# **USE AND CARE GUIDE**

THERMADOR PROFESSIONAL® PRO HARMONY® DUAL FUEL RANGES

#### Models:

PRD304GHU PRD364GDHU PRD366GHU PRD486GDHU













Congratulations on your recent THERMADOR<sup>®</sup> purchase! Whether you are a dedicated chef or simply a connoisseur of the art of cooking, owning a THERMADOR kitchen is the ultimate expression of personal style, good taste and an appreciation for the complete culinary experience. Our award-winning products have been empowering culinary enthusiasts for more than eleven decades.

Before you begin using your new THERMADOR product, please take a moment to review the Use and Care Guide. You will find the answers to all of your questions as well as some very important safety information. Pay special attention to the *Important Safety Instructions* located at the beginning of the manual. Your THERMADOR product is ready and waiting to be used for your next gourmet creation!

Our products are handcrafted with the highest quality authentic materials to ensure years of reliable service. In the unlikely event that you have a service question, please have your model and serial numbers of your product available. You can find this information beneath the control panel area of the range.

We realize that you have made a considerable investment in your kitchen. Please feel free to share your THERMADOR<sup>®</sup> kitchen photos and remodeling stories with us. Follow us on Twitter or post your kitchen photos on Facebook. We would love to hear from you!

THERMADOR wishes you many years of creative cooking.



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This THERMADOR® appliance is made by BSH Home Appliances Corporation 1901 Main Street, Suite 600 Irvine, CA. 92614

# **Questions?**

1-800-735-4328

www.thermador.com

We look forward to hearing from you!

# **Safety**



# IMPORTANT SAFETY INSTRUCTIONS READ AND SAVE THESE INSTRUCTIONS

#### PLEASE READ CAREFULLY

# **WARNING:**

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch.
  - · Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# **WARNING:**



A child or adult can tip the range over and be killed. Verify that the anti-tip bracket is securely installed. Ensure the anti-tip bracket is engaged when the range is moved.

Do not operate the range without the antitip bracket in place. Failure to follow the instructions in this manual can result in death or serious burns to children and adults.

Check for proper installation and use of anti-tip bracket. Carefully tip range forward pulling from the back to ensure that the anti-tip bracket engages the range leg and prevents tip-over. Range should not move more than 1" (2.5cm).

# Gas and Electrical Requirements and Grounding Instructions

### Gas Type Verification

Verify the type of gas supplied to the location. Ensure that the appliance is connected to the type of gas for which it is certified. All models are certified for use with natural gas. Field conversion of the appliance for use with propane gas supply will require a conversion kit (PALPKITHC). Make certain your range and gas type are the same. Refer to the product rating label which can be located as indicated on page 38.

## **CAUTION:**

When connecting the unit to propane gas, make certain the propane gas tank is equipped with its own high-pressure regulator in addition to the pressure regulator supplied with the range. The maximum gas pressure to this appliance must not exceed 14.0" water column (34.9 mb) from the propane gas tank to the pressure regulator.

#### **IMPORTANT:**

When installing against a combustible surface, a High Shelf or Low Backguard is required. A THERMADOR® High Shelf or Low Backguard must be purchased separately. Before using the range, insure that it is equipped with a proper backguard. Refer to the *Installation Manual* accompanying this appliance for more information.

When using the Flush Island Trim, THERMADOR recommends a minimum 12" (305 mm) rear clearance to a combustible surface. Clearances from non-combustible materials are not part of the ANSI Z21.1 scope and are not certified by CSA. Clearances of less than 12" (305 mm) must be approved by the local codes and/or by the local authority having jurisdiction.

Before using the range, ensure that it is equipped with a proper backguard. Refer to the *Installation Manual* accompanying this appliance for more information.



# **WARNING:**

To avoid possible burn or fire hazard, a backguard designed specifically for this range must be installed whenever the range is used.

#### CAUTION.

The high shelf can get hot! **DO NOT** place the following items on top of the high shelf:

- plastics or containers that can melt
- flammable items
- a total load over 30 lbs. (13.6 kg)

#### **WARNING:**

**ALWAYS** DISCONNECT THE ELECTRICAL PLUG FROM THE WALL RECEPTACLE BEFORE SERVICING THIS UNIT.

# CAUTION:

FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE CONNECTED TO A PROPERLY GROUNDED AND POLARIZED ELECTRICAL POWER SUPPLY.

#### 30" Dual Fuel Models:

240/208 volts, 60 Hz., 35 Amp electrical circuit required for each line.

#### 36" Dual Fuel Models:

240/208 volts, 60 Hz., 40 Amp electrical circuit required for each line.

#### 48" Dual Fuel Models:

240/208 volts, 60 Hz., 50 Amp electrical circuit required for each line.

It is recommended that a dedicated circuit servicing this appliance be provided.

The use of gas cooking appliances results in the production of heat and moisture.

See the *Installation Manual* for electrical requirements and grounding instructions.

It is the personal responsibility and obligation of you, the user, to have this appliance connected to the electrical power supply by a qualified electrician, in accordance with the National Electrical Code and/or applicable local codes and ordinances.

### **WARNING:**

#### IN CASE OF AN ELECTRICAL FAILURE

If for any reason a gas control knob is turned ON and there is no electrical power to operate the electronic igniters on the range's cooktop STAR® burners, **turn OFF the gas control knob and wait 5 minutes** for the gas to dissipate before lighting the STAR burner manually.

To light the STAR burners manually, carefully hold a lighted match to the STAR burner ports and turn the gas control knob to HI. During a power failure, you can use the standard cooktop STAR burners, but each must be lit with a match.

**DO NOT** attempt to light the two left XLO<sup>®</sup> STAR burners and two right XLO STAR burners manually. These STAR burners are equipped with the ExtraLow<sup>®</sup> feature and cannot be lit manually.

#### **TESTED IN ACCORDANCE WITH:**

- UL 858, The Standard for the Safety of Household Electric Ranges
- ANSI Z21.1, The American National Standard for Household Cooking Gas Appliances
- CAN 1-1.1-M81, Domestic Gas Ranges
- CSA C22.2 No. 61, Household Cooking Ranges

Check your local building codes for the proper method of installation. In the absence of local codes, this unit should be installed in accordance with the National Fuel Gas Code No. Z223.1 current issue and the National Electrical Code ANSI/NFPA No. 70 current issue or the Can - B149 Installation Codes for Gas Burning Appliances and C22.1 Canadian Electrical Code Part 1.

It is the responsibility of the owner and the installer to determine if additional requirements and/or standards apply to specific installations.



# Safety Practices to Avoid Personal Injury

When properly cared for, your new THERMADOR PROFESSIONAL® range has been designed to be a safe, reliable appliance. However, use extreme care when using this restaurant caliber range as this type of appliance provides intense heat. When using kitchen appliances, basic safety precautions must be followed, including the following:

Read this *Use and Care Guide* carefully before using your new range to reduce the risk of fire, electrical shock, or injury to persons.

Ensure proper installation and servicing. Follow the *Installation Manual* provided with this product. Have the range installed and electrically grounded by a qualified technician.

Have the installer show you where the gas supply shut-off valve is located so that you know how and where to turn off the gas to the range. Have the installer show you the location of the circuit breaker. Mark it for easy reference.

**DO NOT** repair or replace any part of the appliance unless specifically recommended in this manual. All other servicing should be referred to a qualified technician.

# Child Safety

Children should not be left alone or unattended in an area where appliances are in use. They should never be allowed to sit or stand on any part of the appliance. If children are allowed to use the appliance, they must be closely supervised.

# **WARNING:**

**DO NOT** store items of interest to children above or at the back of the range. If children should climb onto the appliance to reach these items, they could be seriously injured.

When children become old enough to operate the appliance, it is the legal responsibility of the parents or legal guardians to ensure that they are instructed in safe practices by qualified persons.

Never use any part of the range or oven for storage. Flammable materials can catch fire and plastic items may melt or ignite. **DO NOT** hang articles from any part of the appliance or place anything against the oven. Some fabrics are quite flammable and may catch on fire.

If the range is near a window, be certain the curtains **DO NOT** blow over or near the range burners; they could catch on fire.

**ALWAYS** have a working smoke detector near the kitchen. In the event that personal clothing or hair catches fire, drop and roll immediately to extinguish flames.

Have an appropriate fire extinguisher available, nearby, highly visible and easily accessible near the appliance. **DO NOT USE WATER ON GREASE FIRES.** 

Turn appliance off and smother fire with baking soda or use a dry chemical or foam-type extinguisher.

### **WARNING:**

#### TO REDUCE THE RISK OF A GREASE FIRE:

- Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- Always turn hood ON when cooking at high heat or when flambéing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
- Clean hood filters frequently. Grease should not be allowed to accumulate on fan or filter.
- Use proper pan size. Always use cookware appropriate for the size of the cooktop burner.

Never let clothing, potholders, or other flammable materials come in contact with or too close to any infrared burner, top burner or burner grate until it has cooled. Fabric may ignite and result in personal injury.

Use only dry potholders: moist or damp potholders on hot surfaces may cause burns from steam. **DO NOT** use a towel or other bulky cloth in place of potholders. **DO NOT** let potholders touch hot elements, hot burners, or burner grates.

For personal safety, wear proper apparel. Loose fitting garments or hanging sleeves should never be worn while using this appliance. Some synthetic fabrics are highly flammable and should not be worn while cooking.



**DO NOT** use aluminum foil to line any part of the oven or range. Use of a foil liner could result in a shock or fire hazard, or the obstruction of the flow of combustion and ventilation air. Foil is an excellent heat insulator and heat will be trapped beneath it. This will upset the cooking performance and can damage the finish of the oven or the range.

## **WARNING:**

# TO REDUCE THE RISK OF INJURY TO PERSONS, IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING:

- Smother flames with a close-fitting lid, cookie sheet, or other metal tray, then turn off the gas burner or the electric element. Be careful to prevent burns. If the flames do not go out immediately, Evacuate and call the fire department.
- Never pick up a flaming pan You may be burned.
- DO NOT USE WATER, including wet dish cloths or towels — a violent steam explosion will result.
- Use an extinguisher only if:
  - You know you have a class ABC extinguisher and you already know how to operate it.
  - The fire is small and contained in the area where it started.
  - The fire department is being called.
- You can fight the fire with your back to an exit.

## **WARNING:**

The appliance is for cooking. Based on safety considerations, never use the oven or cooktop to warm or heat a room. Also, such use can damage the cooktop or oven parts.

#### **WARNING:**

**NEVER** use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.

#### WARNING.

NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks air flow through the oven. Aluminum foil linings may also trap heat, causing a fire hazard. This will upset the cooking performance and can damage the finish of the oven or the range.

When using the cooktop: **DO NOT TOUCH THE BURNER GRATES OR THE IMMEDIATE SURROUNDING AREA.** Areas adjacent to the burners may become hot enough to cause burns.

Never leave the range unattended when using high flame settings. Boil overs cause smoking and greasy spillovers that may ignite. More importantly, if the burner flames are smothered, unburned gas will escape into the room. See front of this manual, *page 1* regarding gas leaks.

Only certain types of glass, heatproof glass-ceramic, ceramic, earthenware, or other glazed utensils are suitable for cooking on the range burners. This type of utensil may break with sudden temperature changes. Use only on low or medium heat settings according to the utensil manufacturer's directions.

**DO NOT** heat unopened food containers; a buildup of pressure may cause the container to burst.

During cooking, set the burner control so that the flame heats only the bottom of the pan and does not extend beyond the bottom of the pan. Proper relationship of cookware to burner flame reduces safety risks.

Avoid using high flame setting with a pan larger than the grate or with one that spans more than one burner, such as a griddle, for prolonged periods of time. This can result in poor combustion that generates harmful by-products.

Use caution to insure that drafts like those from forced air vents or fans **DO NOT** blow flammable material toward the flames or push the flames so that they extend beyond the edges of the pot.

Always use utensils that have flat bottoms large enough to cover the burner. The use of undersized utensils could expose a portion of the flame and may result in ignition of clothing.

Bakeware, such as large casserole pans, cookie sheets, etc., should never be used on the cooktop.

To minimize the risk of burns, ignition of flammable materials and unintentional spillage, position handles of utensils inward so they do not extend over adjacent work areas, cooking areas, or the edge of the range's cooktop.

Hold the handle of the pan to prevent movement of the utensil when stirring or turning food.



**DO NOT** use pots or pans on the grill plate accessory.

**DO NOT** use the grill plate accessory for cooking excessively fatty meats or products which promote flare-ups.

The optional cutting board accessory must be removed before operating the griddle beneath it or burners adjacent to it.

**GREASE IS FLAMMABLE.** Let hot grease cool before attempting to handle it. Avoid letting grease deposits collect. Clean after each use.

For proper lighting and performance of the burners, keep the igniter ports clean. It is necessary to clean these when there is a boil over or when the burner does not light even though the electronic igniters activate. See "Cleaning Recommendations" on page 33.

### **WARNING:**

After a spill or boil over, turn off the burner and using caution due to possible hot surfaces, clean around the burner and burner ports. After cleaning, check for proper operation.

Clean the range with caution. Avoid steam burns; **DO NOT** use a wet sponge or cloth to clean the range while it is hot. Some cleaners produce noxious fumes if applied to a hot surface. Follow directions provided by the cleaner manufacturer.

**DO NOT** use flammable cleaners to clean the range.

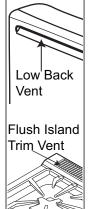
Be sure all cooktop controls are turned off and the cooktop is cool before using any type of aerosol cleaner on or around the cooktop. The chemical that produces the spraying action could, in the presence of heat, ignite or cause metal parts to corrode.

When using the oven: **DO NOT** touch the broiler element, the interior surfaces of the oven or the exterior area immediately surrounding the door. Interior oven surfaces become hot enough to cause burns. The heat deflector, which deflects heat away from the cooktop and the trim on the top and sides of the oven door, will also be hot when the oven is in use.

**DO NOT** obstruct the flow of combustion or ventilation air.



## **WARNING:**



**DO NOT block** or obstruct the flow of air through the ventilation openings. The oven vent is located at the back of the appliance. The vents need to be unobstructed and open to provide necessary airflow that is important for proper oven performance.

**DO NOT** touch oven vent area while the appliance is on and for several minutes after the appliance is off. Some parts of the vent and surrounding areas become hot enough to cause burns. Allow appliance sufficient time to cool before touching or cleaning vent areas.

**DO NOT** position plastic or other heatsensitive items on or near the oven vent. These items could melt or ignite.

Place oven racks in desired position while oven is cool. If a rack must be moved while the oven is hot, **DO NOT** let the potholders contact the broiler element.

Use care when opening the oven door; let hot air or steam escape before removing or replacing foods.

**DO NOT** clean, rub, damage, move or remove the door gasket. It is essential for a good seal during baking. If the gasket becomes worn or excessively soiled with food particles, replace gasket to assure a tight seal.

**Protect the self-cleaning feature.** Clean only those parts indicated in this booklet. **DO NOT** use commercial oven cleaners or oven liner protective coatings of any kind in or around the self-cleaning oven.

For safety reasons and to avoid equipment damage, never sit, stand, or lean on the oven door.



Use CAUTION when opening the oven door during or immediately after operation. Stand to the side of the oven when opening an oven door to allow hot air or steam to escape. Keep face well away from the open door to avoid injury.

Service should only be done by authorized technicians. Technicians must disconnect the power supply before servicing this unit.

Listen to be sure the cooling blower runs whenever the oven controls are set to BROIL or BAKE modes, after oven heats to 300°F (149°C). If the fan does not operate, **DO NOT** use the oven. Call Customer Support at 1-800-735-4328 for assistance.

To avoid a fire hazard, grease accumulation must be prevented by frequently cleaning the ventilation hood and filters.

In case of fire or when intentionally "flaming" liquor or other spirits on the range's cooktop, follow hood manufacturer's instructions. Use caution when cooking foods with high alcohol content (e.g. rum, brandy, bourbon) in the oven. Alcohol evaporates at high temperatures. There is a risk of burning as the alcohol vapors may catch fire in the oven. Use only small quantities of alcohol in foods, and open the oven door carefully.

#### **WARNING:**

Avoid using high flame setting with a pan larger than the grate or with one that spans more than one burner, such as a griddle, for prolonged periods of time. This can result in poor combustion that generates harmful byproducts.

**DO NOT** store or use corrosive chemicals, vapors, flammables or nonfood products in or near this appliance. It is specifically designed for use when heating or cooking food. The use of corrosive chemicals while heating or cleaning will damage the appliance and could result in injury.

## **WARNING:**

This appliance should not be installed with a ventilation system that directs air in a downward direction toward the range. This type of ventilation system may cause ignition and combustion problems with the appliance resulting in personal injury, property damage, or unintended operation. Ventilating systems that direct the air upwards do not have any restriction.

# **WARNING:**

#### State of California Proposition 65 Warnings:

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

# **Before You Begin**

Before using your range for the first time, check that you have these items:

**Table 1: Range Accessories and Parts** 

DESCRIPTION	30" 4 BURNER	36" WITH GRIDDLE	36" 6 BURNER	48" WITH GRIDDLE
Full Access <sup>®</sup> Oven Racks, Large Oven	1	3	3	3
Full Access Oven Racks, Secondary Oven	_	_	_	2
Flat Rack, Large Oven	2	_	_	_
Two-Piece Broil Pan*	1	1	1	2
STAR <sup>®</sup> Burner Caps	4	4	6	6
Burner Grates	2	2	3	3
Center Grate	1	_	_	_
Control Knobs	5	6	7	9
Titanium Coated Aluminum Griddle	_	1	_	1
Handy Hints Guide	1	1	1	1
Product Registration Card	1	1	1	1
Flush Island Trim**	1	1	1	1
Installation Manual	1	1	1	1
Use and Care Guide	1	1	1	1

<sup>\*</sup> All models have one porcelain two-piece broiler pan for the oven. The 48" models also have a small two-piece broiler pan for the Secondary Oven.

<sup>\*\*</sup> Models are supplied with a Flush Island Trim; however, see Warning on page 1 concerning spacing behind the range when using the range with the Flush Island Trim.



Remove all packaging materials and temporary labels from oven and cooktop. Please, recycle the packaging material as all THERMADOR<sup>®</sup> packaging is recyclable.

- 1. Check that you have the items listed in Table 1.
- Record the Model and Serial number on page 38.
   See "Data Rating Plate." The model and serial number must be provided when calling Customer Support for assistance. Enter this information on the Product Registration Card included with this product then mail it to the indicated address.
- 3. **Optional Accessories.** Grill Plate (PA12GRILHC), Black Knob Kit (PAKNOBLK), Blue Knob Kit (PAKNOBLU)12" Cutting Board (PA12CHPBLK), Griddle Cover (PA12CVRJ), Wok Support Ring (PWOKRINGHC) and other accessories are available from your THERMADOR® Dealer.

4. Position the racks correctly in the oven. The correct rack position depends on the recipe and the cooking mode. The rack positions are numbered from the bottom of the oven, like an elevator. Rack position 3 is the most frequently used position. Place rack(s) in the proper position before turning on the oven.

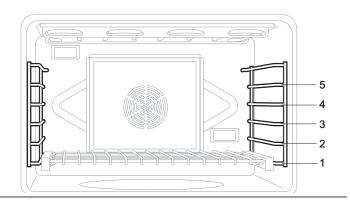


Figure 1: Main Oven Rack Positions

#### **IMPORTANT:**

Always remove the Full Access<sup>®</sup> oven racks before self-cleaning the oven. If the gliding racks remain in the oven during Self-Clean, lubricants in the glide mechanisms of each rack will be lost and the finish will discolor.



# **WARNING:**

To help prevent burns, NEVER remove or reposition the oven racks while the oven is ON or while the oven is cooling.



# **WARNING:**

Aluminum foil should never be used to cover the oven racks or to line the oven. It can damage the oven and cause a fire hazard if heat is trapped under it.

#### Placing Racks in the Oven:

Each gliding oven rack can be pulled out and pushed back into the oven with minimal effort — even while supporting a large turkey or roast.

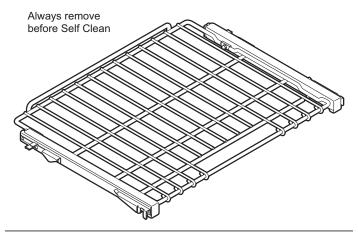


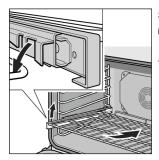
Figure 2: Full Access Oven Rack



 Hold the rack on a slight angle. Place the safety hooks under the front of the rack guides.



- Push the rack into the oven, lifting the rack stops over the front of the rack guides.
- 3. Hold the rack straight.
- Push the rack in until it is even with the front hooks.



- 5. Lift the rack up.
- Push the rack in completely.
- Engage the rack's front hooks on the rack guides.

#### **IMPORTANT:**

When placing the gliding rack in the oven, make sure the front supports on the rack guides rest in the large slots at the front corners of the rack. This is necessary to keep the rack in the correct position while fully inserted into the oven.

Figure 3: Inserting the Oven Rack

#### Placing Flat Racks in the Oven:

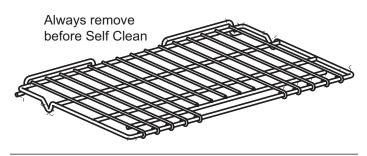
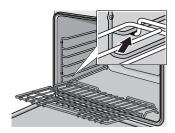


Figure 4: Flat Oven Rack

The rack is designed with a stop so it will stop before coming completely out of the oven and not tilt.



- Grasp rack firmly on both sides.
- 2. Insert rack (see picture).
- 3. Tilt rack up to allow stop into rack guide.
- Bring rack to a horizontal position and push the rest of the way in. Rack should be straight and flat, not crooked.

Figure 5: Inserting the Oven Rack

#### Removing Flat Rack from Oven

Grasp rack firmly on both sides and pull rack toward you. When the stop is reached, tilt rack up and pull the rest of the way out.

- Ensure that the burner caps are correctly seated on the burner bases of the range's cooktop (see Figure 16 and Figure 17 on Page 14). Turn on each burner to check for proper flame color. See "Flame Description" on page 15 for details.
- 6. Before baking or broiling, the oven and broiler should be turned on to burn off the manufacturing oils using one of the two following methods:
  - Turn on kitchen ventilation (or if vent hood is a recirculation type open a window). Turn the oven on to 450°F (230°C) for 20 to 30 minutes; then turn the broiler to BROIL for the same length of time. Please note that it is normal for small amounts of smoke to be visible from the range during this initial breaking-in process.
  - Turn on kitchen ventilation (or if vent hood is a recirculation type open a window). Remove oven racks. Set oven into self clean cycle and let self clean run (see "Self-Cleaning the Oven" on page 31).

Please note that some pets or humans can be sensitive to the odors created during the self-cleaning process whether it is a manufacturing residue burn off or food, so it is recommended that those potentially affected be removed from the kitchen area during the self-clean process.

The THERMADOR PROFESSIONAL® range occasionally has a smell or smoke when first used. These smells or smoke comes from the burning off of manufacturing residues and is typical of any new oven regardless of manufacturer.

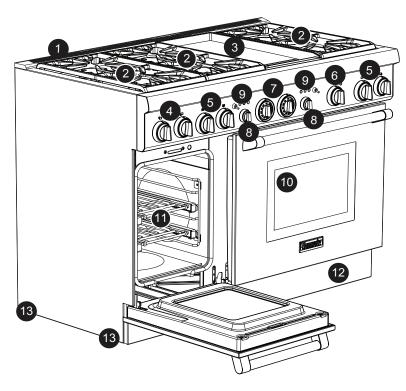
Please read "Care and Maintenance" on page 31 before cleaning the oven racks.

#### NOTE:

It is normal for the cooling process to push heated air out into the room when the oven is on.

# **Description**

# **Model and Parts Identification**



# Key for 48" Models

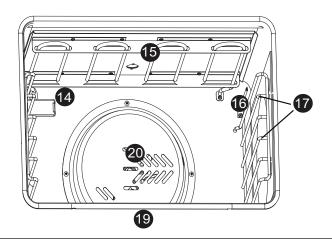
- Flush Island Trim (22" High Shelf or 9" Low Back may be ordered separately)
- 2. Burner Grates & Burners
- 3. Electric Griddle
- 4. Control Knobs, ExtraLow® Burners (2)
- 5. Control Knobs, Standard Burners (4)
- 6. Control Knob, Griddle (1)
- 7. Oven Temperature Selectors
- 8. Oven Mode Selector
- 9. Oven Light Switches
- 10. Oven Door
- 11. Secondary Oven (2 Full Access<sup>®</sup> Oven Racks, included)
- 12. Kick Panel
- 13. Range Feet (4)



#### MARNING

To provide proper ventilation of the range, **DO NOT** remove range feet.

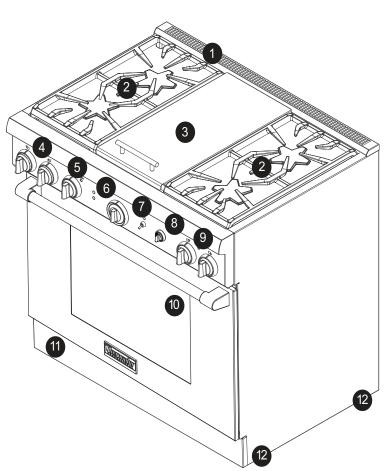
Figure 6: 48" Dual Fuel Range Identification



### **Electric Oven Interior**

- 14. Oven Interior Light
- 15. Broil Element
- 16. Oven Thermostat
- 17. Rack Guides
- 18. Full Access Oven Racks (3 included, not shown)
- 19. Bake Element (hidden)
- 20. Convection Fan Cover (main oven only)

Figure 7: Oven Interior Identification



# Key for 36" Models

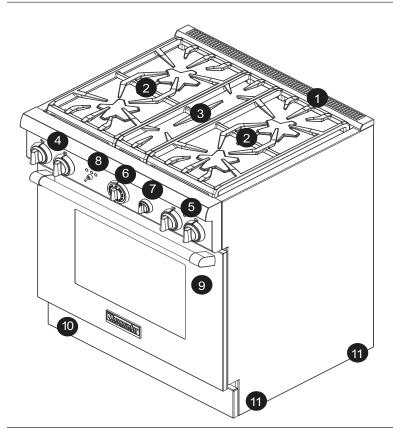
- 1. Flush Island Trim (22" High Shelf or 9" Low Back may be ordered separately)
- 2. Burner Grates & Burners
- 3. Griddle, on select models (figure shown with griddle cover accessory, sold separately)
- 4. Control Knobs, ExtraLow® Burners (2)
- 5. Griddle Knob, on select models
- 6. Oven Temperature Selector
- 7. Oven Light Switch
- 8. Oven Mode Selector
- 9. Control Knobs, Standard Burners (2 or 4 depending on model)
- 10. Oven Door (see Figure 7)
- 11. Kick Panel
- 12. Range Feet (4)



#### WARNING:

To provide proper ventilation of the range, **DO NOT** remove range feet.

Figure 8: 36" Dual Fuel Range Identification



# Key for 30" Models

- 1. Flush Island Trim (22" High Shelf or 9" Low Back may be ordered separately)
- 2. Burner Grates & Burners
- 3. Center Grate
- 4. Control Knob, ExtraLow® Burners (2)
- 5. Control Knobs, Standard Burners (2)
- 6. Oven Temperature Selector
- 7. Oven Mode Selector
- 8. Oven Light Switch
- 9. Oven Door (see Figure 7)
- 10. Kick Panel
- 11. Range Feet (4)



#### **WARNING:**

To provide proper ventilation of the range, **DO NOT** remove range feet.

Figure 9: 30" Dual Fuel Range Identification

# **Using The Cooktop**

# Sealed STAR® Burners

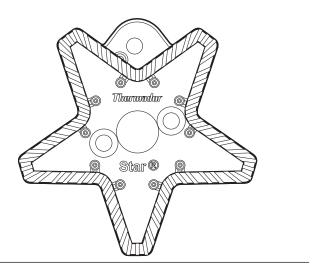


Figure 10: STAR Brass Burner Base

Your new range has sealed STAR burners. Each burner has a unique QuickClean<sup>®</sup> base feature which allows the burner and area around the burner to be easier to clean. There are no burner parts under the cooktop to clean, disassemble or adjust.

The cooktop features four or six gas surface burners; each rated at 18,000 BTU/HR (15,000 BTU/ HR using Propane). On all models, the two left burners have the exclusive ExtraLow<sup>®</sup> feature, the remaining burners are standard. Each burner has its own control knob.

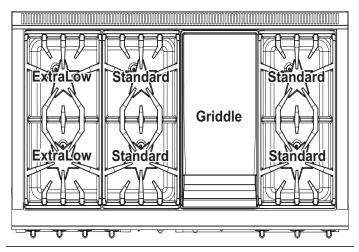


Figure 11: 48" Burner Power Features

#### **Control Knobs**

The control knobs for two sealed gas burners, one in front and one in the rear, are located directly in front of and below the pair of burners on the control panel.

The symbol above each control knob identifies either the burner position on the cooktop or the griddle control, depending upon your model.

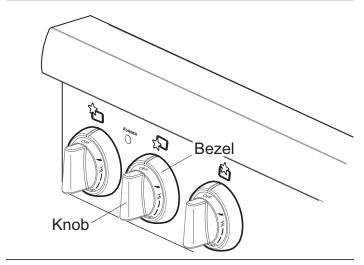


Figure 12: Control Knob

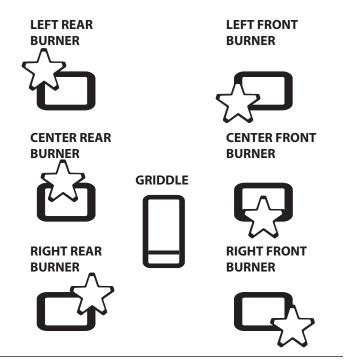


Figure 13: Cooktop Symbols

### Operation of the Burners

- Press in on the knob and turn it counter-clockwise to the HI setting on the knob.
- The igniter for the selected burner clicks and sparks.
- After burner ignition, the igniter stops clicking.
- Rotate the knob to any flame setting between HI and SIM.
- The blue signal light, between the burner knobs, will light when adjacent burners are lit. The light will remain on until the adjacent burners are turned off.

#### **BTU for Standard Burners**

- HI is equivalent to 18,000 BTU / HR (15,000 BTU / HR using Propane).
- SIM is equivalent to 2,100 BTU / HR

#### BTU for ExtraLow® Burner

- HI is equivalent to 18,000 BTU / HR (15,000 BTU / HR using Propane).
- SIM is equivalent to 3,000 BTU / HR
- XLO<sup>®</sup> is equivalent to 370 BTU / HR

## ExtraLow® Burners

The controls for the two left burners, front and rear, have flame settings even lower than the standard **SIM** settings.

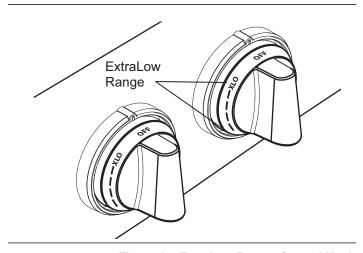


Figure 14: ExtraLow Burner Control Knob

The drawing shows that the control knob has an additional range between the **SIM** and **XLO** settings. When the knob is set within this range, the flame cycles off and on. By varying the length of time the flame is off and on, the heat is reduced even further to cook delicate foods. For example, these very low settings are suitable for simmering and poaching, melting chocolate and butter, holding cooked foods at temperatures without scorching or burning, etc.

#### **Operation of the ExtraLow Burners**

- XLO, the very lowest setting, is achieved by cycling the flame ON for approximately 8 seconds and OFF for 52 seconds of each minute.
- When the knob is set just below the SIM setting, the flame will cycle ON for approximately 52 seconds and OFF for 8 seconds of each minute.
- To vary the amount of low heat to suit the food and quantity, the control can be set anywhere within the SIM and XLO range marked on the knob.

#### **ExtraLow Techniques**

- The type and quantity of food affects which setting to use.
- The pan selected affects the setting. Its size, type, material, and whether a lid is used, all affect the consistency of the cooking temperature.
- To maintain a low or simmer heat, bring food to a rolling boil. Stir well, then cover the pan and lower the heat to a setting just below SIM.
- Check periodically to see if the control knob should be turned to another setting.
- If an over-size pan is used, the simmer action may occur mainly in the center of the pan. To equalize the temperature throughout the food, stir the food around the outer edges of the pan into the food in the center.
- It is normal to stir food occasionally while simmering.
   This is especially important when simmering for several hours, such as for a homemade spaghetti sauce or beans.
- When lowering the flame setting, adjust it in small steps.
- If the setting is too low to hold a simmer, bring the food back to a boil before re-setting to a higher heat.
- It is normal not to see simmer bubbles immediately after the food has been stirred.
- There may be bubbling when the flame cycles ON and no bubbles when the flame is OFF. Even when the flame is OFF, there will be steam and a slight quiver on the liquid's surface.

Each burner has its own electronic igniter that sparks when the burner is turned on. Each burner should light in 4 seconds or less. If a burner does not light, check to see that the cap is positioned correctly on the base.



**DO NOT** touch the STAR<sup>®</sup> burners when the igniters are sparking.

If a burner fails to ignite, refer to the section "Before Calling For Service" on page 38.

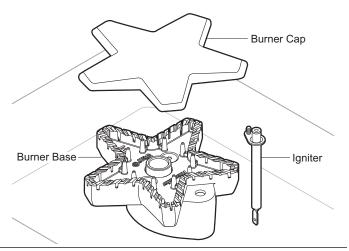


Figure 15: STAR® Burner Components

# **Burner Cap Placement**

The burner caps must be properly placed on the burner bases for the cooktop to function properly. If the burner cap is not properly placed, one or more of the following problems may occur:

- · Burner flames are too high.
- Flames shoot out of burners.
- Burners do not ignite.
- Burner flames light unevenly.
- · Burner emits gas odor.



# WARNING:

To prevent flare-ups and avoid the creation of harmful by-products, do not use the cooktop without all burner caps and all burner grates properly positioned.



## **WARNING:**

To prevent burns, do not touch burner caps or grates while hot. Turn the cooktop off and allow the burners to cool.

# **Checking Burner Cap Placement**

- Check each burner to make sure there is no gap between the burner cap and burner base. See Figure 16 and Figure 17: Correct and Incorrect Burner Cap Placement to see examples of correct and incorrect placements of the burner cap.
- You may gently try to move the burner caps from side to side to check if the caps are properly placed on the burner bases. When properly placed, each burner cap will rest flat on top of its burner base, and completely cover the star-shape of the burner base when viewed from the top as shown in Figure 16: "Correct Burner Cap Placement".

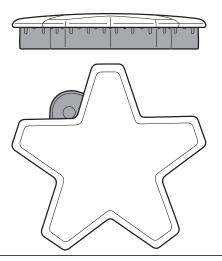
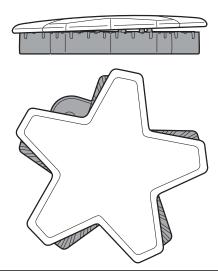


Figure 16: Correct Burner Cap Placement



**Figure 17: Incorrect Burner Cap Placement** 

### **Automatic Re-Ignition**

If any one or more burners blow out, the electronic igniter automatically activates to re-light the flame. **Do not touch the burners when the igniters are active.** 

#### IMPORTANT:

- For proper combustion do not use the cooktop without the burner grates in place.
- There is a slight sound associated with gas combustion and ignition. This is a normal condition.
- On cooktops using propane gas (LP), a slight "pop" sound may be heard at the burner ports a few seconds after the burner has been turned off.

#### Power Failure

- In the event of a power failure, only the standard burners can be manually lit. It is necessary to light each one individually.
- If the cooktop is being used when the power failure occurs, turn all knobs to the OFF position.
- The standard burners can be lit by holding a match at the ports and turning the control knob to the HI position. Wait until the flame is burning all around the burner cap before adjusting the flame to the desired height.
- The ExtraLow<sup>®</sup> burners cannot be used during a power failure. Be sure to turn them off.
- If an ExtraLow burner is on when a power failure occurs, it cannot be turned back on until the knob is first turned off.
- The griddle cannot be used during a power failure.
- If you smell gas, refer to safety precautions listed on page 1.



In the event of a power failure, turn all knobs to the **OFF** position. Only the Standard burners can be lit manually.

# Flame Height

- The correct flame height depends on 1) size and material of pan being used; 2) food being cooked; and 3) amount of liquid in the pan.
- Never extend the flame beyond the base of the pan.
- Use a low or medium flame for pan materials that conduct the heat slowly, such as porcelain coated steel or glass-ceramic.

#### Flame Description

• The burner flame color should be blue with no yellow on the tips. It is not uncommon to see orange in the flame color; this indicates the burning of airborne impurities in the gas and will disappear with use.

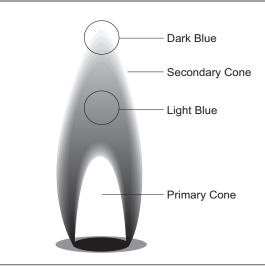


Figure 18: Flame Color

- With propane (LP) gas, slight yellow tips on the <u>primary</u> <u>cone</u> are normal.
- The flame should burn completely around the burner cap. If it doesn't, check that the cap is positioned correctly on the base and that the ports are not blocked.
- The flame should be stable with no excessive noise or fluttering.

# **Cookware Recommendations**



To avoid risk of serious injury, damage to appliance or cookware, please observe the following:

- Bakeware, such as large casserole pans, cookie sheets, etc. should never be used on the cooktop.
- Placement of large stock pots should be staggered when used on the cooktop.

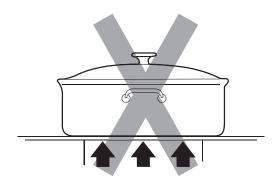


Figure 19: Base Diameter

- Select the base diameter to match the diameter of the flame. The diameter of the flame should be the same size as the pan base or slightly smaller. Oversize or under size pans sacrifice cooking performance. A 5½" (140 mm) base size is generally the smallest recommended.
- Avoid using high flame setting with a pan larger than
  the grate or with one that spans more than one burner,
  such as a griddle, for prolonged periods of time. This
  can result in poor combustion that generates harmful
  by-products.

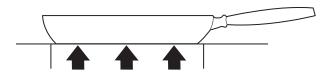


Figure 20: Balanced Pan

- Balance is important for stability and even cooking. The handle must not be heavier than the pan and tilt it unevenly. A pan must sit level on the grate without rocking or wobbling.
- Food packaged in aluminum foil should not be placed directly on the burner grate. Aluminum foil can melt during cooking.

- Do not let plastic, paper or cloth come in contact with a hot burner grate. They may melt or catch fire.
- Never let a pan boil dry. This can damage your pan and the cooking surface.
- Professional quality pans with metal handles are recommended because plastic handles can melt or blister if the flame extends up the side of the pan. Professional quality pans are found at restaurant supply stores and gourmet specialty shops. All cookware should have these characteristics: good heat conductivity, good balance, correctly sized base diameter, a heavy, flat base, and a proper fitting lid.
- For best cooking results, the flame should be contained under the bottom of the pan.
- Aluminum and copper are pan materials that conduct the heat quickly and evenly. These metals are sometimes attached to the base or in the core between stainless steel.

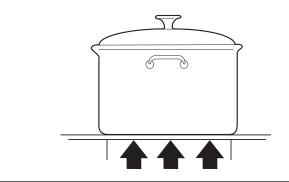


Figure 21: Flat Base Pan

- A heavy, flat base is more apt to remain flat when heated. Pan bases that are warped, dented, ridged or too lightweight will heat unevenly. Heat and cool pans gradually to avoid sudden temperature changes which tend to distort cookware. Do not add cold water to a hot pan.
- A properly fitting lid will shorten cooking time and make it possible to use lower heat settings.

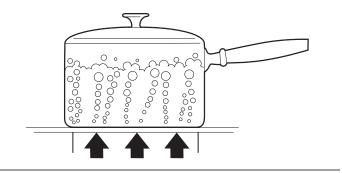


Figure 22: Covered Pan

# **Specialty Cookware**

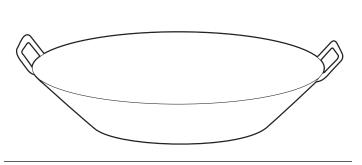


Figure 23: Flat-Bottom Wok Pan

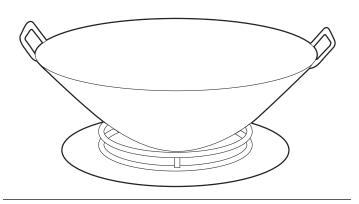


Figure 24: Round-Bottom Wok in Support Ring

**Woks** — Either flat-based or round-bottom woks with the accessory ring can be used on all models. Round bottom woks must be used with a support ring. The Wok pan and the porcelain-coated cast iron wok support ring must be purchased separately (PWOKRINGHC).

Canners and Stock Pots — Select one with a base diameter that extends no more than 2" (51 mm) beyond the grate.

**Standard Size Water Bath Canner** — 21 to 22 quarts (19.95 to 20.9 liters), with an 11" to 12" base (279–305 mm) and a 9" to 11" depth (229–279 mm).

**Standard Size Pressure Canner** — 8 to 22 quarts (7.6 to 20.9 liters), with an 8" to 11" base (203–279 mm) and a  $6\frac{1}{2}$ " to 12" depth (165–305 mm).

### Canning Tips:

- A flat base pan is preferred to one with a concave, convex or rippled base.
- When using two canners at the same time, use staggered burners. Do not block air to the burners. A flame needs the right amount of air for complete combustion.
- Use a cover on a canner when bringing the contents to a boil.
- Once the contents have reached a boil on HI, use the lowest flame possible to maintain the boil or pressure.
- Canning produces a large amount of steam. Take precautions to prevent burns.

# **Cooking Recommendations**

Use the chart beginning on *page 18* as a guide. The settings you use will vary depending on the pans selected and the starting temperature of the food.

On the chart, the "Finish Setting" has been separated for the standard and ExtraLow burners. There may or may not be a change between the two burner settings.

The ExtraLow<sup>®</sup> setting can be either a cooking or a holding setting.

Raise or lower the flame setting gradually. Allow time for the pan and the food to adjust to the new setting.

# **Surface Burner Cooking Recommendations**

Food	Start Setting	Finish Setting Standard STAR <sup>®</sup> Burners	Finish Setting ExtraLow <sup>®</sup> (XLO <sup>®</sup> ) STAR Burners
BEVERAGES Cocoa	MED – heat milk, cover	SIM – finish heating	XLO – keep warm, cover*
BREADS French Toast, Pancakes, Grilled Sandwiches	MED – preheat skillet	SIM to MED – cook	Same as for Standard Burners
BUTTER Melting	SIM – to start melting		Allow 5 – 10 minutes to melt
CEREALS  Cornmeal, Grits, Oatmeal	HI – cover, bring water to a boil, add cereal	SIM to MED – finish cooking according to package directions	Same as for Standard Burners  XLO – to hold, cover*
CHOCOLATE Melting	XLO – may be stirred to hasten melting		XLO – allow 10 – 15 minutes to melt XLO – to hold*
DESSERTS Candy	SIM to MED – cook following recipe	SIM to MED	Same as for Standard Burners
Pudding and Pie Filling Mix	SIM to MED SIM – cook according to package directions	SIM	Same as for Standard Burners
Pudding	SIM to MED SIM – bring milk to a boil	SIM	Same as for Standard Burners
EGGS Cooked in Shell	MED HI – cover eggs with water, add lid, bring to boil		XLO – cook 3 – 4 minutes for soft cooked; or 15 – 20 minutes for hard cooked
Fried, Scrambled	SIM to MED – melt butter, add eggs	SIM finish cooking	Same as for Standard Burners  XLO – to hold for a short period*
Poached	HI – bring water to the boiling point, add eggs	SIM to MED – finish heating	Same as for Standard Burners
MEAT, FISH, POULTRY  Bacon, Sausage  Patties	MED HI – until meat starts to sizzle	SIM to MED – finish cooking	Same as for Standard Burners
Braising: Swiss Steak, Pot Roast, Stew Meat	MED HI – melt fat, then brown on MED HI, add liquid, cover		XLO – Simmer until tender
Quick Frying: Breakfast Steaks	MED HI – preheat skillet	MED HI – fry quickly	Same as for Standard Burners
Frying: Chicken	MED HI – heat oil, then brown on MED	SIM – cover, finish cooking	Same as for Standard Burners
Deep Frying: Shrimp	MED HI – heat oil	MED to MED HI – to maintain temperature	Same as for Standard Burners
* These foods should be	stirred occasionally.	•	,

Food	Food Start Setting		Finish Setting ExtraLow <sup>®</sup> (XLO <sup>®</sup> ) STAR Burners	
Pan Frying: Lamb Chops, Thin Steaks, Hamburgers, Link Sausage	MED HI – preheat skillet	MED – brown meat	Same as for Standard Burners  XLO – to hold	
Poaching: Chicken, whole or pieces, Fish	MED HI – Cover, bring liquids to a boil		To finish cooking	
Simmering: Stewed Chicken, Corned Beef, Tongue, etc.	HI – cover, bring liquid to a boil		XLO – to simmer slowly XLO – to hold, cover	
PASTAS  Macaroni, Noodles, Spaghetti	HI – bring water to a boil, add pasta	MED HI to HI – to maintain a rolling boil	Same as for Standard Burners	
POPCORN  (use a heavy, flat bottom pan)	HI – cover, heat until kernels start to pop	MED HI – finish popping	Same as for Standard Burners	
PRESSURE COOKER Meat	MED HI to HI – build up pressure	SIM to MED – maintain pressure	Same as for Standard Burners	
Vegetables	HI – build up pressure	SIM to MED – maintain pressure	Same as for Standard Burners	
RICE	HI – cover, bring water and rice to a boil	SIM – to maintain Low Boil. Cover and cook until water is absorbed	Same as for Standard Burners  XLO – to hold, cover	
SAUCES Tomato Base	MED HI – cook meat/ vegetables, follow recipe	SIM – to maintain simmer	XLO – simmer to thicken sauce, uncovered	
White, Cream, Bernaise,	MED – melt fat, follow recipe	SIM – finish cooking	XLO – to hold, cover*	
Hollandaise	XLO		<b>XLO</b> – to hold, lowest setting for short period, stir frequently	
SOUPS, STOCK	HI – cover, bring liquid to a boil	SIM to maintain simmer	Simmer <b>XLO</b> – to hold, cover*	
VEGETABLES Fresh	HI – cover, bring water and vegetables to a boil	SIM to MED – cook 10 minutes, or until tender	Same as for Standard Burners XLO – to hold, cover	
Frozen	HI – cover, bring water and vegetables to a boil	SIM to MED – cook according to package directions	Same as for Standard Burners	
Deep Frying	HI – heat oil	MED to MED HI – maintain frying temperature	Same as for Standard Burners	
In Pouch	HI – bring water and pouch to a boil	SIM to MED – cook according to package directions	Same as for Standard Burners	
Saute	HI – heat oil or melt butter, add vegetables	SIM to MED – cook to desired doneness	Same as for Standard Burners	
Stir Fry	HI – heat oil, add vegetables	HI to MED HI – finish cooking	Same as for Standard Burners	
* These foods should be	stirred occasionally.			

# Using the Electric Griddle (available on some models)

# Description

The built-in griddle is made of restaurant-quality aluminum that has a non-stick titanium coating. This produces a surface with even heat that is easy to clean.

A maple cutting board (PA12CHPBLK), stainless steel cover (PA12CVRJ), and non-stick titanium coated aluminum grill plate (PA12GRILHC) are available as accessories and may be purchased separately. The maple cutting board and stainless steel cover are sized to fit on top of the surface when the griddle is not being used. The non-stick grill plate accessory is designed to replace the griddle plate. See the instructions that come with the grill plate accessory for more details.

The maple chopping block and stainless steel cover must be removed before turning the griddle on.

- The griddle plate (or grill plate accessory) must always be in place when the griddle is turned on.
- The electric griddle element is rated 120 volts AC, 1,630 watts.
- The griddle is electronically controlled with temperatures marked on the knob from 150 – 500°F (66 – 260°C).
- There are no fixed settings on the knob.
- Press and turn the knob clockwise to the temperature setting.



The griddle element is hot after use. Allow sufficient time for griddle components to cool before cleaning.



To avoid risk of injury, **NEVER** operate griddle without the griddle plate installed. **NEVER** use griddle in a manner that is not prescribed by the Use and Care Guide.

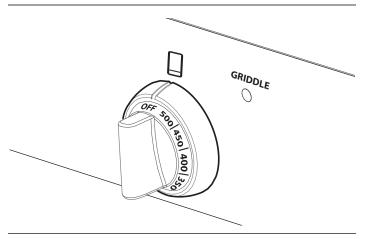


Figure 25: Griddle Control Knob

# Preparing the Griddle (not all models)

If the range is equipped with an electric griddle, check the griddle frame adjustment by pouring two tablespoons of water on the back of the griddle plate. The water should slowly roll into the grease tray. If not, adjust the two screws under the back of the frame. Start with one half turn counterclockwise (CCW) of the screws. Further adjustment should be made by one-quarter turn until water slowly flows into the grease tray (*Figure 26*).

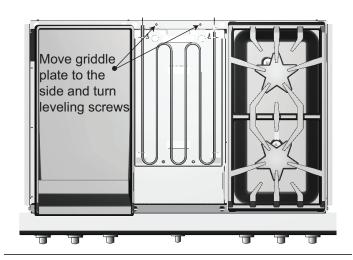


Figure 26: Griddle Plate Leveling Screws

The griddle plate should be washed with warm soapy water then rinsed with clear water prior to use. The griddle may be used without any butter, margarine or oil. However, a very small amount may be used to flavor foods.

Any utensil may be used on the griddle surface. Care should be taken that the surface is not gouged when utensils are used. **DO NOT** cut directly on the griddle plate.

#### NOTICE:

Griddle/Grill performance may vary if there is an excessive amount of airflow in the vicinity of the appliance. The excessive airflow could be from an air-conditioning register or ceiling fan blowing at the cooktop. This could create longer than normal heat-up time, or it could cause the Griddle/Grill temperature to be higher or lower than the knob setting.

#### NOTE:

Having a properly installed ventilation hood is not considered a source of excessive airflow.

## **Griddle Cooking Recommendations**

FOOD	SETTING
Eggs	325°F – 350°F (160°C – 180°C)
Bacon, Breakfast Sausage	450°F – 475°F (230°C – 245°C)
Toasted Sandwiches	375°F – 400°F (190°C – 200°C)
Boneless Chicken Breasts	425°F – 450°F (220°C – 230°C)
Boneless Pork Chops, 1" (25.4 mm) thick	425°F – 450°F (220°C – 230°C)
Steaks, 1" (25.4 mm) thick	450°F – 475°F (230°C – 245°C)
Ground Beef Patties, 6 ounces	450°F – 475°F (230°C – 245°C)
Ground Turkey Patties, 6 ounces	450°F – 475°F (230°C – 245°C)
Hot Dogs	350°F – 375°F (180°C – 190°C)
Ham Slices, ½" (12.7 mm) thick	350°F – 375°F (180°C – 190°C)
Pancakes, French Toast	400°F – 425°F (200°C – 220°C)
Potatoes, Hash Browns	400°F – 425°F (200°C – 220°C)

<sup>\*</sup> Level foods to a uniform thickness to ensure even cooking.

#### Griddle Grease Tray

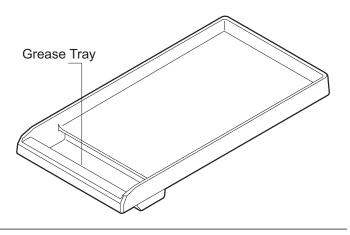


Figure 27: Grease Tray

- Clean the tray after every use. When removing the tray, use care when tipping it so that the contents do not spill.
- The griddle plate and its grease tray are dishwasher safe.
- After cooling, pour the grease into a grease-resistant container for disposal.

#### Cooking on the Griddle

- 1. Turn the knob to the appropriate cooking temperature to preheat the griddle.
- 2. Preheat until the griddle light goes off.
- 3. Add butter, margarine, oil or shortening if desired.

# **Using the Oven**

# **Oven Functions**

### Tips for Bake

Most cooking times in recipes are designed for a preheated oven and require that the oven already be at a certain temperature before cooking starts. Refer to your recipe for preheating recommendations. Preheating time depends on the temperature setting and the number of racks in the oven.

#### **Getting the Best Results**

- Minimize opening the door:
  - · Use a minute timer.
  - Use the interior oven light.
- Use the rack position recommended by the recipe.
- Use the bakeware recommended by the recipe.
- Store the broiler pan(s) outside the oven. An extra pan without food, affects the browning and cooking.
- The type of pan used affects the browning:
  - For tender, golden brown crusts, use light non-stick/anodized or shiny metal pans.
  - For brown crisp crusts, use dark non-stick/ anodized or dark, dull metal pans or glass bakeware. These may require lowering the bake temperature 25°F (14°C).

#### **Bake Rack Positions**

 Rack level positions in the oven are numbered like an elevator. Number one level is the lowest and number five level is at the top.

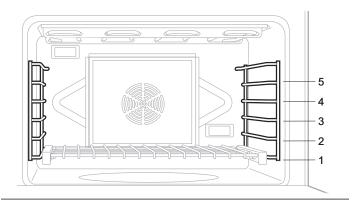


Figure 28: Oven Rack Positions

#### **Bakeware Type**

- Metal bakeware (with or without a non-stick finish), heat-proof glass, glass-ceramic, pottery, or other utensils are suitable for the oven.
- Cookie sheets with only two sides give the best results.
   Aluminum commercial half-sheets or professional cooking utensils may be used.
- The 36" and 48" (914 mm and 1219 mm) ovens will hold a full-sized commercial baking sheet (18" x 26") (457 mm x 660 mm).

#### **Placement**

- Allow at least 1" (25.4 mm) of space between the pans and the oven walls so heat can circulate around each pan.
- Stagger bakeware so that one is not directly above another. Allow 1½" (38 mm) above and below each pan.

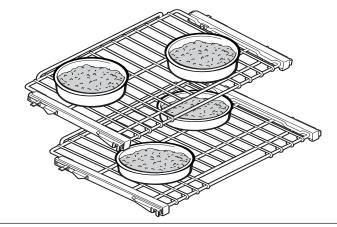


Figure 29: Pan Placement

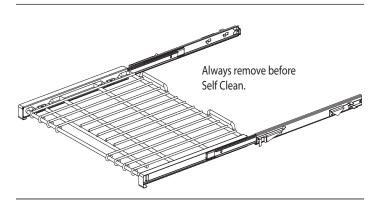


Figure 30: Full Access® Oven Rack

#### **Rack Positions**

#### **One Rack Baking**

• The Bake mode is best for baking on one rack with rack level #3 used for most baked items. If the item is tall, such as an angel food cake, rack level #2 may be used. Pies are best baked on rack level #2 to make certain the bottom of the crust is done without over browning the top. When large pieces of meat or poultry are roasted, such as a prime rib of beef or a turkey, rack level #2 is the preferred rack.

#### Two Rack Baking

 Casserole dishes may be baked using rack levels #2 and #4.

#### **Three Rack Baking**

 If three-rack baking is desired, the Convection Bake mode should be used.

# Secondary Oven (48" Models)

 Baking on rack #3 will result in the best product. When additional height is needed, rack #2 may be used. The use of rack #2 with pies will result in a crisp bottom crust without over baking the top.

#### NOTE:

Rack positions are general recommendations for baking; however, if a recipe calls for a different rack position than those given, then the recipe or package directions should be followed.

# Convection

# Cooking with Convection

There are many advantages to cooking with convection. In the convection system, a fan in the back of the oven moves heated air evenly around the oven. The moving air provides even heat so foods can be placed on any rack level with consistent results. Multiple racks of foods can be cooked or large quantities of foods can be cooked at the same time. Foods will cook thoroughly without having to rotate pans.

Low, shallow bakeware should be used with convection cooking. This allows the heated air to circulate around the food. Pans with high sides or pans that are covered are not suitable for convection cooking because high sides or lids prohibit the warm air from circulating around the food.

Your favorite pans and cookware can be used for convection cooking provided they have low sides to allow the heated air to circulate around the food. Any food cooked uncovered will brown evenly and form a nice crust. Foods in covered dishes (casseroles, pot roast) or delicate custards do not benefit from convection cooking.

# **Convection Baking**

Time can be saved by baking an entire batch of cookies at the same time. The cookies will bake evenly and be done all at once. The baking time may be shorter due to the warm circulating air. For small items such as cookies, check to see if they are done one to two minutes before the recipe time. For larger baked items such as cakes, check five to six minutes before the time indicated on the recipe.

Convection cooking of meat and poultry will result in foods that are brown and crispy on the outside and moist and juicy on the inside. Large meat or poultry items may cook up to 30 minutes less than the suggested time so check them so they will not be over baked. A meat thermometer or an instant read thermometer will provide more accurate results than the "minute per pound" method. The larger the piece of meat or poultry, the more time you will save.

#### **Converting Conventional Baking to Convection Baking**

To convert most recipes for baked items (cookies, cakes, pies, etc.); reduce the oven temperature by 25°F (14°C). For meats and poultry, the temperature should not be reduced. The same temperature recommended in recipes and cooking charts for meats and poultry should be used.

# Tips for Convection Bake

#### **Preheating the Oven**

Preheat the oven before cooking any foods, except large pieces of meat or poultry. See your recipe for preheating recommendation. Preheating time depends on the temperature setting and the number of racks in the oven.

#### **Temperature Setting**

When using Convection Bake, reduce the temperature recommended in the recipe by 25°F (14°C), although the temperature does not need to be reduced when cooking meats and poultry. When roasting meats, check internal temperature prior to time recommended by recipe to prevent over cooking.

#### **High Altitude Baking**

When baking at high altitudes, in either Bake or Convection Bake, recipes and baking times vary. For accurate information, write the Extension Service, Colorado State University, Fort Collins, Colorado 80521. There may be a cost for the bulletins. Specify the type of information you want (example: cakes, cookies, breads, etc.).

#### Condensation

It is normal for a certain amount of moisture to evaporate from the food during any cooking process. The amount depends on the moisture content of the food. The moisture will condense on any surface cooler than the inside of the oven, such as the control panel.

#### Rack Positions (see Figure 1 on Page 7)

#### One-Rack Baking

- When baking on one rack, best results are obtained in the bake mode (See "One Rack Baking" on page 23.)
- When roasting a turkey or a large piece of meat, convection bake may be used. Rack #2 is the most appropriate rack.

#### — Two-Rack Baking

- Racks #2 and #4 are most appropriate when using the convection bake mode for cakes, cookies, biscuits, and other baked goods. Cake pans should be staggered on racks #2 and #4. Cookie sheets should be placed on rack #2 directly under the one on rack #4.
- To bake several casseroles, frozen pies, or cakes, use racks #2 and #4.
- These two racks can also be used for a large oven meal.

#### Three-Rack Baking

 When several sheets of cookies are to be baked, bake them on racks #1, #3, and #5. Place the baking sheets directly above each other on the respective racks to allow air to flow around the baking sheets.

#### Bakeware Type

- Aluminum bakeware gives the best browning results.
- Cookie sheets with only one or two sides give the best results. Aluminum commercial half-sheets or professional cooking utensils may be used but baking times may be increased.

#### Placement

- For better browning, utensils such as cookie sheets, jelly roll pans and rectangular baking pans should be placed crosswise on the rack with the shorter sides on the right and the left. This allows the air to circulate freely.
- When baking on more than one rack, cookie sheets should not be staggered; round cake pans should be staggered.
- When baking on more than one rack, cookie sheets and rectangular (9 x 13) cake pans should not be staggered; round cake pans should be staggered.



# **CAUTION:**

When using the oven in any mode never use aluminum foil to cover the oven racks or to line the oven. It can damage the oven and cause a fire hazard if heat is trapped under it.

#### **Minimum Internal Cooking Temperatures**

The minimum internal temperatures that foods must reach to be considered safe to eat, as determined by the *U. S Department of Agriculture Food Safety and Inspection Service*, are as follows:

Fresh ground beef, veal, lamb, pork	160°F (72°C)			
Beef, veal, lamb roasts, steaks, chops				
Medium rare	145°F (63°C)			
Medium	160°F (71°C)			
Well done	170°F (77°C)			
Fresh pork roasts, steaks, chops				
Medium	160°F (72°C)			
Well done	170°F (77°C)			
Ham				
Cook before eating	160°F (72°C)			
Fully cooked, to reheat	140°F (60°C)			
Poultry				
Ground chicken, turkey	165°F (74°C)			
Whole chicken, turkey	180°F (82°C)			
Breasts, roasts	170°F (77°C)			
Thighs and wings	180°F (82°C)			
Stuffing (cooked alone or in bird)	165°F (74°C)			
Egg dishes, casseroles	160°F (72°C)			
Leftovers	165°F (74°C)			

# Dehydrating Foods with Convection Bake

Use the Convection Bake to dry and preserve fruits and vegetables.

#### Tips:

- Drying times vary depending on the moisture and sugar content of the food, the size of the pieces, the amount being dried and the humidity in the air.
- Dry most fruits and vegetables at 150°F (66°C).
- Check food at the minimum drying time.
- It is best to use drying racks (not included) so that air can flow around the food. Do not place food directly on a baking sheet or pan. Food needs to be elevated to ensure even drying.
- Multiple drying racks can be used simultaneously.
- Racks #2 and #4 or #1, #3 and #5 can be used for multiple rack dehydrating. Use rack #3 if only dehydrating one rack.
- Dehydrating meat is not recommended due to food safety concerns.
- Consult a food preservation book, county Cooperative Extension Office or library for additional information.

Food Item	Preparation	Approx. Drying Time (hrs)	Test for Doneness		
Fruit					
Apples	Dipped in ¼ cup lemon juice and 2 cups water, ¼" slices	8 – 15	Slightly pliable		
Bananas	Dipped in ¼ cup lemon juice and 2 cups water, ¼" slices	8 – 15	Slightly pliable		
Cherries	Wash and towel dry. For fresh cherries, remove pits		Pliable leathery, chewy		
Orange peels	Orange part of skin thinly peeled from oranges.	1 – 4	Dry and brittle		
Orange slices	slices 1/4" slices of orange		Skins are dry and brittle, fruit is slightly moist		
Pineapple rings, canned	Towel dried	8 – 13	Soft and pliable		
Pineapple rings, fresh	Towel dried	7 – 12	Soft and pliable		
Strawberries	Wash and towel dry. Sliced ½" thick, skin down on rack	9 – 17	Dry and brittle		
Vegetables					
Peppers	Wash and towel dry. Remove membrane of peppers, 1" coarsely chopped pieces	13 – 17	Leathery with no moisture inside		
Mushrooms	Wash and towel dry. Cut thin slices, 1/8" thick	5 – 12	Tough and leathery, dry		
Tomatoes	Wash and towel dry. Cut thin slices, ⅓" thick, drain well	5 – 12	Dry, brick red color		

**Table 2: Dehydrate Chart** 

# Setting Bake, Convection Bake, or Extended Bake

These cooking modes are for baking, roasting or warming using one, two or three racks.

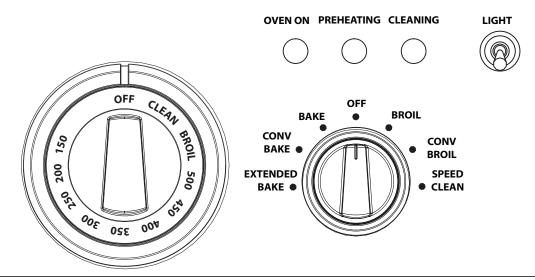


Figure 31: Oven Controls for 48" Range Main Oven

#### To Set Bake or Convection Bake

- Select BAKE mode or CONVECTION BAKE mode using the Mode Selector Knob.
- Set oven temperature using the Temperature Selector Knob.
  - If using CONVECTION BAKE, set the Temperature Selector Knob 25°F (14°C) below the temperature suggested in the recipe. No variation in temperature setting is necessary if roasting meats or poultry.
  - The OVEN ON and PREHEATING lights turn on.



• The oven is preheated to the set temperature when the **PREHEATING** light cycles off the first time.



 The OVEN ON light stays on during any active cooking mode, and remains on until either of the oven knobs is turned to the OFF position.

#### NOTE:

The interior oven light is operated by a separate switch that turns the light on and off, independent of any control setting.

#### **Extended Bake**

This unique cooking mode is for assisting the user for compliance to Sabbath principles.

- Select EXTENDED BAKE mode using the Mode Selector Knob.
- 2. Set oven temperature using the Temperature Selector Knob.
  - PREHEATING PHASE is the same as for other BAKE modes. Once the oven is preheated to the selected temperature, the twenty-two (22) minute Extended Bake cycle begins.
  - ACTIVE PHASE baking is as usual for nineteen
     (19) minutes, except during the last two (2)
     minutes, the OVEN ON and PREHEATING lights
     blink slowly (on 3 sec. / off 3 sec. together) to serve as a NOTICE for the final phase.



Once the two lights stop blinking (both remaining on), the final three (3) minutes allows the Sabbath user access to the oven without effecting a change

in the operation of the range. Heating elements remain off during this phase.

#### Automatic operation of the cooling blowers:

The cooling blowers activate after the oven reaches 300°F (149°C). When the oven is turned off, the blowers remain on until the oven temperature cools below 250°F (121°C).

**DO NOT** continue to use the ovens if the cooling blower fails to activate while baking. Call a qualified service agency to repair the range.

#### NOTE:

It is normal for the cooling process to push heated air out into the room when the oven is on.

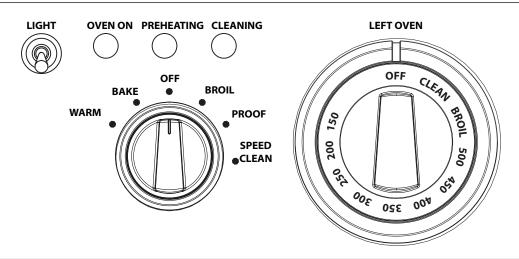


Figure 32: Secondary Oven Controls for 48" Range

#### Setting the Secondary Oven (48" Range)

- 1. Select mode using the Mode Selector Knob.
- Set oven temperature using the Temperature Selector Knob.
  - The OVEN ON and PREHEATING lights turn on.



 The oven is preheated to the set temperature when the PREHEATING light cycles off the first time.



 The OVEN ON light stays on during any active cooking mode, and remains on until either of the oven knobs is turned to the OFF position.

# WARM (secondary oven, only on 48" models)

This feature maintains the warm environment needed for keeping cooked foods hot.

#### To Set the Secondary Oven to WARM

- To preheat the oven turn the Mode Selector Knob to WARM about 10 minutes before use. <u>DO NOT</u> rotate the Temperature Selector Knob to any setting (leave in OFF position).
- Place the <u>hot</u> food in the secondary oven then close the door. The ideal temperature for keeping the food warm will be maintained until the Selector Switch is turned off.
- 3. **Do not open the oven door unnecessarily.** Opening the door will reduce the temperature of the oven.



#### **Food Safety Concern Food Poisoning Possible**

Do not use the WARM mode for cooking food. The WARM mode is not hot enough to cook foods at safe temperatures.

### PROOF (secondary oven, only on 48" models)

The proof feature maintains the warm, non-drafty environment needed for proofing yeast leavened products.

#### To Set the Secondary Oven for Proofing

- 1. Allow dough to thaw if frozen.
- 2. Place dough in dish and loosely cover.
- 3. Use any rack level that accommodates the size of the bowl or pan. Close the door.
- 4. Select PROOF using Selector Knob. **DO NOT** turn on Oven Temperature Control Knob.

Size	Time
Loaf, 1 lb (0.45 kg)	60 – 75 minutes
Rolls, 0.1 lb (0.05 kg)	30 – 45 minutes

The ideal temperature for proofing will be maintained until the Selector Knob is turned off.

Dough has "proofed" when it has doubled in size.

Do not open the oven door unnecessarily. Opening the door will lower the temperature of the air in the oven and lengthen the proofing time. Use the oven light to check the rising of the dough.

Proofing time may be decreased when using the large oven at the same time you are proofing. Check bread product early to avoid over-proofing. If you are using the large oven for extended periods of time we recommend, for optimum results, that you complete the proofing before using the large oven.

# Other Uses of Bake

# Slow Cooking and Low Temperature Uses of the Oven

In addition to providing perfect temperatures for baking and roasting, the oven can be used at low temperatures to keep hot, cooked foods at serving temperature and to warm plates.

Hot cooked foods can be kept at serving temperatures. Set the oven to bake and use the temperature suggested on the chart. For best results, preheat the oven to the desired temperature.



**FOOD SAFETY** — The United States Department of Agriculture advises: **DO NOT** hold foods at temperatures between 40°F – 140°F (4°C – 60°C) for more than 2 hours. Cooking raw foods below 275°F (135°C) is not recommended.

# Suggested Temperature Recommendations to Keep Food Hot

FOOD	OVEN TEMPERATURE
Beef	150°F (70°C)
Bacon	200° – 225°F (90 – 110°C)
Biscuits and Muffins (covered)	175° – 200°F (80 – 90°C)
Casserole (covered)	175°- 200°F (80 - 90°C)
Fish and Seafood	175° – 200°F (80 – 90°C)
Deep Fried Foods	200° – 225°F (90 – 110°C)
Gravy or Cream Sauces (covered)	175°F (80°C)
Lamb and Veal Roasts	175° – 200°F (80 – 90°C)
Pancakes and Waffles (covered)	200° – 225°F (90 – 110°C)
Potatoes Baked	200°F (90°C)
Mashed (covered)	175°F (80°C)
Pies and Pastries	175°F (80°C)
Pizza (covered)	225°F (110°C)
Pork	175° – 200°F (80 – 90°C)
Poultry (covered)	175° – 200°F (80 – 90°C)
Vegetables (covered)	175°F (80°C)

### **Baking Recommendations**

FOOD	PANSIZE	CONTROL TEMPERATURE SETTING	TOTAL SUGGESTED COOKING TIME
Cookies	12" x 15" Cookie Sheet	375°F (190°C)	8 – 12 minutes
Layer Cakes	8" or 9" Round	350°F (180°C)	25 – 35 minutes
Sheet Cakes	9" x 13" Pan	350°F (180°C)	30 – 40 minutes
Bundt™ Cakes	12 Cup	325°F (165°C)	60 – 75 minutes
Brownies or Bar Cookies	9" x 9" Pan	325°F (165°C)	20 – 25 minutes
Biscuits	12" x 15" Cookie Sheet	425°F (220°C) or Package Directions	10 – 15 minutes
Quick Bread	8" x 4" Loaf Pan	350°F (180°C)	55 – 70 minutes
Muffins	12-cup Muffin Pan	425°F (220°C)	14 – 19 minutes
Fruit Pies	9" Diameter	425°F (220°C)	35 – 45 minutes
Fruit Cobblers	9" x 9" Pan	400°F (205°C)	25 – 30 minutes
Yeast Bread, Loaves	8" x 4" Loaf Pan	350°F (180°C)	25 – 30 minutes
Dinner Rolls	9" x 13" Pan	375°F (190°C)	12 – 18 minutes
Cinnamon Rolls	9" x 13" Pan	375°F (190°C)	25 – 30 minutes
Yeast Coffee Cake	12" x 15" Cookie Sheet	375°F (190°C)	20 – 30 minutes

# **Broil/Convection Broil**

# Tips for Broil

#### **Preheating the Broiler**

It is recommended that you preheat the broil element before starting to cook. Preheat for 3 minutes then place food in oven.

#### **Getting the Best Results**

- · Defrost food before broiling.
- Door is to be closed during broiling.
- Steaks should be more than 1" (25.4 mm) thick if rare meat is desired. Use convection broil if steaks are over 1½" (38mm) thick.
- Turn foods over only once, after half the total cooking time. It is not necessary to turn very thin foods (ham slices, fillets of fish, etc.). Liver slices must be turned over regardless of thickness.
- Center foods directly under the broiling element for best browning.

#### **Rack Positions**

Before turning on the oven, place the rack in the desired position. After preheating the broiler, center the broil pan under the broil element.

#### Main Oven

Rack #5 — Use this rack position when broiling beef steaks, ground meat patties, ham steak and lamb chops 1" (25.4 mm) or less in thickness. Also use when top browning foods.

Rack #4 — Use this rack position when broiling meat  $1\frac{1}{8}$ " (29 mm) or more in thickness or fish, poultry, pork chops and ham steaks 1" (25.4 mm) or more in thickness.

Rack #3 — Use this rack when broiling chicken quarters or halves.

#### Secondary Oven (48" models only)

Foods may be broiled on racks #3, 4 or 5 depending upon the type and thickness of the food. Rack #5 may be used for top browning of foods.

#### **Utensils**

- The porcelain enamel two-piece broil pan and grid is included with the range. DO NOT cover the slotted grid (top) with aluminum foil.
- Use metal or glass-ceramic bakeware when top browning casseroles, main dishes, or bread.
- DO NOT use heat-proof glass or pottery. This type of glassware cannot withstand the intense heat of the broil element.
- The small porcelain broiler pan is designed to be used in the Secondary Oven of 48" models.

For rare steaks, cook the first side to  $90^{\circ}F$  ( $32^{\circ}C$ ). For medium or well done steaks, cook the first side to  $100^{\circ}F$  ( $38^{\circ}C$ ). Turn and cook the second side to desired internal temperature.

#### NOTE:

It is not possible to use the BAKE mode and BROIL mode simultaneously. When one mode is on, the other mode cannot be turned on.

#### **Setting Broil or Convection Broil**

Only the upper element heats in the BROIL mode. Successful broiling requires constant exposure to high, intense heat.

- 1. Place oven rack in desired position.
- Set Mode Selector Knob to BROIL or CONVECTION BROIL.
- 3. Set Temperature Selector Knob to BROIL setting.
  - The temperature gauge will move to BROIL after five minutes.
- 4. Place food in oven at desired rack position as referenced on this page.
- 5. The door should be closed throughout the broil cycle.

- Your THERMADOR PROFESSIONAL<sup>®</sup> range comes with a large two-piece broiler pan. The slotted grid allows drippings to flow into the lower pan, away from the intense heat of the broil element, minimizing spattering, smoking, and the chance of a grease fire.
- The 48" Models have a small porcelain broiler pan, for use in the Secondary Oven.

#### Automatic operation of the cooling blower:

The cooling blowers activate after the oven reaches 300°F (149°C). When the oven is turned off, the blowers remain on until the oven temperature cools below 250°F (121°C).

DO NOT continue to use the broiler if the cooling blower fails to activate while broiling. Call a qualified service agency to repair the range.

# **Broiling and Roasting Recommendations**

All meats are placed on the broiler pan included with the range.

FOOD ITEM	RACK NUMBER	OVEN MODE	CONTROL SETTING	APPROXIMATE COOKING TIME	INSTRUCTIONS & TIPS
BEEF		Б. 11	B ::		B 11 11
Ground Beef Patties, 1/2" (12.7 mm) thick	5	Broil or Conv Broil	Broil or Conv Broil	15 – 20 minutes	Broil until no pink in center
T-Bone Steak	4	Broil or Conv Broil	Broil or Conv Broil	12 – 20 minutes	Time depends on rareness of steak
Flank Steak	4	Broil or Conv Broil	Broil or Conv Broil	12 – 20 minutes	Rare to medium rare
		Roast or	425°F (220°C) to sear		Small roasts take more minutes per pound;
Rib Roast	3	Conv Roast	325°F (165°C) to finish	20 – 25 min/lb	reduce time by using Convection Roast
BREADS					
Toast, Garlic Bread, etc.	5	Broil	Broil	1 – 2 minutes	Broil until brown
PORK	3	Roast or	325°F (165°C)	20 – 25 min/lb	Cook until juices are
Loin Roast		Conv Roast	(100 0)	20 20 11111/15	clear
POULTRY  Boneless, Skinless Chicken Breasts	4	Broil or Conv Broil	Broil or Conv Broil	20 – 25 minutes	Cook until juices are clear
Chicken Thighs	3	Broil or Conv Broil	Broil or Conv Broil	25 – 30 minutes	Remove skin; Cook until juices are clear
Half Chickens	3	Broil or Conv Broil	Broil or Conv Broil	30 – 45 minutes	Turn with tongs; Cook until juices are clear
Roast Chicken	2	Roast or Conv Roast	375°F (190°C)	75 – 90 minutes	Do not stuff; reduce time by using Convection Roast
Turkey	2	Roast or Conv Roast	325°F (165°C)	20 – 25 min/lb	Reduce time by using Convection Roast

# **Care and Maintenance**

# **Self-Cleaning the Oven**

# WARNING:

- Children should not be left alone or unattended in an area where appliances are in use.
- During the Self-Clean cycle, exterior surfaces may become hotter than usual. Parts of the appliance may become potentially harmful to children, and to persons who lack adult knowledge of appliances and lack adult reactions to potentially harmful conditions. Keep these individuals away during self-clean and while the appliance is in use.
- The elimination of soil during self-cleaning may facilitate the emission of small amounts of chemicals or other substances that may be harmful upon sufficient exposure. To minimize exposure to these substances, provide good ventilation with an open window, or use a ventilation fan or hood.
- Keep pet birds out of the kitchen or other rooms where kitchen fumes could reach them. During selfclean, fumes are released that may be harmful to birds.

### Electric Oven

The self-cleaning mode of your new range features pyrolytic self-cleaning. When set to the CLEAN mode, the oven reaches a high temperature, approximately 830°F (443°C), that burns off the food soil.

When the oven is set for CLEAN, the cooktop burners may be used. The griddle cannot be used when the oven is set for CLEAN.

It is common to see smoke and/or flames during the clean cycle, depending on the content and amount of soil remaining in the oven. If a flame persists, turn off the oven and allow it to cool before opening the door to wipe up the excessive food soil.

At the end of the CLEAN cycle, some gray ash or burned residue may remain inside the oven. This is a mineral deposit that does not burn or melt. The amount of ash depends on how heavily soiled the oven was before it was cleaned. It is easily removed, when the oven is cold, using a damp paper towel, sponge, or cloth.

Wipe off any smoke residue that remains on the front frame with Formula  $409^{\circledR}$  or Fantastik $^{\circledR}$ . If stain remains, use a mild liquid cleanser. The amount of smoke stain is directly related to the amount of food soil left in the oven at the time of self-cleaning. Clean the oven often.

## Before Self-Cleaning the Oven

Wipe out puddles of grease and any loose soil that can be easily removed. Remove any soil that is outside the door seal area. This appliance is designed to clean the oven interior and that portion of the door that is inside the oven. The outer edges of the door and the oven cavity are not in the cleaning zone. Wipe this area clean **BEFORE SETTING THE OVEN TO SELF-CLEAN**.

- · Remove all utensils.
- Remove racks.
- Clean the oven front frame and outer door edges.
   Wipe up large spillovers and grease.
- Be sure the light bulbs and glass covers are in place.
- Turn on the ventilator hood above the range and leave it on until the oven has completed the selfclean cycle.

#### **IMPORTANT:**

Please note that some pets or humans can be sensitive to the odors created during the self-cleaning process whether it is a manufacturing residue burn off or food, so it is recommended that those potentially affected be removed from the kitchen area during the self-clean process.

If another clean cycle is initiated at the end of a clean cycle and the temperature of the oven is still above 500°F (260°C), the LED will start blinking to indicate the range has not completely cooled down after the first cycle. The oven cannot be used until the oven temperature drops below 500°F and the door is unlocked.

#### Lock

When the CLEAN cycle starts, the automatic door lock cycle begins. Check the door to confirm that it is locked. You can stop the clean cycle by selecting the OFF position. The CLEANING light will turn off only after the oven has cooled below 500°F (260°C) and the automatic door lock has completed its cycle to the open position.

Make certain that the oven door is locked at the beginning of the self-cleaning cycle.

#### To Set Self-Clean

- 1. Select SPEED CLEAN using the Mode Selector Knob.
- Set Temperature Selector Knob to CLEAN.
  - · Cooling Blower turns on.
  - OVEN ON, PREHEATING and CLEANING lights turn on.

OVEN ON PREHEATING CLEANING







 When the oven reaches maximum self-clean temperature, the PREHEATING light turns off.

#### NOTE:

The door closing process takes approximately 20 seconds to complete, at which time the door becomes locked.

Check to make certain the door is locked.

## At the End of the Clean Cycle

The Clean cycle takes 2 hours to complete. The OVEN ON light and the CLEANING light turn off when the cycle is finished. Do not turn either of the oven temperature knobs to the OFF position until the automatic lock cycles to the open position.

- 1. Select OFF using the Mode Selector Knob.
  - The door latch will open automatically when the oven is below 500°F (260°C) and the automatic Door Lock completes its 60 second cycle to the open position.
  - The cooling blower turns off when the oven temperature drops to 200°F (93°C).
- 2. Turn the oven temperature knob to OFF position.

# Cleaning Tips

- The porcelain enamel finish is acid resistant, but not acid proof. Acidic foods, such as citrus juices, tomatoes, rhubarb, vinegar, alcohol or milk, should be wiped up and not allowed to bake onto the porcelain during the next use.
- Remove the oven racks. See Racks, on Range Cleaning Recommendations, page 33.

 The heating elements in the oven do not require cleaning; the elements burn themselves clean when the oven is in use. Both elements are permanently connected. It is not necessary to clean the broiler shield above the broil element.



The interior of the oven will still be at baking temperatures when the automatic lock cycles to its open position and the oven door can be opened.

# Range Cleaning

# When Cleaning This Range:

- Use the mildest cleaning procedure that will do the job efficiently and effectively. Some cleaners of the same type are harsher than others. Try on a small area first.
- Always rub metal finishes in the direction of the polish lines for maximum effectiveness and to avoid marring the surface.
- Treat stainless surfaces with a stainless steel polish after cleaning to maintain and protect the finish.
- Use only clean soft cloths, sponges, paper towels, fibrous brushes, plastic, non-metal or steel wool soap pads for cleaning and scouring, as recommended on the chart.
- Any part of this appliance can be cleaned with hot sudsy water. When rinsing is required, rinse thoroughly.
- · Do not use chlorine-based cleaners.
- Always wipe dry immediately to avoid water marks.



Avoid cleaning any part of the range while it is hot.

#### **Brand Names**

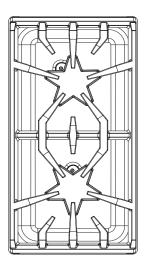
The use of brand names is intended only to indicate a type of cleaner. This does not constitute an endorsement. The omission of any brand name cleaner does not imply its adequacy or inadequacy. Many products are regional in distribution and can be found in the local markets. It is imperative that all products be used in strict accordance with instructions on the package. The following chart gives directions for cleaning this range.

# **Cleaning Recommendations**

PART/MATERIAL	SUGGESTED CLEANERS	IMPORTANT REMINDERS
Brass Burner Base and Cast Iron Cap		
	<ul> <li>Hot sudsy water; rinse and dry thoroughly.</li> <li>Mild abrasive cleansers: Bon-ami<sup>®</sup>, Cameo<sup>®</sup> Aluminum and Stainless Steel Cleaner, Wright's<sup>®</sup> All Purpose Brass Polish.</li> <li>Liquid cleaners: Kleen King<sup>®</sup>.</li> <li>Stiff nylon bristle tooth brush to clean port openings.</li> <li>After cleaning, make sure that the STAR<sup>®</sup> burner cap is correctly seated on the STAR burner base.</li> </ul>	DO NOT scratch or gouge the port openings of STAR burner cap.
Igniters/ Ceramic	Use a cotton swab dampened with water, Formula 409® or Fantastic®.	DO NOT use sharp tools to scrape the igniters. The igniters are fragile. If an igniter is damaged, it may not light the burner.
Control Knobs/ Metal Bezels/ Chrome Full Access <sup>®</sup> Oven Racks/ Chrome	Hot sudsy water; rinse and dry immediately.	<ul><li>Do not soak knobs.</li><li>Do not force knobs onto wrong valve shaft.</li></ul>
Exterior Finish/Backguard Stainless Steel	<ul> <li>Nonabrasive cleaners: hot water and detergent, Fantastik<sup>®</sup>, Formula 409<sup>®</sup>. Rinse and dry immediately.</li> <li>Cleaner polish: Stainless Steel Magic<sup>®</sup> to protect the finish from staining and pitting; enhances appearance.</li> <li>Hard water spots: household vinegar.</li> <li>Mild Abrasive Cleaners: Siege<sup>®</sup> Stainless Steel and Aluminum Cleaner, Kleen King<sup>®</sup> Stainless Steel liquid cleaner.</li> <li>Heat discoloration: Cameo<sup>®</sup>, Barkeepers Friend<sup>®</sup>, Zud<sup>®</sup>, Wright's<sup>®</sup> All Purpose Brass Polish.</li> </ul>	<ul> <li>Stainless steel resists most food stains and pit marks providing the surface is kept clean and protected.</li> <li>Never allow food stains or salt to remain on stainless steel for any length of time.</li> <li>Rub lightly in the direction of polish lines.</li> <li>Chlorine or chlorine compounds in some cleaners are corrosive to stainless steel. Check ingredients on label.</li> </ul>

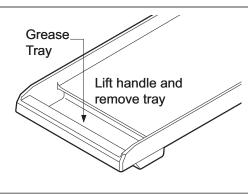
#### SUGGESTED CLEANERS

#### Grates/ Porcelain Enamel on Cast Iron



- Nonabrasive cleaners: hot water and detergent, Fantastik<sup>®</sup>, Formula 409<sup>®</sup>. Rinse and dry immediately.
- Mild abrasive cleaners: Bon-ami<sup>®</sup> and Soft Scrub<sup>®</sup>.
- Abrasive cleaners for stubborn stains: soap-filled steel wool pad.
- Lestoil<sup>®</sup> or other degreaser.
- The rough texture of the grate can sometimes remove aluminum deposits from the bottom of pans and fill in areas between the high spots on the surface of the grate. The metal deposits can be removed with a clean Scotch Brite<sup>™</sup> scrub sponge or a course steel wool pad.
- The grates are heavy; use care when lifting. Place on a protected surface.
- Blisters/ crazing/ chips are common due to the extreme temperatures on grate fingers and rapid temperature changes.
- Acidic and sugar-laden spills deteriorate the enamel. Remove soil immediately.
- Abrasive cleaners, used too vigorously or too often can eventually mar the enamel.
- Use special care when cooking with copper and aluminum pots and pans as this type of cookware can sometimes leave metal deposits on the grates.

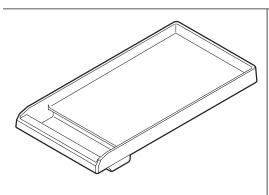
#### Griddle Grease Tray/ Aluminum with non-stick titanium coating



- Remove grease tray and discard grease into a grease resistant container for disposal. Wash grease tray in warm soapy water or place in dishwasher.
- Clean the grease tray after each use.
- Wash in detergent and hot water; rinse and dry.
- Stubborn soil: Soft Scrub<sup>®</sup>.

- Empty grease tray after each use.
- Remove tray after grease has cooled. Be careful not to fill it so full that tipping to remove it spills the grease.

#### Griddle/ Aluminum with non-stick titanium coating



- Wipe griddle surface with warm soapy water then rinse with warm water. Wipe dry with a soft cloth.
- If food particles stick to the griddle plate, remove with a mild abrasive cleaner such as Soft Scrub<sup>®</sup>.
- NEVER flood a hot griddle with cold water. This can warp or crack the aluminum plate.
- DO NOT clean any part of the grill or griddle in a selfcleaning oven.

PART/MATERIAL	SUGGESTED CLEANERS	IMPORTANT REMINDERS
Surface Spill Trays Porcelain Enamel (gloss finish)	A cleaner such as Soft Scrub <sup>®</sup> may be used. Apply with a damp sponge or cloth according to the manufacturer's instructions. Rinse thoroughly and wipe dry with a soft cloth.	
	If cleaners such as Bar Keeper's Friend <sup>®</sup> , Bon Ami <sup>®</sup> , Comet <sup>®</sup> or Ajax <sup>®</sup> are used, apply with a damp sponge or cloth according to the manufacturer's directions. Rub lightly as these cleansers may scratch the finish. Rinse thoroughly and wipe dry with a soft cloth.	
	For burned on foods, soap filled fiber or steel wool pads such as S.O.S. <sup>®</sup> or Brillo <sup>®</sup> may be used. Dampen the pad and rub gently. Care must be taken as these may scratch the finish. Rinse thoroughly and wipe dry with a soft cloth.	
Broil Pan Grid/Bottom Porcelain Enamel	To loosen cooked on food, sprinkle empty hot grid with powdered laundry detergent or squirt with liquid detergent and cover with wet paper towels. Allow to stand.	
	Hot sudsy water.	
	Wash, rinse thoroughly and dry.	
	Cleaners: Soft Scrub <sup>®</sup> .	
	<ul> <li>Apply with a damp sponge or cloth according to manufacturer's directions. Rinse and wipe dry.</li> </ul>	
	Powdered Cleanser: Bon-ami <sup>®</sup> , Comet <sup>®</sup> , Ajax <sup>®</sup> .	
	<ul> <li>Apply with a damp sponge or cloth according to manufacturer's directions. (Rub lightly, it may scratch the finish!) Rinse thoroughly and wipe dry.</li> </ul>	
	Soap-filled fiber or steel wool pads: S.O.S <sup>®</sup> , Brillo <sup>®</sup> .	
	Dampen pad, rub lightly, it may scratch the finish. Rinse thoroughly and wipe dry.	
Cavity Porcelain Enamel on Steel	Porcelain enamel is acid resistant, but not acid proof. Acid foods such as citrus juices, tomatoes, rhubarb, vinegar, alcohol or milk, should be wiped up and not allowed to bake onto the porcelain during the next use. Over a period of time, the porcelain may craze (get fine hairlike lines) This will not affect oven performance.	
	Hot sudsy water. Wash, rinse thoroughly, and dry.	
	Mild Cleaners: Bon-ami <sup>®</sup> , or vinegar and water, Soft Scrub <sup>®</sup> .	
	Apply to a damp sponge or cloth. Rub lightly. Rinse thoroughly. Dry. If food has burned onto the oven and is difficult to remove, the spots can be soaked with a cloth saturated Soft Scrub, Bon Ami, or Comet. Close the door and allow it to soak for an hour or two, or until the food soil can be easily removed with a damp soapy cloth or mild abrasive.	
Doors Exterior, Frame, Door Handle	Use care to keep cleaners and water away from the door vents. If water of cleaners spill into the vents, water may streak the glass inside.	
Stainless Steel		
Seal Door Gasket	General Kitchen Cleaners: Formula 409 <sup>®</sup> , dry with a cloth. <b>DO NOT</b> rub. Do not move	Fantastik <sup>®</sup> . Spray on and blot e, remove or damage mesh.

# **Do-It-Yourself Maintenance**

# Oven Light Bulb Replacement

# CAUTION:

- Make sure the appliance and lights are cool and power to the appliance has been turned off before replacing the light bulb(s). Failure to do so could result in electrical shock or burns.
- The covers must be in place when using the appliance.
- The covers serve to protect the light bulb from breaking.
- The covers are made of glass. Handle carefully to avoid breaking. Broken glass could cause an injury.
- The light socket is live when the door is open.

Replace only with a recommended light bulb designed for appliance oven use. DO NOT USE a standard household light bulb in any oven. Call THERMADOR® Customer Care Center at 1-800-735-4328 or your nearest THERMADOR dealer to determine the proper replacement bulb for your range. You will need to know your range's model number and serial number.

#### To Replace the Light Bulb:

For bulb replacement, any commercially available bulb with the following specification can be used: **120 or 130 VAC**, **50 W max.**, **G8 base**, **Halogen**. Use a clean, dry cloth to handle halogen light bulbs. This will increase the life of the bulb.

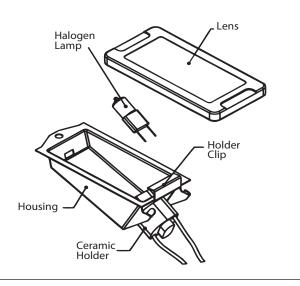


Figure 33: Oven Lamp Assembly

- 1. Turn off circuit breaker.
- 2. Remove oven racks.
- 3. Slide the tip of a flat blade screw driver between the fixing clip and the lamp housing (*Figure 34*, A).

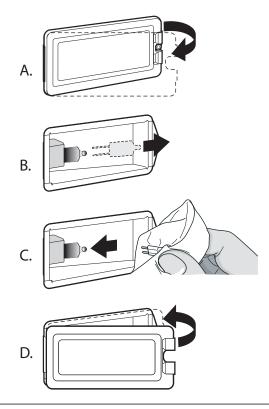


Figure 34: Bulb Replacement

- 4. Support the glass lens cover with two fingers along the bottom edge to prevent the cover from falling to the bottom of the oven. Gently twist the flat blade screw driver to loosen the glass lens cover.
- 5. Remove the glass lens cover and fixing clip.
- Remove the bulb by grasping and sliding the bulb straight back until the two prongs have cleared the ceramic holder (*Figure 34*, B).
- 7. Do not touch the glass of the new replacement bulb with your fingers. It may cause the bulb to fail when it first lights. Grasp the replacement bulb with a clean dry cloth. Locate the two prongs in the ceramic holder, gently poking until the two prongs locate in the ceramic socket.
- 8. Press down to seat the bulb (Figure 34, C).
- 9. Slide the protective lens into the holder clip and push the other end until the fixing clip snaps back into the housing (*Figure 34*, D).
- 10. Turn on circuit breaker.

#### Power Failure

In the event of a power failure, only the standard STAR<sup>®</sup> burners can be lit manually. It is necessary to light each standard burner individually (see also *page 15*).

If the range's cooktop is being used when the power failure occurs, turn all of the burner control knobs to the OFF position. The standard burners can be lit by holding a match at the ports and turning the control knob to the HI position. Wait until the flame is burning all the way around the burner cap before adjusting the flame to the desired height.

The two ExtraLow<sup>®</sup> burners on the left sides cannot be used during a power failure. Be sure to turn them OFF if a power failure occurs because they will not turn back on u9

ntil the control knobs are turned OFF and then turned back on again.

If you have low gas pressure, contact your gas company.

# Intermittent or Constant Igniter Sparking

Intermittent or constant sparking of the sealed gas surface burners can result from a number of preventable conditions. Eliminate these conditions as indicated in the following chart.

SYMPTOM	CAUSE	REMEDY
Intermittent sparking	<ul><li>Ceramic igniter is wet or dirty.</li><li>STAR burner ports are clogged.</li></ul>	<ul> <li>Carefully dry or clean igniter.</li> <li>Clean ports on STAR burner cap with a wire, a needle or straightened paper clip.</li> </ul>
More than four clicks of igniter before lighting	Improper fit of STAR burner cap onto STAR burner base.	Align STAR burner cap properly on STAR burner base.
Constant Sparking	<ul> <li>Range is not properly grounded.</li> <li>Electrical power supply is incorrectly polarized.</li> </ul>	<ul> <li>Refer to the <i>Installation Manual</i>. Have a qualified electrician ground the range properly.</li> <li>Refer to the <i>Installation Manual</i>. Have a qualified electrician ground the range properly.</li> </ul>

# **Before Calling For Service**

Before calling for service, check the following to avoid unnecessary service charges.

#### Be sure to check these items first:

- Is there a power outage in the area?
- Is the household fuse blown or the circuit breaker tripped?
- Is the range disconnected from the electrical supply?

#### If the burners do not ignite:

- Are the burner caps properly aligned and seated in the burner bases?
- Are the burner ports clogged?
- Is a fuse blown or is the circuit breaker tripped?
- Is the manual shut-off valve closed, preventing the flow of gas?

## **Data Rating Label**

The data rating plate shows the model and serial number of your range. It is located on the frame, behind the oven door (*Figure 35*).

The electric wiring diagrams and schematics are attached behind the toe kick, and should not be removed except by a service technician, then replaced after service (*Figure 35*).

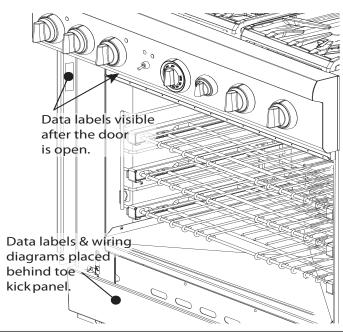


Figure 35: Rating Label Location



Before removing the toe kick panel, disconnect the range from the electrical power supply. Reinstall the toe kick panel before reconnecting the range to the power supply and operating the range.

#### Service Information

For handy reference, copy the information below from the data rating plate located on the frame, behind the oven door. Keep your invoice for Warranty validation.

Model Number	
Serial Number	
Date of Purchase	
Dealer's Name	
Dealer's Phone Number	
Service Center's Name	
Service Center's Phone Number	

Also, enter this information on the Product Registration Form included with this product, then mail it to the indicated address.

Register your BSH product to ensure timely service and access to your product related information. You may register your product through one of the following ways:

- 1. Mail in the completed THERMADOR® Product Registration card.
- 2. Register your product online at www.thermador.com.
- 3. Call us at THERMADOR customer service at 1-800-735-4328.

# **Statement Of Limited Product Warranty**

# What this Warranty Covers & Who it Applies to

The limited warranty provided by BSH Home Appliances Corporation (BSH) in this Statement of Limited Product Warranty applies only to the THERMADOR<sup>®</sup> appliance sold to you, the first using purchaser, provided that the Product was purchased:

- For your normal, household (non-commercial) use, and has in fact at all times only been used for normal household purposes.
- New at retail (not a display, "as is", or previously returned model), and not for resale, or commercial use.
- Within the United States or Canada, and has at all times remained within the country of original purchase.

The warranties stated herein apply only to the first purchaser of the Product and are not transferable.

Please make sure to return your registration card; while not necessary to effectuate warranty coverage, it is the best way for BSH to notify you in the unlikely event of a safety notice or product recall.

### How Long the Warranty Lasts

Product built preceding January 1, 2012 with a number of FD911299999 or lower: BSH warrants that the Product is free from defects in materials and workmanship for a period of three hundred and sixty-five (365) days from the date of purchase. The foregoing timeline begins to run upon the date of purchase, and shall not be stalled, tolled, extended, or suspended, for any reason whatsoever.

Product built subsequent to January 1, 2012 with a number of FD920100000 or higher: BSH warrants that the Product is free from defects in materials and workmanship for a period of seven hundred and thirty (730) days from the date of purchase. The foregoing timeline begins to run upon the date of purchase, and shall not be stalled, tolled, extended, or suspended, for any reason whatsoever.

# Repair/Replace as Your Exclusive Remedy

During this warranty period, BSH or one of its authorized service providers will repair your Product without charge to you (subject to certain limitations stated herein) if your Product proves to have been manufactured with a defect in materials or workmanship. If reasonable attempts to repair the Product have been made without success, then BSH will replace your Product (upgraded models may be available to you, in the sole discretion of BSH, for an additional charge). All removed parts and components shall

become the property of BSH at its sole option. All replaced and/or repaired parts shall assume the identity of the original part for purposes of this warranty and this warranty shall not be extended with respect to such parts. BSH's sole liability and responsibility hereunder is to repair manufacturer-defective Product only, using a BSHauthorized service provider during normal business hours. For safety and property damage concerns, BSH highly recommends that you do not attempt to repair the Product yourself, or use an un-authorized servicer; BSH will have no responsibility or liability for repairs or work performed by a non-authorized servicer. If you choose to have someone other than an authorized service provider work on your Product, THIS WARRANTY WILL AUTOMATICALLY BECOME NULL AND VOID. Authorized service providers are those persons or companies that have been specially trained on BSH products, and who possess, in BSH's opinion, a superior reputation for customer service and technical ability (note that they are independent entities and are not agents, partners, affiliates or representatives of BSH). Notwithstanding the foregoing, BSH will not incur any liability, or have responsibility, for the Product if it is located in a remote area (more than 100 miles from an authorized service provider) or is reasonably inaccessible, hazardous, threatening, or treacherous locale, surroundings, or environment; in any such event, if you request, BSH would still pay for labor and parts and ship the parts to the nearest authorized service provider, but you would still be fully liable and responsible for any travel time or other special charges by the service company, assuming they agree to make the service call.

# Out of Warranty Product

BSH is under no obligation, at law or otherwise, to provide you with any concessions, including repairs, pro-rates, or Product replacement, once this warranty has expired.

# Warranty Exclusions

The warranty coverage described herein excludes all defects or damage that are not the direct fault of BSH, including without limitation, one or more of the following:

- Use of the Product in anything other than its normal, customary and intended manner (including without limitation, any form of commercial use, use or storage of an indoor product outdoors, use of the Product in conjunction with air or water-going vessels).
- Any party's willful misconduct, negligence, misuse, abuse, accidents, neglect, improper operation, failure to maintain, improper or negligent installation, tampering, failure to follow operating instructions, mishandling, unauthorized service (including selfperformed "fixing" or exploration of the appliance's internal workings).

- Adjustment, alteration or modification of any kind.
- A failure to comply with any applicable state, local, city, or county electrical, plumbing and/or building codes, regulations, or laws, including failure to install the product in strict conformity with local fire and building codes and regulations.
- Ordinary wear and tear, spills of food, liquid, grease accumulations, or other substances that accumulate on, in, or around the Product.
- Any external, elemental and/or environmental forces and factors, including without limitation, rain, wind, sand, floods, fires, mud slides, freezing temperatures, excessive moisture or extended exposure to humidity, lightning, power surges, structural failures surrounding the appliance, and acts of God.

In no event shall BSH have any liability or responsibility whatsoever for damage to surrounding property, including cabinetry, floors, ceilings, and other structures or objects around the Product. Also excluded from this warranty are scratches, nicks, minor dents, and cosmetic damages on external surfaces and exposed parts; Products on which the serial numbers have been altered, defaced, or removed; service visits to teach you how to use the Product, or visits where there is nothing wrong with the Product; correction of installation problems (you are solely responsible for any structure and setting for the Product, including all electrical, plumbing or other connecting facilities, for proper foundation/flooring, and for any alterations including without limitation cabinetry, walls, floors, shelving, etc.); and resetting of breakers or fuses.

TO THE EXTENT ALLOWED BY LAW, THIS WARRANTY SETS OUT YOUR EXCLUSIVE REMEDIES WITH RESPECT TO PRODUCT, WHETHER THE CLAIM ARISES IN CONTRACT OR TORT (INCLUDING STRICT LIABILITY, OR NEGLIGENCE) OR OTHERWISE. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED. ANY WARRANTY IMPLIED BY LAW, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, SHALL BE EFFECTIVE ONLY FOR THE PERIOD THAT THIS EXPRESS LIMITED WARRANTY IS **EFFECTIVE. IN NO EVENT WILL THE MANUFACTURER** BE LIABLE FOR CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, "BUSINESS LOSS", AND/OR PUNITIVE DAMAGES, LOSSES, OR EXPENSES, INCLUDING WITHOUT LIMITATION TIME AWAY FROM WORK, HOTELS AND/OR RESTAURANT MEALS, REMODELLING EXPENSES IN EXCESS OF DIRECT DAMAGES WHICH ARE DEFINITIVELY CAUSED **EXCLUSIVELY BY BSH, OR OTHERWISE. SOME** STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

No attempt to alter, modify or amend this warranty shall be effective unless authorized in writing by an officer of BSH.

We reserve the right to make changes in the product or this manual without notification.

# **THERMADOR®** Support

#### **Service**

We realize that you have made a considerable investment in your kitchen. We are dedicated to supporting you and your appliance so that you have many years of creative cooking.

Please don't hesitate to contact our STAR<sup>™</sup> Customer Support Department if you have any questions or in the unlikely event that your THERMADOR appliance needs service. Our service team is ready to assist you.

USA: 800-735-4328 www.thermador.com/support

Canada: 800-735-4328 www.thermador.ca

#### Parts & Accessories

Parts, filters, descalers, stainless steel cleaners and more can be purchased in the THERMADOR eShop or by phone.

USA:

www.thermador-eshop.com

Canada contact: Marcone 800-287-1627 or Reliable Parts 800-663-6060

