



3243 North California Avenue, Chicago, IL 60618

7900 BAG-N-BOX PUMP SERVICE MANUAL

MODEL

7900

7901

7902

7900-E



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

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Part Number Configuration: 7900 Bag-in-Box Oil Pump

	7900	RC	A	S	X
<u>Model</u>	7900 - 7900 Bag in Box Pump				
<u>Control</u>		RC - Remote Control L - Logic Control GM - Remote Control (Gold Medal Plug)			
<u>Voltage</u>			60 Hz. (North America) A - 120/1/60 50 Hz E - 230/1/50 Japan F - 100/1/50		
<u>Oil Connection</u>				S - Side Oil Line Connections (Standard) F - Front / Rear Oil Line Connections	
<u>Options</u>					X - No Custom Features C - Custom Features H - Heated Tubes EH - 30" Heated Tubes Z - Other

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 for this symbol. It points out important safety precautions and procedures. It means **ATTENTION! Become Alert! Your personal safety is at risk!** 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 safe installation and service of your Cretors machine. The manual must be read and understood before installing, or maintaining equipment, or equivalent training must be provided.



"The employer must instruct each employee in the recognition and avoidance of unsafe conditions, regulations applicable to his work environment to control and 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 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. 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 distributor 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 last page of this manual. Always have the model and serial number of your machine available to assist in obtaining the correct information.

IV. SPECIFICATIONS

Size Specifications:

MODEL 7900	7900 AUTOMATIC OIL PUMP MODEL
Capacity:	(2) 35 lb. boxes of oil.
Electrical:	120 volt, 60 cycle, single phase, 250 watts, 1.5 amps.
Dimensions:	16-1/2" H x 18-1/4" D x 14-3/4" W
Net Weight:	30 lbs.
Shipping Weight:	39 lbs.

V. PURPOSE OF MANUAL

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

This manual should be kept available to maintenance personnel.

VI. INSTALLATION INSTRUCTIONS

A. Location

Choose a location for your Cretors machine that maximizes the ease of operation and maintenance procedures. Be sure to check your local building and fire codes for location restrictions.

B. Power Supply

1. The 7900 Oil Pump is provided with other 120 volt components, which requires a 120 volt circuit for proper operation. Check the nameplate to determine the required power supply.



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

2. C. Cretors and Company recommends dedicated circuits for the 7900 Model Cretors Oil Pump. The 7900 Model Cretors Oil Pump requires a dedicated circuit to avoid a voltage drop in the supply wiring. Check your local electrical codes regarding fuse or circuit breaker requirements.



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

C. Connecting your Oil Pump to the Power Supply

1. Make certain that the power supply circuit breakers are in the off position.



Perform work only on de-energized circuits. Failure to do so may result in damage to your equipment or present a shock hazard.

2. Make certain all switches on the popcorn machine are in the off position before plugging in your 7900 Model Cretors oil pump.
3. Plug your popcorn machine and oil pump into the correct type of outlet, turn on the circuit breaker and then turn on the machine switches. If the motor groans, the receptacle in the wall may have been improperly wired. Contact an electrician.

D. Pump Installation

1. Make certain the pump switch on the control panel is in the off position.
2. Receiving a 7900 pump as a replacement for 7700 or earlier models.
 - a. The units equipped with wood bases, remove the (2) screws on back flange of oil pail tray (P/N 1349) and remove tray. This tray is not needed for 7900 model.
 - b. Replace existing plastic hose (#1223) (7" on Diplomat, 19" on President) with 20" or 24" plastic hose respectively. The existing hose clamps (#1609) and socket (#5216) are still used. If existing hose length was shortened so the socket (#5216) does not have sufficient length to connect to the plug (#5217) on the pump, replace the entire length – 110" (for Merchant and Profiteer).



Use proper lifting techniques when removing the kettle assembly to avoid injury to back.

- c. The 7900 model weighs approximately 30 lbs., so use proper lifting techniques and slide pump into cabinet. Allow at least 3" from front edge of pump to back side of door. This will ensure door, when closed, will not interfere with a properly connected bag connector.
- d. Connect hose (#1223) simply by pushing socket (#5216) into plug (#5217) and make sure it has snapped into place. Test engagement by pulling up on hose near connection, fittings will not disengage.
- e. Connect pump cord and plug (#2009-A) to pump receptacle (#2011) located on top back 7900 model.
- f. Loading the oil – each box is filled with approximately 35 lbs of oil. As this time we do not supply the oil or the boxes they come in, but we can supply the appropriate bag connector (available from your local authorized Cretors distributor).
- g. Using proper lifting techniques, load one box into bottom tray and one on top. Following instruction on the box itself, connect the bag connector to the Bag-n-Box nozzle. You are now ready to adjust the pump as outlined in Pump Adjustment.



Make sure that the popper heat switch is in the off position during all pump adjustments. Failure to do so may result in serious burns.



WARNING! If either shelf is not occupied by the Bag-n-Box, use caution around these surfaces they will be hot! Failure to do so may result in serious burns.

E. Pump Adjustment

1. Make sure that the pump power switch and the auxiliary switch located on the popper are on.
2. Check the output adjustment, place the kettle in the dump position and hold the oil measure cup under the oil delivery tube.



WARNING! Never hold the oil measure cup under the oil delivery tube if the kettle is in the up position. The kettle is hot! Failure to do so may result in serious burns.

3. Press the delivery button (#1066) or One Pop button, and wait for the pump to cycle. Dispose of the oil, and cycle the pump again.
4. After three cycles, the amount of oil delivered will be consistent. Check this amount with the measuring cup.
5. If the amount of oil is not correct, it may be adjusted. For a Salt/Sugar machine, the timer may be located in the popper. To adjust the pump:
 - a. Turn of the pump switch.
 - b. To set the oil quantity delivery:
 - i) Remove the snap out plug on the front side of the bottom cover to expose the timer.
 - ii) Check to make sure the timer has good contact by pushing down lightly onto the timer base, making certain not to push any of the switches.
 - iii) Switches 1 through 10 are each assigned a certain amount of seconds of delay time. Each successive switch is double the amount of delay time for the switch before it. The amount of delay time is written at the top, along the Open/Off line (i.e. 1,2,4,8, etc.)
 - iv) The switch must be in the Up position along the Open/Off line for the delay time to apply. An example of this for three seconds would have the switch corresponding to 1 on the Open/Off line up along with the switch corresponding to 2 on the Open/Off line.

<u>Machine</u>	<u>Recommended Amount of Oil</u>	<u>Set Timer to Number of Seconds (Your results may vary.)</u>
PT14	4.5 oz.	3 seconds
MR16	5.5 oz.	4 seconds
DI20	7.5 oz.	5 seconds
PR20	7.5 oz.	5 seconds
G20	7.5 oz.	5 seconds
DI32	11 oz.	9 seconds
PR32	11 oz.	9 seconds
G32E	11 oz.	9 seconds
G32G	11 oz.	9 seconds
G48E	16 oz.	12 seconds
G60E	11 oz.	12 seconds

- c) Turn on the pump switch and re-check the oil output using steps 1-5 in the Pump Adjustment Section.
- d) Install snap out plug.

G. Bag-n-Box Connector

1. To prepare the box for use: Break the perforated opening on the box and bend back the corrugated tab. Reach inside and grasp the bag spout. Place the ring of the spout into the box slot and lock into place with the corrugated tab.
2. Place the bag-in-box in the appropriate shelves. Next remove the travel cap from the spout. The travel cap prevents the dirt and dust from coming into contact with the internal slider for sanitary hook-up.
3. Snap the locking plate over the bag spout. The tapered probe on the connector is then pushed into the bag spout and locks into place. This bi-directional locking action does two things. One, it eliminates any possibility of accidental disconnect, giving the user a "foolproof" positive connection and two, it opens the channel allowing product to follow.
4. When the bag-n-box container is empty. To disengage the connector, snap the connector probe into the out position and remove it from the bag spout. This disconnects and reseals the bag. All product contact surfaces are protected ensuring a sanitary situation.
5. No disassembly of connector is required when switching from one Bag-n-box container to another Repeat steps 1 – 3 to properly re-connect Bag-n-box to pump.

*NOTE: Prior to each attachment of Bag-n-box connector, ensure that the probe has not been contaminated. If this has occurred, clean the connector as described in **Sanitation Instructions**.

VII. TROUBLE SHOOTING



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



Perform work only on de-energized circuits. Failure to do so may lead to electrical shock resulting in personal injury or death.

PROBLEM	POSSIBLE CAUSE	ACTION
Nothing works.	Is the pump plugged in?	Plug in.
	Is the switch turned on?	Turn on the popper switch.
Pump not heating.	Check element.	Use an ammeter to diagnose.
Motor hums, but will not turn:	Debris in pump.	Clean out.
	Motor burns out, because it cannot turn.	Replace motor.
Pump runs all the time.	Timer set incorrectly.	Reset. (See Pump Adjustment)
	Bad timer.	Replace timer.
Motor runs, but does not dispense oil	Check for oil in the box.	Exchange.
	Pump sucking plastic bag, not oil by the nozzle.	Move connector.
Amount of oil delivered is not consistent.	Check oil tubing for leakage and for restrictions.	Fix or replace clamps on tubing.
	Bag-n-box connector improperly installed.	Re-install connector.
	Oil is not in liquid state.	Wait till oil is liquid.

Do not attempt to operate pump if the Bag-n-Box is in the upright position.

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

If you have any questions, contact your local distributor 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 two years. Please take this time to fill out the factory registration card and return it to Cretors 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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