3243 North California Avenue, Chicago, IL 60618

HEADLINER POPCORN MACHINE SERVICE MANUAL

120/208 - 240 Volt,
Single and Three Phase, 60 Hz

230 Volt,
Single Phase, 50 Hz

400 Volt, 3N~,
Three Phase, 50 Hz

100/200 Volt,
Single Phase, 50 & 60 Hz

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

BEGIN SERIAL NO. 00000000

04/00

SAFETY FIRST

The information in this manual is essential for the safe installation and maintenance of your Cretors popcorn machine. The manual must be read and understood before installing, 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.

I INTRODUCTION

This manual is filled with time-saving and money-saving information regarding your Cretors popcorn 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 front and back covers of this manual. Always have the model and serial number of your machine available to assist in obtaining the correct information.

ELECTRICAL SPECIFICATIONS: Headliner Models are available in any of the following Electrical configurations:

120/208 - 240 Volt, Single, 60 Hz
230 Volt, Single Phase, 50 Hz
400 Volt, 3N~, Three Phase, 50 Hz
100/200 Volt, Single Phase, 50 & 60 Hz

SPECIFICATIONS:

MODEL HDL20CP	**HEADLINER 20 OZ. ELECTRIC COUNTER MODEL**
Capacity:	20 oz. All-Steel Kettle, 400 one-ounce servings per hour
Electrical:	5600 watts,
Dimensions:	28"D x 36"W x 47" H - - - - 71 cm D x 91 cm W x 119 cm H
Net Weight:	250 lbs. (113 kg.)

MODEL HDL32CP	**HEADLINER 32 OZ. ELECTRIC COUNTER MODEL**
Capacity:	32 oz. All-Steel Kettle 640 one-ounce servings per hour
Electrical:	6600 watts
Dimensions:	28"D x 36"W x 47" H - - - - 71 cm D x 91 cm W x 119 cm H
Net Weight:	250 lbs. (113 kg.)

MODEL HDL20FP	**HEADLINER 20 OZ. ELECTRIC FLOOR MODEL**
Capacity:	20 oz. All-Steel Kettle 400 one-ounce servings per hour
Electrical:	5600 watts
Dimensions:	28"D x 36"W x 74"H - - - - 71 cm D x 91 cm W x 188 cm H
Net Weight:	370 lbs. (168 kg.)

MODEL HDL32FP	**HEADLINER 32 OZ. ELECTRIC FLOOR MODEL**
Capacity:	32 oz. All-Steel Kettle 640 one-ounce servings per hour

Electrical:	6600 watts
Dimensions:	28"D x 36"W x 74"H - - - - 71 cm D x 91 cm W x 188 cm H
Net Weight:	380 lbs. (168 kg.)

I 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.

III PURPOSE OF MANUAL

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

This manual should be kept available to maintenance personnel.

IV INSTALLATION INSTRUCTIONS

1. Location

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

2. Power Supply

A. Check the nameplate to determine the required power supply.

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

B. C. Cretors and Company recommends dedicated circuits for the Headliner model popcorn machine. The Headliner model poppers require a dedicated circuit to avoid voltage drop in the supply wiring. Check your local electrical codes regarding fuse or circuit breaker requirements.

Make certain your popcorn machine is properly grounded. Failure to do so may result in damage to your equipment or present a shock hazard.

3. Connecting Machine to Power Supply

A. Make certain that power supply circuit breakers are in the 'OFF' position.

B. Push the plug completely into the receptacle. If the cord has a twist lock plug be sure to turn to lock in position.

C. If the supply cord is damaged, it must be replaced by Cretors', or by a Cretors' approved service agent, or a similarly qualified person in order to avoid a hazard.

4. Pump Installation

Refer to the Service Manual supplied with the pump to be installed in the machine.

5. Counter Model Installation

The Counter Model Headliners have 4" legs which must be attached at the time of installation. The legs are required to comply with Sanitation Standards.

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

V 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.

A. Perform work only on de-energized circuits. Failure to do so may lead to electrical shock resulting in personal 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 popcorn machine.

If the supply cord is damaged, it must be replaced by Cretors', or by a Cretors' approved service agent, or a similarly qualified person in order to avoid a hazard.

2. Kettle Temperature Control

THERMOSTAT OPERATION

A. The thermostat is installed as a safety device to prevent overheating of the kettle if the machine should be left unattended momentarily while in operation. The operation of the thermostat is indicated by the kettle indicator light which is located in the ceiling of the cabinet. The indicator light should stay on for most of the popping cycle. The indicator light should go off 10-20 seconds before the corn finishes popping and the kettle is dumped. If the indicator light goes out 30 seconds or more before the corn finishes popping, the thermostat may be too low and be in need of adjustment.

CAUTION If the corn has dried out, it may not finish popping at normal temperatures and the light may appear to go out early. DO NOT ADJUST KETTLE TEMPERATURE BASED ON POOR QUALITY CORN.

B. If set too high (over 500°F 260ºC), the thermostat can cause a serious fire hazard.

C. Repair part thermostats shipped from the factory have been factory adjusted to switch off the current to the heating elements when the kettle temperature reaches 410° F (210ºC). The factory setting should prove satisfactory; however, each thermostat must be checked after installation to confirm correct operation. To adjust the thermostat, perform the following operations:

THERMOSTAT ADJUSTMENT

A. Locate the plugged thermostat adjustment hole on the side of the kettle retainer and remove the plug.

B. Turn on the kettle heat.

C. Locate pyrometer over thermostat.

D. Set temperature so that the power to heat elements is cut off at the correct temperature.

KETTLE	SALTED CORN	SUGAR CORN
20 OZ.	420° F. (215° C)	385° F. (193° C)
32 OZ.	420° F. (215° C)	385° F. (193° C)

E. To adjust thermostat, insert a flat blade screwdriver into the slotted adjustment screw and turn COUNTER - CLOCKWISE to raise the temperature or CLOCKWISE to lower the temperature.

F. Do not adjust more than one-quarter turn at a time. One full turn of the adjustment screw equals approximately 110° (43°C) Fahrenheit.

G. Do not screw the adjusting screw all the way in or out! This will render the thermostat inoperable and the kettle heat will increase to a dangerous level and could possibly cause a "flash fire" if oil is put into the pan.

H. If no pyrometer is available, the thermostat may be adjusted by observing the operation of the indicator light as described in the Thermostat Operation section. Adjust the thermostat so that the kettle heat is turned off 10 to 20 seconds before the corn finishes popping and the kettle is dumped

CAUTIONIf the corn has dried out, it may not finish popping at normal temperature, and the light may appear to go out early. DO NOT ADJUST KETTLE TEMPERATURE BASED ON POOR QUALITY CORN.

CAUTION Do not adjust the temperature so high that the pan smokes at the end of the popping cycle. If set too high (over 500°F or 260°C), the kettle can become a serious fire hazard.

I. Your final setting should allow the indicator light to cycle off 10 to 20 seconds prior to dumping the kettle.

J. Observe two or three cycles of correct operation to be certain everything is working correctly.

3. Kettle Removal

To remove the kettle assembly, perform the following operations:

A) Unplug the popcorn machine from the power supply.

B) Remove the Retainer Patch (#4873).

C) Remove the hex screws on the bottom of the retainer and remove the retainer.

D) Disconnect the lead wires from the mica terminal plate.

E) Loosen the two square-head set screws that hold the kettle support plate(s) to the support shaft.

F) Slide the kettle off of the support shaft. Use proper lifting techniques when removing the kettle assembly to avoid injury to back.

G) If wires must be replaced, be sure to use nickel wire supplied by Cretors. Conventional copper or "stove" wire will have limited life.

H) When removing nuts and spacers from the threaded studs on the bottom of the pan, do not wipe off the silver lubricant. Without this lubricant (NEVER SEEZ) the nuts may freeze on the studs and cause the studs to break when the nuts are turned, in an attempt to remove them.

4. Kettle Installation

A) When reassembling the kettle, be sure all nuts and bolts are tight. Check to make sure that all electrical connections are secure. A loose connection can heat up and burn off the wires.

B) Check the kettle support bar to be sure it is level.

C) Locate the kettle so that the drive shaft lines up with the blade center, and tighten the bolts on the kettle support plate (plates) that hold the kettle in place.

D) Turn on the agitator motor and dump the kettle. If the drive shaft does not engage and disengage freely, readjust the kettle. Under normal circumstances if the kettle was aligned before it was removed, the only adjustment needed is to slide it in or out along the support shaft until the drive shaft is aligned with the blade center. In severe cases it may be necessary to make further adjustments, see the section on alignment.

E) When the drive shaft engages and disengages freely, securely tighten the other bolts holding the pan.

F) Replace the retainer and the retainer patch.

5. Kettle Alignment

A) Begin by checking to see if the (#4808) kettle support bar is level. With the kettle removed, apply slight downward pressure on the dump handle to simulate the weight of the pan. Measure the distance from the top of the bar to the top of the cabinet at both the tip and at the base near the support column. The measurements should be equal to within 1/8 inch (3 mm). This dimension should be approximately 11 and 7/8 inches (30.16 cm).

B) If the bar is not level, remove the cover from the support column. Locate the (#4766) kettle level nut and loosen the set screw that holds it to the shaft. With the set screw loosen the nut can be turned to move the (#4808) support bar up or down. When level, retighten the set screw.

C) When the (#4808) bar is level and properly aligned the (#4833) agitator drive shaft should be directly above it. If the bar is not under the drive shaft it can be moved to either side by rotating the entire support column. The support column is rotated by loosening the four bolts that attach it to the top of the cabinet. Re tighten and recheck alignment.

6. Kettle return spring adjustment

The kettle counter balance return spring holds the kettle in a level position when popping corn and permits the kettle to be emptied when the handle is pulled down. The fixed end of the spring is held by a hooked plate with four adjustment points. The tension of this spring is adjusted by sliding a small tube over the fixed end of the spring and moving it to a different adjustment point.

7. Replacing damaged oil discharge tube

If the oil discharge tube, which terminates within the kettle becomes damaged, the tube can now be replace easily. By using a 9/16 wrench to loosen and remove the bottom piece of the coupling. Pull the damaged tube out and replace with P/N 1089-1 tube.
CAUTION, make sure the mitered end of the tube is facing the opposite direction of the stirrer blade P/N 7552 rotation. This is so that the unpopped kernels are not forced up into the tube. Tighten up the coupling when finished.

VI TROUBLE SHOOTING

1. Problem - Popping is slow

QUESTION: Were the correct amounts of corn and oil used?

Refer to the chart in the operating section for the correct quantities.

QUESTION: Does the kettle indicator light go out more than 30 seconds before the corn finishes popping?

YES! Temperature set too low - See section on how to adjust temperature.

CAUTION If the corn has dried out, it may not finish popping at normal temperatures, and the light may appear to go out early. DO NOT ADJUST KETTLE TEMPERATURE BASED ON POOR QUALITY CORN.

CAUTION Do not adjust the temperature so high that the pan smokes at the end of the popping cycle. If set too high (over 500°F or 260°C), the kettle can become a serious fire hazard.

NO!

A. Voltage may be low - check voltage at circuit breaker with kettle heat 'ON'. Extension cords or inadequate wiring will provide full voltage, if no load is applied. Once the kettle heat and auxiliaries are turned on, the voltage may drop 5 to 10 volts.

B. If indicator light stays 'ON', one element in a multi-element pan may be have failed. Use an ammeter to diagnose.

C. Check the amperage draw of the heating elements, by using a clamp-on ammeter. Determine whether or not a heating element has failed by performing the following procedure:

   a. Remove the top of the machine by removing the screws that hold the top panel and lift the top off.

   b. Turn on the kettle heat.

Place the ammeter around the lead to the popper kettle as listed below. The following current draws are normal:

120/208-240V and 100/200V machines – black or red
230V machines – blue or brown
400V machines – black or brown

Kettle	Wire Color	Elements	**120/208 –240V.& 100/200V**
20 oz.	red	1447-A	15 amps
	black	1983-A	7.5 amps
32 oz.	red	1528-A & 1808-A	22.9 amps
	black	2615-A	8.3 amps

Kettle	Wire Color	Elements	**230V**
20 oz.	blue	1447-C	11.2 amps
	brown	1983-C	11.2 amps
32 oz.	blue	1528-C & 1808-C	15.6 amps
	brown	2615-C	15.6 amps

Kettle	Wire Color	Elements	**400V**
20 oz.	black	1447-C	7.5 amps
	brown	1983-C	3.2 amps
32 oz.	black	1528-C & 1808-C	11.5 amps
	brown	2615-C	4.1 amps

A low reading indicates a problem in the kettle. One or more of the heat elements may not be functioning properly. If the element is not functioning, the possible causes are either that the element has burned out or a lead wire has burned off one of the element terminals due to a loose connection. In either case the kettle must be removed and the problem identified. See service section for kettle removal instructions.

a) Remove kettle (see Service Section for removal instructions)
b) Check for short circuits inside the kettle.
c) If wires must be replaced, be sure to use nickel wire supplied by Cretors. Conventional copper or "stove" wire will have limited life.
d) Make a visual check for broken, loose, burned or heat damaged wires. If there are no obvious broken or loose wires shorting out on the kettle, the elements must be checked.
e) Perform a continuity test on the elements. It is possible that one of the elements has burned through its insulation and casing and is shorting out directly to the kettle bottom.

Continuity and Ohms test

Whenever you are performing a Continuity or Ohm test the machine must be unplugged from the wall. Perform work only on de-energized circuits. Failure to do so may lead to electrical shock resulting in personal injury or death.

When checking Ohms, make sure that the meter probes are making good contact on the terminals. Remove the nickel buss bars that connect the electrical terminals on the heat elements.
Using a multimeter, check each element between the following points:

Terminal to terminal	1. 2.	Ohm readings should match chart listed below. If Ohm readings are not close, replace.
First terminal to element case	1. 2.	Continuity to case from terminal indicates a grounded element; replace. No continuity - functioning properly
Second terminal to element case	1. 2.	Continuity to case from terminal indicates a grounded element; replace. No continuity - functioning properly

32 oz. - **120V** elements	2615-A 1808-A 1528-A	1000 Watt – 14.4 Ω 1250 Watt – 11.5 Ω 1500 Watt – 9.6 Ω 3.8 Ω (total)
20 oz. - **120V** elements	1983-A 1447-A	900 Watt – 16.0 Ω 1800 Watt – 8.0 Ω 5.3 Ω (total)

32 oz. – **240V** elements	2615-C 1808-C 1528-C	1000 Watt – 57.6 Ω 1250 Watt – 46.1 Ω 1500 Watt – 38.4 Ω 15.6 Ω (total)
20 oz. – **240V** elements	1983-C 1447-C	900 Watt – 64.0 Ω 1800 Watt – 32.0 Ω 21.3 Ω (total)

Replace failed heat elements with identical units available from your local dealer or from Cretors. Reassemble and reinstall kettle assembly onto the machine.

2. Problem - Kettle Will Not Heat

QUESTION: Do any of the other components work - motor, light, etc.?

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!

A. Problem is in machine.

The following procedures are performed with the power 'ON'. As with any electrical repairs, there is a shock hazard present.

Check the relay. The Diplomat thermostat uses a relay to control the power to the popper pan heat elements. To check the relay, perform the following operations:

A) To gain access to the relay, remove the top of the machine by removing the screws on the top.

B) Using a voltmeter, check the power to the relay coil, which are the small terminals in the center.

C) With the popper switch on, at room temperature, the thermostat should be calling for heat and providing power to the relay. If the coil reading is not 120 volts, (230 volts on 230V and 400V, 50Hz machines) the problem is in the thermostat.

D) If the coil reading is 120 volts, (230 volts on 230V, 50hz and 400V) check the voltage between the output terminal with wire #1 and the output terminal with wire #3 from the kettle support. If this does not have a reading of 208 or 240 volts, the relay is not functioning and needs to be replaced.

3. Problem - Corn Burns

QUESTION: Is the agitator working?

YES!

A. Check to be certain the stirrer blade is on the bottom of the pan and is stirring the corn.
B. Were the correct amounts of corn and oil used? See operation section for correct amounts.
C. Temperature set too high? - adjust temperature.

NO!

A. Does the agitator drive shaft engage the blade center and turn it? See service section for kettle alignment instructions.
B. Does the kettle sag when corn is added to the kettle causing the agitator to disengage? See service section on return spring adjustment.
C. Check motor connections - loose wire.
D. Motor bad - replace.

4. Problem in Cornditioner

The cornditioner heat system in the cabinet consists of a blower, heating element, and thermostat mounted in the base of the popper case cabinet. The thermostat controls the temperature of the air supplied by the cornditioner. The cornditioner circulates hot air through the popper case to keep popped corn hot and crisp. An indicator light next to the cornditioner switch indicates when there is power to the circuit.

To access the cornditioner components remove the wire cover panel on the popper case bottom. Remove six screws from the edge of the panel on the left side of the cabinet. This will expose the cornditioner components.

With the power connected, turn the cornditioner on.

QUESTION: Is the switch light 'ON' and no air being delivered?

A. Check connections to blower.
B. Replace blower.

QUESTION: Is the switch light 'ON' and cool air is being supplied?

A. Check heat element; replace.
B. Check thermostat; replace.

5. Problem - Exhaust Odors

A. Wash grease filter.
B. Replace charcoal media in the charcoal filter box.

6. Pump

Refer to pump service manual

VII OPERATING INSTRUCTIONS

1. 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.

2. 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.

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

4. Always turn 'OFF' the KETTLE HEAT switch 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.

5. To operate your Cretors popcorn popping machine:

A. Fill the corn drawer with corn. (Models HDL20FP, HDL32FP)

B. Fill the salt box and hang it on the inside edge of the corn drawer.

C. Connect and adjust the pump as explained in the installation instructions and preheat the popping oil until liquid, if necessary.

D. Fill the corn measure with corn and the salt measure with salt, and empty these into the kettle. When making sugar corn, add the correct amount of sugar, rather than salt, with the measure of corn.

E. Close the kettle lid by pulling the knob down. Avoid contact with the kettle. Contact with a hot popping kettle may result is serious burns or scalds.

CAUTION! 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.

F. Turn 'ON' the agitator, turn 'ON' the exhaust fan, turn 'ON' the kettle heat.

G. Press the delivery button to pump the correct amount of oil into the kettle.

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

SALTED CORN

	VOLUMETRIC MEASURE		
Kettle Size	Corn	Oil	Salt
20 oz.	20 oz. 591 ml	6.5 oz. 195 ml	2 tsp.
32 oz.	32 oz. 1083 ml	12.25 oz. 367.5 ml	3 tsp.

SUGAR CORN

	VOLUMETRIC MEASURE		
Kettle	Corn	Oil	Sugar
20 oz.	12 oz. 351 ml	4.25 oz. 127.5 ml	8.25 oz. 245 ml
32 oz.	19.5 oz. 577 ml	7.5 oz. 225 ml	15.25 oz. 451 ml

H. 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, dump the kettle by pulling the large black handle down as far as it will go. Then 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.

I. Repeat steps D - H as desired, adding corn to the corn drawer and salt to the salt box as necessary.

J. When the oil container is empty, replace with new full container of oil. See appropriate pump instruction manual.

NOTE: The ideal time for maximum volume 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. Reduce the charge of raw corn if the time is more than 3-1/2 minutes and increase the charge if the time is less than 2-1/2 minutes per popping. This almost can be a sign of a failing thermostat or a heating element not heating. See troubleshooting section of this manual.

K. Follow the recommended sanitation procedures.

VIII 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.

1. Popping Kettle

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

B. Do not use steel wool or other similar abrasives to clean the kettle as they will ruin the kettle by removing the nickel plating.

C. Do not attempt to clean the kettle with power connected unless you are boiling the "CKC" cleaning compound to clean the inside of the kettle in step F.

D. Do not attempt to clean a hot kettle. Failure to do so may result in serious burns or scalds.

E. The kettle has a polished nickel finish and is very easy to clean if oil is not allowed to burn on it. 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 solidified, 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.

F. 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 3/4" 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 Headliner machine. The kit is sold separately under P/N 10831, which you can purchase from your local distributor.

G. Cretors Outside Kettle Cleaner "COC" should be used periodically to remove popping oil that may become baked to the outside of the kettle. The kettle agitator assembly should be removed weekly for thorough cleaning.

H. The agitator assembly is disassembled by removing the spring pin (#1472) going through the top of the stirrer blade (#7552). Lift off the stirrer blade.

I. Clean all parts thoroughly, making sure to use Cretors Kettle Cleaner. Do not use any harsh abrasives or cleaning material.

J. Reassemble in reverse order, following the directions above.

2. Cabinet

A. Remove and empty the waste clean-out drawer (#5138) daily or whenever it is full. Under heavy use this may need to be done more often. Failure to empty the drawer and clean cabinet may result in a fire hazard due to restricted air flow from the cornditioner.

B. The cabinet glass and cabinet base can be cleaned with any good grade glass or household cleaner suitable for glass and plastic surfaces. The inside of the cabinet can be cleaned with the same cleaner as the outside, if it is the type that has a cleaning agent to cut the oil remaining from the popping operation, and it is acceptable for food contact surfaces. Do not soak unit with water. Avoid wetting of inside of electrical enclosure.

C. The doors can be cleaned with Cretors' Plastic Clean and Shine. This product is specially formulated to clean plastic doors. Do not use cleaners that have ammonia or alcohol. The use of these cleaners will cause the doors to become brittle and crack.

D. Counter Model Headliners require the installation of 4" legs which are included with unit.

E. The popper case bottom of the cabinet should be removed at least weekly or more often if needed to thoroughly clean the air chamber beneath of salt and small bits of corn which come through the air holes. The corn and scraps may be swept into the clean-out drawer and then removed.

F. This appliance shall not be cleaned with a water jet.

3. Pump

Refer to the pump manual

SAFETY FIRST

The information in this manual is essential for the safe maintenance of your Cretors popcorn machine. The manual must be read and understood before installing, 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.

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, 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.

EST'D. 1885
CRETORS®

C. CRETORS AND COMPANY
3243 N. CALIFORNIA AVENUE
CHICAGO, IL 60618
PHONE (773) 588-1690, (800) 228-1885, FAX (773) 588-2171
WEB SITE: http://www.cretors.com Email: postmaster@cretors.com