



We invented the popcorn machine  
**THEN JUST KEPT GOING!**

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**176 MITTEL DRIVE, WOOD DALE, IL 60191**

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# **RINGMASTER® 5-1/2" & 7" COTTON CANDY MACHINE**

**120 Volt,  
Single Phase, 50/60 Cycle**

**230 Volt,  
Single Phase, 50 Cycle**

**Optional Floss Stand**



**READ and UNDERSTAND these operating, servicing, and safety instructions before operating or servicing this machine**

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## SAFETY FIRST



The information in this manual is essential for the safe installation and maintenance of your Cretors cotton candy machine. The manual must be read and understood before installing, operating or maintaining this equipment, or equivalent training must be provided.



"The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury".  
Ref.: 29 CFR 1926.20 (b)(4)(a)(2)



It is understood that safety rules within individual companies vary. If a conflict exists between the safety procedures contained in this manual and the rules of a using company, the more stringent rule should take precedence.

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## I INTRODUCTION

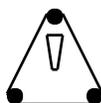
This manual is filled with time-saving and money-saving information regarding your Cretors machine. There is nothing, however, more important than the safety aids and warnings that are found throughout this document. The Safety Alert Symbol is used to identify topics of primary safety concern wherever they appear. Furthermore, a separate section has been included which deals exclusively with operation and accident prevention.

If, after reviewing this manual, anything is unclear or technical problems are encountered, contact the dealer from whom you purchased your machine for assistance and if there are any additional questions, feel free to contact our Customer Service Department at the address and/or phone number listed on the back cover of this manual. Always have the model and serial number of your machine available to assist in obtaining the correct information.

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## II SAFETY ALERT SYMBOL

The symbol shown below is used to call your attention to instructions concerning your personal safety and the safety of others. Watch this symbol. It points out important safety precautions. It means "ATTENTION! Become Alert! Your personal safety is involved!" Read the message that follows and be alert to the risk of personal injury or death.



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### III PURPOSE OF MANUAL



This instruction manual is intended to familiarize owners with the operation, servicing and safety procedures associated with your Cretors machine.



This manual should be kept available to operating and maintenance personnel.



A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

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### IV PRODUCT IDENTIFICATION

#### CRETORS RINGMASTER COTTON CANDY MACHINE

ELECTRICAL SPECIFICATIONS: Ringmaster Cotton Candy Machines are available in any of the following Electrical configurations:

120 Volt, Single Phase, 50/60 Cycle  
230 Volt, Single Phase, 50 Cycle

#### SPECIFICATIONS:

MODEL RM	RINGMASTER
Electrical:	1700 watts (5-1/2") 2250 watts (7")
Dimensions for Base	20-1/2"D x 12-1/2"W x 18" H - - - - 131 cm D x 80 cm W x 118 cm H
Net Weight of Base:	38 lbs. (17 kg.)
Dimensions of Bowl:	8-1/2 "H x 26" diameter - - - - 53 cm H x 170 cm diameter
Net Weight of Bowl:	14 lbs. (5 kg.)

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## V THEORY AND OBSERVATIONS OF COTTON CANDY OPERATION

The Ringmaster is the finest, most quiet Cotton Candy Machine on the market. The very best materials and parts including the latest components in heat control have been used in its construction.

All machines are sugar-tested, and are mechanically and electrically sound when they leave the factory.

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## VI CONTROL PANEL

MOTOR SWITCH	-Turns motor heat ON/OFF
HEAT SWITCH	-Turns heat ON/OFF - Interlocked with Motor Switch and cannot operate unless Motor Switch is ON
POTENTIOMETER	-controls voltage to heat element
VOLTMETER	- Indicates voltage supplied to heat element

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## VII INSTALLATION INSTRUCTIONS

### 1. Location

Choose a location for your Cretors machine to maximize the ease of operation and maintenance procedures. Check your local building and fire codes for location restrictions.

### 2. Unpacking

After the Ringmaster is unpacked, place it on a sturdy table or counter at a height to suit the operator. Release the shipping clamps by turning the large knobs on the top of the cabinet counterclockwise. Turn these knobs until they sit against the nuts at the top of the shaft. It may be necessary to push them down to completely release the clamp mechanism. Clean the floss bowl thoroughly with soap and water and then place the bowl on the rubber bumpers on the machine. Install stabilizer mesh with clips. Manually rotate the spinner head to see that it turns freely. The spinner head assembly is spring mounted and should bounce freely and not make solid contact with the frame. (We suggest that you keep the heavy duty corrugated carton in which the Ringmaster was shipped for future transportation of the machine. We recommend that the shipping clamps be retightened at the time.)

### 3. Power Supply

Check the nameplate to determine the required power supply. The Ringmaster is designed to operate in either a 120V outlet or 230V outlet. The lead wire to the outlet should be at least #12 wire to assure proper voltage for a maximum of 20 Amps.



Connect your Ringmaster only to the correct power source. Failure to do so may result in personal injury or death and may damage your machine.



Make certain the Motor Rocker Switch on the Ringmaster is in the 'OFF' position when plugging into power source. Failure to do so may result in personal injury or death and may damage your machine.

#### 4. After Connecting Ringmaster Cotton Candy Machine to Power Supply

The Ringmaster is equipped with a solid state voltage control which permits the operator to adjust the heat output of the element to compensate for varying conditions. Input voltage can vary as much as 40 volts.

## VIII SERVICE INSTRUCTIONS



In the case of improper operation, qualified personnel only should perform the following diagnostic checks, and, if necessary, corresponding adjustments and repairs. Many of the following procedures present an electrical shock hazard and can cause serious injury or death.

#### 1. Parts

When ordering parts, refer to the attached parts diagram. Always supply the serial number, model number, and voltage of your cotton candy machine.

## IX TROUBLE SHOOTING

#### 1. Problem - Spinner Head Will Not Spin

QUESTION: Do any of the other components work?

NO! Check power supply:

- A. Is it plugged in?
- B. Is the receptacle live?
- C. Is machine plugged into the proper voltage? Measure with voltmeter and compare to specification on nameplate of machine.



Do not attempt electrical repairs on the power supply circuit unless you are qualified to do so. The electrical shock associated with line voltages can cause serious injury or death.

YES! Problem is in machine.

- A. Unplug machine.
- B. Check for loose or broken connections.
- C. Remove four screws that hold the switch plate in place.
- D. Remove switch plate.
- E. Using multimeter, check the continuity from the top to the bottom of the motor switch. With the switch in the 'ON' position check both sides of the switch:
  - a. If there is no continuity from the top to the bottom on either side of the switch - replace the switch.
  - b. If there is continuity - replace the motor.

## 2. Problem - Will Not Make Cotton Candy

QUESTION: Does the motor spin?

YES! Problem is in the heat control circuit.

QUESTION: Does the voltmeter on the machine adjust from 0 v. to 120 V. when turning the potentiometer clockwise?

YES! Check the heat element. With the machine unplugged:

- A. To check the heating element, remove the insulator cover over the wire terminals inside the spinner head.
- B. Remove the brass nuts that hold the leads to the heat element
- C. With a multimeter, check the resistance of the heat element. Place the meter leads on the two element terminals.
- D. (5-1/2" - 120V- 9 $\Omega$  230V-36 $\Omega$ ,) (7" - 120V-6.3 $\Omega$ , 230V-25 $\Omega$ ) - If your readings are not close to these resistance readings, replace the heating element.

NO!

- A. Unplug machine
- B. Check for loose or broken connection
- C. Using multimeter, check the continuity from the top to the bottom of the motor switch. With the switch in the 'ON' position check both sides of the switch:
  - a. If there is no continuity from the top to the bottom on either side of the switch - replace the switch.
  - b. If there is continuity - replace the motor.
- D. Remove the brushes by removing the covers of the brush holders, located on the aluminum casting under the spinner head.
- E. If the brushes are badly worn, replace.
- F. Disconnect the two leads from the potentiometer.
- G. With a multimeter, place the meter leads one on each of the potentiometer leads.
- H. Turn the potentiometer clockwise slowly and watch your multimeter. The resistance should start to go down as you turn the potentiometer clockwise.
  - 1. If it does, the dual voltage control needs to be replace. It is located inside the bottom of the cabinet.
  - 2. If it does not, replace the potentiometer.

## 2. Spinner Head Repair

To disassemble the spinner head to replace worn or damaged parts, first disconnect the machine from its power source.

- A. Remove cotton candy bowl
- B. Locate the 5/16" screw or plug to the left or right of brush holders
- C. Remove the 5/16" screw or plug and insert a 1/4" diameter rod (a medium Phillips head screwdriver will work) into the hole and into the motor shaft. This will keep the spinner head from turning.
- D. Remove the four cap nuts on the top of the spinner head.
- E. Remove the insulator cover and nuts inside spinner head.
- F. Remove the brass nuts that hold the leads to the heat element.
- G. The heat element can then be removed.
- H. Remove the bottom nuts on the brass studs that the lead to the elements were attached to.
- I. Remove the center bolt and cap with a 7/16" socket or wrench.
- J. Remove the aluminum spacer.
- K. Remove the insulator washer.
- L. Remove the top brass ring.
- M. Remove the insulator ring (with beveled ends on both sides)
- N. Remove bottom brass ring.
- O. Inspect both brass rings for burns or pits. If badly marked, they must be turned on a lathe to clean the surface or be replaced.
- P. Remove bottom insulator ring.

To assembly the spinner head, first disconnect the machine from its power source.

- A. Slide small insulator ring on to the motor shaft.
- B. Put the brass ring (with the long brass stud) on
- C. Slide the insulator ring (with the beveled ends) on
- D. Put the brass ring (with the short stud) on
- E. Slide on the large insulator.
- F. Slide on aluminum washer with the slotted side up.
- G. Place the spinner head on and then the center bolt and cap
- H. Slide stud insulators on small & Large
- I. Screw the brass nuts on studs (do not over tighten)
- J. Put Stainless steel screen with heat element on
- K. Place element terminals on brass studs and screw brass nuts on
- L. Put insulator cover and nuts on
- M. Put spinner top and the four cap nuts

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## X OPERATING INSTRUCTIONS



1. Do not attempt to operate your Cretors Cotton Candy machine until you have read and understood this manual. Failure to do so may result in serious injury or death.



2. Do not attempt to operate your Cretors Cotton Candy machine unless the installation instructions have been strictly adhered to. Failure to do so may result in serious injury or death.

3. Turn all switches "OFF" and plug the cord into the proper outlet with the correct electrical supply as specified on the nameplate.
4. Have an adequate supply of granulated sugar on hand. (Coarse sugar is more desirable, if available.)
5. Color the sugar with the desired color and flavor, according to directions on the package.
6. Turn "ON" the motor switch. While spinner head is turning, carefully fill spinner head completely with sugar. It is important to have the spinner head turning when filling with sugar.
7. You are now ready to make cotton candy. Turn the heat switch "ON" Turn the voltage control to its highest position, as this will cause the cotton candy to flow in a few seconds. Then lower the voltage to the point where a light fluffy floss is produced.
8. Leather 'floaters' on the top of the spinner head create a draft of air which controls where the loss lies in the bowl. Twisting them up or down causes the candy to lie higher or lower in the bowl.

NOTE: Since atmospheric conditions, as well as voltage, affect the production of cotton candy, it will be necessary for you to determine the correct operating voltage. After working with the machine for a short time, the proper setting is easy to determine.



9. Operate your cotton candy machine only if it is in sanitary condition (SANITATION INSTRUCTIONS). Failure to do so may result in illness to your customers. Caution. Don't attempt to touch the Spinner Head when it is turning and making cotton Candy. The sugar is heated to 300 Deg Fahrenheit to make cotton candy and can cause severe burns. Don't attempt to pick up the sugar with your bare hands, always use a Cotton Candy cone or stick.

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## XI SANITATION INSTRUCTIONS



Be certain the machine is turned 'OFF' and power is unplugged before sanitizing this machine. Failure to do so could result in injury or death.



Do not clean heated surfaces until they have been given sufficient time to cool. Failure to do so may result in serious burns.

1. Daily maintenance of this unit will prevent carbon buildup. The spinner head should be cycled sufficiently to use up all sugar.
  - a. Turn 'ON' the motor and heat switches
  - b. Run the unit for five minutes to achieve maximum heat potential (there may be smoke)
  - c. Shut 'OFF' motor and let spinner head stop spinning
  - d. Wait five seconds, then restart motor
2. Repeat the above steps ( a through d) two to three times
3. Turn heat 'OFF' and let motor run for a few minutes to cool down
4. Shut motor 'OFF'
5. Soap and water or a cleaning agent that is acceptable for food contact surface is recommended for bowl and stabilizer.



Always shut heat 'OFF' first for 30 seconds and then shut 'OFF' the motor.

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If you have any questions, contact your local dealer and if there are any additional questions, feel free to contact the Customer Service Department at C. Cretors and Company. Additional copies of this manual can be obtained from C. Cretors and Company at the address listed below. Please provide model and serial number when requesting additional copies of this manual. There will be a nominal charge for additional copies.

Cretors guarantees this machine to be free of defects in parts, materials and workmanship for one year. Please take this time to fill out the factory registration card and return it to the factory to activate your warranty. If you have any questions concerning the Cretors' warranty, please contact your local dealer or the Customer Service department at C. Cretors and Company.

C. CRETORS AND COMPANY

176 MITTEL DRIVE

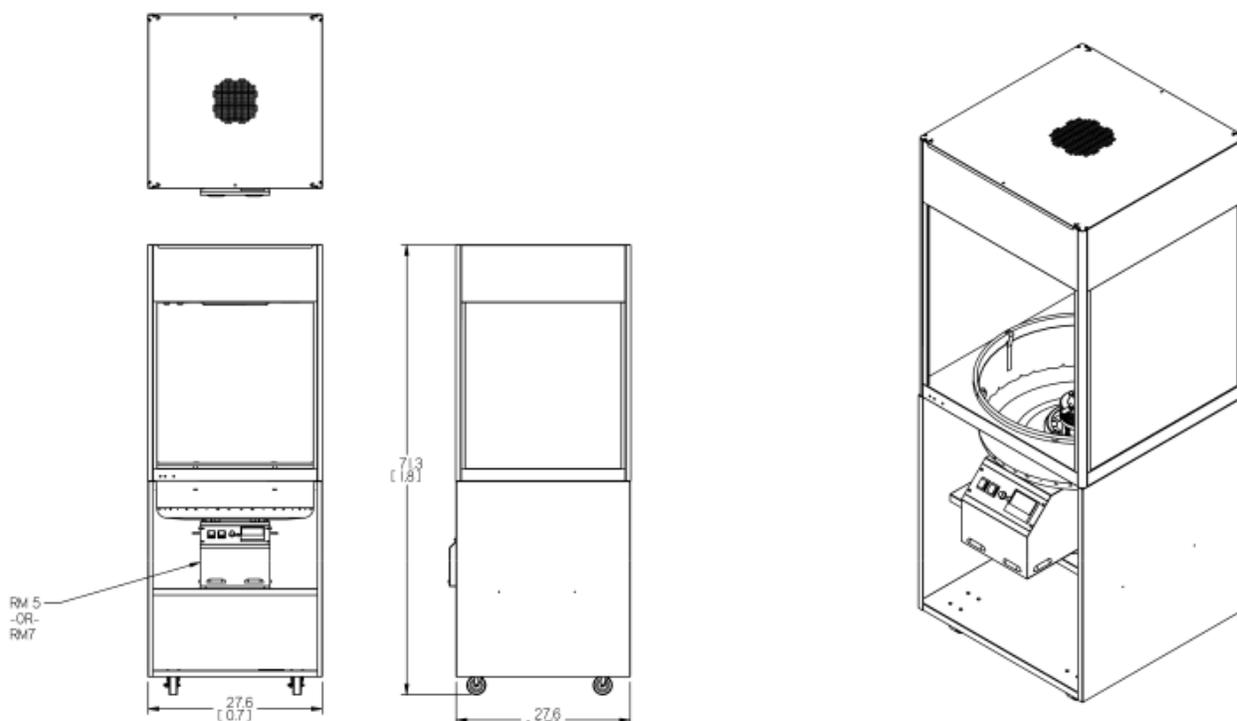
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## Optional Cotton Candy/ Floss Stand



If equipped with optional Cretors Cotton Candy/Floss Stand, the Ringmaster body should be installed into the stand without the bowl on. Drop the feet of the RM body into the embossed dimples in the shelf. Plug the RM into the outlet located in the back of the Floss stand. Now install the bowl into the cabinet on top of the top shelf in the floss stand.

There are two switches located in the top of the Floss Stand. One will turn on the lights and sign (if equipped), the other will turn on the exhaust fan.

The exhaust screen will need to be removed and cleaned regularly if the exhaust system is used.