



3000 CONTROLLER Operation Manual



Frymaster, a member of the Commercial Food Equipment Service Association, recommends using CFESA Certified Technicians.

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NOTICE

IF, DURING THE WARRANTY PERIOD, THE CUSTOMER USES A PART FOR THIS MANITOWOC FOOD SERVICE EQUIPMENT OTHER THAN AN **UNMODIFIED** NEW OR RECYCLED PART PURCHASED DIRECTLY FROM FRYMASTER DEAN, OR ANY OF ITS AUTHORIZED SERVICE CENTERS, AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, FRYMASTER DEAN AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS, DAMAGES OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER.

NOTICE

This appliance is intended for professional use only and is to be operated by qualified personnel only. A Frymaster Authorized Servicer (FAS) or other qualified professional should perform installation, maintenance, and repairs. Installation, maintenance, or repairs by unqualified personnel may void the manufacturer's warranty.

NOTICE

This equipment must be installed in accordance with the appropriate national and local codes of the country and/or region in which the appliance is installed.

NOTICE TO OWNERS OF UNITS EQUIPPED WITH COMPUTERS

U.S.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation. While this device is a verified Class A device, it has been shown to meet the Class B limits.

CANADA

This digital apparatus does not exceed the Class A or B limits for radio noise emissions as set out by the ICES-003 standard of the Canadian Department of Communications.

Cet appareil numérique n'émet pas de bruits radioélectriques dépassant les limites de classe A et B prescrites dans la norme NMB-003 édictée par le Ministre des Communications du Canada.

 DANGER

Prior to movement, testing, maintenance and any repair on your Frymaster fryer, disconnect ALL electrical power from the fryer.



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Operation Manual**

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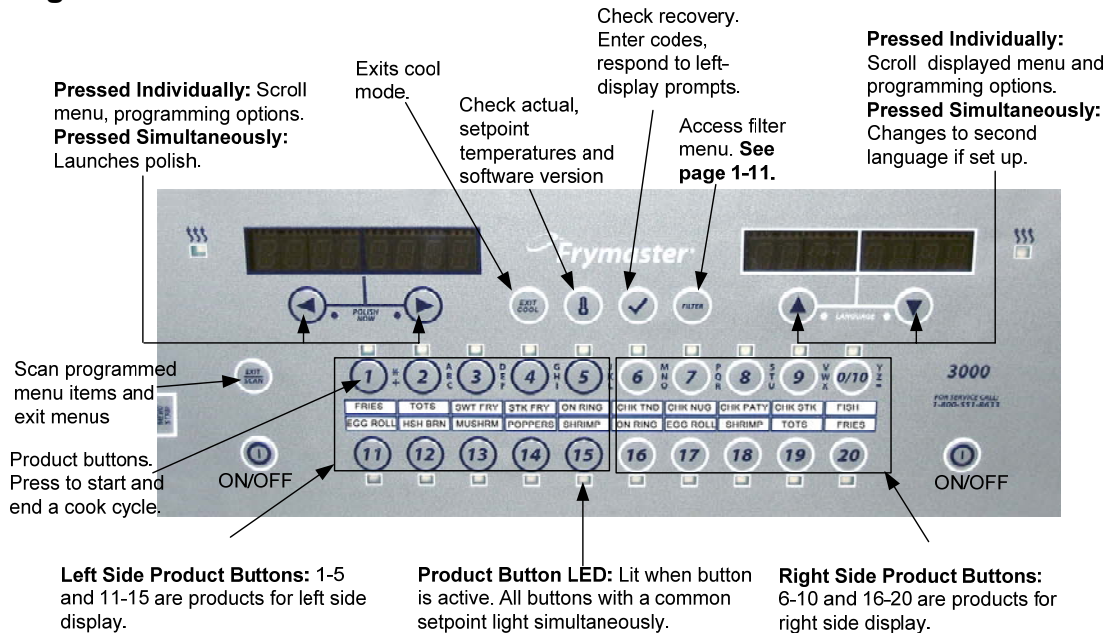
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CHAPTER 1: 3000 CONTROLLER INSTRUCTIONS

1.1 Using the 3000



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.
- **DROP display:** Press product button and drop product.
- **** display:** The vat temperature is out of the drop zone.
- **DONE display:** Press blinking product button to cancel alarm and end a cook.
- **Cancel a Cook:** Press and hold blinking product button to cancel cook cycle.
- **HOLD display:** Press blinking product button to cancel hold alarm.

Change setpoint: Press and hold a product button at the desired temperature until it beeps and a low tone is heard (approximately three seconds) and release.

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:** Press to start a cook cycle. Active when adjacent LED is lit. LED flashes during a cook cycle. Press and hold to cancel a cook cycle. Press at end of cook cycle to cancel an alarm. Press and hold a product with different setpoint (approximately three seconds) until it beeps to change setpoint temperature.
- **Scan/Exit:** 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. Press scan to exit menus.
- **Left/Right Arrows:** Navigate options in left display. Press both simultaneously to start a polish cycle.
- **Up/Down Arrows:** Navigate options in right display. Press both simultaneously to change to a second language if one is selected in setup.
- **Exit Cool:** Exits cool mode, returns fryer to setpoint temperature.
- **Thermometer, Fryer ON:** Press and release for setpoint in left display and vat temperature in right display.
- **Thermometer, Fryer OFF:** Press to display temperature, time, date, system version, controller and circuit board software versions.
- **Checkmark, Fryer OFF:** Press and hold 3 seconds: Scroll filter usage; Press and hold 10 seconds: Product setup.
- **Checkmark, Fryer ON:** Enter Codes, Respond to left display prompts.
- **Filter: Press and release:** Cooks remaining to filter cycle. **Press and hold:** Filter options: Filter, Clean and Filter, Dispose, Fill Vat from Bulk (Bulk option only) and Boil Out (OFF only).

1.2 3000 Menu Summary Tree

Filter Menu	1.9
[With computer ON, press and hold FILTER button]	
Filter	
Clean and Filter	
Dispose	
Fill Vat From Bulk (Bulk option only)	
Boil Out [With computer OFF, press and hold FILTER button]	
Info Mode	1.5
[Press and hold ✓(check) button]	
Last Dispose Stats	
Daily Stats	
Selected Period Stats	
Last Load Stats	
Main Menu and Tech Modes	
[With computer OFF, press and hold ✓(check) button 10 seconds, displays Main Menu - Product Setup]	
Product Setup	1.6-1.8
[Enter 1650]	
Select Product	
Long Name	
Short Name	
Cooking Mode	
1 Time	
1 Tempr	
1 Sensitivity	
1 Alarm Time (Shake)	
1 Alarm Name (Shake)	
1 Alarm Mode (Shake)	
1 Alarm Tone (Shake)	
2 Alarm Time (Shake)	
Filter Prompt	
Instant On	
Hold Time	
Load Standard (Load Default Product Menu)	
Vat Setup	1.4
[Enter 1656]	
System	1.4
Language	
2 nd Language	
Locale (CE or Non-CE)	
Energy (Gas or Elec)	
Type (Vat)	
System Volume (Sound Level)	
Tempr Format (F or C)	
Exit Melt Tempr	
Cool Mode Tempr	
Cool Mode Default	
Fresh Oil	
Waste	
Drain Switch	
Recovery Alarm	
Basket Lift	
Hold Time	
Time/Date	1.4
DST(Daylight Savings Time) Setup	1.4
Filter	1.4
Cooks til Filter	
EOD Filter Timer	
EOD Filter Time	
Flushing Timer	
Boil Out Timer	
1 Polish Timer	
1 Polish Prompt Time	
1 Polish Duration	
1 Polish Start Tempr	
E-Log List of last 10 error codes	1.4
Change Password	1.4
Tech Mode	
[Enter 3000]	
Clear E-Log	
Clear Passwords	
Lane Count	
Hold Mode	
Max Cook Tempr	
Hi-Limit Test	

1.3 Setup: Main Menu

Press and hold the checkmark key for 10 seconds produces the setup mode, which first displays Product Setup. Turn the controller off and follow the steps below to navigate the options.

Left Display	Right Display	Action
OFF	OFF	Press and hold ✓ until controller displays Main Menu changing to Product Setup.
PRODUCT SETUP	Blank	Press ► to scroll to Product Setup, Vat Setup, Tech Mode, and Exit. With the desired selection displayed, press ✓.
PRODUCT SETUP	Blank	Programming menu items and cooking parameters. Described on page 1-8 through 1-11.
VAT SETUP	Blank	Vat set up is described below in section 1.4.
TECH MODE	Blank	Tech mode is for technicians only.
EXIT	EXIT	Press Exit/Scan button three times to return the controller to OFF.

1.4 Vat Setup

Vat Setup mode allows the controller to be set for language displays, vat sizes, and temperature range displays. With the controller OFF follow the steps below. ***NOTE: Most of the system choices are only available on the far left controller.**

Left Display	Right Display	Action
OFF	OFF	Start with the far LEFT controller. Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.
PRODUCT SETUP	Blank	Press ► to scroll to Vat setup and press ✓. Product setup is described on pages 1-8 through 1-11.
VAT SETUP	ENTER CODE	Enter 1656.
SYSTEM	Blank	Press ► to scroll to System, Time/Date, DST Setup, Filter, E-Log or Change Password. With desired choice displayed, press ✓ or press Exit/Scan button twice to return the controller to OFF. * See NOTE above.
LANGURGE	ENGLISH	Press ▼▲ to scroll to choice and press ►.
2ND LANGURGE	SPANISH	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.)). Default is Spanish.
LOCALE	NON-CE	Press ▼▲ to scroll to choices: CE (European Conformity standards), CE Belgium or Non-CE (non-European standards) and press ►. This option is only available on the far left computer on multiple batteries.
ENERGY	GAS	Press ▼▲ to scroll to choices: Gas or Electric and press ►. This option is only available on the far left computer on multiple batteries.
TYPE	GL30 FULL	Press ▼▲ to scroll choices: Gas- GL30 Full, GL30 Split, Electric- EL30-14 Full, EL30-14 Split, EL30-17 Full and EL30-17 Split. With the current fryer vat type displayed, press ►.
SYSTEM VOLUME	5	Sets sound level for controller. Enter level, 1-9 (1=Lowest/ 9=Loudest). Press ►.
TEMPR FORMAT	F	Press ▼▲ to scroll choices: F for Fahrenheit; C for Celsius. Press ►.
EXIT MELT TEMPR	180° (82 °C)	Use numbered keys to change default setting. Press ►. (This is the temperature for the fryer to exit the melt cycle.) Range is 100°F (38°C) to 200°F (93°C). Default is 180°F (82°C).
COOL MODE TEMPR	250F (121 °C)	Use numbered keys to change default setting. Press ►. (This is the temperature during setback or idle mode.) Default is 250°F (121°C).
COOL MODE DEFAULT	0	Use numbered keys to change default setting. (This is the amount of minutes the fryers sits idle before going to cool mode. Setting is disabled if set to zero.) Press ►. Default is zero.
FRESH OIL	NONE	Press ▼▲ to scroll choices None, JIB or Bulk. Default is none. Press ►. This option is only available on the far left computer.
WASTE	NONE	Press ▼▲ to scroll choices None or Bulk. Default is none. Press ►. This option is only available on the far left computer.

1.4 Vat Setup cont.

Left Display	Right Display	Action
<i>DRAIN SWITCH</i>	<i>NO</i>	Press ▼▲ to scroll choices YES and NO. Press ►. (Set to YES if the fryer has a drain switch installed.) Default is NO.
<i>RECOVERY ALARM</i>	<i>DISABLED</i>	Press ▼▲ to scroll choices DISABLED and ENABLED. Press ►. (This is a recovery alarm that locks out the fryer if it does not heat properly. Default is disabled.
<i>BASKET LIFT</i>	<i>DISABLED</i>	Press ▼▲ to scroll choices DISABLED and ENABLED. If the fryer has basket lifts, set to enabled. Press ►. Default is disabled.
<i>HOLD TIME</i>	<i>AUTO</i>	Press ▼▲ to scroll choices AUTO and MANUAL. Press ►. (This is the hold timer cancel alarm.) If set to auto, the alarm will auto cancel. Default is auto.
<i>EXIT</i>	<i>EXIT</i>	Press ✓ button once to return the controller to OFF.
TIME/DATE		
<i>OFF</i>	<i>OFF</i>	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.
<i>PRODUCT SETUP</i>	Blank	Press ► to scroll to Vat setup and press ✓.
<i>VAT SETUP</i>	<i>ENTER CODE</i>	Enter 1656.
<i>SYSTEM</i>	Blank	Press ► to scroll to TIME/DATE.
<i>TIME/DATE</i>	Blank	Press ✓.
<i>TIME ENTRY</i>	<i>TIME</i>	Use numbered keys to change time. Enter the time in 24 hour format. Press ►.
<i>DATE FORMAT</i>	<i>MM/DD/YY</i>	Press ▼▲ to scroll choices. With the date format displayed, press ►.
<i>ENTER DATE</i>	<i>DATE</i>	Use numbered keys to change date. Press ►.
<i>EXIT</i>	<i>EXIT</i>	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.
DST SETUP	This is daylight savings time setup. In the United States, daylight saving time begins each year at 2:00 A.M. on the second Sunday in March, with clocks moving ahead one hour. Daylight saving 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.	
<i>OFF</i>	<i>OFF</i>	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.
<i>PRODUCT SETUP</i>	Blank	Press ► to scroll to Vat setup and press ✓.
<i>VAT SETUP</i>	<i>ENTER CODE</i>	Enter 1656.
<i>DST</i>	<i>ENABLED</i>	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.
<i>DST START MONTH</i>	<i>3</i>	Enter the daylight savings time starting month using the 1-10 keys. (Default is US government starting month “3”.) Press ►.
<i>DST START SUNDAY</i>	<i>2</i>	Enter the daylight savings time starting Sunday using the 1-10 keys. (Default is US government starting Sunday “2”.) Press ►.
<i>DST END MONTH</i>	<i>11</i>	Enter the daylight savings time ending month using the 1-10 keys. (Default is US government ending month “11”.) Press ►.
<i>DST END SUNDAY</i>	<i>1</i>	Enter the daylight savings time ending Sunday using the 1-10 keys. (Default is US government ending Sunday “1”.) Press ►.
<i>EXIT</i>	<i>EXIT</i>	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		
<i>OFF</i>	<i>OFF</i>	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.

1.4 Vat Setup cont.

Left Display	Right Display	Action
<i>PRODUCT SETUP</i>	Blank	Press ► to scroll to Vat setup and press ✓.
<i>VAT SETUP</i>	<i>ENTER CODE</i>	Enter 1656.
<i>SYSTEM</i>	Blank	Press ► to scroll to FILTER.
<i>FILTER</i>	Blank	Press ✓.
<i>COOKS TIL FILTER</i>	0	Press ►. (This is the total number of cooks that occur before a filter prompt. The default is 0.) Enter the number of cooks before a filter prompt is desired.
<i>EOD FILTER TIMER</i>	<i>DISABLED</i>	Press ▼▲ to scroll to choice enable or disable and press ►. Default is DISABLED)
<i>EOD FILTER TIME</i>	23:59	Use numbered keys to program end of day filter alert time. Enter time in 24 hour format. Press ►. Enter 23:59 if no end of day filter prompt is desired. After this time, the controller prompts for filter when user presses the power button to go to the OFF state.
<i>FLUSHING TIMER</i>	5	Use numbered keys to change default setting for the flushing timer in Clean and Filter. Enter the time in minutes. Default is five minutes.
<i>BOIL OUT TIMER</i>	30	Use numbered keys to change default setting for the boil out timer. Enter the time in minutes. Default is 30 minutes.
<i>1 POLISH TIMER</i>	<i>DISABLED</i>	Press ▼▲ to scroll to choice enable or disable and press ►. Default is DISABLED)
<i>1 POLISH PROMPT TIME</i>	23:59	Use numbered keys to program polish prompt time. Press ►. (This is the time the polish prompt will occur each day.) Enter time in 24 hour format.
<i>1 POLISH DURATION</i>	15	Use numbered keys to change. Press ►. (This is the duration, in minutes for a polish.) Default to 15 minutes.
<i>1 POLISH START TEMPR</i>	(300F) (149°C)	Use numbered buttons to change temperature. (This is the minimum temperature required for a polish to begin.) Press ►. Default is 300F (149C).
<i>EXIT</i>	<i>EXIT</i>	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 once to return the controller to OFF.
E-LOG		Follow the first three steps above to adjust time and date.
<i>OFF</i>	<i>OFF</i>	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP .
<i>PRODUCT SETUP</i>	Blank	Press ► to scroll to Vat setup and press ✓.
<i>VAT SETUP</i>	<i>ENTER CODE</i>	Enter 1656.
<i>SYSTEM</i>	Blank	Press ► to scroll to E-LOG.
<i>E-LOG</i>	Blank	Press ✓. (This is a log of the ten most recent error codes.)
<i>NOW</i>	<i>TIME/DATE</i>	Press ►. (Current time and date)
<i>A E#</i>	<i>TIME/DATE</i>	Errors listed A-J. Press ► to scroll through errors. Error codes are listed on page 7-5. If no errors exist, pressing ► will display No errors.
<i>EXIT</i>	<i>EXIT</i>	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.
CHANGE PASSWORD	Blank	Press ✓.
<i>PRODUCT SETUP</i>	1650	Use numbered keys to change code. Press ►.
<i>VAT SETUP</i>	1656	Use numbered keys to change code. Press ►.
<i>EXIT</i>	<i>EXIT</i>	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.

1.5 INFO MODE: Viewing Operational Stats

The 3000 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 key with the controller off or on. The steps to view the data are detailed below.

Left Display	Right Display	Action
OFF/ON	OFF/ON	Press ✓ until INFO MODE is displayed.
LAST DISPOSE STATS	Blank	Press ► to scroll: Last Dispose Stats, Daily Stats, Selected Period Stats, Last Load Stats. With the desired stats displayed, press ✓.
TOTAL COOKS	Number	Press ►. (This is the number of cooks since the last dispose.)
LAST DISPOSE	DATE	Press ►. (This is the date of the last dispose.)
FILTERS-SINCE DISPOSE	Number	Press ►. (This is the number of filters since oil disposal.)
FILTERS BY-PASSED - SINCE DISPOSE	Number	Press ►. (This is the number of by-passed filters since oil disposal.)
POLISHES-SINCE DISPOSE	Number	Press ►. (This is the number of polishes since oil disposal.)
POLISHES BY-PASSED - SINCE DISPOSE	Number	Press ►. (This is the number of by-passed polishes since oil disposal.)
OIL LIFE	Number Days	Press ►. (This is the number of days since the last dispose.)
OIL LIFE- 1 DISPOSE PRIOR	Number Days	Press ►. (This is the oil life in days 1 dispose prior.)
OIL LIFE - 2 DISPOSES PRIOR	Number Days	Press ►. (This is the oil life in days 2 disposes prior.)
AVG OIL LIFE	Number Days	Press ►. (This is the average oil life of past 3 disposes.)
AVG COOKS	Number	Press ►. (This is the average cooks over past 3 disposes.)
RESET LAST DISPOSE STATS	YES NO	Press ► to scroll or ▲ to reset Last Dispose stats.
RESET LAST DISPOSE STATS	ENTER CODE	Enter 1656
COMPLETE	Blank	
EXIT	Exit	Press ✓ button once and press ► to scroll to desired choice. Once desired choice is displayed, press ✓ button or press the Scan button once to return the controller to OFF.
DAILY STATS	Blank	With the desired stats displayed, press ✓.
MON	DATE	Press ▼▲ to scroll a day within the prior week. With the desired date displayed, press ►.
FILTERS	NUMBER AND DAY	Press ▼▲ to scroll number of times the vat was filtered on that day of the prior week. Press ►.
FILTERS - PRIOR WEEK	NUMBER AND DAY	Press ▼▲ to scroll number of daily filter cycles in the prior week. Press ►. Press ✓ button once to return to Info Mode menu, or Exit/Scan button once to return the controller to OFF.
FILTERS BYPASS	NUMBER AND DAY	Press ▼▲ to scroll number of times the filter prompt was bypassed on that day in the prior week. Press ►.
COOKS	NUMBER AND DAY	Press ▼▲ to scroll number of cook cycles on that day of the prior week occurred. Press ►.
EXIT	EXIT	Press ✓ button once and press ► to scroll to desired choice. Once desired choice is displayed, press ✓ button or press the Scan button once to return the controller to OFF.
SELECTED PERIOD STATS	Blank	Press ► to scroll Info Mode Menu: Last Dispose Stats, Daily Stats, Selected Period Stats, Last Load Stats with the desired stats displayed, press ✓.

1.5 INFO MODE: Viewing Operational Stats cont.

Left Display	Right Display	Action
<i>USAGE SINCE</i>	<i>TIME</i>	Press ►. (This is the date and time the selected period started.)
<i>COOKS</i>	Number	Press ►. (This is the total number of cooks since start of selected period.)
<i>QUIT COOKS</i>	Number	Press ►. (This is the total number of cooks that were cancelled since start of the selected period.)
<i>ON HOURS</i>	Number	Press ►. (This is the total number of hours the fryer was on since start of the selected period.)
<i>RESET USAGE</i>	<i>YES NO</i>	Press ► to scroll or ▲ to set start of new selected period stats.
<i>RESET USAGE</i>	<i>ENTER CODE</i>	Enter 1656.
<i>COMPLETE</i>	Blank	
<i>EXIT</i>	<i>EXIT</i>	Press ✓ button once and press ► to scroll to desired choice. Once desired choice is displayed, press ✓ button or press the Scan button once to return the controller to OFF.
<i>LAST LOAD STATS</i>	Blank	With the desired stats displayed, press ✓.
<i>STARTED</i>	Number Minutes	Press ►. (This is the time the last cook started.)
<i>ACTUAL TIME</i>	Number Minutes	Press ►. (This is the actual cook time including stretch time.)
<i>PROGRAM TIME</i>	Number Minutes	Press ►. (This is the programmed cook time.)
<i>MAX TEMP</i>	Number	Press ►. (This is the maximum temperature of the oil during the last cook.)
<i>MIN TEMP</i>	Number	Press ►. (This is the minimum temperature of the oil during the last cook.)
<i>AVG TEMP</i>	Number	Press ►. (This is the average temperature of the oil during the last cook.)
<i>HEAT ON</i>	%	Press ►. (This is the percentage of the cook time the heat source was on during the last cook.)
<i>READY FOR COOK</i>	<i>YES OR NO</i>	Press ►. (This displays yes if the fryer was back to set temperature before the cook cycle was started.)
<i>EXIT</i>	<i>EXIT</i>	Press ✓ button once and press ► to scroll to desired choice. Once desired choice is displayed, press ✓ button or press the Scan button once to return the controller to OFF.

1.6 Main Menu: Product Setup (Single Setpoint Cooking)

Programming 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 Exit/Scan key until the display returns to its pre-programming status. Ensure the controller is OFF and follow the steps below. To access menu strip, remove screws attaching bezel. Lower bezel and remove strip from back of controller. Once menu strip is updated, reverse the steps. To unassign a product from a button set the cook time to 0:00 and press EXIT/SCAN.

Left Display	Right Display	Action
OFF	OFF	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.
PRODUCT SETUP	Blank	Press ✓.
PRODUCT SETUP	ENTER CODE	Enter 1650.
SELECT PRODUCT	Blank	Press desired product button.
LONG NAME	PRODUCT NAME OR BUTTON NUMBER	Enter product name with letter keys. Advance cursor with ▲▼. Press ► to advance to next product set up feature.
SHORT NAME	ABBREVIATED PRODUCT NAME OR BUTTON NUMBER	Enter four character product name which alternates with the timer during a cook. Press ►.
COOKING MODE	SINGLE SETPOINT	Press ►. If multiple setpoint or segmented cooking is desired press ▼ MULTIPLE SETPOINT and go to 1.8 and follow the instructions. (Default is SINGLE SETPOINT)
1 TIME	0:00 OR PREVIOUSLY ENTERED TIME	Enter total cook time with numbered keys. Press ►.
1 TEMPR	TEMPR	Enter cooking temperature. Press ►.
1 SENSITIVITY	Number	Enter the level of sensitivity, 0-9, for the product. Press ►. Refer to the sensitivity chart on page 1-17.
1 ALARM TIME (Shake Time)	0:00 OR PREVIOUSLY ENTERED TIME	Enter time in cook cycle for audible alarm for shaking. Press ►. If set to 0:00 skip to FILTER PROMPT.
1 ALARM NAME	SHAKE	Press ▼▲ to scroll through the alarm names (ex. Shake, Stir). Press ►.
1 ALARM MODE (Shake Alarm Mode)	AUTO	Press ►. Default is auto. If manual is desired press ▼▲ to scroll to Manual shake alarm mode. Press ►. Alarm (Shake) Mode when set to auto, cancels the alarm automatically after a few seconds. Manual requires user action.
1 ALARM TONE (Shake Alarm tone)	SHORT	Press ▼▲ to scroll choice of shake alarm tones. Press ►. Default is SHORT.
2 ALARM TIME	0:00	Press ►. Leave at 0:00 if a second alarm is not needed.
FILTER PROMPT	0 or previously entered number.	Enter number of cook cycles before a filter prompt and press ►.
INSTANT ON	5 or previously set number	This is the time, in seconds, the fryer heats at 100%, after the product button is pressed before the controller adjusts the temperature. Enter value and press ►. (Default is 5. 0=OFF). NOTE: Instant on time may need to be adjusted for light cooking loads.
HOLD TIME	0 or previously entered time.	Enter time in minutes to hold product before discarding. Press ►.
EXIT	EXIT	Press the ✓ button to save changes.
SELECT PRODUCT	Blank	For additional programming refer back to Product Setup above. To exit press the EXIT SCAN button twice to OFF.

To access menu strip, remove screws attaching bezel. Lower bezel and remove strip from back of controller. Once the menu strip is updated, reverse the steps to reassemble. To unassign a product from a button set the cook time to 0:00 and press EXIT/SCAN.

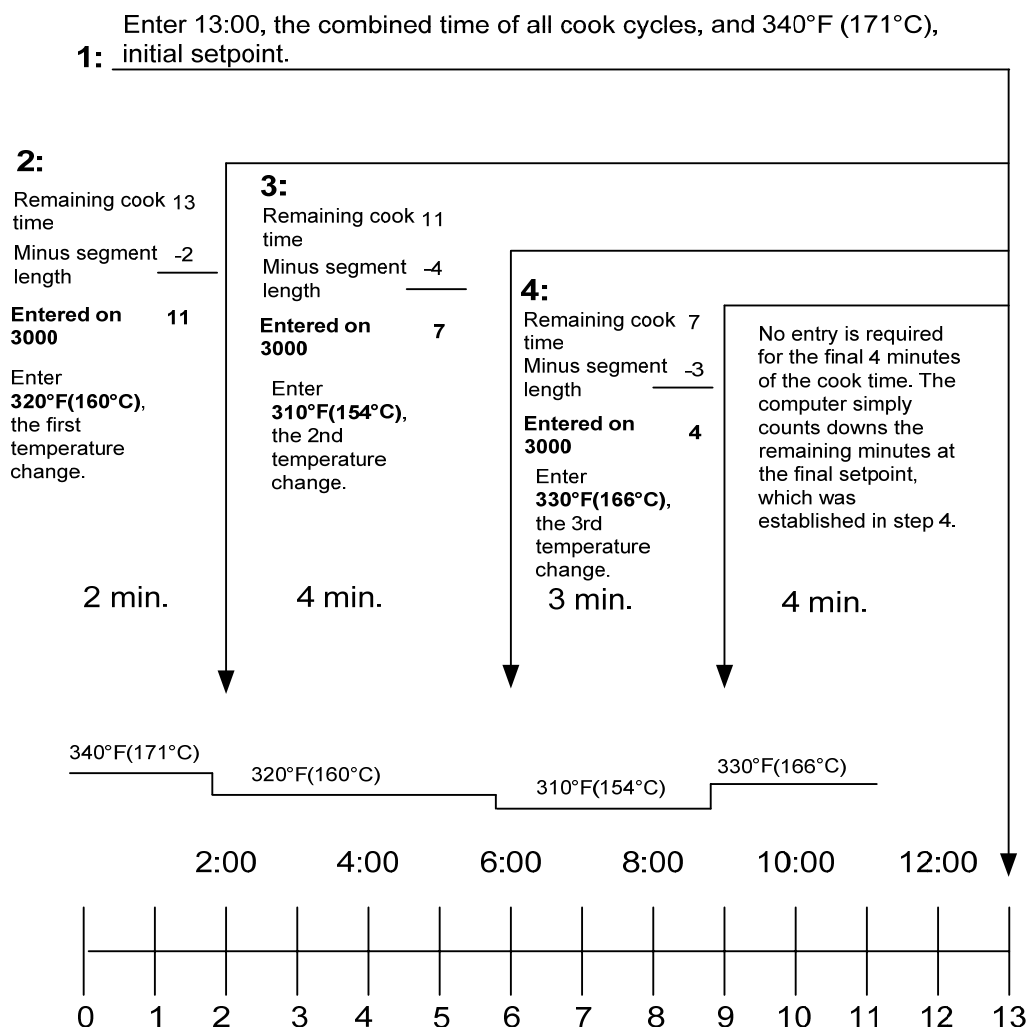
1.7 Multiple Setpoint (Segmented) Cooking Overview

The 3000 is capable of multiple setpoint (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 10 and 11.

- 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



1.8 Main Menu: Product Setup (Multiple Setpoint (Segmented) Cooking)

Left Display	Right Display	Action
OFF	OFF	Press ✓ until the controller displays Main Menu for three seconds changing to PRODUCT SETUP.
PRODUCT SETUP	Blank	Press ✓.
PRODUCT SETUP	ENTER CODE	Enter 1650
SELECT PRODUCT	Blank	Press desired product button.
LONG NAME	PRODUCT NAME OR BUTTON NUMBER	Enter product name with letter keys. Advance cursor with ▲▼. Press ► to advance to next product set up feature.
SHORT NAME	ABBREVIATED PRODUCT NAME OR BUTTON NUMBER	Enter abbreviated four character product name with letter keys that alternate with time during a cook. 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 SENSITIVITY	Number	Enter the level of sensitivity, 0-9, for the product. Press ►.
2 TIME	0:00 OR PREVIOUSLY ENTERED TIME	Enter time remaining after first temperature change (see page 1-9) and press ►.
2 TEMPR	0:00 OR PREVIOUSLY ENTERED TEMPERATURE	Enter first temperature change and press ►.
2 SENSITIVITY	0 OR PREVIOUSLY ENTERED VALUE	Enter the flex value, 0-9, for the product and press ►.
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 SENSITIVITY	0 OR PREVIOUSLY ENTERED VALUE	Enter the flex value, 0-9, for the product and press ►.
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 SENSITIVITY	0 OR PREVIOUSLY ENTERED VALUE	Enter the flex value, 0-9, for the product and press ►.
5 TIME	:00 OR PREVIOUSLY ENTERED TIME	Leave at zero if no more segments are needed and press ►. If more segments are needed, 10 is the limit, continue programming as shown above.
1 ALARM TIME	:00 OR PREVIOUSLY ENTERED TIME	Enter time in cook cycle for audible alarm for shaking. Press ►.
1 ALARM NAME	SHAKE	Press ▼▲ to scroll through the alarm names (ex. Shake). Press ►.
1 ALARM MODE	AUTO DEFAULT	Press ▼▲ to scroll to confirm Auto or Manual shake alarm mode. Press ►.
1 ALARM TONE	SHORT	Press ▼▲ to scroll to choice of shake alarm tones. Press ►.
2 SHAKE TIME	:00 OR PREVIOUSLY ENTERED TIME	Enter time in cook cycle for a second audible alarm for shaking. Press ►.
2 ALARM NAME	SHAKE	Press ▼▲ to scroll through the alarm names (ex. Shake). Press ►.
2 ALARM MODE	AUTO DEFAULT	Press ▼▲ to scroll to confirm Auto or Manual shake alarm mode. Press ►.

1.8 Main Menu: Product Setup (Multiple Setpoint (Segmented) Cooking) cont.

Left Display	Right Display	Action
2 ALARM TONE	SHORT	Press ▼▲ to scroll to choice of shake alarm tones. Press ►.
3 TIME	:00 OR PREVIOUSLY ENTERED TIME	Enter time for third audible alarm for shaking. Press ►.
3 ALARM NAME	SHAKE	Press ▼▲ to scroll through the alarm names (ex. Shake). Press ►.
3 ALARM MODE	AUTO DEFAULT	Press ▼▲ to scroll to confirm Auto or Manual shake alarm mode. Press ►.
3 ALARM TONE	SHORT	Press ▼▲ to scroll to choice of alarm tones. Press ►.
FILTER PROMPT	0 or previously entered number.	Enter number of cook cycles before a filter prompt and press ►.
INSTANT ON	5	This is the time, in seconds, the fryer heats at 100%, after the product button is pressed, before the controller adjusts the temperature. Enter value and press ►. (Default is 5. 0=OFF).
HOLD TIME	0 or previously entered time.	Enter time to hold product before discarding. Press ►.
EXIT	EXIT	Press the ✓ button to save changes.
SELECT PRODUCT	Blank	For additional programming refer back to Product Setup above. To exit press the EXIT SCAN button twice to OFF.

To access menu strip, remove screws attaching bezel. Lower bezel and remove strip from back of controller. Once the menu strip is updated, reverse the steps to reassemble. To unassign a product from a button set the cook time to 0:00 and press EXIT/SCAN.

1.9 Filter Menu

WARNING

The on-site supervisor is responsible for ensuring that operators are made aware of the inherent hazards of operating a hot oil filtering system, particularly the aspects of oil filtration, draining and cleaning procedures.

DANGER

Draining and filtering of oil must be accomplished with care to avoid the possibility of a serious burn caused by careless handling. The oil to be filtered is at or near 350°F (177°C). Ensure all hoses are connected properly and drain handles are in their proper position before operating any switches or valves. Wear all appropriate safety equipment when draining and filtering oil.

DANGER

Allow oil to cool to 100°F (38°C) before draining into an appropriate container for disposal.

DANGER

Do not drain more than one frypot at a time into the built-in filtration unit to avoid overflow and spillage of hot oil.

DANGER

When draining oil into a disposal unit or portable filter unit, do not fill above the maximum fill line located on the container.

The 3000 has five Filter menu options: Filter, Clean and Filter, Dispose, Fill Vat from Bulk (Bulk option only) and Boil Out (only in OFF mode). All are accessed by pressing and holding the Filter button until the display becomes Filter Menu. If fryer is not at set point, controller displays wait for filter. The controller must be on and at setpoint for Filter and Filter and Clean.

Entering Filter Menu Mode

Left Display	Right Display	Action
<i>DROP</i>	<i>DROP</i>	Press the filter button until FILTER MENU is displayed for three seconds changing to Filter.
<i>FILTER</i>	Blank	Press ► to scroll to Clean and Filter, Dispose, Fill Vat from Bulk (Bulk only), Boil Out (functions only when controller is OFF), or Exit. With the desired choice displayed press ✓. Follow the instructions below to navigate the modes.

1.9.1 Filter

Left Display	Right Display	Action
<i>FILTER</i>	Blank	Press and hold ✓ until FILTER is displayed (or LEFT /RIGHT on split vats).
<i>LEFT</i> (Split vats only)	<i>RIGHT</i> (Split vats only)	Press either button under side to filter.
<i>FILTER</i>	Blank	Press the ✓ button.
<i>FILTER NOW?</i>	<i>YES NO</i>	Press ▲ (YES) to continue. A no answer bypasses filtration and cooking continues.
<i>FILTER PAN READY?</i>	<i>CONFIRM</i>	Ensure the filter pan is in place and clean. Press ▲.
<i>OPEN DRAIN VALVE</i>	Blank	Open drain valve.
<i>DRAINING</i>	:40 sec. countdown timer	None required. If the drain valve becomes clogged with food particles, use the Fryer's Friend (poker-like tool) to clear the blockage.

 **DANGER**

NEVER attempt to clear a clogged drain valve from the front of the valve! Hot oil will rush out creating the potential for severe burns.

DO NOT hammer on the drain valve with the cleanout rod or other objects. Damage to the ball inside will result in leaks and will void the Frymaster warranty.

<i>TURN FILTER ON</i>	<i>CONFIRM</i>	Turn filter on and press ▲.
<i>FLUSHING</i>	:30 sec. countdown timer	None required.
<i>CLOSE DRAIN VALVE</i>	Blank	Close drain valve.
<i>FILLING</i>	:45 sec. countdown timer	None required.
<i>TURN FILTER OFF WHEN FULL</i>	<i>CONFIRM</i>	Turn filter off and press ▲.
<i>OFF</i>	<i>OFF</i>	

 **DANGER**

The crumb tray in fryers equipped with a filter system must be emptied into a fireproof container at the end of frying operations each day. Some food particles can spontaneously combust if left soaking in certain shortening material.

 **WARNING**

Do not bang fry baskets or other utensils on the fryer's joiner strip. The strip is present to seal the joint between the fry vessels. Banging fry baskets on the strip to dislodge shortening will distort the strip, adversely affecting its fit. It is designed for a tight fit and should only be removed for cleaning.

1.9.2 Clean and Filter

Left Display	Right Display	Action
Follow steps to Entering Filter Menu Mode on page 1-12.		
<i>CLEAN AND FILTER</i>	Blank	Press ✓.
<i>CLEAN NOW?</i>	<i>YES NO</i>	Press ▲. A yes answer turns vat off. A no answer bypasses clean and filter and cooking continues
<i>FILTER PAN READY?</i>	<i>CONFIRM</i>	Ensure the filter pan is in place and clean. Press ▲.
<i>OPEN DRAIN VALVE</i>	Blank	Open drain valve.
<i>DRAINING</i>	:40 sec. countdown timer	None required.
<i>SCRUB VAT COMPLETE?</i>	<i>YES</i>	Press ▲.
<i>TURN FILTER ON</i>	<i>CONFIRM</i>	Turn filter on and press ▲.
<i>FLUSHING</i>	5:00 countdown timer	None required.
<i>FILL VAT</i>	<i>YES</i>	Press ▲.
<i>CLOSE DRAIN VALVE</i>	Blank	Close drain valve.
<i>FILLING</i>	1:30 sec. countdown timer	None required.
<i>TURN FILTER OFF WHEN FULL</i>	<i>CONFIRM</i>	Turn filter off and press ▲.
<i>OFF</i>	<i>OFF</i>	

1.9.3 Dispose (JIB and None Settings)



DANGER

Allow oil to cool to 100°F (38°C) before draining into an appropriate METAL container for disposal. When draining oil into a disposal unit, do not fill above the maximum fill line located on the container.

For safe, convenient draining and disposal of used oil or shortening, Frymaster recommends using the Frymaster Shortening Disposal Unit (SDU). The SDU is available through your local distributor.

Left Display	Right Display	Action
Follow steps to Entering Filter Menu Mode on page 1-12.		
<i>DISPOSE</i>	Blank	Press ✓.
<i>DISPOSE NOW?</i>	<i>YES NO</i>	Press ▲. A yes answer turns fryer off. A no answer delays dispose and cooking continues
<i>REMOVE FILTER PAN</i>	<i>CONFIRM</i>	Remove filter pan and press ▲.
<i>INSERT DISPOSAL UNIT</i>	<i>CONFIRM</i>	Insert disposal unit under the drain and press ▲.
<i>OPEN DRAIN VALVE</i>	Blank	Open the drain valve.
<i>DISPOSING</i>	:60 sec. countdown timer	None required.
<i>VAT EMPTY?</i>	<i>CONFIRM</i>	Press ▲ when empty.
<i>VAT CLEAN?</i>	<i>CONFIRM</i>	Press ▲ when clean.
<i>CLOSE DRAIN VALVE</i>	Blank	Close the drain valve.
<i>REMOVE DISPOSAL UNIT</i>	<i>CONFIRM</i>	Remove disposal unit and press ▲.
<i>INSERT FILTER PAN</i>	<i>CONFIRM</i>	Insert the pan and press ▲.
<i>FILL VAT</i>	<i>CONFIRM</i>	Fill vat with fresh oil and press ▲ when full.
<i>OFF</i>	<i>OFF</i>	



DANGER

WHEN USING SOLID SHORTENING, PACK THE SHORTENING DOWN INTO THE BOTTOM OF THE FRYPOT. DO NOT OPERATE THE FRYER WITH A SOLID BLOCK OF SHORTENING SITTING IN THE UPPER PORTION OF THE FRYPOT. THIS WILL CAUSE DAMAGE TO THE FRYPOT AND MAY CAUSE A FLASH FIRE.

1.9.4 Dispose (BULK Setting)

Left Display	Right Display	Action
Follow steps to Entering Filter Menu Mode on page 1-12.		
DISPOSE	Blank	Press ✓.
DISPOSE NOW?	YES NO	Press ▲. A yes answer turns fryer off. A no answer delays dispose and cooking continues
FILTER PAN READY?	CONFIRM	Ensure the filter pan is prepared and press ▲.
OPEN DRAIN VALVE	Blank	Open the drain valve.
DRAINING	Countdown timer	None required.
TURN FILTER ON	CONFIRM	Turn filter on and press ▲.
WASHING	:50 countdown timer	None required.
TURN FILTER OFF	CONFIRM	Turn filter off and press ▲.
VAT EMPTY?	CONFIRM	Press ▲ when empty.
SWITCH TO BULK OIL MODE	CONFIRM	Using the mode switch, switch to BULK OIL MODE and press ▲.
CLOSE DRAIN VALVE	Blank	Close the drain valve.
OPEN DISPOSE VALVE	CONFIRM	Open dispose valve and press ▲.
DISPOSING	4:00 countdown timer	None required.
CLOSE DISPOSE VALVE	CONFIRM	Close the dispose valve and press ▲.
REMOVE FILTER PAN	Blank	Open the door and pull filter pan out of the cabinet.
IS PAN EMPTY?	YES / NO	Ensure the pan is empty and press YES (▲), otherwise press NO (▼) and follow the prompts.
INSERT FILTER PAN	CONFIRM	Insert the pan and press ▲.
FILL VAT FROM BULK?	YES NO	Press YES (▲) to fill vat from bulk and skip to OPEN OIL RETURN VALVE step in FILL VAT FROM BULK in the next section. Otherwise press NO (▼).
OFF	OFF	

1.9.5 Fill Vat from Bulk (Bulk option only)

Left Display	Right Display	Action
Follow steps to Entering Filter Menu Mode on page 1-12.		
FILL VAT FROM BULK	Blank	Press ✓.
FILL VAT FROM BULK?	YES NO	Press ▲.
SWITCH TO BULK OIL MODE	CONFIRM	Using the mode switch, switch to BULK OIL MODE and press ▲.
OPEN OIL RETURN VALVE	CONFIRM	Open the oil return valve and press ▲.
PRESS AND HOLD FILL POT BUTTON	Blank	Press and hold the fill pot button to fill the vat.
IS VAT FULL?	YES NO	Press YES (▲) when full, otherwise press NO (▼) and follow the prompt.
CLOSE OIL RETURN VALVE	CONFIRM	Close the oil return valve and press ▲.
SWITCH TO FRYER MODE	CONFIRM	Using the mode switch, switch to FRYER MODE and press ▲.
OFF	OFF	

1.9.6 Boil Out (NOTE: To enter boil out mode, the controller must be OFF)

DANGER

Never leave the fryer unattended during the boil-out process. If the boil-out solution boils over, turn the fryer off immediately and let the solution cool for a few minutes before resuming the process.

WARNING

Do not drain boil-out solution into a shortening disposal unit (SDU), a built-in filtration unit, or a portable filter unit. These units are not intended for this purpose, and will be damaged by the solution.

Left Display	Right Display	Action
Follow steps to Entering Filter Menu Mode on page 1-12. The controller must be off.		
<i>BOIL OUT</i>	Blank	Press ✓.
<i>BOIL OUT NOW?</i>	<i>YES NO</i>	Press ▲ to continue.
<i>IS VAT PREPARED?</i>	<i>CONFIRM</i>	Ensure vat is empty and drain closed and press ▲.
<i>REMOVE FILTER PAN</i>	<i>CONFIRM</i>	Remove the filter pan and press ▲.
<i>IS SOLUTION IN THE VAT?</i>	<i>CONFIRM</i>	Ensure solution is in the vat and press ▲.
<i>START BOIL OUT</i>	<i>CONFIRM</i>	Press ▲. Turns on and heats to 195°F (91 °C). The boil-out timer starts.
<i>BOIL OUT</i>	<i>30:00</i>	The countdown timer begins.
<i>BOIL OUT DONE</i>	<i>CONFIRM</i>	Press ▲ to confirm and cancel the alarm.
<i>IS SOLUTION REMOVED?</i>	<i>CONFIRM</i>	Once solution is removed press ▲ to confirm.
<i>OFF</i>	<i>OFF</i>	

DANGER

Remove all drops of water from the frypot before filling with oil. Failure to do so will cause spattering of hot liquid when the oil is heated to cooking temperature.

1.10 Polishing

The 3000 displays a series of prompts when a polish filter cycle is under way. To initiate a polish, press and hold the ◀▶ arrows simultaneously. The steps are detailed below. A “waiting to polish” message may display until the signal is received that the vat is ready for polish cycle to begin.

Left Display	Right Display	Explanation/Action
<i>POLISH NOW?</i>	<i>YES NO</i>	Respond to prompt with button push. Press ▲ under YES or ▼ under NO. Yes starts a polish, detailed below. No delays filter for 30 minutes and cooking continues. Answering NO after two prompts cancels polish.
<i>FILTER PAN READY?</i>	<i>CONFIRM</i>	Press ▲ when replaced.
<i>OPEN DRAIN VALVE</i>	Blank	Open the drain valve.
<i>DRAINING</i>	:40 sec. countdown timer	None required.
<i>TURN FILTER ON</i>	<i>CONFIRM</i>	Turn filter on and press ▲.
<i>POLISHING</i>	<i>15-MINUTE COUNTDOWN TIMER</i>	None required. The oil flows from the filter pan to the frypot and back to the filter pan for 15 minutes.
<i>CLOSE DRAIN VALVE</i>	Blank	Close the drain valve.
<i>FILLING</i>	:45 sec. countdown timer	None required.
<i>TURN FILTER OFF WHEN FULL</i>	<i>CONFIRM</i>	Turn filter off and press ▲.
<i>OFF</i>	<i>OFF</i>	

1.11 SCAN Mode

The daily stats mode can be used to see current stats about any product quickly throughout the day. Follow the steps below to view stats.

Left Display	Right Display	Explanation/Action
<i>DROP</i>	<i>DROP</i>	Press the Exit/Scan button.
<i>SELECT PRODUCT</i>	Blank	Press a product button to check daily stats.
<i>LONG NAME</i>	8 Character product name	Press ► to progress to next product stat.
<i>SHORT NAME</i>	4 character abbreviated product	Press ► to progress to next product stat.
<i>COOKS REMAINING</i>	Number	Number of cooks remaining until filter prompt. Press ►.
<i>COOKS TODAY</i>	Number	Number of cooks completed today. Press ►.
<i>COOKS SINCE LAST DISPOSE</i>	Number	Numbers of cooks since last dispose. Press ►.
<i>1 TIME</i>	Time	Time that product is programmed to cook. Press ►.
<i>1 TEMPR</i>	Temperature	Temperature that product is programmed to cook. Press ►.
<i>1 SENSITIVITY</i>	Number	The level of sensitivity the product is programmed to cook at. Press ►.
<i>1 ALARM TIME</i>	Shake Time	The time during a cook till a product shake alarm occurs. Press ►.
<i>1 ALARM NAME</i>	<i>SHAKE, STIR, NUMBERED ALARM</i>	This is the name of the alarm. Press ►.
<i>1 ALARM MODE</i>	<i>AUTO OR MANUAL</i>	The alarm mode the product is programmed with. Press ►.
<i>1 ALARM TONE</i>	<i>SHORT, MEDIUM, LONG DOUBLE OR LONG SHORT, NONE</i>	The shake alarm tone the product is programmed with. Press ►.
<i>FILTER PROMPT</i>	Number	The number of cook cycles before a filter prompt occurs. Press ►.
<i>INSTANT ON</i>	0	This is the time, in seconds, the fryer heats before the computer checks the temperature. NOTE: An incorrect entry may cause the fryer to overshoot temperature and over cook some products. Press ►.
<i>HOLD TIME</i>	<i>0:00</i> or previously entered time.	The time to hold product before discarding. Press ►.
<i>EXIT</i>	<i>EXIT</i>	Press Exit/Scan button twice to exit.

1.12 Sensitivity Settings Chart

Sensitivity Settings for Various Products

Product	350° F/176° C	Sensitivity Setting
<i>Chicken</i>		
chicken fillet, 1 ¼ oz.	3:25	5
chicken fillet (frozen), 4 oz.	4:20	5
chicken patty (frozen), 5 oz.	6:15	5
frozen chicken		5
fresh chicken, 9 pieces		5
<i>Potatoes</i>		
steak fries	3:43	5
regular fries, ½-inch	3:16	5
shoestrings, ¼-inch	1:50	5
shoestrings, ⅜-inch	2:40	5
tater tots	2:05	5
hash browns	2:05	5
farm fries	1:14	5
<i>Seafood</i>		
crab cakes	4:00	3
clam cakes	4:00	3
large scallops	3:25	3
small scallops	1:10	3
shrimp (35 to a lb.)	2:15	3
shrimp (40 to 75 to a lb.)	1:45	3
shrimp (75 to 100 to a lb.)	1:10	3
cod, 2 ½ oz.	3:25	7
flounder fillet, 7 oz.	4:35	3
flounder, whole, 10-12 oz.	6:25	3
cod fillet, 3 ½ oz.	4:35	7
perch, 5 oz.	4:30	3
haddock, 7 oz.	6:25	7
clams	2:00	3
oysters	1:10	4
strip clams (fresh)	0:35	4
strip clams (frozen)	0:45	4
<i>Vegetables</i>		
okra	4:30	4
eggplant	4:00	4
zucchini	3:00	4
mushrooms	3:45	4
onion rings (frozen)	3:00	4
cauliflower	1:45	4
<i>Other</i>		
corn dogs		4
chicken fried steak patty	5:00	5

Note: This chart is provided to assist in choosing a sensitivity setting. It is meant as a guide only and the settings may be changed to suit different needs.

CHAPTER 2: OPERATOR TROUBLESHOOTING FOR 3000 CONTROLLERS

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 authorized service agent 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 FLT CYCL displayed.	Fryer is in melt-cycle mode.	This is normal when fryer is turned on with oil temperature below 180 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 410°F (210°C) or, in CE countries, 395°F (202°C).	Shut the fryer down immediately and call your FAS for assistance.
Controller displays HI TEMP .	Frypot temperature is more than 40 °F (4°C) above setpoint.	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.	See vat setup page 1-3 to adjust temperature scale.
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.	Contactors 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.

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.
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	Oil 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.
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 temperature has risen 40°F (4.4°C) higher than setpoint. If temperature continues to rise, high limit will shut the burner off when temperature reaches 425°F (218°C) Non-CE or 395°F (202°C) CE.

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