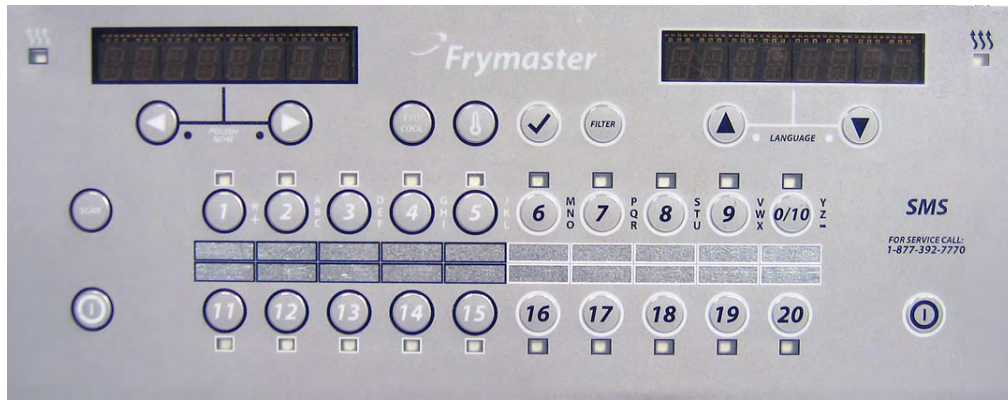# YUM K3000 Controller

Operation Manual

This manual is updated as new information and models are released. Visit our website for the latest manual.

⚠️ **CAUTION**
READ THE INSTRUCTIONS BEFORE USING THE FRYER.
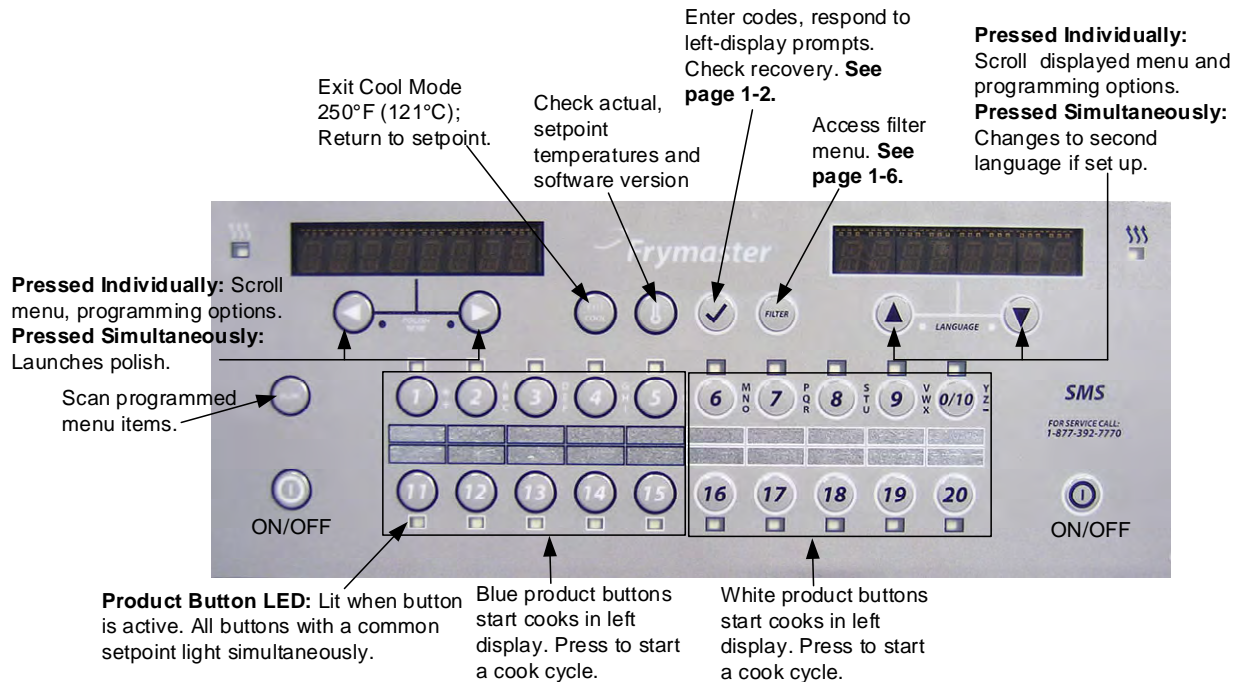
Keep these instructions for future reference.

CE   **WELBILT**®

CHAPTER 1: K3000 CONTROLLER INSTRUCTIONS

1.1 Using the K3000

Exit Cool Mode 250°F (121°C); Return to setpoint.

Check actual, setpoint temperatures and software version

Enter codes, respond to left-display prompts. Check recovery. **See page 1-2.**

Access filter menu. **See page 1-6.**

Pressed Individually: Scroll displayed menu and programming options.
Pressed Simultaneously: Changes to second language if set up.

Pressed Individually: Scroll menu, programming options.
Pressed Simultaneously: Launches polish.

Scan programmed menu items.

Product Button LED: Lit when button is active. All buttons with a common setpoint light simultaneously.

Blue product buttons start cooks in left display. Press to start a cook cycle.

White product buttons start cooks in left display. Press to start a cook cycle.

ON/OFF
- Press ON/OFF button fryer heats to setpoint or idle temperature and displays: COOL or DROP.

Cooking
- Fryer displays COOL or DROP
- **COOL display:** Press product button; fryer heats to setpoint and displays DROP.
- Press product button and drop product.
- **DROP display:** Press product button and drop product. (Product buttons 1-5 and 11-15 start cooks on the left display. Products 6-10 and 16-20 start cooks on the right display.)
- **DONE display:** Press product button to cancel alarm.
- Press and hold product button to cancel cook cycle.

Responding to Polish Prompt
- Controller displays Polish Now, alternating with Yes No.
- Press Yes (button under Yes display) and the polish cycle launches.
  Controller displays Cool after polish cycle.

Controller Button Navigation
- **Product:** Active when adjacent LED is lit. Press to launch cook cycle. Press and hold to stop a launched cook cycle. Press at end of cook cycle to halt alarm.
- **Scan:** Press once, all product buttons are lit; Select Product displayed. Press product button to view product name. Press Scan again to repeat. Press Scan twice to return to normal operation.
- **Left/Right Arrows:** Navigate options in left display.
- **Up/Down Arrows:** Navigate options in right display. Press the up/down arrow simultaneously to change to a second language if one is selected in setup.
- **Exit Cool:** Set fryer's cook cycle exit temperature to 250°F (121°C) or setpoint.
- **Thermometer: Fryer ON:** Press and release for setpoint/left; vat temp/right.
- **Thermometer: Fryer OFF:** Press to display temperature, time, date, system version, K3000 version and circuit board versions.
- **Checkmark: Fryer OFF:** Press and hold 3 seconds: Scroll filter usage; Press and hold 10 seconds: Product setup.
- **Checkmark: Fryer ON:** Respond to prompts. Press and release: Check recovery. Press and hold 4 seconds: Info Mode.
- **Filter: Press and release:** Cooks remaining to filter cycle. **Press and hold:** Filter options: Filter and Dispose.

1.2 Navigating Controller

Press and hold the checkmark button for 10 seconds produces the setup mode, which first displays Product Setup. Follow the steps below to navigate the options

Left Display	Right Display	Action
OFF	OFF	Press and hold ✔ until Product Setup is displayed.
PRODUCT SETUP	Blank	Press ▶ to scroll: Vat Setup, Tech Mode, and Exit. With the desired selection displayed, press ✔ .
PRODUCT SETUP	Blank	Product setup (entering and editing menu items) is described on page 1-10 through 1-13.
VAT SETUP	Blank	Vat Setup is described on page 1-4.
TECH MODE	Blank	Tech Mode is described on page 1-6.
EXIT	EXIT	Press Scan button three times to return the Controller to OFF.

1.3 Viewing Operational Stats

The K3000 collects and stores information on the cook cycles and filter cycles. This data is accessed in the info mode, which is accessed by pressing the checkmark button. The steps to view the data are detailed below:

Left Display	Right Display	Action
OFF	OFF	Press and hold ✔ until INFO MODE is displayed. Release and press ✔ .
OIL STATS	Blank	Press ▶ to scroll: Oil Stats, Filter Stats, Review Usage, Last Load. With the desired stats displayed, press ✔ .
TOTAL COOKS - LAST DISPOSE	Number	Press ▶. (This is the number of cooks since the last dispose.)
TOTAL HEADS–LAST DISPOSE	Number	Press ▶. (This is the number of heads cooked since the last dispose.)
LAST DISPOSE	DATE	Press ▶. (This is the date of the last dispose.)
TEMP > 300F– TODAY	Number Hrs	Press ▶. (This is the number of hours the temperature of the oil rose above 300°F during operation today.)
TEMP > 300F– SINCE DISPOSE	Number Hrs	Press ▶. (This is the number of hours the oil temperature was above 300°F since oil disposal.)
TEMP > 300F–1 BACK	Number Hrs	Press ▶. (This is the number of hours the oil temperature was above 300°F since the previous oil disposal.)
TEMP > 300F–2 BACK	Number Hrs	Press ▶. (This is the number of hours the oil temperature was above 300°F since two oil disposals ago.)
FILTERS–SINCE DISPOSE	Number	Press ▶. (This is the number of filters since oil disposal.)
FILTERS–1 BACK	Number	Press ▶. (This is the number of filters that have occurred since the previous oil disposal.)
FILTERS–2 BACK	Number	Press ▶. (This is the number of filters that have occurred since two oil disposals ago.)
POLISHES–SINCE DISPOSE	Number	Press ▶. (This is the number of polishes since oil disposal.)
POLISHES–1 BACK	Number	Press ▶. (This is the number of polishes that have occurred since the previous oil disposal.)
POLISHES–2 BACK	Number	Press ▶. (This is the number of polishes that have occurred since two oil disposals ago.)
RESET OIL STATS	YES NO	Press ▶ to scroll or ▼ to reset oil stats.
RESET OIL STATS	ENTER CODE	Enter 3228.
Continued on the following page		

1.3 Viewing Operational Stats cont.

Left Display	Right Display	Action
COMPLETE	Blank	
EXIT	*EXIT*	Press ✔ button once to return to menu, or Scan button once to return the Controller to OFF.
FILTER STATS	Blank	Press ▶ to scroll: Filter Stats, Review Usage, Last Load. With the desired stats displayed, press ✔.
MON	*DATE*	Press ▼▲ to scroll seven days of data. With the desired date displayed, press ▶.
FILTERED	*NUMBER AND DAY*	Press ▼▲ to scroll number of times the vat was filtered in the seven -day period. Press ▶.
FLT BPSD	*NUMBER AND DAY*	Press ▼▲ to scroll number of times the filter prompt was bypassed in the seven-day period. Press ▶.
COOKS	*NUMBER AND DAY*	Press ▼▲ to scroll number of cook cycles that occurred in the seven-day period. Press ▶.
HEADS	*NUMBER AND DAY*	Press ▼▲ to scroll number of heads that were cooked in the seven-day period. Press ▶.
FLT AVG	*NUMBER AND DAY*	Press ▼▲ to scroll average number of daily filter cycles that occurred in the seven-day period. Press ▶. Press ✔ button once to return to menu, or Scan button once to return the Controller to OFF.
REVIEW USAGE	Blank	Press ▶ to scroll: Filter Stats, Review Usage, Last Load. With the desired stats displayed, press ✔.
USAGE SINCE	Blank	
DATE	*TIME*	Press ▶. (This is the date and time of the last usage reset.)
TOTAL COOKS	Number	Press ▶. (This is the total number of cooks since the last usage reset.)
QUIT COOKS	Number	Press ▶. (This is the total amount of cooks that were cancelled since the last reset usage.)
ON HOURS	Number	Press ▶. (This is the total amount of hours the fryer was on since the last reset.)
RESET USAGE	*YES NO*	Press ▶ to scroll or ▲ to reset oil stats usage.
RESET USAGE	*ENTER CODE*	Enter 3228.
COMPLETE	Blank	
EXIT	*EXIT*	Press ▶ to scroll: Filter Stats, Review Usage, Last Load. With the desired stats displayed, press ✔ or press Scan to return the Controller to OFF.
LAST LOAD	Blank	Press ✔.
PRODUCT	*PRODUCT NAME*	Press ▶. (This is the product last cooked.)
STARTED	Time	Press ▶. (This is the time the last cook started.)
ACTUAL TIME	Number Minutes	Press ▶. (This is the actual cook time including flex time.)
PROGTIME	Number Minutes	Press ▶. (This is the actual programmed cook time.)
MAX TEMP	Number	Press ▶. (This is the maximum temperature of the oil during the last cook.)
MIN TEMP	Number	Press ▶. (This is the minimum temperature of the oil during the last cook.)
AVG TEMP	Number	Press ▶. (This is the average temperature of the oil during the last cook.)
HEAT ON	Number	Press ▶. (This is the percentage of the cook time the heat source was on during the last cook.)
READY	*YES OR NO*	Press ▶. (If the fryer was back to proper temperature before the cook cycle was started.)
EXIT	*EXIT*	Press ▶ to scroll: Filter Stats, Review Usage, Last Load. With the desired stats displayed, press ✔ or press Scan button to return the Controller to OFF.

1.4 K3000 Setup Mode

Setup mode allows the Controller to be set for language displays, vat sizes, and temperature range displays. Follow the steps below to enter and navigate Vat Setup.

Vat Set Up

Left Display	Right Display	Action
OFF	OFF	Press and hold ✔ until Product Setup is displayed.
PRODUCT SETUP	Blank	Press ▶ to scroll to Vat setup and press ✔ . Product setup is described on pages 1-10 through 1-13.
VAT SETUP	ENTER CODE	Enter 3228.
SYSTEM	Blank	Press ✔ button or press ▶ to scroll to Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ . If SYSTEM is not chosen skip to the relevant selection.
LANGUAGE	ENGLISH	Press ▼▲ to scroll to choice and press ▶.
2ND LANGUAGE	ENGLISH	Press ▼▲ to scroll to choice and press ▶. (This option allows another language to be toggled easily from the front panel (ex. Spanish as a second language.)).
LOCALE	NON-CE	Press ▼▲ to scroll to choice Non-CE or CE and press ▶.
ENERGY	GAS	Press ▼▲ to scroll to choice Gas or Electric and press ▶.
TYPE	KJ3 FULL	Press ▼▲ to scroll choices: the choices are: **Gas**-KJ3/CF-FULL, 118G/D63 FULL, H55 FULL, H55 SPLIT, MJ45 FULL, MJ45 SPLIT, HV75 FULL, HV105 FULL, 114/HD50 FULL, HD60 FULL, HD65 FULL D80 FULL, 11814 FULL and MJ35 FULL, . **Electric**-118E/RE80 FULL, FPRE117 FULL, FPRE117 SPLIT, FPRE114 FULL and FPRE114 SPLIT, 11817 FULL, FPRE122 FULL, FPRE122 SPLIT FPC128 FULL, FPC128 SPLIT and FPC136 FULL. With the vat size of the fryer controlled by the Controller displayed, press ▶.
SYSTEM VOLUME	9	Sets sound level for Controller. Enter level, 1-9 (0=Lowest/ 9=Loudest). Press ▶.
TEMPR FORMAT	F	Press ▼▲ to scroll choices: F for Fahrenheit; C for Celsius. Press ▶.
EXIT MELT TEMPR	100F	Use numbered buttons to change default setting (use 10 for 0). Press ▶. (This is the temperature for the fryer to exit the melt cycle.) Default is 100F (38C).
SETBACK TEMPR	250F	Use numbered buttons to change default setting (use 10 for 0). Press ▶. (This is the temperature during setback or idle mode.) Default is 250F (121C).
FRESH OIL	NONE	Press ▼▲ to scroll choices JIB, Bulk-RTI, Bulk-F (Frontline) or None. Press ▶. **NOTE: All fryers except OCF should be set to NONE.**
WASTE	NONE	Press ▼▲ to scroll choices JIB, Bulk-RTI, Bulk-F (Frontline) or None. Press ▶. **NOTE: All fryers except OCF should be set to NONE.**
DRAIN SWITCH	NO	Press ▼▲ to scroll choices YES and NO. (This is if a drain switch is installed.) Press ▶.
RECOVERY ALARM	DISABLED	Press ▼▲ to scroll choices DISABLED and ENABLED. (This is a recovery alarm that locks out the fryer if the fryer does not heat properly. The default is disabled). Press ▶.
EXIT	EXIT	Press ✔ button.
OFF	OFF	None required.
TIME/DATE	Blank	Press ✔ .
TIME ENTRY	TIME	Use numbered buttons to change time (use 10 for 0). Press ▶.
DATE FORMAT	MM/DD/YY	Press ▼▲ to scroll choices. With the date format displayed, press ▶.
ENTER DATE	DATE	Use numbered buttons to change date (use 10 for 0). Press ▶.
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.

Continued on the following page

1.4   K3000 Setup Mode cont.

Left Display	Right Display	Action
DST SETUP		This is daylight savings time setup. In the United States, daylight savings time begins each year at 2:00 A.M. on the second Sunday in March, with clocks moving ahead one hour. Daylight savings time ends each year at 2:00 A.M. on the first Sunday in November, with clocks moving back one hour. For the two states and international locations, which do not use DST, set to disabled.
OFF	OFF	Press and hold ✔ until Product Setup is displayed.
PRODUCT SETUP	Blank	Press ▶ to scroll to Vat setup and press ✓.
VAT SETUP	ENTER CODE	Enter 3228.
DST	ENABLED	Press ▼▲ to scroll choices DISABLED and ENABLED. Press ▶. (This enables or disabled daylight savings time. Default is enabled.) If disabled is chosen, pressing the ▶ button, displays exit. Press the exit scan button three times to exit.
DST START MONTH	3	Enter the daylight savings time starting month using the 1-10 keys. (Default is US government starting month "3".) Press ▶.
DST START SUNDAY	2	Enter the daylight savings time starting Sunday using the 1-10 keys. (Default is US government starting Sunday "2".) Press ▶.
DST END MONTH	11	Enter the daylight savings time ending month using the 1-10 keys. (Default is US government ending month "11".) Press ▶.
DST END SUNDAY	1	Enter the daylight savings time ending Sunday using the 1-10 keys. (Default is US government ending Sunday "1".) Press ▶.
EXIT	EXIT	Press ✓ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log or Change Password. With desired choice displayed, press ✓ or press the Exit/Scan button three times to return the controller to OFF.
FILTER	Blank	Press ✔ .
GLOBAL FILTER COUNT	20	Press ▶. (Changes the total number of cooks that occur before a filter prompt. The default is 20.)
EOD FILTER TIME	21:00	Use numbered buttons to change end of day filter alert time. Press ▶.
1 POLISH TIMER	ENABLED	Press ▼▲ to scroll to choice and press ▶. (This enables or disables the polish timer.)
1 POLISH TIME	08:00	Use numbered buttons to change time (use 10 for 0). (This is the time the first polish prompt will occur each day. The default is 8:00 AM.) Press ▶.
1 POLISH DURATION	30	Use numbered buttons to change (use 10 for 0). (This is the duration, in minutes for a polish. The default if 30 minutes.) Press ▶.
1 POLISH DELAY TIME	00:00	Use numbered buttons to change time (use 10 for 0). (This is the amount of time which an operator can delay the start of a polish.) Press ▶. After the delay the operator must polish.
1 POLISH START TEMPR	300F	Use numbered buttons to change temperature (use 10 for 0). (This is the temperature required for a polish to begin.) Press ▶.
2 POLISH TIMER	ENABLED	Press ▼▲ to scroll to choice and press ▶. (This enables or disables the second polish timer.)
2 POLISH TIME	14:00	Use numbered buttons to change time (use 10 for 0). (This is the time the second polish prompt will occur each day.) Press ▶.
2 POLISH DURATION	30	Use numbered buttons to change (use 10 for 0). (This is the duration, in minutes for a polish. The default if 30 minutes.) Press ▶.
2 POLISH DELAY TIME	01:00	Use numbered buttons to change time (use 10 for 0). (This is the amount of time which an operator can delay the start of the second polish. The default is one hour.) Press ▶. After the delay the operator must polish.
Continued on the following page		

1.4   K3000 Setup Mode cont.

Left Display	Right Display	Action
2 POLISH START TEMPR	300F	Use numbered buttons to change temperature (use 10 for 0). (This is the required temperature for the second polish to begin.) Press ▶.
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.
E-LOG	Blank	Press ✔ . (This is a log of the ten most recent error codes.)
NOW	TIME/DATE	Press ▶. (Current time and date)
A E#	TIME/DATE	Errors listed A-J. Press ▶ to scroll through errors. If no errors exist, pressing ▶ will display No Errors.
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.
C-LOG	Blank	Press ✔ . (This is a reserved internal data collection feature that only exists in pressure fryers.)
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.
CHANGE PASSWORD	Blank	Press ✔ .
PRODUCT SETUP	Current code (1724)	Use numbered buttons to change code (use 10 for 0). Press ▶.
VAT SETUP	Current code (3228)	Use numbered buttons to change code (use 10 for 0). Press ▶.
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.
EDIT ALARM NAMES	Blank	Press ✔ .
ALARM 1	NUM1	Enter or edit alarm name with letter buttons. Press ▶. Continue scrolling through names up to alarm 10. (Ex. Shake, Stir, etc.)
EXIT	EXIT	Press ✔ button once and press ▶ to scroll to System, Time/Date, Filter, E-Log, Change Password or Edit Alarm Names. With desired choice displayed, press ✔ or press the Scan button once to return the Controller to OFF.

1.5   Navigating Filter Menu

The K3000 has five functions in the Filter Menu: Filter, Clean, Dispose, Fill Vat from Pan and Drain to Pan. They are accessed by pressing and holding the Filter button until FILTER is displayed. The first matrix below steps through the initial navigation. Navigation of the functions are covered in separate matrices. The Controller must be on and at setpoint to use all the functions of the filter menu. If the fryer is not at setpoint the Controller displays WAIT FOR FILTER.
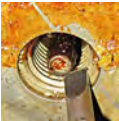
Entering Filter Mode

Left Display	Right Display	Action
DROP	DROP	Press and hold the filter button until Filter is displayed.
FILTER	Blank	Press ▶ to scroll to choices: Filter, Dispose and Exit. With the desired choice displayed press ✔ . Follow the instructions below to navigate the modes.

Filter

Left Display	Right Display	Action
Blank	FILTER	Press ✓.
FILTER NOW? alternating with YES/NO	Blank	Press YES.
OPEN DRAIN VALVE	Blank	Open drain valve.
DRAINING	Blank	None required.
OPEN RETURN VALVE	Blank	Open return valve.
POLISHING	COUNTDOWN TIMER	None required.
CLOSE DRAIN VALVE	CONFIRM	Close drain valve and press CONFIRM.
FILLING	Blank	None required.
CLOSE RETURN VALVE WHEN FULL AND PRESS CONFIRM	CONFIRM	Press CONFIRM.
COOL	COOL	

Clean

Left Display	Right Display	Action
Blank	CLEAN	Press ✓.
CLEAN NOW?	YES NO	Press YES.
OPEN DRAIN VALVE		Open drain valve
DRAINING		None required.
SCRUB VAT COMPLETE?	YES	Clean the vat with a scrub brush. Clean the sediment from around the ATO sensors with a screwdriver or similar object to remove any sediment from around the sensors and press the YES button to continue when complete.
OPEN RETURN VALVE		Open return valve.
POLISHING	5-MINUTE COUNTDOWN TIMER	None required.
FILL VAT?	YES	Press YES.
CLOSE DRAIN VALVE	CONFIRM	Close drain valve and press CONFIRM.
FILLING		None required.
CLOSE RETURN VALVE WHEN FULL AND PRESS CONFIRM	CONFIRM	Press CONFIRM.
OFF	OFF	

Dispose

Left Display	Right Display	Action
Blank	DISPOSE	Press ✓.
DISPOSE NOW?	YES NO	Press YES.
REMOVE PAN	CONFIRM	Remove the filter pan and press CONFIRM.
INSERT DISPOSAL UNIT	CONFIRM	Insert disposal unit under the drain and press CONFIRM.
OPEN DRAIN VALVE		Open the drain valve.
DISPOSING		None required.
VAT EMPTY?	CONFIRM	Press CONFIRM once the vat is empty.
CLEAN VAT COMPLETE?	CONFIRM	Press CONFIRM once the vat is clean.
CLOSE DRAIN VALVE		Close drain valve and press CONFIRM.
REMOVE DISPOSAL UNIT	CONFIRM	Remove disposal unit from the fryer and press CONFIRM.
INSERT PAN	CONFIRM	Insert the filter pan and press CONFIRM.
MANUALLY FILL VAT	CONFIRM	Fill vat with oil to the bottom fill line and press CONFIRM when full.
OFF	OFF	

Drain to Pan

Left Display	Right Display	Action
Blank	*DRAIN TO PAN*	Press ✓
DRAIN TO PAN?	*YES NO*	Press YES.
OPEN DRAIN VALVE		Open the drain valve.
DRAINING		None required.
VAT EMPTY?	*CONFIRM*	Press CONFIRM.
CLOSE DRAIN VALVE		Close the drain valve.
OIL IN DRAIN PAN	*CONFIRM*	Press CONFIRM.
FILL VAT FROM DRAIN PAN?	*YES NO*	Press YES.
OPEN RETURN VALVE	*OPEN RETURN VALVE*	Open the return valve.
FILLING		None required.
CLOSE RETURN VALVE WHEN FULL AND PRESS CONFIRM	*CONFIRM*	Press CONFIRM.
OFF	*OFF*	

Fill Vat from Pan

Left Display	Right Display	Action
Blank	*FILL VAT FROM PAN*	Press ✓
FILL VAT FROM PAN?	*YES NO*	Press YES.
OPEN RETURN VALVE		Open the return valve.
FILLING	*FILLING*	None required.
CLOSE RETURN VALVE WHEN FULL AND PRESS CONFIRM	*CONFIRM*	Press CONFIRM.
OFF	*OFF*	

1.6 Polishing

The K3000 displays a series of prompts when a polish filter cycle is under way. The steps are detailed below.

	Left Display	Right Display	Explanation/Action
	POLISH NOW?	*YES NO*	Respond to prompt with button push. Press YES or NO. Yes produces a filter, detailed below. No delays filter and cooking continues.
**	*ADD FILTER POWDER*	*CONFIRM*	Add filter powder and press CONFIRM.
**	*INSERT PAN*	*CONFIRM*	Insert filter pan and press CONFIRM.
*	*CHANGE FILTER PAPER*	*CONFIRM*	Remove the filter pan and change the filter paper.
*	*ADD FILTER POWDER*	*CONFIRM*	Add filter powder and press CONFIRM.
*	*INSERT PAN*	*CONFIRM*	Insert filter pan into fryer.
*	*OPEN DRAIN VALVE*		Open the drain valve.
	DRAINING		None required. The oil drains from the frypot to the filter pan.
	OPEN RETURN VALVE		Open the return valve.
	POLISHING	*30-MINUTE COUNTDOWN TIMER*	None required. The oil flows from the filter pan to the frypot and back to the filter pan for 30 minutes.
	CLOSE DRAIN VALVE		Close the drain valve.
	FILLING		None required. The oil returns from the filter pan to the frypot.
	CLOSE RETURN VALVE WHEN FULL AND PRESS CONFIRM	*CONFIRM*	Close the return valve and press CONFIRM.
	COOL	*COOL*	

*NOTE: Only occurs on first polish of the day.

**NOTE: Only occurs on first polish after lunch and subsequent polishes during the day.

1.7 Prompts Encountered While Programming

The K3000 can be programmed for single-segmented cooking, which is used for most products and segmented cooking, which is used for bone-in chicken. When programming for either product, the time prompts encountered are sequentially numbered. For non-segmented products, enter 0:00 for the second time prompt (2 Time) and the additional programming steps associated with segmented programming don't appear.

For segmented products, the process is longer. As many as 10 segments can be introduced during the cook cycle of one product. The complete cook cycle can be thought of as a timeline, with temperatures changes introduced at time-specific points on the timeline.

As Time 2, Time 3, Time 4 appear in the programming steps, the time entered is **NOT** the duration of the specific cycle, but the point a temperature change occurs on the timeline. For example, a Time 2 change that is to change a temperature in a 13 minute cycle after 2 minutes is entered as 11. The first temperature change will occur with 11 minutes remaining on the time line. **See graphic on page 1-12.**

Below is a explanation of the prompts presented in the sequence they occur. Programming is detailed on pages 1-12 thorough 1-15.

Left Display	Right Display	Explanation/Action
LONG NAME	NAME OR BUTTON NUMBER	Enter the full name of the product
SHORT NAME	NAME OR BUTTON NUMBER	Enter the four character abbreviated name of the product
COOKING MODE	SINGLE SETPOINT	**Segmented:** If multiple setpoint or segmented cooking is desired press ▼ MULTIPLE SETPOINT and go to 1.9 and follow the instructions. **Non-Segmented:** Leave at default of SINGLE SETPOINT.
1 TIME	0:00 OR PREVIOUSLY ENTERED #	In segmented and non-segmented programming, the total cook time is entered here.
1 TEMPR	TEMPERATURE	This is the setpoint for non-segmented products; the initial setpoint for segmented products.
1 FLEX	NUMBER	Flex is the feature in the Controller that allows the fryer to react to large and small loads with the same cooking curve. It is generally not used with bone-in chicken. The default value is 5. The range is 0-9.
1 PRESSURE SOLENOID	OPEN	This option is only present on pressure fryers. During cooks it determines if the pressure solenoid should be open or closed. For segmented or multi-setpoint cooking it may be closed and open during different cycles during the cook.
2 TIME	TIME	**Segmented:** Enter time remaining in the cook cycle after the first temperature change occurs. **Non-Segmented:** Enter 0:00
2 TEMPR	TEMPERATURE	**Segmented:** This is the first temperature change, which occurs at the point entered at the 2 Time prompt. **Non-Segmented:** Doesn't appear
2 FLEX	ON OR OFF	See 1 Flex.
2 PRESSURE SOLENOID	OPEN	See 1 Pressure Solenoid.
3 TIME	TIME	**Segmented:** Enter time remaining in the cook cycle after the second temperature change occurs. **Non-Segmented:** Doesn't appear.
3 TEMPR	TEMPERATURE	**Segmented:** This is the second temperature change, which occurs at the point entered at the 3 Time prompt. **Non-Segmented:** Doesn't appear
3 FLEX	ON OR OFF	See 1 Flex.

1.7 Prompts Encountered While Programming cont.

Left Display	Right Display	Explanation/Action
3 PRESSURE SOLENOID	OPEN	See 1 Pressure Solenoid.
4 TIME	TIME	**Segmented:** Enter time remaining in the cook cycle after the third temperature change occurs. **Non-Segmented:** Doesn't appear.
4 TEMPR	TEMPERATURE	**Segmented:** This is the third temperature change, which occurs at the point entered at the 3 Time prompt. **Non-Segmented:** Doesn't appear
4 FLEX	ON OR OFF	See 1 Flex.
4 PRESSURE SOLENOID	OPEN	See 1 Pressure Solenoid.
5 TIME	TIME	**Segmented:** Enter 0:00 if no more segments are needed. **Non-Segmented:** Doesn't appear.
1 ALARM TIME	TIME	An audible alarm in the cook cycle, indicating a need to shake or stir the product.
1 ALARM NAME	SHAKE, STIR, NUMBERED ALARM	Navigate choice with arrow buttons under display.
1 ALARM MODE	MANUAL OR AUTO	The alarm can be self cancelling (Auto) or manually canceled (Manual), which requires a button push. Navigate choice with arrow buttons under display.
1 ALARM TONE	SHORT, MEDIUM, LONG, DOUBLE OR LONG SHORT, NONE	The duration of the audible alarm is optional. Navigate choice with arrow buttons under display.
2 ALARM TIME	TIME	The second point in the cook cycle an alarm sounds.
2 ALARM NAME	SHAKE, STIR, NUMBERED ALARM	Navigate choice with arrow buttons under display.
2 ALARM MODE	MANUAL OR AUTO	Navigate choice with arrow buttons under display.
2 ALARM TONE	SHORT, MEDIUM, LONG, DOUBLE OR LONG SHORT, NONE	Navigate choice with arrow buttons under display.
3 ALARM TIME	TIME	The third point in the cook cycle an alarm sounds.
3 ALARM NAME	SHAKE, STIR, NUMBERED ALARM	Navigate choice with arrow buttons under display.
3 ALARM MODE	MANUAL OR AUTO	Navigate choice with arrow buttons under display.
3 ALARM TONE	SHORT, MEDIUM, LONG, DOUBLE OR LONG SHORT, NONE	Navigate choice with arrow buttons under display.
AFTER COOKING	SET POINT OR COOL	**Setpoint**: Fryer remains at setpoint; **Cool:** Fryer holds at 250°F (121°C).
FILTER LOCKOUT	NUMBER	Number of cook cycles for the product before a filter prompt.
HEAD COUNT	0	Number of heads of chicken or the equivalent number for a non-chicken product.
INSTANT ON	0	This is the time, in seconds, the fryer heats before the Controller checks the temperature.
EXIT	EXIT	Press ✔ or Scan button to exit programming.

1.8 Programming for Single Setpoint (Non-Segmented) Items

Programming for non-segmented food items is shown below. The right column has the action necessary to continue. Exit from a programming step at any time by pressing the Scan button until the display returns to its pre-programming status.

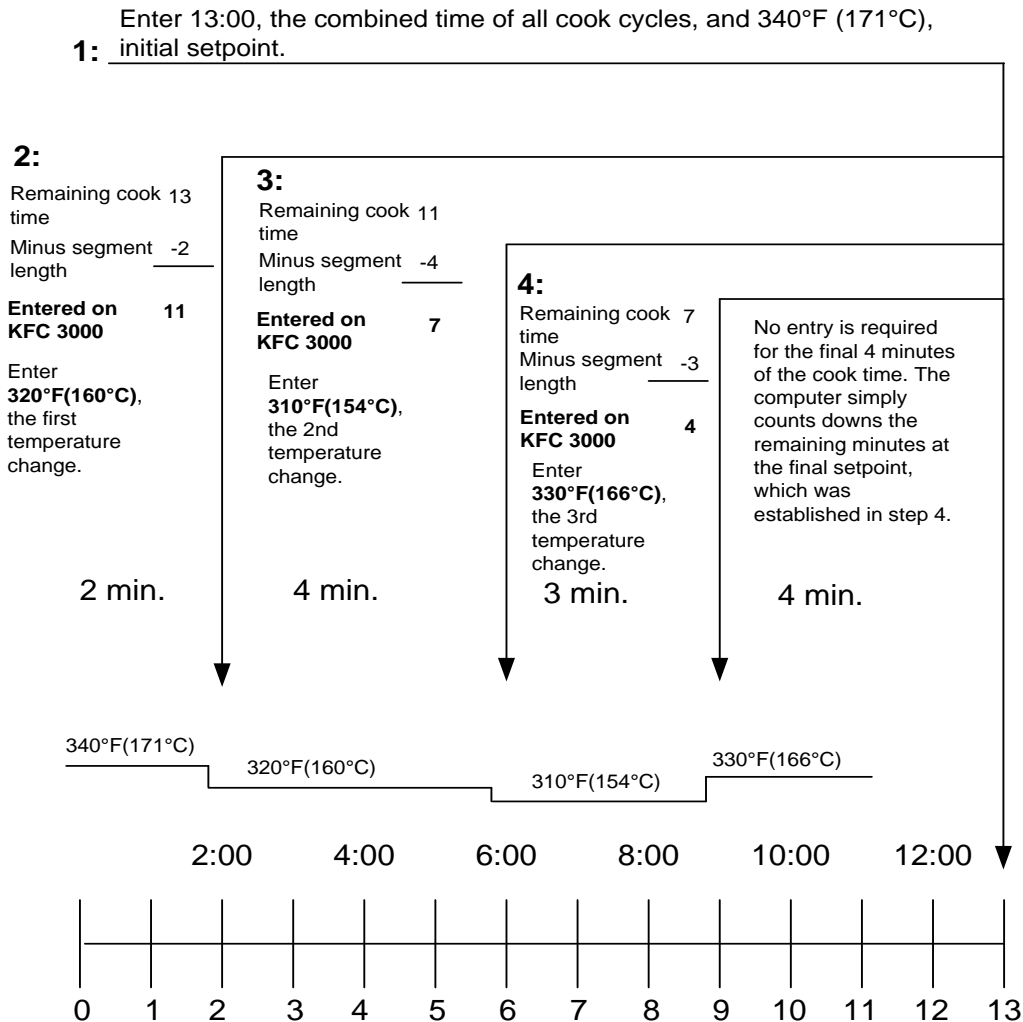| Left Display	Right Display	Action
OFF	OFF	Press and hold ✔ until Product Setup is displayed.
PRODUCT SETUP	Blank	Press ✔ .
PRODUCT SETUP	ENTER CODE	Enter 1724.
SELECT PRODUCT	Blank	Press desired product button 1-20 that is not currently used to program new product otherwise press a product button that is not lit.
LONG NAME	PRODUCT NAME OR BUTTON NUMBER	Enter product name with letter buttons. Advance cursor with ▲▼. Press ▶.
SHORT NAME	ABBREVIATED PRODUCT NAME OR BUTTON NUMBER	Enter abbreviated four character product name with letter buttons. Press ▶.
COOKING MODE	SINGLE SETPOINT	Press ▶. If multiple setpoint or segmented cooking is desired press ▼ MULTIPLE SETPOINT and go to 1.9 and follow the instructions. (Default is SINGLE SETPOINT)
1 TIME	0:00 OR PREVIOUSLY ENTERED TIME	Enter total cook time with numbered buttons. Press ▶.
1 TEMPR	TEMP	Enter cooking temperature. Press ▶.
1 FLEX	Number	Enter the level of flex, 0-9, for the product. Press ▶.
1 PRESSURE SOLENOID	OPEN	Set to desired position with the ▼▲ buttons. Press the ▶ button to change to CLOSED. *(Option only for pressure fryers.)*
2 TIME	0:00 OR PREVIOUSLY ENTERED TIME	Enter 0:00. Press ▶.
1 ALARM TIME	0:00 OR PREVIOUSLY ENTERED TIME	Subtract the time from the starting cook time when the alarm should sound. (Example: If a cook time is 5:00 and the shake time should be 30 seconds into the cook time enter 4:30 as the alarm time). Enter that time for shaking, stirring, etc. Press ▶. (Note: If alarm time is set to 0:00 skip to After Cooking below.)
1 ALARM NAME	SHAKE	Press ▼▲ to scroll through the alarm names (ex. Shake). Press ▶.
1 ALARM MODE	AUTO OR MANUAL	Press ▼▲ to scroll to Auto or Manual alarm mode. Press ▶.
1 ALARM TONE	SHORT, MEDIUM, LONG DOUBLE OR LONG SHORT, NONE	Press ▼▲ to scroll to choice of alarm tones. Press ▶.
2 ALARM TIME	0:00	Press ▶. Leave at 0:00 for non-segmented cooking.
AFTER COOKING	COOL OR SETPT	Press ▼▲ to scroll to Cool or Setpoint mode the fryer should exit to after cook cycle: cool = 250; Setpoint = cooking temp. Press ▶.
FILTER LOCKOUT	0	Enter number of cook cycles before a filter prompt and press ▶.
QUANTITY?	NO	Press ▼▲ to scroll to YES if a quantity per load is required, otherwise leave to default NO.
HEAD COUNT	0 OR PREVIOUSLY SET NUMBER	Enter number of head or the equivalent value for the product. Press ▶.
INSTANT ON	0	This is the time, in seconds, the fryer heats before the Controller checks the temperature. Enter value and press ▶.
EXIT	EXIT	Press Scan button to exit or the ✔ button for additional programming.
SELECT PRODUCT	Blank	More Programming? Press product button and follow instructions above. Exit Programming? Press Scan Button.
PRODUCT SETUP	Blank	Press Scan button to exit or the ✔ button for additional programming.
OFF	OFF	

1.9 Multi-Setpoint (Segmented)
1.9.1 Cooking Programming Overview

The K3000 is capable of segmented cooking, a feature which allows a cooking cycle to be broken into a number of parts, each with its own cooking temperature and time.

An abbreviated version of the programming for a 13-minute cook cycle with four cooking temperatures is shown below. Steps are compressed for clarity. The cook times represent when on the timeline of the total cook cycle the segment occurs. In this example, the first temperature change occurs with 11 minutes remaining in the total cook time; 11 is entered at the prompt for the second cook time. Two minutes into the total cook cycle, the temperature will change;11 minutes will remain. Cook times for the remaining segments are arrived at by subtracting the segment length from the remaining cook time. The complete programming steps are shown on pages 15 and 16.

- Step 1 sets total cook time and initial setpoint.
- Step 2 sets the duration of the first cooking segment, 2 minutes, and the setpoint of the first temperature change.
- Step 3 sets the duration of the second cooking segment, 4 minutes, and the setpoint of the second temperature change.
- Step 4 sets the duration of the third cooking segment, 3 minutes, and the setpoint of the third temperature change.

The four remaining minutes in the cook time elapse at the final temperature. No entry is required to use the final minutes

1: Enter 13:00, the combined time of all cook cycles, and 340°F (171°C), initial setpoint.

2:

Remaining cook time	13
Minus segment length	-2
Entered on KFC 3000	**11**

Enter **320°F(160°C)**, the first temperature change.

3:

Remaining cook time	11
Minus segment length	-4
Entered on KFC 3000	**7**

Enter **310°F(154°C)**, the 2nd temperature change.

4:

Remaining cook time	7
Minus segment length	-3
Entered on KFC 3000	**4**

Enter **330°F(166°C)**, the 3rd temperature change.

No entry is required for the final 4 minutes of the cook time. The computer simply counts downs the remaining minutes at the final setpoint, which was established in step 4.

2 min.   4 min.   3 min.   4 min.

340°F(171°C)   320°F(160°C)   310°F(154°C)   330°F(166°C)

2:00   4:00   6:00   8:00   10:00   12:00

0   1   2   3   4   5   6   7   8   9   10   11   12   13

1.9.2 Alarm Programming Overview

Alarms are set to remind operators to shake fry baskets or tend to the product in some other way at points during the cook cycle. The instructions below detail setting three alarms in a 13-minute cook cycle. To enter a single alarm, exit the sequence after setting the first alarm.

Three alarms can be programmed for a cook cycle. The K3000 counts down cook times from the total time to zero. Alarms are entered at the point in the countdown they are desired. The example below is for alarms at 11:00, 6:00 and 2:00 on the countdown clock; the alarms will occur two, seven and 11 minutes into the 13-minute cook cycle.

1: 11:OO

At the ALARM 1 prompt, enter 11:00. The alarm will occur with 11 minutes remaining in the cook cycle; two minutes have passed.

2: 6:OO

At the ALARM 2 prompt, enter 6:00, The alarm will occur with 6:00 remaining in the cook cycle; seven minutes have passed.

3: 2:OO

At the ALARM 3 prompt, enter 2:00. The alarm will occur with 2:00 remaining in the cook cycle; 11 minutes have passed.

Cook cycle ends

13:00

2:00   7:00   11:00

Points in the cook cycle the alarms occur

1.10 Programming for Multi-Setpoint (Segmented) Items

Left Display	Right Display	Action
OFF	*OFF*	Press and hold ✔ until Product Setup is displayed.
PRODUCT SETUP	Blank	Press ✔ .
PRODUCT SETUP	*ENTER CODE*	Enter 1724
SELECT PRODUCT	Blank	Press desired product button
LONG NAME	*PRODUCT NAME OR BUTTON NUMBER*	Enter product name with letter buttons. Advance cursor with ▲▼. With name entered, press ▶
SHORT NAME	*ABBREVIATED PRODUCT NAME OR BUTTON NUMBER*	Enter abbreviated four character product name with letter buttons. Press ▶.
COOKING MODE	*SINGLE SETPOINT*	Press ▶. If multiple setpoint or segmented cooking is desired press ▼ Multiple Setpoint (Segmented) and follow the instructions in the next section. (Default is SINGLE SETPOINT)
1 TIME	*0:00 OR PREVIOUSLY ENTERED TIME*	Enter total cook time for segmented item and press ▶.
1 TEMPR	*TEMPERATURE*	Enter initial cooking temperature and press ▶.
1 FLEX	*0 OR PREVIOUSLY ENTERED VALUE*	Enter the flex value, 0-9, for the product and press ▶.
1 PRESSURE SOLENOID	*OPEN*	Set to desired position with the ▼▲ buttons. Press the ▶ button to change to CLOSED. *(**Option only for pressure fryers.**)*
2 TIME	*0:00 OR PREVIOUSLY ENTERED TIME*	Enter time remaining after first temperature change (see page 1-11) and press ▶.
2 TEMPR	*0:00 OR PREVIOUSLY ENTERED TEMPERATURE*	Enter first temperature change and press ▶.
2 FLEX	*0 OR PREVIOUSLY ENTERED VALUE*	Enter the flex value, 0-9, for the product and press ▶.
2 PRESSURE SOLENOID	*OPEN*	Set to desired position with the ▼▲ buttons. Press the ▶ button to change to CLOSED. *(**Option only for pressure fryers.**)*
3 TIME	*0:00 OR PREVIOUSLY PROGRAMMED TIME*	Enter time remaining after second temperature change and press ▶.
3 TEMPR	*0:00 OR PREVIOUSLY PROGRAMMED TEMPERATURE*	Enter temperature of the second segment and press ▶.
3 FLEX	*0 OR PREVIOUSLY ENTERED VALUE*	Enter the flex value, 0-9, for the product and press ▶.
3 PRESSURE SOLENOID	*OPEN*	Set to desired position with the ▼▲ buttons. Press the ▶ button to change to CLOSED. *(**Option only for pressure fryers.**)*
4 TIME	*00 OR PREVIOUSLY ENTERED TIME*	Enter time remaining after third temperature change and press ▶.
4 TEMPR	*0:00 OR PREVIOUSLY PROGRAMMED TEMPERATURE*	Enter temperature of the third segment and press ▶.
4 FLEX	*0 OR PREVIOUSLY ENTERED VALUE*	Enter the flex value, 0-9, for the product and press ▶.
4 PRESSURE SOLENOID	*OPEN*	Set to desired position with the ▼▲ buttons. Press the ▶ button to change to CLOSED. *(**Option only for pressure fryers.**)*

1.10   Programming for Multi-Setpoint (Segmented) Items cont.

Left Display	Right Display	Action
5 TIME	:00 OR PREVIOUSLY ENTERED TIME	Leave at zero if no more segments are needed and press ▶. *If more segments are needed, 5 is the limit, continue programming as shown above.*
1 ALARM TIME	:00 OR PREVIOUSLY ENTERED TIME	Subtract the time from the starting cook time when the alarm should sound. (Example: If a cook time is 5:00 and the shake time should be 30 seconds into the cook time enter 4:30 as the alarm time). Enter that time for shaking, stirring, etc. Press ▶.
1 ALARM NAME	SHAKE	Press ▲ to scroll through choices: Shake, Stir, Num1. With NUM 1 displayed, scroll through number choices with ▲. Display name and press ▶.
1 ALARM MODE	MANUAL OR AUTO	Choose mode with ▲ and press ▶.
1 ALARM TONE	SHORT, MEDIUM, LONG DOUBLE OR LONG SHORT, NONE	Choose tone with ▲ and press ▶.
2 ALARM TIME	TIME	Subtract the time from the starting cook time when the second alarm should sound. (Example: If a cook time is 5:00 and the shake time should be 30 seconds into the cook time enter 4:30 as the alarm time). Enter that time for shaking, stirring, etc. Press ▶.
2 ALARM NAME	NAME	Press ▲ to scroll through choices and press ▶.
2 ALARM MODE	MANUAL OR AUTO	Choose mode with ▲ and press ▶.
2 ALARM TONE	SHORT, MEDIUM, LONG DOUBLE OR LONG SHORT, NONE	Choose tone with ▲ and press ▶.
3 ALARM TIME	NAME	Subtract the time from the starting cook time when the third alarm should sound. (Example: If a cook time is 5:00 and the shake time should be 30 seconds into the cook time enter 4:30 as the alarm time). Enter that time for shaking, stirring, etc. Press ▶.
3 ALARM MODE	MANUAL OR AUTO	Choose mode with ▲ and press ▶.
3 ALARM TONE	SHORT, MEDIUM, LONG DOUBLE OR LONG SHORT, NONE	Choose tone with ▲ and press ▶.
AFTER COOKING	SET POINT OR COOL	Choose fryer status after cook cycle with ▲▼ and press ▶.
FILTER LOCKOUT	0	Enter number of cook cycles before a filter prompt and press ▶.
QUANTITY?	NO	Press ▼▲ to scroll to YES if a quantity per load is required, otherwise leave to default NO.
HEAD COUNT	USER PROMPT 00	Enter chicken head count or equivalent number for non-chicken item and press ▶.
INSTANT ON	0	This is the time, in seconds, the fryer heats before the Controller checks the temperature. Enter value and press ▶.
EXIT	EXIT	Press ✔ .
SELECT PRODUCT	Blank	Press Scan twice. Display goes to OFF.
OFF	OFF	

1.11 K3000 Menu Summary Tree

Filter Menu 1.5
    [With computer ON, press and hold FILTER button]
— Filter
— Clean
— Dispose
— Drain to Pan
— Fill Vat From Pan

Info Mode 1.3
    [With computer OFF, press and hold ✓(check) button]
—Oil Stats
—Filter Stats
—Review Usage
—Last Load

Setup and Tech Modes
    [With computer OFF, press and hold ✓(check) button 10 seconds, displays Product Setup]
    ┌─ Product Setup 1.4
    │   [Enter 1724]
    │   └─ Select Product .... 1.9 - 1.10
    │   ├─Long Name
    │   ├─Short Name
    │   ├─Cooking Mode
    │   ├─1 Time
    │   ├─1 Tempr
    │   ├─1 Flex
    │   ├─1 Pressure Solenoid
    │   ├─2 Time
    │   ├─1 Alarm Time
    │   ├─1 Alarm Name
    │   ├─1 Alarm Mode
    │   ├─1 Alarm Tone
    │   ├─2 Alarm Time
    │   ├─After Cooking Setpoint
    │   ├─Filter Lockout
    │   ├─Quantity
    │   ├─Head Count
    │   └─Instant On   [Only adjustable by Entering 3228]
    ├─ Vat Setup
    │   [Enter 3228]
    │   ├─ System 1.4
    │   │   ├─Language
    │   │   ├─2nd Language
    │   │   ├─Locale (CE or Non-CE)
    │   │   ├─Energy
    │   │   ├─Type (Vat)
    │   │   ├─System Volume (Level)
    │   │   ├─Tempr Format (F or C)
    │   │   ├─Exit Melt Tempr
    │   │   ├─Setback Tempr
    │   │   ├─Fresh Oil
    │   │   ├─Waste
    │   │   └─Recovery Alarm
    │   │
    │   ├─ Time/Date 1.4
    │   ├─ DST (Daylight Savings Time) Setup 1.4
    │   ├─ Filter 1.4
    │   │   ├─Global Filter Count
    │   │   ├─EOD Filter Time
    │   │   ├─1 Polish Timer
    │   │   ├─1 Polish Time
    │   │   ├─1 Polish Duration
    │   │   ├─1 Polish Delay Time
    │   │   ├─1 Polish Start Tempr
    │   │   ├─2 Polish Timer
    │   │   ├─2 Polish Time
    │   │   ├─2 Polish Duration
    │   │   ├─2 Polish Delay Time
    │   │   └─2 Polish Start Tempr
    │   ├─ E-Log Log of last 10 error codes 1.4
    │   ├─ Change Password 1.4
    │   └─ Edit Alarm Names 1.4
    │
    └─ Tech Mode
            [Enter 1650]
            ├─ Clear E-Log
            ├─ Clear Passwords
            ├─ Lane Count
            └─ Hi-Limit Test

CHAPTER 2: OPERATOR TROUBLESHOOTING

2.1 Introduction

This chapter provides an easy reference guide to some of the common problems that may occur during the operation of your equipment. The troubleshooting guides that follow are intended to help you correct, or at least accurately diagnose, problems with your equipment. Although the chapter covers the most common problems reported, you may encounter problems that are not covered. In such instances, the Frymaster Technical Services staff will make every effort to help you identify and resolve the problem.

When troubleshooting a problem, always use a process of elimination starting with the simplest solution and working through to the most complex. Most importantly, always try to establish a clear idea of why a problem has occurred. Part of your corrective action involves taking steps to ensure that it doesn't happen again. If a controller malfunctions because of a poor connection, check all other connections while you're at it. If a fuse continues to blow, find out why. Always keep in mind that failure of a small component may often be indicative of potential failure or incorrect functioning of a more important component or system.

If you are in doubt as to the proper action to take, do not hesitate to call the Frymaster Technical Service Department or your local Frymaster Authorized Servicer for assistance.

Before calling a servicer or the Frymaster HOTLINE (1-800-551-8633):

- **Verify that electrical cords are plugged in and that circuit breakers are on.**
- **Verify that gas line quick-disconnects are properly connected.**
- **Verify that any gas line cutoff valves are open.**
- **Verify that frypot drain valves are fully closed.**
- **Have your fryer's model and serial numbers ready to give to the technician assisting you.**

⚠ **DANGER**

Hot oil will cause severe burns. Never attempt to move this appliance when filled with hot cooking oil or to transfer hot cooking oil from one container to another.

⚠ **DANGER**

This equipment should be unplugged when servicing, except when electrical circuit tests are required. Use extreme care when performing such tests.

This appliance may have more than one electrical power supply connection point. Disconnect all power cords before servicing.

Inspection, testing, and repair of electrical components should be performed by an factory authorized servicer only.

2.2 Troubleshooting Fryers

2.2.1 Error Messages and Display Problems

PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
No display on the controller.	A. Controller not turned on. B. No power to fryer. C. Failed Controller or other component	A. Press the ON/OFF switch to turn the Controller on. B. Verify that the fryer is plugged in and that the circuit breaker is not tripped. C. Call your FAS for assistance.
Fryer repeatedly cycles on and off when first started with MLT $CYCL$ **displayed.**	Fryer is in melt-cycle mode.	This is normal when fryer is turned on with oil temperature below 100 F° (38C°).
Heat indicator is on and blower is running, but burner will not ignite.	Blown fuse on interface board or ignition module.	Contact your FAS for service.
Fryer does not heat after filtering.	Drain valve is open.	Verify that the drain valve is fully closed.
Controller displays HOT $HI-1.$	Frypot temperature is more than 410ºF (210ºC) or, in CE countries, 395ºF (202ºC).	Shut the fryer down immediately and call your FAS for assistance.
Controller displays HI $TEMP.$	Frypot temperature is more than 40 ºF (4ºC).	Press the power button to turn off fryer and let cool before returning power to fryer. If issue continues call your FAS for assistance.
Controller displays $RECOVERY$ $FAULT/ YES$ **and alarm sounds.**	Recovery time exceeded maximum time limit.	Clear error and silence the alarm by pressing the ▲ (YES) button. If the error continues call your FAS for assistance.
Controller display is in wrong temperature scale (Fahrenheit or Celsius).	Incorrect display option programmed.	Toggle between F° to C° by pressing the ✓ button until Product setup is displayed. Press ▶ to scroll to Tech Mode and press ✓. Enter 1658. Press the scan button. The Controller displays $OFF.$ Turn the Controller on to check temperature. If the desired scale is not displayed, repeat.
Controller displays $HIGH$ $LIMIT$ $FAILURE$ $DISCONNECT$ $POWER.$	Failed high limit	Shut the fryer down immediately and call your FAS for assistance.
Controller displays $TEMPR$ $PROBE$ $FAILURE.$	Problem with the temperature measuring circuitry including the probe or damaged Controller wiring harness or connector.	Shut the fryer down and call your FAS for assistance.

PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
Controller displays *HEATING FAILURE.*	Contactor issue, gas valve off, failed Controller, failed transformer, open high-limit thermostat.	It is normal for this message to appear during startup if a gas fryer's lines have air in them. Check that the gas valve is on. If it continues, shut the fryer down and call your FAS for assistance.
Controller displays *SERVICE REQUIRED* **followed by an error message.**	An error has occurred which requires a service technician.	Press ▼ (NO) to continue cooking and call your FAS for assistance. In some cases, cooking may not be allowed.
Controller heat LED illuminated but fryer is not heating. (HP Pressure fryers only)	Main power switch is off.	Turn on main power switch and ensure heating lamp is illuminated.
Controller displays *HEATING FAILURE. CHECK HI-LIMIT. DRAIN VALVE. VACUUM SWITCH. BLOWER MOTOR.* **(HP Pressure fryers only)**	Open high-limit, open drain valve, faulty drain valve switch, plugged vacuum pressure switch, failed blower motor.	Check drain valve, high-limit, vacuum pressure switch, blower motor. If it continues, shut the fryer down and call your FAS for assistance.

2.2.2 Filtration Problems

PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
Controller displays *IS VAT FULL? YES NO* **after a filtration.**	A. Normal after filtering or filling.	A. Press ▲ (YES) if the vat is full, otherwise press ▼ (NO) and follow prompts.
CLEAN. POLISH. FILTER OR DISPOSE **won't start.**	Temperature too low or Controller displays OFF.	Ensure fryer is at 250°F(121°C) or setpoint before starting; ensure the Controller is ON.
Controller displays *WAIT FOR FILTER.*	A. Another function is still in process. B. MIB has not cleared checking system.	A. Wait until the previous function ends to start another filtration cycle. B. Wait one minute and try again.
Controller displays *CHANGE FILTER PAPER?*	Daily filter paper change prompt has occurred.	Press ▲ (YES), follow prompts and change the filter paper. Do **NOT** ignore *CHANGE FILTER PAPER* prompts.
Controller displays *INSERT PAN.*	A. Normal during Change Filter Paper routine.	A. Insert pan and press ▲ (CONFIRM) button.

PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
Controller displays **OIL IN DRAIN** **PAN / CONFIRM**	Drain valve open or possibility that oil is in drain pan.	Press ▲ (CONFIRM) and follow directions for **FILL VAT FROM DRAIN PAN.**
Controller displays **FLT DYLD**	A filter cycle has been delayed.	This is a normal display when a filter has been delayed. After the next filter prompt press YES to filter.
Controller displays **POL DYLD**	A polish cycle has been delayed.	This is a normal display when a polish has been delayed. After the next polish prompt press YES.

2.2.3 Error Log Codes

Code	ERROR MESSAGE	EXPLANATION
E03	ERROR TEMP PROBE FAILURE	Temp probe reading out of range
E04	HI 2 BAD	High limit reading is out of range.
E05	HOT HI 1	High limit temperature is past more than 410°F (210°C), or in CE countries, 395°F (202°C)
E06	HEATING FAILURE	A component has failed such as controller, interface board, contactor, gas valve, ignition module or open-high limit.
E20	INVALID CODE LOCATION	SD card removed during update
E21	FILTER PAPER PROCEDURE ERROR (Change Filter Paper)	24 hour timer has expired
E22	OIL IN PAN ERROR	Oil may be present in the filter pan.
E25	RECOVERY FAULT	Recovery time exceeded maximum time limit.
E28	HIGH TEMP ALARM	Oil has exceeded 40 ºF (4ºC) over setpoint.

2.2.4 HP Pressure Fryer Specific

The HP pressure fryer has a STRATIFY mode that turns the pump on for various times to mix the oil so that excess water can escape from the oil.

It enters STRATIFY mode when:
-The fryer reaches 300F (149C) after initially heating.
-Every 30 minutes after cooks.
-After an EXIT COOL.

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