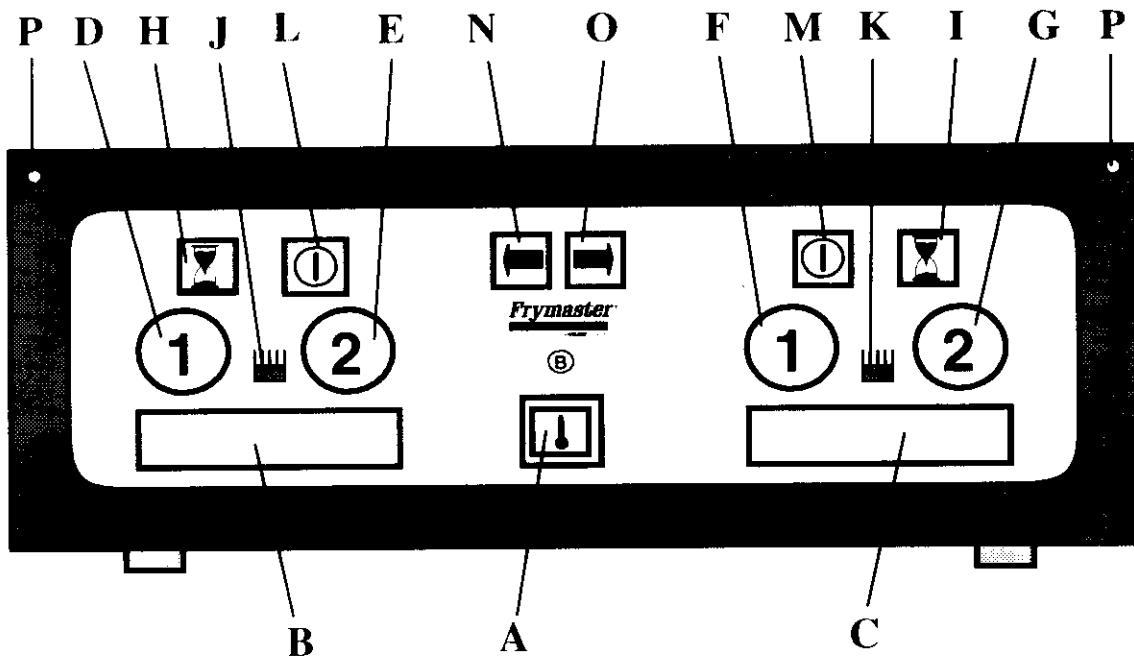


M-100B™ COOKING COMPUTER FUNCTION IDENTIFICATION




ITEM	DESCRIPTION
A	Switch - Temperature Display
B	Display - Left Channel
C	Display - Right Channel
D	Operate Switch, #1 Left Channel
E	Operate Switch, #2 Left Channel
F	Operate Switch, #1 Right Channel
G	Operate Switch, #2 Right Channel
H	Switch - Left Channel Recovery Recall/Use Time
I	Switch - Right Channel Recovery Recall/Use Time
J	Light - Left Side Heat ON
K	Light - Right Side Heat ON
L	Switch - Left Side ON/OFF
M	Switch - Right Side ON/OFF
N	Switch - Left Side Menu Select
O	Switch - Right Side Menu Select
P	Screws - Computer Mounting

INTRODUCTION TO THE M-100B™ COOKING COMPUTER

The M-100B™ cooking computer automatically maintains fryer temperature to cook any food product according to preprogrammed cooking instructions. The cooking computer acts as a cooking process timer and controls the fryer.

Featuring a programmed set of LED warning messages, the cooking computer utilizes a flashing display and an audible alarm for immediate attention when, for example, there is a failure in the probe-sensing device in the fryer.

You can add and display the name of any product in both test menus. Two duty or shake times can be programmed for any product in both test menus. The test menus can be set to automatically adjust the cooking rate to compensate for product variances in texture, internal temperature and basket load.




Recovery is a feature that reports the overall health of the fryer. Recovery time is displayed at the press of the  button. See **Recovery Out of Range** if you encounter a **REC LOC** condition.


The cooking computer is factory programmed with product, cooking times and temperature settings set to McDonald's standards.

The computer readout displays the remaining programmed cooking time for each product. The LED will flash **PULL** upon completion of the cooking cycle and an audible alert sounds. The cooking computer is programmed to signal duty action cues and quality control limits.

The automated melt cycle is a part of the M-100B™ program and is activated when you turn on the fryer. It will also reactivate anytime the vegetable oil is below 180°F (82°C).

BOIL-OUT is accessed through menu selection (if activated from the set-up mode) and will not allow the fryer to boil over if the correct amount of water and cleaning solution are used.

The **FILTER** mode is a new feature. When starting the built-in filtration cycle, access the **FILTER** mode by pressing the  or  key until **FILTER** appears in the display. After the built-in filter pan is set-up properly, the cooking oil has been transferred from the frypot to the filter pan and you have activated the filter pump (see the Filter Section of the equipment manual for details), press the **1** or **2** switch to activate the timer. The filtering process, which starts with the activation of the filter pump and stops when cooking oil is filtered. When the **FILTER** clock times out (5 minutes), close the drain valve, then disable the alarm by pressing the  switch. When all the cooking oil returns to the frypot from the filter system, turn the filter pump off.

To check the computer version, gas/electric fryer selection, press the  switch when the computer is **OFF**.

EQUIPMENT SET-UP AND CLOSE PROCEDURES

SET-UP

NOTE: Fill to the bottom oil level line with "cold" cooking oil. This will allow for cooking oil expansion as heat is applied. Do not fill "cold" oil any higher than the bottom line; overflow may occur as heat expands the oil.

- Ensure that the power cord(s) is plugged into the appropriate receptacle(s).

NOTE: Ensure that the vegetable oil level is at the top oil level line when the vegetable oil is at cooking temperature (hot). It may be necessary to add vegetable oil to bring the vegetable oil level up to the proper indicator mark.

NOTE: When fryer is not in use, place frypot cover on frypot.

COMPUTER INFORMATION

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. While this device is a verified Class A device, it has been shown to meet the Class B limits. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.


If necessary, the user should consult the dealer or an experienced radio and television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.


M-100B™ COMPUTER OPERATING INSTRUCTIONS



NOTE: Ensure that the vegetable oil level is at the OIL LEVEL line (or the **bottom** line for fryers equipped with 2 oil level lines) located on the rear of the frypot. It may be necessary to add vegetable oil to bring the vegetable oil level up to the indicator mark.

To Operate:

1. Turn ON the cooking computer (fryer) by pressing the right  switch (left or right side in a split pot). The computer will only display the product name when the pot temperature is within an acceptable range. The computer will alternately display *LOW TEMP, FR FRIES*, etc., if the pot temperature is 15°F (8°C) or more below the set temperature for the product selected. You will not be able to start the cooking cycle until the cooking oil is within 15°F (8°C) of setpoint.









NOTE: The last product displayed when the computer was turned OFF is displayed when turning the computer ON. If power is removed from the fryer, the default product will be displayed after the computer is turned ON.

2. Select the product to be cooked by pressing the  switch (left or right side in a split pot) until selected product name is displayed.



NOTE: The M-100B is programmed to cook Crispy Chicken (CSPY) and Chicken McNuggets (NUG) in the same side of a split pot arrangement. The  operate switch corresponds to Crispy Chicken, the  operate switch corresponds to Chicken McNuggets.

3. The computer will automatically enter the melt cycle if the pot temperature is below 180°F (82°C). The burners will cycle on and off causing the vegetable oil to melt without scorching. Within 45 minutes, the computer will exit the automatic melt cycle.
4. The heat light illuminates continuously as the computer allows the pot temperature to rise to the programmed set temperature for the product.
5. When the heat light goes off, the pot will be approaching the desired temperature, and cooking may begin.

Cooking Product:

1. Fill basket(s) with product, drop product, then press the  or  switch that corresponds to the full or split pot to be cooked. This will activate the cooking cycle of the product.
 2. The display will show the number of minutes and seconds of cooking time *remaining*.
 3. At the programmed shake time, the audible alert sounds, and the display flashes *SHAKE*. After the duty is performed, press the corresponding  or  switch to cancel the shake alarm. The switch is below the activated timer associated with the pot/product being cooked.
 4. After the completing the cooking time, the audible alert will sound, and the display flashes *PULL*. Remove the indicated basket and press the corresponding  or  switch to cancel the remove alarm. The switch is below the activated timer associated with the pot/product being cooked. If no other products are being cooked in the pot, the display shows *7:00 QA* indicating that the quality timer is counting down. If the quality time is set for some time other than 7:00 minutes/seconds, the display starts counting down from that time. (QA is not available for McChicken, Crispy Chicken or Filet o Fish).
 5. When the quality time expires, the audible alarm sounds, and the display flashes *QA*. Cancel the alarm by pressing the corresponding  or  switch. The switch is below the activated timer.
- NOTE: When you initiate a new cook cycle, the quality time automatically resets.

Temperature (Set/Actual):

To display the actual pot temperature, press the  switch once. To display the set temperature, press the  switch twice.

Low Temperature Indication:


The operate switches lock, the display flashes *LOW TEMP* and an audible alert sounds when the pot temperature is more than 45°F (25°C) below the set temperature during the cook cycle. If the the pot temperature returns to a range between 45°F (25°C) to 15°F (8°C) of setpoint, the audible alert will stop, but the timers remain locked and the display alarm continues flashing. All functions return when the pot temperature is within the 15°F (8°C) limit.

Probe Failure Indication:


If the probe fails, the display reads *PROBE FAILURE* alternating with the audible alarm. To cancel the alarm, turn the computer OFF. If a probe fails during hi-limit test, *PROBE FAILURE* is displayed.

NOTE: If the temperature probe fails in the left side of a split pot, that side cannot be turned back ON once it has been turned OFF.

Recovery Out of Range:

If the first recovery after the fryer power is turned off, then on takes longer than 1 minute or 40 seconds for electric fryers or 2 minutes and 35 seconds for gas fryers, the computer will display *REC LOC* and shut the fryer down. To clear REC LOC condition, enter the program mode and push the  button. If REC LOC occurs 3 or more times without correction, have the fryer serviced by a qualified service agent.




Close:



1. Press the  switch to the OFF position.
2. Filter vegetable oil and clean fryers.
3. Place the frypot covers on the frypots.

M-100B™ COOKING COMPUTER PROGRAMMING INSTRUCTIONS

A. MAKING CHANGES IN PROGRAM MODE





How to Enter the Program Mode

Both displays of cooking computer must indicate *OFF* before entering the program mode. Press the  switch and the left  &  switches simultaneously. Release all 3 switches at the same time. If you successfully enter the program mode the display will flash *McDONALD COMPUTER* then the version number.



To return ALL time, temperature and EPRA settings to the factory defaults, press all 4 operate switches (left and right  and ) simultaneously while in the program mode. *UPDATING MENU* will briefly appear in the display.

TEST MENU PROBE COOK COMPENSATION

NOTE: With Y (Yes), the timing of the product will be time/temperature compensated; with N (No), the product will cook at a straight time.





1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to locate the menu to be programmed.
3. Press the right  or  switch to select Y or N.
4. Exit program mode by pressing the right  switch.


CHANGE SHAKE, REMOVE, OR QUALITY TIME



1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to obtain the required menu item in the left display.
3. Press the  switch to obtain the required function (SHAKE, QA, PULL) in the left display. The current time setting and auto (AUTO) or manual (MAN) cancels appear in the right display.

NOTE: The manual (MAN) cancel applies only to PULL, QA, and FILTER functions.



4. To change the times, use the following switches:




Left		thousands
Left		hundreds
Left		tens
Right		ones

Press the right  switch will alternate between (AUTO) auto cancel and (MAN) manual cancel.


5. Press the  switch to lock in the new time(s).
6. Exit the program mode by pressing the right  switch.


CHANGE PROGRAMMED SET TEMPERATURE

1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to locate the menu item to be changed.
3. Press the  switch to locate the temperature function to be changed; displayed as *SET-TEMP* in the left display and *F* (Fahrenheit) or *C* (Centigrade) in the right display.
4. Change degree increments as follows:

Left		hundreds
Left		tens
Right		ones






NOTE: The computer cannot be programmed to a set temperature of more than 375°F (191°C).

NOTE: Press the right  switch to select *F* (Fahrenheit degrees), or *C* (Centigrade degrees).

5. Exit the program mode by pressing the right  switch.







PRODUCT ACCUMULATOR

NOTE: This feature keeps a running total of cooks per product.



1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the left or right  switch.
3. For the left pot, press the  switch. For the right pot press the  switch. A running total of cooks per product will be displayed.
4. To clear accumulated times from computer memory, press either  switch, then the  switch.

EDIT MODE PROCEDURES FOR A TEST MENU








1. Enter the program mode. See *How to Enter the Program Mode*.

2. Press the  switch to select either test menu 1 or 2.
3. Press the  switch to enter the edit mode. The right display will show *EDIT* and a blinking cursor will appear in the left display along with the product name.
4. To change a letter: Use the left  switch to go UP in the alphabet. Use the left  switch to go DOWN in the alphabet.
5. To move to a different character position, use the  or  switches.







NOTE: Pressing the left  switch will reset the product name to factory defaults.

6. To exit and save the message, press the  switch. *SAVE* is displayed in the right display while the program updates internal memory. This will exit back to normal program mode.
7. To exit program mode, press the right  switch.



PROGRAMMING TWO DUTY TIMES IN EITHER TEST MENU

1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to select either test menu 1 or 2.
3. Press the  switch, *DUTY1* appears in the left display. The time entered appears in the right display.
4. Press right  switch to enter Duty 1 time.
5. Press the  switch, *DUTY2* appears in the left display. The time entered appears in the right display.
6. Press right  switch to enter Duty 2 time.
7. Press the  switch to continue normal program mode.
8. To exit program mode, press the right  switch.

FUNCTION ELIMINATION





1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to locate the menu.
3. Press the  switch to locate the function to be eliminated.
4. Use the operate switches , ,  from left to right to set the time display to read *000*. This will eliminate the function, and it will not display in the run mode.
5. Exit the program mode by pressing the right  switch.

MENU ELIMINATION

1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the  switch to locate the menu to be eliminated. The menu will be displayed on the left display.
3. The right display will show a *Y* (Yes) or *N* (No). To eliminate the complete menu from the run mode, the *N* for no should be displayed by pressing either of the 2 right operate switches.
4. Exit the program mode by pressing the right  switch.

USE/TIME INFORMATION




NOTE: This procedure is used to determine the total amount of time that a fryer has been cooking.

1. Enter the program mode. See *How to Enter the Program Mode*.
2. Press the appropriate  switch to display use time.
3. To reset use/time data to zero, press and hold the  switch and press that side's  or  switch then release simultaneously.





NOTE: The simultaneous release of these 2 switches is critical. If not done correctly, data will not reset.

B. MAKING CHANGES IN THE "SETUP MODE"





How to Enter the Setup Mode

Press the right ,  and the  switches simultaneously. Release all 3 switches at the same time.





DESIGNATE GAS/ELECTRIC FRYER

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch to display *GAS* - *YES* or *NO*.
3. Push the right  or  switch to change fryer designation. *GAS* - *YES* will indicate a gas fryer, *GAS* - *NO* will indicate an electric fryer.
4. Press the  switch to save the settings and exit the setup mode.

DESIGNATE FULL/SPLIT FRYPOT

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch to display *1 VAT* in the left display. (*YES* in the right display indicates a full pot, *NO* indicates a split pot.)
3. Push the right  or  switch to change frypot designation.
4. Press the  switch to save the settings and exit the setup mode.



CALIBRATION ADJUSTMENT

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch to select *CALIB*.
3. Press the  switch. Current pot temperatures will be displayed for both sides.
4. *For the left side of a split pot:*
Press the left  switch to go UP a degree (max. 5° F). Press the left  switch to go DOWN a degree (max. 5°F).


For the right side of a split pot or a full pot:

To change a temperature for right side: Press the right **1** switch to go UP a degree (max. 5° F). Press the right **2** switch to DOWN a degree (max. 5° F). Use this step for full pots.


NOTE: The computer cannot be programmed to a set temperature of more than 375°F (191°C).

5. Press the  switch to save and exit.
6. To exit setup mode, press right  switch.

TEMPERATURE DISPLAY

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch to locate the word *DISPLAY* in the left display.
3. Press either the right **1** or **2** to select either constant menu display or alternating temperature/menu display.


NOTE: When *CONSTANT* is chosen, only the menu name is displayed. When *ALT* is chosen, the display will alternate the menu name with the actual pot temperature.



4. Exit the setup mode by pressing the right  switch.

CHANGE BEEPER RATE

This function has been removed from the Setup Mode. Beep rate 1 is assigned to SHAKE, QA, FILTER and any other duty alarm (e.g. burn-off, boil-out). Beep rate 5 is assigned to PULL. Beep rate 8 is assigned to IGNITION FAILURE, LOW TEMP, PROBE, HI LIMIT, and any other "failure alarm".


ACTIVATE/DEACTIVATE BOIL OUT MODE

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch until *BOIL-OUT* is shown in the display.



3. Press the right **1** or **2** to toggle the boil-out mode on/off from the computer's menu.
4. Press the  switch to save and exit.
5. Exit the setup mode by pressing the right  key.

CHANGE LANGUAGE

NOTE: Computer can be programmed for the following languages: English, French, French-Canadian, Spanish, or Portuguese.

1. Enter setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch. Continue pressing until the word *LANGUAGE* is shown in the left display.
3. Press the right **1** or **2** switch. Continue pressing until the desired language is shown in the right display.
4. After making language selection, press either ON/OFF switch to lock in selection. Display will show *LOADING* for about 5 seconds. This indicates selected language is part of computer the program.

EPRA SETTING

1. Enter the setup mode. See *How to Enter the Setup Mode*.
2. Press the  switch to locate *EPRA* in the left display and *YES* or *NO* in the right display.
3. The default setting is *EPRA - NO*. If the fryer is equipped with an Early Product Removal Alarm (EPRA), press the right **1** switch. *YES* will appear in the right display.
4. Exit the setup mode by pressing the right  switch.

NOTE: To change the EPRA setting from *YES* to *NO*, enter the *program* mode and press all 4 operate switches (left and right **1** and **2**) simultaneously. *UPDATING MENU* will appear in the display.