



**INSTANT RECOVERY®
GAS FRYER
SERIES PRE-2000**

MANUAL

IMPORTANT:

THE USER'S MANUAL PROVIDES SPECIFIC OPERATING INSTRUCTIONS FOR YOUR MODEL. USE THE INSTANT RECOVERY® GAS FRYER 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.

Record the Serial number and Model number of this Instant Recovery® Gas Fryer in the spaces provided. **Keep these numbers for future reference.**

SERIAL NUMBER

MODEL NUMBER

Keating commercial fryers are not intended for household use.

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

1-800-KEATING | keatingofchicago.com

NOTE:

PURCHASER SHOULD POST IN A PROMINENT LOCATION INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.



⚠ 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.

⚠ WARNING

PROPANE GAS MAY EVENTUALLY LOSE ITS ODOR AND PRECAUTIONS SHOULD BE TAKEN TO ASSURE THAT PROPANE GAS IS NOT PRESENT EVEN THOUGH YOU DO NOT DETECT AN ODOR. IF THERE IS ANY DOUBT, YOU SHOULD CALL YOUR LOCAL PROPANE GAS SUPPLIER FOR ASSISTANCE.

THE EQUIPMENT IS TO BE INSTALLED TO COMPLY WITH THE BASIC PLUMBING CODE OF THE BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC. (BOCA) AND THE FOOD SERVICE SANITATION MANUAL OF THE FOOD AND DRUG ADMINISTRATION (FDA).



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■ INTRODUCTION

Instructions in this manual should be read thoroughly before attempting to operate this Keating Gas Fryer. 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.

SAFETY PRECAUTIONS

⚠️ WARNING

THIS SYMBOL WARNS YOU THAT SERIOUS BURNS OR OTHER INJURIES MAY RESULT IF SAFETY INSTRUCTIONS ARE NOT FOLLOWED.

- This service manual should be retained in a safe place for future reference. The installation of your new fryer must conform to local codes or in the absence of local codes, with the current National Fuel Gas Code ANSI Z223.1/NFPA 54 (latest edition), Natural Gas Installation Code CAN/CGA-B149.1 or Propane Installation Code CAN/CGA-B149.2.
- Your ventilation hood, when installed, must conform to the current ANSI/NFPA 96 standard (latest edition).
- No frame or restriction shall be constructed around the fryer that will restrict air movement into the fryer's combustion area or prevent proper ventilation.
- Keating fryers are designed to operate on the gas fuel specified on the serial plate and must not be operated with another gas fuel. They cannot be converted to another gas fuel by turning or engaging a switch.

⚠️ WARNING

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY APPLIANCE.

You will post, in a prominent location, instructions to be followed in the event the user smells gas. This information shall be obtained from your local gas supplier.

IMPORTANT: IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNIT AT MAIN SHUT-OFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR EMERGENCY SERVICE.

- You must maintain this appliance free and clear from combustibles.
- You must maintain the following minimum clearances from combustible and non-combustible construction:

MINIMUM CLEARANCE

CONSTRUCTION CLEARANCES		
	COMBUSTIBLE	NON-COMBUSTIBLE
BACK	6"	0"
RIGHT SIDE	6"	0"
LEFT SIDE	6"	0"

SUITABLE FOR NON-COMBUSTIBLE FLOORS

- You must install this appliance at least 16 inches away from any open flame.
- Adequate clearance for servicing and proper operation must be maintained. Your fryer is designed to be serviced from the front.
- Keating commercial fryers are not intended for household use.
- ALWAYS instruct new employees on proper fryer operation.
- A fryer should be operated ONLY by properly trained personnel.
- ALWAYS turn fryer off each night.
- ALWAYS turn fryer off at customer power panel before servicing.
- ALWAYS disconnect fuel source before servicing.
- NEVER leave a fryer unattended during operation.
- NEVER move a fryer when full of hot oil.
- NEVER introduce objects or liquids into fryer, while operational, which are not designed or made for cooking.
- THIS FRYER MAY NOT BE ALTERED, MODIFIED OR CHANGED IN ANY WAY.

The State of California enacted the California Safe drinking water and Toxic Enforcement Act of 1986, (Prop. 65), which "prohibits any person in the course of doing business from knowingly and intentionally exposing any individual to a chemical known to the State of California to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individuals." The Governor's Scientific Advisory Panel added carbon monoxide to the list of hazardous chemicals known to cause reproductive harm.

Carbon monoxide would not be present in concentrations that would pose a "significant risk" to the consumer when the equipment is installed, operated and maintained as follows:

- Installed in accordance with all local codes, or in the absence of local codes, with the current National Fuel Gas Code ANSI Z223.1/NFPA 54 (latest edition).
- Installed under a properly designed operating exhaust hood.
- Connected to the type of gas for which the appliance is manufactured.
- In-line pressure regulator, not supplied by Keating, must be installed outside the appliance to maintain proper incoming gas pressure (7" W.C. Natural, 11" W.C. L.P).

- Pressure regulator installed in the appliance is adjusted for the manifold pressure marked on the serial plate.
- Adequate air supply to the appliance.
- Inline pressure regulator, not supplied by Keating, must be installed outside the appliance (when needed to maintain the specified manifold pressure marked on the serial plate.
- The equipment is operated in the manner intended using the proper utensils.
- Keep the equipment clean and have it checked periodically.
- Burner air adjustments, mechanical maintenance and repairs must be performed by qualified service personnel.

If the equipment is not installed, operated and maintained in accordance with the above, concentrations of carbon monoxide in excess of the established limits could be present in the kitchen environment.

ALL PERSONNEL IN THE WORK PLACE WHO MAY BE SUBJECT TO ANY EXPOSURE OF CARBON MONOXIDE MUST BE WARNED OF SUCH POSSIBLE EXPOSURE. THIS WARNING SHOULD BE CONVEYED IN A MANNER SO THAT IT IS CLEARLY UNDERSTOOD BY THE EMPLOYEE, AND THE EMPLOYEE SHOULD BE ASKED IF IN FACT HE OR SHE UNDERSTANDS THE CORRECT METHOD OF OPERATION OF THE EQUIPMENT AND THAT A RISK OF EXPOSURE EXISTS IF THE EQUIPMENT IS OPERATED IMPROPERLY

■ FIRST STEPS

NATIONAL CODE REQUIREMENT

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas code, ANSI Z223.1 or the Natural gas Installation Code, CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2. Flexible connectors must comply to ANSI Z221.69/CAN/CGA1.16.

When pressure testing at test pressures less than or equal to 1/2 psig (3.45 KPA), fryer **must be isolated** from gas supply piping. When pressure testing at test pressures above 1/2 psig (3.45 KPA), fryer **must be disconnected** from gas supply piping system.

POSITIONING

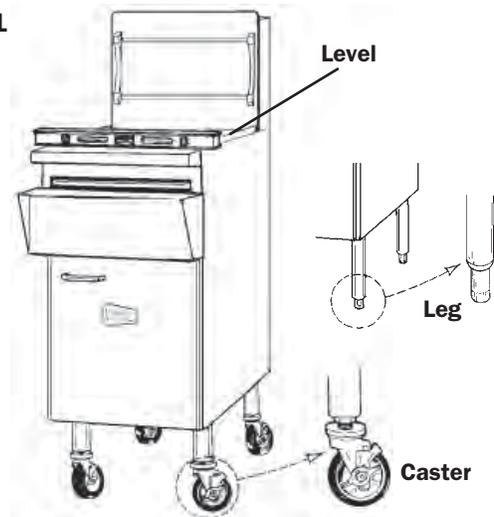
The fryer must be no closer than 6 inches from any combustible material and 16 inches away from any open flame. The fryer must be placed under an exhaust hood with a fire retardant system. Your ventilation hood, when installed, must conform to the current ANSI/NFPA 96 standard. ALL connections and placement must comply with local and national codes. It is the responsibility of the owner and local installer to comply with these regulations when installing the fryer.

Counter model and floor model fryers must be restrained to prevent tipping when installed in order to avoid splashing, spilling, etc. of hot liquid. The restraining method may be a manner of installation or by separate means.

LEVELING

The fryer will operate at its highest efficiency when properly leveled. Place a level on fryer vessel from side to side. For fryers on legs, the bottom foot of the leg is adjustable. Turn counter clockwise to decrease height or clockwise to increase height until level. For fryers on casters, the casters are adjustable by loosening the jam nut and turning the caster in or out. When the desired level is reached, tighten the jam nut. Adjustments of more than 3/4" are not recommended on any caster. The same procedure should be followed to level the fryer from front to back.

Figure 1



RESTRAINING DEVICES

1. On fryer installations with casters, casters and jam nuts must be completely tightened. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement.

Fryer must also be restrained to prevent tipping when installed so that hot liquid splashing is avoided.



2. The restraint means must be attached to the rear of the Keating Gas Fryer within 2" of the center line width and approximately 1-5/8" from the bottom of the cabinet back to allow the restraining bolt to be anchored to the cabinet back between the cabinet bottom and inner liner.

If disconnection of the restraint is necessary, it must be reconnected when the Keating fryer is returned to its originally installed position.

NOTICE: WHEN THIS APPLIANCE IS INSTALLED WITH CASTERS, IT MUST BE INSTALLED WITH CASTERS SUPPLIED, A CONNECTOR COMPLYING WITH EITHER ANSI Z21.69 OR CAN/CGA-6.16 AND A QUICK-DISCONNECT DEVICE COMPLYING WITH EITHER ANSI Z21.41 OR CSA-6.9. IT MUST ALSO BE INSTALLED WITH RESTRAINING MEANS TO GUARD AGAINST TRANSMISSION OF STRAIN TO THE CONNECTOR, AS SPECIFIED IN THE APPLIANCE MANUFACTURER'S INSTRUCTIONS.

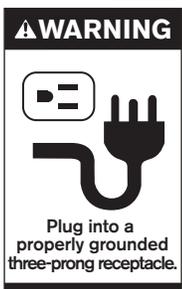
ELECTRICAL CONNECTION

The Keating fryer, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, the National Electrical Code, ANSI/NFPA No. 70. or the Canadian Electrical Code, CSAC-22.2 as applicable. A wiring diagram is located on the last page. In the USA and Canada, the electrical supply must be 120 VAC, 60 Hz.

The Keating Instant Recovery® Gas Fryer is equipped with a 9' neoprene covered, 3 wire electrical cord with a three-pronged grounded plug for protection against electrical shock. This plug must be placed into a 120V properly grounded three-pronged polarized outlet. For proper grounding procedures see local codes, or in the absence of local codes, the National Electrical Code ANSI/NFPA 70 (latest edition) or Canadian Electrical Code CAN 22.2 (latest edition) as applicable.

NOTE: The electrical wiring diagram for the fryer is located on the inside of the fryer door or in the back of this manual.

WARNING



THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG 120 VOLT NEMA 5-15 (GROUNDING) PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED AND POLARIZED THREE-PRONG RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.

CAUTION

Before plugging in the fryer, confirm the outlet is properly polarized and grounded. If the hot and neutral terminals are reversed or the outlet is not properly grounded, the burners may not ignite (burner on light will go out after 2-1/2 seconds and the ignition processes will continue 3 times).

WARNING

IF DISCONNECTION OF THE RESTRAINT IS NECESSARY, IT MUST BE RECONNECTED WHEN THE FRYER IS RETURNED TO ITS ORIGINALLY INSTALLED POSITION.

GAS CONNECTION

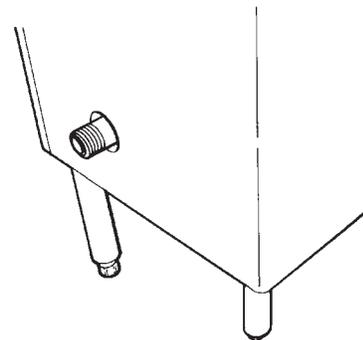
WARNING

• PIPE JOINT COMPOUNDS RESISTANT TO PROPANE GASES MUST BE USED.

• BEFORE OPERATING THIS FRYER, CHECK PIPE JOINTS FOR LEAKS BY USING A SOAP AND WATER SOLUTION ONLY. DO NOT USE AN OPEN FLAME!

ON AN AA OR CMG (MILLIVOLT) FRYER, DO NOT SHORT GAS VALVE TERMINALS WHEN TESTING WIRING AS THERMOSTAT AND GAS VALVE DAMAGE MAY OCCUR AND CAUSE UNSAFE CONDITIONS.

Figure 2
Main Gas Connection



Connect the fryer to the main gas supply line at the rear of the fryer. The piping should be a minimum of 3/4" NPT supply pipe for a single fryer at the burner manifold. Batteries require larger supply lines. Installation must conform to the current local codes and National Fuel Gas Code (U.S.) ANSI Z223. 1/NFPA 54 (latest edition), Natural Gas Installation Code CAN/CGA-B149.1 or Propane Installation Code CAN/CGA-B149.2 (latest edition).

A 3/4" NPT manual gas valve is factory installed with each floor model fryer (for single fryers and batteries), except for 10x11AA – 20AA models which use a 1/2" NPT valve. The required gas pressure for proper operation of each fryer is 4" water column for natural gas and 10" water column for Propane gas at the burner manifold. Remove the allen head test plug on the gas manifold and use a manometer to check the gas pressure.

In-line pressure regulators are not supplied by Keating. They are to be provided and installed by others as directed by local codes.

NOTE: If more than one gas fryer is on the same supply line, you may require a larger line. Consult your local gas company to assure adequate volume and pressure. Refer to serial plate for proper gas requirements for your particular model.

NOTE: Piping for a battery should be at least 1-1/4" to 1-1/2" IPS, depending on total BTU input. Consult your local gas supplier for appropriate battery piping size.

GAS LEAK TESTING

Prior to lighting your fryer:

1. Make sure all thermostats, switches and safety valves are in the "OFF" position.
2. Turn main On/Off manual gas valve to the "ON" position.
3. Have your plumber or gas company check for leaks with a soap solution or sniffer. (NEVER check with an open flame!)
4. Have your plumber or gas company representative light the constant pilot. (Not necessary if your fryer has a spark ignitor.)

GAS PRESSURE AT MANIFOLD

- NATURAL Gas - 3.0 in. W.C.
- LP Gas - 10.0 in. W.C.

MINIMUM INCOMING GAS PRESSURE

- NATURAL Gas - 7.0 in. W.C.
- LP Gas - 11.0 in. W.C.

NOTE: It is estimated that half of all service calls made on Keating Instant Recovery® Fryer result from an inadequate gas supply. During installation, have a gas company representative make certain that the fryer is receiving adequate gas pressure and volume (see "Installation" or your serial plate on the fryer door).

⚠ WARNING

PROPANE GAS MAY EVENTUALLY LOSE ITS ODOR AND PRECAUTIONS SHOULD BE TAKEN TO ASSURE THAT IT IS NOT PRESENT EVEN THOUGH YOU DO NOT DETECT AN ODOR. IF THERE IS ANY DOUBT, YOU SHOULD CALL YOUR LOCAL PROPANE GAS SUPPLIER FOR ASSISTANCE.

■ OPERATING

FILLING

NOTE: Before filling the fryer make certain the fryer vessel is sanitized, dry and the drain valve is completely closed. Refer to Figure 6 on page 8 for location of drain valve.

NOTE: We recommend that solid shortening not be used in AA and CMG Model fryers as they are not equipped with a melt cycle. If solid shortening is used, it should be melted prior to filling the fryer vessel. Damage done by melting solid shortening in the fryer vessel will void the warranty.

⚠ WARNING

BE SURE THE HEAT TRANSFER TUBES ARE COMPLETELY COVERED WITH OIL BEFORE SWITCHING THE FRYER ON. IF OIL LEVEL DROPS BELOW TOP OF HEAT TRANSFER TUBES, SEVERE DAMAGE TO FRYER AND INJURY TO OPERATOR MAY RESULT.

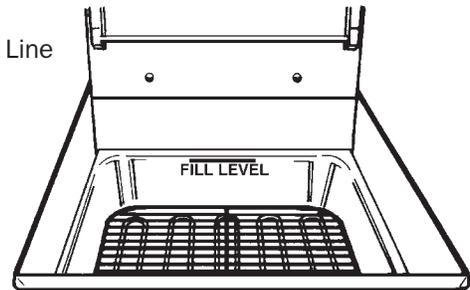
⚠ WARNING

WATER IN ANY FORM AND HOT OIL DON'T MIX!

⚠ CAUTION

OIL EXPANDS WHEN HEATED. THE FILL LEVEL LINE HAS BEEN PROVIDED TO ENSURE OPTIMUM COOKING WHILE ENSURING THE SAFETY OF THE OPERATOR. DO NOT OVERFILL THE FRYER VESSEL.

Figure 3
Fill Level Line



A. AA and CMG Models

1. Fill the fryer vessel with oil or MELTED solid shortening up to the "Fill Level" line.

B. BB, TS, CPU and Basket-Lift Models

1. Fill the fryer vessel with oil up to "Fill Level" line. (See Figure 3).
2. If solid shortening is used, remove screen and firmly pack solid shortening between the heat transfer tubes. After this has been done and the fryer has been lit, proceed to melting instructions (Page 6) for use of the melt cycle.

LIGHTING

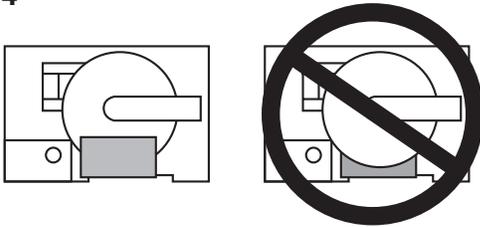
⚠ WARNING

BEFORE ATTEMPTING TO LIGHT THE FRYER, MAKE SURE THE GAS CONNECTIONS ARE SECURE AND HAVE BEEN LEAK TESTED AND THE FRYER HAS BEEN PROPERLY FILLED WITH OIL.

NOTE: For safety purposes, all Hi-Limit controls are manually reset. Always check the Hi-Limit reset button before attempting to use the fryer. If the Hi-Limit has tripped, the fryer will not operate. (Located behind the fryer door underneath the front panel).

NOTE: For a fryer with a Central or Zero-Space™ Filter, always check the rear drain operating handle before attempting to use the fryer. A safety switch prevents the fryer from operating if the handle is not pushed in completely and latched. (See Figure 4)

Figure 4



A. AA and CMG Models

1. Open the main gas supply to unit (usually at rear) by turning handle in-line with gas piping or hose. Also open manual valve (red gas cock) on gas piping inside unit where applicable.
2. Rotate the tan gas valve knob to the “PILOT” position.
3. Light the constant pilot (located near far left burner) with a match.
4. Set the On/Off switch to the “ON” position.
5. Push in knob and the constant pilot will ignite the runner pilot tube. Hold the knob for 45 seconds and release slowly. If the runner pilot tube fails to stay lit, wait five minutes before attempting to re-light to allow any accumulated gas to escape.
6. After runner pilot tube stays lit, release knob and rotate it to the “ON” position.
7. Set thermostat to desired temperature (325°F - 335°F).

B. BB, TS, CPU and Basket-Lift Models

1. Open main gas supply to unit. Open manual valve (red gas cock) on piping inside unit where applicable.
2. Light the constant pilot (located near far left burner) with a match. If your fryer has an optional spark ignitor, omit this step.
3. Turn on main power On/Off switch to the “ON” position.
4. Set the Fry/Off/Melt switch (BB model) or Cook/Idle/Melt switch (TS and Basket-Lift models) to the “OFF” (BB) or “IDLE” (TS and Basket-Lift) position.
5. Activate pilot light momentary switch (for runner pilot) and hold about 30 seconds, releasing it after pilot indicating light is illuminated. If the runner pilot tube fails to stay lit, wait 5 minutes before attempting to re-light to allow any accumulated gas to escape.

6. Set the Fry/Off/Melt switch (BB model) or Cook/Idle/Melt switch (TS and Basket-Lift models) to the “FRY” (BB) or “COOK” (TS and Basket-Lift) position.
7. Set the thermostat to the desired temperature (325°F - 335°F).

NOTE: The fryer cannot be operated during a power failure as the electronic ignition system cannot be operated.

MELTING

The Keating Melt Cycle safely melts solid shortening in the fryer vessel without scorching.

⚠ WARNING

BEFORE ATTEMPTING TO USE THE FRYER, MAKE SURE THE FRYER HAS BEEN PROPERLY FILLED WITH OIL.

A. BB, TS and Basket-Lift Models

1. Set the thermostat to the desired frying temperature (325°F - 335°F).
2. If using solid shortening, set the Fry/Off/Melt switch (BB Model) or Cook/Idle/Melt switch (TS and Basket-Lift Models) to the “Melt” position. Stay in the “Melt” cycle until the shortening has melted completely and is at the “Fill Level” line before switching to the “Fry” (BB Model) or “Cook” (TS and Basket-Lift Models) position for cooking.

A. CPU Model

See separate fryer instructions or call 1-800-KEATING.

NOTE: During the “Melt” cycle, the burners are on for approximately 5 seconds and off for approximately 55 seconds.

⚠ WARNING

BE SURE THE HEAT TRANSFER TUBES ARE COMPLETELY COVERED WITH MELTED SHORTENING BEFORE ATTEMPTING TO FRY. IF THE TUBES ARE NOT COMPLETELY COVERED WITH MELTED SHORTENING, SEVERE DAMAGE TO FRYER AND INJURY TO OPERATOR MAY RESULT

COOKING

Keating Instant Recovery® Gas Fryers are designed to provide maximum production efficiency and deliver high quality food products.

Low-temperature cooking, highly polished stainless steel and a true COLD ZONE mean extended oil life. Follow the cooking procedures for your model.

⚠️ WARNING

• **OPERATION OF THIS FRYER SHOULD BE LIMITED TO PERSONNEL WHO HAVE BEEN THOROUGHLY TRAINED IN OPERATING PROCEDURES.**

• **USE ONLY KEATING APPROVED BASKETS IN YOUR FRYER. NEVER OVERFILL FRY BASKETS. DO NOT BANG BASKETS ON BASKET HANGERS OR ON FRYER VESSEL.**

• **CARE SHOULD BE TAKEN WHEN LOWERING BASKETS INTO FRYER TO PREVENT SPLASHING HOT OIL FROM FRYER VESSEL.**

• **NEVER LIFT BASKETS DIRECTLY OUT OF THE FRYER VESSEL WITHOUT DRAINING, AS SEVERE INJURY MAY RESULT.**

A. AA, CMG and BB Models

1. Fill fryer as described on page 5 – Filling.
2. Set thermostat to the desired frying temperature (between 325°F - 335°F).
3. When the oil reaches the desired frying temperature, lower filled basket(s) slowly into the hot oil.
4. When cooking cycle is complete, carefully lift basket(s) out of oil and place them on basket hanger rods (on splashback of fryer) to allow draining of excess oil.

B. TS Model

1. Fill fryer as described on page 5 - Filling.
2. Set thermostat to the desired frying temperature (between 325°F - 335°F).
3. When the oil reaches the desired temperature, the “HEAT” light will go off and the “COOK” light will illuminate.
4. Lower filled basket(s) slowly into the hot oil.
5. Set timer for left or right side basket, whichever is being lowered into oil.
6. When timer(s) sounds, carefully lift basket(s) out of oil and place them on basket hanger rods (on splashback of fryer) to allow draining of excess oil.

C. Basket-Lift Model

1. Fill fryer as described on page 5 - Filling.
2. Set thermostat to the desired frying temperature (between 325°F - 335°F).
3. When the oil reaches the desired temperature, the “HEAT” light will go off and the “COOK” light will illuminate.
4. Fill basket(s) to proper level and place on upper bar of lift rod(s).
5. Set timer(s) to desired cooking time using up or down arrow buttons. For programming timers, see pages 9-10.

6. Push “start/STOP” button on timers(s). Basket(s) will automatically lower into fryer vessel.

7. When cooking cycle is complete, an audible alarm will sound and the basket(s) will raise automatically. Allow oil to drain before removing baskets.

D. CPU Model

See separate fryer instructions or call 1-800-KEATING.

SHUT DOWN

A. AA, CMG Models

1. Turn fryer On/Off switch to “OFF” position.
2. Rotate tan gas valve knob to “PILOT” position, push it in slightly, and rotate it to “OFF” position.

B. BB, TS, CPU and Basket-Lift Models

1. Set Fry/Off/Melt switch (BB Model), Cook/Idle/Melt switch (TS and Basket-Lift Models) or Fry/On/Off switch (CPU Model) to the “OFF” (BB and CPU Models) or “IDLE” (TS and Basket-Lift Models) position.
2. Turn main power On/Off switch to the “OFF” position.

DRAINING

⚠️ WARNING

ALWAYS SHUT THE FRYER OFF COMPLETELY BEFORE DRAINING. THE FRYER SHOULD BE DRAINED ONLY UNDER THE SUPERVISION OF PROPERLY TRAINED PERSONNEL. A DRAIN PIPE AND COVERED CONTAINER SUITABLE FOR USE WITH HOT OIL SHOULD BE USED TO ENSURE THE SAFETY OF THE OPERATOR.

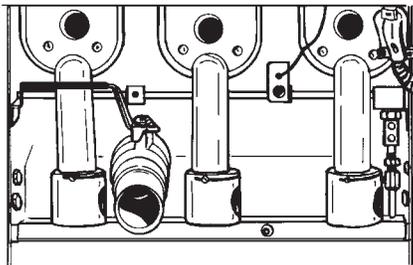
1. Operator should be outfitted with proper attire including:
 - Oil and heat resistant gloves
 - Oil and heat resistant apron
 - Safety goggles
 - Oil and heat resistant footwear

Figure 5
Operator in Safety Gear

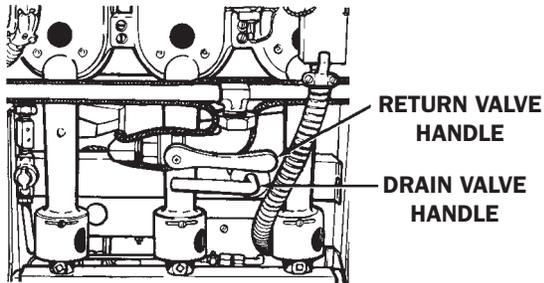


Figure 6 - Drain and Drain Valve

Front Drain

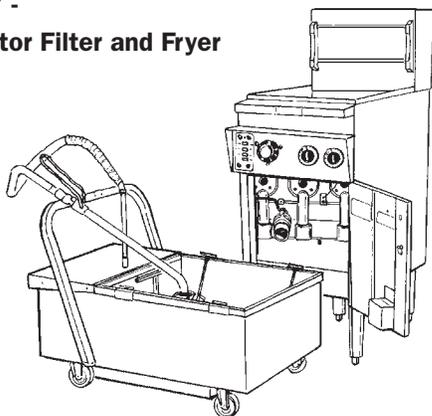


Rear Drain



2. Turn off the fryer and open the door.
 3. For front drain fryers, put approved container under drain valve. For fryers with a central filter, slide filter drawer in completely.
 4. • **Front Drain:**
Slowly turn handle forward to avoid splashing. The drain will be completely open after 1/4 turn.
 - **Rear Drain:**
Slowly pull drain valve operating handle straight out (unhook from metal latch first).
5. After fryer drains, close the drain valve.
 6. Filtering may be done at this step - refer to filter manual.

Figure 7 - Nutroilator Filter and Fryer



⚠WARNING

UNDER NO CIRCUMSTANCES SHOULD YOU PERMIT HOT OIL TO COME IN CONTACT WITH WATER OR ICE. ALL DRAINING SHOULD BE DONE UNDER THE SUPERVISION OF PROPERLY TRAINED PERSONNEL. A DRAIN PIPE AND COVERED CONTAINER SUITABLE FOR USE WITH HOT OIL SHOULD BE USED WHENEVER A FRYER IS DRAINED. ALWAYS DRAIN OIL INTO A COVERED RECEPTACLE.

CLEANING AND BOIL-OUT

When cleaning and boiling out your fryer use Keating Sea Powder and Keating Klenzer to keep your fryer in top condition. Keating Sea Powder dissolves any grease build up - even carbonized grease in fryer vessels - one of the leading causes of premature oil breakdown. Once your fryer vessel is clean, use Keating Klenzer, the finest dry stainless steel polish available, to restore your Keating Instant Recovery® Gas Fryer's exterior to its original luster.

⚠CAUTION

Disconnect electric power source before cleaning.

⚠CAUTION

To avoid damaging the fryer, do not power wash, spray or hose it down while cleaning it.

Figure 8

Keating Klenzer and Sea Powder



1. Put on safety attire. See Draining.
2. Turn the fryer off.
3. Drain oil from fryer. Filtering may be done at this step.
4. Remove oil container to a secure area to prevent accidental spillage.
5. Fill fryer vessel to "Fill Level" line with water.

⚠WARNING

UNDER NO CIRCUMSTANCES SHOULD THE FRYER BE LEFT UNATTENDED DURING BOIL-OUT. TRAINED PERSONNEL MUST BE PRESENT DURING THE PROCEDURE TO PREVENT BOIL OVER OR TO TURN OFF THE POWER IF WATER DROPS BELOW HEAT TRANSFER TUBES.

6. Set thermostat and turn fryer on to bring water to a gentle boil.
7. Once boil has been reached, turn fryer off.

8. Dissolve 2/3 cup of Keating Sea Powder for every five gallons of water and let soak for 1/2 hour. If there is a large build-up of carbonized grease, allow fryer to soak overnight.

CAUTION: When soaking overnight, make sure the fryer is turned off.

CAUTION: Do not damage or reposition thermostat probe as this may affect the accuracy of the fryer.

9. While soaking, a natural fiber brush may be used to scrub the tubes and inside walls of fryer.

10. Drain the water and Sea Powder into a dry suitable receptacle and remove from cooking area.

NOTE: DO NOT pump water through the filter machine.

11. Spread Keating Klenzer liberally on tubes and sides of fryer vessel.

12. A non-abrasive scouring pad may be used to remove the now softened carbonized grease.

13. Thoroughly rinse fryer vessel with potable water to remove all Klenzer.

14. Prior to refilling with oil, wipe the inside of the fryer vessel making sure all water and Klenzer has been removed.

⚠ WARNING

WATER IN ANY FORM AND HOT OIL DON'T MIX!

15. Close drain valve.

⚠ WARNING

FAILURE TO CLOSE DRAIN VALVE BEFORE REFILLING THE FRYER MAY RESULT IN SERIOUS INJURY.

⚠ WARNING

WHEN YOUR FRYER IS BEING USED IN CONJUNCTION WITH A CENTRAL FILTER, DISCONNECT POWER SUPPLY BEFORE RESETTING MOTOR TO PREVENT SERIOUS INJURY WHEN RESET SWITCH IS ENGAGED (SEE FILTER MANUAL).

16. Check thermostat bulb positioning - see page 11.

17. Refill the fryer with new or filtered oil.

ELECTRONIC TIMERS

The electronic timers provide a clearly visible and accurate display and are very easy to use. This procedure resets the timer to operate in minutes:seconds.

A. Timer Operation

TIMER ACTION	OFF	ON	PAUSED	END OF CYCLE
LED	OFF	FLASHING	STEADY	STEADY
DISPLAY	SET TIME 03:00	COUNTING DOWN	FLASHES TIME REMAINING	FLASHES "00:00"

START/STOP BUTTON

- Push to **START** new cycle or to restart paused cycle
- Push to **PAUSE (STOP)** cycle in progress
- Push and hold 2 seconds to **RESET** stopped (PAUSED or COMPLETED) cycle

TIME SELECT BUTTONS

- Push **DOWN ARROW** to decrease set time
- Push **UP ARROW** to increase set time

AUDIBLE ALARM

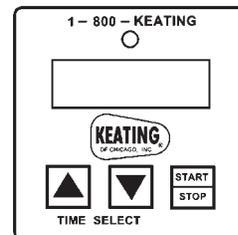
- Beeps at **END OF CYCLE**
- Push and hold **START/STOP** Button to **RESET** timer

OUTPUT RELAY

- Energized when timer is "ON" (display counting down)
- De-energized when timer is "OFF", at **END OF CYCLE**, or **PAUSED**

B. How to program the "Keating" Electronic Timer

STEP 1



Make certain power to the timer has been OFF for at least 30 seconds. Then PRESS and hold down the UP arrow button while turning the rocker power switch to the ON position.

NOTE: If power switch does not turn off timers, the unit must be unplugged (two people may be needed).

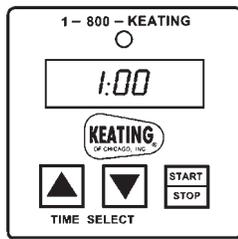
The timer will turn ON and the display will now be indicating:



The BEEPER will BEEP 4 times.

If STEP 1 was OK, proceed to STEP 2. If not, retry Step 1 making sure the power was OFF for at least 30 seconds or more.

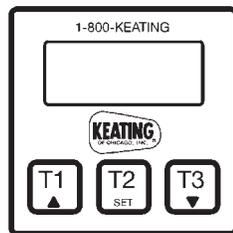
STEP 2



PRESS all 3 buttons in sequence: left-center-right. The BEEPER will BEEP when each button is pressed. If BEEPER does not BEEP, the timer is defective. STOP TESTING. Reset procedure is completed when 1:00 appears on the digital display.

OPTIONAL TIMER

Operating Instructions (Part # 056921)



DIGITAL TIMERS

The electronic timers, standard on TS & IFM models, provide a clearly visible and accurate display and are very easy to use.

PROGRAMMING

To program the timers, the unit must be in the idle mode. Press and hold the set button for approximately two seconds. The display will show "SEt". Press the T1, T2 or T3 for the cook time to be programmed. The display will show the current setting for that cook time. 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 "St0" for approximately two seconds and the timer will return to normal operation. Repeat the process as necessary for the other timers.

OPERATING LOGIC

When the timer is powered up, the display will show the time setting for the cook time that was operated last and the relay output contacts will be open. To start a cycle, press the desired cook time button (T1, T2 or T3). 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.

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 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 cook time last used.

■ MAINTENANCE

WARRANTY REPAIRS

Keating's warranty begins with the date of installation. In the event that your Instant Recovery® Gas Fryer, under warranty, needs repairs other than routine maintenance or cleaning, you are required to contact Keating of Chicago (at 1-800-KEATING) before calling a local service company.

PREVENTIVE MAINTENANCE

Preventive maintenance should be done in daily, weekly, monthly and yearly intervals as necessary. Following preventive maintenance procedures will help keep your fryer working efficiently. Proper care and servicing will lead to years of quality performance.

PREVENTATIVE MAINTENANCE CHART

TIME FRAME	OPERATOR/OWNER
AT LEAST DAILY*	<ul style="list-style-type: none"> • Check lights and controls. • Check that the oil is up to "Fill Level" line. • Clean all baskets. • Drain, strain or filter oil.
AT LEAST WEEKLY*	<ul style="list-style-type: none"> • Drain and clean fryer. • Boil-out fryer.
AT LEAST MONTHLY*	<ul style="list-style-type: none"> • Verify Thermostat settings. • Test Hi-Limit control.
TIME FRAME	QUALIFIED SERVICE PERSONNEL
AT LEAST YEARLY*	<ul style="list-style-type: none"> • Disassemble fryer to clean pilot and burners orifices and runner pilot tube. • Check and replace radiants. • Calibrate thermostat.

*High production facilities should be checked more often. Contact the factory or a local service company to perform maintenance and repairs.

Oil Breakdown

As part of a "Preventive Maintenance Program", the oil in your fryer needs to be filtered regularly to avoid breakdown. The initial investment in the frying system is less than the total overall costs of oil during the life of the fryer, and with regular filtering, you can realize substantial savings in oil costs as well as maintenance charges.

LIMITED CALIBRATION

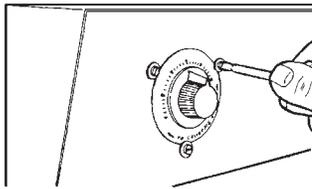
(Less than 25° difference)

You will need:

- One screwdriver with 1/8" wide flat blade
- One accurate fryer thermometer

Figure 9

Thermostat calibration with knob on



1. Set thermostat to desired frying temperature.
2. Allow fryer to cycle three times.
3. Place an accurate thermometer in the oil at the tip of the thermostat bulb.

NOTE: Locate thermometer in same position for every calibration.

4. If calibration of fryer is found to be less than 25°F off, simply loosen three dial plate retaining screws, rotate dial plate to match thermometer reading and tighten screws. If it is more than 25°F off contact a qualified service company..

⚠ WARNING

DO NOT ADJUST THE THERMOSTAT SET SCREW - IT VOIDS ANY WARRANTY ON PART.

Thermostat Bulb Positioning

BEFORE REPLACING, TEST THERMOSTATS

NOTE: Operational problems can easily be corrected by thermostat bulb positioning.

Keating's patented thermostat application is accurate within 2°F of the dial setting between 250°F – 350°F. This accuracy is attained only if the thermostat bulb is placed properly against the heat transfer tube. To quickly and accurately test for proper bulb placement, a single thickness of writing paper should be pulled through between the tube and the bulb with medium resistance.*

1. *For 14" Gas Fryers:

- The end of thermostat bulb should touch the burner tube.

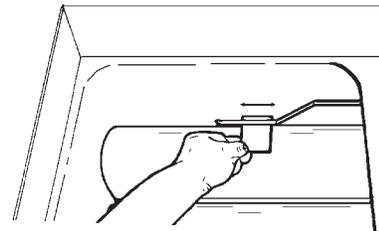
2. For 10x11", 18" + Up Gas Fryers:

- If the bulb is too loose, the paper will slip through with little or no resistance. A fryer with a thermostat bulb that is too loose will overshoot.
- If the bulb is too tight, the paper will either not pull through or it will tear. A fryer with a thermostat bulb that is too tight will short cycle.

Overshoot: The thermostat takes a long time to cycle and then misses its preset temperature by 20°F - 40°F yielding a poor quality product. overshoot.

Short Cycle: The thermostat will cycle rapidly while the fryer is in the idle mode; the temperature will be erratic.

Figure 10



Thermostat Bulb Positioning 10x11, 18 & Up

REQUIRED TEST THERMOSTAT Multimeter (for testing continuity)

CHECKING CONTINUITY WITH THE MULTIMETER

1. Rotate the thermostat shaft until an audible click is heard.
2. Rotate the thermostat shaft left and right ten times causing the switch to click on and off ten times, while using the Multimeter to verify continuity.
3. If the switch does not show continuity during all ten trials, replace the thermostat.

⚠ WARNING

DISASSEMBLING THE THERMOSTAT WILL VOID THE THERMOSTAT WARRANTY.

1. Set compression ring onto capillary end of bulb finger tight, 1/2" from end of capillary.
2. Insert new thermostat bulb through control panel back.
3. Apply oil resistant flexible sealant onto compression fitting thread before installing fitting into fryer vessel.

4. Position bent portion of bulb against far right heat transfer tube and install compression fitting snugly into fryer vessel.
5. Adjust bulb so at least 2" of bent portion of it is next to heat transfer tube and tighten compression nut onto compression fitting for fryer 10x11, 18 & up. The end of thermostat bulb should touch the burner tube for 14" fryers.
6. Refill fryer with oil to "fill level line".
7. Start fryer, preheat and calibrate with thermometer.

D. Hi-Limit Check

The manual Hi-Limit test button can be used to test the Hi-Limit Control by pushing and holding the button in until the fryer reaches the Hi-Limit temperature (425°F). Place an accurate thermometer in the oil. If the Hi-Limit Control doesn't shut off the fryer between 425°F and 450°F, have it replaced.

■ SERVICE

A properly adjusted Keating Instant Recovery® Fryer, with no load, will cycle "on" approximately every 2-1/2 to 3 minutes. Each cycle will last 15-25 seconds, ensuring that the temperature setting is held within a narrow band.

- The burners when on will produce clear blue flames directed at the inside walls of the heat transfer tubes. The radiant's fins, located towards the rear of each transfer tube, will glow bright red, helping to ensure optimum heat distribution into the fryer vessel. All radiants should be pulled gently forward until their retaining clips engage the rear of the tubes.
- On constant pilot models, the pilot light will be between 3/8" to 1/2" high and will use about 180 BTU's of gas per hour.
- The runner pilot tube is used to ignite the burners. Flames from the tube should be clear blue and between 3/8" to 1/2" high spread across the entire tube. The burners will ignite almost instantly after the thermostat calls for heat.
- Every Keating Instant Recovery® Gas Fryer has a number of safety controls to ensure safe operation and guard against component failure. Operation of each control is explained in Service section.

■ SERVICE DIAGNOSIS

The following diagnosis is only to be used as a guide to qualified service personnel. Keating recommends that you use a qualified & licensed service company. (Equipment still under warranty requires it.) Call 1-800-KEATING if you need assistance in locating a qualified service company.

NOTE: To correctly and quickly diagnose the system, the chart below should be followed in sequential order.

TROUBLE SHOOTING CHART

PROBLEM	PROBABLE CAUSE	SOLUTION
Constant pilot won't light	<ul style="list-style-type: none"> a. Gas isn't turned on. b. Clogged constant pilot tubing. c. Constant pilot valve isn't turned on. 	<ul style="list-style-type: none"> a. Turn manual gas valve on. If using flexible connector with quick disconnect, make sure quick disconnect is completely engaged. b. Turn fryer and manual gas valve off. Clean tubing. c. Turn constant pilot valve on and adjust pilot flame height.
Runner pilot tube won't light	<ul style="list-style-type: none"> a. Gas isn't turned on. b. No electricity to fryer (BB & TS models). c. Hi-Limit has been activated. d. Clogged runner pilot orifice(s). e. Drain valve handle isn't pushed in completely (Central filter only). 	<ul style="list-style-type: none"> a. Turn manual gas valve on. If using flexible connector with quick disconnect, make sure quick disconnect is completely engaged. b. Plug fryer into approved outlet. c. Push Hi-Limit reset button located under control panel. See page 17. d. Turn fryer and manual gas valve off. Clean orifice(s) and other parts as necessary. e. Push in and latch drain valve handle to activate rear drain safety switch.
Runner pilot won't stay lit	<ul style="list-style-type: none"> a. Low gas supply or pressure. b. Dirty runner pilot tube or pilot orifice(s). c. Low pilot flame height. d. Flame switch control is faulty (BB & TS models). e. Hi-Limit has been activated. f. Exhaust problems or drafts in kitchen. g. Thermopile or gas valve is faulty (AA & CMG models). 	<ul style="list-style-type: none"> a. Verify if size of incoming gas line to fryer and manifold gas pressure are adequate. b. Turn fryer and manual gas valve off. Clean orifice(s) and pilot tube. c. Adjust pilot flame height. d. If it takes more than 60 seconds for pilot to stay lit, replace flame switch control. e. Push Hi-Limit reset button located under control panel. See page 17. f. Install or adjust flue restrictors. If problem persists, contact your HVAC representative. g. Perform millivolt tests. Replace faulty thermopile or gas valve.

PROBLEM	PROBABLE CAUSE	SOLUTION
Delayed ignition	<ul style="list-style-type: none"> a. Dirty runner pilot tube or pilot orifice(s). b. Low pilot flame height. c. Exhaust problems or drafts in kitchen. d. Low gas supply or pressure. 	<ul style="list-style-type: none"> a. Turn fryer and manual gas valve off. Clean orifice(s) and pilot tube. b. Adjust pilot flame height. c. Install or adjust flue restrictors. If problem persists, contact your HVAC representative. d. Verify if size of incoming gas line to fryer and manifold gas pressure are adequate.
Burners won't come on	<ul style="list-style-type: none"> a. Thermostat is faulty. b. Fry/Off/Melt switch (BB & TS models) or On/Off switch (AA & CMG models) is faulty. c. Faulty gas valve. 	<ul style="list-style-type: none"> a. Push and hold in Hi-Limit test button. If burners come on, replace thermostat. b. Replace switch. c. Replace gas valve.
Flames come out top of flue	<ul style="list-style-type: none"> a. Excessive gas supply or pressure. b. Collapsed burner radiants. c. Exhaust problems. 	<ul style="list-style-type: none"> a. Adjust pressure, change burner orifices or install in-line regulator. b. Replace radiants. c. Install or adjust flue restrictors. If problem persists, contact your HVAC representative.
Flames come out front of fryer	<ul style="list-style-type: none"> a. Exhaust problems. b. Radiants have slipped forward. c. Flue blockage. 	<ul style="list-style-type: none"> a. Install deflector to block down draft. Install or adjust flue restrictors. If problem persists, contact your HVAC representative. b. Reposition radiants. c. Turn fryer and manual gas valve off. Let flue cool and remove foreign objects.
Fryer has poor recovery or runs cold	<ul style="list-style-type: none"> a. Baskets overfilled. b. Fryer vessel overfilled with oil. c. Carbon coating on heat transfer tubes. d. Radiant collapsed or out of position. e. Faulty or erratic thermostat. f. Low gas supply or pressure. 	<ul style="list-style-type: none"> a. Don't over fill baskets. b. Fill fryer up to "Fill Level" line as oil expands when heated. c. Boil-out fryer. See pages 8 & 9 - Cleaning and Boil-Out. d. Check with oil supplier for higher grade oil. e. Check thermostat calibration and bulb position (see pages 11 & 12) and replace thermostat if necessary. Check if Hi-Limit trips at 425°F. If not, replace Hi-Limit.
Fryer is overheating	<ul style="list-style-type: none"> a. Thermostat bulb improperly placed. b. Thermostat out of calibration or is faulty. 	<ul style="list-style-type: none"> a. Adjust bulb position. See pages 11 & 12 - Thermostat Bulb Positioning. b. Check calibration of thermostat and replace if necessary.
Oil in fryer vessel smokes	<ul style="list-style-type: none"> a. Oil is breaking down. b. High carbon content in oil. c. Dirty fryer vessel. d. Inferior grade of oil. e. Fryer is overheating and Hi-Limit control has failed. 	<ul style="list-style-type: none"> a. Replace oil. b. Filter or replace oil. c. Boil-out fryer. See pages 8 & 9 - Cleaning and Boil-Out. d. Check with supplier for higher grade oil. e. Check thermostat calibration and bulb position (See pages 11 & 12) and replace thermostat if necessary. Check if Hi-Limit trips at 425°F. If not, replace Hi-Limit.

PROBLEM	PROBABLE CAUSE	SOLUTION
Oil in fryer vessel boils over	<ul style="list-style-type: none"> a. Baskets overfilled. b. Fryer vessel overfilled with oil. c. Oil is breaking down and foaming. d. Water in cold zone. 	<ul style="list-style-type: none"> a. Don't over fill baskets. b. Fill fryer up to "Fill Level" line as oil expands when heated. c. Replace oil. d. Stir oil with a paddle until water boils off. Filter oil. If water remains, let oil cool and drain a quart of it.
Basket-Lift mechanism won't operate	<ul style="list-style-type: none"> a. Connections are loose or timer faulty. b. Motor limit switch is faulty. c. Lift motor is faulty (14" model). d. Actuator is faulty (18" and above models). e. Control circuit fuse has blown. f. Relay is faulty (18" and above models). 	<ul style="list-style-type: none"> a. Tighten connections. Replace timer if faulty. b. Replace limit switch (14" model). Replace actuator (18" and above models). c. Replace motor. Specify left or right side motor when ordering. d. Replace actuator. e. Replace fuse (use type SC-5 in 14" model and type SC-3 in 18" and above models). f. Replace relay.
Basket-Lift motor runs, but basket doesn't move	<ul style="list-style-type: none"> a. Cam is slipping on motor shaft (14" model). 	<ul style="list-style-type: none"> a. Tighten cam onto flat on motor shaft.
Basket-Lift basket goes down, but won't go up.	<ul style="list-style-type: none"> a. Basket-Lift motor limit switch is misaligned (14" model). 	<ul style="list-style-type: none"> a. Align limit switch.
Basket-Lift buzzer won't shut off	<ul style="list-style-type: none"> a. Buzzer limit switch is misaligned (14" model). 	<ul style="list-style-type: none"> a. Align limit switch.

■ ORDERING PARTS

Parts may be ordered by calling 1-800-KEATING or your local Keating service company. We recommend using genuine Keating Replacement Parts - engineered and manufactured specifically to meet exact specifications and requirements for Keating equipment.

Refer to the Keating Gas Fryer Limited Warranty for complete service and ordering information.

The model/serial plate is attached to the inside of the front door. The serial and model numbers are necessary when ordering.

NOTE: On Drop-In fryers, the model/serial plate is attached to the top of the control panel.

WARNING AND OPERATING PLATES

All warning and operating plates on the Instant Recovery® Gas Fryer should be in place at all times. If plates are damaged or lost, replace them immediately.

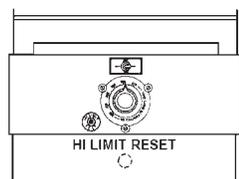
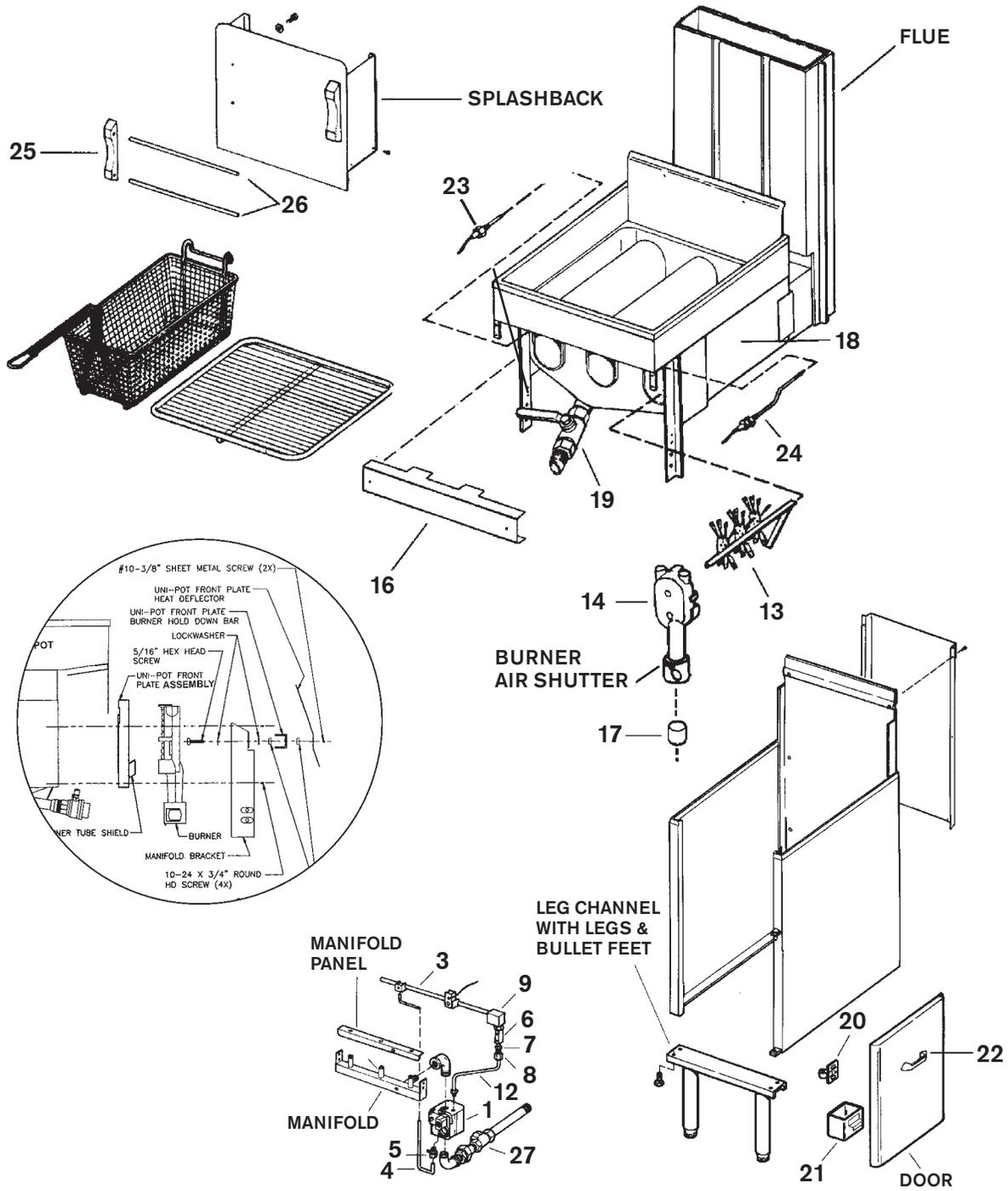
■ PARTS LIST - GAS FRYER

GAS FRYER PART LIST - MODELS WITH UNI-POT

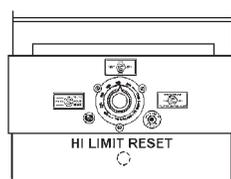
(Corresponds with Parts List on Pages 17 - 18)

ITEM	DESCRIPTION	MODEL	P/N	Quantity Per Model						
				10x11	14	18	20	24	34x24	
1	GAS VALVE, MILIVOLT									
	NATURAL GAS	AA, CMG	023625	1	1	1	1			
	PROPANE	AA, CMG	023624	1	1	1	1			
	GAS VALVE, 120V									
	NATURAL GAS	BB, TS	038165	1	1	1	1	1		
	PROPANE	BB, TS	038165	1	1	1	1	1		
	TAN KNOB	AA, CMG	004803	1	1	1	1			
	PILOT OPERATING HANDLE	CMG	019426	1	1	1	1			
	BRACKET FOR PILOT	CMG	004804	1	1					
	OPERATING HANDLE W/SCREW									
	SCREW FOR KNOB	AA	004805	1	1	1	1			
2	THERMOPILE	AA, CMG	022770	1	1	1	1			
3	RUNNER PILOT TUBE		1-800-KEATING	1	1	1	1	1	1	
4	CONSTANT PILOT ASSEMBLY	ALL	004259	1	1	1	1	1	1	
5	CONSTANT PILOT VALVE	ALL	004266	1	1	1	1	1	1	
6	RUNNER PILOT AIR SHUTTER									
	NIPPLE W/NUT		015747	1	1	2	2	2	2	3
	CLIP		004090	1	1	2	2	2	2	3
7	RUNNER PILOT ORIFICE		1-800-KEATING	1	1	2	2	3		
8	RUNNER PILOT ORIFICE HOLDER STRAIGHT		004142	1	1	2	2	2	2	3
9	RUNNER PILOT 90° ELBOW (1/4" - 1/8")		015746	1	1	2	2	2	2	2
10	RUNNER PILOT TEE, IN TUBING		006474			1	1	1	1	2
11	RUNNER PILOT SOLENOID ADAPTER	ALL	005743	1	1	1	1	1	1	1
12	ALUMINUM 1/4" TUBING (Specify Length)		1-800-KEATING	1	1	3	3	3	3	5
13	RADIANT, 3 - FINS	ALL	000041	2	3	4	4	5	5	6
14	BURNER	ALL	1-800-KEATING	2	3	4	4	5	5	6
15	BURNER ORIFICE		1-800-KEATING	2	3	4	4	5	5	6
16	BURNER HOLD DOWN BAR		1-800-KEATING	1	1	1	1	1	1	2
17	BURNER SPACER	18" & UP	019683			4	4	5	5	6
18	FRYER VESSEL		1-800-KEATING	1	1	1	1	1	1	1
19	DRAIN VALVE, FRONT, 1"	AA, BB, TS, CMG	004553	1	1					
	DRAIN VALVE, REAR, 1"	AA, BB, TS	016341	1	1					
	DRAIN VALVE, FRONT, 1 1/4"	AA, BB, TS	004554			1	1	1	1	2
	DRAIN VALVE, REAR 1 1/4"	AA, BB, TS	016342			1	1	1	1	2
20	DOOR CATCH, ROLLER STYLE	AA, BB, TS, CMG	004540	1	1	1	1	1	1	2
21	DRIP CUP (INSIDE DOOR)	AA, BB, TS, CMG		NO LONGER AVAILABLE						
22	DOOR HANDLE	ALL	004542	1	1	1	1	1	1	1
23	HI-LIMIT CONTROL W/RESET	AA, BB, TS, CMG		SEE PAGES 20-22						
24	THERMOSTAT	SEE MODEL		SEE PAGES 20-22						
25	BASKET HANGER MOUNTING BLOCK									
	LEFT	AA, BB, TS, CMG	004539	1	1	1	1	1	1	1
	CENTER	AA, BB, TS, CMG	003813			1	1	1	1	2
	RIGHT	AA, BB, TS, CMG	004538	1	1	1	1	1	1	1
26	BASKET HANGER ROD	AA, BB, TS, CMG		2	2	2	2	2	2	2
	2/PER FRYER			003849	003895	003935	003953	003954	011954	
27	MAIN SUPPLY GAS VALVE	BB, TS, CMG	019515			1	1	1	1	1
		18-20 AA								
		10x11, 14 AA	019514	1	1					

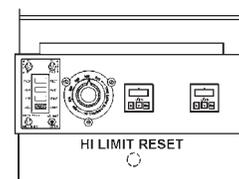
INSTANT RECOVERY® GAS FRYER ASSEMBLY



AA/CMG CONTROL PANEL

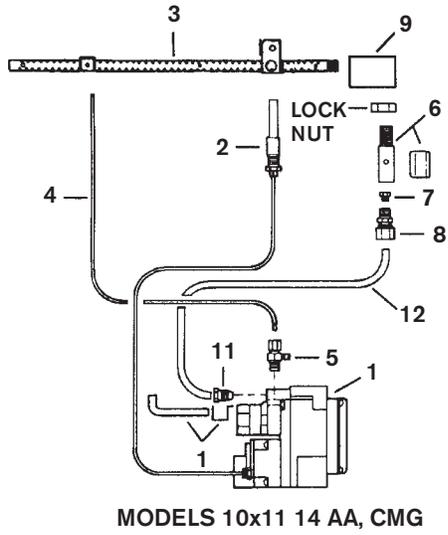


BB CONTROL PANEL

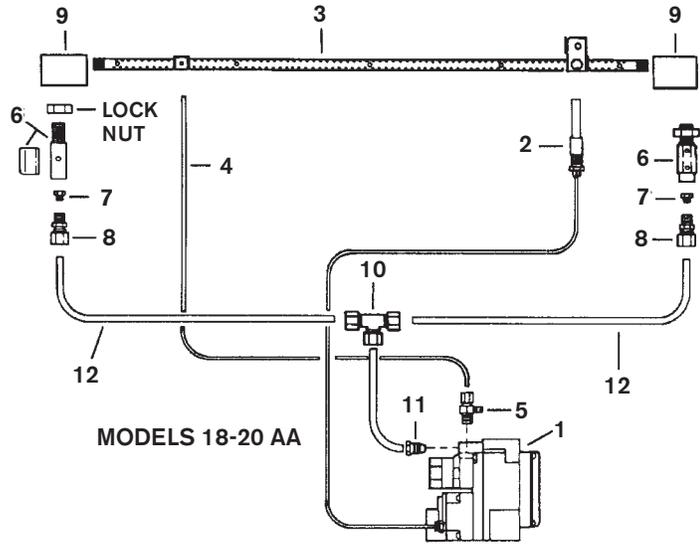


TS CONTROL PANEL

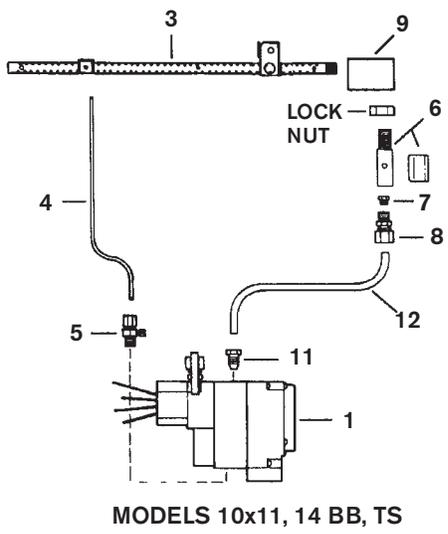
RUNNER PILOT ASSEMBLY



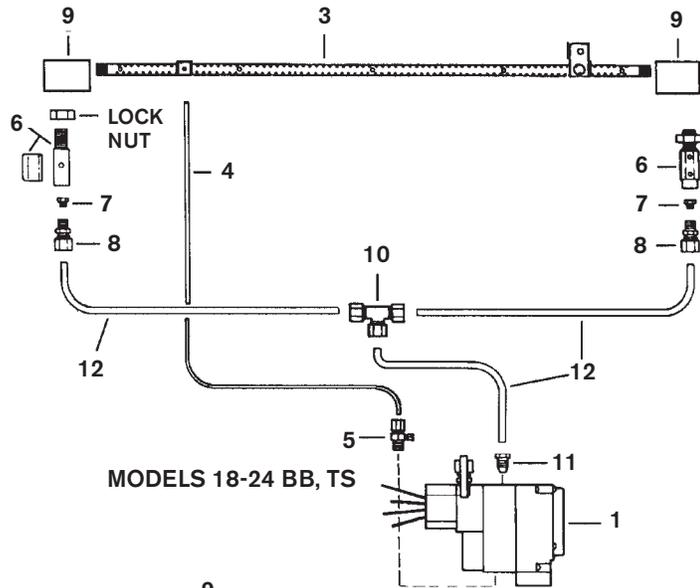
MODELS 10x11 14 AA, CMG



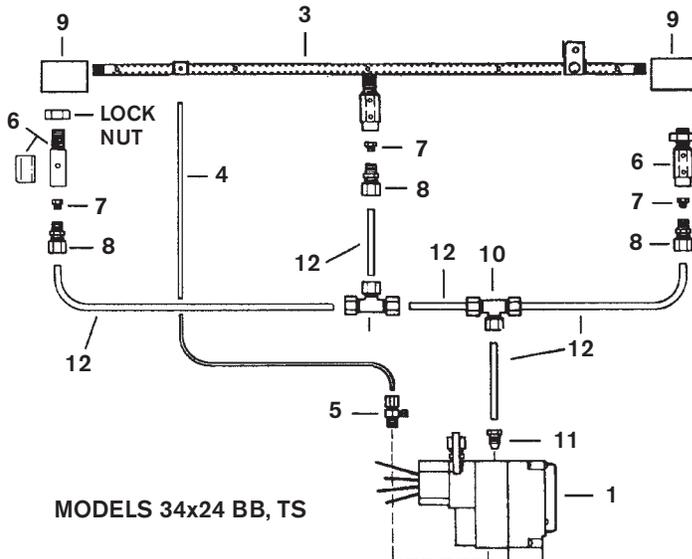
MODELS 18-20 AA



MODELS 10x11, 14 BB, TS

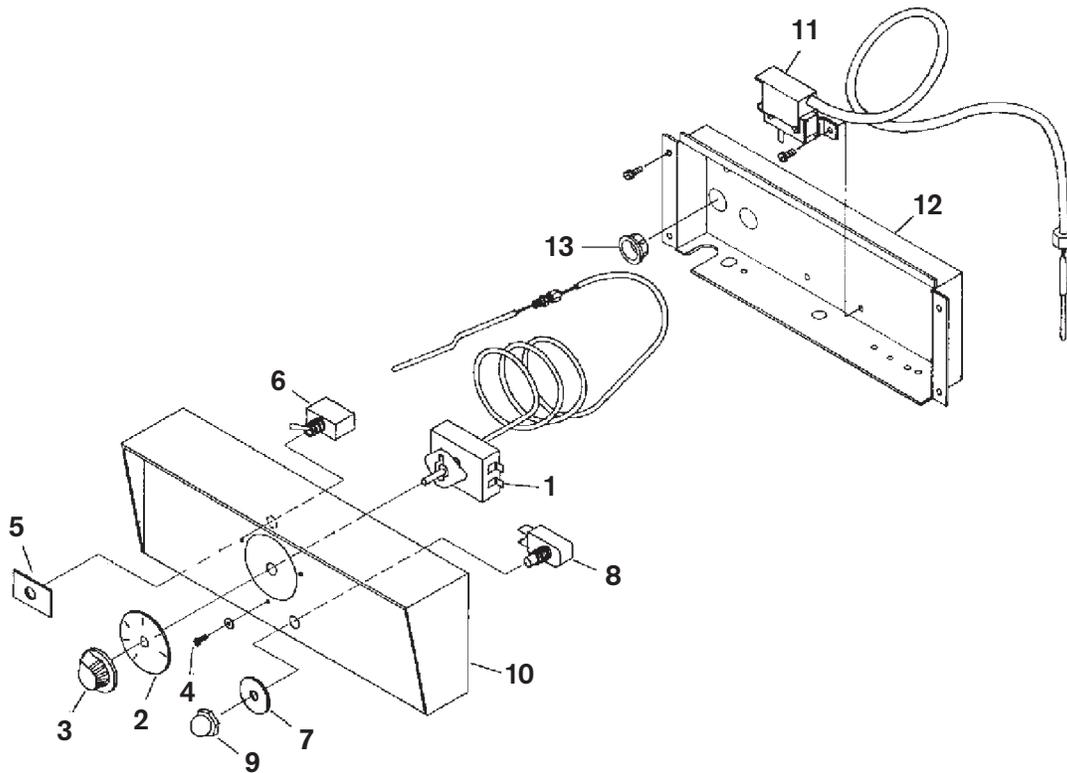


MODELS 18-24 BB, TS



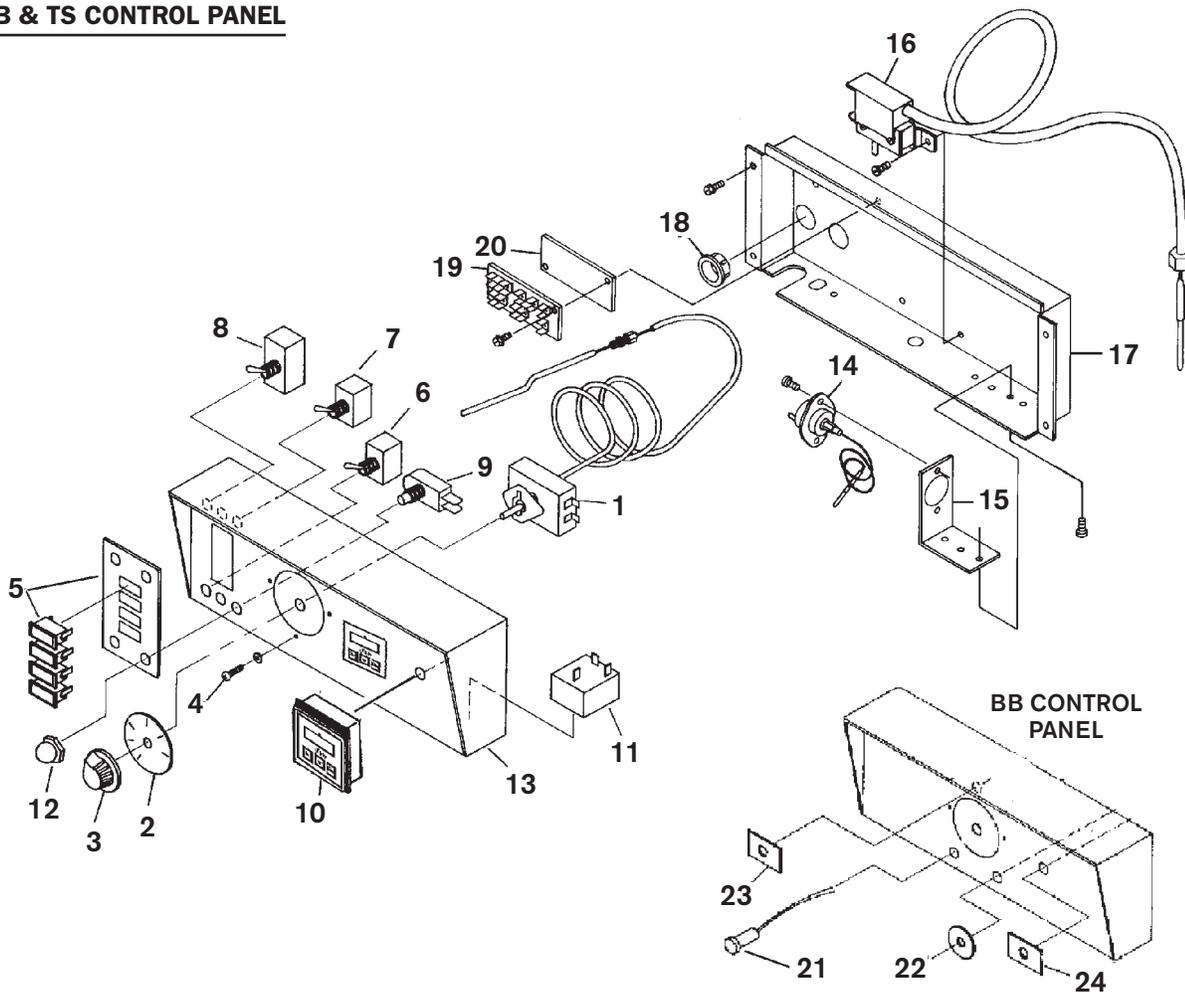
MODELS 34x24 BB, TS

AA AND CMG CONTROL PANEL



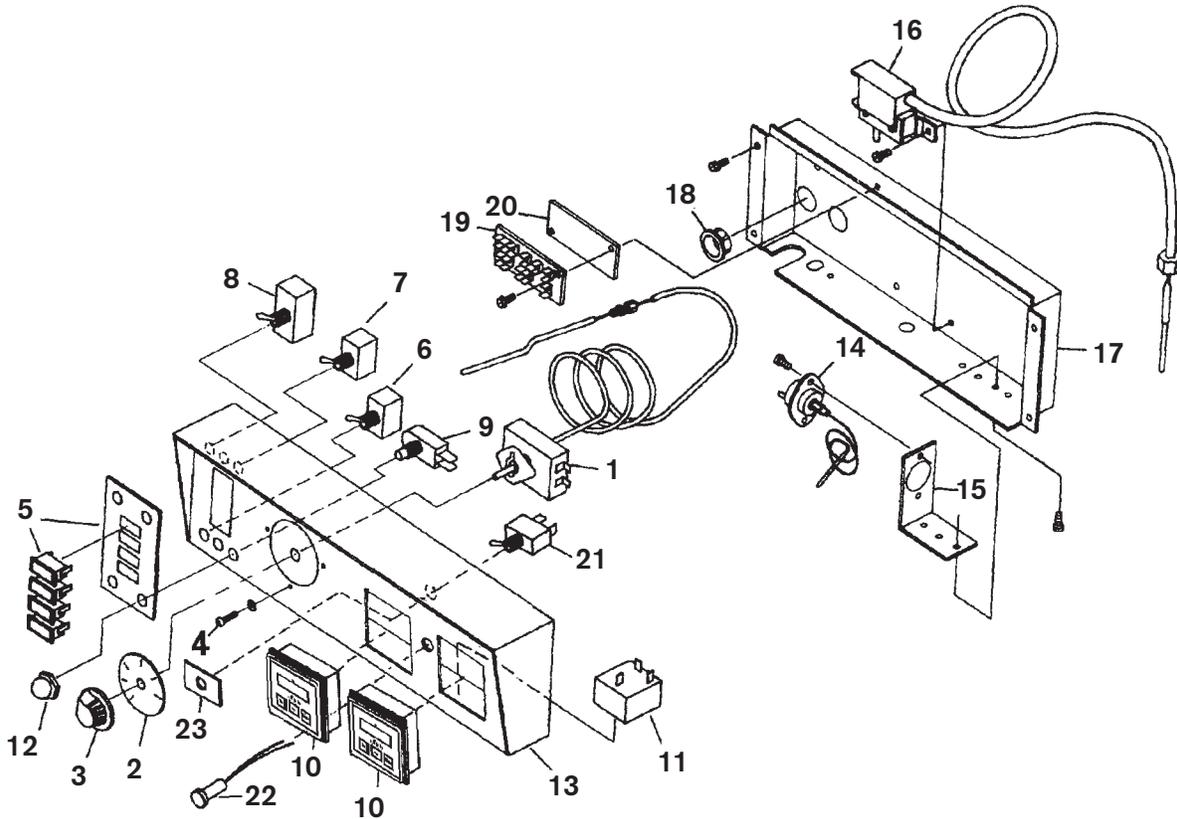
ITEM	DESCRIPTION	P/N	QTY
1	THERMOSTAT 14" CM & 14" AA	023145	1
	THERMOSTAT 10x11", 18" & UP	035553	1
2	THERMOSTAT DIAL PLATE	058037	1
3	THERMOSTAT KNOB, BLACK	060612	1
4	RETAINING SCREWS	004610	3
5	FRY/ON/OFF SWITCH PLATE	007997	1
6	TOGGLE SWITCH, FRY/ON/OFF	004499	1
7	HI-LIMIT TEST PLATE	004305	1
8	HI-LIMIT TEST BUTTON	004304	1
9	NUT WITH BOOT	009389	1
10	CONTROL PANEL, HOODED	1-800-KEATING	1
11	HI-LIMIT CONTROL	004341	1
12	CONTROL PANEL BACK	----	1
13	BUSHING, 7/8"	000514	1

BB & TS CONTROL PANEL



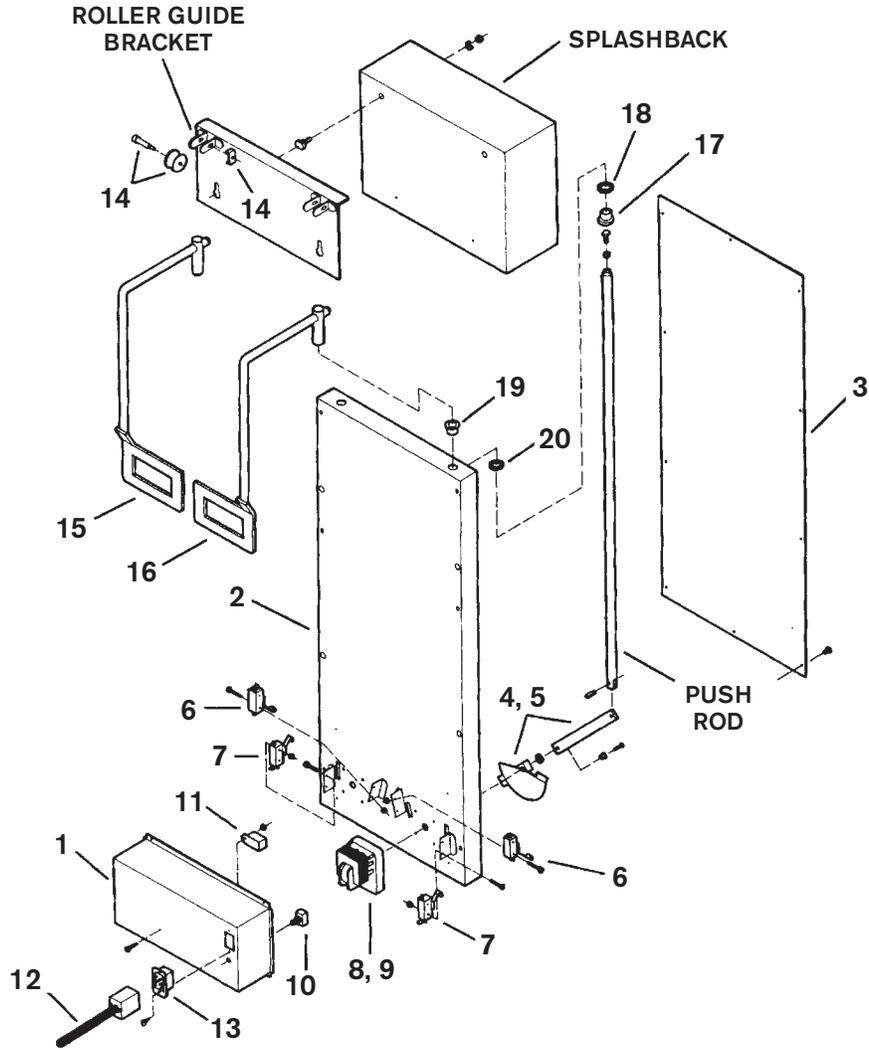
ITEM	MODEL	DESCRIPTION	P/N	QTY
1	BB & TS	THERMOSTAT 14"	035574	1
	BB & TS	THERMOSTAT 10x11", 18" & UP	035575	1
2	BB & TS	THERMOSTAT DIAL PLATE	058037	1
3	BB & TS	THERMOSTAT KNOB, BLACK	060612	1
4	BB & TS	RETAINING SCREWS	004610	3
5	TS	SET OF (4) LIGHTS 120V, WITH PLATES	004156	1
6	BB & TS	PILOT ON MOMENTARY SWITCH	004501	1
7	BB & TS	TOGGLE SWITCH, FRY/OFF/MELT	000521	1
8	BB & TS	TOGGLE SWITCH, MAIN ON/OFF	004499	1
9	BB & TS	HI-LIMIT TEST BUTTON	004304	1
10	TS	TIMER, ELECTRONIC	023709	2
11	BB & TS	MELT CONTROL	004169	1
12	BB & TS	NUT WITH BOOT	009389	1
13	BB & TS	CONTROL PANEL, HOODED	----	1
14	BB & TS	FLAME SWITCH CONTROL	038563	1
15	BB & TS	FLAME SWITCH CONTROL BRACKET	012833	1
16	BB & TS	HI-LIMIT CONTROL	004341	1
17	BB & TS	CONTROL PANEL BACK	----	1
18	BB & TS	BUSHING, 7/8"	000514	1
19	BB & TS	TERMINAL BOARD	000639	1
20	BB & TS	INSULATION BOARD	000263	1
21	BB	INDICATING LIGHT - AMBER 120V	004158	1
22	BB & TS	HI-LIMIT TEST PLATE	004305	1
23	BB & TS	FRY/OFF/MELT SWITCH PLATE	009919	1

BASKET-LIFT CONTROL PANEL - 14" - 24" MODELS



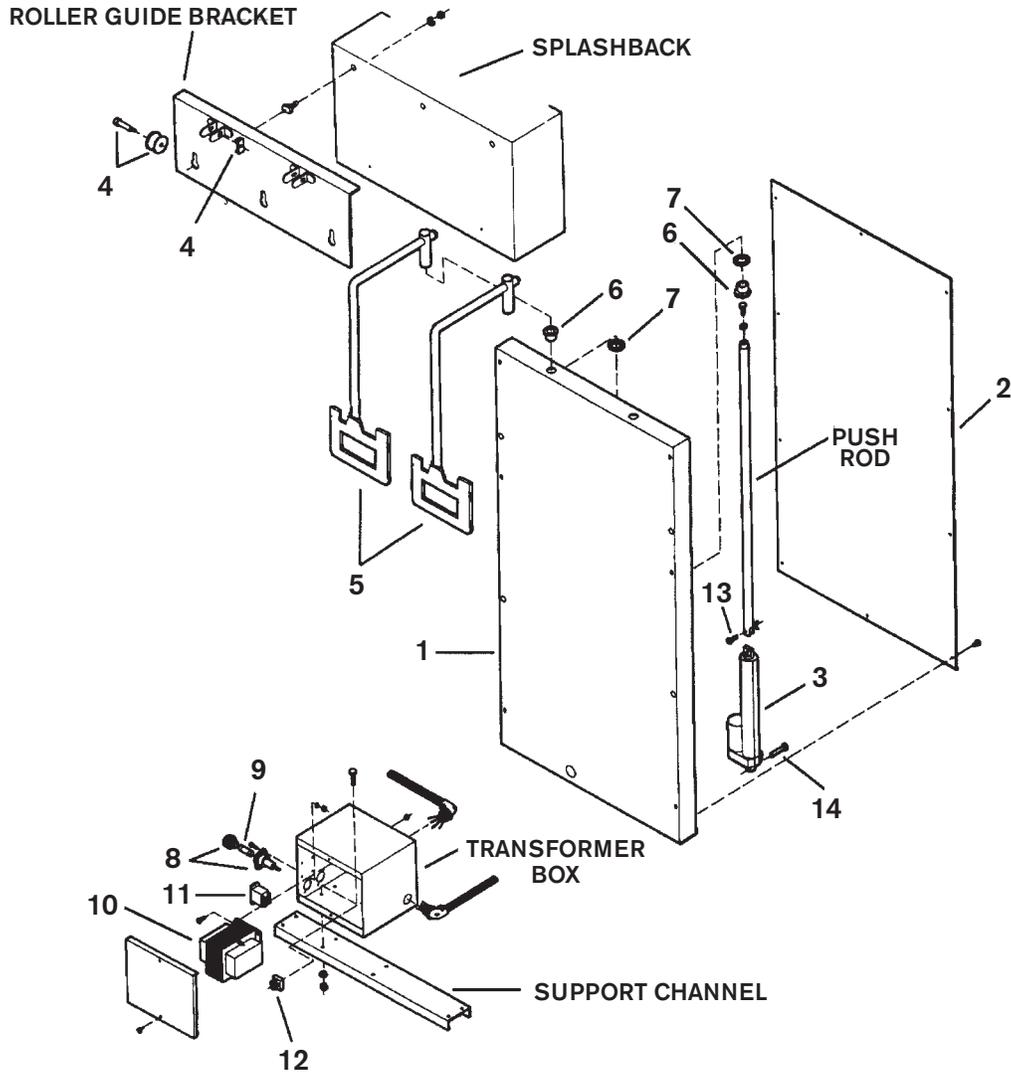
ITEM	DESCRIPTION	P/N	QTY
1	THERMOSTAT 14 TS	035574	1
	THERMOSTAT 10x11", 18" & UP	035575	1
2	THERMOSTAT DIAL PLATE	058037	1
3	THERMOSTAT KNOB, BLACK	060612	1
4	RETAINING SCREWS	004610	3
5	SET OF (4) LIGHTS 120V, WITH PLATES	004156	1
6	PILOT ON MOMENTARY SWITCH	004501	1
7	TOGGLE SWITCH, FRY/OFF/MELT	000521	1
8	TOGGLE SWITCH, MAIN ON/OFF	004499	1
9	HI-LIMIT TEST BUTTON	004304	1
10	TIMER, ELECTRONIC	023709	2
11	MELT CONTROL	004169	1
12	NUT WITH BOOT	009389	1
13	CONTROL PANEL, HOODED	----	1
14	FLAME SWITCH CONTROL	038563	1
15	FLAME SWITCH CONTROL BRACKET	012833	1
16	HI-LIMIT CONTROL	004341	1
17	CONTROL PANEL BACK	----	1
18	BUSHING, 7/8"	000514	1
19	TERMINAL BOARD	000639	1
20	INSULATION BOARD	000263	1
21	TOGGLE SWITCH, BASKET-LIFT ON/OFF	004499	1
22	INDICATING LIGHT - 120V RED, BASKET-LIFT ON/OFF	000525	1
23	BASKET-LIFT ON/OFF SWITCH PLATE	007997	1

BASKET-LIFT HOUSING & ROLLER GUIDE - 14" MODELS



ITEM	DESCRIPTION	P/N	QTY
1	MOTOR AND WIRE COVER	----	1
2	HOUSING, S/S OR CRS	----	1
3	REAR COVER, S/S OR CRS	----	1
4	LEFT SIDE CRANK BAR AND CAM (Viewing front of fryer)	016209	1
5	RIGHT SIDE CRANK BAR AND CAM (Viewing front of fryer)	016401	1
6	MIRCROSWITCH, MOTOR LIMIT	004592	2
7	MICROSWITCH, BUZZER LIMIT	004592	2
8	MOTOR, CCW, LEFT (Viewing front of fryer)	000390	2
9	MOTOR, CW, RIGHT (Viewing front of fryer)	000391	2
10	BUZZER ON/OFF SWITCH WITH PLATE	004499	1
11	BUZZER	004223	1
12	WIRE HARNESS ASSEMBLY, W/PLUG, 6-PRONG	019600	1
13	RECEPTACLE, 6-PRONG, MALE, WITH WIRE HARNESS	018754	1
14	ROLLER FOR LIFT ROD	015817	2
	ROLLER PIN	016393	2
	ROLLER PIN LOCK	016392	2
15	LIFT ROD, LEFT (Viewing front of fryer)	018990	1
16	LIFT ROD, RIGHT (Viewing front of fryer)	018991	1
17	BUSHING, PUSH ROD	016405	4
18	BUSHING RETAINING RING	015831	4

BASKET-LIFT HOUSING, ROLLER GUIDE & TRANSFORMER BOX - 18" - 24" MODELS

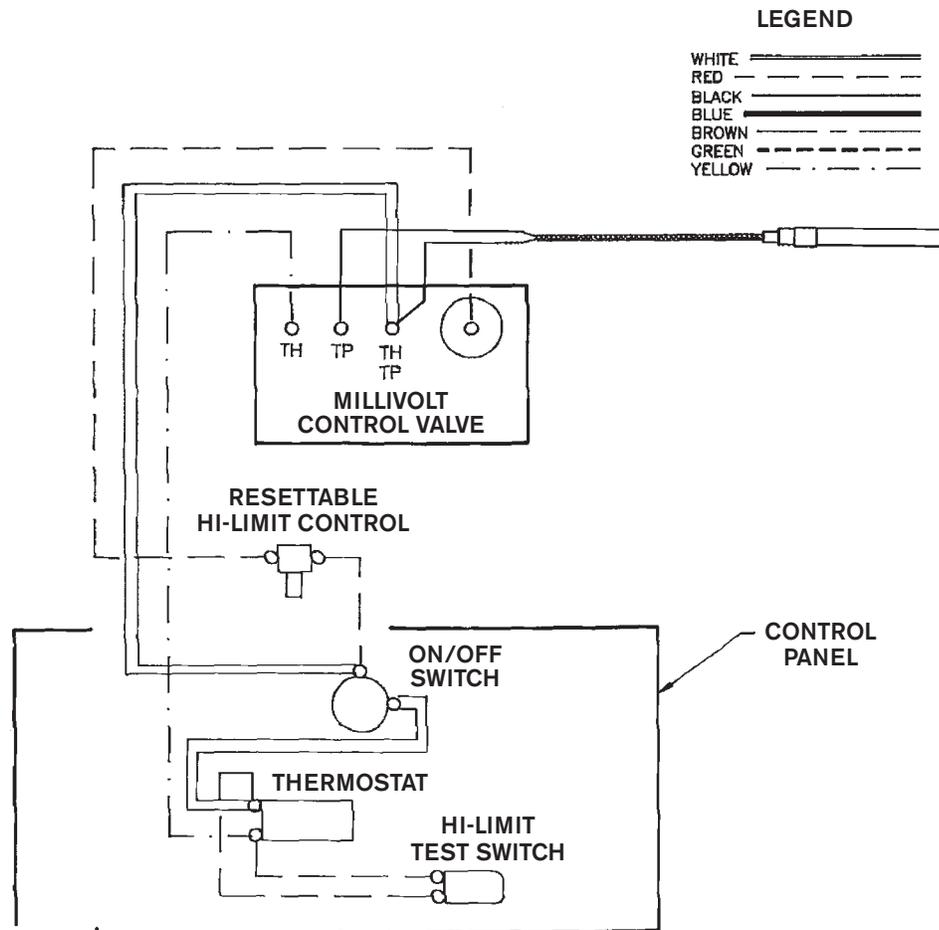


ITEM	DESCRIPTION	P/N	QTY
1	HOUSING, S/S OR CRS	----	1
2	REAR COVER, S/S OR CRS	----	1
3	LINEAR ACTUATOR, 24VDC, WITH LIMIT SWITCHES	018471	2
4	ROLLER FOR LIFT ROD	015817	2
	ROLLER PIN	016393	2
	ROLLER PIN LOCK	016392	2
5	LIFT ROD, FOR SPLIT BASKETS	020086	2
6	BUSHING, PUSH ROD	016405	4
7	BUSHING RETAINING RING	015831	4
8	FUSE HOLDER	004335	2
9	FUSE, ACTUATOR GROUND FAULT, 3A, SC-3	004334	2
10	TRANSFORMER	1-800-KEATING	1
11	RELAY, BASKET-LIFT	008088	2
12	RECTIFIER, 24VD, WITH WIRES	019427	1
13	UPPER ACTUATOR CLEVIS PIN, 1/4" x 3/4"	019218	2
14	LOWER ACTUATOR CLEVIS PIN, 1/4" x 1-3/8"	019219	2

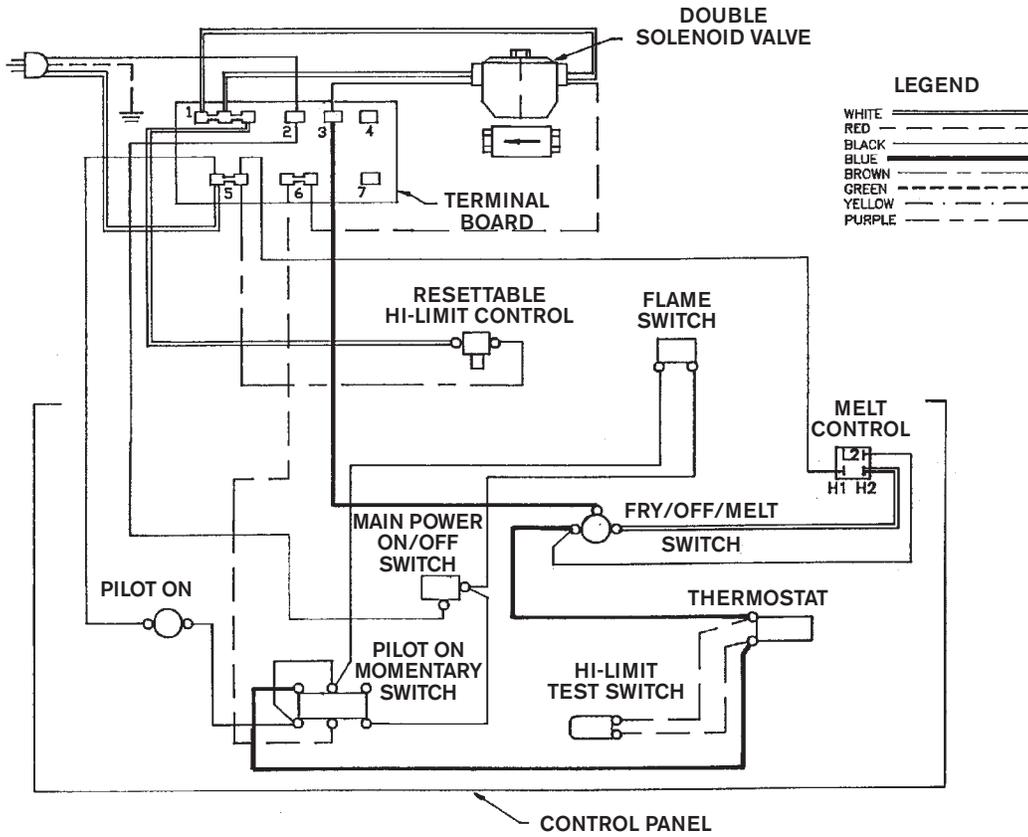
■ WIRING DIAGRAMS

AA & CMG WIRING DIAGRAM

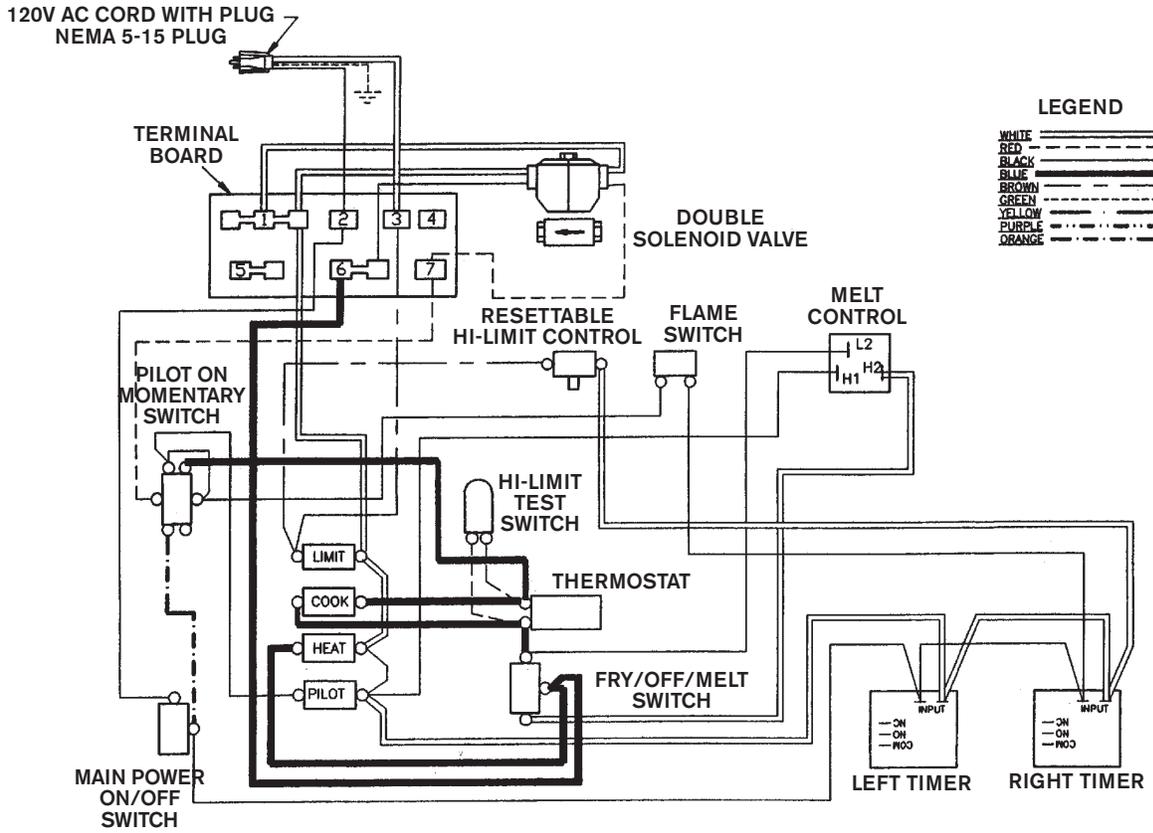
NOTE: Separate wiring diagrams have been attached to the fryer and on the inside of this manual and should be saved for troubleshooting and maintenance. The wiring diagrams in this section cover standard fryers which may or may not match the diagrams sent with the fryer. Non-standard fryers such as CPU models do not have wiring diagrams printed in this section.



BB WIRING DIAGRAM

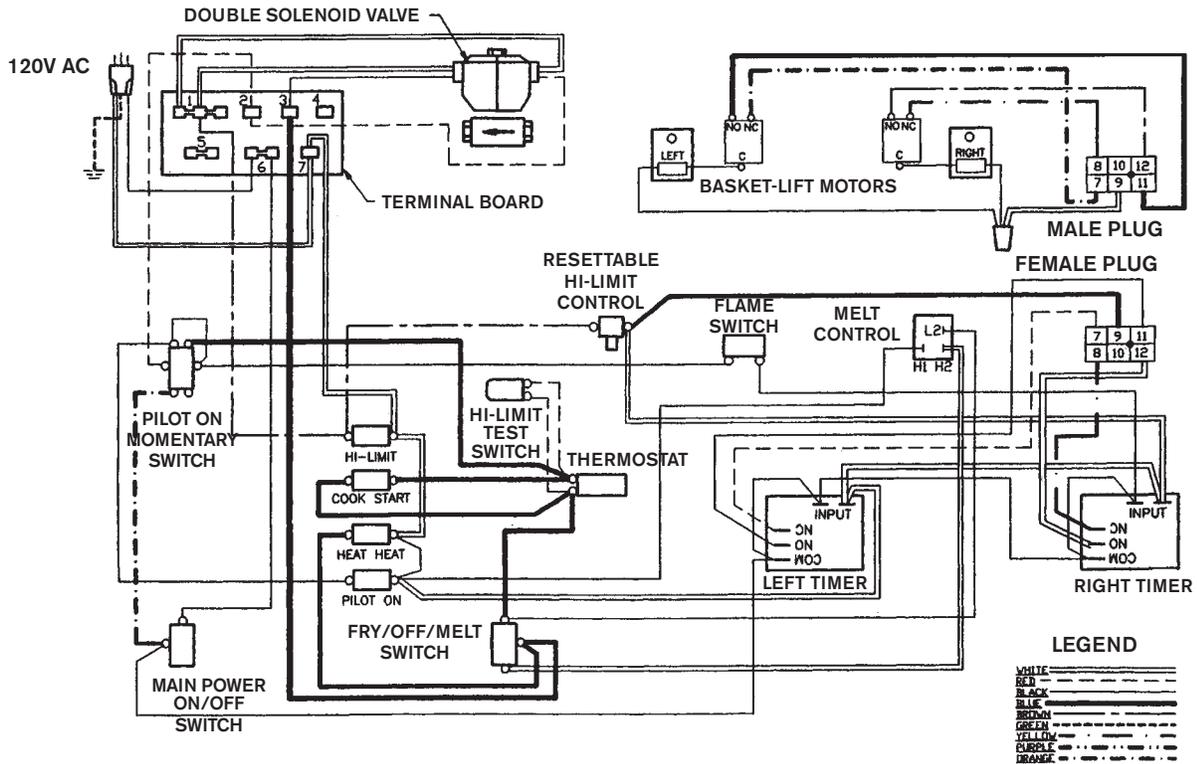


TS WIRING DIAGRAM

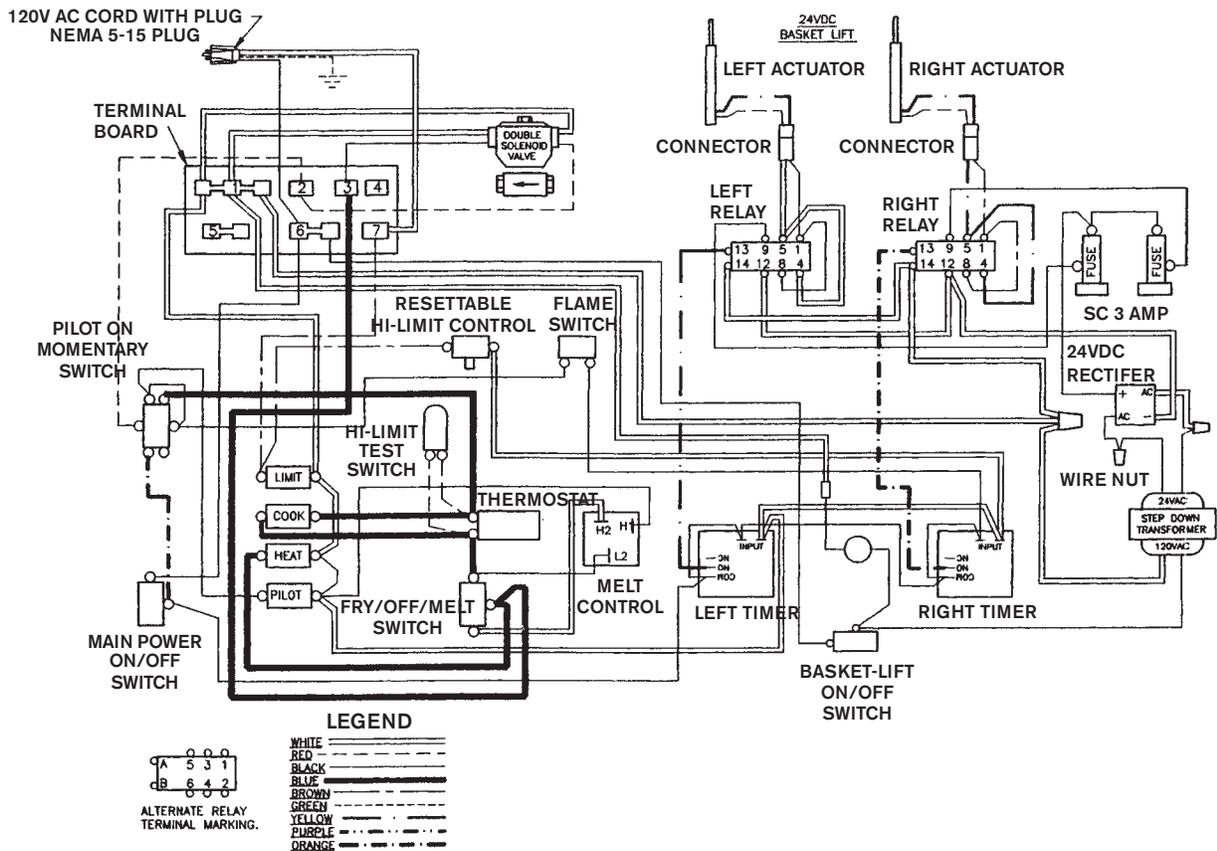


TS MODELS WITH BASKET-LIFT WIRING DIAGRAM

14 TS MODEL



18 & UP TS MODEL





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 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:

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, damaged during shipment 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 unauthorised 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.

■ **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.

.....
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.
8901 West 50th Street
McCook, IL 60525-6001

1-800-KEATING
PHONE: 708-246-3000
FAX: 708-246-3100

Serving Those Who Serve the Very Best®