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# **SECTION 3. OPERATION**

3-	1. OPERATING CONTROLS	
	Power/Pump Switch	The Power/Pump Switch is a three way switch with center "OFF" position. Move the switch to the position marked "POWER" to operate the fryer. Move the switch to the position marked "PUMP" to operate the optional portable filter pump. Certain conditions must be met prior to operaton of the filter pump. These conditions are covered later in this section.
	Cookpot	This reservoir holds the cooking shortening.
	Cooking Rack	This stainless steel rack consists of five shelves which contain the food product during and after frying.
$\bigcirc$	Lid Gasket	The lid gasket provides the pressure seal for the cookpot chamber.
- 0410-	Operating Valve	The dead weight style operating pressure relief value is used to maintain a constant level of steam pressure within the cookpot. Any excess steam pressure is vented through the exhaust stack.
	Safety Relief Valve	The safety relief valve is an ASME approved spring loaded valve set at 14.5 psi. In the event the operation valve becomes obstructed, this safety valve will release excess pressure, keeping the cookpot chamber at 14.5 psi. If this occurs, turn the Power/Pump switch to the "OFF" position to release all pressure from the cookpot.
	Safety Relief Valve Lever	THE LEVER IS NOT TO BE PULLED.
$\bigcirc$		DANGER
		Severe burns from the steam will result.
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## 3-1. OPERATING CONTROLS (Continued)

Gauge

Solenoid Valve

Drain Valve

Drain Interlock Switch

Condensation Drain Pan

Lid Stop Bracket

The pressure gauge indicates the pressure inside the cookpot.

The solenoid valve is an electro-mechanical device that causes pressure to be held in the cookpot.

The solenoid valve closes at the beginning of the frying cycle and is opened automatically at the end of the frying cycle. If this valve should become dirty or the teflon seat nicked, pressure will not build up and it must be repaired per the maintenance section.

The drain valve is a two-way ball valve. It is normally in the closed position. Pull the knob out to drain the shortening from the cookpot into the filter drain pan.

DO NOT OPEN THE DRAIN VALVE WHILE COOKPOT IS UNDER PRESSURE. Hot shortening will exhaust from this valve. Severe burns will result.

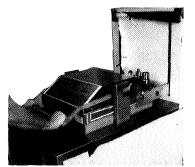
The drain interlock switch is a microswitch that provides protection for the cookpot in the event an operator inadvertently drains the shortening from the cookpot while the main switch is in the POWER position. The switch is designed to automatically shut off the heat when the drain valve is opened.

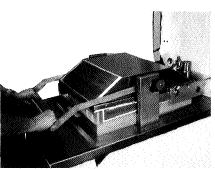
The condensation drain pan is the collection point for the condensation formed within the steam exhaust system. It must be removed and emptied periodically.

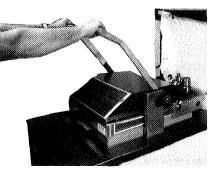
The lid stop bracket stops the upward motion of the lid assembly. This allows the lid to be lifted to an upright position with the rack removed allowing easier access to the cookpot for filtering and cleaning.

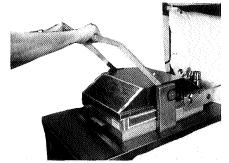
Model 680

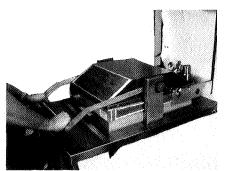
# **3-2. LID OPERATION**









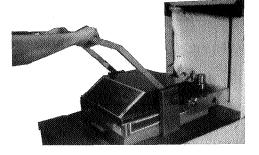


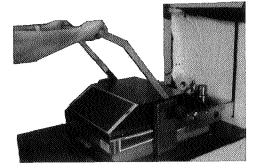
To close lid:

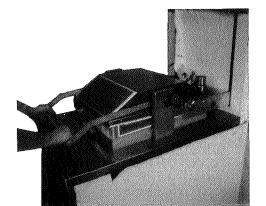
- 1. Lower the lid until gasket comes into contact with the pot.
- 2. With the lid lowered, pull lid handle forward until it stops.
- 3. Lift up on the lid handle until it stops.
- 4. Bring lid handle out towards you until it stops.
- 5. Push lid handle down, locking lid in place.

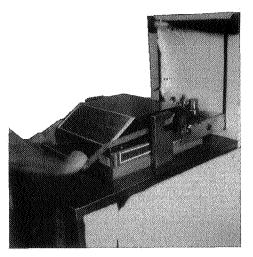
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# 3-2. LID OPERATION (Continued)









To open lid:



DO NOT ATTEMPT TO OPEN LID UNTIL THE PRESSURE DROPS TO ZERO. Opening the lid when the cookpot is pressurized will allow hot shortening and moisture to escape from the cookpot, resulting in severe burns.

- 1. Gently raise handle until it stops.
- 2. Push handle back until it stops.

3. Lower handle.



DO NOT raise the lid with the handle in the up position. Be sure to lower the handle before attempting to raise the lid, or damage to the lid could result.

4. Push handle back and raise lid.

**3-3. MELT CYCLE OPERATION** If the shortening is below 185°F (77°-85°C) with the Power/Pump Switch in the "Power" position, the fryer will enter the melt cycle. The shortening is heated slowly to prevent scorching of the shortening. The display will read "LO" and the heat will cycle, 10 seconds on, 30 seconds off, to ensure slow melting of shortening. No other buttons on the control panel will operate except the Power/Pump Switch. NOTE Should you require outside assistance, just call 1-800-543-6243, or Ohio, 1-800-762-2964. **3-4. SWITCHES AND INDICATORS** NOTE If the fryer has the FAST controls, see the FAST "LO" Mode operation manual. The display will read "LO" anytime the shortening temperature is below 256°F. When the Power/Pump Switch is placed in the "Power" position, the control will begin a melt mode which cycles the heat on and off. This slowly melts/heats the shortening until the temperature reaches 185°F (85°C). At 85°F (85°C) this heat stays on until the "COOL" mode is reached, or until reaching the temperature of the selected cooking cycle. "COOL" Mode After cooking or filtering the shortening, the temperature will automatically go into the "COOL" mode which keeps shortening at 250°F (121°C). This temperature extends the shortening life and minimizes the time needed to heat the shortening for the next cook cycle. Press "Exit Cool" to leave the "Cool" mode, then press product button for the cook cycle desired. WARNING Although the display will read "COOL" in the standby mode, the shortening is hot and could cause burns.

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Cycle Selection	Select the cook cycle by pressing the button for the number of heads, or product, to be cooked. Shortening will then heat to "Drop" temperature.
	Pressing the same button again will begin the cook cycle. The indicator will change from "Drop" to counting down the cook time in minutes and seconds.
	At the end of the cook cycle, press the same button again when the indicator reads "Done" and the alarm sounds. The fryer will reset to the "Cool" mode.
Time/Temperature Display	This is a four (4) digit LED type display which shows the remaining cook time during cook cycles and also the shorten- ing temperature on demand from the operator.
Heat Indicator	The heat light will illuminate whenever the control calls for heat. When shortening temperature has been reached the heat light will go off.
Hi Temperature Indicator	The display will read "HI" if the shortening temperature is $40^{\circ}$ above the setpoint.
Drop Indicator	The display will read "Drop" when the shortening has reached the setpoint temperature $(+4^{\circ} \text{ to } -2^{\circ})$ .
Done Indicator	The display will read "DONE" at the end of the cook cycle.
Temperature Button	This button allows the operator to read the temperature of the shortening while in a cook cycle. The display range is from $256 ^{\circ}$ F (124 $^{\circ}$ C) to 390 $^{\circ}$ F (199 $^{\circ}$ C).
3-5. FRYER POWER MODE	With the Power Switch in the "Power" position, the mode is selected depending on the temperature of the shortening.
	1. If pot temperature is below the melt temperature of 185°F (85°C) the fryer will enter the melt mode. Display will read "LO".
	2. If the pot temperature is 185°F (85°C) or higher, the control will regulate the programmed temperature of the selected cycle.
	3. The temperature will be regulated at 250°F (121°C), if the "EXIT COOL" button is pressed during heat up. The display will read "COOL".

Henny Penny

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3.	5. FRYER POWER MODE (Continued)	WARNING
		Although the display will read "COOL" in the stand- by mode, the shortening is hot and could cause burns.
		NOTE
		In the event of a power failure, no attempt should be made to operate the fryer. The Model 680 Fryer is equipped with an automatic ignition system and can not be operated without electrical power.
3	-6. MODE SELECTION TO FILTER SHORTENING	When the operator wishes to filter, move the Power Switch to the "OFF" position and filter as usual (refer to filter instructions). The display should read "COOL" before filtering.
		DANGER Z
		AMMINZ
		Dropping the shortening while at the "DROP" temperature and not in the "COOL" mode can result in shortening overflowing the cookpot which could cause serious burns, personal injury, fire and/or property damage.
		WARNING
		To avoid personal injuries or property damage be sure shortening has been pumped back into the cookpot before depressing the "EXIT COOL" switch. Unit will enter heat mode.
		NOTE
ł		The filter pump motor on the PF-180 is equipped with a manual reset button in the event the motor's thermal protection actuates. This reset button is located on the rear of the motor. A hinged door is placed on the motor cover to easily access this reset button. Wait approx- imately 5 minutes before attempting to reset this protective device. Also, some effort must be used when resetting the button and a definite "click" will be heard when it resets.

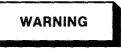
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3-6. MODE SELECTION TO FILTER SHORTENING (Continued)	CAUTION
	To prevent burns caused by splashing shortening, the unit's main power switch must be in the "OFF" position before resetting the filter pump motor's manual reset protection device.
	NOTE
	The pump motor and the combustion air motor are permanently lubricated and need no maintenance.
<b>3-7. CLEANING THE FRYPOT</b>	After the initial installation of the fryer, as well as before every change of shortening, the cookpot should be thoroughly cleaned as follows:
	1. Turn the main power switch to "OFF".
	DANGER Z
	The filter drain pan must be in position under the drain valve to prevent splashing or spilling of hot liquids. Failure to do so will result in splashing and severe burns.
	2. Refer to KFC's Standards Library on cleaning instructions.
	WARNING Always wear chemical splash goggles or face shield and protective rubber gloves when cleaning the cookpot as the cleaning solution is high in alkaline. Avoid splashing or other contact of the solution with your eyes or skin. Severe burns may result. Carefully read the instructions on the cleaner. If the solution comes in contact with your eyes rinse thoroughly with cool water and see physician immedi- ately.

3-7. CLEANING THE FRYPOT (Continued)



NEVER PRESSURIZE FRYER TO CLEAN. Leave the lid open. Water under pressure is super heated and will cause severe burns if it comes in contact with skin.



Never heat the cleaning solution to the boiling point. If the cleaning solution in the cookpot starts to foam and boil over, DO NOT TRY TO CONTAIN IT BY CLOSING THE FRYER LID, or severe burns could result.



Do not use steel wool, other abrasive cleaners or cleaners/sanitizers containing chlorine, bromine, iodine, or ammonia chemicals, as these will deteriorate the stainless steel material and shorten the life of the unit.

### NOTE

Make sure the inside of the cookpot, the drain valve opening, and all parts that come in contact with the new shortening are as dry as possible.

3-8. FILLING OR ADDING SHORTENING 1. It is recommended that a high quality frying shortening be used in the pressure fryer. Some low grade shortenings have a high moisture content and will cause foaming and boiling over.

2. If a solid shortening is used, it can be melted into a liquid first, then poured into the cookpot. Attempting to melt solid shortening in the cookpot may cause burning or scorching of the fresh shortening.

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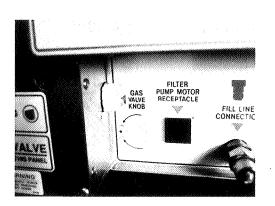
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3-8. FILLING OR ADDING SHORTENING (Continued)	3. The gas model requires 95 lbs. The cookpot has three level indicator lines inscribed on the rear wall of the cookpot which show when the heated shortening is at the proper level.
	<ul> <li>4. Cold shortening should be filled to 1/2 inch below lower indicator.</li> <li>DANGER</li> <li>DO NOT fill cookpot with shortening above the upper cookpot "Fill" line. This could cause the shortening to overflow the cookpot, which could cause serious burns, personal injury, fire and/or property damage.</li> </ul>
3-9. CARE OF THE SHORTENING	1. To protect the shortening when the fryer is not in imme- diate use, the fryer should be put into the "COOL" mode.
	2. Frying breaded products requires filtering to keep the shortening clean. The shortening should be filtered after six loads of product, and the cracklings brushed down the drain.
	3. Maintain the shortening at the proper cooking level, add fresh shortening as needed.
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	Failure to follow these instructions can result in shortening overflowing the cookpot which could cause serious burns, personal injury, fire and/or property damage.
3-10. LIGHTING AND SHUTDOWN OF BURNER	1. Turn Power/Pump Switch to the "OFF" position.
	<ol> <li>Rotate manual valve knob of Combination Gas Control clockwise to the "OFF" position and wait for at least five (5) minutes before continuing to next step.</li> </ol>
GAS PUMP MOTOR VALVE RECEPTACLE	3. Rotate manual valve knob of Combination Gas Control counter clockwise to the "ON" position.
VE	4. Place the electrical Power/Pump switch to the "POWER" position.
	5. The burner will light and operate in a melt cycle mode until shortening reaches a preset temperature.

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### 3-10. LIGHTING AND SHUTDOWN OF BURNER (Continued)



# 3-11. RACKING CHICKEN

6. Press cycle selection switch after temperature is displayed on front of control panel.

To shutdown burner:

- 1. Rotate manual valve knob of Combination Control to the "OFF" position.
- 2. Turn Power/Pump Switch to the "OFF" position.

This fryer is equipped with a grounded cord and plug for your protection against shock, and should be plugged into a 3 prong grounded receptacle. Do not cut or remove grounding prong.

# WARNING

Before servicing the fryer, the burner should be shut down and the electrical supply removed from the unit. The fryer should be unplugged or the wall circuit breaker turned off, or electrical shock could result.

- 1. Place breaded chicken on greased racks with the largest pieces towards the outside of the rack.
- 2. Load racks into basket starting at the bottom of basket and working up with each rack.
- 3. Place a clean, empty rack into the slot above the top rack of chicken to prevent pieces from floating while cooking.

## NOTE

For additional information on racking chicken, refer to KFC's COM.

**3-12. COOKING CHICKEN** 

- 1. When the display indicates proper temperature, close and lock the lid.
- 2. Press the button for the desired product to be cooked.
- 3. At the end of the cook cycle, pressure will begin venting automatically, an alarm will sound, and the display will indicate the end of the timing cycle. At this time, press the button next to the product cooking.
- 4. Wait for the pressure gauge to show "0" pressure in the pot before attempting to open the lid.



Check the pressure gauge reading. Do not attempt to open the lid until the pressure drops to zero. Opening the lid when the cookpot is pressurized will allow hot shortening and moisture to escape from the cookpot, resulting in severe burns.

- 5. Unlock lid and raise lid quickly to remove chicken from shortening.
- 6. Allow chicken to drain for at least 15 seconds, then using the rack handles, remove racks from basket, starting with the top rack and working down the basket.

### NOTE

For further instructions on operating the cooker and filter, see KFC's COM.