



IM-2000™ 8 PRODUCT COOKING CONTROLLER

MANUAL

IMPORTANT:

THE USER'S MANUAL PROVIDES SPECIFIC OPERATING INSTRUCTIONS FOR YOUR MODEL. USE THE IM-2000™ CONTROLLER ONLY AS INSTRUCTED IN THIS MANUAL.

KEEP A COPY OF YOUR BILL OF SALE.

The date on the bill establishes the warranty period should service be required. If service is performed, it is in your interest to obtain and keep all receipts.

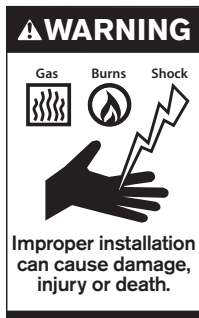
KEEP THIS MANUAL FOR TRAINING NEW PERSONNEL.

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

As continuous product improvement occurs, specifications may be changed without notice.

1-800-KEATING | keatingofchicago.com

NOTE: The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.



⚠ 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.



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

IF NOT INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, THIS PRODUCT COULD EXPOSE YOU TO SUBSTANCES IN FUEL OR IN FUEL COMBUSTION WHICH CAN CAUSE DEATH OR SERIOUS ILLNESS AND WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

The products are protected under one or more of the following U.S. Patents:

| | | |
|-----------|-----------|-----------|
| 4,077,690 | 4,113,623 | 4,278,872 |
| 4,320,285 | 4,610,238 | 4,644,931 |
| 4,688,475 | 4,740,888 | 4,742,455 |
| 4,782,445 | 4,812,625 | 4,812,963 |
| 4,864,498 | 4,911,068 | 4,920,948 |
| 4,921,509 | 4,973,882 | 5,043,860 |
| 5,171,974 | 5,331,575 | |

Plus foreign patents and patents pending.

Plus licensed patents

| | | |
|-----------|-----------|-----------|
| 4,437,159 | 4,549,527 | 4,663,710 |
| 4,858,119 | | |

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■ INTRODUCTION

Instructions in this manual should be read thoroughly before attempting to operate the IM-2000™ Controller. All installation and service on Keating equipment must be performed by qualified, certified, licensed and/or authorized installation or service personnel.

Operating information for Keating equipment has been prepared for use by qualified and/or authorized personnel.

Keating equipment is made in the USA and has American sizes of hardware. All metric conversions are approximate.

■ INSTALLATION INSTRUCTIONS

Proper installation will assure top performance. Alterations of any kind to your equipment will void the warranty. Before uncrating, check equipment carefully for damage.

IF EQUIPMENT ARRIVES DAMAGED

Keating does not assume responsibility for loss or damage incurred in transit.

IMPORTANT

This merchandise has been thoroughly inspected and carefully packed before leaving our plant. Responsibility for its safe delivery was assumed by the carrier at the time of shipment. Claims for loss or damage to the contents should, therefore, be made upon the carrier, as follows:

CONCEALED LOSS OR DAMAGE

Concealed loss or damage means loss or damage which does not become apparent until the merchandise has been unpacked. The contents may be damaged in transit due to rough handling even though

the carton may not show external damage. When the damage is discovered upon unpacking, make a written request for inspection by the carrier's agent within fifteen days of the delivery date. Then file a claim with the carrier since such damage is the carrier's responsibility. By following these instructions carefully, we guarantee our full support of your claims to protect you against loss from concealed damage.

VISIBLE LOSS OR DAMAGE

Any external evidence of loss or damage must be noted on the freight bill or express receipt, and signed by the carrier's agent. Failure to adequately describe such external evidence of loss or damage may result in the carrier refusing to honor a damage claim. The form required to file such a claim will be supplied by the carrier.

DO NOT RETURN DAMAGED MERCHANDISE TO KEATING. FILE YOUR CLAIM AS STATED ABOVE.

■ FIRST STEPS

NOTE: Not all features are available on all models.

Thank you for your purchase. You have chosen a product with over 25 years of innovation and quality manufacturing behind it. The IM-2000 Cooking Controller is designed to simplify the operation of your appliance and allow your foodservice operators to spend more time with the customers and other important responsibilities. Quality control of your food product is assured through the various features, notification displays and alarms designed into all SCS Controllers.

There are three modes of operation on the IM-2000 Cooking Controller -

Operating Mode: used to cook the various menu items

Product Programming Mode: used to add or modify menu items

System Programming Mode: used to configure the controller to various applications

CONTROLLER OPERATING ENVIRONMENT

NOTE: The solid state components in this controller are designed to operate reliably in a temperature range up to 158°F/70°C. Before installing this controller, it should be verified that the ambient temperature at the mounting location does not exceed 158°F/70°C.

■ CONTROLLER KEY DESCRIPTIONS

The diagram shows the IM-2000™ control panel with the following callouts:

- HEAT:** When lit (bright) indicates a product hold time is being tracked.
- HOLD:** When lit (bright) indicates the controller is calling for heat.
- MELT:** When lit (bright) indicates the controller is in melt cycle.
- PROG:** When lit (bright) indicates the controller is in the program mode.
- ON/OFF (left):** Optional "soft" ON/OFF key switches controller functions off while leaving power to the appliance on. In "operating" mode, allows access to the programming mode. In "programming" mode allows access to the operating mode. In "operating" mode, displays the remaining cook time on every product key currently in a cook cycle and lights the respective product's LED for 2 seconds each. In "programming" mode, steps to the next function to be programmed.
- PROG:** In "operating" mode, used to view remaining hold times. In "programming" mode, used to accept the information and "enter" it into the controller's memory.
- TEMP TOGGLE CLEAR:** In "operating" mode, displays the actual temperature followed by the programmed or set temperature. In "programming" mode, allows the user to toggle between choices in an entry field and clear values from a data field.
- ON/OFF (right):** Optional "soft" ON/OFF key—available for dual vat fryers.

■ OPERATING THE CONTROLLER

STARTING A COOK CYCLE



To start a cook cycle, simply press the product key for the product you wish to cook. If the product key is programmed, the correct cooking time will be displayed **1:200** (example) and this time will immediately start to count down in minutes and seconds. The pressure solenoid will also close if programmed to do so. If **done** is displayed immediately and the unit starts to signal, the key being operated is not programmed. If correctly programmed, it will count down to **:00** followed by **done** and start to signal.



Cancel this signal by pressing the same cycle product key used to start the cook cycle.

ACTION ALARMS

If the unit is programmed with action alarms, the action alarms will signal at a preset time during the cooking cycle; for example, **:30**. This signal, a dual rhythm beeping, will last 5 seconds and then self-cancel. The display will flash the action alarm time and the unit will then start counting toward **:00**.

HOLDING TIMERS



If the unit is programmed with holding times, they will automatically start counting upon expiration of the cooking cycle. When there are active hold times, the HOLD indicator will be lit. To view all active hold times, press and hold the HOLD key. Upon expiration, the timer will display **HLD** and pulse with an audible tone.



To cancel, press the HOLD key.



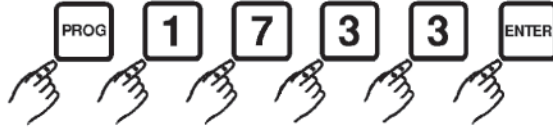
To view the hold time with the least amount of time remaining, press the HOLD key.

BOIL MODE

⚠ CAUTION

PLEASE CONSULT AND FOLLOW KEATING'S GUIDELINES FOR CLEANING AND BOILING OF THE FRY VATS IN YOUR FRYER MANUAL. The boil function accurately maintains the fryer temperature at 190°F (88°C) to assist in the cleaning of fry vats. To start the boil process, turn the appliance OFF. Empty the fry vat of fat. Once the vat is emptied of fat and refilled with cold water, the controller and fryer may now go into boil mode.

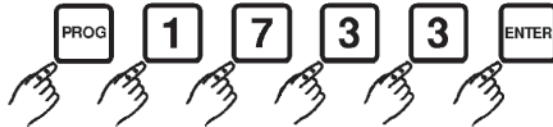
To Enter Boil Mode:



The fry vat will maintain a temperature of 190°F (88°C) to allow the boil function to be performed.

NOTE: The fry vat must be below a temperature of ____ °F/____ °C to enter the boil mode.

To Exit Boil Mode:



The controller will no longer have [boil] in the display. Turn the appliance off. Empty the water from the vat, wipe all remaining water from the vat. Once dry, refill the vat with fat.

⚠ CAUTION

Refill the vat with fat **ONLY** when it is completely dry.

■ CONTROLLER FEATURES

NOTE: Not all features are available on all models.

FAHRENHEIT OR CELSIUS TEMPERATURE DISPLAY

The operator will have the ability to configure the controller to display the temperature in degrees Fahrenheit or Celsius from the System Programming mode.

MELT CYCLE

When the computer is ON and the vat temperature is below the Melt Limit Temperature, the controller will control the melting of the shortening.

PROGRAMMABLE TIMES

The operator will have the ability to program the cook times for each product key. The controller is programmable in minutes (up to 59) and seconds (up to 59).

PROGRAMMABLE (FASTFLEX.)™ TIMING MODE

The operator will be able to program the timing mode (flex or straight) for each product key. If a product is configured for flex time, the controller will adjust the actual cook time taking into consideration the temperature variation due to load size, initial product temperature, product moisture content, and other factors affecting the cook cycle, to insure the controller provides consistent, high-quality product. Under straight time mode, the controller will cook only for the specified time without adjusting for these variations.

PROGRAMMABLE ACTION ALARMS

The operator will be able to program one action alarm on each product key. An action alarm is an indication to the operator to perform some action at a pre-programmed time.

■ DISPLAY DESCRIPTIONS

NOTE: Not all features are available on all models.

- Lo** The unit is in the Operating Mode. The actual vat temperature is more than 10 degrees below the programmed vat temperature.
- The unit is in the Operating Mode. The actual vat temperature is within the proper cooking temperature range. The vat is ready to start a cook cycle.
- Hi** The unit is in the Operating Mode. The actual vat temperature is more than 40 degrees above the programmed vat temperature. An audible alarm sounds simultaneously.
- PrOb** The controller probe is either open or shorted; accompanied with an audible alarm. Check or replace the probe.
- 2:30** The unit is in the Operating Mode and a cook cycle is in process.
- donE** The unit is in the Operating Mode and a cook cycle has been completed.
- Code** The unit is waiting for a pass code to be entered.
- Prod** The unit is in the Product Key Programming Standby Mode.
- t, |** A cooking time is displayed.
- tE |** A cooking temperature is displayed.
- tC |** A timing mode (flex or straight) is displayed.
- PrE** Product key action alarm Programming Standby Mode.
- PrE |** The action alarm status is displayed.
- SYS** The unit is in System Programming Standby Mode.
- dEG** The unit is in Fahrenheit or Celsius Programming Mode.
- Ctrl** The unit is in Controller Backup Programming Mode.
- PrHE** The unit is in Fryer Preheat or Melt Cycle Programming Mode.
- APPL** The unit is in the Appliance Type Programming Mode.

■ PROGRAMMING THE CONTROLLER

PROGRAMMING NOTES:

16 button units have 2 displays that show a full line of information;

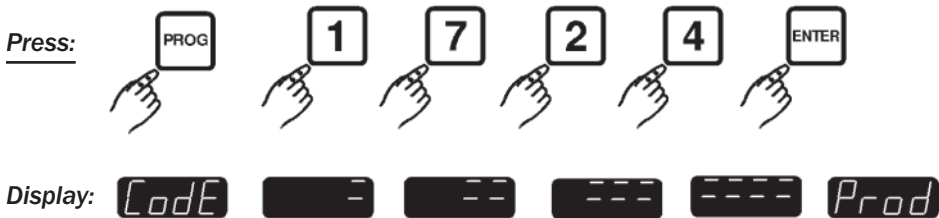
for example: .

8 button units have a single, dual-purpose display that will alternate information;

for example: . (This manual shows only 8 button units.)

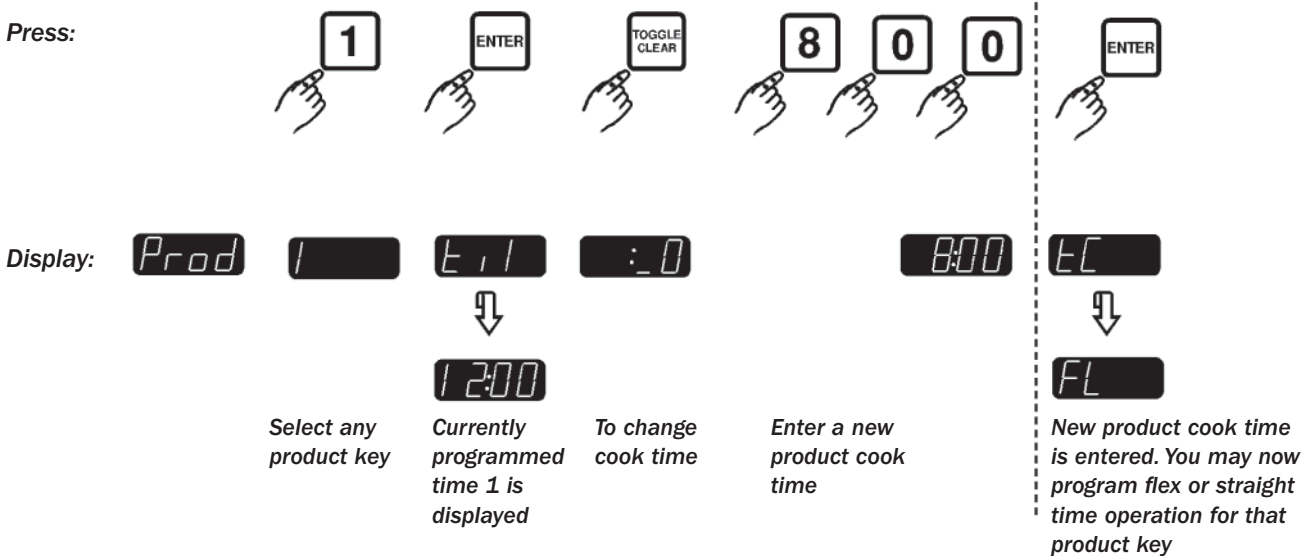
SCAN advances you to the next setting for the same function. ENTER completes programming for that function and advances you to the next function.

ENTERING PROGRAMMING MODE

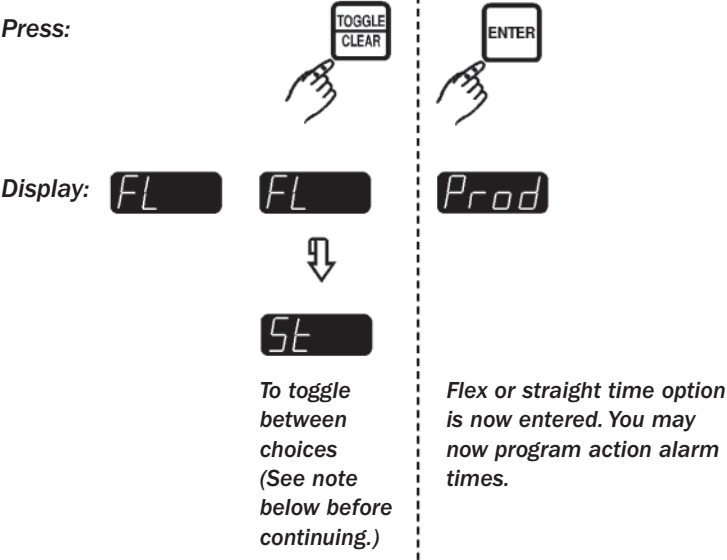


The controller is now in Product Key Programming Standby Mode

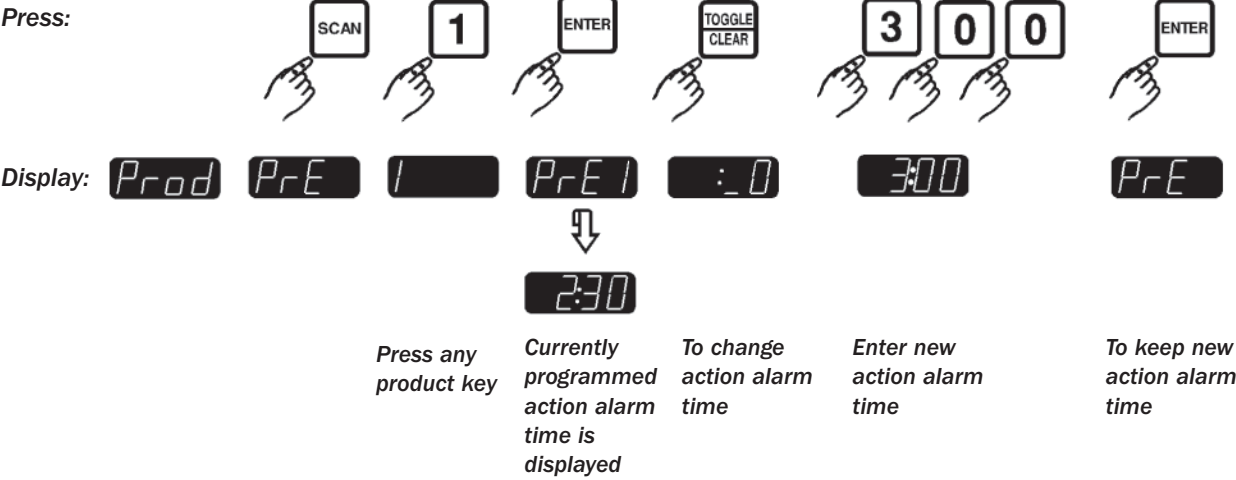
PROGRAMMING A PRODUCT KEY COOK TIME












PROGRAMMING FLEX OR STRAIGHT TIME OPERATION



PROGRAMMING ACTION ALARM TIMES



PROGRAMMING HOLD TIMES

Press:         

Display: **PrE** **HoLd** **1** **HE** **:0** **2000** **HoLd**








↓

2:30

Press any product key Currently programmed hold time is displayed To change hold time Enter a new hold time To keep new hold time

NOTE: Up to 4 hold timers can be programmed per product key on the 8 button controller; up to 8 hold timers can be programmed per product key on the 16 button controller.

PROGRAMMING COOK TEMPERATURE

Press:       

Display: **HoLd** **SEtT** **SEtT** **0** **350F** **SEtT**

↓

375F

Currently programmed temperature is displayed To change set temperature Enter a temperature To keep new temperature

EXITING PROGRAMMING MODE







Press:  







Press PROG when any of these functions are displayed

Prod **PrE** **HoLd** **SEtT**

Display: **Prod** **----**




ENTERING SYSTEM PROGRAMMING MODE





Press:      




Display:      




The controller is now in System Programming Standby Mode

PROGRAMMING FAHRENHEIT OR CELSIUS TEMPERATURE DISPLAY

Press:   



Display:    




  



  



Current degree option is displayed *Toggle between Fahrenheit or Celsius* *to keep displayed before setting; and advance to "Programming Operating Mode"*

PROGRAMMING OPERATING MODE (CONTROLLER OR TIMER)

Press:  

Display:   

Toggle between Controller and Timer *To keep displayed operating mode; and advance to "Programming Appliance Type"*

PROGRAMMING APPLIANCE TYPE

Press:



Display:



Current appliance type is displayed

Toggle between three appliance configurations for size of fryer or power type; for example:
 ELEC - Electric Fryer
 GAS - Gas Fryer
 GEN - Generic Option Selected*

To keep displayed appliance type; and advance to "Programming Preheat Option"

*This display may differ depending on custom configuration of the controller.

PROGRAMMING PREHEAT OPTION

Press:



Display:



Current preheat option is displayed

Toggle between YES - Melt Cycle Enabled, or NO - Melt Cycle Override

To keep preheat option choice

⚠ WARNING

Melt Cycle override should NOT be used with solid shortening. Misuse could result in personal injury.

EXITING SYSTEM PROGRAMMING

Press:



One of these displays will appear



The controller is now in Operating Standby Mode

WARRANTY STATEMENT

Keating’s warranty begins with the date of installation. Keating of Chicago, Inc. provides a limited one-year warranty for its products (except probes and hoses for which the period is 90 days). A copy of the exact provisions of this warranty and the other terms and conditions of sale are available upon request.



WARRANTY

LIMITED WARRANTY

Keating of Chicago, Inc. ("Keating") warrants to the original purchaser. ("Customer"), all new Keating Fryers, Filter Systems, Griddles, Keep Krisp®, Custom Pasta Systems, Top-Side™ Cookers, Computer Timers, Fryer & Pasta Vessels and Keating replacement parts ("products") installed after June 1, 1994 to be free to defects in material or workmanship, subject to the following terms and conditions.

LENGTH OF WARRANTY

All products other than Fryer & Pasta Vessels and replacement parts shall be warranted for a period of one year from the date of original equipment installation. Keating replacement parts are warranted for a period of ninety days from the date of installation. Fryer & Pasta Vessels are warranted as described below.

FRYER & PASTA VESSEL WARRANTY

Fryers purchased after June 1, 1994 carry a prorated vessel warranty on defects in materials or workmanship to the Customer based on the following scale:

| Time from Installation Date | Fryer Vessel Warranty Credit |
|-----------------------------|------------------------------|
| 13-60 months | 100% |
| 61-72 months | 80% |
| 73-84 months | 60% |
| 85-96 months | 40% |
| 97-108 months | 20% |
| 109-120 months | 10% |

The credit for the defective fryer & pasta vessel shall be applied against the cost of the replacement vessel, utilizing Keating's then current price, upon return of the vessel to Keating, (freight to be paid by Keating within the first 12 months only), only during the first 60 months, subject to the limitations described below.

LIMITATIONS OF LIABILITY

In the event of warranty claim or otherwise, the sole obligation of Keating shall be the repair and / or replacement at the option of Keating of the product or component or part thereof. Such repair or replacement shall be at the expense of Keating except that the Customer shall pay the following expenses: all freight and labor expense for Keating replacement parts; for all other products, mileage exceeding 50 miles or travel more than one hour, labor costs of more than one person, overtime rates, truck charges, difference between ground and other mode of transportation, and holiday charges. Any repair or replacement under this Limited Warranty does not constitute an extension of the original warranty for any period for the product or for any component or part thereof. Parts to be replaced under this Limited Warranty will be repaired at the option of Keating with new or functionally operative parts. Keep Krisps and Computer Timers must be returned to Keating for warranty repair or replacement. Field repairs of those items are not authorized.

THE LIABILITY OF KEATING ON ANY CLAIM OF ANY KIND, INCLUDING CLAIMS BASED ON WARRANTY, EXPRESSED OR IMPLIED, CONTRACT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORIES SHALL BE SOLELY AND EXCLUSIVELY THE REPAIR OR REPLACEMENT OF THE PRODUCT AS STATED HEREIN, AND SUCH LIABILITY SHALL NOT INCLUDE, AND CUSTOMER SPECIFICALLY RENOUNCES ANY RIGHTS TO RECOVER, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER INJURIES TO PERSONS OR DAMAGE TO PROPERTY, LOSS OF PROFITS OR ANTICIPATED PROFITS, OR LOSS OF USE OF THE PRODUCT.

If any oral statements have been made regarding the Keating products, such statements do not constitute warranties and are not part of the contract 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, STATUTORY OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS.

EXCLUSIONS

The warranties provided by Keating of Chicago, Inc. do not apply in the following instances:

- Defects arising out of or resulting from improper installation or maintenance, abuse, misuse, modification or alteration by unauthorized service personnel, or any other condition not attributable to a defect in material or workmanship. Proper installation and maintenance are the responsibility of the installer and Customer, respectively. Proper installation and maintenance procedures are prescribed by the Keating Service Manual.
- In the event that the product was damaged after leaving the factory due to flood, fire, other acts of God or accident, damage during shipment should be reported to the carrier and is not the responsibility of Keating.
- In the event the serial number or rating plate has been removed from the product or altered.
- On parts which would normally be worn or replaced under normal conditions, including but not limited to electric bulbs, fuses, interior and exterior finishes, gaskets and radiants.
- With regard to adjustments and calibrations such as leveling, tightening of fasteners or plumbing connections, improper gas pressure or improper electrical supply, the checking of and changes in adjustment and calibrations are the responsibility of the installer. Proper installation procedures are prescribed by the Keating Service Manual.
- In the event of unauthorized repairs or alterations to the Keating product.
- With the use of sodium chloride in pasta vessels or harsh chemicals in fryer or pasta vessels.
- Installation in Household.

OTHER TERMS AND CONDITIONS

The Customer must provide proof of purchase from Keating.

This Limited Warranty is valid in the 50 United States, its territories, and Canada, and is void elsewhere.

Keating products are sold for commercial use only. If any Keating product is sold as a component of another product or used as a consumer product, such Keating product is sold As Is without any warranty.

If any provision of this Limited Warranty is held to be unenforceable under the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of the warranty shall remain unaffected. Further in such event, the maximum exclusion or limitation allowable under applicable law shall be deemed substituted for the unenforceable provision.

This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Illinois.

TO SECURE WARRANTY SERVICE

All repair services under this Limited Warranty must be authorized by Keating or performed at Keating. Authorization may be obtained by calling 1-800-KEATING within the Continental United States, Alaska, Hawaii, Puerto Rico and Canada during normal business hours (8 a.m. through 5 p.m. Central Time, Monday through Friday). When calling, please have the following information available: (1) name, address and telephone number of the Customer; (2) location of product, if different; (3) name, model number and serial number of the product; (4) installation date; and (5) description of defect. Keating will then issue a service authorization work order number to one of its approved independent servicing organizations, or request the product or part be shipped to Keating for repair or replacement, as appropriate. Any defective part subject to a claim under this Limited Warranty must be shipped freight prepaid to Keating for testing and examination. Keating's decision as to the cause and nature of any defect under this Limited Warranty shall be final.

■ **SERVICE INFORMATION:**

If you have a service related question call **1-800-KEATING**.
Please state the nature of the call; it will ensure speaking with the appropriate person.

Have your serial and model number available when ordering parts.

As continuous product improvement occurs, specifications may be changed without notice.

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KEATING LIMITED WARRANTY CARD

PLEASE COMPLETE AND MAIL AT ONCE--WARRANTY IS NOT IN EFFECT UNTIL CARD IS RETURNED, OR COMPLETE THE WARRANTY CARD ON OUR WEBSITE FOR YOUR CONVENIENCE.

COMPANY: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

DEALER NAME: _____

DATE OF PURCHASE: _____ INVOICE #: _____

SERIAL #: _____ MODEL: _____

FRYER GRIDDLE CUSTOM PASTA
 FILTER SYSTEM TOP-SIDE COOKER HOTPLATE

I HAVE READ THE INSTALLATION AND OPERATING INSTRUCTIONS.

SIGNED: _____ DATE: _____



KEATING OF CHICAGO, INC.
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Serving Those Who Serve the Very Best®