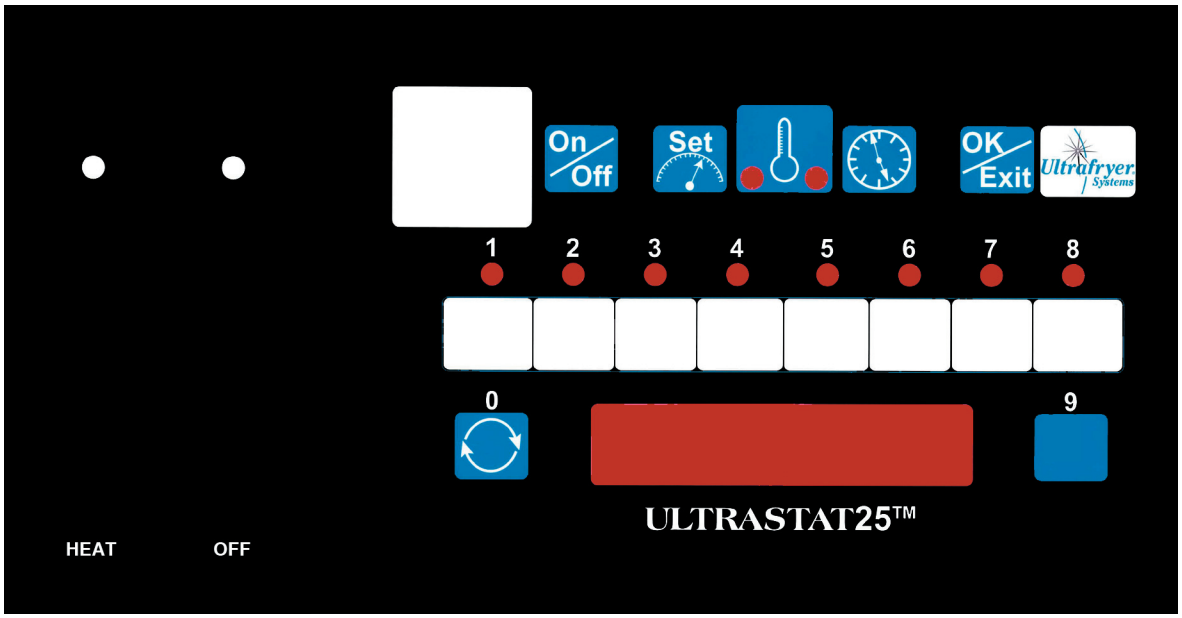
Ultrafryer® Systems



ULTRASTAT25

Ultrafryer Computer Operation Instruction

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PREFACE

This manual was written and published by the Technical Publications Department, Ultrafryer Systems, for use by store personnel who operate an Ultrafryer Fryer equipped with the Ultrastat25 Cooking Computer. This manual complements and should be used in conjunction with the Ultrafryer Fryer Maintenance and Repair Manual provided with each Ultrafryer Fryer.

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NOTE: This Manual is applicable to both Electric and Gas Fryers equipped with an Ultrastat 25 Cooking Computer.

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I. INTRODUCTION

This computer is designed to simplify the timing process and allow operators to spend more time with customers and other important responsibilities. Quality control of cooked products is assured through the various features, notification displays and alarms designed into the computer.

A. ULTRASTAT25 COMPUTER FILTER / SHORTENING MANAGEMENT

1. Measuring, Tallying, and Checking Shortening Degradation

The first principle of FM/SM is knowing how "used" the shortening is. Cooking causes changes and "impurities" in shortening and the effect varies with cook time, cook temperature, breading, cooking load, ice particles and other factors difficult to name and quantify .

In the U25 controller cooking buttons (product keys) are programmed for time and temperature and labeled for a certain kind of product. It is also possible to program into each product key a measure of the shortening degradation experienced with each cook of the intended product. Rather than use a measure (such as pieces or pounds) which does not totally represent the whole of shortening degradation factors the unit of measure is the **HIT**.

Defining HITS - Each restaurant or chain of restaurants determines how much degradation to associate with each cooking of each product and devises a system so that the cooking "drops" planned from the least harsh to the most harsh degradation may be represented by a series of whole numbers. For instance, cooking one pound of unbreaded french fries is the least degrading cook drop planned. The research chef would assign a small whole number of hits, say 3. The button for one pound would be programmed for 3 hits. The product key cooking 2 pounds at a drop would be programmed for 2 times 3 or 6 hits.

Cooking 5 pounds of breaded veal cutlets might be determined to degrade the shortening 5 times as bad cooking one pound of unbreaded fries. The product key for 5 pounds of beaded veal cutlets would be programmed for 5 times 3 or 15 hits.

The research chef then decides how used he wants his shortening to be before it is to be filtered and how used it must be before it is to be discarded. If he decided shortening should be filtered after cooking the equivalent of 5 drops of 5 pounds of breaded veal cutlets he would indicate that filtering should be done after 5 (drops) times 15 (veal cutlet hits) or 75 hits. He would then program the feature key associated with filter hits (FK7) with a limit of hits before the filter message is to be displayed. This quantity is labeled **FHCL** (for filter hit count limit) and this would be set to 75. Any consistent set of units would do so long as the hits on the product keys and the hit limit on the 7th feature key were defined to be the measure of the same degree of degradation.

Checking the HIT Count - When the total of filter hits (viewable as **FHCS** in feature key 7 or by pressing the **"O"** key when in the ready mode) reaches the **FHCL** (in our example 75) the controller displays **FILTER** as a message alternating with other messages (such as **READY**) to indicate filtering is recommended.

Some restaurants may want to use an option of the filter management (**FM/SM**) system as an added caution. The U25 measures how long the fryer has been **ON** since the last filtering. It is possible to set in product key 7 the value of **TIME** in hours. When the vat has been on for that amount of time a **FILTER** message will be displayed. This is because after only a few drops to add impurities the shortening will degrade from just idling at a high temperature.

The elapsed time since filtering may be viewed when in the ready mode by pressing the **"O"** key a second time to see **FTP** (filter time prompt) in units of **HH:MM**. When **FTP** exceeds **TIME** the **FILTER** message is displayed. The restaurant manager may check the amount of cooking and the amount of time since filtering on every fryer vat. The appearance of the **FILTER** message indicates whether or not either the time or cooking hit count sum has exceeded the limit, but the manager can also know how close to the limit each parameter is.

Disposal Limit - The restaurant research chef may also define the number of hits of shortening degradation, regardless of the filtering done the period since last disposal, at which the **DISPOSAL** message is displayed. For instance, and using the hits as defined in the example above, the restaurant might filter twice a day and the filtering may conveniently occur after the 75 hits each time. In such instances the chef determines his shortening would last 6 days and still provide the quality desired. He would then want the disposal hit limit set at 75 (ideal hits between filterings) times 2 (ideal filterings per day) times 6 (days of ideal usage and filtering) or 900 hits. This is done by programming **DHL** (disposal hit limit) in feature key **8** to a value of **900**.

Heavier usage over the period would cause 900 hits to be reached before the customary 6 days. This information would allow the manager to possibly modify his disposal plans. The actual number of hits can be viewed by going to feature key **8** and looking at **DHC** (disposal hit count).

2. **Help in the Filtering Process -** The U25 provides timing help and display guidance in the filtering process and sets the **FHCS** (Filter Hit Count Sum) to zero after the timing aid has been used. It assumes proper filtering has then been done and since the Ultrafryer® gas or electric fryers provide many features to make filtering effective and user friendly it usually will have been.

   Ultrafryer® fryers with built in shortening return filter systems have a main power switch that directs the incoming control power to either the heating controls (contactor circuit or gas valve circuit) or the pump controls. In addition a drain valve switch also removes the power from the heating control circuits. When either or both of these switches are put in the position for shortening handling the U25 switches from the heating mode to the filtering mode. It indicates this by displaying **DRAINING** rather than **READY** in the display window. If the **FILTER** message had been displayed during the heating mode, it will now alternate with the draining message in the display. If the **FILTER** message was not yet displayed the **DRAINING** message will alternate with **TURN OFF**. If filtering is desired, the user leaves the U25 soft ON/OFF switch in the **ON** position and follows the filtering procedure. If the main power switch was turned **"OFF'** for closing down the fryer for an off period without filtering the soft ON/OFF switch is turned to off.

   Using the Timing Aid - The filtering procedures in the fryer manual for your particular filter system configuration should be followed without regard to the U25. During the procedure a polishing period is often called for .

   If and when the polishing step is initiated the timer button on the U25 should be pressed. A 10 minute countdown will begin. If the step is finished before 10 minutes press the **OK/EXIT** button. The U25 display now says **CLOSE DRAIN** indicating the filter hit count sum has been set to zero and refilling may begin.

   If using a filter system in which polishing is not required, press the timer button for the wash wand, bottom sweep, or automatic vat cleaner operation. When finished (if less than 10 minutes) press **OK/EXIT** to turn off the timer. The U25 will display **CLOSE DRAIN** indicating the filter hit count sum has been set to zero and refilling may begin.

Closing the drain will not make this message disappear because the main power switch for the vat just filtered should still be in the pump position. The **CLOSE DRAIN** switch will remain until the vat is refilled and the main power switch is returned to the heat position from the pump position. Only then will the **DRAIN-FILTER-REFILL** cycle be completed and the **DRAIN-FILTER-REFILL** switches be closed.

If using an external pump or the self cleaning pump nozzle control to refill the vat it is possible (but forbidden) to pump while the vat power switch is on. In this case closing the drain will return the U25 to the "ready for turning on to the heating mode" condition. For safety reasons the user must refill the vat before attempting to return the U25 to heating mode. As a precaution the U25 does not go **ON** when all the mechanical fryer switches are restored to the heat position, but goes to the **TURN OFF** mode and displays the message **TURN OFF .**

3. **The Disposal Procedure -** When the **DHC** (disposal hit count) reaches the **DHL** (disposal hit limit) the **DISPOSE** message is displayed. Since Disposing means filtering isn't required it displaces the filter message. When the shortening is discarded it is necessary to manually reset the **DHC** value, since the U25 has no inputs with which to automatically detect that disposal has occurred. Setting the **DHC** to zero will also zero the filter hits and filter elapsed time counters.

4. **Summary -** The U25 can be used to give important information about shortening care and usage. If not desired, the messages may be opted out by setting **FHCL, DHL** and **TIME** to zero in the feature programming mode. If management has elected to use the information it is most valuable when the user is trained in the meaning of the messages and values, the filtering process, the reasons for filtering and the value and cost of good shortening.

Appendix

Glossary of parameters:

FHCL - Filter Hit Count Limit: The number of total hits from the cooking with any combination of the product keys at which the **FILTER** message is to be displayed.

FHCS - Filter Hit Count Sum: The number of total hits from the cooking with any combination of the product keys since the last filtering.

TIME - The number of hours of being ON before the **FILTER** message is displayed.

FTP - Filter Time Prompt: The number of hours and minutes **(HH:MM)** since the last filtering.

DHL - Disposal Hit Limit: The number of total hits from the cooking with any combination of the product keys at which the DISPOSE message is to be displayed.

DHC - Disposal Hit Count: The number of total hits from the cooking with any combination of the product keys since the last disposal.

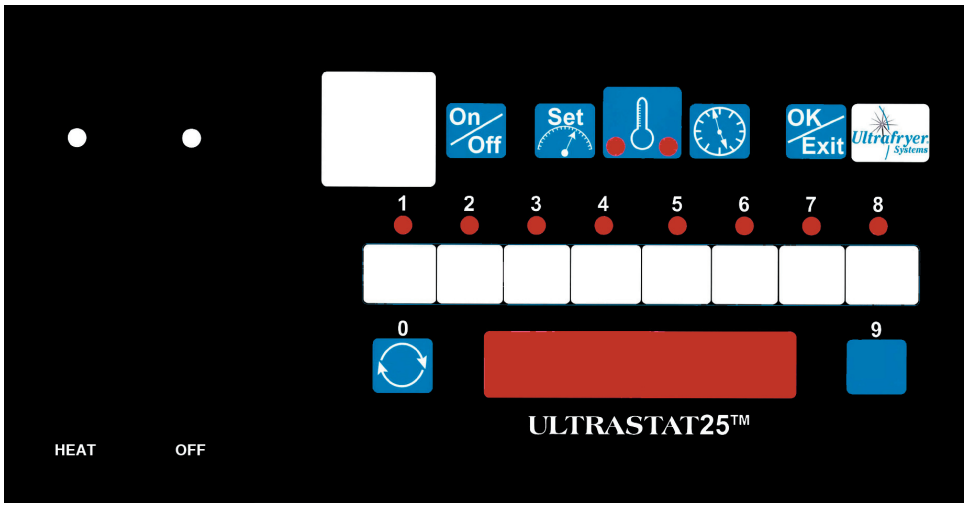
B. SAFETY - The Ultrastat25 Cooking Computer operates on 24 volt single phase electrical power, and like other electrical equipment, should not be operated with wet hands or while standing in water. Water should **NEVER** be sprayed on or at the computer, as there is a danger of electrical shock and / or serious damage to the computer circuitry. Should the computer accidentally be sprayed with water, **1) IMMEDIATELY** turn the Power **OFF** at the Main Power Switch and **2) IMMEDIATELY** contact a qualified service agent to check the computer. The Computer is located in close proximity to hot liquid shortening and care must be taken to avoid serious burns. The floor in front of, and area around the fryer should be kept clean and dry. Whenever anything is put into a cooking vat, care should be taken to not splash the hot shortening. Products should always be "placed" into the shortening, not thrown.

C. SAFE CLEANING PROCEDURE - Before performing any cleaning routine, electrical power to the Ultrastat25 cooking computer should be turned OFF at the Main Power Switch. A **SLIGHTLY** dampened cloth may then be used to clean any debris from the face of the computer. **DO NOT USE** any cleaner or de-greaser solvent as they may mar the face or damage the internal circuitry of the computer. Any questions regarding correct cleaning procedures should be directed to the Customer Service Department at 1-800-525-8130.

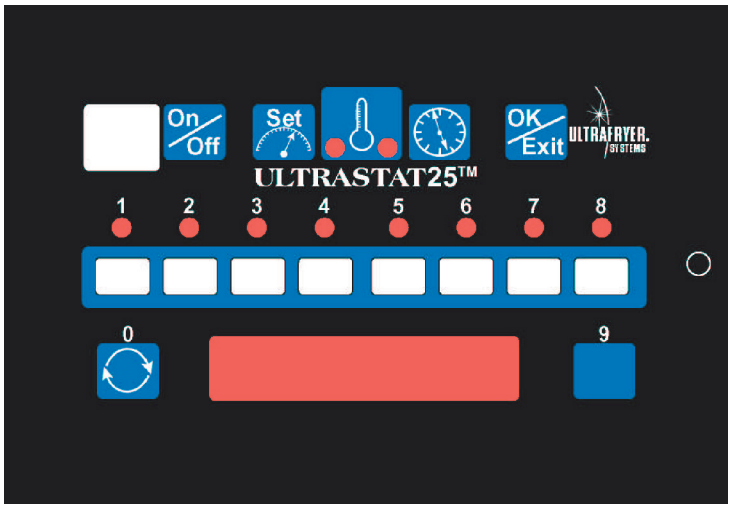
II ULTRASTAT25 COOKING COMPUTER

A. COMPUTER CONTROL PANEL

The appearance of the Ultrastat 25 Cooking Computer's control panel may vary slightly depending upon the style of fryer on which the computer is installed:



Ultrastat 25 Computer panel on an Ultrafryer-style fryer



Ultrastat 25 Computer panel on a Cadet-style fryer

Regardless of appearance, the actual operation of the Ultrastat 25 Cooking Computer will be the same in all instances.

B.. COMPUTER FEATURES

1. **Programmable Stage Times**
   The user will have the ability to program certain cook times in each stage of 10 stages in a cook cycle for each product key. The computer is programmable in minutes (up to 59) and seconds (up to 59).

NOTE: *Multiple cook starts are not allowed if a product key has more than one stage programmed.*

2. **Programmable Stage Temperatures**
   The user will be able to program certain cook temperatures in each stage of a cook cycle for each product key. The valid temperature range is 200 to 390°F (93 to 199°C).

NOTE: *The user will be able to program from one (1) to ten (10) stages in a cook cycle for each product key.*

3. **Programmable Timing Mode**
   The user will be able to program the timing mode (flex or straight) for each stage of each product key. If a product is configured for flex time, the computer will adjust the actual cook time taking into consideration the temperature variation due to load size, initial product temperature, product moisture content, and other factors affecting the cook cycle, to insure the computer provides consistent, high-quality product. Under straight time mode, the computer will cook only for the specified time without adjusting for these variations.

4. **Programmable Action Alarms**
   The user will be able to program up to three action alarms on each product key. An action alarm is an indication to the operator to perform some action at a pre-programmed time (e.g., STIR FOOD, SHAKE BASKET, etc.).

5. **Programmable Temperature Setback**
   The user will be able to program a temperature setback to take effect whenever a fryer has not been activated for a period of time.

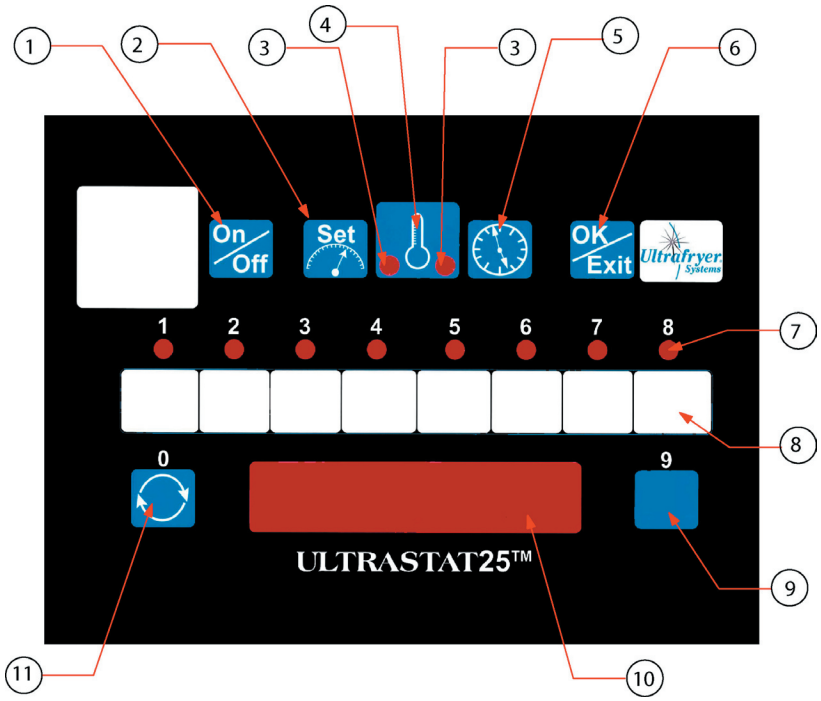
6. **Programmable Filtration and Shortening Disposal Prompts**
   The user will be able to program a filtration and shortening disposal prompt based on the number of product drops. These features may also be turned **OFF** if desired.

7. **Melt Cycle**
   When the computer is ON and the vat temperature is below the Melt Release Temperature, the computer will control the melting of the shortening. In the Melt Mode, the word **MELT E, G, or P,** will appear in the display. After the vat temperature is above the Melt Release Temperature, the user may press the **"OK/EXIT"** key to enter normal cooking mode. Each time the computer is turned **ON**, it will automatically enter the Melt Cycle and must again be overidden by pressing the **"OK/EXIT"** key.

CAUTION: IT IS ABSOLUTELY IMPERATIVE THAT THE USER CHECK TO SEE THAT THE HEAT MECHANISM IS COMPLETELY COVERED WITH "LIQUID" SHORTENING BEFORE PRESSING THE "OK/EXIT" BUTTON. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY AS WELL AS DAMAGE TO THE FRYER.

NOTE: *If shortening temperature is **ABOVE** the set point programmed for cooking, the computer will automatically override the Melt Mode.*

C. COMPUTER PANEL KEY DESCRIPTIONS



1. **ON/OFF KEY**
   Turns the Computer ON and OFF when the fryer toggle ON/OFF switch is in the **ON** position and the Drain Lever in in the closed **UP** position.

2. **SET KEY**
   a. In "operating" mode, allows access to the programming mode.
   b. In "programming" mode, allows access to the operating mode.

3. **HEAT DEMAND LEDS**
   When lit (bright) indicate the computer is calling for heat.

4. **TEMPERATURE KEY**
   a. When depressed one time, displays actual shortening temperature for 3 seconds.
   b. When depressed two times, within 3 seconds, displays current setpoint temperature for 3 seconds.
   c. When depressed three times, within 3 seconds, will return to previous display.

5. **TIME KEY**
   Used to display remaining cook time of a product, activate/abort the recipe display of a product, and start the Filter Timer.

6. **OK/EXIT KEY**
   a. In "operating" mode used to manually exit the shortening melt cycle, exit the Filter Timer, and activate/exit the setback mode.
   b. In "programming" mode serves as an ACCEPT key.

7. **PRODUCT LED**
   a. When **BLINKING** fast, in "cooking" mode indicates cooking of that product is in process.
   b. When **BLINKING** slow, indicates cooking of that product is complete.

NOTE: When several products are in the "cooking" mode and the **TIME KEY** is pushed, the Product LED of the first to finish will **BLINK** fast and the other LED's will **BLINK** slow. When the cook cycle of the "first" product key is complete, its LED will blink **FAST** and the other product key LEDs will turn **OFF.**

   c. When lit **BRIGHT** in the "programming" mode, indicates that product is being programmed.

8. **PRODUCT COOK AND PROGRAMMING KEY**
   a. In "operating" mode, used to start and stop a product cook cycle.
   b. In "programming" mode, used to enter numerical values 1 to 8 and to select **RECIPE** or **FEATURES** to be programmed.

9. **PROGRAMMING KEY**
   In "programming" mode, used to enter the numerical value of 9.

10. **DISPLAY**
    Displays modes, functions and operation of the computer.

11. **TOGGLE/PROGRAMMING KEY**
    a. In "programming" mode, it is used to enter the numerical value of **"0"** and "toggle" (switch) between **FLEX/STRAIGHT** time modes, **HIGH/LOW** melt release temperature and **CELSIUS/FAHRENHEIT** temperature units.
    b. In "operating" mode, it can be pushed to display the current **HIT COUNT** and **TIME PROMPT.**

D. DISPLAY DESCRIPTIONS

ACT 100 F/C	The actual shortening temperature in degrees Fahrenheit/Celsius when the  key is depressed, ie., 100ºF (38ºC).
1 0:0 0	Time remaining in a cook cycle or other computer function, ie., 10:00.
BOIL 20:00	Time remaining in the **BOIL** mode, ie., 20:00.
OFF	Indicates the Computer is ready to be turned **ON.** **NOTE:** Computer must be turned **OFF** by the **ON/OFF** key before the ON/OFF key can be used to turn the Computer **ON.**
TURN OFF	Prompts operator to push the Computer's ON/OFF key. Usually occurs when the fryer power switch is turned **OFF** or drain valve is **OPENED.**
TOO LOW	Indicates an entered value is too low and is **NOT ACCEPTABLE.**
TOO HIGH	Indicates an entered value is too high and is **NOT ACCEPTABLE.**
SETBACK	When optional **SETBACK** feature is used, indicates the computer has reduced the fryer's **SETPOINT** temperature to a **LOWER,** energy saving, temperature when a product has not been cooked for a programmable length of time.
CK 1-8	Indicate the specific Product Key number for which the computer is displaying status information during a cook cycle.
STIR 1-8	Indicates an action needs to be taken on a product being cooked by a specific product key such as **STIR 5**.
MELT E	Electric Melt Cycle - Heating mechanism is **ON** 4 seconds and **OFF** 36 seconds.
MELT G	Gas Melt Cycle - Heating mechanism is **ON** 8 seconds and **OFF** 32 seconds.
MELT P	Purge Melt Cycle - Heating mechanism is **ON** 12 seconds and **OFF** 28 seconds.

READY	The actual shortening temperature is no more than the **READY BAND** below the (SETPOINT) temperature and no higher than **40ºF (22ºC)** above the set-point temperature. **NOTE:** The **READY BAND** is factory set according to the customer's order, usually set at **10ºF (5ºC).**
LOW	The actual shortening temperature is more than the **READY BAND** below the (SETPOINT) temperature.
HIGH	The actual shortening temperature is more than **40ºF (22ºC) ABOVE** the (SETPOINT) temperature.
HIGH TMP	The actual shortening temperature is **ABOVE 420ºF (216ºC).** If this occurs the computer will emit a **CONTINUOUS ALARM** signal.
DONE 1 - 8	Indicates a cook cycle has been completed on a product being cooked by a specific product key, such as **DONE 5.**
FILTER	When **FILTER PROMPT** is enabled, indicates it is time to filter the shortening because the predetermined quantity of product cooked since last filtering has been exceeded**..**
DISPOSE	When **DISPOSAL PROMPT** is enabled, indicates it is time to replace the shortening because the predetermined quantity of product cooked with the shortening has been exceeded**.**
PB OPEN	Indicates the computer temperature probe is **OPEN .** When this occurs; 1) any cook cycle will be **CANCELLED** ; 2) heating mechanism will be turned **OFF** and, 3) normal key presses will be **INHIBITED.**
PB SHORT	Indicates the computer temperature probe is **SHORTED .** When this occurs; 1) any cook cycle will be **CANCELLED** ; 2) heating mechanism will be turned **OFF** and, 3) normal key presses will be **INHIBITED.**
DRAINING	Indicates the fryer has electrical power and the Drain Valve has been **OPENED** to initiate a shortening **FILTER** or **DISPOSAL** operation, or the fryer toggle ON/OFF switch has been turned **OFF** to allow operation of the filter pump. This display will alternate with the following displays: **DRAINING/ FILTER, DRAINING/DISPOSAL OR DRAINING/TURN OFF.**

E. OPERATING THE COMPUTER

1. **To warm up from OFF:**
   a. Press the **ON/OFF KEY,** 

   the computer will initiate the **SHORTENING MELT MODE** .
   b. When shortening reaches the **SHORTENING RELEASE TEMPERATURE,** press 

   the **OK/EXIT KEY** at which time **LOW** will appear on the display.
   c. When shortening reaches a temperature in the **READY BAND** around the (SETPOINT) temperature, the Fryer is ready to Cook after the shortening is thoroughly stirred.

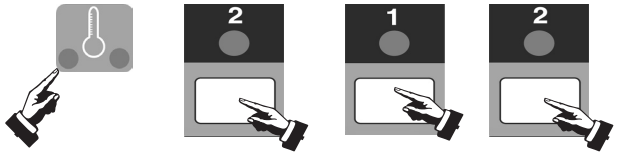
2. **To run a cook cycle**
   a. Press the Product Key number **(PK #)** for the product;
   b. At the end of the cook cycle, the alarm will sound and **DONE #** will be displayed.
   c. Press the Product Key number **(PK #)** to silence the alarm and reset that Product Key.

3. **Action Alarms**
   If the unit is programmed with action alarms, the action alarms will signal at a preset time during the cooking cycle. This signal, a **FAST RATE BEEP**, will last 5 seconds and then self-cancel. **STIR #** will appear in the display indicating the product key # for which product should be stirred.

4. **BOIL**

CAUTION: PLEASE CONSULT AND FOLLOW THE ENCLOSED GUIDELINES IN SECTION III, E FOR BOILING OF THE FRYER VATS.

The boil function accurately maintains the fryer temperature at 192ºF (89ºC) to assist the cleaning of fry vats. To start the boil process, turn the appliance **OFF.** Empty the fry vat of shortening. Once the vat is emptied of shortening and refilled with cold water, the computer and fryer may be put into the Boil
. Mode by turning the Fryer and Computer **ON.**

To Enter Boil Mode: 

Press the **TEMPERATURE KEY,** followed by the **2 , 1 , 2 keys**.

BOIL will appear in the Display and the fry vat will maintain a temperature of 192ºF (89ºC) to allow the boil function to be performed.

NOTE: The Fry Vat must be below a temperature of 220ºF (104ºC) to enter the **Boil Mode.**

To Exit Boil Mode: 

Press the **ON/OFF KEY.**

Turn the appliance OFF. The computer will no longer display **BOIL.** Empty the water from the vat, wipe all remaining water from the vat. Once dry, refill the vat with shortening following procedures in paragraph III B 1,

CAUTION: REFILL THE VAT WITH SHORTENING ONLY WHEN IT IS COMPLETELY DRY.

5. **FILTER PROMPT**
   If the unit is programmed for **FILTER PROMPT, FILTER** alternating with a normal display will appear after the pre-programmed number of product drops have been exceeded.

III Ultrastat25 COMPUTER OPERATING INSTRUCTIONS

A. TURNING THE Ultrastat25 COMPUTER ON/OFF

To operate the Ultrafryer, **BOTH** the Ultrafryer Toggle ON/OFF switch and the Computer ON/OFF key must be in the **ON** position.

NOTE: The Ultrafryer Drain Lever must be in the closed **COMPLETELY UP** position to turn the computer **ON.**

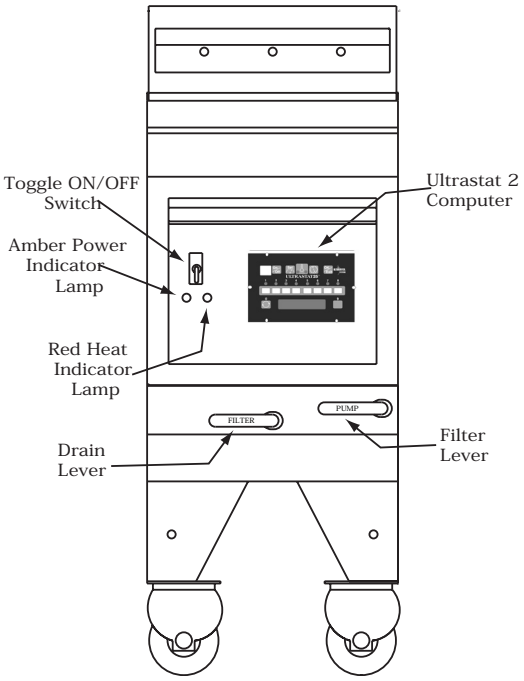
1. **TOGGLE ON/OFF SWITCH**

   a. The Toggle On/Off switch is located in the upper left hand corner of the front access panel of the Ultrafryer. When this switch is **OFF**, shortening can be **FILTERED** but the Computer **CANNOT** be turned **ON**. When this switch is **ON** the Computer can be turned **ON** but shortening **CANNOT** be filtered.

   b. To turn the Ultrafryer **ON**, turn the Toggle ON/OFF switch to the **ON** position. The **AMBER** Power Indicator Lamp will **LIGHT** and **OFF** will appear in the DISPLAY of the Computer.

   NOTE: The Ultrafryer heat mechanism cannot be activated when the Computer is **OFF**.

   c. When the fryer is not equipped with a **BUILT-IN** filter system follow procedures in the Fryer's Operations Manual for filtering shortening.



2. **TURNING THE COMPUTER ON :**

NOTE: To turn the Computer ON the Ultrafryer Toggle ON/OFF Switch must be in the **ON** position and the Drain Lever must be in the closed **UP** position.

   a. The Computer ON/OFF Key is located in the Upper left corner of the Computer panel.

   b. To turn the Computer **ON**, depress the ON/OFF Key. **MELT E, G, or P** will appear in the computer Display to indicate the computer is in the **SHORTENING MELT MODE**, and the **HEAT DEMAND** lamps on the computer and the **RED INDICATOR** lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is being periodically turned **ON** and **OFF** to gently heat the shortening.

3. **TURNING THE COMPUTER OFF :**

   To turn the Computer **OFF**: turn power on the Ultrafryer **OFF** by turning the Toggle ON/OFF switch to the **OFF** position. **DRAINING / TURN OFF** will appear in the display; then push the Computer ON/OFF key to turn the Computer **OFF.**

   NOTE: When the Computer is **OFF**, the Heat Mechanism **CANNOT** be activated.

B. MELTING SHORTENING

Each time the Computer is turned **ON**, it will enter the **SHORTENING MELT MODE**. This mode is used to "gently" melt **SOLID** shortening in a vat after BOIL-OUT as well as **CONGEALED** shortening in a vat prior to store opening. While the Computer is in this mode it will periodically turn the Ultrafryer Heat Mechanism **ON** and **OFF** to gradually warm the shortening.

NOTES: 1) The Computer will keep the Ultrafryer in the **MELT CYCLE** until the operator **MANUALLY** pushes the **OK/EXIT** key. 2) The Computer **CANNOT** be taken out of the **SHORTENING MELT MODE** until shortening temperature reaches the **MELT RELEASE TEMPERATURE**. The Melt Release Temperature is factory set for a **HIGH** exit temperature (135ºF (57ºC)) or a **LOW** exit temperature (75ºF (24ºC)) according to the customer's specifications. Once the Melt Release Temperature is reached the Melt Mode may be canceled by pushing the **OK/EXIT** key. 3) The following **MELT**

CYCLE OPTIONS, which determine the amount of time the **HEAT MECHANISM** is turned **ON** and **OFF** to gently melt shortening, can be programmed based on the type of fryer equipped with an Ultrastat 25 Cooking Computer.

TYPE FRYER	MELT CYCLE OPTION
Ultrafryer Model EU ZRT Express or ZRT Counter Top Electric Fryer	**E -** Heat Elements are turned **ON** for **FOUR (4)** seconds and **OFF** for 36 seconds.
Ultrafryer Model PAR-2 Gas Fryer	**G -** Burners are turned **ON** for **EIGHT (8)** seconds and **OFF** for **32** seconds
Ultrafryer Model PAR-3 ZRT Express or ZRT Counter Top Gas Fryer	**P -** Burners are turned **ON** for **12** seconds and **OFF** for **28** seconds.

WARNING: DO NOT PUSH THE "OK/EXIT" KEY UNTIL THE VAT IS CHECKED TO ASSURE THE HEAT MECHANISM IS "COMPLETELY" COVERED WITH LIQUID SHORTENING.

1. **MELTING SOLID SHORTENING -** The preferred method of heating solid shortening in a computer equipped fryer is as follows:
   a. Cut a block of solid shortening into small pieces.
   b. Place small pieces of shortening **EVENLY** on top of the Heat Mechanism or **THOROUGHLY** pack these pieces of solid shortening between, below and above the HEAT MECHANISM. While packing solid shortening is messy and time consuming, it is the fastest way to melt solid shortening.
   c. Turn the Ultrafryer Toggle ON/OFF Switch **ON**; then place the Computer in the **SHORTENING MELT MODE** by depressing the ON/OFF key. **MELT E, G, or P** will appear in the computer display indicating the Computer is in the **SHORTENING MELT MODE**; and the **HEAT DEMAND LEDS** on the computer and the fryer's **RED INDICATOR LAMP** will cycle ON and OFF indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the shortening.
   d. When the heat mechanism is **COMPLETELY** covered with **LIQUID** shortening and the shortening is **ABOVE** the Melt Release Temperature, replace the grill in the fryer vat; then push the **OK/EXIT** key on the Computer.

WARNING: DUE TO THE LOCATION OF THE COMPUTER'S TEMPERATURE PROBE, IT IS POSSIBLE FOR THE SHORTENING LEVEL TO BE ABOVE THE PROBE WITHOUT COVERING THE HEAT MECHANISM. THEREFORE, VISUALLY CONFIRM THAT LIQUID SHORTENING IS AT LEAST TWO (2) INCHES ABOVE THE HEAT MECHANISM BEFORE PRESSING THE OK/EXIT KEY.

e. Continue adding solid shortening as follows:
   1) Place small pieces of solid shortening into a fry basket.
   2) **CAREFULLY** lower the basket into the fryer vat.
   3) **GENTLY** turn the basket to allow these pieces of solid shortening to float away.
   4) Repeat the above steps until liquid shortening is even with the middle line of the **"E◄ "** in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer vat.

2. WARMING CONGEALED SHORTENING

Each morning when the Ultrafryer and Computer are first turned **ON**, the Computer will be in the **SHORTENING MELT MODE** and the Ultrafryer Heat Mechanism will be turned **ON** and **OFF** to gradually warm congealed shortening to the **MELT RELEASE TEMPERATURE.** When liquid shortening temperature rises to the Melt Release Temperature, the operator can push the **OK/EXIT** key to heat shortening to its **SETPOINT** temperature, provided shortening is 2" (52 mm) over the Heat Mechanism.

C. OPERATING THE COMPUTER

1. COOKING FEATURES

a. PROGRAMMED STAGED TIMES/TEMPERATURES

Some Computers will be pre-programmed with a STAGED COOK CYCLE for cooking chicken. When a Computer is in a STAGED COOK CYCLE it controls the Ultrafryer so shortening is heated to a CERTAIN TEMPERATURE at a CERTAIN TIME in the cook cycle. For example a product key could be programmed as follows for cooking Chicken:

NOTE: These times and temperatures are examples ONLY and ARE NOT USED BY ANY KNOWN COMMERCIAL RESTAURANT.

SETTING	TIME	TEMPERATURE
1	14:00	330ºF / 166ºC
2	13:55	305ºF / 152ºC
3	6:00	310ºF / 154ºC
4	4:00	320ºF / 160ºC
5	2:00	330ºF / 166ºC

The SETPOINT temperature of that product key is 330ºF (166ºC). When product is dropped the shortening temperature will **DROP** and the Computer will control the fryer to maintain shortening temperature at 305ºF (152ºC) for about **7 MINUTES** (13:55 to 6:00 in the cook cycle). At the end of 8 MINUTES, the Computer will control the fryer to increase shortening temperature to 310ºF (154ºC) for 2 MINUTES (8:00 to 10:00 in the cook cycle). At the end of 10 MINUTES, the Computer will control the fryer to increase shortening temperature to 320ºF (160ºC) for 2 MINUTES (10:00 to 12:00 in the cook cycle). For the last 2 minutes (12:00 to 14:00) in the cook cycle, the Computer will control the fryer to increase and maintain the shortening temperature at 330ºF / 166ºC.

NOTE: Multiple products **CANNOT** be simultaneously cooked if a **STAGED COOK CYCLE** is being used because a staged cook cycle requires a fryer to be at a **CERTAIN TEMPERATURE** at a **CERTAIN TIME** in the cook cycle.

b. MULTIPLE COOK TEMPERATURES

Computers can be programmed with **COOK CYCLES** that require different shortening temperatures for different products cooked in a fryer vat. For example, **PRODUCT KEY 1** could have a **SETPOINT** temperature of **330ºF (166ºC)** and **PRODUCT KEYS 2, 3 AND 4** could have a **SETPOINT** temperature of **350ºF (177ºC).**

NOTE: When the Ultrafryer and Computer are first turned **ON**, shortening in that fryer vat will be heated to the **LOWEST SETPOINT** temperature (330ºF / 166ºC). If a product requires the **HIGHER SETPOINT** temperature, press the Product Key for that product.

c. FLEX/STRAIGHT TIME MODE

Some Computers are pre-programmed for the **FLEX** time mode and others are set for the **STRAIGHT** time mode. The **FLEX** time mode automatically adjusts the **COOK TIME** taking into consideration: 1)shortening temperature drop when the product is placed into the shortening, 2) initial product temperature, 3) product moisture content and 4) other factors affecting the cook cycle to insure a consistently high quality product is cooked. In **FLEX** time the computer displays **"FLEX"** time rather than **"STRAIGHT"** time. In the **STRAIGHT** time mode, a product is cooked for the amount of time for which the Computer has been programmed without any variation of time.

NOTE: When **FLEX TIME MODE** is being used the **TIME** being displayed will appear as if it were **REAL TIME** elapsing, but this time is running SLOWER or FASTER than real time depending on whether the **ACTUAL** temperature is below or above the setpoint temperature.

d. FILTER PROMPT

A computer can be programmed for a visual **FILTER PROMPT** after a pre-determined amount of product has been cooked, or a predetermined amount of time has passed to alert the operator it is time to filter the shortening. If this feature is used, **FILTER** will appear in the display alternating with a normal display, after the programmed amount of product has been cooked.

e. DISPOSAL PROMPT

A computer can be programmed for a visual **DISPOSAL PROMPT** after a pre-determined amount of product has been cooked, to alert the operator it is time to dispose of the shortening. If this feature is used, **DISPOSE** will appear in the display alternating with a normal display, after the programmed amount of product has been cooked.

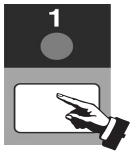
f. TEMPERATURE SETBACK

A computer can be programmed to automatically reduce the **SETPOINT TEMPERATURE** of a fryer to a **LOWER**, energy saving, temperature when a product has not been cooked in that fryer for a pre-determined length of time. If this feature is used, **SETBACK** will appear in the display to alert the operator that shortening temperature in the fryer is being reduced.

2. COOKING

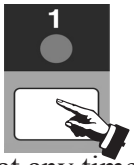
When the Computer is taken out of the **SHORTENING MELT MODE** each morning, shortening in the fryer vat will be heated to its SETPOINT temperature and **"LOW"** will appear in the display to indicate the shortening temperature is MORE than the **READY BAND** temperature **BELOW** the setpoint temperature. When shortening temperature rises to the **SETPOINT** temperature **READY** will appear in the display indicating a **COOK CYCLE** can be started.

a. STARTING A COOK CYCLE



To start a cook cycle, simply press the product key you wish to cook. If the product key is programmed, the Product Key **LED** will **BLINK FAST** and **CK 1** and correct cooking time will be displayed, (example, **14:00**) and this time will immediately start to count down in minutes and seconds. If correctly programmed, the computer will count down to **00 : 00** , the alarm will **SOUND** and **DONE 1** will appear in the display. Press Product Key 1 to silence the alarm and reset that product key for another cook cycle.

b. CANCELLING A COOK CYCLE



If a cook cycle was inadvertently started it may be cancelled two (2) ways:

1) Press and hold the same product key used to start the cook cycle for **4 SECONDS.** This prevents an accidental cancelling of a cook cycle while a product is being cooked.
2) A cook cycle can be **CANCELLED** at any time by turning the Ultrafryer Toggle ON/OFF SWITCH to the **OFF** position.

c. ACTION ALARMS

Some Computers are pre-programmed for **ACTION ALARMS** when cooking certain products to alert the operator it is time to take some action such as stirring the product. When this feature is used; the Computer will alert the operator with a **RAPID BEEPING** that will last for **5 SECONDS** then self-cancel, and **STIR** will appear in the display and continue counting towards the next action alarm time. For example, a product key could be programmed with three (3) action alarms:

PRE-ALARM	TIME	OCCURRENCE TIME IN A 14 MINUTE COOK CYCLE
1	9:00	5:00
2	6:00	8:00
3	3:00	11:00

The first action alarm would be signaled when the Computer counts down to 9:00 (5 minutes after start of the cook cycle), the second alarm would be signaled when the Computer counts down to 6:00 (8 minutes into the cook cycle), and the last signal would occur when 3 minutes is left in the cook cycle (11 minutes into the cook cycle**).**

D. FILTERING SHORTENING

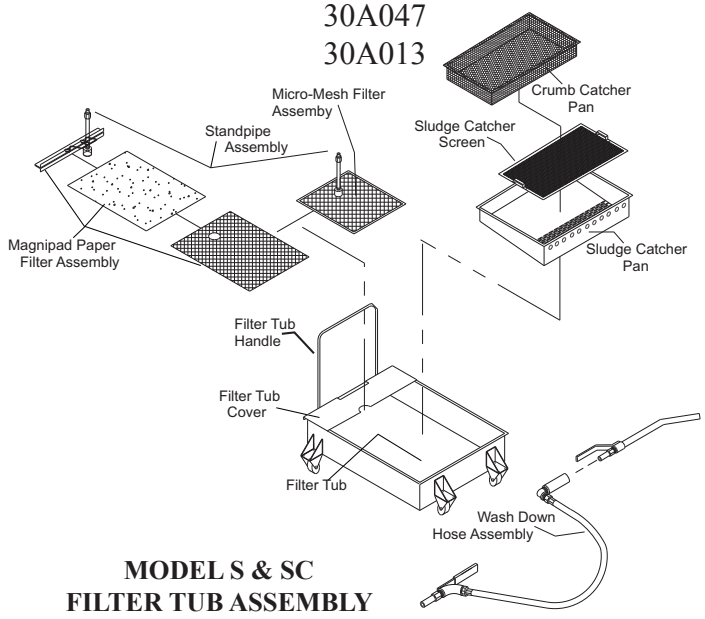
In many restaurant situations shortening in the Ultrafryer should be filtered at least twice a day, once after the lunch rush and again after the dinner rush. Other users may establish filter frequencies in line with their oil cleaning requirements and programmed filter prompts. The fryer vat used to cook French Fries should be filtered **FIRST,** followed by fryer vats for other products. The instructions listed below "complements" step-by-step procedures contained in the applicable Ultrafryer Fryer Maintenance and Repair Manual which should be used along with this manual when FILTERING SHORTENING. This manual was provided with the Ultrafryer. If another copy is required it can be ordered through normal supply channels under part numbers listed below or by calling 1-800-545-9189. **ABBREVIATED** filtering procedures are as follows:

ULTRAFRYER MODEL	MANUAL PART NUMBER
Par-1 or Par-2 Gas Fryer	30A012 & 30A046
Par-3 Gas Fryer	30A047
EU Electric Fryer	30A013

1. ULTRAFRYER FILTERING PROCESS

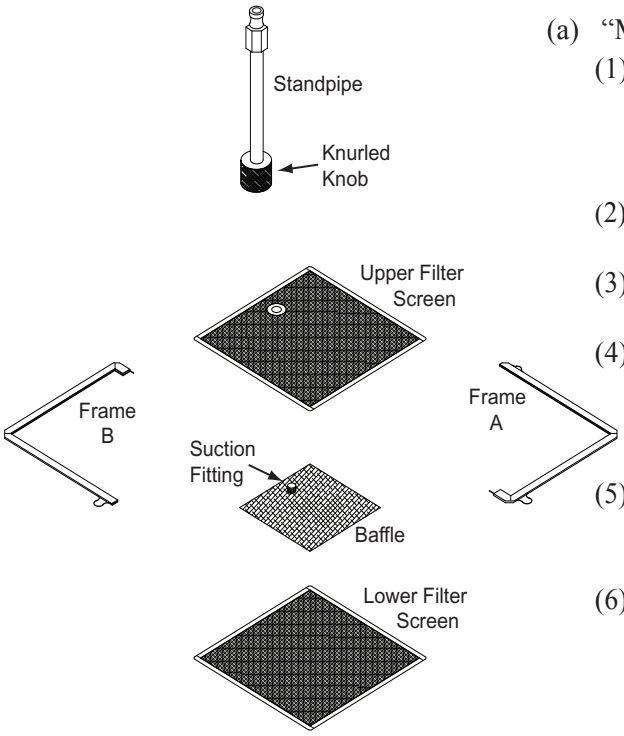
a. Set up the Filter Tub as follows:

NOTE: To assemble, filter shortening and boil-out a fryer using a Model "F" Filter Tub Assembly, follow procedures in the applicable manual listed above.



MODEL S & SC
FILTER TUB ASSEMBLY

1) Make sure the CRUMB CATCHER PAN, SLUDGE CATCHER PAN AND SCREEN; FILTER TUB, HANDLE AND COVER; WASH DOWN HOSE, SUCTION LINE HOSE, AND FILTER ASSEMBLY are clean and dry.
2) Assemble the Permanent Filter Screen as follows:



(a) "Micro-Mesh" Stainless Steel Filter Screen

(1) Remove the **STANDPIPE** from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE** FRAME A to remove it from the **FILTER SCREENS FIRST.**

(2) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove FRAME B from the **FILTER SCREENS.**

(3) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN**.

(4) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP.** If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.

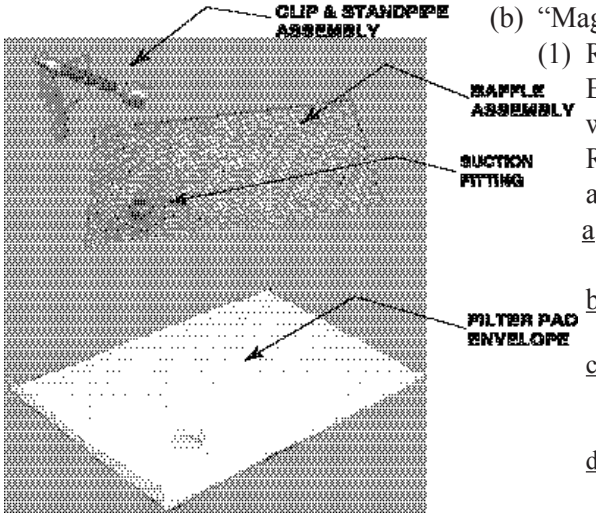
(5) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.

(6) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME A.

CAUTION: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE FILTER.

(7) Place the **PIN** end of FRAME B on the FILTER SCREENS so the **PIN** is seated in the **CHANNEL** of FRAME A near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the PIN end over the edge of the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME B and the **PIN** of FRAME A is seated in the **CHANNEL** of FRAME B .

(8) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** on the **STANDPIPE** to the **SUCTION**



(b) "Magnepad Paper Envelope" Filter

(1) Remove and discard the Filter Pad Envelope, **CAREFULLY** clean the Baffle Assembly and Clip/ Standpipe Assembly in the 3 compartment sink with **HOT** water and allow these items to air dry. **DO NOT USE SOAP!!** Re-assemble the Magnepad Envelope Filter using a **NEW** Filter Pad Envelope as follows:

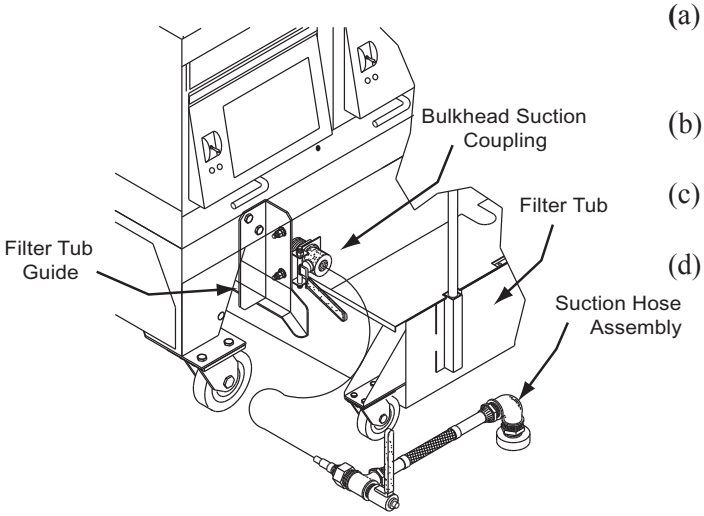
a Insert the **BAFFLE** into the **FILTER PAD ENVELOPE,** when inserted properly the **SUCTION FITTING** will protrude through the hole in the pad.

b Fold **FLAP** over (in the direction of the hole), securing the Baffle inside the **FILTER PAD ENVELOPE.**

c **CAREFULLY,** align the **CLIP & STANDPIPE ASSEMBLY** so that the **CLIP** can secure the **FLAP** on the Envelope and the **STANDPIPE** will align over the **SUCTION FITTING** protruding through the Envelope.

d Tighten the Knurled **NUT** on the **STANDPIPE** on the **SUCTION FITTING** protruding through the Envelope.

3) Reassemble the Filter Tub by replacing the components in the following sequence; 1) **FILTER ASSEMBLY,** 2) **SLUDGE CATCHER SCREEN, AND PAN**, 3) **CRUMB CATCHER PAN,** 4) **COVER,** 5) **SUCTION LINE HOSE AND WASH DOWN HOSE,** and 6) **FILTER TUB HANDLE.**



(a) **CAREFULLY** insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the handle end of the tub.

(b) **CAREFULLY** insert the Sludge Catcher Screen and Pan, and the Crumb Catcher Pan in the Filter Tub.

(c) Place the Cover on the Filter Tub; then install the Handle on the Filter Tub.

(d) **SECURELY** connect the Suction Line Hose Assembly to the **STANDPIPE** on the Filter Tub and the **BULKHEAD** Suction Coupling on the Fryer as shown to the left:

b. When the **FILTER PROMPT FEATURE** has been activated and **FILTER** appears in the display, alternating with a normal display; 1) press the 0 key to display the current **HITS**, 2) press the 0 key again to display the current **TIME PROMPT** time and 3) plan to filter shortening at the next convenient time.

c. When it is convenient to filter shortening, filter each fryer as follows:
   1) Turn the **TOGGLE ON/OFF SWITCH** and if applicable, **MANUAL GAS VALVE** for the vat to be filtered **OFF.**

CAUTION: DO NOT TURN THE COMPUTER OFF!!

2) Place **16 OUNCES (.45 kg)**, by volume, of **FILTER AGENT** in a 20" (508 mm) and 18" (457 mm) deep fryer vat, 14 ounces (.39 kg) in an 18" (457 mm) shallow fryer vat and 8 ounces (.23 kg) in a 14" (356 mm) fryer vat; thoroughly stir the filter agent into the shortening using the skimmer, then skim the shortening to remove any floating crumbs.

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

3) Carefully open the drain valve on the vat to be filtered and polished by turning the **DRAIN LEVER** slightly downward, **DRAINING** alternating with **FILTER** will appear in the Computer display. When the bottom of the filter tub is covered with about two (2) inches (51 mm) of shortening, **OPEN** the drain lever and slowly drain shortening to allow the heat mechanism to gradually **COOL**.

4) When all shortening in the vat has drained into the filter tub, use the **DRAIN ROD** to stand the wire rack on one side of the vat.

5) Use the drain rod and/or the "L" shaped brush to pull the sediment on the bottom of the vat towards the valve opening, then use the rod to push sediment through the valve opening.

6) **SECURELY** connect the **MALE** In-Line Plug on the Wash Down Handle & Nozzle to the **FEMALE** Locking Seal Coupling on the Wash Down Hose; then **SECURELY** connect the **MALE** In-Line Plug on the other end of the Wash Down Hose to the **FEMALE** Bulkhead Coupling on the upper rear panel of the fryer. A distinct **CLICK** will be heard when the Male Plug is properly seated to the Female Coupling.

CAUTION: IF THESE CONNECTIONS ARE NOT SECURELY SEATED, HOT SHORTENING WILL BE DISCHARGED AROUND THIS CONNECTION WHICH COULD CAUSE SEVERE BURNS.

7) Place the Wash Down Hose Nozzle into the vat and hold it firmly against an inner wall. This prevents the hose from "jumping" when the Filter Pump is turned on.

8) Turn the **Pump Lever** to the open **(DOWN)** position, hold the nozzle at a 45 degree angle from the bottom of the vat causing the shortening and debris to bounce off the rear wall of the vat and flow towards the drain valve.

9) Use the drain rod to push the sediment through the drain valve to keep the drain clear. Hose off the Heat Mechanism and all walls of the vat until all the shortening and residue at the bottom of the vat has been flushed through the drain into the filter tub.

10) Turn the **Pump Lever** to the closed **(UP)** position, and then disconnect the Wash Down Hose **MALE** In-Line Plug from the **FEMALE** Bulkhead Coupling on the upper rear panel by depressing the **BUTTON** release on the coupling by raising the metal lever.

11) Replace the wire rack in the fryer.

CAUTION: IF THE FILTER TUB IS EQUIPPED WITH A MAGNEPAD PAPER FILTER ASSEMBLY PROCEED TO PARAGRAPH 14) BELOW!!

12) Turn the **Pump Lever** to the open **(DOWN)** position to allow shortening in the filter tub to circulate through the system; then press the **TIME** key on the Computer to activate the Filter Timer. **FILT 10:00** will appear in the display and immediately start counting down.

CAUTION: DO NOT POLISH THE SHORTENING LONGER THAN TEN (10) MINUTES AS IT WILL PUMP EXCESS AIR INTO THE SHORTENING CAUSING SHORTENING TO BREAK DOWN.

NOTE: The filter pump system can **ONLY** be operated when the fryer's Toggle ON/OFF switch is in the **OFF** position and the Pump Lever is in the **OPEN** (down) position.

13) When the Filter Timer counts down to **00:00**, **FILTER** alternating with **DONE** will appear in the display and an alarm will sound for about 5 seconds.

14) The Filter Timer can be terminated early or **TIMEOUT/ALARM** acknowledged, by pressing the **OK/EXIT** key. The display will then be **DRAIN** alternating with **CLOSE.**

15) Turn the **Pump Lever** and **Drain Lever** to the closed (UP) position. The Filter Hit Count and Time Prompt will reset and the display will show **TURN OFF.** In addition, closing the Drain Valve will also terminate the **FILTER DONE** display.

16) Turn the **Pump Lever** to the open **(DOWN)** position to automatically return the shortening in the filter tub to the Fryer.

17) When all shortening has been returned to the vat, turn the Pump Lever to the closed **(UP)** position, then **CAREFULLY** remove any sediment from the filter screen using the Filter Tub Scraper.

NOTE: Magnepad Paper Filter Assemblies **DO NOT** have to be **SCRAPED** after filtering shortening.

18) If applicable, add shortening to the fryer vat; then press the 

key, **OFF,** then back **ON** again to resume normal operation. **MELT G/E/P** will appear in the display.

19) Repeat step 3) through 18) to filter shortening in the remaining vats.

20) When all vats have been filtered, separate the Wash Down Hose Nozzle from the hose and **IMMEDIATELY** hang the hose in an upright position so shortening can drain into a container. Remove the the Suction Line Hose Assembly from the **BULKHEAD** Suction Coupling beneath the left end of the fryer by depressing the **BUTTON** release lever; then remove the filter tub from beneath the fryer.

NOTE: Failure to disconnect the Suction Line hose and to hang the Wash Wand Hose in an upright position in order to drain may cause the hoses to become clogged with hardened shortening.

21) **THOROUGHLY** clean the Filter Tub Assembly as follows:
   a) Disassemble the Filter Machine by removing the following items in the order listed; (1) **CRUMB CATCHER PAN, SLUDGE CATCHER PAN** and **SCREEN**, (2) **FILTER TUB HANDLE,** (3) **COVER,** (4) **SUCTION LINE HOSE,** and (5) **FILTER ASSEMBLY.**
   b) Clean the Suction Line Hose Assembly with sanitizer solution; then hang the hose in an upright position so any shortening can drain into a container.
   c) Discard crumb fragments in the Crumb Catcher Pan and **THOROUGHLY** clean the pan with **HOT** water and let it air dry.
   d) Remove sludge from the Sludge Catcher Screen and Pan using a scraper and **THOROUGHLY** clean these items with **HOT** water and allow them to air dry.
   e) Raise the Filter Assembly above the Filter Tub and let any sediment or shortening drain into the tub; then **THOROUGHLY** clean the filter assembly as follows:
      (1) "Micro-Mesh" Stainless Steel Filter Screen
         (a) **CAREFULLY** remove any debris from the screen using a scraper.
         (b) Remove the **STANDPIPE** from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE** FRAME A to remove it from the **FILTER SCREENS FIRST.**
         (c) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove FRAME B from the **FILTER SCREENS.**
         (d) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN**.
         (e) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP.** If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.
         (f) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.
         (g) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME A.
         (h) Place the **PIN** end of FRAME B on the FILTER SCREENS so the **PIN** is seated in the **CHANNEL** of FRAME A near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the PIN end over the edge of the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME B and the **PIN** of FRAME A is seated in the **CHANNEL** of FRAME B .
         (i) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** on the **STANDPIPE** to the **SUCTION FITING .**
      (2) The "Magnepad Paper Envelope" Filter **DOES NOT** have to be scraped or replaced after filtering shortening.
   f) Remove any sediment and shortening in the Filter Tub using a scraper; then wipe the tub dry with paper towels.
   g) Carefully insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the handle end of the tub.
   h) **CAREFULLY** insert the Sludge Catcher Screen and Pan in the Filter Tub; then replace the Crumb Catcher Pan.
   i) Place the assembled Filter Tub in its storage location.

2. RESUME NORMAL OPERATION

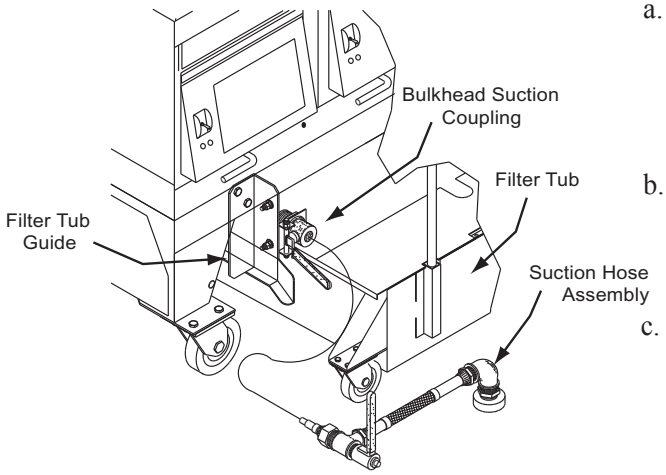
VISUALLY check and if necessary add fresh shortening to each fryer vat until shortening reaches the Middle line of the **"E ← "** in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer; then turn the Toggle ON/OFF switch and Computer ON/OFF button to the **ON** position to return to normal operation.

NOTE: The Drain Lever must be in the closed **UP** position to turn the computer on.

E. ULTRAFRYER BOIL-OUT

The instructions listed below "complement" step-by-step procedures contained in the applicable Ultrafryer Maintenance and Repair Manual which should be used along with this manual when **BOILING OUT** a fryer. The Ultrafryer Maintenance and Repair Manual was provided with the Ultrafryer. If another copy is required it can be ordered according to paragraph III D, page 15 this manual.

1. SHORTENING REMOVAL/DISPOSAL



a. If the store is equipped with a Shortening Disposal System, remove used shortening from the fryer vat that is **CLOSEST** to the Shortening Disposal System connector. If the store is **NOT** equipped with a Shortening Disposal System, remove used shortening from the first fryer vat.

b. Position the assembled filter tub in front of the **FILTER TUB GUIDES** beneath the **LEFT** side of the fryer bank; then roll the filter tub under the fryer until it is butted against the **FILTER TUB STOP** beneath the rear of the fryer as shown to the left:

c. Turn the **TOGGLE ON/OFF SWITCH** and**,** if applicable, **MANUAL GAS VALVE** to the first vat **OFF**; then **SECURELY** connect the suction line hose assembly to the **STANDPIPE** on the filter tub and the **BULKHEAD SUCTION COUPLING** on the Fryer as shown to the left.

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

d. Turn the venthood Exhaust Fan ON and drain shortening from **EACH** fryer vat as follows:

1) Carefully open the drain valve by turning the **DRAIN LEVER** slightly downward. When the bottom of the filter tub is covered with about two (2) inches of shortening, **OPEN** the drain lever and slowly drain shortening to allow the heat mehanism to gradually **COOL.**

2) When all shortening has drained into the filter tub, use the **DRAIN ROD** to stand the wire rack on one side of the vat.

3) **SECURELY** connect the **MALE** In-Line Plug on the Wash Down Handle and Nozzle to the **FEMALE** Locking Seal Coupling on the Wash Down Hose; then **SECURELY** connect the **MALE** In-Line Plug on the other end of the Wash Down Hose to the **FEMALE** Bulkhead Coupling on the upper rear panel of the Fryer. A distinct **CLICK** will be heard when Male Plugs are properly seated in the female couplings.

CAUTION: IF THE PLUGS ARE NOT SECURELY ATTACHED TO THE COUPLERS, HOT SHORTENING WILL BE DISCHARGED AROUND THESE CONNECTIONS WHICH COULD CAUSE SEVERE BURNS.

4) Place the Wash Down Hose Nozzle into the vat and hold it firmly against the inner wall. This prevents the hose from "jumping" when the Filter Pump is turned on.

5) Turn the **PUMP LEVER** to the open **(DOWN)** position, hold the nozzle at a 45º angle from the bottom of the vat causing the shortening and debris to bounce off the rear wall of the fryer and flow towards the drain valve.

6) Use the drain rod to push the sediment through the drain valve to keep the drain clear. Hose off the Heat Mechanism and all walls of the fryer vat until all the shortening and residue on the bottom of the vat has been flushed through the drain into the filter tub.

7) Turn the **PUMP LEVER** and **DRAIN LEVER** to the closed **(UP)** position.
8) Dispose of used shortening as follows:
   a) Restaurants **NOT** equipped with a Shortening Disposal System:
      (1) Place the Wash Down Hose nozzle into a **METAL** container and hold it firmly against an inner wall. This prevents the hose from **"jumping"** when the Filter Pump is turned **ON**.
      (2) Turn the **PUMP LEVER** to the open **(DOWN)** position and pump shortening from the filter tub into the metal container.
      (3) When all shortening in the filter tub has been pumped into the metal container, turn the **PUMP LEVER** to the closed **(UP)** position and remove any sediment from the permanent filter screen using the filter tub scraper.
      (4) Repeat steps **dl), d2), d3), d4), d5), d6), d7), d8), a1; d8)a2)** and **d8)a3)** above to remove shortening from remaining vats to metal containers.
   b) Restaurants **EQUIPPED** with a Shortening Disposal System:
      (1) Remove the Wash Down Hose **MALE** In-Line Plug from the **FEMALE** Bulkhead Coupling on the upper panel of the Fryer by depressing the **BUTTON RELEASE** lever; then **SECURELY** connect the Shortening Disposal Hose **MALE** In-Line Plug to this **FEMALE** Bulkhead Coupling.
      (2) **SECURELY** connect the fitting on the other end of the Shortening Disposal Hose to the Disposal System connector on the wall and **ENSURE ALL** valves (pertinent to the flow of shortening) to the Rendering tank are **OPEN.**
      (3) Turn the Pump Lever to the open **(DOWN)** position and pump shortening from the filter tub into the exterior rendering tank.
      (4) When all shortening has been suctioned from the filter tub, turn the Pump Lever to the closed **(UP)** position, and if applicable, remove any sediment from the Micro-Mesh filter screen using the Filter Tub Scraper. **THE MAGNEPAD FILTER DOES NOT HAVE TO BE SCRAPED.**

NOTE: Leave the Shortening Disposal Hose connected to Bulkhead Coupling and Disposal System connector.

      (5) Repeat steps **d1), d2), d3), d4), d5), d6),** and **d7**) to drop shortening from the next vat into the filter tub.
      (6) Remove the Wash Down Hose from the Bulkhead Coupling on the rear wall of this Fryer; then turn the Pump Lever on the fryer **CLOSEST** to the Shortening Disposal System to the open **(DOWN)** position to pump shortening from the filter tub into the exterior rendering tank.
      (7) When all shortening has been suctioned from the filter tub, turn the Pump Lever to the closed **(UP)** position, and remove any sediment from the Micro-Mesh filter screen using the Filter Tub Scraper. **THE MAGNEPAD FILTER DOES NOT HAVE TO BE SCRAPED.**
      (8) Repeat steps **b) (5), (6)** and **(7),** above to remove shortening from the remaining fryer vats to the exterior rendering tank.
      (9) Remove the Shortening Disposal Hose/Wash Down Hose from the Bulkhead Coupling on the rear wall of the fryer and replace the wire rack in each vat.
      (10) **IMMEDIATELY** hang the Wash Down Hose and, if applicable the Shortening Disposal Hose in an upright position and **THOROUGHLY** clean and reassemble the filter tub. If applicable, replace the Magnepad **FILTER PAD ENVELOPE** by following procedures in step 1 a. 2) (b) on page 16.

2. FRYER VAT BOIL-OUT

a. **BOIL-OUT** each fryer following cleaning instructions contained in the Cleaning Manual provided by your approved chemical supplier. The following are generic procedures:

1) Ensure all Drain Levers are in the closed **(UP)** position, then add water to each vat until it reaches a point two (2) inches **BELOW** the middle line of the **"E ← "** in the word **LEVEL** of the **UPPER** shortening level mark on the rear wall of the vats.

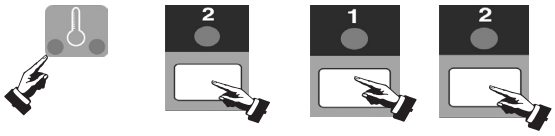
WARNING: ONLY USE A COMMERCIAL GRADE "NON-CHLORINE" BOIL-OUT COMPOUND!!

2) Add the amount of **BOIL-OUT COMPOUND** in each fryer vat prescribed in the Cleaning Manual provided by the Chemical Supplier.

3) Turn the Toggle ON/OFF switch and**,** if applicable, Manual Gas valve for each fryer vat to the ON position; then depress the Computer ON/OFF Key to the **ON** position.

NOTE: The Drain Lever must be in the closed **UP** position to turn the computer **ON**.

4) Place the Computer in the **BOIL MODE** by pressing the following Computer keys in the order shown:



NOTE: BOIL 30:00 will appear in the Computer display and the Computer will turn the Ultrafryer ON and OFF to heat and maintain the boil-out solution at 192ºF (89ºC).

5) Frequently scrub the sides, front and rear of each fryer vat with a long handled synthetic bristle scrub brush.
6) After the boil-out solution has **"BOILED"** for 30 minutes and the alarm sounds, press the 

key to **EXIT BOIL MODE**.
7) Turn the Toggle ON/OFF Switch and if applicable, the Manual Gas Valve for each fryer to their **OFF** position and **CAREFULLY** dispose of the boil-out solution in each fryer in a floor drain.

NOTE: Do not use the filter pump to remove water from the vats as this will cause premature pump failure and void the pump warranty.

8) Use a scrubbing pad to remove carbon buildup from the top of the heat mechanism. To remove carbon buildup on the sides and bottom of the heat mechanism; slide one end of a stropping pad under each heat mechanism, grasp that end with a pair of tongs, and rock the pad up and down along the length of each heat mechanism until all encrusted material has been removed.
9) Rinse each fryer with hot water until the water coming out of the drain valve is clear.
10) Mix a solution of **ONE PART** vinegar to **25 PARTS** of water. Place this mixture into a one gallon garden pressure sprayer; and **THOROUGHLY** spray this solution onto the **SIDES**, **HEAT MECHANISM**, and **BOTTOM** of each fryer to neutralize the Boil-Out Compound.

NOTE: Boil-Out Compound will cause shortening to break down rapidly if it is not neutralized.

11) **THOROUGHLY** wipe the sides, heat mechanism, and bottom of each fryer with clean, lint-free, dry towels to remove any remaining water; then fill each fryer with **NEW** shortening following procedures in Paragraph III B of this manual.

IV ULTRASTAT COMPUTER SETTINGS AND PROGRAMMING

The Ultrastat25 Cooking Computer has two (2) modes of operation:

OPERATING MODE - Pre-programmed cook times and temperature for standard products plus action alarms.

PRODUCT PROGRAMMING MODE - Allows customers to add, delete or modify product **RECIPES** or **FEATURES.** Recipe programming pertains to staged cook times, temperatures and action alarms of products; Feature programming pertains to selecting celsius/fahrenheit, computer setback of time and temperature, melt cycle options, filtering prompts and shortening disposal prompts.

CAUTION: DUE TO THE COMPLEXITY OF AN ULTRASTAT25 COMPUTER, PROGRAMS SHOULD ONLY BE CHANGED BY AN AUTHORIZED OPERATIONS MANAGER/SUPERVISOR OR A SERVICE AGENT APPROVED BY ULTRAFRYER SYSTEMS' CUSTOMER SERVICE DEPARTMENT.

A. PROGRAM DISPLAYS

1. RECIPE PROGRAM DISPLAYS

PROGRAM — Indicates computer is in the program mode and allows the customer to select **RECIPE** programming by entering **3660** (cook password) or **FEATURE** programming by entering **3661** (feature password).

RECIPE — Indicates computer is in the Recipe programming mode in which product staged cook times and temperatures, and action alarms may be programmed

TOO HIGH — Indicates the number of steps, time, temperature, or action alarms entered is too high and is **NOT ACCEPTABLE.**

TOO LOW — Indicates the number of steps, time, temperature, or action alarms entered is too low and is **NOT ACCEPTABLE.**

STRAIGHT — Indicates "straight" cook time has been selected where the product is cooked at a certain temperature for a certain time**.**

FLEX — Indicates "flex" cook time has been selected where the computer adjusts the actual cook time taking into consideration the temperature variations due to load size, initial product temperature, product moisture content, and other factors affecting the cook cycle.

ALARMS — Indicates the number of **STIR** alarms that may be programmed for this Product Key.

HITS — Indicates shortening abuse weight factor of the Product Key being programmed.

NOTE: A "programming timeout" will occur if no key is pressed for **TWO (2)** minutes and the computer will return to normal operations.

2. FEATURE PROGRAM DISPLAYS

PROGRAM — Indicates computer is in the program mode and allows the customer to select **RECIPE** programming by entering **3660** (cook password) or **FEATURE** programming by entering **3661** (feature password).

FEATURE — Indicates computer is in the Feature programming mode in which the customer is able to select either: 1) Celsius or Fahrenheit temperature unit; 2) Alarm (Beeper) volume; 3) Setback time / temperature; 4) Melt Option; 5) Filter prompt; and 6) Disposal prompt.

TOO HIGH — Indicates an entered value is too high and is **NOT ACCEPTABLE.**

TOO LOW — Indicates an entered value is too low and is **NOT ACCEPTABLE.**

SETB 00:00 — Prompt to enter the **SETBACK** time in hours and minutes.

SETB000F/C — Prompt to enter the **SETBACK** temperature in degrees fahrenheit or celsius.

G — Melt option for a gas fryer (Gas cycles **ON** for 8 seconds and **OFF** 32 seconds)

E — Melt option for a electric fryer (Heat element **ON** for 4 seconds and **OFF** 36 seconds)

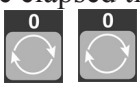
P — Melt option for purge where the purge cycle is **ON** for 12 seconds and **OFF** 28 seconds

M REL HI — Prompt to select the **HIGH** (135ºF (57ºC)) Melt Release temperature.

M REL LO — Prompt to select the **LOW** (75ºF (24ºC)) Melt Release temperature.

FHCL ### — Prompt to enter the shortening **FILTER HIT COUNT LIMIT** for the filter prompt.

FHCS ### — Indicates the current **FILTER HIT COUNT** (weighted cooks since last Filtering).

TIME — Indicates the elapsed time in **HOURS** of operation to start of the Filter Prompt. Setting it to 

will disable the Time Prompt.

LAST/PREV/FCTY— Indicates View Recovery Test options between **LAST, PREVIOUS,** and **FACTORY** recovery times. While viewing **FACTORY** a new 3 digit second value may be entered.

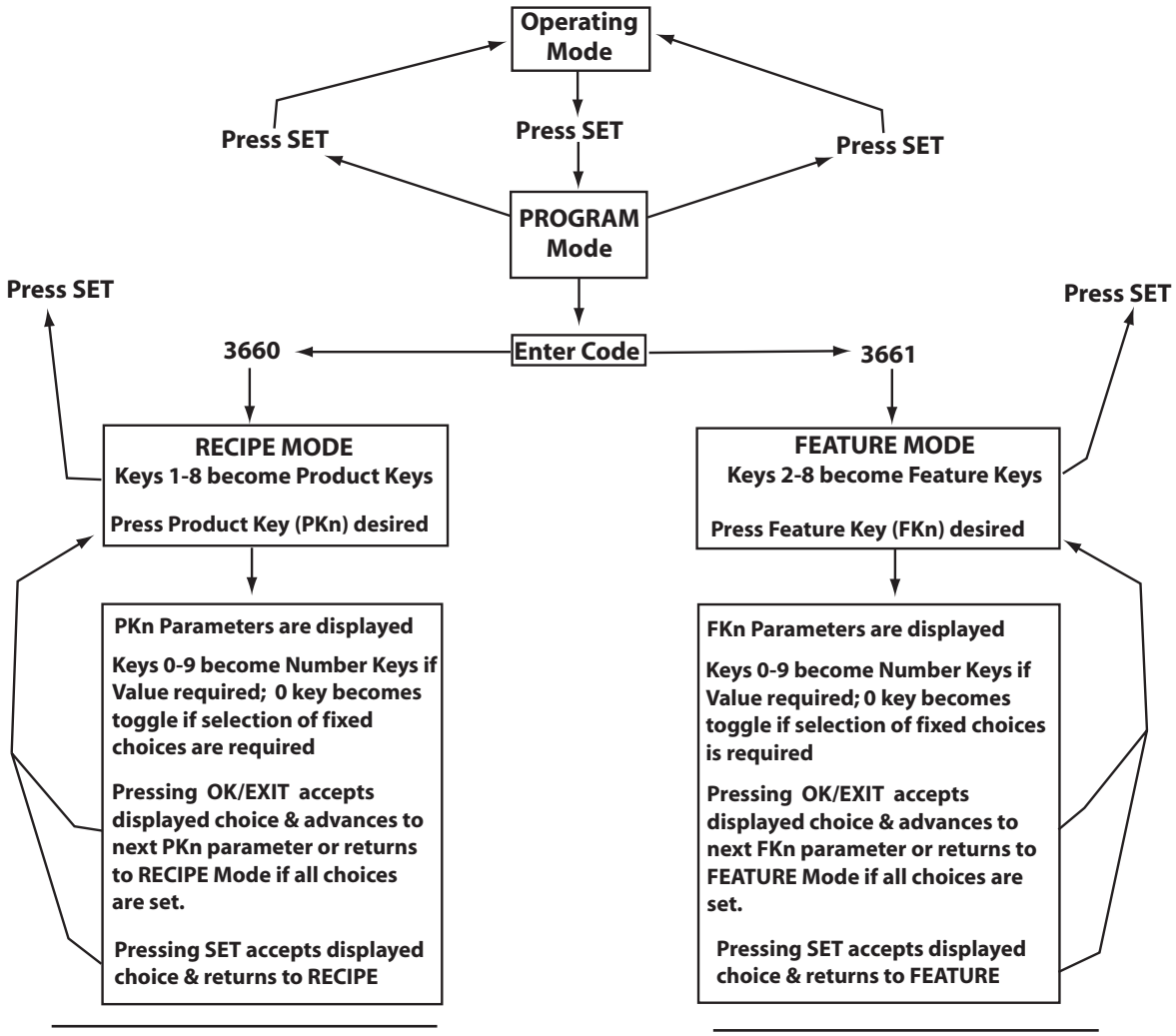
DHL ###### — Prompt to enter the shortening **DISPOSAL HIT COUNT LIMIT** for the disposal prompt.

DHC ###### — Indicates the current **DISPOSAL HIT COUNT**.

NOTE: HIT refers to the shortening abuse associated with cooking a quantity of a product. The hits are programmed to each product key and added to the Filter Hit Count each time the product is cooked.

B. ULTRASTAT 25 COMPUTER PROGRAMMING

1. PROGRAMMING FLOW CHART



RECIPE Parameters

No. of Steps
(For each step)
TIME
TIME CURVE
TEMPERATURE

No. of ALARMS
(For each alarm)
TIME
HITS

FEATURE List

FK2 -- Degrees (F or C)
FK3 -- Alarm Volume (1,2,or 3)
FK4 -- SETBACK (TIME, TEMP)
FK5 -- MELT (E, G, or P)
Release temp (LO or HI)
FK6 -- Recovery Data
LAST; PREV; FCTY
FK7 -- FILTER Prompt
HIT LIMIT; HITS; TIME Cue
FK8 -- DISPOSE Prompt
HIT LIMIT; HITS

2. To program product cook times, temperatures, and action alarms, proceed to paragraph 3, **RECIPE PROGRAMMING.** To program Celsius/Fahrenheit temperature unit, computer setback time and temperature, melt cycle options, and filtering/disposal prompts proceed to paragraph 4, **FEATURE PROGRAMMING**.

NOTES: 1. The following steps pertain to programming one (1) Product Key for a gas fryer.
2. A <u>PROGRAMMING TIMEOUT</u> will occur if no keys are pressed for <u>two (2) minutes</u> in the programming mode.

3. RECIPE PROGRAMMING:

STEP	ACTION	RESPONSE
1	**ENSURE** the Drain Lever on the fryer is in the **CLOSED** position, shortening is at the proper level, the **TOGGLE ON/OFF SWITCH** is **ON;** the **AMBER** power indi-cator lamp is **LIT;** then depress the computer **ON/OFF** key.	A. **MELT E, G, or P** will appear in the display to indicate the computer is in the **SHORTENING MELT MODE.** B. The **HEAT DEMAND** lamp on the computer and the **RED HEAT INDICATOR** lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is periodically being turned **ON** and **OFF**
2	Depress the **SET** key to enter the **PROGRAMMING MODE.**	A. **PROGRAM** will appear in the display to indicate the computer is in the program mode.
3	Enter the **COOK PASSWORD "3660"** to enter product key programming.	A. **RECIPE** will appear in the display to indi cate product keys may be programmed. B. All Product Key **LED'S** will **LIGHT.**
4	Depress the **PRODUCT KEY** to be programmed, ie., **PK 1.**	A. Product Key 1 **LED** will **LIGHT** indicating it is ready to be programmed. B. Product Key 2 through 8 **LED'S** will be **OFF**. C. Prompt **00 STEPS** will appear in the display indicating the number of cooking steps to be programmed for this product key.
5	Enter the number of cooking steps to be programmed, (example **05**); then depress the **OK/EXIT** key for this number to be accepted. **NOTE:** Maximum number of steps to be accepted is **10. "TOO HIGH"** will appear in the display if more than **10** steps is entered.	A. Prompt **S1 00:00** will appear in the display indicating the time for step 1 to begin is to be entered.
6	A. Enter the **TIME** STEP 1 is to begin, (referenced to the end of a cook cycle); then press the **OK/EXIT** key for the time to be accepted, i.e.; **STEP 1 13:00.** B. Depress the 0 Key to toggle between **STRAIGHT** or **FLEX** Timing Mode; then depress the **OK/EXIT** Key for this selection to be accepted, i.e.; **STEP 1 FLEX** C. Enter the **TEMPERATURE** for STEP 1; then depress the **OK/EXIT** Key for this temperature to be accepted, i.e.; **STEP 1 330ºF/166ºC** **NOTE:** If **00:00** is entered, programing for this **PRODUCT KEY** is ended. D. Repeat Steps 6A, 6B, and 6C to program the **START TIME, TIMING MODE,** and **TEMPERATURE** for subsequent STEP 2, STEP 3, STEP 4, and STEP 5. **NOTES:** 1) If **00:00** is entered for a subsequent STEP, NO OTHER STEP CAN BE PROGRAMMED. 2) Entry **MUST BE** between 200 and 390ºF (93 to 199ºC). 3) **TOO HIGH** will be displayed if entry is greater than 390ºF (199ºC). 4) **TOO LOW** will be displayed if entry is less than 200ºF (93ºC). 5) Repeated presses of the **OK/EXIT** key will scroll through time, straight/flex and temperature for each step until the last step is completed.	A. Prompt **STRAIGHT/FLEX** will appear in the display indicating the Type Timing Mode is to be selected. B. Prompt **S01 000F** will appear in the display indicating the Temperature in ºF for STEP 1 is to be entered. C. Prompt **S2 00:00** will appear in the display indicating START TIME, TIMING MODE and TEMPERATURE for STEP 2 is to be entered. D. After the **TEMPERATURE** for the last STEP **(STEP 5)** has been entered and accepted, prompt **ALARMS** will appear in the display indicating the number of alarms desired is to be entered.

3. RECIPE PROGRAMMING ... continued:

<table>
<tr><th>STEP</th><th>ACTION</th><th>RESPONSE</th></tr>
<tr><td>7</td><td>Enter the number of stir alarms desired; for example 3 ; then depress the OK/EXIT key for this number to be accepted.
NOTE: Maximum number of alarms is 3. TOO HIGH will be displayed if a higher number is entered.</td><td>A. Prompt Am 00:00 will be displayed indicating the time for each alarm signal is to be entered.</td></tr>
<tr><td>8</td><td>Enter the TIME each alarm is to begin, referenced to the end of the cook cycle; then press the OK/EXIT key after each entry. For example:
<table><tr><th>ALARM</th><th>TIME</th><th>OCCURENCE TIME IN COOK CYCLE</th></tr><tr><td>1</td><td>9:00</td><td>4:00</td></tr><tr><td>2</td><td>6:00</td><td>7:00</td></tr><tr><td>3</td><td>3:00</td><td>10:00</td></tr></table>NOTE: Each time entered must be a minimum of 10 seconds less than the previous entry.</td><td>A. Prompt HITS ## will be displayed indicating the HIT COUNT VALUE for the FILTER PROMPT and DISPOSAL PROMPT may be entered.

NOTE: HIT COUNT VALUE EQUALS SHORTENING ABUSE ASSOCIATED WITH THE PRODUCT DROP.</td></tr>
<tr><td>9</td><td>Enter the HIT COUNT VALUE (PRODUCT DROP) equivalent to the product being programmed; then depress the OK/EXIT key for the number to be accepted. For example:
<table><tr><th>PRODUCT</th><th>ENTER</th></tr><tr><td>CHICKEN</td><td>5</td></tr><tr><td>FRENCH FRIES</td><td>1</td></tr><tr><td>FILLETS</td><td>2</td></tr></table>NOTE: Hit Count Value (product drop) equals the measure of abuse shortening gets with the cook of a product using this Product Key. The measure of abuse is then associated with the Hit Count Limit stored in the Filter Prompt and Disposal Prompt Features. Any convient unit may be defined as long as the same unit is used on each Product Key as well as the Filter and Disposal Prompts.
A convient unit might be the cooking of 1 POUND of unbattered french fries; then a HIT COUNT of 1 would be entered for a Product Key meant to cook 1 pound of unbattered french fries in a basket. If a chef/manager determined a pound of battered fillets (5 pieces) caused TWICE as much abuse as unbattered french fries; then a HITCOUNT of 2 would be entered for a Product Key meant to cook a pound (5 pieces) of battered fillets. Likewise, 48 pieces of battered chicken may cause 5 times the abuse as unbattered french fries, so a HITCOUNT of 5 would be entered for a Product Key meant to cook 48 pieces of battered chicken.</td><td>A. RECIPE will appear in the display indicating another product may be programmed according to steps 4 through 9.

B. Press the next PRODUCT KEY to be programmed, ie., PK 2, and program this product key according to steps 4 through 9.

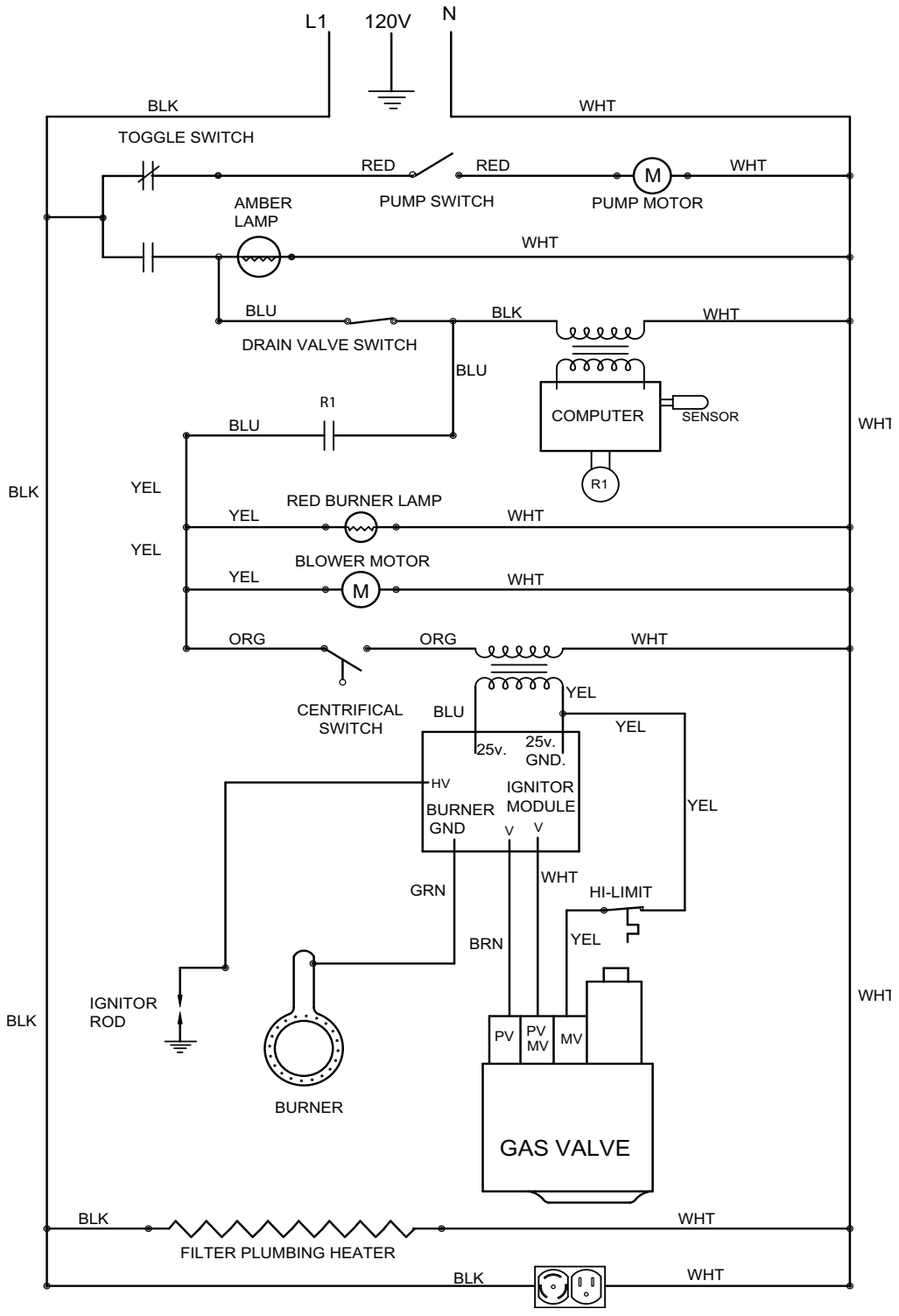
C. When all product keys have been programmed and RECIPE appears in the display, press the SET key “twice” to exit the Recipe programming mode. READY will appear in the display.</td></tr>
</table>

4. FEATURE PROGRAMMING:

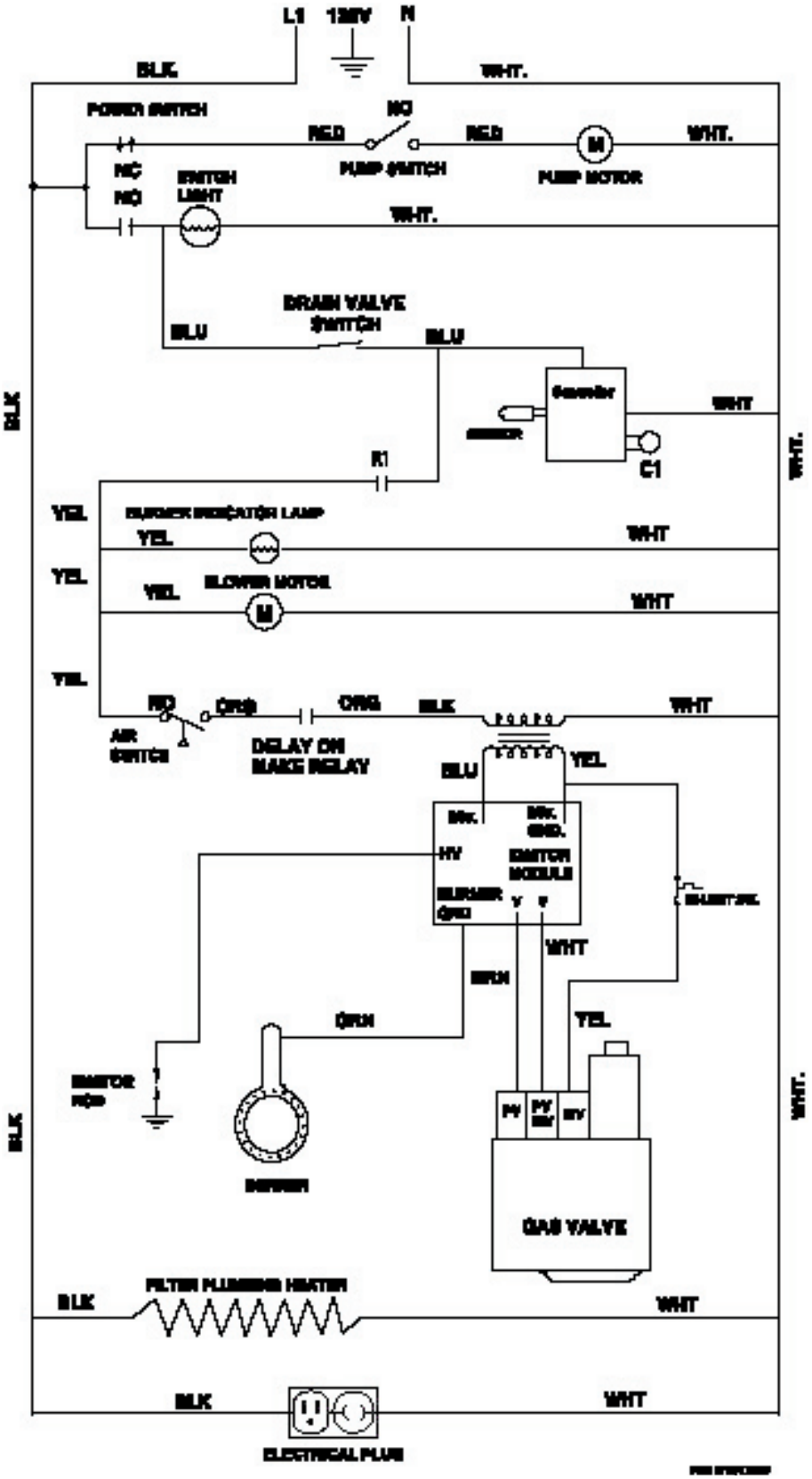
STEP	ACTION	RESPONSE
1	Depress the **SET** key to enter the programming mode.	A. **PROGRAM** will appear in the display to indicate the computer is in the program mode.
2	Enter the **FEATURE PASSWORD "3661"** to enter Feature key programming.	A. **FEATURE** will appear in the display to indicate Feature key may be programmed. B. All Feature Key **LED'S** will **LIGHT.**
3	Depress the **FEATURE KEY** to be programmed, ie., **FK 2**.	A. All Feature Key **LED'S** will turn **OFF.**
4	Depress Feature Key **"2"** ; then depress the  key to toggle between the **CELSIUS** and **FAHRENHEIT** temperature units. Press the **OK/EXIT** key for this selection to be accepted.	A. **DEGREE C/F** will be displayed to indicate the temperature unit selected. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the in the display.
5	Depress Feature Key **"3"** ; then depress the  key to toggle between **BEEPER** volumes. Press the **OK/EXIT** key for this selection to be accepted.	A. **VOLUME 3** will be displayed to indicate this volume has been selected. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the in the display.
6	Depress the Feature Key **"4"** to program the **SETBACK TIME/TEMPERATURE** desired.	A. Prompt **SETB 00:00** will appear in the display indicating the **TIME** period of **INACTIVITY** before the Setback Mode is entered.
7	Enter the time period of **INACTIVITY** before the Setback Mode is automatically activated. For example: **02:00** for two (2) hours. Press the **OK/EXIT** key for this time to be accepted. **NOTE:** Setback can be initiated by **QUICKLY** pressing the **TEMPERATURE** followed by the **OK/EXIT** keys.	A. **SETB 02:00** will be displayed indicating this entry has been accepted. B. Prompt **SETB 000F/C** will be displayed indicating the amount the **SETPOINT TEMPERATURE** is to be reduced is to be entered.
8	Enter the number of degrees below the **SETPOINT TEMPERATURE** shortening is to be reduced at the end of the **SETBACK TIME.** Press the **OK/EXIT** key for this entry to be accepted. For example: **SHORTENING TEMPERATURE** **SETPOINT** / **REDUCED** / **ENTER** **330ºF (166ºC)** / **250ºF (121ºC)** / **80ºF (27ºC)** **NOTE:** Maximum value that will be accepted is **150ºF (66ºC).**	A. **SETB 80ºF (27ºC)** will be displayed indicating the **SETBACK TEMPERATURE SETPOINT** will be reduced during **SETBACK** mode activation. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the display.
9	Depress the Feature Key **"5"** then depress the  key to toggle between the **MELT OPTIONS.** For example: **"G"** for gas, **"E"** for electric, or **"P"** for purge. Depress the **OK/EXIT** key for this entry to be accepted. **NOTE:** The Gas Cycle will be **ON** 8 seconds and **OFF** 32 seconds, the Purge Cycle will be **ON** 12 seconds and **OFF** 28 seconds and the Electric Cycle will be **ON** for 4 seconds and **OFF** for 36 seconds.	A. **M REL HI** or **M REL LO** will appear in the display indicating the **MELT RELEASE** setting may now be selected.
NOTE: ZRT Express and Counter Top and Model PAR-3 Gas Fryers are to be set for P - PURGE, all other Gas Fryers are set for G - GAS.		

4. FEATURE PROGRAMMING .... continued :

STEP	ACTION	RESPONSE
10	Press the 0 key to toggle between the **REL HI** (135ºF (57ºC))and**MRELLO**(75ºF(24ºC)). For example: toggle **M REL LO** which permits the **OK/EXIT** key to be operational above **75ºF (24ºC)** to exit the shortening melt mode. Press the **OK/EXIT** key to accept this selection.	A. **M REL HI / M REL LO** will be displayed to indicate this selection hasbeenaccepted. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the display.
11	Depress Feature Key **"6"** then the 0 key to toggle between the **VIEW RECOVERY TEST OPTIONS**, ie., **LAST** , **PREVIOUS** and **FACTORY.** While viewing **FACTORY,** a new value can be entered by depressing the **OK/EXIT** key first then entering **3 DIGITS** in seconds. Depress the **OK/EXIT** Key to exit this feature.	A. **LAST/PREV/FCTY** will appear in the display. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the display.
12	Depress Feature Key **"7"** to program the **FILTER PROMPT.**	A. Prompt **FHCL ###** will be displayed indicating the **FILTER HIT COUNT LIMIT** for the Filter prompt may be entered.
13	Enter the maximum number of **HITS** (product drops) to be cooked prior to alarming a **FILTER PROMPT** ; then press the **OK/EXIT** key. For example: enter **105** **NOTES:** 1) If filtering shortening was recommended after cooking a **THOUSAND** pieces of battered chicken, that would equate to cooking 48 pieces of battered chicken about 21 times. Therefore the max number of **HITS** (product drops) prior to alarming a **FILTER PROMPT** would be **105** (Hit Count Value 5 x 21 Product Drops). 2) Maximum value that can be entered is 999. 3) Entering 0 0 0 will disable this feature.	A. Current Filter Hit Counts **FHCS 105** will be displayed indicating a filter prompt will be signaled after the following quantity of product has been cooked, for example: **CHICKEN 1008 PIECES** **FRENCH FRIES 105 BASKETS** **FILLETS 262 PIECES**
14	Depress the **OK/EXIT** key to get the **TIME PROMPT LIMIT** display.	A. **TIME PROMPT LIMIT (TIME xx)** will be displayed, indicating **TIME PROMPT LIMIT** may be entered.
15	Enter time of operation, in hours, before a **TIME PROMPT LIMIT** will be displayed. For example; enter **02**. Press the **OK/EXIT** key for this value to be accepted. **NOTE:** Entering 0 0 will disable this feature.	A. **TIME 02** will be displayed indicating the entry has been accepted. B. When **OK/EXIT** key is pressed, **FEATURE** will appear in the display.
16	Press Feature Key **"8"** to program the shortening **DISPOSAL PROMPT.**	A. Prompt **DHL #####** will be displayed indicating the **DISPOSAL HIT COUNT LIMIT** for the Disposal Prompt may be entered.
17	Enter the maximum number of **HITS** (product drops) to be cooked prior to alarming a **DISPOSAL PROMPT**. For example: enter **01458 .** Press the **OK/EXIT** key for this value to be accepted. **NOTES:** 1) If shortening disposal was recommended after cooking **14,000** pieces of battered chicken, that would equate to cooking 48 pieces of battered chicken about 292 times. Therefore the max number of **HITS** (product drops) prior to alarming a **DISPOSAL PROMPT** would be **1458** (Hit Count Value 5 x 292 Product Drops). 2) Maximum value that can be entered is 65,535. 3) Entering 0 0 0 0 0 will disable this feature.	A. Current Disposal Hit Count **DHCO 3704** will be displayed indicating a **DISPOSAL PROMPT** will be signaled after the following quanity of product has been cooked. For example: **CHICKEN 14,016 PIECES** **FRENCH FRIES 1,458 BASKETS** **FILLETS 3,645 PIECES** B. When the **OK/EXIT** key is pressed **FEATURE** will appear in the display.
18	Press the **SET** key to exit the programming mode.	



MODEL PAR-2 GAS FRYER W/COMPUTER
WIRING DIAGRAM



MODEL PAR-3 GAS FRYER W/COMPUTER
WIRING DIAGRAM