

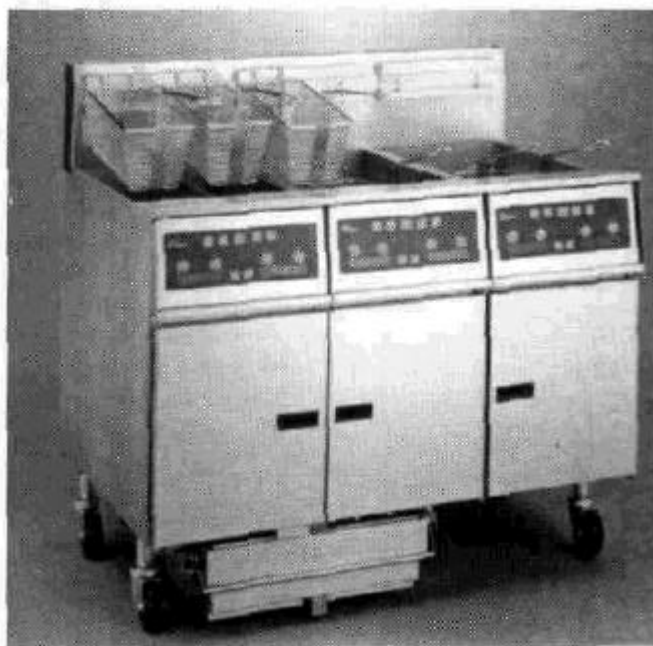


GAS FRYER with FILTER PITCO MODEL MG14S-C/MFD



This equipment chapter is to be inserted in the Fryer section of the *Equipment Manual*.

MANUFACTURED
EXCLUSIVELY FOR
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INSTALLATION & OPERATORS MANUAL

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FOR YOUR SAFETY:

Do not store gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

TO THE PURCHASER

POST IN A PROMINENT LOCATION INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THAT AN OPERATOR SMELLS GAS. OBTAIN THIS INFORMATION FROM YOUR LOCAL GAS SUPPLIER.

WARNING:

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE MANUALS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

WARNING

This appliance is equipped with a three prong (grounding) plug. This is for your protection against shock hazard in the event of equipment malfunction. Always plug the unit into a properly grounded three-prong receptacle. DO NOT cut or remove the grounding (third) prong.

WARNING

DO NOT use an open flame to check for gas leaks! Keep all open flames away from the machine at all times.

WARNING Machines equipped with casters and a flexible power cord, must be connected to a gas supply with a Quick-Disconnect device. This quick disconnect must comply with ANSI Z24.41. To limit the movement of the unit without depending on the connector or quick disconnect, a restraining cable must also be installed.

WARNING

There is an open flame inside the machine. The unit may get hot enough to set nearby materials on fire. Keep the area around the unit free from combustibles.

WARNING

Ensure that the machine can get enough air to keep the flame burning correctly. If the flame is starved

of air it can give off a dangerous carbon monoxide gas. Carbon Monoxide is a clear odorless gas that can cause suffocation.

WARNING

Carbon Monoxide gas can build up if you obstruct the flue. Blocking the flue will also cause the unit to overheat. DO NOT obstruct the flow of combustion/ventilation or air opening around the machine. Ensure that you meet the minimum clearances specified in the installation instructions. Adequate clearance around the unit is necessary for servicing and proper burner operation.

WARNING

If the machine should shut down unexpectedly wait 5 minutes before attempting to restart it. This will allow for any excess gas in the unit to dissipate.

WARNING

The power supply must be disconnected before servicing or cleaning the unit.

WARNING

DO NOT supply the fryer with a gas that is not identified on the data plate, located on the inside of one of the doors of the machine. If you need to convert the machine to another type of fuel, contact your dealer or Authorized Blodgett Service Agency.

WARNING

To prevent tipping of the machine and splashing of HOT oil your Pitco Frialator fryer is equipped with a Gas Hose Quick Disconnect and restraining device. This attaches the rear of the machine to the wall. When the fryer is in its operating location, lock the casters and reattach the restraining device to the rear of the machine.

WARNING

Shortening, when it is at cooking temperatures, is very HOT and DANGEROUS! Use extreme caution when handling! Use the proper protective gear such as insulated gloves, aprons, face shield and sleeves when handling hot shortening. DO NOT attempt to move any machine that has hot oil in it. Allow the oil to cool to room temperature or drain the oil into a suitable container before moving the fryer.

WARRANTY STATEMENT

Pitco Frialator, Inc. makes the following limited warranties to the original purchaser only for this equipment and replacement parts:

1. WARRANTY PROVISIONS - FRYERS A.

Pitco Frialator, Inc. warrants all parts, with the exception of the frypot, computer, burner and Heat Tube Baffle for 1 year after the date of installation of the fryer. B. If any parts become defective during the first year after the installation date, Pitco Frialator will also pay for the labor, freight and travel costs involved in replacing said part.

2. WARRANTY PROVISIONS - FRYPOTS

A. If a frypot develops a leak due to a defect in material or workmanship within the first 10 years after installation, Pitco Frialator, Inc. will either weld or replace, at its discretion, the frypot.

B. The customer will be responsible for all freight, labor and travel charges for this repair, except within the period stated in section 1-B.

3. WARRANTY PROVISIONS - COMPUTER

A. Pitco Frialator, Inc. will warrant the Intelli-fry Computer from defects in material or workmanship for a period of two years.

B. If the computer is found to be defective during the first 2 years after the installation date, Pitco Frialator Inc. will also pay for the labor, freight and travel costs involved in replacing said part.

4. WARRANTY PROVISIONS - BURNERS

A. Pitco Frialator, Inc. will warrant the Burners from defects in material or workmanship for a period of 10 years.

B. The customer will be responsible for all freight, labor and travel charges for this repair, except within the period stated in section 1-B.

5. WARRANTY PROVISIONS - HEAT TUBE BAFFLES

A. Pitco Frialator, Inc. will warrant the Heat Tube Baffles from defects in material or workmanship for a period of 3 years.

B. The customer will be responsible for all freight, labor and travel charges for this repair, except within the period stated in section 1-B.

Retain this manual for future reference

INSTALLATION INSTRUCTIONS

CAUTION:

This equipment is manufactured for the use on a particular type of gas and electrical voltage which is specified on the rating plate located on the inside of the door.

When your fryers arrive, look them over carefully noting any damage on the freight bill. If concealed damage is found after you have accepted the equipment, report it to the carrier immediately, as all claims must be filled within 15 days of the receipt of the shipment. Also, be sure to keep any packing materials as these will be necessary to make a claim.

Follow these installation instructions carefully. A proper installation is important for the operation of the fryers.

In the United States, all installations must conform to all local and state codes and well as the National Fuel Gas Code (ANSI 223.1 1992). In Canada, installations must be made in accordance to Canadian Standard CAN 1-B 149.1 or .2 "Installation Codes for Gas Burning Appliances & Equipment."

Electrically operated appliances must be electrically grounded in accordance with local codes; or in the absence of local codes, with the National Electric Code ANSI/NFPA No. 70-1996; in CANADA, with CSA C22-1 Canadian Electrical Code Part 1.

NOTE: Should you experience a power failure, your fryers will shut off automatically. If this happens, do not attempt to restart the fryers until the power is restored.

Ventilation:

A proper ventilation system is also an important part of the installation. For information on the construction and installation of ventilating hoods, please see "Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment", N.F.P.A. No. 96-1987. Copies can be obtained by writing to the Na-

tional Fire Protection Association, Battery March Park, Quincy, MA 02269

NOTE: It is recommended that the ventilation system be cleaned and maintained in accordance with the procedures laid out in the appropriate Preventative Maintenance Card.

Quick Disconnect Gas Connection:

Units equipped with casters must be installed with connectors that comply with the standards for connectors for Movable Gas Appliances, ANSI Z21.69-1987, and Addenda Z21.69A-1989. (CAN/CGA - 6.16 and CAN/CGA - 6.9.) This connection should include a quick disconnect device that complies with the Standard for Quick Disconnect Devices for use with Gas Fuel, ANSI Z21.41-1989. When installing a quick disconnect you must also install a means of limiting the movement of the fryer. This device will prevent the gas line or quick disconnect from being strained.

Fuel Supply Line Leak and Pressure Testing:

The fuel supply system must be tested before the machine can be used. If the fuel line is going to be tested at a pressure greater than ($>$) 1/2 PSI (3.45 kPa), make sure that the unit is disconnected from the fuel line. If the fuel line is going to be tested at a pressure equal to or less than (\leq) 1/2 PSI (3.45 kPa), the machine can be connected to the supply but the gas valve must be shut.

Clearances:

WARNING:

Area must be kept clear of all combustible materials.

Minimum clearance of 6" (15cm) must be maintained from combustible construction on each side and the rear of the equipment. This equipment may be installed on combustible floors.

Maintain a minimum of 24" (61 cm) clearance in front of the fryer to provide for proper operation, maintenance-

nance and servicing.

NOTE; Do not block the area around the bottom or underneath the fryer. The air required to support the gas combustion is drawn from the underneath and sides of the fryer.

A wiring diagram is located in the back of this manual and inside the fryers.

The control (interlock) voltage for this equipment must be 120 VAC (US & Canada). For other countries please check the rating plate.

Regular cleaning of this equipment, as well as the hood, is an important part of proper maintenance. Refer to Maintenance Requirement Cards for proper procedure and frequency.

Once the fryers are in place:

NOTE: Many of the components that require operating or maintaining/servicing can be accessed from behind the doors in the front of the machine.

Leveling the fryers will help ensure proper operation. To level the fryers loosen the two set screws on the caster stem. Rotate the collar of the caster to raise or lower the height of the unit. Tighten the set screws to lock adjustment.

Clean the fry tanks using the Boil Out procedure on Maintenance Card Number 14A

EQUIPMENT SET UP AND SHUT DOWN PROCEDURES

CAUTION:

Never operate this equipment empty. Always make sure there is the correct amount of shortening or in the case of cleaning, water in the tank before turning the unit ON.

Filling the fryer with oil:

It is very important to make sure the oil level is correct before attempting to heat shortening in your Pitco

fryer.

Liquid shortening can be poured directly into the fry tank until the correct level has been reached. This is indicated by a line on the right or left hand sides of the inside of the fry tank.

For solid shortening, the shortening must be cut into small blocks about 1" (2.54 Cm) in size. These small blocks must be placed under and around the heating elements.


The fryer can now be turned ON. **Set-**

Up:

NOTE: Please read the Operating instructions thoroughly before attempting to operate this equipment.

Make sure the gas line quick disconnect is attached. Make sure that the power cords are plugged into their receptacles and that the proper building circuit breakers are turned ON.

Turn the gas valve knob to the ON position.

Press the  key on either side of a full vat or the right key for the right side and the left key for the left side of a split vat for the computer to turn the unit ON. The burners will ignite, begin to heat and will be controlled by the computer /controller.

NOTE: From a cold start the fryer will automatically begin a melt cycle. This is a condition where the computer will heat the shortening in small controlled bursts of heat. Once the predetermined temperature has been reached, the unit will exit the melt cycle and go to normal operation. The melt cycle cannot be overridden.


Make sure that the shortening is at the proper level after the cooking temperature has been reached. It may be necessary to add shortening to maintain the proper level. There are two level lines on the side of each tank (H) for hot level, (C) for cold level.

NOTE: When adding solid shortening to an empty fry tank, first remove the baskets and support racks and fill the bottom of the tank with shortening, continue to pack the remaining shortening into the tank. Place the basket support rack on top of the shortening before turning the unit ON.

For liquid shortening fill to the level lines indicated on the right or left hand sides of the inside of the fry tank.

Gas pressure at the manifold should be 3.5" W.C. (0.872 kPa) (8.715 mBars) for natural gas and 10" W.C. (2.49 kPa) (24.9 mBars). Please check the rating plate on the inside of the door to verify the type of gas that your equipment was manufactured for.

Shut Down:

Press the  key to turn the fryer OFF.

To shut down for an extended period of time, turn the gas valve to the OFF position. This will insure that the unit cannot be turned ON accidentally.

NOTE: When the fryer is not being used, place the cover over the fry tank.

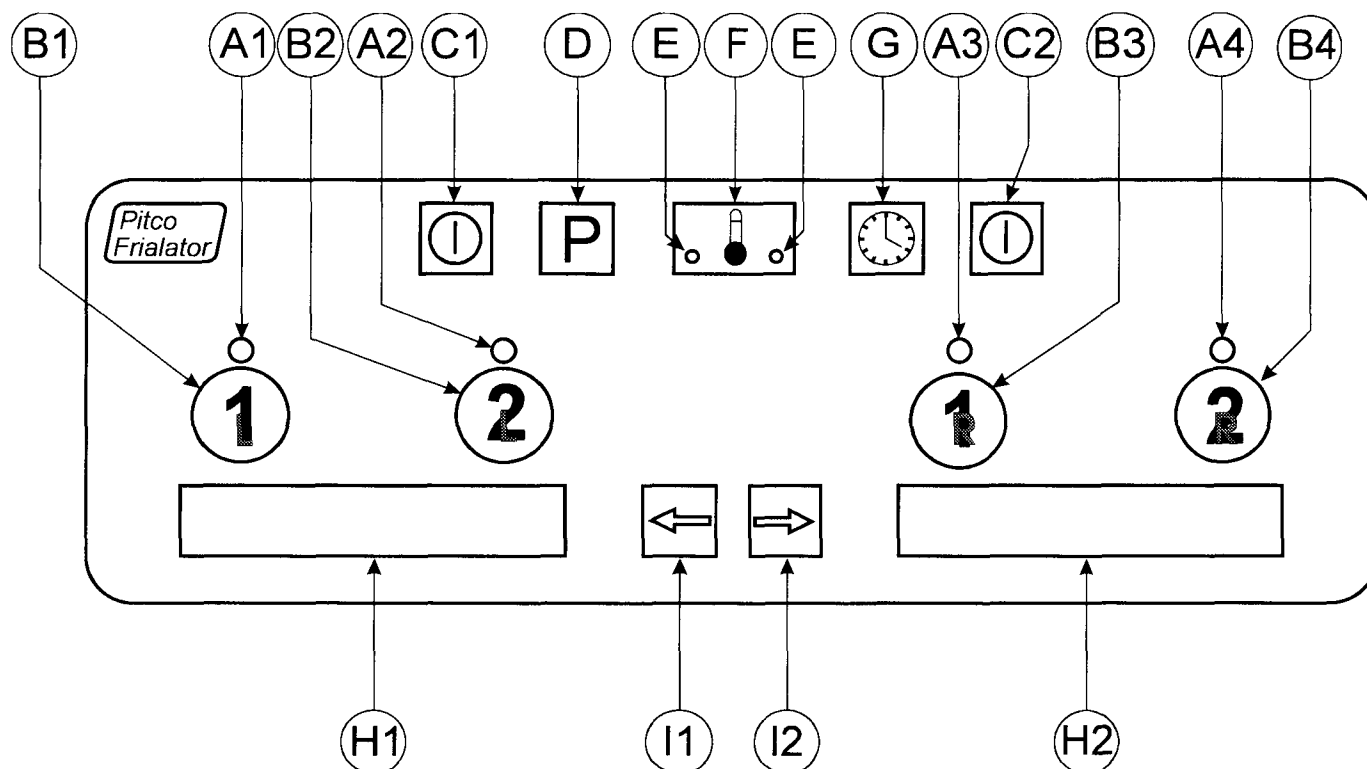
WARNING:

Shortening, when it is at cooking temperatures, is very HOT and DANGEROUS! Use extreme caution when handling! Use the proper protective gear such as insulated gloves, aprons, face shield and sleeves when handling hot shortening. When discarding used shortening, drain the fryer into the appropriate receptacle, move the receptacle to the grease barrel and pump the old shortening into the grease barrel.

NOTE: It is recommended that the flue be inspected periodically (about once a month). To do this, shut the fryer down and allow the machine to cool to room temperature. Turn the gas valve to the OFF position and, using a small flashlight look down the flue. The flue should look clear and completely free of any debris or oil. If any debris or oil

is found in the flue area DO NOT run the machine. Call the Authorized Service Agency to have a qualified service technician inspect the machine

THE PITCO FRIALATOR COOKING COMPUTER







ITEM	DESCRIPTION	FUNCTION
A1	1L Timer "In Use" Indicator light	Light will illuminate when a product key is pressed
A2	2L Timer "In Use" Indicator light	
A3	1R Timer "In Use" Indicator light	
A4	2R Timer "In Use" Indicator light	
B1	1L Program START key	These keys are used to start a product cook cycle
B2	2L Program START key	
B3	1R Program START key	
B4	2R Program START key	
C1	Left Split Vat ON/OFF key	Power ON and OFF keys
C2	Right Split Vat ON/OFF key	
D	Program key	For programming use
E	Heating Signal Indicator lights (LEDs)	Lights will illuminate when the computer calls for a heat cycle
F	Temperature key	Used for checking ACTUAL and SET temp.
G	Program Time key	For programming use
H1	Left Display Window	Illuminated at all times when the machine is ON
H2	Right Display Window	
I1	Left Selection Arrow	For programming use
I2	Right selection Arrow	






OPERATING INSTRUCTIONS

NOTE: Refer to page 4 for a complete pictorial view of the Computer/Controller.

NOTE: The hood will also be turned ON if any of the fryers under it is turned ON.

Turn the Computer/Controller ON by pressing the

 key (On Full Vat either  key can be pressed; on split vats the Left  operates the Left side and the Right  operates the Right side.) The Computer/Controller will display the menu item if it is within temperature range and will alternately flash the menu item and "WAIT" if it is not.



To change menu item press the left  key or right  key to move through the menu items available. Continue to press the key until the menu item you want to cook is shown in the display. On split vat fryers, first press  then the  key to choose left side or the  key for right side, then scroll as above.



If the shortening temperature is below 180°F (82°C) the unit will automatically begin its melt cycle. The heat demand LED(s) will be lit and the heat cycle will go ON and OFF automatically to prevent damaging the shortening. The computer will leave the Melt Cycle automatically and enter Cooking mode where the programmed cooking temperature will be maintained.

Normal Melt Cycle time from a cold start is less than 60 Minutes. Times may vary somewhat due to the temperature of the cold shortening and the power being supplied.









In the Cooking mode, the heat demand LED(s) will remain ON constantly until the Programmed cooking temperature is reached at which time it will cycle ON and OFF with the Burners to maintain that temperature.





Cooking Product:





Fill the baskets with product, drop the product and touch one of the Left Product keys,   or Right

Product keys   to start the cooking timers.

The display will show the cook time in minutes and seconds (**example:** 3 00) this time displayed will count downward toward 0 00. When the pre-programmed Shake time (French Fries only) has elapsed the alarm will sound and the display will show "SHAKE". This indicates that the basket should be shaken. This alarm is canceled automatically if programmed, or by pressing the product key which has the illuminated LED.

In a Full Vat Fryer, the  and  keys should be used to time the left basket,  and  keys should be used to time the right basket. Either key on each side work in parallel with the other on that side and will control the timing for that side. **Example:** Either  or  controls the timing for the left basket. Either  or  controls the timing for the right basket

In a Split Vat Fryer, if more than one product is being cooked at the same time the LEDs will flash at different rates. Each key   (Left Side) or   (Right Side) are independent of each other. The LED which is flashing on that side indicates the cook cycle which will be completed first. If only one key is pressed then that LED remains steady. **Example:**

 is pressed first and is timing down,  is then pressed. The LED above  flashes while the LED above  is steady.



NOTE: When an alarm sounds all other LED's will be extinguished and the operator will need to perform the required duty being displayed and cancel the alarm indicated by the flashing LED. When the alarm has been canceled the other times will be displayed in progress. No new cook cycles can be

started until the alarm is cancelled.

After the cooking time has counted down completely, the alarm will sound and "PULL" will be displayed as well as the LED over the product key that needs attention will flash. If no other products are being cooked in that vat, "QUAL" and a time counting down will be displayed. This is Quality time which indicates how long the last cooked product can be held in good condition. When the quality time reaches the programmed cooking time of the product "QA" will flash in the display.

NOTE: The quality timer is reset if another product cook cycle is begun on either side for Full Vat or on the same side for a Split Vat.

Displaying Actual and Set Vat Temperatures:

Press the Temperature key  once to display the actual vat temperature, "ACT XXX°F" will be displayed; press it twice to display the set temperature "SET XXX°F" will be displayed. Press and hold the  display actual vat temperature as long as the key is held or until alarm occurs.

Low Temperature Indication:









If the actual vat temperature should fall 15°F (8°C) below the set temperature the display will alternately flash "WAIT" and the menu item. Also a very short alarm (chirp) will sound until the vat temperature comes within 15°F (8°C) of the set temperature.

Probe Failure Indication:

Should the probe fail, the display will flash "PROBE" alternating with "FAILURE" and the alarm will sound. To cancel this alarm, the computer (or the one side indicated in the case of a split vat) must be turned OFF.



PROGRAMMING THE COMPUTER





NOTE: The computer must be turned ON and display a menu item before the programming mode can be entered. To enter the programming mode on full vat or left


side split vat machines, press the  key followed by the  key, then press the  key again followed by the  key. On right split vat machines only, use the following sequence of keys to enter the programming mode the    and  keys.



Choosing Menu Items:





The left display will show the menu item the right display will indicate "SHOW YES" or "SHOW NO".

By pressing the  and/or  keys the menu items can be scrolled and selected. In the right display "SHOW YES" or "SHOW NO" will indicate which menu item will be available in cooking mode. **Example:** To display only French Fries and Hash

Browns on a full vat, press the    and  keys, the last displayed item will show in the left display "HASH BRN", right display indicates "SHOW YES". This means that this menu item will

be available in the cooking mode. Press the  key and "PIES" shows in the left display the right display shows "SHOW YES". To change the status press

 The right display changes to "SHOW NO" indicating that this menu item will not be available in the cooking mode. Press the  key to scroll to the next menu item, "FR FRIES". The display will indicate "SHOW YES". Since French fries are to be available in the cooking mode no action is needed

for this menu item. Press the  key and continue to change the status of all menu items to "SHOW NO" except "FR FRIES" and "HASH BRN". Press the  key to exit program mode and review the menu items available in cooking mode by pressing the  and/or  keys. The only menu items that should show are "FR FRIES" "HASH BRN" and a non menu item "OPTIONS".

Programming Vat Temperature(s):

Each menu item can be programmed for a cooking temperature. To program a cooking temperature, first scroll to the menu item to be programmed, enter the

programming mode by pressing the and keys for full vat or left side split vat; press the and for right side split vat. Press the key. The left display will show the previously programmed set point **Example:** "SET 360°F". To change press the key for hundreds. The hundreds digit will flash. Press the key to lower the temperature, and the to raise. To change the tens digit press the key. The tens digit will flash. Press the key to lower the temperature, and the to raise. To change the ones digit press the key. The ones digit will flash. Press the key to lower the temperature, and the to raise. Press the key to save the changes and exit the programming mode.

NOTE: A maximum of 380°F (193°C) and minimum of 200°F (93°C) can be programmed.

Manual and Automatic Cancel of Alarms:

The shake alarm can be set to Auto (self-cancel after 7 seconds of sounding) or Manual cancel which requires the product key to be pressed to cancel the audible alarm. To change the status from Manual cancel to Auto cancel, first select the menu item then enter the programming mode by pressing the and keys for full vat or left side split vat; and the and keys for right side

split vat. Then press the key. The left display will show the alarm **Example:** "SHAKE A" (A for auto), the right display will show "AUTO CNC". To change, press the key. The displays will change to "SHAKE M" and "MAN CNC". Each menu item can be individually programmed in this manner.

Programming Times:

First select the menu item then enter the program

ming mode by pressing the and keys for full vat or left side split vat; and the and keys for right side split vat. Then press the key twice. In the left display A time in Minutes and Seconds will appear in the left display; in the right display the duty name will appear **Example:** Left "00 30" Right "SHK TIME". To change this time press the key for minutes, the key for tens of seconds, the key for ones of seconds. Press the key to save this time. To change to another duty time within the same menu item press the or keys for "PULL" or "QUAL". Press the key and proceed as above. Press the key twice to be able to change menu items and press the or keys to change. Proceed as above.


NOTE: To return all setting to the factory programmed specifications press the and keys the left display will show "RESTORE", the right display will show "FACT NO". To reset to factory specs press the key and the right display will read "FACT YES"; press the key to save this choice.


High Limit Testing:

Before testing the High Limits use the or keys until "OPTIONS" is shown in the left display for full vat and left side of split vat or right display for right side of split vat. Press the and keys. Use the or keys until the left display shows "HI LIMIT" Press the keys again and the actual vat temperatures will be shown **Example:** "ACT 360°F".






First High Limit (Internal)

Press and hold the key. The heat demand relay will engage and the heat demand LED(s) will be lit.





(For right side split vat the  key must be pressed and held.) The first high limit is internal to the computer and should trip between the temperatures of 400°F (204°C) and 420°F (215°C). This trip will be indicated in 2 ways: First the heat demand LED(s) will go out; second the display will alternate between "HI 1" and "XXX°F" or "XXX°C", indicating the trip temperature. This display will continue until the vat temperature drops below 400°F (204°C). If the first high limit fails to trip within the specified range 400°F (204°C) and 420°F (215°C) the display will alternate between "HI 1" and "BAD" until either the second high limit test is started (see below) or the test is ended. Proceed to the Second High Limit









test or to end the test press the  key twice to turn the fryer OFF and back ON.

Second High Limit (Mechanical)










Proceed with the first high limit test (see above). Once the first high limit has been tripped, press and hold the  or  key. The heat demand relay will activate and the heat demand LED(s) will light up. The vat temperature is displayed continuously. The second high limit should trip between 425°F (218°C) and 450°F (232°C). When the trip occurs the display will alternate between "HI 2" and "XXX°F" or "XXX°C" indicating the trip temperature. If the vat temperature reach 460°F (237°C) without tripping the second high limit the computer will automatically shut OFF the heat. The Left Product key  or Right Product Key  will no longer control the heat demand. After 30 seconds the computer will sound an alarm and the display will alternate between "HI 2" and "BAD". Should this occur the alarm can only be shut off by turning the computer OFF using the  key(s).

Changing between Degrees Fahrenheit and Celsius:


In the cooking mode, scroll using the  or  key until "OPTIONS" is displayed. Press the   key

and  keys and scroll again using the  or  key until "DEGREES" is displayed. Press the  key again and "DEGREE F" OR "DEGREE C" will be displayed. Press the  key to change. Press the P key again to save this choice. To exit to the cooking mode scroll using the  or  key until "EXIT" is displayed, then press the  key.










Boil Mode:







In the cooking mode scroll using the  or  key until "OPTIONS" is displayed. Press the   and  keys and scroll again using the  or  key until "BOIL" is displayed. Press the  key and then press  to start the boil timer. "BOIL OUT" and then "BOIL 60 00" will be displayed. The "60 00" is a sixty minute timer which will count down during the boil mode.

NOTE: The boil mode cannot be accessed if the vat temperature is above 212°F (100°C). At the end of the boil time cycle the audible alarm will sound one short beep and the display will show "BOIL DONE" and the LED will flash. Press the key under the flashing LED to cancel the boil mode. The display will show "TURN OFF".














NOTE: The unit must be turned OFF using the  key to exit boil out mode.

Alarm Volume:
















To change the volume of the audible alarms (except Wait Alarm. See below.), in the cooking mode scroll using the  or  key until "OPTIONS" is displayed. Press the    and  keys and scroll again using the  or  key until "VOLUME A" is displayed. Press the  key again and the display will show "VOL OFF", "VOL LOW" OR "VOL

HI". Use the  or  scroll keys to move between these choices. The alarm will sound as an example of each selection. Press the  key to save any changes made. To exit to cooking mode scroll using the  or  keys until "EXIT" is displayed, then press the  key.

Wait Alarm Volume:












To change the volume of the wait alarm, in the cooking mode, scroll using the  or  key until "OPTIONS" is displayed. Press the    and  keys and scroll again using the  or  key until "VOLUME W" is displayed. Press the  key again and the display will show "VOL LOW" OR "VOL HI". Use the  key to move between these choices. Press the pi key to save changes. To exit to the cooking mode, scroll using the  or  key until "EXIT" is displayed, then press the  key.

Language Selection:

In the cooking mode scroll using the  or  key until "OPTIONS" is displayed. Press the    and  keys and scroll again using the  or  key until "LANGUAGE" is displayed. Press the  key and the display will show the current language selection
Example: "ENGLISH". Change languages by pressing the  or  key. Press the  key to save your selection. To exit to cooking mode scroll using the  or  key until "EXIT" is displayed, then press the  key.

Recovery Time Review:


To review the recovery times, in the cooking mode


scroll using the  or  key until "OPTIONS" is displayed. Press the    and  keys and scroll again using the  or  key until "RECOVERY" is displayed. Press the  key again and the display will show the latest recovery time "NEW XXX". Press the  or  key to review the "OLD XXX" and "STD XXX" times.


Filter Timer:

The computer/controller is equipped with a filter timer to time the cleansing of the shortening. To initiate the filter timer, open the drain valve, the display will show "DRAINING". Once all the shortening has been drained down into the filter, turn the filter return pump ON by opening the RED return valve handle as shown in the filtering instructions on page 10.

KEEP THE DRAIN VALVE OPEN.

Press the  key. A five minute timer will start (FTR 5 00) at the end of which the alarm will sound and the display will flash "FILTER" "DONE" alternately

To cancel the audible alarm press the  key. "CLOSE" "DRAIN" will flash alternately because the drain valve is still open. Closed the drain valve. The display will indicate "TURN OFF". Continue to pump the shortening until bubbles are seen in the tank. This indicates that the filter return lines have been emptied and the pump can be turned OFF by closing the RED return valve handle.

Press the  key to turn the fryer OFF.

NOTE: The fryer will not return to the cooking mode until the fryer has been turned OFF and back ON again.

FILTERING INSTRUCTIONS

Filter shortening in accordance to the *Operations and Training Manual*.

WARNING:

Shortening, when it is at cooking temperatures, is very HOT and DANGEROUS! Use extreme caution when handling! Use the proper protective gear such as insulated gloves, aprons, face shield and sleeves when handling hot shortening. When discarding used shortening, drain the fryer into the appropriate receptacle, move the receptacle to the grease barrel and pump the old shortening into the grease barrel.

WARNING:

Do not attempt to drain more than one vat at a time. This will overfill the filter pan and could cause severe injury and equipment damage.

WARNING:

If the filter Circuit Breaker or motor Thermal Overload switches trip the filter will cease to operate. Before resetting the filter Circuit Breaker or Motor Thermal Overload close the Red Return Valve handle to prevent the filter from operating unexpectedly and possibly causing injury. Once the Circuit Breaker or Thermal Overload has been reset continue with the filtering operation as before.

Preparing the filter for use:

- Disengage filter drawer latches by grasping the handle across the front of the pan. Pull up on the handle and the pan can be pulled out.
- Slide drawer forward until it stops.
- Remove the pan cover by grasping the handle on the front right hand side. Push the cover backwards about 1 inch and disengage the rear of the cover from the pan. (You may have to shake the cover to do this.)
- Grasp the Left and Right handles of the Paper Retaining Frame and lift upward to remove it.
- Remove the filter paper or pad by folding the edges inward so that the debris is collected.
- Lift the Paper Support Screen out of the pan.

The Pan, Paper Support Screen and Paper Retaining Frame can now be cleaned.

NOTE: Be sure that the filter pan is free of any debris which could cause the paper and hold down ring not to seat properly.

- Place the Paper Support Screen in the bottom of the pan making sure that the screen is located on the two retaining pins in the bottom of the pan.
- Place filter Paper or Pad over screen making sure that there is an equal amount of excess paper on each side.
- Place the Retaining Frame on the paper or pad making sure that all edges are being pressed down evenly.
- Add powder (if used) per instructions on packet.
- Replace the cover by pushing the rear edge over the back of the pan, lay the cover onto the pan and pull forward, the cover should now locate itself on the pan edges.
- Slide filter drawer back under fryer making sure that the oil return pipe locates into its mating connection. Both sides should now be latched correctly so that the filter pan remains in place under the fryer.

CAUTION:

Be careful when using the clean out rod. Damage to the drain valve may result.

WARNING:

Hot shortening can cause severe injury. Take care when filtering or disposing of hot shortening. Protective gear such as gloves, apron, face shield and sleeves should be worn.

Operating Instructions of Filter:

CAUTION:

Do not attempt to filter unless shortening is at cooking temperature.

- **Open the drain valve.** *Unlatch the locking pin by pushing the small GREEN lever away from valve body and simultaneously pulling the GREEN drain valve handle down until it stops. The Display will show "DRAINING".*

- Allow the shortening to drain to the level of the heat tubes.


NOTE: If the oil does not drain when the Green Drain Valve has been opened it may be necessary to clear the drain lines of any debris build up. To do this follow the steps outlined below:

1. Close the drain valve.
2. Carefully unscrew the thumb screws from the cover to be removed. (Top or End cover.) A small amount of oil may come out and will need to be collected with an appropriate container or drop cloth. Remove the cover and gasket, take care not to loose these parts.



WARNING:

Shortening, when it is at cooking temperatures, is very HOT and DANGEROUS! Use extreme caution when handling! Use the proper protective gear such as insulated gloves, aprons, face shield and sleeves when handling hot shortening.

3. Using a clean out rod or similar appropriate tool clear any debris that is stopping the flow of oil in the drain manifold.
4. Once the debris has been cleared replace the cover and gasket. Align the gasket so that it will seal when the cover is attached. Tighten the thumbscrews. DO NOT use any tools to tighten the thumbscrew as this will over-tighten them and could cause damage to the threads.

- **Close the drain valve.** *Push the GREEN drain valve handle upward until the locking pin latches. (It is not necessary to push the small GREEN lever in order to make it latch.)* The Display will show "TURN OFF".
- **Clean the fry vat.** *Dip the cleaning tool in oil and wet down the vat walls. Sprinkle the walls and elements with McDonald's Fryer Cleanser. Scrub all surfaces with the fryer cleaning tool. Make sure all cleaner residue is removed from inside the fry vat.*
- Open the GREEN Drain Valve.
- Press the  key on computer.
Display will show "FTR MM SS".
- **Open the RED Return Valve.** *Pull downward on the Red Lever until you hear the pump operate.*
- Brush the residue in the bottom of tank down

into the drain.

- The filter timer will time out and the Display will show "FILTER" / "DONE" and an audible alarm will sound.
- Press the  key, the Display will show "CLOSE" / "DRAIN".
- Close the GREEN Drain Valve. The Display will show "TURN OFF" and the Fry Vat will refill.
Allow all of the shortening to return to the tank. Bubbles will be produced in the vat when all the shortening has been returned. This means that the return lines have been cleared.
- Close the RED Return Valve. *Push upward on the Red Return Valve Handle.* This will turn the pump Off.
- Press the  key and the Display will show "OFF".
- Allow the Drain and Return lines to drain for at least 5 minutes before removing filter pan to reduce dripping.

Your machine is now ready to cook with.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Computer does not come on nothing shows in either display	A. Main circuit breaker is turned off B. Fryer fuse is blown	A. Locate the correct building circuit breaker and turn OFF and back ON again. B. Call an Authorized Service Technician
Computer heat light comes on but burners do not heat	A. If the oil is hot the Hi Limit may be tripped	A. Allow the oil to cool, reset the Hi Limit and turn the computer OFF and back ON again.
Computer display shows "OFF" and cannot be turned "ON".	A. Bad computer	A. Locate the correct building circuit breaker and turn OFF and back ON again. If this does not reset the computer call an Authorized Service Technician.
Spark sound can be heard, NO main burners come on.	A. Gas Valve knob closed B. Gas line not connected C. Hi Limit switch tripped	A. Turn knob to ON position. B. Check gas line connection in rear of machine C. If oil is hot allow it to cool and reset Hi Limit
RED return valve is open no pump sound can be heard	A. RED return valve not fully open B. Filter circuit breaker may be tripped C. Filter motor Thermal Overload may be tripped D. Sensor switch may be loose	A. Pull slightly on the RED return valve handle B. Locate the filter circuit breaker behind the door of the left hand fryer and reset it. C. Push RED reset button located on end of filter motor, behind the door of left hand fryer. D. If the mounting screws are loose try to tighten them, if this is not possible call an Authorized Service Agency.
Drain valve is closed and the computer has been reset but still shows "DRAINING" or "TURN OFF"	A. GREEN drain valve is is not fully closed B. Sensor switch may be loose	A. Apply a little more pressure to close the valve B. If the mounting screws are loose try to tighten them, if this is not possible call an Authorized Service Agency.
Drain valve is open, the oil is draining slowly or not at all.	A. GREEN drain valve is not fully open B. Drain is plugged with debris	A. Apply a little more pressure to open the valve B. Use the clean out rod from inside the fry vat to clear the drain valve. If this does not clear the blockage, CLOSE the GREEN drain valve and follow the instructions for clearing the main drain line. CAUTION: Some HOT oil may come out when the cap is removed. Remove the four thumb screws from the end cap (do NOT lose these.) Use the clean out rod to clear the main drain tube. Install the end cap along with its gasket and four screws. Do not overtighten these screws.

To obtain copies of any McDonalds Operating or Service Manuals please contact Pitco Frialator at the address below, please reference the literature number for the publication you require:

L20-137 - McDonalds Electric Operating Manual

L20-138 - McDonalds Gas Operating Manual

L20-139 - McDonalds Electric Service Manual

L20-140 - McDonalds Gas Service Manual

In the event of problems with or questions about you order, please contact the Pitco Frialator factory, from 8:00 a.m. - 5:00 p.m., Eastern Standard Time, Monday through Friday, toll-free at:

(800)258-3708 US and Canada only or
(603)225-6684 World Wide

In the event of problems with or questions about you equipment, please contact the Pitco Frialator Authorized Service and Parts representative (ASAP) covering you area, through the National Service Network at:

(800)298-1862 US only, 24 hours