

3243 North California Avenue, Chicago, IL 60618

DIGITAL GIANT POPCORN MACHINE OPERATION MANUAL

120/208 Volt, Single and Three Phase, 60 Hz

120/240 Volt, Single and Three Phase, 60 Hz

> 230 Volt, Single Phase, 50 Hz

> 400 Volt, Three Phase, 50 Hz.

100/200 Volt Single Phase, 50/60 Hz

Included in this manual:

- *One Pop Option
- *Salt/Sugar Option



READ and **UNDERSTAND** these operating and safety instructions before operating this popcorn machine!

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I. SAFETY ALERT SYMBOL

The symbol shown is used to call your attention to instructions concerning your personal safety and the safety of others. Watch for 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.



II. SAFETY FIRST



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



"The employer shall instruct each employee in the recognition and avoidance of unsafe conditions, as well as, the regulations applicable to his work environment and 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.

III. INTRODUCTION

This manual is filled with time-saving and money-saving information regarding your Cretors popcorn machine. There is nothing more important than the safety aids and warnings that are 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 service and accident prevention.

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

IV. PURPOSE OF MANUAL

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

It is important that this manual be kept available to operating personnel.



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

V. PRODUCT IDENTIFICATION

Model	Kettle	Voltage	Corn	Control		Hand	Features	
EG	Electric							•
	20	20 Oz. Ke	ettle					
	32	32 Oz. K	ettle					
	48	48 Oz. K	ettle (Not a	available in	Stainless Steel)			
	60	60 Oz. St	ainless St	eel Kettle				
		60Hz. (Nor		,				
		С	120/240					
		D	120/208					
		Q	120/208					
		R	230/1/6	0				
		50 Hz.		_				
		E	230/1/5					
		G	400v 3l					
		N	240/41	5/3/50				
		Japan	400/00/	2/4/50				
			100/200					
		J	100/200					
		P	100/200	Salted C				
			2	Sugar Co				
			3		ugar Corn (Order Salt /	Sugar Dum	n)	
			,	X	Standard Control		P)	
				ô	One Pop Control			
				c	One Pop with Cour	nter		
				D	SS Pan Pedestal	0.4		
				E	Digital Control	-0.5		
				F	Digital One Pop	0.68		
						R		
						L		
EG								
Model	Kettle	<u>Voltage</u>	Corn	Control		<u>Hand</u>	Х	No Custom Features
							С	Custom Features
							X	Not Equiped for Pump
							0	OEM Package
							F	Fan Control
							D	Dual Control
							SS	Stainless Steel 32 Oz.
							Z	

VI. PRINCIPLES OF POPCORN MACHINE OPERATION

Theory and Observations of Popcorn Machine Operation

- A. The efficient production of popcorn requires the presence of popcorn kernels, heat, and oil. The purpose of the oil is to distribute the heat throughout kernels evenly and quickly. If the heat is not distributed evenly and quickly, the kernels may burn instead of pop.
- B. In order to pop corn in oil, the kettle, oil and parts near the heating elements are necessarily and unavoidably heated to temperatures high enough to pop popcorn. The temperature is controlled using a digital temperature control located inside the kettle to maintain the kettle at an operating temperature of approximately:

400-410°F (204-210°C) for salted corn 375-385°F (190-195°C) for sugar corn



Contact with these surfaces will burn and scald you. Do not touch the kettle, oil or parts in direct vicinity of the heating elements.

C. The kettle is provided with an agitator to assist in the quick and even distribution of heat throughout the kernels.



The oil is heated to high temperatures in a kettle provided with electric heating elements to reach a proper popping temperature. An operator is required in the vicinity of the kettle only when handling corn or dumping popped corn from the kettle. Neither of these operations requires direct contact with the kettle. Direct contact with the hot oil, kettle, or heating elements could result in serious burns or scalds. Keep away from the kettle whenever possible. Use the handle when dumping the kettle, and use the provided cups to measure corn, oil and salt.

- D. As the popcorn pops, it will push the lid open and discharge into the cabinet. When the corn finishes popping, the corn remaining in the kettle can be removed by holding the kettle handle in your right hand and rotating upwards in a counter-clockwise direction to dump the kettle. Return kettle to level position when finished.
- E. Your Giant Model Cretors popcorn popper maybe equipped for a pump, which, when properly adjusted, automatically delivers the proper amount of oil to the popping kettle.
- F. OEM models are provided with a short cord and plug and have a flexible armored cable with wires connected to the 'cornditioner' switch on the switch panel.
- G. One Pop Option only allows the kettle to pop one batch of corn at a time and then shut down. The One Pop Option makes it impossible to leave a kettle heat turned on.

- H. With the One Pop Option, the kettle heat switch is turned on; however, the kettle will not begin to heat until the One Pop button is pressed. When the One Pop button is pressed the green indicator light will go on, the kettle will begin to heat, and the kettle heat indicator light will turn on. The kettle will then heat until the temperature control opens at the end of the popping cycle. When the temperature control opens at the end of the popping cycle the kettle heat indicator light goes out and the heat turns off. The kettle will not begin to heat again until the kettle has cooled and the One Pop button is pressed.
- I. If the machine is equipped with an oil pump, and the pump switch is turned on, pressing the One Pop button will begin the pumping cycle, as well as, the heat cycle. (When cleaning the kettle and oil is not wanted, turn off the oil switch and the oil pump will not run.)
- J. If the machine is equipped with the Salt/Sugar option, the operator moves the toggle switch to either the salt or sugar position for desired corn type. Kettle temperature and oil amount will change automatically. In the salt position, the thermostat will turn off at the sugar temperature but a timer will allow the heat to remain on until it reaches the salt temperature.

VII.	CONTROL SWITCHES	(Not all machines contain all of these switches.)
K	ETTLE HEAT	-Turns the kettle heat On/Off.
Α	GITATOR	-Turns the stirrer blade motor On/Off.
E	XHAUST	-Turns exhaust blower On/Off.
C	ORNDITIONER	-Turns the cornditioner blower and heat On/Off.
L	IGHTS	-Turns interior lights On/Off.
C	OIL	-Provides power to the oil pump.
Г	ELIVERY	-Initiates the pump cycle.
F	USE/CIRCUIT BREAKER	-Provides protection to all circuits, except the kettle.
R	OTARY SWITCH	-Turns power On/Off to all circuits.
C	NE POP	-Turns the kettle heat on and initiates pump cycle.
S	ALT/SUGAR	-Sets the pump and kettle temperature to proper settings.
Г	IGITAL CONTROLLER	- Displays and controls kettle temperature.

VIII. OPERATING INSTRUCTIONS



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



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



Operate your popcorn machine only if it is in good sanitary condition (See **SANITATION INSTRUCTIONS**). Failure to do so may result in illness to your customers.



Always turn the kettle heat switch off when not popping corn. Failure to do so will cause oil to stain the kettle, possibly resulting in an unsanitary condition. It may also cause a "flash" fire if oil is added to a kettle left unattended with the heat on, resulting in serious burns or death.

A. To operate your Cretors popcorn popping machine:

- 1. Connect and adjust the pump as explained in the pump installation instructions and pre-heat the popping oil until liquid, if necessary.
- 2. Fill the corn measure with corn and the salt measure with the salt, and empty these into the kettle. When making sugar corn, add the correct amount of sugar, rather than salt, with the measure for corn.



WARNING! Always add corn to the kettle before pressing the oil delivery button or adding oil. Failure to do so may result in the oil being heated too rapidly resulting in a fire.



Avoid contact with the kettle. Contact with a hot popping kettle may result in serious burns or scalds.

- 3. Rotate the kettle lid closed by using the counter weight as a handle.
- 4. If equipped, move Salt/Sugar switch to desired mode.
- 5. Turn on the agitator, the exhaust fan, and then turn on the kettle heat and press the oil delivery button.
- 6. If machine is with the One Pop option, press the One Pop button to begin the popping cycle, and oil delivery.



WARNING! After the first popping the kettle is hot. Avoid contact with the kettle when adding corn or salt. Failure to do so may result in serious burns or scalds.

Measuring cups have been provided to accurately measure the proper amounts of popcorn, salt and oil. The correct amount for each popping is:

SALTED CORN

	<u>VOLUMETRIC N</u>	<u>MEASURE</u>	
Kettle Size	<u>Corn</u>	<u>Oil</u>	<u>Salt</u>
20 oz.	20 oz.	6.5 oz.	2 tsp.
	591 ml	192 ml	10 ml
32 oz.	32 oz.	12.25 oz.	3 tsp.
	1083 ml	360 ml	15 ml
48 oz.	48 oz.	16.5 oz.	4 tsp.
	1420 ml	492 ml	20 ml
60 oz.	60 oz.	20 oz.	5 tsp.
	1774 ml	591 ml	25 ml

SUGAR CORN

	<u>VOLUMETRIC M</u>	<u>IEASURE</u>	
<u>Kettle</u>	<u>Corn</u>	<u>Oil</u>	<u>Sugar</u>
20 oz.	12 oz.	4.25 oz.	8.25 oz.
	351 ml	122 ml	245 ml
32 oz.	19.5 oz.	7.5 oz.	15.25 oz.
	577 ml	225 ml	451 ml
48 oz.	28.7 oz.	10.5 oz.	20.75 oz.
	850 ml	310 ml	614 ml
60 oz.	48 oz.	16.5 oz.	26 oz.
	850 ml	492 ml	770 ml

7. As the corn pops, it will push the lid open. When the lid has moved about one and one-half inches, it will open completely, allowing the corn to discharge from the kettle. When the corn finishes popping (when there are about four seconds between pops) dump the kettle by lifting the large black handle up and rotate as far as it will go. When the pan is empty, return the handle to its upright position.



Avoid contact with the kettle when dumping popped corn. Failure to do so may result in serious burns or scalds.

- 8. Repeat steps 2-7 to continue popping. When finished, turn kettle heat switch off.
- 9. When the oil container is empty, replace with a new full container of oil. See Pump Instruction manual.

<u>NOTE</u>: The ideal time for maximum volume (corn expansion) is between 2-3/4 to 3-1/2 minutes from the time the corn is placed into the kettle until the time it is dumped. Check the popping time after several popping cycles. The pilot light should turn off approximately 10-20 seconds before the corn finishes popping. If this is not the case, please refer to the Trouble Shooting Section in your Service Manual.

IX. SANITATION INSTRUCTIONS



Be certain the machine is turned off and power is unplugged before sanitizing this machine unless a specific cleaning procedure requires power to the 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 or scalds.

A. Popping Kettle

1. The Cretors kettle is designed to be cleaned in place. There is no need to remove the kettle to clean.



Do not immerse an assembled kettle in water. This will damage the electrical components and may cause short circuits resulting in electrical shock hazard if power is applied.

- 2. Do not use steel wool or other similar abrasives to clean the nickel plated kettles, as they will ruin the kettle by removing the nickel platting. Stainless steel kettles can be cleaned aggressively.
- 3. Do not clean the kettle with power connected unless you are boiling the CKC cleaning compound to clean the inside of the kettle. Follow instructions in step 6.
- 4. The kettle either has a polished nickel finish or is a polished stainless steel finish and is very easy to clean if oil is not allowed to burn. After the final popping, the best practice is to wait until the oil just begins to solidify, then take a cotton towel or absorbent rag and wipe the kettle. Once the oil is allowed to completely solidify, it can become more difficult to remove. We recommend coconut oil for your Cretors popper; it will not stick or burn as easily as other oils.
- 5. A thorough cleaning every week with CKC cleaning compound is recommended. This will prevent the accumulation of carbon on the bottom and internal sides of the kettle. When boiling the CKC cleaning compound in the kettle, do not fill the kettle with more than ¾" high of water inside the kettle. If the kettle has been overheated or oils that tend to carbonize are used the normal cleaning procedures may not suffice. Increase frequency as needed.

Cretors has developed a cleaning kit for your Giant machine. The kit is sold separately under P/N 10837. If you need more information, please feel free to contact your local distributor or call Cretors at 1-800-228-1885.

6. Cretors Outside Kettle Cleaner COC should be used periodically to remove popping oil that may become baked on to the outside of the kettle.

- 7. The kettle agitator assembly should be removed weekly for thorough cleaning. The stirrer blade is disassembled by removing the spring pin that goes through the top of the stirrer blade. Lift off the stirrer blade.
- 8. Clean all parts thoroughly, making sure to use CKC. Do not use any harsh abrasives or cleaning materials.
- 9. There are two new Cretors cleaners. Carbon OFF in the blue can is to be used with no heat. The red can would require the kettle to be heated. Read the directions on the cans.
- 10. Reassemble in reverse order, following the directions given.

B. Kettle Cover and Agitator Removal

- 1. To remove the kettle cover, first remove the rear pin by rotating the loop of the pin so that the pin can be pulled out of the two kettle tabs. Next, remove the front pin by rotating the loop of the pin so that the pin can be pulled straight out of the hinges and apron. As the pin is pulled out, hold the front cover as it will fall off when the pin is removed. Lastly, lift off the rear cover and then the apron. To remove the apron, lift straight up where the tabs insert into the kettle, then pull the tabs out, one side at a time until the apron is fully disengaged from the kettle.
- 2. The agitator assembly is disassembled by removing the anti-pack pin going through the top of the stirrer blade. Lift off the stirrer blade. Place kettle in dump position and slide the clutch dog and shaft out from the bottom of the pan. (If shaft will not easily drop out, use a hammer and lightly tap on the shaft to break it free. If it is apparent that the clutch dog and shaft cannot be removed, leave it in place, however, at sometime in the future it will be necessary to remove and replace the entire pan center and clutch dog assembly. This must be done before the clutch dog shaft becomes hard to turn; when the shaft becomes hard to turn the agitator motor will be overloaded and damaged.)
- 3. Clean all parts thoroughly, making sure to use CKC. Do not use any harsh abrasives or cleaning material. Pay particular attention to the interior of the blade center. Some popping oils will carbonize and build up on the interior of the blade center and create a tight fit on the pan center. (Normal clearance is 1/8" -- 3 mm). When this happens oil will 'wick-up' the narrow gap and leak down the clutch dog shaft and give the appearance that the kettle is leaking oil. In extreme cases the carbon will cause the blade center to grip the pan center and turn it. This will loosen the pan center and a serious oil leak will occur. When reassembling lightly coat the clutch dog shaft with moly grease or a comparable high temperature lubricant.
- 4. Reassemble cover in reverse order, following the directions above.

C. Giant Popping Plants

Remove and empty the waste clean-out drawer daily or whenever it is full. Under heavy use this may need to be done more often.

This appliance should not be cleaned with a water jet.

This manual is filled with time-saving and money-saving information regarding your Cretors popcorn popper. There is nothing, however, more important than the safety aids and warnings found throughout this document.

If you have any questions regarding the operation or cleaning of your Cretors popcorn popper, contact your local distributor. Should you have any difficulties or are unable to reach them, 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 the 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 two years. 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 distributor or the Customer Service Department at C. Cretors and Company.



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