SERVICE MANUAL



FACTORY CONTACT INFORMATION





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

IS AN ELAUT GAME,
BUILT WITH PERMISSION BY
BAYTEK ENTERTAINMENT

JOIN OUR SERVICE FIRST NETWORK!

This free service is intended to keep you up to date on the latest game information, early notification of parts specials, pertinent technical bulletins, updates on retro fit parts, software upgrades, and much more.

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

SALES

Phone: (920) 822-3951 Fax: (920) 822-8936

Email: sales@baytekent.com

PARTS

Phone: (920) 822-3951 Ext 1101

Fax: (920) 822-1496

Email: parts@baytekent.com

SERVICE

Phone: (920) 822-3951 Ext 1102

Fax: (920) 822-1496

Email: service@baytekent.com

Open Monday - Friday 8 AM - 5PM C.S.T.

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

TABLE OF CONTENTS

FACTORY CONTACT INFORMATION		2
TABLE OF CONTENTS		3
WELCOME TO Trolls		4
GAME SPECIFICATIONS		5
SAFETY PRECAUTIONS		5
GAME SET UP	6	- 7
OPTIONAL POWER DROP SETUP		8
CHECK ARM HEIGHT		9
HOW TO PLAY		10
PRIZE TOWER KITS		11
TICKET PAYOUT PATTERNS		12
VOLUME & DIPSWITCH SETTINGS		13
DOOR BOARD DIPSWITCH SETTINGS		13
CARD SWIPE INSTALLATION		14
CIRCUIT BOARD LAYOUT		15
WIRING DIAGRAMS		
TROUBLESHOOTING GUIDE	21 -	26
FAQ		27
AVAILABLE BLANKING PLATES		27
POWER SUPPLY DIAGNOSTICS		28
BILL ACCEPTOR DIAGNOSTICS		28
HOW TO SET COIN COMPARITOR MECHS		29
HOW TO OPEN DOME		30
HOW TO UPDATE SOFTWARE		30
HOW TO CHANGE TURNTABLE MOTOR		31
HOW TO ACCESS COMPONENTS		32
GAME DIMENSIONS		32
PARTS LIST		
PARTS PICTURES		
DECAL DIAGRAM		37
MAINTENANCE LOG		38
TECHNICAL SUPPORT		39
\A/A DD A NITV		40

WELCOME TO TROLLS

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 game 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

GAME SPECIFICATIONS

WEIGHT					
GAME WEIGHT	480 lbs.	218 kg			
SHIP WEIGHT	540 lbs.	245 kg			
GAM	E DIMENSIC	MC			
GAW	E DIMENSIC	INS			
WIDTH	54 1/4"	138 cm			
DEPTH	54 1/4"	138 cm			
HEIGHT	82 1/2"	210 cm			
	·				
OPERATING TEMPERATURE					
FAHRENHEIT	45 - 80 F				
CELSIUS	7.2 - 26.7 C				

SHIPPING DIMENSIONS

50"x 48"x 90" 540 lbs. class 125

PALLET

A

POWER REQUIREMENTS			
INPUT VOLTAGE	100 to 120		220 to 240
RANGE	VAC		VAC
INPUT FREQUENCY	60 Hz		50 Hz
RANGE	00 HZ		50 HZ
MAX OPERATING CURRENT			

4.5 AMPS @ 110 VAC / 3 AMPS @ 220VAC

A

Note: Control panels can be removed to allow access through a 45" door. Small dome on top of game can be removed to reduce height to under 80"

SAFETY PRECAUTIONS

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.

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

WARNING

CAUTION

Lifting heavy objects can cause back, neck or other injuries. Be sure adequate lifting and moving

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.

UNPLUG THE POWER CORD.

The power cord must be accessible at all times in case of an emergency.

GAME SETUP

The game will arrive on a pallets surrounded by cardboard. Please inspect the pallet for shipping damage and report immediately to the freight company if any damage found.

There will be about 1/2 hours of assembly time needed.

Tools Needed:

9/16" Wrench 7/16" Wrench

2 people # 2 Square head screwdriver bit

Remove the cardboard from the pallet.

The game is screwed down to the pallet in 2 locations.

Remove the bag of keys from the cabinet ledge and open all 4 main doors.

Remove the lag screw from inside the door above the wood support below game using 9/16" wrench.

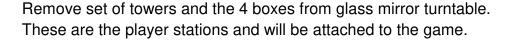
Remove game from pallet and roll the game into final position in room.

Lock wheel casters so the game is harder to move.

Open Dome: Reach inside and above the pink, blue, and green main doors and unlatch the 3 latches directly above the lock brackets.

Lift the dome from the pink side; it will hinge back and rest in an open position.





Open the Pink Station's cash box and remove the hardware kit.

Attach the 4 player stations to the sides of the cabinet using the washers and lock nuts from the hardware kit using a 7/16" wrench. Be sure to match the color of the player stations to the cabinet side colors.





A5WAFL060 A5

A5NULO050

GAME SETUP

Plug in the 3 cables to connect the player station to the cabinet:

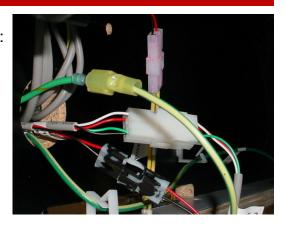
Ground Wire: CE5180 plugs into CE5168

Button: CE5155 plugs into CE5155

Speaker: Black connector of speaker plugs into the black

connector of CE5159

Note: Do not plug into the pink connector!



Evenly distribute the tower set over the glass mirror turntable. Refer to "Prize Tower Kits" for more information on quantity and values of tower sets.

Close dome and secure the 3 latches above the pink, blue, and green main doors.

Pull the power cord from the bottom of the game, and plug into a standard electrical outlet.

Turn on the power strip, located inside the blue side main door.

Your ready to play!





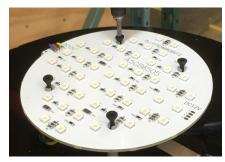
OPTIONAL POWER DROP SETUP

The Trolls game is pre-wired, ready to accept incoming AC voltage from the top of the game from a location's drop cord.

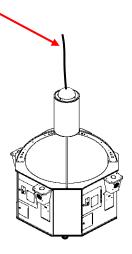
However, there is some modification to the game that must be done.



Remove 4 screws from the top half dome of game using a Phillips screwdriver. Remove the black filler plug.



Remove 4 screws from the LED light board using a #2 square bit drive.





Pull the black power cord up through the hole.



Reinstall the LED light board using a #2 square bit drive. The power cord will extend out from under this board.



Place the half dome back onto game, making sure to pull power cord out the hole in the top of the half dome.



Open the pink station's main door and unplug the existing AC power cord from the line filter. Plug in the spare secondary AC power cord that is coming from the top of the cabinet.

CHECK ARM HEIGHT

Check the height of the arms above the glass mirror turntable.

If the arms are too low, they will catch the edge of the mirror and snap backward causing towers to tip over on their side.

A tower on it's side will not score, and block the win tray for actual player wins.

The arms must not be touching the glass, and should be 1/4" above the glass mirror turntable surface.



To Adjust Height:

Use a Phillips screwdriver to turn this screw.

Turn clockwise for arm to go up.

Turn counterclockwise for arm to go down.

You may need to do these for each of the 4 arms.



HOW TO PLAY

Choose one of the four brightly-colored player stations.



Simply press the button to activate the swinging arm.



Time your move just right to push a ticket prize off the rotating platform.



Score tickets when the prize lands on the win platform!



PRIZE TOWER KITS

Each Troll's game includes a large bag of RFID programmed towers. There are different options depending on ticket payout needs.

95% of customers use the Standard Tower Set (Part # A5TA11002-STD):

- 40 of 150 value ticket towers
- 1 of "Bonus Set" (packaged separately to prevent the hair from making a mess on the rest of the towers) with:
 - 2 of 300 tickets
 - 1 of 500 tickets
 - 1 of 1000 tickets
- 1 of "Payout Adjustment Set" (packaged separately as many times it is not needed) to adjust payout higher or lower with:
 - 5 of 100 tickets
 - 1 of 200 tickets
 - 1 of 750 tickets
 - 1 of 1000 tickets







We recommend filling the playfield with all 40 of the 150 towers and all 4 of the "Bonus Set" towers.

Only use the "Payout Adjustment Set" if you would want to increase or decrease your average ticket payout over time. Refer to the "Ticket Payout Pattern" for information on recommended tickets per game.

The other 3 tower sets sold by Baytek:

20 Pence Tower Set - Part # A5TA11002-UDC

30 of 50 tickets

5 of 30 tickets

5 of 20 tickets

2 of 150 tickets

1 of 250 tickets

1 of 1000 tickets

Payout Adjustment Set Included:

5 of 10 tickets

1 of 100 tickets

1 of 200 tickets

1 of 500 tickets

Nickel Tower Set - Part # A5TA11002-CEC

40 of 10 tickets

5 of 30 tickets

2 of 30 tickets

2 of 100 tickets

Payout Adjustment Set Included:

5 of 5 tickets

1 of 20 tickets

1 of 50 tickets

1 of 100 tickets

Point Set - Part # AATA11002-PTS - Same as Standard Set but with the word "Points" used instead of "Tickets"

To order replacement RFID prize towers, contact BayTek Entertainment:

Phone: (920) 822-3951 Ext 1101 Email: parts@baytekent.com

TICKET PAYOUT PATTERNS

Table describing the values of RFID towers to be placed on the playfield for the corresponding tickets per game.

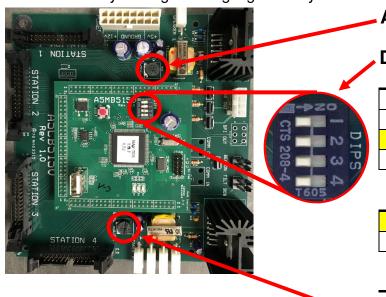
Factory default is highlighted in yellow.

Average Desired Tickets per Game	Prize Tower Kit	Tower Values
26 - 30	Standard Set, modified	40 of 150 towers, 1 of 200 tower, 2 of 300 towers, 1 of 500 tower, 1 of 750 tower, 2 of 1000 towers
22 - 26	Standard Set, modified	40 of 150 towers, 2 of 300 towers, 1 of 750 tower, 2 of 1000 towers
18 - 22	Standard Set, modified	40 of 150 towers, 2 of 300 towers, 2 of 1000 towers
15 - 19	Standard Set	40 of 150 towers, 2 of 300 towers, 1 of 500 tower, 2 of 1000 towers
13 - 17	Standard Set, modified	35 of 150 towers, 5 of 100 towers, 1 of 200 tower, 1 of 300 tower, 1 of 500 tower, 1 of 750 tower
8 - 12	20 Pence Set	30 of 50 towers, 5 of 30 towers, 5 of 20 towers, 2 of 150 towers, 1 of 250 tower, 1 of 1000 tower
5 - 9	20 Pence Set, modified	30 of 50 towers, 5 of 30 towers, 5 of 20 towers, 2 of 150 towers, 1 of 250 tower, 1 of 500 tower
3 - 7	20 Pence Set, modified	30 of 50 towers, 5 of 30 towers, 5 of 20 towers, 1 of 100 towers, 1 of 200 tower, 1 of 250 tower
1 - 5	Nickel Set (\$.05)	40 of 10 towers, 2 of 30 towers, 1 of 100 towers

VOLUME & DIPSWITCH SETTINGS

Volume adjustment and game setting dipswitches are located on the motherboard, located inside the Pink station main door.

* Factory settings are highlighted in yellow below *



Attract Volume Setting

Dipswitch Settings

1	2	COINS PER PLAY
OFF	OFF	1 Coin Per Play (\$0.25)
OFF	ON	2 Coins Per Play (\$0.50)
ON	OFF	4 Coins Per Play (\$1.00)
ON	ON	6 Coins Per Play (\$1.50)

3	ATTRACT SOUNDS
ON	Attract Mode On
OFF	Attract Mode Off

4 Not Used

Game Volume Setting

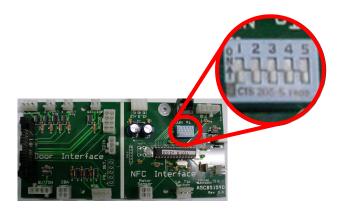
DOOR BOARD DIPSWITCH SETTINGS

Mercy tickets are tickets that are given at the end of the game if no tower has been won.

This is especially useful in card swipe installations where the name game can be played faster when a mercy ticket is given.

These dipswitches are located on the door board in the inside of each station's main door. All 4 door boards should be set at the same values.

* Factory settings are highlighted in yellow below *



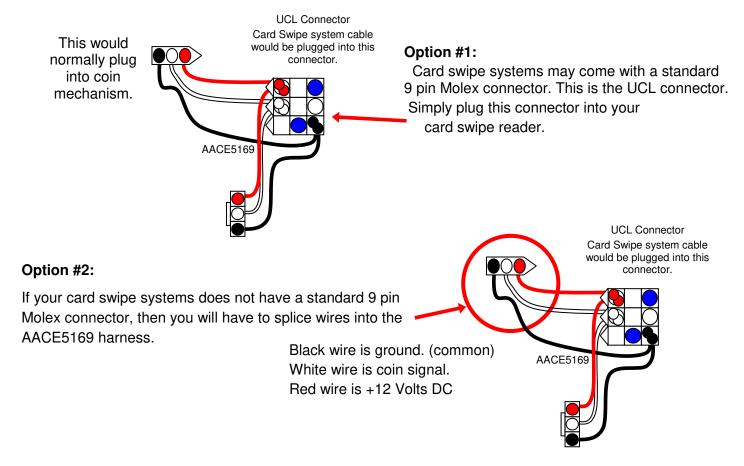
Dipswitches

	1	2	3	4	5
No Mercy Ticket	OFF	OFF	OFF		
1 Mercy Ticket	ON	OFF	OFF		
2 Mercy Tickets	OFF	ON	OFF	NI-4	NI-4
3 Mercy Tickets	ON	ON	OFF	Not	Not Used
4 Mercy Tickets	OFF	OFF	ON	OSCU	OSCU
5 Mercy Tickets	ON	OFF	ON		
10 Mercy Tickets	OFF	ON	ON		

CARD SWIPE INSTALLATION

The Trolls 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.



Notes:

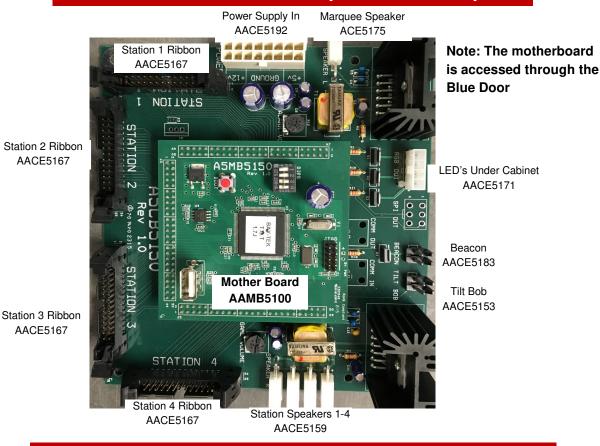
- Many card swipe systems have a voltage threshold that can be adjusted in the card swipe menu. Please set this "Game Drive Threshold" to 2 Volts.

Game Adjustments:

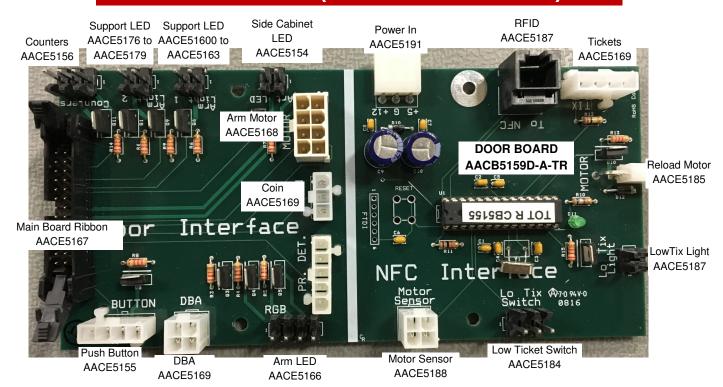
On the motherboard inside the blue station main door, set dipswitches #1 and #2 to ON. (1 Credit per play)
On the 4 door boards inside all 4 main doors, set dipswitches #1 to ON, all others OFF. (1 mercy ticket)

CIRCUIT BOARD LAYOUT

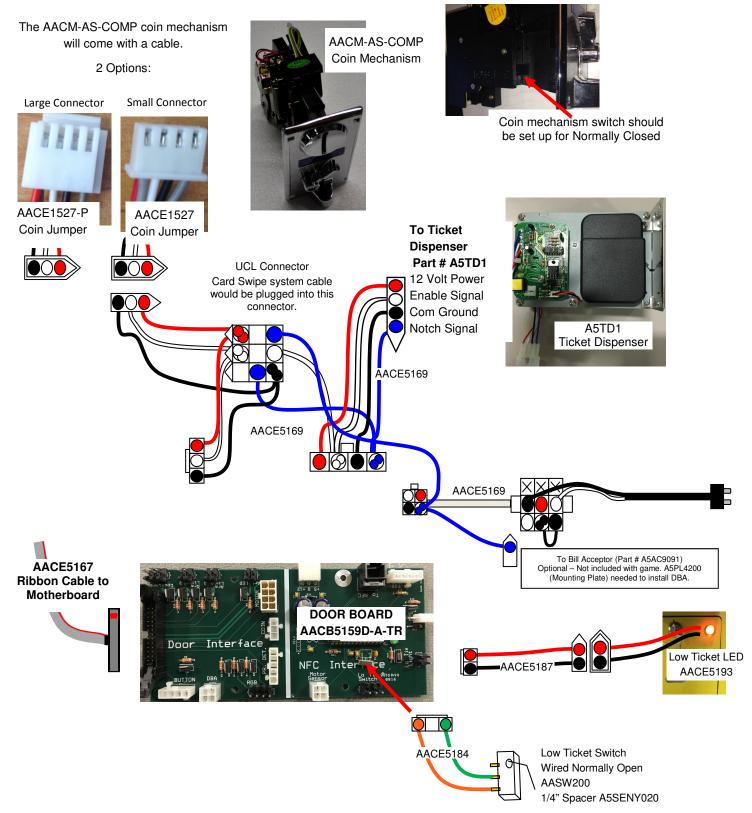
MOTHERBOARD (AAMB5100)



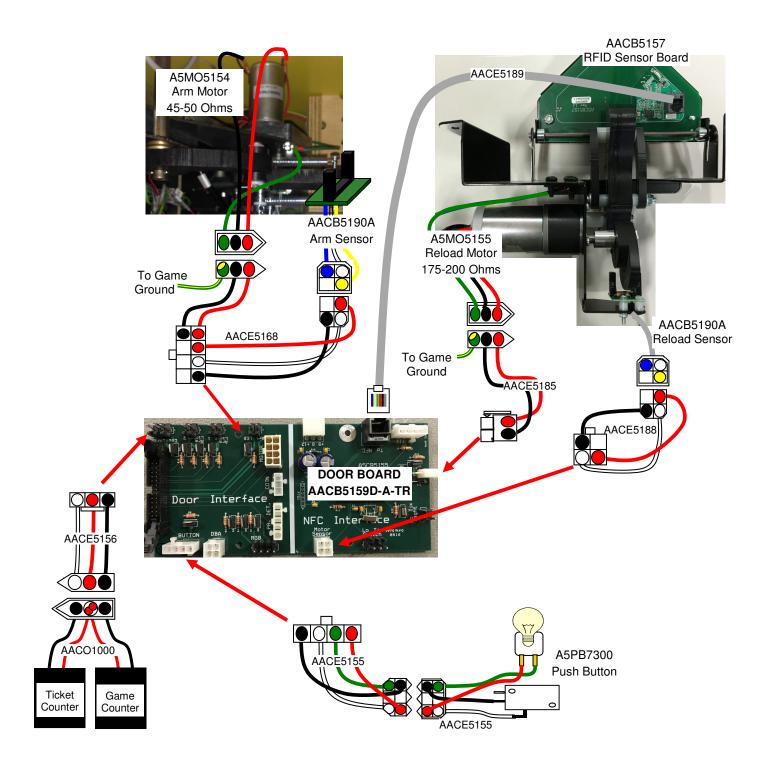
DOOR BOARDS (AACB5159D-A-TR) X 4



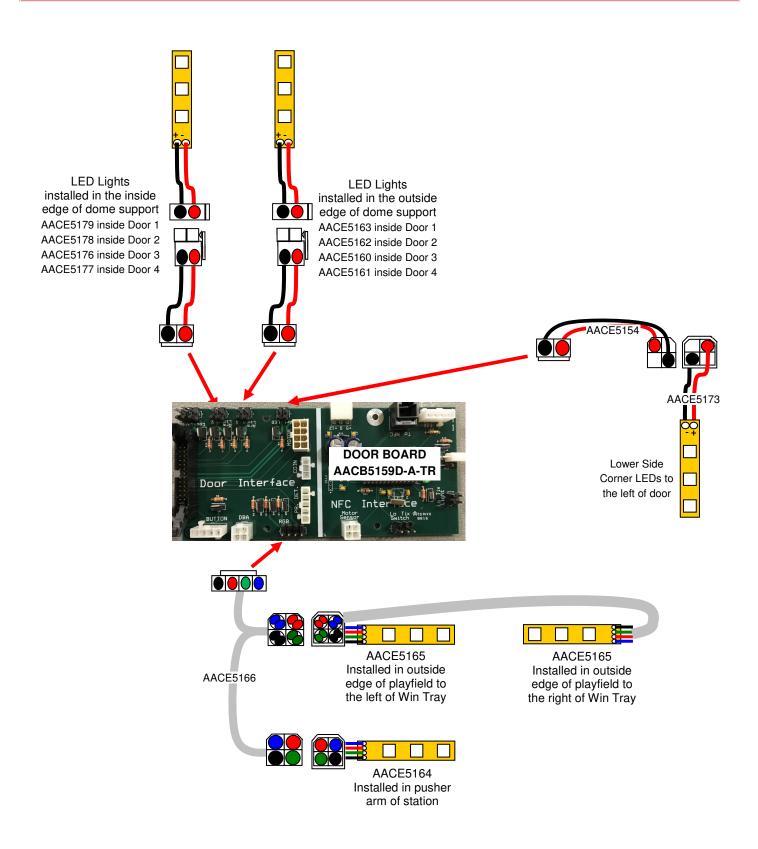
TICKET DISPENSER, COIN MECH, DBA, LOW TICKET SWITCH



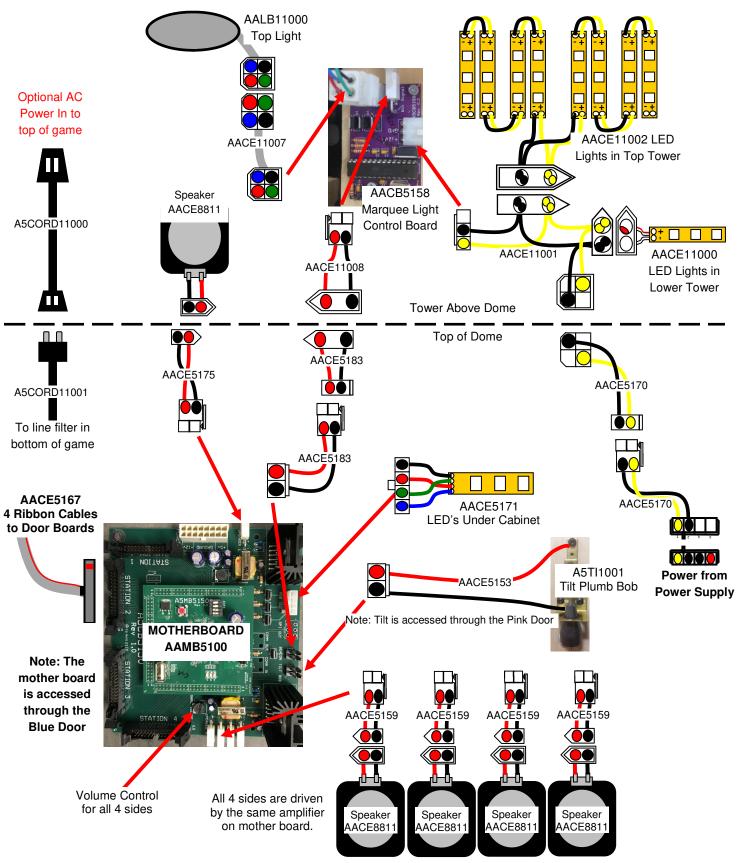
ARM MOTOR & SENSOR, RELOAD TRAY MOTOR & SENSOR



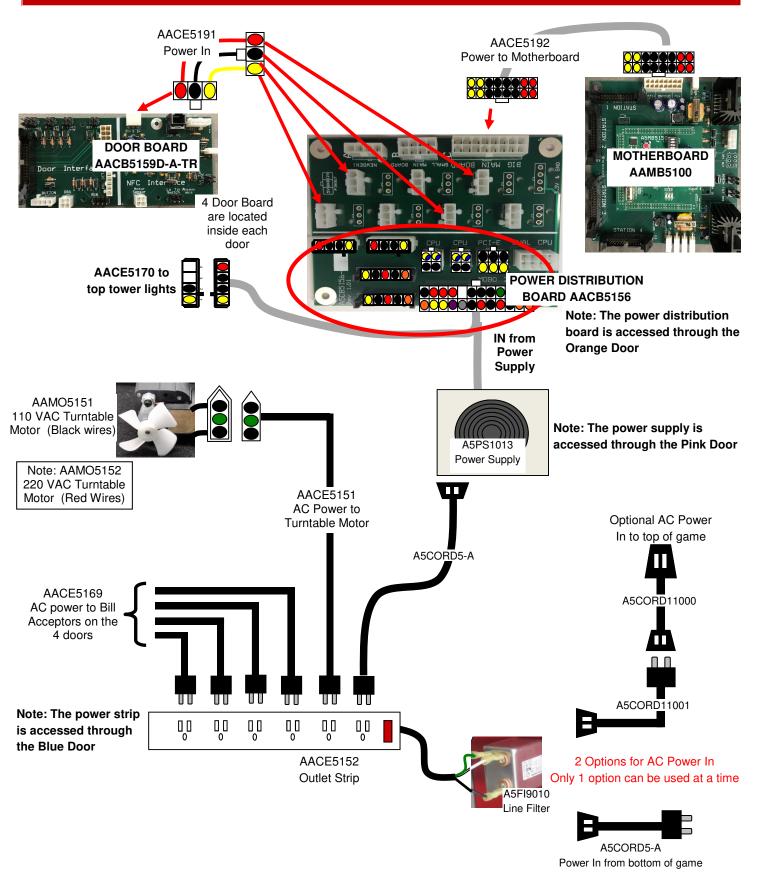
LED'S: CORNER, ARM, AND DOME SUPPPORT



SPEAKERS, BEACON, LED'S UNDER GAME, & TILT



110 VOLT AC AND 12 VOLT DC



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.

Problem	Probable Cause	Remedy
No power to the game	Unplugged.	Check wall outlet. Check Line Filter. Replace line filter if needed. (A5FI9010)
No lights on at all There are 2 options for	Circuit breaker tripped.	Reset power strip breaker switch or building circuit breaker.
voltage coming into game. Refer to Power	Power strip faulty.	Swap plug position, replace if needed (AACE5152)
Drop for more info	Faulty cable/power supply.	See Power Supply diagnostic below.
Game not coining up.	Ensure game makes sound when coin switch is triggered.	Check coin switch—Should be wired normally closed. (NC) Switch should be up.
	Verify communication between Central Main Board and Door Board.	Check wiring to Door Board. Part #'s AACE1527, AACE5169
NO N		Refer to "No Communication between boards" troubleshooting section.
NC - Normally Closed NO - Normally Open	Game set to large amount of credits per game.	Check Mother Board dipswitches # 1 & # 2
No Sound Mother Board creates sound.	Volume set to zero on Central Main board. (See Central Board Pinout)	Adjust Alarm Volume Adjust Game Volume
Alarm speaker is in the top of the game. Game speakers are on	Disconnected, loose or broken wires.	Check connections and reseat audio cable from Central Main Board to Speakers. Cables #'s: CE5175, CE8811
each side.	Faulty speaker.	Replace speaker Part # AACE8811
Player Push Button	Ensure the switch is operating normally.	Check for continuity on the switch. Replace switch if needed. Part # A5PB7300
Switch not Working Ensure switch is wired	Ensure CE5155 cable is plugged into door board	Refer to Wiring Diagram from push button to door board.
normally open	Disconnected, loose or broken wires.	Check connections from door board to push button. Cables #'s: AACE5155 & AACE5155
	Identify a faulty Door Board	Swap door board to different station to verify faulty board. Replace if needed AACB5159D-A-TR

Problem	Probable Cause	Remedy
Under Cabinet LED lights not working	Ensure CE5171 LED cable is plugged into Mother Board	Refer to Wiring Diagram for plug location
Power comes from mother	Disconnected, loose or broken wires.	Check connections from Mother Board to LED's Cables #: CE5171
board	Faulty LED cable	Replace LED cable. Part # AACE5171
Tower LED lights not working	Ensure CE5170 cable is plugged into power supply	Refer to Wiring Diagram from tower to power supply.
Power comes from power	Disconnected, loose or broken wires.	Check connections from power supply to LED's Cables #'s: CE5170, CE11001, CE11002
supply	Faulty LED cable	Replace LED cable. Part # AACE11002
LED lights inside pusher arm not	Ensure CE5166 cable is plugged into door board	Refer to Wiring Diagram from LED to door board
working	Disconnected, loose or broken wires.	Check connections from door board to LED's Cables #'s: CE5166, CE5164
Power comes from door board	Faulty LED cable	Replace LED cable. Part # AACE5164
LED lights inside the outside edge of	Ensure CE5166 cable is plugged into door board	Refer to Wiring Diagram from LED to door board
playfield not working	Disconnected, loose or broken wires.	Check connections from door board to LED's Cables #'s: CE5166, CE5165
Power comes from door board	Faulty LED cable	Replace LED cable. Part # AACE5165
LED lights in lower corner to left of door	Ensure CE5154 cable is plugged into door board	Refer to Wiring Diagram from LED to door board
not working	Disconnected, loose or broken wires.	Check connections from door board to LED's Cables #'s: CE5154, CE5173
Power comes from door board	Faulty LED cable	Replace LED cable. Part # AACE5173
LED lights in dome support not working	Ensure cable is plugged into door board	Refer to Wiring Diagram from LED to door board
Power comes from door board	Disconnected, loose or broken wires.	Check connections from door board to LED's Cables #'s: CE5176, CE5177, CE5178, CE5179
2 connectors on door board: - CE5177 to CE5179	Faulty LED cable	for inside edge of dome support and CE5160, CE5161, CE5162, CE5163 for outside edge of dome support
- CE5160 to CE5163		Replace LED cable associated with bad LED

Problem	Probable Cause	Remedy
	Ensure control board is receiving 12 Volts DC	Verify 12 Volts DC is going to board from CE11001 cable
Top Light not working	Ensure CE11007 cable is plugged into control board	Refer to Wiring Diagram from top light to control board.
Power comes from Marquee Light Control Board	Ensure CE5183 cable is plugged into mother board	Refer to Wiring Diagram from mother board to control board.
	Disconnected, loose or broken wires.	Check connections from mother board and power supply through marquee control board to top light Cables #'s: CE5183, CE11008, CE11007
	Faulty top light	Replace top light if needed. Part # AALB11000
Tilt not working Power comes from mother board	Ensure CE5153 cable is plugged into mother board Disconnected, loose or broken wires.	Refer to Wiring Diagram from tilt to mother board. Check connections from mother board to tilt Cables #'s: AACE5153
Ensure volume is turned up on the motherboard.	Faulty tilt plumb bob.	Adjust cone shaped weight so that it touches met- al ring when game is shaken. Replace tilt if needed. Part # A5TI1001
Ticket/ Game Counters not working Power comes from door board Ticket Meter will click as tickets come out of game. Game Meter will click after the game is over.	Ensure CE5156 cable is plugged into door board Disconnected, loose or broken wires. Faulty Counters	Refer to Wiring Diagram from counters to door board. Check connections from door board to counters Cables #'s: AACE5156 ,AACO1000 Replace counters if needed. Part # AACO1000
Turntable not turning Power comes directly from the power outlet strip. 110 VAC Motor (or 220VAC Internationally)	Ensure motor cable is plugged into connector and CE5151 is plugged into the power strip Disconnected, loose or broken wires. Faulty Motor	Refer to Wiring Diagram from counters to door board. Check connections from door board to counters Cables #'s: AACE5151 Replace motor is receiving AC voltage and it is still not turning. Part # AAMO5151. (Part # AAMO5152 if 220VAC international)
Dollar Bill Acceptor not functioning.	Check for power to Bill Acceptor.	Acceptor should cycle stacker at game power up. If not, check cable connections. Refer to "How to Clean Bill Acceptor" Or clean
Ensure Bill Acceptor is set to "Always Enable"	Dirt or debris in acceptor slot.	with bill reader cleaning card. (A5CC9000)
Important : Only 110 Volt AC DBA is to be installed.	Pinched, broken, or disconnected wiring.	Check wiring from bill acceptor to Door Boar (AACE5169) Repair or replace wiring harness. Make sure wires are secure in connectors.
	Bill acceptor problem. Part # A5AC9091	Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.

Problem	Probable Cause	Remedy
Low Ticket LED not working.	Ensure low ticket switch is wired normally open.	Check AACE5184 cable from low ticket switch to the door board.
Power comes from the door	Ensure the low ticket switch is operating normally.	Check for continuity on the switch. Replace switch if needed. Part # AASW200
board	Ensure CE5187 cable is plugged into door board	Refer to Wiring Diagram from low ticket LED to door board.
	Disconnected, loose or broken wires.	Check connections from door board to low ticket LED. Cables #'s: CE5187 & AACE5193
	Faulty low ticket LED light	Replace light if needed. Part # AACE5193
Tower not Recognized on Win Tray	Verify if problem is tower or the tray itself.	Place the same tower on a different Win Tray. - If the different Win Tray also does not reload, the tower is faulty and should be replaced. - If the different Win Tray does reload, there is a problem with the original tray. Continue below.
Place tower on tray - it should be reloaded back	Test RFID sensor on tray.	Check phone cable from RFID sensor to Door Board. Part # AACE5189 Swap RFID sensor to different station to verify operation. Replace if needed. Part # AACB5157
onto the playfield	Verify 12 Volts DC to motor when it should reload.	Swap reload tray assembly to a different station to verify faulty motor. Replace if needed. AART5100
	Ensure motor returns to home position.	Check sensor on assembly. Replace sensor if needed. Part # AACB5190A
	Identify a faulty Door Board	Swap door board to different side to verify faulty board Replace if needed AACB5159D-A-TR
Tower is not being reloaded back onto	Verify 12 Volts DC to motor when it should reload.	Swap reload tray assembly to a different station to verify faulty motor. Replace if needed. AART5100
playfield	Ensure motor returns to home position.	Check sensor on assembly. Replace sensor if needed. Part # AACB5190A
Game does pay tickets correctly	Identify a faulty Door Board	Swap door board to different side to verify faulty door board. Replace if needed AACB5159D-A-TR
Reload tray does not return to original	Ensure CE5187 cable is plugged into door board	Refer to Wiring Diagram from reload sensor to door board.
position	Disconnected, loose or broken wires.	Check connections from door board to reload sensor. Cables #'s: AACE5188 & AACE5190A
Place tower on tray after game power on.	Faulty Reload Sensor	Replace sensor if needed. Part # AACE5190A
	Faulty mechanical linkage inside reload assembly.	Swap tray assembly to different station to verify faulty mechanism. Replace if needed. AART5100

Problem	Probable Cause	Remedy
	Ensure player push button switch is working properly.	Refer to "Player Push Button Switch not Working" section.
Prize Arm not moving	Ensure the low ticket switch is operating normally.	Check for continuity on the switch. Replace switch if needed. Part # AASW200
	Ensure CE5168 cable is plugged into door board	Refer to Wiring Diagram from motor to door board.
	Disconnected, loose or broken wires.	Check connections from door board to arm motor. Cables #'s: AACE5168 & AAMO5154
	Faulty motor.	Check for 12 Volts and 45-50 Ohms at motor. Replace if needed. Part # AAMO5154
	Identify a faulty Door Board	Swap door board to a different side to verify faulty door board. Replace if needed AACB5159D-A-TR
Prize Arm is in wrong position	Ensure CE5168 cable is plugged into door board	Refer to Wiring Diagram from arm sensor to door board.
position	Disconnected, loose or broken wires.	Check connections from door board to arm sensor. Cables #'s: CE5168 & AACE5190A
	Faulty sensor.	Replace sensor if needed. Part # AACE5190A
	Identify a faulty Door Board	Swap door board to a different side to verify faulty door board. Replace if needed AACB5159D-A-TR
	Verify Power Supply is ON and fan is turning. Replace Power Supply if needed. A5PS1013	
No Communication	Verify green LED's on Centra "Power" is blinking ON	Main board.
No coin up, no game play, or	Ensure power supply cables are plugged into the lower half of th Power Distribution Board.	
station specific issue.	Specific station issue?	Swap door board from one station to the other to isolate a faulty door board. If problem follows the door board, replace AACB5159D-A -TRA
		Swap the ribbon cables on the motherboard to verify a faulty motherboard. If the problem follows the socket on the motherboard, then replace motherboard. Part # AAMB5100

TOWERS NOT REGISTERING AND/OR DISPENSING TICKETS

1.) Game must first register a tower on the "Win Tray"

Place a tower on the tray anytime and it will reload it back onto the playfield.

If it does not reload - please refer to "Tower not Recognized on Win Tray" section.

2.) Tower must land in Win Tray when after player button is pushed.

If tower reloads back onto playfield, coin the game up (music will start) and press the button to begin arm moving.

If the arm does not move - please refer to "Prize Arm not moving" section.

3.) Game must not be in "Tilt Mode"

Shake the game and verify it says "Please do not shake the game"

If there is no sound, turn the volume knob on the motherboard and refer to "Tilt not Working" section.

Tickets do not dispense or Wrong amount dispensed. Check for the correct amount of tickets showing on tower won.	Tickets on tower does not match tickets coming out of game.	If game has card readers attached - there may not be enough current to power game and all 4 readers. Incorrect RFID programmed on tower Opto Sensor on ticket dispenser dirty. Faulty ticket dispenser. Notch on tickets cut too shallow. Faulty cable. Disconnected, loose or broken wires. Faulty Door Board.	Install dedicated power supply to power card swipe systems. Verify the tower pays a consistent amount of tickets, and that tower should be replaced. 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 Newgen board. Check for continuity. Cables AACE5169 Swap Door Board to verify faulty board. Replace Door board(AACB5159D-A-TRA)	
	Tickets on tower do match tickets coming out of game.	Great! This is working as it should!		

FAQ

1.) What are Mercy Tickets?

Mercy tickets are a specific number of tickets that can be given out if the player does not win a tower. This speeds up game play on a card swipe system game because it will allow the next game to be played as soon as the first game is done. There is a bank of dipswitches on the door board that tells the game how many mercy tickets it should give. Refer to Door Board Dipswitch Settings for more information.

2.) Why are my towers are tipping over on playfield?

The pusher arms must not be set too low that they touch the glass mirror playfield. The arm will then catch the end of the playfield and snap backward, causing towers to scatter. Refer to Check Arm Height for more information.

3.) In which doors are the main components located?

The Blue Side has Mother Board and Power Outlet Strip access.

The Orange Side has Power Distribution Board access.

The Pink Side has Power Supply and Tilt Plumb Bob access.

4.) Why is my alarm going off?

There is a plumb bob in the cabinet that will detect game movement. If someone is trying to cheat by tipping or pushing the game to win, the plumb bob will trigger the alarm and a tower in the win spot will not register as a win.

5.) I have a card swipe system, why are ticket values not correct?

New version card reader systems draw more current and may cause weird ticket dispensing issues.

Baytek recommends installing a separate power supply to power the card swipes directly.

AVAILABLE BLANKING PLATES

A5PL9995

DBA Plate instead of Upstacker Bill Acceptor

plate used instead of Coin Mech Coin Comparator

Plate used for Bill Validator

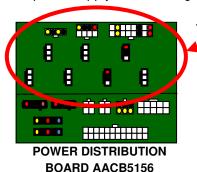
Plate used instead of ticket dispenser

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)

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. A "Upstacker" should be used for clearance issues. Standard DBA is MEI # AE2431-D5E Part # A5AC9091

Determine if Bill Acceptor has power:

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

If NO power: Use meter to measure 110 AC voltage at cable going into Bill Acceptor from power strip.

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

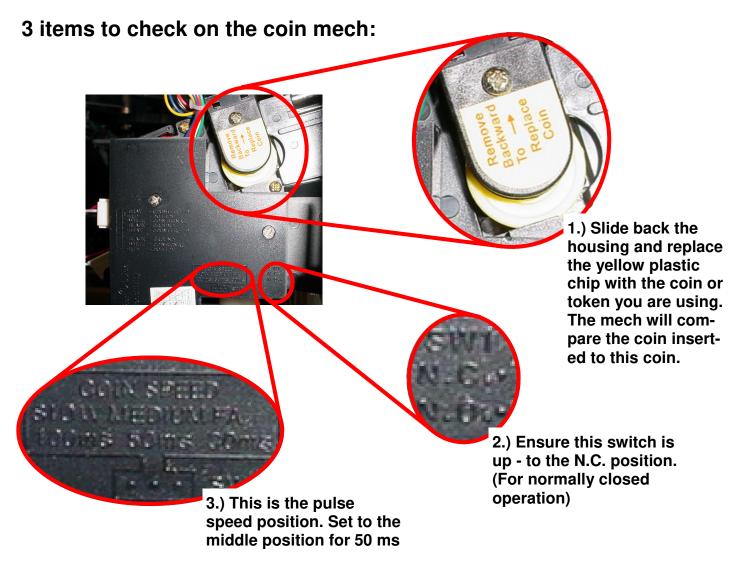
ERROR CODES

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



HOW TO SET COIN COMPARITOR MECHS

Coin comparators come standard on a Trolls game that is not specifically ordered for use with a card swipe system. These mechs are specifically designed to work with any size coin or token. Coin mechs can be swapped between stations to identify a faulty mech.



Game not coining up.	Ensure game makes sound when coin switch is triggered.	Check coin switch—Should be wired normally closed. (NC) Switch should be up.
	Verify communication between Central Main Board and Door Board.	Check wiring to Door Board. Part #'s AACE1527, AACE5169
		Refer to "No Communication between boards" troubleshooting section.
	Game set to large amount of credits per game.	Check Mother Board dipswitches # 1 & # 2
	Faulty coin mech	Swap mech between stations to identify a faulty mech

HOW TO OPEN DOME

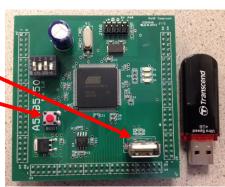
Reach inside and above the pink, blue, and green main doors and unlatch the 3 latches directly above the lock brackets.

Lift the dome from the pink side; it will hinge back and rest in an open position.



HOW TO UPDATE SOFTWARE

- With the game power on, locate the Central Main Board, USB Input and Boot Button (Red).
- 2. Plug the new software loaded onto the USB stick into the port provided.
- 3. Tap the Boot Button (Red), watch the Led on the board as it goes off, and comes back on. It should then blink three times, then go to a steady flashing. Remove the USB stick. The game will boot up normally.
- 4. The game is now ready for play.



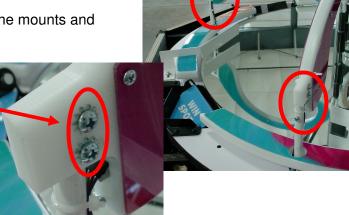


HOW TO CHANGE TURNTABLE MOTOR

The turntable motor should be replaced by removing the round mirror glass table.

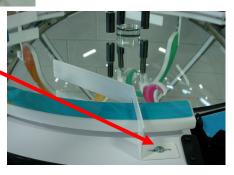
The blue and pink pusher arms must be removed from the mounts and allow to dangle out of the way - off the mirror.

Do this by removing the 2 screws in each arm using a Phillips screwdriver.



Remove 3 of the white metal prize guides from the blue, pink, and Orange sides by removing the Phillips screws.

Remove the mirror glass turntable carefully from cabinet and place aside in a safe location.



Remove the 4 screws in the motor bracket using a Phillips screwdriver.

Lift bracket with motor attached from cabinet.

The motor can now be unscrewed and replaced.



Re-install in cabinet making sure the shaft of the motor is in the center of the greased lazy susan.

Place the mirror glass turntable back in cabinet - make sure the pin locks in the retaining socket on the bottom of the mirror. It will fall into place as you turn the mirror.

Reattach the pusher arms. Make sure to push the LED light strip inside the white plastic as you align the pusher arm on the support bracket.

Reattach the white metal guides.









HOW TO ACCESS COMPONENTS

Unlock and open the Blue Station main door.

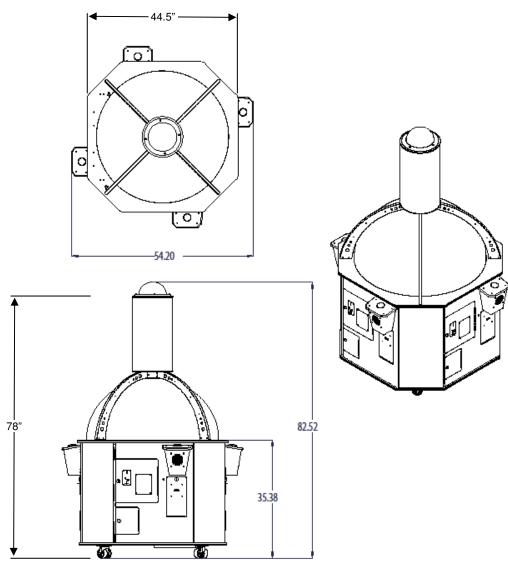
This provides access to the Mother Board and Power Outlet Strip.

The Orange Station main door provides access to the Power Distribution Board.

The Pink Station main door provides access to the Power Supply and Tilt Plumb Bob.



GAME DIMENSIONS



PARTS LIST

PART#	DESCRIPTION	PART #	DESCRIPTION
A5AC5150	Acrylic, Center Puck	A5DE11000	Decal, Ring, Blue/Org
A5BR5002	Bearing, Lazy Ball Bearing Swivel	A5DE11001	Decal, Ring, Org/Green
A5CA1005	Caster,250# Load, Swivel/Lock	A5DE11002	Decal, Ring, Pink/Blue
A5CB2050	Coin Box, Plastic, Black,	A5DE11003	Decal, Ring, Green/Pink
A5CL1004	Clamp, Versa Latch	A5DE11004	Decal, Cab Corner Panel, Branch
A5CM-AS-COMP	Coin Mechanism, Comparator	A5DE11005	Decal, Cab Corner Panel, Guy Diamond
A5DO11000	Dowel. 1 1/4 Inch	A5DE11006	Decal, Cab Corner Panel, Orange
A5DO5150	Dome, Clear	A5DE11007	Decal, Cab Corner Panel, Poppy
A5Fl9010	Filter, Inline	A5DE11008	Decal, Arm, Blue
A5LK2001	Lock, Cash Box, A05/E00 Key Code	A5DE11009	Decal, Arm Reverse, Blue
A5LK5002	Lock, 7/8", H95 Key Code	A5DE11010	Decal, Arm, Orange
A5ME5152	Metal, Pusher Arm Shaft	A5DE11011	Decal, Arm Reverse, Orange
A5ME5155	Metal, Ticket Tower Guides, White	A5DE11012	Decal, Arm, Pink
A5ME5162	Metal, Button Housing, Blk	A5DE11013	Decal, Arm Reverse, Pink
A5ME5164	Metal, Graphics Edge Cover, Black	A5DE11014	Decal, Arm, Green
A5ME5166	Metal, Lift Brkt,Galv,Tot,L&R	A5DE11015	Decal, Arm Reverse, Green
A5ME5167	Metal, Pusher Arm Brkt	A5DE11016	Decal, Control Panel, Blue
A5ME5168	Metal, Motor Bracket	A5DE11017	Decal, Control Panel, Orange
A5ME11000	Metal, Black Arc Arms	A5DE11018	Decal, Control Panel, Pink
A5ME11001	Metal, Black Arc Arm Cover	A5DE11019	Decal, Control Panel, Green
A5ME5172	Metal, Bracket, Shock Mnt To Lid	A5DE11020	Decal, Marquee
A5ME5173	Metal, Conn Plate, Marquee Arm	A5DE11020	Decal, Marquee
A5ME5174	Metal, Guide Pin	A5DE11021	Decal, Marquee Rolux
A5ME5175	Metal, RFID Prize Table	A5DE11022	Decal, Reload Tray, Blue
A5ME5176	Metal, RFID Mounting Bkt	A5DE11023	Decal, Reload Tray, Orange
A5ME5177	Metal, RFID Motor Bkt	A5DE11024	Decal, Reload Tray, Pink
A5ME5178	Bracket, Turntable Motor	A5DE11025	Decal, Reload Tray, Green
A5ME5180	Metal, Motor Hub	A5DE11027	Decal, Playfield Lid, Blue/Purple
A5PB7300	Pushbutton,2"Lighted	A5DE11028	Decal, Playfield Lid, Purple/Red
A5PL4200	Plate, Up Stacker	A5DE11029	Decal, Playfield Lid, Red/Yellow
A5PL5150	Plate, Blanking, In Place Of Comp	A5DE11030	Decal, Playfield Lid, Yellow/Blue
A5PL8900	Plate, Blanking, Bill Validator	A5DE11036	Decal, Cab Front, Light
A5PL9995	Plate, Ticket Dispenser, Blanking	A5DE11037	Decal, Cab Top, Light
A5SP5150	Spring,Gas,60 Lb. Force,17.13 Exlg	A5DE11038	Decal, Cab Mid, Light
A5TI1001	Tilt, Plum Bob	A5DE11039	Decal, Cab Bottom, Light
AAFI5150	Finger Spring Tips Set Of 4	A5DE11040	Decal, Cab Front, Dark
AAMI5150	Mirror Turntable Glass	A5DE11041	Decal, Cab Top, Dark
W5CL1002	Clamp, Panel, Kick Plate	A5DE11042	Decal, Cab Mid, Dark
W5HG1015	Hinge,5",Double Bend	A5DE11043	Decal, Cab Bottom, Dark
W5HG1045	Hinge,5.75" Double Bend		
W5HG1050	Hinge,8",Double Bend		

W5HG5150

W5KE5000

W5TM1316

Hinge, Dome

Keeper, Lock

T-Molding,13/16"Blk/Silver

PARTS LIST

		<u> </u>	
PART #	DESCRIPTION	PART #	DESCRIPTION
A5CORD5	Cord, AC Computer Cord	AACE11000	Cable Assy, Marquee Square Lights
AACE1527	Coin Mech Jumper Cable, Small Connector	AACE11001	Cable Assy, Marquee Lights Power
AACE1527-P	Coin Mech Jumper Cable, Large Connector	AACE11002	Cable Assy, Marquee Upright Lights
AACE5151	Cable Assy, AC Motor Power	AACE11007	Cable Assy, Power To RGB Board
AACE5152	Cable Assy, Outlet Strip	AACE11008	Cable Assy, Marquee Brd Pwr CB5158
AACE5153	Cable Assy, Plumb Bob		
AACE5154	Cable Assy, Side Light Power		
AACE5155	Cable Assy, Game Play Button		
AACE5156	Cable Assy, Counters		
AACE5159	Cable Assy, Control/Speaker	AATA11000/R	Standard Ticket Tower Set
AACE5160	Cable Assy, Marq Sup Lights #3	AATA11000/R-CEC	Lowest Ticket Value Tower Set
AACE5161	Cable Assy, Marq Sup Lights #4	AATA11000/R-UDC	Low Ticket Value Tower Set
AACE5162	Cable Assy, Marq Sup Lights #2	AATA11000/R-POIN	TS Points Ticket Tower Set
AACE5163	Cable Assy, Marq Sup Lights #1		•
AACE5164	Led Lights In Pusher Arm		
AACE5165	Led Lights Installed In Outside Edge Of Playfield	A F.M.O.F.1.F.4	Makey Awar 40 Dawa
AACE5166	Cable Assy, Plyfld Light Jumper	A5MO5154	Motor,Arm,10 Rpm
AACE5167	Cable Assy, Communication	A5MO5155	Motor, RFID Tray,12vdc,20rpm
AACE5168	Cable Assy, Arm Motor & Sensor	A5PS1013	Power Supply, EVGA 500
AACE5169	Cable Assy, DBA, Coin Mech, Ticket Dispenser	A5TD1	Ticket Dispenser
AACE5170	Cable Assy, 12vmarq Power	AAMO5151	Motor, Turntable Motor, 110vac
AACE5171	Led Lights Under Cabinet	AAMO5152	220 Volt Ac Turntable Motor
AACE5173	Cable Assy, Side Stick Lights	A A O D E 1 F O D A T D A	Doord Door Doord
AACE5175	Cable Assy, Marquee Speaker Wire	AACB5159D-A-TRA	
AACE5176	Cable Assy, Marq Sup Lights #3	AACB5156	Power Distribution Board
AACE5177	Cable Assy, Marq Sup Lights #4	A5CB5157	PCB,NFC Antenna
AACE5178	Cable Assy, Marq Sup Lights #2	A5CB5190A	PCB, Sensor, Tot
AACE5179	Cable Assy, Marq Sup Lights #1	AACB5158	Marquee Light Control Board
AACE5180	Cable Assy, Ground Wire	AAMB5100	Motherboard Assembly
AACE5181	Cable Assy, Button Housing Ground		
AACE5183	Cable Assy, Beacon Cable		
AACE5184	Cable Assy, Low Ticket Switch		
AACE5185	Cable Assy, TOT Reload Motor		
AACE5187	Cable Assy, TOT Reload, Low Tic		
AACE5188	Cable Assy, RFID Sensor		
AACE5189	Cable Assy, RFID Sensor		
AACE5191	Cable, Door Board Power		
AACE5192	Cable, Main Board Power		
AACE5193	Low Ticket Light		
		-	

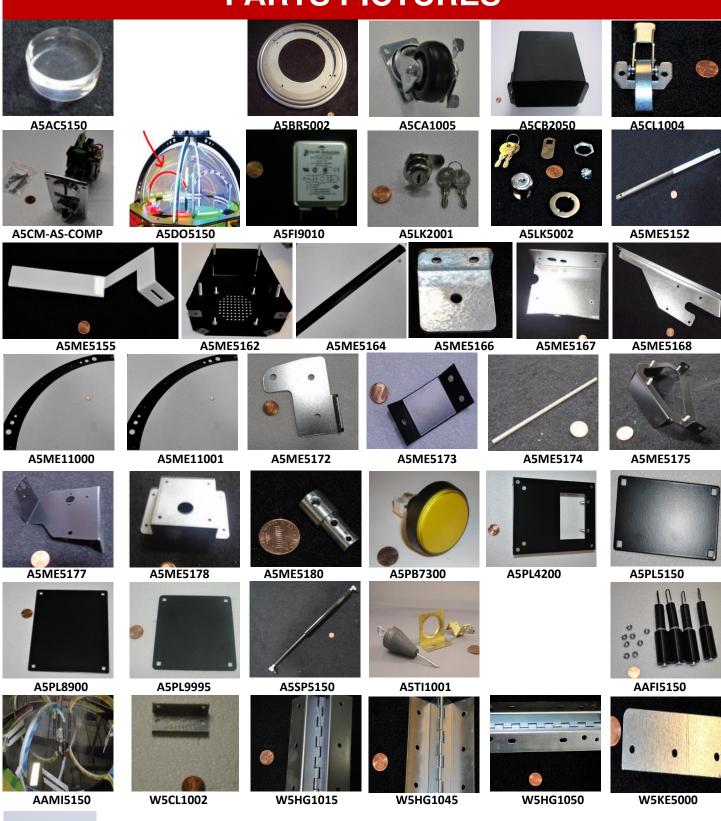
AACE8811

AACO1000

Speaker

Counters

PARTS PICTURES





W5TM1316

PARTS PICTURES















A5CORD5-A

AACE1527

AACE1527-P

AACE8811

AACO1000

A5MO5154

A5MO5155













A5PS1013

A5TD1

AAM05151

AAMO5152

AACB5156

A5CB5157









A5CB5190A

AAMB5100

AACB5159D-A-TR

DECAL DIAGRAM



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.

DATE	MAINTENANCE PERFORMED	PARTS ORDERED	MISC.

NOTES			

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:

<u>Repair & Return</u> – 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 Games 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

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

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.