Dacor Technical Training - 2009

Dacor's New All Gas Ranges









Introducing Dacor's New All Gas Ranges

Available Models:

30" Model: ER30G 36" Model: ER36G

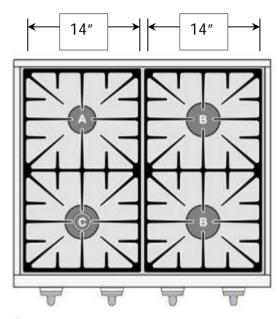






Burner Configuration

30" Model: ER30G



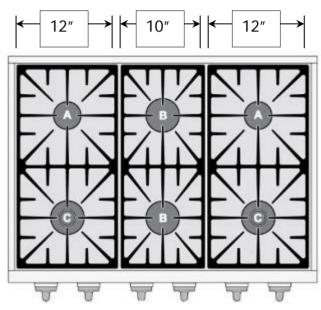
Burner Locations

A Standard Burner: 1300 - 9500 BTU

B Standard Burner: 1700 - 15000 BTU

C SimmerSear Burner: 800 - 18000 BTU

36" Model: ER36G



Burner Locations

A Standard Burner: 1300 - 9500 BTU

B Standard Burner: 1700 - 15000 BTU

C SimmerSear Burner: 800 - 18500 BTU



Illumina Burner Controls...





...glow Dacor Signature Blue when the burners are on for a stylish and safe cooking experience.



Superior Burner Technologies

SimmerSear™ Burner

- Simmer, sear and sauté at ultrahigh or ultra-low temperatures with laser precision.
- 800 18,500 BTU on ER36G
- 800 18,000 BTU on ER30G

Perma-Flame™

 Automatically re-ignites when flame goes out, to ensure the cooking experience remains uninterrupted.

Smart Flame™ technology

 Reduces flame output under each grate finger, protecting the finish and longevity of the grates.







Superior Burner Technologies

- Only Gas Ranges in the high end market equipped with various sized BTU rated burners for super precise simmering, searing and sauteing.
- All burners have a simmer setting.
- Long lasting aluminum burners.
- Continuous porcelain spill tray for easy cleaning





Large Oven Window

- Large oven window is clear glass for easy viewing inside the oven!
- The ER36G has the largest window in the industry!
- ER36G window size is 264 square inches or 22"x12"
- ER30G window size is 216 square inches or 18"x 12"
- Two bright 20 watt halogen lights in the ER36G and one in the ER30G





Electronic Thermostat with Indicator

- Similar in style but not in function to our competitors...
- Our backlit rotary thermostat is connected to a electronic control board.
- This board is connected directly to the oven temperature sensor for immediate reaction to changing oven temperatures.

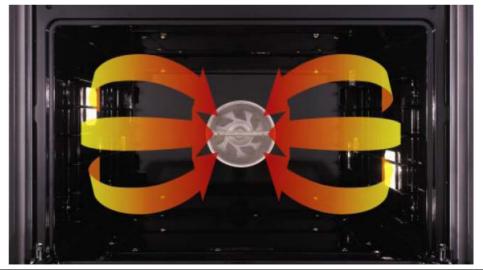




Three part Convection System ™

- Consist of the fan, air baffle, and convection filter
- Channels hot air from baffle vents, up against racks then draws air back through filter for even heating.
- Cook three racks of cookies at once.
- · Cook different foods on multiple racks with no flavor transfer.

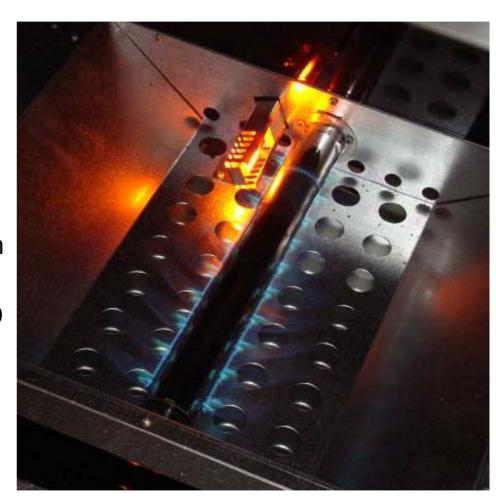






Bake Burner and Oven Cell

- Hidden, Stainless Steel Bake
 Burner under one piece porcelain
 for easy cleaning
 - Rated at 30,000 BTU
- Electronic Hot Surface Igniters
 (HSI) are highly engineered ignition system for unsurpassed reliability
 - Equipped on both the bake AND broil elements





Gas Infrared Broil

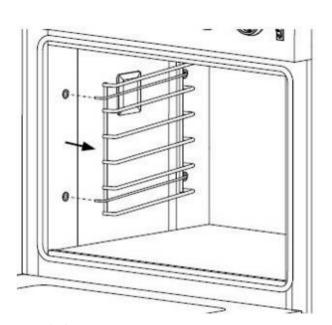
- An intense gas broiler surface that will quickly sear or caramelize any product.
 - Rated at 18,000 BTU
- Large footprint assures even heat distribution.
- Convection can be selected for even quicker searing and more intense heat distribution.





Bake Modes and Oven Cell Features

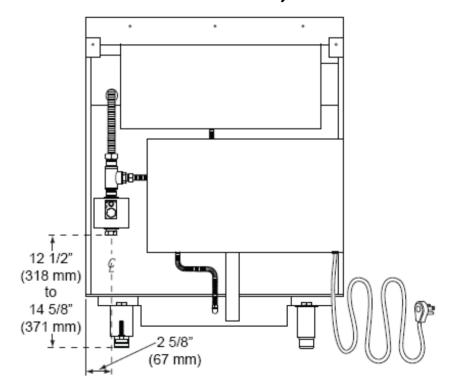
- Four oven modes
 - Convection Bake
 Convection Broil
 - Bake Broil
- Oven temperature range 125°- 500°
- Speckled porcelain cell interior
- Bright 20 watt halogen light
- Three chrome racks with 6 adjustable rack position
- Removable rack support for easy cleaning
- Ultra solid spring door hinge (same as Discovery wall oven)
- GlideRack™ available as optional accessory for the ER36G & ER36GI
- ER36G Oven Cell is 5.4 cubic feet (Fits a full size sheet pan!)
- ER30G Oven Cell is 4.04 cubic feet





Specifications

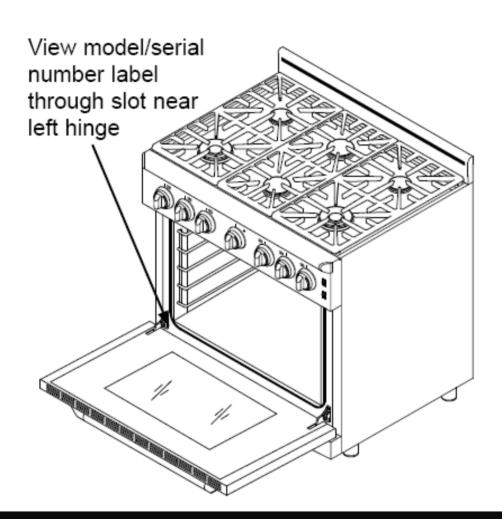
- Measurements:
 - ER30G (29 7/8" W x 35 to 36 3/4" H x 28 1/2"D)
 - ER36G (35 7/8" W x 35 3/4 to 37 7/8 H x 29" D)
- Requirements:
 - Electrical
 - 120V, 15A
 - Standard Gas Supply
 - Natural Gas (NG)
 - Gas Special Orders
 - Liquid Propane (LP)
 - High Altitude (H)



BACK OF RANGE



Data Tag Location





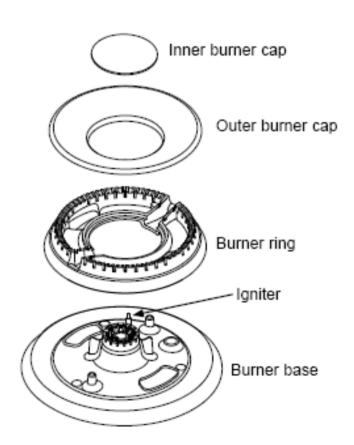




Surface Burners

Dual Stacked Burner:

- Left Front Burner on 30".
- Right and Left Front Burners on 36".
- 800 BTU Low
- 18,000 BTU High for 30" and 18,500 BTU High for 36"



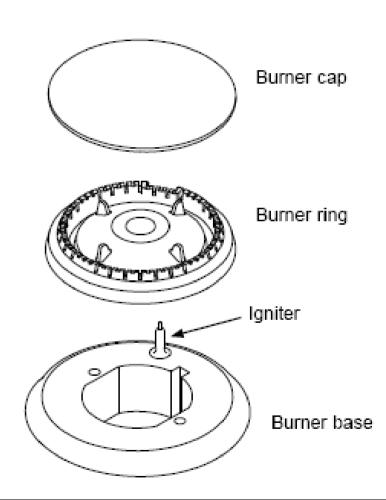


Surface Burners

Standard Stacked Burner.

- A Burner: 1300 to 9500 BTU

- B Burner: 1700 to 15,000 BTU





Surface Burners

Stacked Burners

As with any Stacked Burner... the burner must be assembled correctly after cleaning to avoid damage:





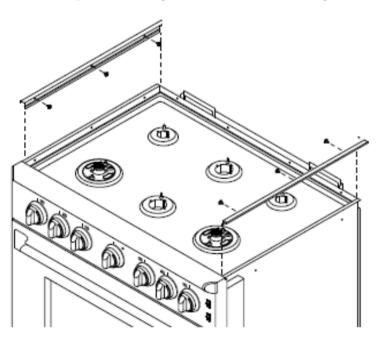
Spill Tray Removal

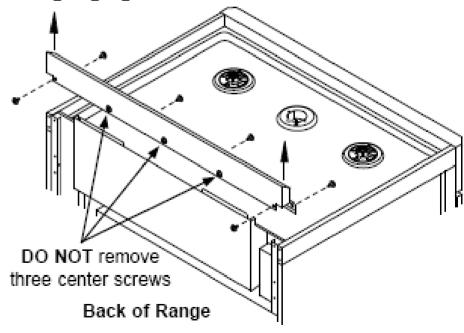
To access cooktop chassis area.

Remove Burners and burner bases (with #20 Torx Driver)

Remove side and rear retaining trim.

Lift Spill Tray out carefully to avoid damaging ignitors.







Burner Bases

Dual Burner Base: 800 to 18,500 BTU Two Gas Lines



Single Burner Base: 1300 to 15,000 BTU Single Gas Line





Burner Gaskets

Each Burner Base has a Gasket. Be sure to replace the Gasket if it is damaged in any way.

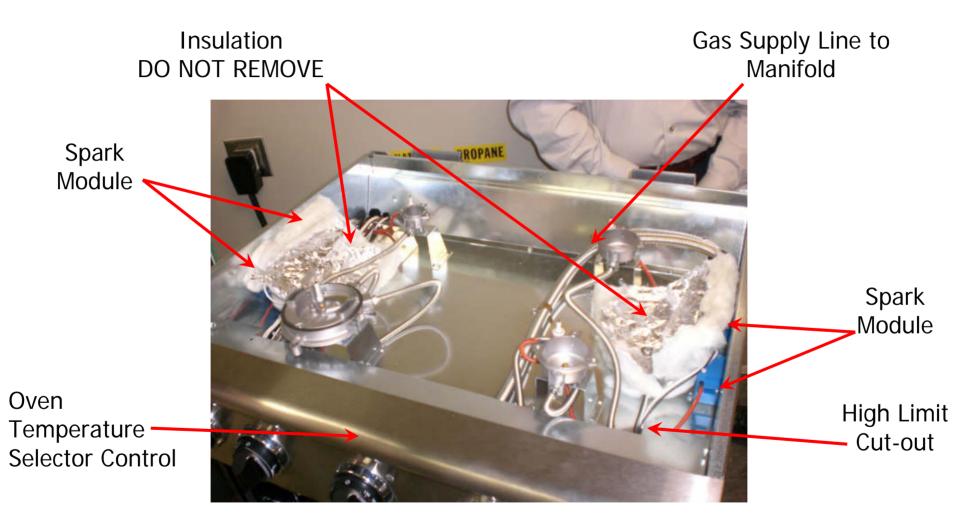








Cooktop Chassis

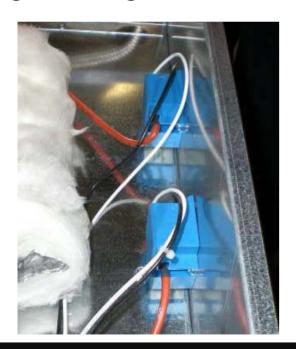




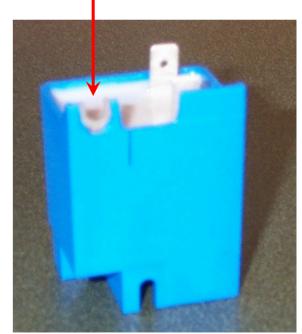
Single Point Ignition

Single Point Ignition allows for only the intended ignitor to spark and for easier ignition failure diagnosis.

Note: the Spark Module MUST be Properly fastened to the cooktop chassis in order for the ignition system to operate properly. Notice the grounding terminal on the bottom of the Spark Module.



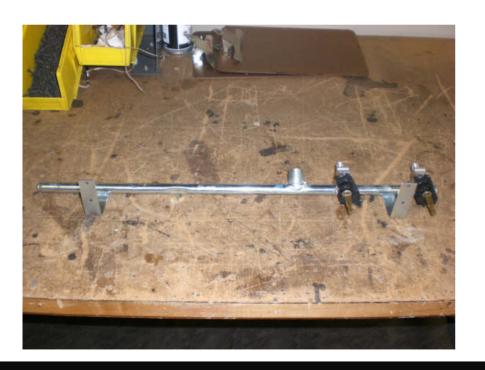


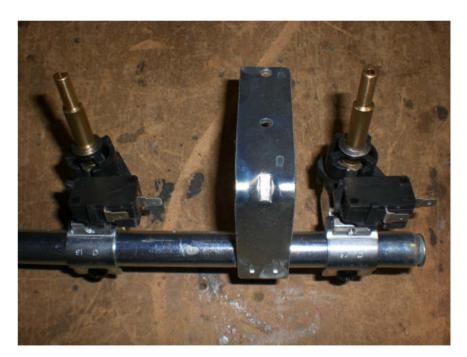




Manifold

The Manifold is easily replaced by removing the cooktop spill tray. Notice the plastic retaining clips for the ignition switches.



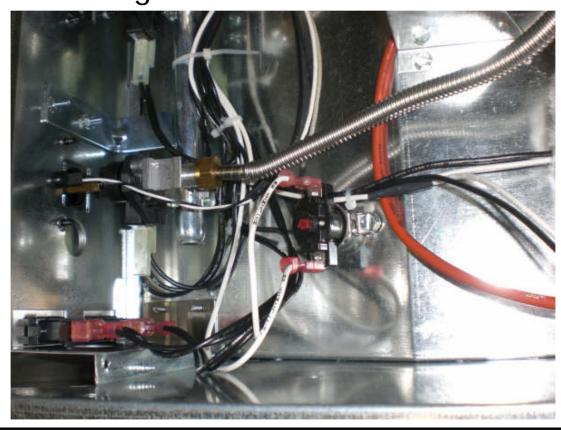




High Limit Cut-out

The Resettable High Limit Cut-out is located just under the cooktop surface at the right side of the machine and can be reset

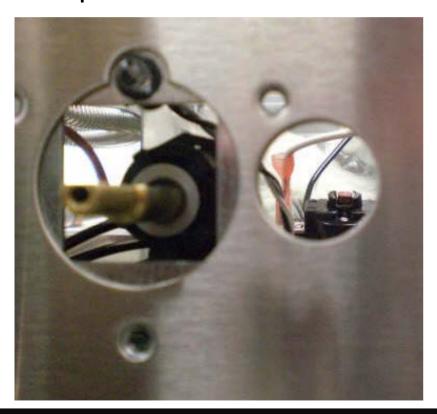
from the front.

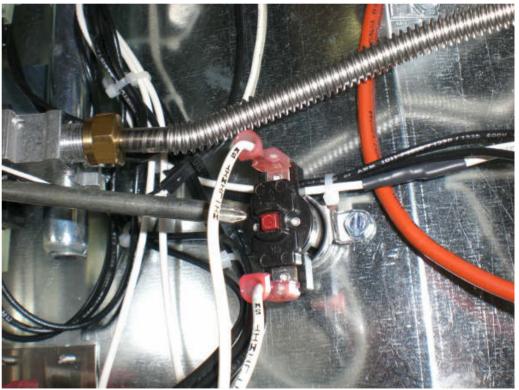




High Limit Cut-out

To reset the High Limit Cut-out, remove the Right Front Burner Knob and Bezel. Insert a long screwdriver into the access hole and push down on the reset tab.

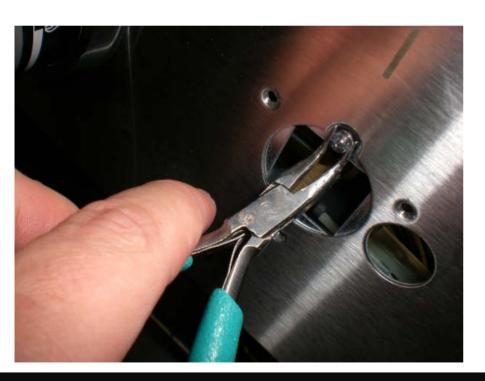






LED Knob Lights

Bulb may be replaced from the front by bulling the bulb out of the socket with needle nose pliers

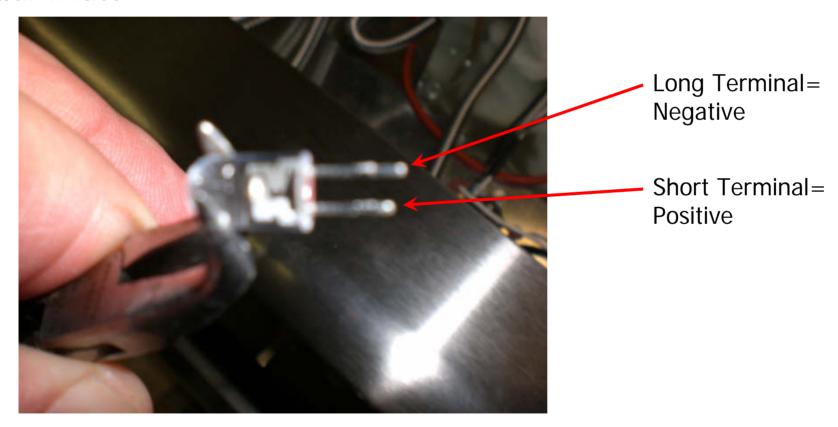






LED Knob Lights

Bulb must be installed correctly. If not, the bulb will not illuminate.





Convection Fan & Light Switches

The Fan and Light Switches may be replaced by removing either the cooktop spill tray or the control panel.

In order for the Convection Bake and Convection Broil Modes to operate properly the Convection Fan Switch must be activated along with selecting the desired temperature using the Oven Temperature Selector Control





Oven Temperature Selector Control

Oven Temperature Selector Control can be replaced by removing the Knob, Retaining Screws and Cooktop Spill Tray.

The oven ON indicator light illuminates when the oven is on. The light cycles on and off during normal use indicating that the oven's burner control system is maintaining a constant temperature.

Knob Light Oven On Indicator Light Temp Selector Control



Control Panel

To Remove Control Panel:

Locate and remove retaining screw behind each knob.

Locate and remove retaining screw for underside of control panel.









Control Panel

To Remove Control Panel:

Locate and remove retaining screw from End Cap.

Slide End Cap Out of Bull Nose.



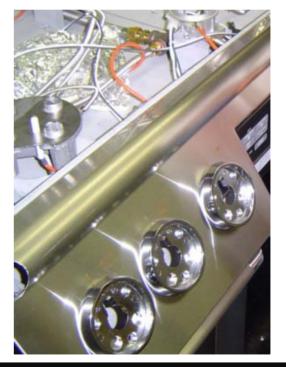


Control Panel

To Remove Control Panel:

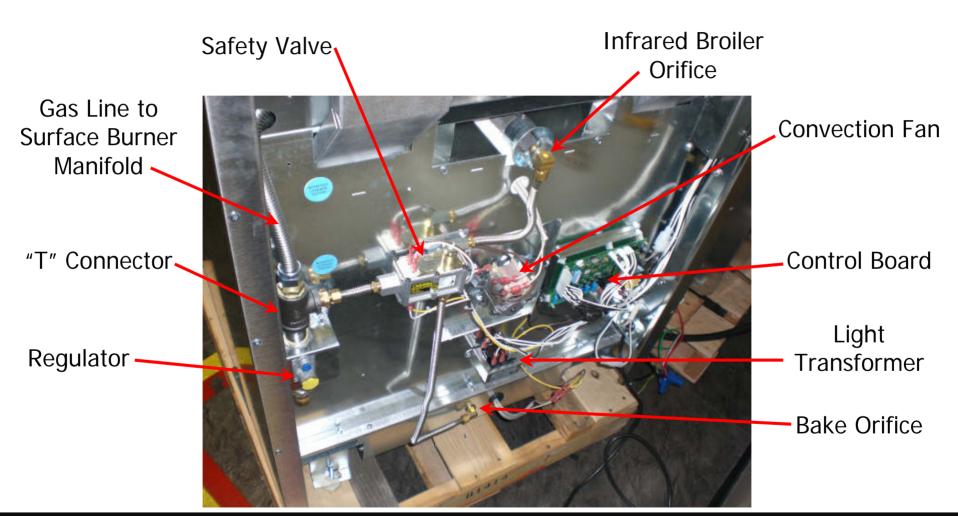
Locate and remove retaining screw from End Cap opening. Lift and rotate control panel off of machine.







Rear Access





Regulator and "T" Connector

Gas Supply and Pressure Requirements

Gas Type	Manifold Pressure* (WC)	Min. Gas Supply Pressure (WC)	Max. Input Pressure
Natural	5"	6"	1/2 p.s.i.
LP	10"	11"	1/2 p.s.i.

Note: Care should be take to avoid over tightening the supply line connection.

A gas leak could occur if over tightened.





Safety Valve

One Dual Safety Valve for both Bake and Broil is located on the rear of the machine

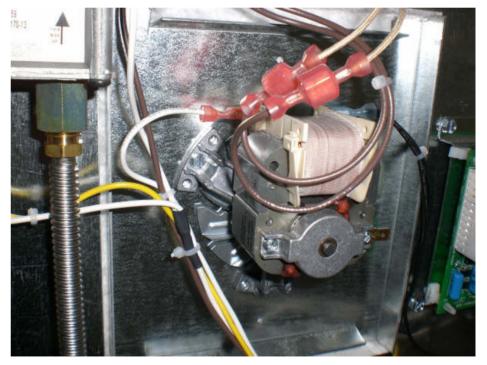




Convection Fan

The Convection Fan is replaceable from the rear of the machine. Note: the Convection Filter must be in place and clean to obtain the best baking results.







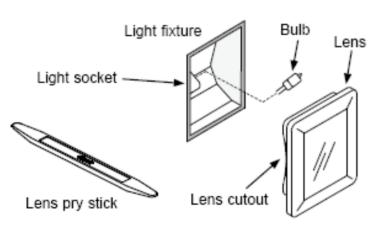
Oven Lights & Transformer

The Light bulb is easily replaced by the customer by removing the lens using the supplied pry stick then slide the light bulb out of the socket.

The Light Bulb is Halogen, 20Watt, 12Volt AC

The Light Socket can be easily replaced by a Technician by bending the retaining tabs inward then pull the socket (complete with wire harness) through the opening.

The Light Transformer is located on the rear of the machine.



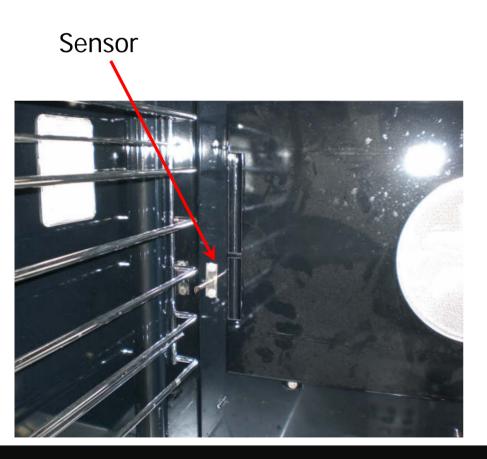


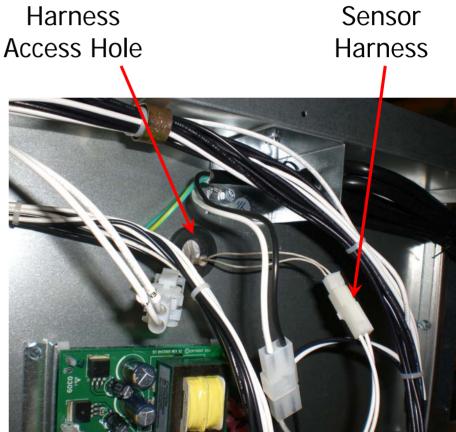




Oven Temperature Sensor

The Oven Temperature Sensor is replaceable from the front.







Control Board

The Control Board is located on the back of the machine.

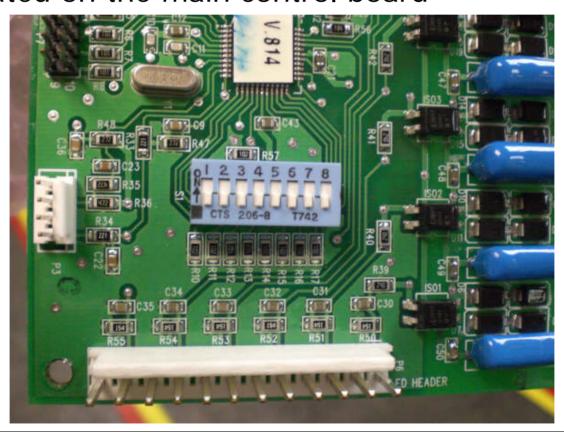
This unit does not have a cooling fan so the rear of the machine is the coolest place for the control board.





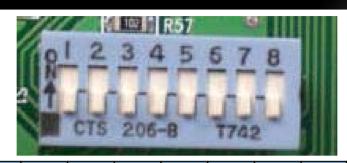
Oven Temperature Calibration

The Oven Temperature may be calibrated by adjusting the toggle switches located on the main control board





Oven Temperature Calibration



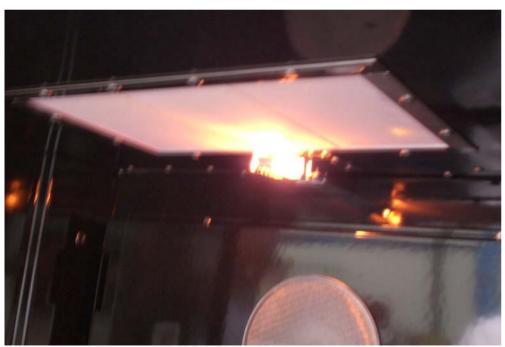
Note: 0=Off and 1=On

	switches															
	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	2	1	1	0	0	1	1	0	0	0	1	1	0	0	1	1
	3	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1
BAKE	4	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
OFFSETS		35	30	25	20	15	10	5	0	- 5	-10	-15	-20	-25	-30	-35
	5	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	6	1	1	0	0	1	1	0	0	0	1	1	0	0	1	1
CONVECTI	7	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1
BAKE	8	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
OFFSETS		35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35



Gas Infrared Broiler

The Gas Infrared Broiler is rated at 18,000 BTU



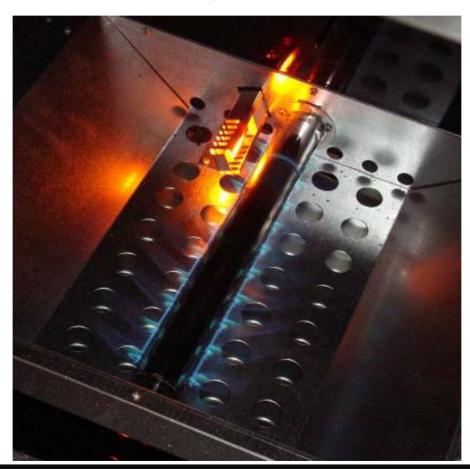




The Difference is in the Details.

Bake Burner

The Bake Burner is rated at 30,000 BTU





Bake Burner

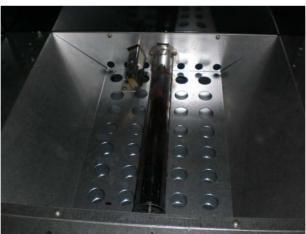
To Access the Bake Burner and Hot Surface Ignitor:

Locate and remove the two Phillips Screws at the front right and left corners of the oven cell floor panel.

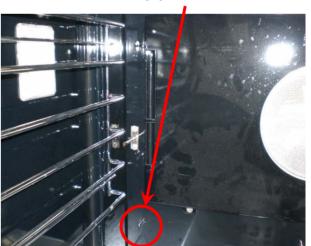
Lift the up the front of the floor panel and pull the panel towards you. Lift out the Heat Deflector.

Heat Deflector





Floor Support Stud





Venting the Oven Cell

The Back Splash/Island Trim is functional on this machine







Error Codes

This Range does have fault codes built into the control board programming (Oven will not Heat):

- The Oven On Indicator Light will blink once every two seconds if the Oven Sensor is Open.
- The Oven On Indicator Light will blink once every five seconds if the Oven Sensor is Shorted.
- The Oven Temperature Knob Light will Blink if there is a control board failure or if the 12 hour bake time-out was exceeded. *In this case, turn power off to unit for 5 minutes. If problem persists replace control board.

Oven Knob Light Oven On Indicator Light





Troubleshooting

NO BAKE	Program in bake check P8 connection on the 'controller Board" P8 to natural for 120vac. Check OHM value of bake igniter (111)OHM Ohm reading at safety valve across white & brown broil side=1.05 Ohm reading at safety valve across white & yellow bake side=1.14 Check amp draw at Igniter for 3.2. If amp draw is below replace.
NO BROIL	Program unit to broil check P10 connection the controller board P10 to neutral for 120vac. Check OHM value of broil igniter(111) Check for open safety valve(brown to white) Ohm out to 1.05 Check amp draw at igniter for 3.2. If amp draw is below replace igniter.
NO CONVECTION FAN	Check 120vac at convection fan on/off switch. Check convection fan on/off switch for open circuit. Check OHM value should be 351 OHM Check for open wire.



Troubleshooting

NO INDICATOR LIGHT

Turning on the gas burner valve active the spark switch send line voltage 120vac to the controller board at the P5 connector harness 6 pin /5wire. T o check out put voltage off each switch do the following test with valve switch active.

Right Rear: Check from P5 connector wire #4 to neutral= 120vac Right Front: Check from P5connector wire #3 to neutral=120vac Left Front: Check from P5connector wire #2 to neutral=120vac Left Rear: Check from P5 connector wire # 1 to neutral=120vac Note: The measure at P5 is in coming voltage fro indicator lights.

If the test above is good follow the steps below to check out put voltage out of controller board to the indicator lights.

Right Rear: Check from P6 connector wire #7 and #2=VDC Right Front: Check from P6 connector wire #5 and #2=5VDC Left Front: Check from P6 connector wire #3 and #2=5VDC Left Rear: Check from P6 connector wire #1 and #2=VDC If no voltage present at any one of the test point replace controller board.



Troubleshooting

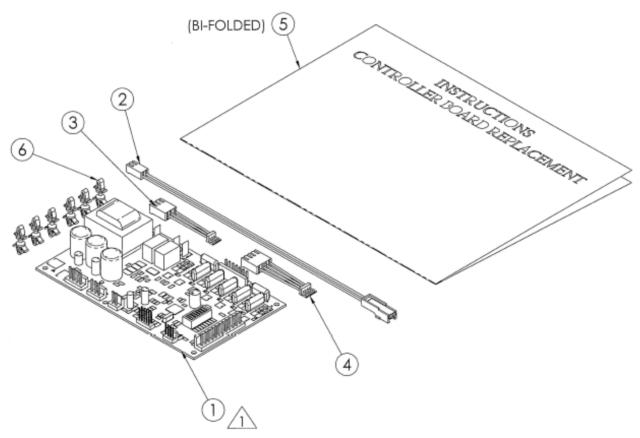
NO SPARK AT BURNER HEAD	Check voltage at spark switch=120vac Check line supply from terminal block to spark switch=120vac Check for open spark switch. Check for open wire /pinch wire/loose connection Check for proper assembly of the burner head
UNIT DOA	Check house power supply =120vac Check in coming house supply voltage into the controller board at P11&P9 =120vac
OVEN LIGHT NOT WORKING	Check voltage to the light off/on switch=120vac Check for open light switch Check to see if LIGHT transformer is wire up correct Check in put voltage at light transformer across 3&5=120vac Check out put voltage across 8&10=12vac Check for open wire.
TEMPERATURE OVEN PROBE (RTD)	Check OHM value of temperature sensor (RTD) =1050-1100 OHM at room temperature at controller board P2.
NO HEAT BAKE OR BROIL	Check for open "High temperature Cut Out" Check gas safety valve ohm's cross brown & white for the broil igniter should show 90-111 ohm's. Bake igniter yellow & white should show 1.14 ohm's.



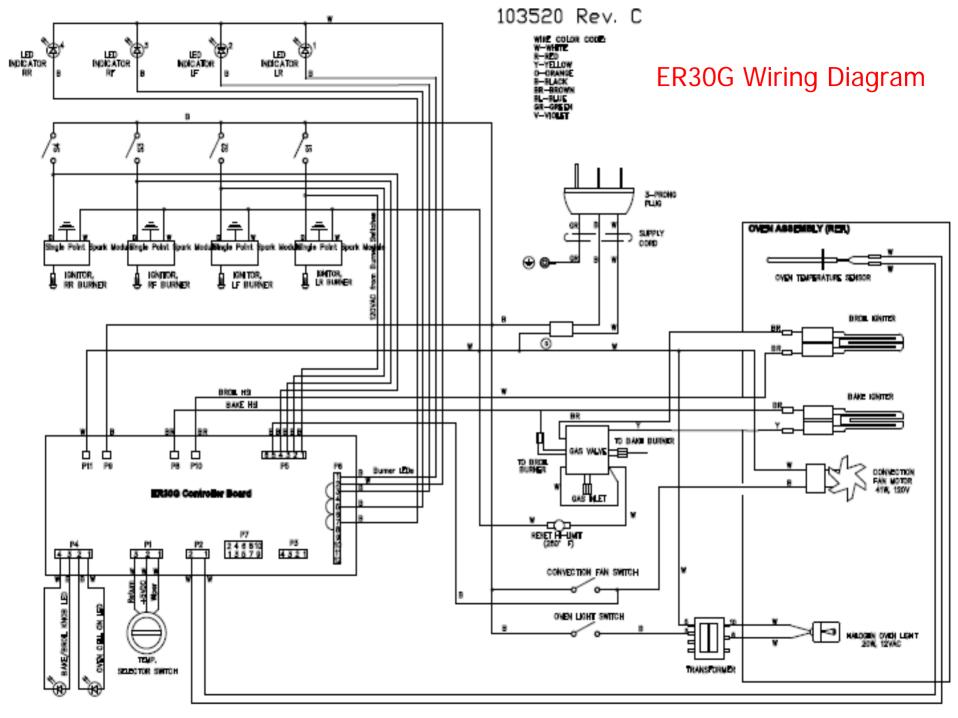
Service Bulletins

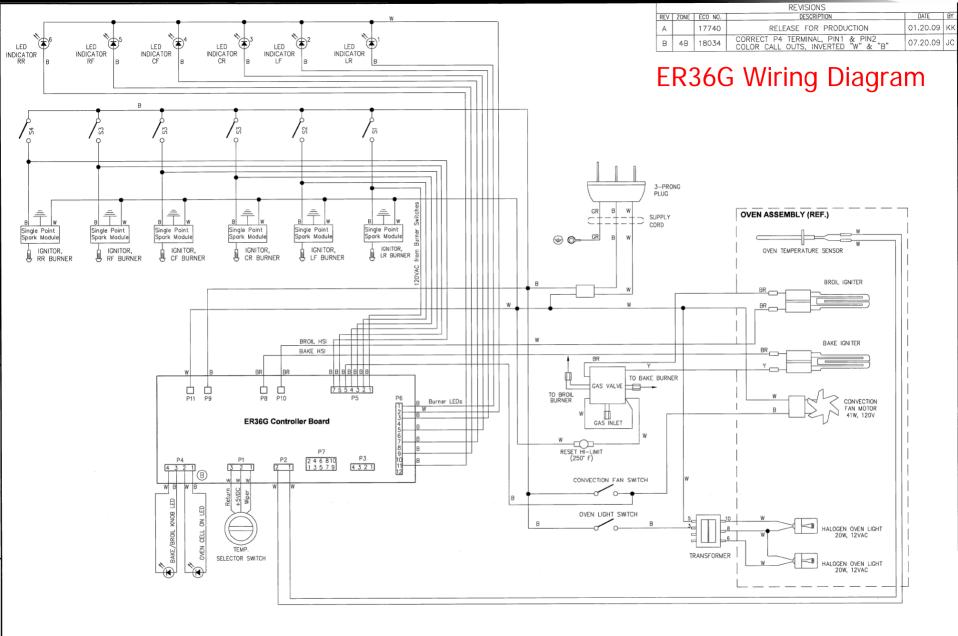
A Control Board Service Kit was created to remedy the 12 hour Time-Out issue and to address 30" and 36" Wire Harness

deference's.













UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DIAMETER DECIMALS ANGLES	APPROVALS	SIGNATURE	DATE	K. KRUEGER	01.12.09	dacor 14425 CLARK AVENUE CITY OF INDUSTRY, CA 91745-1235		
± .003 .xx ± .03 ± 1° .xxx ± .015	CHECKER	l. Hota	7/20/09	RELEASED FOR:	DATE	TITLE WIRING DIAGRAM		
MATERIAL	ENGINEERING	a. Corter	7/20/09	PRODUCTION		ER36G & ER36GI		
NOTED	QUALITY MGR.			PROTOTYPE		SIZE SHEET SIZES: DRAWING/PART NO. REV.		
FINISH NONE	PRODUCTION			QUOTATION		C C C 106431 B		
	Revised by:	Real	72009	TOOLING		C 0 0 106431 0		