



SERVICE & PREVENTATIVE MAINTENANCE TRAINING

KEATING OF CHICAGO MIRACLEAN® GAS GRIDDLE & TOP-SIDE™ COOKING HEAD



"Serving Those Who Serve The Very Best"®

Table of Contents

MIRACLEAN® GRIDDLE

Customer Service	1
Keating of Chicago Web Site	4
Miraclean Griddle Features	7
Calibration	8
Inspection	9
Installation	10 - 12
Leveling	10
Gas Pressure	11
Quick Disconnect	12
Lighting	13
Lighting Problems	18 - 32
Heating Problems	33 - 35
Cleaning	36 - 38

TOP-SIDE™ COOKER

Top-Side Cooker.....	39
Features	40
Control Box	42
Setting the Temperature	44
Digital Timers	46
Trouble Shooting	50 - 52
Cooking Head	50
Auto-Lift	52
Cleaning	53 - 54
Warranty	55
Returned Parts	59



Customer Service

**For warranty problems on our equipment,
have the end-user call 1-800-KEATING
with model and serial #.**

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Customer Service

Our Customer Service Team can help you with everything from troubleshooting to parts identification.

You must have the model and serial number of the unit when calling for assistance.

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Customer Service

Our policy at Keating is to provide you with a written quotation on any parts identified. We want to ensure you receive the correct parts.



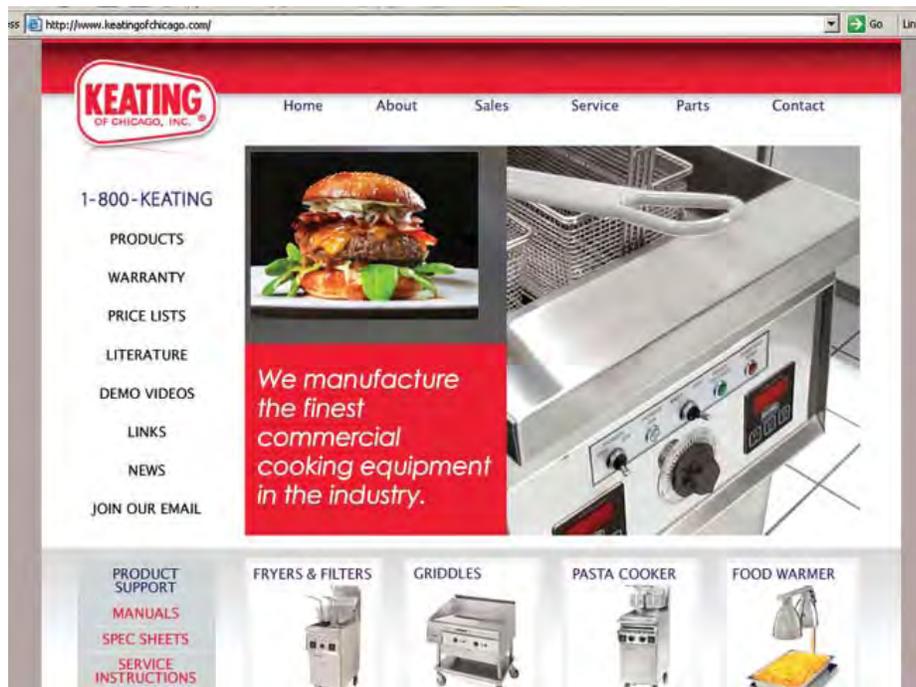
Keating of Chicago Online

Finding support for our products is easier than ever!

You can visit our web site 24 hours a day at:
keatingofchicago.com

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Keating of Chicago Online



From our Home page, you can easily find:

- Warranty Service contact information
- Authorized Service Providers Directory
- Download product manuals, updated service instructions, MSDS Sheets for Keating Klenzer, Acidox and Sea Powder products, and much more!

MIRACLEAN® Griddles



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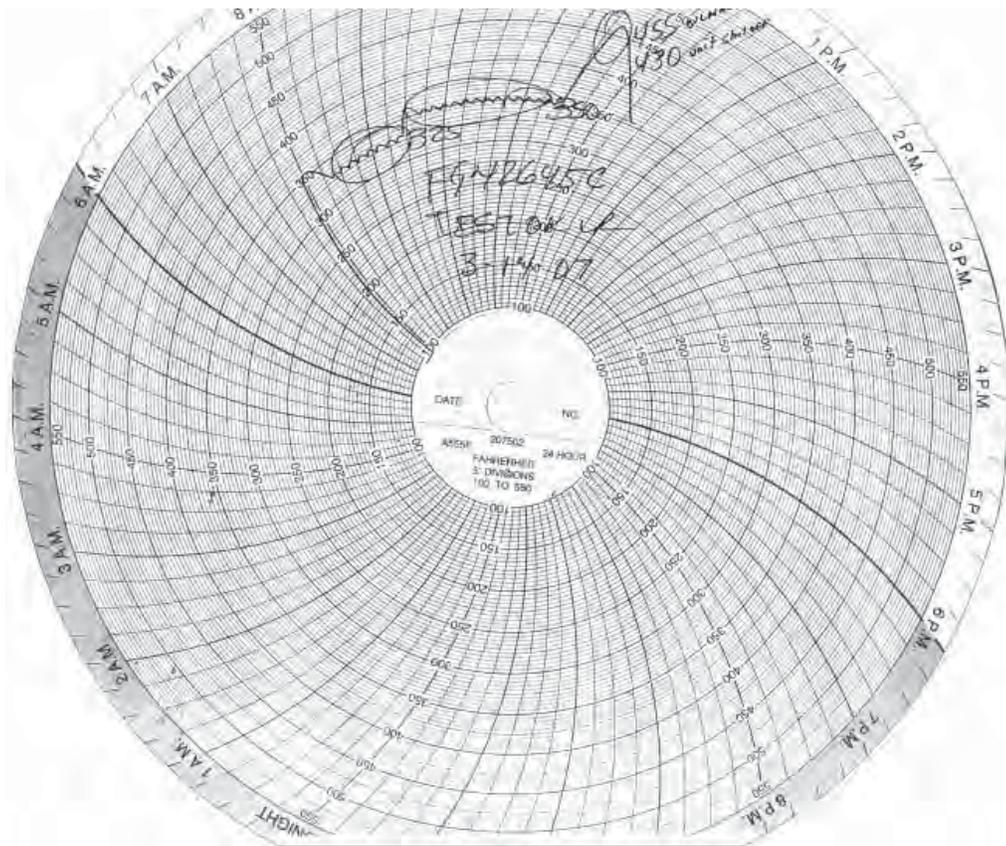
MIRACLEAN® Griddle Features

- **MIRACLEAN® Surface**
 - MIRACLEAN® plating applied in an 8 step process yielding a surface $7/10$ as hard as a diamond
 - $3/4$ " Plate
- **Hundreds of size combinations available**
- **Gas and Electric Models**
- **Better heat transfer, cooler kitchens**
- **Energy savings**
- **Easy clean-up**

"Serving Those Who Serve The Very Best"®

No Calibration Required

- **Equipment Testing**



- All equipment tested at factory before shipping.
- Thermostat has been calibrated at our factory.
- Test Charts included in accessory box with manual.

"Serving Those Who Serve The Very Best"®



Equipment Inspection

- Equipment is Inspected Prior to Shipping



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INSPECTION SHEET
GRIDDLE / MG

Order #:

Model:

Electric: Voltage:

Gas: Nat LP

Serial #:

Date: Plate #:

Equipment update - old serial card # Serial #:

Assembler checked for Gas Leaks, Signature: _____

Assembler checked union, Signature: _____

Assembler checked all wire connections are tight, Signature: _____

Topside Is Level And Operates Properly: _____

Plate and perimeter quality checked

Adjusted incoming gas pressure " w.c.

Amperage readings - A

Hypot tested at: Volts

Heating section number	1	2	3	4	5	6
Spark electrode adjusted	<input type="checkbox"/>					
Pilot adjusted	<input type="checkbox"/>					
Thermopile volt.-burner "OFF", mV	<input type="checkbox"/>					
Thermopile volt.-burner "ON", mV	<input type="checkbox"/>					
Thermostat calibrated	<input type="checkbox"/>					

TSC thermostat calibrated

Equipment matches the order

Mech. overview (dent, scratch, hardware...)

Is serial number printed on the order

Serial card, two copies signed, dated

All switches in "OFF" position

No black dots on the griddle plate

Grease Draw Welded

Labels present, aligned

Test chart with serial number signed, dated

Test chart copy and customer manual

Accessories and **removable** parts present

Clean, good appearance

No mechanical discrepancy

Combustion tested %CO2 ppm CO

Plate is demagnetized

Inspector: _____ Date: _____

Customer Representative: _____ Date: _____

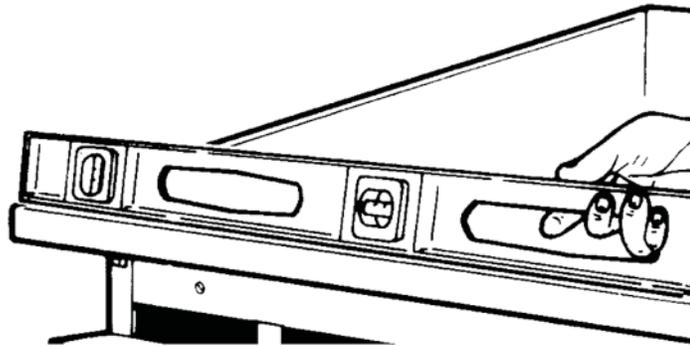
Inspector: Customer Representative

F-028
Griddle Inspection Form
Revision: 5
Effective: 09/01/2011

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Installation

- **Leveling**



- Place a level on the griddle plate from side to side. For griddles on legs, the bottom foot is adjustable. Turn counter clockwise to decrease height, clockwise to increase height. Casters are adjustable by loosening the jam nut. When desired level is reached, tighten the jam nut. Follow the same procedure to level from front to back.

Installation

- **Gas Pressure**



– Have installer follow gas pressure requirements. Installer should check incoming gas pressure and manifold pressure with all equipment in the kitchen on and operating.

- Natural Gas
 - 7" Supply
 - 4" Manifold
- LP Gas
 - 11" Supply
 - 10" Manifold

Installation

- **Quick Disconnect**



This griddle installation is incorrect – the quick disconnect should connect directly to the griddle.



This griddle installation is correct.

Lighting the MIRACLEAN® Griddle

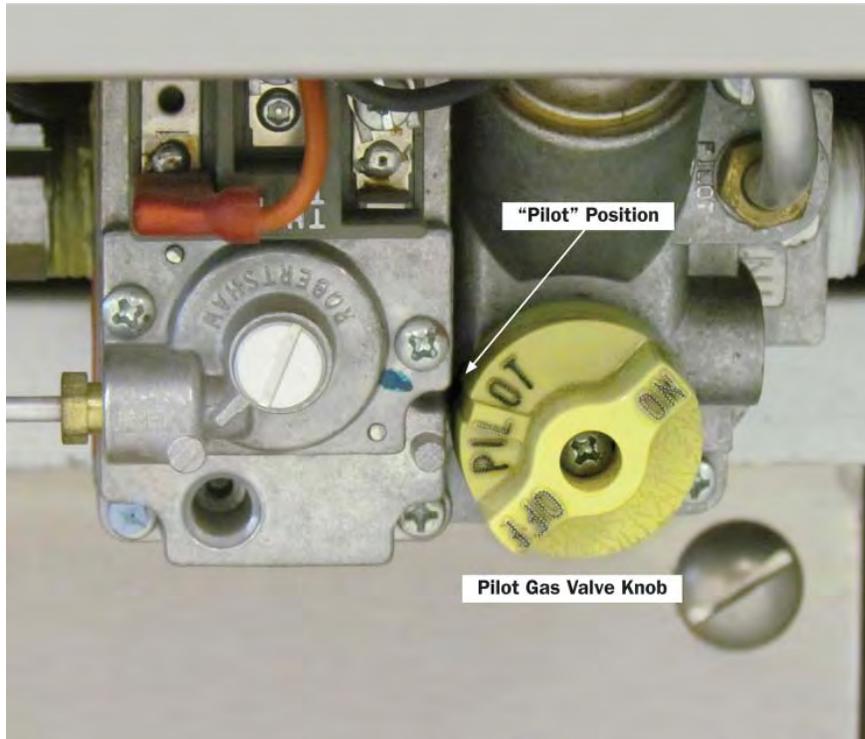


- Make sure main gas valve is in “ON” position.
- Make sure flexible connector is connected.

NOTE:

Air in the supply line may require a longer than normal period of time to light griddle during initial installation, after overnight shut down, or when re-lighting.

Lighting the MIRACLEAN® Griddle

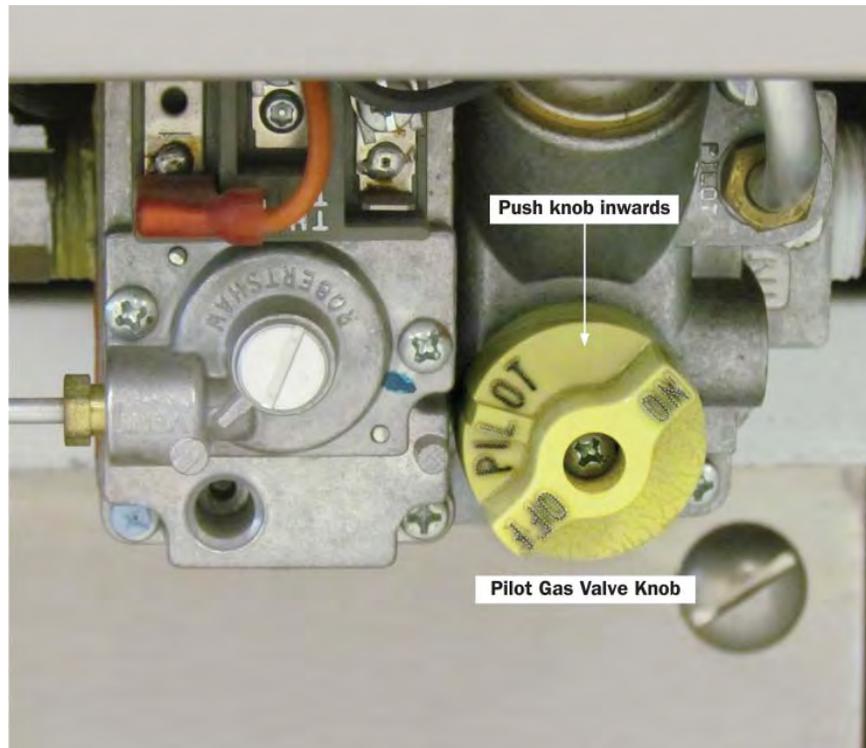


- Turn pilot gas valve knob to “PILOT” position.

NOTE:

We recommend lighting the burner on the side farthest from the incoming gas first (left side when facing griddle). When the farthest burner receives gas, gas is available for other burners.

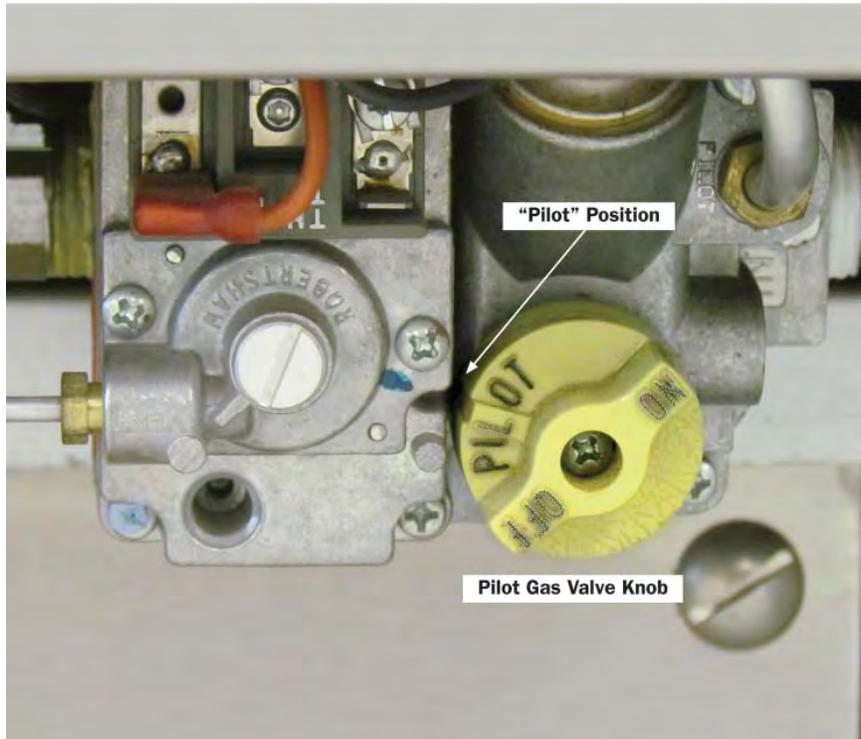
Lighting the MIRACLEAN® Griddle



- Push in and hold the pilot gas valve knob, and while holding, push the red spark ignition button to light the pilot. (When griddle is first installed, it may take longer than 90 seconds to bleed the air from the gas line).



Lighting the MIRACLEAN® Griddle



- When the spark ignites the pilot, continue to hold in for 60 seconds. Then release the pilot gas valve knob; the pilot should remain burning. Turn the knob to the "ON" position.

Lighting the MIRACLEAN® Griddle



- Turn On/Off switch to "ON" position.
- Set thermostat knob to desired temperature.

NOTE:

The operating temperature should be from 10°F to 25°F lower than conventional griddles - we recommend 350°F.

Lighting Problems Trouble Shooting

PROBLEM: None of the pilots will light

- No Gas
 - Check incoming gas line & quick disconnect in rear of griddle.
 - Note: Each section of the griddle is independent.
 - Air in gas line, (start-ups & reconnections)

Lighting Problems Trouble Shooting

PROBLEM: One of the pilots won't light

- **#1** - Check Piezo
 - Verify spark is present (does pilot light using a match/lighter?)
 - Bend the electrodes into the correct position
- **#2** - Check Gas Valve Knob
 - Is the knob broken?
 - It should NOT spin 360 degrees



Lighting Problems Trouble Shooting

The millivolt valve is a thermopile self-powered combination gas control. Before checking the millivolt system, the following operations should be performed and observations made:

1. A genuine Keating millivolt thermostat should be used for millivolt operation.
2. The thermostat leads and all wire connections should be cleaned and tightened to eliminate all unnecessary resistance.

Lighting Problems Trouble Shooting

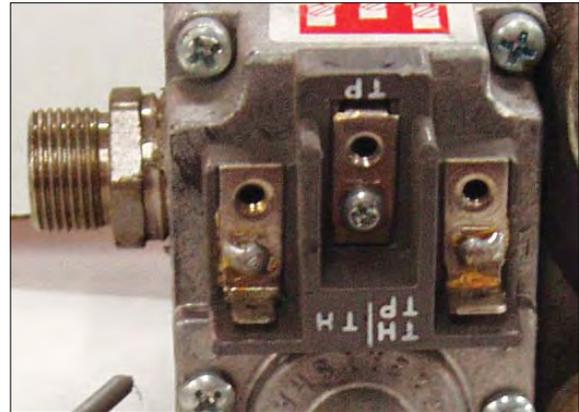
PROBLEM: Pilot lights, but will not stay lit

- **#1** - Check millivolt output with Voltmeter or Multi-meter
 - With thermostat contacts open, 325 to 700 mV.
 - With thermostat contacts closed, 200 mV or more.
 - If readings are below the numbers listed, replace thermopile.



Lighting Problems Trouble Shooting

NOTE: The millivolt system and individual components may be checked with a Millivolt meter having a 1-1000 mV range. Conduct each check below by connecting meter test leads to terminals as indicated. All readings are closed circuit.



CHECK	TO TEST	CONNECT METER LEADS TO TERMINALS	THERMOSTAT CONTACTS	METER READING SHOULD BE
A	MILLIVOLT SYSTEM CHECK	TP TH	CLOSED	100mV OR MORE
B	THERMOPILE OUTPUT	THTP TP	OPEN	BETWEEN 325-700mV
C	SYSTEM RESISTANCE CHECK	THTP TH	CLOSED	MEASURE LESS THAN 80mV
D	AUTOMATIC PILOT OUTPUT	THTP TH	OPEN	BETWEEN 120mV - 30mV

Lighting Problems Trouble Shooting

PROBLEM: Pilot lights, but will not stay lit

- **#2** - Check wire connection at gas valve magnet
 - Remove, rewire if necessary
 - Check the black wire between TH terminal on gas valve and the thermostat. It must not have any breaks or bare spots that allow it to ground out.
 - Check for loose thermopile connections at the gas valve:
TP – THTP
 - Check for bare spots along thermopile wire.



Lighting Problems Trouble Shooting

PROBLEM: Pilot lights, burner does not

- #1 - Check for
 - Gas valve in pilot position.
 - Power switch or thermostat “OFF” position.
 - Loose wire connections.

Lighting Problems Trouble Shooting

PROBLEM: Pilot lights, burner does not

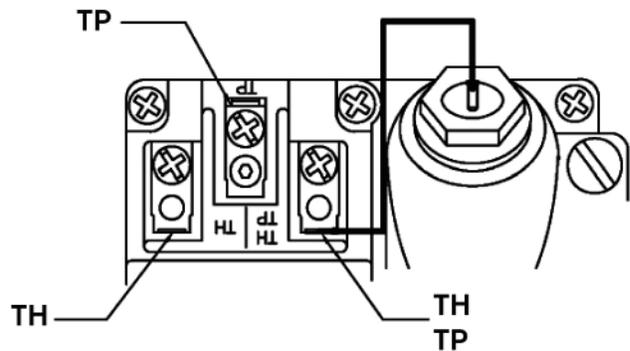
- **#2** - Defective thermostat
 - With all components in “ON” position, clip a jumper wire between the terminals on the thermostat. If the burner ignites, replace the thermostat.
- **#3** - Defective switch
 - With all components in “ON” position, clip a jumper wire between the terminals on the switch on the side with the wire harness attached. If the burner ignites, replace the switch. **Note:** if there is continuity between the unused terminals on the switch, the wire harness could be moved to that side of the switch and could resolve a switch issue.

Lighting Problems Trouble Shooting

PROBLEM: Pilot lights, burner does not

- **#4 - Defective gas valve**
 - With a quality multi-meter, there are 3 sets of ohm checks to determine if there is high resistance in the gas valve.

Note: when checking the ohm readings, the thermopile wire must be disconnected from the TP terminal on the valve and the switch and/or thermostat needs to be in the “OFF” position.



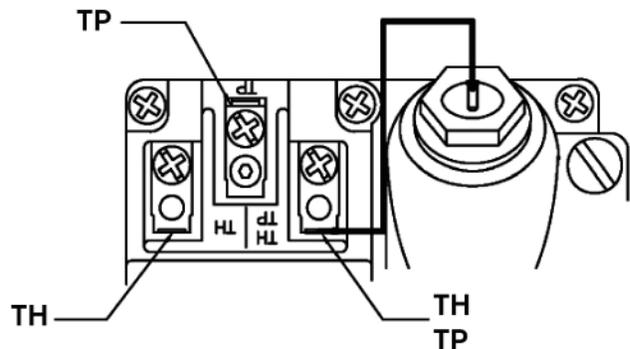
Check 1: Place one point of the multi-meter on the TH terminal on the valve and the other point on a bare metal surface on the griddle. This resistance reading should be 1.6 ohms \pm 0.2 ohms.

Lighting Problems Trouble Shooting

PROBLEM: Pilot lights, burner does not

- **#4** - Defective gas valve, continued
 - With a quality multi-meter, there are 3 sets of ohm checks to determine if there is high resistance in the gas valve.

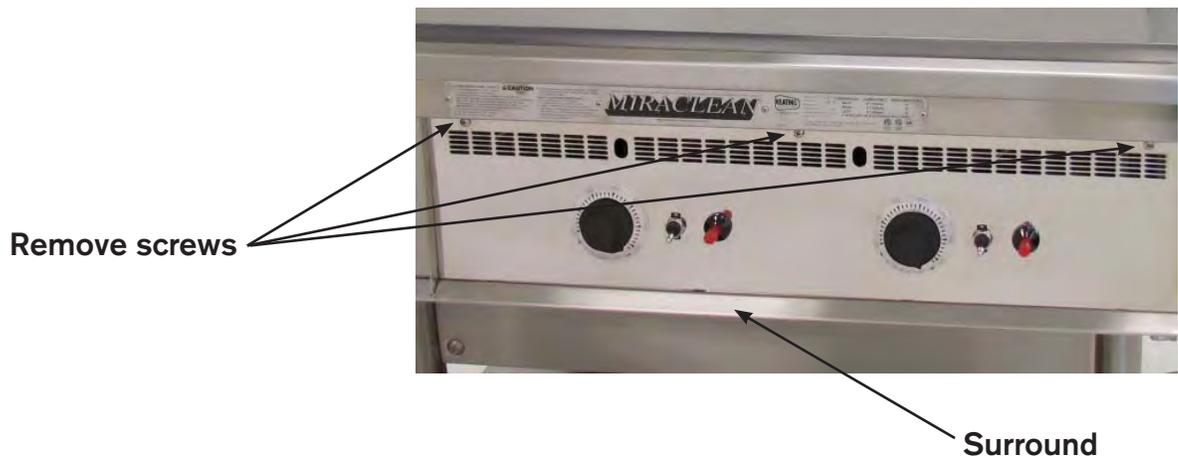
Check 2: Place one point of the multi-meter on the THTP terminal on the valve and the other on the TH terminal. This resistance reading should be 11.5 ohms \pm 0.2 ohms.



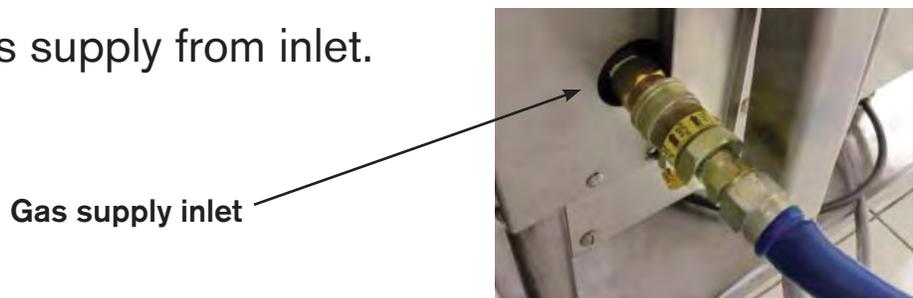
Check 3: Place one point of the multi-meter on the THTP terminal and the other on the TP terminal. This resistance reading should be 10.0 ohms \pm 0.2 ohms. If any of the resistance readings are outside of tolerance, replace the gas valve.

Lighting Problems Trouble Shooting

• Gas Valve Replacement



1. Remove screws from control panel.
2. Remove grease drawer, set to side.
3. Remove screws that hold surround.
4. Carefully guide control panel through surround.
5. Set heat shield off to side.
6. Disconnect gas supply from inlet.



Lighting Problems Trouble Shooting

- **Gas Valve Replacement**, continued



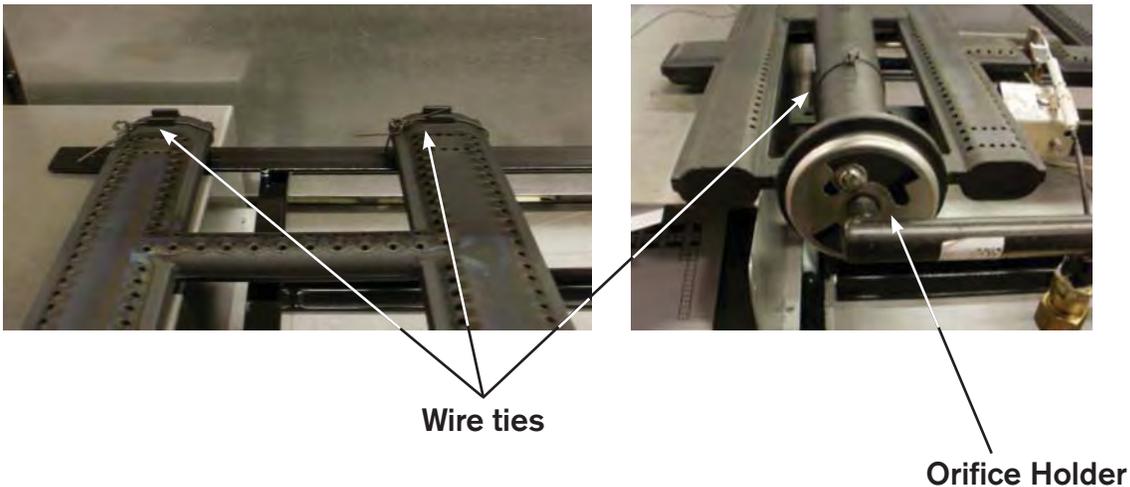
Remove
nut bolts

7. Remove (2) nut bolts that attach griddle frame.
8. Griddles with grease chute on side of plate, go on to step 10.

Griddles with grease chute in front of plate – disconnect the burner that sits over grease drawer. Go to step 9.

Lighting Problems Trouble Shooting

- **Gas Valve Replacement**, continued

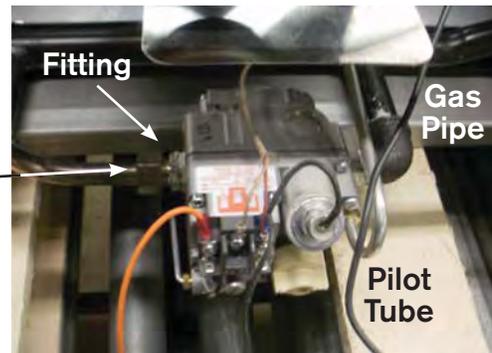


9. A. Cut the wire ties that hold the burner to frame (there are 3 wires to cut).
B. Lift the back of the burner so the stub on the bottom of the burner comes out of the hole in the frame. Move the burner towards the back of the griddle so the burner will slide off of the orifice holder.
10. Pull the frame toward you about 2 inches to give clearance for the gas valve when removing.

Lighting Problems Trouble Shooting

- **Gas Valve Replacement**, continued

11. Disconnect the wires attached to the gas valve.
12. Loosen nut. 
13. Disconnect pilot tube.
14. Unscrew gas valve to remove from gas pipe.
15. Remove fitting from old gas valve and clean it. Add new gas pipe sealant to threads, and install on new gas valve.
16. Clean threads of gas pipe and apply gas pipe sealant. Thread new gas valve.
17. Install new gas valve onto gas pipe. Connect tube and tighten nut.
18. Connect wire to new gas valve.
19. Connect pilot tube to new gas valve.



Lighting Problems Trouble Shooting

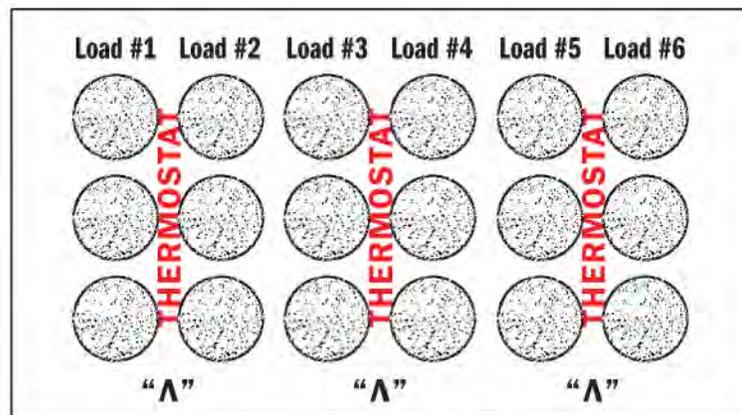
- **Gas Valve Replacement**, continued

20. Slide frame back into cabinet and install the nuts and bolts.
21. Griddles with grease chute located on side of plate, go to step 22. Griddles with grease chute in front of plate – you will need to reinstall burner onto the frame.
 - A. Slide the burner over the orifice holder and set the burner nub back into hole in frame.
 - B. Use wire ties to fasten burner in place to the frame.
22. Slide control panel back through surround.
23. Re-attach surround and upper heat shield onto the griddle.
24. Re-attach the control panel onto the surround.
25. Re-attach grease drawer.
26. Re-attach gas supply to griddle.

Heating Problems Trouble Shooting

PROBLEM: Improper Heating

- **#1** - Check for draft blowing on plate using a butane lighter. Observe flame.
- **#2** - Check for flue blockage.
- **#3** - Improper food loading (refer to chart).

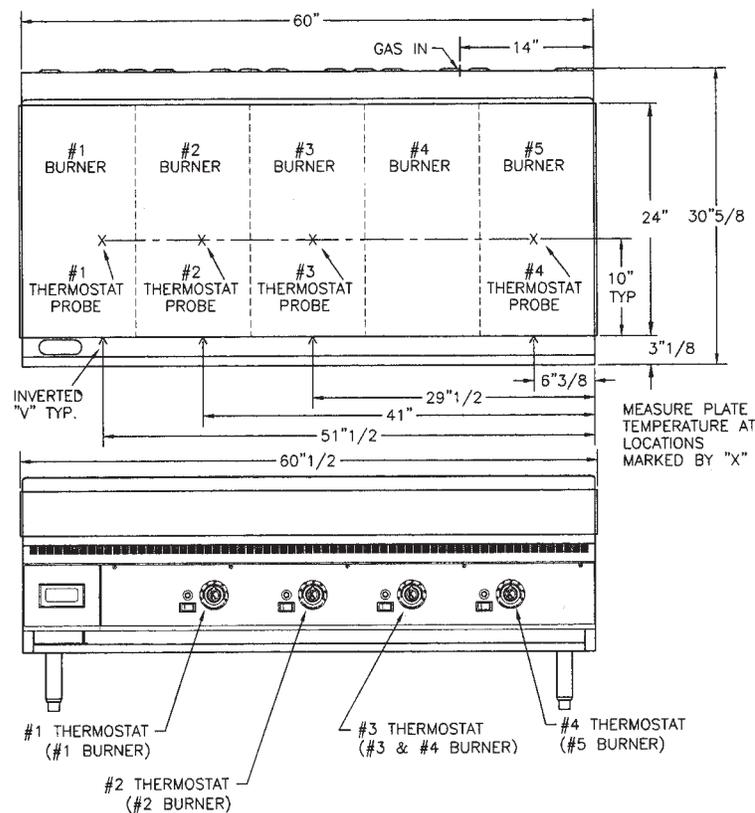


Thermostat "V" Bulb Location

Heating Problems Trouble Shooting

PROBLEM: Improper Heating

- **#4** - Take temperatures 12" back from front of plate over the inverted "V" using a surface thermometer (do not use an infrared thermometer).



Heating Problems Trouble Shooting

PROBLEM: Improper Heating

- **#5** - Verify proper installation of the thermostat. Tip of bulb sticks out 1" past end of "V" channel.



Cleaning the MIRACLEAN® Griddle

STEP 1

Scrape the Miraclean® surface using the Keating scraper.



DO NOT use bricks, stones, screens or chemicals to clean the griddle surface.

DO NOT hack, chop, cut or hit the griddle surface.

Cleaning the MIRACLEAN® Griddle

STEP 2

Clean your Miraclean® Griddle while warm at approximately 300°F. Use entire pitcher of water - pour ½ pitcher at a time on the surface while brushing with the Keating Palmetto brush. Scrub the griddle clean with the brush, sweeping the water into the drain trough.



DO NOT use ice to cool the griddle surface.

Cleaning the MIRACLEAN® Griddle

STEP 3

Once the griddle has been cleaned, sprinkle Keating Klenzer on the surface. Add water, and using the Palmetto brush, work the Klenzer and water into a paste. Allow to dry, and then polish with a soft cloth. Rinse thoroughly with potable water to remove excess Klenzer. Clean the griddle on a daily basis.



DO NOT use chemicals to clean the griddle.



Top-Side™ Cooker

Keating recommends setting the temperature of the Top-Side Cooker 50°F higher than the surface of the MIRACLEAN griddle – 350°F for the griddle, 400°F for the Top-Side.



Top-Side™ Cooker Features

- **Cuts cooking time in half**
- **Micro-Leveler**
- **Miraclean® Plate**
- **Manual or Automatic design**
- **Polymer coated reversible cooking sheets for easy clean-up**

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Top-Side™ Cooker Features

Product	Miraclean with Top-Side Cooker @ 400°F	Conventional Griddle @ 350°F
Fresh Hamburger 3-1/4 oz. scoop	30 seconds	5 - 6 min.
Hamburger Patties 4 oz. Frozen	2 min. 30 sec.	6 min.
Hamburger Patties 2 oz. Frozen	40 sec.	1 min. 40 sec.
Sausage Patties 3 oz.	2 min.	6 min.
Bacon – Restaurant Sliced (Cooked to crisp)	1 min.	6 min.
Chicken Breasts 4 oz. Frozen (Cooked to 170°F)	3 min. 30 sec.	8 min.
Salmon Filet 7 oz.	7 min.	21 min.
Salmon Steak 6 oz.	6 min.	18 min.
Orange Roughy 2.1 oz.	2 min. 30 sec.	6 min.
Grilled Cheese Sandwich	2 min. 10 sec.	5 min.

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Top-Side™ Control Box Location

Top-Side control box(es) should be located in a well ventilated area.

The maximum ambient temperature for each control box is 122°F (50°C).



Top-Side™ Control Box Location



The Top-Side control boxes shown are stacked and contained in a box causing high ambient temperatures - control boxes should always be located in a well ventilated area.



Setting the Temperature of the Top-Side™

- Turn the ON/OFF switch to the “ON” position.



Setting the Temperature of the Top-Side™

- To set the temperature, press and hold the “PUSH TO SET” button on the thermostat and adjust the knob to the desired temperature. To increase the temperature, turn clockwise. To decrease, turn the knob counterclockwise. The new temperature will be entered after 3 seconds. The red “ELEMENT ON” light will illuminate when the element is on.



Checking the Digital Timers



Operating Logic

When the timer is powered up, the display will show the time setting for the channel that was operated last and the relay output contacts will be open. To start a cycle, press the desired channel button (1-3). The display will begin to countdown from the preset time setting and the relay output contacts will close. During the countdown the colon will flash at a one-second rate. When the countdown has reached "00:00" the relay output contacts will open, the display will flash, and the audible alarm will sound. To cancel the audible alarm, press any button.

Setting the Digital Timers

- **Standard feature with Auto-Lift**



Programming

Each timer may be set for a total of 3 times. To program the timer, it must be in the idle mode.

Press and hold the set button for approximately two seconds. The display will show "SET". Press the button for the channel to be programmed (T1, T2 or T3).

The display will show the current setting for that channel. Use the up or down button to increment or decrement the setting. When the setting is correct, press and hold the set button again for approximately two seconds.

The display will show "StO" and the timer will return to normal operation. Repeat this process for setting the 2 additional times.

Pause the Digital Timers



Pause Feature

To pause a cycle in progress, press any button. The relay output contacts will open, the display will flash, and the countdown will pause.

To resume the countdown, press any button. The display will resume the normal countdown and the relay output contacts will close.

Canceling the Digital Timers



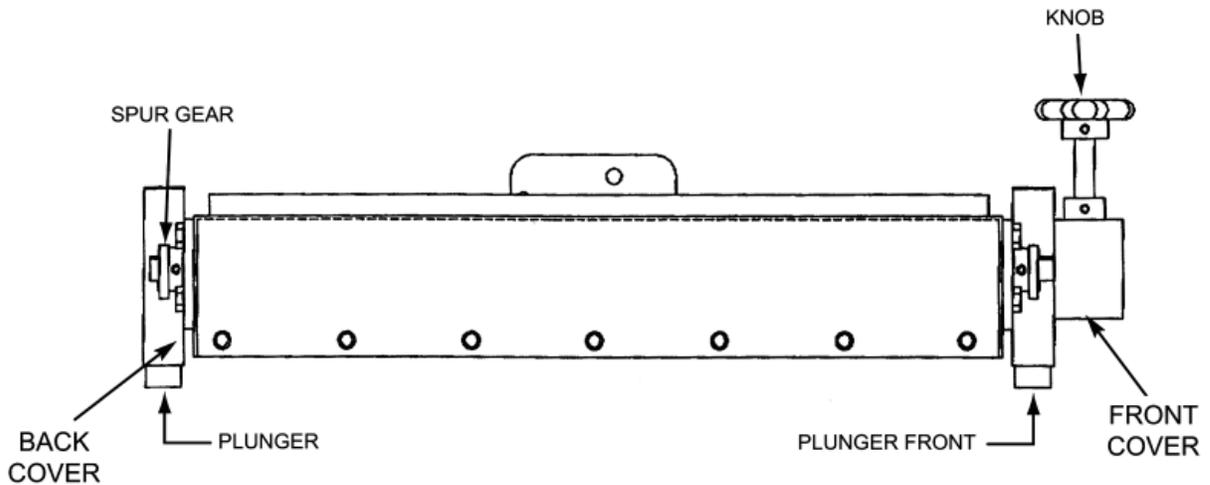
Canceling a Cycle

To cancel a cycle in progress press and hold any button for approximately two seconds. The relay output contacts will open and the display will show the time setting for the channel last used.

Cooking Head Trouble Shooting

PROBLEM: Uneven heating

- Check the micro leveler – are both plungers in the same position?



Cooking Head Trouble Shooting

PROBLEM: Improper heating

- Check temperature probes (high limit & thermostat).

High Limit –

Probe @ room temperature:

1,000-1,100 ohms

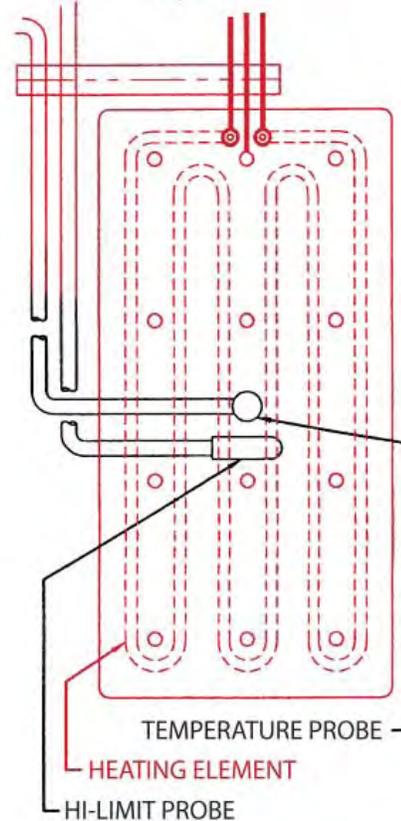
@ 400°F: 1,800 ohms

Thermostat –

Disconnect probe from controller and measure resistance. If resistance is over 15%, replace probe.

Temperature (F°)	Resistance (Ohm)
95	0.30
100	3.80
125	4.60
150	5.50
175	6.40
200	7.90
225	8.40
250	9.70
275	10.90
300	12.40
325	13.80
350	15.10
375	17.00
400	18.40
425	20.20
450	21.30
475	23.30

Top-Side Cooking Head
Top View



Auto-Lift Trouble Shooting

- **Auto-Lift**
- **Uses a timer to raise and lower actuator**

PROBLEM: Head fails to lift or lower

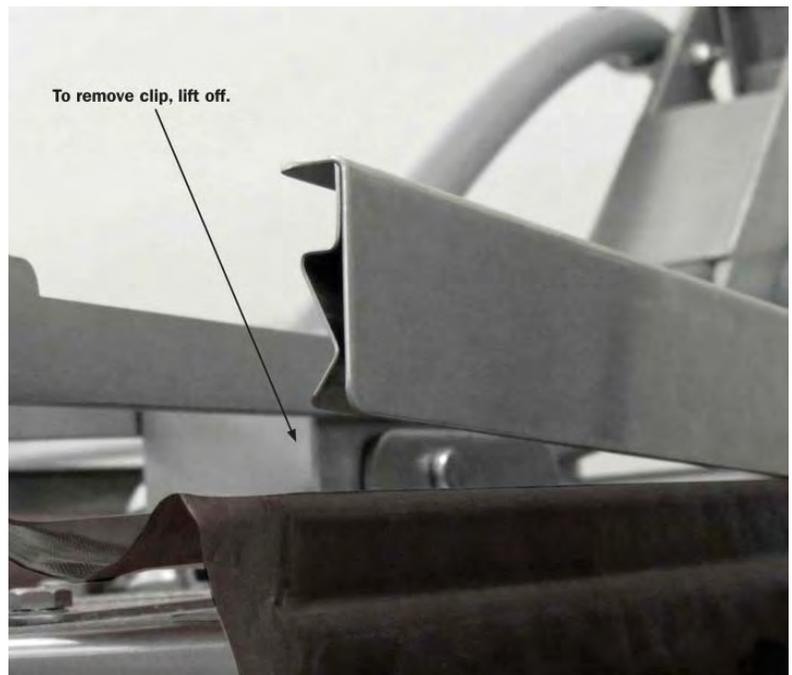
- Verify proper timer operation.
- Check circuit breaker in rear.
- Verify voltage to actuator (replace actuator if necessary).



Cleaning the Cooking Sheet

End of Day Cleaning

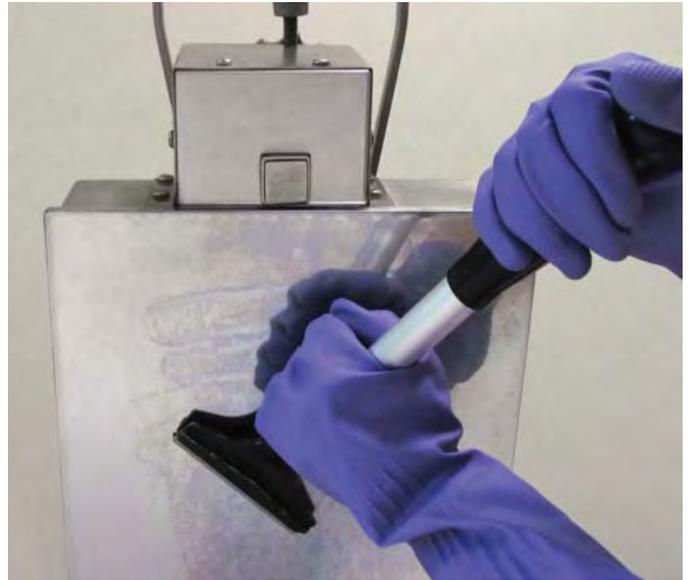
1. Remove the cooking sheet from the cooking head.
2. Wash the cooking sheet in a sink with soap and water and dry thoroughly.
3. After the cleaning is complete, reverse the cooking sheet and reattach it to the cooking head.



NEVER SCRAPE COOKING SHEETS WITH THE SCRAPER.

Cleaning the Cooking Head

1. With the cooking sheet removed, scrape MiracleClean surface from front to back with Keating griddle scraper.
2. Clean and polish surface with Keating Klenzer on a damp soft cotton cloth. Wipe off excess Klenzer.





Warranty

KEATING 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 of 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 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, EXPRESS OR IMPLIED, CONTRACT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY SHALL BE SOLELY AND EXCLUSIVELY THE OBLIGATION 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 DAMAGES 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:

1. 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.
2. In the event that the product was damaged after leaving the factory due to flood, fire, other acts of God or accident, damage during shipments should be reported to the carrier and is not the responsibility of Keating.
3. In the event the serial number or rating plate has been removed from the product or altered.
4. 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.
5. 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.
6. In the event of unauthorized repairs or alterations to the Keating product.
7. With the use of sodium chloride in pasta vessels or harsh chemicals in fryer or pasta vessels.
8. 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.

KEATING OF CHICAGO, INC. | 1-800-KEATING | WWW.KEATINGOFCHICAGO.COM

6/20

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Warranty

Our equipment has a standard one year parts and labor warranty.

NOTE: All calls on equipment which may be within the warranty time frame are not necessarily warranty calls. A responsible and experienced servicer knows the difference between a legitimate warranty repair and operator generated failure. It is the responsibility of the service company to obtain payment for any non-warranty repairs or services directly from the end user. Keating will NOT make payment for non-warranty work. If you have any questions, call 1-800-KEATING.

Call 1-800-KEATING for a Work Authorization Form prior to warranty service.

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Warranty

• Work Authorization Form



PHONE: 708-248-3000
FAX: 708-248-3100
1-800-KEATING
keatingofchicago.com

WARRANTY SERVICE AUTHORIZATION



URGENT

FAX BACK WITHIN 2 HOURS
(TO NOTIFY US OF SCHEDULED SERVICE TIME)

FROM: _____ C.T.

WORK ORDER # _____

To: SERVICE DEPARTMENT

From: _____

Company: _____

Account#: _____

Phone: _____

Fax: _____

A service call was received for the following:

Location: _____

Phone: _____

Contact: _____

Model: _____

Address: _____

Serial#: _____

City, State, Zip: _____

Shipped Date: _____

Authorization: _____

Labor Hrs Allowed: _____

***** Malfunction & Service Instructions *****

This authorization is for WARRANTY repairs ONLY! NON-WARRANTY service must be billed to the customer.
Keating Warranty Does NOT Cover:
Calibration, Gas Pressure Problems, Multiple Trips/Recalls, Electrical Service, Cleaning and Maintenance,
Installation Check Out, Start Ups & Training, Misuse and/or Abuse of Equipment, or Clogs in Fryer or Filter.

PLEASE RETURN: FAULTY PARTS, A COPY OF THIS WORK AUTHORIZATION & THE BILL FOR SERVICE TO:

WARRANTY DEPT.
100 GROVE STREET
CAPRON, IL 61012

FOLLOW UP DATE: _____ PERFORMED BY: _____ CUSTOMER SATISFIED WITH SERVICE? YES NO

DO NOT WRITE BELOW THIS LINE. Please use another sheet if needed.

FOR FULL KEATING WARRANTY SEE THE BACK PAGE OF SERVICE MANUAL
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Warranty

Our labor guide includes labor rates, and goes into greater detail regarding warranty invoices and our part return process.



LABOR GUIDE

Instructions for filing a Warranty Labor Claim

Service Company

1. Contact Keating at 1-800-KEATING for work authorization prior to service.
2. Supply equipment model and serial numbers.
3. Service the equipment in accordance with Keating's warranty policy.
4. **Immediately** return defective parts and a **Warranty Claim Form** (using a CEFSA form or equivalent) to Keating of Chicago. Send this information to: Warranty Department, 100 Grove Street, Capron, IL 61012 (See warranty authorization).
5. All claims must be received at the factory within 30 days of repair. Late claims will be rejected.
6. Requests for variance from stated policies must be sent to the National Service Manager. Send requests via fax prior to claim submission.
7. Review rejected claims to determine if cause of rejection can be corrected and resubmit within five days.

Regarding Warranty

All Keating equipment serviced under warranty **MUST** use Keating parts. Any equipment repaired with substitute parts will not receive **credit**.

General Information

Services **not covered** by the Manufacturer's Limited Warranty include:

1. Correction of improper installation such as gas line size, gas pressure, ventilation, etc.
2. Recommended start up adjustments, calibrations, leveling, etc.
3. Incomplete or inaccurate warranty claims (See warranty authorization).
4. Warranty claims not received at the factory within 30 days following date of service.
5. Labor charges in excess of the Labor Guide without prior authorization.
6. Mileage and/or travel time greater than fifty (50) miles and/or one (1) hour without prior authorization.
7. Charges for handling of parts.
8. Calibration may be requested only **once**.
9. Any variance must be approved in writing by the National Service Manager.
10. Credit will not be issued for parts returned that test good.

Rates are subject to change without notice.

Factory

1. All claims will be processed as rapidly as possible.
2. Claims which are incomplete, inaccurate or do not comply with requirements and limitations will be rejected. An explanation will be sent as soon as possible.
3. Acceptable claims will be reviewed for compliance with the **Labor Guide**.
4. Credit will be issued to the service provider for all accepted claims.
5. The service provider will receive a copy of each credit memo noting the warranty claim form number and reasons for any deductions.
6. Customers will be contacted to verify satisfactory warranty service.

Instructions for using the Labor Guide

1. Labor rates include diagnosis, part replacement and equipment testing time.
2. Full time credit for the highest rated component; plus 1/2 time credit for each additional part.
3. No additional time allotted if components had to be removed to replace highest rated component.

Protect yourself and your customers by providing only Keating approved parts for repair of all Keating equipment.

1

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Returned Parts

- **If the Return Authorization is not included with your replacement part, you must call 1-800-KEATING for an Authorized Merchandise Return.**
- **All parts returned from the field are tested.**
- **“New” parts tested for proper operation before returning to stock.**
- **Parts are tested for the malfunction stated on service invoice.**
- **Returned part must be received in a condition that allows for testing.**
- **If part tests “defective”, invoice is processed.**
- **If part tests “good”, the part & invoice are returned to the service company.**



Returned Parts

• Warranty Part Test Report Form


Warranty Part Test Report

Service Company: _____ Invoice: _____

Date Received: _____ Date Tested: _____ Date Code: _____

Receiving Record # _____ Part # _____ Component # _____

Customer Name _____ Address _____ City _____ State _____

Parts listed above were replaced to be tested in our Quality Assurance Lab. The results are listed below.

Return Part to Service Company	Test Good	Test Bad	Test Bad	Out of Warranty Scrap Part in 30 days	Return Part to Stock	Part warehouse location:		Test Results
						Item Returned:	Used	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flame Switch:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hi-Limit:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pump/Motor:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thermopile:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Thermostat:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Timer:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Transformer:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gas Valve:	<input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/> <input type="checkbox"/>	_____

Comments: _____

Part is New, returned to stock: _____

Part FAILED our tests: Inspector Signature: _____

Part PASSED our tests: Inspector Signature: _____

Returned to Manufacturer to determine cause of Failure: _____

Failure caused by Abuse: _____

Reimbursement is Denied for parts replaced by Service Company and tested Good per Keating's Warranty Policy.

Scrap

Good parts will be returned to the service company on Order # _____

Reviewed Test Results: _____

F-020WarrantyPartTest - Revision: 3
0211

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Sample Rejected Part

EXAMPLE: Rejected Thermostat

- The manufacturer of the thermostat voids the warranty if the set screw in the stem of the thermostat has been adjusted. Keating will not pay for warranty service to adjust the set screw.

