

# SNOWBALL Toss



**Innovative Concepts in Entertainment, Inc.**  
1-716-759-0370 / [play@icegame.com](mailto:play@icegame.com) / [www.icegame.com](http://www.icegame.com)  
10123 Main Street, Clarence, NY 14031



# Table of Contents

|   |    |
|---|----|
| Safety, Warnings, and Power Requirements  | 3  |
| Marquee Setup                             | 4  |
| Game Controls and Meters                  | 7  |
| Automatic Game Settings                   |    |
| Program Options                           | 8  |
| Recommended Bonus Values                  | 9  |
| Error Codes                               | 10 |
| Troubleshooting and Technical Information |    |
| Tilt - Cheat Sensor                       | 10 |
| The Ball gate Assembly                    | 11 |
| Reset shelf                               | 13 |
| Graphics                                  | 14 |
| Warranty                                  | 16 |

## SAFETY AND WARNINGS BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION, OR DAMAGE TO THE ELECTRONICS.

**NOTE: THIS GAME IS INTENDED FOR INDOOR USE ONLY.**

DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY.

THIS GAME IS DESIGNED TO DISSIPATE STATIC ELECTRICITY THROUGH THE GROUNDING PLANE OF THE GAME. IF THE A.C. GROUND DOES NOT WORK, THE GAME COULD DISCHARGE STATIC ELECTRICITY THROUGH THE GAME CIRCUITRY, WHICH COULD CAUSE DAMAGE.

THE POWER SUPPLY IS NOT VOLTAGE ADJUSTABLE. TO OPERATE THE GAME AT VOLTAGES OTHER THAN THOSE IT WAS DESIGNED FOR. PLEASE CONTACT OUR SERVICE DEPARTMENT FOR VOLTAGE CONVERSION INFORMATION.

### WARNING

DO NOT remove any of the components on the main board (e.g. compact flash and eproms) while the game is powered on. This may cause permanent damage to the parts and the main board. Removing any main board component part while powered on will void the warranty.

ALWAYS REMOVE POWER TO THE GAME, BEFORE ATTEMPTING ANY SERVICE, UNLESS NEEDED FOR SPECIFIC TESTING. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SERIOUS INJURY TO YOURSELF OR OTHERS.

THIS GAME IS NOT SUITABLE FOR INSTALLATION IN AN AREA WHERE A WATER JET COULD BE USED.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## AC Power Information

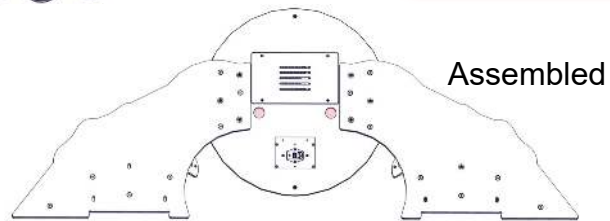
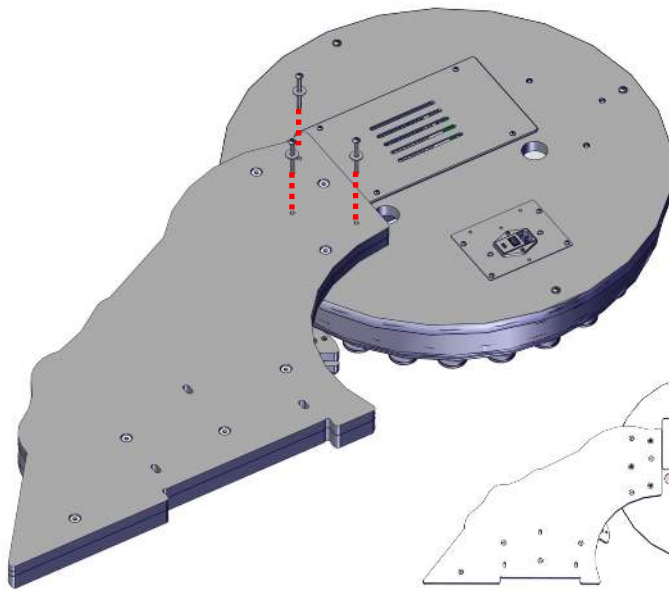
The games main fuse is accessed through the back of the game at the power mod. Above the power cord is a small panel that contains the main fuse.

The value of the fuse for 120 volt users is 3.5 AMPS at 250Volt type slow blow.

The value of the fuse for 230 users is 2.5 AMPS at 250Volt type slow blow.

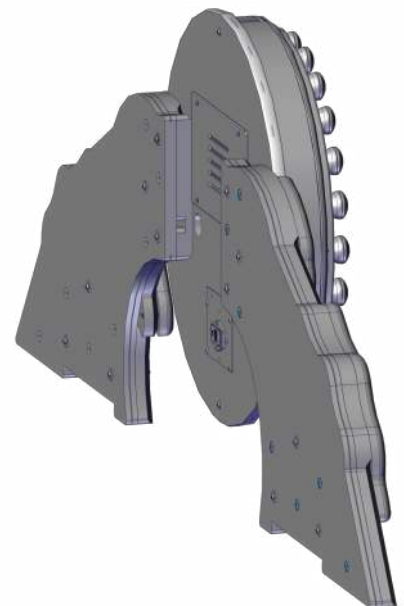
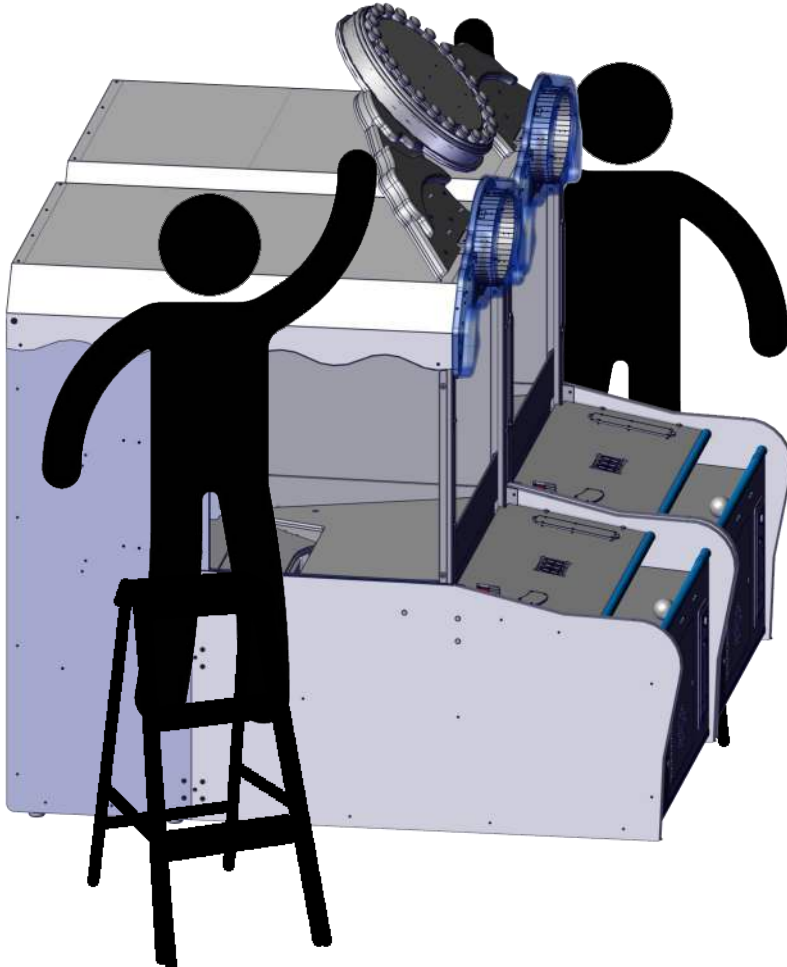
## Step 1:

Attach the supports arms to the marquee center with three AA6480 Allen bolts and AA6075 washers. Make sure to route the wire harness through the wire access hole. Connect the LED harness.



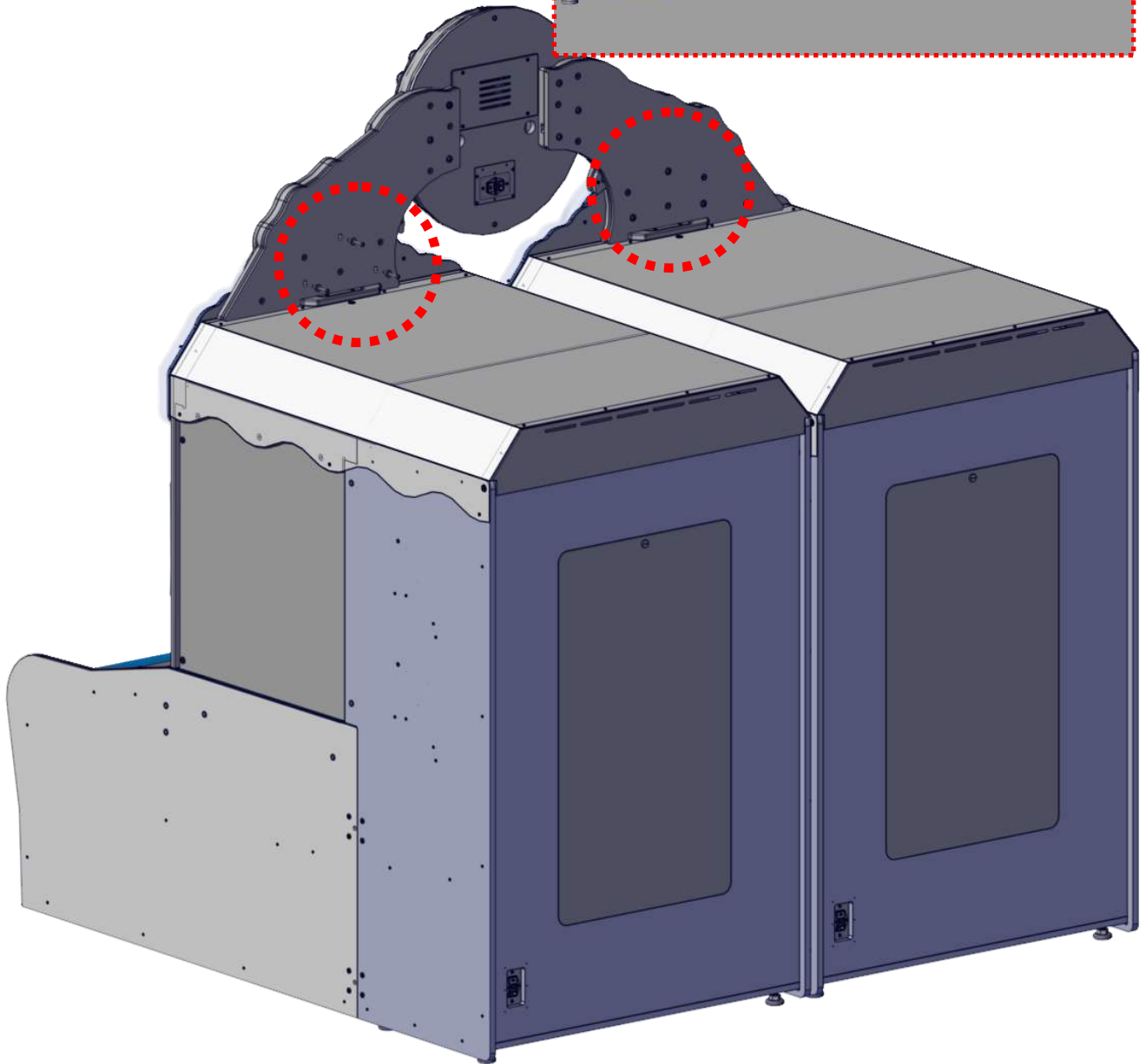
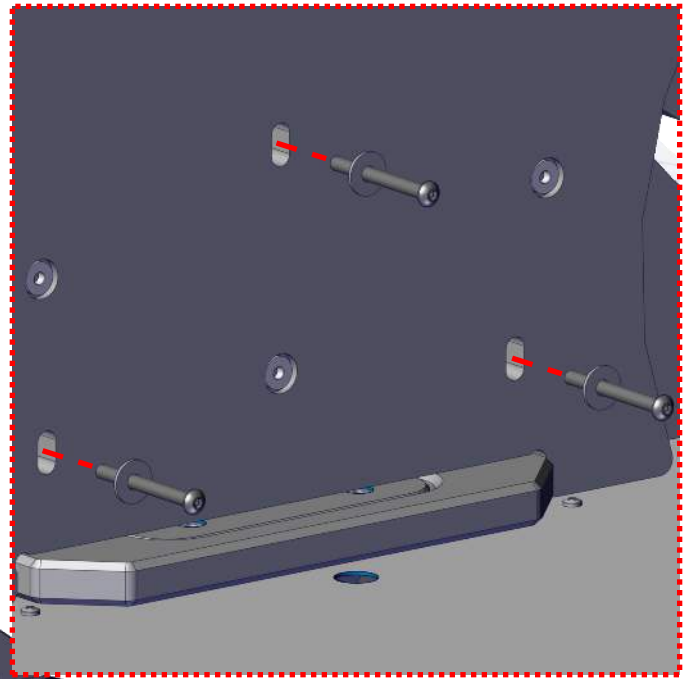
## Step 2:

Lift the marquee with a helper onto the top of two games pushed side by side.



### Step 3:

Secure the marquee to the cabinets using three AA6480 Allen bolts and AA6075 washers on each side..



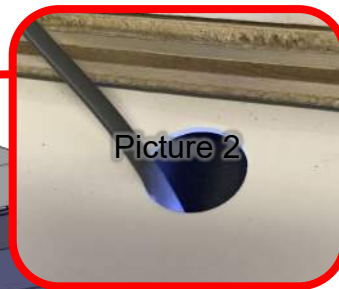
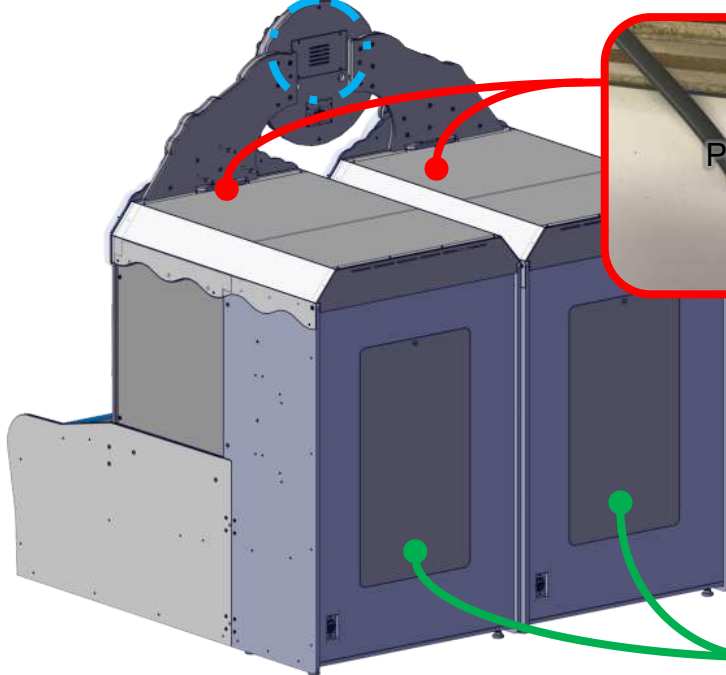
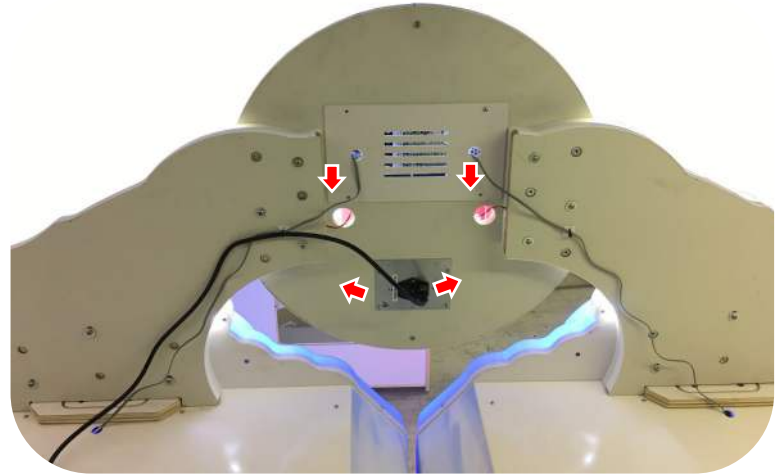
## Step 4:

Remove the marquee back cover by removing the four screws shown with the arrows. Insert both phone style cables through the back door and plug into the marquee board (picture 1). Then take the other end and insert it through the roof (picture 2). Secure the cable down the same side as the cheat sensor wiring at the front, on the right side (from the front of the cabinet).

Then plug the phone style cable into the main board (picture 3).



Picture 1



Picture 2



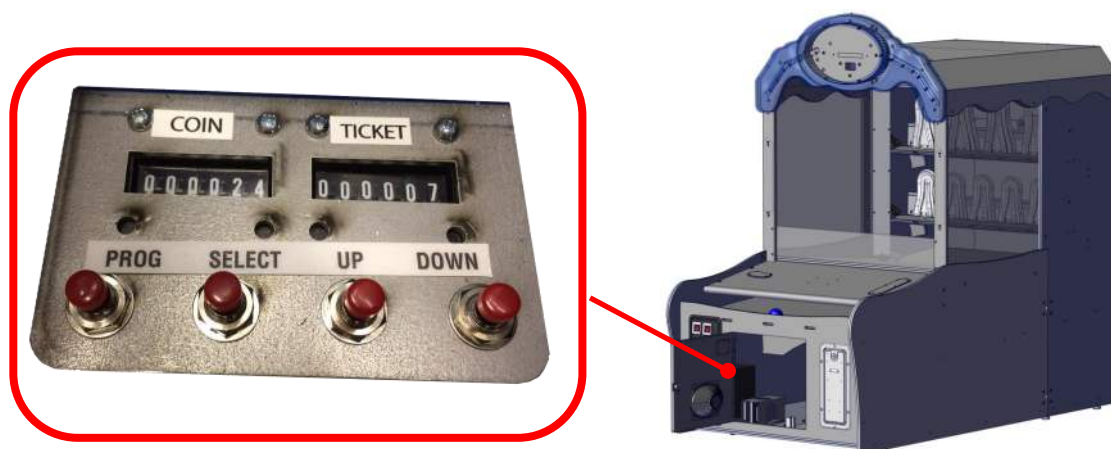
Picture 3

## Step 5:

You must change the game ID to different values. Open the front access door on each game and press the "PROG" button. Press the "SEL" button until your score shows 19. Then press "UP" button if the two games are not different values. One should be set to "1" and the other to "2". It is also recommended to set option 8 to the same (Bonus Tickets).

## Game controls and Meters

Located on the center door is the operators control panel. There you can quickly adjust the volume of the game by pressing the “UP” and “DOWN” push buttons. You can view how many coin pulses and tickets has been paid by viewing the meters.



To adjust the game’s programming, press the “PROG” button. Press the “SELECT” button to cycle through the different options.

To increase the option value press the button “UP”. Press the “DOWN” button to decrease the options’ value.

It is recommended to use our suggestive settings when configuring the game.

Please review the next few pages before determining your settings.

### Automatic Game Settings

You can use the game’s automatic game setting feature if you know your price of play.

When you power the game on, wait until the version number is displayed on the control panel. Press the “SELECT” button. 99 will be shown on the score display to indicate you are in this mode.

Press the “ADVANCE” button to select the number that equals the amount you will change.

0 = leave alone, don’t make any changes

1 = Special settings for CEC

2 = \$1.00

3 = Free Game – No Tickets

4 = Special settings for PPP

5 = 50 Cents

6 = \$1.50

7 = \$2.00

Press the “SELECT” button to Exit. Power cycle to game for the settings to take effect.

## Programming Options for Snowball



| Option |  | Default | Min | Max | Inc | Short Description                 |
|--------|--|---------|-----|-----|-----|-----------------------------------|
| 0      | Game Volume<br>This option adjusts the general game sounds.  | 5       | 0   | 7   | 1   | Game Volume                       |
| 1      | Music Volume<br>This option adjusts the music in the game and attract mode.  | 3       | 0   | 7   | 1   | Music Volume                      |
| 2      | Coin 1<br>How many pulses to start your game.  | 1       | 0   | 10  | 1   | Cost of Game                      |
| 3      | Coin 2<br>This pulse is equal to the cost of the game. Use as a multiplier for credits.  | 1       | 0   | 10  | 1   | # of Coin 1's                     |
| 4      | DBV<br>This pulse is equal to the cost of the game. Use as a multiplier for credits.   | 4       | 0   | 10  | 1   | # of Coin 1's                     |
| 5      | Attract Time<br>This options determines how much time to be idle between its attract time.                                       | 0       | 0   | 90  | 1   | Attract time                      |
| 6      | Red Seconds<br>During the game you can determine how much time to wait before lighting a clown red for the double point feature. | 3       | 1   | 10  | 1   | Seconds between Red lite Attempts |
| 7      | Bonus Score<br>How much a player must score before achieving the bonus cloud.  | 500     | 10  | 999 | 10  | Bonus Target Score                |
| 8      | Bonus Tickets<br>How many tickets you win when you win the bonus cloud.  | 100     | 0   | 999 | 25  | Bonus Ticket Value                |
| 9      | Game Time<br>How long the game lasts.  | 20      | 10  | 30  | 1   | Time for Game Play                |
| 10     | Score to Increment<br>Once a bonus is achieved you can use this option to increment the bonus by this options' value.            | 50      | 0   | 100 | 10  | Score Increase if Bonus Achieved  |
| 11     | Games to Dec<br>This value determines how many games played without a bonus win before decreasing the points needed to win.      | 1       | 0   | 50  | 10  | Games Lost before Bonus Score - 1 |

Options continued on next page.....



- 12 Score 0 - 40 1 0 20 1 Tickets for Zone  
Sets the amount of tickets to win when 0 to 40 points are scored. See Score chart below. Also is used for giving tickets just for playing.
- 13 Score 50 - 140 2 1 250 1 Tickets for Zone  
Sets the amount of tickets to win when 50-90 points are scored. See Score chart below.
- 14 Score 150- 240 3 1 250 1 Tickets for Zone  
Sets the amount of tickets to win when 100-190 points are scored. See Score chart below.
- 15 Score 250 - 340 4 1 250 1 Tickets for Zone  
Sets the amount of tickets to win when 200-290 points are scored. See Score chart below.
- 16 Score 350 - 440 5 1 250 1 Tickets for Zone  
Sets the amount of tickets to win when 300-390 points are scored. See Score chart below.
- 17 Score 450 - Bonus 10 1 250 1 Tickets for Zone  
Sets the amount of tickets to win when 400-490 points are scored. See Score chart below.
- 18 Ticket Multiplier 1 0 2 1 0 = Just for Fun  
1 = 1 ticket = 1 ticket  
2 = 2 tickets = 1 ticket
- This allows you to either turn off tickets and play for a score, pay out normal, or pay 1/2 the amount of tickets owed.
- 19 Game ID 0 0 2 1 0 = No marquee used.  
When two games are linked, they must have different ID numbers. Game ID 1 controls the LED colors. When ID is set they also broadcast to the marquee score and bonus information.
- 20 Fixed Ticket Override 0 0 100 1 0 = Normal  
Setting a value will result in the game only paying that amount when played.
- 21 Cheat Sensitivity 0 0 40 1 1=sensitive, 40 not so much, 0 = off
- 22 Factory Reset 0 0 1 1 Factory Reset  
Resets your values back to their lower settings. You will then need to reconfigure to your settings.

## Suggested Score Tables

| \$0.50  |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 2       |
| 50-140  | 5       |
| 150-240 | 10      |
| 250-340 | 15      |
| 350-440 | 25      |
| 450-490 | 50      |
| Bonus   | 250     |

| \$1.00  |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 5       |
| 50-140  | 10      |
| 150-240 | 20      |
| 250-340 | 30      |
| 350-440 | 40      |
| 450-490 | 50      |
| Bonus   | 500     |

| \$1.50  |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 5       |
| 50-140  | 15      |
| 150-240 | 25      |
| 250-340 | 35      |
| 350-440 | 50      |
| 450-490 | 75      |
| Bonus   | 500     |

| \$2.00  |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 10      |
| 50-140  | 20      |
| 150-240 | 30      |
| 250-340 | 40      |
| 350-440 | 50      |
| 450-490 | 100     |
| Bonus   | 500     |

| CEC     |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 2       |
| 50-140  | 3       |
| 150-240 | 4       |
| 250-340 | 6       |
| 350-440 | 8       |
| 450-490 | 14      |
| Bonus   | 100     |

| PPP     |         |
|---------|---------|
| Score   | Tickets |
| 0-40    | 2       |
| 50-140  | 4       |
| 150-240 | 6       |
| 250-340 | 8       |
| 350-440 | 10      |
| 450-490 | 20      |
| Bonus   | 100     |

# Error Codes for Snow Ball - TOP ROW TURNS RED IF ERROR

Error 1 Ticket Error DISPLAY SHOWS TIC.

Solution: Refill Tickets! See section “When “Tic” appears in the display”

Error 2 CF Error ; Compact flash error

Solution: Reseat Flash card or replace.

Error 3 Ball Gate Closed Error; Game didn't see the sensor for closed.

Solution: **Check for proper ball gate operation. See section “Ball Gate Assembly”**

Error 4 Ball Gate Open Error; Game didn't see the sensor for open.

Solution: **Check for proper ball gate operation. See section “Ball Gate Assembly”**

Error 5 Top Motor/Switch Error; Top Row switch not seen.

Solution: **Check Clown Reset Bracket sensor.**

Error 6 Bottom Motor/Switch Error; Bottom Row switch not seen.

Solution: **Check Clown Reset Bracket sensor.**

To enter Error display mode, please press the UP push button located on the lower center door when in attract. To exit this mode, repress the UP push button .

---

## What does 7L17 displayed mean? TILT!!

The game has a passive infrared sensor (PIR sensor) located in the top of the canopy to detect people trying to climb in the game to cheat. When the sensor senses a change in an object's temperature (a person), the game will display “TLT” on your score display. There are two ways the game will behave when this condition occurs depending on what you have set option 19 to. A setting of 0 will end the current game and allow the player to reinsert money to play again. A setting of 1 will lock the game in 7L17 mode until the operator cycles power to the game.

Here are some steps to troubleshoot this issue:

Unplug cheat sensor at connector J26 on the main board and coin the game up.

If you can play the game, then the fault is likely the cheat sensor or a short in the harnessing. Replacement ICE part number BL1332X.

If you cannot play the game, then contact ICE tech support to have your board sent in for repair or request an advance replacement.

The pinout for connector J26 are:

Pin 1 is 12-volt DC positive power.

Pin 2 is the cheat signal. 0 volts DC not activated, 12 volts DC activated.

Pin 3 DC ground.

## The Ball Gate Assembly: Technical Information

Two half-moons attached together and connected to a single motor. The position of the left half-moon is sensed by two reed switches. A small magnet is located under the left moon. When the reed switch is activated, it will be at 0 VDC, the other will be opposite, +5 VDC.

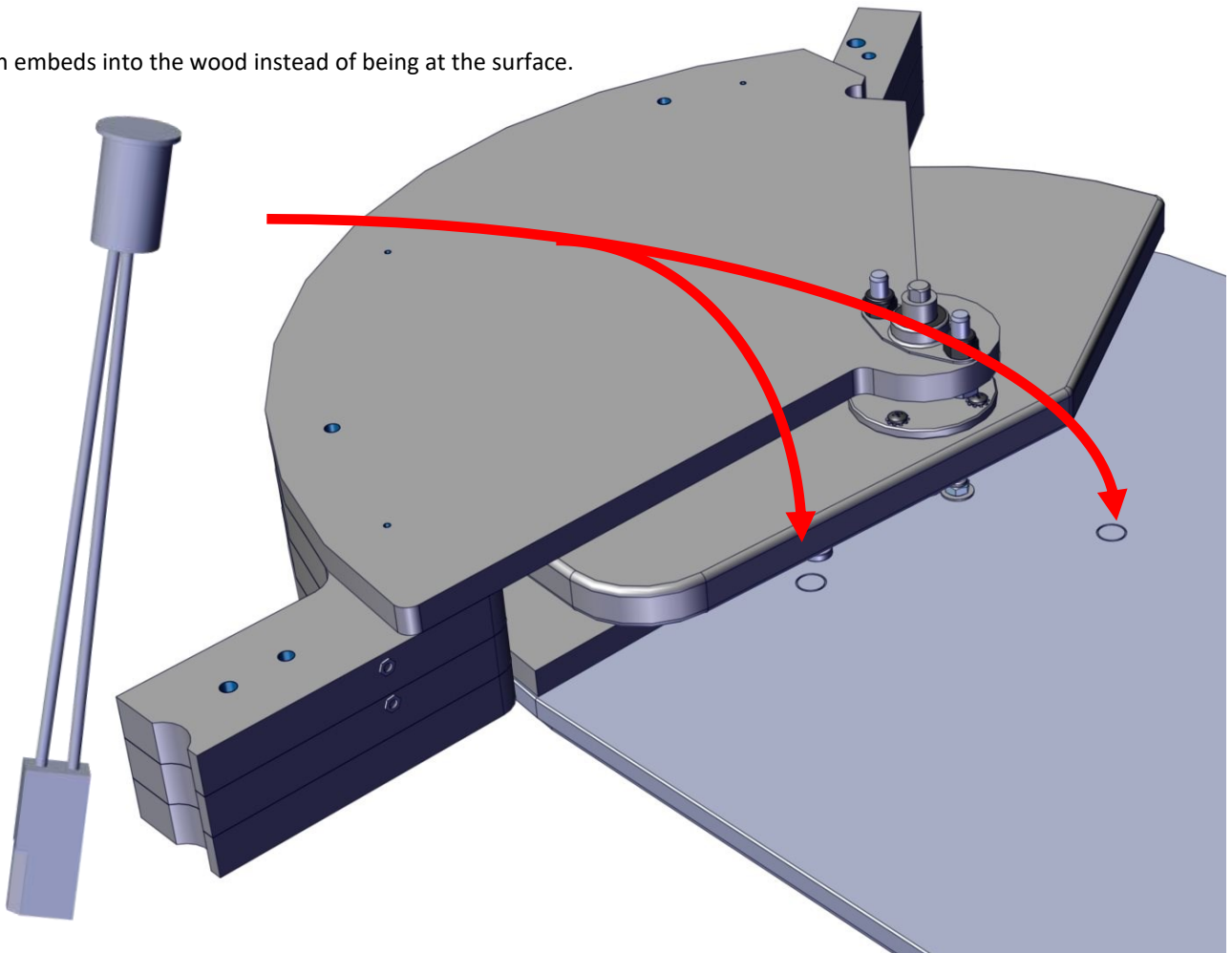
On the main board at J14, pins 1 and 2 supply the voltage to the ball gate motor. Pins 3 and 4 are the sense lines used to determine the position of the ball gate. Located underneath the left side of the ball gate is a magnet. When the gate is closed this magnet activates the sensor attached to pin 3 taking the signal to ground. Pin 4 will be at +5 VDC. When the gate opens, pin 4 will go to ground and pin 3 will have +5 VDC on it.

If the magnet sensors are not flush to the wood surface, the magnet will not activate the sensor causing the ball gate to move past the closed or open position. When this occurs, the ball gate will shut down and only a power cycle will allow the ball gate to work again.

If after checking that the ball gate is not having a sensor problem, look at the linkage for any of the Grubb screws that might have gotten loose. Also look at the connector rod and make sure it is slotted and not rounded out.

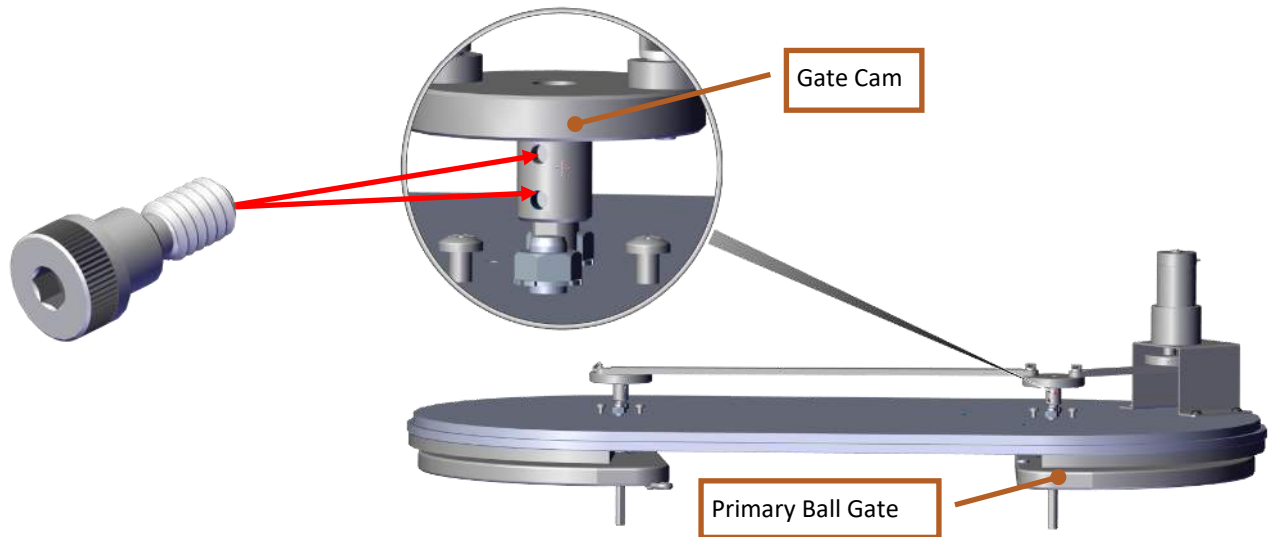
**\*\* Note \*\*** If the game doesn't see the open or close reed switches it will open the ball gate and not attempt to run the ball gate motor again until you power cycle the game.

Reed switch embeds into the wood instead of being at the surface.



## Ball-gate sensors Access

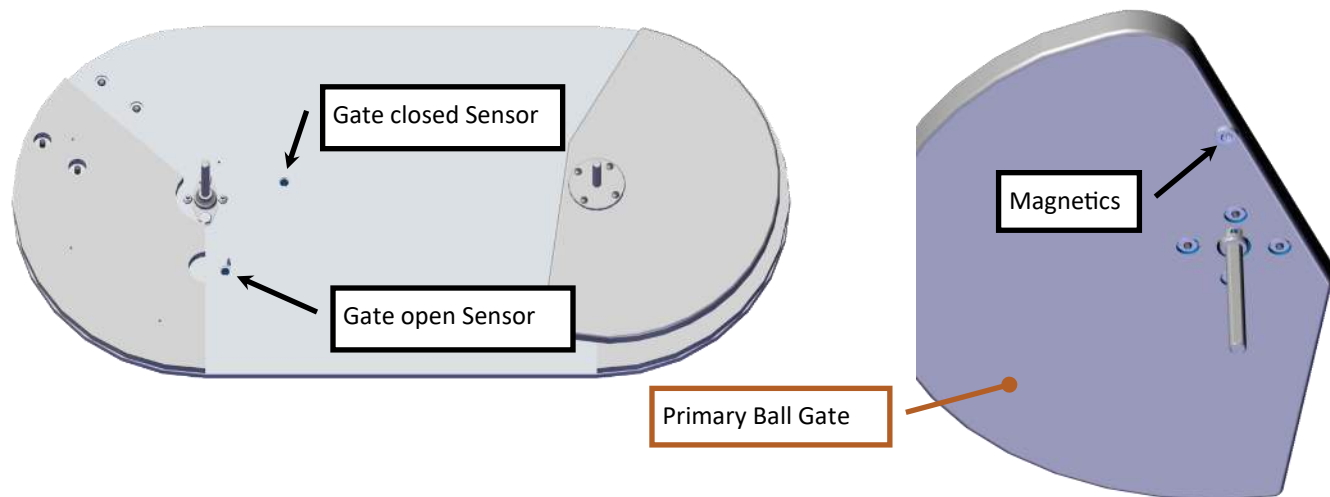
Remove the two screws that hold the gate cam to the Primary Ball gate assembly. Slide the Primary Ball gate assembly out.



## Ball-gate sensors Operation

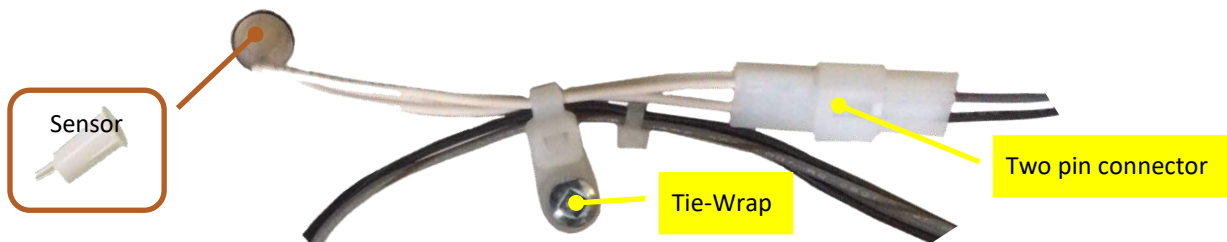
There are two magnetic sensors located under the primary ball gate assembly. The primary ball gate assembly has a magnetic attached underneath so that when the assembly rotates it will pass over one of the two sensors. When the ball gate assembly moves counter clock-wise, it will pass over the sensor for the closed position and stop the assembly. When the ball gate assembly rotates clock-wise, it will pass over the sensor for the open position and stop the assembly. Using a volt meter, when the magnet passes over either of the sensors, that sensor will have no voltage present. When the magnet is not over the sensor it should read +5 volt of DC power. With the power off on the game, the sensor is normally open.

**\*\* WARNING \*\*** Never manually move the Primary Ball Gate assembly as damage will occur to the motor gearbox assembly below.



## Ball-gate sensors Removal

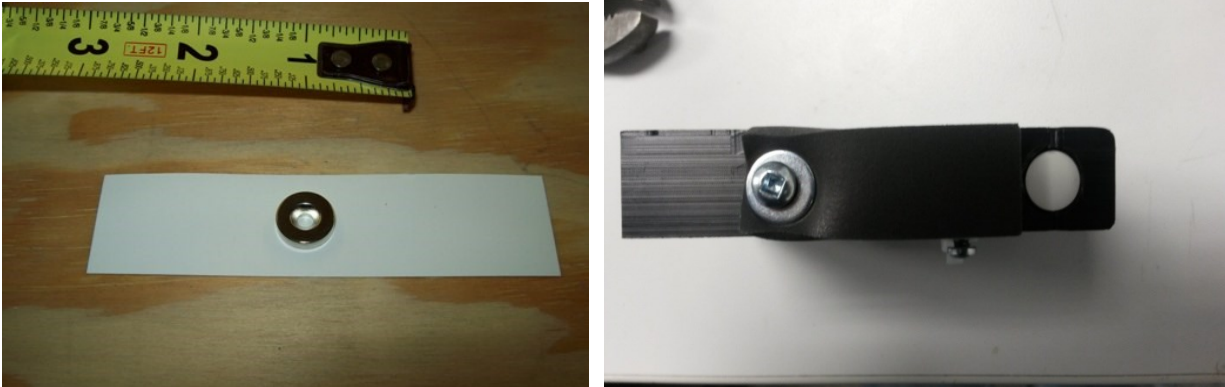
To remove a sensor, disconnect the two pin connector. Then unscrew the tie-wrap and push the sensor out. To install a replacement sensor, insert the connector from the top through the hole and push firmly down. Attach the wire harness and re-install the wire tie.



## RESET SHELF EXPLAINED

The main board controls the two shelf motors. Each shelf sensor has its own output back to the main board. When a sensor is not seen by the game, the game will continue to run the motor until it times out, making the shelf reset multiple times.

There is a small round metal magnet on the bottom left corner of the shelf.



This magnet must be aligned with the sensor in the shelf rest.

We can verify with an ohm meter that the sensors are working at the main board. Each sensor will read open or “OL” on your meter when the shelf is up. When the shelf is down the signal will be than an ohm of resistance.

TOP: Measure at pins 3 and 4 on the J12 connector between the BLUE/BLACK wire and the BLACK wire.

BOTTOM: Measure at pins 3 and 4 on the J13 connector between the BLUE/WHITE wire and the BLACK/WHITE wire.

**\*\* NOTE \*\* *Balls can unplug sensor wiring if not properly secured.***

## USING A VOLTAGE METER

You can also measure the voltages present at the main board. At connectors 12 and 13 on the main board you will find on pin 3 of each connector 0 volts when the shelf is in the home position. When the shelf moves away from the sensor, the voltage will go to 12 volts. Then when the shelf returns to the home position, it will go back down to 0 volts. You can use pin 4 for you referenced ground.

At connectors J9 and 10 on the main board are the clown sense lines. Under each clown is a magnet. When the clowns are standing up there will be +5 volts of DC on the sense line for that clown. When the clown is knocked down, the sense line will drop to 0 volts. There are 12 sense lines in total. J9 is the top row and has 4 sense lines. J10 is for the bottom row and has 5 sense lines.



BL7217 (2)



BL7228PC (1)



BL7227PC (1)



BL7212PC (1)



BL7200 (1)



BL7210PC (2)



FREE GAME BL7234PC (1)

BL7201(1)



BL7209 (1)

BL7204 (1)



BL7203 (1)



BL7205 (1)



BL7206 (1)



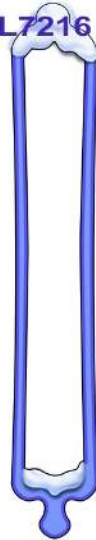
BL7207 (1)



BL7208 (1)



BL7216 (1)



BL7233 (1)



BL7215 (1)



BL7214 (1)



BL7213 (1)

BL7214  
CEC  
2 Token

| TICKETS |
|---------|
| 2       |
| 4       |
| 6       |
| 8       |
| 10      |
| 20      |
| 200     |

BL7272  
\$1 Game

| TICKETS |
|---------|
| 1       |
| 2       |
| 3       |
| 4       |
| 5       |
| 10      |
| 100     |

BL7220  
CEC &  
ent Game

BL7273  
50 cent Game

| TICKETS |
|---------|
| 5       |
| 10      |
| 20      |
| 30      |
| 40      |
| 50      |
| 500     |

D&B ONLY  
BL7271  
\$1 Game

| COUPONS |
|---------|
| 10      |
| 20      |
| 30      |
| 40      |
| 50      |
| 100     |
| 500     |

BL7275  
\$2 Game

| TICKETS |
|---------|
| 2       |
| 5       |
| 10      |
| 15      |
| 25      |
| 35      |
| 50      |
| 75      |
| 500     |

BL7274  
\$1.50 Game

| TICKETS |
|---------|
| 5       |
| 10      |
| 20      |
| 30      |
| 40      |
| 50      |
| 100     |
| 500     |

CEC  
FLA

BL7277PC (1)



BL7211PC (1)

BL7224PC (1)  
BOTTOM  
SHELF



BL7223PC (1)  
TOP SHELF



BL7218 (1)



BL7230 (1)



BL7231 (1)



BL7232 (1)



BL7236PC (1)  
MEGA MARQUEE



BL7219 (1)



# WARRANTY POLICY

I.C.E. Inc warrants all components in new machines to be free of defects in materials and workmanship for the period listed below:

- 180 days on Main PCB's, Computers & Motors
- 1 year on all LCD monitor panels
- 90 days on all other electronic and mechanical components
- 30 days on all I.C.E. repairs and parts purchases

I.C.E. Inc shall not be obligated to furnish a warranty request under the following conditions:

- Equipment or parts have failed through normal wear and tear
- Equipment has been subjected to unwarranted stress, abuse or neglect
- Equipment has been damaged as a result of arbitrary repair/modification

Products will only be covered under warranty by obtaining an I.C.E. authorized RMA #. To obtain an RMA # please provide I.C.E. tech support with the game serial # or original I.C.E. invoice # and a detailed description of the failure or fault symptoms.

I.C.E. Inc will assume no liability whatsoever for costs associated with labor or travel time to replace defective parts. All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications.

I.C.E. Inc will cover domestic UPS ground, or comparable shipping costs during the warranty period. International or expedited shipments are available for an additional charge. To obtain credit defective parts must be returned to I.C.E. Inc, at the customer's expense, within 30 days. After 30 days a 15% re-stocking fee will apply to all returns.

ICE distributors are independent, privately owned and operated. In their judgment, they may sell parts and/or accessories other than those manufactured by I.C.E. Inc. We cannot be responsible for the quality, suitability or safety of any non-I.C.E. part or modification (including labor) that is performed by such a distributor.

**Innovative Concepts in Entertainment**

**10123 Main St.**

**Clarence, NY 14031**

**Phone #: (716) - 759 – 0360**

**Fax #: (716) – 759 – 0884**

**[www.icegame.com](http://www.icegame.com)**