Pitco Frialator

Installation, Operation and Maintenance Manual for Fryer Model Numbers 7,12,14,14R & 18 Gas Fryers With Options and (F) Built-In and UFM (Spacefighter) Filter Systems

NRTL

Literature # L20-056 R4 (06/11)

ORIGINAL EQUIPMENT LIMITED WARRANTY

General Warranty

Pitco Frialator, Inc. warrants to the original user of its commercial cooking appliances and related equipment that said appliances and related equipment will be free from defects in material and workmanship under normal use for a period of one (1) year from the date of installation, with appropriate documentation, to a maximum of fifteen (15) months from the date of manufacture, subject to the following additions, exceptions, exclusions and limitations.

What is covered.

This warranty is limited to the repair or replacement at the Company's option, without charge, any part found to be defective within the warranty period and reasonable expenses incurred for freight and material for the installation of such part; in addition, the Company's obligation shall be limited to reimbursement for normal labor on such parts.

Pitco Frialator, Inc. agrees to pay The Blodgett Corporation Authorized Service and Parts Distributor, for any labor and material required to repair or replace, at the Company's option, any part which may fail due to defects in material or workmanship during the above general warranty period.

Standard Fryers and Cookers

In addition to the above general warranty, for its standard fryers and cookers, the Company warrants to the original user any stainless steel fry tank or cooking vessel to be free from defects for a period of ten (10) years from the date of manufacture and any standard fry tank to be free from defects for a period of five (5) years from the date of manufacture. Labor and freight shall be the responsibility of the user.

Economy Gas Fryers

In addition to the above general warranty, for its economy gas fryers, the Company warrants to the original user any stainless steel fry tank to be free from defects for a period of five (5) years from the date of manufacture and any standard fry tank to be free from defects for a period of three (3) years from the date of manufacture. Labor and freight shall be the responsibility of the user.

Limitations to Fry Tank and Cooking Vessel Warranty

After the expiration of the general warranty period, any additional warranty on fry tanks or cooking vessels shall only obligate the Company to repair or replace, at its option, any fry tank or cooking vessel which it determines to be defective. Claims under this item shall be supported by a statement detailing the defect, and the Company may require the return of the fry tank or cooking vessel claimed to be defective.

How to Keep Your Warranty in Force.

- € Make sure any shipping damages reported immediately. Damages of this nature are responsibility of the carrier.
- € Install the unit properly. This is the responsibility of the installer and the procedures are outlined in the manual.
- € Do not install it in a home or residence.
- € If it is not maintained properly. This is the responsibility of the user of the appliance and the procedures are outlined in the manual.
- € Maintain it properly. This is the responsibility of the user of the appliance and the procedures are outlined in the manual.
- € Adjustments, such as calibration, leveling, tightening of fasteners or plumbing or electrical connections normally associated with initial installation. These procedures are outlined in the manual.
- € If it is damaged due to flood, fire or other acts of God, this is not covered under this warranty.
- € Use it for what it is intended. If it is used for a purpose other than for which it was intended or designed, resulting damages are not covered under the warranty.
- € Make sure that it has the correct voltage, gas supply and/or good quality water. If a failure is due to poor water quality, harsh chemical action, erratic voltage or gas supplies these damages are not covered under the warranty.
- € Do not materially alter or modify from the condition in which it left the factory.
- € Do not obliterate, remove or alter the serial number rating plate.
- € Use only Genuine OEM parts from Pitco Frialator, Inc. or its Authorized Parts and Service Distributors, repairs are not covered by the warranty.
- € If any other failure occurs which is not attributable to a defect in materials or workmanship, it is not covered.

This warranty specifically excludes parts which wear or would be replaced under normal usage, including, but not limited to, electric lamps, fuses, interior or exterior finishes and gaskets.

Limits to the Warranty

Outside the United States of America and Canada, this warranty is limited to the replacement of parts and Pitco Frialator, Inc. will not bear any other expense be it labor, mileage, freight or travel.

Charges for mileage over one hundred (100) miles, travel time over two (2) hours, overtime, and holiday charges are not covered under this warranty. These charges are the responsibility of the individual or firm requesting these services.

If any oral statements have been made regarding the appliance, these statements do not constitute warranties and are not part of the contract of sale. This limited warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS.

Limitations of Liability

In the event of a warranty or other claim, the sole obligation of Pitco Frialator, Inc. will be the repair or replacement, at the Company's option, of the appliance or the component part. This repair or replacement will be at the expense of Pitco Frialator, Inc. except as limited by this warranty statement. Any repair or replacement under this warranty does not constitute an extension in time to the original warranty. Parts covered under this warranty will be repaired or replaced, at the Company's option, with new or functionally operative parts. The liability of Pitco Frialator, Inc. on any claim of any kind, including claims based on warranty, express or implied contract, negligence, strict liability or any other legal theories will be exclusively the repair or replacement of the appliance. This liability will not include, and the purchaser specifically renounces any right to recover special, incidental, consequential or other damages of any kind, including, but not limited to, injuries to persons, damage to property, loss of profits or anticipated loss of the use of this appliance.

If any provision of this warranty is unenforceable under the law of any jurisdiction, that provision only will be inapplicable there, and the remainder of the warranty will remain unaffected. The maximum exclusion or limitation allowed by law will be substituted for the unenforceable provision.

How to Obtain Warranty Service

First direct your claim to the Blodgett Corporation Authorized Service and Parts Distributor closest to you giving complete model, serial and code numbers, voltage, gas type, and description of the problem. Proof of the date of installation and/or the sales slip may also be required. If this procedure fails to be satisfactory, write the National Service Manager, Pitco Frialator, Inc., P. O. Box 501, Concord, NH. 03302-0501. USA

This warranty gives you certain specific legal rights; you may have other rights which vary from state to state.

NOTICES

There are three different types of notices that you should be familiar with, a NOTICE, CAUTION, and WARNING. A NOTICE is a special note used to call attention to a particularly important point. CAUTION is used to point out a procedure or operation which may cause equipment damage. The WARNING notice is the most important of the three because it warns of an operation that may cause personal injury. Please familiarize yourself with your new cooker before operating it and heed the notices throughout this manual. The WARNINGS are listed below and on the following page for your review prior to operating the unit.

FOR YOUR SAFETY

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

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.

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

TO THE PURCHASER, OWNER AND STORE MANAGER

Please review these warnings prior to posting them in a prominent location for reference.

WARNING

DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WARNING

Improper installation, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.

WARNING

Installation, maintenance and repairs should be performed by a Pitco Authorized Service and Parts (ASAP) company technician or other qualified personnel. Installation, maintenance or repairs by unauthorized and unqualified personnel will void the warranty.

WARNING

Installation and all connections must be made according to national and local regulations and codes in force.

WARNING

A country approved all pole circuit breaker with a minimum open contact gap of 3mm must be used for proper installation. (CE countries)

WARNING

During the warranty period if a customer elects to use a non-original part or modifies an original part purchased from Pitco and/or its Authorized Service and Parts (ASAP) companies, this warranty will be void. In addition, Pitco and its affiliates will not be liable for any claims, damages or expenses incurred by the customer which arises directly or indirectly, in whole or in part, due to the installation of any modified part and/or received from an unauthorized service center.

WARNING

This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable.

WARNING

DO NOT alter or remove structural material on the appliance to facilitate storage or for any other reason.

WARNING

This appliance is intended for professional use only and should be operated by fully trained and qualified personnel.

WARNING

DO NOT use the electrical cord as a leash to move the appliance. Series injury and appliance damage can occur.

WARNING

If the supplied power cord or receptacle is damaged, it must be replaced by a Pitco Authorized Service and Parts (ASAP) company technician, or a similarly qualified person in order to avoid a hazard.

WARNING

The power supply must be disconnected before servicing, maintaining or cleaning this appliance.

WARNING

The appliance is NOT jet stream approved. DO NOT clean the appliance with a water jet.

WARNING

DO NOT attempt to move this appliance or transfer hot liquids from one container to another when the unit is at operating temperature or filled with hot liquids. Serious personal injury could result if skin comes in contact with the hot surfaces or liquids.

WARNING

DO NOT sit or stand on this appliance. The appliance's top panel, filter pan, filter carriage, pan cover is not a step. Serious injury could result from slipping, falling or contact with hot liquids.

WARNING

NEVER use the appliance as a step for cleaning or accessing the ventilation hood. Serious injury could result from slips, trips or from contacting hot liquids.

WARNING

The filter pan should be dry and free of water droplets prior to use. Serious injury could result from hot steam vapors when hot oil/shortening mixes with water.

WARNING

DO NOT overfill filter pan with hot oil/shortening. Do not leave appliance unattended while draining or refilling with oil/shortening. Over filling the appliance can cause serious injuries and damage the appliance.

WARNING

The contents of the crumb catch and/or filter pan of any filter system must be emptied into a fireproof container at the end of each day. Some food particles can spontaneously combust if left soaking in certain types of oil or shortening.

WARNING

Completely shut the appliance down when the oil/shortening is being drained from the appliance. This will prevent the appliance from heating up during the draining and filling process. Serious injury and appliance damage can occur.

WARNING

This appliance is intended for indoor use only.

WARNING

DO NOT operate appliance unless all panels and access covers are attached correctly.

WARNING

It is recommended that this appliance be inspected by a qualified service technician for proper performance and operation on a yearly basis

WARNING

This appliance is designed to operate on a specific voltage. This information can be found on the data plate located on the rear of the appliance

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Chapter 1 - General Information

Congratulations on the purchase of your new Pitco Frialator universal fryer. This unit will give you many years of reliable service if you follow the simple operation and maintenance procedures in this manual. Contained in this manual are the general installation, operation, and maintenance procedures for the universal fryer Models 7, 12, 14, & 18. This information covers both units with built-in filters and Under Fryer Manual (UFM) filter.

WHICH FRYER DO I HAVE?

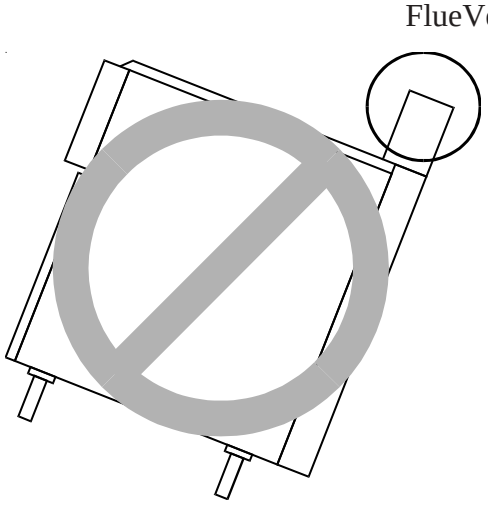
There are many models and options available for the gas fryer, each with its own model number. To find out which model you have, look inside the door at the equipmentData Plate. This Data Plate contains the following information: Model Number, Serial Number, BTU Rating, Gas Type, Gas Pressure Rquirements and Voltage Requirements.

CHECKING YOUR NEW FRYER.

Your new fryer and it's filter (where applicable) have been carefully packed. If a UFM style filter has been shipped to you it will be packed in a separate box and strapped to the top of the fryer crate. Every effort has been made to ensure that your fryer will be delivered to you in perfect condition. As you unpack your new fryer, inspect each of the pieces for damage. If something is damaged, DO NOT sign the bill of lading. Contact the shipper immediately, the shipper is only responsible for 15 days after delivery. Check the packing list enclosed with your fryer to ensure that you have received all of the parts to the fryer. If you are missing any parts, contact the **DEALER** from whom the fryer was purchased. As you unpack the fryer and it's accessories be careful to keep the weight of the fryer evenly distributed.

CAUTION

To prevent equipment damage, do not tilt the fryer onto any two of it's casters/legs or pull the unit by the flue vents.



Locate the model and serial numbers from each piece of equipment you purchased and write them, along with the Purchse and Installation dates , in the place provided in the front of this manual. **KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.**

CHECK YOUR ORDER

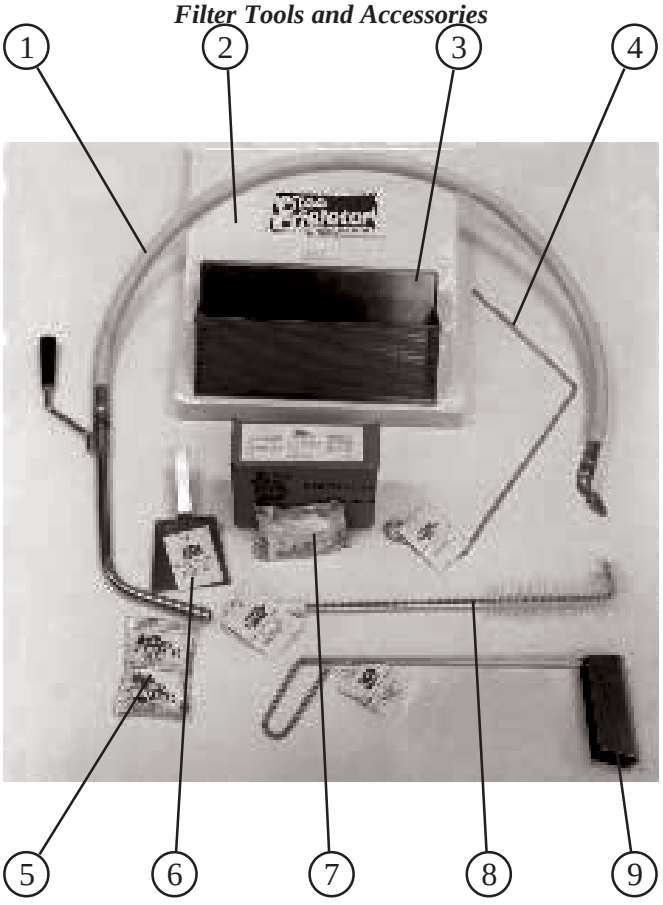
The crate containing the fryer unit will also contain the following:

2 - Fry baskets per fryer
1 - Fry Basket Hanger per fryer
2 - Pitco Cleaner Sample ..... Item # 5
1 - Drain Clean Out Rod ..... Item # 4

The crate with the filter module (if applicable) also contains the filter tools and accessories shown in picture. These items are very important and MUST be retained for future use. A complete description of each component is contained in the Oil/shortening Filter Procedure Chapter.

1 - Filter Crumb Catch ..... Item # 3
1 - Precoat Filter Aid ..... Item # 7
1 - Flush Hose (Optional) ..... Item # 1
25 - Filter Sheets ..... Item # 2
1 - Cleaning Brush (Fryer) ..... Item # 8
1 - Fryer Crumb Scoop ..... Item # 9
1 - Filter Crumb Scoop ..... Item # 6

Filter Tools and Accessories



Chapter 2 - Assembly and Leveling

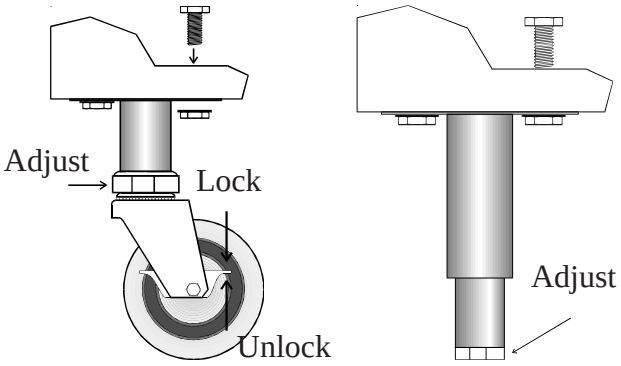
When you receive your fryer it is completely assembled with the possible exception of the legs (or casters) and the heat shield. In some cases if you have purchased a multi-fryer unit you may need to assemble the system.

LEG/CASTER INSTALLATION and ADJUSTMENT

Installing the legs and leveling the fryer is done with two 7/16" wrenches and a large pair of Slip Lock pliers. The legs/casters must be installed to provide the necessary height to meet sanitation requirements and assure adequate air supply to the burners. Attach the legs/casters by performing the following procedure.

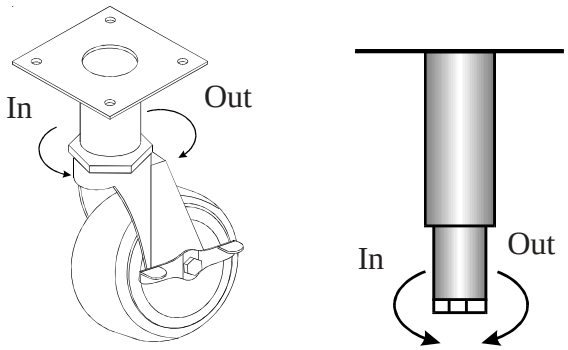
a. Lay the fryer on its back being careful not to damage the flue by pulling on it. Protect the outside of the fryer with cardboard or similar material when laying it down.

b. Attach each leg/caster with the four 1/4-20 x 5/8" bolts supplied with the fryer.



c. Mount the bolts from the inside of the fryer with the nut on the outside. The nuts have lock washers attached to them, therefore it is not necessary to use lock washers.

d. When all four legs/casters are mounted, stand the unit up being careful not to put too much weight on any one leg/caster. Adjust the height and level the fryer by adjusting the leveling devices on the leg/caster with the water pump pliers.



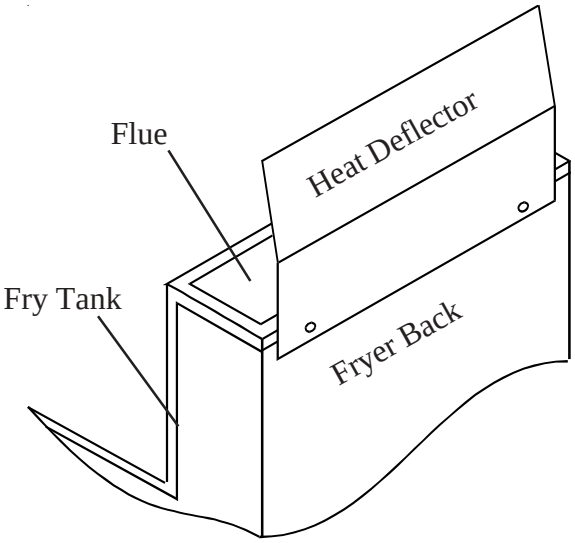
e. On units with casters, move the fryer to the desired location and lock the wheels using the locking devices on the sides of the front wheels.

HEAT DEFLECTOR INSTALLATION

You will find a removable label at the rear top edge of the unit. This label has instructions for positioning and installation of the heat deflector. Refer to the label and the instructions below to install the deflector.

a. Remove the two self-drilling screws from the top, rear of the fry tank.

b. Position the heat deflector so that the angled portion of the deflector is facing toward the front of the fryer. Secure the heat deflector to the back of the unit using the sheet metal screws previously removed.



WARNING

DO NOT obstruct the flow of combustion/ventilation or air openings around the fryer. Adequate clearance around the fryer is necessary for servicing and proper burner peration. Ensure that you meet the minimum clearances specified in the installation instructions.

c. When properly installed the angled section of the heat deflector will extend over the flue opening to redirect the heat. It SHOULD NOT cover the flue opening. Nothing should block the flue opening as this will cause the fryer to overheat and produce dangerous gases.

BASKET LIFT ACCESS

The basket lift mechanisms are installed at the factory and do not need adjustment.

ASSEMBLY OF MULTI FRYER SYSTEMS

If you purchased a multi-fryer unit it could be shipped in more than one piece. There are five joining strips that need to be attached in the Rear, Front, Upper Front, and under the Front and Rear Leg/Caster Mounting Plates. To assemble the unit follow the instructions below.

a. Unpack the units and move them close together.

b. Remove the Front Panels and Burner Heat Shields from each fryer.

c. Lay the fryers on their backs using cardboard or similar material to protect the surfaces.

d. Remove the legs/casters and reattach them by placing the Joining Plates between the leg/caster and the frame of the fryers.

e. Use the screws supplied with your system to attach the Front and Upper Front joining strips. Secure them tightly.

f. Stand the fryer system up but do not allow too much weight to be placed on any one leg/caster.

g. Attach the Rear joining strip the back of the fryer system using the supplied screws.

h. Connect the Filter Return Piping and the Drain Manifold using the supplied parts. Copy the layout from the existing fryers. Use a little cooking oil to lubriacte the Orange gaskets before forcing them over the piping.

i. Replace the Burner Heat Shields and Front Panels to complete the system assembly.

Chapter 3 - INSTALLATION

Although it is possible for you to install and set up your new fryer, it is STRONGLY recommended that you have it done by qualified professionals. The professionals that install your new fryer will know the local building codes and ensure that your installation is safe.

WARNING

The fryer must be properly restrained to prevent movement or tipping. This restraint must prevent the fryer from movements that would splash hot liquids on personnel. This restraint may be any means (alcove installation, adequate ties, or battery installation).

INSTALLATION CLEARANCES

The fryer needs clearance around it for proper operation. Adequate clearances allow for servicing and proper burner operation. The clearances shown below are for cooker installation in combustible and non-combustible construction.

	Combustible Construction	Non-Combustible Construction
Back	6"	6"
Sides	6"	6"
Floor	6"	6" (Needed for Combustion.)

In addition to the clearances required for proper fryer operation, there must be at least 28 inches of isle space in front of the fryer to remove/install the filter pan/module.

GAS CONNECTION

Your fryer will give you peak performance when the gas supply line is of sufficient size to provide the correct gas flow. The gas line must be installed to meet the local building codes or National Fuel Gas Codes. In Canada, install the fryer in accordance with CAN/CGA-B149.1 or .2 and local codes. Gas line sizing requirements can be determined by your local gas company by referring to National Fuel Gas Code, Appendix C, Table C-4 (natural gas) and Table C-16 (propane). The gas line needs to be large enough to supply the necessary amount of fuel to all appliances without losing pressure to any appliance.

Fuel Types -

WARNING

NEVER supply the fryer with a gas that is not indicated on the data plate. Using the incorrect gas type will cause improper combustion. If you need to convert the fryer to another type of fuel, contact your dealer.

Gas Line Connection - Connect the fryer to the gas supply line with a connector that complies with the Standard for Connectors for Movable Gas Appliances (ANSI Z21.69-Latest Edition). If you are installing a fryer with casters use a quick disconnect refer to the Quick Disconnect installation instruction. Connect the gas line to the fryer using a pipe joint sealant that is resistant to **L**iquefied **P**etroleum. If the fryer was disconnected during the fuel line testing, use a solution of soap and water to leak test the new connection.

NOTICE: NEVER use an adaptor to make a smaller gas supply line fit the cooker connection. This may not allow the correct amount of gas flow for optimum burner operation, resulting in poor cooker performance.

Quick Disconnect Gas Connection - Gas fryers equipped with casters must be installed with connectors that comply with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69-Latest Edition, and Addenda Z21.69A-Latest Edition. 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-Latest Edition.

When installing a quick disconnect you must also install a means for limiting the movement of the fryer. This device will prevent the gas line or the quick disconnect from being strained. The restraining device should be attached to the fryer on the back panel as shown in the illustration. The Quick Disconnect, Hose, and Restraining device can be obtained from your dealer.

Fuel Supply Line Leak and Pressure Testing - The fuel supply system must be tested before the fryer is 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 fryer is disconnected from the gas line. If the fuel line is to be tested at a pressure equal to or less than (≤) 1/2 PSI (3.45 kPa), the fryer can be connected to the fryer but the unit's gas valve must be shut. Test all gas line connections for leaks when they are pressurized with a solution of soap and water.

ELECTRICAL CONNECTION

The electrical service (where applicable) used by the fryer must comply with local codes. If there are no local codes that apply, refer to the National Electrical Code (NEC) to install the service. In Canada refer to CSA Standard C22.1 and local codes. Wiring diagrams are provided inside the fryer control box. The basic power requirements for the fryer are shown below.

Input Voltage	120 VAC, 60Hz	240 VAC, 50Hz
Current per fryer	0.5 Amps	0.5 Amps
Current per basket lift	1.8 Amps	1.0 Amps
Filter System	7.0 Amps	4.0 Amps

WARNING

The fryer is equipped with an oil proof, three prong (grounding) plug for your protection against electrical shock hazard in the event of equipment malfunction. DO NOT cut or remove the grounding (third) prong from this plug. This plug must be plugged into a properly grounded three prong receptacle.

Electrical System for Filter System - The UFM fryer has one power supply for the fryer controls and the filter module. When the fryer next to a Built In Filter has power, the filter is internally wired into the fryer. When the Fryer next to the Built-In filter system doesn't require power the Filter is supplied with its own power cord.

All fryer must be grounded in accordance with local code; if no local code apply, comply with NEC ANSI/NFPA No. 70-Latest Edition. It is advised that this power supply be plugged into a wall receptacle that is controlled by the Hood system. This will prevent the fryer from being operated without the Hood running. The UFM filter system also has a power cord which is plugged into the receptacle mounted on the right hand side on the inside of the fryer.

VENTILATION and FIRE SYSTEMS

Your new fryer must have the correct ventilation to function safely and properly. Exhaust gas temperatures can reach as high as 1200°F. Therefore, it is very important to install a fire safety system. Your ventilation system should be designed to allow for easy cleaning. Frequent cleaning of the ventilation system and the fryer will reduce the chances of fire. the table below provides a list of reference documents that provide guidance on ventilation and fire safety systems.

Topic	Underwriters Laboratory Document	National Fuel Gas Code Document
Grease Extractor	ANSI/UL 710-Latest Edition	ANSI/NFPA 96-Latest Edition
Ventilation Hood	ANSI/UL 705-Latest Edition	ANSI/NFPA 96-Latest Edition
Filter Unit	ANSI/UL 586-Latest Edition	ANSI/NFPA 96-Latest Edition
	ANSI/UL 900-Latest Edition	
Types of Fire Extinguishers and Detection Equipment		
CO2	ANSI/UL 154-Latest Edition	ANSI/NFPA 12-Latest Edition
Dry Chemical	ANSI/UL 299-Latest Edition	ANSI/NFPA 17-Latest Edition
Water	ANSI/UL 626-Latest Edition	ANSI/NFPA 13-Latest Edition
Foam		ANSI/NFPA 11-Latest Edition
Sprinklers	ANSI/UL 199-Latest Edition	ANSI/NFPA 13-Latest Edition
Smoke Detectors	ANSI/UL 268-Latest Edition	ANSI/NFPA 72B-Latest Edition
Fire Detection	ANSI/UL 521-Latest Edition	ANSI/NFPA 72B-Latest Edition
Thermostats		

Excessive ventilation causes Down Drafts, which will interfere with the pilot and main burner. Leave at least 18 inches of open space between the fryer's flue vent opening and the intake of the exhaust hood.

CAUTION

Ensure that your ventilation system does not cause a Draft into the fryer's flue opening. Down Drafts will cause the fryer to exhaust improperly which will cause overheating resulting in possible permanent damage to the fryer. Damage caused by Down Drafts will not be covered under equipment warranty. NEVER allow anything to obstruct the flow of exhaust gases exiting from the fryer flue. DO NOT put anything on top of the flue area.

NOTICE: NEVER connect the blower directly to the flue openings. The direct flow of air will cause poor temperature recovery, poor ignition, inefficient combustion and could extinguish the pilot.

INITIAL ADJUSTMENTS

After your fryer has been installed it needs to be adjusted to ensure that it will perform as designed. These adjustments must be performed by a **qualified person**. To perform these adjustment the following tools will be needed:

- Manometer (low pressure gauge)
- Digital Thermometer (Temperature probe)
- DC Millivolt Meter (0-1000mv)

VISUAL CHECKS

Before you begin filling and adjusting the fryer check the temperature bulbs (computer/high-limit), located in the fryer tank to ensure that the mounting screws are tight. Look down inside the fryer tanks to see the probes.

Gas Line Requirements - A correctly installed gas supply system will deliver 7.0 ±2.0" w.c. natural gas (12.0 ±1.0" w.c. LP) to all appliances connected to the line, operating at full demand. Typically the input gas pressure will not fluctaute and more than 1/2" w.c.

WARNING

Do NOT exceed 13.5" w.c. pressure as damage may occur to the gas valve.

Gas Pressure Adjustments -

a. Ensure that the gas valve knob is in the OFF position. Remove the manifold pressure tap plug and connect an accurate pressure gauge (range of 0-16" w.c. in 0.1" increments) or manometer.

b. Light the pilot burner for the unit being tested and adjust the thermostat to light the main burners.

c. The installed pressure gauge reading should be the same, ±0.1", as that marked on the data plate inside the door. If the pressure is correct go to step e, if not, adjust the pressure.

d. To adjust the pressure, remove the regulator adjustment screw cover (see the Gas Valve illustration.) Remove the cover cap. Use a flat tip screwdriver to adjust the screw until the correct pressure is reached. (clockwise will increase the pressure, counterclockwise will decrease the pressure.)

e. When the pressure is correct, install the cover cap.

f. Turn gas control valve knob to the OFF position. Remove the gauge/manometer and install the pressure tap plug using some liquid pipe sealant compound.

BURNER IGNITION SYSTEMS

CAUTION

Before going any further, fill the fryer with WATER. Water is used for the installation adjustments because the temperature will never exceed 212°F (100°C) thereby allowing plenty of adjustment time. Never let the water level go below the MIN LEVEL mark on the rear of the tank. Never allow water to boil over onto any of the controls if they are mounted in the front panel.

There are two basic types of pilotsystems: **Standing**, which must be manualy lit and **Electronic Ignition**, which lights itself. Determine which ignition system you have and refer to the directions below for that system.

WARNING

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

Standing Pilot Lights: To light the pilot light follow the steps outlined below:

WARNING

Wait 5 minutes before attempting to relight the pilot to allow for any gas in the fryer to dissipate.

a. If the gas to the fryer is turned OFF turn it ON.

b. Turn the Gas Valve Knob to the PILOT position and push the knob Inward.

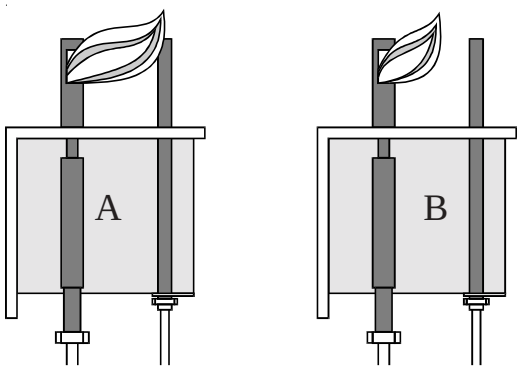
Hold the knob in for approximately one minute to purge the air out of the line. Hold a flame to the Pilot Light until the pilot ignites. Once lit, hold the knob in for approximately one minute, to make sure the pilot is established, and then release.

c. If the pilot goes out wait 5 minutes for any gas to dissipate and repeat step b. (If this is the first time the pilot has been lit try lighting the pilot several more times before assuming there is anything wrong.)

d. Turn the Gas Valve Knob counterclockwise to the ON position.

e. Refer to the OPERATING section of this manual for the instructions on how to operate the fryer.

Pilot Flame Adjustment - This procedure is only necessary on the **standard** pilot systems. The pilot flame should be adjusted to produce the correct millivolt output from the thermopile. Example A illustrates a pilot flame size that is too small to produce sufficient millivolt output. Example B is the correct size for proper millivolt output.



Pilot Flame Adjustment

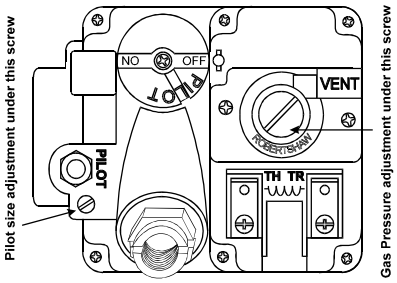
a. Locate the thermopile wires coming from the Gas Valve to the High Limit.

b. Connect the negative (-) test probe to pilot bracket or pilot tubing.

c. Connect the positive (+) test probe to to one of the High Limit terminal connection screws.

d. When the pilot is running the output from the thermopile should be between 350 and 450 millivolts. If the reading is within this range, the test is complete. If the reading is above or below this range continue to the next step.

e. Remove the pilot flame adjustment cover.



Gas Valve Showing Location of the Pressure Regulator and Pilot Adjustment Screw

f. Rotate the adjusting screw to achieve a reading of 400 ±50 mv. (Clockwise lowers the flame and the millivolt output. Counterclockwise increases flame size and millivolt output.)

NOTICE: Allow 3 to 5 minutes between flame adjustments to allow the reading to settle.

g. Replace the pilot flame adjusting screw cover.

Electronic Ignition Pilot Systems - There is nothing to manually light on the electronic ignition systems, simply follow the instructions for operating the machine and the pilot will auto-

matically ignite and extinguish.

Electronic Ignition Pilot Flame Adjustment - The illustration of the Gas Valve shows the location of the Pilot Adjustment Screw. Follow these steps to check and adjust the pilot flame:

a. Unplug the wire from the wire terminal at the Flame Sensor. Connect a DC microammeter between the flame sensor terminal and the end of the wire.

b. If a current reading of 0.15 - 0.25 microamps or greater is found this test is complete. If a reading below this level is found continue to the next step.

c. Remove the cover screw to expose the pilot flame adjusting screw. Rotate the screw in the direction necessary to achieve a reading of 0.15 - 0.25 microamps. (Clockwise lowers the flame and the current. Counterclockwise increases flame size and the current.)

NOTICE: Allow 3 to 5 minutes between flame adjustments to allow the reading to settle.

d. Once the pilot flame is set, replace the pilot flame adjusting screw cover and remove the ammeter. Make sure the wire is secure on the flame sensor terminal.

MAIN BURNER SYSTEMS

For the burners to work the gas supply valve must be open and the main power switch must be on. The main burner receives gas from the main gas supply through the thermostatically controlled valve. When the thermostat is turned up the gas control valve opens. The pilot will ignite the burners. On Electronic Ignition systems the Pilot will light automatically each time the thermostat calls for heat.

Burner Adjustment - After the burner system is operating adjust the Air Collars to obtain a soft, steady blue flame that should enter the heat tube without touching the front of the fry tank.

INITIAL CLEANING

When the fryer is shipped, many of its parts are covered with a thin coat of Kosher Grade Peanut Oil for protection. Before the fryer is ready for cooking it must be cleaned. This will remove the oil coating and any foreign matter that may have accumulated during storage and shipment. Perform the cleaning as described below.

a. Fill the tank with water and add one packet of Pitco fryer cleaner or a mild detergent.

b. Turn the fryer on and set the thermostat to 200°F. (If the fryer is equipped with a computer the computer will automatically control the BOIL OUT temperature.) Allow the fryer to heat for 15 minutes.

NOTICE: Do not leave the fryer unattended during cleaning. Never let the water level go below the "Min Level" mark on the back of the tank.

c. Using the fryer cleaning brush, scrub the inside of the fryer to remove protective coating.

d. When cleaning is complete, turn the fryer OFF and turn Gas Valve Knob to the PILOT position. If the fryer has Electronic Ignition turn the Gas Valve Knob to the OFF position. Drain the water into a container suitable for hot water and dispose of it in a responsible manner.

e. When the tank has cooled, thoroughly rinse it with cool water.

f. Using a clean dry cloth, wipe out all of the water.

WARNING

Remove ALL of the water from the Fry Tank. Any remaining water could cause hot oil to splatter out of the fryer when theoil reaches temperatures above 212°F/100°C.

CAUTION

Mild steel tanks must be wiped down/coated with cooking oil to keep the tank from forming surface rust.

g. Now that the tank is clean, you are ready to fill and operate the fryer. Refer to the appropriate section in this manual for these instructions.

THERMOSTAT CALIBRATION CHECK

NOTICE: Thermostat calibration requires that the temperature of the fryer be raised above boiling. Therefore, you will need to fill the fry tank with oil. To perform the calibration check detailed below you will need a digital thermometer or a good quality grease thermometer.

a. Place the tip of the thermometer in the oil approximately 1" above the temperature sensors.

b. Set the thermostat at 325°F and wait for the temperature reading on the thermometer to rise. As the temperature rises toward 325°F watch the thermometer closely.

c. The burners should turn off when the oil temperature reaches 325°F. If they DO NOT or they shut off below 325°F, remove the thermostat knob and adjust the calibration screw until they do. On older machines equipped with Solid State Thermostats the set screws that hold the thermostat knob in place can be loosened and the knob can be relocated on the shaft. Tighten the screws when finished.

WARNING

Do NOT exceed 13.5" w.c. pressure as damage may occur to the gas valve.

CAUTION

If the burners do not turn off at the lowest thermostat setting, the thermostat could be defective. Contact your ASAP representative.

d. Let the fryer cycle 4 to 6 times while checking the temperature. Compare the thermometer temperature against the thermostat setting. If the values are more than 5°F apart, continue to calibrate the thermostat.

Chapter 4: Operating Instructions

This chapter describes how to operate your fryer to obtain the best performance. Included in this chapter are filling, operating, and cleaning instructions for gas fryers.

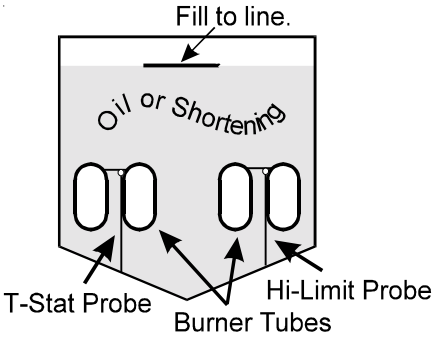
FILLING THE FRYER

Both liquid and solid shortening can be used in the fryer, but liquid is preferred. If solid shortening is used, it is recommended that you use the melt cycle feature (optional) to melt the shortening.

Filling the Fryer With Liquid Shortening

a. Make sure the drain valve is completely closed.

b. Fill the fryer with oil to the "Oil Level" line marked on the back of the tank.



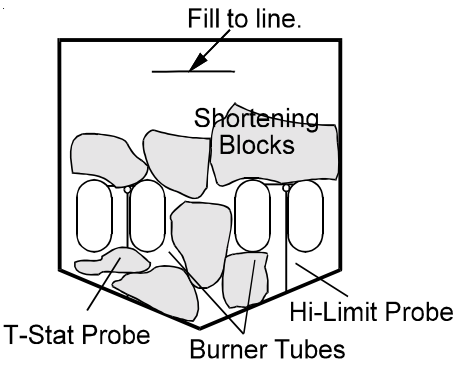
Filling the Fryer With Solid Shortening

WARNING

Never melt blocks of solid shortening on top of the burner tubes. This will cause a fire, and will void your warranty.

a. Make sure the drain valve is completely closed.

b. Remove the screen covering the tubes.



c. Cut the shortening into cubes no larger than 1". ALWAYS pack the shortening below, between, and on top of the burner tubes. DO NOT leave any large air gaps. Use care when packing the solid shortening in the tank. DO NOT

bend or break the temperature sensor probes. If these are damaged the fryer will not function properly.

d. Once the fryer is packed with shortening, the shortening must be melted. To melt the shortening refer to the Fryer Start-Up section for your fryer.

MELTING SOLID SHORTENING

Fryers equipped with a melt cycle feature will automatically melt the shortening. If your fryer does not have a melt cycle, follow the Manual Shortening Melting procedures.

Automatic Shortening Melting

On machines equipped with Computers or Digital Controls it is recommended that the melt cyle be programmed to be automatic. When these controls are programmed to perorm the melt cycle automaticaly they will exit the melt cycle automaticaly when a temperature of approximately 160°F is reached.

Manual Shortening Melting

NOTICE: The melting procedure below requires the manual cycling of the fryer. Watch carefully for smoke. If smoke is noticed, the shortening is scorching. To prevent this, decrease the time you leave the burners on.

On machines equipped with an Electric or Manual thermostats start the machine as described in the operating section of this manual and turn the thermostat up to make the burners turn on for about 4 seconds. Then turn the thermostat down to make the burners turn off for about 30 seconds. After the shortening has melted and is in a fully liquid state the thermostat may be turn up to the cooking temperature.

OPERATING INSTRUCTIONS

NOTICE: When not in use the shortening should be cooled and covered to prevent contamination.

CAUTION

Do not attempt to move the fryer when it has hot liquid in it. Splashing hot liquids can cause severe burns.

WARNING

Water and oil/shortening DO NOT mix. Keep liquids away from hot oil/shortening. Dropping liquid frozen food into the hot oil/shortening will cause violent boiling.

Fryer Start Up

DO NOT START FRYER WITHOUT FILLING WITH OIL!

a. Light the pilot light as described in the Installation section of this manual. (if the machine is equipped with Electronic Ignition this step will be automatic.)

b. Turn the thermostat control knob (located behind the door) to the desired temperature setting.

c. On fryers with Computers or Digital Controls, turn the fryer ON by pressing the OFF/ON/START switch to the START position and releasing. The heating light on display will come on. The heating light will cycle with the main burners.

Product Selection

Place the product in the fryer basket being used and press the numbered key for the product. Place the basket in the tank. Once pressed, the display on the computer console will change to show cooking time for the product.

Automatic Basket Lifts (Optional)

Before using the basket lifts, ensure that the oil/shortening is up to normal operating temperature. Pressing any of the timer keys on the control will cause the Basket Lift Arms to lower. When the time cycle is complete the BAsket Lift Arms will raise automaticaly.

Fryer Shut Down

There are two shutdown modes of fryer operation, STANDBY and COMPLETE. The standby mode removes the ability for the fryer's main burners to cycle. Complete shutdown turns off the gas supply to the fryer.

Standby Shutdown Turn the thermostat to OFF. Depress and turn the gas valve clockwise to the PILOT position (if fryer has an Electronic Ignition turn the gas valve to the OFF position). Place the OFF/ON/START switch to the OFF position. The fryer is now in Standby and can remain this way for short periods of time ONLY. NEVER leave the fryer in standby overnight.

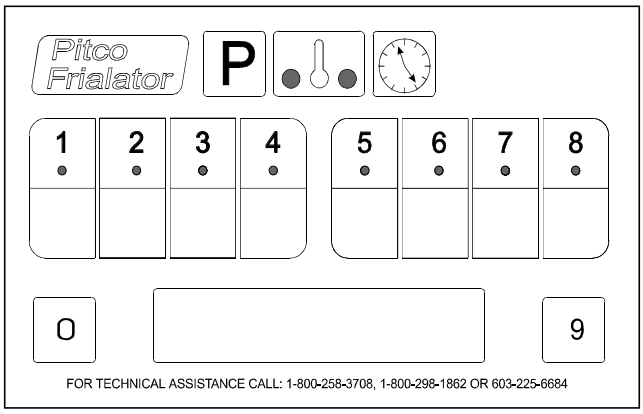
Complete Shutdown To completely shut down the fryer, turn the gas valve counterclockwise to the OFF position and place OFF/ON/START switch to the OFF position. The fryer is now completely shut down and can be cleaned and filtered.

Power Failure

NOTICE: No Attempts should be made to operate the fryer during power outages.

If power is removed from the fryer for any reason during operation, the unit will shutdown. Wait five minutes after power is restored before restarting the fryer. This will give any gas fumes in the burner time to disipate. To restart the unit, follow the Start-up procedure as you normally would.

Chapter 5 - THE INTELLIFRY COMPUTER



This section describes how to program the Intellifry computer. The computer monitors and controls the entire operating cycle of both frying baskets. The controls on the left of the control panel are for the left fry basket, and the right basket is operated from the controls on the right. The illustration below shows the Intellifry Multi Product computer control panel.

Your computer is fully programmable to satisfy all of your frying needs. To ensure proper product preparation, always refer to in house guidelines for cooking when changing the program. Each of the programmable features are described in the following paragraphs.

NOTICE: When programming the features of the computer, programming information will be displayed in the corresponding display window except on the Model I8.

Melt Cycle. The melt cycle of the fryer is used to soften and melt solid shortening. This is important to prevent scorching and extend the life of the shortening. During the melt cycle the heat is pulsed until the temperature of the shortening reaches 160°F. Once the temperature reaches 160°F the fryer switches to the constant (full) heat mode. The fryer comes from the factory with the melt cycle turned on.
Cook Time. The cooking time for a product can be changed to meet the needs of any recipe. The time set for a product is the time necessary at the SET temperature to cook the product. The Intellifry computer will compensate for any change in the oil/shortening temperature by increasing and decreasing the cooking time. For this reason, when a product is cooking the time displayed is elastic time, not actual time. When you put a product in the tank and start the timer, the oil/shortening temperature will drop. The computer senses this drop and extends the cook time to ensure that the product will receive the proper cooking time.
Shake Time. An alarm will sound at a preset time to tell you to stir or shake the product. DO NOT lift the product out of the oil/shortening.
Temperature. The oil/shortening temperature for each fryer is set separately and maintained by the computer. Only one SET temperature is allowed in each computer, so products being cooked in the left side must be cooked at the same temperature as the right side.
Boil. The Intellifry computer has a special boil mode program built into it. This program temperature cannot be reset. The boil mode will raise and hold the temperature of the fryer at 195°F. To enter the boil mode simply start the fryer as normal, the computer will sense that the water in the fry tank has reached 212°F and is not increasing. At this time the computer will display "BOIL" and lower the temperature to 195°F. The boil mode is exited by turning the fryer ON when there is oil in the fry tank. The computer will sense that the temperature has risen above 212°F and continue to het normally. Boil mode is used during weekly cleaning of the fryer described in the maintenance section of this manual.
Computer or Probe Failure. If there is a probe(devise use for sensing the temperature of the oil in the fry tank) failure or a problem with the computer, temperature control will automatically transfer to the auxiliary thermostat. The transfer is controlled by the computer and a transfer relay. If, for any reason, the relay becomes de-energized, temperature control will transfer to the auxiliary thermostat. Once the problem has been corrected, (the computer senses that the problem has been corrected or the power is restored to the transfer relay) temperature control will transfer back to the computer.

LEVEL 1 PROGRAMMING.

Checking the Temperature Functions and Cooking Times.

To check the ACTUAL temperature press the  once.

To check the SET temperature press the  key two times. After 5 seconds the display will return to normal.

To check the COOK, SHAKE and HOLD times press the  followed by the product key you wish to check. The times will be displayed in sequence followed by a short pause, finaly returning to the normal cook mode.
When the computer is calling for heat the two lights in the lower corners of the  key will illuminate.

Programming Cook, Shake and Hold Times.

To set the COOK time press the  key then the  key. Enter the desired product key and change the desired time by using the numbered keys. Press the  key to set the corresponding SHAKE time using the numbered keys. Press the  key to set the corresponding HOLD time using the numbered keys. Pressing the  key two times at any point during this proceedure will return you to the normal cook mode.

Programming Cooking Temperature.

This setting determines the thermostat setting for the computer. Unlike conventional thermostats, once the computer is set it will never need calibration. Set the desired temperature by performing the following procedure.

Press the P key followed by the thermometer key. The new COOK temperature may now be set using the numbered keys. Pressing the P key two times at any point during this proceedure will return you to the normal cook mode.

LEVEL 2 PROGRAMMING

There are several features that merit mention at this point. Their programming functions are explained along with their descriptions.

To enter the level 2 programming mode press the P key followed by the 0 key. If a password has been set you will be asked to enter it, if you do not remember what the password is use "6684". This will allow you to program these basic functions and reset the password.

To choose between "°F" or "°C" press the 1 key and use the 0 key to toggle between the options.

To set "PASSWORD REQUIRED" or "NO PASSWORD" press the 2 key and use the 0 key to toggle between the two options.

To set a new password press the P key and enter a four digit password. Press the P key again and the display will return to the normal cook mode. To continue setting level options in the level 2 programming you must re enter to level 2 programming mode in the same manner as before.

To set the beeper volume press the 3 key and use the 0 key to toggle between the options.

To set the Language option press the 4 key and use the 0 key to toggle between the options. At the time of printing the only language option available is SPANISH (ESPANOL). When a language option has been set the display will show in that language.

Pressing the P key two times at any point during this proceedure will return you to the normal cook mode.

To set the melt cycle option press the 5 key and use the 0 key to toggle between the three options available. Solid shortening melt cycle (MELT S), Liquid oil/shortening melt cycle (MELT L) or no melt cycle (NO MELT). It is highly recommended that a melt cycle is used to ensure longevity of oil and fryer.

To view the recovery test data press the 6 key followed by any numbererd key to view the stored data. Each time the fryer heats through the temperature range of 250°F - 300°F it records (in seconds) the time it took and stores it as recovery data. This data can be recorded when the fryer is new and viewed again at a later date to see wether the fryer is performing correctly.

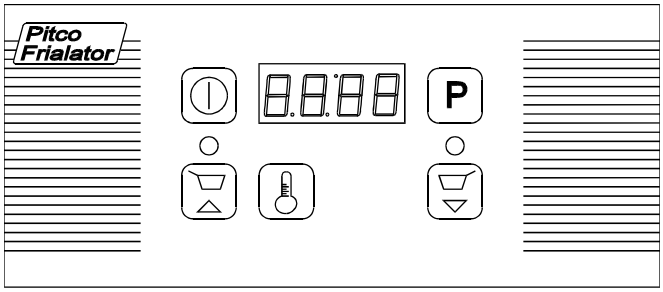
To set the control mode press the 7 key and use the 0 key to toggle between the options. The computer may be set in a "CONTROL" mode for total computer control or in "TIMER" mode where the Auxiliary Thermostat will control the temperature of the oil and the computer will act as a timer.

To exit the level 2 programming mode at any time press the P key two times. This will return you to the normal cook mode.

Chapter 6 - THE DIGITAL CONTROL.

The Pitco Digital Controller has been designed to take the place of the standard Solid State Thermostat. It provides the operator with more functions than the Solid State without giving the operator all of the features of an Intellifry Cooking Computer.

OPERATING THE DIGITAL CONTROLLER



Below is listed the control functions of the Pitco Digital Controller:

Press the ⏻ key to turn the control ON. Press and hold the ⏻ key for 3 seconds to turn the control OFF.

Press the ▲ or the ▼ key to start the Left or Right timers.

Press the 🌡 key to display the ACTUAL Temperature. Press the 🌡 key a second time to display the SET temperature.

PROGRAMMING THE DIGITAL CONTROL

Press the P key to enter the program mode.

Once the program mode has been entered the display will show the LH Timer setting 300. An adjustment may be made by using the ▲ or ▼ keys.

Press the P key again and the display will allow you to change the RH Timer setting by using the ▲ or ▼ keys.

Press P again, the display will show 350F and the Set Temperature may be changed by using the ▲ or ▼ keys.

Press P again, the display will show CH S and the Melt Cycle Options may be selected by using ▲ or ▼ keys. S may be selected to allow for a mild Melt Cycle needed for Solid Shortening. L may be selected to allow for a more aggressive Melt Cycle needed for Liquid cooking media. O may be selected to bypass a Melt Cycle.

Press P again, the display will show ULoC or LoC and the Password option may be set by using ▲ or ▼. If a Password Required option is programmed the Password will be ▲▲ then ▼▼ and is not adjustable.

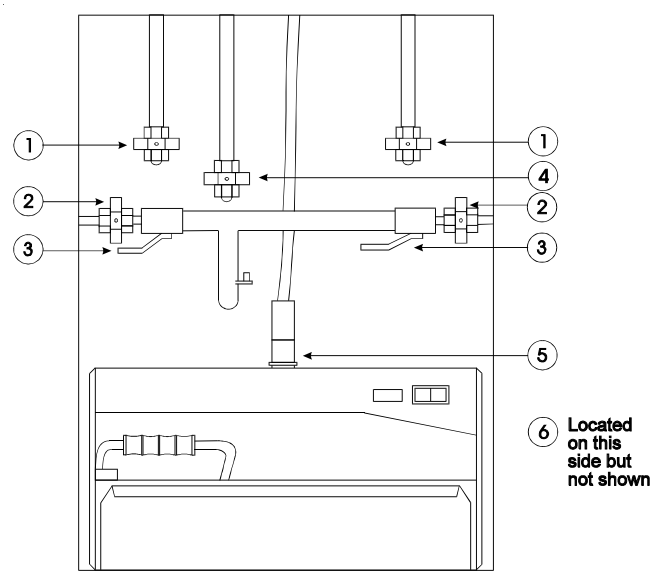
Press P again, the display will show F or C and the Fahrenheit or Celcius option may be chosen by using ▲ or ▼ keys.

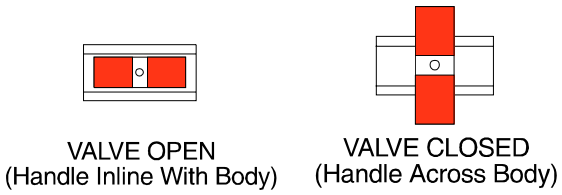
Press P again and the display will return to the LH Timer setting. To exit the Programming mode at any time, press and hold P for three seconds.

The following messages may also be seen in the display:

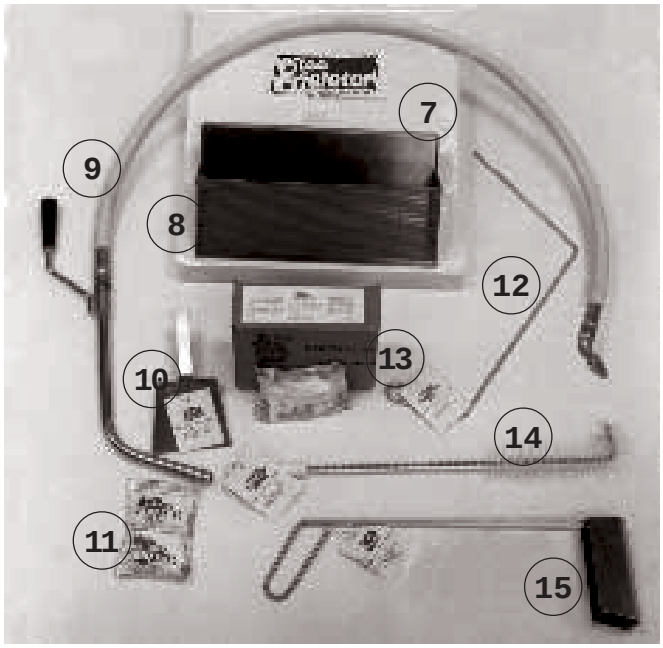
drop indicates the fryer is ready for cooking. HEAT indicates the controller is in the heating mode. CH indicates the controller is in a Melt cycle. . indicates the controller is outputting a heat signal.

Chapter 7 - Filtering procedures





UFM Fryer Illustrating Filter Components



Filter Tools and Accessories

(1) Return Valve(s) RED - Used for returning the oil to the fryer tank.

(2) Drain Valve(s) GREEN - Drain the oil from the fryer tanks to the filter pan.

(3) Flush Hose Connection YELLOW - Quick disconnect and valve for optional flush hose.

(4) Oil Return Connection - Quick disconnect for connecting the filter unit to the fryer.

(5) Filter Unit Cord - Provides electrical power to the filter unit.

(6) Filter Paper - Package of pre-cut filter paper.

(7) Filter Crumb Catch - Mounts in the filter pan and catches large debris when the oil is draining.

(8) Flush Hose (OPTIONAL) - Attached to the filter piping (4), this hose and nozzle is used to flush out the fryer tank. This hose is an optional item.

(9) Filter Crumb Scoop - Short handle wide pan design, this scoop is used to remove the debris from the filter pan.

(10) Cleaner - Used during fryer boil-out cleaning.

(11) Drain Clean Out Rod - Long handled design, this tool is used to clean out the drain openings.

(12) Filter Powder (Aid) - Coarse Diatomaceous earth used to enhance the filter ability of the filter media.

(13) Cleaning Brush - Used to brush down the crumbs inside the fryer tank during oil/shortening filtering.

(14) Fryer Crumb Scoop - A specially designed long handle scoop for scooping out the fryer. The scoop section is narrow and will fit between the heat tubes to allow access into the bottom of the tank.

This section describes the procedures used to filter fryers using either the UFM or built in filter units. The callouts in the figure point to the components discussed in the filter procedure. These component locations should be representative of either filter system. Frequent filtering of your oil/shortening will prolong the oil/shortening's usable life. Daily oil/shortening filtering is strongly recommended.

WARNING

At operating temperature the oil/shortening temperature will be greater than 300°F. Extreme care should be used when filtering operating temperature oil/shortening to avoid personal injury.

GENERAL FILTER HINTS

1. Ensure that all oil in the filter pan is returned before it cools and hardens. This is very important if you are using solid shortening.
2. Always use **Pitco Filter Powder** for fastest filtrations, maximum labor saving, and cleanest/clearest oil/shortening possible.
3. The longevity of your oil is related to how clean you keep it. With a Pitco built in system, it is easy to do a quick drain/refill anytime. By removing suspended particles often, it prevents them from burning.

4. When the time it takes to refill the fryer after filtering exceeds the time shown below, carefully scrape the filter bag or paper. If scraping does not bring the refill time back down change the filter paper.

Model	Refill Time
7	2:00 Minutes
14 (all models)	3:00 Minutes
18	5:00 Minutes

5. Built-In Systems - Disconnect the filter pan hose after filtering to allow the hot oil/shortening to drain.
6. Flush Hose (Optional) - If your fryer has a flush hose allow it to drain completely before storing.
7. Always check to ensure that the black quick disconnect (oil return line) is completely engaged before filtering. When connecting the quick disconnect, you will feel a definite snap and hear a click when the connection is made. After connecting the hose, gently pull on the connection to make sure it is connected.
8. The filter power **MUST** be plugged into the fryer at all times.
9. When the filter pan is empty bubbles will be seen returning to the fry tank. Purge the filter lines by allowing the filter pump to run 15 seconds after air bubbles show inside the fryer tank.

Filter Procedures:

WARNING

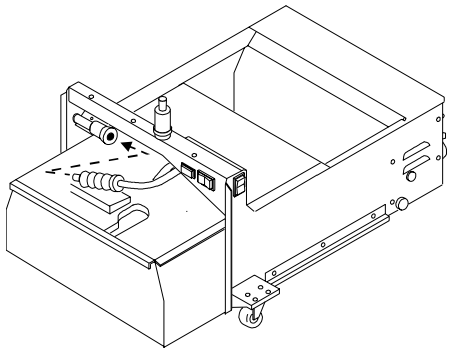
When working with hot oil ALWAYS wear oil-proof, insulated gloves.

Although there are differences between UFM and Built-In filters, the process used to filter the fryer is the same.

NEVER

- Run the filter system without a filter bag/paper.
- Attempt to filter more than one fryer tank at a time.
- Drain the fry tank when the machine is still running.
- Store the UFM Filter Unit anywhere other than in the fryer filter cavity.

a. Disconnect the filter pan, slide it out and empty the crumb basket. Scrape previously filtered residue off the filter paper. Examine the filter bag for dark, scuffed, or torn areas.



b. Turn the fryer OFF (See Standby Shutdown). Remove the baskets from the fryer tank(s). Use the clean out rod (12) to lift out the tube screens. If there are excess crumbs in the fryer tank, remove them with the crumb scoop (15).

c. Stir in Filter Powder (13) to the oil/shortening in fryer. It is also acceptabile to wait until the oil/shortening has been drained into the filter pan before adding the Filter Powder.

2 packets for #14 size machines (35 - 55lb)
3 packets for #18 size machines (55 - 85lb)

d. Check the drain spout to ensure that it is aimed into the filter pan.

NOTICE: Always open a system valve before starting the filter pump.

e. Slowly open the green handled drain valve (3) for the tank being filtered. If necessary use the clean-out rod (12) to clear the crumbs from the drain. Use the long handled brush (14) to clean the sides of the tank as the oil drains. If you have the optional flush hose (9) go to step i.

CAUTION

The filter tank can only hold the oil from one fryer. DO NOT try to filter more than one fryer at a time.

NOTICE: NEVER turn on the filter pump unless the PREHEAT FINISHED light (5) is on.

f. Open the red handled return valve (1) to the tank you are filtering. When the tank is empty close the green drain valve (3) and turn on the filter pump. As the tank fills, brush the inside of the tank to remove crumbs.

g. When bubbles are seen coming out of the oil return spout turn off the pump. Open the green handled drain valve (3) and allow the tank to drain again. Repeat steps b through d until the tank is clean.

h. When the tank is clean, drain the oil/shortening by opening the green handled drain valve (3). Allow the oil/shortening to circulate for approximately 2 minutes by returning oilto the fry tank while it is still draining. This polishes the oil/shortening and cleans out the filter lines.

i. OPTIONAL FLUSH HOSE (9) - Connect the flush hose to the quick disconnect (4). Direct the flush hose nozzle into the tank being filtered. Open the green handled drain valve (3), the yellow handled flush hose valve, and start the pump. Continue to rinse until all the debris has been removed from the tank. Turn off the pump and allow the tank to drain to the filter. Close the yellow handled flush valve and disconnect the flush hose.

j. Turn the pump off, close the green handled drain valve (2), and replace the tube screen. Open the red handled return valve (1) and turn on the pump to refill the fryer with the filtered oil. Continue to run the filter pump until bubbles

come out the oil return opening. Allow the pump to continue pumping bubbles for about 15 seconds, this will help keep the oil return lines clear. Turn the pump off and close the red handled return valve (1). If necessary add more oil/shortening to the tank to return the oil/shortening level to at least the minimum level mark. The fryer is now ready for use.

USING THE UFM MODULE AS A PORTABLE FILTER

The UFM filter system, when used with the filter unit flush hose part # B6623201, can be moved around the kitchen to filter individual fryers. To filter other fryers follow the procedure below:

a. Unplug the power cord from the fryer and disconnect the quick disconnect from the top of the filter unit.

b. Move the filter unit to the appliance to be filtered. Attach the flush hose to the filter unit quick disconnect. Plug the filter unit cord into a three prong (grounded) outlet using a 3 prong (grounding) 14 AWG extension cord.

c. Remove the filter pan lid and direct the appliance oil drain into the crumb catch. Use a drain extension connected to the fryer drain valve to allow the drain to extend over the filter pan. Be sure to wait for the Preheat Finished light to come on before turning on the pump.

d. When finished filtering, disconnect the flush hose and empty it into a fryer. Hang the hose, nozzle down, to drain.

FILTER PAPER REPLACEMENT

The filter sytem your fryer is equipped with will be either a UFM or built-in filter system. While both filter systems perform the same function, they have different filter system components. This section describes each of the filter system's components and details the procedures necessary to replace the filter media. Determine which filter system you have and refer to the appropriate section.

<u>UFM Filter System</u>
The UFM filter module, also referred to as the Spacefighter filter, stores neatly under the fryer when not in use.

WARNING

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

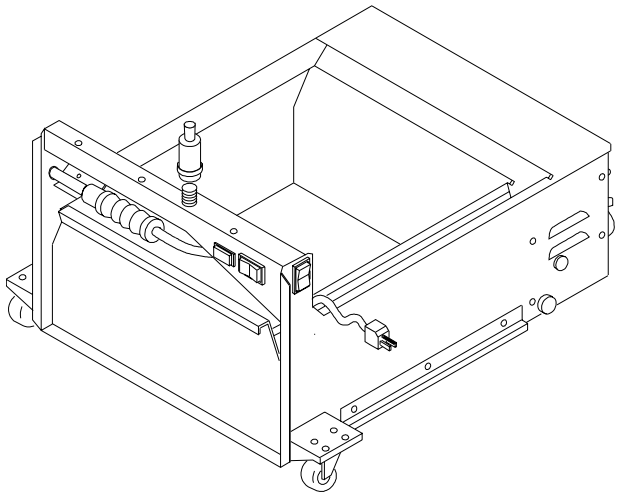
WARNING

At operating temperature, the shortening in the fryer may be hotter than 375°F (190°C). This hot, melted shortening will cause severe burns. Do not let the hot shortening touch your skin or clothing. Always wear insulated oil-proof gloves when working on the filter system.

WARNING

It will be easier and safer if the filter assembly has cooled to room temperature before handling any filter parts.

UFM Filter Module and its components



(1) Filter Pan - Holds the oil from the fry tank.

(2) Pump Switch - Two position switch used to turn the filter pump ON/OFF.

(3) Preheat Finished Indicator - Lights to indicate that the filter lines are warmed to filtering temperature.

(4) Pick-Up Tube - Connects filter envelope assembly to piping. Incorporates a strainer to protect filter pump from grit in the event of envelope failure.

(5) Filter Assembly Connector - An insulated handle covers the filter pan assembly connection. This connection separates the filter pick-up assembly from the filter piping for removing the filter pan for cleaning.

(6) Filter Unit Quick Disconnect - Quick disconnect that connects the filter unit to the fryer.

(7) Pump Motor Thermal Overload - (Behind cover) Protects motor from high temperatures. Trips if the pump motor is near overheating.

(8) Circuit Breaker - Generally left ON. Will trip if overload occurs (i.e. pump is turned on but no system valves are open). To reset, find and correct cause of trip. Turn power switch (3) OFF. Push circuit breaker OFF, then return it to ON. Normal operation will resume.

(9) Power Supply Cord - Plugs into fryer receptacle to provide power for filter operation.

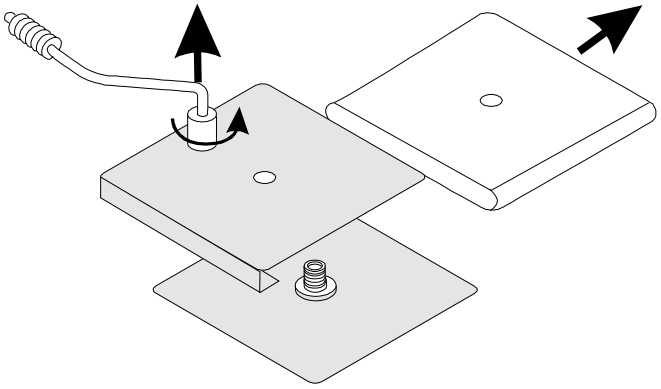
Follow the procedures below to change the UFM filter paper. (It is not necessary to remove the filter unit from the fryer to change the paper.)

a. To remove the filter pan, disconnect the filter tube connection. Grasp the white Insulator Handle (1) and pull to the right. The tube will slide out with little resistance.

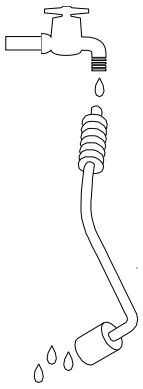
b. Grasp the Upper Front Lip of the pan and gently pull the pan toward the front of the filter unit. When the pan is clear of the filter unit, remove the filter pan cover. (Not shown.)

c. Remove the crumb catch tray from the front of the filter pan. This is a “V” shaped screen that hangs on the Front Upper Lip of the pan. Discard any debris that may be in the crumb catch.

d. Lift the Pick up Screen Assembly out of the pan. Unscrew the Suction Tube from the filter Paper Support Rack. Remove the clip screen and slide the filter paper support rack assembly out of the filter paper.



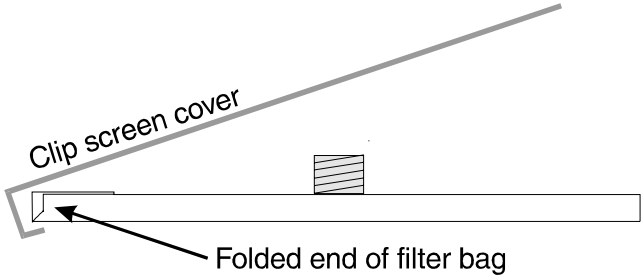
e. All of the filter pick up assembly parts can be washed in a dish washer or a pot sink. Flush out the Suction Tube Assembly with hot water. The Pick up Tube has a small screen located in the lower end, inside the tube. This screen keeps grit and solid material from getting inside the system. After flushing the Pick up Tube screen check to ensure that the screen is free of debris. After cleaning, it is very important to thoroughly dry the parts before re-assembling.



f. Slide the new filter paper onto the Filter Paper Support Rack. Ensure that the hole in the filter paper goes over the threaded connector.

g. Fold the open end of the bag in two folds, each about 1" (25mm) apart.

h. Slide the Clip Screen over the folded end of the filter paper. Ensure the opening of the Clip Screen goes over the Pick up Tube connection. Screw the Suction Tube assembly onto the threaded connection.



i. Place the assembled Filter Rack Assembly in the Pan and install the Crumb Catch Tray in the front of the Pan.

j. Slide the Pan assembly back into the filter unit and attach the Pick up Tube Connector to the filter unit connection. Take care when inserting the connector, it has two o-ring seals inside the left hand connector that can be damaged.

Built-In Filter System

The motor is built into the cabinet and is not removed with the Fil;ter Pan. The controls are mounted on the front panel of tyhe cabinet.

Follow the procedures below to change the filter paper:

WARNING

It will be easier and safer if the filter assembly has cooled to room temperature before handling any filter parts.

a. Disconnect the filter pan Suction Hose Quick Disconnect from the right hand (Black) fitting.

b. If the fryer is equipped with an optional flush hose, disconnect the Flush Hose from the left (White) fitting quick disconnect. Allow the hose to drain to the filter pan.

c. Slide the Filter Pan out of the filter cabinet. Remove and empty the Crumb Catch Basket.

d. Scrape the filter paper to remove any sediment. Unclip the Paper Retainer handles from the Filter Pan clips in the front and rear of the Filter Pan and remove the Paper Retainer from the Filter Pan. Remove and discard the old paper. Underneath the filter paper is a Paper Support rack that can now be removed from the Filter Pan.

e. Thoroughly wash and clean the Filter Pan, Crumb Catch Basket, Paper Support Rack, and the Paper Retainer. Dry all the parts completely before re-assembly.

f. Place the Paper Support Rack in the bottom center of the Filter Pan. Place a new sheet of filter paper over the Support Rack.

g. Install the Paper Retainer over the filter paper. Ensure that all edges of the filter paper are held in place by the Paper Retainer. Attach the retainer handles under the pan clips at the front and rear of the Filter Pan. Replace the Crumb Catch Basket.

h. Slide the filter pan assembly back into the filter cabinet.

Connect the Filter Pan suction hose to the right (black) filter Quick Disconnect.

i. Slide the Crumb Catch Basket under the drain elbow. If the unit has the optional flush hose, connect the flush hose to the left (white) fitting. Place the flush hose over the nozzle support rod on the Paper Retainer.

DAILY CLEANING

Your fryer should be cleaned every day to maintain peak performance and appearance. Perform the procedures below every day.

a. Wipe up any oil/shortening that spills onto the exterior of the fryer. This should be done with a clean soft cloth while the oil is still warm.

b. Use warm water with a mild detergent to clean surfaces. Be careful not to get water in the oil/shortening and to remove any detergent from the fry tank.

c. Use a non-abrasive scouring powder or pad to clean stains if necessary.

WEEKLY CLEANING

The fryer should be thoroughly cleaned once a week. This cleaning should include a complete draining of the fryer and a Boil Out as described in the Initial Cleaning section of this manual.

FLUE INSPECTION

It is recommended that once every six monts, with the shut down and cooled down, you examine the flue area. Check for corrosion or blockage of the flue. Ensure that the fryer is shutdown and do not turn it on during the examination. Examination of the flue area during cooking may cause bodily injury.

Chapter 8 - Troubleshooting

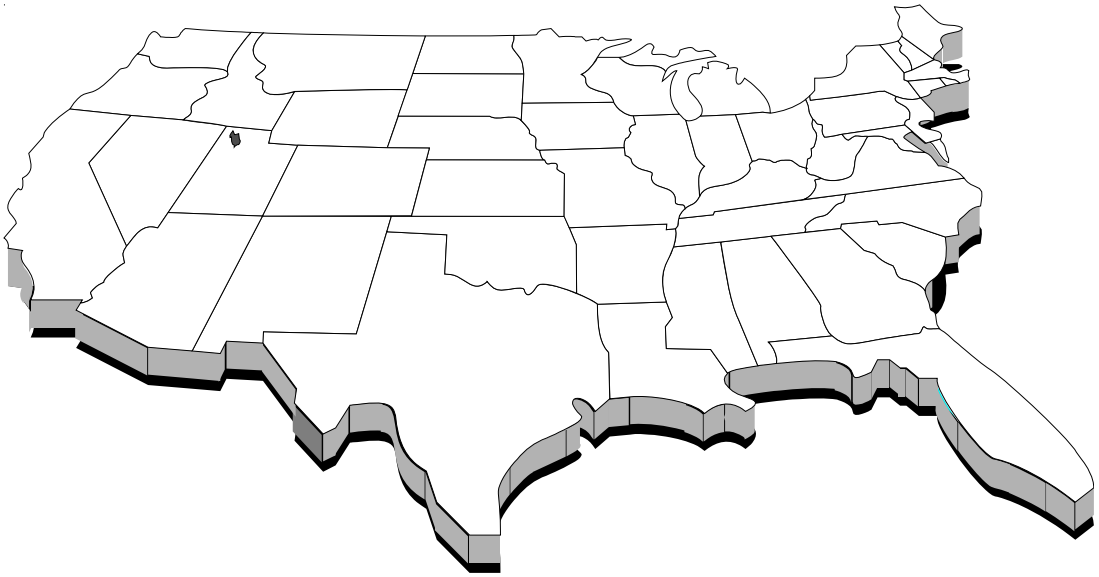
Follow the procedures outlined in this section before calling for a service technician. This may say you time and money.

Fryer Problems (Standing Pilot):

PROBLEM	POSSIBLE CAUSE	SYMPTOM
Main burners come on as soon as the Gas Valve Knob is turned to the ON position.	A. Loose fitting.	A. Check and make sure all of the tubing fittings at the Gas Valve and thermostat are tight.
Fryer consistently overheats	A. Loose fittings.	A. Check and make sure all of the tubing fittings at the Gas Valve and thermostat are tight.
Pilot will NOT light.	A. Gas line NOT turned on or connected.	A. Connect or turn ON and retry.
Pilot goes out when knob is released.	A. Hi Limit tripped.	A. Press Hi Limit button and retry.
Fryer will not maintain the temperature set on the thermostat knob.	A. Thermostat out of calibration	A. Calibrate the thermostat as described in the INSTALLATION section of this manual.

Fryer Problems (Electronic Ignition):

Pilot Sparks but does NOT light	A. Gas Valve Knob NOT turned ON.	A. Check the position of the knob.



In the event of problems with or questions about your equipment, please contact your local ASAP (Authorized Service and Parts) representative. You can find their number by calling: (603)-225-6684

In the event of problems with or questions about your order, please contact the Pitco Frialator factory, from 8:00 a.m. - 5:00 p.m., Eastern Standard Time, Monday through Friday, at:
(603)-225-6684.