

GE Consumer & Industrial

Technical Service Guide

April 2006

Monogram 30-in. Single and Double Convection Wall Ovens

ZET1PL1SS

ZET1SL1SS

ZET2PL1SS

ZET2SL1SS



31-9142



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

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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Technical Service Guide
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Introduction

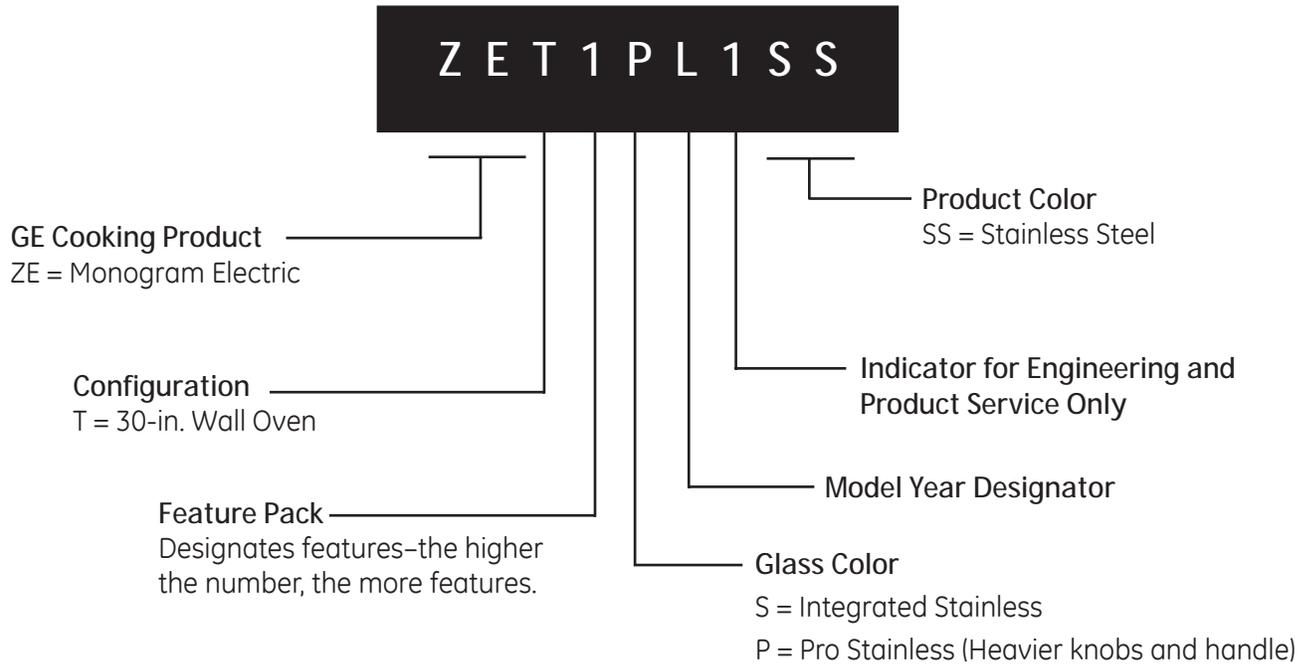
Monogram introduces the new GE Professional Wall Ovens. Their superior style and performance parallel commercial ovens. Available in two design choices -- integrated and professional -- these ovens feature electronic dial controls that combine the precision of modern digital technology with the simplicity of traditional mechanical controls.

- 6 electronically controlled heating elements -- two bake, two broil, and two convection -- provide precise cooking control with fast preheating.
- Reverse-air convection technology utilizes a bidirectional fan that works with a dedicated third heating element to promote even heat circulation.
- Performance compensation for 208-volt installation boosts power as needed in multifamily dwellings.
- 4.4 cu. ft. total capacity.
- Recessed convection, low-profile broil elements, and hidden bake elements.
- Halogen light columns located on both sides of the oven interior.
- Full-extension, self-cleaning porcelain-coated racks that can be left in the oven during the self-clean cycle.
- Hidden bake element, which is concealed beneath the oven floor, allows quick and easy ash removal following the self-clean cycle.
- Both Monogram wall oven designs are available in single and double configurations.



Nomenclature

Model Number



Single Wall Oven



The nomenclature plate is located on the front left behind the oven door in both the single and double configurations.

The mini-manual is located in the control compartment taped to the left side wall.

Serial Number

The first two characters of the serial number identify the month and year of manufacture.
Example: **AL123456S** = January, 2006

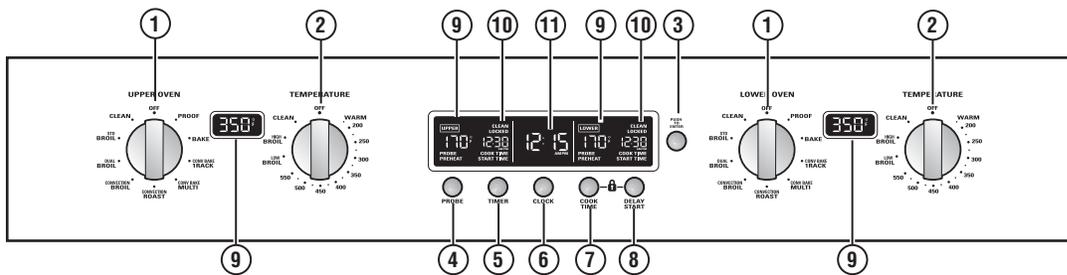
A - JAN	2006 - L
D - FEB	2005 - H
F - MAR	2004 - G
G - APR	2003 - F
H - MAY	2002 - D
L - JUN	2001 - A
M - JUL	2000 - Z
R - AUG	1999 - V
S - SEP	1998 - T
T - OCT	1997 - S
V - NOV	1996 - R
Z - DEC	1995 - M

The letter designating the year repeats every 12 years.

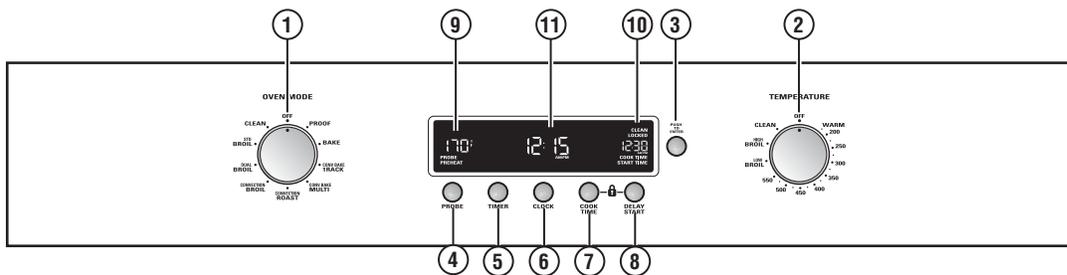
Example:

T - 1974
T - 1986
T - 1998

Control Features



Double oven control – Pro style shown (Appearance may vary)

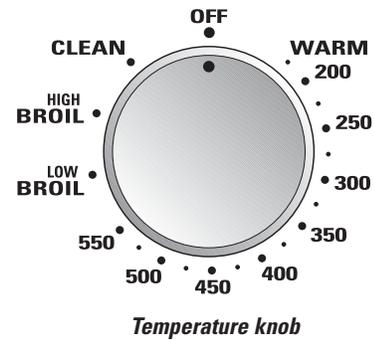
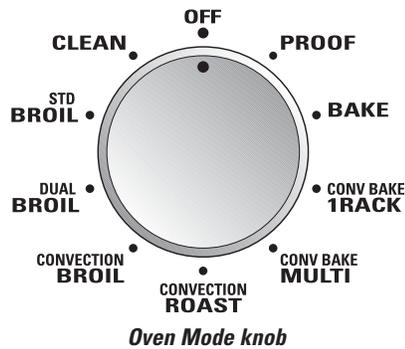


Single Oven control – Integrated style shown (Appearance may vary)

- 1 **Oven Mode knob** – Turn to select:
 - PROOF** – Maintains a warm environment useful for rising yeast-leavened products.
 - BAKE** – Select for traditional baking.
 - CONV BAKE 1 RACK** – Use for convection baking on one rack.
 - CONV BAKE MULTI** – Use for convection baking on multiple racks.
 - CONV ROAST** – Use for convection roasting.
 - CONV BROIL** – Use for convection broiling.
 - DUAL BROIL** – Select to provide traditional broiling for a larger food quantity.
 - STD BROIL** – Select to provide traditional broiling for a smaller food quantity.
 - CLEAN** – Select for the self-cleaning function.
- 2 **Temperature knob** – Turn to select:
 - Use to set baking temperatures from 200°F to 550°F.
 - WARM** – Keeps already cooked foods warm for up to 2 hours after the cooking function is finished.
 - LOW BROIL** – A lower broiling temperature is automatically set.
 - HIGH BROIL** – A higher broiling temperature is automatically set.
 - CLEAN** – The self-clean temperature is automatically set.
- 3 **Mini-Knob**
 - Turn to select and push to enter PROBE, TIMER, CLOCK, COOK TIME and DELAY START settings.
- 4 **PROBE** – Push to select the probe to cook food to a set internal temperature. Turn and push the Mini-Knob to set.
- 5 **TIMER** – Push to select the timer function. The timer does not control oven operations. The timer can time up to 11 hours and 59 minutes. Turn and push the Mini-Knob to set.
- 6 **CLOCK** – Push to enter the time of day. Turn and push the Mini-Knob to set.
- 7 **COOK TIME** – Push to enter the desired length of cooking time for baking (or roasting), convection baking and convection roasting. Turn and push the Mini-Knob to set.
- 8 **DELAY START** – Push to delay the start of cooking or the self-clean cycle. Turn and push the Mini-Knob to set the time you want the oven to start.
- 9 **Temperature Display** – Shows the oven set temperature or probe set temperature and if the oven is preheating. (On some double wall oven models, UPPER and LOWER are displayed above their respective settings.)
 - NOTE:** On some wall oven models, the set temperature shows in displays between their respective control knobs.
- 10 **Timing and Cleaning Status Display** – If set, shows the remaining COOK TIME and the DELAY START time. Lights indicate the status of the self-clean cycle.
- 11 **Time of Day Display** – Shows set time of day.

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Oven Controls Overview



For all modes except Proof, the oven will not operate unless both the Oven Mode and the Temperature knobs are set. See table.

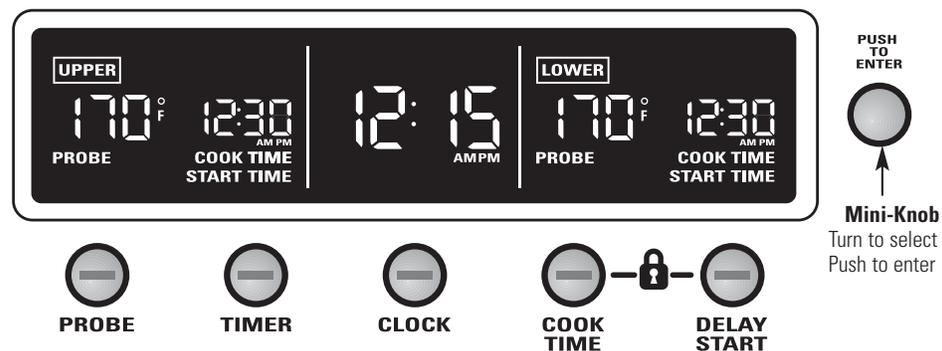
To cancel a feature, turn either the Oven Mode knob or the Temperature knob to OFF.

To cancel PROOF, turn the Oven Mode knob to OFF.

Mode Knob	Temperature Knob
PROOF	OFF
BAKE	WARM to 550°F
CONV BAKE/1 RACK	WARM to 550°F
CONV BAKE/MULTI	WARM to 550°F
CONVECTION/ROAST	WARM to 550°F
CONVECTION/BROIL	HIGH or LOW BROIL
DUAL BROIL	HIGH or LOW BROIL
STD BROIL	HIGH or LOW BROIL
CLEAN	CLEAN

Probe Temperature Set and Time Controls

Double oven display shown



Push the **PROBE**, **TIMER**, **CLOCK**, **COOK TIME** or **DELAY START** buttons and set them by turning and pushing the Mini-Knob. See each respective section for details.

The **Mini-Knob** will select in increments of 1, 5 or 10 depending on how fast it is turned. Turn it clockwise to increase probe set temperatures and time or counterclockwise to reduce them. Push to set.

See the *Control lockout* section for how to lock and unlock the controls.

(Continued next page)

Clock and Control Lockout

Power failure

If a flashing time of day is in the display, you have experienced a power failure. Reset the clock.

Clock

The clock must be set for the automatic oven timing functions to work properly.

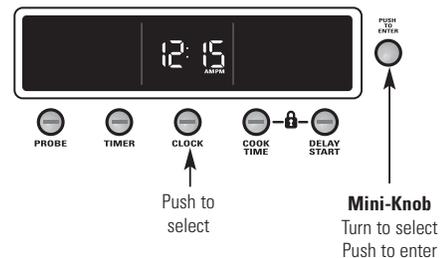
The time of day clock **cannot** be changed during Delay Start. (It can be changed during a regular bake or broil operation.)

To set the clock

- 1 Push the **CLOCK** button.
- 2 Turn the Mini-Knob to select the time of day and push it to enter.

NOTE: While setting, the time will roll around from AM to PM.

Double oven display shown.



Control lockout

Allows you to lock out all controls so that the Oven Mode knob, Temperature knob and the control panel buttons cannot be activated when set.

NOTE: On double oven models, this activates this feature for both ovens.

To lock/unlock the controls:

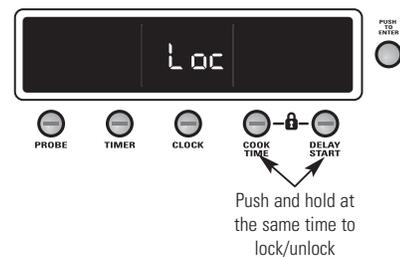
- 1 Push and hold the **COOK TIME** and **DELAY START** buttons at the same time for 3 seconds until the control beeps and the display shows "Loc." After locking the controls, the time of day will appear in the display.
- 2 To unlock, push and hold the **COOK TIME** and **DELAY START** buttons at the same time. ("Loc" will appear in the display). Hold for 3 seconds until the control beeps and "Loc" disappears from the display.

When this feature is on and the controls are attempted to be set, the display will show "Loc."

NOTES:

- If locked while a cooking, cleaning or timed function are in operation, they will be cancelled.
- The adjustment will be retained in memory after a power failure.

Double oven display shown.



Timer Feature

NOTE: The timer is independent of all the other functions and it does not control the oven.

You may program the timer to time cooking or other household activities for up to 11 hours and 59 minutes.

To set the timer:

- 1 Push the **TIMER** button.
- 2 Turn the Mini-Knob to select the length of time for the timer up to 11 hours and 59 minutes and push to enter it.

*On double oven models, a second timer may be set by pressing the **TIMER** button twice.*

The timer display will show hours and minutes counting down 1 minute at a time from 24 hours to 1 hour. It will then change to show minutes and seconds counting down until the last minute is reached. The control will beep and the display will show seconds until the timer counts down to :00.

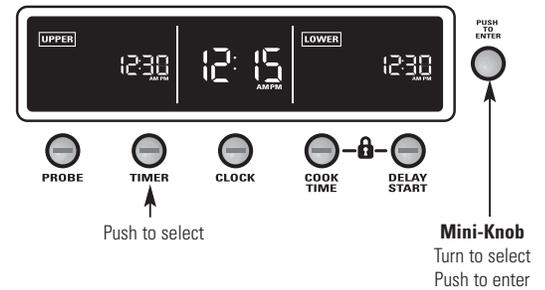
When the timer reaches :00, the control will beep 3 times followed by one beep every 6 seconds until the **TIMER** button is pushed.

The 6-second tone can be cancelled by following the steps in *Tones at the end of a timed cycle* in the *Special Features* section.

To cancel the timer:

- 1 Push the **TIMER** button.
- 2 Turn the Mini-Knob to :00 and push to enter.

Double oven display shown.



Special Features

Special features of your oven control

Your oven has additional Special Features that you may choose to use.

They remain in the control's memory until the steps are repeated. The Special Features will remain in memory after a power failure.

Either the Oven Mode knob and/or the Temperature knob must be turned to OFF.

On double oven models, either the Oven Mode knob or the Temperature knob will have to be turned to OFF for each oven.

NOTE: While in the Special Features mode, if the Mini-Knob is not pushed to enter a choice after 60 seconds, the mode will be cancelled (without changes) and the time of day will return to the display.

The following are the features and how you may activate them.

Oven thermostat adjustment

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.

To adjust the oven thermostat:

1 Push and hold the **PROBE** and **DELAY START** buttons at the same time for 4 seconds until the display shows SF (Special Features).

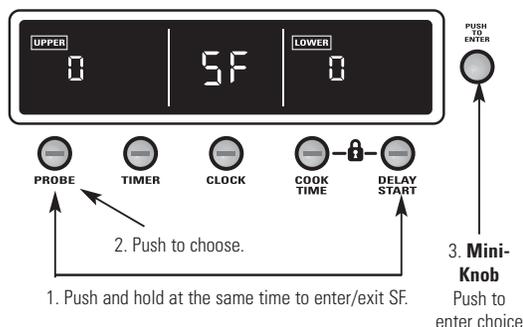
2 Push the **PROBE** button. A "0" will show in the display.

*On double wall oven models, a "0" will show in both the upper and lower oven displays. Push the **PROBE** button a 2nd time ("UPPER" will show in the display) to set the upper oven, and push **PROBE** a 3rd time ("LOWER" will show in the display) to set the lower oven.*

3 Turn the Mini-Knob to adjust the oven thermostat up to 35°F hotter or (-) 35°F cooler in 1°F increments.

4 Push the Mini-Knob to enter your choice.

Double oven display shown.



5 Push and hold the Mini-Knob for 5 seconds to exit SF (Special Features) and return to the time of day clock.

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 only affect baking temperatures; it does not affect broiling, convection or self-cleaning temperatures. The adjustment will be retained in memory after a power failure.

Tones at the end of a timed cycle

At the end of a timed cycle, 3 short beeps will sound followed by one beep every 6 seconds until the **TIMER** button is pushed. This continuous 6-second beep may be cancelled. To cancel the 6-second beep:

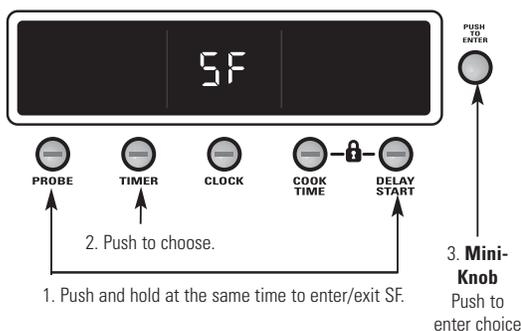
1 Push and hold the **PROBE** and **DELAY START** buttons at the same time for 4 seconds until the display shows SF (Special Features).

2 Push the **TIMER** button to choose between:
con SF bEEP – Continuous Beeps – Reminder beeps will sound after a timed cycle has ended until the **TIMER** button is pushed.
SF bEEP – No beeps – The reminder beeps after a timed cycle is cancelled.

3 Push the Mini-Knob to enter your choice.

4 Push and hold the Mini-Knob for 5 seconds to exit SF (Special Features) and return to the time of day clock.

Double oven display shown.



NOTE: On double oven models, this cancels the end-of-cycle tone for both ovens.

Special Features

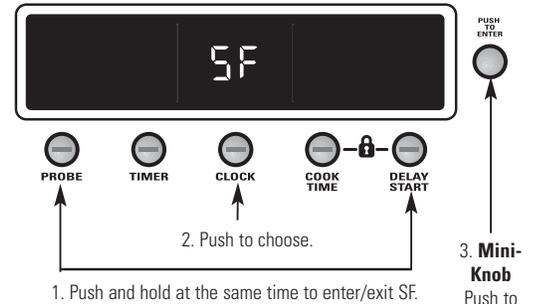
12-hour, 24-hour or clock blackout

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.

- 1 Push and hold the **PROBE** and **DELAY START** buttons at the same time for 4 seconds until the display shows SF (Special Features).
- 2 Push the **CLOCK** button to choose between:
12 hr – 12 hour clock with AM and PM.
24 hr – 24 hour clock – military time.
OFF – blacks out the clock from the display.
- 3 Push the Mini-Knob to enter your choice.
- 4 Push and hold the Mini-Knob for 5 seconds to exit SF (Special Features).

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

Double oven display shown.



1. Push and hold at the same time to enter/exit SF.

2. Push to choose.

3. **Mini-Knob**
Push to enter choice

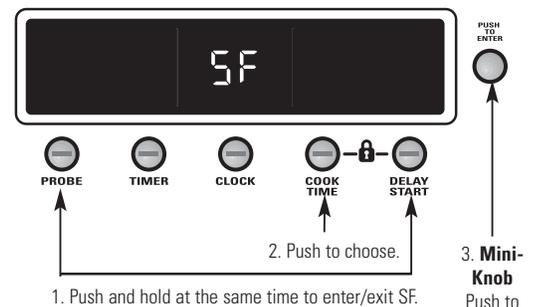
Tone volume

This feature allows you to adjust the tone volumes to a more acceptable volume. There are three possible volume levels.

- 1 Push and hold the **PROBE** and **DELAY START** buttons at the same time for 4 seconds until the display shows SF (Special Features).
- 2 Push the **COOK TIME** button to choose between:
1 SF bEEP – Quietest Beep Volume.
2 SF bEEP – Middle Beep Volume.
3 SF bEEP – Loudest Beep Volume.
- 3 Push the Mini-Knob to enter your choice.
- 4 Push and hold the Mini-Knob for 5 seconds to exit SF (Special Features) and return to the time of day clock.

NOTE: On double oven models, this activates this special feature for both ovens.

Double oven display shown.



1. Push and hold at the same time to enter/exit SF.

2. Push to choose.

3. **Mini-Knob**
Push to enter choice

Special Features

Sabbath Feature, 12-hour shut-off or no shut-off

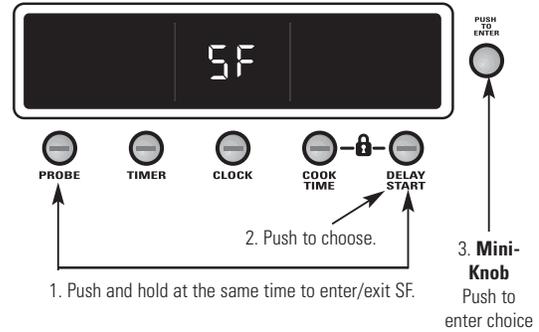
With this feature, should you forget and leave the oven on, the control will automatically turn off the oven after 12 hours during baking functions. If you wish to turn off this feature, follow the steps below.

- 1 Push and hold the **PROBE** and **DELAY START** buttons at the same time for 4 seconds until the display shows SF (Special Features).
- 2 Push the **DELAY START** button to choose between:
 - 12 SF Shdn** – The oven will automatically turn off after 12 hours.
 - no SF Shdn** – The oven will not automatically turn off after 12 hours.
 - SAbbAth** – Designed for use on the Jewish Sabbath and Holidays.The Sabbath feature can be used for baking/roasting only. It cannot be used for convection, broiling, self-cleaning or Delay Start cooking.

When the Sabbath Feature is set, the oven light and all audible beeps will be disabled. The feature will also provide a random delay period, of approximately 30 seconds to 1 minute, before the oven will turn on once it is set to BAKE.
- 3 Push the Mini-Knob to enter your choice.
- 4 Push and hold the Mini-Knob for 5 seconds to exit SF (Special Features) and return to the time of day clock.

NOTE: *On double oven models, this activates this special feature in both ovens.*

Double oven display shown.



Sales Mode

The oven control can be operated in SALES MODE. When the unit is connected to 120 VAC from L1-L2, the control will function normally. The 240 VAC relays will not function.

Operational Notes

Certain modes, when selected, will automatically enter into a preheat. The PREHEAT light will turn on and 100°F will appear in the display. (The temperature display will start to change once the oven temperature reaches 100°F.) The convection fan will turn on several seconds into the preheat cycle and remain on until the oven has reached the set temperature. The control will beep when the oven is preheated—this will take approximately 10 to 15 minutes. The PREHEAT light will turn off and the display will show the set temperature.

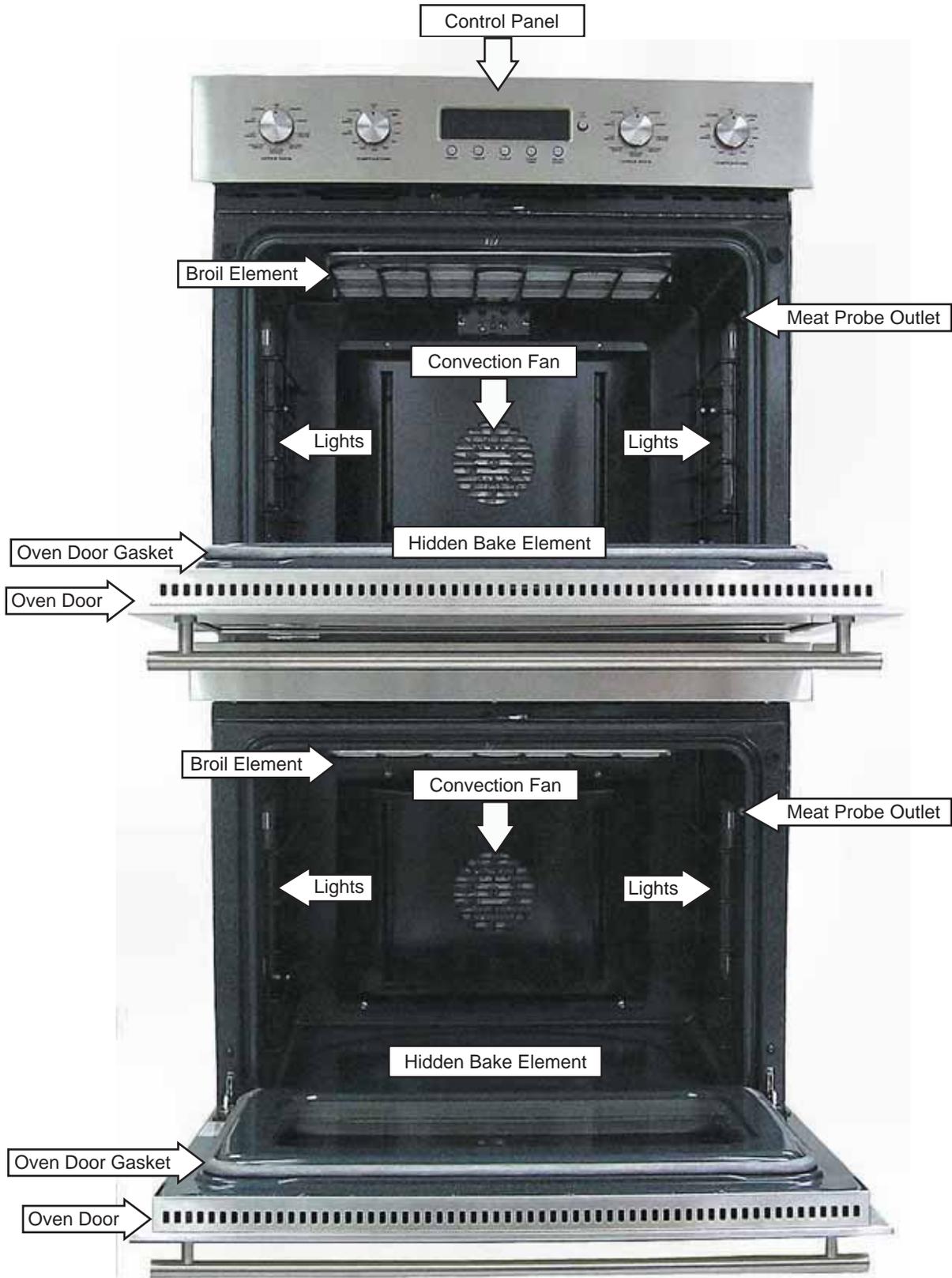
Preheat Chart

Mode	Preheat
Proof	No
Bake	Yes
Convection Bake - 1 Rack	Yes
Convection Bake - Multi	Yes
Convection Roast	Yes
Convection Broil	No
Dual Broil	No
Std Broil	No
Clean	No
Probe Usage	No

- Different broil elements are used in each broil mode. There are 3 different broil modes, each providing a HI and a LO setting.
 - The Dual Broil mode uses both the inside and outside broil elements.
 - The Standard Broil mode uses the inner element only.
 - The Convection Broil mode uses both the inside and outside broil elements and convection fan.
 - Broil will not work if the temperature probe is plugged in.
 - When using the probe, you can use the timer, but you cannot use timed oven operations.
 - On the double wall oven, the oven control will automatically set the oven that has the probe plugged into it.
 - In Convection Bake, the rear bake element and the fan operate whenever the oven is heating.
 - Convection Broil will not work if the temperature probe is plugged in. Never leave your probe inside the oven during a broil cycle.
 - On the double wall oven, you can use timed baking in both ovens at the same time. Turn the Oven Mode knob and the Temperature knob of the second oven to the desired settings. Push the COOK TIME button and turn and push the Mini-Knob to enter. Push the DELAY START button and turn and push the Mini-Knob to enter.
 - The Clean cycle can be set for a minimum of 3 hours and a maximum of 5 hours. The default setting is 5 hours. The 5 hour set time consists of 4 hours and 20 minutes of cleaning and 40 minutes of cool down. The door will unlock at an approximate temperature of 450°F.
 - On the double wall oven, you can set a clean cycle in both ovens at the same time. The last oven set will automatically delay its start until the first oven's clean cycle cools to 400°F. On the double wall oven, you can bake or broil in one oven and self-clean in the other at the same time.
 - Self-Clean will not work if the temperature probe is plugged in or if the Sabbath feature is set.
 - Proofing will not operate when oven is above 125°F. The display will show "too hot". Allow the oven time to cool.
- Preheat operation consists of multiple phases which are time and/or temperature dependant. Each phase of preheat utilizes combinations of inner and outer bake, broil, and convection elements. For example, one phase may use inner convection, outer convection, and outer broil simultaneously. Another phase may use inner broil and outer bake simultaneously.
 - The oven and the oven interior lights will turn on immediately and stay on until the oven is turned off.
 - The convection fan will cycle on and off while cooking to best distribute hot air in the oven. The convection fan shuts off when the oven door is opened.
 - A cooling fan will turn on to cool internal parts. This is normal, and the fan may continue to run even after the oven is turned off.

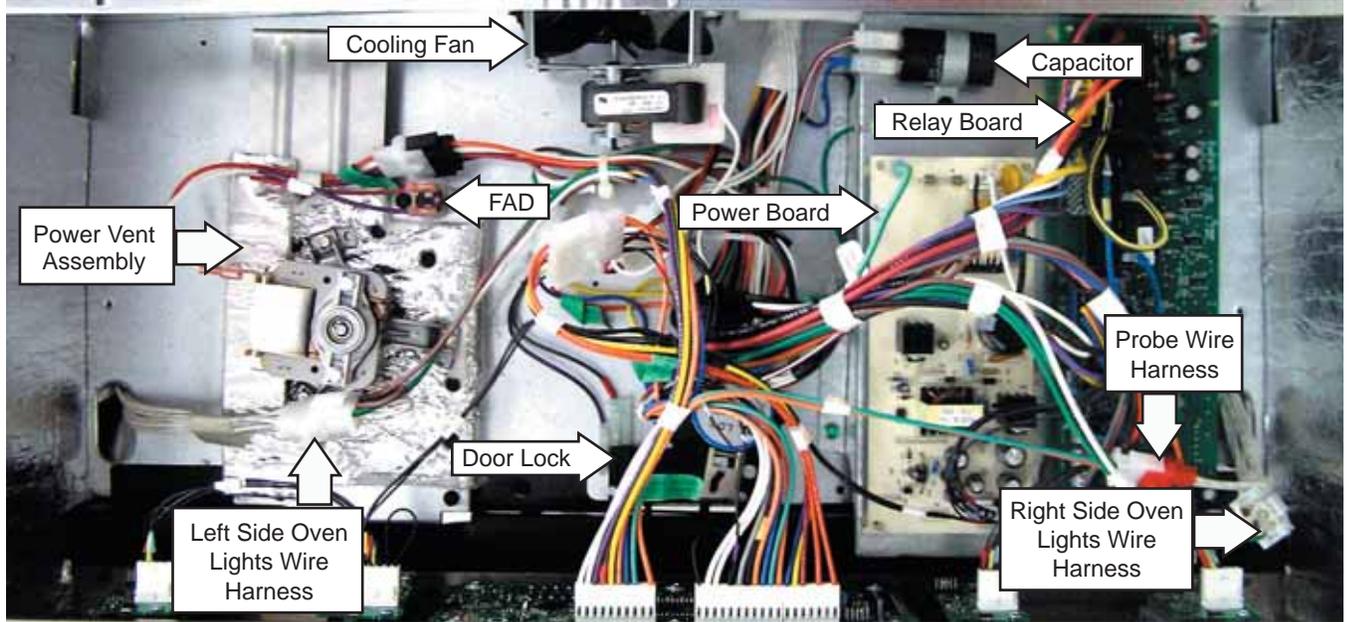
Component Locator Views

30-in. Double Wall Oven (Integrated Stainless shown)

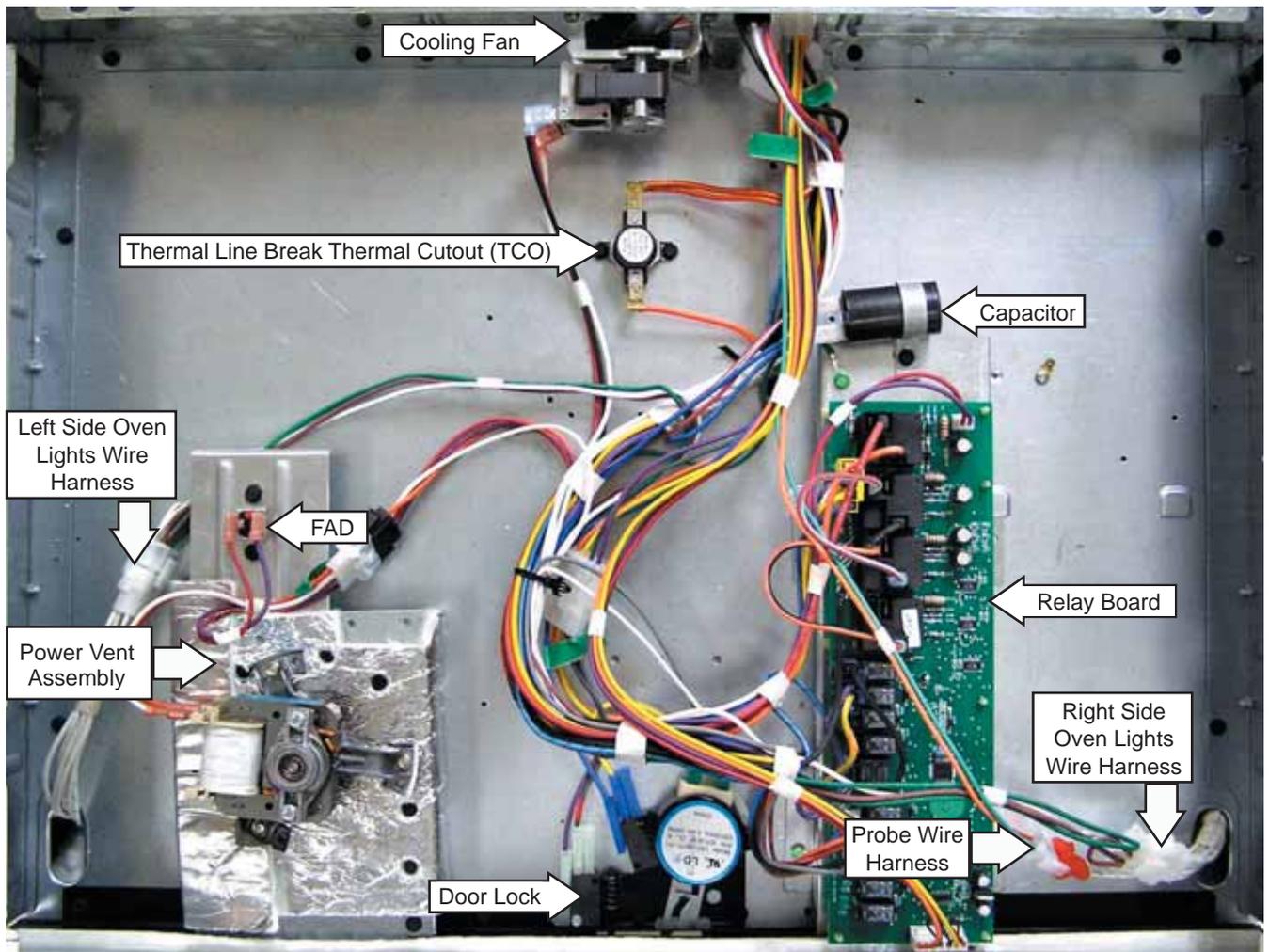


Control Compartment

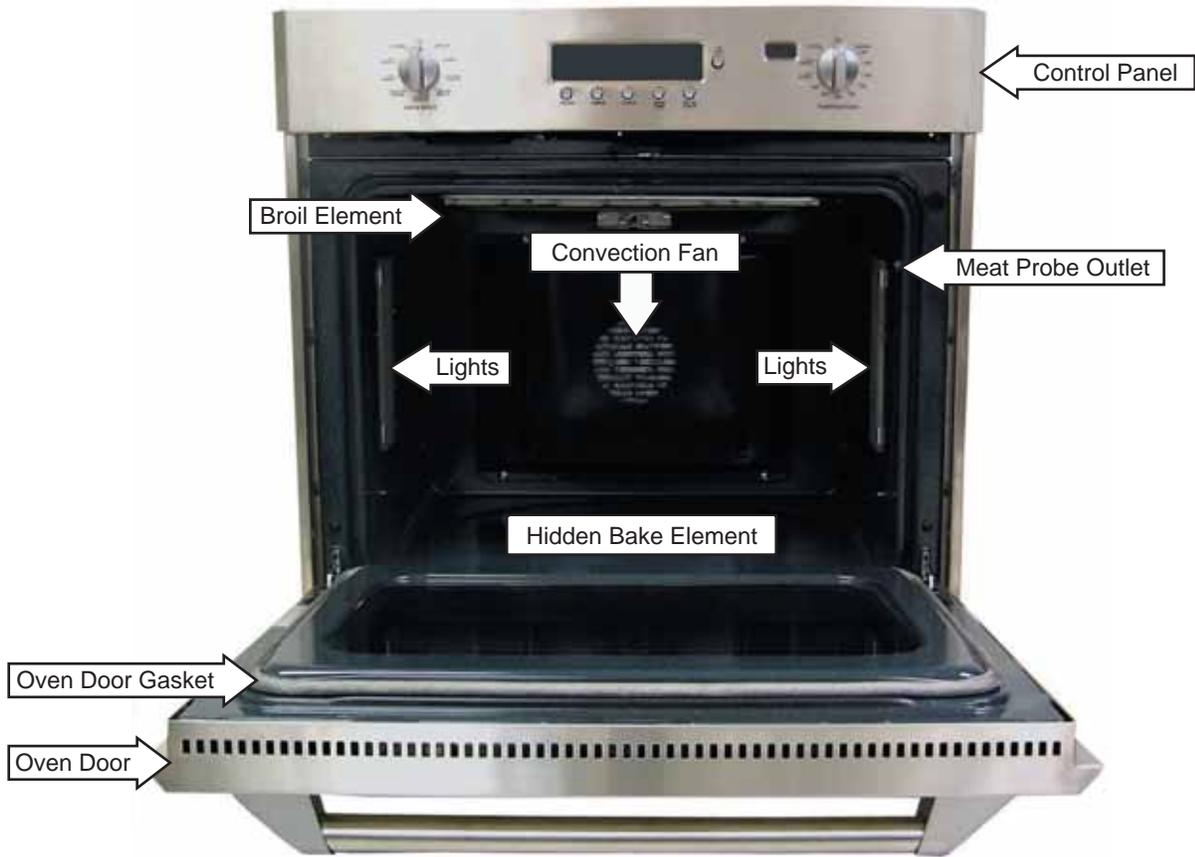
Top Oven



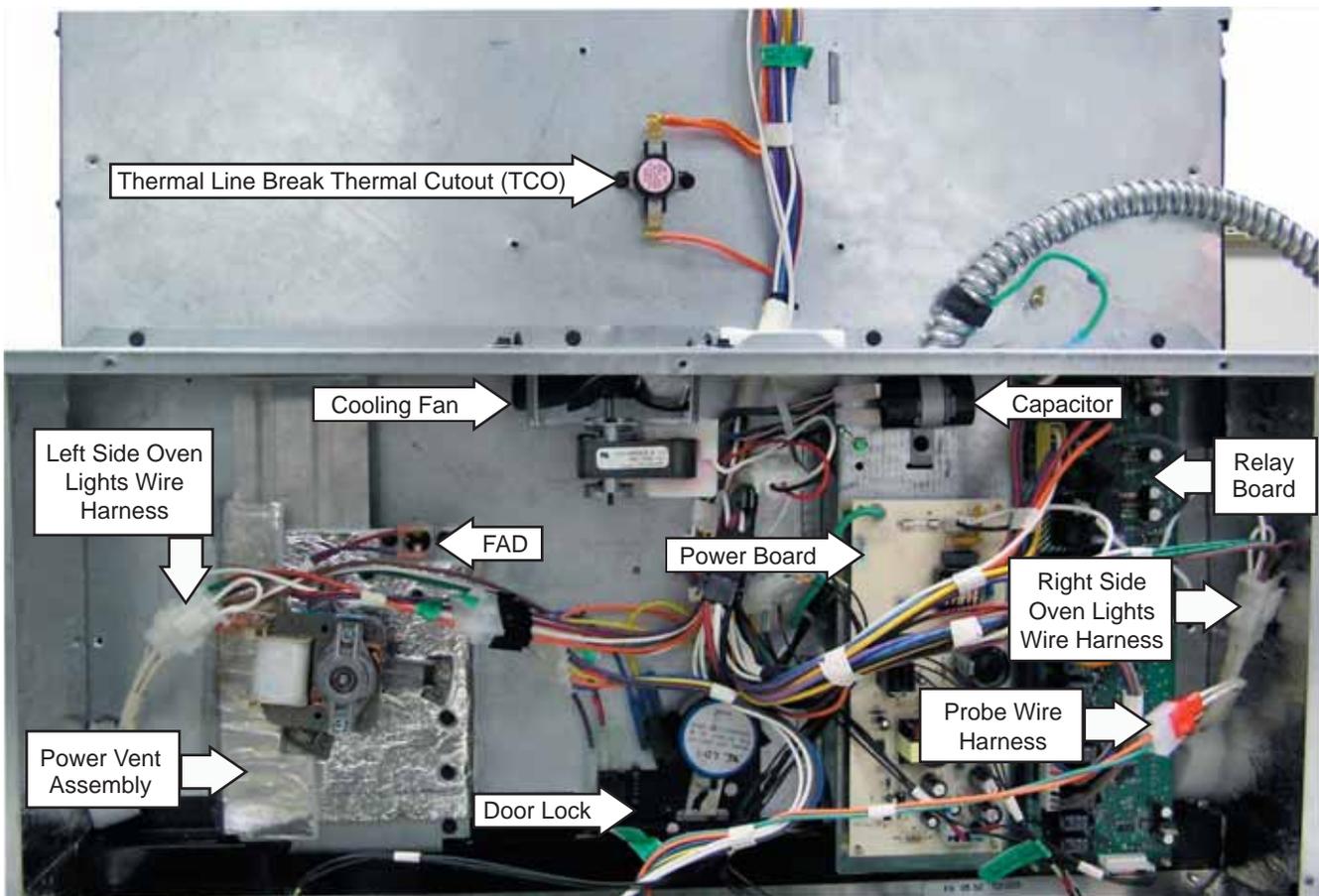
Bottom Oven



30-in. Single Wall Oven (Pro Stainless shown)



Control Compartment



Oven Component Access Chart

WARNING:

- The single and double wall ovens are heavy and require two people to remove them from the installation. Care should be taken when removing and installing.
- Sharp edges may be exposed when servicing. Use caution to avoid injury. Wear Kevlar gloves or equivalent protection.

	Front Serviceable Oven Components	Components Requiring Oven Removal	Components Requiring Oven Separation
Bake Element		●	
Broil Element	●		
Cooling Fan	●		
Convection Bake Element	●		
Convection Fan Assembly	●		
Door Hinge Receiver		●	
FAD	●		
Lock Assembly	●		
Meat Probe Outlet		●	
Oven Light Housing		●	
Oven Temperature Sensor	●		
Power Supply and Relay Board	●		
Power Vent Assembly (lower oven)			●
Power Vent Assembly (single and upper oven)	●		
Rack Support Stud Plate		●	
Thermal Line Break TCO (lower oven)	●		
Thermal Line Break TCO (single and upper oven)		●	
Vent Tube/Smoke Eliminator	●		

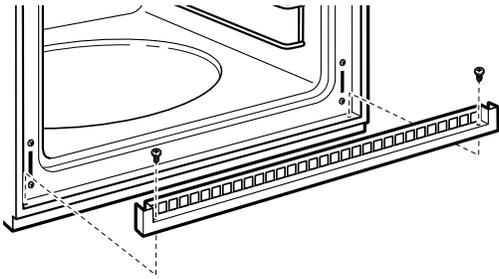
Oven Removal

The replacement of certain components require oven removal. (See *Oven Component Access Chart*.)

WARNING: The oven is heavy and requires two people to remove it from the installation.

To remove the oven:

1. Remove oven doors and racks. (See *Door Assembly* and *Oven Racks*.)
2. Remove the 2 Phillips-head screws that attach the metal bottom trim to the bottom edge of the cabinet. Remove the trim.



3. Remove the 4 Phillips-head screws (2 on each side) from the side trim that hold the oven in place.

Double Wall Oven



4. Pull the oven slightly forward to access some components (See *Oven Component Access Chart*) or if removing it completely, utilize a table or platform in front of the oven and pull the oven completely out.

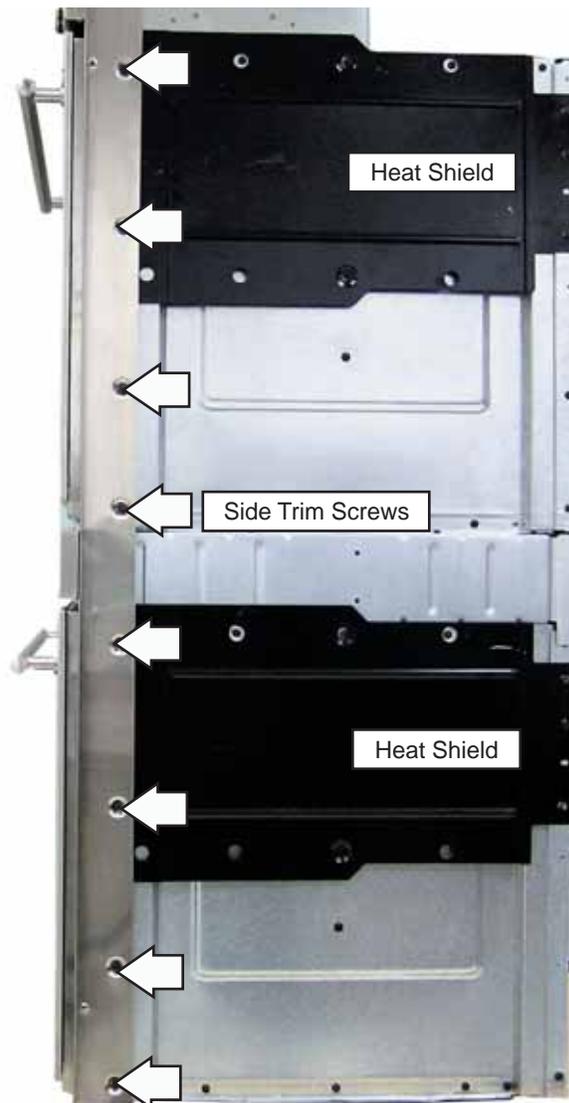
Note: When reinserting ovens into cabinet opening, ensure conduit is properly positioned behind ovens. (See the *Installation Instructions* manual.)

Side Access Panels

To remove each side access panel:

1. Remove the ¼-in. hex-head screws that hold each side trim in place. The single wall oven has 4 hex-head screws. The double wall oven has 8 hex-head screws.

Double Wall Oven

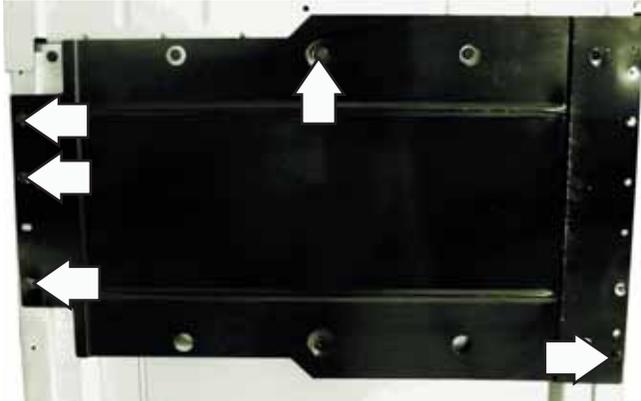


Note: Single wall ovens do not have the black heat shield.

(Continued next page)

2. On double wall ovens, remove the single Phillips-head and the four ¼-in. hex-head screws that hold the heat shield to the side of the oven.

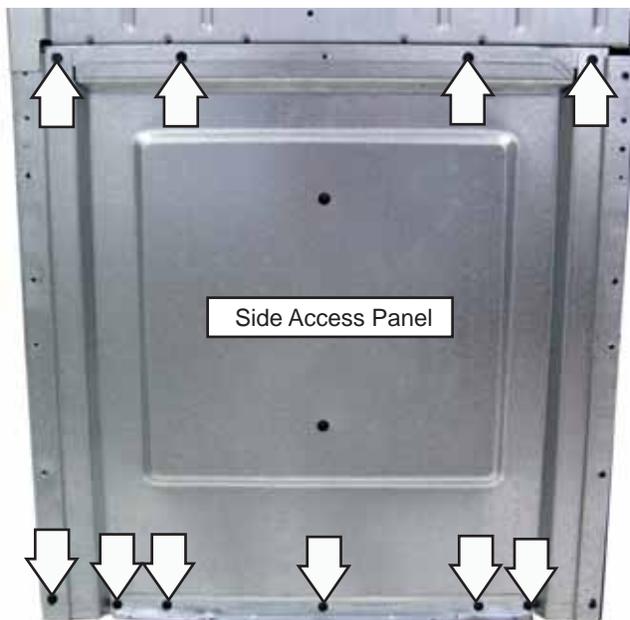
Double Wall Oven



3. Remove the ¼-in. hex-head screws that hold the side access panel to the oven. The double wall oven has 10 hex-head screws. The single wall oven has 14 hex-head screws.

Note: Do not remove the 2 Phillips-head screws located in the center of the side access panel.

Double Wall Oven



Oven Separation (Double Wall Oven)

To separate the double wall oven, remove the access cover attached to the back of the ovens. It is held in place by two screws and 4 tabs.

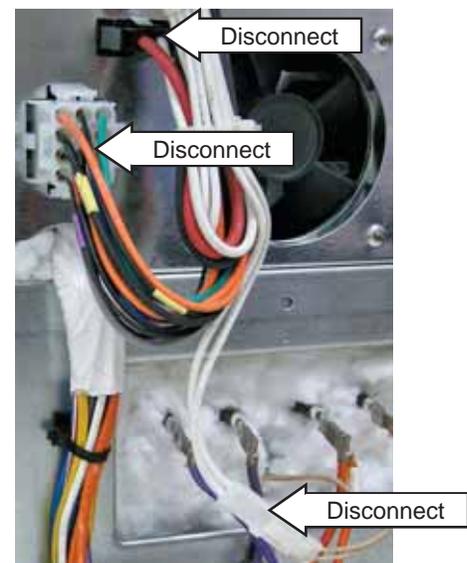
To separate the ovens :

1. Remove the two ¼-in. hex-head screws then remove the access cover from the 4 tabs.

Double Wall Oven



2. Disconnect the 2 wire harnesses and the sensor harness from the bottom oven.

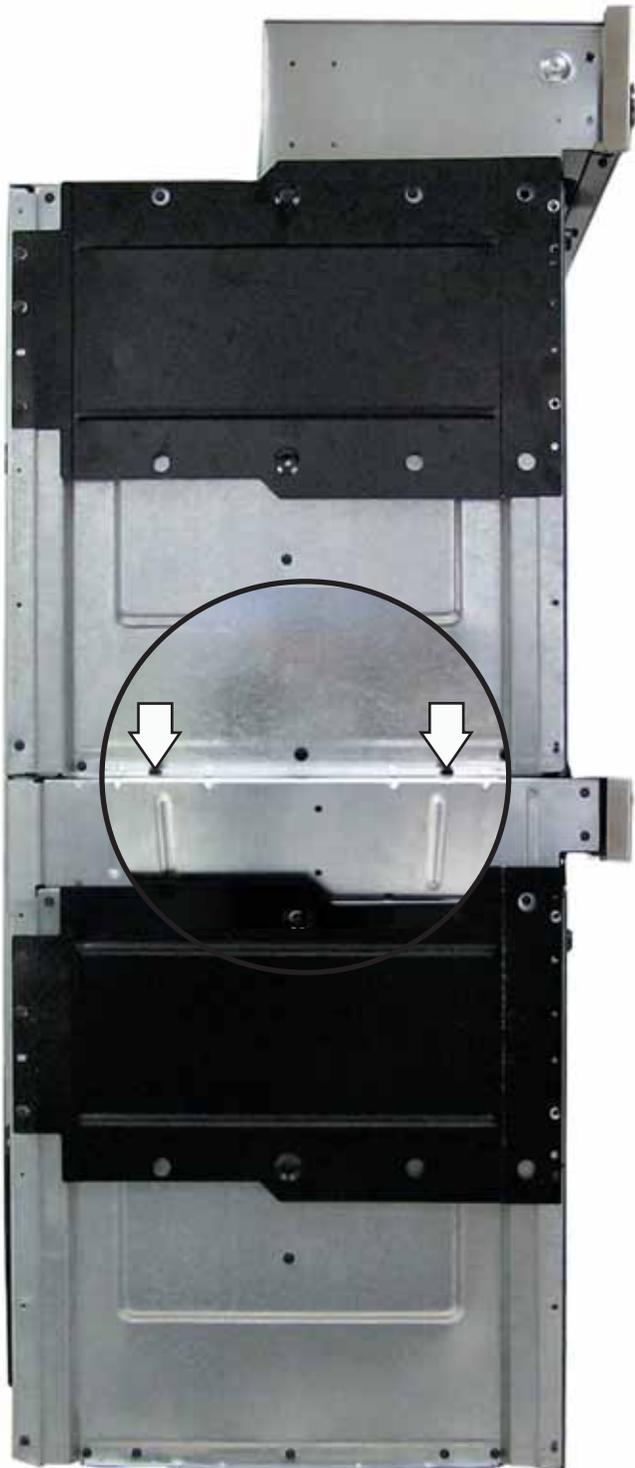


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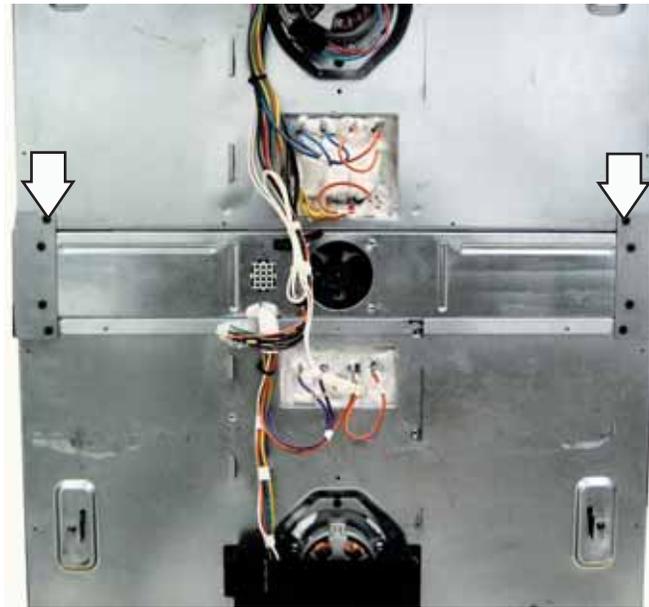
3. Remove the eight ¼-in. hex-head screws from each side trim.

Note: The top of each side trim has a pin that fits firmly into a keyhole slot at the top of the control panel.

4. Carefully push the side trim down, then pull out at the top.
5. Remove the four ¼-in. hex-head screws (2 on each side) that hold the top oven to the bottom oven.



6. Remove the two ¼-in. hex-head screws that hold the back of the top oven to the bottom oven.



7. Carefully lift the top oven from the bottom oven and place it on a protective surface.

Oven Components

Door Assembly

The oven door can be separated into 2 assemblies. The outer assembly consists of the outer panel and a replaceable door handle. The inner assembly is made up of the inner panel, door gasket, 3 glass panels, air channel, insulation retainer, and replaceable door hinge assemblies.

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

To remove the door:

1. Open the door fully. Pull the hinge locks down toward the door frame, to the unlocked position. (This may require a flat-blade screwdriver to start the hinge locks moving).

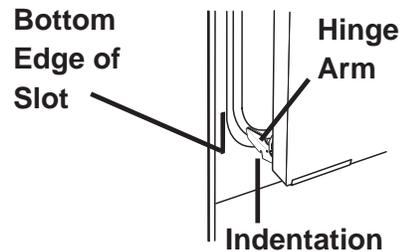


2. Firmly grasp both sides of the door at the top.
3. Close the door to the door removal position, then lift it up and out.



To replace the door:

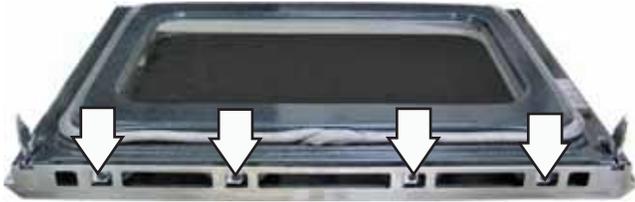
1. With the door at the same angle as the removal position, seat the indentation of the hinge arm into the bottom edge of the hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.



2. Open the door fully. If the door will not fully open, the indentation is not seated correctly in the bottom edge of the slot.
3. Push the hinge locks up against the front frame of the oven cavity to the locked position.
4. Close the oven door and check for proper alignment.

To remove the outer door assembly:

1. Remove the door.
2. Place the inner door assembly, gasket side up, on a protective surface.
3. Remove the three ¼-in. hex-head screws and the single T15 Torx screw from the bottom of the outer door assembly.



4. Remove the 4 T15 Torx screws (2 on each side) from the outer 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 two ¼-in. hex-head screws that hold the door handle to the outer door assembly.

Door Shown with Inner Door Assembly Removed



Caution: Care must be taken if reinstalling the door handle. Overtightening screws can damage handle. Hand-tighten screws and make sure handle fits snugly to door panel. (Do not use electric driver.)

To replace the inner door assembly:

1. Remove the outer door assembly. (See *Door Assembly*.)

2. Remove the 4 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 four ¼-in. hex-head screws that attach the glass and side brackets (glass closest to the outer door glass) to the inner door.

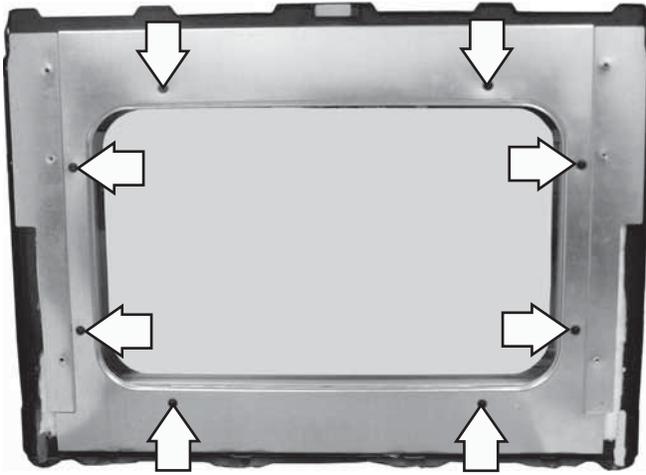


4. Remove the two ¼-in. hex-head screws that hold the heat deflector to the heat barrier.

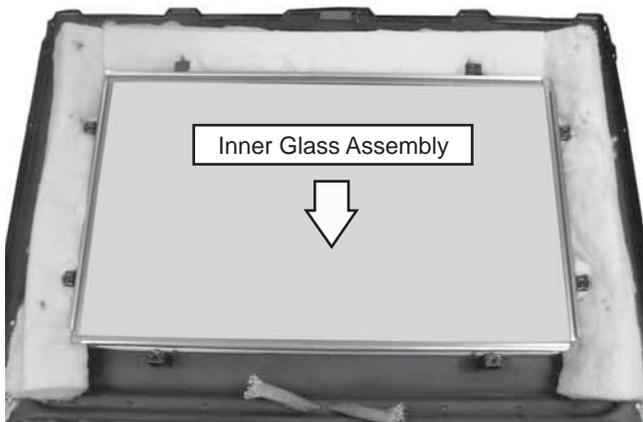


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- Remove the eight ¼-in. hex-head screws that hold the heat barrier to the inner door. Remove the barrier.



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



Assembly Notes

When assembling, make sure the hinges are parallel to each other and perpendicular to the door liner. If not, the hinge may bind on the receiving channel of the door. If the new hinge is not in the cocked and locked position after installing, place the bottom of the door against a firm, protected surface and push the hinge arm down to the cocked position. Pull the hinge lock back against the door liner surface to lock the hinge in this position.

Air enters the door assembly through large slots in the bottom and flows upward between the inner and outer assemblies, exhausting through slots in the top of the door. **DO NOT INSULATE THIS AIR CHANNEL.**

Arrows on the side of the inner glass assembly indicate the direction in which the inner oven door glass is installed. The arrows should be pointing toward the oven cavity.



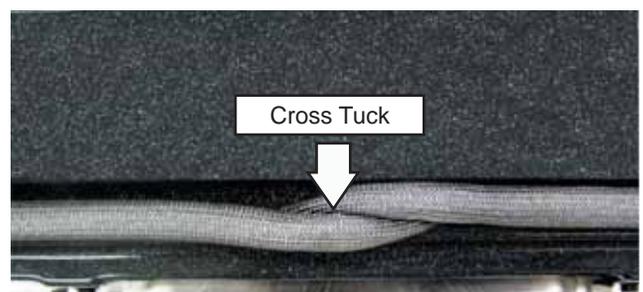
Door Gasket

The gasket forms a complete seal around the front edge of the oven liner and the inner door panel. The door gasket is attached to the inner door panel by spring clips. When removing the gasket, pull the ends of the gasket out of the slots at the bottom of the door. Place a finger under the gasket beside each clip and pull straight up.



When installing the door gasket, it is helpful to fold the gasket in half and locate the center clip. Insert the clip at the top of the door and work your way around the door.

Make sure the gasket is cross-tucked in the bottom slots of the inner door panel. Use a small screwdriver to tuck the loose ends of the gasket into the slots. The overlap is required to ensure a proper door seal.

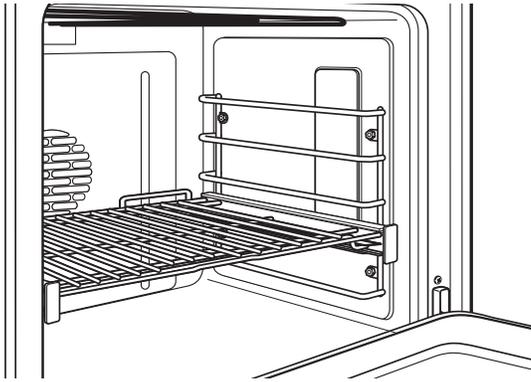


Oven Racks

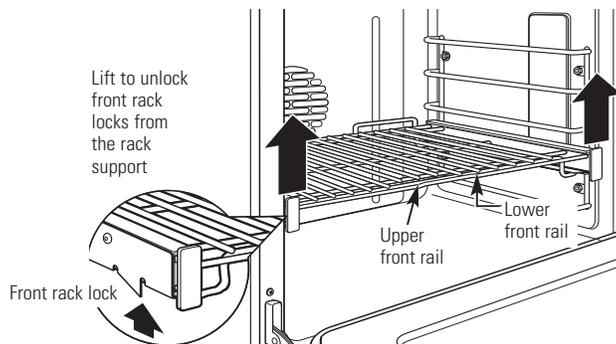
WARNING: To avoid possible burns, remove or install the racks before turning on the oven.

To remove a rack:

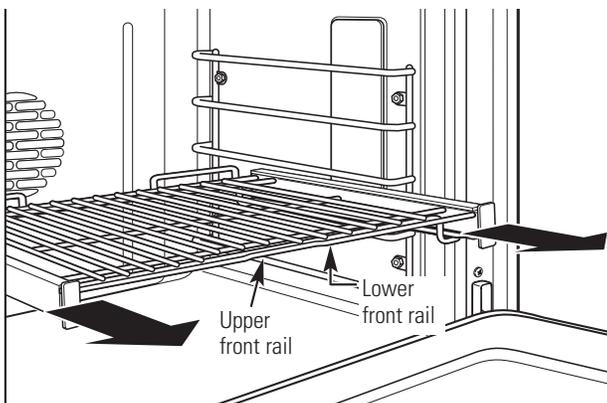
1. Make sure the rack is pushed all the way into the oven.



2. Grasp the rack by both its upper front rail and its lower front rail and lift straight up to unlock the front rack locks from the rack supports.

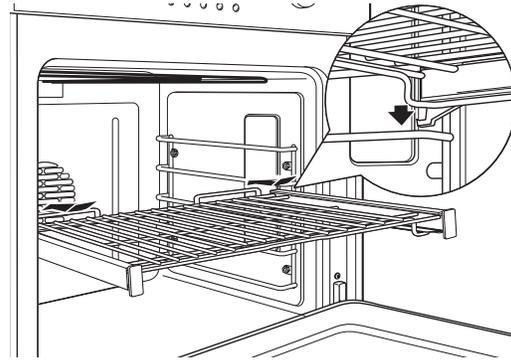


3. Firmly holding onto both the upper and lower front rack rails, pull the rack forward and remove it from the oven.

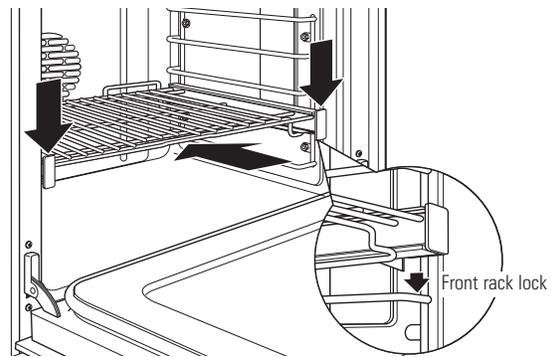


To install a rack:

1. Place the rear rack locks over and onto the rack supports. (Five rack positions are available including the top position.)



2. Slide the rack all the way in until the rear rack locks are secure on the rear rack supports and press the front rack locks onto the front rack supports.



Care and Cleaning

Note:

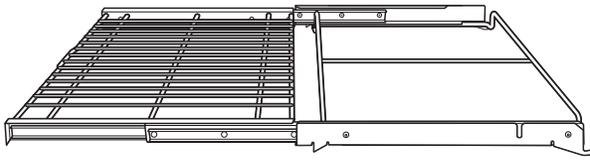
- The racks may remain in the oven during the self-cleaning cycle without being damaged.
- Periodically, after several self-clean cycles, the oven racks may need to be lubricated using the graphite lubrication shipped with the wall oven. To order additional graphite lubrication, call our National Parts Center 800.626.2002 and reference WB02T10303.

Lubricating an oven rack:

1. Remove rack from the oven.

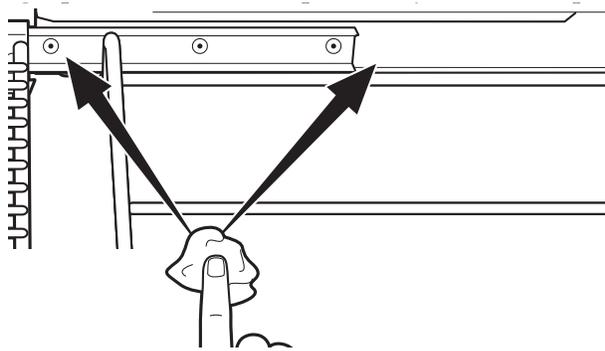
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2. Fully extend the rack on a table or countertop. Newspaper may be placed underneath the rack for easy clean up.

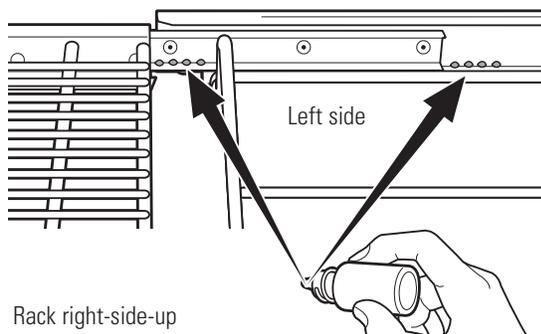


3. If there is debris in the slide tracks, wipe it away using a paper towel.

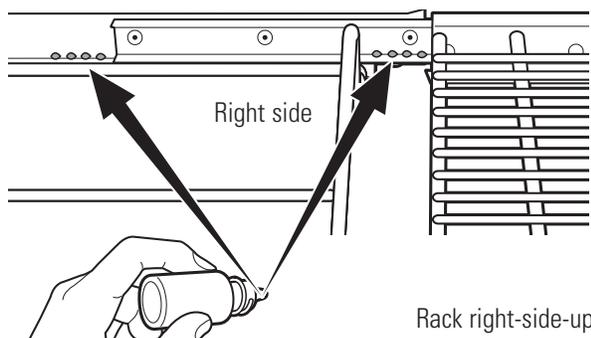
Note: Any graphite lubricant wiped away must be replaced.



4. Shake the graphite lubricant before opening it. Starting with left slide mechanism of the rack, place four (4) small drops of lubricant on the two (2) bottom tracks of the slide close to the bearing carriers.



5. Repeat for the right slide mechanism of the rack.



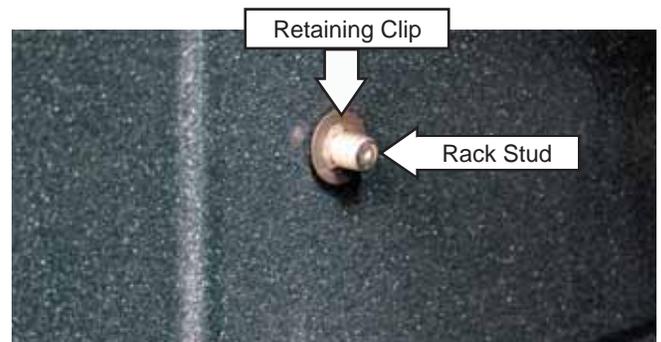
6. Open and close the rack several times to distribute the lubricant.
7. Replace the cap on the lubricant and shake it again. Turn the rack over and repeat steps 3, 4, 5 and 6.
8. Close the rack. Turn rack right-side-up and install in the oven.
9. Repeat above steps for each rack.

Note: Do not spray racks with Pam® or other lubricant sprays.

Rack Support Stud Plates

Each oven utilizes 4 rack ladder stud plates, 2 on each side. The rack support stud plates are behind each side access panel. They are held in place by retaining clips. A damaged or malfunctioning rack support stud will require replacing the stud plate.

The oven must be removed from the installation to access the rack support stud plates. (See *Oven Removal*.)



Note: Upon reassembly, ensure displaced insulation around oven and components is returned to its original position.



Oven Temperature Sensor

The oven temperature sensor has a resistance of:

- 1091 Ω at room temperature
- 1654 Ω at 350°F
- 2634 Ω at 865°F (Clean temperature)

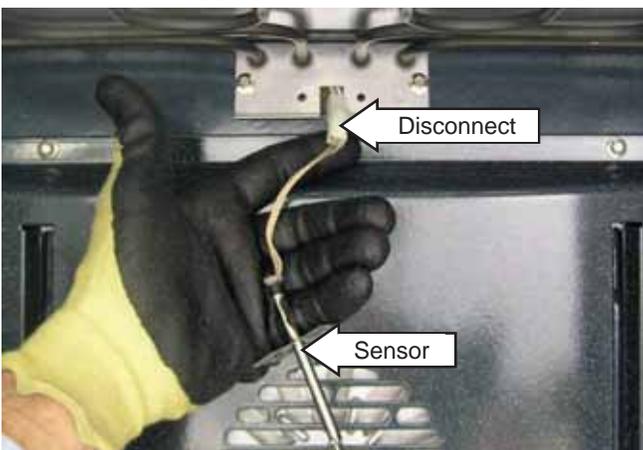
The oven temperature sensor has a resistance change rate of 2 Ω per °F.

To remove the oven temperature sensor:

1. Disconnect power.
2. Remove oven racks. (See *Oven Racks*.)
3. Remove the two ¼-in. hex-head screws that attach the sensor to the broiler element bracket.



4. Carefully pull the sensor and sensor wiring harness from the oven liner.
5. Disconnect the sensor wiring harness.



Note: When reinstalling the sensor, use a small flat-blade screwdriver to push and guide the sensor wire harness into the oven liner.



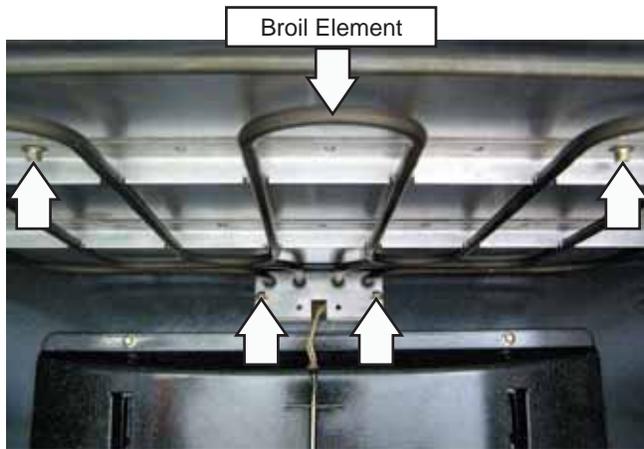
Broil Element

- The broil element is composed of an inner and an outer element. It is replaced as one unit.
- The broil elements will not work if the temperature probe is plugged in.
- The inside element is rated at 2330 watts, has an approximate resistance value of 21 Ω , and draws approximately 11.2 amps.
- The outside element is rated at 1570 watts, has an approximate resistance value of 35 Ω , and draws approximately 6.7 amps.
- The broil element is located on the back wall of the oven and can be removed from inside the oven cavity.

To remove the broil element:

1. Remove oven racks. (See *Oven Racks*.)
2. Remove the two ¼-in. hex-head screws that attach the sensor to the broiler element bracket. (See *Oven Temperature Sensor*.)
3. Carefully pull out the sensor approximately 2-in. from the broiler element bracket.

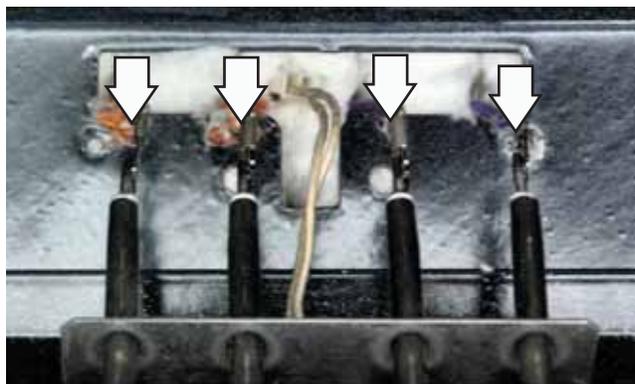
4. Remove the four ¼-in. hex-head screws that hold the broiler element to the oven cavity.



5. Carefully pull, then lower the broiler element towards the front of the oven until the element terminals are accessible.

IMPORTANT: The lower wattage outer element utilizes 3/16-in. terminal connections. The higher wattage inner element utilizes ¼-in. terminal connections.

6. Disconnect the wires from the broiler element.

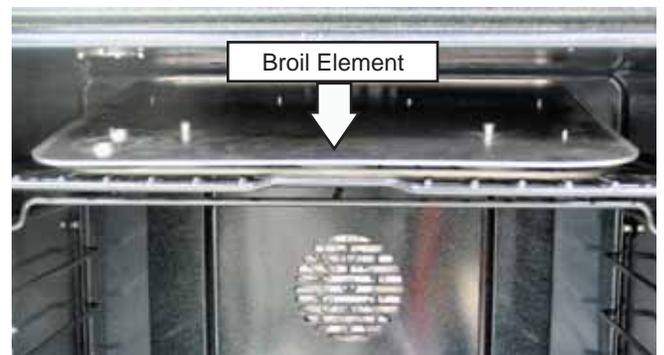


Vent Tube/Smoke Eliminator

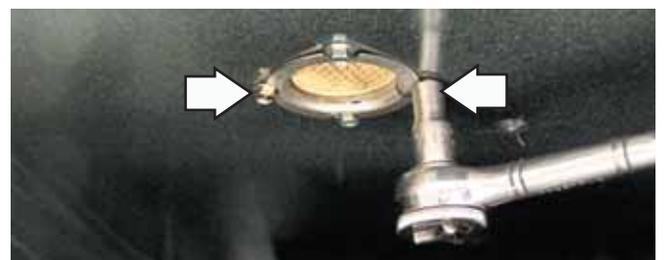
The oven vent tube/smoke eliminator is located in the top left front corner of the oven cavity above the broiler element shield. Air vented from the oven cavity will pass through the catalyst, then enter the vent tube of the power vent assembly.

To remove the vent tube/smoke eliminator:

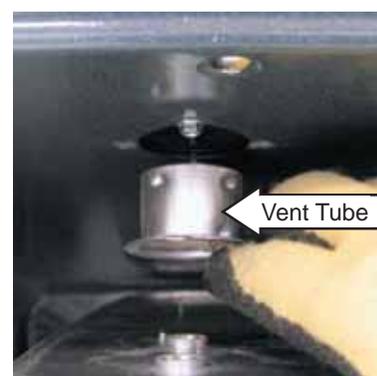
1. Place an oven rack in the top position and remove any remaining oven racks. (See *Oven Racks*.)
2. Remove the 2 hex-head screws that attach the front of the broiler element to the oven cavity, then carefully lower the broiler element to the oven rack.



3. Remove the 2 hex-head screws that hold the vent tube to the top of the oven cavity. Do not remove the remaining hex-head screws, they are for the power vent assembly.



4. Remove the vent tube from the oven cavity.

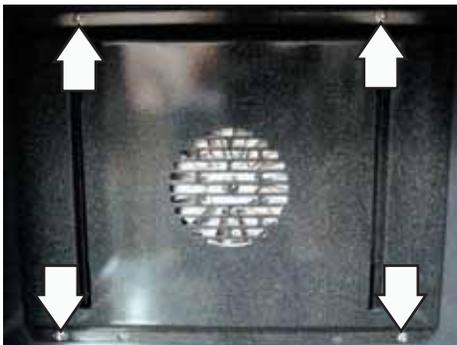


Convection Bake Element

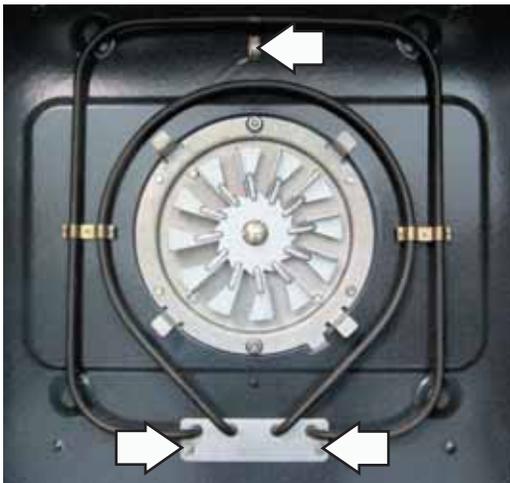
- The convection bake element is composed of an inner and an outer element. It is replaced as one unit.
- The inside element is rated at 900 watts, has an approximate resistance value of 62 Ω , and draws approximately 3.9 amps.
- The outside element is rated at 1600 watts, has an approximate resistance value of 35 Ω , and draws approximately 6.9 amps.
- The convection bake element is located on the back wall of the oven and can be removed from inside the oven cavity.

To remove the convection bake element:

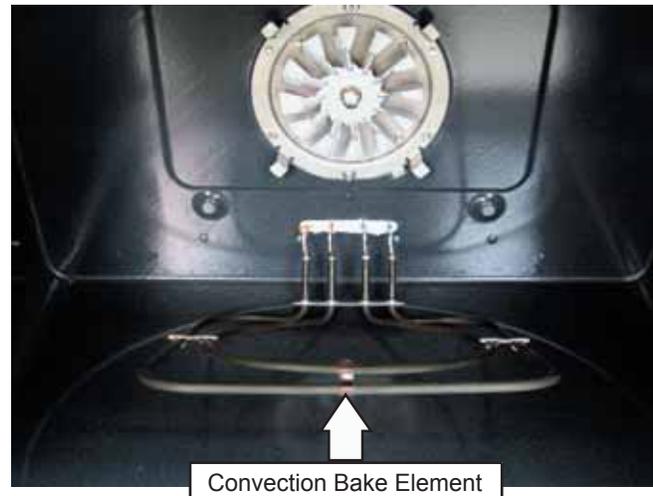
1. Remove oven racks. (See **Oven Racks**.)
2. Remove the four 1/4-in. hex-head screws that hold the convection cover to the back wall of the oven cavity.



3. Remove the three 1/4-in. hex-head screws that hold the convection bake element to the back wall of the oven cavity.



4. Carefully pull the convection bake element towards the front of the oven until the element terminals are accessible.



IMPORTANT: The lower wattage inner element utilizes 3/16-in. terminal connections. The higher wattage outer element utilizes 1/4-in. terminal connections.

5. Disconnect the wires from the convection bake element.

Convection Fan Assembly

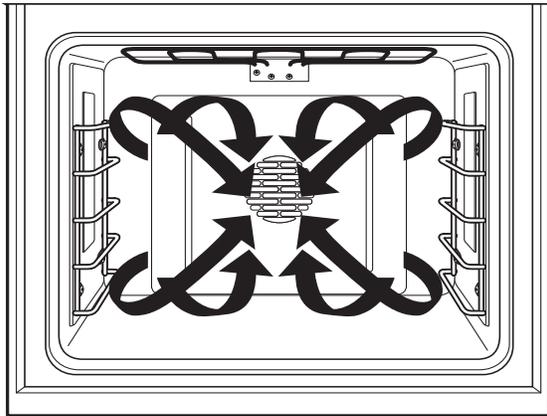
The convection fan assembly is located on the back wall of the oven cavity and consists of the fan guard, blade, insulation, and motor. The fan motor utilizes a capacitor that can be accessed from the component compartment. (See **Component Locator Views**.) The convection fan assembly can be removed from inside the oven.

The convection fan operates during the following modes:

- Preheat
- Convection Bake
- Convection Broil
- Convection Roast
- Clean

The convection fan will turn on (after a short delay). The fan may cycle on and off, and change direction in any of these modes, to best distribute hot air in the oven. The convection fan shuts off when the door is opened.

Convection Airflow

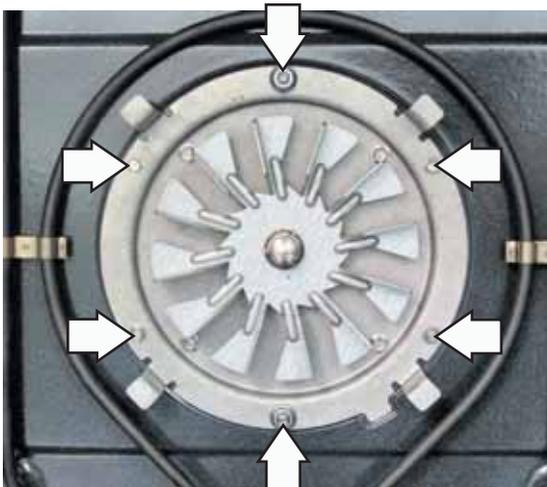


The convection fan motor has approximate resistance values between the following wires:

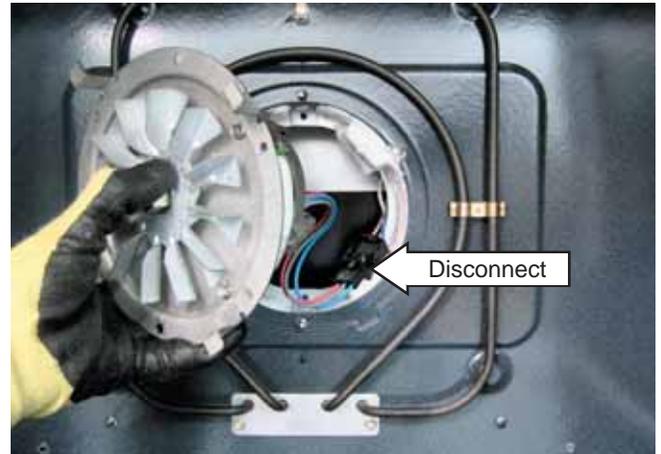
- Red and Blue: 174 Ω
- Red and Gray: 78 Ω
- Blue and Gray: 96 Ω

To remove the convection fan and motor assembly:

1. Remove oven racks. (See *Oven Racks*.)
2. Remove the four ¼-in. hex-head screws that hold the convection cover to the back wall of the oven cavity.
3. Remove the outer four ¼-in. hex-head screws and the two ⅜-in. hex-nuts that attach the fan assembly to the back wall of the oven cavity.



4. Carefully pull the fan assembly into the oven cavity and disconnect the fan motor wire harness.



5. The fan blade is attached to the motor shaft with a left-hand thread ½-in. hex-nut. Turn the nut clockwise to remove.

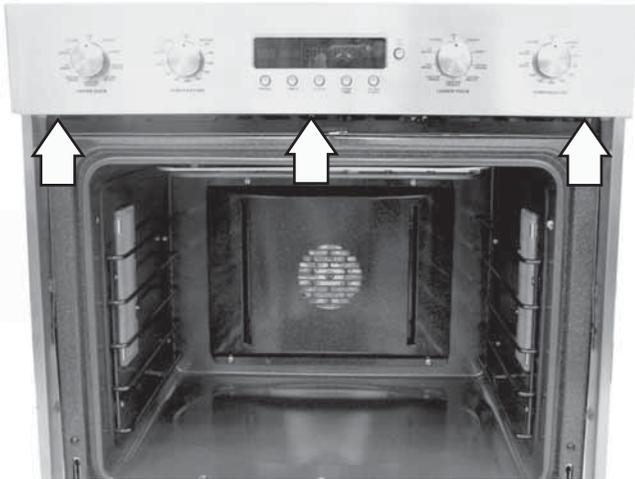


Control Compartment Access

Note: It may be necessary to partially remove the oven from the installation to avoid damage to the customer's woodwork. (See *Oven Removal*.)

To access the control compartment:

1. Open oven door.
2. Remove the three ¼-in. hex-head screws that attach the bottom of the control panel to the vent trim.



Note: The control panel has keyhole slots at the top and is held very tight to the side trims.

3. Carefully push the control panel up, then pull out at the bottom.
4. Mark and disconnect wire harnesses from the control panel.

Caution: Wire harnesses connecting the mode and temperature encoders can be incorrectly reconnected. Make sure wire harnesses are connected properly.



Lower Oven Control Compartment Access (Double Wall Oven)

To access the lower compartment:

1. Remove the upper oven door. (See *Door Assembly*.)
2. Remove the 2 Phillips-head screws from the top of the middle trim.
3. Open the lower oven door.
4. Remove the three ¼-in. hex-head screws from the bottom of the middle trim. Remove the trim.



5. Remove the four ¼-in. hex-head screws that attach the cross member to the front of the control compartment. Remove the crossmember.



6. If necessary, remove the three ¼-in. hex-head screws that attach the vent trim to the front of the cabinet. Remove the trim.

Logic Board

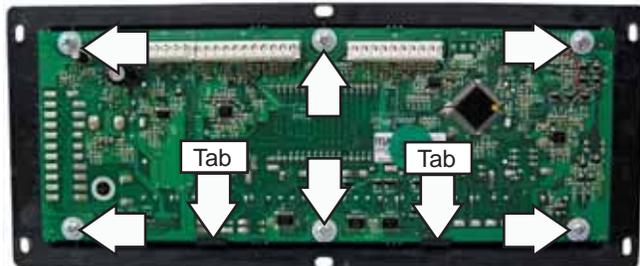
The logic board is mounted to the display frame attached to the inside center of the control panel. It is necessary to remove the control panel and the display frame to replace the logic board.

To remove the logic board:

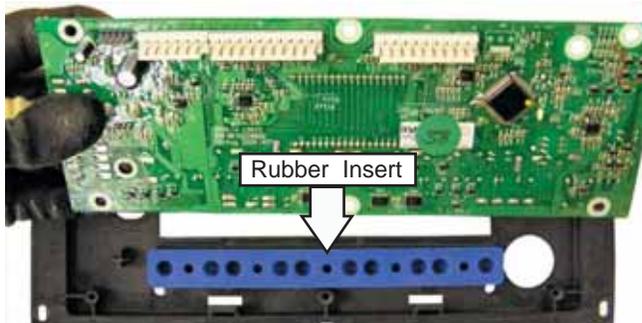
1. Remove the control panel. (See *Control Compartment Access*.)
2. Remove the 4 Phillips-head screws then carefully lift the display frame from the control panel.



1. Remove the PUSH TO ENTER knob by pulling it straight out from the display frame.
2. Remove the 6 Phillips-head screws that attach the logic board to the display frame.
3. Carefully lift the top of the logic board and remove it from the bottom 2 tabs.



Note: Ensure the rubber insert is positioned properly in the push-button recess and that all pads operate freely before reinstalling the control panel.

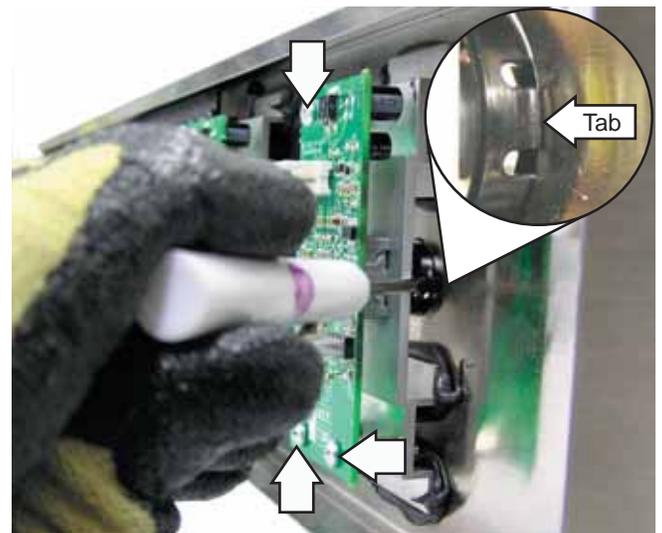


Mode and Temperature Encoders

The mode and temperature encoders are mounted to the control panel. For ease of access, it may be necessary to remove the control panel to replace mode and temperature encoders.

To remove the mode or temperature encoder:

1. If necessary, remove the control panel. (See *Control Compartment Access*.)
2. Pull the encoder knob straight out from the control panel.
3. Using a small flat-blade screwdriver, press in the 2 tabs (located on the inside of the grommet) and slide the grommet off the encoder shaft.
4. Remove the 3 Phillips-head screws from the back of the encoder.



1. Remove the 11-mm nut and washer that hold the encoder to the control panel.



Note: To ensure proper alignment, position encoder locator pin in control panel slot before tightening nut.

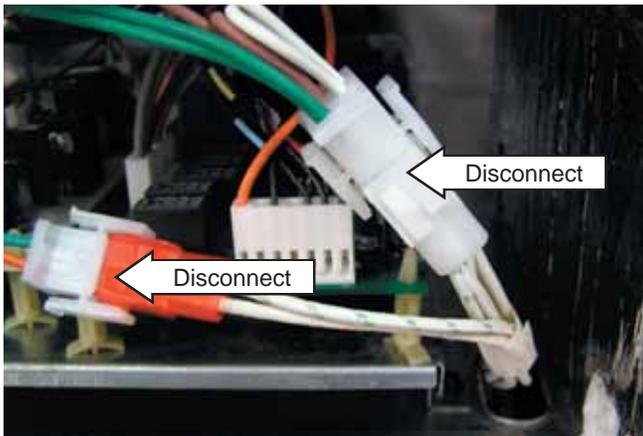
Power Supply and Relay Boards

The power supply is mounted on a metal bracket located in the control compartment. This power supply serves both ovens on a double oven model.

The relay board for the single oven (or the upper oven on a double oven model) is mounted on this same metal bracket. The relay board for the bottom oven is mounted on a metal bracket located between the two ovens.

To access the oven power supply or relay board:

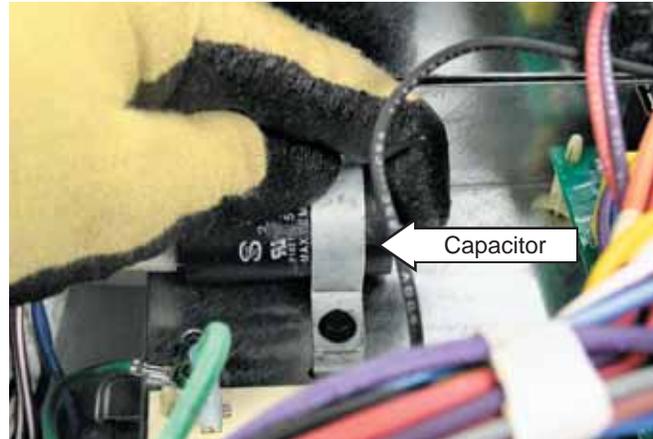
1. Access the control compartment. (See *Control Compartment Access* or *Lower Oven Control Compartment Access*.)
2. Disconnect the right side lights and meat probe wire harnesses.



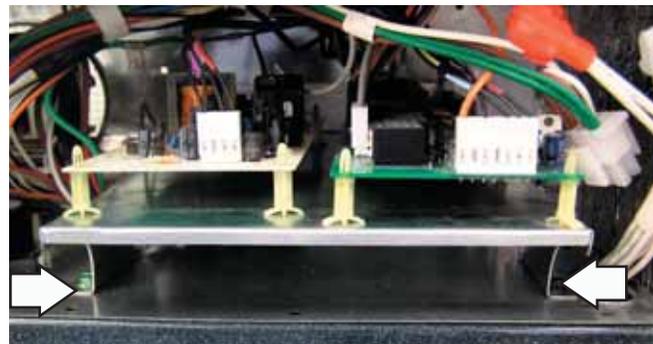
3. For single or upper oven, remove the three ¼-in. hex-head screws that attach the vent trim to the front of the control compartment. Remove the vent trim.



4. Carefully reach into the control compartment and slide the capacitor out of the restraining clamp.



5. Remove the two ¼-in. hex-head screws that attach the metal bracket front legs to the control compartment.



Note: Upon reassembly, ensure the metal bracket rear legs are inserted into the slots and that the green ground screw is installed on the front left leg of the metal bracket.

6. Pull the metal bracket outward and rotate it clockwise.

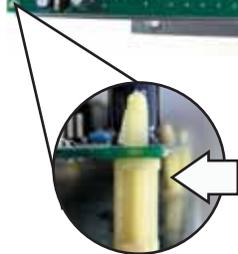
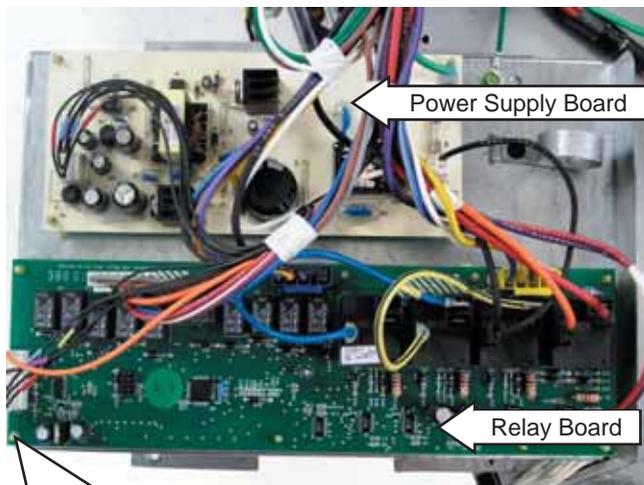


To remove the power supply:

Disconnect the wire harnesses from the power supply board at locations J13, U12, and the ground wire from U15.

To remove the relay board:

1. Disconnect the 5 wire harnesses from the relay board at locations J1-J2-J3-J4, J7-J6-J5-J10, J8, J9, and J12.
2. Disconnect the red and orange wires from relay K3, and the black wires from relay K17.
3. Mark the location of the jumper wires located on relays K16, K17, and K18. Remove the jumper wires.



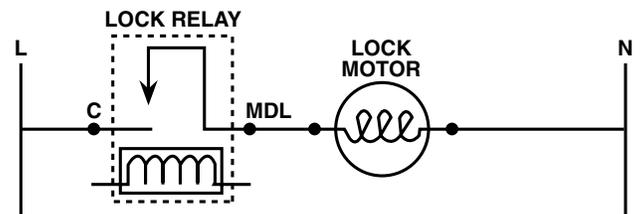
The boards are held in place by compression tabs.

Lock Assembly

The motorized door lock assembly is located above the oven. The assembly consists of a lock motor, cam and switch assembly, lock hook, heat barrier, mounting plate, and oven door switch.

The lock motor is energized when the control is set for Clean and Clean Time selected. The K9 relay contact will close and complete the circuit that supplies the voltage to the lock motor.

Door Locking/Unlocking Strip Circuit



The lock motor has approximate resistance value of 1.9K Ω .

Note:

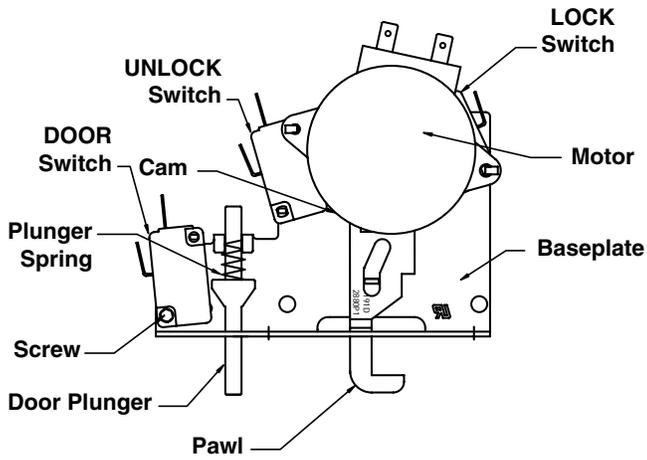
- To enable proper operation of the door lock, ensure that the door jamb switch is in "common" to "normally open" (door closed). This enables power to be delivered when the door lock closes.
- Display of Control will flash "LOCKED" if the door switch is in the "C" (common) to "NC" (normally closed) position (door open).
- The word "LOCKED" will flash on and off in the display while the lock motor is in motion. When the door is locked, the word "LOCKED" remains illuminated in the display.

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: When door is either being locked or unlocked, both the lock and unlock switches will be in the open position. The LOCKED AND UNLOCKED diagrams are representative of a single/upper oven but apply the same to a lower oven.

Door Lock - Locked Position

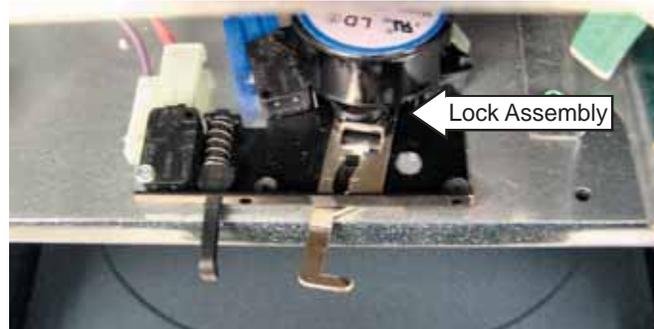


Lock Assembly Voltage Checks

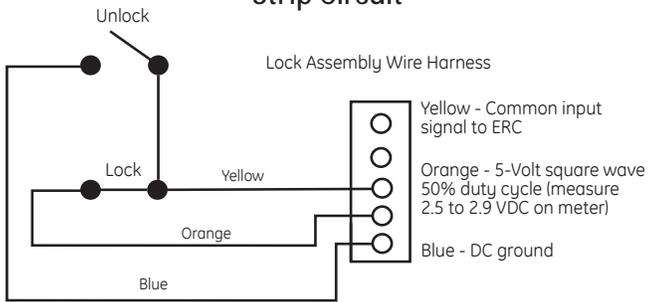
Test Wires	Locked	Unlocked	While Unlocking	While Locking
Yellow to Orange	0	2.5 VDC	2.5 VDC	2.6 to 2.9 VDC
Yellow to Blue	2.6 to 2.9 VDC	0	5.0 VDC	5.0 VDC

To remove the lock assembly:

The lock assembly is held in place by two ¼-in. hex-head screws. To access the lock assembly on a single or upper oven, see *Control Compartment Access*. On the lower oven, see *Lower Oven Control Compartment Access*.

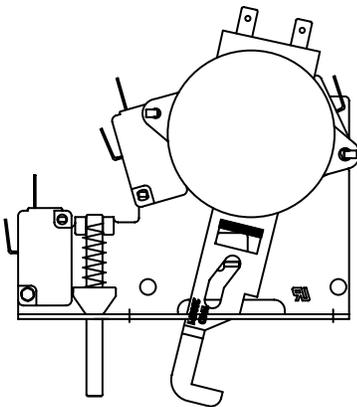


Strip Circuit

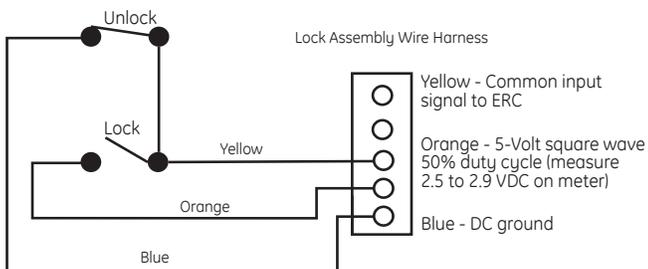


Caution: It is possible to reconnect the switch wiring incorrectly to the lock assembly. When reconnecting the wiring, make sure it is properly connected to the lock assembly before turning the power back on.

Door Lock - Unlocked Position



Strip Circuit



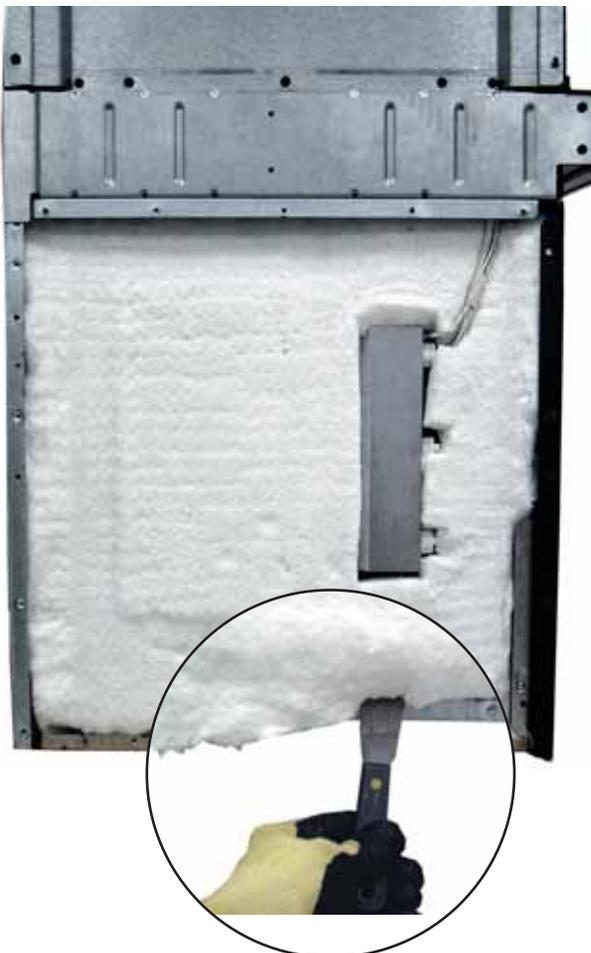
Bake Element

- The bake element is composed of an inner and an outer element. It is replaced as one unit.
- The inside element is rated at 1700 watts, has an approximate resistance value of 33Ω , and draws approximately 7.3 amps.
- The outside element is rated at 1000 watts, has an approximate resistance value of 56Ω , and draws approximately 4.3 amps.
- The bake element is located under the oven floor. The bake element terminals are located behind the left side access panels on both the single and double wall ovens.

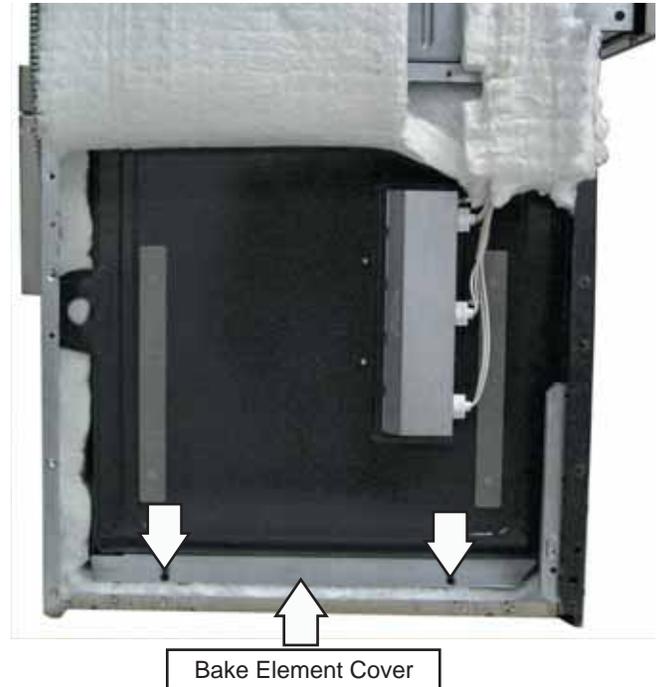
To remove a bake element:

1. Remove the oven from the installation, then remove the left side access panel for the appropriate bake element. (See *Oven Removal*.)
2. Carefully lift the insulation from the outside of the oven to access the screws that hold the bake element cover in place.

Double Wall Oven Left Side Access Panel Shown

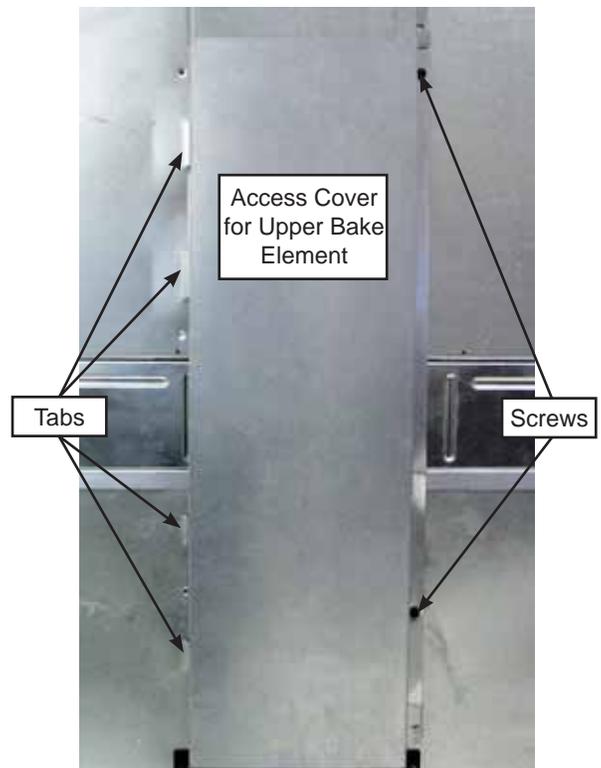


3. Remove the two ¼-in. hex-head screws that hold the bake element cover to the oven.



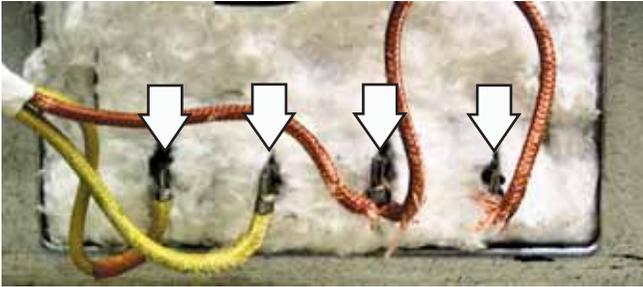
4. On the single wall oven, (and the lower oven on a double wall oven), the black access cover is held in place by four ¼-in. hex-head screws. On the double wall oven, the upper oven has an additional access cover held in place by two ¼-in. hex-head screws and 4 tabs.

Double Wall Oven Shown



IMPORTANT: The lower wattage outer element utilizes $\frac{3}{16}$ -in. terminal connections. The higher wattage inner element utilizes $\frac{1}{4}$ -in. terminal connections.

5. Disconnect the wires from the bake element.



6. Carefully move the insulation to access and remove the two $\frac{1}{4}$ -in hex-head screws that attach the bake element to the oven as shown.



7. Place a flat-head screwdriver in one of the terminal entry holes and push the element forward until the terminals clear the entry holes in the back of the oven.



8. Grasp and pull the element out from the left side of the oven.



Note:

- When reinstalling the element, it may be helpful to grasp and pull the element terminals through the entry holes using long-nose pliers.
- When reconnecting the elements, make sure the connectors are securely attached to the element terminals.
- Upon reassembly, ensure displaced insulation around oven and components is returned to its original position.

Cooling Fan

A cooling fan is located above each oven in the center rear wall of the control compartment. In a double wall oven, both fans operate together.

The fan(s) will begin to operate at approximately 200°F (oven cavity) to cool the internal components. The fan(s) may continue to operate even after the oven is turned off and will cease operating at approximately 350°F.

The fan motor in the single and upper oven is a 2 speed motor and has an approximate resistance value of:

Red to white = 33 Ω

Black to white = 27 Ω

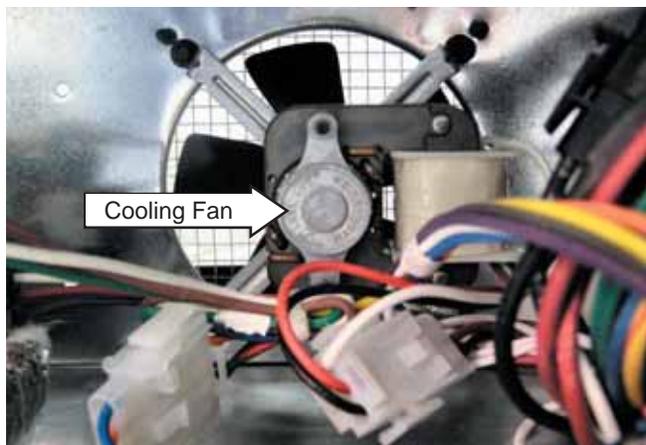
Red to black = 6.3 Ω

The fan motor in the lower oven is a single speed motor and has an approximate resistance value of 67 Ω .

The cooling fan(s) can be removed from the front of the oven.

To remove the cooling fan in the single and upper oven:

1. Access the control compartment. (See *Control Compartment Access*.)
2. Using a long extension, remove the four ¼-in. hex-head screws that hold the cooling fan to the rear wall of the control compartment.
3. Disconnect the cooling fan wire harness.



4. Carefully remove the cooling fan from the control compartment.

To remove the cooling fan in the lower oven:

1. Access the lower oven control compartment. (See *Lower Oven Control Compartment Access*.)

Note: For added accessibility, it may be helpful to remove the relay board metal bracket from the lower oven. (See *Power Supply and Relay Board*.)

2. Using a long extension, remove the four ¼-in. hex-head screws that hold the cooling fan to the rear wall of the control compartment.
3. Disconnect the cooling fan wire harness.
4. Carefully remove the cooling fan from the control compartment.

Door Hinge Receivers

To remove the door hinge receivers:

1. Remove the side access panels. (See *Oven Removal*.)
2. Carefully lift the insulation from the outside of the oven.
3. Remove the 4 T-15 screws (2 on each side) that hold each hinge receiver to the oven frame.



Note: Upon reassembly, ensure displaced insulation around oven and components is returned to its original position.

Meat Probe and Outlet

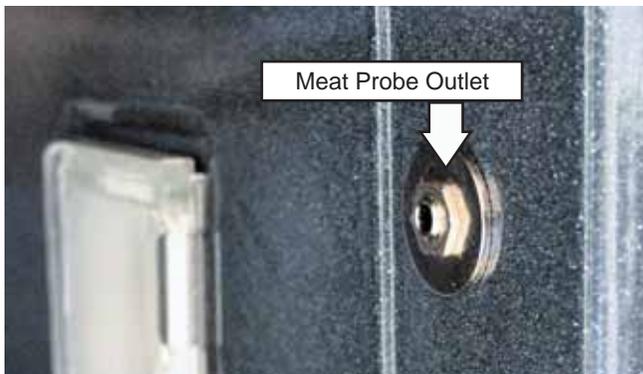
Each oven is equipped with a meat probe outlet located near the top right front corner of the oven cavity. The meat probe outlet is connected to the logic board in the control compartment. The meat probe has a resistance value of 30K-50K Ω at room temperature.

To remove the meat probe outlet:

1. Remove right side access panel nearest the meat probe outlet. (See *Oven Removal*.)
2. Carefully lift the insulation from the outside of the oven to access the meat probe outlet wire harness.
3. Disconnect the meat probe outlet wire harness in the appropriate control compartment.

Note: In the double wall oven, disconnect the upper oven meat probe outlet in the upper control compartment. Disconnect the lower oven meat probe outlet in the lower oven control compartment.

4. Remove the tape that attaches the meat probe outlet wiring to the oven light wiring.
5. Pull the probe outlet wiring through the wiring entry hole.
6. Remove the $\frac{3}{8}$ -in. hex-head nut that holds the meat probe outlet to the inside of the oven.



Note: Upon reassembly, ensure displaced insulation around oven and components is returned to its original position.

Power Vent Assembly and FAD (Fan Apparency Device)

Each oven is equipped with a power vent assembly located above the left side of the door.

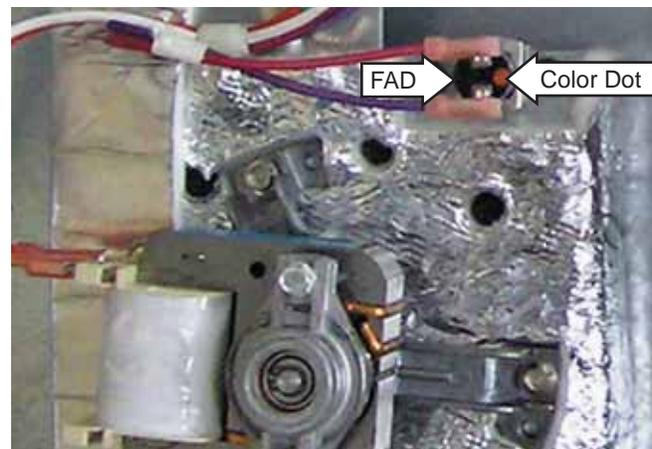
- The power vent fan comes on approximately 4 minutes after preheat beep, or instantaneously in any broil mode.
- It is normal for steam to come out of this vent and the area around the vent to become hot during oven use. It is important to keep the vent unblocked to ensure proper air circulation.
- The oven power vent fan motor has an approximate resistance value of 20 Ω and rotates clockwise as viewed from the top.
- To remove the lower oven power vent assembly, it is necessary to remove the oven from the installation and separate them.

The FAD is a low voltage thermal switch. It is mounted to the power vent assembly and disconnects power to the relay boards when the control compartment area gets too hot or the cooling fan fails. The FAD is active during all operations. An open FAD will display an F9 fault code for the consumer. The color dot on the FAD indicates thermal operating range.

FAD Thermal Operation and Location

	OPEN	RESET	DOT COLOR	FAD LOCATION
SWO	302°F	242°F	Yellow	On Vent
DWO UPPER	284°F	224°F	Pink	On Vent
DWO LOWER	302°F	242°F	Yellow	On Aluminum Shield

Top View of Power Vent Assembly and FAD (Single and Upper Oven Shown)



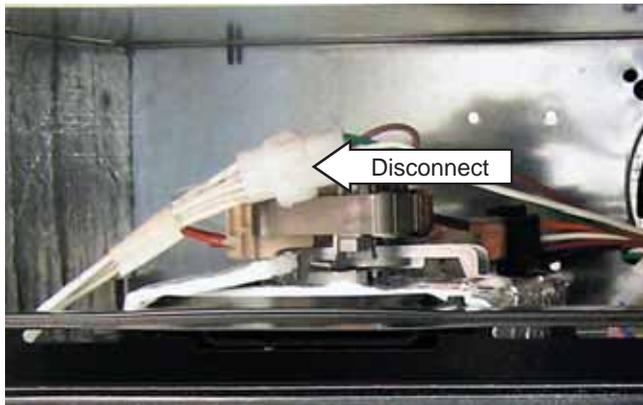
(Continued next page)

To remove the FAD:

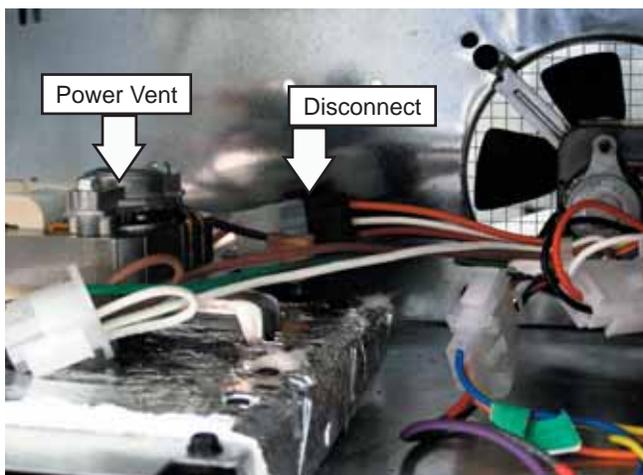
The FAD is held in place by two ¼-in. hex-head screws. To access the FAD on a single or upper oven, see *Control Compartment Access*. On the lower oven, see *Lower Oven Control Compartment Access*.

To remove the single or upper oven power vent assembly and FAD:

1. Remove the racks. (See *Oven Racks*.)
2. Access the control compartment. (See *Control Compartment Access*.)
3. Remove the three ¼-in. hex-head screws that attach the vent trim to the oven. Remove the vent trim.
4. Disconnect the left side light wire harness.



5. Disconnect the power vent wire harness.



Note: Two holes are provided in the broiler shield to gain access to the 2 screws that attach the power vent assembly to the oven frame.

6. Remove the two ¼-in. hex-head screws that attach the power vent assembly to the oven frame.



7. Lift and remove the power vent assembly.

To remove the lower oven power vent assembly and FAD:

1. Remove the ovens from the installation and separate the ovens. (See *Oven Removal*.)
2. Remove the three ¼-in. hex-head screws from the bottom of the middle trim.
3. Remove the three ¼-in. hex-head screws that attach the vent trim to the oven. Remove the vent trim.
4. Disconnect the power vent wire harness.

Note: Two holes are provided in the broiler shield to gain access to the 2 screws that attach the power vent assembly to the oven frame.

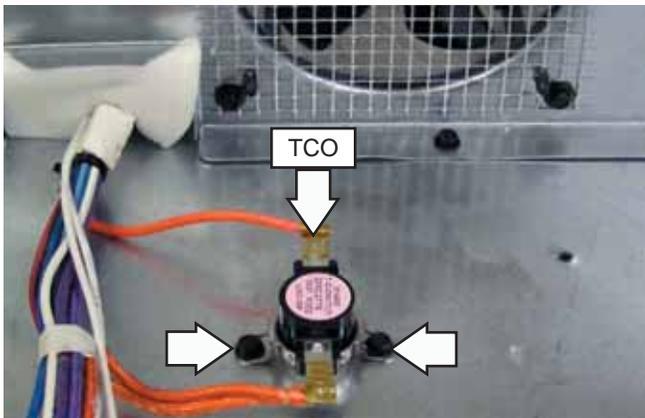
5. Remove the two ¼-in. hex-head screws that attach the power vent assembly to the oven frame.
6. Lift and remove the power vent assembly.

Thermal Line Break Thermal Cutout (TCO)

The thermal line break TCO is wired in series with the common side of all the elements and is used to protect against element runaway. The line break opens at 302°F and resets at 272°F. If the TCO opens, check for a constantly closed double line break relay and one or more element relays.

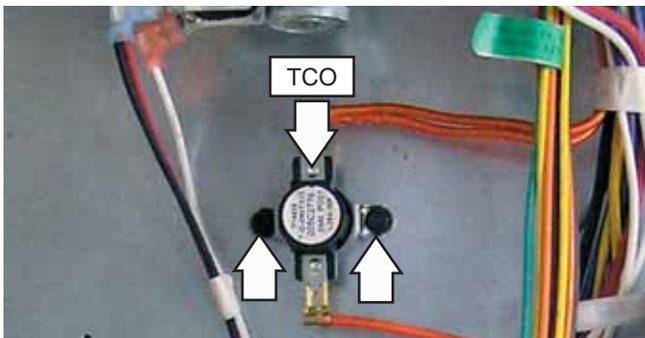
Single Wall Oven

The TCO is underneath a cover behind the control compartment. To access this cover, remove the oven from the installation. (See *Oven Removal*.) The cover is held in place by three ¼-in. hex-head screws and a single tab. The TCO is held in place by two ¼-in. hex-head screws.



Double Wall Oven

The TCO is located in the lower control compartment between the top and bottom oven. (See *Lower Oven Control Compartment Access*.) The TCO is held in place by two ¼-in. hex-head screws.



Oven Light Assemblies

Each oven is equipped with two halogen light assemblies located on the side walls of the oven. The oven door switch monitors the position of the oven door and provides this information to the logic board. The logic board operates the light relay located on the relay board. The lights come on when the door is opened or when the oven is in a cooking cycle. The oven lights do not come on during self-cleaning or if the Sabbath Feature is set.

Each light assembly consists of a removable light cover with two locking clips, a light housing with three light bulb sockets and three halogen light bulbs.

To remove the oven light assemblies:

1. Remove the oven from the installation, then remove the side access panels. (See *Oven Removal*.)
2. If removing the oven light housing from a single wall oven (or the upper oven on a double wall oven) remove the 5 Phillips-head screws and the top cover. If removing the oven light housing from the lower oven, access the lower oven control compartment. (See *Lower Oven Control Compartment Access*.)
3. Disconnect the oven light wire harness.
4. Carefully lift the insulation from the outside of the oven.
5. Remove the tape that attaches the oven light wiring to the meat probe outlet wiring.
6. Pull light wiring through the wiring entry hole.
7. Remove the light cover. (See *To remove a light bulb*, on the next page.)
8. Remove the two ¼-in. hex-head screws that attach the light housing to the oven liner.
9. Pull the oven light housing from the oven liner.

Note: Upon reassembly, ensure displaced insulation around oven and components is returned to its original position.

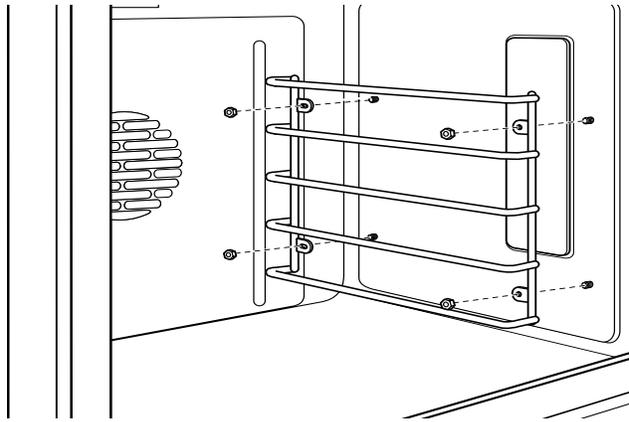
Oven Light Bulbs

Caution:

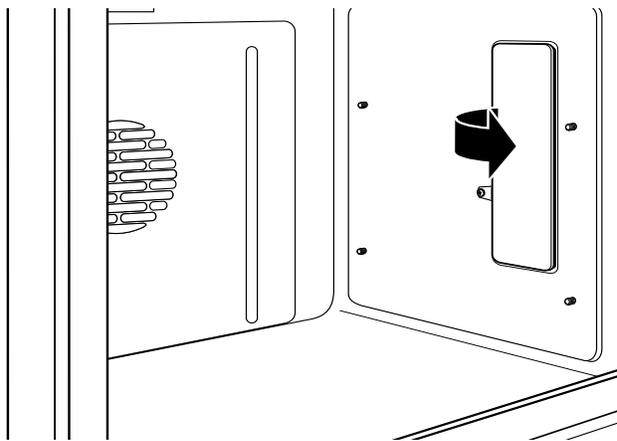
- Before replacing the bulb, disconnect electrical power to the oven at the main fuse or circuit breaker panel.
- Be sure to let the light cover and bulb cool completely. Do not touch a hot bulb with bare hands or a damp cloth.

To remove a light bulb:

1. Remove the racks from the oven. (See *Oven Racks*.)
2. Using an adjustable wrench, remove the four nuts holding the rack support over the light assembly.

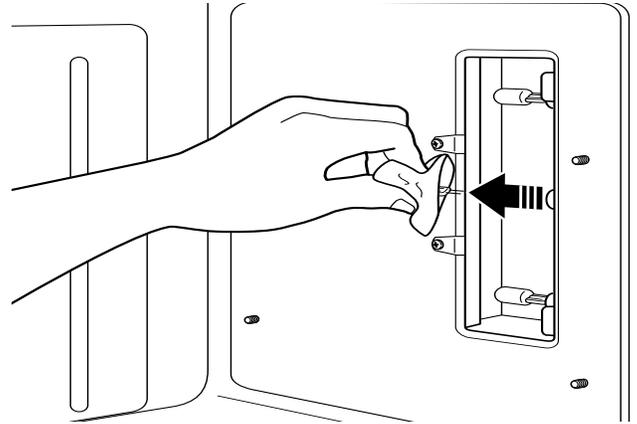


3. Remove the glass light cover by pulling its back edge out and rolling it toward you. Do not remove any screws.



Note: The two locking clips may fall from the glass light cover. Upon replacement, they will need to be placed in the correct position on the light cover and pressed back into the light housing until seated.

4. Using gloves or a dry cloth, remove the burned-out light bulb by pulling it straight out.



To replace a light bulb:

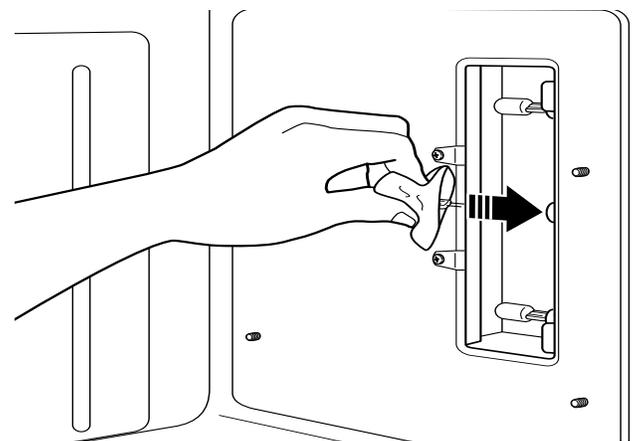
Use a new 120-volt Halogen bulb, with G8 pins, not to exceed 25 watts.

Replacement bulbs may be purchased by calling 800.626.2002. Order Part Number WB25T10064.

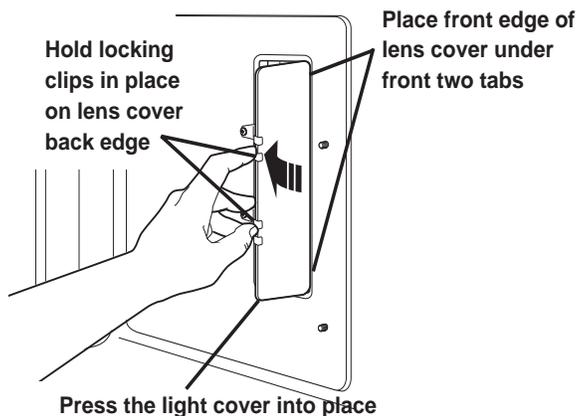
Note:

- Higher wattage bulbs will damage your oven.
- Using gloves or a dry cloth, remove the bulb from its packaging. Do not touch the bulb with bare fingers. Oil from bare fingers may cause hot spots on the glass surface and lead to premature failure of the bulb. If you do touch the glass, clean it with alcohol prior to installation.

1. Push the bulb straight into the receptacle all the way.

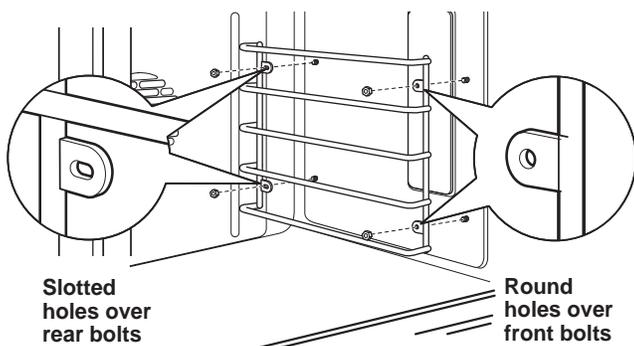


2. Replace the light cover by placing its front edge under the front two tabs in the light housing. Roll the back edge into place, making sure that it is firmly seated.



Note:

- If the locking clips fell from the glass lens cover, hold them on the cover, in the correct position, while replacing the cover on the light compartment.
 - The light cover must be in place when using the oven.
 - For improved lighting inside the oven, clean the glass cover frequently using a wet cloth. This should be done when the oven is off, disconnected from the power supply, and completely cool.
3. Replace the rack support with the slotted holes over the rear bolts and the round holes over the front bolts. Lightly secure with the four nuts removed earlier, but do not over-tighten or the enamel could be chipped.



4. Replace the racks. (See *Oven Racks*.)
5. Reconnect electrical power to the oven.

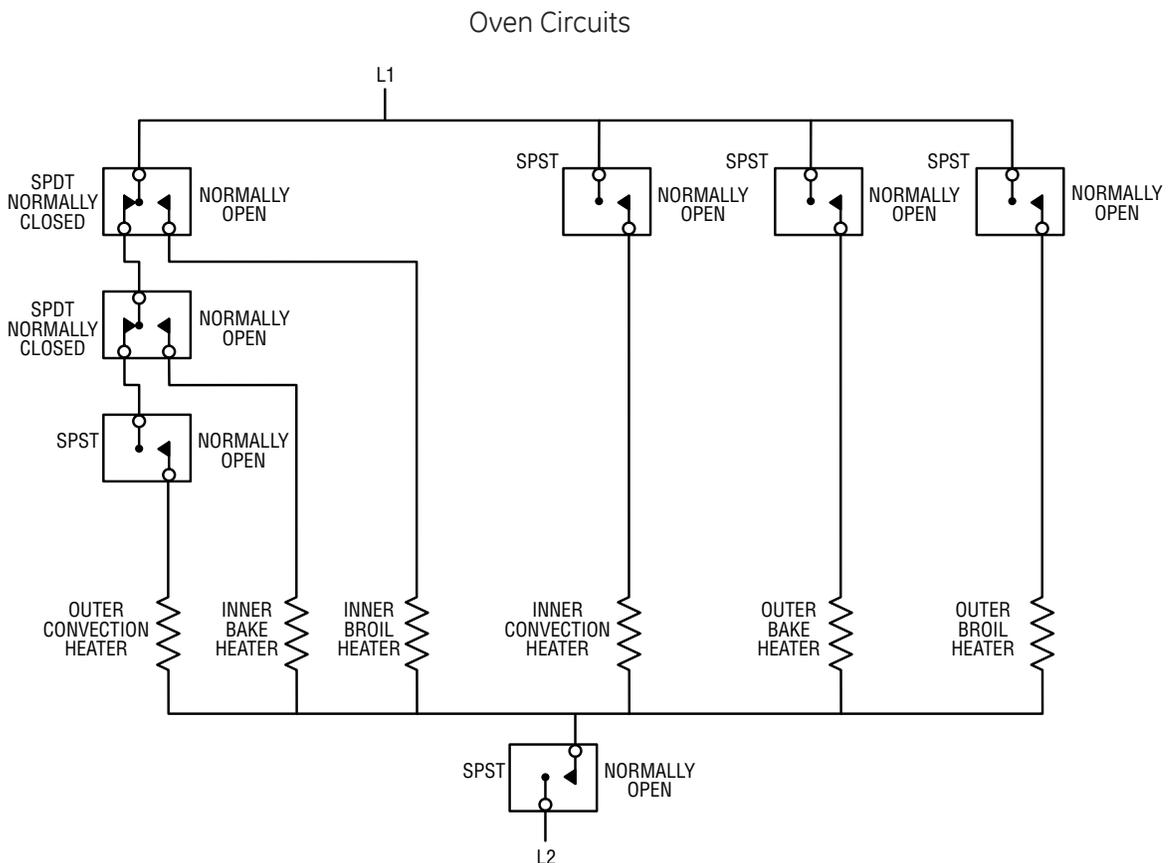
Electronic Oven Control

Overview

The Electronic Oven Control system consists of the logic/display board, power supply board, relay board, mode and temperature encoders, oven sensor, and door lock assembly.

Caution: Components are electrically HOT on control when voltage is connected to range.

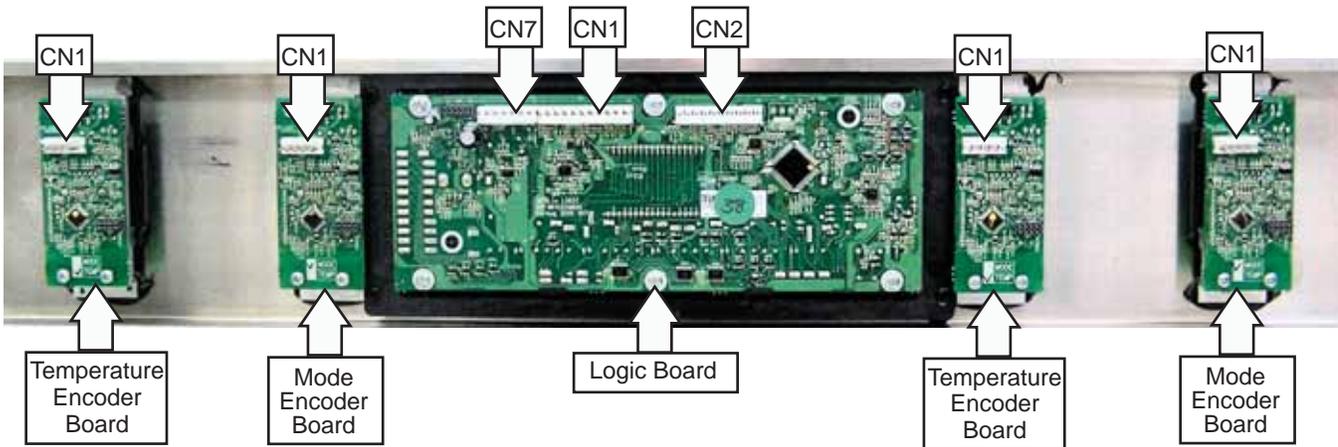
- Bake, broil, and convection units can be on at the same time.
- Bake, broil, and convection units operate simultaneously during preheat. There are six units that can operate in any combination of up to 4270 Watts. There can be several minutes of off time between bake and broil unit operation after preheat.
- In the clean cycle, the broil unit is only on during first 30 minutes or until oven reaches 750°F. During the balance of the clean operation, the oven will cycle between the bake and broil units, with one second of off time while calling for heat.



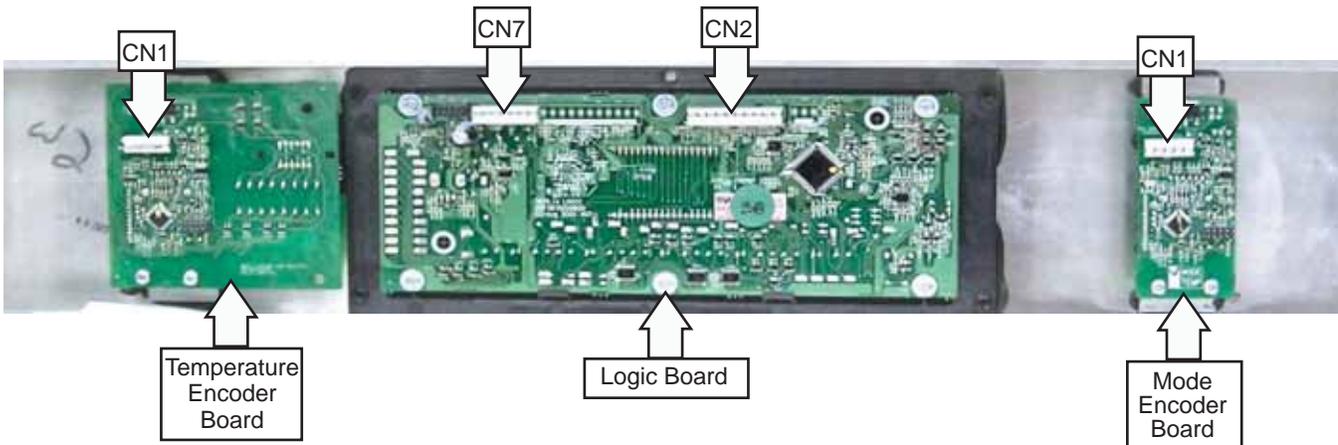
Control Boards Connector Locator

WARNING: Components are electrically HOT when voltage is connected to oven.

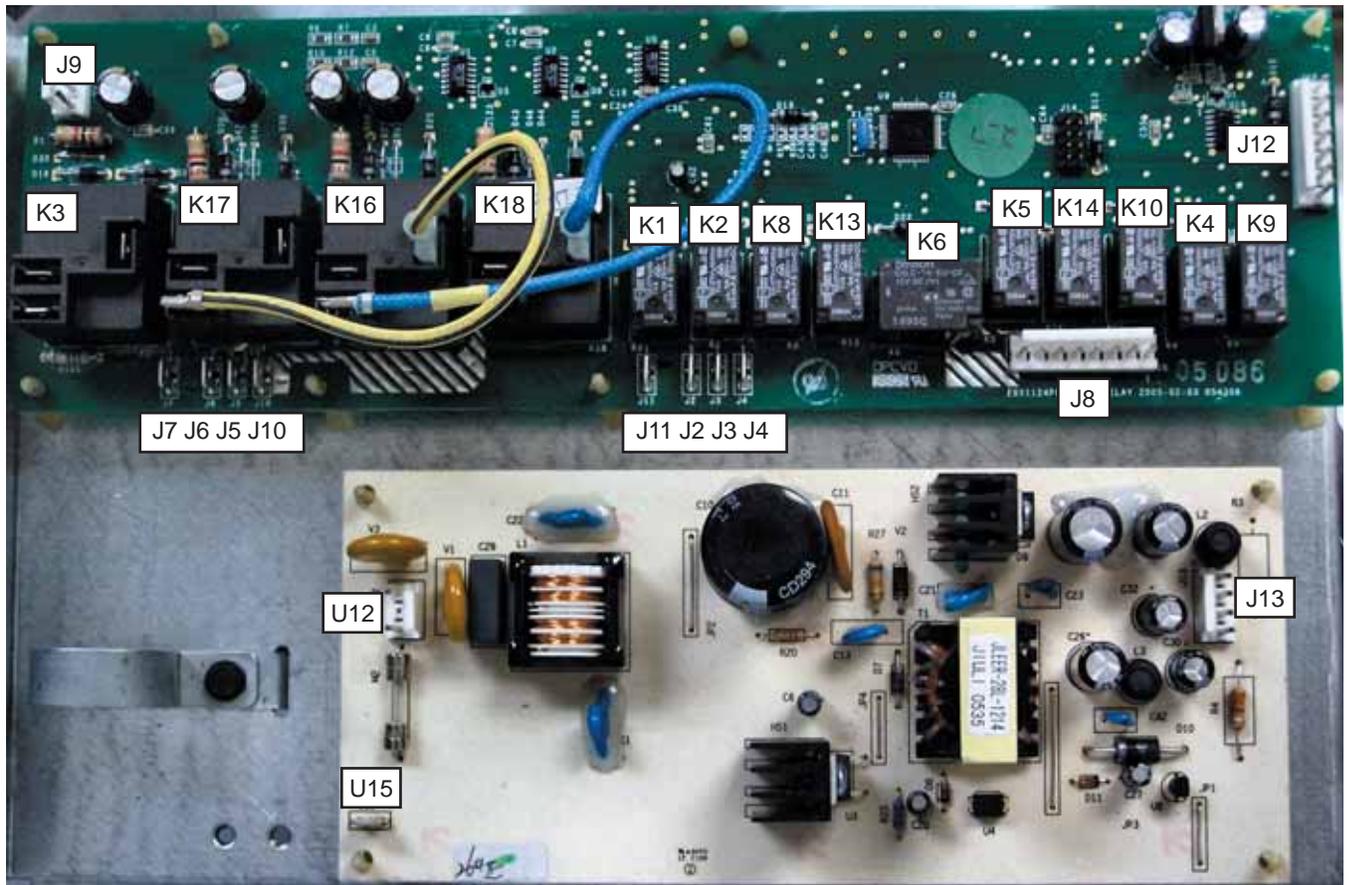
Control Panel for Double Wall Oven



Control Panel for Single Wall Oven



Power Supply Board and Relay Board



J2 - Broil Outer Element

J3 - Bake Outer Element

J4 - Convection Inner Element

J5 - Bake Inner Element

J6 - Broiler Inner Element

J7 - N to Double Line Break Relay

J8 - Wire harness to Vent Fan, Cooling Fan, Lights, and Lock Motor

J9 - Thermal Switch FAD

J10 - Convection Outer Element

J11 - L1 supply to Broil Outer Element, Bake Outer Element, Convection Inner Element, Convection Fan, Power Vent Fan, Cooling Fan, Lights, and Lock Motor

J12 - Logic Board

J13 - DC ground (blue), 12 Volt (red to blue), and -14 Volt (purple to blue)

K1 - Outer Broil Relay

K2 - Outer Bake Relay

K3 - Double Line Break Relay

K4 - Oven Light Relay

K5 - Vent Fan Relay

K6 - Convection Fan Directional Relay

K8 - Inner Convection Relay

K9 - Lock Motor Relay

K10 - High Speed Cooling Fan Relay

K13 - Convection Fan Relay

K14 - Low Speed Cooling Fan Relay

K16 - Bake Inner Element Relay

K17 - Broil Inner Element Relay

K18 - Convection Outer Element Relay

U12 - L1 (black) - N (white)

U15 - Ground

Diagnostics and Service Information

Service Test Mode (Factory Test Mode in Mini-Manual)

The electronic control system components may be tested individually for troubleshooting purposes. To enter service test mode, the unit must be restarted. Within 5 minutes of restart, press the Push to ENTER knob, COOK TIME and DELAY START buttons simultaneously and hold for 3 seconds. The display board will show Prod when the service test mode has been entered. The temperature reading of the sensor will show to the right and left of the center display. The right display of the temperature will only appear on a double wall oven unit. Once in this mode, turn the TEMPERATURE dial to clean and follow the table below for testing all features of the oven. The service test mode will time-out after 5 minutes. Re-enter service test mode to continue.

Note:

- If the display is out, you cannot enter service test mode. If 12 VDC is present between pins 5 and 7 at location CN7 on the logic board, replace the logic board. If 12 VDC is not present, replace the power supply board.
- The cooling fan will operate in test steps 1, 3, 5, 7, and 9.

STEP	TEMP KNOB	MODE KNOB	240V RELAY	120V RELAY
0	CLEAN	OFF	N/A	N/A
1	CLEAN	CLEAN	BROIL 1+2 ON	LOCK DOOR, ENGAGE VENT FAN
2	CLEAN	STD BROIL	BROIL 1+2 OFF	UNLOCK DOOR
3	CLEAN	DUAL BROIL	BROIL 1+2 ON	CONV FAN CCW
4	CLEAN	CONV BROIL	BROIL 1+2 OFF	CONV FAN OFF
5	CLEAN	CONV ROAST	CONV 1+2 ON	CONV FAN CW
6	CLEAN	CONV BAKE- MULTI	CONV 1+2 OFF	CONV FAN OFF
7	CLEAN	CONV BAKE- RACK	BAKE 1+2 ON	COOLING FAN HI ON
8	CLEAN	BAKE	BAKE 1+2 OFF	COOLING FAN OFF
9	CLEAN	PROOF	N/A	COOLING FAN LO ON

To exit the service test mode, push and hold the Push to ENTER knob for 6 seconds or until the clock displays the time on the control.

Control Voltage

WARNING

- Components are electrically HOT on control when voltage is connected to range. To prevent electrical shock, use extreme caution when diagnosing oven with outer covers removed and power on.
- Heat sinks on the power supply board are electrically live. Take special precautions when troubleshooting with the power on. If the power board has failed, the board capacitor can hold a voltage charge on the heat sinks. Wait at least 5 minutes after disconnecting power before servicing the power supply board.

Note: Voltage must be present across terminals L1 to N for control to operate.

Component Voltage Test

The voltage applied to certain components can be tested individually. Enter the Service Test Mode and select the step for the operation of the desired component. Check for proper voltage on the relay board as described in the table and shown on the diagram below.

Note:

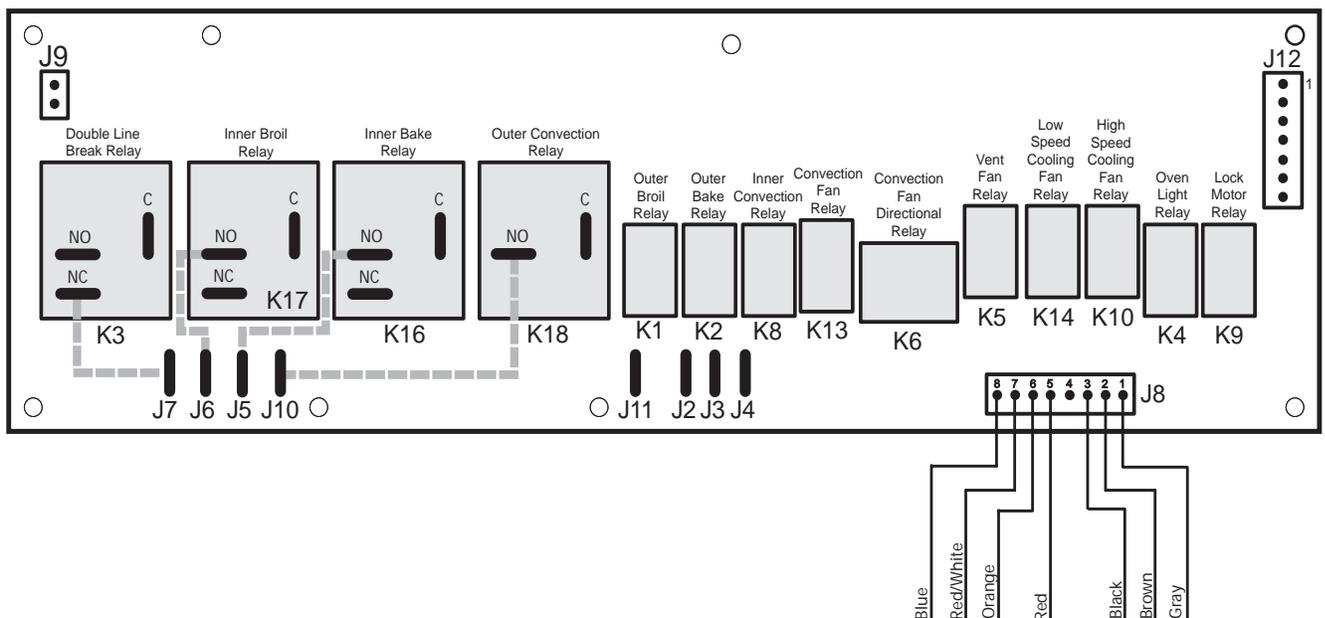
- N (Neutral) can be measured from the J7 terminal on the relay board or from the U12 connector on the Power Supply board.
- L2 can be measured from the orange wire on the common terminal C of the Double Line Break relay or on the black wire at the 240 VAC power harness.

STEP	COMPONENT	TEST LOCATIONS	EXPECTED VOLTAGE
1	Lock Motor - Lock	N to J8 pin 1 (gray)	120 VAC**
1	Vent Fan	N to J8 pin 6 (orange)	120 VAC
1	Inner Broil Element*	L2 to J6	240 VAC
1	Outer Broil Element*	L2 to J2	240 VAC
2	Lock Motor - Unlock	N to J8 pin 1 (gray)	120 VAC**
3	Convection Fan CCW	N to J8 pin 8 (blue)	120 VAC
5	Convection Fan CW	N to J8 pin 7 (red/white)	120 VAC
5	Inner Convection Element	L2 to J4	240 VAC
5	Outer Convection Element	L2 to J10	240 VAC
7	Cooling Fan - High Speed	N to J8 pin 3 (black)	120 VAC
7	Inner Bake Element	L2 to J5	240 VAC
7	Outer Bake Element	L2 to J3	240 VAC
9	Cooling Fan - Low Speed	N to J8 pin 5 (red)	120 VAC

* Step #1 or Step #3 will test these components.

** 120 VAC only present during the first 10 seconds of test.

Test Location Diagram

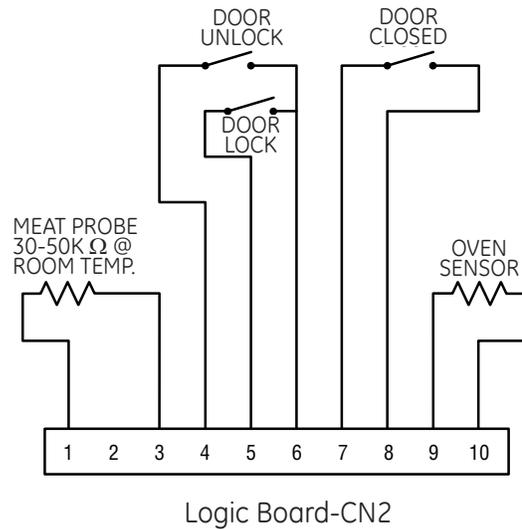


Oven Sensor and Door Switch Test

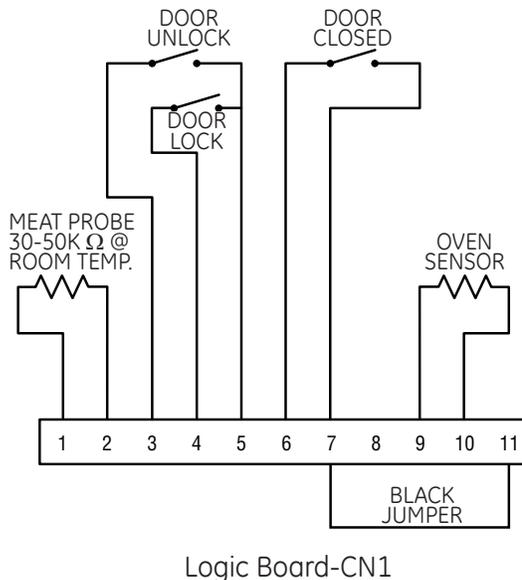
Note: See *Lock Assembly* for door switch function explanation.

1. Remove power from oven.
2. Make resistance measurement from side of sensor and lock switch connector with exposed terminals.
3. The resistance measurements are made on the logic board at connector CN2 (single/upper oven) and CN1 (lower oven-double wall oven only).
4. If abnormal reading is observed, wiggle leads at disconnect block. If any variation, replace.

SINGLE/UPPER OVEN		
Circuit	Terminals	Ohms
Oven Sensor	9 to 10	1091 Ω @ Rm. Temp. 1654 Ω @ 350°F 2634 Ω @ 865°F
Door Latched	5 to 6	0 Ω
	4 to 6	Open
Door Unlatched	4 to 6	0 Ω
	5 to 6	Open



LOWER OVEN (DOUBLE WALL OVEN ONLY)		
Circuit	Terminals	Ohms
Oven Sensor	9 to 10	1091 Ω @ Rm. Temp. 1654 Ω @ 350°F 2634 Ω @ 865°F
Door Latched	4 to 5	0 Ω
	3 to 5	Open
Door Unlatched	3 to 5	0 Ω
	4 to 5	Open



Error Codes

The electronic oven control has error (F) codes that can be utilized by the service technician in order to quickly identify failed or improper operation of certain oven components. The oven may stop operating but not give an F code on the display immediately. F codes are stored in nonvolatile EEPROM memory until the same fault occurs twice consecutively. After that, the F code will be displayed. The last 7 F codes can be recalled by pressing together the TIMER, CLOCK, and ENTER buttons for 3 seconds. For all F codes, except F2, tone can be muted by pressing any button. All F codes, except for F9, are suppressed. F9 is the only error code that can be displayed for the consumer.

ERROR CODE	MEANING	CAUSE / CORRECTION
F2	Oven temperature Inside oven cavity as measured by sensor over 650°F unlatched or 915°F latched	Welded relay contacts on the relay board Airflow to rear of unit High resistance in oven sensor leads and/or connectors (especially at sensor in rear)
F3	Open oven sensor (over 2900 ohms)	Disconnect power. Disconnect sensor harness from control. Measure sensor resistance (white leads) to be 1080 ohms at room temperature with 2 ohms per degree change. Look for damaged harness terminals if not a bad sensor.
F4	Shorted oven sensor (under 950 ohms)	Disconnect power. Disconnect sensor harness from control. Measure sensor resistance (white leads) to be 1080 ohms at room temperature with 2 ohms per degree change. Separate sensor from harness to determine fault.
F7	Shorted key	Check logic display assembly. If rubber button pad is misaligned, correct; otherwise, replace logic board.
F8	EEPROM data shift failure	If repeated, replace logic board.
F9	Cooling fan stalls or other cause of open thermal switch	Suspect stalled cooling fan or airflow to control area.
CX C1 C2 C3 C4 C5 C6	Communication Error Communication Fail with Upper Relay Board Communication Fail with Upper Temp Encoder Communication Fail with Upper Mode Encoder Communication Fail with Lower Relay Board Communication Fail with Lower Temp Encoder Communication Fail with Lower Mode Encoder	Check harness first and then replace component indicated by CX error code.
FC	Door Latch Error	Inspect door latch and circuitry. Replace if switches are defective.

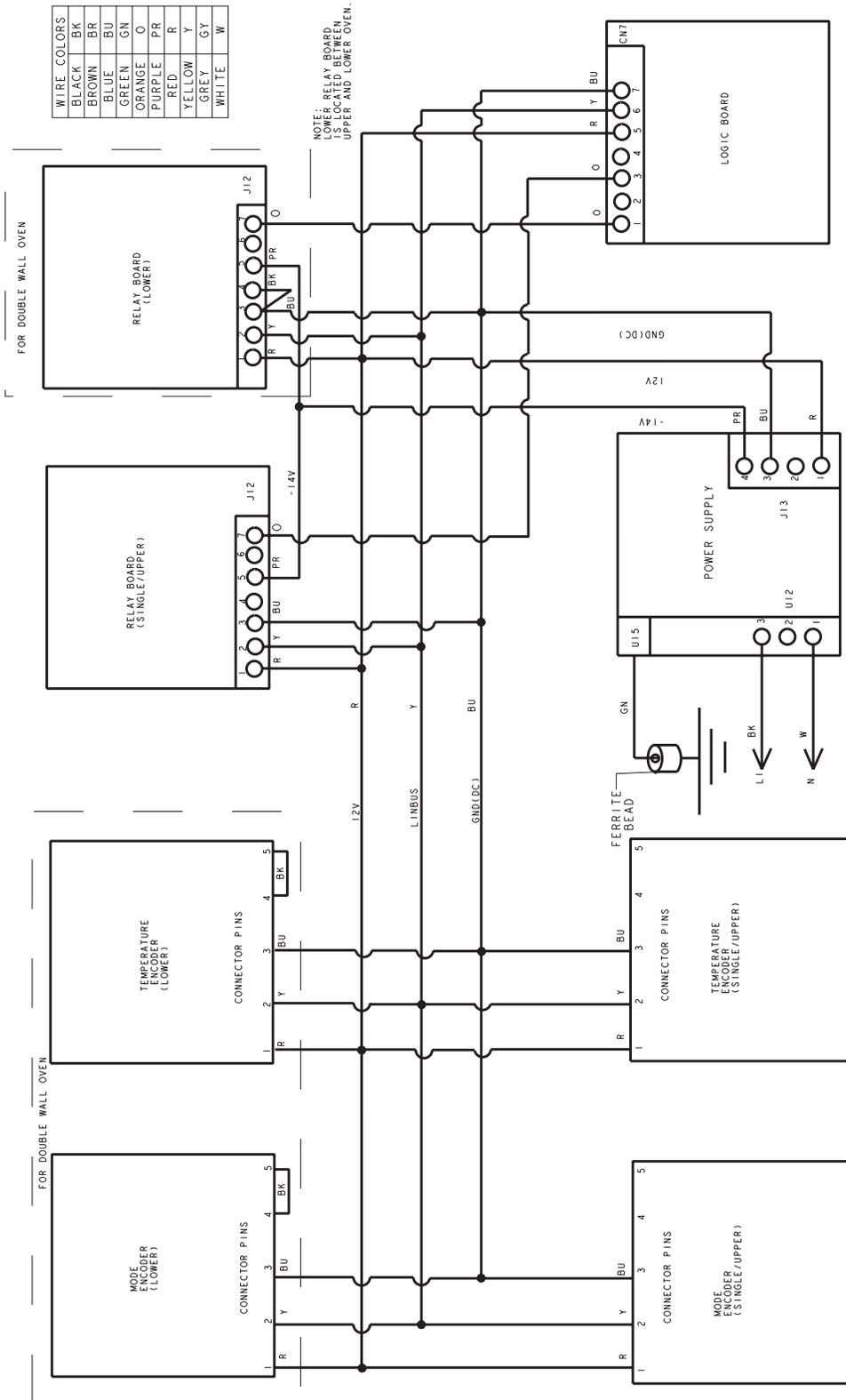
Note:

- To clear F codes, while in the F code mode, press COOK TIME and DELAY START simultaneously for 3 seconds.
- F2 through F8 - If sensor, wiring connection, relay board, and airflow check OK, replace the logic board.
- F9 - If cooling fan, FAD, and airflow check OK, replace the relay board.
- If the initial set temperature displayed differs from the selected temperature, replace the temperature encoder board.
- If the door lock circuitry checks OK, but the door lock motor runs continuously, replace the logic board.

Schematics and Wiring Diagrams

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.

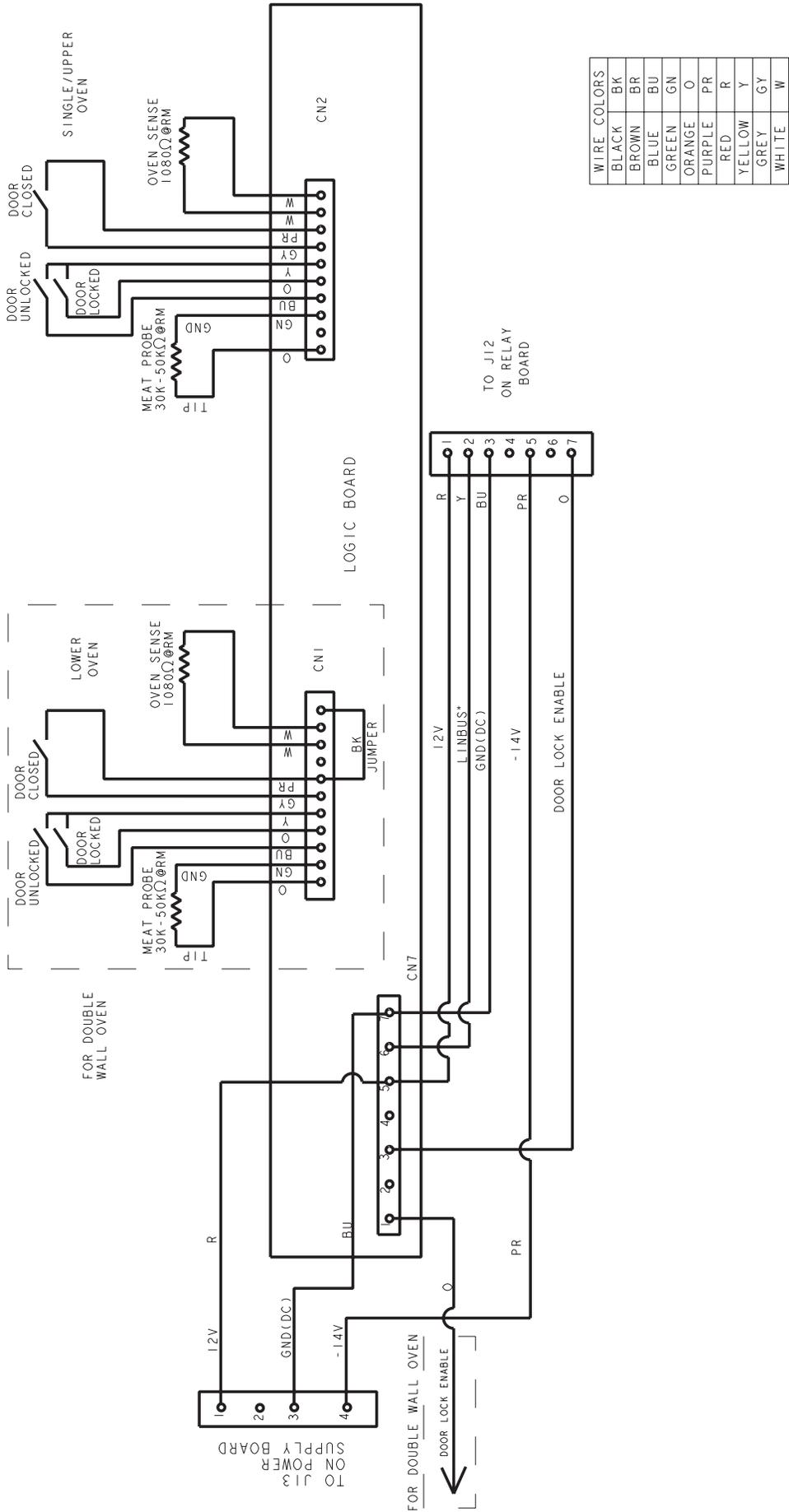


LOW VOLTAGE AND COMMUNICATION

*LINbus: (Local Interconnect Network) : A communication network comprised of a LIN master and one or more LIN slaves. In this wall oven, the Logic board acts as the LIN master while the Mode encoder, Temp encoder, and Relay board are the LIN slaves. The Logic board sends messages to the other components based on a predefined list of commands.

All the components receive a signal to perform a specific task, but only the appropriate component will act on the message and respond accordingly. The component which acts on the specific is based on programming in the control. Since the LINbus signal is a digital control signal, special equipment, such as an oscilloscope, is required to measure it.

(Continued Next Page)



SENSOR CIRCUITS AND LOGIC OVERLAY BOARD

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Warranty

WHAT IS COVERED

From the Date of the Original Purchase

LIMITED ONE-YEAR WARRANTY

For one year from date of original purchase, we will provide, free of charge, parts and service labor in your home to repair or replace any part of the oven that fails because of a manufacturing defect.

.....
This warranty is extended to the original purchaser and any succeeding owner for products purchased for ordinary home use in the 48 mainland states, Hawaii, Washington, D.C. or Canada. If the product is located in an area where service by our 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 Service location for service. In Alaska the warranty is the same except that you must pay to ship the product to the service shop or for the service technician's travel costs to your home.

All warranty service will be provided by our Factory Service Centers or by our authorized Customer Care® servicers during normal working hours.

Should your appliance need service, during warranty period or beyond, in the USA call 800.444.1845. In Canada: 888.880.3030.

WHAT IS NOT COVERED

- Service trips to your home to teach you how to use the product.
- Replacement of house fuses or resetting of circuit breakers.
- Damage to the product caused by accident, fire, floods or acts of God.
- Damage after delivery.
- Failure of the product if it is used for other than its intended purpose or used commercially.

- Improper installation, delivery or maintenance.

If you have an installation problem, contact your dealer or installer. You are responsible for providing adequate electrical, gas, exhausting and other connecting facilities as described in the Installation Instructions provided with the product.

- Incidental or consequential damage caused by possible defects with this appliance.
- Product not accessible to provide required service.

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.

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

Warrantor in USA: General Electric Company,
Louisville, KY 40225

Warrantor in Canada: Camco Inc.



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Appliances
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