GE Appliances

Technical Service Guide March 2012

GE Gas Ranges C2S985 **CGS985 CGS990 JGB870** P2B930 **PGB900 PGB910 PGB915 PGB930 PGB935 PGB980 PGB995**





31-9224



GE Appliances General Electric Company Louisville, Kentucky 40225



IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

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

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in the building.
- Immediately call the gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

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Introduction

The Café, Profile, and GE gas ranges have some of the following features:

- Gas convection oven Circulates air throughout the oven cavity ensuring better baking and roasting results.
- Self-clean oven Conveniently cleans the oven cavity without the need for scrubbing.
- 17,000-BTU PowerBoil[™] burner Delivers intense heat for rapid boiling.
- 20,000-BTU tri-ring burner Three-in-one burner is designed for accelerated boiling and gentle simmering.
- Deep-recessed cooktop Designed with a recessed surface to help contain spills and make cleaning easy.
- Precise simmer burner Allows for low, even heat distribution that is ideal for delicate foods and sauces.
- Center oval burner Oval fifth burner in the center of the cooktop is large to accommodate odd-sized cookware or griddles.
- 5.4-cu. ft. oven capacity Enough room to cook an entire meal at once.
- Baking drawer Offers an additional 1.0 cu. ft. of capacity for convenient baking from 140°F to 450°F.
- Nonstick griddle Provides a flat, nonstick surface for cooking and warming all types of foods.
- Reversible cast-iron griddle/grill Provides the flexibility to sear meats on the grill and cook delicate meals on the griddle.





Nomenclature

Model Number

side of the lower oven front frame.



Installation

Installation information is for reference only. See the installation instructions shipped with the product for complete details and before attempting to install the range.

Power Supply

This appliance features pilotless electronic ignition for energy savings and reliability. It must be supplied with 120V, 60 Hertz, properly grounded dedicated circuit protected by a 15-amp or 20-amp circuit breaker or time-delay fuse as noted on the rating plate.

Wiring must conform to the National Electrical Codes.

Grounding Specifications

Ground Path Resistance	0.10 Ω	Max.
Insulation Resistance	250 KΩ	Min.

Gas Supply

This range is designed to operate at a pressure of 5 inches of water column on natural gas or, if designed for LP gas (propane or butane), 10 inches of water column.

Make sure you are supplying this range with the type of gas for which it is designed.

This range is convertible for use with natural or propane gas. If you are installing this range for use with LP gas, conversion must be made by a qualified LP installer before attempting to operate the range on that gas.

For proper operation, the pressure of natural gas supplied to the regulator must be between 5 inches and 13 inches of water column. For LP gas, the pressure supplied must be between 10 inches and 13 inches of water column. When checking for proper operation of the regulator, the inlet pressure must be at least 1 inch greater than the operating (manifold) pressure as given above.

The pressure regulator located at the inlet of the range manifold must remain in the supply line regardless of whether natural or LP gas is being used.

A flexible metal appliance connector used to connect the range to the gas supply line should have an I.D. of 1/2 in. and be 5 feet in length for ease of installation. In Canada, flexible connectors must be single wall metal connectors no longer than 6 feet in length.

Anti-Tip Device

WARNING: To reduce the risk of tipping the range, the range must be secured by a properly installed anti-tip bracket. Follow the instructions packaged with the bracket.

To check if the bracket is installed and engaged properly, look underneath the range to see that the rear leveling leg is engaged in the bracket. On some models, the storage drawer or kick panel can be removed for easy inspection. If visual inspection is not possible, slide the range forward, confirm the anti-tip bracket is securely attached to the floor or wall, and slide the range back so the rear leveling leg is under the anti-tip bracket.

Minimum Clearances

48″



461/4"

Using the gas surface burners.

Throughout this manual, features and appearance may vary from your model.

- Before Lighting a Gas Burner
- Make sure all burners are in place.
- Make sure all grates on the range are properly placed before using any burner.
- If your range has the Gas/Control Lockout feature, make sure it is disabled before attempting to light the surface burners.

How to Light a Gas Surface Burner

WARNING | Burner flames that

are not covered by cookware may present a risk

of fire or clothing ignition. The griddle burner

should only be used with the griddle in place.

Push the control knob in and turn it to the LITE position.



Failure to do so may result in serious injury. Make sure all the surface burners are placed in

their respective positions. Push the control knob in and turn it to the LITE

position.

Sealed Gas Burners

Your gas range cooktop has sealed gas burners. They offer convenience, cleanability and flexibility to be used in a wide range of cooking applications.

The smallest burner in the right rear position is the simmer burner. On some models, the right front position triple flame burner will be the simmer burner. This burner can be turned down to **SIM** for a very low simmer setting. It provides precise cooking performance for delicate foods such as sauces or foods that require low heat for a long cooking time.

The medium (left rear) and the large (left front) burners are the primary burners for most cooking. These general-purpose burners can be turned down from HI to LO to suit a wide range of cooking needs.

The extra large burner (right front, triple flame burner, or left front burner on some models) are the maximum output burners. Like the other four burners, it can be turned down from HI to **SIM** for a wide range of cooking applications.

After Lighting a Gas Burner

- Do not operate the burner for an extended period of time without cookware on the grate. The finish on the grate may chip without cookware to absorb the heat.
- Be sure the burners and grates are cool before you place your hand, a pot holder, cleaning cloths or other materials on them.

You will hear a little *clicking* noise—the sound of the electric spark igniting the burner.

Turn the knob to adjust the flame size. If the knob stays at LITE, it will continue to click.

When one burner is turned to LITE, all the burners spark. Do not attempt to disassemble or clean around any burner while another burner is on. An electric shock may result, which could cause you to knock over hot cookware.

These burners are designed to guickly bring large amounts of liquid to a boil. They have a special **POWER BOIL**[™] setting designed to be used with cookware 10 inches or larger in diameter for the extra large and 11 inches or larger for the triple flame burner.



The center oval burner (on some models) is for large pots/pans or for use with the griddle.



For Front Griddle Burner Only

How to Light Bridge Burner for Model PGB980

AWARNING Burner flames

that are not covered by cookware may present a risk of fire or clothing ignition. The griddle burner should only be used with the griddle in place. Failure to do so may result in serious injuty.

- Light rear burner fully at the Lite position.
- Turn the same rear burner knob to the Griddle Burner Hi setting to light the bridge.
- Be sure front griddle burner setting is the same as rear burner and bridge burner combo.



For Rear Burner and Bridge Burner Combo Only



How to Select Flame Size

AVVARINING Flames that are not covered by cookware may present a risk of burns or clothing ignition. Never let flames extend beyond the sides of the cookware. Watch the flame, not the knob, as you adjust heat. When fast heating is desired, the flame size on a gas burner should match the cookware you are using.

Flames larger than the bottom of the cookware will not result in faster heating and may be hazardous.

Top-of-Range Cookware

Aluminum: Medium-weight cookware is recommended because it heats quickly and evenly. Most foods brown evenly in an aluminum skillet. Use saucepans with tight-fitting lids when cooking with minimum amounts of water.

Cast-Iron: If heated slowly, most skillets will give satisfactory results.

Enamelware: Under some conditions, the enamel of some cookware may melt. Follow cookware manufacturer's recommendations for cooking methods.

Glass: There are two types of glass cookware—those for oven use only and

those for top-of-range cooking (saucepans, coffee and teapots). Glass conducts heat very slowly.

Heatproof Glass Ceramic: Can be used for either surface or oven cooking. It conducts heat very slowly and cools very slowly. Check cookware manufacturer's directions to be sure it can be used on gas ranges.

Stainless Steel: This metal alone has poor heating properties and is usually combined with copper, aluminum or other metals for improved heat distribution. Combination metal skillets usually work satisfactorily if they are used with medium heat as the manufacturer recommends.



Stove Top Grills

Do not use stove top grills on your sealed gas burners. If you use the stove top grill on the sealed gas burner, it will cause incomplete combustion and can result in exposure to carbon monoxide levels above allowable current standards. This can be hazardous to your health.



Use a flat-bottomed wok.



Wok This Way

We recommend that you use a 14-inch or smaller flat-bottomed wok. Make sure the wok bottom sits flat on the grate. They are available at your local retail store.

Only a flat-bottomed wok should be used.

Do not use a wok support ring. Placing the ring over the burner or grate may cause the burner to work improperly, resulting in carbon monoxide levels above allowable standards. This could be dangerous to your health.

In Case of Power Failure

In case of a power failure, you can light the gas surface burners on your range with a match. Hold a lit match to the burner, then push in and turn the control knob to the *LITE* position. Use extreme caution when lighting burners this way. Surface burners in use when an electrical power failure occurs will continue to operate normally.

NOTE: If Gas/Control Lockout is in use at the time of a power failure, the surface burners cannot be lit.

Using the griddle. (on some models)



Your non-stick coated griddle or preseasoned griddle (on some models) provides an extra-large cooking surface for meats, pancakes or other food usually prepared in a frying pan or skillet. **NOTE:** Your griddle will discolor over time as it becomes seasoned with use.



How to Insert the Griddle

ACAUTION Place and remove the griddle only when all grates and griddle are cool and all surface units are turned OFF. The griddle can only be used with the center burner. To insert the griddle, remove center grate and replace with griddle.

NOTE: Do not clean the griddle in the selfcleaning oven



Your nonstick coated griddle or preseasoned griddle (on some models) provides an extra-large cooking surface for meats, pancakes or other food usually prepared in a frying pan or skillet. **NOTE:** Your griddle will discolor over time as it becomes seasoned with use.



How to Insert the Chef's Griddle

This griddle can only be used with the left rear, front and bridge burners. To insert the griddle, place on top of the grates so that the feet on the bottom of the griddle set between the fingers on the grates. **NOTE:** Do not clean the griddle in the self-cleaning oven.

Using the oven controls.

(Throughout this manual, features and appearance may vary from your model.)

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Features, appearance and pad locations may vary.

Oven Control, Clock, Timer and Features CGS985 Models



Bake Pad

Touch to select the bake function. Broil Hi/Lo Pad

Touch to select the broil function.



Convection Bake Pad

Touch to select baking with the convection function.



Convection Roast Pad

Touch to select roasting with the convection function.



Start Pad

Must be touched to start any cooking or cleaning function.

6 Display

Shows the time of day, oven temperature, whether the oven is in the bake, broil or self-cleaning mode, the times set for the timer or automatic oven operations, and if the range is locked.

If "F- and a number or letter" flash in the display and the oven control signals, this indicates a function error code. Touch the Clear/Off pad. Allow the oven to cool for one hour. Put the oven back into operation. If the function error code repeats, disconnect the power to the oven and call for service.

If your oven was set for a timed oven operation and a power outage occurred, the clock and all programmed functions must be reset.

The time of day will flash in the display when there has been a power outage.



Touch to select self-cleaning function. See the Using the self-cleaning oven section.



Oven Light On/Off Pad Touch to turn the oven light on or off.



Delay Start Pad Use along with COOKING TIME or SELF CLEAN pads to set the oven to start and stop automatically at a time you set.



Cooking Time Pad

Touch and then touch the number pads to set the amount of time you want your food to cook. The oven will shut off when the cooking time has run out.

	-	
4	11	

Clear/Off Pad

Touch to cancel **ALL** oven operations except the clock, timer and Gas/Control Lockout or Control Lockout (depending on model).



(13)

Clock Pad Touch before setting the clock.

Number Pads

Use to set any function requiring numbers, such as the time of day on the clock, the timer, the oven temperature, the internal food temperature, the start time and length of operation for timed baking and self-cleaning.



Kitchen Timer On/Off Pad



Touch when using the probe to cook food.



Gas/Control Lockout (on some models) Touch and hold the Gas/Control Lockout pad for 3 seconds to lock/unlock the surface burners, oven burners and control panel so they cannot be activated.

Using the oven controls.

(Throughout this manual, features and appearance may vary from your model.)



Features, appearance and pad locations may vary.

Oven Control, Clock, Timer and Features PGB900, PGB910, PGB915, PGB930, PGB935, PGB980 Profile Models

Bake Pad Touch to select the bake function.

Broil Hi/Lo Pad

Touch to select the broil function.

Convection Bake Multi/1 Rack Pad (on some models)

Touch to select baking with the convection function.

Convection Roast Pad (on some models) Touch to select roasting with the convection function.



Touch to select a warm environment useful for rising yeast-leavened products.

Start Pad

Must be touched to start any cooking or cleaning function.



5

Display

Shows the time of day, oven temperature, whether the oven is in the bake, broil or self-cleaning mode, the times set for the timer or automatic oven operations, and if the range is locked.

If "F- and a number or letter" flash in the display and the oven control signals, this indicates a function error code. Touch the Clear/Off pad. Allow the oven to cool for one hour. Put the oven back into operation. If the function error code repeats, disconnect the power to the oven and call for service.

If your oven was set for a timed oven operation and a power outage occurred, the clock and all programmed functions must be reset.

The time of day will flash in the display when there has been a power outage.



Self Clean Pad

Touch to select self-cleaning function. See the Using the self-cleaning oven section.

Oven Light On/Off Pad Touch to turn the oven light on or off.



Delay Start Pad



Cooking Time Pad



Touch and then touch the number pads to set the amount of time you want your food to cook. The oven will shut off when the cooking time has run out.

Clear/Off Pad

Touch to cancel ALL oven operations except the clock, timer and Gas/Control Lockout or Control Lockout (depending on model).



14

12

Clock Pad Touch before setting the clock.

Number Pads

Use to set any function requiring numbers, such as the time of day on the clock, the timer, the oven temperature, the internal food temperature, the start time and length of operation for timed baking and self-cleaning.

Kitchen Timer On/Off Pad Touch to select the timer feature.



15

Control Lockout (on some models) The control lockout is 9 and 0. Touch and hold the 9 and 0 pads at the same time for 3 seconds.



Warming Drawer On/Off Pad (on some models) touch this pad and then touch number pads 1-3 to use the warming drawer. See the Using the electric warming drawer section.

Using the lower oven.

(Throughout this manual, features and appearance may vary from your model.)



Features, appearance and pad locations may vary.



Oven Control, Clock, Timer and Features JGB870, PGB995, CGS990 Models

Bake Pad Touch to select the bake function.

Convection Bake Pad (on some models) Touch to select baking with the convection function.



Convection Roast Pad (on some models) Touch to select roasting with the convection function.

Start Pad

Must be touched to start any cooking or cleaning function.

Warm Pad

Touch to keep cooked foods warm. See the How to Set the Oven for Warming section.

Display 6

Shows the time of day, oven temperature, whether the oven is in the bake, broil or self-cleaning mode, the times set for the timer or automatic oven operations, and if the range is locked.

If "F-" and a number or letter flash in the display and the oven control signals, this indicates a function error code. Touch the Clear/Off pad. Allow the oven to cool for one hour. Put the oven back into operation. If the function error code repeats, disconnect the power to the oven and call for service.

If your oven was set for a timed oven operation and a power outage occurred, the clock and all programmed functions must be reset.

The time of day will flash in the display when there has been a power outage.



Touch to select self-cleaning function. See the Using the self-cleaning oven section.

Oven Light On/Off Pad

Touch to turn the oven light on or off.

Delay Start Pad 9

Use along with **Cooking Time** or **Self Clean** pads to set the oven to start and stop automatically at a time you set.



Cooking Time Pad

Touch and then touch the number pads to set the amount of time you want your food to cook. The oven will shut off when the cooking time has run out.

Clear/Off Pad

Touch to cancel **ALL** oven operations except the clock, timer and Gas/Control Lockout or Control Lockout (depending on model).



12 Clock Pad



73 Number Pads

Use to set any function requiring numbers, such as the time of day on the clock, the timer, the oven temperature, the internal food temperature, the start time and length of operation for timed baking and self-cleaning.



Kitchen Timer On/Off Pad Touch to select the timer feature.



Touch when using the probe to cook food.



15

Gas/Control Lockout Pad (on some models) Touch and hold the **Gas Control Lockout** pad for 3 seconds to lock/unlock the surface burners, oven burners and control panel so they cannot be activated.

Special features of your oven control.

Your new touch pad control has additional features that you may choose to use. The following are the features and how you may activate them.

The special feature modes can only be activated while the display is showing the time of day. They remain in the control's memory until the steps are repeated.

When the display shows your choice, touch the **Start** pad. The special features will remain in memory after a power failure.





9

0

CONTROL LOCKOUT

Gas/Control Lockout (on some models)

Your control will allow you to lock out the surface burners, oven burners and control panel so they cannot be activated.

To lock/unlock the controls:

- Turn all surface burners off.
- Touch and hold the Gas/Control Lockout
- pad for 3 seconds until the display shows *LOC ON*.
- 3 To unlock the control, touch and hold the *Gas/Control Lockout* pad for 3 seconds until the display shows *LOC OFF*.

Control Lockout (on some models)

Your control will allow you to lock out the touch pads so they cannot be activated when touched or cleaning the glass panel.

To lock the controls:

Touch the **9** and **0** touch pads at the same time for 3 seconds until the control beeps twice. The display will show *LOC* continuously and the time of day if not blacked out.

NOTE: All cooking and timing functions will be cancelled when locking out the control.

12-Hour, 24-Hour or Clock Blackout

Your control is set to use a 12-hour clock.

If you would prefer to have a 24-hour military time clock or black out the clock display, follow the steps below.

- Touch the **Bake** and **Broil Hi/Lo** pads at the same time for 3 seconds until the display shows SF.
- Z Touch the *Clock* pad once. The display will show *12 hr.* If this is the choice you want, touch the *Start* pad.

Touch the *Clock* pad again to change to the 24-hour military time clock. The display will show 24 hr. If this is the choice you want, touch the *Start* pad.

Touch the *Clock* pad again to black out the clock display. The display will show *OFF*. If this is the choice you want, touch the Start pad.

NOTE: If the clock is in the black-out mode, you will not be able to use the **Delay Start** function.



Cook and Hold

Your new control has a cook and hold feature that keeps cooked foods warm for up to 3 hours after the cooking function is finished. This feature can only be used when timed cooking.

To activate this feature, follow the steps below.

- Touch the **Bake** and **Broil Hi/Lo** pads at the same time for 3 seconds until the display shows **SF**.
- Touch the **Cooking Time** pad. The display will show **HId OFF.**

Touch the *Cooking Time* pad again to activate the feature. The display will show *Hld ON*.

3 Touch the *Start* pad to activate the cook and hold feature and leave the control set in this special features mode.

When this feature is on and the touch pads are touched, the control will beep and the display will show *LOC ON*.

- The control lockout mode affects all controls. No controls will work when this feature is activated.
- The adjustment will be retained in memory after a power failure.
- To unlock the control, touch the 9 and 0 touch pads at the same time for 3 seconds until the control beeps twice, and LOC will be removed from the display.

NOTE: Some models have a Control Lockout pad. Touch and hold it for 3 seconds to lock/ unlock.

BROIL + BAKE HI/LO CLOCK START

Using the Sabbath feature.

(Designed for use on the Jewish Sabbath and Holidays)

The Sabbath feature can be used for baking/roasting in the upper and lower oven or baking drawer (on some models). It cannot be used for convection, broiling, self-cleaning or delay start cooking.

NOTE: The oven light comes on automatically (on some models) when the door is opened and goes off when the door is closed. The bulb may be removed. See the Oven Light Replacement section. On models with a light switch on the control panel, the oven light may be turned on and left on.





When the display shows \supset the oven is set in Sabbath. When the display shows $\supset \subset$ the oven is baking/roasting.



When the display shows \supset the oven is set in Sabbath. When the display shows $\supset \subset$ the oven is baking/roasting.



How to Set for Regular Baking/Roasting

Make sure the clock shows the correct time of day and the oven is off.

- Press and hold both the **Bake** and **Warm** pads, at the same time, until the display shows **SF**.
- Z Tap the **Delay Start** pad until **SAb bAtH** appears in the display.
- Touch the **Start** pad and \supset will appear in the display.
- Touch the **Bake** pad. No signal will be given.
- Jusing the number pads, enter the desired temperature between 170° and 550°. No signal or temperature will be given.

- 6 Touch the **Start** pad.
- After a random delay period of approximately 30 seconds to 1 minute, ⊃ ⊂ will appear in the display, indicating that the oven is baking/roasting. If ⊃ ⊂ doesn't appear in the display, start again at Step 4.

To adjust the oven temperature, touch the *Bake* pad, enter the new temperature using the number pads and touch the Start pad.

NOTE: The *Clear/Off* and *Cooking Time* pads are active during the Sabbath feature.

Using the number pads, enter the desired

approximately 30 seconds to 1 minute,

that the oven is baking/roasting. If $\supset \subset$

Bake pad, enter the new temperature using the

 $\supset \subset$ will appear in the display, indicating

doesn't appear in the display, start again

After a random delay period of

To adjust the oven temperature, touch the

number pads and touch the *Start* pad.

When cooking is finished, the display will

change from $\supset \subset$ to \supset and **0:00** will appear,

indicating that the oven has turned **OFF** but is

still set in Sabbath. Remove the cooked food.

temperature. No signal or temperature will

How to Set for Timed Baking/Roasting-Immediate Start and Automatic Stop

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10

be given.

at Step 7.

|9| Touch the **Start** pad.

Make sure the clock shows the correct time of day and the oven is off.

- Press and hold both the **Bake** and **Warm** pads, at the same time, until the display shows **SF**.
- Tap the **Delay Start** pad until **SAb bAtH** appears in the display.
- ∃ Touch the *Start* pad and ⊃ will appear in the display.
- **4** Touch the **Cooking Time** pad.
- **5** Touch the number pads to set the desired length of cooking time between 1 minute and 9 hours and 99 minutes. The cooking time that you entered will be displayed.
- 6 Touch the **Start** pad.
- Touch the *Bake* pad. No signal will be given.

How to Exit the Sabbath Feature

- Touch the *Clear/Off* pad.
- If the oven is cooking, wait for a random delay period of approximately 30 seconds to 1 minute, until only ⊃ is in the display.
- Press and hold both the *Bake* and *Warm* pads, at the same time, until the display shows *SF*.
- Tap the *Delay Start* pad until *12 shdn* or *no shdn* appears in the display. *12 shdn* indicates that the oven will

automatically turn off after 12 hours. *no shdn* indicates that the oven will not automatically turn off.

5 Touch the **Start** pad.

NOTE: If a power outage occurred while the oven was in Sabbath, the oven will automatically turn off and stay off even when the power returns. The oven control must be reset.

Adjust the lower and upper oven thermostats—Do it yourself!

You may find that your new oven cooks differently than the one it replaced. Use your new oven for a few weeks to become more familiar with it. If you still think your new oven is too hot or too cold, you can adjust the thermostat yourself.

Do not use thermometers, such as those found in grocery stores, to check the temperature setting of your oven. These thermometers may vary 20–40 degrees.

NOTE: This adjustment will not affect the broiling or the self-cleaning temperatures. The adjustment will be retained in memory after a power failure.



To Adjust the Lower Thermostat

- Touch the **Bake** and **Warm** pads at the same time for 3 seconds until the display shows **SF**.
- Z Touch the **Bake** pad. A two-digit number shows in the display.

Touch **Bake** once to decrease (-) the oven temperature, or twice to increase (+).

The oven temperature can be adjusted up as much as 35°F or down as much as 35°F. Touch the number pads the same way you read them. For example, to change the oven temperature 15°F, touch 1 and 5. When you have made the adjustment, touch the **Start** pad to go back to the time-of-day display. Use your oven as you would normally.

NOTE: The thermostat adjustment for Baking will also affect Convection Baking or Convection Roasting.

To Adjust the Upper Thermostat

- Pull the **OVEN CONTROL** knob off the range and look at the back side. To make an adjustment, loosen (approximately one turn), but do not completely remove, the two screws on the back of the knob.
- With the back of the knob facing you, hold the outer edge of the knob with one hand and turn the front of the knob with the other hand. To raise the oven temperature, move the top screw toward the right. You'll hear a click for each notch you move the knob. To lower the temperature, move the top screw toward the left.

Each click will change the oven temperature approximately 10°F. (Range is \pm 30°F. from the arrow.) We suggest that you make the adjustment one click from the original setting and check oven performance before makingany additional adjustments.

- After the adjustment is made, retighten screws so they are snug, but be careful not to overtighten.
- Re-install knob on range and check performance.



Component Locator Views

Top View (Profile and GE models)



Top View (Café models)





Maintop Burner Compartment (Profile and GE models)



Maintop Burner Compartment (Café models)

(Shown with Heat Shield Removed)



Rear View (Profile and GE models)

(Profile model shown with back cover and cooktop removed)



Rear View (Café models)

(Café model shown with back cover and cooktop removed)



Left Side View

(Café model shown with side panel and cooktop removed. Profile and GE models look the same from this view.)





Control Panel Assembly

WARNING: Components on the control panel are electrically hot when voltage is connected to the range.

The control panel assembly consists of a glass touch panel and an ERC that is attached to a metal insert panel.

Touch Panel and Electronic Range Control (ERC)

The glass touch panel and ERC are separate components, but must be tested together.

TOUCH PANEL TEST

Press each pad on the touch panel, then press the start pad. If the touch panel is functioning properly, the following should occur:

- BAKE, WARM, CONVECTION BAKE, CONVECTION ROAST, SELF CLEAN, COOKING TIME, KITCHEN TIMER, DELAY START, CLOCK, OVEN LIGHT, and GAS/CONTROL LOCKOUT modes – Audible tone plus display showing mode of operation selected.
- CLEAR/OFF Audible tone and display shows time of day.
- **PROBE** Audible tone and response if meat probe is plugged in.
- Numerical Pads Audible tone. Can only be used after another function has been selected.

To remove the touch panel and ERC (Profile and GE models):

1. Remove the two T-15 Torx screws from the bottom of the control panel.



2. Loosen the two 1/4-in. hex-head screws (1 from each corner) that attach the top of the control panel to the range.



- 3. Place a protective surface over the cooktop.
- 4. Pull out the bottom of the control panel, then lift the panel off the range.
- 5. Place the control panel in the service position as shown below.



Service Position

6. Mark and disconnect the 21 wires and wire harnesses.



7. Remove the 4 Phillips-head screws that attach the control board to the control panel.



8. Disconnect the wire harness. Remove the two T-15 Torx screws and six 1/4-in. hex-head screws from the control panel to remove the glass touch panel.



To remove the touch panel and ERC (Café models):

- 1. Remove the cooktop. (See Cooktop.)
- 2. Remove the 6 Phillips-head screws from the bottom of the control panel (3 on each side).



- 3. Pull the 6 knobs off the control panel.
- 4. Remove the 7 Phillips-head screws and two T-15 Torx screws holding the control panel to the burner valves.





5. Remove the two 1/4-in. hex-head screws and the heat shield.



- 6. Pull the fiber barrier out of the control panel.
- 7. Slide the wire clips off the top of the control panel.



8. Disconnect 2 wiring harnesses.

10. Remove 2 Phillips-head screws and the 2 control panel brackets (1 not shown).



11. Turn the control panel over to expose the control board bracket. Release the control board tabs from the control panel and remove the control panel from the range.



9. Remove 2 Phillips-head screws from the top of the control panel (1 not shown).



12. Mark and disconnect the 15 wires and wiring harnesses from the control board.



13. Remove the 4 Phillips-head screws from the control board bracket.





Electronic Range Control (ERC) Pin Locator



- CN2 Oven Sensor, Upper and Lower Door Latch, and Meat Probe
- CN420 Thermostat Switch
- CN6 Lockout Valve Switches
- CN950 Glass Touch Board
- RY500A Bake Assist (Lower Oven Bake Assist)
- RY500B Bake Assist (BROIL)
- TB101 **L1**
- TB102 **N**
- TB540 Convection Fan Direction (jumpered to TB503)
- TB541 GasF Convection Fan HI
- TB542 GasS Convection Fan LO

- TB601 Upper Oven Mode Select (to external relay)
- TB620 Oven Light (OL)
- TB630 Cooling Fan
- TB640 Cooktop Gas Lockout Valve
- TB650 Door Lock Motors Unlock
- TB502 Bake Lower Cavity Glow Bar (BAKE)
- TB503 Convection Fan Enable (jumpered to TB540)
- TB655 Door Lock Motors Lock
- TB660 L1 (to Upper Oven Self-Clean Enable)
- TB661 Upper Oven Self-Clean Enable
- TB680 Thermostat Clean Position Sensing

Maintop Burner Alignment

For proper operation of the burner, alignment of the orifice holder, orifice, and air/gas mixer tube must be correct. The alignment can be checked by placing a 7-mm or 9/32-in. nut driver over the orifice to exaggerate the angle. The nut driver should stand straight, indicating the alignment and gas injection angle is correct. A slight downward pressure may be necessary to seat the nut driver over the orifice retainer ring.

If an angle adjustment is necessary, remove the burner cap, head, and bowl to inspect the orifice holder and the brackets that hold them in place. Adjust as necessary. A misaligned burner may result in uneven flames around the burner head.

Low Flame Simmer Adjustment

Low flame setting adjustments must be made with 2 other burners in operation on a medium setting. This prevents the low flame from being set too low, resulting in the flame being extinguished when the other burners turn on.

- 1. Turn on all surface burners.
- 2. Turn the knob on the burner being adjusted to LO (Low) or SIM (Simmer).
- Remove the knob and insert a small flat blade screwdriver into the valve shaft and turn it clockwise to fully tighten the bypass screw. Repeat this process for each screw.



4. For the tri-ring burner, remove the knob and insert a small flat blade screwdriver into the small hole to the right of the valve shaft and turn down the bypass screw.



Right adjustment screw for tri-ring and rectangle bridge burner (on some models)

Note: If the flame appears too low or unstable, adjust the valve bypass screw slowly (turn counterclockwise) until a stable flame exists for each burner. Make sure 2 other burners are turned on to medium.

Testing the Flame Stability

Test 1: Quickly turn the knob from *HI* to *LOW*. If the low flame goes out, increase the flame size and test again.

Test 2: For each burner being adjusted, quickly open and close the oven door, followed by the storage drawer while observing the flame. If the flame is extinguished by the air currents created by the door or drawer movement, continue adjusting the bypass screw (turn counterclockwise) for a larger flame. Repeat door and drawer openings until the flame is stable.

Surface Burner Igniters

The igniters for the single burners are inserted thru the cooktop and attached to the burner brackets. All of the igniter wires will be included in a single wire harness.

To remove the single burner igniter:

- 1. Remove the grates, burner caps, and heads.
- 2. If able to reach under the burner hole, push the igniter out of the cooktop. Otherwise, carefully insert a small, flat blade screwdriver between the edge of the igniter and the cooktop to gently pry the igniter up.





Caution: When removing the wire from the igniter, do not damage the heat shrink insulation on the wire. If damaged, repair insulation with fiberglass tape.

3. Unplug the wire from the igniter.

Note: When connecting the igniter, ensure the wire is pressed as far as possible into the igniter base.



Cooktop

The cooktop can be removed without disconnecting the gas supply to the range and without disconnecting the manifold inlet gas tube to the manifold.

WARNING: Sharp edges may be exposed when servicing. Use caution to avoid injury. Wear Kevlar gloves or equivalent protection.

To remove the cooktop (Café models):

- 1. Remove the grates, burner caps, and heads.
- 2. Remove the surface burner igniters. (See *Surface Burner Igniters*.)
- 3. Remove the fifteen T-15 Torx screws from the burners.



4. Remove the four T-15 Torx screws (2 not shown) holding the front of the cooktop to the control panel.



5. Remove the three 1/4-in. hex-head screws and the vent trim.



6. Remove the two 1/4-in. hex-head screws from the rear of the cooktop and remove the cooktop from the range.



To remove the cooktop (Profile and GE models):

- 1. Remove the surface burner igniters and the screws holding the burners to the cooktop. (See *To remove the cooktop (Café models)*, steps 1–3.)
- 2. Insert a putty knife between the cooktop and manifold panel 2 inches from either side.
- 3. Lift the cover as you push in each release clip.



Note: The cooktop panel hinge slots rest on a hinge pin mounted to each end plate.



- 4. Lift the front of the cooktop panel upward approximately 45 degrees.
- 5. Lower the rear of the cooktop panel to disengage the hinge slots from the hinge pins.
- 6. Lift the cooktop panel up and over the hinge pins and remove the cooktop panel.



Note: Range shown with control panel removed for clarity.

Tri-Burner Igniter

The front right burner is a 4-orifice power burner. The Café models are rated at 20k BTU and the GE and Profile models are rated at 19k BTU. The outer 3 orifices are connected to a common manifold, and they operate simultaneously. The center orifice is the simmer burner.

To remove the tri-burner igniter:

- 1. Remove the cooktop. (See *Cooktop*.)
- 2. Remove the T-15 Torx screw from the igniter bracket.



Caution: When removing the wire from the igniter, do not damage the heat shrink insulation on the wire. If damaged, repair insulation with fiberglass tape.

3. Unplug the wire from the igniter.

Note: When connecting the igniter, ensure the wire is pressed as far as possible into the igniter base.



Manifold Panel

On Profile and GE models, it is necessary to remove the manifold panel to access the igniter switch assembly and burner valves.

To remove the manifold panel:

- 1. Remove the cooktop. (See Cooktop.)
- 2. Pull the 6 knobs off the control panel.
- 3. Remove the 2 Phillips-head screws from the top of the manifold panel (1 on each side).



4. Remove the 4 Phillips-head screws from the bottom of the manifold panel (2 on each side).



5. Remove the 2 Phillips-head screws and two T-15 Torx screws holding the control panel to the burner valves.





6. Disconnect the 4 wires from the manifold cover.



Igniter Switch Assembly

Each surface burner utilizes a switch housing that is wired to a single harness. Inside each housing are 2 switches. When the burner valve is advanced from the **OFF** position to the **LITE** position, the igniter switch closes. The closed igniter switch sends line voltage to the spark module and activates all surface burner igniters. At the same time, the lockout error switch opens and removes previously applied line voltage from the ERC at location **In WM**. When the cooktop is locked out, this removed voltage allows the ERC to display **ERR** and sound a continuous error tone. This informs the user that they cannot operate the cooktop in the lockout mode.



Left Rear Switch Housing Shown In Off Position (cover removed for clarity)

Valve Position	Igniter Switch	Lockout Switch
OFF	Open	Closed
LITE	Closed	Open
On	Open	Open

Igniter Switch Assembly Test

To test the igniter switch assembly on Café models, remove the control panel. (See *Touch Panel and Electronic Range Control (ERC)*.) To test the igniter switch assembly on Profile and GE models, remove the manifold panel. (See *Manifold Panel*.)

Disconnect the igniter switch assembly harness. Check for continuity on the switch harness connector.

Note: The black wire changes to blue in the final right rear burner switch. For that switch, check for continuity between the black and blue wires, instead of black and black.

Valve Position	Wire Color	Continuity
OFF	Black to Black	0 Ω
LITE	Black to Black	Open
On	Black to Black	Open
OFF	Red to Violet	Open
LITE	Red to Violet	0 Ω
On	Red to Violet	Open

The switch housing and harness is replaced as 1 assembly.

To remove the igniter switch assembly:

- 1. On Café models, remove the control panel. (See *Touch Panel and Electronic Range Control (ERC)*.)
- 2. On Profile and GE models, remove the manifold panel. (See *Manifold Panel*.)
- 3. On Profile and GE models where the igniter switch is partially covered by the manifold bracket, remove the burner valve from the manifold. (See *Burner Valves*.)



- 4. Remove the rear cover. (See *Rear Cover*.)
- 5. Disconnect the igniter switch harness.



6. Pull each igniter switch off the burner valve stem and remove the igniter switch assembly.

Note: The bottom of each switch is molded to conform to the top of the valve for a locked-in fit. For proper igniter operation, each switch must be locked in to the top of the valve. When installing the igniter switch assembly, align each switch to the valve stem and body, then push the switch down firmly.



Burner Valves

To remove the single and tri-burner valves (Café models):

- 1. Remove the control panel. (See *Touch Panel and Electronic Range Control (ERC)*.)
- 2. Pull the igniter switch off the burner valve stem. (See *Igniter Switch Assembly*.)
- 3. For single burner valves, remove the 13-mm nut and 1/4-in. hex-head screw.



4. For the tri-burner valve, remove the 13-mm nut, the 9/16-in. nut, and 1/4-in. hex-head screw.



5. Separate the burner tube from the burner valve.

Caution: Ensure the valve seal is in place before installing the valve.



To remove the single burner valve (Profile and GE models):

- 1. Remove the manifold panel. (See Manifold Panel.)
- 2. Pull the igniter switch off the burner valve stem. (See *Igniter Switch Assembly*.)
- 3. Remove the 13-mm nut and 1/4-in. hex-head screw.


4. Separate the burner tube from the burner valve.

Caution: Ensure the valve seal is in place before installing the valve.



Spark Module

The spark module receives line voltage when a surface burner knob is placed in the LITE position. The line voltage input to the spark module can be checked on the ERC.

To test for line voltage to the spark module:

- 1. On Profile and GE models, place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.)
- 2. On Café models, remove the rear cover. (See *Rear Cover.*)
- 3. Connect power to the range.
- 4. Turn off the gas supply or lock out the surface burners. (See *Control Features*.)
- 5. With a burner knob turned to the LITE position, test for line voltage (120 VAC) from the violet wire at the switch harness to N (neutral) on the ERC.

To remove the spark module (Profile and GE models):

- 1. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*, steps 1-4.)
- 2. Mark and disconnect the 8 wires from the spark module.



To remove the spark module (Café models):

- 1. Remove the rear cover. (See *Rear Cover*.)
- 2. Mark and disconnect the 8 wires from the spark module.



3. Release the spark module from the range by pressing the 2 tabs.



Fan Apparent Device

The Café models with the cooling fan include a Fan Apparent Device (FAD). This thermostat disables the ovens if over temperature occurs due to a cooling fan failure. The FAD is a self-resetting thermostat, which opens at 265°F and closes at 225°F.

If either oven is terminating self-clean before the time-out, check the fan and FAD operation.

To remove the fan apparent device:

- 1. Remove the cooktop. (See Cooktop.)
- 2. Disconnect the 2 wires from the FAD.
- 3. Remove the two 1/4-in. hex-head screws.



Door Lock Assembly

The door lock assembly consists of a lock motor cam and switch assembly, lock hook, and mounting plate.

The lock motor is energized when the control is set for the self-clean mode. The K4 relay contacts will close and complete the circuit that supplies the voltage to the lock motor. On double ovens, the door locks are connected in series and the lower door lock is always driven open/closed first. The lower door lock has an extra switch that switches L1 to the driving circuit of the upper door motor.

NOTE: The control display flashes **LOCK** if the door switch is in the **C** to **NC** position (door open).

• LOCK flashes on and off in the display if one of the door lock motors is in motion. When the door is locked, LOCK remains illuminated in the display.

• CAM – The cam on the motor performs two functions:

- 1. Positions the lock hook in the door to prevent opening during clean operation.
- 2. Operates the lock switches, which tell the control if the door is unlocked or locked and ready for clean operation.

NOTE: The Café models with a cooling fan also use the cam on the upper door to switch between high and low fan speed cooling modes. The lower door cam has an additional switch that switches L1 to the upper door motor once it has reached the desired state.



The door lock motor has an approximate resistance value of 3 k $\Omega.$

To remove the upper oven door lock assembly (Café models):

- 1. Remove the cooktop. (See Cooktop.)
- 2. Remove the heat shield and fiber barrier to expose a cover over the latch assembly. (See *Touch Panel and Electronic Range Control (ERC)*, steps 6-7.)
- 3. Remove the two 1/4-in. hex-head screws from the lock assembly cover.
- 4. Slide the lock assembly cover back to release it from the tabs.



5. Remove the two 1/4-in. hex-head screws holding the door lock assembly to the frame.



Caution: It is possible to connect the switch wiring incorrectly to the lock assembly. When connecting the wiring, make sure it is properly connected to the lock assembly before turning the power back on.

6. Remove the door lock assembly from the range, then mark and disconnect the 8 wires.



To remove the upper oven door lock assembly (Profile and GE models):

- 1. Remove the cooktop. (See Cooktop.)
- 2. Remove the two 1/4-in. hex-head screws holding the door lock assembly to the frame.



3. Remove the door lock assembly from the range, then mark and disconnect the 6 wires.



⁽Continued next page)

To remove the lower oven door lock assembly:

- 1. Remove the left side panel. (See Side Panel.)
- 2. Remove the two 1/4-in. hex-head screws holding the door lock assembly to the frame.



3. Disconnect the wires from the lower oven TCO (see *Cavity Thermal Cut Out (TCO)*), the white wire from the latch motor, and the ground wire from the lock assembly bracket.

- 5. Pull the lock assembly out from the left side of the frame.
- 6. Mark, then disconnect the 11 wires attached to the lock assembly or transfer the wires, 1 at a time, to the replacement lock assembly.





4. Remove the wire bundle from the 2 wire retainers.



Motorized Door Lock Circuit Information

There are two circuits that control the door lock. These are the lock motor circuit and the lock switch circuit.

The lock motor circuit applies voltage (120 VAC) to the lock motor. This circuit is from L1 thru the door switch, lock relay, and lock motor to neutral. For this circuit to be complete, the lock relay must be energized by the control and the door must be closed. An open oven door results in LOCK DOOR flashing in the display after the control has been programmed for the clean cycle and START has been pressed.

The lock switch circuit tells the control if the lock motor is in the unlocked or locked position or somewhere in between. There are two lock switches mounted to and operated by the lock motor.

The lock switch circuit runs from the control, thru 1 of the lock switches (switch 2 for unlocked or switch 1 for locked), and back to the control. If neither switch is closed, and the oven temperature is below 715°F (379°C) for double ovens or 770°F (410°C) for single ovens, the control will energize the lock motor circuit until the correct switch closes to complete the circuit. If the circuit to the correct switch is open, the lock motor will run continuously with the oven below 715°F (379°C) for double ovens or 770°F (410°C) for single ovens.

Clean Cycle and Lock Sequence

- 1. Program the clean cycle:
- Press the SELF CLEAN pad. Four hours (4:00) appears on the time display. (Cleaning time can be changed from the 4-hour starting point by pressing the SELF CLEAN pad a second time.)
- After **START** has been pressed, **ON** illuminates to indicate the cycle has begun.
- 2. Locking the door:
- After programming the clean cycle and pressing the **START** pad, the control energizes the lock relay. Voltage (120 VAC) is applied to the lock motor circuit. The oven door must be closed before the lock motor can run. **LOCK DOOR** will flash and the control will beep until the door is closed.
- The lock motor turns a cam mounted to the motor shaft.
- LOCKED DOOR flashes on and off in the display while the lock motor is in motion.

- As the cam revolves about 1/2 rotation (approximately 12 seconds), it moves the lock hook into a corresponding slot in the oven door to secure it.
- The movement of the cam closes lock switch 1, which tells the control the door is locked. The control then removes power from the lock motor circuit by de-energizing the lock relay.
- The lock motor stops and lock switch 1 is held closed by the cam thru the clean cycle.
- LOCKED DOOR stops flashing and remains illuminated in the display.
- **ON** illuminates in the display.
- 3. During the clean cycle:
- The broil relay closes and the broil burner begins to heat. The broil burner operates alone during the first 30 minutes of the clean cycle, followed by the bake burner alone during the remaining time.
- As the clean cycle progresses and the temperature of the oven control area rises, the cooling fans are activated.
- A normally closed thermal switch is mounted on a bracket in front of the cooling fan. This switch is in the lock switch circuit and opens the lock switch circuit in the event of an overtemperature condition in the control area (caused by a stalled fan, fan switch failure, or similar condition). An F2 (overtemperature) failure code will appear on the control if this switch opens while the oven is above 715°F (379°C) for double ovens or 770°F (410°C) for single ovens. With the oven between 400°F (204°C) to 600°F (315°C), the clean cycle will be canceled by the opening of the switch and the control will revert back to the time-of-day mode. Below 400°F (204°C), the lock motor will revolve continuously, and the words LOCKED **DOOR** will flash on the control until the circuit is established.

Range Components

WARNING: Sharp edges may be exposed when servicing. Use caution to avoid injury. Wear Kevlar gloves or equivalent protection.

Note: When testing certain components on Profile and GE models, it is easier to check their resistance on the ERC by placing the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC).*) For Café models, if possible, remove the rear cover to check certain component's resistance. (See *Rear Cover.*)

Oven Door Removal

The upper and lower doors use different types of hinges.

Caution: The door is very heavy. Use the correct lifting procedure. Do not lift the door by the handle.

To remove the upper oven door:

- 1. Open the door fully.
- 2. Lift each hinge lock toward the oven frame until it stops. A tool, such as a small flat blade screwdriver, may be required.



- 3. Close the door 45 degrees until the hinge lock rests on the oven frame.
- 4. Press down simultaneously on each release button located on the top of the hinges.
- 5. Lift the door up until it is clear of the door hinges.



- 6. Place the door assembly on a protective surface.
- 7. Pull the hinge arms out slightly to relieve pressure on the locking tabs.
- 8. Move the hinge locks down onto the hinges to their original position.
- 9. Push the hinges toward the range until they close.

To remove the lower oven door:

- 1. Open the door fully.
- 2. Pull the hinge locks back to the unlocked position. A tool, such as a small flat blade screwdriver, may be required.



- 3. Close the door 45 degrees until the hinge lock rests on the door frame.
- 4. Lift the door up and out until the hinge arm clears the slot.



5. Place the door assembly on a protective surface.

Oven Door Assembly

The oven door can be separated into 2 assemblies. The outer door assembly consists of the outer panel, reinforcement plate, and a replaceable door handle. The inner door assembly is made up of the inner panel, inner glass assembly, retainers, heat barrier, door gasket, and replaceable door hinge assemblies.

To remove the lower outer door assembly:

- 1. Remove the door. (See Oven Door Removal.)
- 2. Place the door assembly on a protective surface with the gasket side up.
- 3. Remove the four 1/4-in. hex-head screws from the bottom of the outer door assembly.



4. Remove the two T-15 Torx screws and washers from the inner door assembly.



Note: The inner door assembly is heavier than the outer door assembly.

5. Separate the inner door assembly from the outer door assembly.

6. Remove the six 1/4-in. hex-head screws (3 on each side) that hold the door handle to the outer door assembly.



To replace the lower inner door assembly:

- 1. Remove the outer door assembly. (See *To remove the lower outer door assembly*.)
- 2. Remove the four T-15 Torx screws (2 on each side) that attach each door hinge to the inner door. Carefully turn the door over and remove both door hinges.



3. Remove the 2 Phillips-head screws (1 on each side) from the bottom of the inner door.



4. Remove the 10 Phillips-head screws and the heat barrier from the inner door panel.



5. Remove the inner glass assembly from the inner door.



6. Remove the door gasket and insulation from the inner door.



To remove the upper outer door assembly:

- 1. Remove the door. (See Oven Door Removal.)
- 2. Place the door assembly on a protective surface with the gasket side up.
- 3. Remove the 5 Phillips-head screws, bracket, and inner glass panel.



4. Remove the 6 Phillips-head screws (3 on each side) from the bottom of the outer door.



5. Remove the 2 Phillips-head screws from the inner door.



Note: The inner door assembly is heavier than the outer door assembly.

- 6. Separate the inner door assembly from the outer door assembly.
- 7. Remove the six 1/4-in. hex-head screws (3 on each side) that hold the door handle to the outer door.



To replace the upper inner door assembly:

- 1. Remove the outer door assembly. (See *To remove the upper outer door assembly*.)
- 2. Remove the four T-15 Torx screws (2 on each side) that attach each door hinge receiver to the inner door. Carefully turn the door over and remove both door hinge receivers.



3. Remove the 10 Phillips-head screws and the heat barrier from the inner door.



4. Remove the inner glass assembly and insulation from the inner door.



Regulator

To remove the regulator:

- 1. Remove the range from its installation.
- 2. Remove the 9/16-in. and 11/16-in. hex-head nuts holding the gas lines to the regulator.
- 3. Remove the three 1/4-in. hex-head screws and the regulator bracket.



4. Remove the three 1/4-in. hex-head screws from the regulator bracket.



Rear Cover

To access the rear cover, it is necessary to remove the range from its installation. The rear cover is attached using twenty-four 1/4-in. hex-head screws (2 not shown).



Side Panel

To access the side panel, it is necessary to remove the range from its installation. The side panel must be removed to access the upper and lower oven TCOs, gas lockout valve, latch assembly, and upper oven lockout relay.

To remove the side panel:

- 1. On Café models, remove the control panel. (See *Touch Panel and Electronic Range Control (ERC)*.)
- 2. On Profile and GE models, remove the manifold panel. (See *Manifold Panel*.)
- 3. Remove the rear cover. (See *Rear Cover*.)
- 4. Remove the remaining 1/4-inch hex-head screws holding the rear of the side panel to the frame.



5. Remove the Phillips-head screw from the front panel.



6. Remove 4 Phillips-head screws from the top of the side panel.

7. On Profile and GE models, remove the extra 1/4in. hex-head screw holding the side panel to the rear touch panel and ERC bracket.



8. Carefully swing the side panel away from the range. Use a large flat blade screwdriver to pry the panel out of the retainer clip while pulling the top front of the side panel out.





Lockout Valve

The range lockout feature (on some models), will allow the user, thru the ERC control, to lock out the surface burners, oven burners, and control panel, so they cannot be activated. (See *Control Features*.) The purpose of the lockout valve is to shut off the gas supply to the surface burners when this feature is selected.

Note: The cooktop is locked out when the oven is in self-clean mode. (See *Control Features*.)

The lockout valve will not operate if a surface burner is in the on position. The **ERC AUX** terminal sends power across the surface burner switches, when they are closed, to the motor lockout valve.



The gas lockout valve incorporates 2 switches to allow the ERC to know the position of the lockout valve. The yellow to orange wires close when the valve is open, which allows gas to flow to the cooktop. When the switch opens, the yellow to silver wires close when the valve is closed. Loss of the yellow to orange contact will cause the lockout motor to run continuously, and LOC will flash in the ERC display. Loss of the yellow to silver wires will cause the lockout motor to run continuously when LOCKOUT or SELF CLEAN is selected and LOC will flash in the display. LOC will display steady when the cooktop is locked out.

	YR &4 YR	
	YX BI YX	
YX NO SX	sx 🚬 sx	
	ox 🔊 ox	
LOCK OUT VALVE SWITCHES	~	ERC

SWITCH POSITION – LOCKOUT VALVE OPEN



SWITCH POSITION - LOCKOUT VALVE CLOSED



Note: The control display will show **LOC ON** if the range lockout pad is touched and the cooktop lock switch is in the closed position.

Control display will show LOC OFF if the range lockout pad is touched and the cooktop unlock switch is in the closed position.

• LOC will flash on and off in the display while the lock motor is in motion. When the cooktop is locked, LOC ON remains illuminated in the display.

• CAM – The cam on the motor performs two functions:

- 1. It positions the lock valve in the open or closed position.
- 2. It operates the lock switches, which tell the control if the lock valve is unlocked or locked.

The lock valve is a ball-type valve that rotates 1/4 turn per command. The ball, placed in the passageway (thru which gas flows), has a hole thru it that enables the valve to open and close. When the ball is positioned with its hole lined up with the passageway, the gas flows thru the hole and the valve is considered open. When the ball is positioned so the hole is perpendicular to the passageway, the gas cannot pass thru and the valve is considered closed. The ball is controlled by the cam located outside the valve.

BALL POSITION – LOCKOUT VALVE OPEN





INLET VIEW

OUTLET VIEW

BALL POSITION – LOCKOUT VALVE CLOSED



INLET VIEW



OUTLET VIEW

On café models, the resistance of the lock motor can be checked by removing the rear cover. (See *Rear Cover.*) The lock motor has an approximate resistance value of $2.1 \text{ k}\Omega$.

On Profile and GE models, the resistance of the lock motor can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.) Test between **N** and **COOK** for the approximate resistance value.

To remove the lockout valve:

- 1. Remove the rear cover. (See *Rear Cover*.)
- 2. Remove the left side panel. (See *Side Panel*.)
- 3. Mark and disconnect the 6 wires from the lockout valve.
- 4. Remove the two 1/4-in. hex-head screws from the lockout valve bracket.



5. Use an 11/16-in. wrench to disconnect the inlet and outlet tube hex-head nuts from the valve.



Cavity Thermal Cut Out (TCO)

The upper and lower cavity TCOs are located behind the left side panel. Both oven cavity TCOs are wired in series between the latching motors and the ERC. If either TCO opens during a clean cycle, the cycle will terminate and the ERC will return to Time Of Day (TOD). If either TCO is open at the start of a clean cycle, the ERC will beep until the cancel button is pressed; no failure code will be displayed. The error code will be logged into the ERC memory and can be retrieved in diagnostic mode. (See *Electronic Range Control (ERC) Failure Codes.*) Both TCOs open at 176°F and close at 158°F.



To remove the cavity TCO:

- 1. Remove the left side panel. (See Side Panel.)
- 2. Disconnect the 2 wires from the TCO.
- 3. Remove the two 1/4-in. hex-head screws that hold the TCO to the oven cavity.

Lockout Relay

The ERC operates a lockout relay that prevents the upper oven from operating when the lower oven is in self-clean. When the lower oven is placed into self-clean, the ERC sends line voltage to the lockout relay. The energized relay disconnects line voltage to the upper oven thermostat control. The ERC also uses this relay to terminate the upper oven selfclean cycle at a preset 5-hour cycle.



The ERC activates the lockout relay from the **OUT WD** terminal when in the clean cycle. When powered, the relay opens the cycling contact circuit of the thermostat (**NC** contact). In the upper oven clean cycle, the ERC powers the thermostat thru the **MDL** terminal.



To remove the lockout relay:

- 1. Remove the left side panel. (See Side Panel.)
- 2. Disconnect the 5 wires from the lockout relay.
- 3. Remove the two 1/4-in. hex-head screws that hold the lockout relay to the bracket.



Cooling Fan

The Café models use a single squirrel cage cooling fan in the right rear corner of the cooktop. Air is pulled in by the fan blades and circulated in the component compartment located under the burner box. The air is exhausted thru louvers below the control panel and out slots above the door.

During cooking modes, the cooling fan turns on when the sensor in the oven cavity senses a temperature over 350°F (177°C). It turns off when the cooking mode is canceled and the oven drops below 250°F (121°C). During cleaning modes, the fan turns on when the doors and cooktop gas lockout valve lock. It turns off when the sensor drops below 175°F (79°C).

The cooling fan can be checked by removing the oven vent trim. (See *Cooktop*, step 5.) It has an approximate resistance value of 24 Ω .

To remove the cooling fan:

- 1. Remove the cooktop. (See Cooktop.)
- 2. Disconnect the 3 wires from the fan motor and the wire clip.



3. Remove the six 1/4-in. hex-head screws and the cooling fan.



Oven Gaskets

The oven gaskets are attached to the range frame with push-in spring clips. To remove the oven gaskets, pull the ends out of the oval slots in the frame and disengage the spring clips.



Lower Oven Door Hinge Receiver

To remove the lower oven door hinge receiver:

- 1. Remove the left side panel. (See Side Panel.)
- 2. Remove the two T-15 Torx screws that attach the hinge receiver to the frame.



Upper Oven Door Hinge

The upper oven door hinge is attached to the frame with two T-15 Torx screws. To replace it, the left side panel must be removed. (See *Side Panel*.)

To remove the upper oven door hinge:

- 1. Remove the left side panel. (See *Side Panel*.)
- 2. Remove the 4 Phillips-head screws and the bracket.



- 3. Remove the two T-15 Torx screws that attach the hinge to the frame.
- 4. Pull the hinge toward the back of the range to remove it.



Door Switch

The oven utilizes a door switch located on the left side of the door frame which is accessible from the front. The door switch monitors the position of the oven door and provides this information to the control board.

To remove the door switch:

- 1. Disconnect power to the range.
- 2. Pull the switch forward to locate the ends of 2 spring clips (1 on each side).
- 3. Insert a small flat blade screwdriver on 1 of 2 spring clips and depress the spring clip while pulling the switch from the door frame.
- 4. Insert the small flat blade screwdriver on the other spring clip, depress the spring clip, and pull the switch from the door frame.



5. Disconnect the door switch wire harness.



Oven Components

Note: When testing certain components on Profile and GE models, it is easier to check their resistance on the ERC by placing the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC).*) For Café models, if possible, remove the rear cover to check certain component's resistance. (See *Rear Cover.*)

Oven Burner Ignition System

The igniter is a Norton-style, rectangular glow bar. The ignition circuit consists of the electronic control, the igniter, and the gas lockout valve. The 3 components are wired in series.

The most important points to know about the ignition system are:

- The igniter resistance decreases as the igniter surface temperature increases.
- The safety valve operates by current, not voltage.

From a cold start, the igniter needs 30–60 seconds, with voltage applied, to reduce the electrical resistance enough to provide a minimum of 2.9 amps of current flow in the series circuit. This is the required current flow needed for the safety valve to open and supply gas to the burner. The glow bar should provide a steady current flow between 3.2–3.6 amps flowing in the circuit. The igniter will remain energized at all times during burner operation. If the igniter glows red, but does not draw at least 2.9 amps, the fault is usually with the igniter, not the valve. Always check the gas lockout valve for a locked-out condition.

Glow Bar Igniter

WARNING: The igniter glow bar and its protective cage are 1 assembly on the Norton-style igniter. The round Carborundum igniter cannot be substituted for the rectangular Norton igniter.

Check the glow bar circuit with a clamp-on ammeter. If the igniter glows red, but the circuit does not draw at least 2.9 amps, the fault is likely with the igniter, not the valve.



Note: If the igniter glows, but ignition does not occur, make sure the gas lockout valve on the pressure regulator is in the open position.

Slow ignition can be caused by one or more of the following conditions:

- 1. Blockage of primary air intake: The hole beneath the bake orifice hood must be open and free of insulation.
- Blockage of secondary air intake holes: Examine the oven burner box (galvanized box surrounding oven burner) and inspect the single row of secondary holes beneath the bake burner for signs of blockage. Also, be sure items in the storage drawer do not push against the ceiling of the drawer area. If pushed hard enough, the ceiling will flex upward and close off the secondary air holes.
- 3. Improper alignment of orifice hood and burner: Orifice must be pointing straight into the burner venturi.
- 4. Improper air/gas adjustment.
- 5. Blockage of burner crossover slots: Crossover slots must be open and free of burrs.
- 6. Improper installation: Failure to seal all openings in the wall behind the range and the floor below the range may permit substantial drafts, which can affect ignition.
- The gas control valve should draw approximately 3.3 to 3.6 amps when operating. Check by measuring the amperage in L1 to the oven control. This can be done by removing the control panel glass and clock/insert assembly.

Broil Burner and Glow Bar Igniter

To check the resistance of the broil burner glow bar igniter on Café models, remove the rear cover. (See *Rear Cover.*) The glow bar igniter has an approximate resistance value of 226 Ω at room temperature. An open measurement indicates an open valve winding, open broil igniter, or open wiring.

The resistance of the broil burner glow bar igniter on Profile and GE models can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.) Turn the upper oven knob to **BROIL** and test between the red wire on pin TB661 (**MCOM**) and TB102 (**N**). Check for the approximate resistance value of 228 Ω . An open measurement indicates an open valve winding, open broil igniter, or open wiring.

To remove the broil burner and glow bar igniter:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the 1/4-in. hex-head screw that attaches the broil burner to the top of the oven cavity.



3. Remove the two 1/4-in. hex-head screws that attach the glow bar igniter to the side of the broil burner.



4. Pull the broil burner off the orifice hood and remove the burner from the oven cavity.



5. Remove the 1/4-in. hex-head screw from the igniter wiring cover and remove it from the oven cavity.



- 6. Remove the rear cover. (See *Rear Cover*.)
- 7. Disconnect the igniter wiring harness and remove the glow bar igniter from the oven cavity.



Note: When installing the broil burner, be sure the orifice hood is inserted into the burner inlet opening.

Bake Assist

A bake assist element is used on all Café models and some Profile models. It is located in the lower oven.

To remove the bake assist:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the rear cover. (See *Rear Cover*.)
- 3. Disconnect the 2 wires from the rear of the bake assist.



4. Remove the four 1/4-in. hex-head screws and the bake assist.





1 on each side.

Bake Burners and Glow Bar Igniters

To check the resistance of the bake burner glow bar igniter on Café models, remove the rear cover. (See *Rear Cover.*) The glow bar igniter has an approximate resistance value of 233 Ω at room temperature. An open measurement indicates an open valve winding, bake igniter, or open wiring.

The resistance of the bake burner glow bar igniter on Profile and GE models can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.) Check for the approximate resistance value of 228 Ω . An open measurement indicates an open valve winding, open bake igniter, or open wiring.

Upper Oven

To remove the bake burner and replace the glow bar igniter:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the rear cover. (See *Rear Cover*.)
- 3. Remove the two 1/4-in. hex-head screws (1 on each side) from the oven floor cover.



4. Grasp the oven floor slots, lift the rear of the oven floor cover, then slide the cover forward and remove it from the oven cavity.



(Continued next page)

5. Remove the two 1/4-in. hex-head screws that attach the burner baffle to the burner box.

Note: When installing the burner baffle, make sure the 2 tabs are secured in the rear oven cavity wall.



- 6. Disconnect the bake igniter wire harness.
- 7. Remove the wire tie.



8. Remove the three 1/4-in. hex-head screws that attach the burner to the burner box.





9. Remove the two 1/4-in. hex-head screws that attach the bake igniter to the side of the burner and remove the burner from the oven cavity.



- 10. Remove the top 1/4-in. hex-head screw from the gas inlet tube shield.
- 11. Strip 2 inches of insulation off a length of stranded wire (at least 18 inches).
- 12. Route the stripped end of the wire thru the igniter connector opening and twist it around the igniter wires.



13. Tape the stranded and igniter wires together to act as a retrieval wire.



Note: As the following step is performed, it will be necessary to guide the igniter harness thru the opening in the rear panel.



- 14. Carefully pull the igniter and part of the retrieval wire thru the opening at the bottom right corner of the upper oven.
- 15. Remove the retrieval wire and, as in steps 13 and 14, attach it securely to the replacement igniter harness.
- 16. Carefully pull the retrieval wire and igniter harness to the opening in the rear panel.
- 17. Use a small flat blade screwdriver to guide the bake igniter harness thru the opening.



18. Remove the retrieval wire and connect the igniter wire harness.

Lower Oven

To remove the bake burner and glow bar igniter:

- 1. Follow steps 1–5 from the upper oven procedure to remove the bake burner and replace the glow bar igniter.
- 2. Disconnect the bake igniter wire harness.



3. Release the bake igniter wiring from the clip.



4. Remove the two 1/4-in. hex-head screws that attach the bake igniter to the side of the burner, then pull the igniter out of the oven cavity.



5. Remove the 2 Phillips-head screws from the top of the metal shield and the three 1/4-in. hex-head screws from the bottom. Remove the metal shield from the oven cavity.



6. Remove the three 1/4-in. hex-head screws that attach the burner to the burner box.





7. Remove the bake burner from the range.

Bake and Broil Burner Flame Adjustments

WARNING: Adjustments require disassembly of the burner section. To prevent handling hot parts, the oven should be cool.

Note: A small amount of odor is normal and will be present when the range is first turned on. If there is a strong odor, the bake and broil burner assemblies should be inspected.

Bake and Broil Burner Test

- 1. Remove the oven door. (See *Oven Door Removal*.)
- 2. Remove the oven bottom and flame spreader (burner baffle). (See *Bake Burners and Glow Bar Igniters*, steps 1-5.)
- 3. Install the oven door.
- 4. Close the oven door, set the control for **BAKE**, and observe the bake burner flame.
- 5. Observe the flames for a period of at least 2 minutes. The flame should not lift or blow off the burner during any period of operation. They should be blue with an approximately 1/2-in. to 3/4-in. (13-mm to 19-mm) inner cone.

Inner Cone of Flame



6. Set the control for **BROIL** and repeat step 5.

Note: The door should remain closed during this test.

To correct any flame problems, perform the following procedures:

Bake Burner

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the bake burner. (See *Bake Burners and Glow Bar Igniters*.)
- 3. Inspect the primary air opening. The opening must be clear and free of insulation all the way down to the metal shield below the 0.314-in. (8-mm) opening.
- 4. Use a screwdriver to loosen the air shutter adjustment screw.
- 5. Using a drill bit as a gauge, adjust the air shutter to 11/32 in. (8.7 mm).
 - a. If the flames were yellow during the test, open the air shutter an additional 1/32 in. (0.79 mm.)
 - b. If the flames blow away or fluttered from the burner during the test, close the air shutter an additional 1/32 in. (0.79 mm).



- 6. Tighten the air shutter adjustment screw.
- 7. Install and close the oven door. Before installing the burner baffle and oven floor cover, set the control for **BAKE** and observe the bake burner flame for any flame problems.

Note: Examine the burner baffle for signs of warpage. If warped, the baffle will have to be replaced.

 Install the burner baffle and oven floor cover. With the customer present, test the oven from a cold start to be sure any odor problems have been corrected.

Broil Burner

The broil burner is accessible and located in the top center of the oven.

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the broil burner. (See *Broil Burner and Glow Bar Igniter*.)
- 3. Inspect the primary air opening. The opening must be clear all the way down to the metal shield below the 0.314-in. (8-mm) opening.
- 4. Use a screwdriver to loosen the air shutter adjustment screw.
- 5. Adjust the air shutter to 11/32 in. (8.7 mm).
 - a. If the flames were yellow during the test, open the air shutter an additional 1/32 in. (0.79 mm).
 - b. If the flames blow away or fluttered from the burner during the test, close the air shutter an additional 1/32 in. (0.79 mm).



- 6. Tighten the air shutter adjustment screw.
- 7. Install the oven door. Set the control for **BROIL** and observe the broil burner flame for any flame problems.
- 8. With the customer present, test the oven from a cold start to be sure any odor problems have been corrected.

Convection Fan Cover

To remove the convection fan cover:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the 6 Phillips-head screws that attach the convection fan cover to the back wall of the oven cavity.

Note: Install the convection fan cover with the arrow pointing up.



Convection Fan Motor

On Café models, check the convection fan motor resistance from the back of the range. Remove the rear cover (see *Rear Cover*) and the gas valve cover (see *Lower Oven Gas Valve*, step 2). Remove the four 1/4-in. hex-head screws (2 on each side) and the convection fan motor cover from the rear of the range.

On Profile and GE models, the resistance of the convection fan can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.) Test the low-speed winding between TB102 (**N**) and the brown wire on TB542 (**FAN LO**) for the approximate resistance value of 26 Ω . Test the high-speed winding between TB102 (**N**) and the blue wire on TB541 (**FAN HI**) for the approximate resistance value of 20 Ω . Both approximate resistance values are at room temperature.

To remove the convection fan motor:

- 1. Remove the convection fan cover. (See *Convection Fan Cover*.)
- 2. Remove the 4 Phillips-head screws that attach the convection fan motor to the back wall of the oven cavity.



3. Disconnect the 3 wires from the convection fan motor.





4. Remove the 13-mm nut from the convection fan blade by securely holding the blade and turning the nut clockwise.



Note: The fan blade is attached to the D-shaped motor shaft with a left-hand thread.

Convection Fan Notes:

- The convection fan will not come on if the door switch is open or while there is a call for heat from the oven temperature sensor (gas burner on).
- The fan will only start to operate 10 seconds after the burners turn off.
- The fan has a high and low speed and will only run in one direction.

If the convection fan is not working, check the following:

- Check to make sure the fan shaft is not rubbing on the oven liner.
- Check the convection fan motor resistance.
- Check for power at the convection fan terminals.

Meat Probe Outlet

The meat probe resistance should be between 30 $k\Omega$ and 50 $k\Omega$ at room temperature.

The meat probe outlet is located in the lower oven cavity toward the front, upper left corner. To access the probe outlet, open the lower oven door and remove the 2 Phillips-head screws that attach the outlet to the oven cavity.



Pull the meat probe outlet down from the oven wall approximately $1\frac{1}{2}$ inches.

Note: When replacing the meat probe outlet, cut the probe wires and splice the new probe using approved heat-resistant connectors.



Temperature Sensor

The temperature sensor is used on all single ovens and the lower cavity on double ovens.

On Café models, the resistance of the temperature sensor can be checked from the rear of the range after the rear cover has been removed. (See *Rear Cover*.)

On Profile and GE models, the resistance of the temperature sensor can be checked at the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.) Disconnect the wire harness from location CN2. On the wire harness connector, test between the pin at location 6 and the pin at location 8.

The temperature sensor has an approximate resistance value of:

- 1100 Ω at room temperature
- 1650 Ω at 350°F (177°C)
- 2650 Ω at clean temperature

To remove the temperature sensor:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the rear cover. (See *Rear Cover*.)
- 3. Disconnect the sensor wire harness. Note the location of the sensor wiring entry hole.



4. Remove the two 1/4-in. hex-head screws that hold the sensor to the rear wall of the oven cavity.



5. Gently pull the sensor wire harness into the oven.

Notes:

- 1. When installing the temperature sensor, use a small flat blade screwdriver to push and guide the sensor wire harness into the oven liner.
- 2. Ensure displaced insulation around the wiring entry hole is returned to its original position.

Thermostat

A thermostat is used on double oven models in the upper oven cavity.

To remove the thermostat:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the rear cover. (See *Rear Cover*.)
- 3. On Profile and GE models, remove the cooktop. (See *Cooktop*.)
- 4. On Café models, remove the right side panel. (See *Side Panel*.)
- 5. Compress the thermostat capillary clips to remove them from the back wall of the oven cavity.
- 6. Unsnap the thermostat capillary from the clips.



7. Pull the thermostat capillary out of the rear panel hole or holes.

Café Models



Profile and GE Models



8. Mark and disconnect the 10 wires from the upper oven switch and remove the thermostat from the range.





Upper Oven Gas Valve

The upper oven gas valve on Café models can be checked by removing the rear cover. (See *Rear Cover*.) Each of the oven control valve bake and broil windings have an approximate resistance value of 1 Ω . Each winding is wired in series with an igniter.

On Profile and GE models, the continuity of each valve winding can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.)

Bake Winding:

Turn the upper oven knob to bake and test between the red wire on pin TB661 (MCOM) and TB102 (N). Check for the approximate resistance value of 395 Ω . An open measurement indicates an open valve winding, open bake igniter, or open wiring.

Broil Winding:

Turn the upper oven knob to **BROIL** and test between the red wire on pin TB661 (**MCOM**) and TB102 (**N**). Check for the approximate resistance value of 228 Ω . An open measurement indicates an open valve winding, open broil igniter, or open wiring.

To remove the upper oven gas valve:

- 1. Remove the oven door. (See Oven Door Removal.)
- 2. Remove the rear cover. (See Rear Cover.)
- 3. Remove the three 1/4-in. hex-head screws from the gas inlet tube shield.





- 4. Mark and disconnect the 4 wires from the valve.
- 5. Use a 9/16-in. wrench to disconnect the gas inlet tube, the bake outlet tube, and the broil outlet tube from the gas valve.
- 6. Carefully remove the tubes from the valve.
- 7. Remove the two 1/4-in. hex-head screws that attach the gas valve to the rear panel.



Lower Oven Gas Valve

The upper oven gas valve on Café models can be checked by removing the rear cover. (See *Rear Cover*.) The lower oven control valve bake winding has an approximate resistance value of 1 Ω . The winding is wired in series with an igniter.

On Profile and GE models, the continuity of the valve winding can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.)

Bake Winding:

Test between the yellow wire on pin TB502 (**BAKE**) and TB102 (**N**). Check for the approximate resistance value of 138 Ω . An open measurement indicates an open valve winding, open bake igniter, or open wiring.

To remove the upper oven gas valve:

- 1. Remove the rear cover. (See *Rear Cover*.)
- 2. Remove the three 1/4-in. hex-head screws and the lower gas valve cover.



3. Remove the three 1/4-in. hex-head screws from the gas inlet tube shield.





- 4. Disconnect the 2 wires from the valve.
- 5. Use a 9/16-in. wrench to disconnect 2 gas tubes from the gas coupler.



- 6. Use a 9/16-in. wrench to disconnect the bake outlet tube from the gas valve.
- 7. Remove the two 1/4-in. hex-head screws that attach the gas valve bracket to the rear panel.



8. Use a 9/16-in. wrench to disconnect the gas tube from the gas coupler.



9. Remove the two 5/16-in. hex-head nuts holding the gas valve to the bracket.



To access each oven light assembly, open the oven door and remove the two 1/4-in. hex-head screws that attach the light assembly to the oven liner.



Pull the light assembly away from the oven liner to access and disconnect the 2 wires.



Oven Light Assemblies

The light assemblies are located on the rear of the oven liner. The oven door switch monitors the position of the oven door and provides this information to the control board. The control board operates the light relay located on the control board. The lights come on when the **OVEN LIGHT** selection on the glass touch panel is activated, the door is opened, or when the oven is in a cooking cycle. The oven lights do not come on during the self-clean cycle or if the sabbath feature is set.

Each light assembly consists of a removable light cover, a wire harness, and a light lens with a halogen bulb and socket.

On Café models, the oven light resistance can be checked by removing the rear cover. (See *Rear Cover*.) Each oven light bulb has an approximate resistance value of 26.8 Ω .

On Profile and GE models, the resistance of the light bulb circuit can be checked on the ERC. Place the control panel in the service position. (See *Touch Panel and Electronic Range Control (ERC)*.)

Diagnostics and Service Information

Problem	Possible Causes	What to Do			
Burner flames are very large, yellow, or yellow-tipped	Incorrect gas being used. The combustion quality of burner flames needs to be determined visually.	 Check for correct gas supply. Use the illustrations below to determine if the burner flames are normal. If the burner flames look like A, check for dirty burners and orifices. Clean or replace. Normal burner flames should look like B or C, depending on the type of gas you use. With LP gas, some yellow tipping on outer cones is normal. A-Yellow flames: Call for service B-Yellow tips on outer cones: Normal for LP gas 			
	Regulator malfunction.	Check output gas supply.			
Burners do not light	Plug on cooktop is not completely inserted in the electrical outlet.	Make sure electrical plug is plugged into a live, properly grounded outlet.			
	Gas supply is not connect- ed or turned ON .	See the Installation Instructions that came with the cooktop.			
	A fuse may be blown or a circuit breaker tripped.	Replace the fuse or reset the circuit breaker.			
	Burner parts not replaced correctly.	 Make sure pins in the burner head are properly located in the burner base holes. 			
	Holes or slits in burners clogged.	 Clean or replace as necessary. Make sure all components are dry before reassembly. 			
	Liquid in burner base due to spillage.	 Remove burner ring to check. Clean and dry thor- oughly before reassembly. 			
	Orifices plugged or dirty.	Clean or replace as necessary.			
	Igniter switch defective.	Replace igniter switches.			
	Igniter wire defective.	• Connect igniter wire.			
	Spark module defective.	Replace spark module.			
Burner control knob will not turn	Knob is in the OFF position.	 The knob must be pushed in before it can be turned; it can only be turned in a counterclock- wise direction. 			
Ticking sound of spark igniter persists after burner lights	Improper flame sensing.	Check for wrong igniter wiring.Replace the igniter.			
Ticking sound persists after burner is turned OFF	Be sure the knob is in the OFF position.	Remove knob and check the bottom of knob for buildup of soil. If ticking persists, replace igniter switches.			

LP Conversion Instructions

A WARNING

This conversion must be performed by a qualified installer or gas supplier in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow ALL instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for the conversion.

The pressure regulator and the burner orifices are set for natural gas. To use Liquid Propane Gas, the regulator and burner orifices must be converted.

The LP orifices for the cooktop burners are shipped in a box or bracket on the back panel behind the drawer. Remove the drawer and metal shield (on some models) to locate.

A WARNING

Do not operate the cooktop or oven burners of this range when using LP (bottled) gas before converting the pressure regulator and burner orifices from LP gas use. Failure to do so could cause high flames and toxic fumes which can result in serious injury.

To adjust your range for use with LP gas, follow these instructions:

- 1. Disconnect all electrical power, at the main circuit breaker or fuse box.
- 2. Shut off the gas supply to the range by closing the manual shutoff valve.

Converting the Pressure Regulator

A. The pressure regulator is located on the rear of the range. (Some models will have a metal shield protecting the regulator that must be removed for conversion and reinstalled when conversion is complete.) The pressure regulator is located in the lower, left hand side of the range as viewed from the front.



NOTICE:

If you are using LP (bottled) gas, all adjustments described in the following steps must be made before you make any burner adjustments.

- B. Unscrew the plastic-protected hex-nut cap.
- C. Completely remove the protective plastic cap off the threaded metal cap.
- D. Turn the metal cap so the type of gas being converted to is displayed and replace the protective plastic cover.
- E. Screw the hex-nut cap back into the regulator. (Do not over tighten)



Lever shown closed (Oven Shut Off only) PUSH LEVER TOWARD REGULATOR TO OPEN

Converting the Cooktop Burners

A. Remove the top grates, burner caps and burner heads.



Front right burner (on some models)

B. Using a 7 mm or 9/32" nut driver, remove the top burner orifices. These may be accessed through the burner opening in the base.

NOTICE:

Save these orifices for future conversion back to natural gas.

C. Remove the LP orifice spuds, from the box or bracket provided. The LP orifice spuds have the letter "L" on the top. To aid in identifying the proper location for the LP orifices during a conversion from Natural Gas to LP Gas, paint color codes have been added to the side or top of the orifice. See the chart below. Each orifice may also show a series of engraved marks (I, II, III . . .) located on the top.



BURNER OUTPUT RATINGS: BTU/HR						
	LP (Propane) Gas 10" W.C.P.					
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKING		
RF	15,000					
RF1		0.025" (0.63)	Black	63L		
RF2		0.025" (0.63)	Black	63L		
RF3		0.025" (0.63)	Black	63L		
RFC		0.014" (0.35)	White	35L		
LF	11,000	0.037" (0.95)	Orange/ Silver	95L		
RR	5,000	0.024" (0.63)	Blue/Blue	63L		
LR	9,100	0.034" (0.86)	Orange/ Green	86L		
С	8,000	0.034" (0.86)	Orange/ Green	86L		

D. Install the LP orifices in their precise locations.



To prevent leakage, make sure the orifice spuds are securely screwed into the gas supply tubes.

E. For the extra large burner (left front-on some models), the choke and set screw will be needed. Insert the choke into the burner head, then inset the set screw into the burner head and tighten securely. Make sure the screw head is against the shoulder (within the choke notch) so it does not have any rotational movement.



F. Install the old orifice spuds into the metal box or bracket along with these instructions, and replace onto the back of the range for possible future conversion.

Converting the Oven Burners

Gas oven models only.

A WARNING

The following adjustments must be made before turning on the gas to the burner. Failure to do so could result in serious injury due to high flames and toxic fumes.

BAKE BURNER ORIFICE

- Remove oven door, drawer, oven bottom, and burner. The lower burner orifice hood is located behind the drawer (on some models a metal shield must be removed). Some models will have a cover over the burner that will need to be removed.
- 2. To convert to LP, replace orifice hood with LP hood supplied in kit with range.

NOTICE:

Save these orifices for future conversion back to natural gas.



NOTICE:

This product cannot be converted to LP by adjusting the orifice hood. The hood must be replaced for LP.

BROIL BURNER ORIFICE (on some models)

To convert to LP, remove burner and replace orifice hood with LP hood supplied in kit with range.



AIR SHUTTER SETTINGS FOR BAKE AND BROIL BURNERS

- Use a screwdriver to loosen the air shutter screw.
- Adjust the air shutters for LP gas by rotating the shutter to the fully open Screw position. Your final settings may vary. Air shutter
 Retighten the air shutter screw.



Bake and broil flame must be checked

with the door closed to properly check flame characteristics.

- 4. Turn on the gas.
- 5. Turn on the electricity.
- 6. Reinstall the oven door.
- 7. Turn on the bake or broil burner.
- 8. As you watch the flame with the oven door closed, check the following through the oven door window.
 - a. If the flames are yellow, open the air shutter more.
 - b. If the flames blow away or flutter from the burner, close the air shutter more.

A WARNING

If you attempt to measure the inner cone of the flame, please use caution: burns could result.

- 9. Checking the flame size:
 - It should be approximately 1/2" to 3/4" long for the bake and broil burners. The combustion guality of the

burner flames needs to be



determined visually. NOTE: If burner flames look like (A), further air shutter adjustment is required. Normal burner flames should look like (B) or (C), depending on the type of gas you use. With LP



- 10. When all adjustments are made and the results are satisfactory:
 - a. Replace the orifice fitting cover.
 - b. Replace the oven baffle (flame spreader).
 - c. Replace the oven bottom.

IN SOME CASES:

- A. With LP gas, some yellow tipping on the outer cone is normal.
- B. Foreign particles in the gas line may cause an orange flame at first, but this will soon disappear.

SPECIAL NOTE:

To convert the oven back to natural gas, reverse the instructions given in making LP adjustments.

Relay Contacts Operation Test and Control Voltage Check

Relay	Terminals	Voltage
BAKE	BAKE to N	120 VAC in BAKE ¹
BROIL	BROIL to N	120 VAC in BROIL ²
LATCH	MDL to N	120 VAC
OVEN LIGHT	LIGHT to L1	120 VAC
FAN LO SPEED	FAN L to N	120 VAC in CONVECTION BAKE ¹
FAN HI SPEED	FAN H to N	120 VAC in CONVECTION ROAST ¹

Be sure to select a temperature or setting.
 Must be in Bake cycle. Wait until preheat has completed and call for heat initializes.

Burner Output Ratings

Café Models

DUDNED OUTDUT DATINGS, DTU/UD						
	DURINER OUTPUT KATINGS: DTU/TIK					
	LP (Propane) Gas 10" W.C.P.					
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKING		
RF	15,000					
RF1		0.025" (0.63)	Black	63L		
RF2		0.025" (0.63)	Black	63L		
RF3		0.025" (0.63)	Black	63L		
RFC		0.014" (0.35)	White	35L		
LF	11,000	0.039" (0.99)	Green/Red	99L		
RR	5,000	0.026" (0.66)	Red/Yellow	66L		
LR	9,100	0.035" (0.89)	Blue/Brown	89L		
С	8,000	0.034" (0.86)	Orange/Green	86L		
LOWER BAKE	13,500	0.043" (1.09)	Green			
UPPER BAKE	10,000	0.037" (0.93)	Red			
BROIL	10,000	0.037" (0.93)	Red			



NG (Natural) Gas 5" W.C.P.				
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKINGS
RF	20,000			
RF1		0.043" (1.09)	Red	109N
RF2		0.043" (1.09)	Red	109N
RF3		0.041" (1.04)	Green	104N
RFC		0.030" (0.71)	None	71N
LF	17,000	0.076" (1.92)	Red	192N
RR	5,000	0.038" (0.96)	Blue	96N
LR	9,100	0.054" (1.36)	Green	136N
С	8,000	0.05" (1.27)	Blue	127N
LOWER BAKE	16,000	0.073" (1.85)	Green	0.073
UPPER BAKE	12,000	0.062" (1.57)	Red	
BROIL	10,000	0.056" (1.42)	Yellow	
Denotes 1.98 mm Orifice size opening Denotes Natural Gas				

GE Models

BURNER OUTPUT RATINGS: BTU/HR						
	LP (Propane) Gas 10" W.C.P.					
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKING		
RF	11,000	0.039" (0.99)	Green/Red	99L		
LF	10,000	0.036" (0.92)	Orange/Lt Blue	92L		
RR	5,000	0.026" (0.66)	Red/Yellow	66L		
LR	9,100	0.035" (0.89)	Blue/Brown	89L		
С	6,000	0.029" (0.73)	White/Light Blue	73L		
LOWER BAKE	13,500	0.043" (1.09)	Green			
UPPER BAKE	10,000	0.037" (0.93)	Red			
BROII	10,000	0.037" (0.93)	Red			



BURNER OUTPUT RATINGS: BTU/HR				
		NG (Natural) Gas	5″ W.C.P.	
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKINGS
RF	17,000	0.076" (1.92)	Red	192N
LF	11,000	0.058" (1.48)	Orange	148N
RR	5,000	0.038" (0.96)	Blue	96N
LR	9,100	0.054" (1.36)	Green	136N
С	6,000	0.043" (1.09)	Blue/White	109N
LOWER BAKE	16,000	0.073" (1.85)	Green	0.073
UPPER BAKE	12,000	0.062" (1.57)	Red	
BROIL	10,000	0.056" (1.42)	Yellow	



Profile Models

BURNER OUTPUT RATINGS: BTU/HR					
	LP (Propane) Gas 10" W.C.P.				
BURNER	BTU RATE	ORIFICE SIZE (mm)	COLOR	MARKING	
RF	11,000	0.039" (0.99)	Green/Red	99L	
LF	10,000	0.036" (0.92)	Orange/Lt Blue	92L	
RR	5,000	0.026" (0.66)	Red/Yellow	66L	
LR	9,100	0.035" (0.89)	Blue/Brown	89L	
С	8,000	0.034" (0.86)	Orange/Green	86L	
LOWER BAKE	13,500	0.043" (1.09)	Green		
UPPER BAKE	10,000	0.037" (0.093)	Red		
BROIL	10,000	0.037" (0.093)	Red		



BURNER OUTPUT RATINGS: BTU/HR

OTU			NG (Natural) Gas 5" W.C.P.					
RATE	ORIFICE SIZE (mm)	COLOR	MARKINGS					
17,000	0.076" (1.92)	Red	192N					
11,000	0.058" (1.48)	Orange	148N					
5,000	0.038" (0.96)	Blue	96N					
9,100	0.054" (1.36)	Green	136N					
10,000	0.055" (1.40)	Yellow	140N					
16,000	0.073" (1.85)	Green	0.073					
12,000	0.062" (1.57)	Red						
10,000	0.056" (1.42)	Yellow						
	RATE 17,000 11,000 5,000 9,100 10,000 16,000 12,000 10,000	RATE (mm) 17,000 0.076" (1.92) 11,000 0.058" (1.48) 5,000 0.038" (0.96) 9,100 0.054" (1.36) 10,000 0.055" (1.40) 16,000 0.073" (1.85) 12,000 0.062" (1.57) 10,000 0.056" (1.42)	RATE (mm) COLOR 17,000 0.076" (1.92) Red 11,000 0.058" (1.48) Orange 5,000 0.038" (0.96) Blue 9,100 0.054" (1.36) Green 10,000 0.055" (1.40) Yellow 16,000 0.073" (1.85) Green 12,000 0.066" (1.42) Yellow					



Denotes 1.98 mm Orifice size opening Denotes Natural Gas
Electronic Range Control (ERC) Failure Codes

The oven may stop operating and not give an F code on the display immediately. F codes are stored in nonvolatile eprom memory until the same fault occurs twice consecutively. When that occurs, the F code will be displayed on the ERC. F codes can be recalled by pressing *KITCHEN TIMER ON/OFF*, *CLOCK*, and *9* simultaneously. While the F code is displayed, press *8* and *6* simultaneously to clear them.

Failure Code	Meaning	Correction	
-F0-	CLEAR/OFF key input failure	Short for approximately 100 seconds.	
-F1-	Control Failure	Loss of element relay redundant driver protection.	
-F2-	Oven temperature condition due to sensor input to control	Oven above 640°F with Lock input untrue. Oven above 915°F with Lock input true.	
-F3-	Open Sensor	Sensor is 2900 to infinite ohms while in a heating mode.	
-F4-	Shorted Sensor	Sensor is 0 to 950 ohms maximum while in a heating mode.	
-F6-	Failed GAs Valve Lockout	Open harness switch and/or installed gas lockout motor.	
-F7-	Shorted key detection except for slew entry and Clear/Off keys	Short for approximately 40 seconds.	
-F9-	door lock false while above Runaway Setpoint, unlatched Door Lock temperature or FAD device setpoint exceeded.	"Unlock" Latch Changing status to "Lock." Latch of Motor changing to "Un-Lock" while above run away set point.	
FC	Door Latch error	Unlock home and lock home are try simultaneously.	
FD	Probe failure	Shorted Probe	
FF	Control failure	Loss of door motor redundant driver protection.	

WARNING: Disconnect electrical power before servicing.

Caution: Label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation. Verify operation after servicing.

Schematic



(Continued next page)



CIRCUIT	TERMINALS	OHMS	CONDITION
OVEN	6 to 8	1100 OVEN AT ROOM	
SENSOR			TEMPERATURE
DOOR	3 to 5	0	DOOR LATCH IN BAKE/BROIL
UNLATCHED			POSITION
DOOR	4 to 5	0	DOOR LATCH IN CLEAN
LATCHED			POSITION
MEAT	1 to 2	55000	AT ROOM TEMPERATURE
PROBE			MEAT PROBE INSERTED

WIRING DIAGRAM

WARNING Power must be disconnected before servicing this appliance.

SENSOR AND LOCK SWITCH CIRCUIT

OVEN TEMP SENSOR 1100 OHMS AT ROOM TEMP 2650 OHMS AT CLEAN TEMP



RELAY CONTACT TO OPERATION TEST							
RELAY	TERMINALS	VOLTAGE IN MODE	VOLTAGE IN OFF				
BAKE	BAKE to N	120 VAC IN BAKE*	0 VAC IN OFF				
BROIL	BROIL to N	120 VAC IN BROIL**	0 VAC IN OFF				
LATCH	MDL to N	120 VAC	0 VAC IN OFF				
OVEN LIGHT	LIGHT to L1	120 VAC	0 VAC IN OFF				
FAN LO SPEED	FAN L to N	120 VAC IN CONVECTION BAKE*	0 VAC IN OFF				
FAN HI SPEED	FAN H to N	120 VAC IN CONVECTION ROAST*	0 VAC IN OFF				

* Be sure to select a temperature or setting

** Must be in Bake cycle. Wait until preheat has completed and call for heat initializes.

Warranty

GE Gas Range Warranty. (For customers in the United States)



All warranty service provided by our Factory Service Centers, or an authorized Customer Care® technician. To schedule service, visit us on-line at GEAppliances.com, or call 800. GE.CARES (800.432.2737). Please have serial number and model number available when calling for service.

Staple your receipt here. Proof of the original purchase date is needed to obtain service under the warranty.

For The Period Of: GE Will Replace:

One Year From the date of the original purchase Any part of the range which fails due to a defect in materials or workmanship. During this *limited one-year warranty*, GE will also provide, *free of charge*, all labor and in-home service to replace the defective part.

What GE Will Not Cover:

- Service trips to your home to teach you how to use the product.
- Improper installation, delivery or maintenance.
- Product damage or failure of the product if it is abused, misused, or used for other than the intended purpose or used commercially.
- Damage to the product caused by accident, fire, floods or acts of God.
- Incidental or consequential damage caused by possible defects with this appliance.
- Damage caused after delivery.
- Product not accessible to provide required service.
- Replacement of house fuses or resetting of circuit breakers.

EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service Location for service. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company. Louisville, KY 40225