



**IMPORTANT FOR FUTURE REFERENCE**

Please complete this information and retain this manual for the life of the equipment.

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

Date Purchased \_\_\_\_\_

# Installation and Operation Manual For Electric Fryers Covering Models SE, SEH, SEM Series



## Warning Page

### TO THE PURCHASER, OWNER AND STORE MANAGER

Please review these warning 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 an 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

Adequate means must be provided to LIMIT the movement of this appliance without depending on the electrical cord connection. Single appliances equipped with legs must be stabilized by installing anchor straps. All appliances equipped with casters must be stabilized by installing restraining chains.

#### WARNING

DO NOT alter or remove structural material on the appliance to accommodate placement under a ventilation hood.

#### WARNING

This appliance is intended for commercial/professional use only and should be operated by fully trained and qualified personnel. It is not intended for continuous mass production of food.

#### WARNING

This appliance is intended for indoor use only.

#### WARNING

If the power supply cord is damaged, it must be replaced by an Pitco Authorized Service and Parts (ASAP) company technician or a similarly qualified person in order to avoid a hazard. In Europe, supply cords must be oil resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57).

#### WARNING

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

#### WARNING

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

#### 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 front panel, tank, splash back, tank cover, work shelf, drain board 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

Potential fire danger exists if the cooking oil level is below the minimum indicated level. The cooking oil level should NOT be allowed to fall below the minimum indicated level line at any time. The use of old cooking oil can be dangerous as it will have a reduced flash point and be more prone to foaming over.

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

#### 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.

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## ORIGINAL STANDARD 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, of 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 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 non-economy 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 non-economy mild steel 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.

### Flat Bottom Gas Fryer

In exception to the above general warranty, for its flat bottom gas fryer model FBG, the Company warrants to the original user any FBG fry tank to be free from defects for a period of four (4) years, pro-rated from the date of manufacture. Labor and freight shall be the responsibility of the user.

### PG14D AL6XN Pasta Cooker

In exception to the above general warranty, for its gas pasta model PG14D AL6XN, the Company warrants to the original user any AL6XN cooking vessel 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.

### VF35/VF65

In exception to the above general warranty, for its gas fryer model VF35 and VF65, the Company warrants to the original user any VF35 or VF65 cooking stainless steel fry tank or cooking vessel 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.

### 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 are reported immediately. Damages of this nature are the responsibility of the carrier and must be reported by the receiver.
- 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.
- 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 and are not covered under warranty.
- 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.

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 Pitco Frialator, Inc. Authorized Service and Parts Distributor, <http://www.pitco.com/serv.asp> 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.

Pitco Frialator, Inc., P.O. Box 501, Jct. I-89 & I-93 Concord, NH 03302-0501 • 553 Route 3A, Bow, NH 03304 USA  
(603) 225-6684 • Fax: (603) 225-8497

[www.PITCO.com](http://www.PITCO.com)

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### General Installation Requirements

Although it may be possible for you to install and set up your new appliance, it is **STRONGLY** recommended that you have this done by a qualified professional. A qualified professional will ensure that the installation is safe and meets local or national building, electrical, and fire codes.

Where conflict exists between instructions in this manual, and local or national codes or regulations, installation and operation shall comply with the codes or regulations in the locale in which the appliance is installed.

### Installation Clearances

The clearances shown below are for combustible and non-combustible installations and will allow for safe and proper operation of your appliance

	<b>Combustible Construction</b> Inches (Centimeters)	<b>Non-Combustible Construction</b> Inches (Centimeters)
Back	6.0" (15.24cm)	0.00" (0.0cm)
Sides	6.0" (15.24cm)	0.00" (0.0cm)
Floor	6.0" (15.24cm)	6.0" (15.24cm)
Aisle	35.0" (88.90cm)	35.0" (88.90cm)

#### **WARNING**

DO NOT obstruct the flow of ventilation air openings around the appliance. Adequate clearance around the appliance is necessary for servicing and proper component ventilation. Ensure that you meet the minimum clearance requirements specified in this manual.

#### **WARNING**

DO NOT install this appliance next to a water cooker, or use in any way in which water can come in contact with the hot oil. Splash over of water into hot oil may result in a steam eruption, potentially causing hot oil to be ejected from the fryer, and creating a burn hazard.

## Electrical Connections

It is advised that this appliance be connected to a power supply that is controlled by the ventilation system. This will prevent the appliance from being operated without the ventilation hood on. If your appliance is single phase, it requires a hardwired, flexible conduit electrical connection, using conductors sized appropriately for the power requirements listed below. Hardwired units require installation of a restraint device mounted to substantial building structure.

ELECTRICAL REQUIREMENTS		Nominal Amps Per Line (50/60 HZ)											
		Single Phase (2 wire + ground)					3 Phase (3 wire + ground)				3 Phase "Y" (4 wire + ground)		
Model	KW/Hr	208V	220V	230V	240V	480V	208V	220V	240V	480V	380/220V	400/230V	415/240V
SFSE (14, 14T, 148, 18, 184)	17	82	78	74	71	36	48	45	41	21	26	25	24
SFSE (14R, 14TR, 148R, 18R, 184R)	22	106	100	96	92	46	62	58	53	27	34	32	31
SFSE (14X, 14TX, 148X)	14	67.3	64.7	60.9	58.3	29.2	38.9	36.7	33.7	16.8	21.3	20.2	19.5
Filter Table (Amps) (V/Hz)	115/60	115/50	208/50-60	220-230/60	220-230/50	240/60	240/50	Heat Tape add 0.9 Amps for 115/50/60 All else add 0.5 Amps					
	5.6 A	6.8 A	3.8 A	3.8 A	N/A	3.5 A	N/A						
	N/A	N/A	N/A	N/A	4.2 A	N/A	3.5 A						

**Note:** 1. Each fryer requires it's own separate power cord. 2. Power supply for Basket Lifts and Filter motor is wired into the fryer's high voltage line terminal block, except for 480V which requires another separate 115V (6.8 amp) power cord connection to the unit.

### CAUTION

Connecting the appliance to the wrong power supply may damage the appliance and void the warranty


### WARNING

This appliance must be connected to a power supply having the same voltage and phase as specified on the data plate located on the inside of the appliance door. DO NOT attempt to connect the appliance to an electrical supply other than that indicated on the data plate. Electrical connection should be performed by a qualified electrician

### WARNING

The electrical connection used by this appliance must comply with local codes. If there are no local codes that apply, refer to the National Electrical Code (NEC), ANSI/NFPA 70 for installation in the US. In Canada, refer to CSA Standard C22.2 and local codes. In other cases, refer to local and national codes and regulations.

### WARNING

The appliance must be grounded in accordance with local code, comply with the NEW and ANSI/NFPA No. 70 latest edition (for US and Canadian installations). In all other cases, refer To local and national codes and regulations. To comply with European requirements, European models are equipped with an equalization-bonding clamp. An equalization bonding lead must be connected to this clamp to provide sufficient protection against potential difference. This clamp, located on the rear of the appliance is marked with the following universal symbol... 

### 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

This equipment must be installed so that the plug (if used) is accessible unless other means for disconnection from the power supply (e.g: circuit breaker) is provided.

### WARNING

If this appliance is permanently connected to fixed wiring, it must be connected by means of copper wires having a temperature rating of not less than 167°F (75°C), and have a local means of disconnection from all poles from the mains included in the fixed wiring in accordance with local codes.

### WARNING

All power connection wiring for this appliance must be made in accordance with the wiring diagrams(s) located on the appliance.

### CAUTION

Leakage current of this appliance may exceed 10 mA. When permanently connected, a high integrity protective system employing an RCD rated at 30 mA must be used with this appliance.

## Installation

### CAUTION

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

When your fryers arrive, inspect 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 all packing materials as these will be necessary to make any claim.

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

All installations must conform to all local and national codes.

Do not block the area around the casters and under the fryers. Contact the Authorized Pitco Frialator representative for any service related problems. Routine maintenance may be performed by qualified personnel.

The duct system, the hood system and the fryers must be cleaned on a regular basis and must be kept clear of any grease build up.

### Ventilation

A proper ventilation system is also an important part of the installation.

### Clearances

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"(61cm) clearance in front of the fryer to provide for proper operation, maintenance and servicing.

Wiring diagram(s) are located in the back of the service manual and inside the fryers.

Regular cleaning of this equipment, as well as the hood, is an important part of proper maintenance.


### Once the fryers are in place:

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 set screws to lock the adjustment. Casters should be adjusted so that the fryers are level and at the correct height under the hood system.



## Installation

### EQUIPMENT SET UP AND SHUT DOWN PROCEDURES

**NOTE:** Should you experience a power failure, your fryers will shut off automatically. Once the power predetermined temperature has been reached, the unit has been restored, press the  key to turn the fryer back ON. If the machine is being filtered, close the RED return valve so that the filter does not run if the machine is left unattended. Do not attempt to restart the fryers until the power is restored.

#### 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 hand side of the inside of the tank.




**NOTE:** The "COLD" level is considered to be the "MINIMUM" oil level and the "HOT" level is considered to be the "MAXIMUM" oil level.

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.

Press the  key on either side of the full vat computer, or the right  key for the right side and the left  key for the left side of a split vat computer to turn the unit ON.

The computer display will light and the heating elements will begin to heat and will be controlled by the computer/controller.

**NOTE:** It is recommended that melt cycle be used. This will extend the shortening life. In melt cycle the shortening turns from solid to liquid gradually through short, controlled bursts of heat. Once the predetermined temperature has been reached, the unit will exit the melt cycle and go to normal operation.

Make sure that the shortening is at the proper level after cooking temperature has been reached. It may be necessary to add shortening to maintain the proper 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 side of the tank.

**NOTE: Recommended cooking batch is 3lbs (1.4kg) per basket.** Maximum cooking batch is not to exceed 5lb (2.27kg) per standard electric fryer (14" wide) basket, or 7.5lb (3.40kg) per Large electric Fryer (18" wide) basket.

#### CAUTION:

Excessive loading or loading of over-wet food can cause surge boiling.

#### Shut Down:

Press the corresponding  key to turn the fryer OFF. The computer display will go blank and all heating functions will cease.

**NOTE:** When the fryer is not being used, place the cover over the fry tank. (The covers are optional and do not come with fryer unless ordered.)



## Filter Procedures for Flat Paper Filter Systems

### Flat Paper Filter Systems

#### NOTE:

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

#### WARNING

**NEVER** - Run the filter system without a filter bag/paper.

**NEVER** - Empty the oil from the fryer before turning OFF the fryer burners.

**NEVER** - Store the Filter Unit anywhere other than in the fryer filter cavity.

Continuous operation is **not allowed!** Only intermittent operation with max. 3 consecutive pump cycles followed by at least 20 minutes break with empty oil compartment.

a. Slide the filter pan out. Carefully remove filtered residue off the filter media. Examine the filter media for clogged or torn areas. Refer to filter media replacement instructions following this section. Reinstall the pan.

b. Turn the fryer that is to be filtered OFF (See Standby Shutdown). Remove the baskets from the fryer tank(s). Use the clean out brush to lift out the tube screens.

c. Check the pickup tube screen by unscrewing the cap counterclockwise. Any debris should be cleaned from the screen before using the filter system. Reinstall the screen by screwing the cap back on clockwise. Do not over-tighten.

d. Slowly open the blue handled drain valve for the tank being filtered. If necessary use the clean-brush to clear the crumbs from the drain. Use the brush to clean the sides of the tank as the oil drains.

#### WARNING

**This filter pan is only large enough to hold the contents of one (1) tank at once, during the filter process.**

e. When the tank is empty, close the blue handled drain valve. Open the red handled return valve to the tank you are filtering. This will start the pump and return the oil to the bottom of the fry tank.

f. When bubbles are seen coming out of the oil return spout, close the red handled valve to turn the pump off. If necessary add more oil to the tank to return the oil level to the fill mark.

**The fryer is now ready for use.**

### DRAINING A TANK

The filter system is also used to drain the fryers. You will need a container capable of holding 400F oil and protective gloves.

a. Rotate the drain down spout so that it extends in the container that you want to drain the shortening into.

b. Open the blue handled drain valve for the tank to be drained. The oil will drain into the container you have chosen. When the container is full or the fry tank is empty, close the blue handled drain valve. If the container was full repeat this step until fryer tank is empty.

c. Once tank is completely empty add new shortening and follow fryer start up Procedures.

#### WARNING

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

#### Preparing the filter for use:

- Slide drawer forward until it stops.
- 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.

## **Filter Procedures for Flat Paper Filter Systems**

- Place the Paper Support Screen 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.
- Slide filter drawer back under fryer making sure that the oil return pipe locates into its mating connection.


### **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.**

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, by pushing 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 use.**

## Filter Procedures for Envelope Paper Filter Systems

### NOTE:

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

**NEVER • Run the filter system without a filter bag/paper.**

**NEVER • Empty the oil from the fryer before turning OFF the fryer burners.**

**NEVER • Store the UFM Filter Unit anywhere other than in the fryer filter cavity.**

Continuous operation is **not allowed!** Only intermittent operation with max. 3 consecutive pump cycles followed by at least 20 minutes break with empty oil compartment.

a. Slide the filter pan out. Carefully remove filtered residue off the filter media. Examine the filter media for clogged or torn areas. Refer to filter media replacement instructions following this section. Reinstall the pan.

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

c. If you have replaced the filter media or remove crumbs and debris, sprinkle Precoat Filter Aid on the filter paper.

d. Check the drain spout to ensure that it is in the drain tower and over the filter pan opening.

e. Slowly open the blue handled drain valve for the tank being filtered. If necessary use the clean-brush to clear the crumbs from the drain. Use the brush to clean the sides of the tank as the oil drains.

### WARNING

**This filter pan is only large enough to hold the contents of one (1) tank at once, during the filter process.**

g. When the tank is empty, close the blue handled drain valve. Open the red handled return valve to the tank you are filtering. This will start the pump and return the oil to the bottom of the fry tank.

h. When bubbles are seen coming out of the oil return spout, close the red handled valve to turn the pump off.

If necessary add more oil to the tank to return the oil level to the fill mark. The fryer is now ready for use.

### DRAINING A TANK

The filter system is also used to drain the fryers. You will need a container capable of holding 400F oil and protective gloves.

a. Rotate the drain down spout so that it extends in the container that you want to drain the shortening into.

b. Open the blue handled drain valve for the tank to be drained. The oil will drain into the container you have chosen. When the container is full or the fry tank is empty, close the blue handled drain valve. If the container was full repeat this step until fryer tank is empty.

c. Once tank is completely empty add new shortening and follow fryer start up procedures.

### WARNING

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

### FILTER MEDIA REPLACEMENT

The filter module stores neatly under the fryer when not in use. The unit is very easy to use and allows for quick installation and filtration, even under the busiest conditions. Follow the procedures below to change the filter media.

## Filter Procedures for Envelope Paper Filter Systems

### WARNING

**At operating temperature, the shortening is 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. It will be easier and safer if the filter assembly has cooled to room temperature before handling any filter parts.**

g. Start reassembling the filter pick up assembly by sliding the new filter paper on to the filter paper support rack. Ensure that the hole in the filter paper goes over the pick up tube assembly threaded connector.

h. Fold the open end of the bag in two folds. The first fold should be approximately 1 inch from the end and the second should be over the edge of the rack assembly.

a. With the filter pan empty of oil, remove the filter pickup assembly into the filter media by grasping the filter pan handle filter pan and slide the filter pan assembly and gently pull the assembly toward the front back into the fryer cabinet of the fryer.

i. 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 connection onto the threaded connection.

b. Separate the filter pickup tube from the filter pickup screen assembly by pulling up on the pickup tube just above where it connects to the pickup screen assembly. Lift pickup tube and swing it to the left, until it rests on the left hand side of the filter pan.

j. Place the filter pickup assembly into the filter pan and slide the filter pan assembly back into the fryer cabinet.

k. Filter unit is now ready for use.

c. Grab filter screen pickup assembly lift handles and carry it to a trash barrel and shake off heavy discard any debris that may be built upon the top of the assembly.

d. Unscrew the filter paper clip bracket from the filter paper support screen and slide the filter paper support screen out of the filter paper clip bracket.

e. Remove filter paper support screen from the filter envelope.

f. 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. After cleaning, it is very important to thoroughly dry the parts before reassembling. Water and oil do not mix. Water in hot oil will cause the oil to splatter.

# Solstice I12 Computer Quick Programming card



Solstice I12 Computer, Single Vat (60126801) and Dual Vat (60126802)  
Quick Reference Card

## SOLSTICE I12 COMPUTER QUICK PROGRAMMING CARD

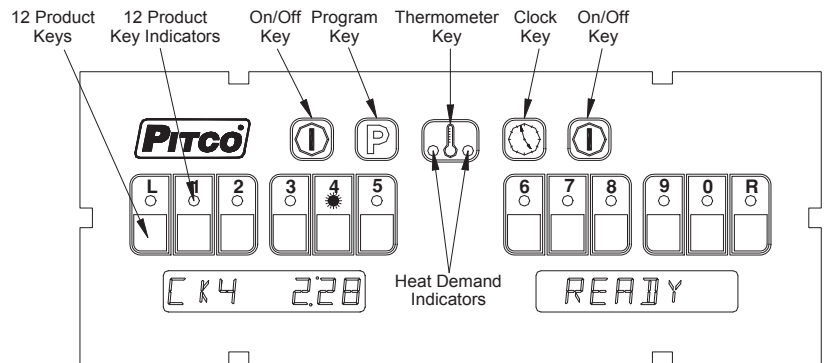
### TURN ON and OFF

**To Turn the Appliance ON :** (See Note 1)

Press Button , Display will show:  
[HEATING], [MELTING] or [READY].


**To Turn the Appliance OFF :** (See Note 1)



Press and Hold Button , Display will show:  
The Software number and then [OFF] [OFF]  
on single vat or a dual vat if both sides are off.



**Note 1:** Use Left [I/O] key for left side and Right [I/O] key for the right of dual vat control. Use either key on the single vat controller.

### OPERATIONS

**To Check Actual Temp :** Press , Display shows actual temp and then returns to normal mode.

**To Check Set Temp :** Press  , Display shows set temp and then returns to normal mode.

**To Check Cook, Shake and Hold Time :** Press  then the Product Key desired. See example below

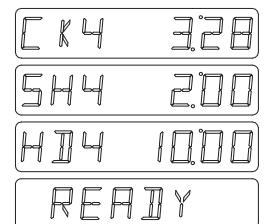
**Typical displays using key 4 as an example:**

Key 4 set for 3 minutes and 28 seconds cook time.


Key 4 Shake Time is set for 2 minutes and :00 seconds before the end of the Cook.

Key 4 Hold Time in set for 10:00 minutes.


In a few moments, the display will return to [READY] or last mode of operation.



**To Check Time Remaining on a Non-Displayed Product Key when Multiple Timers are in Use :**

Press  then the Product Key of the Non – Displaying timer key, The display will switch from showing the lowest time remaining over to the time remaining for the key that was pressed. Repeat for other keys.

**To Start a Cook :** When display shows [READY] Press any [L,1,2,3,4,5,6,7,8,9,0,R] Product Key to start cook timer. The indicator light above will flash to indicate the timer is running:

**To End a Cook :** When the audible alarm is beeping, press the appropriate Product Key  (i.e. Key 4) with the flashing indicator light, all other indicator lights are off until the key is pressed.


**To Cancel a Cook :** Press and Hold the Product Key you want to cancel until its indicator light is turned off.

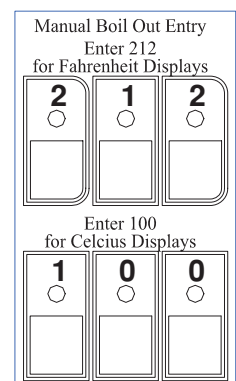
**Boil Out Mode :** After filling empty vat with water, turn appliance on.

**Automatic Entry :** When the water temperature reaches just below 212°F (100°C) the computer will display.

PRESS 0 TO BOIL, press Product Key  to continue heating,

display then shows .

**Manual Entry :** Press  then enter Product Key [2] [1] [2] for Fahrenheit or [1] [0] [0] for Celsius display unit. When last digit is entered, boil mode will start automatically. On Dual Vat computers both sides will enter boil mode. You must turn off both sides of the fryer to exit Boil mode.



## Solstice I12 Computer Quick Programming card



Solstice I12 Computer, Single Vat (60126801) and Dual Vat (60126802)  
Quick Reference Card

### FIRST LEVEL PROGRAMMING

**ENTER PROGRAM** Press **[P]** key, display show **[PROGRAM]**, If PASSWORD IS REQUIRED, and you are unable to remember the set password use (6684).

**SET TEMPERATURE** Single or Dual Vat (left side) - Press **[T]** Enter Desired Temperature.

Dual Vat (right side) - Press **[T]** **[T]** Enter Desired Temperature.

**To SAVE and CONTINUE Press [P], to EXIT First Level Programming Press [P] Again.**

**SET TIME(s)** .. Press **[C]**, display shows **[SELECT] [PRODUCT]**, Press any Product Key **[L,1,2,3,4,5,6,7,8,9,0,R]**.

**COOK TIME (CKn mm:ss)** Enter Time and Press **[C]** to proceed to **SHAKE TIME (SHn mm:ss)** Enter Time and Press **[C]** to proceed to **HOLD TIME (HDn mm:ss)** Enter Time and Press **[C]** to proceed to **HOLD PRE-ALARM (PAn mm:ss)** Enter Time and Press **[C]** to return to **[SELECT] [TIME]**, repeat for other product keys.

**To SAVE and CONTINUE Press [P], to EXIT First Level Programming Press [P] Again.**

### SECOND LEVEL PROGRAMMING

**ENTER PROGRAM** Press **[P]** key, display shows **[PROGRAM]**, If PASSWORD IS REQUIRED, and you are unable to remember the set password use (6684). Then press **[0]** you have now entered the upper level programming, all the useable function keys will be lighted and the display will show **[SELECT OPTIONS]**.

**NOTE: Any time [P] is used to save a setting [0] must be pressed to return to [SELECT OPTIONS]**

- Function Keys Programming

**[1] FAHRENHEIT / CELCIUS** – Toggle between Fahrenheit and Celcius scale by pressing the **[0]** key  
Change is saved by pressing the **[P]** key to set

**[2] SET PASSWORD** – Press **[0]** to choose **[PASS REQ]** or **[NO PASS]**. If password is chosen then press **[P]**, current password displays. Use the number keys to enter new password and press **[P]** to set.

**[3] BEEPER VOLUME & TONE** – Press **[0]** to toggle between levels 1,2,3 & Tone(1,2,3) and press **[P]** to set.

**[4] LANGUAGE** – Press **[0]** to toggle between different languages and press **[P]** to set.

**[5] MELT CYCLE** – Press **[0]** to toggle **[NO MELT]**, **[MELT S]** (solid), **[MELT L]** and press **[P]** to set.

**[6] RECOVERY TIME** – Press **[0]** to display **[F065 LXXX]**, “F” is Factory time and lastest time is “LXXX”

**[7] CONTROL/TIMER** (Single or Dual-left side) – Press **[0]** to switch control to timer mode, press **[P]** to set.

**[8] CONTROL/ TIMER** (Dual Tank-right side) – Press **[0]** to switch control to timer mode, press **[P]** to set.

**To SAVE and CONTINUE Press [P], to EXIT SECOND Level Programming Press [P] Again.**

### OTHER DISPLAYS:

**[PROBE OP] [OPEN]** If probe is detected open, normal heating and cooking activities are suspended.

**[HIGH TMP] [HIGH TMP]** If vat temperature has exceeded set temperature by 40°F (22°C), or an absolute of 410°F (210°C) max.

**[DRAINING] [TURN OFF]** Drain valve has been opened, Heat control is turned off. To restore to normal operation, close the drain valve. Display will show **[TURN OFF] [TURN OFF]**. Turn controller off, and refill the vat.

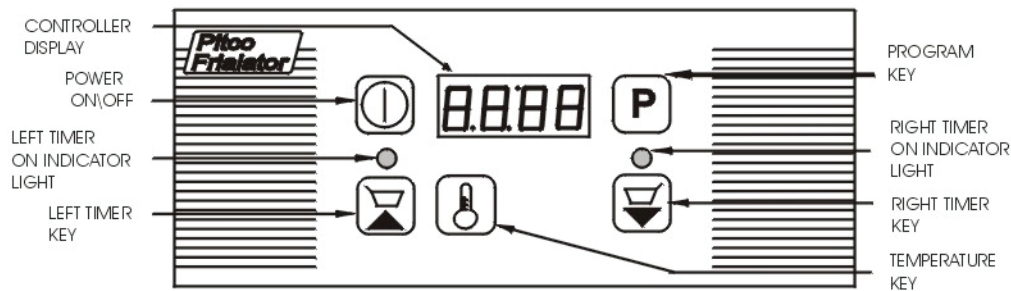
**[HEAT] [FAILURE] OR [IGNITION] [FAILURE]** Heating system failed to respond due to a tripped high temperature limit switch and is in need of resetting. For gas models, the pilot failed to light, flame ignition detection is marginal or draft protector tripped on SCB.

**[SYSTEM] [FAILURE]** If probe is detected as a short circuit, normal heating and cooking activities are suspended.



## Solstice Digital Controller

### DIGITAL CONTROLLER PROGRAMMING INSTRUCTION



### CONTROLLER FUNCTIONS

- PRESS TO TURN CONTROLLER ON
- PRESS AND HOLD FOR 3 SECONDS TO TURN CONTROLLER OFF
- PRESS TO DISPLAY ACTUAL TEMPERATURE
- PRESS TWICE DISPLAY SET TEMPERATURE
- PRESS TO START LEFT BASKET TIMER
- PRESS TO START RIGHT BASKET TIMER
- PRESS TO ENTER PROGRAMMING MODE
- INDICATES PROGRAMMING MODE IS PASSWORD PROTECTED

### LOWER LEVEL PROGRAMMING INSTRUCTIONS

NOTE: PROGRAMMING CAN NOT BE PERFORMED WHILE TIMERS ARE ACTIVATED

#### STEP 1

##### ENTERING PROGRAM

PRESS If the display appears proceed to STEP 2, if the LEFT TIMER INDICATOR LIGHT turns ON and the CONTROLLER DISPLAY shows the left timer set time (time displayed is not counting down) you are in the PROGRAM MODE, Proceed to STEP 3.

#### STEP 2

##### ENTERING PASSWORD MODE

With showing on the display, press (password) to gain access to controller programming. NOTE: If the timer starts counting down, the password was not entered fast enough and the controller needs to be turned OFF and back ON, and the STEP 1 repeated.

### PROGRAMMING CONTROLLER OPTIONS

TO SAVE AND EXIT PROGRAMMING PRESS AND HOLD KEY FOR 5 SECONDS

#### STEP 3

##### LEFT TIMER KEY PROGRAMMING

With the LEFT TIMER INDICATOR LIGHT lit and the CONTROLLER DISPLAY Showing the left timer programmed cook time PRESS or to change left Programmed cook time. TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 3

#### STEP 4

##### RIGHT TIMER KEY PROGRAMMING

PRESS RIGHT TIMER INDICATOR LIGHT will illuminate and the display will show the set time for the RIGHT TIMER KEY. PRESS or to change right programmed cook time. TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 3

#### STEP 5

##### SET TEMPERATURE PROGRAMMING

PRESS , display will show the programmed SET TEMPERATURE. PRESS or to change programmed SET TEMPERATURE. TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 3









## Solstice Digital controller

### LOWER LEVEL PROGRAMMING CONTROLLER OPTIONS CONTINUED






NOTE: PROGRAMMING CAN NOT BE PERFORMED WHILE TIMERS ARE ACTIVATED

TO SAVE AND EXIT PROGRAMMING PRESS AND HOLD **P** KEY FOR 5 SECONDS

- STEP 6  
MELT CYCLE  
PROGRAMMING
- PRESS **P**, display will show **CH L** , **CH 5** or **CH 0** . PRESS  or  to change programmed MELT setting. ( **CH 5** = Solid shortening melt cycle, **CH L** = Liquid shortening melt cycle, and **CH 0** = No melt cycle). TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 6
- STEP 7  
**L0C** / PASSWORD  
PROGRAMMING
- PRESS **P** , display will show **L0C** or **UL0C** RIGHT. Press  or  to change password protection "ON" or "OFF". TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 6
- STEP 8  
CELCIUS / FAHRENHEIT  
PROGRAMMING
- PRESS **P** , display will show **C** or **F** (Celcius or Fahrenheit). PRESS  or  to change programmed TEMPERATURE scale.. TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 6
- STEP 9
- PRESS **P** , You have now returned to STEP 3 or back to the beginning of the Programming loop.





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### UPPER LEVEL PROGRAMMING INSTRUCTIONS

- STEP 1
- Follow LOWER LEVEL PROGRAMMING INSTRUCTIONS STEP 1 and STEP 2
- STEP 2  
BASKET LIFT, SINGLE OR  
DUAL LIFT OPTION
- PRESS and HOLD **P** , While holding the **P** key depressed, PRESS  key. Display will show **LIF 1** or **LIF 0** . PRESS  or  to change the number of Basket lifts operating on fryer. TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 6
- STEP 3  
ACTUAL TEMPERATURE  
DISPLAY
- PRESS **P** display will show **t 0** or **t 1** . PRESS  or  to change the programmed setting ( **t 0** =actual temperature display will only show when key is pressed, **t 1** actual temperature will display at all times). TO SAVE FOLLOW INSTRUCTIONS SHOWN ABOVE STEP 6

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### CONTROLLER DISPLAY EXPLANATION

-  INDICATES THE FRYER IS IN A MELT CYCLE.
-  INDICATES FRYER TEMPERATURE IS LOWER THAN CONTROLLER SET TEMPERATURE AND IS HEATING.
-  INDICATES FRYER HAS REACHED CONTROLLER SET TEMPERATURE AND IS READY FOR COOKING.
-  WHEN DOT IS LIT, INDICATES HEATING SYSTEM IS ACTIVATED.

## Troubleshooting Chart

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 elements 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.
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 Over-load 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. Blue drain valve 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. Blue 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 to clear the drain valve from inside the fry vat. If this does not clear the blockage, CLOSE the Blue 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 two wing nuts 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 or remove drain "T" cleanout access covers, by removing thumb screws (do not lose screws). Then clean drain, replace access cover and thumb screws



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