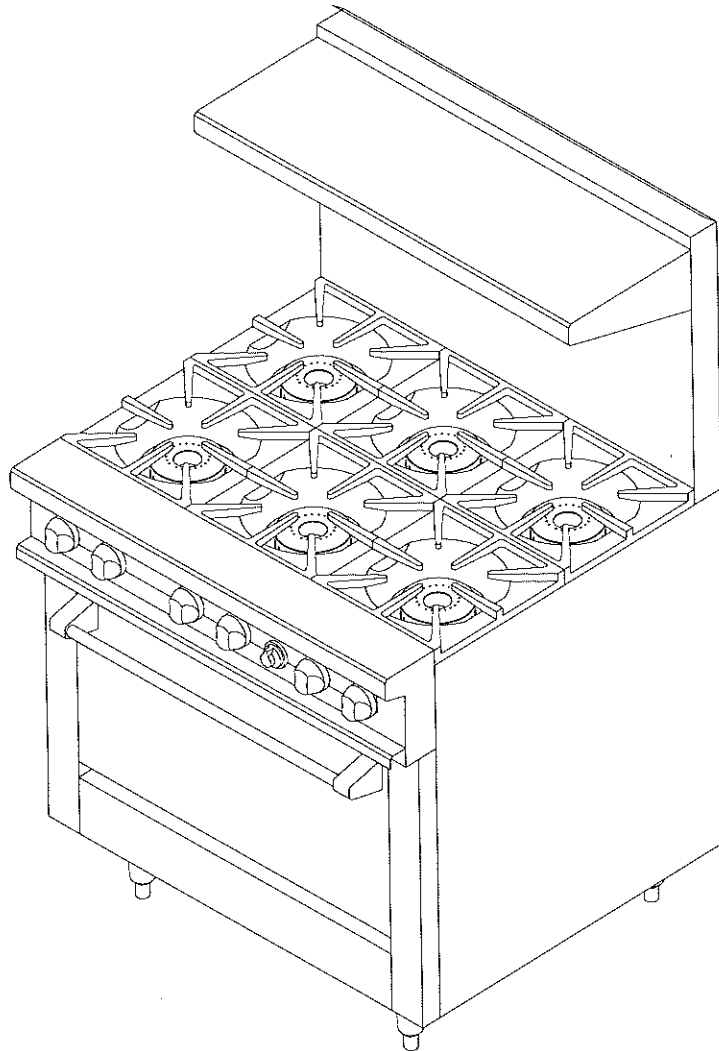


THERMA**TEK** RESTAURANT SERIES
commercial cooking solutions

OWNERS MANUAL AND INSTALLATION INSTRUCTIONS



MODEL # TMD36-6-1 (shown)



Made in U.S.A

THERMA**TEK**
commercial cooking solutions

INTRODUCTION/ SAFETY PRECAUTIONS

Thank you for choosing your new THERMA-TEK Equipment. Our Products are designed to be safe and reliable when properly cared for and used reasonably. Your service agency or dealer recommends periodic inspections. Installation, maintenance, and repairs should be performed by your local authorized service agency. **This equipment is not intended for home use.**

This equipment is for commercial use by trained professionals familiar with commercial cooking equipment. It is the responsibility of the Supervisor or equivalent person to ensure that users wear suitable protective clothing and safety gear. Caution: some parts of the equipment become very hot and will cause burns if accidentally touched.

FOR YOUR SAFETY

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

FOR YOUR SAFETY

If you smell gas:

1. Shut off gas to appliance.
2. Extinguish any open flame.
3. If odor continues, immediately call your gas supplier.

Consult your local gas supplier for instructions to be followed in the event you smell gas.
Post these instructions in a prominent location.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT ALTERATION, SERVICE AND/OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE OWNERS/INSTALLERS MANUAL THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

CALIFORNIA PROPOSITON 65 – WARNING

The burning of gas cooking fuel generates some by-products which are on the list of substances known by the State of California to cause cancer or reproductive harm. California law requires businesses to warn customers of potential exposure to such substances. To minimize exposure to these substances, always operate this unit according to the owners/installation manual, ensuring you provide good ventilation when cooking with gas.

PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

INSTALLATION AND SAFETY GUIDELINES

IMPORTANT

Safe and satisfactory operation of your equipment depends on its proper installation. Installation must conform to local codes, or in the absence of local codes with the National Fuel Code ANSI Z223.1 (latest edition).

All THERMA-TEK appliances are shipped with a gas pressure regulator packed with the unit. All units are adjusted, tested, and inspected at the factory prior to shipment.

After uncrating, immediately check the equipment for visible signs of shipping damage. If such damage has occurred, do not refuse shipment, but contact the shipper and file appropriate freight claims.

GENERAL

- Installation of this equipment shall be made by licensed and Authorized/Qualified personnel.
- A manual gas shut-off valve must be installed in the gas supply (service) line ahead of the appliance and gas pressure regulator installed in the gas stream for safety and ease of future service.
- The gas pressure regulator supplied must be installed on the appliance prior to connecting the equipment to the gas line. Failure to install a regulator will void the equipment warranty and result in a potentially hazardous condition.
- The appliance and its individual shut off valve must be disconnected from the gas supply system during any pressure testing of that system in excess of ½ PSI.
- The appliance must be isolated from the gas supply system by closing its individual shut off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than ½ PSI.
- Please contact the factory, the factory representative, or a local authorized service company to perform maintenance and repairs.

RATING PLATE

Information on this plate includes the model and serial number. When communicating with the factory about a unit or requesting special parts or information, this information is required for proper identification. Other information on the plate is the BTU/hr input of the burners, gas pressure in inches WC, and whether the unit has orifices for natural or propane gas. Rating plate is located behind the lower front panel.

IMPORTANT: The appliance must be connected only to the type of gas identified on the rating plate.

GAS CONVERSION

We recommend that the appliance be ordered from the factory for the type of gas at the installation site. When gas conversion is necessary contact the factory for a proper gas conversion kit.

INSTALLATION AND SAFETY GUIDELINES

CLEARANCES

- The unit must be kept clear of all combustibles.
- The unit must be installed with the 6" legs or casters supplied for proper operation.
- Minimum clearance from combustible construction:

	<u>Side</u>	<u>Back</u>
○ Open top	12"	6"
○ Hot Top	6"	6"
○ Griddle	6"	6"
○ Broiler	6"	6"

- Minimum clearance from non-combustible construction: 0" Side, 0" Back

LEVELING

A carpenter's spirit level should be placed on the cooking surface and the unit leveled side-to-side, and front to back. If it is not level, burner combustion may be erratic or the unit may not function efficiently.

AIR SUPPLY AND VENTILATION

The appliance must be installed under a ventilation hood.

The area around the appliance must be kept clear to avoid any obstructions of the flow of combustion and ventilation air as well as for ease of maintenance, service, and proper appliance operation. Keep clearance for openings into the combustion chamber and adequate air supply. Means must be provided for any commercial, heavy duty-cooking appliance to exhaust combustion wastes to the outside of the building.

Air movement should be checked during installation. Strong exhaust fans in the hood or in the overall air conditioning system can produce a slight draft in the room, which can interfere with pilot or burner performance. If pilot or burners problems persist make up air openings or baffles may have to be provided in the room.

Filters and drip troughs should be part of any industrial hood, but consult local codes before constructing and installing any hood. The duct system, exhaust hood, and filter bank must be cleaned on a regular basis and kept free of grease.

ALTITUDE

The appliance input rating (BTU/hr) is for elevations up to 2000 feet. For elevations above 2000 feet, the rate should be reduced 4% for each 1000 feet above sea level. The correct orifices are installed at the factory if the operating altitude is known at the time of sale.

INSTALLATION AND SAFETY GUIDELINES

GAS CONNECTION

The gas supply (service) line must be at least the same size or larger than the inlet line of the appliance. THERMA-TEK restaurant series equipment is supplied with a ¾" NPT Schedule 40 inlet. Sealant on all pipe joints must be resistive to LP gas.

MANUAL SHUTOFF VALVE

A manual shut-off valve must be installed in the gas service line ahead of the appliance and regulator in the gas stream and in a position where it can be reached quickly in the event of an emergency. The manual shut-off valve is supplied by the installer.

PRESSURE REGULATOR

All commercial cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since pressure may fluctuate on local demand. A regulator is supplied with the appliance. **Failure to install a pressure regulator will void the equipment warranty.** The regulators are adjusted at the factory, 5.0" WC for natural gas, and 10.0" WC for propane gas. Ensure the supply pressure is within the following range: Natural Gas 6.0" WC to 13.0" WC / Propane Gas 11.0" WC to 13.0" WC. Only qualified service personnel with proper test equipment must make any adjustments to the regulators.

RIGID CONNECTIONS

Double check any installers supplied gas pipes visually and blow them out with compressed air to clear any dirt particles, threading chips, or any other foreign matter before installing a service line. Those particles will clog orifices when gas pressure is applied. All connections must be sealed with a joint compound for LP gas, and tested with a soapy water solution before lighting any pilots.

FLEXIBLE COUPLINGS, CONNECTORS AND CASTERS

If the unit is to be installed with flexible coupling and or quick disconnect fittings, the installer must use a heavy duty commercial flexible connector at least ¾" NPT (with suitable strain relief) in compliance with the standard for connectors for movable gas appliances, ANSI Z21.69-1987 and Addenda Z2.169a-1989 (or latest edition) or connectors for movable appliances, CAN/CGA-6.16 (or latest edition) and quick disconnect device must comply with the standard for quick disconnect devices for use with gas fuel, ANSI Z21.41-1989 (or latest edition) or quick disconnect devices for use with gas fuel, CAN1-69 (or latest edition). Adequate means must be provided to limit the movement of the appliance. Domestic connectors are not suitable.

When the appliance is supplied with casters and is connected to the supply piping by means of a connector for movable appliances, and if disconnecting the restraint is necessary, this restraint must be reconnected after the appliance is returned to its original installation position. The strain relief is a cable attached to the rear of the appliance.

RESTAURANT RANGE BACKGUARD MOUNTING INSTRUCTIONS

KIT INCLUDES:

- (2) PN 31079 BACKGUARD SUPPORT
- (4) PHILLIPS HEAD SHEET METAL SCREWS

FIGURE 1

FIGURE 1: SHELF AND BACKGUARD MOUNTING ASSEMBLY TO RANGE

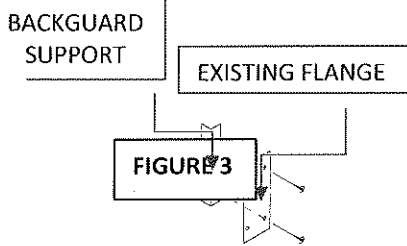
FIGURE 2: STEP ONE DIAGRAM

FIGURE 3: PN 31079 BACKGUARD SUPPORT ASSEMBLY TO EXISTING PART

FIGURE 4: STEP 2 DIAGRAM

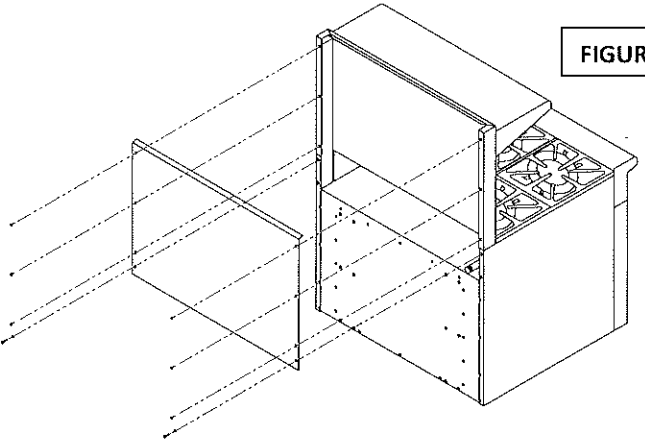
STEP 1

REMOVE BACK PANEL FROM SDHS BY REMOVING (6) PHILLIPS HEAD SCREWS AND (2) 7/16" HEX HEAD BOLTS AS SHOWN IN FIGURE 2.



(2) EXISTING SHEET METAL SCREWS

FIGURE 2



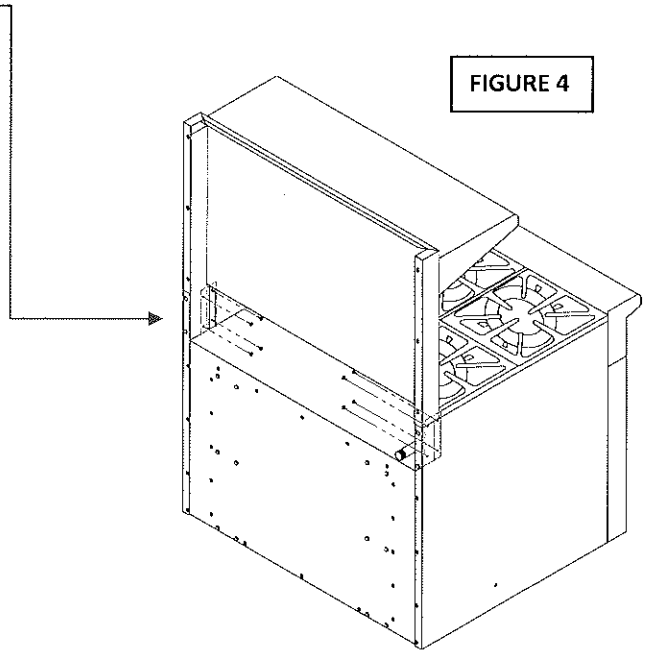
STEP 2

FLANGE EXISTS ON RANGE AT THE LOCATION DIRECTED BY ARROW. REMOVE (2) EXISTING SHEET METAL SCREWS FROM FLANGE AND ATTACH BACKGUARD SUPPORT HERE WITH EXISTING SCREWS AS SHOWN IN FIGURE 3. USE (2) PHILLIPS HEAD SHEET METAL SCREWS FROM KIT TO SECURE ASSEMBLY TO SHELF UPRIGHT AND INNER BURNER AS SHOWN IN FIGURE 4. BOX SIDE PROCEDURE IS DONE TO BOTH SIDES OF SDHS.

NOTE: WHEN LOCATING HOLES FOR PLATE, BE SURE SDHS IS STRAIGHT AND PLUMB.

REINSTALL BACK PANEL.

FIGURE 4



INITIAL START-UP

All THERMA-TEK appliances are adjusted and tested before leaving the factory. Adjustments and calibrations may be necessary upon installation to meet local conditions, low gas characteristics; problems caused by rough handling or vibration during shipping, and are to be performed only by qualified service personnel. These adjustments are the responsibility of the customer and or dealer and are not covered by our warranty.

Check all gas connections for leaks with a soapy water solution before lighting pilots. **Do not use an open flame to check for leaks.** Putting an open flame beside a new gas connection is extremely dangerous. Before lighting any pilots, make sure that burner valves and thermostats are in the off position.

LIGHTING THE PILOTS

CAUTION: When lighting the pilots and checking for leaks, do not stand with your face close to the Combustion chamber.

OPEN TOP:

- Remove top grates
- Make sure pilot adjust valve located on the manifold is open.
- Light the pilot and adjust flame to approximately ½”.

GRIDDLE/HOT TOP:

- Looking through slot in the valve panel, locate pilot lighting holes in the burner front shield.
- Make sure pilot adjust valve located on the manifold is open.
- Light the pilot and adjust flame to approximately ¾” high.

BROILER:

- Remove grates.
- Make sure pilot adjust valve located on the manifold is open.
- Light the pilot and adjust to approximately ¾” high.

OVEN:

- Access the pilot behind the lower front panel by lifting the panel upward and rotating forward.
- Locate the oven safety and depress and hold the red button on the safety.
- Repeatedly push the igniter button until the pilot lights.
- Continue to hold the red button on the safety until pilot stays lit, approximately 30 seconds.
- If the pilot goes out, turn all knobs to the off position, and wait 5 minutes before trying to relight the pilot.

SHUTDOWN

- Nightly shutdown: Turn burner valves and thermostat to off position, pilots will remain lit.
- Complete shutdown: Turn burner valves and thermostats to off position. Turn main gas supply to range off.

OPERATING INSTRUCTIONS

BEFORE USE

All units are wiped clean with solvents at the factory to remove any visible signs of dirt, oil or grease remaining from the manufacturing process.

Open Tops & Broilers

The top grates should be removed and washed before use. With these removed it will be possible to remove plastic ties holding the burners in place for shipment.

Hot Top

The hot top is made of cast iron and should be seasoned before use. To season, pour a small amount of cooking oil on the top. With a cloth, spread the oil over the entire surface to create a thin film. Wipe off any excess oil with a cloth. Turn burner on very low and allow top to heat up gradually for about 2 hours. Repeat this procedure a second time before regular use. This will resist cracking of the cast iron and ensure a longer life.

Griddle

New griddles should be seasoned as follows:

1. Clean the griddle surface thoroughly with hot soapy water to remove the protective oil coating wiped on at the factory.
2. Rinse with a mixture of $\frac{1}{4}$ cup vinegar to one-quart water.
3. Spread unsalted shortening or liquid frying compound evenly over the entire griddle surface.
4. Turn all griddle burners to medium or thermostats to 350 degrees and wait until the shortening begins to smoke, then turn the burners off.
5. Rub the now melted shortening into the griddle surface with a cloth covering the entire surface.
6. Let the griddle cool, then repeat steps 3,4, & 5.
7. When the griddle is cool after the second seasoning, wipe it once again with a thin film of shortening or cooking oil.

Oven

Before using the new oven be sure all packing material is removed from the oven. Remove any plastic ties that may have been used to hold the oven racks in place for shipping. Wipe down the oven interior of any dirt or debris that may be left from shipping. On initial lighting, turn the oven to 250 degrees and operate for one hour, then reset the thermostat to its maximum and operate for another hour. This will burn off any solvents remaining on the unit. At the end of this second hour, turn the thermostat off, open the door and let cool.

OPERATING INSTRUCTIONS

OPERATING SUGGESTIONS

Open Tops

Open top burners are quickly lighted and require no preheating time. Light only as many burners as needed.

Hot Top

Heat the hot top thoroughly before using. During slow periods the top can be kept warm with the burners turned partially down.

Griddle

Heat the griddle thoroughly before using. During slow periods the top can be kept warm with the burners turned partially down, or heat only the portion of the griddle required.

Broiler

Allow the grates to thoroughly heat before using. During slow periods heat only the portion required.

Oven

Allow time to preheat ovens before using (25 min. at 400 F). If used properly, the automatic temperature control will cut gas costs. Do NOT run on maximum heat all the time. Turn the thermostat down to 250 F when the oven is idling, or turn it off when not in use.

Moderate oven temperatures will produce better food, reduce shrinkage and keep maintenance costs down. Using a low temperature for roasting (about 325 F) will reduce meat costs by reducing shrinkage. A pan of water may be placed on the oven bottom. This water supplies humidity to reduce shrinkage. If necessary, add water during roasting.

CARE AND CLEANING

Any piece of equipment works better and lasts longer when properly maintained. Cooking equipment is no exception. Your THERMA-TEK appliance must be kept clean during the workday and thoroughly cleaned at the end of the day.

OPEN TOP

- Remove grates and burners and wash thoroughly with hot soapy water. Be sure to clean burner ports by using a piece of wire
- Make sure air shutter openings are clear of any debris.
- Make sure pilot flashtube is clear.
- Empty crumb trays.

HOT TOP

- Wipe the top while still warm with a soft damp cloth or other grease removing material to remove spillovers, grease etc. before they burn in. A crust on top of the range looks unsightly and slows down speed of cooking because it reduces the flow of heat to the utensil. If necessary scrape the top with a nylon scraper.

GRIDDLE

- Scrape with a nylon griddle scraper to remove cooked on spills. Use a fine-grained stone only when absolutely necessary.
- Wipe away any griddle stone dust and food particles with a cloth.
- Wash with hot soapy water, and then rinse with vinegar and water solution.
- Then rinse again with clear water.
- Re-oil with shortening or liquid frying compound.
- Remove grease can, empty, and clean it thoroughly with hot soapy water.
- Never flood the griddle with cold water. This promotes griddle warping and can cause the griddle plate to crack if continued over a long period of time.

BROILER

- Remove large pieces of food residue and carefully scrape spillovers from the drip tray below the cooking surface.
- Cast iron grates should be scraped with a wire brush frequently, and periodically soaked in hot water to remove grease from the pores of the cast iron. Never expose the grates to extreme heat for the purpose of burning off excess grease. This practice will shorten the life of the grates.
- The lava rock in the Char-rock broiler are highly porous and relatively self cleaning. High heat will effectively clean and burn off grease. The lava rock should be turned over about every week depending on the amount of cooking being done and the type of food being prepared.

OVEN

- Wipe oven door often during the workday with a damp cloth.
- At the end of the workday wipe the oven interior with a damp cloth.
- Soften any built up debris by soaking with a damp cloth. Scrape if necessary with a nylon scraper.

STAINLESS STEEL

- All stainless steel body parts should be wiped regularly with hot soapy water during the day and with a liquid cleaner designed for this material at the end of each day. Do not use steel wool, abrasive cloths, cleansers, or powders to clean stainless steel surfaces. If it is necessary to scrape stainless steel to remove encrusted materials, soak in hot water to loosen the material, and then use a nylon or wood scraper to loosen debris. Never use a spatula, knife or any other metal tool to scrape stainless steel. These tools will scratch the stainless steel.



Installation

Initial Startup

The following is a check-list to be completed by qualified personnel prior to turning on the appliance for the first time.

- Open the manual shut-off valve at the rear of the oven.
- Remove the control panel and combustion cover.
- Be sure the gas on/off switch on the front panel is in the on position.
- Turn the selector switch to High Fan, 80,000 BTU, and the thermostat to 550°F (288°C).

The oven main burner lights, and the Oven Ready Light comes on. With the main burner on, check the following.

- Verify there are no gas leaks, by checking all gas connections with a soapy water solution.
- Verify that the inlet pressure is correct. The inlet pressure can be checked at the pressure tap located on the combination valve's inlet side.
- Verify that the manifold pressure is correct. The manifold pressure can be checked at the pressure tap located on the manifold. Check pressure at both 80,000 BTU and 60,000 BTU.
- If the pressure readings are not set correctly, adjust accordingly.
- FIRST TIME ONLY BREAK-IN PROCEDURES
 - a.) Set burner rate to 60,000 BTU.
 - b.) Turn oven on high fan and adjust thermostat to 350°F (177°C). Allow oven to heat soak for one hour.
 - c.) Adjust thermostat to 550°F (288°C). After reaching setpoint, set burner rate to 80,000 BTU. Allow oven to heat soak until all residual smoke and fumes have stopped.



WARNING

The break in procedure burns off excess oils present in the metals during fabrication. Smoke may be produced. Proper ventilation is required.

ADJUSTMENTS ASSOCIATED WITH INITIAL INSTALLATION

Each oven, and its component parts, have been thoroughly tested and inspected prior to shipment. However, it is often necessary to further test or adjust the oven as part of a normal and proper installation. These adjustments are the responsibility of the installer, or dealer. Since these adjustments are not considered defects in material or workmanship, they are not covered by the Original Equipment Warranty. They include, but are not limited to:

- calibration of the thermostat
- adjustment of the doors
- burner adjustments
- leveling
- testing of gas pressure
- tightening of fasteners.

No installation should be considered complete without proper inspection, and if necessary, adjustment by qualified installation or service personnel.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Burner flame too large	Incorrect pressure setting or orifice	Check pressure setting and orifice.
Burner flame soft and yellow tipping	Insufficient primary air	Check air shutter setting.
Flame lifts off burner ports	Excessive primary air	Check air shutter setting.
Flame lights back to orifice	Excessive primary air	Check air shutter setting.
Delayed ignition	1) Pilot flame too small 2) Burner ports blocked 3) Incorrect air shutter setting 4) Incorrect pressure setting 5) Pilot lighter tube dirty or blocked	1) Check pilot flame length. 2) Clean burner ports. 3) Check air shutter setting. 4) Check pressure setting. 5) Clean tube.
Pilot burner will not ignite	1) Pilot blocked or dirty 2) Pilot adjusting screw closed	1) Clean pilot. 2) Open & adjust flame length.
Griddle too hot or not hot enough	Thermostat out of calibration	Check calibration.
Oven too hot or not hot enough	Thermostat out of calibration	Check calibration.
Oven pilot burner will not ignite	1) Pilot orifice is blocked 2) Flame length too short 3) Loose thermocouple connection 4) Faulty thermocouple 5) Faulty flame safety device	1) Clean pilot orifice and lines. 2) Check flame length & adjust. 3) Tighten connection. 4) Replace thermocouple. 5) Replace safety valve.

HOW TO OBTAIN SERVICE

For warranty service, contact your local THERMA-TEK authorized service agency. Provide him or her with the Model #, Serial #, date of installation, and a brief description of the problem. If you need assistance locating the authorized service agency in your area, contact your local dealer. He or she will have a listing of authorized dealers in your area, or on the web www.therma-tek.com

We want you to remain a satisfied customer. If a problem arises that cannot be resolved to your satisfaction, please contact our customer service at:

570-455-3000

570-455-9491 (fax)

877-THERTEK (toll free)

Or e-mail us at info@therma-tek.com

For Technical support call: 570-455-3000



TERMS OF SALE

FOB: THERMA-TEK, 115 ROTARY DRIVE, HAZLETON, PA 18202

INSPECTION: Shipments must be inspected promptly upon receipt. No claims for damaged merchandise or missing parts or other errors will be recognized unless written notice thereof is given to Therma-Tek Commercial Cooking Equipment Company within 30 days after shipping date.

RETURNED GOODS: Returned goods are subject to a 15% restocking charge along with any reconditioning charges. Any authorized product return, must be returned in its original unused and undamaged condition, in its original carton, with all accessories and user manuals included. A Return Materials Authorization Number (RMA) by Therma-Tek must be granted, and returned goods must be shipped freight prepaid. Custom units built to buyer specifications may not be returned or cancelled.

SHIPMENTS: All equipment ships under class 85. FOB: Hazleton, PA 18202

PRODUCT REVISIONS: Therma-Tek Commercial Cooking Equipment Company reserves the right without prior notice to make changes and revisions in product specifications, design and materials at its discretion and without notice.

PRICES: All prices are subject to change without notice. Prices do not include sales or any other local state tax. All prices are in U.S. Dollars.

TERMS: Net 30 days subject to Therma-Tek credit department approval. All amounts past due are subject to 1 1/2% per month service charge

LIMITED WARRANTY: TWO (2) YEAR PARTS AND LABOR FOR U.S.

THERMA-TEK LIMITED WARRANTY: The Therma-Tek Commercial Cooking Equipment Company warranty applies to all equipment that has been unaltered, properly installed and maintained in accordance with national and local codes and in accordance with the Therma-Tek installation manuals.

Therma-Tek products are warranted to the original purchaser to be free from defects in material and workmanship under normal use and service for a period of (2) two years from the date of original installation. Equipment must be no older than two (2) years from date of manufacture to carry the one (2) year parts and labor warranty. Equipment is not warranted when used in a non-commercial location. Porcelain items are excluded from this warranty. Parts wear is not considered a defect. Faucets, cast iron parts and glass items are warranted for 90 days. This warranty does not apply to equipment damaged, altered or abused accidentally or intentionally, modified by unqualified service personnel or with missing or altered serial name plates. Therma-Tek agrees to repair or replace defective parts (with normal shipping charges) due to flaws in material or workmanship during the warranty period. Labor to repair or replace defective parts shall be warranted when and only performed by an authorized Therma-Tek service agency. Travel over 50 miles, holiday or overtime labor charges are not covered. T

Any use of any third-party or non Therma-Tek replacement parts will void the warranty.

Any Therma-Tek Commercial Cooking Equipment Company product purchased, shipped or installed out of the 48 contiguous U.S. states is limited to a one (1) year parts only warranty. Replacement parts are F.O.B. Therma-Tek, Hazleton, Pennsylvania 18202.

Proper installation, initial check out, air shutter adjustments, or normal maintenance such as lubrication, adjustment or calibration of controls is the responsibility of the dealer, owner/user or installing contractor and is not covered by this warranty.

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