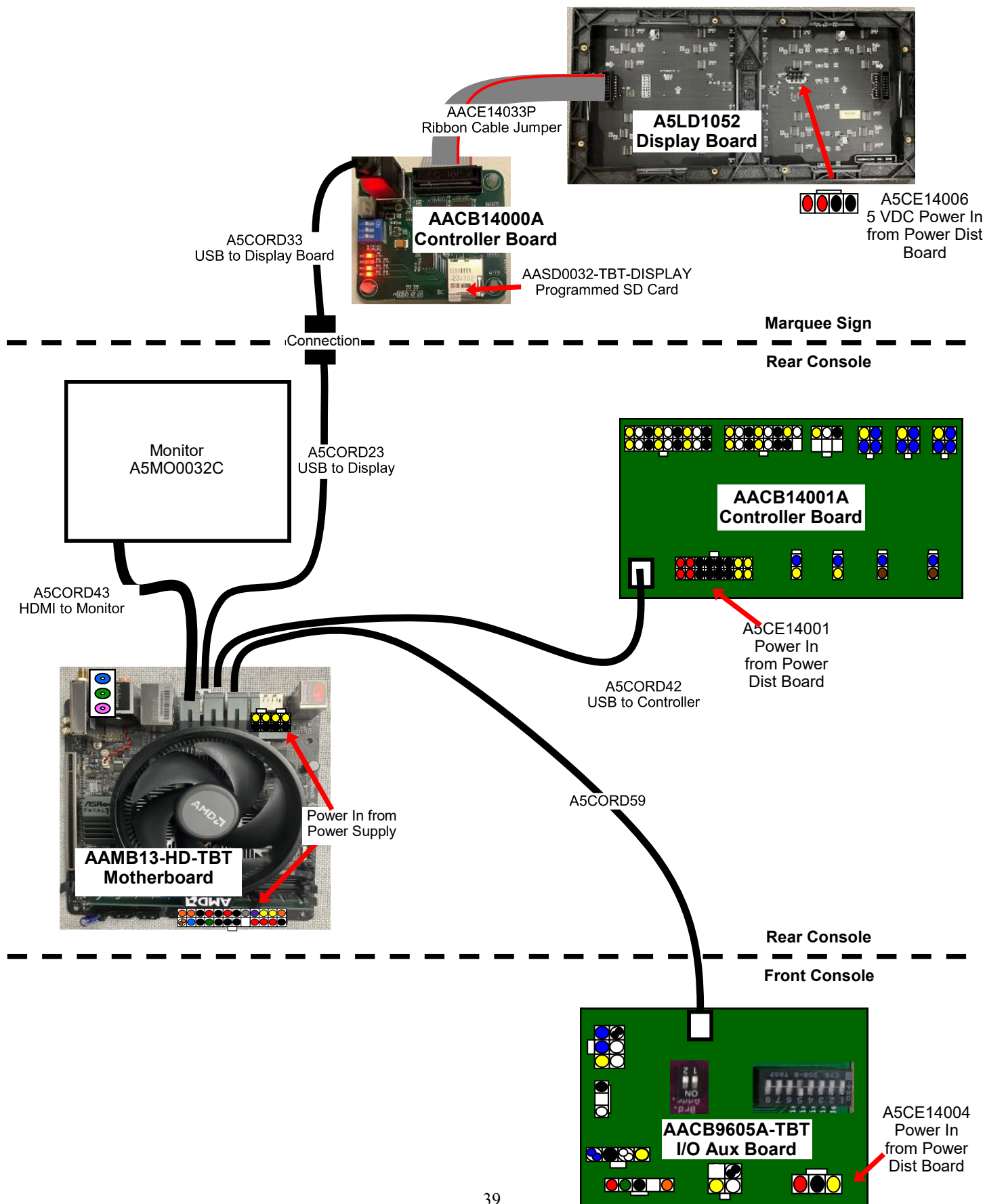
LED LIGHTING WIRING DIAGRAM



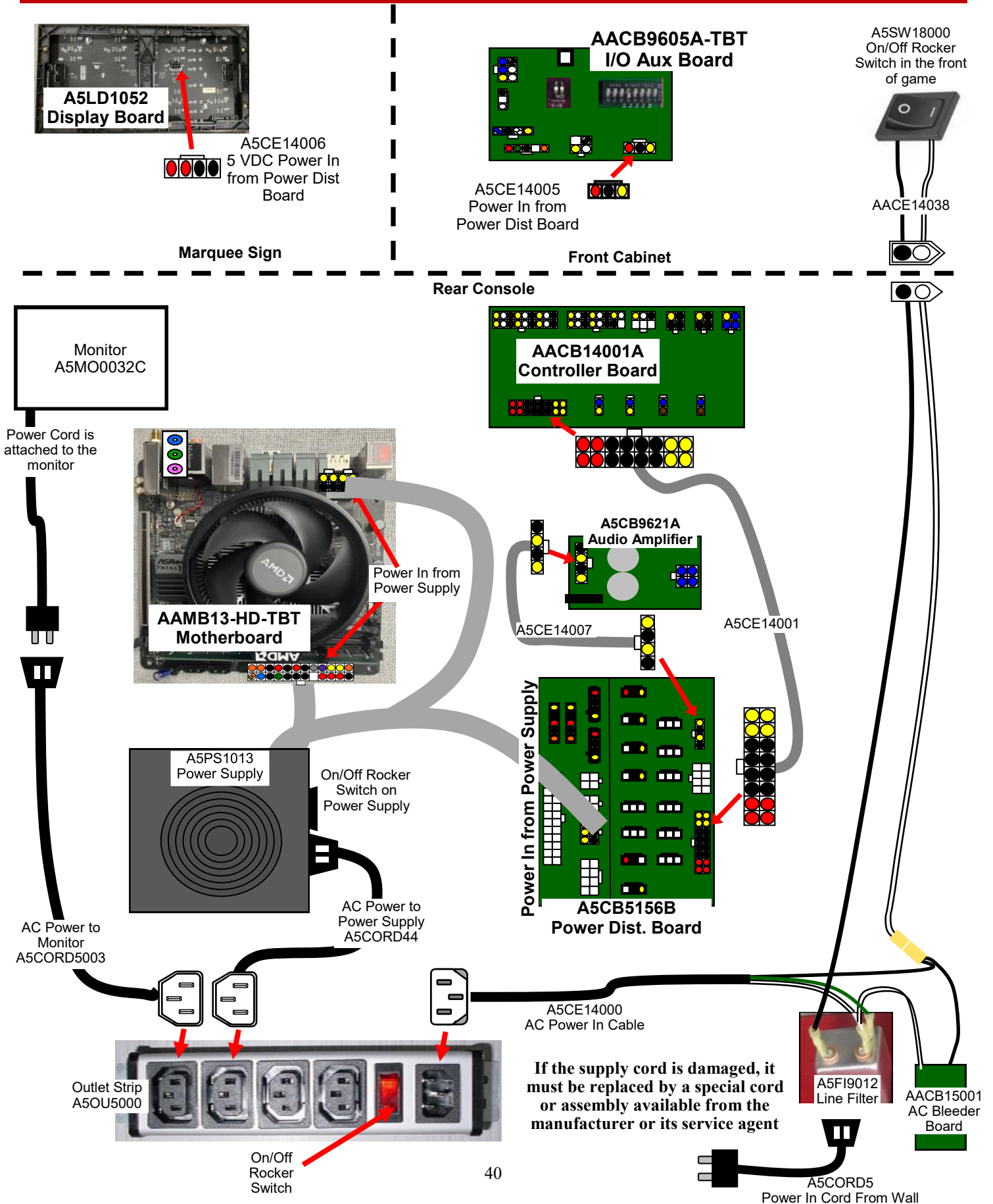
MARQUEE WIRING DIAGRAM



COMMUNICATION WIRING DIAGRAM



POWER SUPPLY WIRING DIAGRAM



AAKIT-TBTLINK LINKING GAMES

Two Toilet Bowl Toss games can be linked so that both games will have the same bonus value.

Tools Needed:

2 Square Bit 7/16" wrench 6-8 foot ladder

Instructions:

Each game will contain a link cable (part # CE14035).
Only 1 cable is needed to link the games.

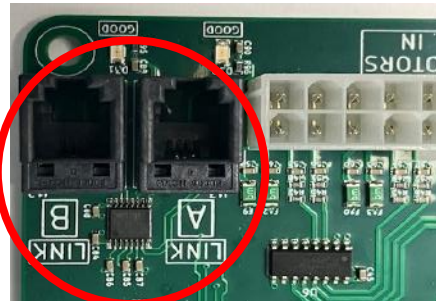
This 1 cable will connect the controller boards in the back of each game.

Plug one end of the cable into the "A" socket on the controller board on one game, and plug the other end in the "B" socket of the controller board on the other game.

One game plugs into "A"

One game plugs into "B"

Note: The cable must not be in the same letter socket.

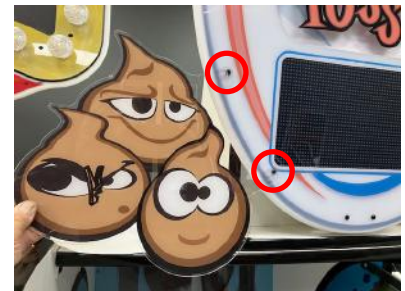


Installing plexi artworks:

Ensure both games are side by side.

Unplug the 2 games from the wall outlets.

Starting on the left game, remove the 2 screws from the left side marquee using a # 2 square bit and reinstall with the new left side plexi using the same screws in the same holes as shown.



On the same left game, on the right side of the marquee, remove the 5 screws from the marquee using a # 2 square bit and reinstall with the new center plexi using the same screws in the same holes as shown.



LINKING GAMES

On the right game, on the left side of the marquee, remove the 5 screws from the marquee using a # 2 square bit and reinstall with the other end of the new center plexi using the same screws in the same holes.



On the same right game, remove the 2 screws from the right side marquee using a # 2 square bit and reinstall with the new right side plexi using the same screws in the same holes as shown.



LINKING GAMES

Install lighting:

There are 2 flood lights which will be installed on the top of the cabinets that will light up the new middle plexi.

From the back of the games - there are pilot holes drilled into the top of the cabinets for the flood light to be installed.

The left game (when viewed from the back) will use this pilot hole.

Locate 1 screw (A5SCPH151) and 1 washer (A5WAFL040) from the kit.



A5SCPH151



A5WAFL040

Locate a flood light from the kit.



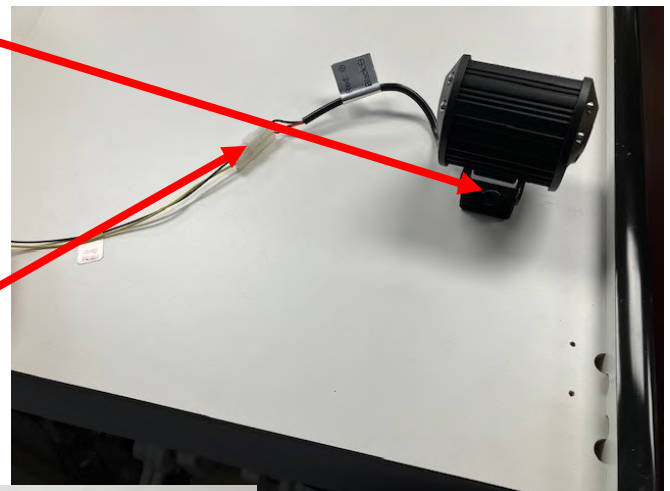
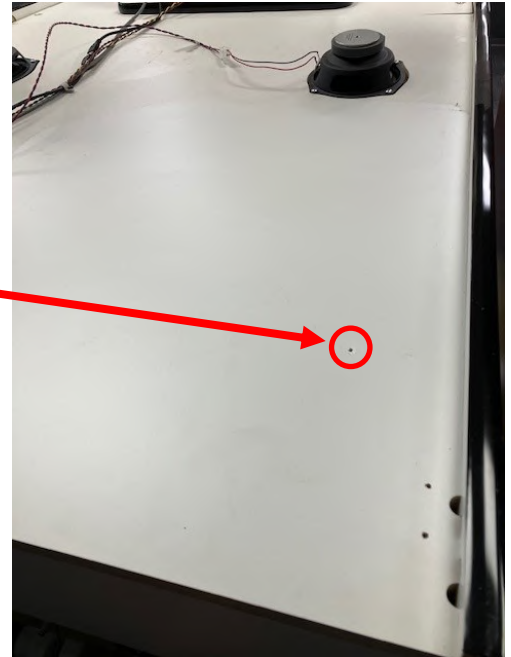
Attach the flood light to the top of the cabinet with screw and washer using a # 2 square bit.

Locate a light cable from the kit



Plug one end of one of the light cable into the flood light cable.

Route the other end of this cable to the left and through the slot in the top of the cabinet.

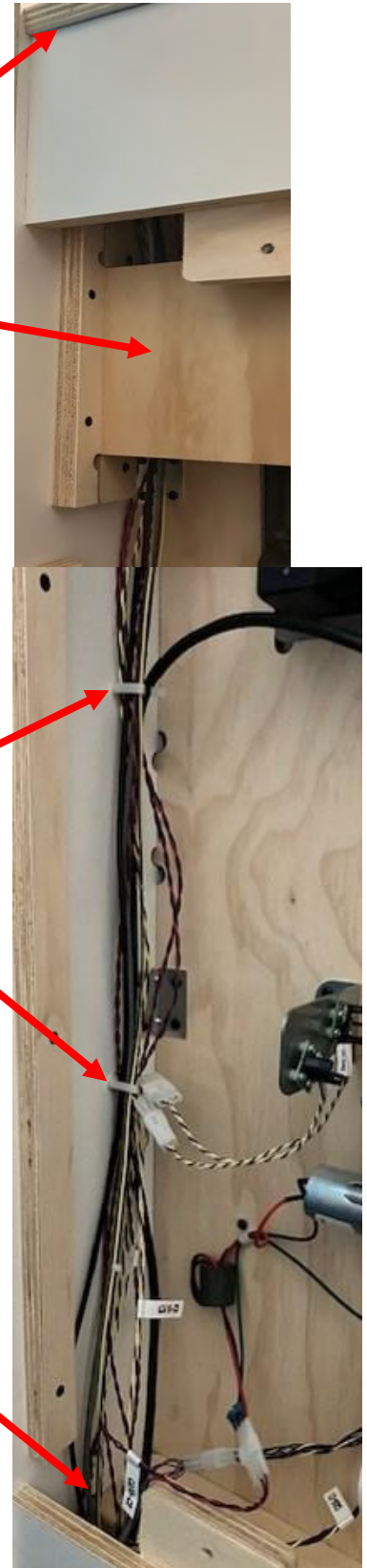


LINKING GAMES

Continue routing cable down the slot in the top of the cabinet,
behind this board.

Continue routing cable down and clip into these 2 wire clamps.

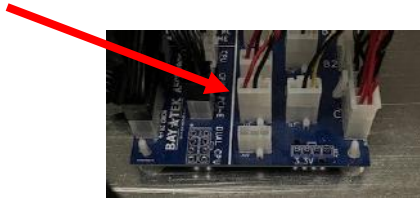
Continue routing cable down into the bottom of the cabinet.



LINKING GAMES

Continue routing cable down around the circuit boards, clipping into these wire clamps.

Plug the end of the cable into an empty socket on the right side of the power distribution board.

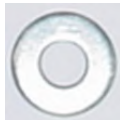


Similarly, install the other flood light on top of the other cabinet.

Locate 1 screw (A5SCPH151) and 1 washer (A5WAFL040) from the kit.



A5SCPH151

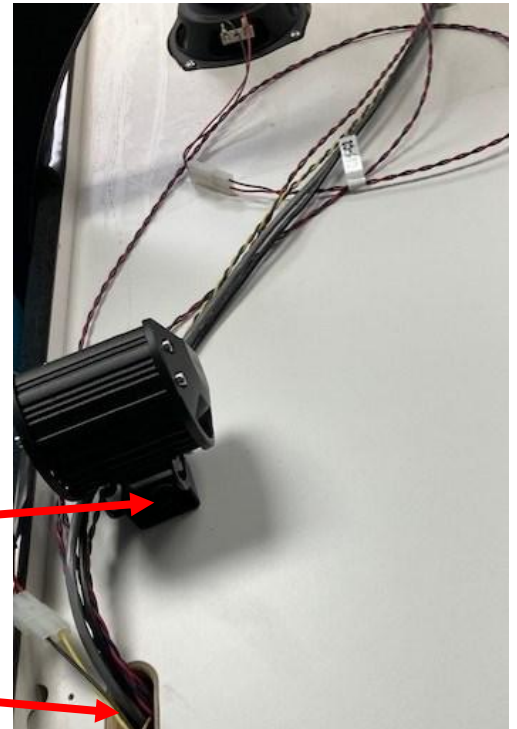


A5WAFL040

The right game (when viewed from the back) will use this pilot hole and attach the flood light to the top of the cabinet with screw and washer using a # 2 square bit.

Plug the remaining light cable into the flood light cable.

Route the other end of this cable down and through the slot in the top of the cabinet.



As before, route the cable down the left side of the cabinet, clipping into the wire clamps.

Route around the back of the circuit boards, clipping into the wire clamps.

Plug the end of the cable into an empty socket on the right side of the power distribution board.

The installation is now complete! The games can now be turned on and tested.



LINKING GAMES

Similarly, install the other flood light on top of the other cabinet.

Locate 1 screw (A5SCPH151) and 1 washer (A5WAFL040) from the kit.



A5SCPH151

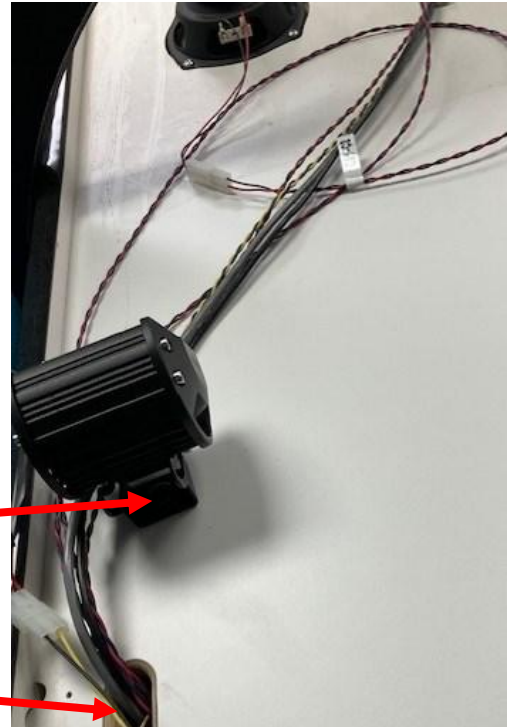


A5WAFL040

The right game (when viewed from the back) will use this pilot hole and attach the flood light to the top of the cabinet with screw and washer using a # 2 square bit.

Plug the remaining light cable into the flood light cable.

Route the other end of this cable down and through the slot in the top of the cabinet.



As before, route the cable down the left side of the cabinet, clipping into the wire clamps.

Route around the back of the circuit boards, clipping into the wire clamps.



Plug the end of the cable into an empty socket on the right side of the power distribution board.



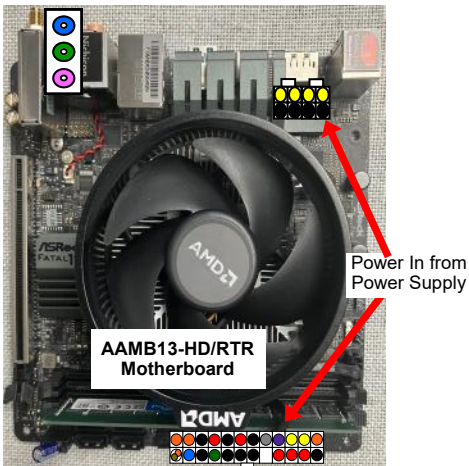
The installation is now complete! The games can now be turned on and tested.

MB13 MOTHERBOARD

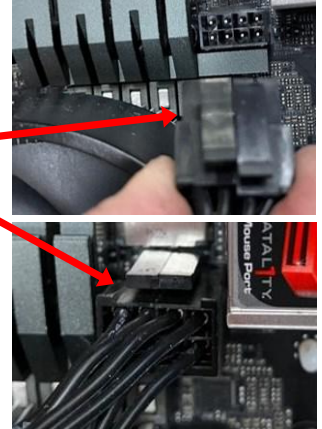
Toilet Bowl Toss games use the MB13 motherboard. There are a few differences from Baytek's other games' motherboards.

Difference # 1:

The additional power supply connection is 8 pins instead of 4 pins.



The MB13 uses 2 of the 4 pin connectors pushed together to make one 8 pin connector.



Difference # 2:

The power on capacitor is located in a different location on the plug and it is now part # AACA1320-10



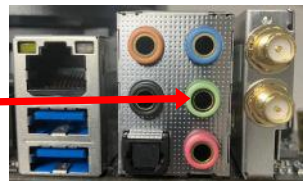
Difference # 3:

The M.2 software drive (Part # AAHD0032-RTR) is now located on the bottom, underneath the motherboard.



Difference # 4:

There are more jacks on the motherboard, but the sound jack still plugs into the green socket.



BALL GATE NOT OPERATING PROPERLY

The ball gate will normally be up to stop balls.

It will cycle down to allow balls to pass over it during game play.

To test - Press the menu button to enter the main menu.

Scroll to "Diagnostic", press the menu select button.

Press the menu select button on "Raise Ball Gate" to open the ball gate.

Verify that the balls roll smoothly to the player.

Press the menu select button on "Lower Ball Gate" to close the ball gate.

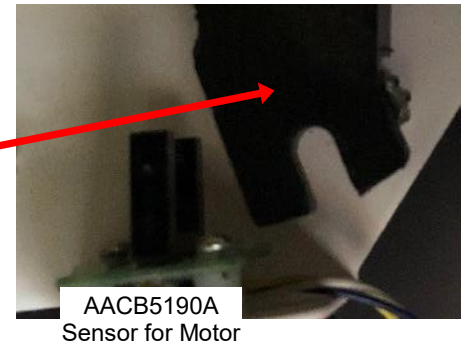
Verify that the balls are being blocked by the ball gate.

If any adjustments need to be made for the ball gate height, refer to **"How to Adjust the Ball Gate"**

The ball gate movement is controlled by a sensor attached to the motor.

The sensor watches a cam with a solid end and a forked end.

- When the gate is up, the motor will stop past the forked end of the cam.

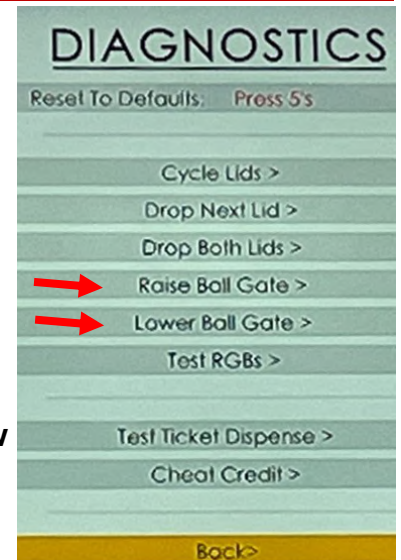


- When the gate is down, the motor will stop past the solid end of the cam.

If the ball gate is constantly going up and down over and over, this sensor is not seeing the cam at all. Check cable connections and replace sensor if needed.

If the motor is not turning at all, refer to wiring diagrams and check wiring, check for 12 volts DC at the motor while selecting open/close gate in the menu. Normally 14 Ohms across the motor.

Replace motor if needed. Part # A5MO5154



POWER SUPPLY DIAGNOSTICS

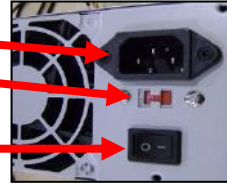
1.) Verify AC power to game. Check power strip in front door. The rocker switch should be illuminated.



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.

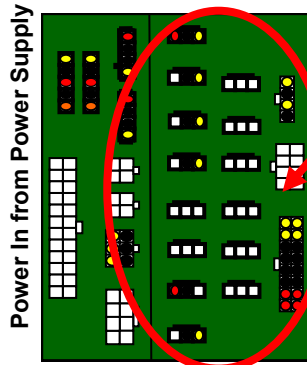


5.) Ensure fan is turning.

- 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.



A5CB5156B
Power Dist. Board

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

- Unplug all power out connectors from the right side 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.

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

Verify Power to Motherboard

The motherboard will turn on 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.

AAMB13-HD-TBT

Make sure the 8 pin power connector is plugged in.
(2 of 4 pin connectors together)

As well as 24 pin power in connector.



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:

Replace power supply (A5PS1013), or motherboard. (AAMB13-HD-TBT)

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

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.

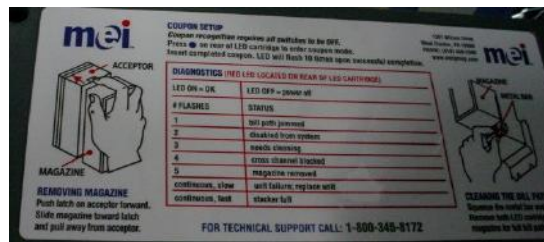
Check dipswitch settings on side of acceptor.

Make sure switch # 8 is OFF for Always Enable



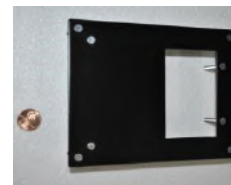
ERROR CODES

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



BLANKING PLATES AVAILABLE

A5PL4200 DBA Plate used for Upstacker Bill Acceptor



A5PL9998 Plate used instead of Coin Mechanisms



A5PL8900 Plate used for Bill Validator



A5PL9995 Plate used instead of ticket dispenser



HOW TO ADJUST THE BALL GATE

If the ball gate is not opening fully, or blocking balls when it is open, the metal motor mount must be adjusted up or down.

Gain access to the ball gate by removing the side access panel on the right side of the cabinet.

Remove this panel by removing the 5 screws using a # 2 square bit.



Verify the ball gate opens and closes cleanly and is set to the correct height to stop balls:

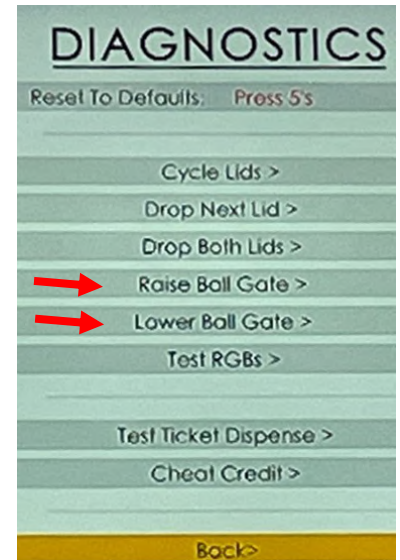
Press the menu button to enter the main menu.

Scroll to “Diagnostic”, press the menu select button.

Press the menu select button on “Raise Ball Gate” to open the ball gate. Verify that the balls roll smoothly to the player.

Press the menu select button on “Lower Ball Gate” to close the ball gate. Verify that the balls are being blocked by the ball gate.

If any adjustments need to be made for the ball gate height, loosen the 2 bolts holding the assembly to the wood using a 7/16” wrench. Re-position the assembly in the appropriate direction and re-tighten the bolts.



Test again using the menu buttons in the diagnostic menu.

When the ball gate height is correct, the black plastic cover can be attached to the bottom of the game. This will protect the wires and motor from curious fingers.

Secure the access panel using the 5 screws using a # 2 square bit.



HOW TO REPLACE SCORE SENSORS

The score sensors are accessed from the back of the cabinet. There are 5 sensors for the 4 ball lanes. The sensor on the end is only there for the emitter.



Directions:

Open the lower back door by unlocking the 2 locks and remove the back door from the cabinet.

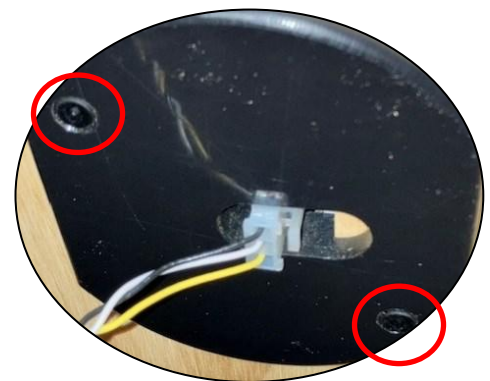


Remove the 2 screws from the black plastic holder using a #2 square bit.

Lower the black plastic holder - the sensor will also be lowered down.

The sensor can now be changed:

Disconnect the sensor's plug, and plug in the new sensor, slide the new sensor up in the slot. Cover with the black plastic holder and re-install the 2 screws.



HOW TO CHANGE SOFTWARE

This is the MB13 motherboard

These instructions will detail how to change software on the MB13.

This is the M.2 Drive as a hard drive with software.

This M.2 Drive is located on the bottom, underneath the motherboard.

Remove this screw with a small #1 Phillips screwdriver.

Slide the M.2 new software drive into the slot on the motherboard as shown.

Using a small # 1 screwdriver, re-insert the screw into the motherboard to secure the software.



HOW TO REPLACE MONITOR

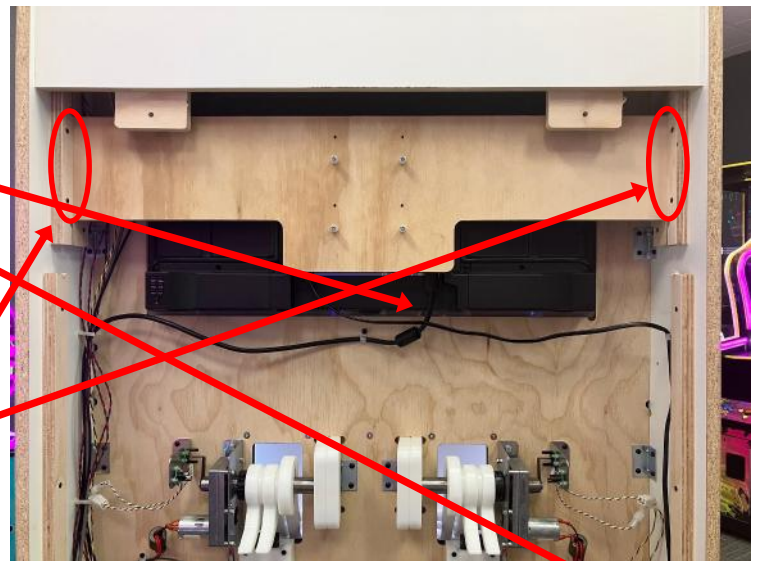
The monitor is replaced from the back of the game.

Instructions:

- Remove the 2 top bolts using a 7/16" wrench.
- Lift up on the back door using this handle and remove the back door from the cabinet.



- Unplug the HDMI cable from monitor.
- Unplug the monitor's power cord from the extension cord below. Follow the power cable down, unclipping it from the wire saddles and unplug from extension cord.
- Remove the 2 screws from each wood support block using a # 2 square bit.



- The wood and monitor will now be free to be removed from the cabinet.
- Place the monitor face down on a soft surface and remove the 4 bolts holding the monitor to the wood using a Phillips screwdriver.
- The new monitor is installed the reverse of this process.

Plug the game in and set up the new monitor:

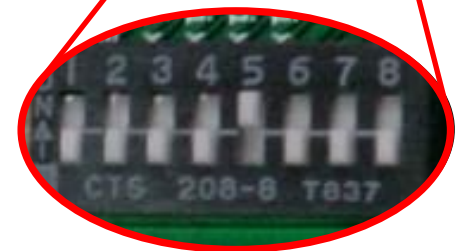
- Locate the remote control and install batteries if needed.
- Press the menu button on the remote to Exit.



I/O BOARD DIPSWITCH SETTINGS

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

Note: Make sure that both dipswitches on this bank of 2 are both Off.



I/O AUX BOARD PINOUT



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

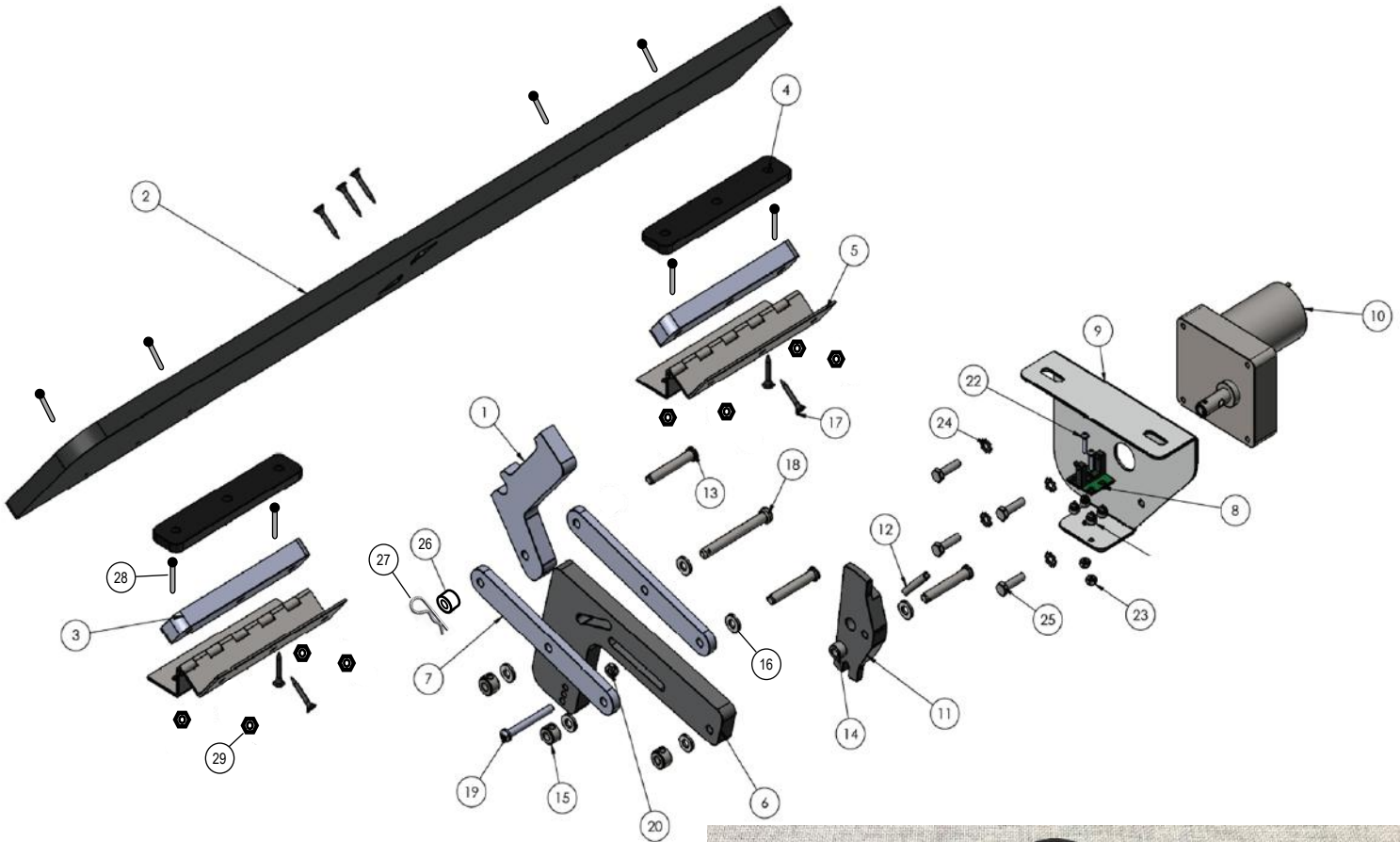
Outputs:

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

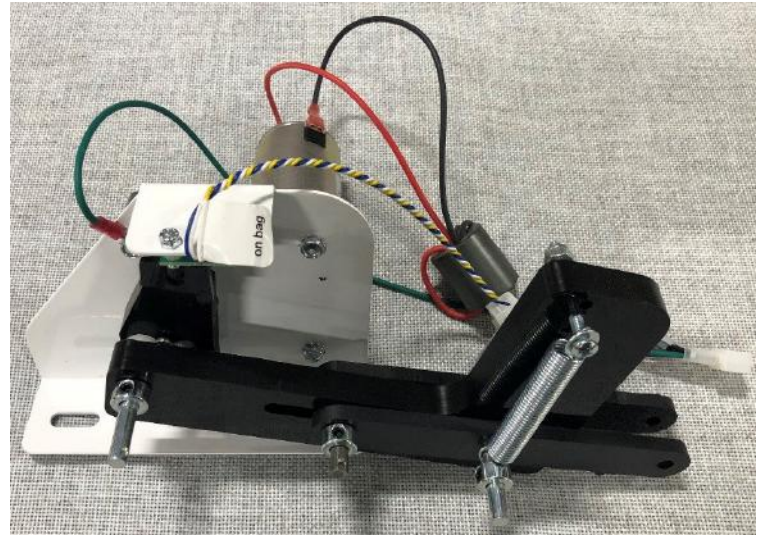
Inputs:

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

BALL GATE EXPLODED VIEW



Item #	Part Number	Description	Qty
1	WACA27508	Ball Gate Arm	1
2	WACA27509	Ball Gate Arm	1
3	WACA27524	Gate Shim	2
4	WACA27523	Gate Shim, Thinner	2
5	W5HG1015-1	Double Bend Hinge	4
6	WACA27577	Spring Loaded Link	1
7	WACA10041	Link	2
8	A5CB5190A	Sensor	1
9	A5ME1727	Motor Bracket	1
10	A5MO5154	Motor	1
11	WACA10121	Motor Arm	1
12	A5PIRO015	1" Long Roll Pin	1
13	A5PICV032	Clevis Pin	3
14	A5SENY175	Nylon Washer	1
15	A5SLLO020	Shaft Collar	4
16	A5WANY050	Nylon Washer	6
17	A5SCFH030	1" Bugle Screw	4
18	A5PICV045	Clevis Pin 2 1/2"	1
19	A5BOPH190	10-24 x 1 3/4" Bolt	1
20	A5NUNY040	Nylon Lock Nut	1
21	A5SFNY010	Nylon Spacer	4



Item #	Part Number	Description	Qty
22	A5BOPH030	Board Stand Off	2
23	A5NUNY020	Nylon Lock Nut	2
24	A5WAET020	Tooth Lock Washer	4
25	A5BOHH030	10-32 X 3/4"	4
26	A5SENY170	1/4" Spacer	2
27	A5CL3401	Hitch Pin Clip	1
28	A5SCPH255	10-24 x 1.5 Screw	8
29	A5NUNY050	10-24 Nylon Hex Nut	8

PARTS PICTURES



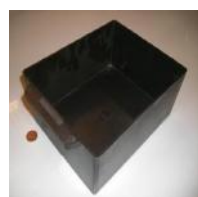
A5BA14000



A5BK9999



A5CA1005



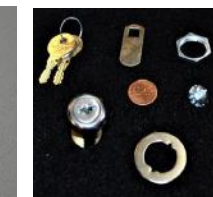
A5CB2020



A5CO4000



A5LK2001



A5LK5002



A5MO0032C



A5MO14000



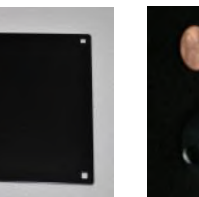
A5MO5154



A5MO5800



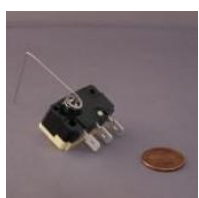
A5OU5000



A5PL8900



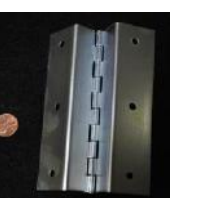
A5SLSX001 A5SP10000



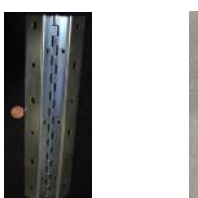
AASW200



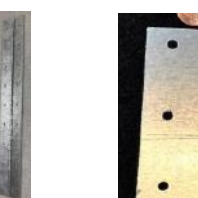
A5KIT-TBT



W5HG1015



W5HG1055



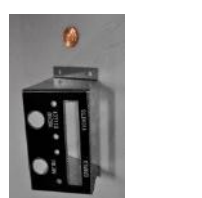
W5HG1070



W5KE5000



W5TM4000



AABK1013



A5ME14000



A5ME14001



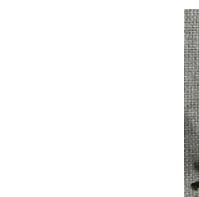
A5ME14002



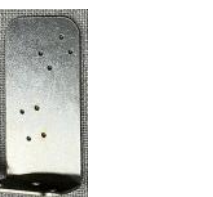
A5ME14003



A5ME14004



A5ME14005



A5ME14006



A5ME14007



A5ME14008



A5ME14009



A5ME14010



A5ME15005



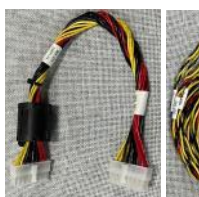
A5ME1727



A5ME4180



A5CE14000



A5CE14001



A5CE14002



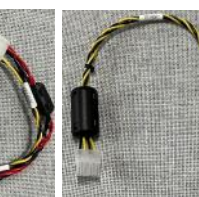
A5CE14003



A5CE14004



A5CE14005



A5CE14006



A5CE14007



A5CE14008



A5CE14009



A5CE14010



A5CE14011



A5CE14012



A5CE14013



A5CE14014



A5CE14015



A5CE14016

PARTS PICTURES



A5CE14017



A5CE14018



A5CE14019



A5CE14020



A5CE14021



A5CE14022



A5CE14023



A5CE14024



A5CE14025



A5CE14026



A5CE14027



A5CE14028



A5CE14029



A5CE14031



A5CE2321



A5CEAU010



A5CORD23



A5CORD33



A5CORD42



A5CORD43



A5CORD44



A5CORD5



A5CORD5003



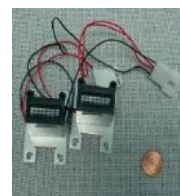
A5CORD59



AACE14033P



AACE8811A



AACO1020



AALD14032



AAPB2700A



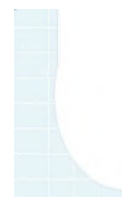
AACBL4A-DOORA



A5DE0042



A5DE14000



A5DE14001



A5DE14002



A5DE14003



A5DE14004



A5DE14005



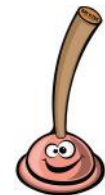
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A5DE14007



A5DE14008



A5DE14009



A5DE14010



A5DE14011



A5DE14012



A5DE14013



A5DE14014



A5DE14015



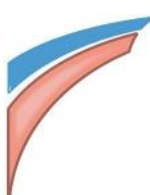
A5DE14016



A5DE14017



A5DE14018



A5DE14019



A5DE14020



A5DE14021

PARTS LIST



A5DE14022



A5DE14023



A5DE14024

A5DE14025



A5CB14002A



A5CB5156B



AACB5190A



A5CB9621A



A5FI9012



A5LD1052



A5PS1013



A5TD1



AACB14000A



AACB14001A



AACB15001



AACB3850A



AACB5190A



AACB4401



AACB9605A-TBT



AAMB13-HD-TBT



AAHD0032-TBT



AASD0032-TBT-DISPLAY

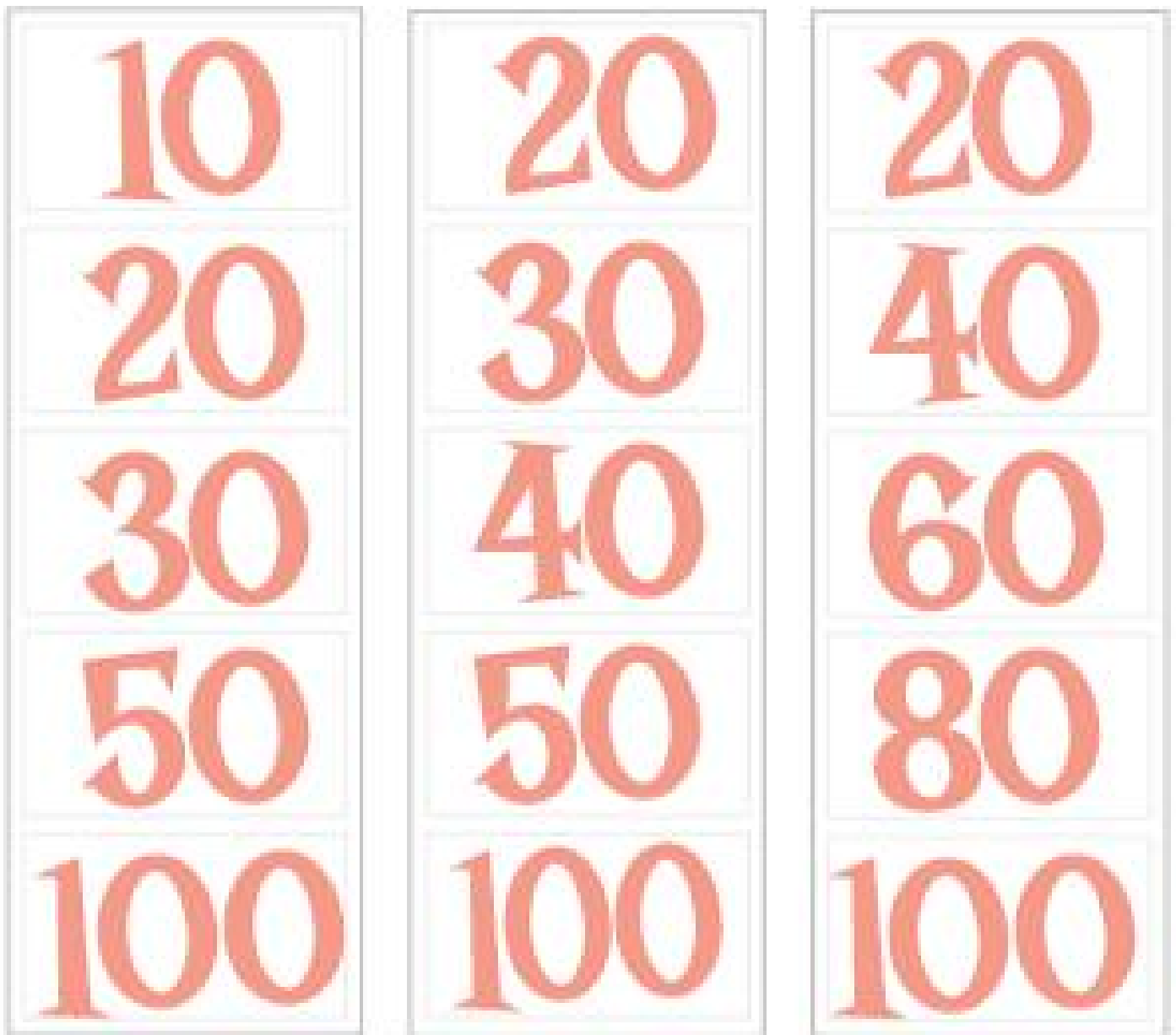
PARTS LIST

PART #	DESCRIPTION	PART #	DESCRIPTION
A5BA14000	Brown Ball 2.5" (30 in each game)	AABK1013	Pushbuttons/Menu Button Bracket w/Decal
A5BK9999	Power Supply Mounting Bracket	A5ME14000	Lift Motor Bracket (3 per game)
A5CA1005	Swivel/Lock Caster (8 per game)	A5ME14001	Lift Motor Shaft (2 per game)
A5CB2020	Coin Box	A5ME14002	Lid Release Shaft
A5CO4000	Shaft Collar (2 per game)	A5ME14003	Front Roof Rail (2 per game)
A5LK2001	Coin Box Lock, A05/E00	A5ME14004	Main Cabinet Connector Plate (2 per game)
A5LK5002	Lock, 7/8", H95 (2 per game)	A5ME14005	Lift Motor Flag (2 per game)
A5MO0032C	Monitor,32"	A5ME14006	Top Lid Lift Sensor Bracket
A5MO14000	Lid Raise Motor (2 per game)	A5ME14007	Top Lid Lift Sensor Bracket
A5MO5154	Ball Gate Motor	A5ME14008	Front Cabinet Connector Plate (2 per game)
A5MO5800	Lid Drop Motor	A5ME14009	Upper game Plate (2 per game)
A5OU5000	Outlet Strip	A5ME14010	Ground Plate
A5PL8900	DBA Blanking Plate	A5ME15005	Ticket Tray Insert (2 per game)
A5SLSX001	Shaft (2 per game)	A5ME1727	Motor Bracket
A5SP10000	Spring, 7/16 x 2-3/4, (2 per game)	A5ME4180	Ticket Dispenser Mount
AASW200	Low Ticket Switch	A5CE14000	Line Filter Cable
A5KIT-TBT	Hardware Kit, Toilet Bowl Toss	A5CE14001	Power Cable to Controller Board
W5HG1015	Hinge, 5", Double Bend (2 per game)	A5CE14002	Rear Power Jumper to Front Disconnect
W5HG1055	Hinge, 11-1/2" Double Bend (2 per game)	A5CE14003	Ticket Dispenser/Front Door Cable
W5HG1070	Hinge, 18", Single Bend	A5CE14004	Rear Power Jumper from Rear Disconnect
W5KE5000	Lock Keepr (4 per game)	A5CE14005	Power Jumper to Marquee Disconnect
W5TM4000	Black T-Molding, 7/8" (34 feet per game)	A5CE14006	Marquee Power Cable

PARTS LIST

PART #	DESCRIPTION	PART #	DESCRIPTION
A5CE14007	Amplifier Board Power Cable	A5DE14003	Marquee Back Decal
A5CE14008	Speaker Cable	A5DE14004	Left Window Printed Plexi
A5CE14009	Top Lid Motor Cable	A5DE14005	Right Window Printed Plexi
A5CE14010	Bottom Lid Motor Cable	A5DE14006	Front Window Printed Plexi
A5CE14011	Lid Drop Motor Cable	A5DE14007	Scoreboard Printed Plexi
A5CE14012	Rear to Middle Cable to Disconnect	A5DE14008	Left Plunger Printed Plexi
A5CE14013	Marquee RGB Light Jumper	A5DE14009	Right Plunger Printed Plexi
A5CE14014	Middle Cabinet Cable to Rear Disconnect	A5DE14010	Front Left Arc Decal
A5CE14015	Toilet Bowl Light Jumper Cable	A5DE14011	Front Right Arc Decal
A5CE14016	Score Sensor Cable	A5DE14012	Ball Gutter Printed Plexi
A5CE14017	Lid Lift/Drop Sensor Jumper	A5DE14013	Ball Trough Decal
A5CE14018	Left Plunger LED Lights	A5DE14014	Toilet Seat Decal
A5CE14019	Right Plunger LED Lights	A5DE14015	Short Bowl Wrap Printed Plexi
A5CE14020	Marquee Perimter LED Lights	A5DE14016	Long Bowl Wrap Printed Plexi
A5CE14021	Left Side Tank LED Lights	A5DE14017	Poop Emoji # 1 Decal (2 per game)
A5CE14022	Right Side Tank LED Lights	A5DE14018	Poop Emoji # 2 Decal (2 per game)
A5CE14023	Tank Body LED Lights	A5DE14019	Poop Emoji # 3 Decal (2 per game)
A5CE14024	Bowl Rim LED Lights	A5DE14020	Front Left Swoosh Decal
A5CE14025	Trough LED Lights	A5DE14021	Front Right Swoosh Decal
A5CE14026	Menu/Counters Cable	A5DE14022	Ramp Drain #2 Printed Plexi
A5CE14027	DBA Cable	A5DE14023	Right Toilet Floor Printed Plexi
A5CE14028	Low Ticket Switch Cable	A5DE14024	Poop Emoji # 4 Decal
A5CE14029	Marquee Background LED Lights	A5DE14025	Poop Emoji # 5 Decal
A5CE14031	Trough Jumper Cable	A5CB14002A	Ball Sensor Board (5 per game)
A5CE2321	Audio Noise Eliminator	A5CB5156B	Power Distribution Board
A5CEAU010	Phono Jack Audio Cable	AACB5190A	Ball Gate Sensor
A5CORD23	USB Cable, 10 foot, A-B	A5CB9621A	Audio Amplifier Board
A5CORD33	USB Cable 3FT	A5FI9012	Line Filter
A5CORD42	USB Cable, 1.5 FT	A5LD1052	Display
A5CORD43	HDMI Cable to Monitor	A5PS1013	Power Supply, 500 Watt
A5CORD44	Power Cord from Power Strip, 2FT	A5TD1	Ticket Dispenser
A5CORD5	Power Cord to Wall	AACB14000A	Display Controller Board
A5CORD5003	Power Cord from Power Strip, 6FT	AACB14001A	Controller Board
A5CORD59	USB Cable to Micro USB, 10FT	AACB15001	Bleed Resistor Board
AACE14033P	Ribbon Cable Jumper Display	AACB3850A	Lid Drop Sensor (2 per game)
AACE8811A	Speaker (2 per game)	AACB5190A	Lid Home Sensor (2 per game)
AACO1020	Game/Ticket Counter	AACB4401	Lid Raised Sensor (2 per game)
AALD14032	Front Underglow LED Strip	AACB9605A-TBT	Door Interface I/O Board
AAPB2700A	Menu Button (2 per game)	AAMB13-HD-TBT	Motherboard Toilet Bowl Toss w/ software
A5DE0042	Menu/Volume Decal	AAHD0032-TBT	M2 Sata Drive, Toilet Bowl Toss
A5DE14000	Back Wall Printed Plexi	AASD0032-TBT-DISPLAY	SD Card for Display Driver Board
A5DE14001	Left Toilet Floor Printed Plexi		
A5DE14002	Ramp Drain #1 Printed Plexi		

TICKET PATTERN CUTOUT OPTIONS



2	5	10	20	30
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2	4	6	10	20
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2	4	6	8	10
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1	2	3	4	5
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10

20

30

40

50

5

10

20

40

50

5

10

15

30

50

5

10

15

20

30

REPAIR/MAINTENANCE LOG

If you need to make repairs or order replacement parts it is a good idea to keep a log. Below is a chart you can use to track repairs and maintenance.

[illegible]

NOTES

[illegible]

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:

· **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 need to return a 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.

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 12 months from the date of shipping

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.

New, purchased parts have a 30 day warranty.

Any labor expended is not included in this warranty.

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