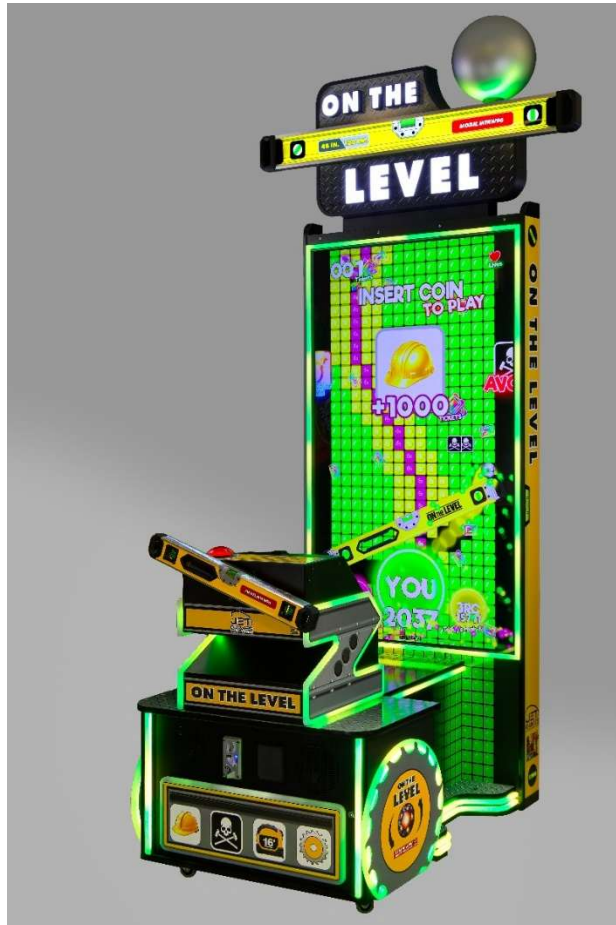


ON THE LEVEL

OWNERS AND SERVICE MANUAL



JET GAMES CORP

822 SOUTH NOVA ROAD, DAYTONA BEACH FL 32114

EMAIL: INFO@JETGAMESUSA.COM

TELE: 386-255-1599 OR 1-800-JET-GAMES

BASIC SAFETY INFORMATION

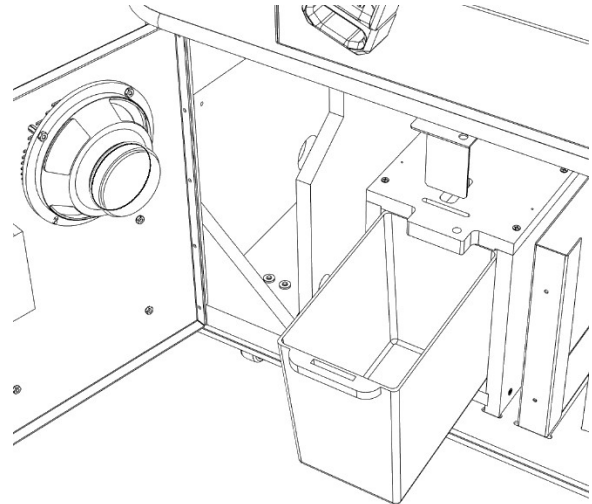
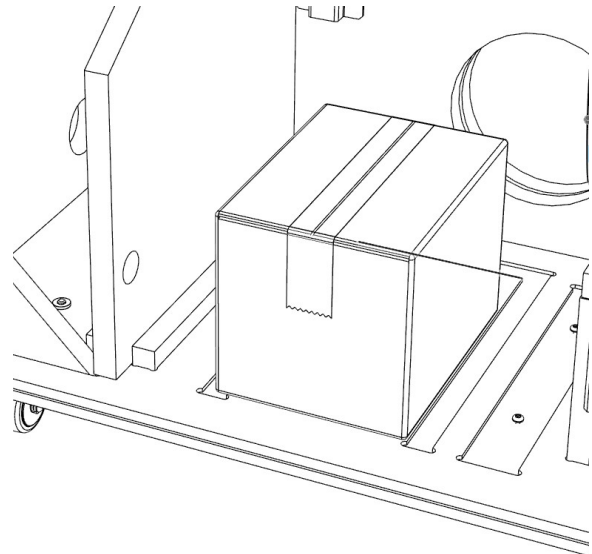
1. For use with A/C 50/60 hz. voltage only. Check the back of the unit for specific Voltage range.
2. Always turn off AC power and unplug the unit before servicing unless the specific service requires power to be on in the game.
3. This game is rated for INDOOR USE ONLY. It is not designed to be used in outside locations even if the outside location is under cover.
4. The game is provided with a 20ft long extension cord. Do not use any additional extension cords unless the additional cords rating either meets or exceeds the rating of the cord provided with the machine.
5. Do not disconnect or connect any game cabling power unless the AC power to the game is turned off.

GAME ASSEMBLY

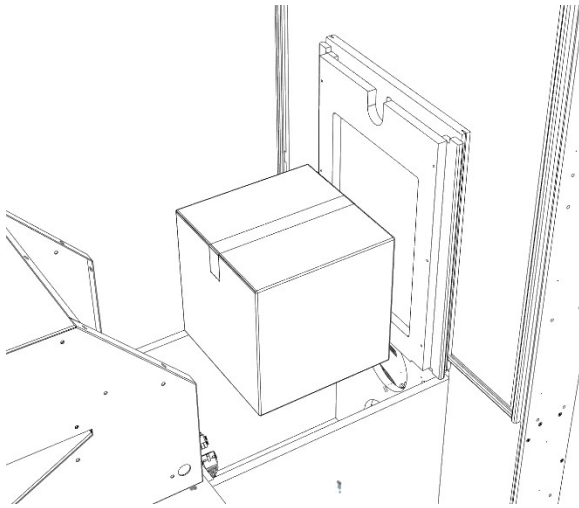
1. Carefully remove all components from the shipping packaging and make sure there is no visible damage. If there is damage, please take photos and contact your distributor immediately.

2. Open the front cabinet door and open up the Cash Box (if supplied) or remove the cardboard box that will contain the following. TV Remote-Control, Remote-control Keypad, Keypad batteries, Large Cam Lock Allen wrench, Marquee bolts and washers, Drywall style screw, Power Cord, and Game Keys.

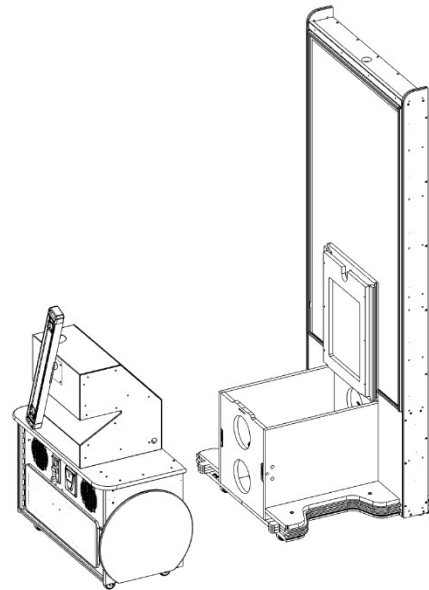
Insert the batteries into the Remote-control keypad at this time.



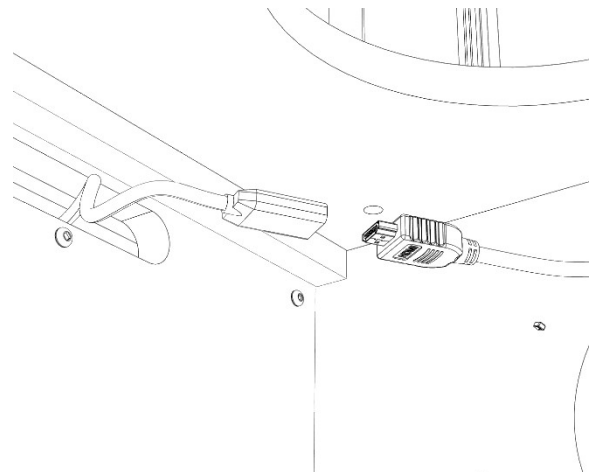
3. Remove the top access panel located in front of the monitor with the provided key and carefully rest it against the monitor glass. Take care not to damage the (2) LED power cables. Remove the Box with the Marquee Ball in it and set aside for marquee assembly.



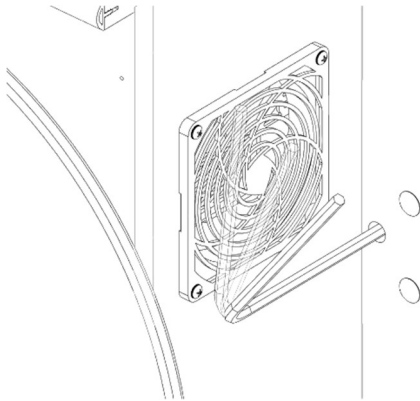
4. Slide the front and rear cabinets together. There are tabs in the rear cabinet that will slot into the front cabinet. As you assemble the two cabinets together, feed the loose connectors from the front cabinet into the rear cabinet through the access holes. Feed the HDMI cable from the rear cabinet into the front cabinet.



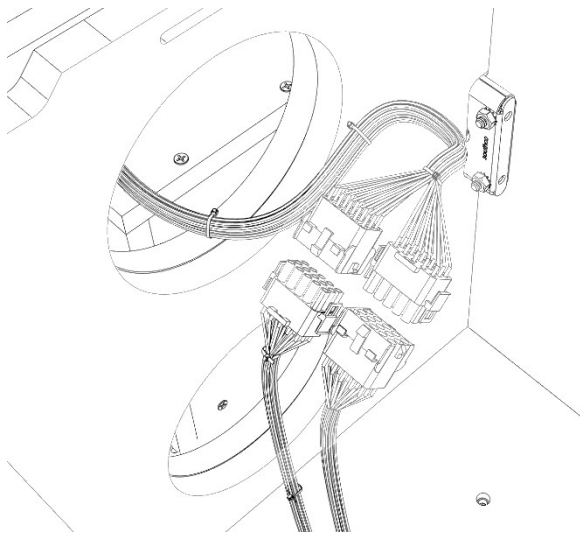
WARNING: INSTALL THE FRONT AND REAR CABINETS TOGETHER AT THIS TIME TO PROVIDE GAME STABILITY AND PREVENT THE REAR CABINET FROM TIPPING.



5. Once cabinets are fully together, insert the long Allen “L” handle wrench into the holes on the sides of the rear cabinet, rotating the Allen handle tool upwards to latch the 2 cabinets together. Make sure you’ve turned the wrench as far as it goes by hand.

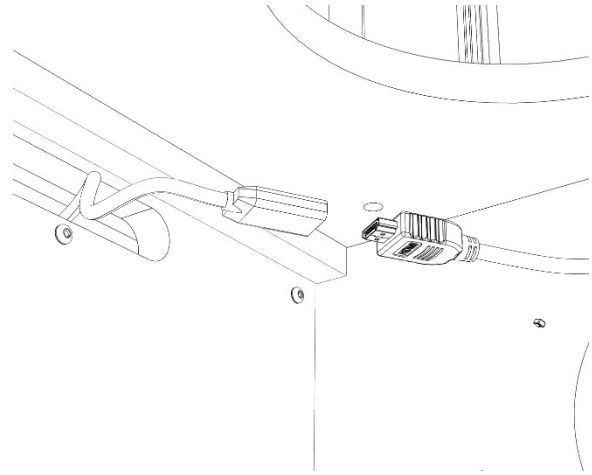


Fasten the connectors from the rear and front cabinets together. These are keyed connectors and can only go together the correct way.



6. Close and lock the access cover.

7. Open the front cabinet door. Find the **HDMI cable** from the rear cabinet and connect it to the **HDMI receptacle Cable**.



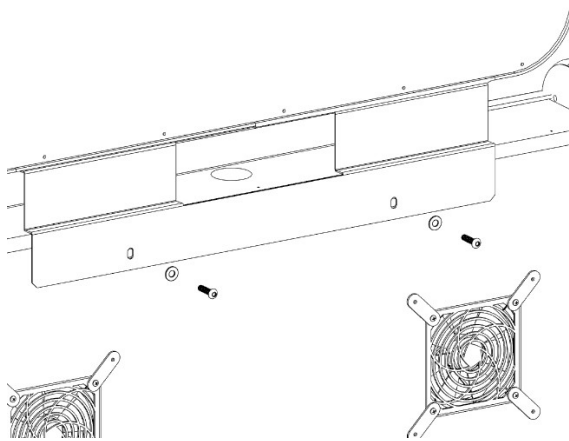
MARQUEE ASSEMBLY

1. The Marquee is pre-assembled and is ready to install.

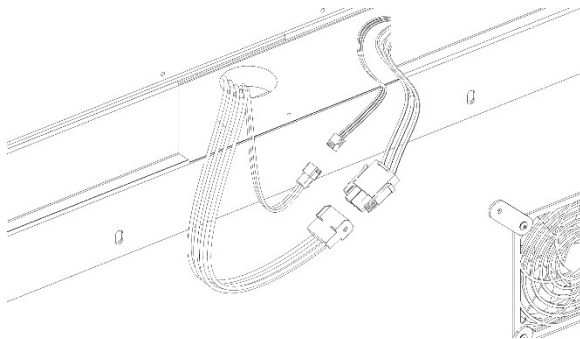
IT IS HIGHLY RECOMMENDED THAT 2 PEOPLE INSTALL THE MARQUEE FOR SAFETY REASONS. A stepstool or stepladder may be helpful for this step.

2. Lift the marquee up to the top of the game. **IMPORTANT!!** Make sure the front flange of the marquee mounting bracket slides under the top Monitor bezel frame edge.

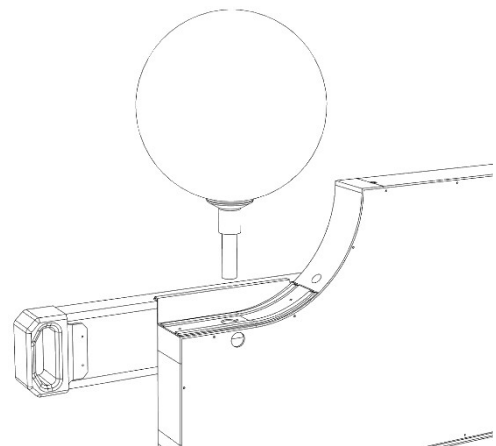
3. Make sure the Marquee is centered left and right. You will then see the marquee fastening holes on the back on the cabinet. Secure the Marquee to the cabinet using the supplied Allen Bolts and Washers.



4. Connect the (2) connectors from the top of the cabinet to the Marquee and tuck the excess harnessing into the mounting bracket.



5. Install the Ball into the top of the marquee. Line up the hole in the mounting bracket to the hole in the ball mounting shaft and secure with the provided drywall style screw.



POWER UP, SETUP, AND TESTING

1. **POWER UP** – Plug the game in and turn it on via the rocker switch on the power module on the rear of the game. **NOTE: The game is provided with a 20ft long extension cord. Do not use any additional extension cords unless the additional cords rating either meets or exceeds the rating of the cord provided with the machine.**

If the monitor does not show the attract mode after a brief period on time, refer to the troubleshooting section. The monitor needs to be set to **HDMI 1** to operate properly. Also, the HDMI cable might not have been connected to the game electronics during assembly.

2. **SET UP** - Locate the **RF Remote Control** on the front of the game. **Press the (5) Key on the keypad. This puts you into Setup mode.**

3. The keypad is set up to function as follows:

- (5), RETURN = Enter
- (8) = UP
- (2) = DOWN
- (4) = LEFT
- (6) = RIGHT

All other keys are non-functional. Use the keys to navigate to the setting you wish to change. When finished exit the menu.

Note: While in set-up mode, go to the Wi-Fi setting and add your network, and connect the game to the network. This will allow us to do software updates automatically to your game if we identify an issue that needs to be corrected.

NOTE: ANY SETTING YOU PUT IN WILL NOT BE CHANGES BY ANY UPDATES.

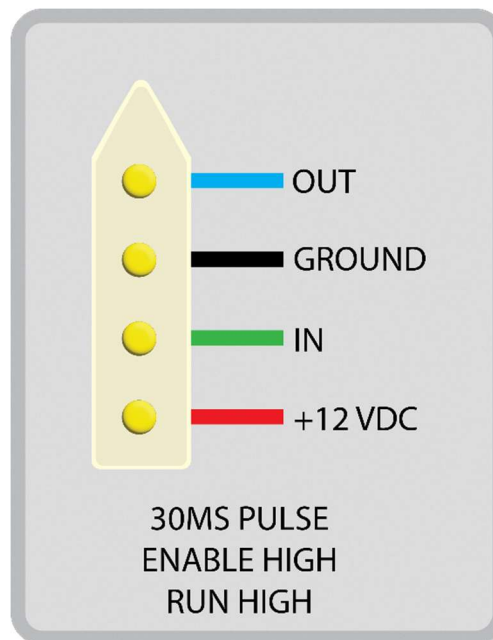
4. Make sure you set up the game for the proper number of coins, and ticket payouts appropriate for your location.

Note: Please use our default ticket payouts as the baseline and check your payout percentages before making any changes to these settings.

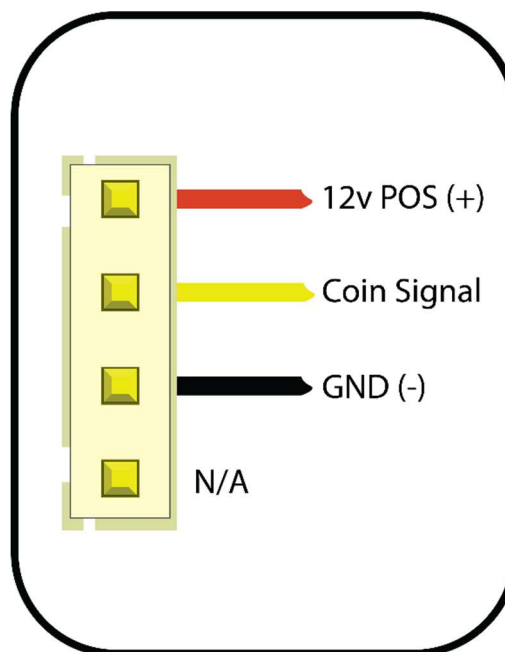
TICKET DISPENSER – CARD SYSTEM CONNECTIONS

The chart below shows the proper connections and settings for either Detronics or Entropy compatible ticket dispensers, or Intercard, Embed, or Amusement Connect card reading systems.

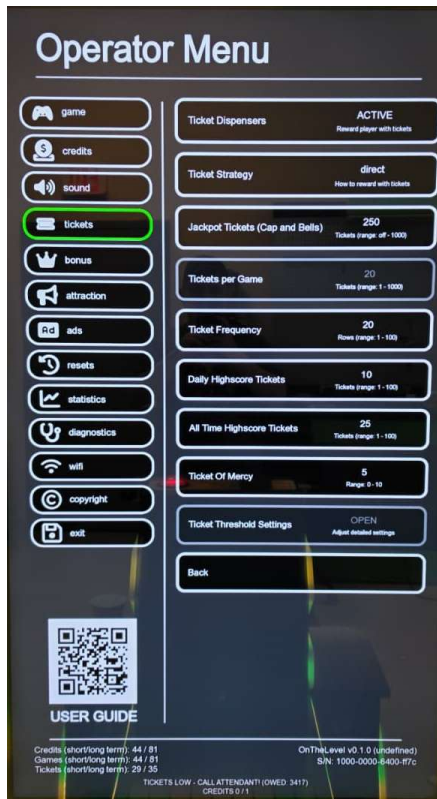
To change ticket payout, go into the Operator Menu (press 5 on numpad in cabinet), and scroll down to tickets.



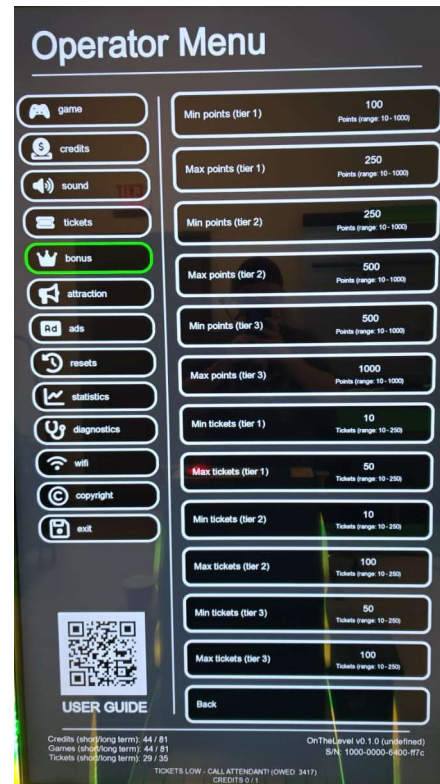
Ticket Mech Connections



Coin Mech Connections



You can also change the bonus ticket payouts within the same menu under Bonus.



6. TESTING – After getting everything set up, play a few games to make sure the coin up or card swipe works properly, and also that the ticket dispenser is dispensing correctly, or card system is registering the proper number of tickets to the accounting system.

Also check to see that the attract mode and game volumes are set properly for the environment in your location.

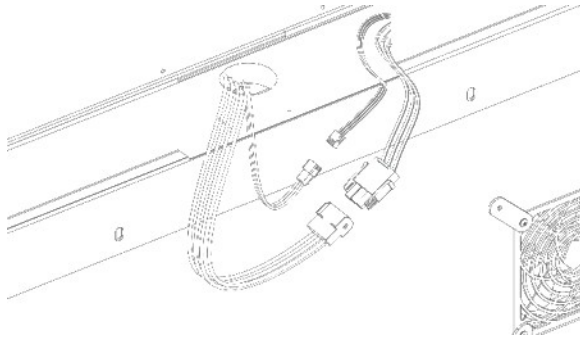
MARQUEE, MONITOR COVER GLASS, AND MONITOR REMOVAL AND SERVICING.

NOTE: THE FOLLOWING OPERATIONS REQUIRE 2 TECHNICIANS DUE TO WEIGHT AND SIZE. ALSO, USING 2

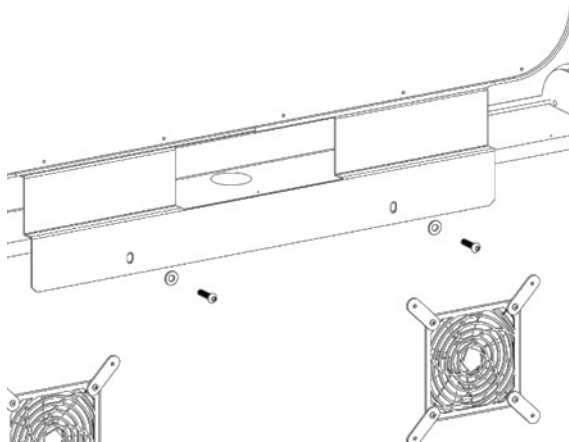
**TECHNICIANS WILL MAKE THESE
PROCEDURES MUCH QUICKER.**

REMOVE THE MARQUEE

1. Using a foot stool or ladder, remove the (2) connectors from the marquee to the game.



2. Remove the (2) allen head bolts and washers that fasten the marquee to the main cabinet.



3. Carefully Remove the Marquee from the main cabinet.

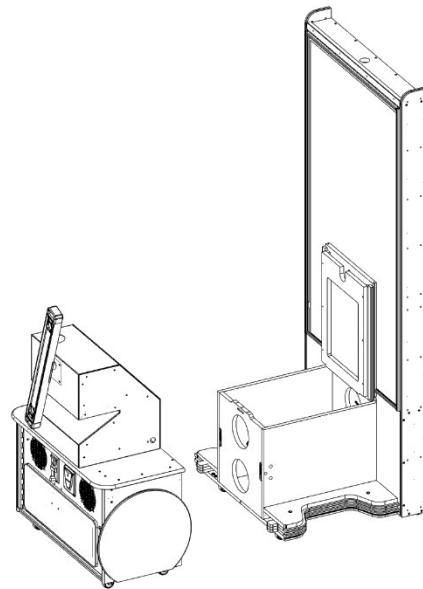
REMOVE THE MONITOR COVER GLASS

1. Remove the Mid Cabinet Access Cover with a key. Remove the LED Connectors and remove the cover from the game.

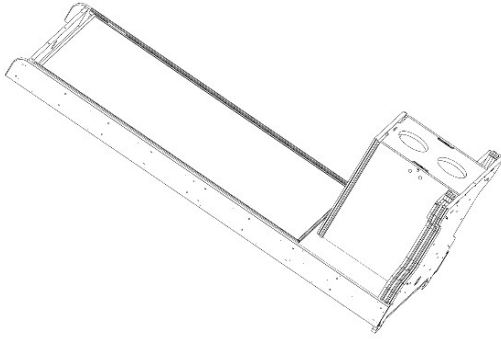
2. Open the front cabinet door and remove the HDMI Connector from the back cabinet to the HDMI plug connector and remove both (15) pin connectors that run from the rear to the front cabinet.

3. Unlatch the front and rear cabinets from each other and set the front cabinet to the side by rolling it into a safe location.

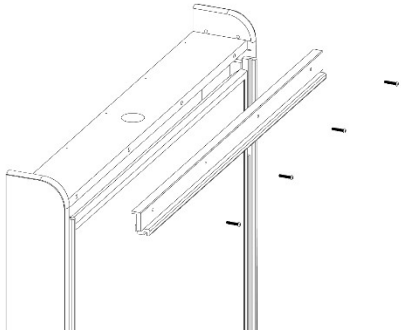
**WARNING: THE REAR CABINET IS TOP
HEAVY WHEN NOT CONNECTED TO THE
REAR CABINET. EXERCISE CAUTION
WHEN MOVING THE REAR CABINET TO
AVOID TIPPING.**



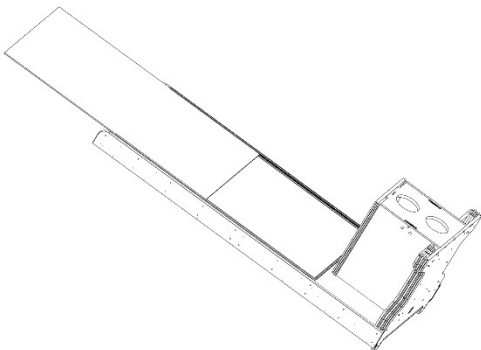
4. With 2 Technicians using a sawhorse or similar support, tip the top of the rear cabinet backwards as illustrated onto the sawhorse. Be sure it is secure and will not move.



5. Remove The upper Monitor bezel by removing the (4) Allen screws as illustrated. Remove the Bezel and **DISCONNECT THE LED CONNECTOR PLUG**. Set the upper monitor bezel to the side.



6. Using Latex Gloves, remove the monitor cover glass by pulling and sliding it straight to the top of the cabinet and out



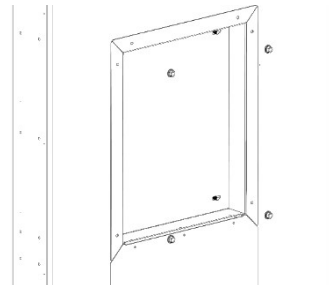
MONITOR REMOVAL

1. Set the cabinet back up onto its caster wheels.

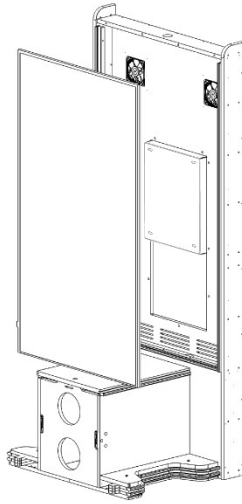
Open the monitor access door on the back of the cabinet by removing the (4) Allen bolts. Lift up the cover and hold it in place with the swing latch. Remove the power cord and the HDMI cable.

2. Above the access door, you will see the (4) mounting nuts that hold the Monitor into the cabinet.

Have one technician stand in front of the monitor, and the other technician should remove the (4) mounting bolts.



3. Have the technician pull the monitor straight out of the rear cabinet assembly.



NOTE: if you are replacing the monitor, remove the (4) mounting studs from the original monitor and install them into the new monitor.

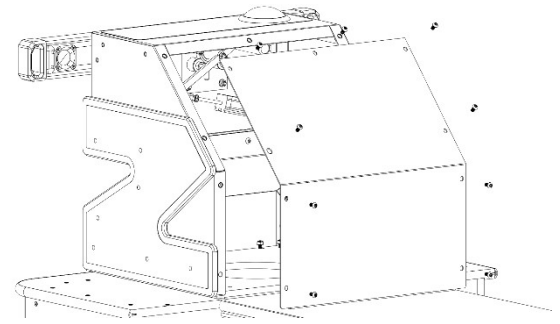
REASSEMBLE IN REVERSE ORDER. **Do not forget to reattach the upper LED cable and connect the HDMI cable and Power cord to the monitor.**

LINEAR SENSOR, PLASTIC STOPPER, AND LEVEL ASSEMBLY REPLACEMENT

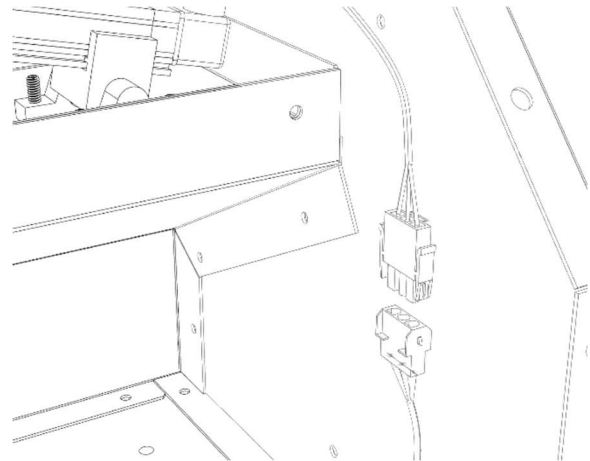
NOTE: TURN OFF POWER TO THE GAME BEFORE PROCEEDING.

LINEAR SENSOR REMOVAL

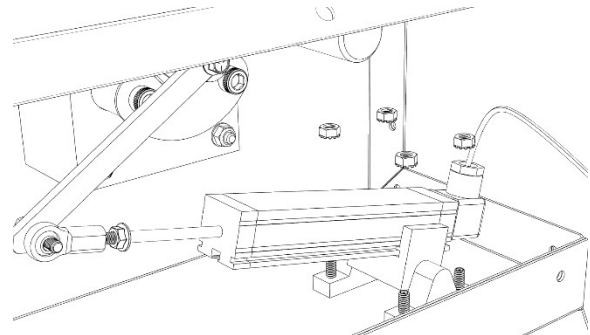
1. Remove the (9) Allen Head Bolts from the rear cover of the Upper Control Cabinet.



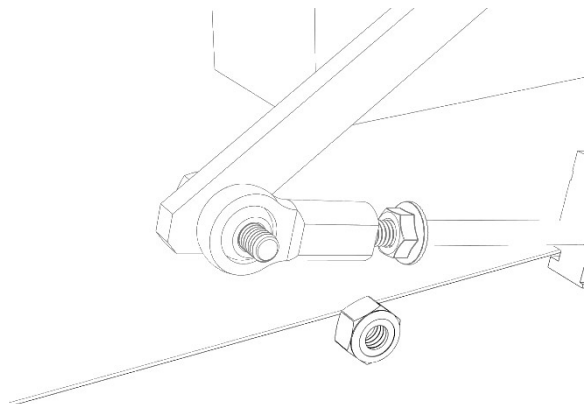
2. Turn off power to the game and disconnect the sensor at the connector.



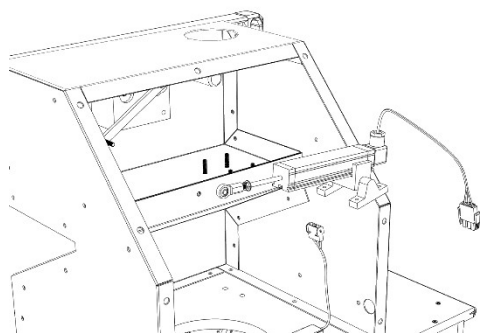
3. Remove the (4) 1/4-20 hex nuts.



4. Remove the Rod End Coupler from the control arm on the sensor.



5. Remove the unit from the game.



**ASSEMBLY IS IN THE REVERSE ORDER.
BE SURE THAT ALL FASTENERS ARE
TIGHTENED CORRECTLY.**

**NOTE: AFTER SENSOR REPLACEMENT,
THE SENSOR MUST BE RECALIBRATED IN
THE GAME FOR THE GAME TO OPERATE
PROPERLY. FAILURE TO DO SO COULD
AFFECT GAME EARNINGS.**

Calibrate the sensor as follows:

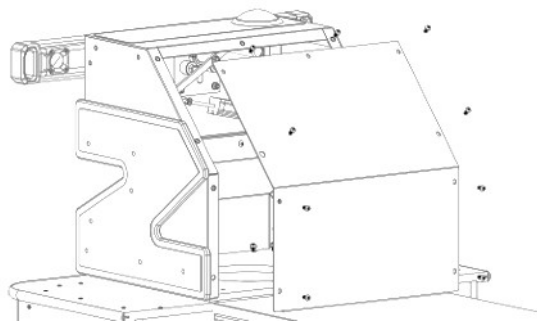
1. Power the game back on and enter programming mode.

2. Scroll down and enter the DIAGNOSTICS section, then scroll down to the BAR TEST.

3. Follow the BAR TEST instructions, exit the programming mode and test, to make sure the level on the screen moves fully from side to side and that the control level and level on the screen are both equally level when in the center position.

PLASTIC STOPPER

1. Turn off power to the game.
2. Remove the (9) Allen Head Bolts from the rear cover of the Upper Control Cabinet.



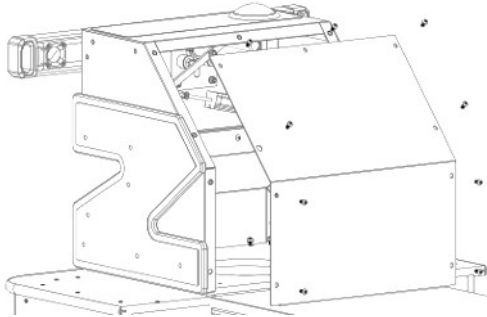
3. Remove Allen bolts with a 5/16" Tee Handle allen wrench, remove the fasteners, bushing brace, and plastic stops.

ASSEMBLY IS IN THE REVERSE ORDER.

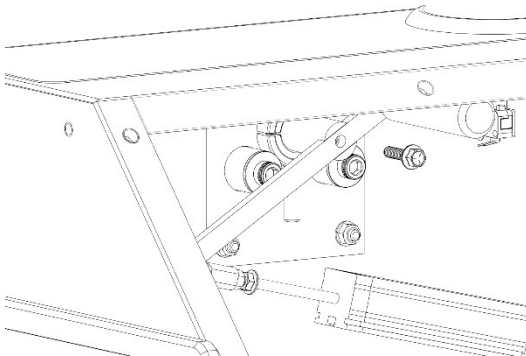
LEVEL ASSEMBLY REPLACEMENT (and Shaft Bearing Service)

**NOTE: TURN OFF POWER TO THE GAME
BEFORE PROCEEDING.**

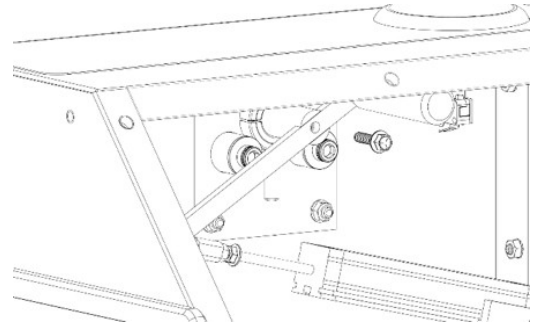
1. Remove the (9) Allen Head Bolts from the rear cover of the Upper Control Cabinet.



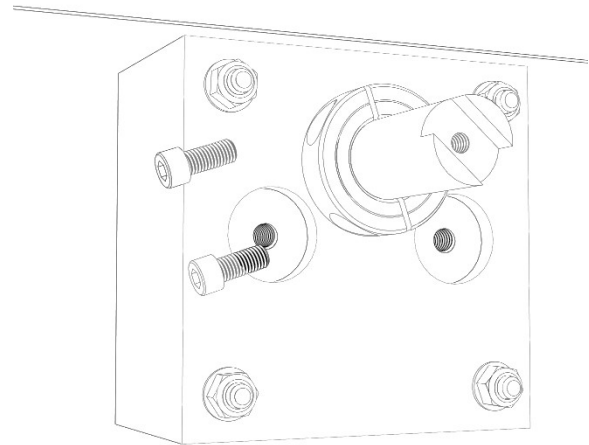
2. Remove the pivot bar from the Level shaft by removing the (1) 1/4-20 flanged hex bolt. Let the pivot bar sit on top of the sensor.



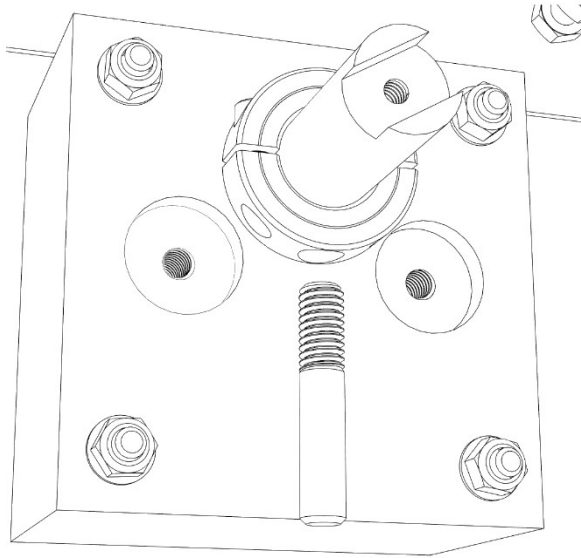
3. Remove the Plastic Stopper Allen Bolts with a 5/16" Tee Handle Allen Wrench, remove the Fasteners, bushing brace, and plastic stops.



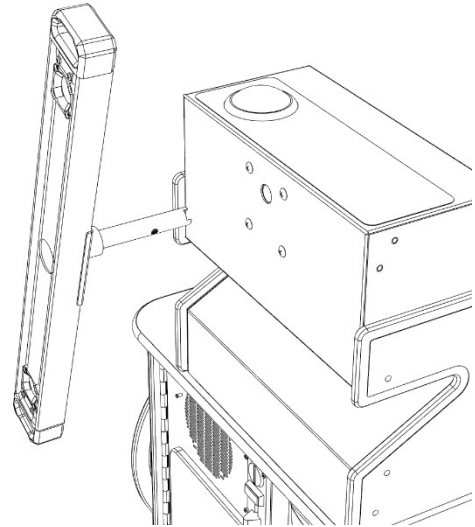
4. Rotate the Level to gain access to the Level Shaft collar screws on both collars. Loosen the (2) collar screws on each collar with a 3/16" Allen Wrench.



5. Remove the (2) 3/8" Stopper pins with a flat blade screwdriver and then slide the (2) collars from the Level Shaft.

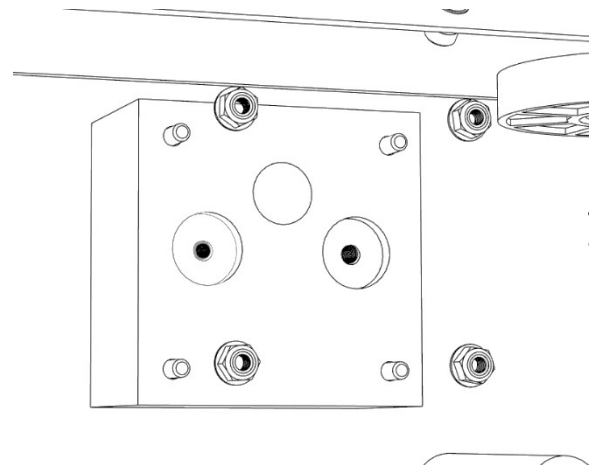


through the front of the game.



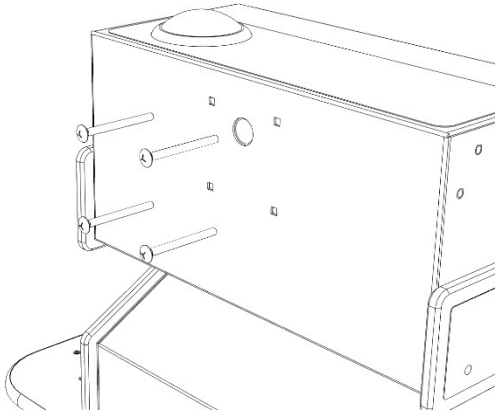
INSPECT THE NEEDLE ROLLER BEARINGS VISUALLY TO BE SURE THERE IS NO EXCESSIVE WEAR. If excessive wear is found, replace the bearings as follows:

1. Remove the Main Bearing Assembly By removing the (4) 1/4-20 Nylock nuts from the rear of the bearing.



6. Extract the Level Assembly from the Main Bearing Assembly by pulling it out

2. Remove the (4) ¼”-20 Carriage Bolts from the front of the pedestal assembly.



3. Pull the Needle Roller Bearings out of the Main Bearing Assembly and replace.

**ASSEMBLY IS IN THE REVERSE ORDER.
BE SURE THAT ALL FASTENERS ARE
TIGHTENED CORRECTLY.**

**NOTE: AFTER SENSOR REPLACEMENT,
THE SENSOR MUST BE RECALIBRATED IN
THE GAME FOR THE GAME TO OPERATE
PROPERLY. FAILURE TO DO SO COULD
AFFECT GAME EARNINGS.**

**NOTE: AFTER SENSOR REPLACEMENT,
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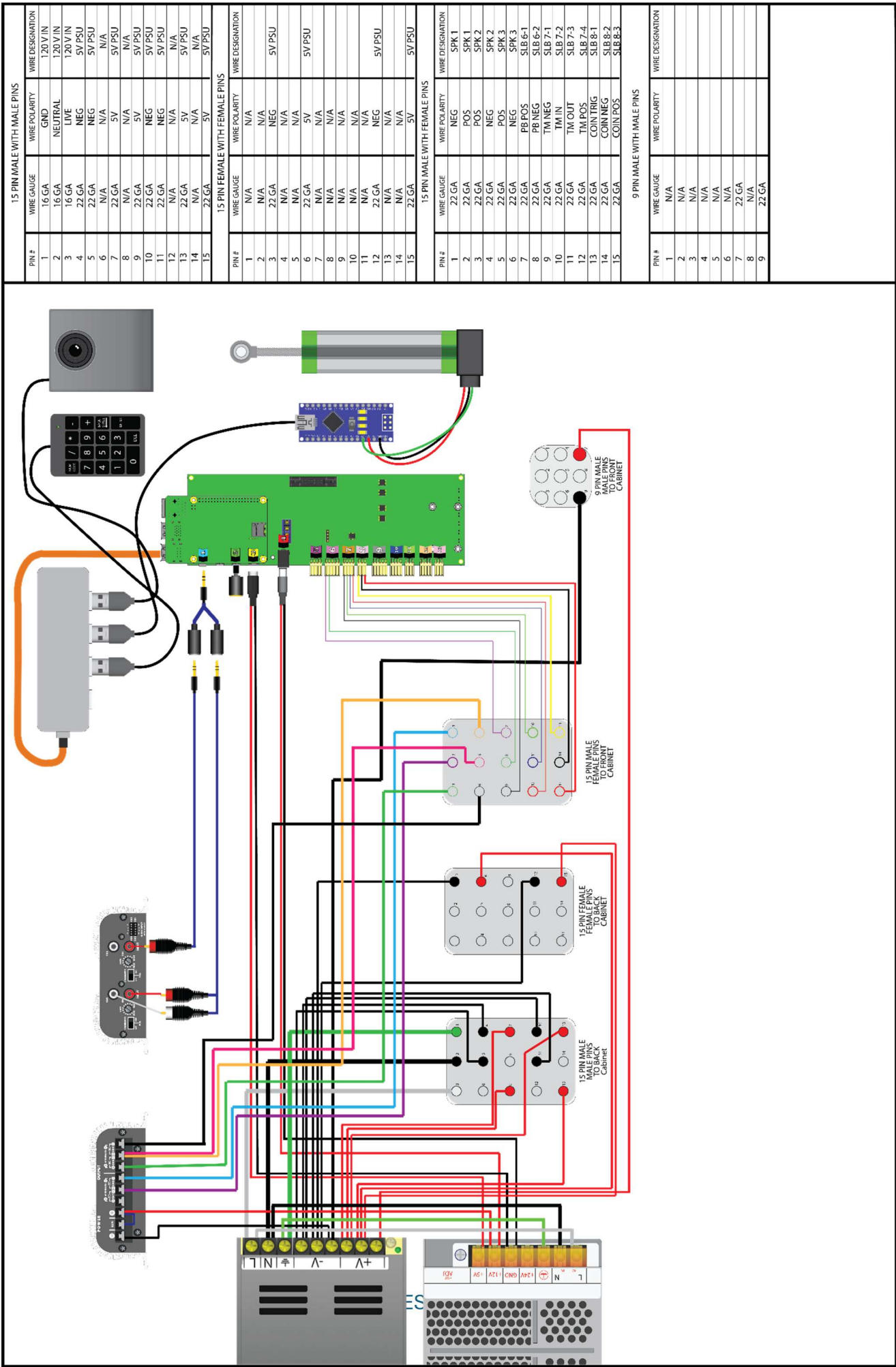
Calibrate the sensor as follows:

1. Power the game back on and enter programming mode.

2. Scroll down and enter the DIAGNOSTICS section, then scroll down to the BAR TEST.

3. Follow the BAR TEST instructions, exit the programming mode and test.

SYMPTOM	POSSIBLE CAUSE	CORRECTION
No power to game	Harnessing between cabinets not connected Main Electronics bad of not connected properly Power Switch off, Main fuse blown.	Check connections for all harnesses Check Harnessing or Electronics for proper function.
Monitor not or working properly	Monitor Power Cord or HDMI not connected Monitor not set to HDMI 1 input Monitor Defective	Check connections at rear of monitor or Main Board Check settings on monitor with remote. Replace Monitor
Level on screen not working properly	Sensor Harness not connected Check Arduino board for power LED Linear Sensor Bad Level not calibrated correctly	Check and re-connect if necessary If no LED, then replace the board/cable assembly Check sensor is connected and test in diagnostics re-calibrates level in diagnostics
Red Push Button will not register initials	Possible bad micro switch or not snapped in	Check switch function and proper installation to housing
Marquee Not Lit up	Connections to marquee from main cabinet	Check Connections.
Coin Input not working or accurate	Improper settings on Coin Mech Improper settings or connections to card reader Game not programmed properly	Check settings and connections Check and repair or correct as necessary Check settings in programming mode
Ticket Payout not working or accurate	Improper settings on ticket dispenser Improper settings or connections to card reader Game not programmed properly	Check connection and switches (if provided) Check and repair or correct as necessary Check settings in programming mode
Manual Level not working correctly	Mechanical part failure	Open up rear control cabinet cover and check for issues

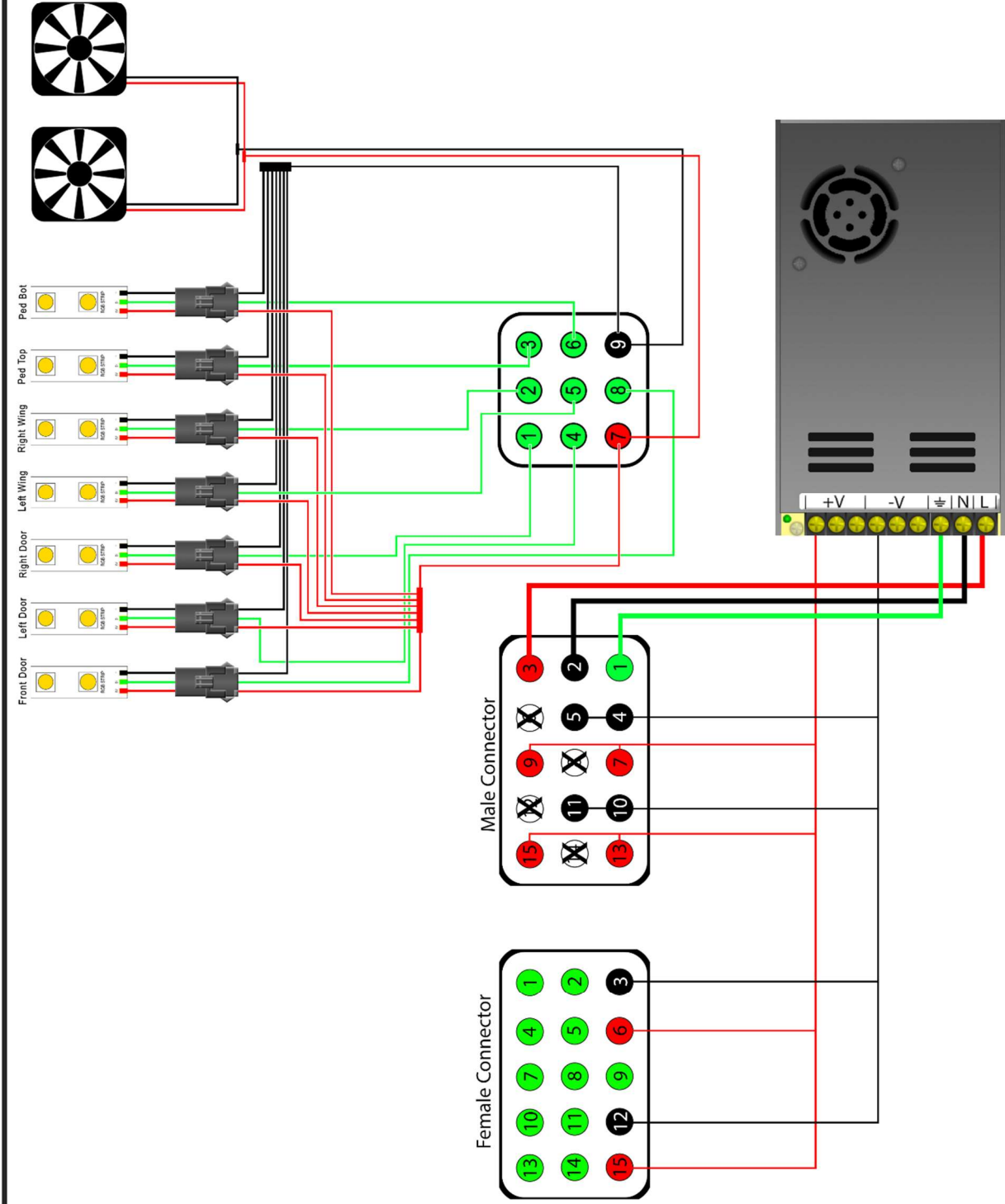


15 PIN MALE WITH MALE PINS			
PIN #	WIRE GAUGE	WIRE POLARITY	WIRE DESIGNATION
1	16 GA	GND	120V IN
2	16 GA	NEUTRAL	120V IN
3	16 GA	LIVE	120V IN
4	22 GA	NEG	5V PSU
5	22 GA	NEG	5V PSU
6	N/A	N/A	N/A
7	22 GA	5V	5V PSU
8	N/A	N/A	N/A
9	22 GA	5V	5V PSU
10	22 GA	NEG	5V PSU
11	22 GA	NEG	5V PSU
12	N/A	N/A	N/A
13	22 GA	5V	5V PSU
14	N/A	N/A	N/A
15	22 GA	5V	5V PSU

15 PIN FEMALE WITH FEMALE PINS			
PIN #	WIRE GAUGE	WIRE POLARITY	WIRE DESIGNATION
1	N/A	N/A	
2	N/A	N/A	
3	22 GA	NEG	5V PSU
4	N/A	N/A	
5	N/A	N/A	
6	22 GA	5V	5V PSU
7	N/A	N/A	
8	N/A	N/A	
9	N/A	N/A	
10	N/A	N/A	
11	N/A	N/A	
12	22 GA	NEG	5V PSU
13	N/A	N/A	
14	N/A	N/A	
15	22 GA	5V	5V PSU

15 PIN MALE WITH FEMALE PINS			
PIN #	WIRE GAUGE	WIRE POLARITY	WIRE DESIGNATION
1	22 GA	NEG	SPK 1
2	22 GA	POS	SPK 1
3	22 GA	POS	SPK 2
4	22 GA	NEG	SPK 2
5	22 GA	POS	SPK 3
6	22 GA	NEG	SPK 3
7	22 GA	PB POS	SLB 6-1
8	22 GA	PB NEG	SLB 6-2
9	22 GA	TM NEG	SLB 7-1
10	22 GA	TM IN	SLB 7-2
11	22 GA	TM OUT	SLB 7-3
12	22 GA	TM POS	SLB 7-4
13	22 GA	COIN TRIG	SLB 8-1
14	22 GA	COIN NEG	SLB 8-2
15	22 GA	COIN POS	SLB 8-3

9 PIN MALE WITH MALE PINS			
PIN #	WIRE GAUGE	WIRE POLARITY	WIRE DESIGNATION
1	N/A		
2	N/A		
3	N/A		
4	N/A		
5	N/A		
6	N/A		
7	22 GA		
8	N/A		
9	22 GA		



** VIEWED FROM WIRED SIDE OF CONNECTORS**

FEMALE CONNECTOR HOUSING AND PINS			
#	WIRE GAUGE	VOLTAGE	DESIGNATION
1	16 AWG	120VAC G	GAME POWER
2	16 AWG	120VAC H	GAME POWER
3	16 AWG	120VAC N	GAME POWER
4	22 AWG	GND	HBRIDGE BOTTOM
5	22 AWG	GND	TV RIGHT
6	22 AWG	5V	TV RIGHT
7	22 AWG	5V	HBRIDGE BOTTOM
8	22 AWG	GND	TV LEFT
9	22 AWG	5V	TV LEFT
10	22 AWG	GND	HBRIDGE TOP
11	22 AWG	GND	TV BOTTOM
12	22 AWG	5V	TV BOTTOM
13	22 AWG	5V	HBRIDGE TOP
14	22 AWG	GND	TV TOP
15	22 AWG	5V	TV TOP

MALE CONNECTOR HOUSING AND PINS			
#	WIRE GAUGE	VOLTAGE	DESIGNATION
1	22 AWG	SIGNAL	HBRIDGE TOP LEFT
2	22 AWG	SIGNAL	HBRIDGE TOP RIGHT
3	22 AWG	GND	MARQUE EDGE AND BACK
4	22 AWG	SIGNAL	TV RIGHT
5	22 AWG	SIGNAL	HBRIDGE BOTTOM RIGHT
6	22 AWG	5V	MARQUE EDGE AND BACK
7	22 AWG	SIGNAL	TV LEFT
8	22 AWG	SIGNAL	HBRIDGE BOTTOM RIGHT
9	22 AWG	SIGNAL	MARQUE EDGE
10	22 AWG	SIGNAL	TV BOTTOM
11	22 AWG	SIGNAL	HBRIDGE BOTTOM LEFT
12	22 AWG	GND	FANS
13	22 AWG	SIGNAL	TV TOP
14	22 AWG	SIGNAL	HBRIDGE BOTTOM LEFT
15	22 AWG	12V	FANS

FRONT CABINET FEMALE HARNESS			
#	WIRE GAUGE	VOLTAGE	DESIGNATION
1	22 AWG	SIGNAL	RIGHT DOOR
2	22 AWG	SIGNAL	RIGHT WING
3	22 AWG	SIGNAL	PED TOP
4	22 AWG	SIGNAL	LEFT DOOR
5	22 AWG	SIGNAL	LEFT WING
6	22 AWG	SIGNAL	PED BOT
7	16 AWG	5V	POWER
8	22 AWG	SIGNAL	FRONT DOOR
9	16 AWG	GND	GROUND

#	WIRE GAUGE	VOLTAGE	DESIGNATION
1	22 AWG	SIGNAL	RIGHT DOOR
2	22 AWG	SIGNAL	RIGHT WING
3	22 AWG	SIGNAL	PED TOP
4	22 AWG	SIGNAL	LEFT DOOR
5	22 AWG	SIGNAL	LEFT WING
6	22 AWG	SIGNAL	PED BOT
7	16 AWG	5V	POWER
8	22 AWG	SIGNAL	FRONT DOOR
9	16 AWG	GND	GROUND

FRONT CABINET WIRING HARNESS			
PIN #	WIRE GAUGE	WIRE VOLT	COLOR
1	22 AWG	SIGNAL	GREEN
2	22 AWG	SIGNAL	GREEN
3	22 AWG	SIGNAL	GREEN
4	22 AWG	SIGNAL	GREEN
5	22 AWG	SIGNAL	GREEN
6	22 AWG	SIGNAL	GREEN
7	16 AWG	5V	RED
8	22 AWG	SIGNAL	GREEN
9	16 AWG	GND	BLACK
FRONT CABINET WIRING HARNESS			
PIN #	WIRE GAUGE	WIRE VOLT	COLOR
1	22 AWG	GND	YELLOW
2	22 AWG	12V	WHITE
3	22 AWG	12V	BLACK
4	22 AWG	GND	GREEN
5	22 AWG	12V	PURPLE
6	22 AWG	GND	BLUE
7	22 AWG	GND	BLACK
8	22 AWG	12V	RED
9	22 AWG	GND	BLACK
10	22 AWG	SIGNAL	GREEN
11	22 AWG	SIGNAL	BLUE
12	22 AWG	12V	RED
13	22 AWG	12V	YELLOW
14	22 AWG	GND	BLACK
15	22 AWG	SIGNAL	RED

