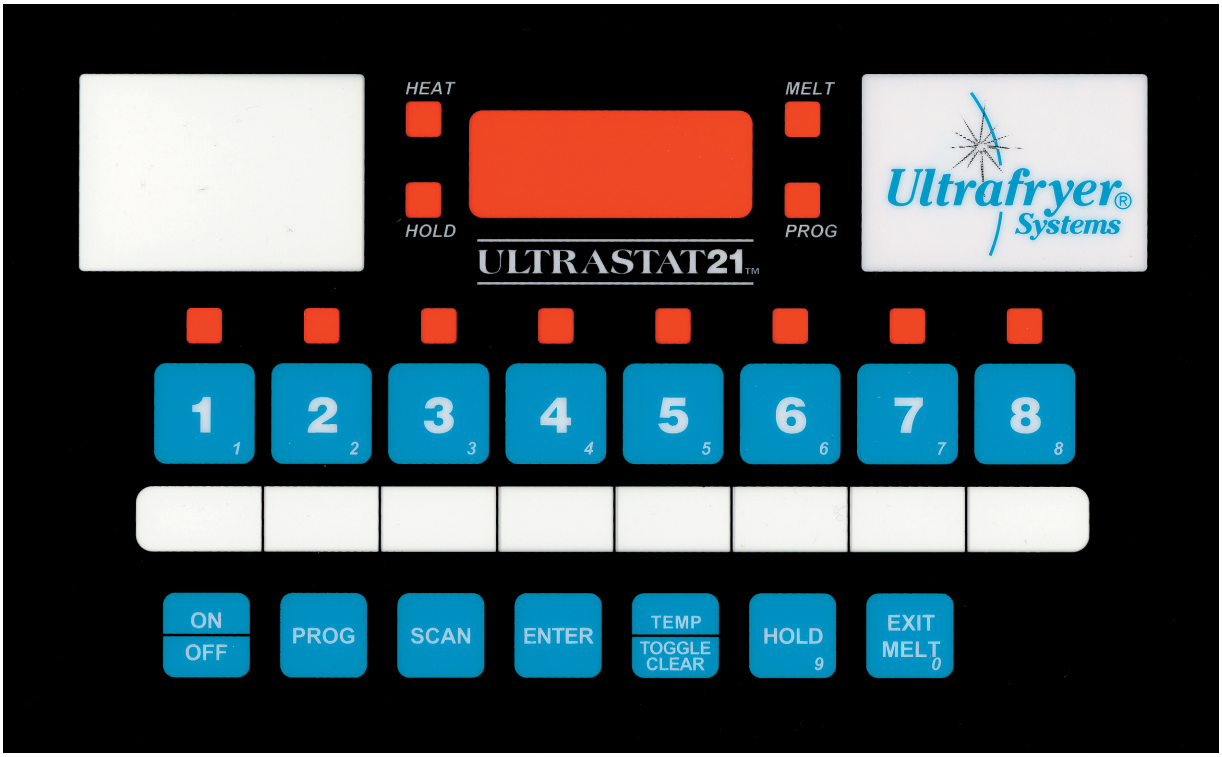
Ultrafryer® Systems



ULTRASTAT21

Ultrafryer Computer Operation Instructions

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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 Ultrastat21 Cooking Computer. This manual complements and should be used in conjunction with the Ultrafryer Fryer Maintenance and Repair Manual provided with each Ultrafryer Fryer.

TECHNICAL PUBLICATIONS DEPARTMENT
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NOTE: This manual is applicable to both Electric and Gas Fryers equipped with an Ultrastat 21 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 perform other important responsibilities. Quality control of cooked products is assured through the various features, notification displays, and alarms designed into the computer.

A. SAFETY - The Ultrastat21 Cooking Computer operates on 24 volt single phase electrical power; and like other electrical equipment, it 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 the area around the fryer should be kept clean and dry. Whenever anything is put into a cooking vat, care should be taken not to splash the hot shortening. Products should always be "placed" into the shortening, not thrown.

B. SAFE CLEANING PROCEDURE - Before performing any cleaning routine, electrical power to the Ultrastat 21 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 cleaners or degreaser solvents 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 Ultrafryer Customer Service Department at 1-800-525-8130.

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II ULTRASTAT21 COOKING COMPUTER

A. COMPUTER FEATURES

1. Programmable Stage Times
The user will have the ability to program certain cook times in each stage of 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 250 to 390°F (121 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 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.

5. Programmable Hold Times
Product key hold times can be programmed to track product quality through its specified holding period. Hold time countdown begins as soon as the cook cycle is complete. The computer will sound an alarm when the product's hold time has expired alerting the user to discard the product.

6. Programmable Hold Time Linking
Each product key can be linked to an independent hold timer or multiple product keys can be linked to a single hold timer.

7. Programmable Filter Lockout Cycle Count
The user will be able to program a single filter lockout cycle count (valid range is 0 to 50) for each product key. To disable filter lockout, enter 0 for lockout cycle count.

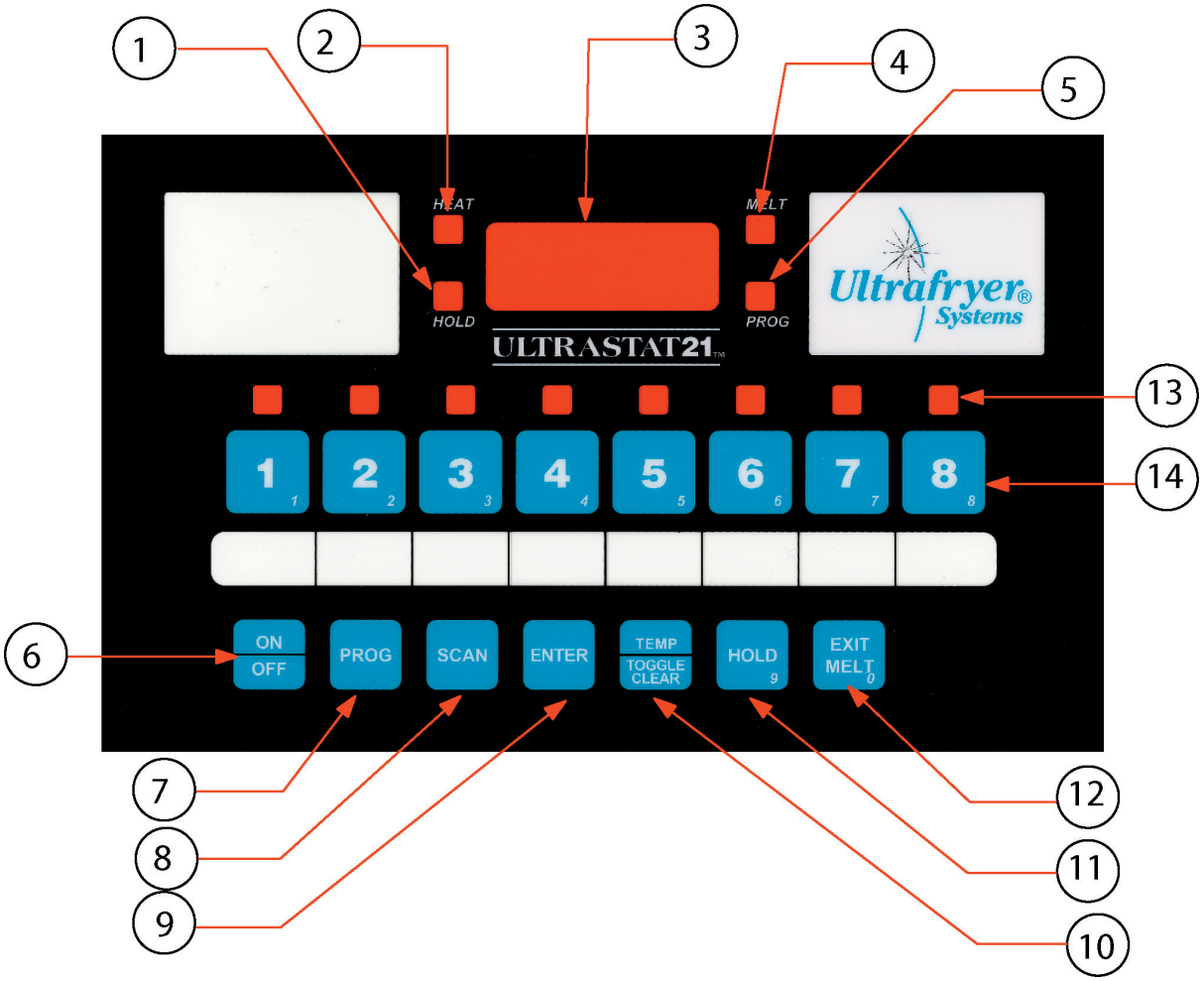
8. Automatic Least Hold Display
The product with the least amount of remaining cook time will be shown in the display. Pressing and holding the "SCAN" key allows you to view each product's remaining cook time.

9. Melt Cycle

When the computer is ON and the vat temperature is below the Melt Limit Temperature, the computer will control the melting of the shortening. After the vat temperature is above the Melt Limit Temperature, the user may press the "EXIT MELT" key to enter normal cooking mode. Each time the computer is turned ON, it will automatically enter the Melt Cycle and must again be overridden by pressing the "EXIT MELT" 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 "EXIT MELT" KEY. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY AS WELL AS DAMAGE TO THE FRYER.

B. COMPUTER PANEL KEY DESCRIPTIONS



1. HOLD LAMP

When lit (bright), indicates a product hold time is being tracked.

2. HEAT LAMP

When lit (bright), indicates the computer is calling for heat.

3. DISPLAY

Displays modes, functions and operations of the computer.

4. MELT LAMP
When lit (bright), indicates the computer is in the melt cycle.

5. PROGRAM LAMP
When lit (bright), indicates the computer is in the program mode.

6. ON/OFF KEY
Turns the computer ON and OFF when the fryer power switch is in the ON position and the drain valve lever is in the closed UP position.

7. PROGRAM KEY
a. In "operating" mode, allows access to the programming mode.
b. In "programming" mode, allows access to the operating mode.

8. SCAN KEY
a. In "operating" mode, displays the remaining cook time on every product currently in a cook cycle and lights the respective products "LED" for 2 seconds.
b. In "programming" mode, steps to the next function to be programmed.

9. ENTER KEY
In "programming" mode, used to accept the information and "enter" it into the computer memory.

10. TEMP/TOGGLE CLEAR KEY
a. In "operating" mode, displays the actual temperature followed by the programmed "set" temperature.
b. In "programming" mode, allows the user to "toggle" (switch) between choices in an entry field and "clear" values from a data field.

11. HOLD KEY
a. In "operating" mode, used to view remaining hold times.
b. In "programming" mode used to enter numerical value 9.

12. EXIT/MELT KEY
a. In "operating" mode, used to manually exit the shortening melt cycle.
b. In "programming" mode, used to enter numerical value 0.

13. PRODUCT LED
a. When lit (bright) in the "operating" mode, identifies the product data being displayed.
b. When let (bright) in the "programming" mode, identifies the product being programmed.

14. PROGRAMMING AND PRODUCT COOK KEY
a. In "operating" mode, used to start and stop a product's cook cycle.
b. In "programming" mode, used to enter numerical values 1 to 8.

C. DISPLAY DESCRIPTIONS

The unit is in the Operating Mode. The actual vat temperature is more than 10ºF (5ºC) below the programmed vat temperature.

The unit is in the Operating Mode. The actual vat temperature is within the proper cooking temperature range. The vat is ready to start a cook cycle.

The unit is in the Operating Mode. The actual vat temperature is more than 40ºF (22ºC) degrees above the programmed vat temperature. A continuous audible alarm sounds simultaneously.

The computer probe is either open or shorted; accompanied with an audible alarm, if shorted. Check or replace the probe.

The unit is in the Operating Mode and a cook cycle is in process.

The unit is in the Operating Mode and a cook cycle has been completed.

The unit is waiting for a pass code to be entered.

The unit is in the Product Key Programming Standby Mode.

A stage cooking time (1-10) is displayed.

A stage cooking temperature (1-10) is displayed.

A stage timing mode (1-10) (flex or straight) is displayed.

Product key action alarm programming standby mode.

The action alarm status is displayed.

The unit is in Product Key Filter Lockout Programming Standby mode

After the fryer is filtered, this display prompts you to refill the fryer with shortening.

D. OPERATING THE COMPUTER

1. Starting a Cook Cycle

To start a cook cycle, simply press the product key 

for the product you wish to cook. If the product key is programmed, the correct cooking time will be displayed 12:00 (example) and this time will immediately start to count down in minutes and seconds. If donE is displayed immediately and the unit starts to signal, the key being operated is not programmed. If correctly programmed, it will count down to :00 followed by donE and start to signal.

Cancel this signal by pressing, 

and holding for 3 seconds, the same cycle product key used to start the cook cycle.

2. Action Alarms

If the unit is programmed with action alarms, the action alarms will signal at a preset time during the cooking cycle :30 (example). This signal, a dual rhythm beeping, will last 5 seconds and then self-cancel. The display will flash the action alarm time and the unit will then start counting toward :00 .

3. Holding Timers

If the unit is programmed with holding times, they will automatically start counting upon expiration of the cooking cycle.

When there are active hold times, the HOLD indicator will be lit. To view all active hold times, press and hold the 

key. Upon expiration, the timer will display HLd 1 and pulse with an audible tone.

To cancel, press the 

key.

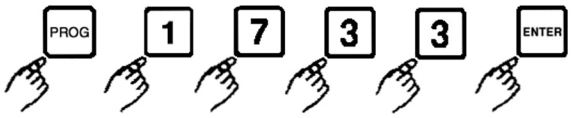
To view the hold time with the least amount of time remaining, press the 

key.

4. BOIL MODE

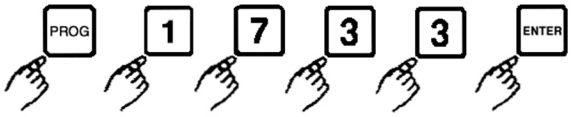
CAUTION: PLEASE CONSULT AND FOLLOW THE ENCLOSED GUIDELINES IN SECTION III E FOR BOILING OF THE FRY VATS.

The boil function accurately maintains the fryer temperature at 190ºF (88ºC) to assist in 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 now go into boil.

To Enter Boil Mode: 

The fry vat will maintain a temperature of 190ºF (88ºC) to allow the boil function to be performed.

NOTE: The fry vat must be below a temperature of 200°F (93°C) to enter the boil mode.

To Exit Boil Mode: 

Turn the appliance off. The computer will no longer have [boiL] in the display.
Empty the water from the vat, wipe all remaining water from the vat. Once dry, refill the vat with shortening following procedures in paragraph B1 below.

CAUTION: Refill the vat with shortening ONLY when it is completely dry.

5. FILL MODE

If the unit is programmed for filter lockout, the FLtr display will appear after the pre-programmed number of cook cycles allowed and the computer will stop operating until the fryer is filtered. After filtering the display will read FiLL.
At this time, the fryer MUST be refilled with shortening.

When this step is complete, press 

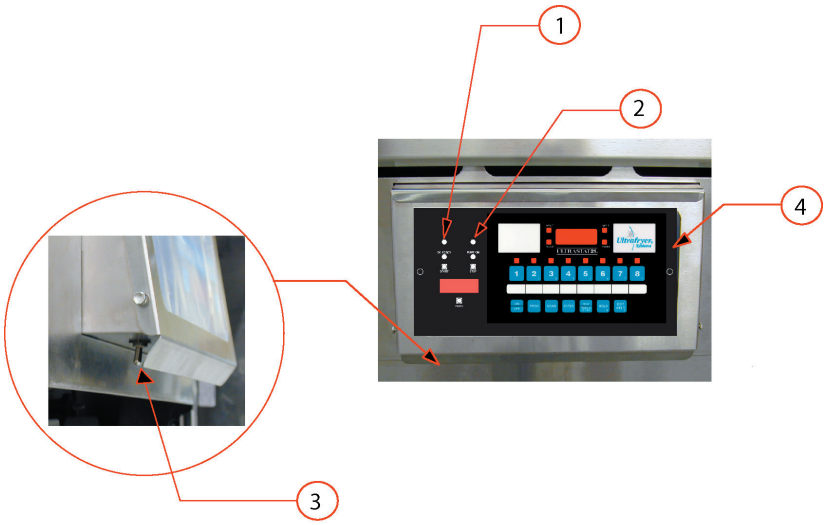
to resume normal operations.

III ULTRASTAT21 COMPUTER OPERATING INSTRUCTIONS

A. TURNING THE ULTRASTAT21 COMPUTER ON/OFF

To operate the Ultrafryer, the Ultrafryer Toggle HEAT/OFF switch (labeled "COOK/FILTER" on eariler fryer models) must be switched to "HEAT," and the Computer ON/OFF Key must be in the ON position.

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



1	Amber "Power" Indicator Lamp
2	Red "Burner" Indicator Lamp
3	"Heat / Off" Toggle Switch (labeled "Cook/Filter" on earlier fryer models)
4	Ultrastat 21 Cook computer

Drain Valve Lever

1. TOGGLE HEAT/OFF SWITCH

NOTE: The **"HEAT/OFF"** switch is labeled **"COOK/FILTER"** on earlier fryer models.

a. The Toggle HEAT/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 **"HEAT",** the Computer can be turned **ON** but shortening **CANNOT** be filtered.
b. To turn the Ultrafryer **ON**, turn the Toggle HEAT/OFF SWITCH to the **HEAT** position (if the switch is labeled "COOK/FILTER," turn the toggle to "COOK"). 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**.

2. TURNING THE COMPUTER ON

To turn the Computer ON, the Ultrafryer Toggle HEAT/OFF Switch must be in the **HEAT** position (if the switch is labeled "COOK/FILTER," it must be in the "COOK" position), and the Drain Valve Lever must be in the **closed / UP** position.

a. The Computer ON/OFF Key is located in the lower left corner of the Computer panel.
b. To turn the Computer **ON**, depress the ON/OFF Key, the **MELT** lamp will **LIGHT** to indicate the computer is in the **SHORTENING MELT MODE**; and the **RED HEAT** lamp will cycle **ON** and **OFF** indicating the Heat Mechanism is being periodically turned **ON** and **OFF** to heat the shortening gradually.

3. TURNING THE COMPUTER OFF

The Computer can be turned **OFF** as follows:

a. Turn power to the Ultrafryer **OFF** by turning the Toggle HEAT/OFF switch to the **OFF** position (or to the "FILTER" position if the switch is labeled "COOK/FILTER").
b. If a "Cook Cycle" **HAS NOT** been activated, simply push the Computer's **ON/OFF** Key.
c. If the Computer **IS IN** a "Cook Cycle", push the Computer **ON/OFF** Key and **HOLD IT FOR 4 SECONDS.**

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 for gradual melting of **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 warm the shortening gradually.

NOTES:

1) The Computer will keep the Ultrafryer in the **MELT CYCLE** until the operator **MANUALLY** pushes the **EXIT MELT** key.
2) The Computer **CANNOT** be taken out of the **SHORTENING MELT MODE** until the shortening temperature reaches the **MELT LIMIT TEMPERATURE**. The Melt Limit Temperature is factory set for a **HIGH** exit temperature (**135ºF (57ºC**)) or a **LOW** exit temperature **(75ºF (29ºC))** according to the customer's specifications. Once the Melt Limit Temperature is reached the Melt Mode may be canceled by pushing the **EXIT MELT** Key.
3) The following **MELT CYCLE OPTION**, which determines the amount of time the **HEAT MECHANISM** is turned **ON** and **OFF** to melt shortening gradually, are factory set based on the type of fryer equipped with an Ultrastat 21 Cooking Computer.

TYPE FRYER	MELT CYCLE OPTION
Ultrafryer Model EU Electric, 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 "EXIT MELT" 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. **PACK** small 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 HEAT/OFF Switch to **HEAT** (or to "COOK" if the switch is labeled "COOK/FILTER"); then place the Computer in the **SHORTENING MELT MODE** by depressing the **ON/OFF** key. The **MELT** lamp will **LIGHT** to indicate the Computer is in the **SHORTENING MELT MODE**; and the **RED HEAT** lamp will cycle **ON** and **OFF** indicating the Heat Mechanism is periodically being turned **ON** and **OFF** to heat the shortening gradually.
   d. When the heat exchanger tubes are **COMPLETELY** covered with **LIQUID** shortening and the shortening is **ABOVE** the Melt Limit Temperature, replace the grill in the fryer vat; then push the **EXIT MELT** 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 EXIT MELT 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 LIMIT TEMPERATURE**. When shortening temperature rises to the Melt Limit Temperature the operator can push the **EXIT MELT** key to heat shortening to its **PRESET** temperature.

C. OPERATING THE COMPUTER

1. COOKING FEATURES

NOTE: COOKING TIME, TEMPERATURE, TIMING MODE (FLEX / STRAIGHT), ACTION ALARMS and **HOLDING TIME** are factory set according to the customers' specifications.

a. PROGRAMMED STAGED TIMES/TEMPERATURES - Some Computers are pre-programmed with a **STAGED COOK CYCLE** for cooking chicken. When the 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 would be programmed as follows:

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 Ultrafryer 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 Ultrafryer 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 Ultrafryer to increase shortening temperature to **330ºF (166ºC)** for the last **2 MINUTES** of the cook cycle (12:00 to 14:00).

NOTE: These times and temperatures are examples **ONLY** and **ARE NOT USED BY ANY KNOWN COMMERCIAL RESTAURANT.** Multiple products **CANNOT** be simultaneously cooked in a fryer vat programmed for a **STAGED COOK CYCLE** 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 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 LOCKOUT - A Computer can be programmed for **FILTER LOCKED** for one or more product keys which would occur after **1 TO 50** cook cycles. If this feature is used FLtr would appear in the display after the pre-programmed number of cook cycles and the Computer **CANNOT** be operated until the fryer shortening is filtered. After shortening has been **FILTERED** the display will read FiLL and the fryer **MUST** be refilled with shortening. When shortening has been replaced in the fryer vat press ENTER to resume normal operations.

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 **"LO"** will appear in the display to indicate the shortening temperature is **MORE** than **10ºF (4ºC) BELOW** the setpoint temperature. When shortening temperature rises to the **SETPOINT** temperature ---- will appear in the display indicating a **COOK CYCLE** can be started.

a. STARTING A COOK CYCLE- 1 To start a cook cycle simply press the product key for the product you wish to cook. If the product is programmed, the correct cooking time will be displayed 12:00 (example) and this time will immediately start to count down in minutes and seconds. If donE is displayed immediately and the unit starts to signal, the key being operated is not programmed. If correctly programmed, it will count down to :00 followed by donE and start to signal. To turn this signal **OFF** and reset the Computer, press the 1 product key used to start the 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 1 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 HEAT/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 **DUAL RHYTHM BEEPING** that will last for **5 SECONDS** then self-cancel, and the display will flash the first **ACTION ALARM TIME** then 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 MIN. 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. HOLDING TIMERS - Computers can be programmed with up to three (3) **HOLDING TIMES**. When this feature is used, the Computer will automatically start counting upon conclusion of the **COOK CYCLE**. For example, if a Computer has been programmed for one (1) holding time; the **HOLD** lamp will be lit to indicate a **HOLDING TIME** is being tracked. When the holding time has expired HLd 1 will appear in the display and an audible tone will be emitted to alert the operator. To **CANCEL** the audible tone and extinguish the hold lamp press the HOLD key.

NOTES: 1 - To view all hold times programmed, press and hold the 

key.

2 - To view the hold time with the LEAST amount of time remaining, momentarily press the 

key.

3. 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:

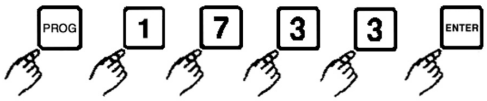
1) Ensure all Drain Valve Levers are in the closed (**UP**) position, then add water to each vat until it reaches a point two **2" (51 mm) BELOW** the middle line of the **"E←— "** in the word **LEVEL** of the **UPPER** shortening level mark on the rear wall of the vats.

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 HEAT/OFF switch to **HEAT** (or to "COOK" if switch is labeled "COOK/FILTER") and, if applicable, the 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 valve lever must be in the closed **UP** position to turn the computer **ON**.

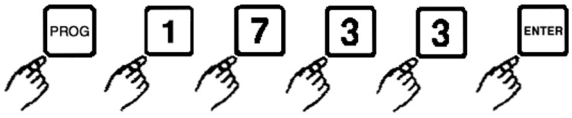
4) Place the Computer in the **BOIL MODE** by pressing the following Computer keys in the order shown:



NOTE: 

will appear in the Computer display and the Computer will turn the Ultrafryer heat mechanism ON and OFF to heat and maintain the boil-out solution to **190ºF (88ºC)**.

5) When the boil-out solution reaches **190ºF (88ºC)** set a timer for 30 minutes. Frequently scrub the sides, front and rear of each fryer vat with a long handled scrub brush.

6) After the boil-out solution has **'BOILED'** for 30 minutes and the timer sounds press the 

to **EXIT BOIL MODE**:

7) Turn the Toggle HEAT/OFF Switch and, if applicable, the Manual Gas Valve for each fryer to their **OFF** positions (or to "FILTER" if switch is labeled "COOK/FILTER") and **CAREFULLY** dispose of the boil-out solution in each fryer into 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 section, grasp that end with a pair of tongs, and rock the pad up and down along the length of each section 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 (refer to the "Melting Shortening" section above).

IV ULTRAFRYER ULTRASTAT21 COMPUTER SETTINGS AND PROGRAMMING

The Ultrastat 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 cook times and temperature for new products.

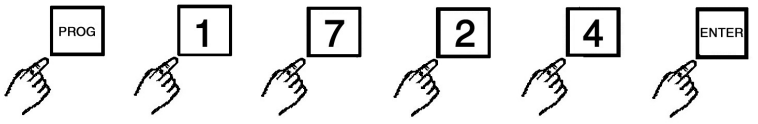
CAUTION: DUE TO THE COMPLEXITY OF AN ULTRASTAT21 COMPUTER, PROGRAMS SHOULD ONLY BE CHANGED BY AN AUTHORIZED OPERATIONS MANAGER/SUPERVISOR OR A SERVICE AGENT APPROVED BY ULTRAFRYER SYSTEMS' CUSTOMER SERVICE DEPARTMENT.

8 button units have a single, dual-purpose display that will alternate information; for example:  (and then)  .

SCAN advances you to the next setting for the same function, **ENTER** completes programming for that function and advances you to the next function.

A. ENTERING PROGRAMMING MODE

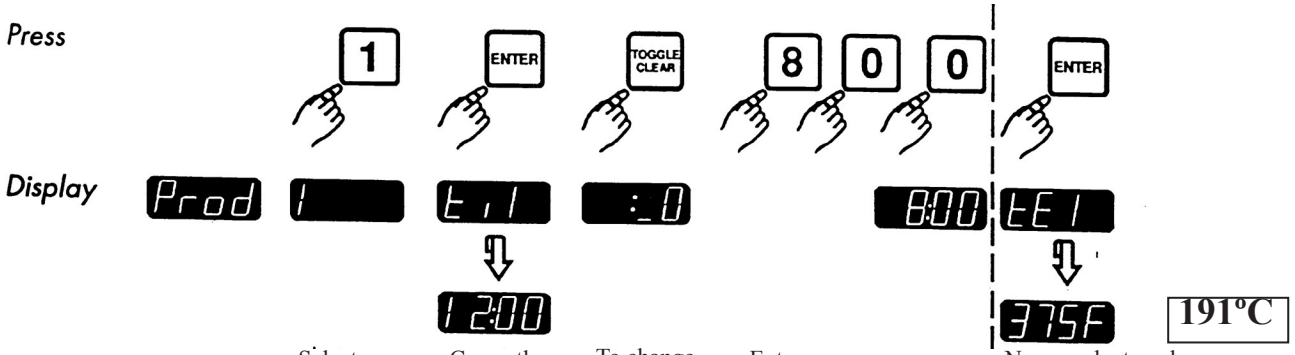
PRESS



DISPLAY

The Computer is now in Product Key Programming Standby Mode.

B. PROGRAMMING A PRODUCT KEY COOK TIME



Select any product key

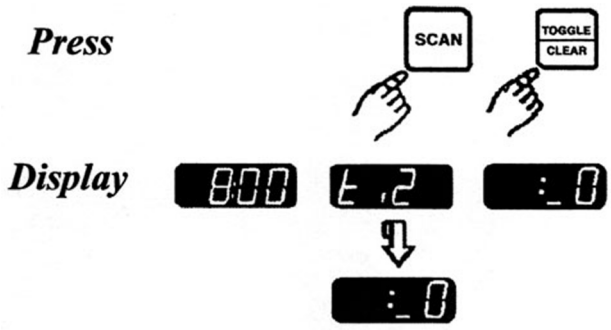
Currently programmed *Time 1* is displayed

To change cook time

Enter a new product cook time (See following note before continuing)

New product cook time is entered. You may now program a cook temperature for that product key.

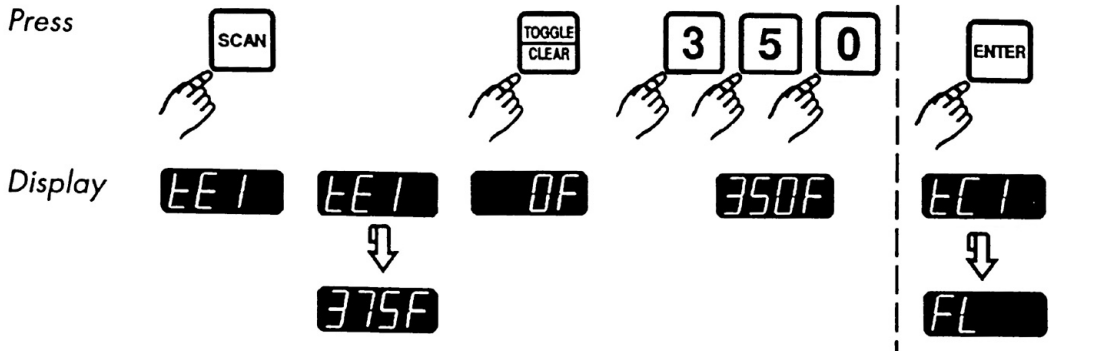
NOTE: To program additional cook times for that product key, press **SCAN** instead of **ENTER** after inputting the new product cook time.



Input new cook time as previously shown. Press **SCAN** to advance to next time; or press **ENTER** to advance before to "Programming a Product Cook Temperature." (Up to 10 different stages can be programmed per product key.)

NOTE: It is recommended that for ease of programming, scan through all stages inputting the desired values before entering and moving to the next function. Continue the same process for each function.

C. PROGRAMMING A PRODUCT TEMPERATURE

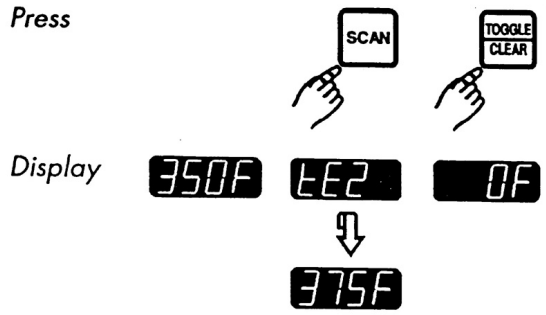


To change currently programmed cook temperature

Enter a new cook temperature (See note below before continuing)

New product cook temperature is entered. You may now program flex or straight time operation.

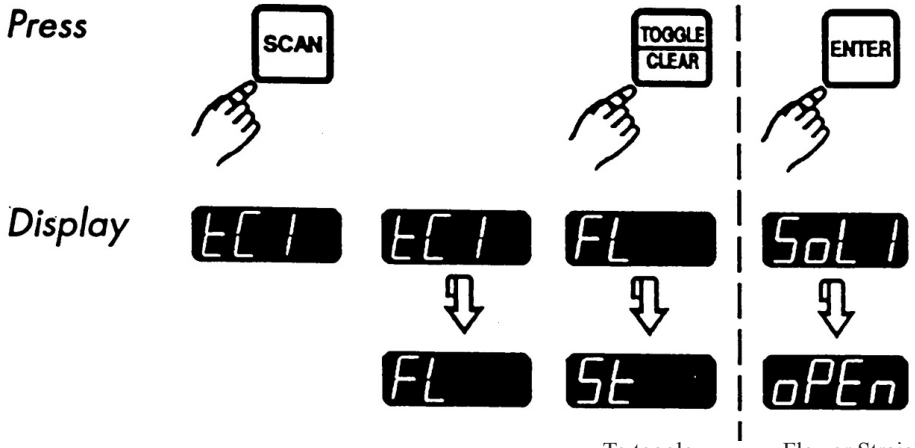
NOTE: To program additional cook temperatures for that product key, press SCAN instead of **ENTER** after inputting the new product cook temperature.



Input new cook temperature as shown above. Press "SCAN" to advance to next cook temperature, or press "ENTER" to advance to "Programming Flex or Straight Time Operation." (Up to 10 different cook temperatures can be programmed per product key.

The controller will only "SCAN" through as many stages as programmed in the time section. For example, if the time for stage 3 is zero, no other parameters for that stage can be programmed.

D. PROGRAMMING FLEX OR STRAIGHT TIME OPERATION

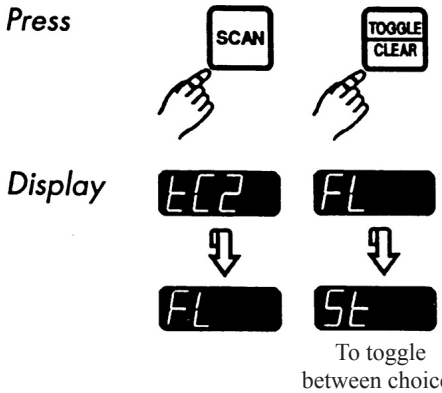


To toggle between choices (See note below before continuing)

Flex or Straight Time option is now entered. You may now program solenoid open or closed.

NOTE: To enter flex or straight time operation options for that product key, press 

instead of **ENTER** after making your choice.

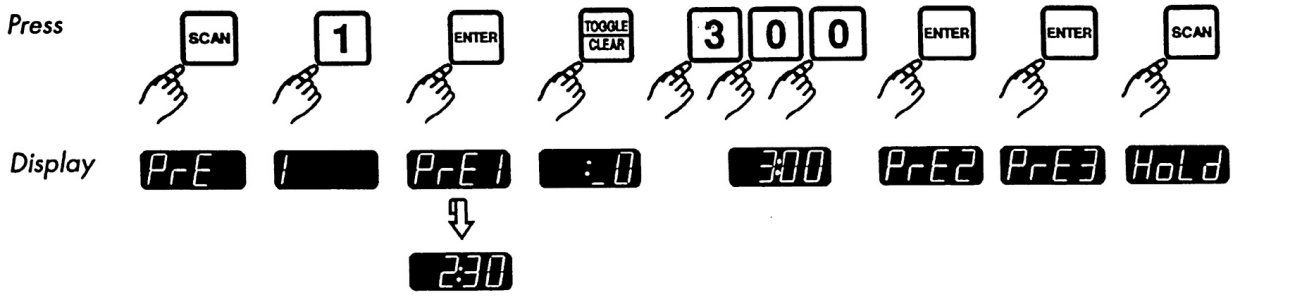


To toggle between choices

Choose either Flex or Straight Time option as shown above. Press "SCAN" to advance to the next Flex or Straight Time option for that product key.

The controller will only "SCAN" through as many stages as programmed in the time section. For example, if the time for stage 3 is zero, no other parameters for that stage can be programmed.

E. PROGRAMMING ACTION ALARM TIMES



Press any product key

Currently programmed action alarm time is displayed

To change action alarm time

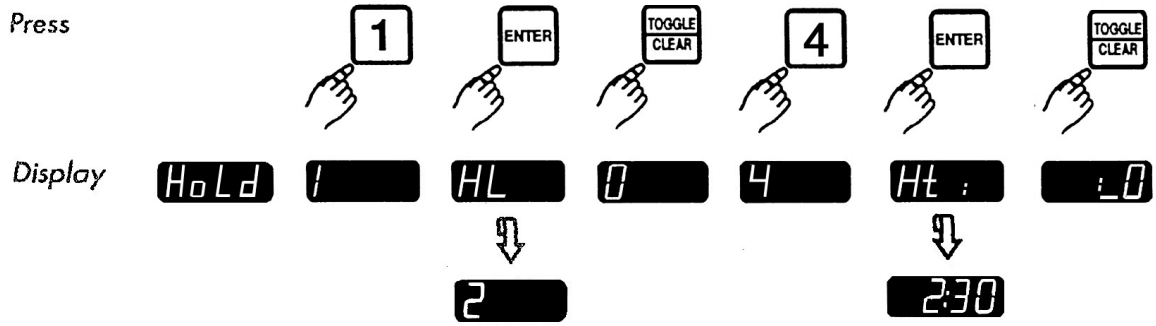
Enter new action alarm time

To keep new action alarm time

*Repeat procedure from Toggle/Clear for action alarms 2 and 3.

To advance to "Programming Product Hold Links & Product Hold Times"

F. PROGRAMMING PRODUCT HOLD TIME LINKS & PRODUCT HOLD TIMES



Press any product key

To accept selected product key; currently programmed hold timer the product key is linked to is displayed.

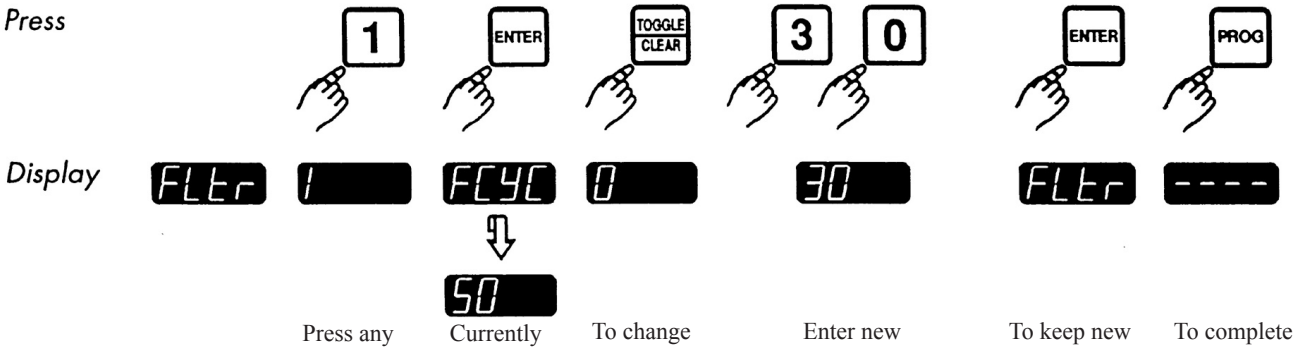
To change the product key to a different hold timer

Press a new hold timer number to link to

To accept new hold timer link; currently programmed product hold time is displayed

To change product hold time

G. PROGRAMMING PRODUCT KEY FILTER LOCKOUT



Press any product key

Currently programmed filter lockout cycle count

To change filter lockout cycle count

Enter new filter lockout cycle count

To keep new fitler lockout cycle count

To complete product key programming

H. EXITING PROGRAMMING MODE

Press

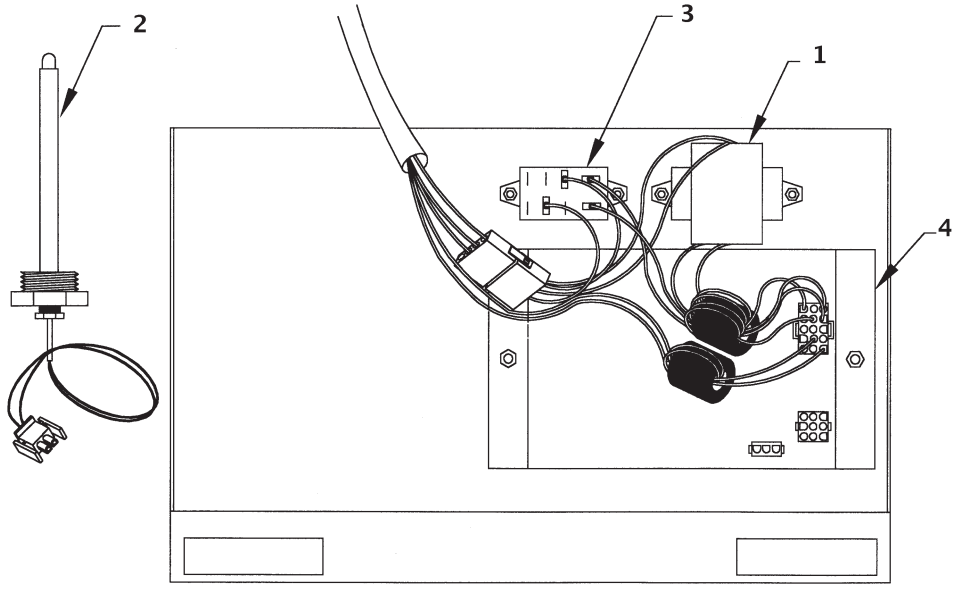
Display

Press "PROG" when any of the above functions are displayed.

NOTE: Toll free technical assistance is available 24 hours a day, 365 days a year by calling 1-800- 243-9271 (from the U.S., Canada and the Caribbean) for those times when help is needed immediately.

V PARTS LIST AND SUPPLY

Items identified below may be obtained from Ultrafryer Systems or by calling an order clerk at 1 - 800 - 549 - 9189.



TEMPERATURE CONTROL ACCESS PANEL (IN LOWERED POSITION)			
INDEX NUMBER	**PART**	**PART NUMBER**	**DESCRIPTION**
1	Transformer	21A233	120 to 24 Step Down, No. 120-10035 with Wiring Harness.
2	Probe	18A006	Temperature, No. 130-60035
3	Relay	23A023	24 Volt SPDT, No. 130-12003
4	Computer	(NOTE)	Programmed at Factory

NOTE: To obtain a replacement "Programmed" Ultrastat21 Cooking Computer contact Customer Service Department at **1-800-525-8130** and provide the following Information:

TYPE STORE: Church's, Popeyes', Company Store, Franchise Store, etc.
TYPE FRYER: Electric or Gas
VAT SIZE: 14, 18, or 20", etc.
PRODUCT: Chicken, French Fries, etc.
TYPE SHORTENING: Liquid or Solid