Troubleshooting the Cotton Candy Machine

Cotton candy is made by melting sugar and exposing it to air to create the floss known as cotton candy. Centrifugal force allows the melted sugar to escape the heat source through tiny vents around the lid of the heating head. Once the tiny strands of melted sugar are cooled by the air, it becomes the cotton candy to be gathered around a cone.

Melting sugar can be a messy process and owning a cotton candy machine means there is some maintenance involved to keep it functioning properly. The most important thing to remember about maintaining a cotton candy machine is to keep it clean.

1. Cleaning

After each shift of using the machine, you will want to clean the heating head out thoroughly.

- ~ HEAT UP the heating head and hold still using a hot pad to remove the four screws in the lid
- ~ You must heat up the head or the screws will be glued in by the sticky sugar
- ~ Soak the lid in hot water and wipe the sugar off the bowl with a wet cloth
- ~ The sugar will dissolve with a sufficient amount of water
- ** Symptoms of a clogged heating head:
 - Sugar will burn and not escape.
 - Globs of sugar will fly out of heating head.
 - Grainy cotton candy cones





2. Troubleshooting

- \sim If nothing happens when flipping on power switch
 - ~ If switch does not light... switch is bad
 - ~ switch does light...
 - A. Check wiring
 - B. Check fuse
 - C. Motor is stuck



- A. Check wiring
 -make sure all wires
 to both switches are
 attached and tight
- B. Check fuse
 - unscrew the fuse socket to be sure the the fuse did not blow
- C. Motor is stuck
 - spray lubricant such as WD40 on the bearing under the motor pulley
 - let soak and spray again and try spinning motor shaft by hand



~ Motor Keeps Locking Up

- Remove motor from machine and disassemble

- The bearing will be inside chassis

OR

on the motor shaft

- Remove bearing
- Run hot water over the bearings and spin by hand
- Let all parts dry completely before reassembling motor



 \sim If motor is spinning and the heating head does not spin, the belt has either broken or slipped off pulley.

~ The belt is a "V" shaped belt and is meant to be installed with the "teeth" to the outside. Improper installation will shorten the lifespan of the belt.



NO HEAT (does spin)

~ Does heat switch light up?

No = Bad Switch

Yes =

- Is there voltage on meter?

No = loose wire or
terminal between
switch and meter



Yes = check the wires from voltage meter to the electrical brush housing to confirm they are connected.

~ Electrical Brushes

- There should be one blue and one red wire from voltage meter to the electrical brush housings
 - > check connections
 - be sure brushes are touching copper bands
- The copper bands can have carbon build up on them from the brushes and can "sparkle"



- Use scratch pad to clean off carbon build up while spinning head by hand
- ~ Heating Head (remove set screw and lift off heating head)
- one blue and one red wire from behind copper bands carry voltage to heating element
 - > Check connections
 - > Check wires look for frayed wires or loose connections
 - ➤ Check heat limiter (white circle with 2 Terminals)
 - > Check short wire from limiter to heating element



All wires and connections look good.....

~ Heating Element

- The most effective way of checking a heating element is using a Multimeter and checking for

A. Continuity or

B. Ohms (approx. 13 Ohms)

