



Hungry Hungry Hippos

HIP-54-4001



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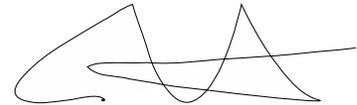
Operation & Service Manual

Version 2.4

*** Read this manual before use**

General Remark

If you encounter any difficulties or if you need support on how to update and/ or install your Hungry Hungry Hippos product, we invite you to contact your local distributor or reach us at techsupport@aagames.com or by calling our support line +1-450-824-1671



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Chapter 01 - Preface

Please read this page before preparing your Hungry Hungry Hippos product for game play.

The following safety instructions apply to all game operators and service personnel. Specific warnings and cautions will be included throughout this manual.

Use the following safety guidelines to help protect the system from potential damage and to ensure your personal safety:

- Electronic components in the game cabinet run on 110V AC 60Hz (220V/ 50Hz in most of Europe, the Middle East and the Far East delivered units).
- To help prevent electric shock, plug the system into a properly grounded power source. These cables are equipped with 3-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3-wire cable with properly grounded plugs. We do recommend a 15A rated current or higher power cord.
- To help protect your system from sudden increases and decreases in electrical power, use a surge suppressor, line conditioner or Uninterruptible Power Supply (UPS).
- Be sure nothing rests on the system's cables and that the cables are not located where they can be stepped on or tripped over.
- Keep your system far away from radiators and other heat sources.
- Do not block cooling vents.

Precaution for Game Operation

Adrenaline Amusements Inc. assumes no liability for injuries incurred while playing our games.

Operators should be aware that certain health and physical conditions may make people susceptible to injury when playing video games.

Safety



To avoid electrical shock, unplug the cabinet before performing installation or service procedures.

If a power cord is damaged, it must be replaced by the equivalent power cord available from your distributor.



Adrenaline Amusement Inc. assumes no liability for any damages or injuries incurred while setting up or servicing the cabinet. Only qualified service staff should perform installation or service procedures.

Environmental Conditions

Cabinet is intended for indoor use only. Be sure to keep the cabinet dry and maintain operating temperatures of 59° - 86°F (15° - 30°C).

Operating & Voltage

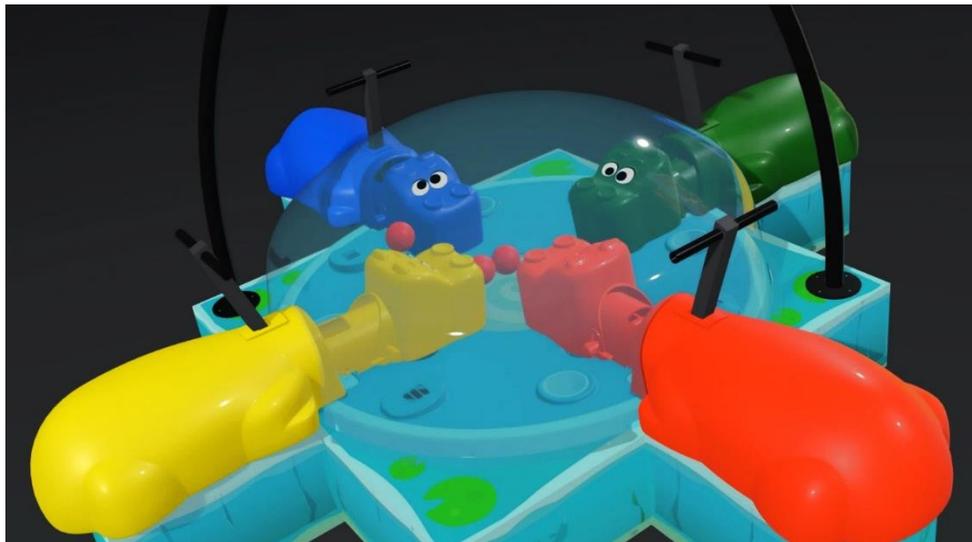
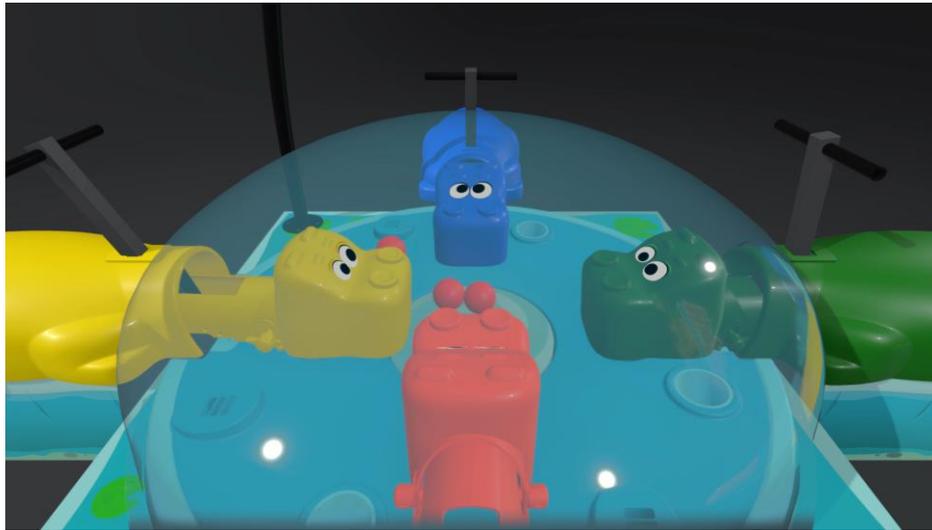
Voltage	Operating
110V AC	4.0 AMP
220V AC	2.0 AMP

Chapter 02 - Game Features

Hungry Hungry Hippos is a skill game where your timing can earn you a lot of tickets.

How to Play

- Get on your Hippo.
- Chomp as many marbles as possible.

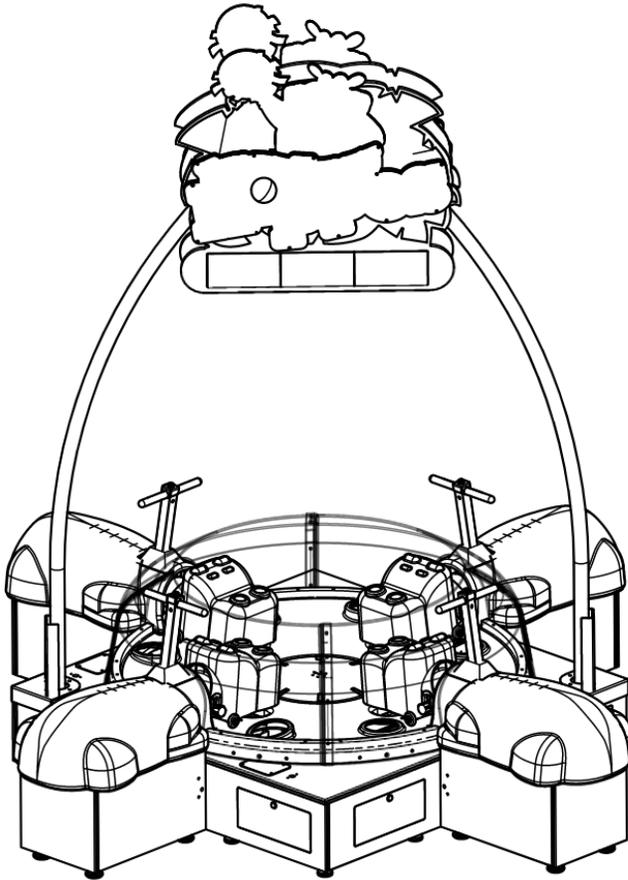


Chapter 03 – Unit Features

Hardware Features

- 4-players game
- 7" Touchscreen monitor inside
- 4 giant hippopotamus-like player seats

Cabinet Facts

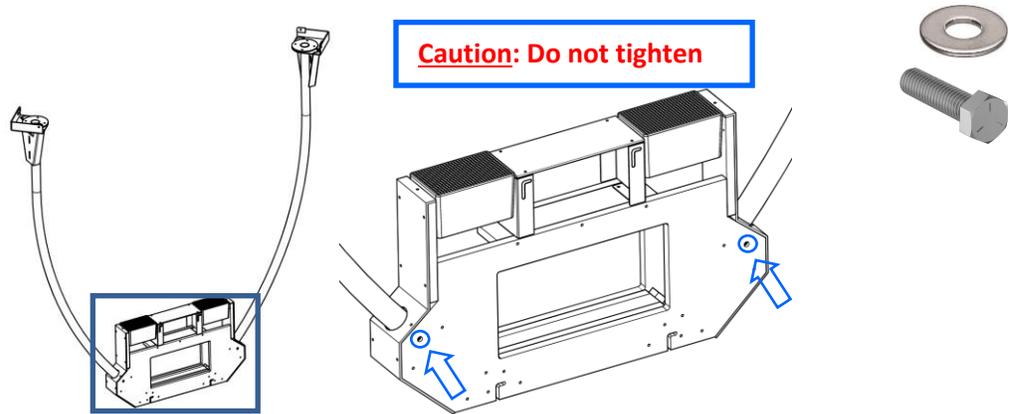
<u>Cabinet Dimensions</u>		
		Height = 107.96" [2742.21mm]
Depth = 110.91" [2817.09mm]	Width = 110.91" [2817.09mm]	
<u>Shipping Dimensions</u>		
Width = 92"	Depth = 45"	Height = 84"
Weight = 1500 lbs		

Chapter 04 – Unit Installation

How to install your Hungry Hungry Hippos Unit

Warning: 2 people are required to perform the following operations.

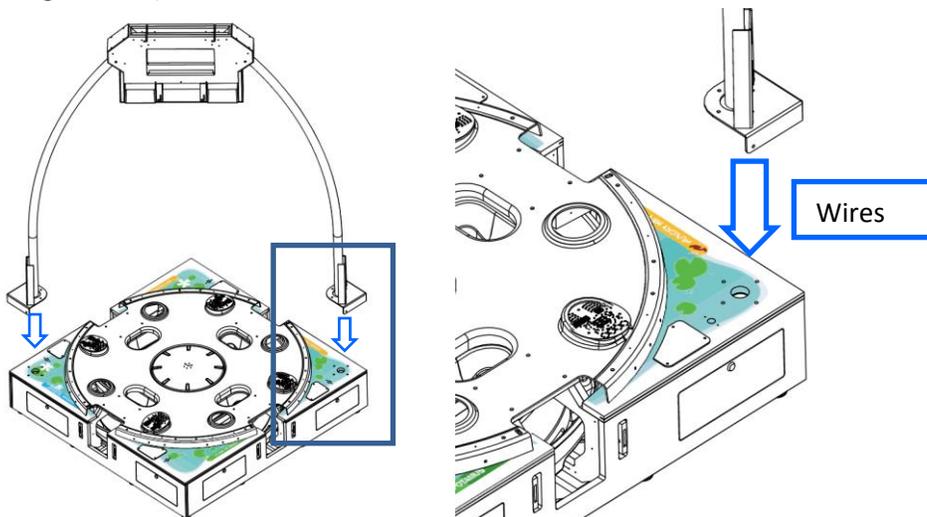
- 1) Position the header assembly upside down on the floor
Install the 2 aluminum tubes with the provided 3/8-16 X 1½ screw and the 3/8 washers



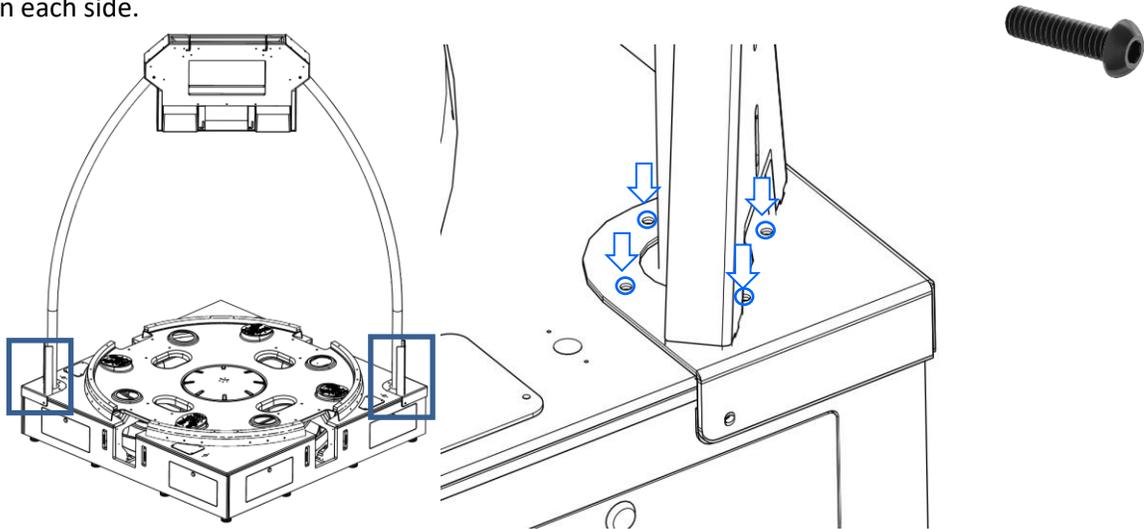
- 2) Connect all wiring between the wired tube and the header assembly



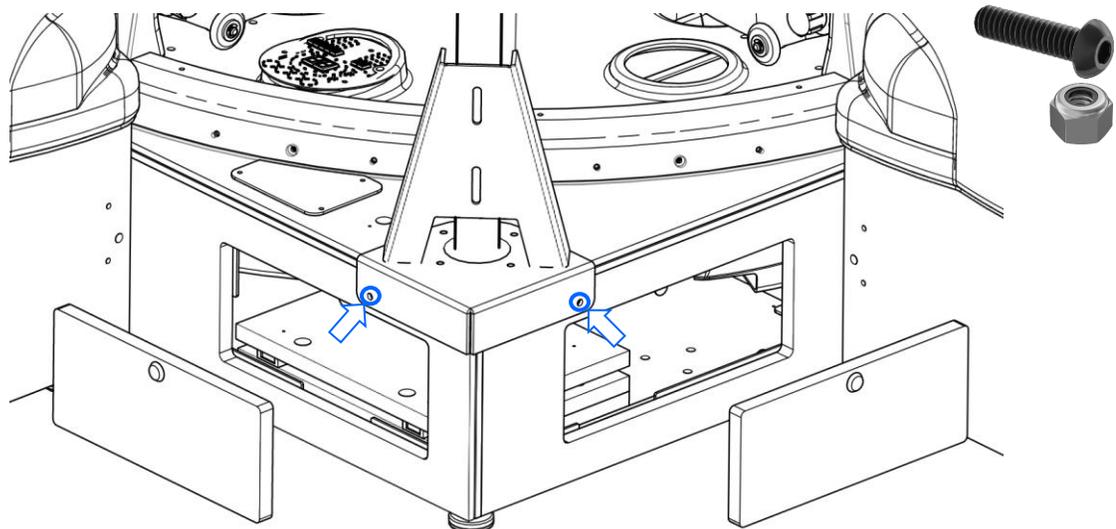
- 3) Position the header assembly
Make sure to insert the wires into the module's corner hole located near the power bar.
(Orange corner)



- 4) Secure the header assembly on the unit by installing the 4 provided button head ¼-20X2” screws in each side.



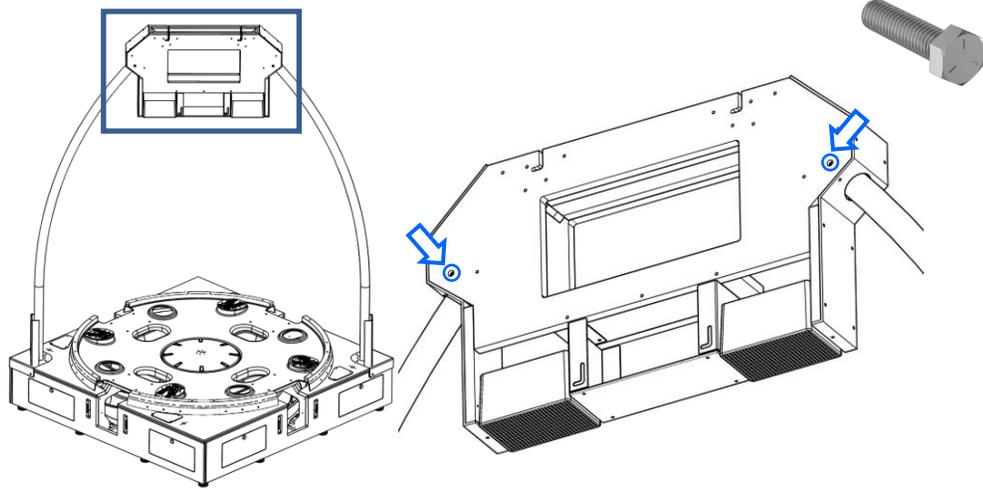
Secure each corner with the provided 2” button head screws and the ¼-20 locknuts



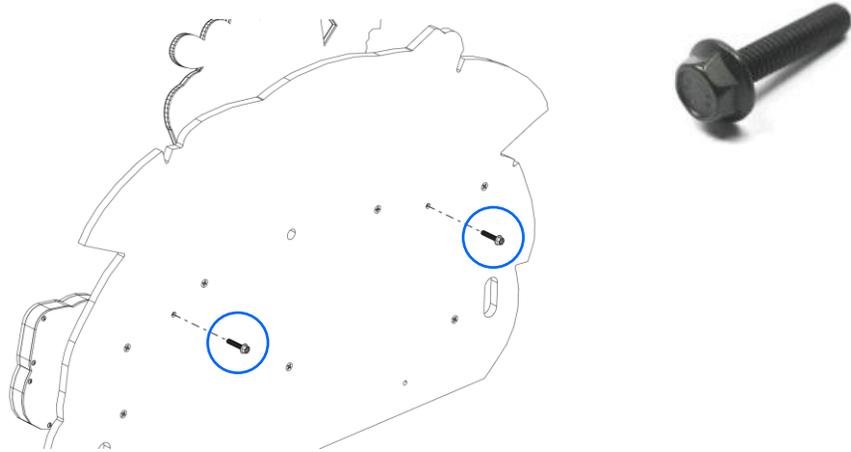
Inside the wood module, connect all wires from the tube and the module together.
Connect the AC cable to the power bar.



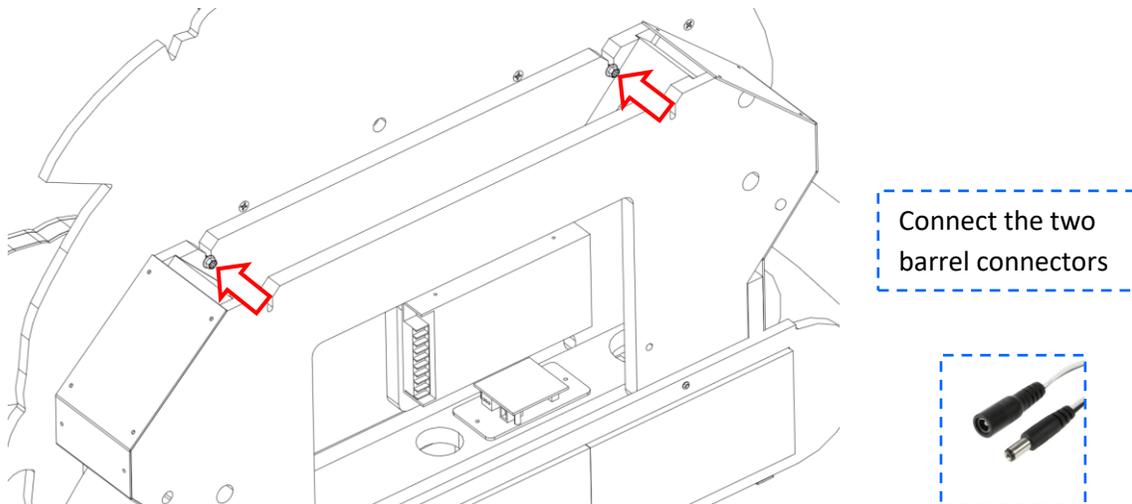
- 5) Tighten the hexagonal 3/8-16 screws from step (1). Repeat for each side (2x)



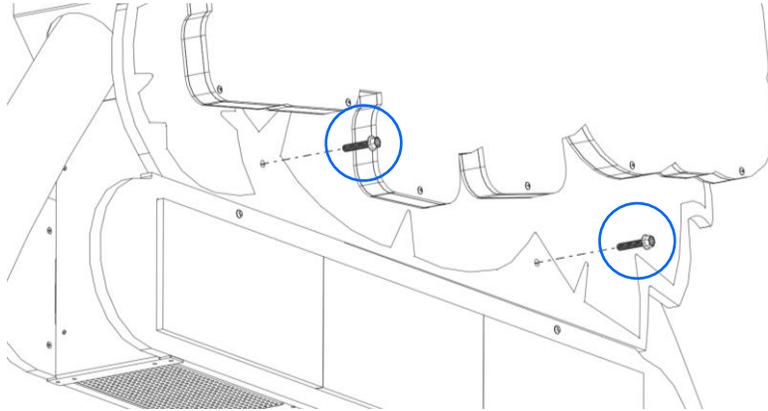
- 6) Install 1/4 of inch of the two hexagonal 1/4-20x1 1/4 screws on the top. Repeat for the other side (2x).



- 7) Place the header between the two grooves of the header and tight the two bolts. Make sure to place the "A" logo on the "A" side and the "B" on the "B" side. Repeat for the other side (2x).



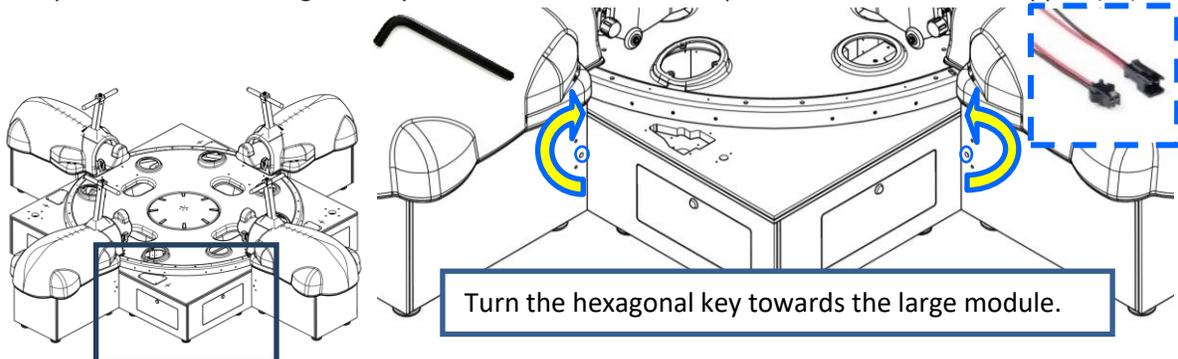
- 8) Secure the panel by installing the other two hexagonal ¼-20x1¼ screws on the front. Repeat for the other side (2x).



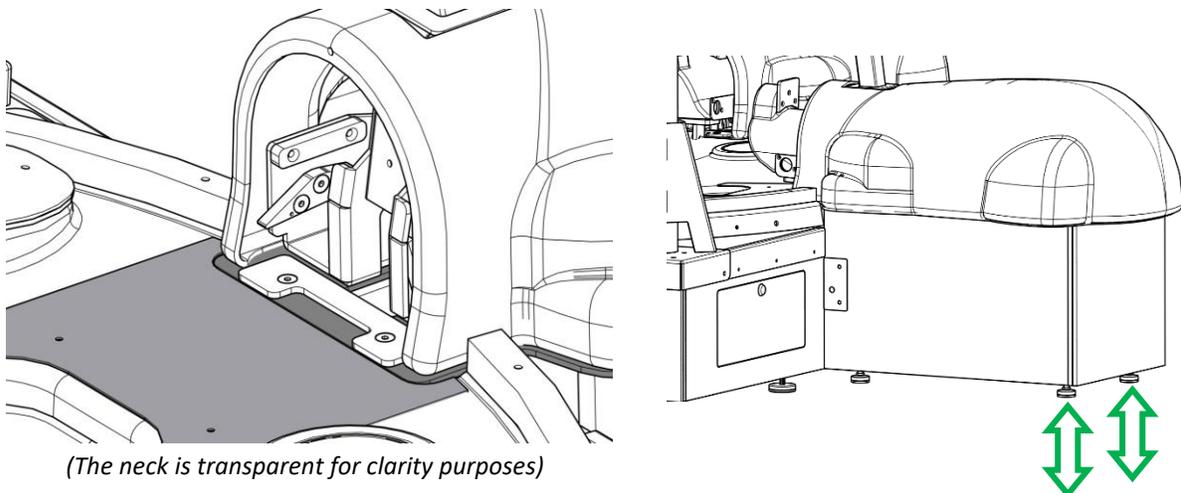
WARNING:

Make sure to tighten well with a tool all four screws in each side. Failure to tighten well may cause screws to come loose and header could fall and cause injuries.

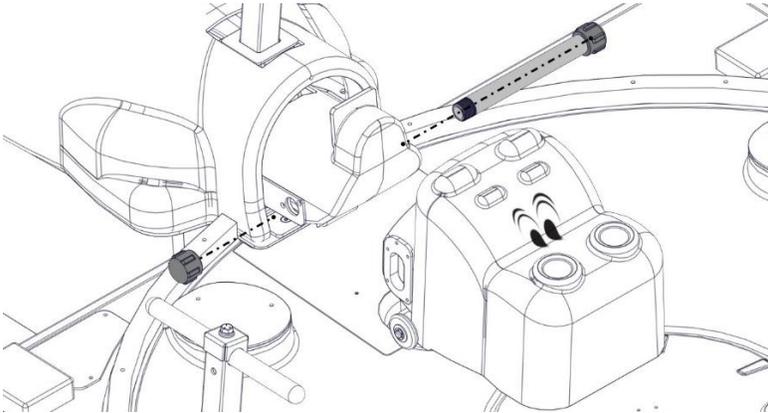
- 9) Connect the lock harnesses together. Secure the small cabinets with the large module using the provided 5/16" hexagonal key and the tub extension. Repeat for each side of all hippos (8x).



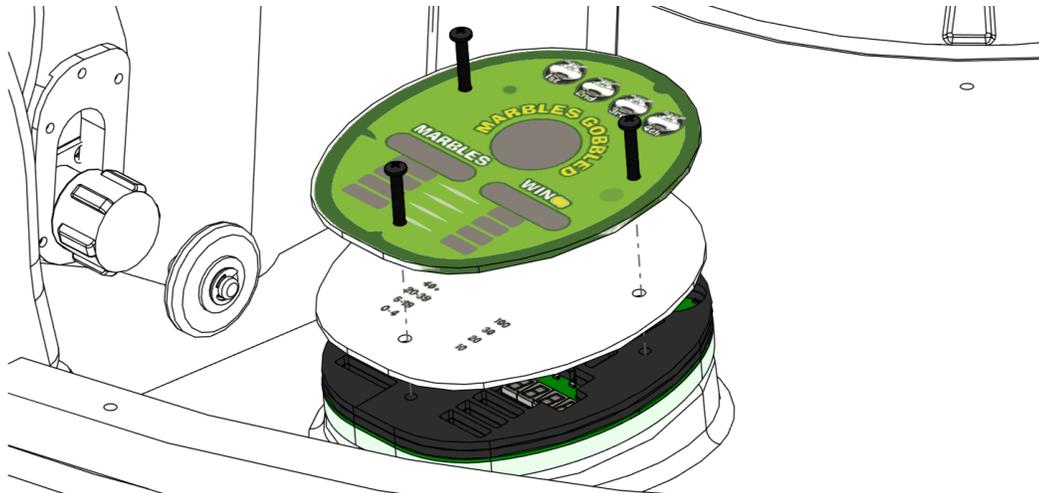
- 10) Adjust the hippo's legs to level the plate to the shim tub. This step is important to prevent the pop-up from breaking prematurely. Repeat for each cabinet (4x).



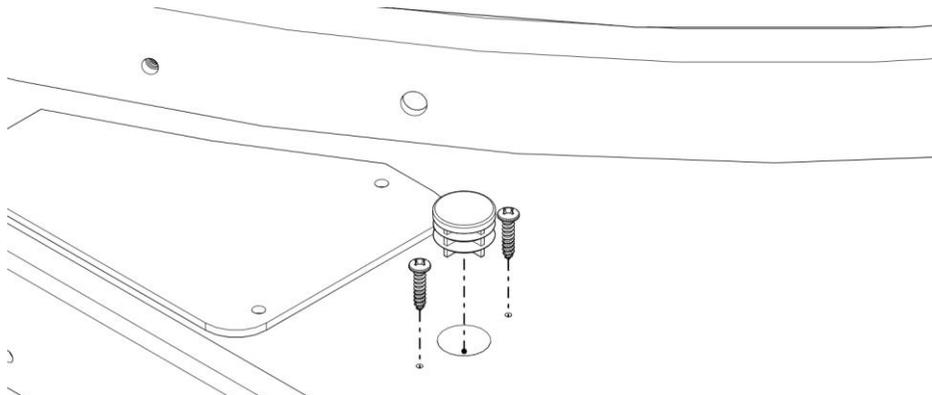
- 11) Place the hippo's head with the PVC pipe and the two caps, use groove pliers to secure them
Repeat for each hippo (4x).



- 12) If you desire to change the payout of the machine, remove the three screws of the acrylic score board and change the payout label. Consult the “Payout configuration” in [Chapter 5](#) for more details about the values. Repeat for each player (4x).

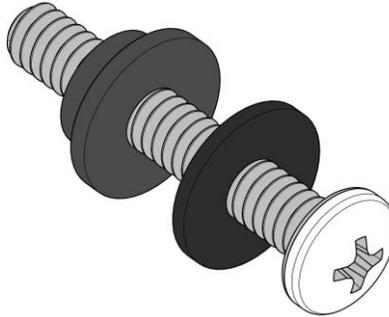


- 13) If you desire install card readers to game, remove the plug and the two white screws on each side of the game module and install your card reader from there.



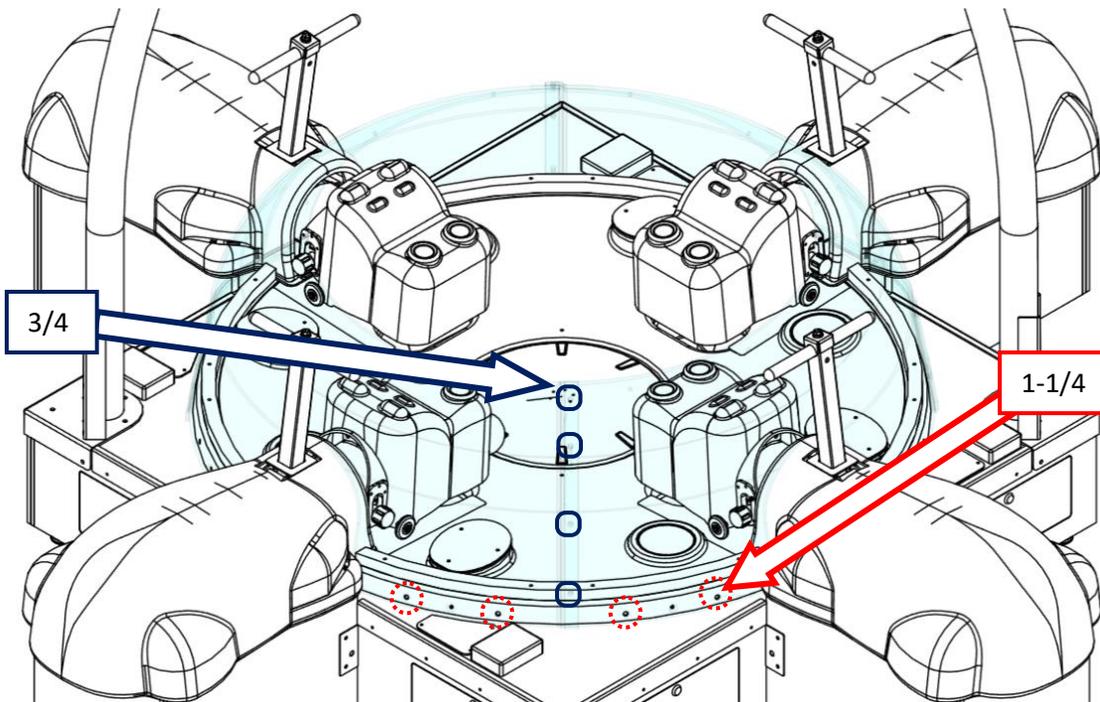
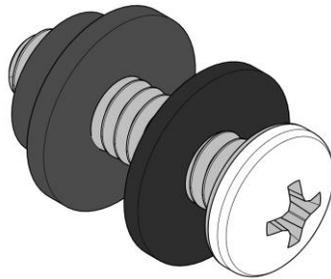
14) Place the four quarters dome in place.

Make sure that the dome's 1.75" screws are well assembled.
Then install them in the base of the quarters dome.



Make sure that the dome's 0.75" screws are well assembled.

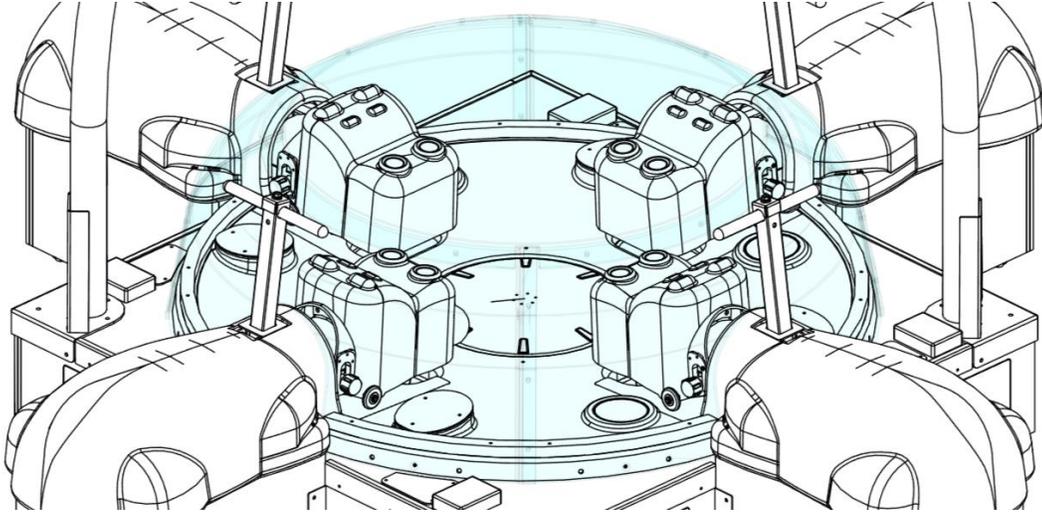
then install them in the vertical edges of the quarters dome. Keep the remaining 12 for the top of the dome.



15) Add the balls on the playfield. ●

20 red balls are required to be on the game

16) Place the top dome and install the remaining $\frac{3}{4}$ screws with their bushings.



17) If you use a card reader as pay method remove the two screws and the black plug.

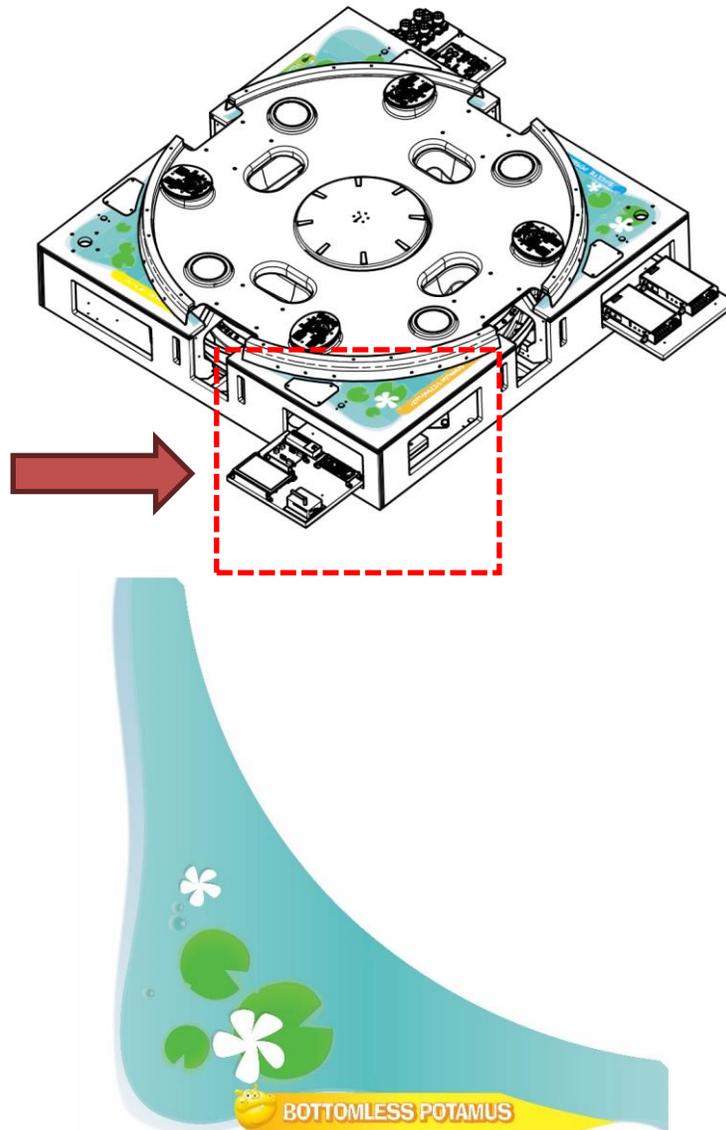
18) Connect the electric wire to the EMI filter then you can plug your Hippos game to the power source.



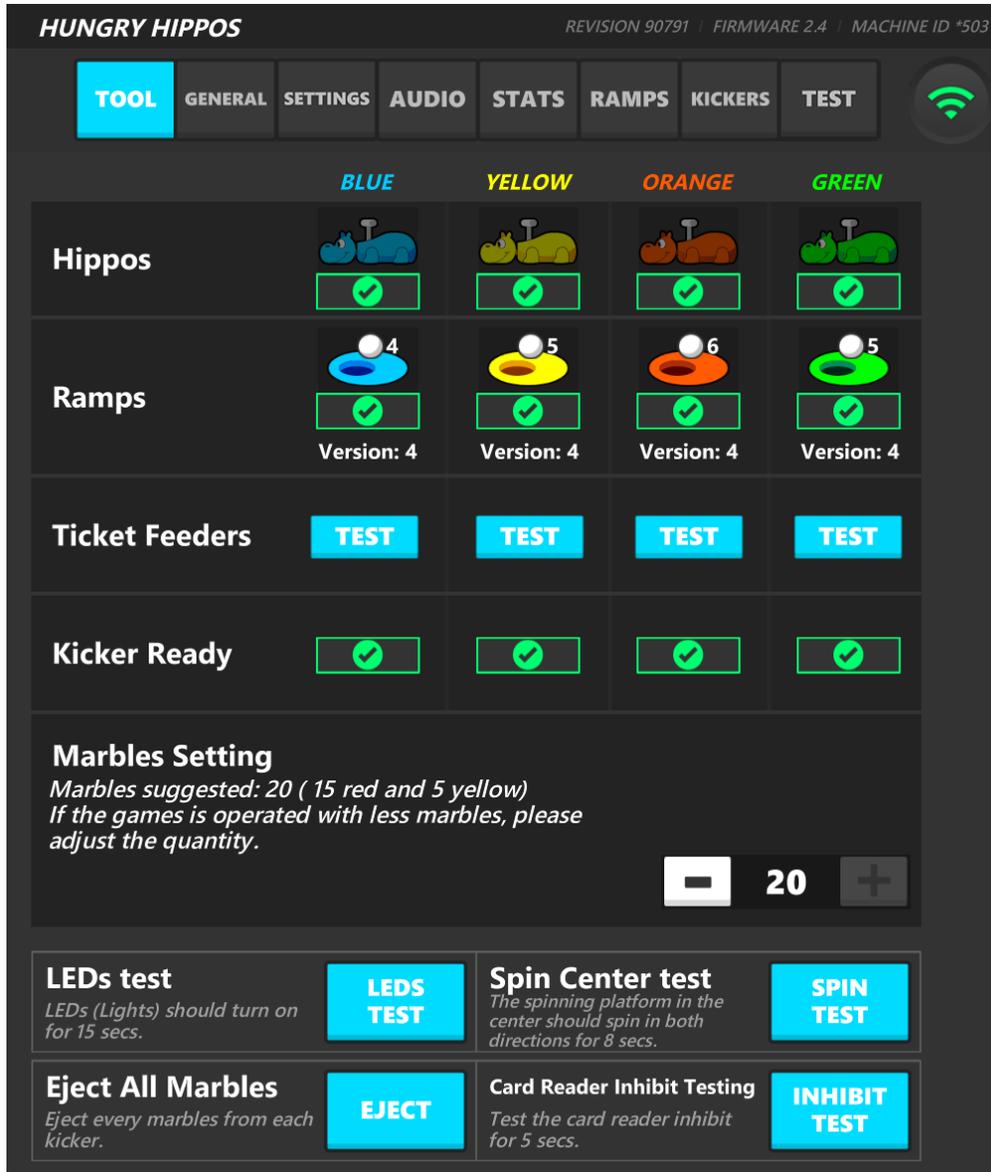
Chapter 05 – Operator Menu

Operator Menu

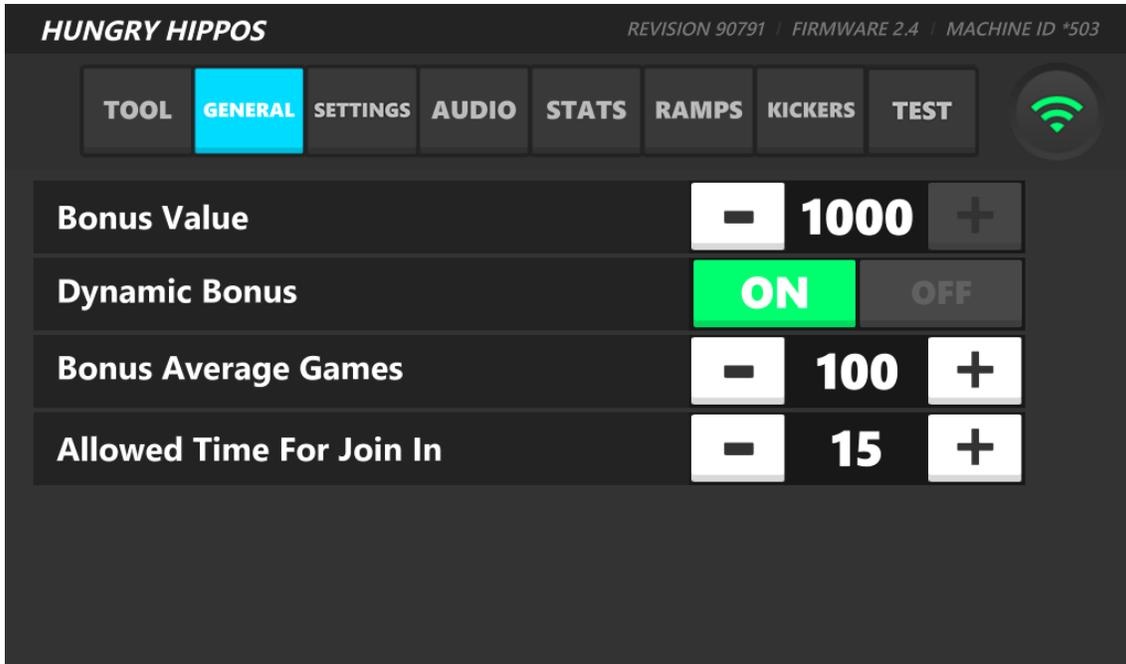
Access the Operator Menu by pressing on the monitor located on the tray below Bottomless Potamus' corner (located at the left of the orange hippo, player 3).



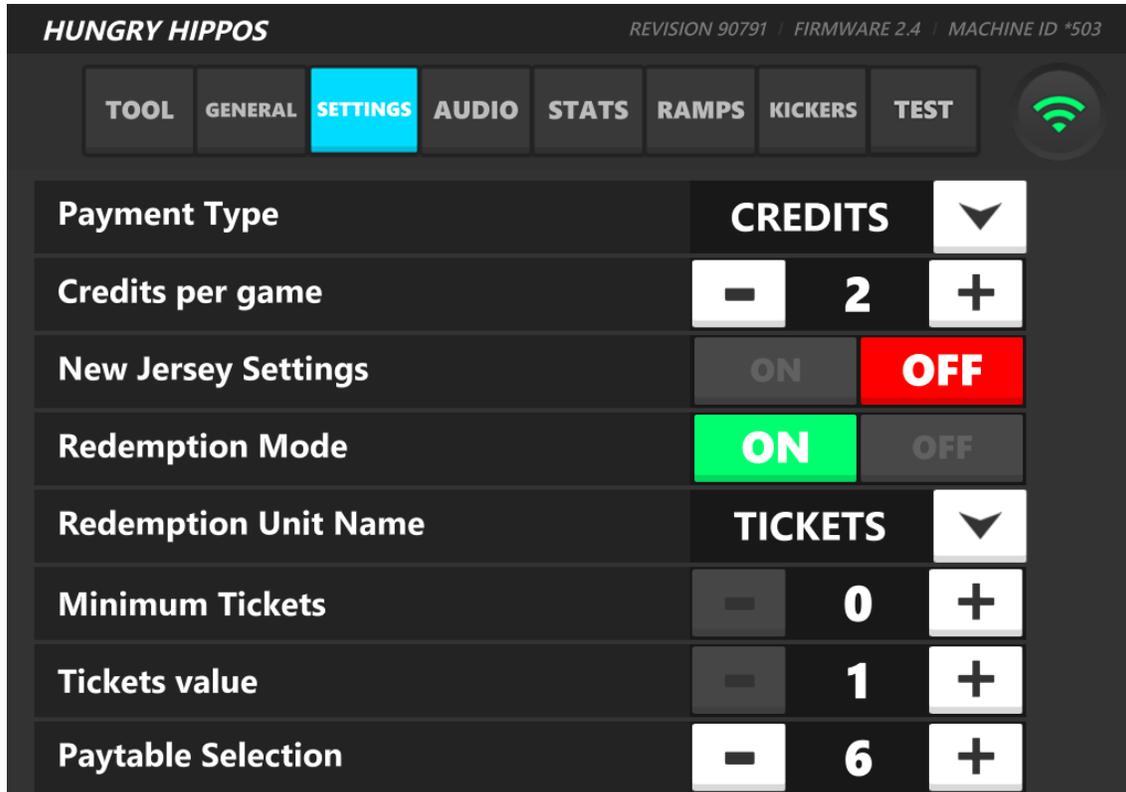
Navigate through the operator menu using the touch screen.



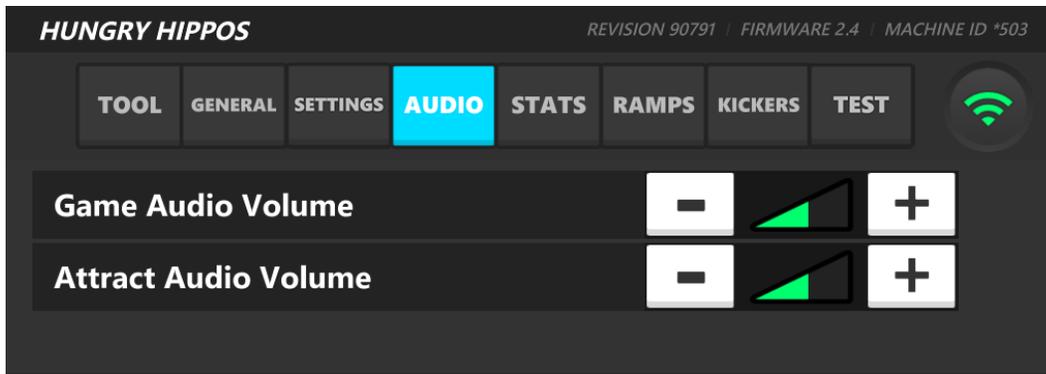
<u>Operator Menu</u>	<u>What It Does</u>
Hippos	Locks and unlocks each player’s mechanism
Ramps	Shows the status of the ramp and software version of each player
Ticket Feeders	Allows to test the feeder and distributes 2 tickets to player selected
Kicker Ready	Shows for each player that at less 2 balls are present in the ramp
Marbles Setting	Allows to adjust the number of balls in the game
LEDS Test	Turns on the LEDs surrounding the playfield
Spin Center Test	Spins the center gear in each direction
Eject All Marbles	Allows to remove all the marbles who are in the ramps
Card Reader Inhibit Testing	Allows to test the card readers inhibit for 5 sec



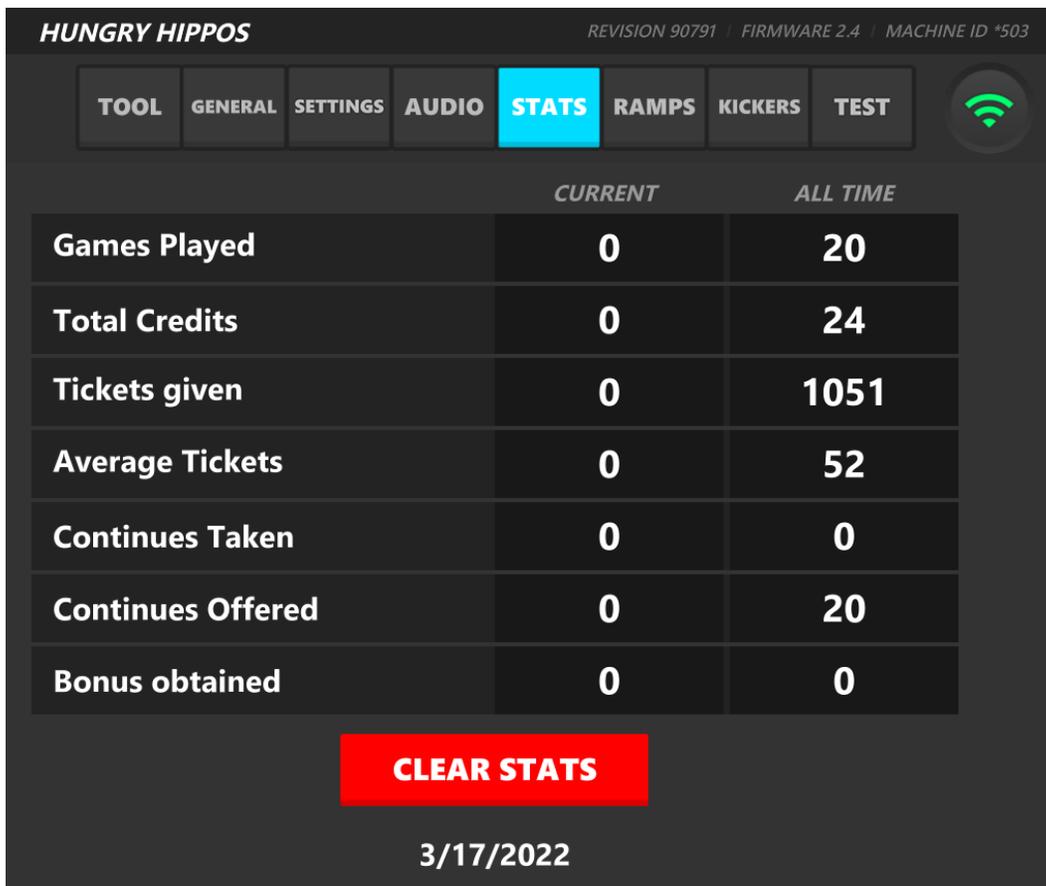
GENERAL		
<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Bonus Value	100-1000	Maximum number of tickets that can be won when a player reaches the bonus round
Dynamic Bonus	On/Off	Adjusts the target score to reach the bonus by using a sample of the last 1000 played games
Bonus Average Games	1-250	Sets the average number of games needed to reach the bonus
Allowed Time for Join In	0-30	Sets the time in seconds to other players to be able to join



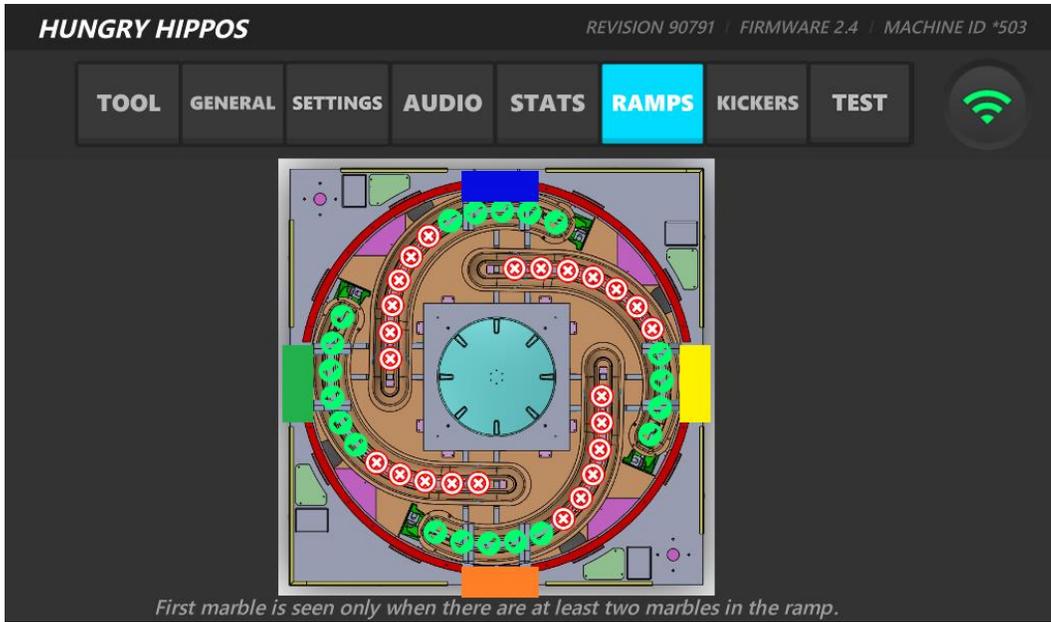
SETTINGS		
<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Payment Type	Credit / Card	Changes the credit type. "Credits" = Coins and "Card" = Card Reader. This will change the in-game text accordingly.
Credits Per Game	1-8	Sets the numbers of credits to be able to play
New Jersey Settings	On/Off	If set to On, a message will be displayed if more than 40 credits are inserted.
Redemption Mode	On/Off	Adjusts the redemption availability
Redemption Unit Name	Tickets/Coupon	Adjusts the in-game text accordingly
Minimum Tickets	0-20	Adjusts the minimum number of tickets dispensed per play.
Ticket Value	1-2	Adjusts the value of physical tickets. Physical tickets are either worth "1" ticket or "2" tickets.
Paytable Selection	1-10	Adjusts the payout of the game according to the table in the Payout configuration section



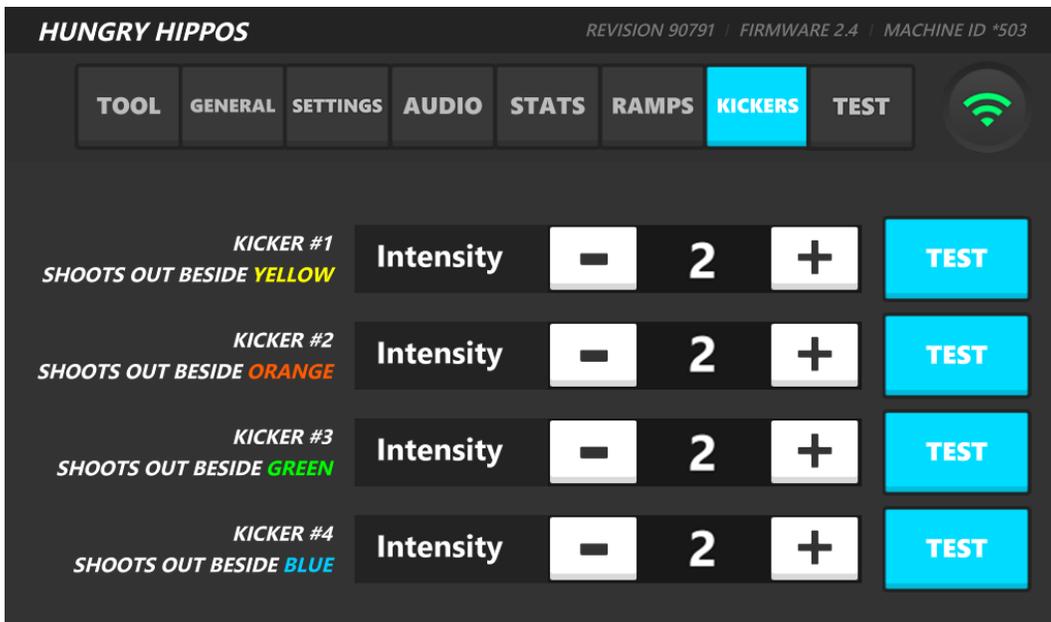
AUDIO		
<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Game Audio Volume	0-20	Adjusts the in-game audio volume. "0" will mute the game.
Attract Audio Volume	0-20	Adjusts the volume of the voice attract loop. "0" will mute the voice



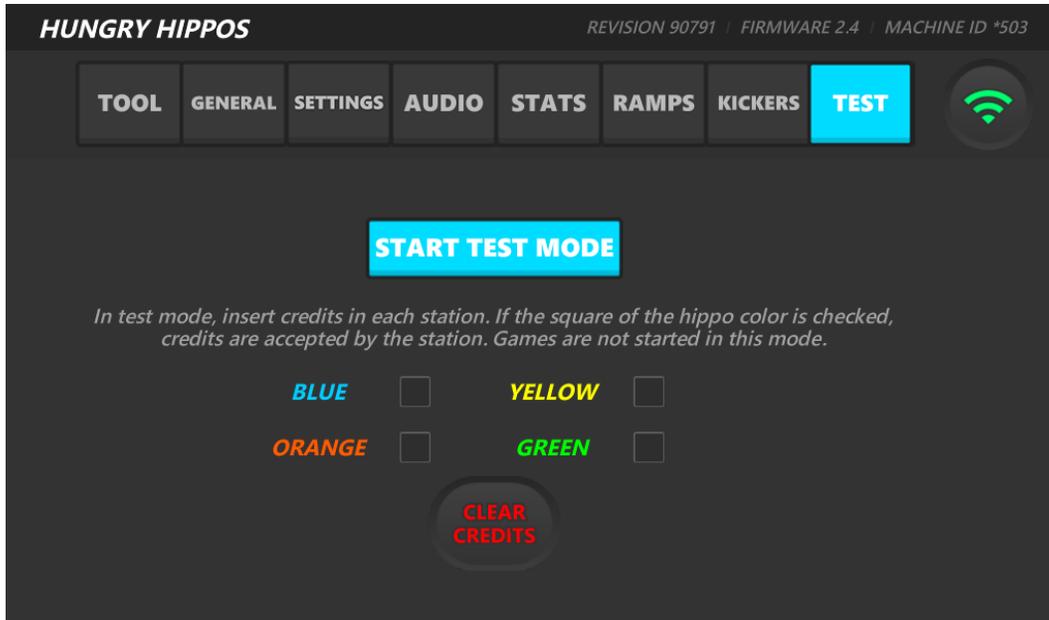
STATS: This page helps to keep data of the game utilisation until it is cleared by the operator.



RAMPS: this page helps to visualize the balls inside the ramps, it helps also to troubleshoot.



Kickers		
<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Kicker #1	1-10	Adjust the strength of the blue hippo's kicker and test it
Kicker #2	1-10	Adjust the strength of the yellow hippo's kicker and test it
Kicker #3	1-10	Adjust the strength of the orange hippo's kicker and test it
Kicker #4	1-10	Adjust the strength of the green hippo's kicker and test it

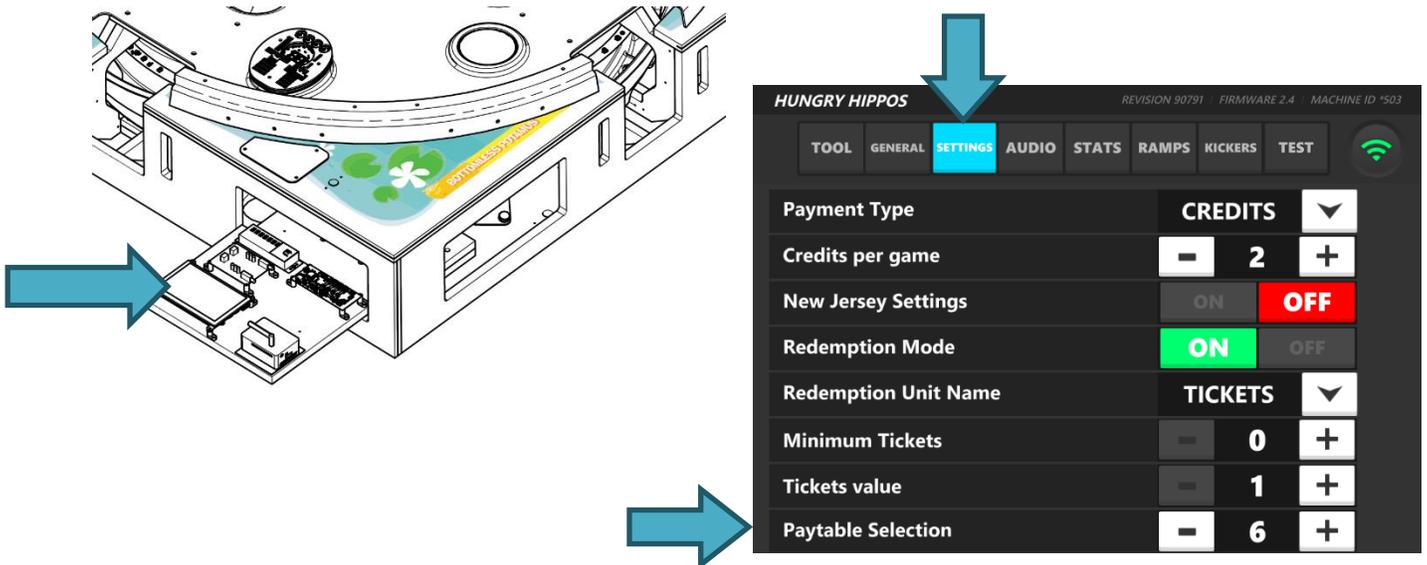


<u>Operator Menu</u>	<u>What It Does</u>
START TEST MODE	It enables the test mode to check each player credit reader without starting a game.
Blue	A check will show in the square when a credit is accepted on the blue station
Orange	A check will show in the square when a credit is accepted on the orange station
Yellow	A check will show in the square when a credit is accepted on the yellow station
Green	A check will show in the square when a credit is accepted on the green station
CLEAR CREDITS	It will erase all the credits and exit test mode

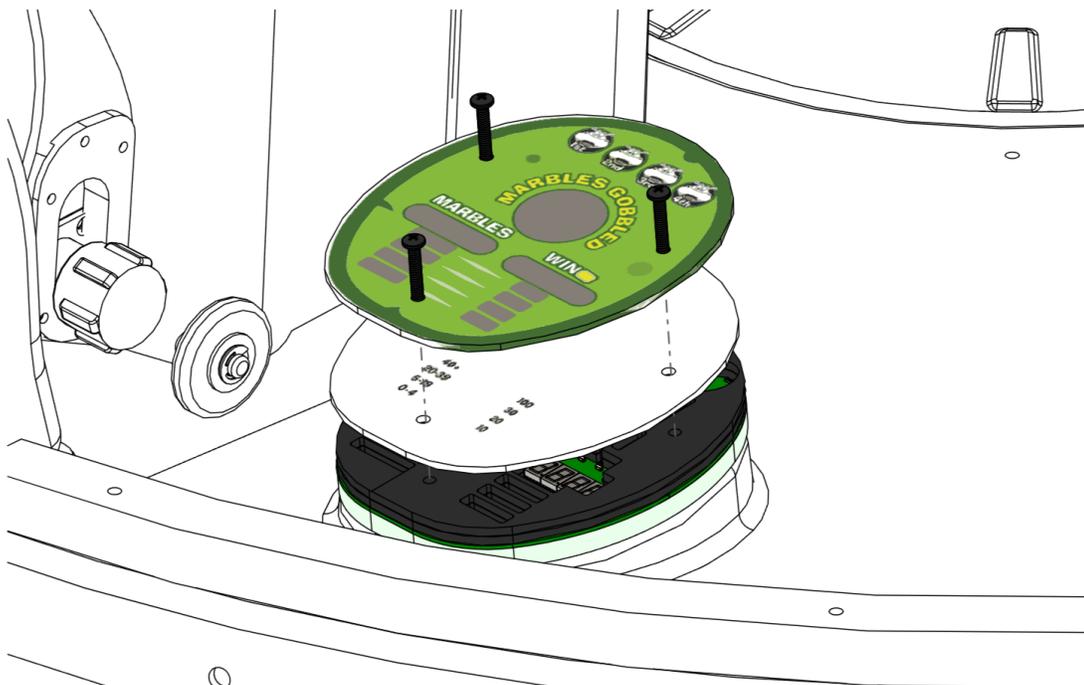
Payout configuration

To select the amount of tickets price for the games, open the service door located near “Bottomless Potamus” and access the 7” monitor.

1. Access the operator menu, then go to the tickets section
2. Go to payable selection and chose between the 10 options of payout.



3. Follow the table bellow to choose the payout of your choice
4. Don't forget to change the payout labels in the base module.

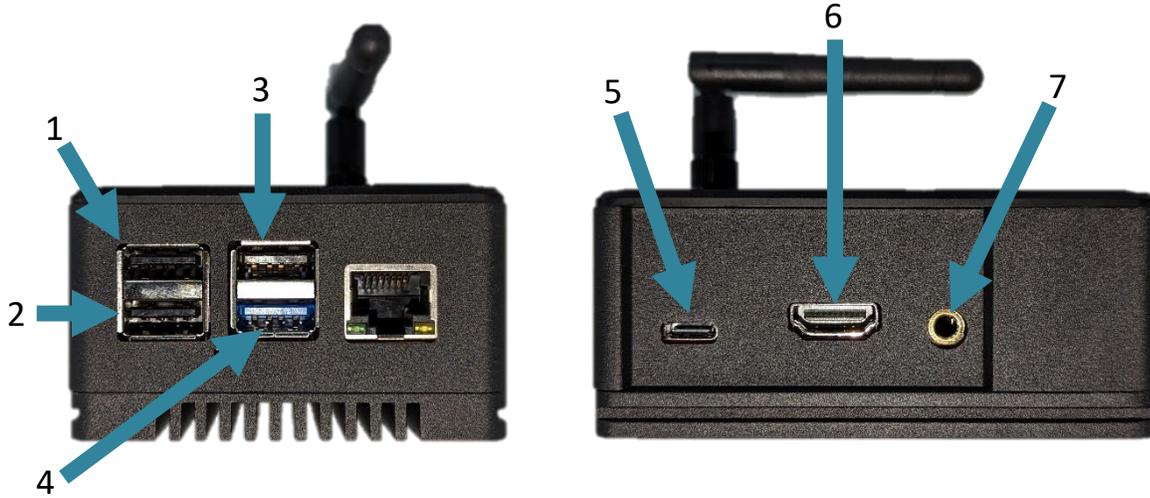


You must remove the dome to do this manipulation.

Paytable Selection					
Payout	Part # and value		Payout	Part # and value	
1	HIP-09-0003-01		2	HIP-09-0003-02	
	40+	15		40+	30
	20-39	10		20-39	15
	5-19	5		5-19	10
	0-4	2		0-4	5
3	HIP-09-0003-03		4	HIP-09-0003-04	
	40+	50		40+	60
	20-39	20		20-39	20
	5-19	10		5-19	15
	0-4	5		0-4	10
5	HIP-09-0003-05		6	HIP-09-0003-06	
	40+	80		40+	100
	20-39	30		20-39	30
	5-19	15		5-19	20
	0-4	10		0-4	10
6 D&B	HIP-09-0003-DB		7	HIP-09-0003-08	
	40+	100		40+	100
	20-39	30		20-39	40
	5-19	20		5-19	25
	0-4	10		0-4	20
8	HIP-09-0003-08		9	HIP-09-0003-09	
	40+	125		40+	125
	20-39	40		20-39	60
	5-19	30		5-19	50
	0-4	25		0-4	30
10	HIP-09-0003-10				
	40+	150			
	20-39	70			
	5-19	50			
	0-4	30			

Chapter 06 – Service & Repair

Computer Connections



<u>No.</u>	<u>Description</u>
1	USB Cable to I/O Board
2	USB Cable to power screen
3	USB Orange Dongle
4	USB Cable to USB Hub
5	USB-C Adapter to Power Supply
6	HDMI Cable to 7" Monitor
7	RCA Cable to Audio Amplifier



<u>No.</u>	<u>Description</u>
USB 1	USB Cable to RGB Controller
USB 2	USB Cable to LED Matrix (Located in Header)

Troubleshooting

* **NOTE: When requesting a warranty replacement, you will be asked to give the unit's serial number from the back of the unit.**

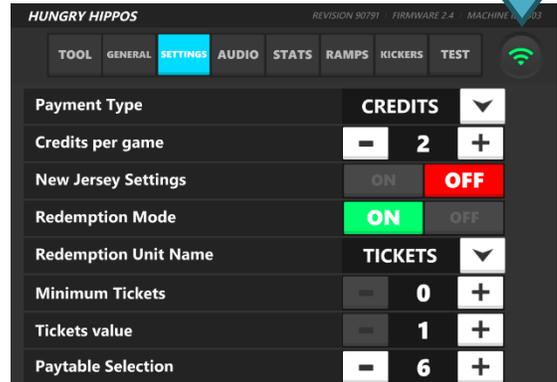
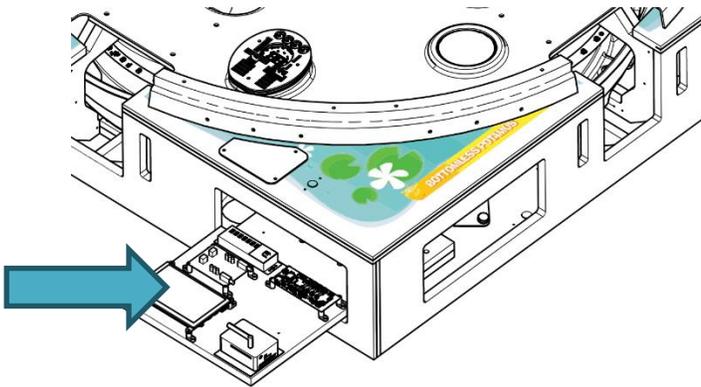
Video Troubleshooting	
No Picture or Display Problem	There might have loose or faulty connections between the monitor and the computer. Make sure that the HDMI cable is connected properly in the computer's video card and in the monitor's connector.
	Verify that the computer is powered on. There should be a blue light on top of the computer
	Check the USB connection between the monitor and the USB Hub
	Validate that the power switch below the monitor is "ON"
Audio Troubleshooting	
Low Volume / No Sound	Increase the volume in the game by pressing the Operator Button and adjusting the volume options in the Operator Menu. You might also Quit the game to desktop and increase the volume via the  Speaker icon on the bottom right of your screen.
	Verify the wiring behind the speakers and the amplifiers. Verify that the 1/8" audio jack is plugged in the computer's sound input jack and that the other end RCA's are plugged in the sound amplifier.

Wireless Internet Configuration

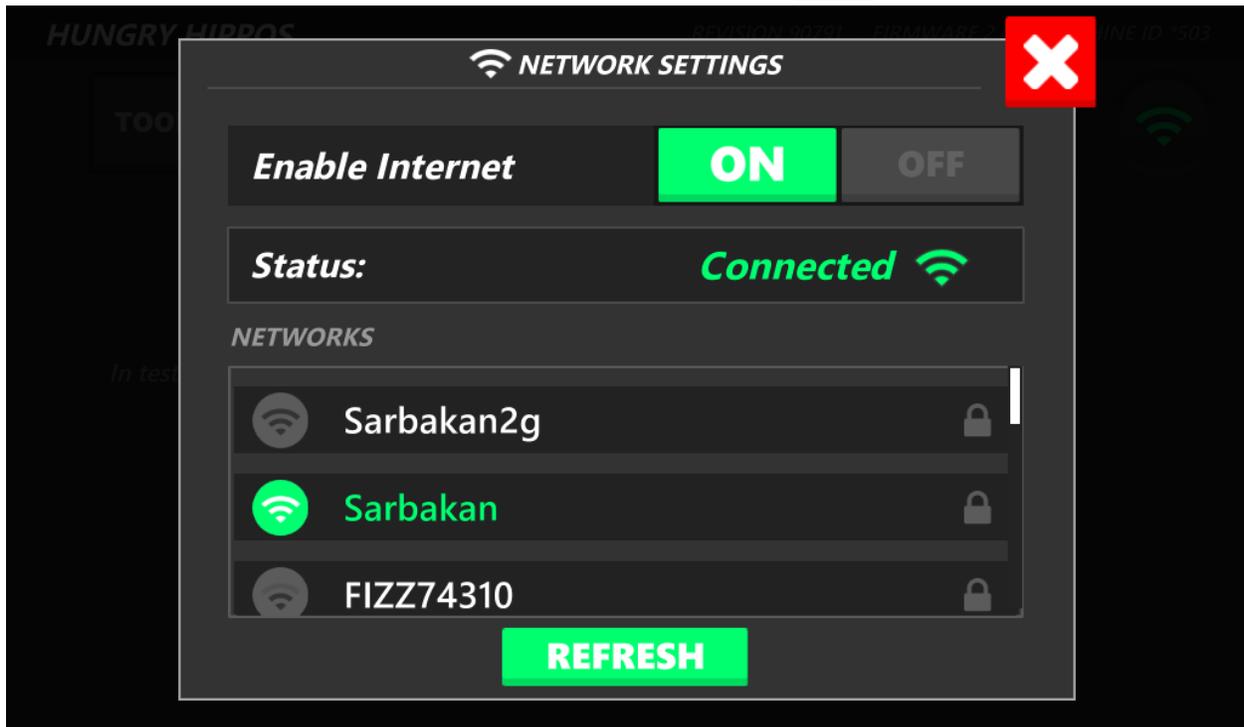
Start the unit.

-Open the service door located near “Bottomless Potamus” and access the 7” monitor.

-Access the operator menu



-Touch the wireless button located at the top right of the menu.

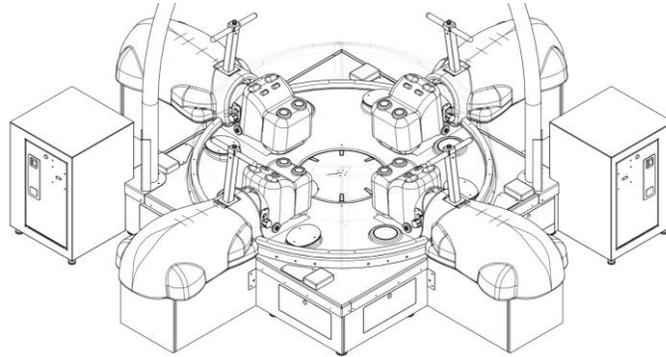


- Select your Wi-Fi network
- Enter your Wi-Fi password
- Turn Enable Internet on

Having your unit connected to the Internet includes free software live updates.

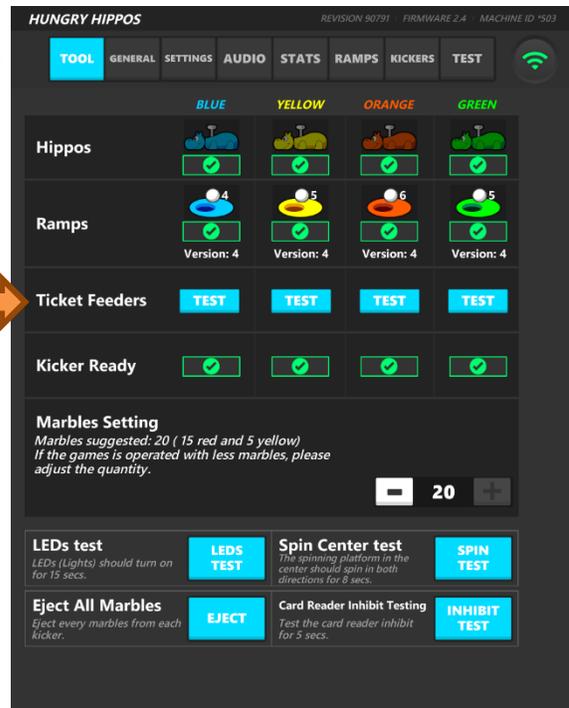
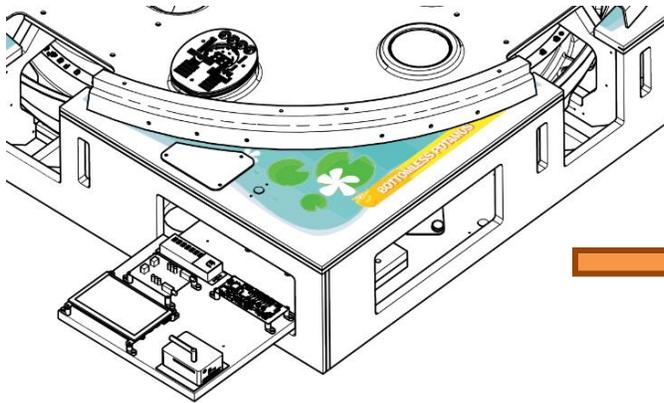
Coin and Tickets Configuration

Card readers are located at the right of each player. The coin and the tickets doors are located at the exterior sides of the boxes.



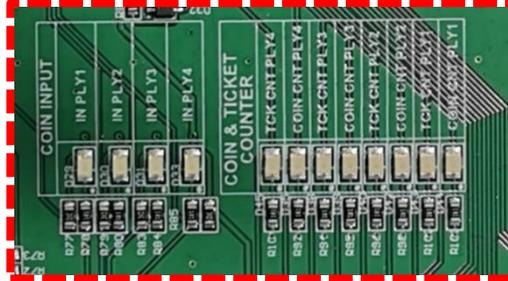
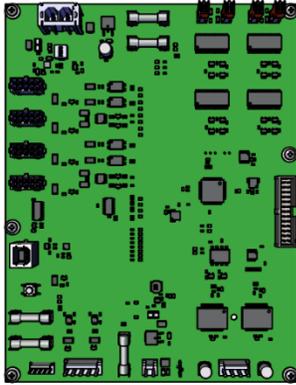
Testing your ticket system

Access the operator menu. In the “TOOL” menu, touch the “TEST” button in the Ticket Feeders section. One ticket will come out of the player you selected.

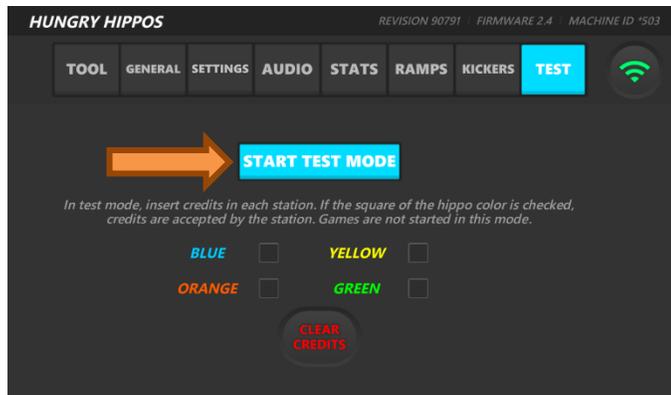
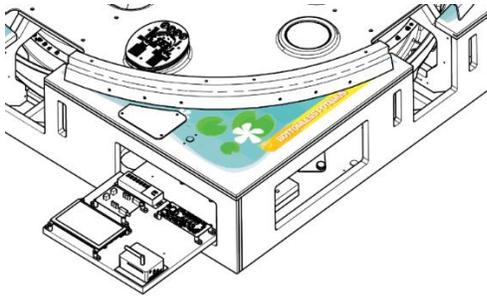


Testing your coin system

Press Card Reader Test on the monitor and verify that the I/O Board's lights are flashing for each player.



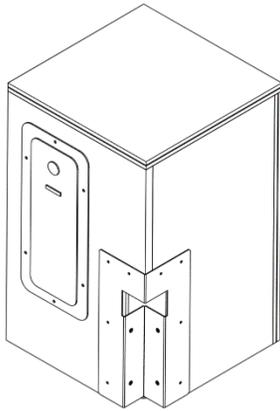
To test the credits, access the operator menu. In the “CREDITS” menu, insert credit to the players you want to test. A check symbol will appear to the square of the player.



Chapter 07 – Add-ons

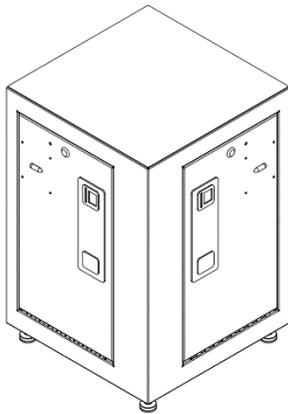
By default, the Hungry hungry hippo is set up for credit and payout by magnetic card. If you want to change the payment method and/or the reward mode, there are two add-on models: the ticket box and the ticket and coin box.

These models are sold separately, and it is necessary to make slight modifications to your game to install them properly



HIP-06-0034- Ticket-box:

This model is made of wood, decorated with the same pattern of the game. The box is made to insert credits by card and payout in tickets. One box reward two players at the same time.

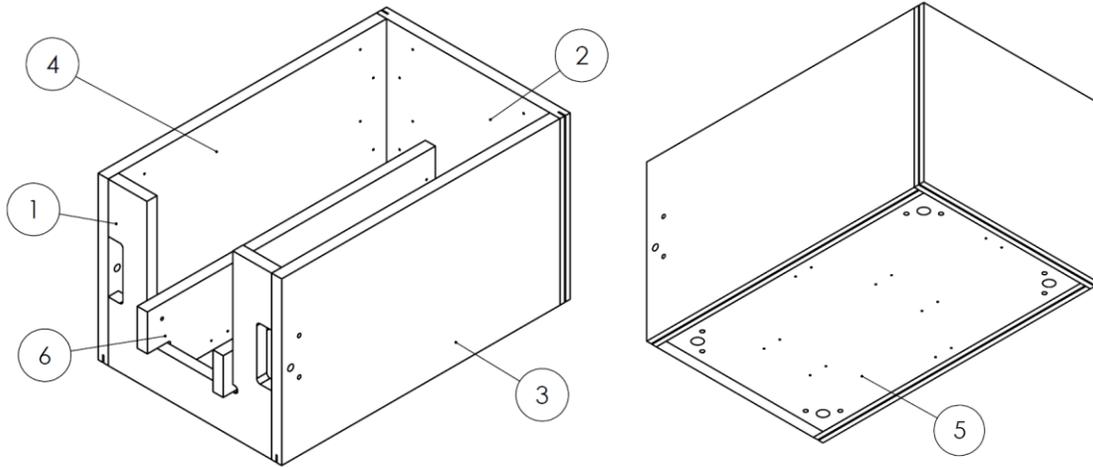


HIP-06-0036 -Coin and ticket box:

This model is made from metal and painted in black. This box is made to insert credits by coin and payout with tickets. This box also serves two players simultaneously.

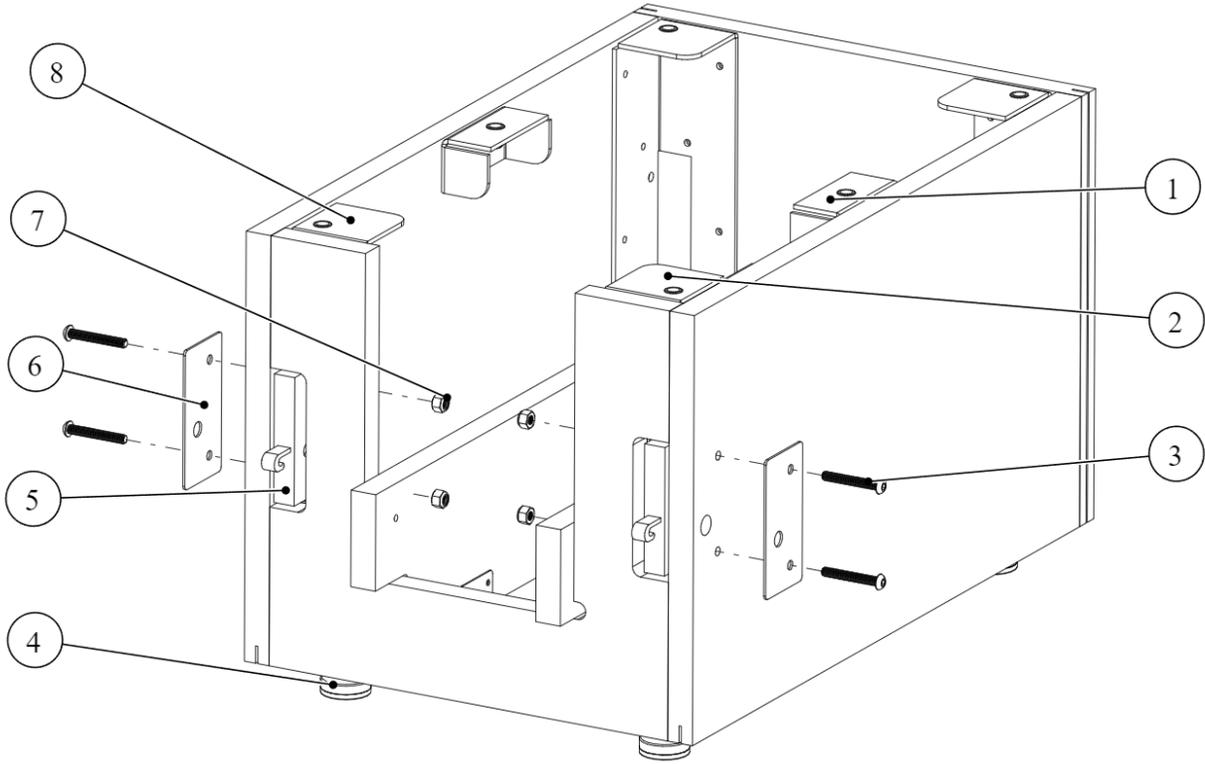
Chapter 08 - Parts

Wood Module – Small cabinet



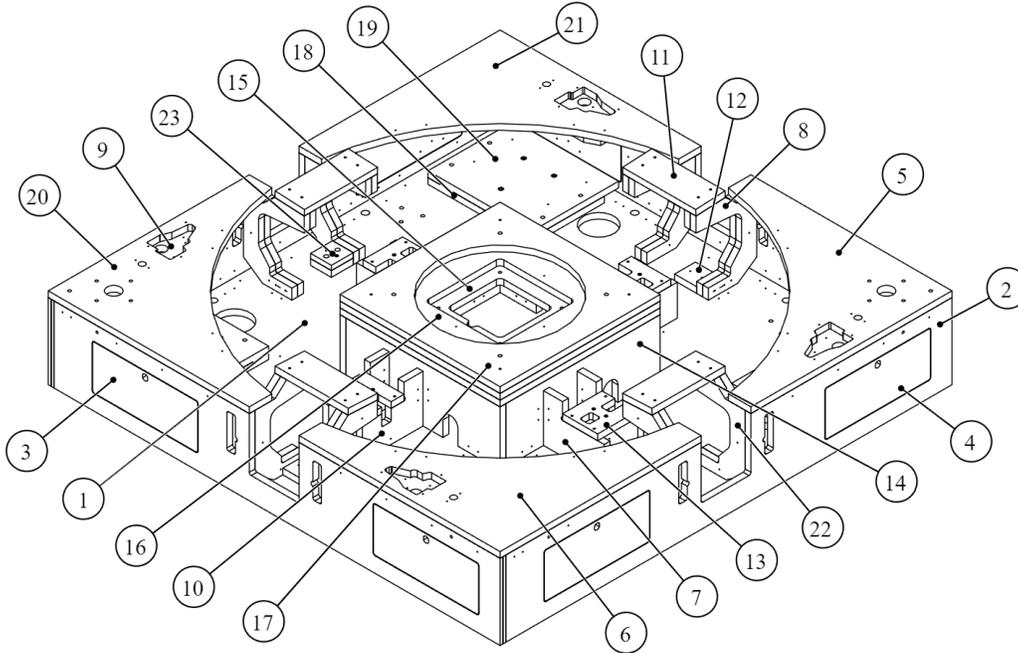
#	Part Description	Part #
1	Front Seat Module, White Melamine $\frac{3}{4}$	HIP-02-0008-01
2	Printed Back Seat Module, Melamine $\frac{3}{4}$	HIP-02-0008-02
3	Printed Left Side Seat Module, Melamine $\frac{3}{4}$	HIP-02-0008-04
4	Printed Right Side Seat Module, Melamine $\frac{3}{4}$	HIP-02-0008-03
5	Floor Seat Module, White Melamine $\frac{3}{4}$	HIP-02-0008-05
6	Inside Vertical Panel Seat Module, White Melamine $\frac{3}{4}$	HIP-02-0008-06

Small Cabinet Parts



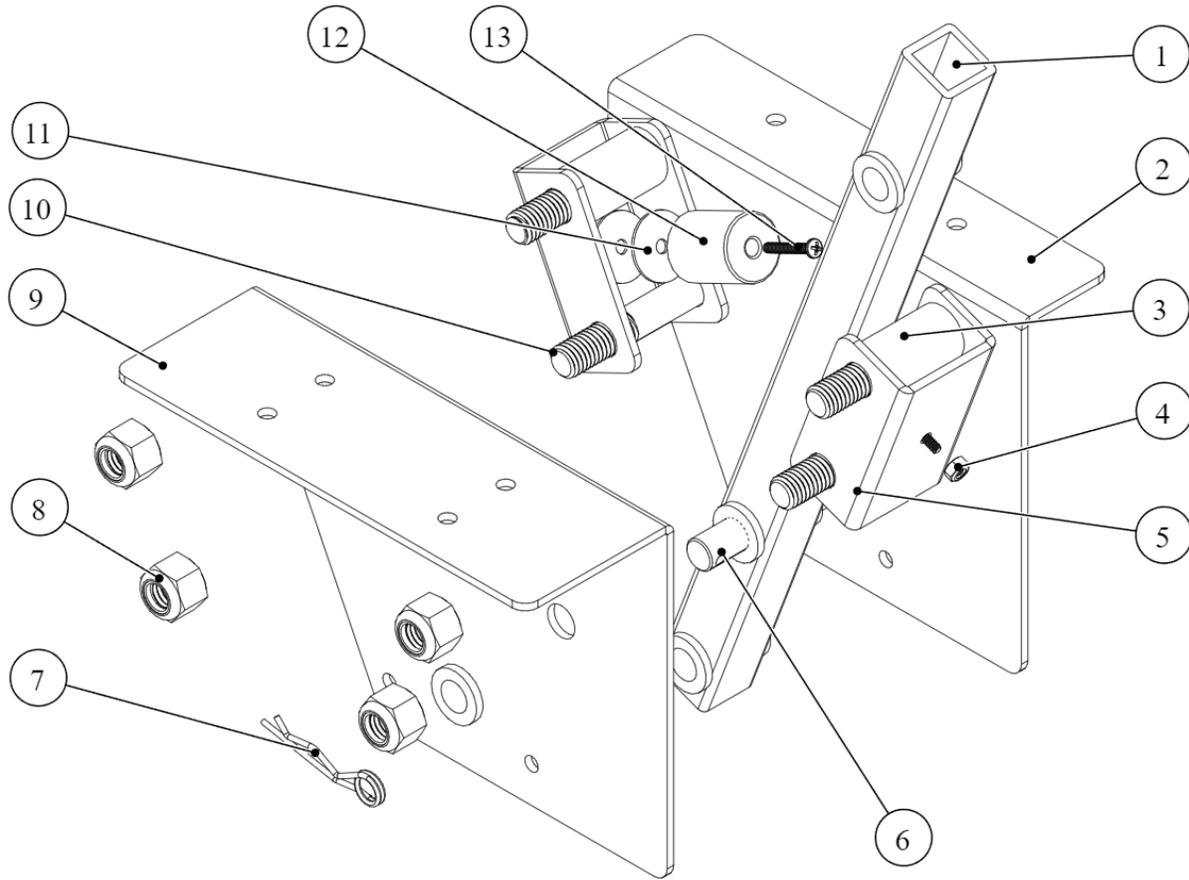
Ref	Part Description	Part #	QTY
1	Seat Module Reinforcement for Hippos	HIP-01-0104	2
2	Seat Module Left Bracket	HIP-01-0033	2
3	Button Head Screw, Hex Drive, Black, 1/4-20 x 2"	BS-HH-BS-1/4-20X2	4
4	Leg Leveler, 3/8-16 x 2" (Or 1.5"), 1" Base Diameter (Or 1.75", 1.38")	AAG-05-0008	4
5	Male R2/R5 Concealed Butt-Joint Panel Fastening Latches	INV-R5-0074-07	2
6	Metal Plate for Latch	HIP-01-0087	2
7	Medium-Strength Steel Nylon-Insert Locknut Grade 5, Zinc-Plated, 1/4"-20 Thread Size	NN-ZS-1/4x20	4
8	Seat Module Right Bracket	HIP-01-0032	2

Base Module



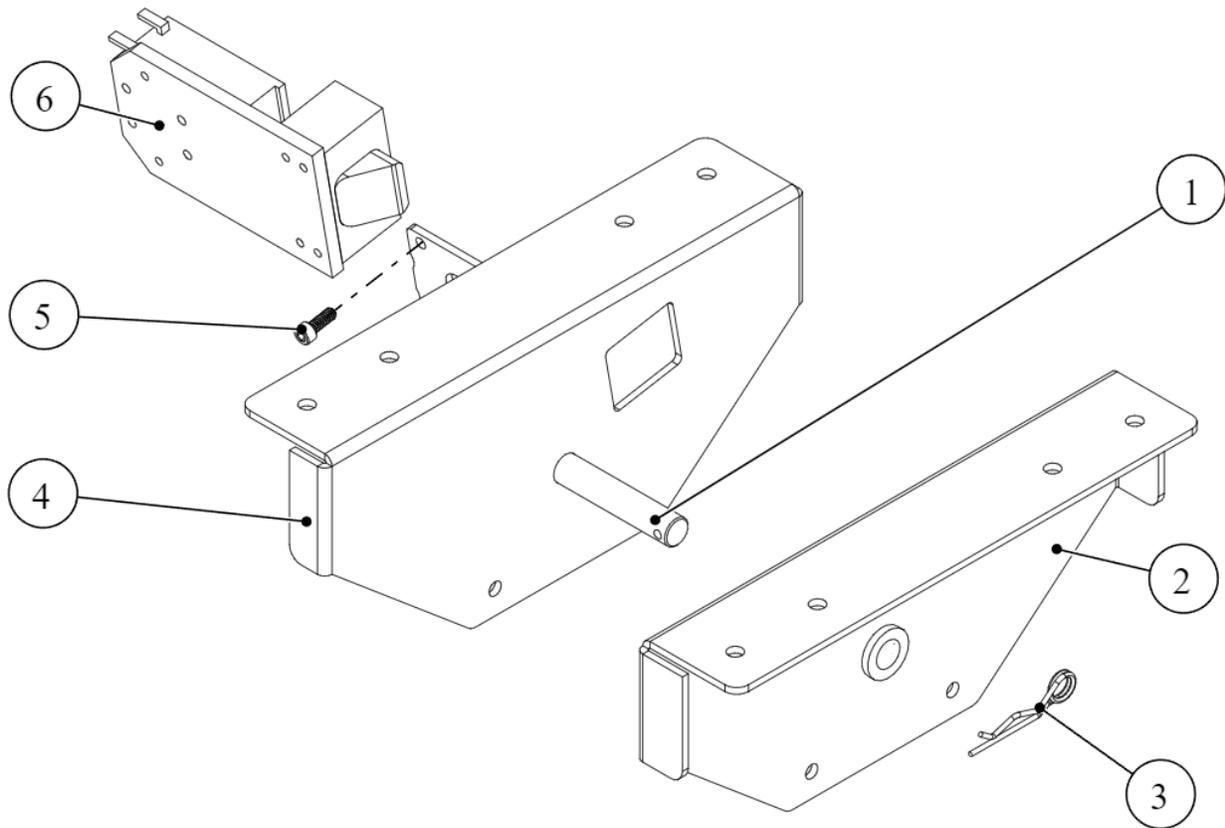
Ref	Part Description	Part #	QTY
1	Center Module Floor White Melamine 3/4"	HIP-02-0001-01	1
2	Printed Melamine 3/4" For Center Module Wall	HIP-02-0001-02	4
3	Printed Melamine 3/4" For Left Access Door on Wall	HIP-02-0001-03	4
4	Printed Melamine 3/4" For Right Access Door on Wall	HIP-02-0001-04	4
5	Printed Melamine 3/4", Corner Arc with Header Hole, Orange Player	HIP-02-0001-05-O	1
6	Printed Melamine 3/4", Center Module Corner Arc, Green Player	HIP-02-0001-06-G	1
7	Center Module Left Mechanism Support, White Melamine 3/4"	HIP-02-0001-07	4
8	Center Module Middle Mechanism Support, White Melamine 3/4"	HIP-02-0001-08	8
9	Center Module Player Status Support, White Melamine 3/4"	HIP-02-0001-09	4
10	Center Module Small Mechanism Support, White Melamine 3/4"	HIP-02-0001-10	4
11	Center Module Top Mechanism Support, White Melamine 3/4"	HIP-02-0001-11	4
12	Center Module Bottom Mechanism Support, White Melamine 3/4"	HIP-02-0001-12	4
13	Center Module Ball Sensor Support, White Melamine 3/4"	HIP-02-0001-13	4
14	Center Module Middle Wall, White Melamine 3/4"	HIP-02-0001-14	4
15	Center Module Middle Top First Layer, White Melamine 3/4"	HIP-02-0001-15	1
16	Center Module Middle Top Second Layer, White Melamine 3/4"	HIP-02-0001-16	1
17	Center Module Middle Top Third Layer, White Melamine 3/4"	HIP-02-0001-17	1
18	Center Module Tray Support, White Melamine 3/4"	HIP-02-0001-18	3
19	Center Module Tray Base, White Melamine 3/4"	HIP-02-0001-19	3
20	Printed Melamine 3/4", Corner Arc with Header Hole, Blue Player	HIP-02-0001-05-B	1
21	Printed Melamine 3/4", Center Module Corner Arc, Yellow Player	HIP-02-0001-06-Y	1
22	Base Module Reinforcement for Hippos	HIP-02-0014	8
23	Plywood Shim for Hippos	HIP-07-0026	4

HIP-06-0018-Hippos back lower mechanism



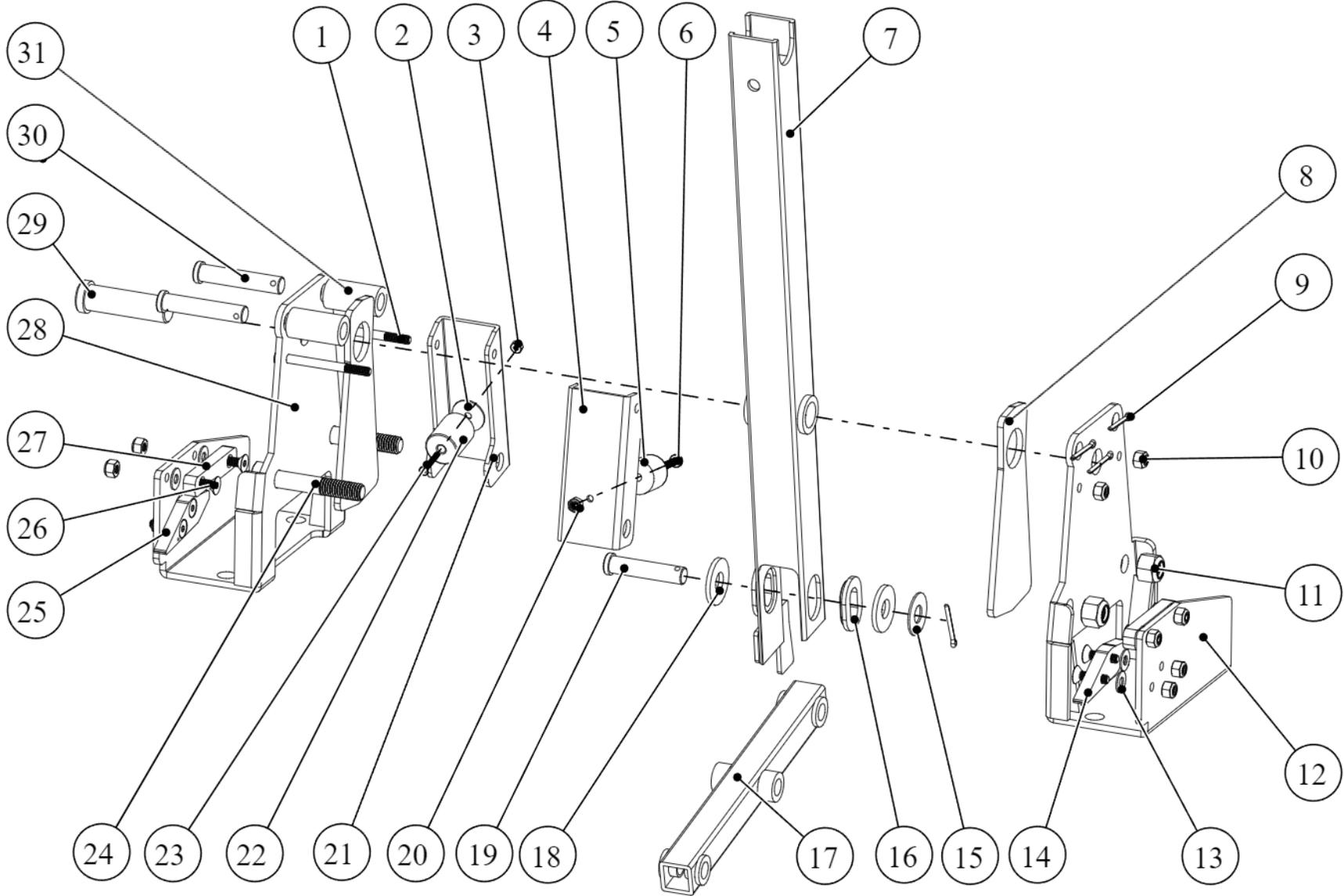
Ref	Part Description	Part #	QTY
1	Rear Arm Assembly for Hippos	HIP-06-0008	1
2	Left Rear Arm Bracket Assembly with Bushing	HIP-06-0046	1
3	1-3/8" Yellow High Pressure Hose, 1/2" ID, 7/8" OD	AAG-07-0005	2
4	Nylon Lock Nut, 6-32"	NN-Z-6-32	2
5	Bracket Bumper for Hippos	HIP-01-0088	2
6	Clevis pin 1/2" Diameter, 2-1/2" Usable Length	CLP-Z-1/2x2-1/2	1
7	Bow Tie Cotter Pins Zinc-Plated Steel, for 7/16" to 1/2" Clevis Diameter, 2-3/4" Long	BCOP-ZS-7/16-1/2x2-3/4	1
8	Medium-Strength Steel Nylon-Insert Locknut Grade 5, Zinc-Plated, 1/2"-13 Thread Size	NN-ZS-1/2x13	4
9	Right Rear Arm Bracket Assembly with Bushing	HIP-06-0047	1
10	Hex Head Screw 1/2"-13 Thread Size, 3" Long, Partially Threaded	HS-HH-ZS-1/2-13x3	4
11	Flat Washer #10 x 1" OD	FW-Z-10-1	4
12	Unthreaded Bumper with Embedded Washer, 1" OD, 1-1/4" High	UB-RO-BR-1x1-1/4	2
13	Machine Screw, Pan Head, Phillips, Zinc Plated, 6-32x1"	MS-PP-ZS-6-32x1	2

HIP-06-0043-Hippos front lower mechanism



Ref	Part Description	Part #	QTY
1	Clevis pin 1/2" Diameter, 2-1/2" Usable Length	CLP-Z-1/2x2-1/2	1
2	Left Stopper Bracket Assembly with Bushing	HIP-06-0044	1
3	Bow Tie Cotter Pins Zinc-Plated Steel, for 7/16" to 1/2" Clevis Diameter, 2-3/4" Long	BCOP-ZS-7/16-1/2x2-3/4	1
4	Right Stopper Bracket Assembly with Bushing	HIP-06-0045	1
5	Pan Head Machine Screw, Phillips, Black, 10-24 x 1/2	MS-PP-BS-10-24X1/2	4
6	Lock Assembly for Hippos	HIP-01-0036-ASSY	1

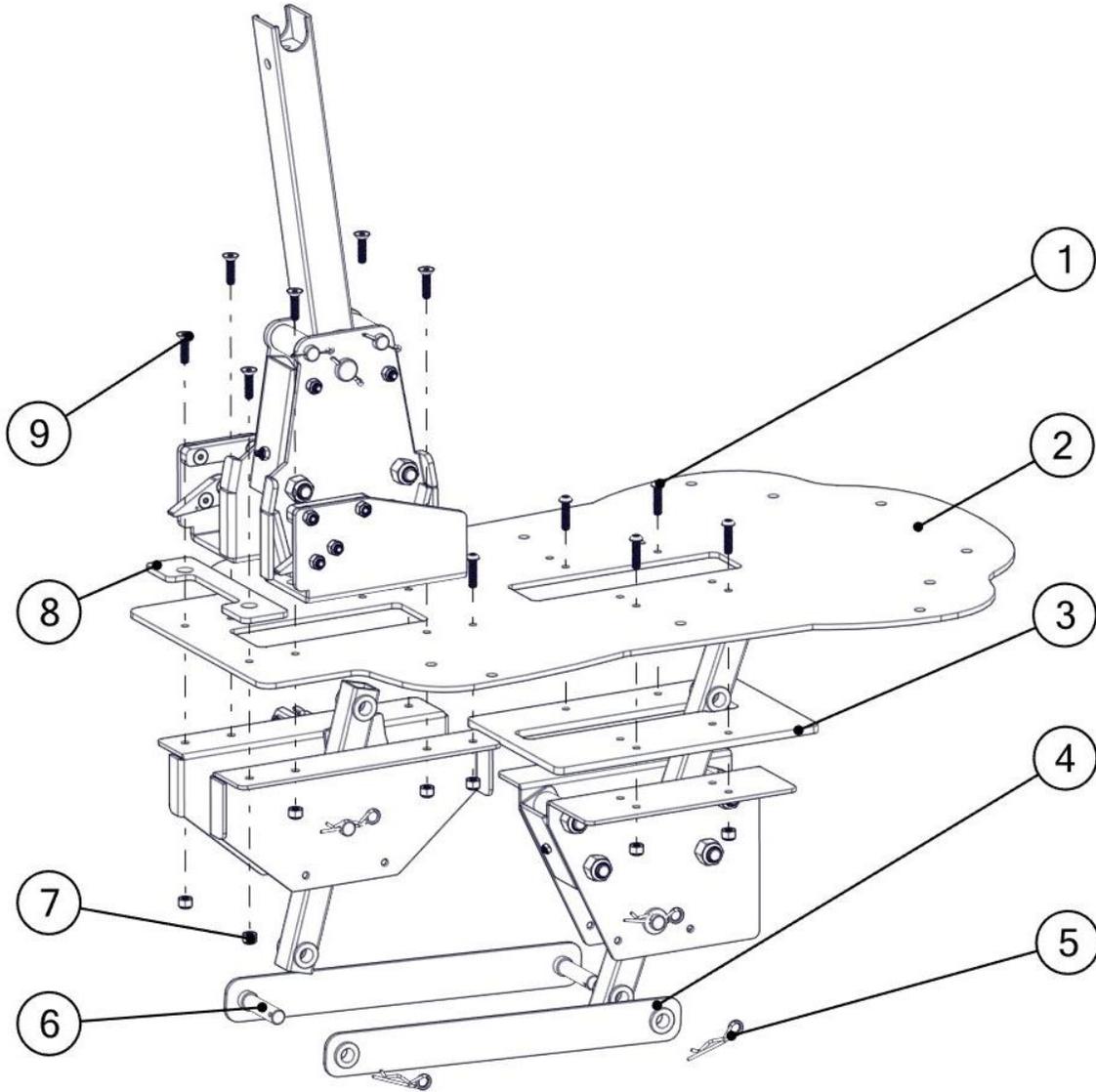
HIP-06-0016-Hippos front upper mechanism



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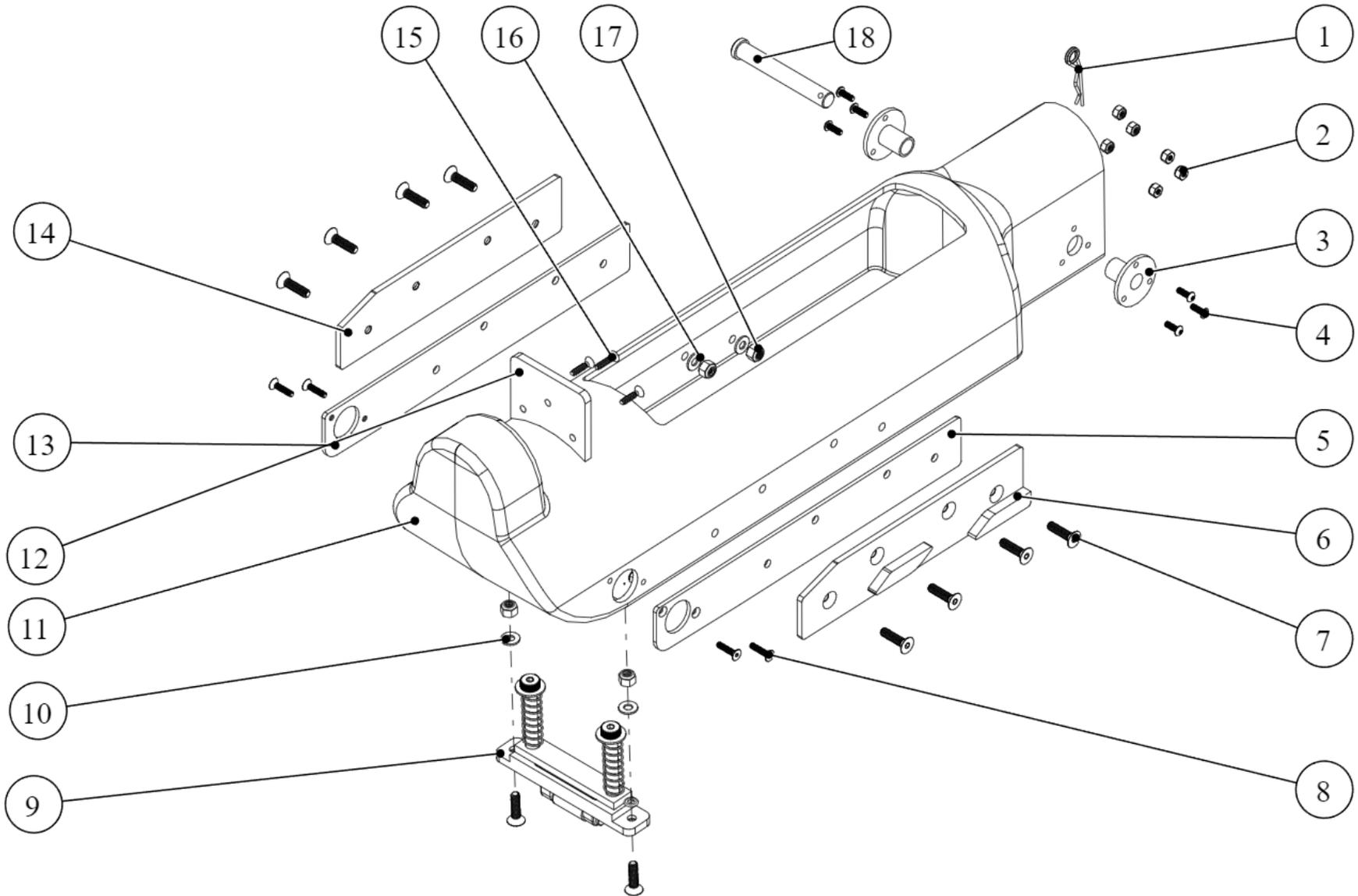
Ref	Part Description	Part #	QTY
1	Hex Head Screw, Zinc, Grade 5, 1/4-20 x 2-3/4"	HS-HH-ZS-1/4-20X2-3/4	2
2	Flat Washer #10 x 1" OD	FW-Z-10-1	2
3	Nylon Lock Nut, 6-32"	NN-Z-6-32	1
4	Front Top Bracket for Bumper	HIP-01-0084	1
5	Hard Strength Unthreaded Bumper with Embedded Washer, 1" OD, 1" High, 70 Durometer	UB-RO-BR-1x1-HARD	1
6	Pan Head Machine Screw, Phillips, Black, 10-24 x 1	MS-PP-BS-10-24X1	1
7	Assembly Of Vertical Handle and Bushing	HIP-06-0041	1
8	Upper Shim 3/16" In UHMW	HIP-07-0047	2
9	Cotter Pin, Zinc, 1/8 x 1-1/4'	COP-ZS-1/8X1-1/4	4
10	Thin Nylock 1/4-20	TNN-ZS-1/4X20	10
11	Medium-Strength Steel Nylon-Insert Locknut Grade 5, Zinc-Plated, 1/2"-13 Thread Size	NN-ZS-1/2X13	2
12	Left Handle Bracket	HIP-01-1005	1
13	Flat Washer, Zinc Plated, M6 x 12mm OD	FW-Z-M6-12	8
14	Left Pivot Guide in Nylatron	HIP-07-0033	1
15	Flat Washer, Stainless Steel, 1/2", 1-1/4" OD	FW-S-1/2-1-1/4	1
16	Pivot Bushing In UHMW, White	HIP-07-0049	2
17	Lower Front Arm Assembly	HIP-06-0009	1
18	Washer, Zinc, 1/2 ID, 1-3/8" OD	FW-Z-1/2-1-3/8	2
19	Clevis pin 1/2" Diameter, 2" Usable Length	CLP-Z-1/2X2	1
20	Steel Nylon-Insert Locknut Zinc-Plated, 10-24 Thread Size	NN-ZS-10-24	
21	Rear Top Bracket for Bumper	HIP-01-0085	1
22	Unthreaded Bumper with Embedded Washer, 1" OD, 1-1/4" High	UB-RO-BR-1X1-1/4	1
23	Machine Screw, Pan Head, Phillips, Zinc Plated, 6-32x1"	MS-PP-ZS-6-32X1	1
24	Hex Head Screw 1/2"-13 Thread Size, 3" Long, Partially Threaded	HS-HH-ZS-1/2-13X3	2
25	Right Pivot Guide in Nylatron	HIP-07-0032	1
26	Machine Screw, Flat Head, Zinc, Hex Drive, 1/4"-20, 7/8"	MS-HF-ZS-1/4-20X7/8	8
27	Stopper Neck in Nylatron	HIP-07-0090	2
28	Right Handle Bracket	HIP-01-1004	1
29	Clevis pin 3/4" Diameter, 2-1/2" Usable Length	CLP-Z-3/4X2-1/2	1
30	Clevis pin 1/2" Diameter, 2-1/4" Usable Length	CLP-Z-1/2X2-1/4	2
31	1-3/8" Yellow High Pressure Hose, 1/2" ID, 7/8" OD	AAG-07-0005	2

Hippos plate assembly



Ref	Part Description	Part #	QTY
1	Button Head Screw, Hex Drive, Black, 1/4-20x 1"	BS-HRO-BS-1/4-20X1	6
2	Body Base Plate	HIP-01-0034	1
3	Shim Guide Plate in HDPE	HIP-07-0040	1
4	Horizontal Arm Assembly	HIP-06-0017	2
5	Bow Tie Cotter Pins Zinc-Plated Steel, for 7/16" to 1/2" Clevis Diameter, 2-3/4" Long	BCOP-ZS-7/16-1/2X2-3/4	2
6	Clevis pin 1/2" Diameter, 2-1/2" Usable Length	CLP-Z-1/2X2-1/2	2
7	Medium-Strength Steel Nylon-Insert Locknut Grade 5, Zinc-Plated, 1/4"-20 Thread Size	NN-ZS-1/4X20	12
8	Bottom Neck Plate in UHMW	HIP-07-0072	1
9	Black-Oxide Alloy Steel Hex Drive Flat Head Screw 1/4-20 Thread Size, 1" Long	MS-HF-BS-1/4-20X1	6

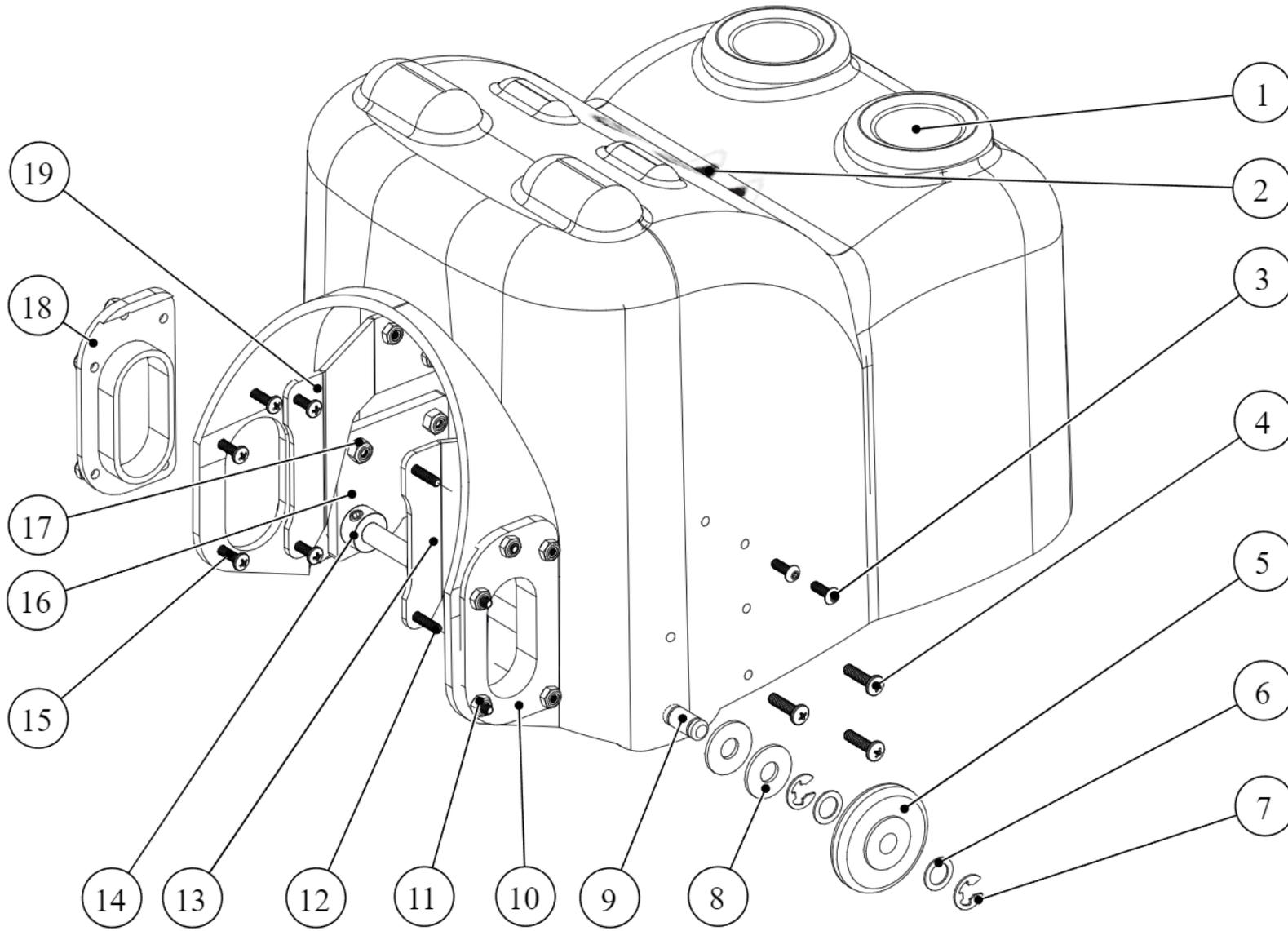
HIP-06-0003-B/G/O/Y-Hippo's Neck Assembly



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Ref	Part Description	Part #	QTY
	Blue Hungry Hungry Hippo Neck Assembly	HIP-06-0003-B	
	Green Hungry Hungry Hippo Neck Assembly	HIP-06-0003-G	
	Orange Hungry Hungry Hippo Neck Assembly	HIP-06-0003-O	
	Yellow Hungry Hungry Hippo Neck Assembly	HIP-06-0003-Y	
1	Bow Tie Cotter Pins Zinc-Plated Steel, for 7/16" to 1/2" Clevis Diameter, 2-3/4" Long	BCOP-ZS-7/16-1/2X2-3/4	1
2	Thin Nylon-Insert Locknut, Zinc-Plated Steel, 8-32 Thread Size	TNN-ZS-8-32	10
3	Rear Busing in Delrin	HIP-07-0055	2
4	Button Head Hex Drive Screw Black-Oxide Alloy Steel, 8-32 Thread, 1/2" Long	BS-HRO-BS-8-32X1/2	6
5	Black Left Neck Guide in UHMW	HIP-07-0031	1
6	Aluminum Left Neck Guide	HIP-01-0081	1
7	Black-Oxide Alloy Steel Hex Drive Flat Head Screw 1/4-20 Thread Size, 1" Long	MS-HF-BS-1/4-20X1	10
8	Black-Oxide Alloy Steel Hex Drive Flat Head Screw 8-32 Thread Size, 3/4" Long	MS-HF-BS-8-32X3/4	4
9	Pop-Up Assembly	HIP-06-0029	1
10	Flat Washer, Zinc Plated, M6 x 12mm OD	FW-Z-M6-12	2
11	Thermoformed Orange/yellow/blues/green Neck	HIP-07-0002-O/Y/B/G-MOD	1
12	Neck Plate for Hippos in UHMWPE	HIP-07-0071	1
13	Black Right Neck Guide in UHMW	HIP-07-0030	1
14	Aluminum Right Neck Guide	HIP-01-0080	1
15	Flat Head Thread-Forming Screws for Plastic Zinc-Plated Steel, Number 10 Size, 3/4" Long	MS-TF-ZS-10-14X3/4	3
16	Flat Washer, 1/4", USS, Zinc	FW-Z-1/4-USS	8
17	Medium-Strength Steel Nylon-Insert Locknut Grade 5, Zinc-Plated, 1/4"-20 Thread Size	NN-ZS-1/4X20	10
18	Clevis pin 1/2" Diameter, 3-1/4" Usable Length	CLP-Z-1/2X3-1/4	1

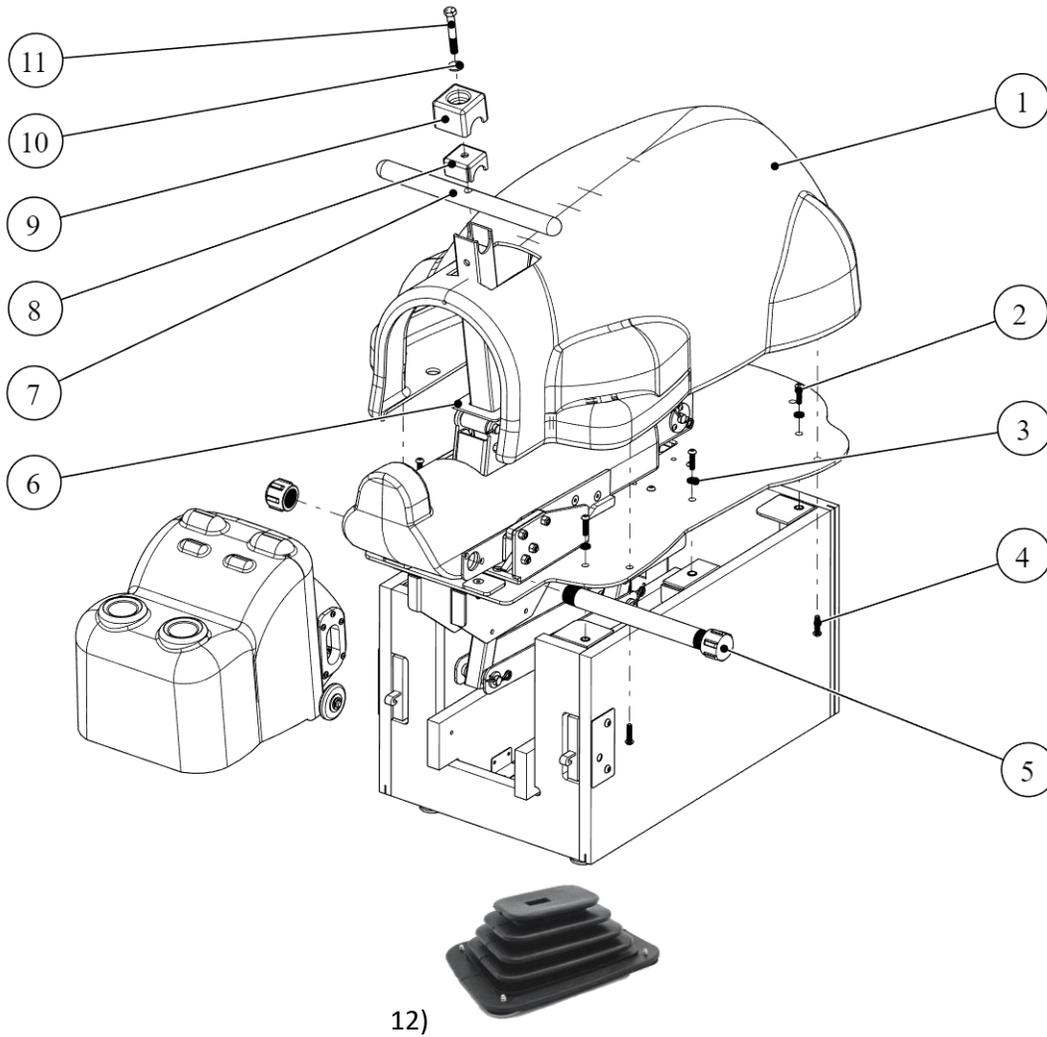
HIP-06-0001-B/G/O/Y-Hippo's Head Assembly



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Chapter 08 – Parts

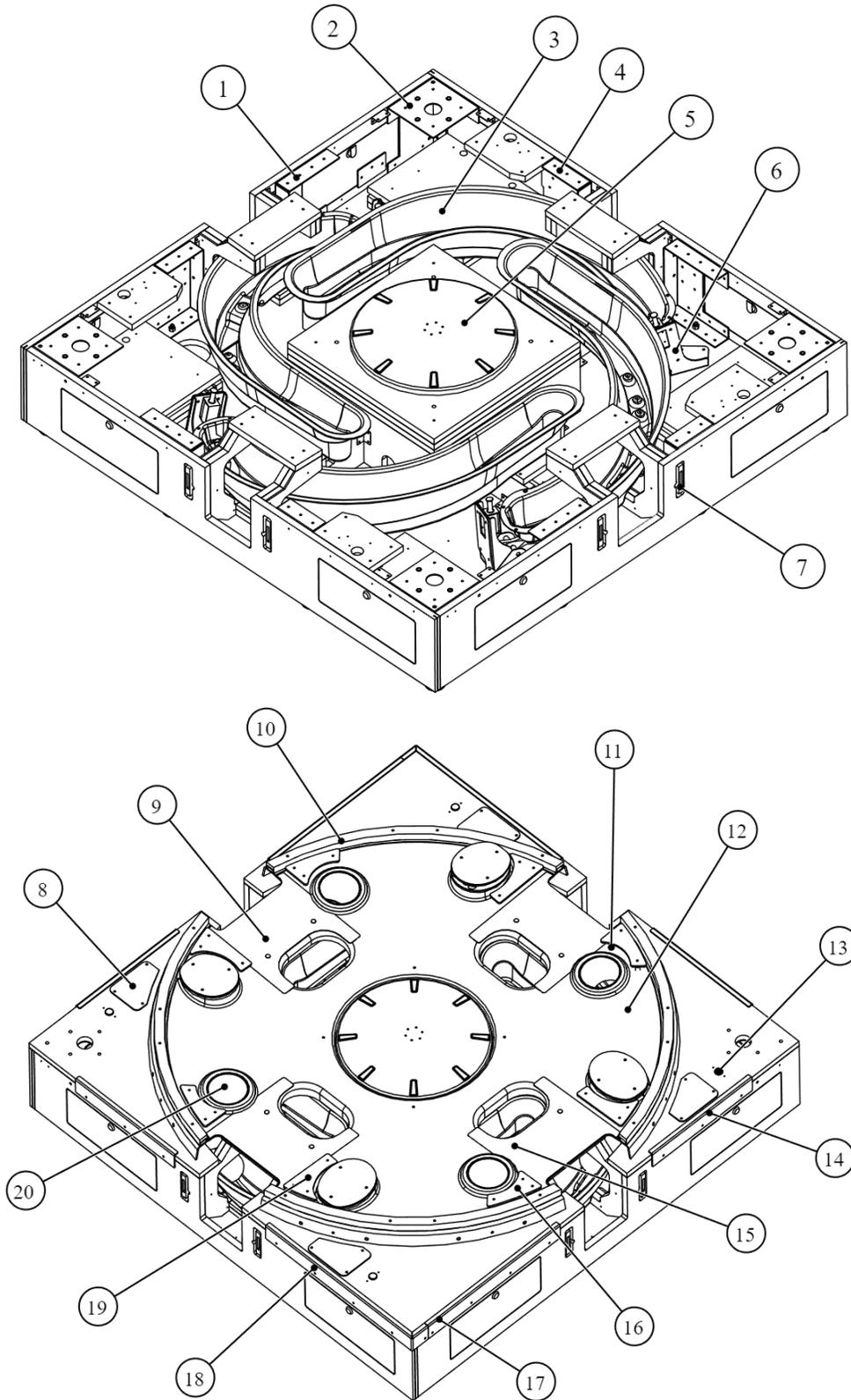
Ref	Part Description	Part #	QTY
	Blue Head Assembly for Hippos	HIP-06-0001-B	
	Green Head Assembly for Hippos	HIP-06-0001-G	
	Orange Head Assembly for Hippos	HIP-06-0001-O	
	Yellow Head Assembly for Hippos	HIP-06-0001-Y	
1	Head Assembly with Drilled Holes, Include Eyes	HIP-06-0039-O/Y/B/G	1
2	Stickers For Hippos Eyes and Eyebrows, Kit Of 2	HIP-09-0001	2
3	Button Head Hex Drive Screw Black-Oxide Alloy Steel, 8-32 Thread, 1/2" Long	BS-HRO-BS-8-32x1/2	4
4	Machine screw, Phillips Drive Pan Head, Black, 10-24 x 3/4	MS-PP-BS-10-24X3/4	6
5	Wheel in UHMW, 21" OD, 1/2" Thick, 0,380"ID	HIP-07-0068	2
6	Flat Washer, 3/8", Cadmium-Plated Steel, 5/8" OD	FW-Z-3/8-5/8	4
7	Heavy Duty Side-Mount External Retaining Rings for 3/8" OD, Black-Phosphate 1060-1090	HERR-BS-3/8	4
8	Flat Washer, 3/8", USS, Zinc, 1" OD	FW-Z-3/8-1	4
9	Head Roller Pivot for Hippos, Black Oxide Steel	HIP-01-0064	1
10	Right Black Head Flange Washer in UHMW	HIP-07-0019	1
11	Thin Nylon-Insert Locknut, Zinc-Plated Steel, 8-32 Thread Size	TNN-ZS-8-32	14
12	Pan Head Screw, Phillips, Zinc, 8-32 x 3/4"	MS-PP-ZS-08-32X3/4	4
13	Right Ear Support	HIP-01-0205	1
14	Set Screw Shaft Collar for 3/8" Diameter, Zinc-Plated 1215 Carbon Steel	AAG-01-0005	2
15	Pan Head Screw, Phillips, Zinc, 8-32 x 5/8"	MS-PP-ZS-08-32X5/8	6
16	Inside Shim for Hippo's Head	HIP-07-4004	2
17	Steel Nylon-Insert Locknut Zinc-Plated, 10-24 Thread Size	NN-ZS-10-24	6
18	Left Black Head Flange Washer in UHMW	HIP-07-0018	1
19	Left Ear Support	HIP-01-0204	1

Hippo Assembly



Ref	Part Description	Part #	QTY
1	Thermoformed Orange/Yellow/Blue/Green body	HIP-07-0001-O/Y/B/G	1
2	Button Head Screw, Hex Drive, Black, 1/4-20x 1"	BS-HRO-BS-1/4-20X1	6
3	Wedge Lock Washer, Zinc, For 1/4" Screw Size	WLW-Z-1/4	6
4	Hex Head Screw, Zinc, Grade 5, 1/4-20 x 3/4"	HS-HH-Z-1/4-20X3/4	6
5	PVC Pipe Kit with Black Cap	AAG-05-0012-KIT	1
6	Protection Shim	HIP-07-0038	1
7	Painted Horizontal Handle	HIP-01-0048-01	1
8	Handle Cover	HIP-01-0047	1
9	Rubber Handle Protection Cover, Duro 80	HIP-07-0057	1
10	Flat Washer, Black stainless Steel, 3/8, 7/8-OD	FW-BS-3/8x7/8	1
11	Button Head Hex Drive Screw Black-Oxide Steel, 3/8"-16, 2-1/2"	BS-HRO-BS-3/8-16X2-1/2	1
12	Rubber Handle Shifter Boot, With Hose 38mm x 38mm x 3mm	HIP-05-0004	1

Large Cabinet Inside Parts



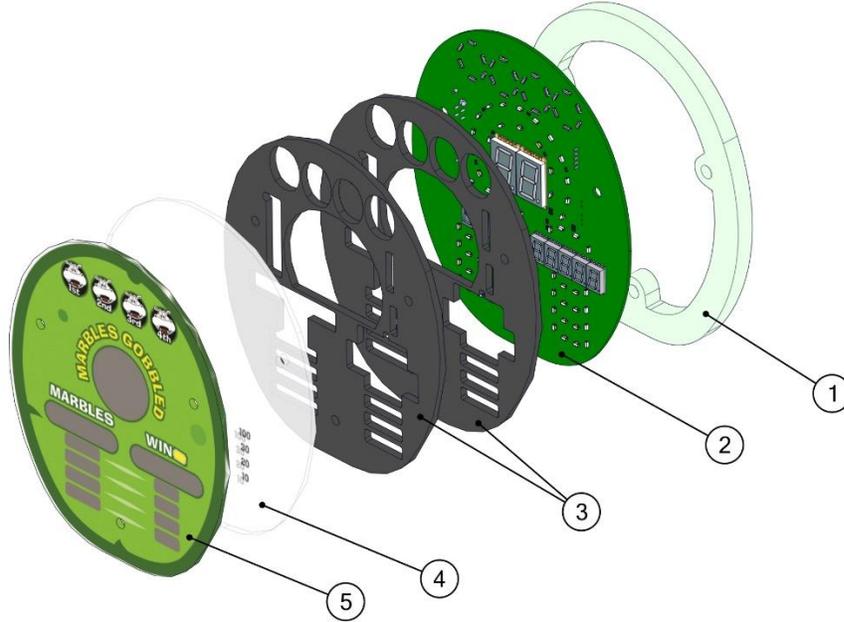
Ref	Part Description	Part #	QTY
1	Reinforced left Latch Holder	HIP-01-0103	4
2	Corner Plate Assembly for	HIP-01-0500	4
3	Ball Chute	HIP-07-0020	4
4	Reinforced Right Latch Holder	HIP-01-0102	4
5	Thermoformed White Ball Gear	HIP-07-4001	1
6	Kicker Assembly for Hippos	HIP-07-0054-ASSY	4
7	Female R2/R5 Concealed Butt-Joint Panel Fastening Latches	INV-R5-0079-07	8
8	Acrylic Cover	HIP-07-0035	4
9	Floor Shim	HIP-07-0058	4
10	Platform Ring light	HIP-07-0012	4
11	Off-White Nylon Unthreaded Spacer 1/2" OD, 3/4" Long, for Number 10 Screw Size	US-WN-1/2x3/4	24
12	Blue Bottom Platform	HIP-07-0005	1
13	Polyethylene Plastic Snap-in Round Plug 0.71" to 0.82" ID	AAG-05-0024	4
14	Side Bracket Post	HIP-01-0044	4
15	Black Push-In Rivets with Ribbed Shank for 0.03"-0.512" Material Thickness, 0.68" Long	PIR-BN-0.03-0.512x0.68	8
16	Left Ball Slide	HIP-07-7006	8
17	Side Bracket	HIP-01-0076	2
18	Corner Bracket	HIP-01-0075	2
19	Right Ball Slide	HIP-07-7005	8
20	Tube Ball	HIP-07-0022	4

HIP-07-0035 Versions



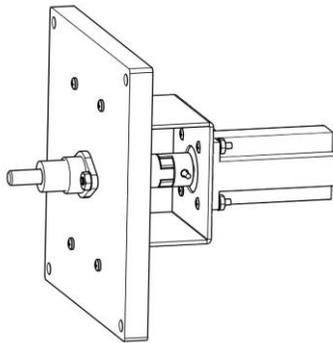
Ref	Description	Part #
1	Acrylic Cover, Tap Card to Play	HIP-07-0035-TAP
2	Acrylic Cover, Swipe Card to Play	HIP-07-0035-SWIPE
3	Acrylic Cover, Insert Credits to Play	HIP-07-0035-INSERT

Score board assembly



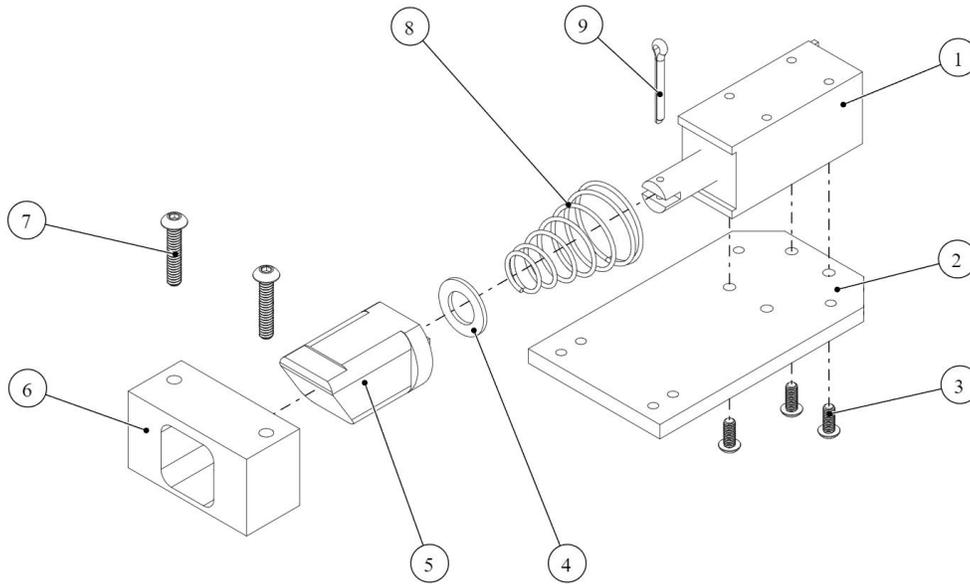
Ref	Part Description	Part #
1	Number Cover Riser for Hippos	HIP-07-7004
2	Score Board Drive for Hippos Programmed	AAG-04-0054-PROG
3	Number Spacer for Hippos	HIP-07-7002
4	Payout for Scoreboard for Hippos	HIP-09-0003
	D&B Scoreboard Payout for Hippos (10/20/30/100)	HIP-02-003-DB
6	Multicolor Scoreboard	HIP-09-0002

HIP-06-0005-Step Motor Assembly



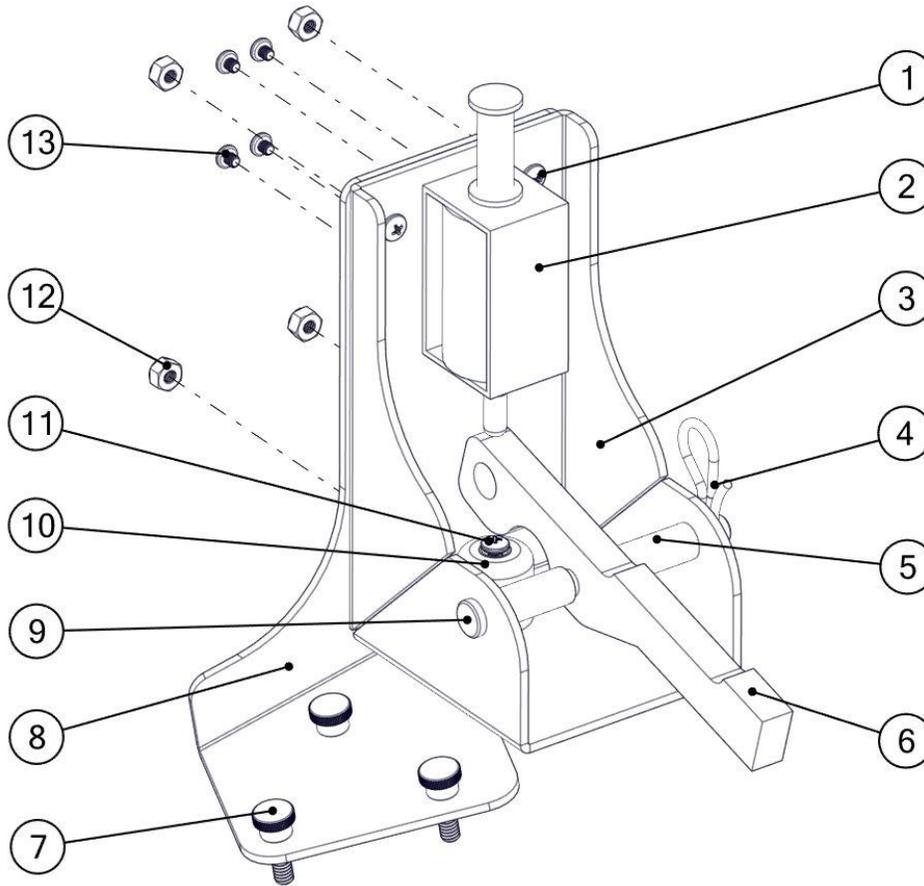
Part Description	Part #
Step Motor Assembly for Hippo	HIP-06-0005

HIP-01-0036-ASSY-Lock Assembly



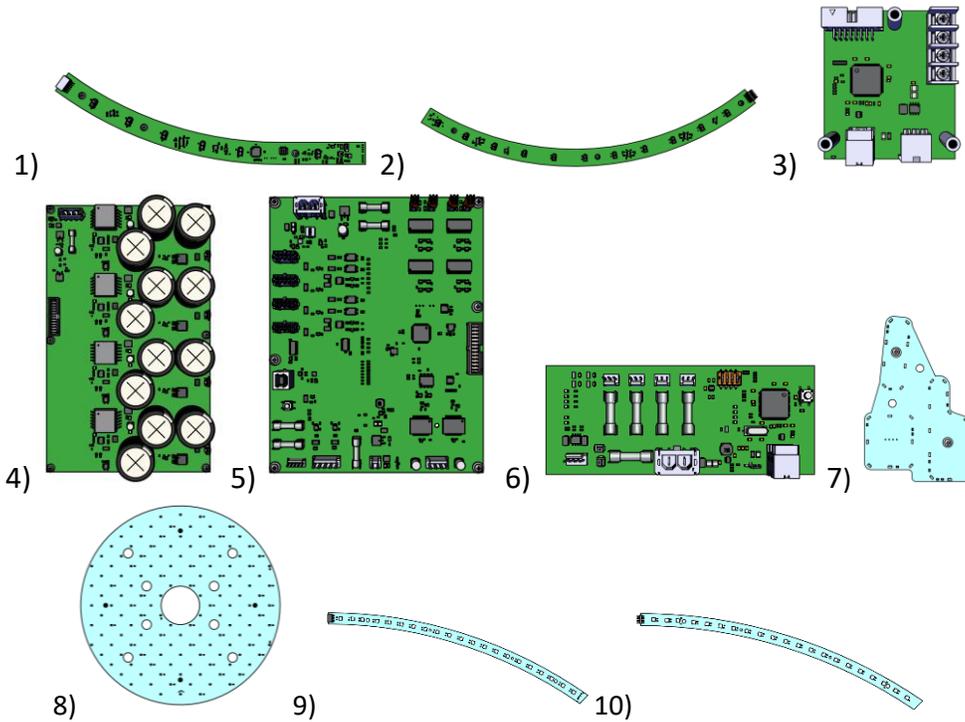
Ref	Part Description	Part #
1	Intermittent Latch Pull Solenoid, 12V	AAG-13-0019
2	Aluminum Stopper Block	HIP-01-0036
3	Button Head Screw, Torx, Black, M4 X 10mm	BS-TRO-BS-M4X10MM
4	Thick Nylon Plastic Washer for 5/8 Screw Size, 0.656 ID, 0.843 OD, Black	FW-P-5/8
5	Aluminum Stopper Pin for Hippos, REV B	HIP-01-0062
6	Sleeve Block in Delrin	HIP-07-0086
7	Pan Head Machine Screw, Phillips, Black, 10-24 x 1-1/2	MS-PP-ZS-10-24X1-1/2
8	Spring For 12V Solenoid, Hippos	AAG-05-0013
9	Cotter Pin, Zinc, 3/32 x 3/4"	COP-ZS-3/32X3/4

HIP-07-0054-ASSY-Kicker Assembly



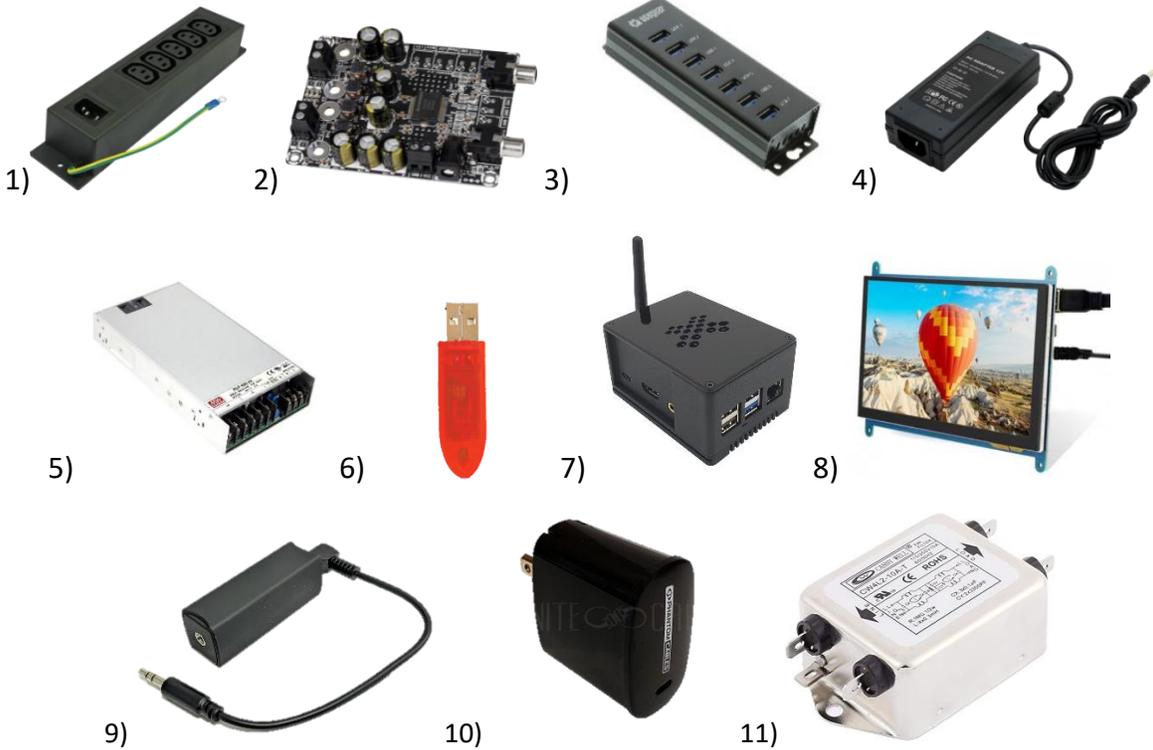
Ref	Part Description	Part #	QTY
1	Pan Head Machine Screw, Phillips, Black, 10-24 x 1/2	MS-PP-BS-10-24X1/2	5
2	Solenoid With Cable and Connector, DC, 12V, 0.4 Ohm	AAG-13-0018-ASSY	1
3	Solenoid Bracket	HIP-01-0021	1
4	Bow Tie Cotter Pins, for 7/16" to 1/2" Clevis Dia, 2-3/4" Long	BCOP-ZS-7/16-1/2X2-3/4	1
5	Plastic Tubing, 1,31" Long, 0,375" ID, 0,50" OD	HIP-01-0094	2
6	Kicker In HDPE	HIP-07-0054-REVF	1
7	Black Nylon Raised-Head Thumb Screws 1/4"-20, 1" Long	TS-N-1/4-20X1	3
8	Kicker Bracket	HIP-01-0029	1
9	Carbon Steel Clevis Pin, 3/8" Diameter, 3-3/4" Usable Length	CLP-3/8X3-3/4	1
10	Medium Strength Unthreaded Bumper with Embedded Washer, 1" OD, 1" High, 50 Durometer	UB-RO-BR-1X1	1
11	Pan Head Machine Screw, Phillips, Black, 10-24 x 3/4	MS-PP-BS-10-24X3/4	1
12	Steel Nylon-Insert Locknut Zinc-Plated, 10-24 Thread Size	NN-ZS-10-24	1
13	Steel Pan Head Phillips Screw M4 x 0.7 mm Thread, 8 mm Long	MS-PP-ZS-M4-0.7X8	4

Printed Circuit Boards



Ref	Part Description	Part Number
1	Hippos Ramp Ball Detector MCU Programmed	AAG-04-0044-R05-PROG
2	Hippos Ramp Ball Detector Extension	AAG-04-0046
3	Program RGB LED Matrix Panel Controller Board	AAG-04-0027-PROG
4	Board for Solenoid Punch Drive	AAG-04-0042
5	I/O Board for Hippos Programmed	AAG-04-0043-PROG
6	RGB Led Controller Board Assembly 12V	AAG-04-0015-12RL
7	White Led Board Center Playfield for Hippos, Revision 3	AAG-14-0008-R03
8	Hippo LED Board Player Feedback	AAG-14-0009
9	Led RGB Board Playfield Start for Hippos, Revision 5	AAG-14-0006-R05
10	Led RGB Board Playfield End for Hippos, Revision 4	AAG-14-0007-R04

Computer & Electronics

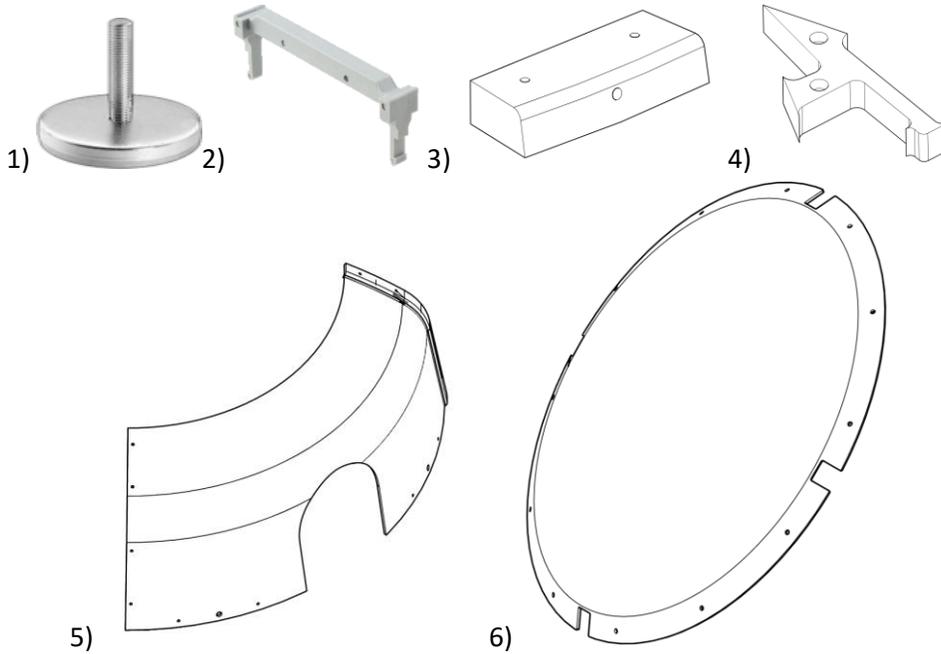


Ref	Part Description	Part Number
1	Power Bar, 5 Outlets	INV-05-1242
2	2X15 Watt Class D Audio Amplifier Board	INV-14-0005
3	7-Port USB, 3.0 Hub, Type A Female USB	AAG-11-0011
4	Switching Power Supply, 12 V, 5A, 2.1mm x 5.5mm Plug	INV-14-0006
5	Switching Power Supply 12V, 500W	AAG-13-0016
	24 Vdc Power Supply	AAG-13-0005
6	Dongle Orange, Hippos, SF, CCP, CCT, IB, CR, RAM	TF-04-1211
7	programmed Mini PC Rock Pi X 2GB/16GB, With Aluminum Housing, Software and Antenna	AAG-11-0013-PROG
8	7" Monitor with Touchscreen for Hippos	HIP-10-0001
9	Audio Isolator, Jack to Jack, 3.5MM, Stereo	AAG-04-0060
10	Wall Charger, USB Type-C	AAG-13-0022
11	EMI filter	HIP-06-0042

Cabling

Part Description	Part Number
Cable Assembly 2.1mm ID, 5.5mm OD Jack to Wire Leads Flat 3.00'	ADR-839-1145-ND
Audio Cable, 18", 3.5mm Male to 2 x RCA Male	INV-35MM-RCAE-02
Straight Barrel Power Cable, 2.1mm, 3'	ADR-CP-2216-ND
Power Cord IEC-C14 to IEC-C7, 18AWG, 3'	INV-PW-117-03
USB Cable USB-A to Micro USB-B, 2.0, 500mm	INV-USB-0001
USB Cable USB-A To USB-B, 3.0, 1'	INV-USB-0002
Cable USB 2.0 'AB', White, 3'	INV-USB-AB1-03
USB Barrel, Jack to USB C, 2,1mm, 5Vdc	INV-PW-100-12
USB 2.0, A Male to A Female, Black, 10'	INV-USB-AA3-10BK
USB Barrel, Jack to USB C, 2,1mm, 5Vdc	INV-USB-0003
Cable USB 2.0 'AB', Black, 10'	INV-USB-AB1-10BK
Cable USB 2.0 'AB', 2'	INV-USB-AB1-02BK
Molex Harness 4 Pin, LP4 Female to LP4 Female	AAG-03-0102-01

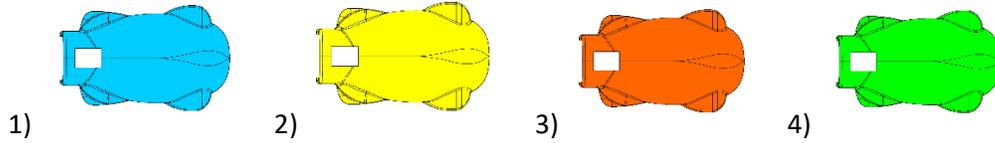
Other Cabinet Parts



Ref	Part Description	Part #
1	Leg Leveler W/Nut, 3/8-16 x2", 1-3/4" BASE, 200 LB	AAG-05-0008
2	Connector Strain Relief, 26 POS	AAG-05-0025
3	Dome Block	HIP-07-0014
4	Light Divider	HIP-07-0036
5	Clear Quarter Dome	HIP-07-0040
	Dome Cover	HIP-07-0902

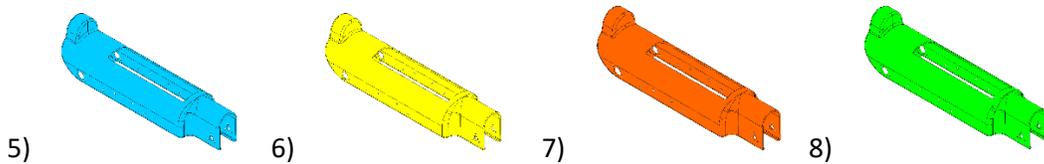
Hippos

Bodies



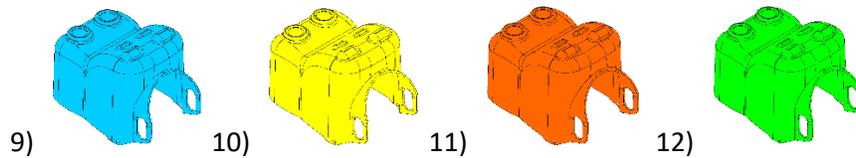
Ref	Part Description	Part #
1	Thermoformed Blue Body for Hippos	HIP-07-0001-B
2	Thermoformed Yellow Body for Hippos	HIP-07-0001-Y
3	Thermoformed Orange Body for Hippos	HIP-07-0001-O
4	Thermoformed Green Body for Hippos	HIP-07-0001-G

Necks



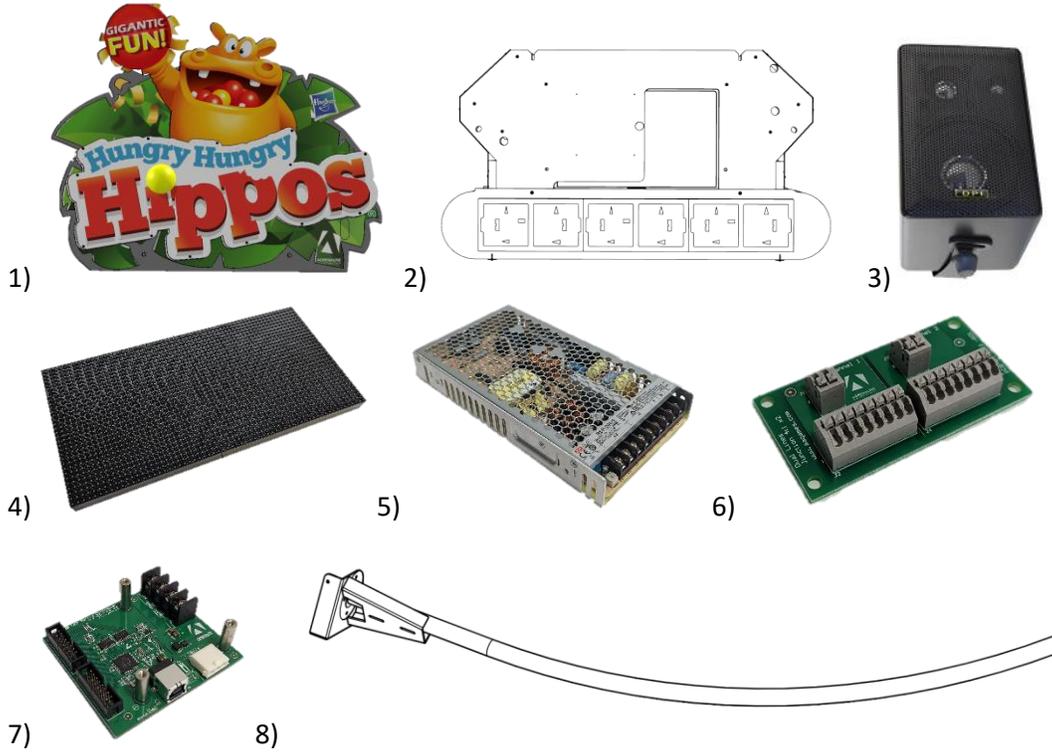
Ref	Part Description	Part #
5	Thermoformed Blue Neck for Hippos	HIP-07-0002-B-MOD
6	Thermoformed Yellow Neck for Hippos	HIP-07-0002-Y-MOD
7	Thermoformed Orange Neck for Hippos	HIP-07-0002-O-MOD
8	Thermoformed Green Neck for Hippos	HIP-07-0002-G-MOD

Heads



Ref	Part Description	Part #
9	Blue Head Assembly with Drilled Holes, Include Eyes	HIP-06-0039-B
10	Yellow Head Assembly with Drilled Holes, Include Eyes	HIP-06-0039-Y
11	Orange Head Assembly with Drilled Holes, Include Eyes	HIP-06-0039-O
12	Green Head Assembly with Drilled Holes, Include Eyes	HIP-06-0039-G

Header Assembly

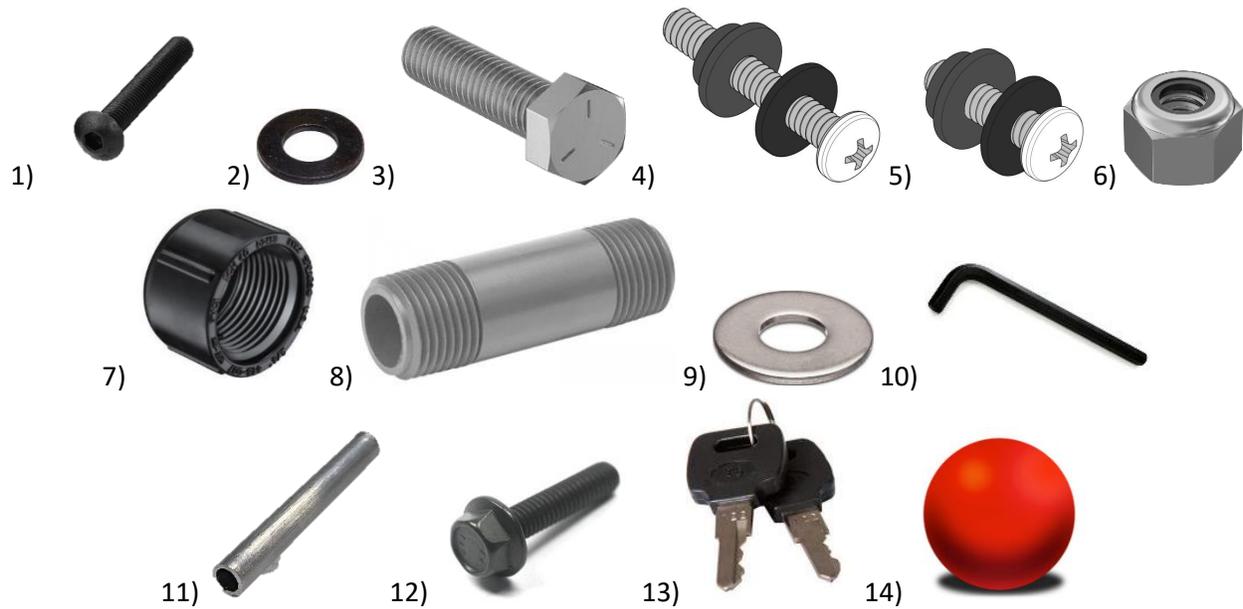


Ref	Part Description	Part Number
1	Hungry Hippos Header, Side A	HIP-09-0004
	Hungry Hippos Header, Side B	HIP-09-0005
2	Hungry Hippos Header Central Structure with Screws	HIP-09-0006-Assy
3	Speakers 4"	ADR-50-9986-00
4	Display Module, 64x32', RGB LED - 4mm pitch	AAG-14-0004-DISPLAY
5	5 Vdc Power Supply	AAG-13-0021
6	Dual Lines Junction 4:1, Qty Of 2	AAG-04-0012
7	Program RGB LED Matrix Panel Controller Board	AAG-04-0027-PROG
8	Display Tubing Assembly	HIP-01-0200

Wiring Harnesses

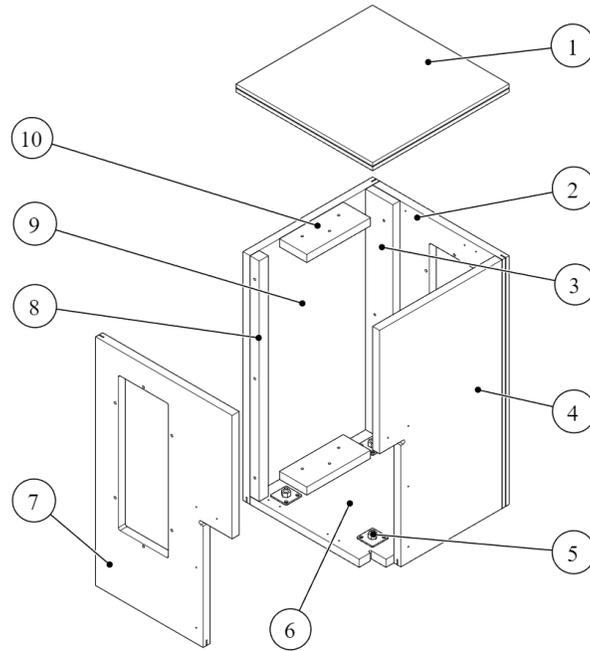
Description	Part #
Harness 38" Male to Female 2 Position, JST SM Series	AAG-03-0068
60' Cable Female 2 Pos. JST SM Series To 2 Pos. MTA Connector	AAG-03-0069
118' Cable Female 2 Pos. JST SM Series To 2 Pos. MTA Connector	AAG-03-0070
80' Cable Female 2 Pos. JST SM Series To 2 Pos. MTA Connector	AAG-03-0071
53' Cable 5 Pos. MTA Connector To 4 Pos. MTA Connector	AAG-03-0072
50' Cable 4 Pos. MTA Connector To 4 Pos. MTA Connector	AAG-03-0073
92' Cable 2 Pos. MTA-156 Connector to SPADE TERM RED	AAG-03-0074
70' Cable 4 Pos. MTA-156 Connector to Female 4 Pos. JST SM Series	AAG-03-0075
84' Cable 4 POS MATE-N-LOK To SPADE TERM BLU	AAG-03-0076
56' Cable Male 2 Pos. Micro MATE-N-LOK To Female 2 Pos. JST SM Serie	AAG-03-0077
104' Cable Male 2 Pos. Micro MATE-N-LOK To Female 2 Pos. JST SM Series	AAG-03-0078
136' Cable Male 2 Pos. Micro MATE-N-LOK To Female 2 Pos. JST SM Series	AAG-03-0079
Harness 86' Super Sabre to Yellow Spade Terminal	AAG-03-0080
Harness 113' For PSU Power	AAG-03-0081
PSU Power Jumper	AAG-03-0082
62' cable 9 Pos. Molex to 10 POS MATE-N-LOK	AAG-03-0083
156' cable 9 Pos. Molex to 10 POS MATE-N-LOK	AAG-03-0084
120' cable 9 Pos. Molex to 10 POS MATE-N-LOK	AAG-03-0085
Audio amplifier 4-wires 85"	AAG-03-0086
66" Shield Cable 4 POS MATE-N-LOK To 5 POS MTA.156 Connector	AAG-03-0087
86" Shield Cable 4 POS MATE-N-LOK To 5 POS MTA.156 Connector	AAG-03-0088
29" Cable 4 POS MATE-N-LOK Connector To 5 POS MTA Connector	AAG-03-0089
96" Cable Female 4 Pos. MTA To 4 Pos Mini Mate-N-Loc	AAG-03-0092
110" Cable insert header tube	AAG-03-0093
90" CABLE 2POS MICRO MATE-N-LOK TO SPADE	AAG-03-0094
106" RGB STRIP CABLE 3POS IDC TO 4POS MAT-N-LOK	AAG-03-0095
58" RGB STRIP CABLE 3POS IDC TO 4POS MAT-N-LOK	AAG-03-0096
70" RGB STRIP CABLE 3POS IDC TO 4POS MAT-N-LOK	AAG-03-0097
104" RGB STRIP CABLE 3POS IDC TO 4POS MAT-N-LOK	AAG-03-0098
96" Cable Female 4 Pos. MTA to 4 Pos Mini Mate-N-Loc	AAG-03-0099
26 Position 6" Cable Assembly Rectangular Socket to Socket	AAG-03-0100
68" Cable Male 2 Pos. Micro MATE-N-LOK To Female 2 Pos. JST SM Series	AAG-03-0103
Harness 102" Super Sabre to SPADE TERM Yellow	AAG-03-0104
150" Cable Female 2 Pos. JST SM Series To 2 Pos. MTA Connector	AAG-03-0105
91" cable 9 Pos. Molex to 10 POS MATE-N-LOK	AAG-03-0106
Power Cable, 5-15R to IEC C14, Black, 16 AWG, 1'	AAG-03-0110
Harness For EMI Filter And Power Bar and Power Entry	AAG-03-0117
USB Cable USB-A To USB-B, 3.0, 1'	INV-USB-0002
Cable USB 2.0 'AB', 2'	INV-USB-AB1-02BK
Audio Cable, 18", 3.5mm Male to 2 x RCA Male	INV-35MM-RCAE-02
Straight Barrel Power Cable, 2.1mm, 3'	ADR-CP-2216-ND
Cable USB 2.0 'AB', Black, 10'	INV-USB-AB1-10BK
USB Cable, Type-C Male-Male, 6.5' OR 10'	INV-USB-0004

Hardware Kit



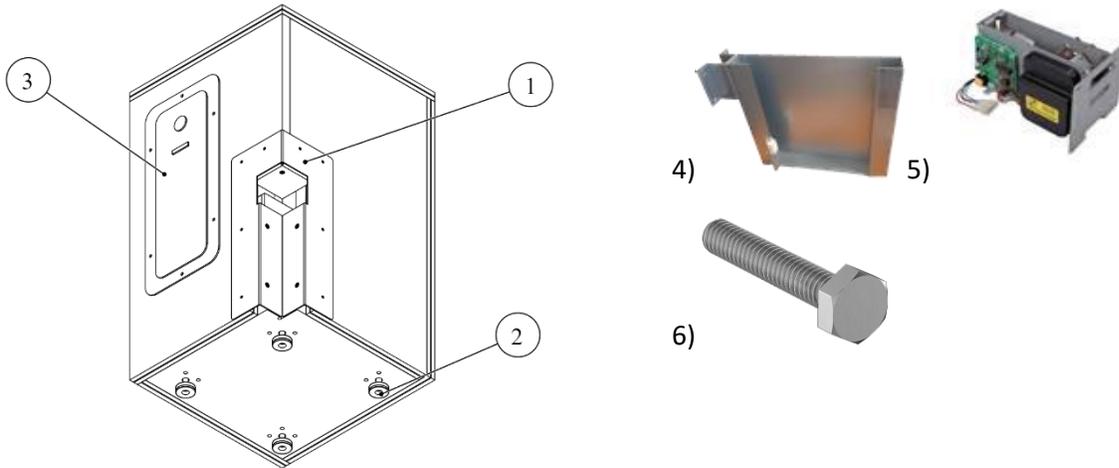
Ref	Part Description	Part Number	Qty
1	Button Head Screw, Hex Drive, Black, 1/4-20 x 2	BS-HH-BS-1/4-20X2	12
2	Flat Washer, 1/4", Black Steel	FW-BS-1/4	12
3	Hex Head Screw, Zinc, 3/8-16 X 1 1/2 Long	HS-HH-ZS-3/8-16X1-1/2	4
4	Long Screw Rubber Bushing Assembly for Dome	HIP-06-0055	16
5	Short Screw Rubber Bushing Assembly for Dome	HIP-06-0054	28
6	Nylon-Insert Locknut, 1/4-20	NN-ZS-1/4X20	4
7	Black 3/4" PVC Cap FPT, Schedule 40	AAG-05-0011	4
8	PVC Nipple 3/4 x 9", Dark Gray, Schedule 80	AAG-05-0012	2
9	Flat Washer, 3/8", USS, Zinc, 1" OD	FW-Z-3/8-1	4
10	Hex Allen L-Key, 5/16, Long Arm	INV-0911LA00079001	1
11	Aluminium Tubing for Allen Key Extension	HTW-01-0030	1
12	Hex Head Screw, Flanged, 1/4-20 x 1-1/4"	HS-HHFL-BS-1/4X1-1/4	8
13	Keys	N/A	2
14	PVC Red Ball for Hippos	HIP-05-0009	24

Ticket Dispenser Box-Wood assembly



#	Part Description	Part #	QTY
1	Printed Melamine 3/4" Top Cover	HIP-02-0016-06	1
2	Printed Melamine 3/4" Left Side	HIP-02-0016-04	1
3	Vertical Wood Stopper	HIP-02-0016-07	1
4	Printed Melamine 3/4" front side	HIP-02-0016-02	1
5	Leg Support for Ticket Dispenser Box	HIP-01-0068	4
6	White Melamine 3/4" Box base	HIP-02-0016-01	1
7	Printed Melamine 3/4" Right Side	HIP-02-0016-03	1
8	Rib for Ticket Dispenser Box	HIP-07-1005	1
9	Printed Melamine 3/4" Back Side	HIP-02-0016-05	1
10	Horizontal Wood Stopper	HIP-02-0016-10	2

Ticket Dispenser Box - Parts

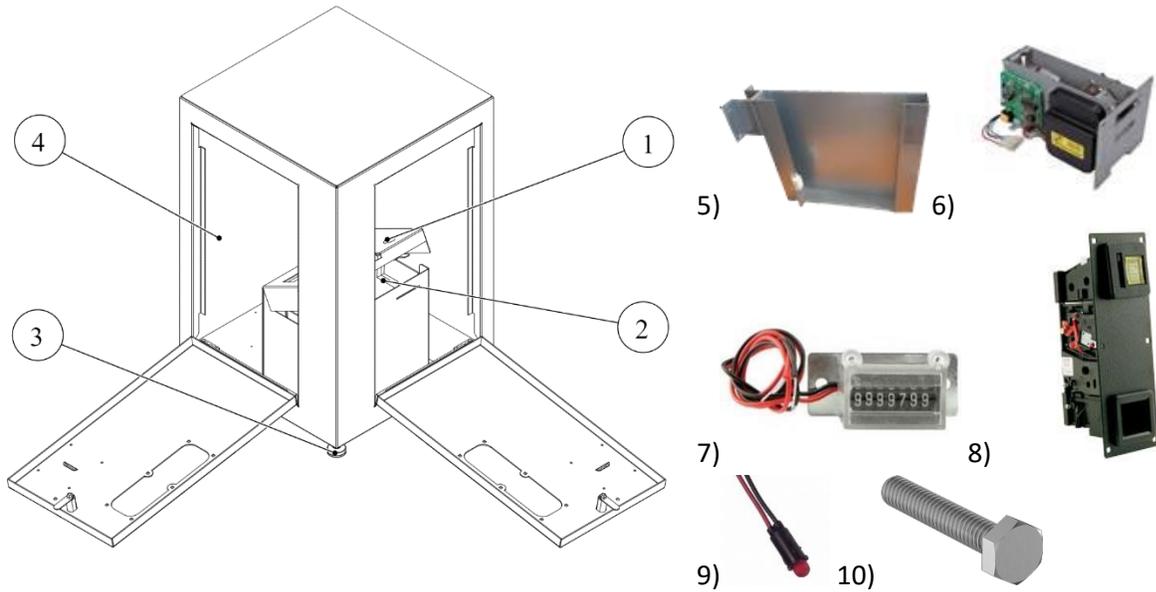


#	Part Description	Part #	QTY
1	Rear Panel and Bracket for Ticket Dispenser Box Assembly	HIP-01-0039	1
2	Leg Leveler, 3/8-16 x 2" Or 1.5", 1" Base Diameter Or 1.75", 1.38"	AAG-05-0008	4
3	Ticket Dispenser Door with Red Led	ADR-40-0540-00KA	2
4	Ticket Bin with Level Sensor Switch	ADR-42-1015-00	2
5	Ticket Dispenser D-TYPE	ADR-TD-0001	2
6	Hex Head Screw, Zinc, Grade 5, 1/4-20 x 1-3/4"	HS-HH-ZS-1/4-20X1-3/4	5

Ticket Dispenser Box-wiring

Part Description	Part #	QTY
60" Cable 4 Pos Plug to 4 Pos RCPT Series 1490	AAG-03-0114	1
88.5" Cable 4 Pos Plug to 4 Pos RCPT Series 1490	AAG-03-0115	1
Harness For Tickets in Cabinet, Hippos	AAG-03-0116	2

Coin/Ticket Box Assembly



#	Part Description	Part #	QTY
1	Cam Lock for Panel Thickness up to 23mm	ADR-14-2010	1
2	Black Plastic Coin Container	INV-07-1011	1
3	Leg Leveler, 3/8-16 x 2" Or 1.5", 1" Base Diameter Or 1.75", 1.38"	AAG-05-0008	4
4	Complete Metal for Coin/Ticket Box for Hippos	HIP-06-0037	1
5	Ticket Bin with Level Sensor Switch	ADR-42-1015-00	2
6	Ticket Dispenser D-TYPE	ADR-TD-0001	2
7	Meter, 12V, 7 Digit with Bracket	ADR-42-08012-072	4
8	Single Front Place Assembly, No Mech, 12V Led, Universal Logo	ADR-40-0023-19NM	2
9	Red Led Low Ticket, Part: L20691-ND	ADR-L20691-ND	2
10	Hex Head Screw, Zinc, Grade 5, 1/4-20 x 1-3/4"	HS-HH-ZS-1/4-20X1-3/4	5

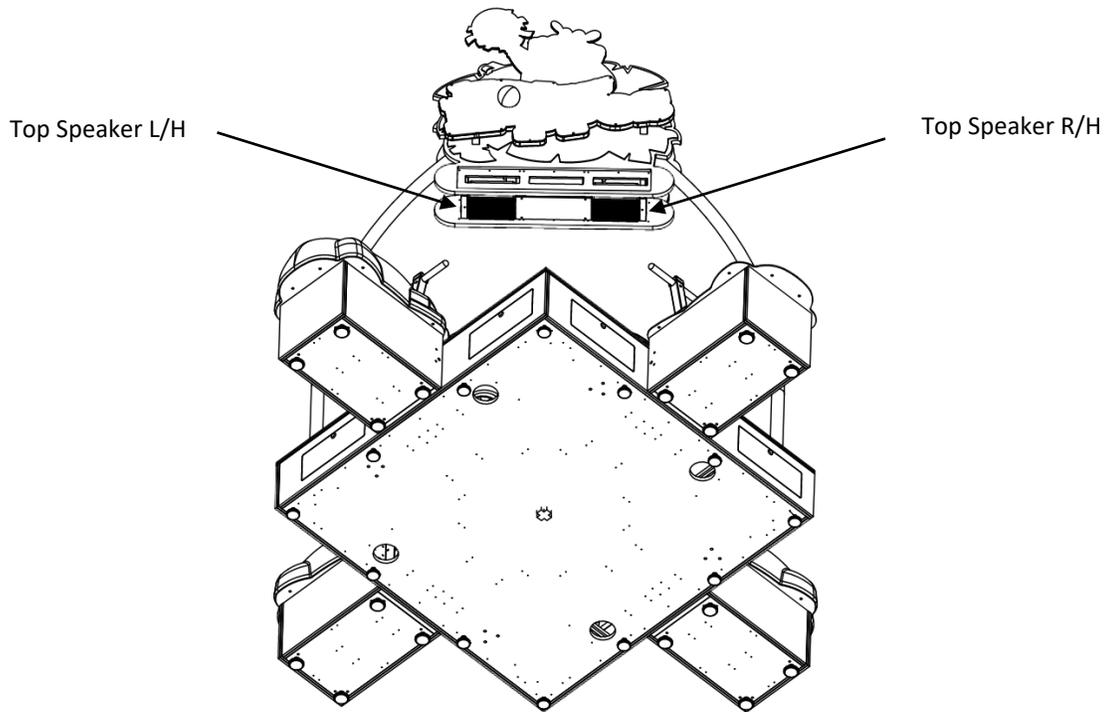
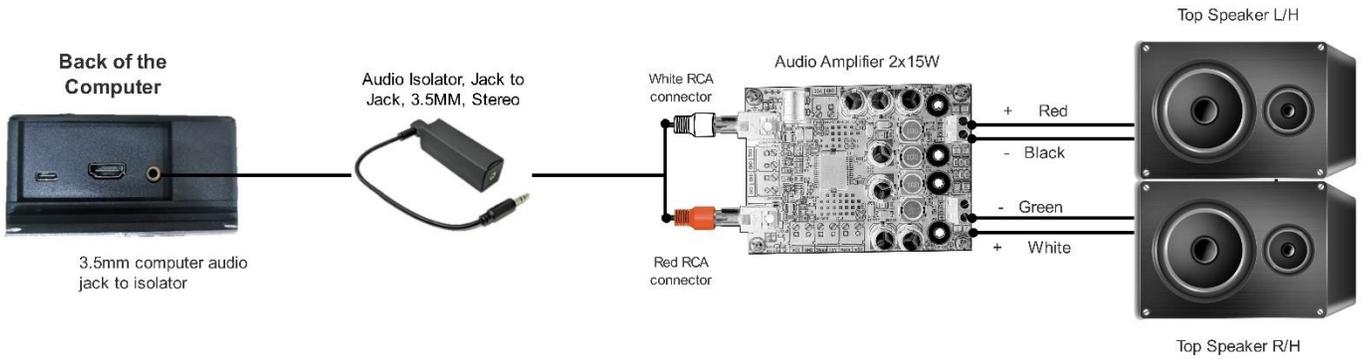
Coin/Ticket Box-wiring

Part Description	Part #	QTY
Harness For Coins & Tickets Cabinet for Hippos	AAG-03-0111	2
60" Cable 9 Pos Plug to 9 Pos RCPT Molex Series 1292	AAG-03-0112	1
88.5" Cable 9 Pos Plug to 9 Pos RCPT Molex Series 1292	AAG-03-0113	1

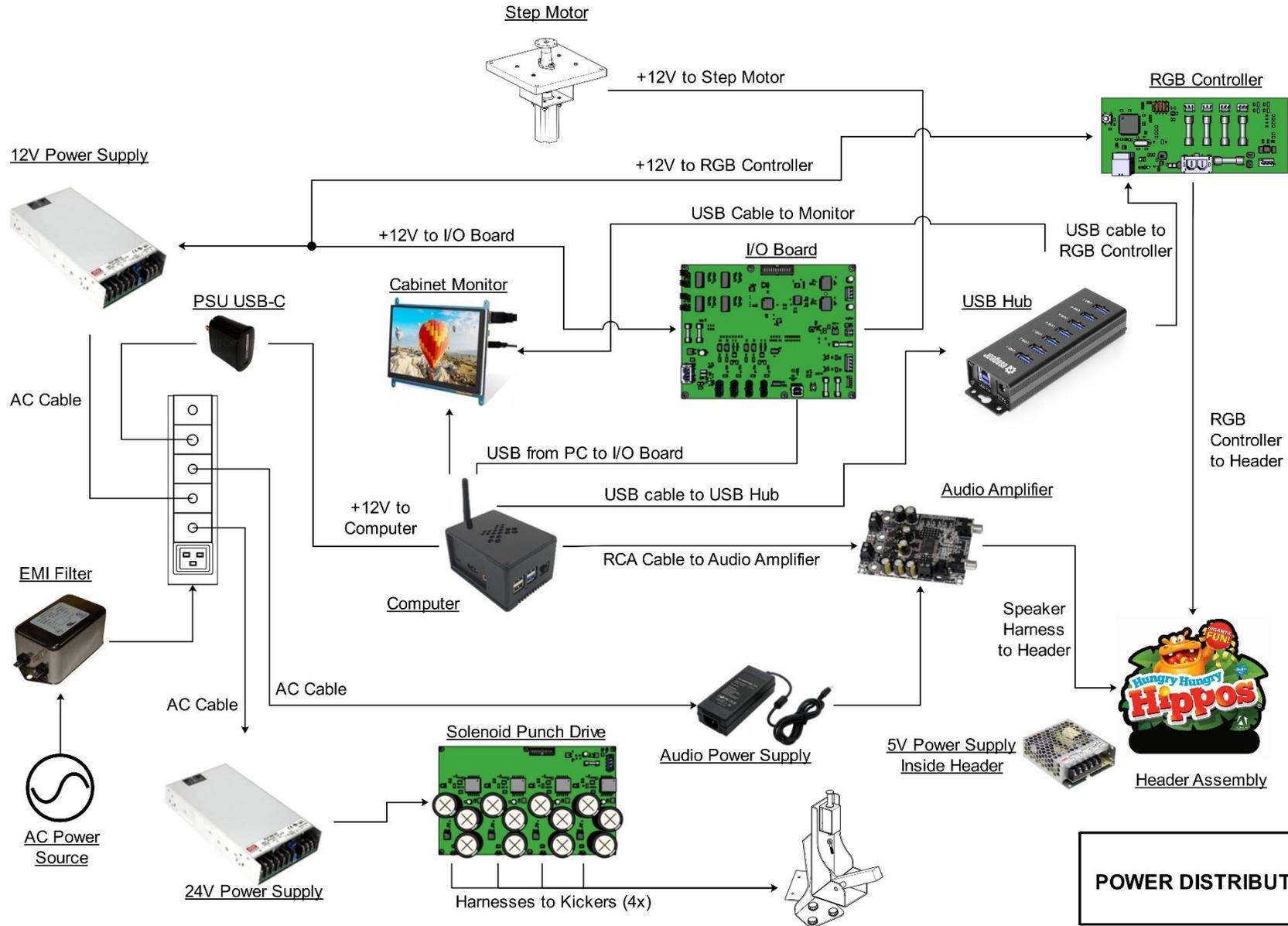
I/O Board Connections

LATCH PLY 1 (BLUE)	LATCH PLY 2(YELLOW)	LATCH PLY3 (ORANGE)	LATCH PLY 4 (GREEN)
J1	J2	J3	J4
1. R 2. B	3. R 1. B	1. R 2. B	1. R 2. B
I/O BOARD POWER	COIN DOOR PLY 1 (BLUE)	COIN DOOR PLY 2(YELLOW)	COIN DOORPLY3 (ORANGE)
J5	J6	J7	J8
1. GND 2. 12V	1. 12V 2. TCK OUT 3. TCK OPTO 4. N/U 5. GND 6. 12V 7. COIN IN 8. COIN CNT 9. TCK CNT 10. GND	1. 12V 2. TCK OUT 3. TCK OPTO 4. TCK CNT 5. GND 6. 12V 7. COIN IN 8. COIN CNT 9. INBIT CARD RD 10. GND	1. 12V 2. TCK OUT 3. TCK OPTO 4. N/U 5. GND 6. 12V 7. COIN IN 8. COIN CNT 9. TCK CNT 10. GND
COIN DOORPLY 4 (GREEN)			COMPUTER
J9	J10	J11	J12
1. 12V 2. TCK OUT 3. TCK OPTO 4. N/U 5. GND 6. 12V 7. COIN IN 8. COIN CNT 9. TCK CNT 10. GND	Not Connected	Not Connected	USB Port
SCOREBOARDS	STEP MOTOR POWER	STEP MOTOR DATA	
J13	J14	J15	J16
1. 12V 2. GND 3. TO- 4. TO+ 5. SHD	1. A 2. A 3. B 4. B	1. 12V 2. GND 3. TO+ 4. TO- 5. SHD	Not Connected
BALL CHUTES			
J17	J18	J19	J20
1. GND 2. 12V	Not Connected	Not Connected	Not Connected

Speakers Wiring Colors

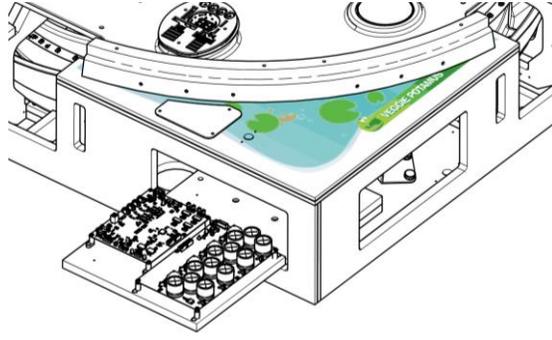


Power Distribution Schematics



Tray Assembly Schematics

I/O Board Tray



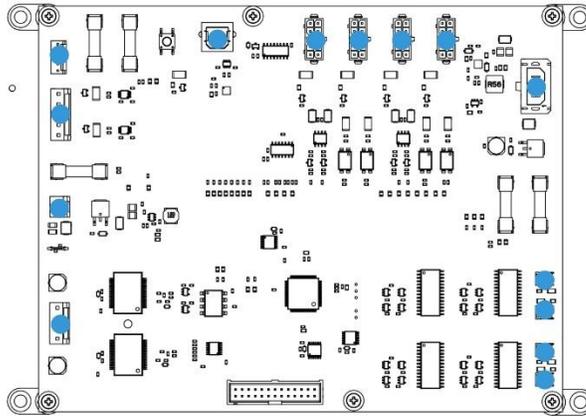
AAG-03-0083 to card reader / coin and ticket PLY1
 AAG-03-0084 to card reader / coin and ticket PLY2
 AAG-03-0085 to card reader / coin and ticket PLY3
 AAG-03-0084 to card reader / coin and ticket PLY4

INV-USB-AB1-10BK
 to Computer

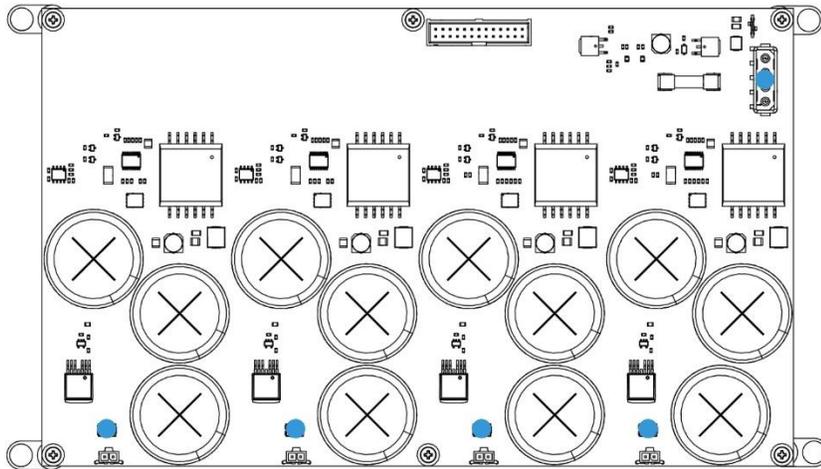
AAG-03-0072-01 to Ball
 Chute PLY1

AAG-03-0087-01 to
 Scoreboard PLY1

AAG-03-0080-01 to 12V
 Power supply



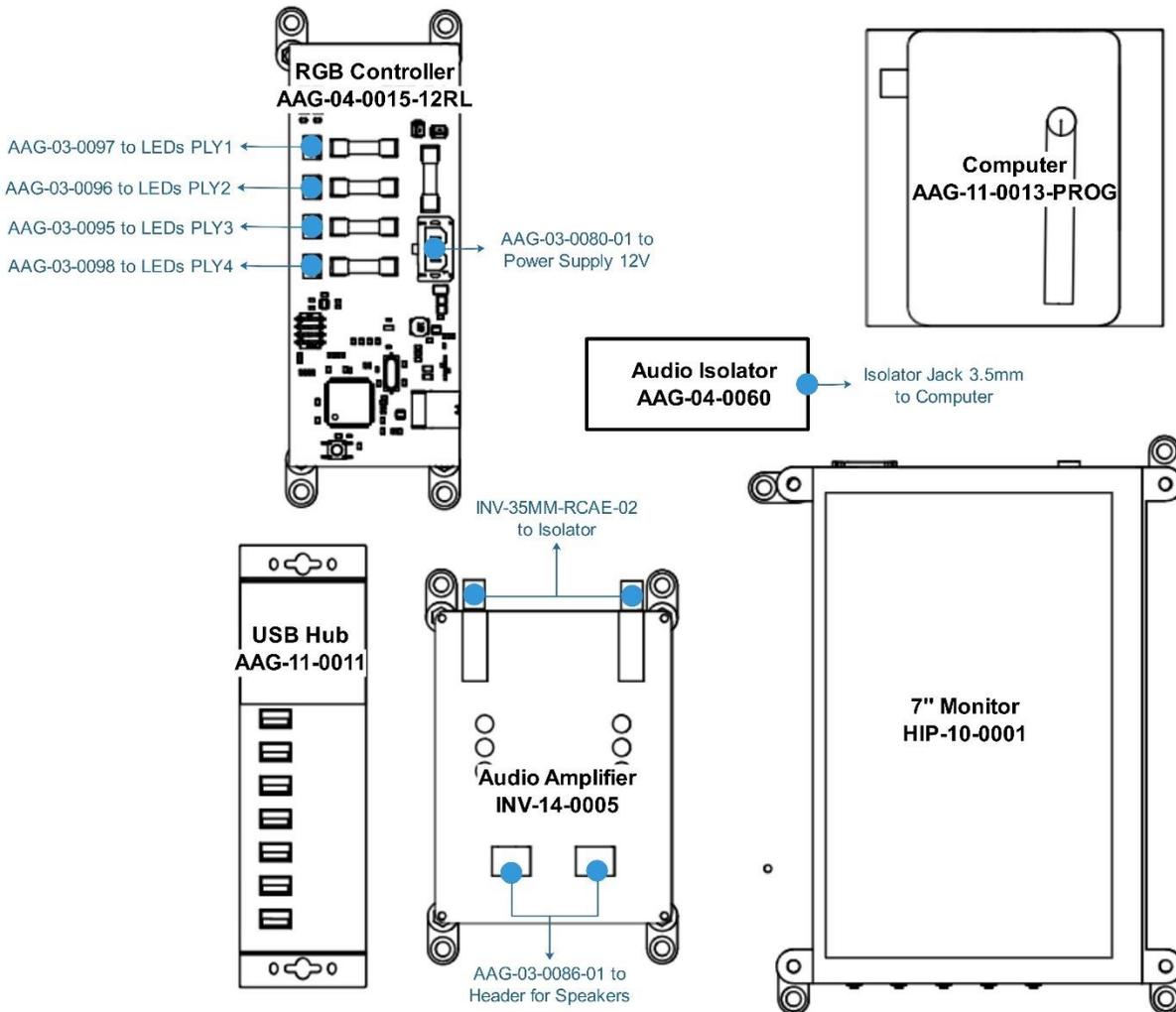
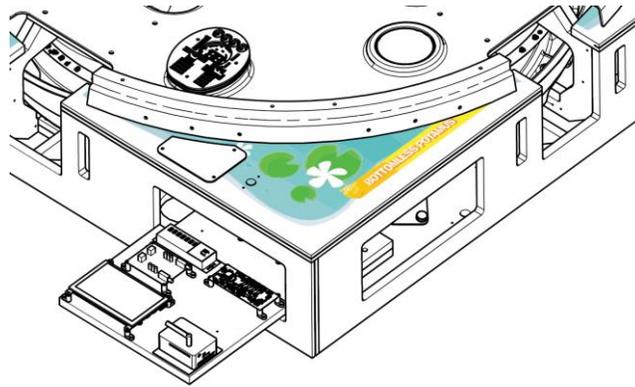
AAG-03-0069 to Latch PLY1
 AAG-03-0071 to Latch PLY2
 AAG-03-0070 to Latch PLY3
 AAG-03-0069 to Latch PLY4



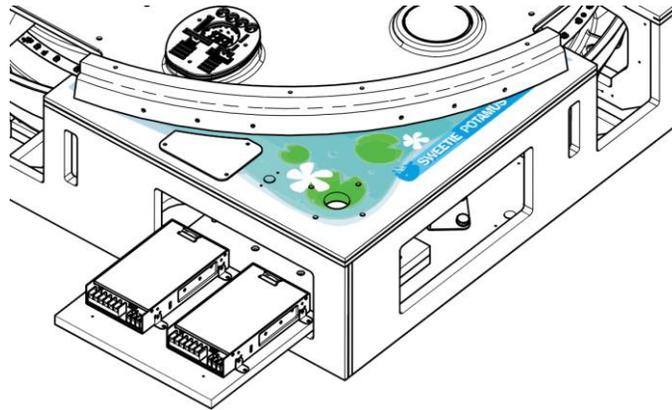
AAG-03-0102-01 &
 AAG-03-0076-01 to 24V
 Power supply

AAG-03-0079 to Ball Kicker PLY1
 AAG-03-0078 to Ball Kicker PLY2
 AAG-03-0077 to Ball Kicker PLY3
 AAG-03-0079 to Ball Kicker PLY4

Computer Tray



Power Supply Tray

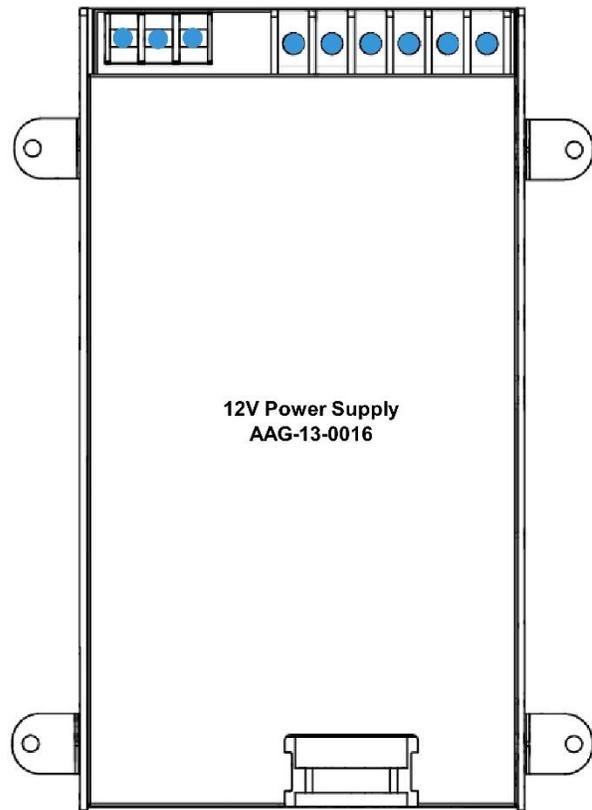
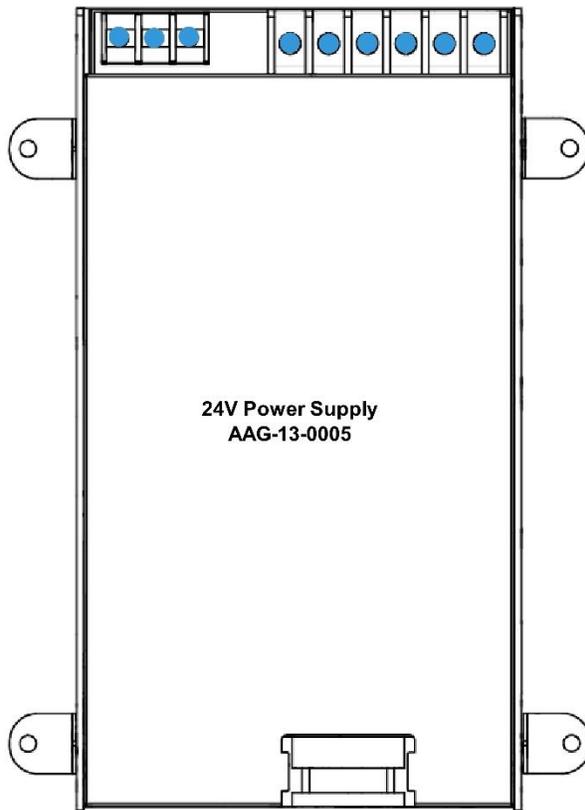


AAG-03-0080-01 to RGB Controller
AAG-03-0080-01 to I/O Board
AAG-03-0090-01 to Computer
AAG-03-0074-01 to I/O Board for Motor
AAG-03-0094 to Step Motor

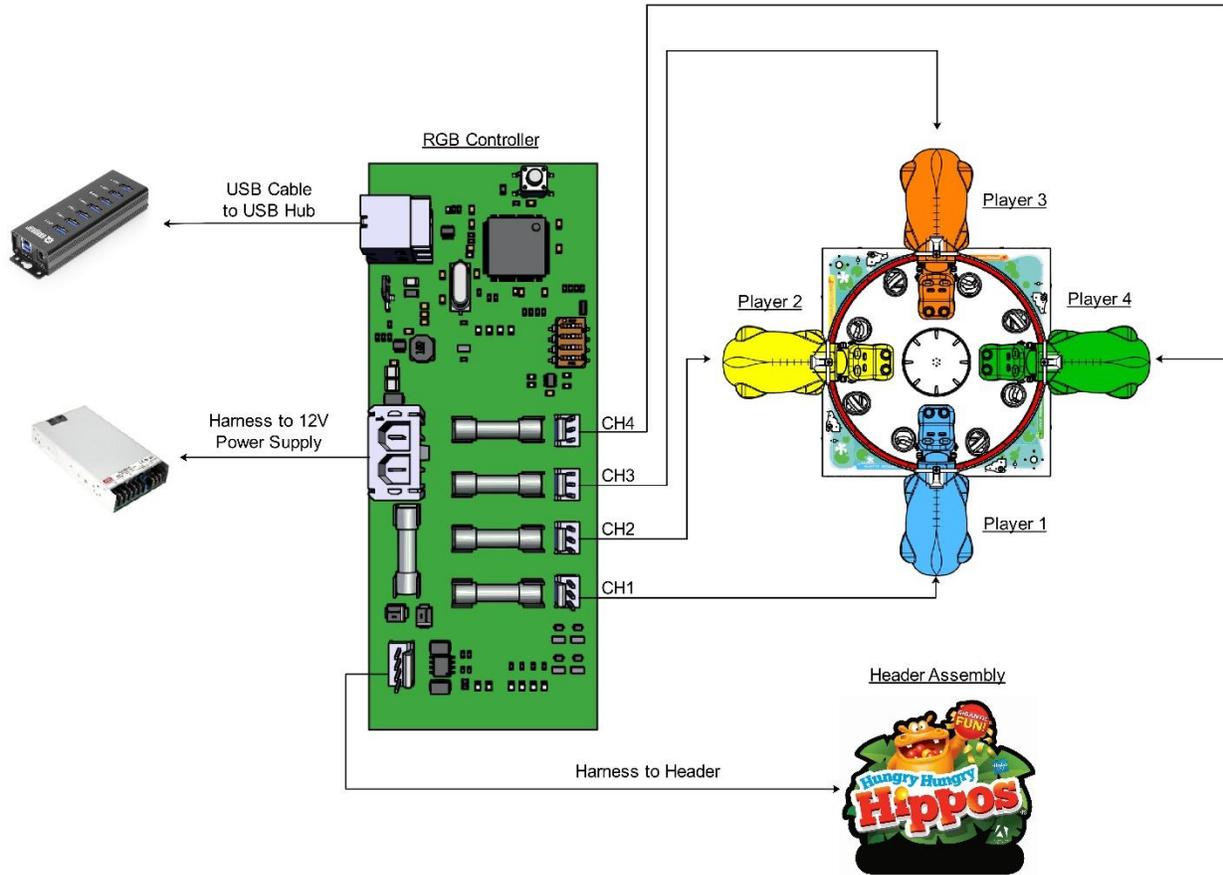
AAG-03-0081-01 to Power Bar

AAG-03-0076-01 to Solenoid Drive

AAG-03-0081-01 to Power Bar



RGB Schematics



Chapter 10 – Card Reader

Configure your Operator settings as seen in Chapter 5 - Operator Menu.

Embed System

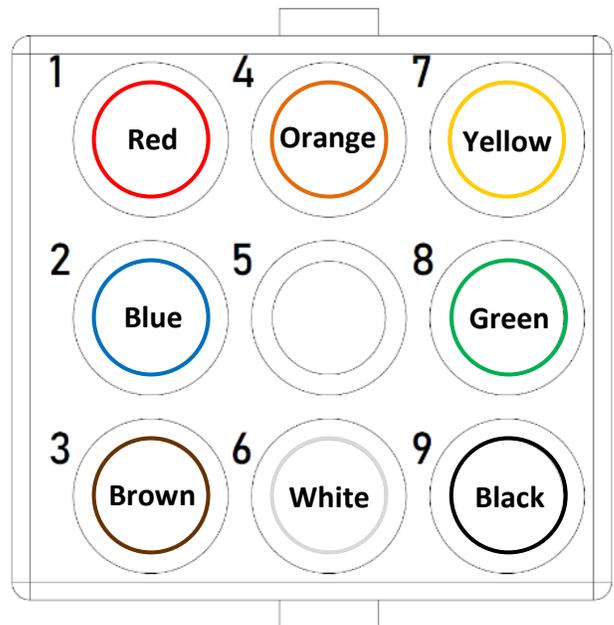
If you are using an Embed system, you need to connect your harnesses to Adrenaline Amusements I/O board & harnesses. You should refer to the Embed instructions manual for wiring pin-out.

The typical Embed settings are *Standard* except:

- Ticket Mech Type: Dumb DC
- Drive Polarity: Positive
- Notch Polarity: Negative
- Game ticket notch width = 6 (60ms)
- Game ticket notch spacing = 24 (240ms)
- Game Drive Threshold = 15 (1.5V or 1500mV)
- Drive Debounce = 40ms

Connectors Pinout

Pin number	Purpose	Color
Pin 1	12V	Red
Pin 2	Coin In	Blue
Pin 3	Ticket Meter	Brown
Pin 4	Coin Meter	Orange
Pin 5	Not connected	
Pin 6	Ticket Notch	White
Pin 7	Coin Inhibit	Yellow
Pin 8	Ticket Run	Green
Pin 9	Ground	Black



Limited Warranty Policies

Customers must provide the unit serial number when claiming any warranty request.

Adrenaline Amusements (AAGames) warrants this Arcade unit (Including accessories) against defects in material or workmanship as follows:

Electronic parts are subject to a 1-year warranty against manufacturing defect, all other parts are subject to a 3-month warranty against manufacturing defect.

We offer an advanced replacement program; the customer has 30 days from delivery date to return the defective parts at their fee or they will be charged automatically for the replacement parts. Parts will be shipped using standard service.

Improper servicing or abuse will VOID existing warranties.

All warranty request needs to be validated with our technical support department.

After the 1-year warranty, Adrenaline Amusements offers repairs & sales services options. Please contact the technical support department for information.

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