

Professional Series Cooktop & Range Training Program



PSC/PDR/PGR Series

Cooktop / Range Top Section

- Model Numbers
- Features and Benefits
- Product Description
- Warranty
- Installation
- Operation
- Disassembly
- Reassembly
- Wiring Diagram
- Service Tips



PSC Series Cooktops

Model Numbers

48 Inch Models

PSC484GGZS

PSC484WKZS

PSC486GDZS

PSC486GLZS

36 Inch Models

PSC364GDZS

PSC364GLZS

PSC366ZS

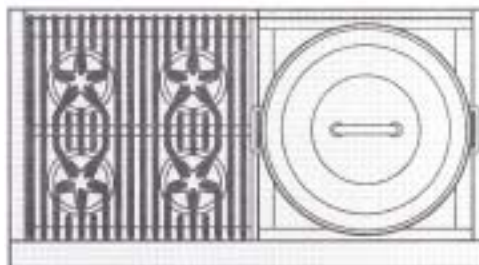
30 Inch Model

PB30ZS

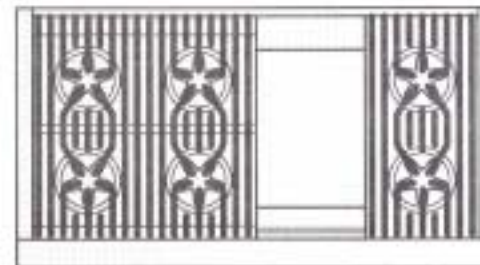
24 Inch Model

P24WKZS

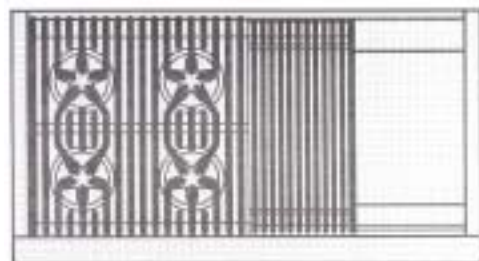
Professional Cooktops 48 inch Models



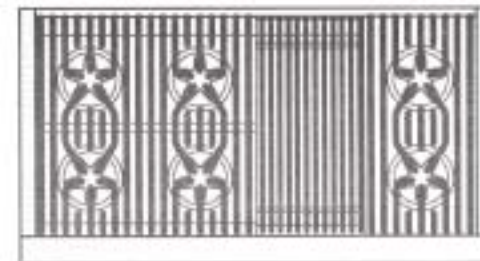
MODEL PSC484WK
(4 Burners and Wok)



MODEL PSC486GD
(6 Burners and Griddle)



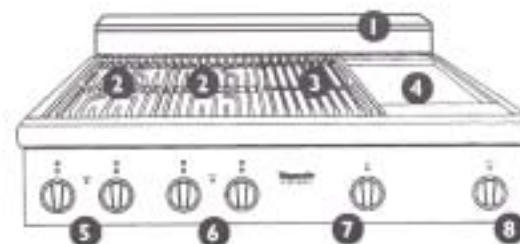
MODEL PSC484GG
(4 Burners and Griddle and Grill)



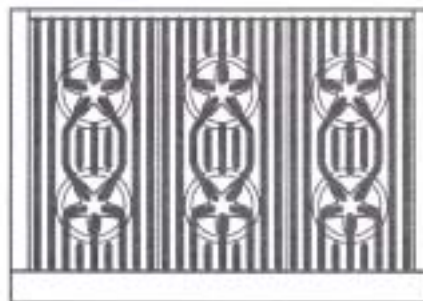
MODEL PSC486GL
(6 Burners and Grill)

Key for PSC48 Models

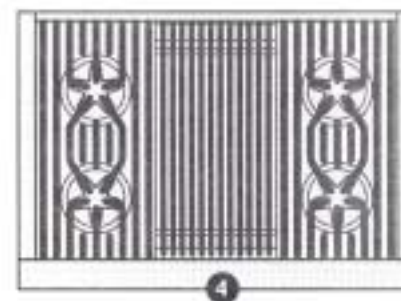
- 1 – 12" Low Back or Island Trim (ordered separately)
- 2 – Burner Grates & Burners
- 3 – Grill (PSC484GG and PSC486GL)
- 4 – Griddle (PSC484GG and PSC486GD)
- 5 – Control Knobs, ExtraLow® Burners
- 6 – Control Knobs, Standard Burners
- 7 – Control Knob, Grill
- 8 – Control Knob, Griddle Thermostat



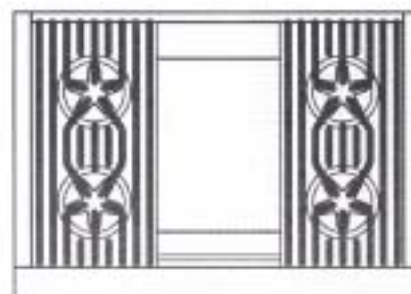
Model PSC484GG



MODEL PSC366
(6 Burners)



MODEL PSC364GL
(4 Burners and Grill)

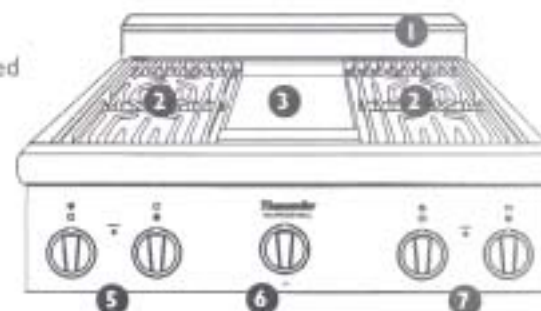


MODEL PSC364GD
(4 Burners and Griddle)

Professional Cooktops 36 inch Models

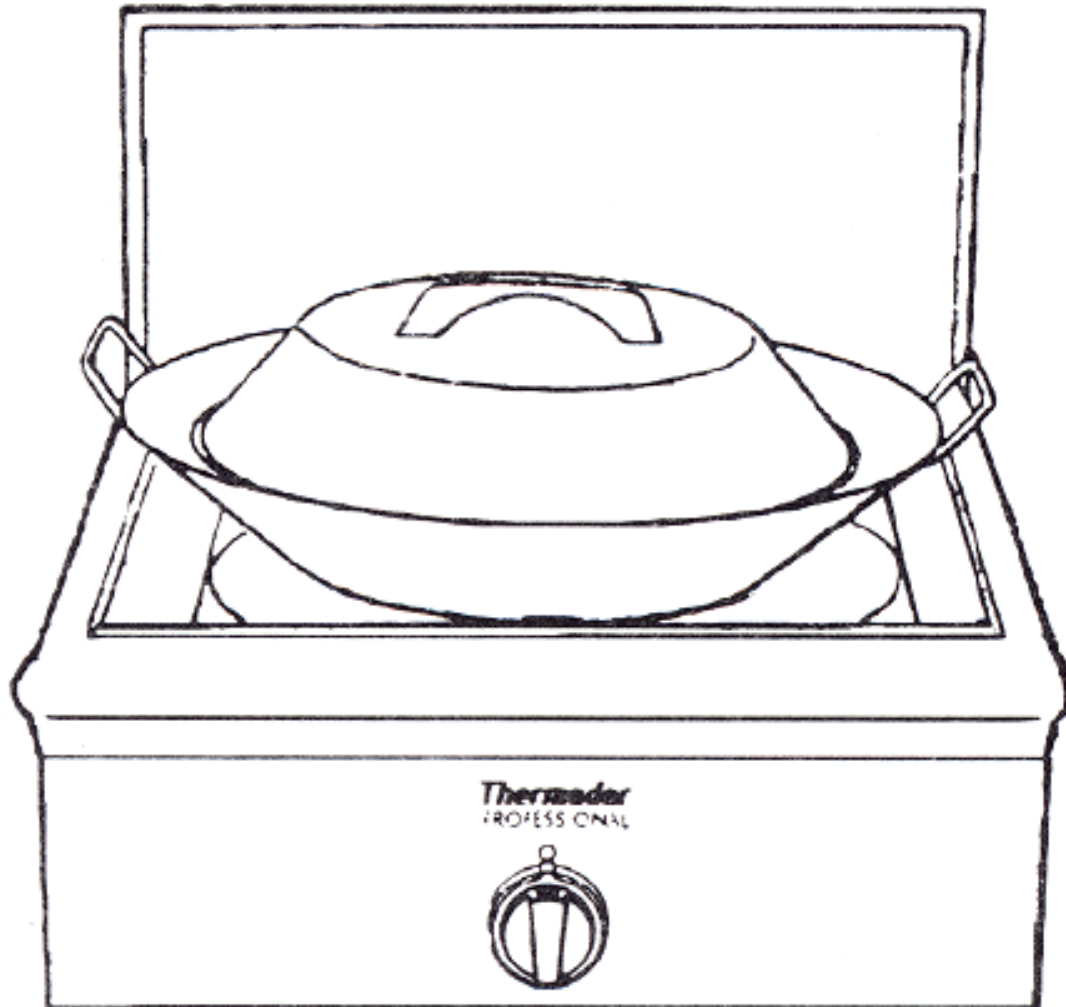
Key for PSC36 Models

- 1 – 12" Low Back or Island Trim (ordered separately)
- 2 – Burner Grates & Burners
- 3 – Griddle (PSC364GD)
- 4 – Grill (PSC364GL) – shown in top view
- 5 – Control Knobs, ExtraLow® Burners
- 6 – Control Knob, Griddle Thermostat (PSC364GD)
- 7 – Control Knobs, Standard Burners



Model PSC364GD

P24WKZS



Professional Series Cooktop Training Program

Model Number Example: PSC484GG

P.....Professional Series

S.....Star Burners

C.....Cooktop

48.....Width of Unit

4.....Four Surface Burners

GG.....Griddle & Grill

Z.....Year of Introduction

S.....Stainless

Note

- GL indicates that the unit has a grill,
- GD a griddle, GG both, WK a wok
- PB30ZS is a 30 inch Indoor BBQ Grill
- P24WKZS is a 24 inch Wok

Features and Benefits

- Stainless Steel 304 Series # 4 Brush
- Porcelain Enamel Cast-Iron Continuous Grates
- Easy To Read Graphics
- Models with Wok have Wok Bowl Lid and Trivet Included
- Backguard Options are:
Island Trim or 12 Inch Low Back



Features and Benefits

- Sealed Star Burners with Electronic Ignition and automatic re-ignition.
- Two of the Star Burners have the Extra-low feature.
- Single point Ignition System, reduces ignition noise to a minimum.
- Stainless Steel Spill Trays.
- Thermostat controlled Griddle with independent gas solenoid valve. Electronic ignition with built-in ignition safety features. Titanium surface easy clean griddle plate and grease tray both are removable for easy clean up. Griddle is rated at 15,000 BTU/HR.

Features and Benefits

- Grill features a U-shaped tube burner rated at 18,000 BTU/HR Electronic Ignition is used, with Automatic Re-ignition. Stainless Steel radiant for even heat distribution. No need for lava rocks or charcoal briquettes.
- Easy turn control knobs which recess into bezels for solid feel.
- Blue Indicator lights for each pair of surface burners, the griddle and the grill.
- Models P24WK & PSC484WK have a high output WOK burner rated at 30,000 BTU/HR.
- All Cooktops & Dual Fuel Ranges are shipped from the factory to operate on natural gas, but they are field convertible to propane.
All PGR All gas Ranges must be ordered specifically for either Natural gas or Propane & are not field convertible

Product Description

Star Surface Burners:

BTU Output for Standard Burners:

- Hi is equivalent to 15,000 BTU/HR
- Lo is equivalent to 2,200 BTU/HR

BTU Output for Extra-Low Burners:

- Hi is equivalent to 15,000 BTU/HR
- Lo is equivalent to 3,000 BTU/HR
- XLO is equivalent to 370 BTU/HR



Extra-Low is achieved by cycling the flame on & off depending on the setting

Product Description

Grill

The grill is equipped with an aluminized steel double U shaped tube burner typical of those used in restaurants. Automatic ignition is used with flame rectification. The burner is rated at 18,000 BTU/HR



Radiant removed
showing U shaped
grill burner



Grill shown with grill grate removed to show stainless steel radiant. Note: No lava rocks are used

Product Description

Griddle

The built in griddle is made of restaurant quality aluminum with titanium surface. This produces a surface with even heat which is easy to clean. The griddle has an aluminized steel tube burner. The burner has electronic ignition with built-in safety feature through an independent gas liter. Griddle is rated at 15,000 BTU/HR



Griddle has a removable grease tray which makes clean-up easy. The tray slides under the lip of the griddle plate when in use.



Griddle Plate is also removable for easy clean-up

wok Product Description

Available on

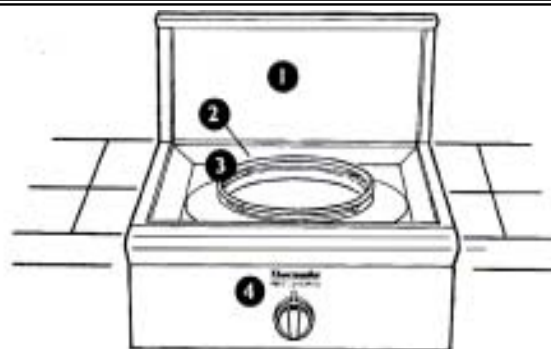
Models PSC484WK and P24WK

The Professional Wok has a heavy cast iron burner typical of those used in restaurants

BTU Output for the Wok Burner

- HI is equivalent to 30,000 BTU/HR
- LO is equivalent to 10,000 BTU/HR

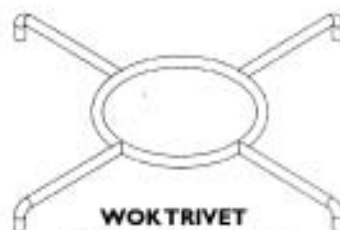




MODEL P24WK

Key for Model GP24WK and PSC484WK

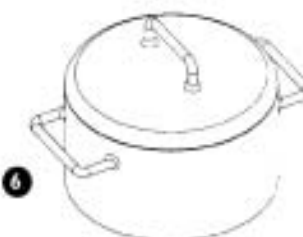
- 1 – Low Back Guard (shown). Optional Island Trim available. (Low Back or Island Trim must be ordered separately.)
- 2 – 24" Wok cooktop
- 3 – Wok pan support ring
- 4 – Control knob
- 5 – Wok pan and lid
- 6 – Large Kettle/Pot (not provided)
- 7 – Wok Trivet



WOK TRIVET
Fits over wok pan support ring for large pots used over wok burner.
(see right)



5
Wok Pan with Lid



6

7

3



Wok Trivet Assembly

Warranty

- One full year from date of purchase, proof of Installation, or move in date.
- Service must be performed by an authorized Service Agency during normal business hours.
- For information regarding the nearest authorized Service Agency call 1-800-735-4328 Monday-Friday 5:00AM-5:00PM Pacific Standard time





Warranty -- Serial # Label



The serial # label, located on the back & underneath the unit shows necessary warranty information.

• **Model # - PSC366ZS**

• **Serial # - 82030126** To find when the product type was built, add 20 to the 1st two digits to get the year (82 + 20 = 02 → product type was built in 2002). The next two digits show the month (03 = March).

Installation

Electrical Requirements:

Unit is supplied with a 36 inch line cord with 3-prong grounding plug and requires connecting to a electrical receptacle connected to a properly grounded and polarized electrical supply rated at 120 VAC, 15 Amps, Single Phase, 60 HZ

Gas Supply:

Units are shipped by the factory to operate on natural gas, however they can be converted for use on propane. The field conversion kit to convert all Professional cooktops (PSC series) is Thermador Model CTLPKIT. Field conversion must be done by qualified service personal only.

Installation

Gas Supply..continued:

Natural Gas Requirements:

Inlet connection: $\frac{3}{4}$ inch N.P.T. (minimum $\frac{3}{4}$ inch dia. flex line)

Supply Pressure: 6 inch to 14 inch water column

Manifold Pressure: 5 inch water column

Propane Gas Requirements:

Inlet connection $\frac{3}{4}$ inch N.P.T. (minimum $\frac{3}{4}$ inch dia. flex line)

Supply pressure: 11 inch to 14 inch water column

Manifold Pressure: 10 inch water column

Installation

Gas Supply..continued:

Hook Up:

A manual gas shut-off valve must be installed external to the appliance, in an accessible location from the front for the purpose of shutting off the gas supply.

Gas Pressure Regulator:

Install the gas pressure regulator (supplied) either to the manifold pipe or to the appliance side of the shut-off valve. Ensure that the appliance pressure regulator is set to 5 inches W.C. for natural gas and 10 inches W.C. for propane gas, and that the arrow points in the direction of the gas flow towards the appliance.

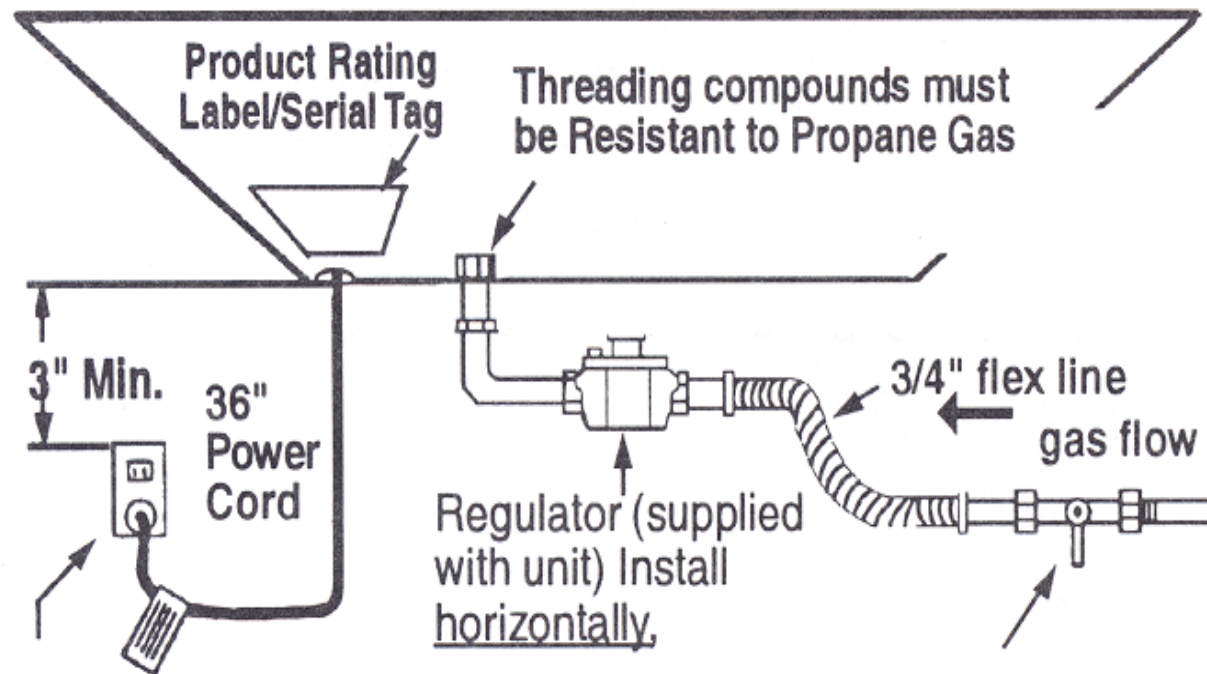
Note: The regulator has to be horizontal after installation

Installation

Gas Supply..continued:

Hook Up:

- Connect the gas supply line to the unit pressure regulator using a ¾ inch flex gas line between the manual gas shut-off valve and the pressure regulator.
- Always use pipe dope or teflon tape on the pipe threads, and be careful not to apply excessive pressure when tightening the fittings.
- Check the supply line connections for leaks using a soap solution. Do not use a flame of any sort to check for leaks.
- All installer supplied parts must conform to local codes.

Front - Bottom of Unit

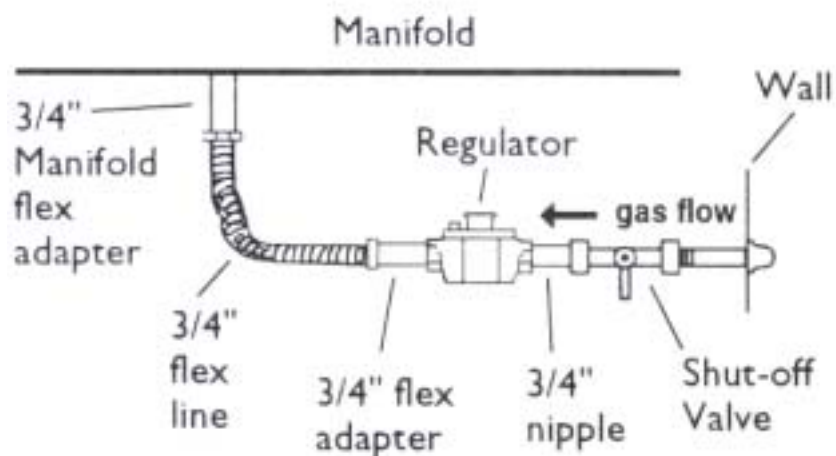
3-Prong grounding type receptacle connected to a properly grounded and polarized electrical supply rated at 120VAC, 15 Amps, Single Phase, 60 HZ.

A manual valve must be installed external to the appliance, in an accessible location from the front, for the purpose of shutting off the gas supply.

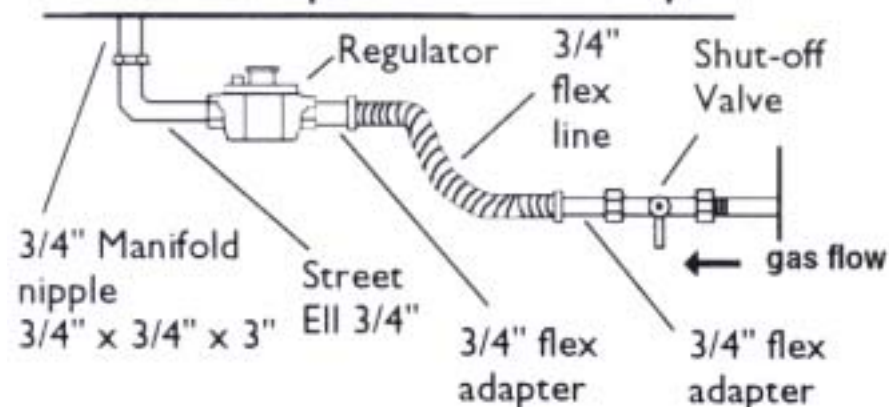
All Installer supplied parts must conform to Local Codes.

Installation Options

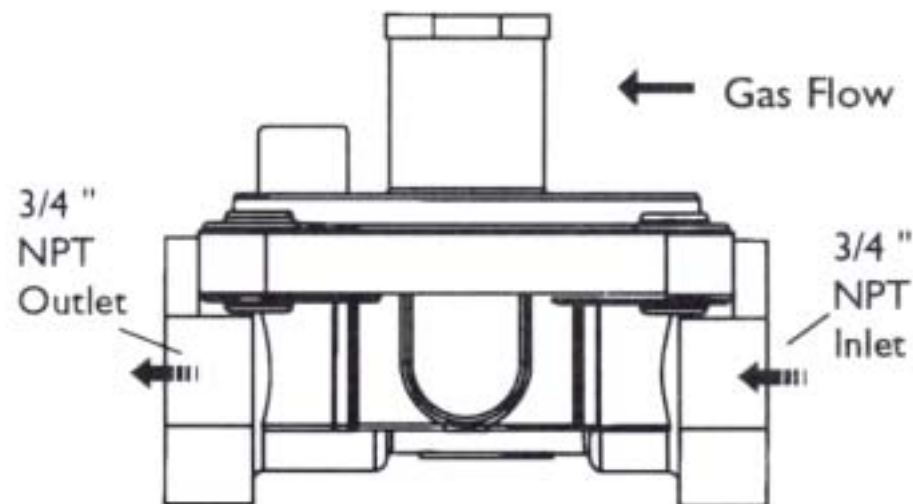
Installation Option 1. From Shut-off Valve



Installation Option 2. From Manifold



GAS SUPPLY REGULATOR



Make sure gas regulator is horizontal after installation

Installation

Clearances:

- A backguard must be utilized when there is less than a 12 inch horizontal clearance between combustible materials and the back edge of the cooktop.
- The Thermador Low Back Backguard must be ordered separately and installed at the rear of the cooktop.
- For island installations and other installations with more than 12 inch clearance, an optional stainless steel Island Trim is available to cover the backguard mounting flanges.
- A 42 inch minimum clearance is required between the top of the cooktop and the bottom of an unprotected cabinet. This distance is reduced to 30 inches if the bottom of the cabinet is protected with not less than 1/4 inch of flame retardant material covered with the recommended thickness of sheet steel, stainless steel, copper or aluminum (see installation instructions for full details).

Installation

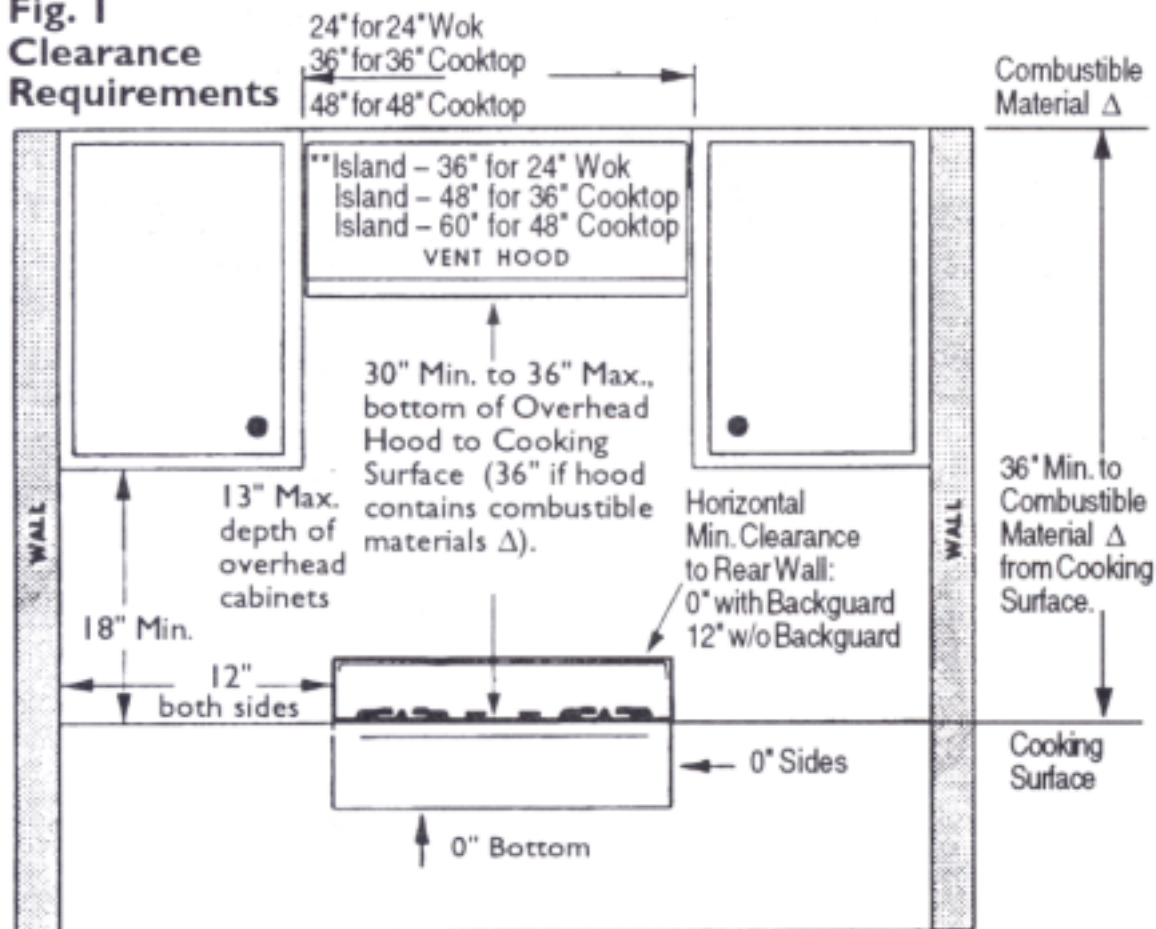
Clearances...continued

- Horizontal clearance on either side of the cooktop to a wall is 12 inches.
- Wall cabinets mounted on either side of the cooktop have to be at a minimum, the width of the cooktop apart, and a minimum of 18 inches above the countertop and no more than 13 inches deep.

Hood

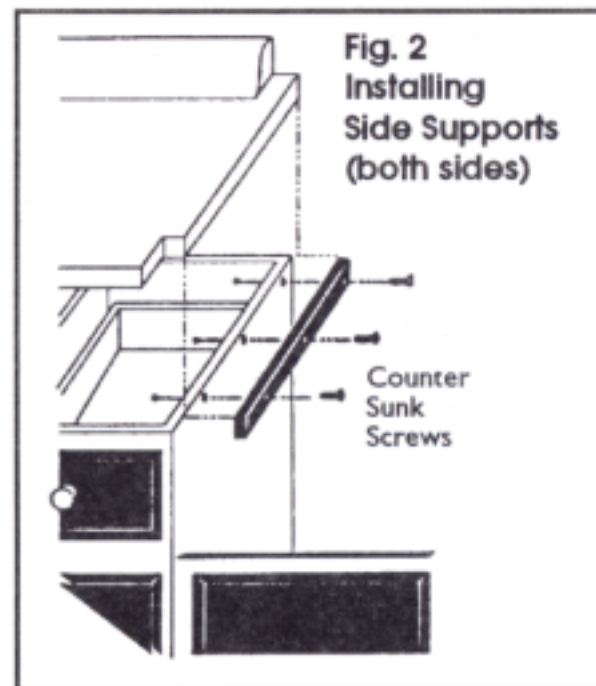
- It is strongly recommended that a suitable exhaust hood be installed above the appliance. Downdraft ventilation should not be used. Thermador Professional wall or island hoods are recommended, and should be at least the width of the cooking surface for wall hoods, for island hoods they should overhang the cooking surface by at least 6 inches on both sides.

**Fig. 1
Clearance
Requirements**



Δ As defined in the "National Fuel Gas Code"
(ANSI Z223.1, Latest Edition).

**Fig. 2
Installing
Side Supports
(both sides)**



Component Description Surface Burners



Potentiometer: variable resistance or voltage divider Contacts 1-5 is a switch between simmer controller & gas solenoid valve



Simmer controller: Powers spark module for Extra-Low burners, controls gas solenoid valves for surface burners only.



Solenoid gas valve: allows gas to flow from control valve to burner

4



Spark module: sends spark to igniter, detects presence or absence of flame

5



Igniter: Receives 14,000 VDC from spark module, part of sensing circuit for flame rectification

Component Description...Griddle



1

The Griddle is electronically controlled. Temperature knob settings range from 150 degrees F to 500 degrees F



2

Griddle Thermostat is push & turn counter clockwise closing single switch contact



3

Griddle Gas Igniter Module
120 VAC input 14,000 VDC output to igniter



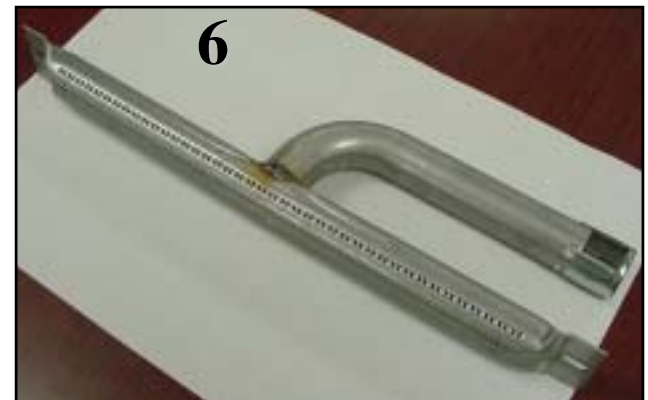
4

Griddle Solenoid Gas Valve
Activated by 120 VAC from gas igniter module



5

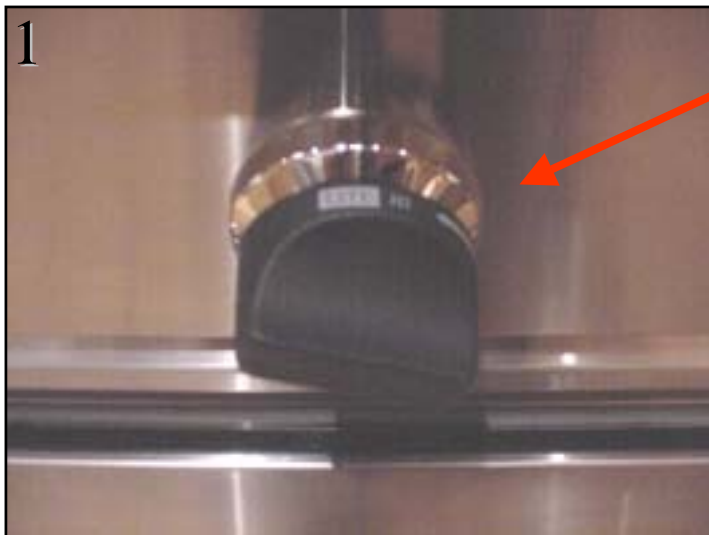
Griddle Igniter



6

Griddle Burner

Component Description... Wok



1

Control Knob & Valve showing Lite Position.



2

Safety Valve with Orifice



3

Wok Top Panel Assembly Frame and Burner



4

Pilot Lite Assembly

Operation

Star Burners



Knob is turned to high



Solenoid gas valve receives 110 VDC from simmer controller through potentiometer contacts 1-5



Rotation of knob opens control valve & changes resistance at potentiometer, changing voltage



Spark module is powered by simmer controller activating only that channel

Extra-Low Burner



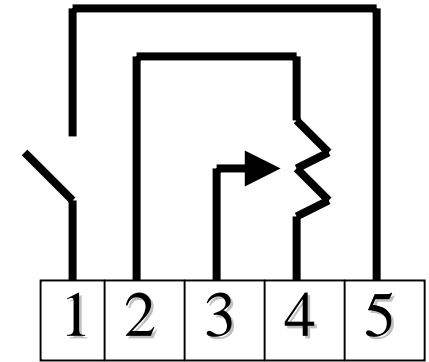
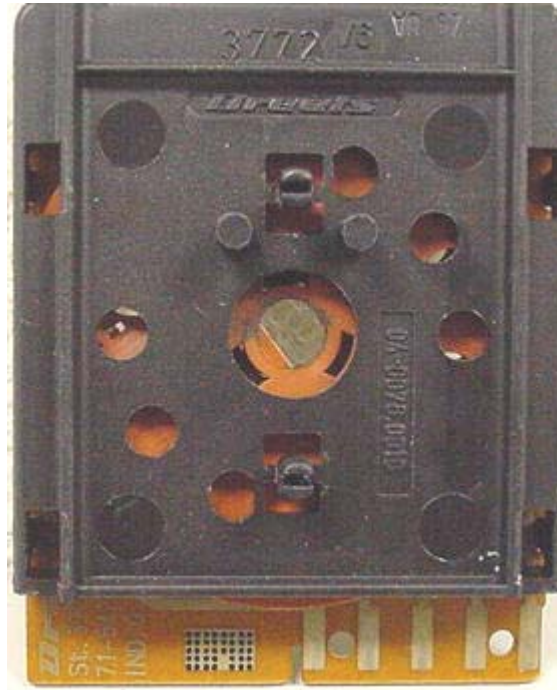
Simmer controller interprets this change as activate the system.



14,000 VDC is generated from spark module causing spark between igniter and burner base

When gas valve control knob is rotated, switch 1-5 closes 110 VDC is received by the gas solenoid valve. The resistance between 2-3 & 3-4 changes causing the simmer controller to power the spark module LR ignition circuit and ignite the burner.

Operation...Potentiometer



To 43-55 VDC
Output from Simmer
Controller

43-55 VDC to Gas
Solenoid Valve

To 5v Line at
Simmer
Controller

Brown

Orange

Blue

Red

To Pot 1 at Simmer Controller

Violet

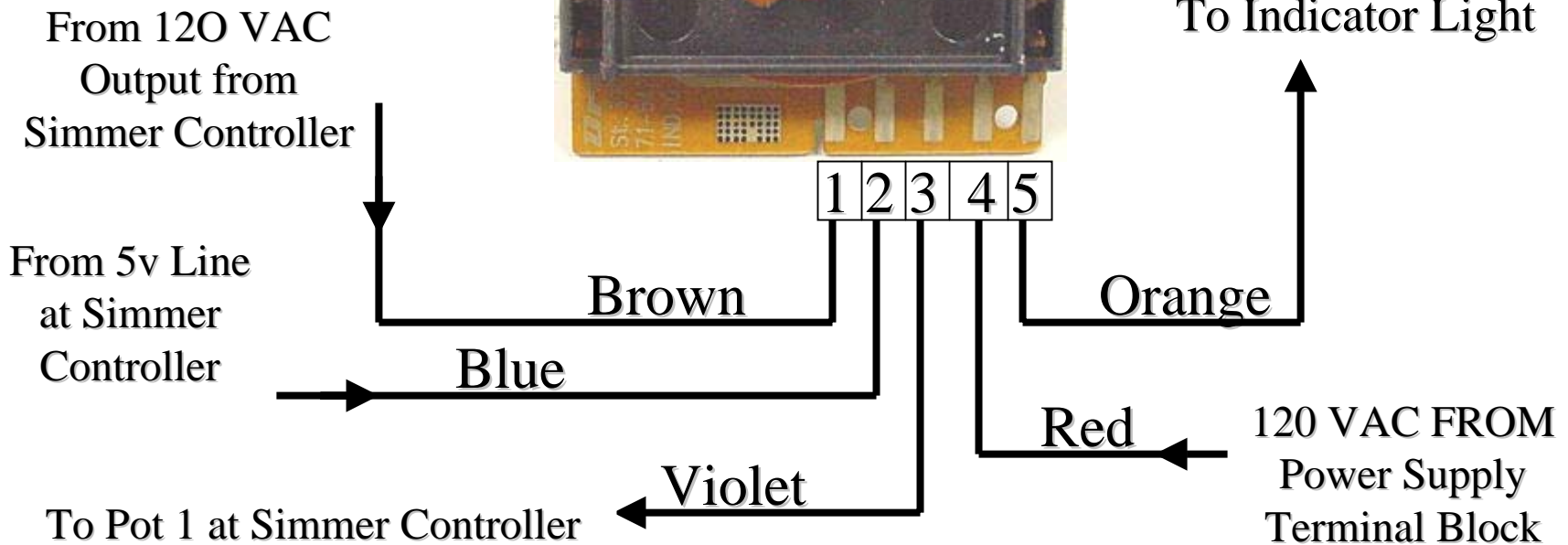
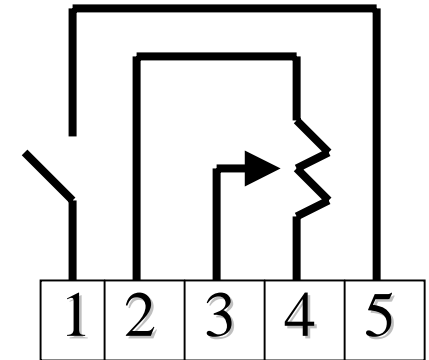
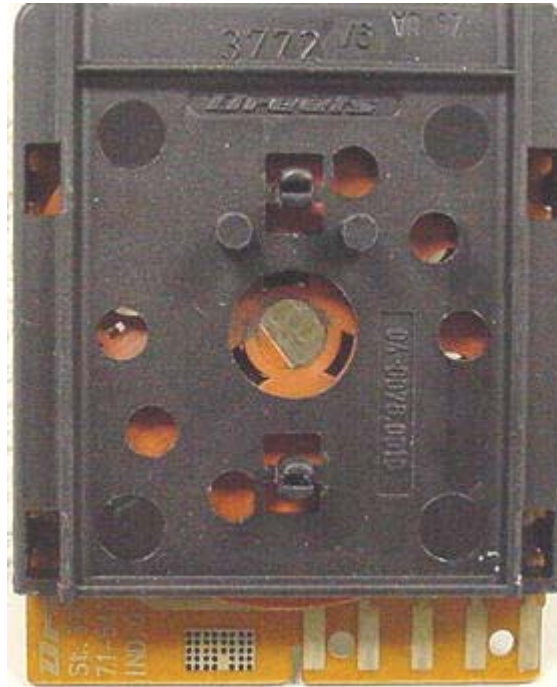
120 VAC FROM
Power Supply
Terminal Block

Example shown
is LR burner

When the gas valve control knob is rotated, contacts 1-5 close sending 120 VAC to the Indicator Light.

By changing resistance between 2-3 & 3-4 this causes the simmer controller to cycle the gas Solenoid and Spark Module ignition circuit.

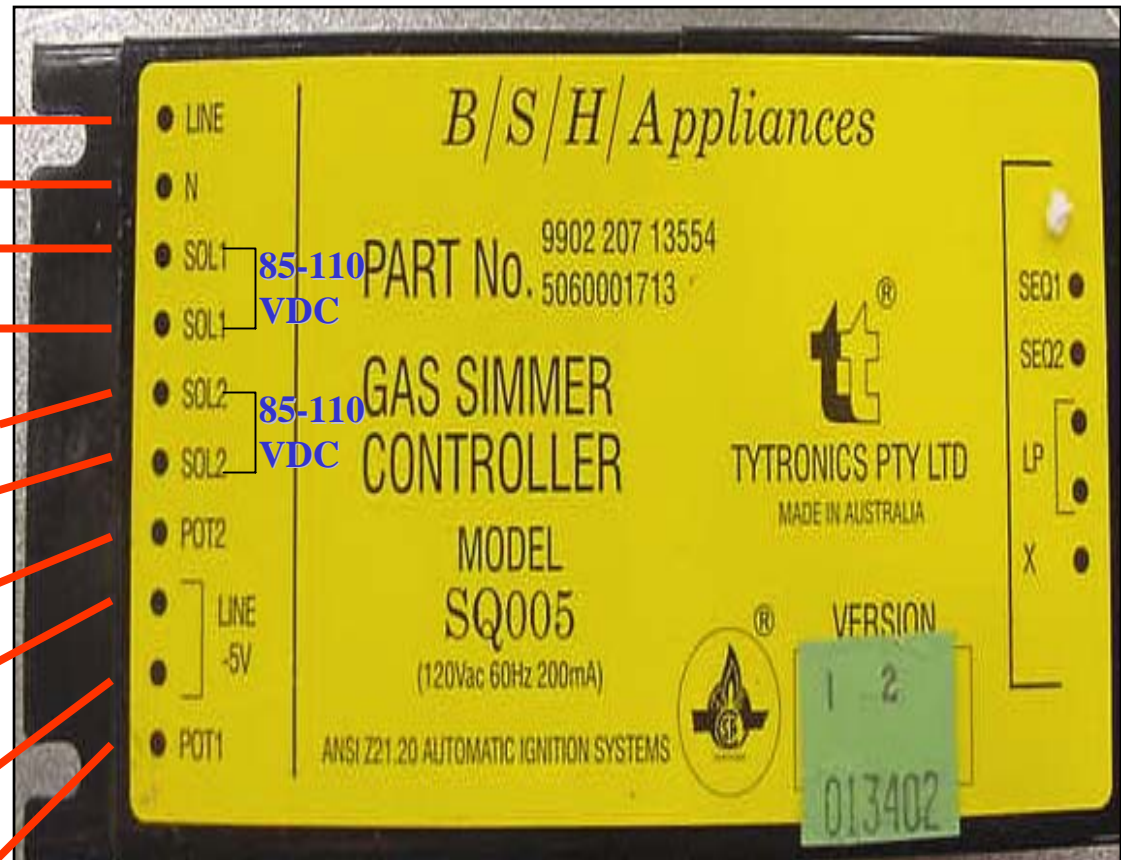
Current Production Potentiometer



Operation

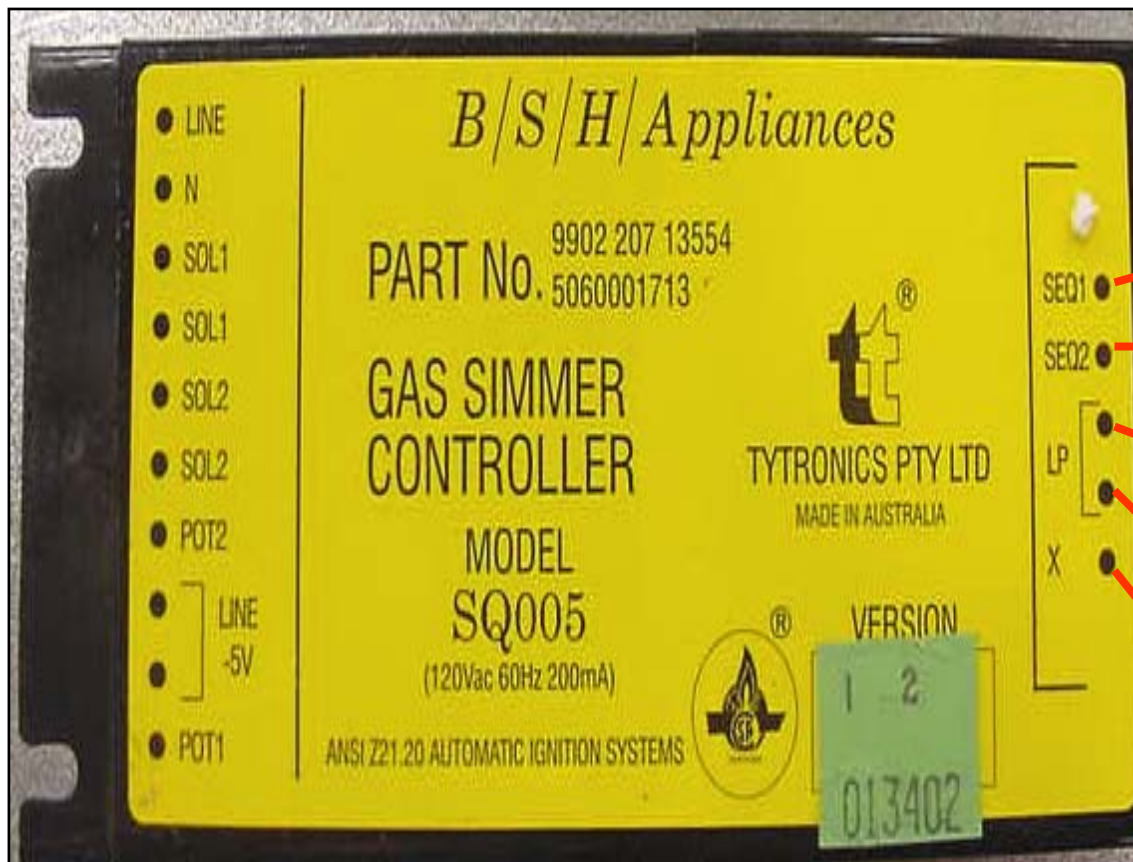
Connections On Left Side of Simmer Controller

- 120 Volt Line** _____
- Neutral** _____
- LR Solenoid Return 43-55 VDC** _____
- LR Output 43-55 VDC to Sol.** _____
Via 1-5 on potentiometer
- LF Solenoid Return 43-55 VDC** _____
- LF Output 43-55 VDC to Sol.** _____
Via 1-5 on potentiometer
- To Terminal 3 on Left** _____
- Front Pot.** _____
- 5 VDC Line to Term. 2 LR** _____
- Pot** _____
- 5 VDC Line to Term. 2 LF** _____
- Pot** _____
- To Terminal 3 on Left Rear** _____
- Pot.** _____



Operation

Connections On Right Side of Simmer Controller



Sequenced Channel 1 to SW 1 on Spark Module

Sequenced Channel 2 to SW 2 on Spark Module

LP = Indicator light on Spark Module

LP = Indicator light on Spark Module

Open

**From LP = Indicator
light on Simmer
Controller**

**From Grill
Spark
Switch**

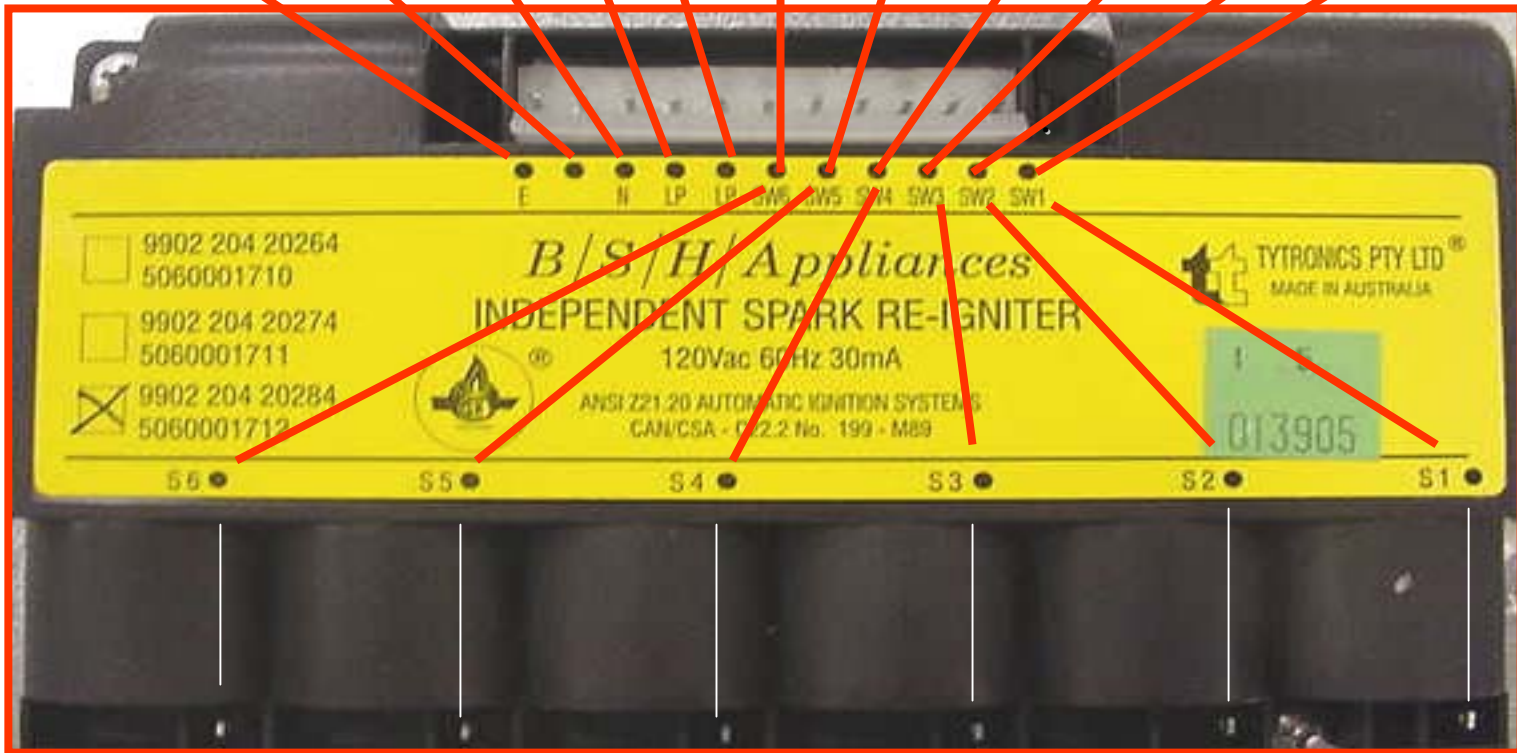
**From RF
Spark
Switch**

**From RR
Spark
Switch**

**From SEQ-2
on Simmer
Controller**

**From SEQ-I
on Simmer
Controller**

Ground Empty Neutral LP LP SW6 SW5 SW4 SW3 SW2 SW1
LP LP Open S5 S4 S3 S2 S1



OPEN

GRILL

RF

RR

LF

LR

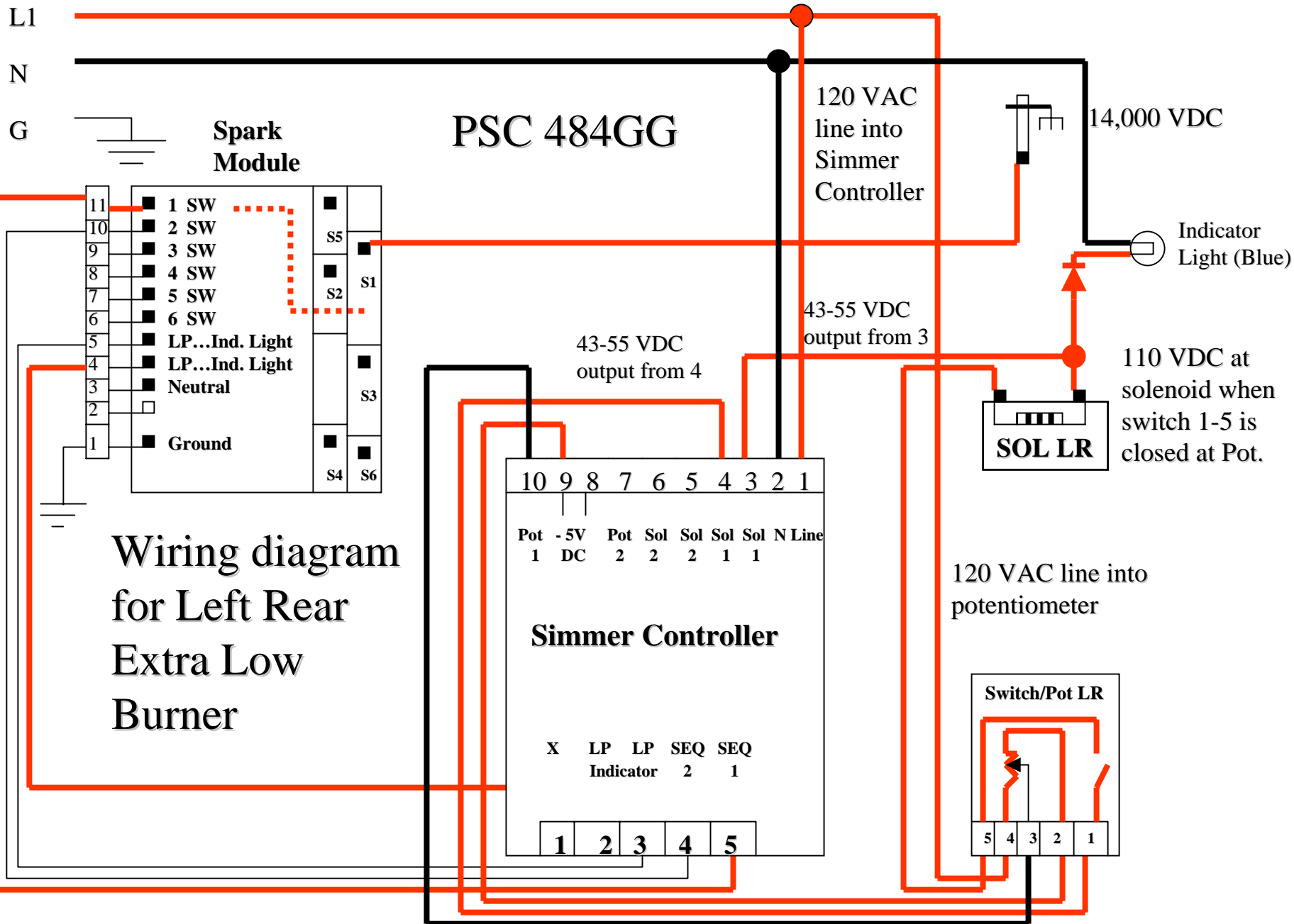
Example is a PSC484GGZS

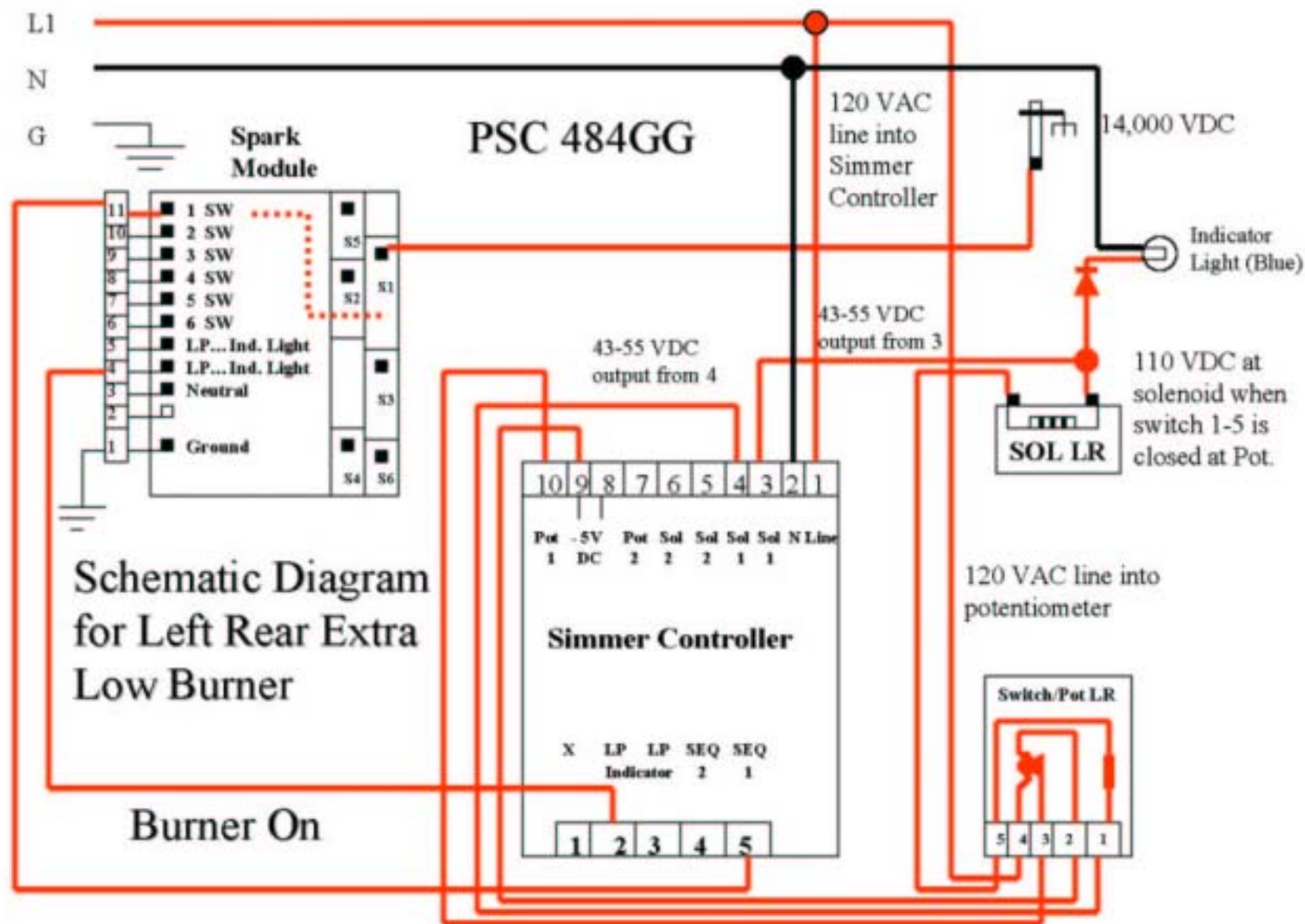
Spark Module

Operation



Note: When cooktop is powered up there is no power to the spark module. Unlike previous spark modules this one can be considered to be six independent mini transformers. SW1 & SW2 for the two Extra Low burners, receive power from the simmer controller. SW3-SW6 receive power from the valve micro switches. This means that the non sequenced burners or grill operate independently of the simmer controller



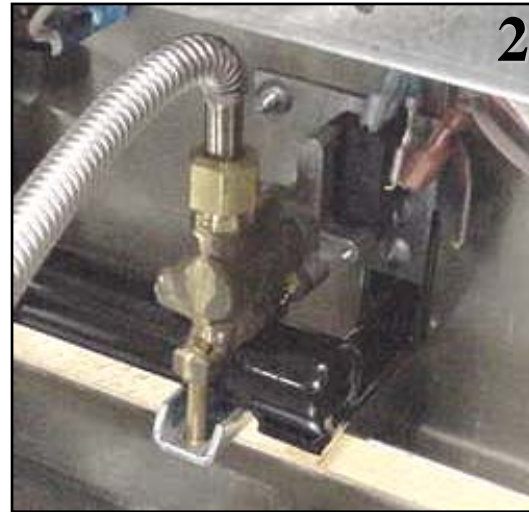


Operation

Star Burners



Knob is turned to high



Regular Burner

Rotation of knob opens control valve & closes spark switch



Spark module is powered by Spark switch activating only that channel



14,000 VDC is generated from spark module causing spark between igniter and burner base

If the non sequence burner sparks and the indicator light stays on in the off position, make sure that the knob is centered in the bezel.

Insure that the knob moves in and out freely

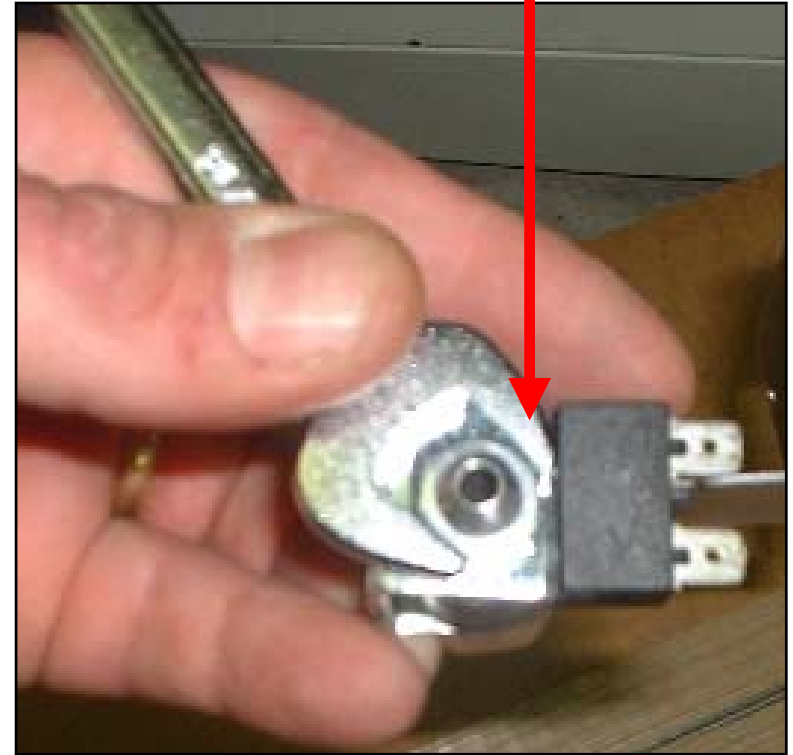
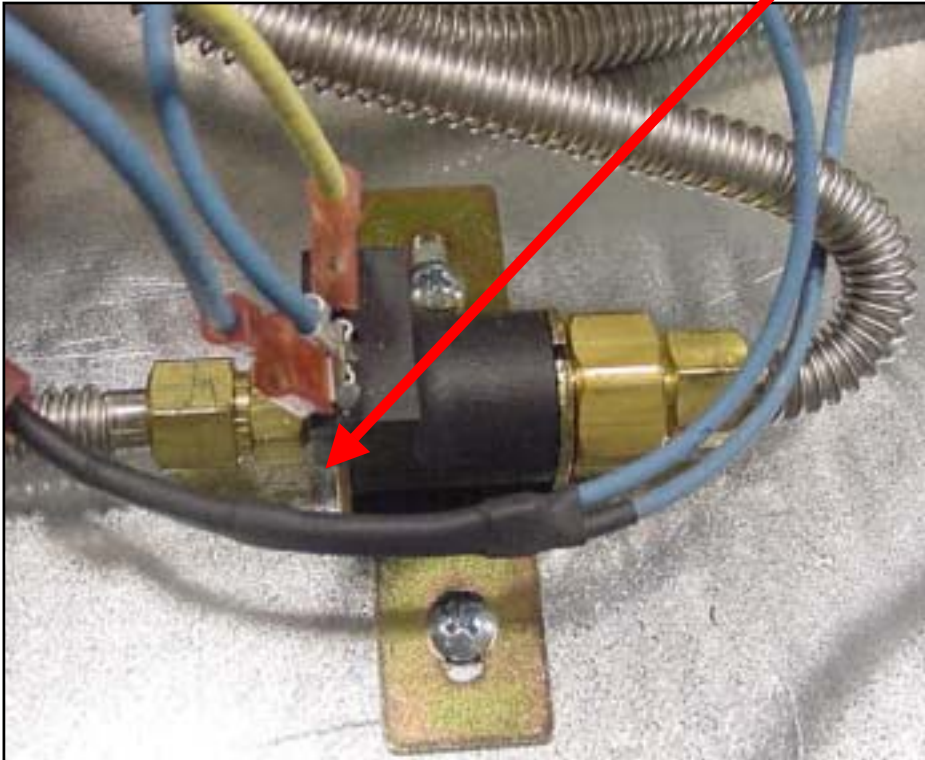
Do not
Remove
both
screws

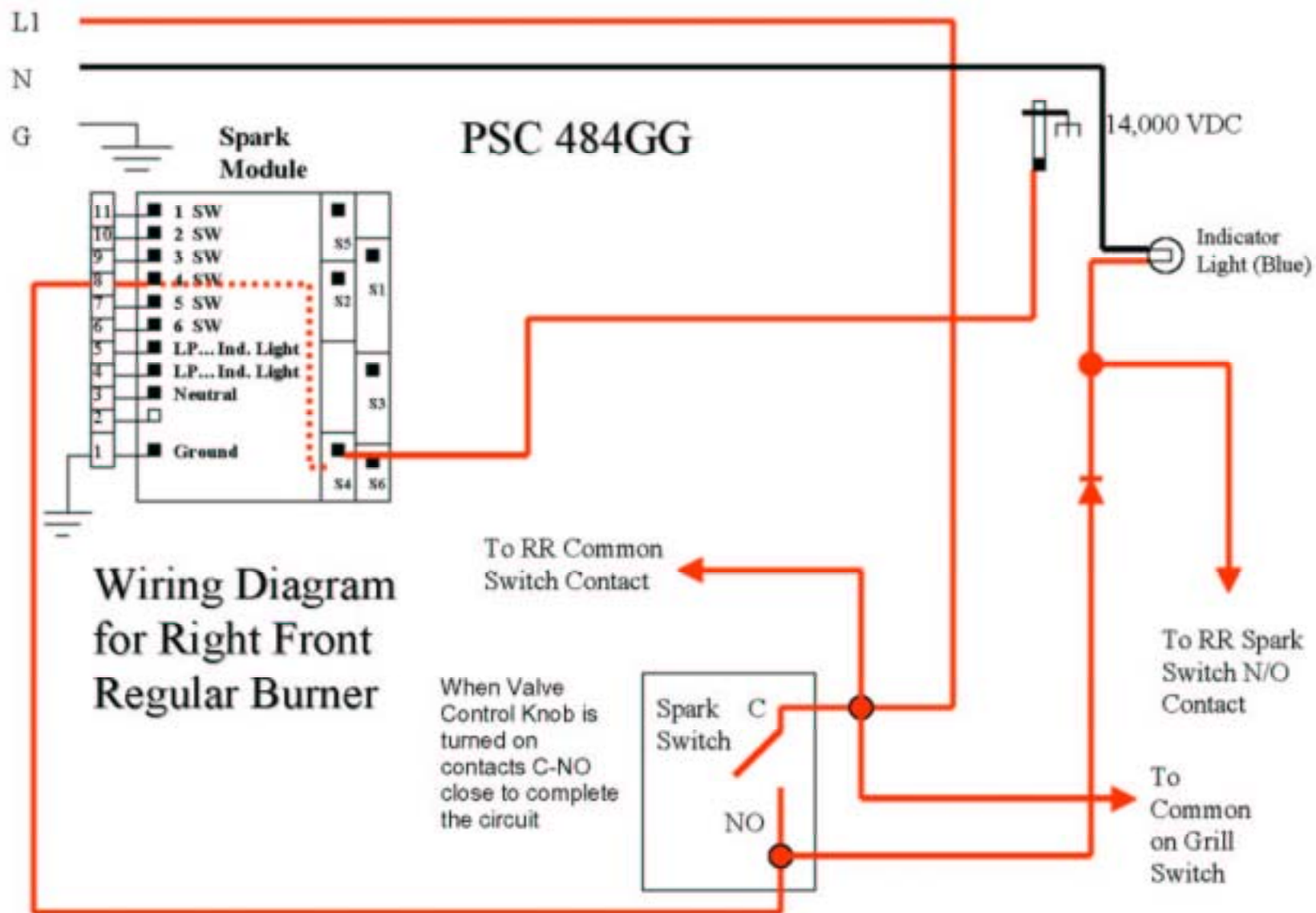


You can adjust by loosening the 2 screws and centering the knob in the bezel..

Solenoid

If the Solenoid creates a noise check to see if the nut that holds the coil to the valve is loose, if so tighten.





THE GRILL

(Available on some models)

When cooking food on the grill you will achieve the same flavor as meat cooked on an outdoor barbecue.

This flavor is actually created by the fats and juices that are brought to the surface of the food and caramelized by the intense heat from the stainless steel radiant.

Most types of foods, steaks, chops, patties, poultry pieces, etc., cook somewhat faster on the gas grill with its constant regulated heat than on an ordinary charcoal grill.

Your new Thermador Professional® grill is equipped with an aluminized steel double U-shaped tube burner typical of those used in restaurants. Automatic ignition is used to eliminate the continuous pilots found on restaurant grills. The grill burner is rated at 18,000 BTU/HR.

NOTE: When used with propane gas, a slight pop or flash may occur at the burner ports a few seconds after the burner has been turned off. This usually occurs after the burner has been on awhile. This is normal.

AUTOMATIC REIGNITION

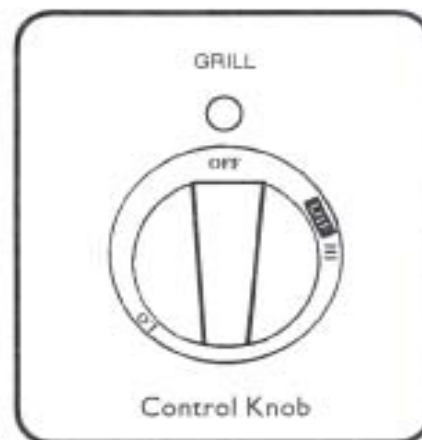
The electronic igniter automatically sparks the burner to light. **DO NOT TOUCH** any burner while the igniters are sparking.

BURNER EFFICIENCY AND FLAME CHARACTERISTICS

The burner flame should be blue in color and stable with no yellow tips, excessive noise or lifting. It should burn completely along both sides of the burner tube.

An improper gas-air mixture may cause either a yellow tipped flame or burner flutter. Have the flame adjusted by a technician. Foreign particles in the gas line may cause an orange flame during initial use. This will disappear with use.

If the flame is uneven, flutters, makes excessive noise or lifts, check to see if the BURNER ports are clogged. If the ports are clogged, use a wire, a straightened paper clip or needle to clear the ports. If the condition persists, contact a service agency for adjustment.



CONTROL KNOB

The burner control has an infinite number of heat settings, and there are no fixed positions on the control knob between HI and LO. To turn the burner on, press the control knob and rotate it counterclockwise to the LITE position.

Adjust the knob to the desired heat setting.

Operation...Grill



Control Valve allows gas to flow to burner **Micro switch** mounted on valve sends voltage to spark module

Grill Igniter sparks to ignite the gas flame is current path for flame rectification



Spark Module receives 120VAC from micro switch converts to 14,000 VDC. Monitors presence or absence of flame



Grill U shaped Burner rated at 18,000 BTU/HR

Contents

Grill Enhancement Kit

1 – Grill Can Radiant Part # 369930

1 – Grill Electrode Bracket Part # 416773

This kit will enhance the performance of two features of the grill. The grill radiant has been revised to re-distribute heat for more even cooking.

The grill electrode bracket has been redesigned to collect gas for improved ignition, and to help protect the electrode from grease drippings, etc.

Both of these components are completely compatible for installation to existing product without modification to the appliance.

Installation Tips for Grill Electrode Bracket



Install the bracket onto the grill can to create 1/8 to 1/4 inch spacing between the bottom edge of the electrode bracket and the burner.

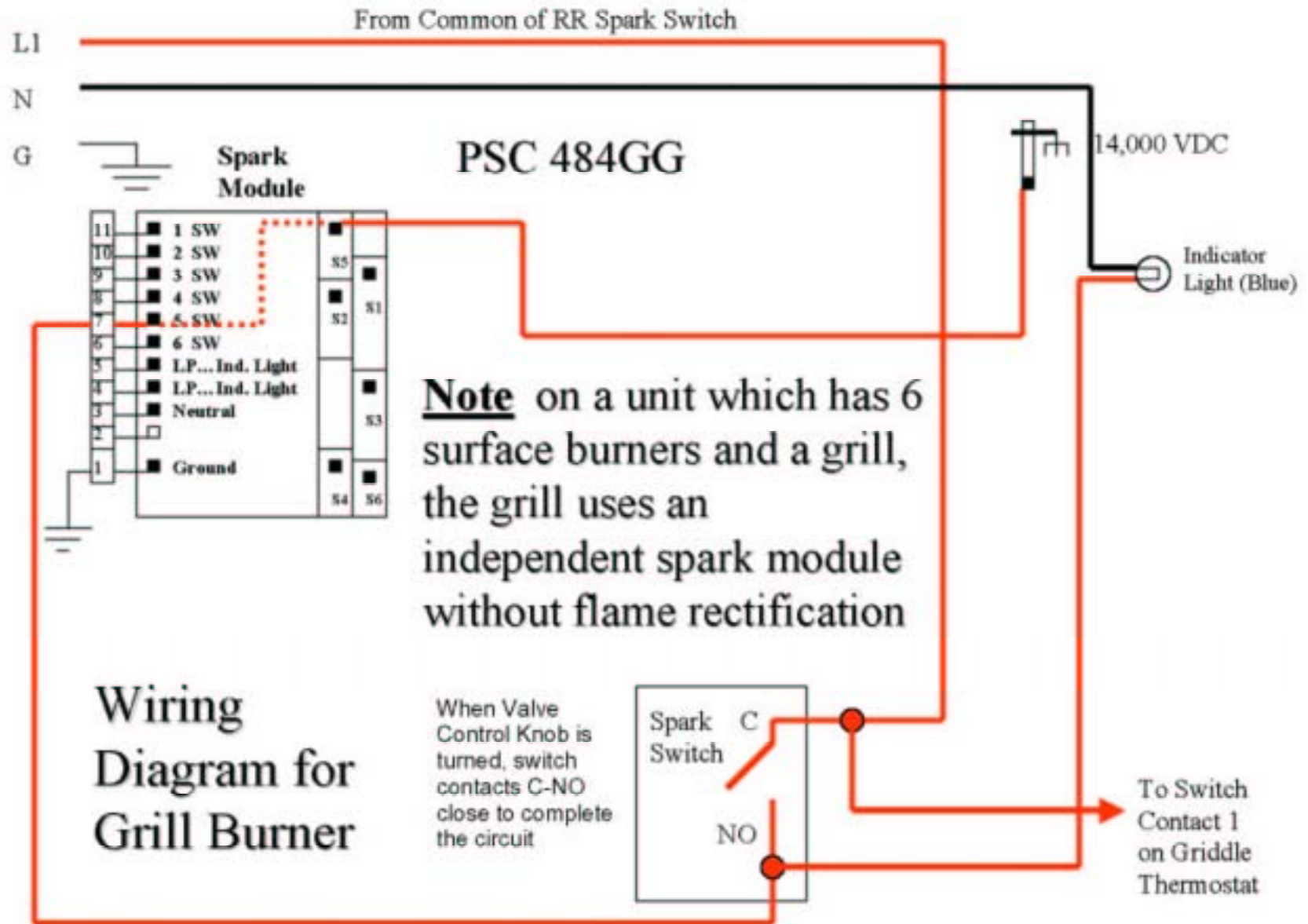
In many cases, this will require the bracket to be moved almost all the way downward-toward the burner-using the slots in the bracket. Additionally, verify that the grill burner's air-shutter is properly adjusted, per the installation instructions, as air-shutter adjustment can also influence ignition performance.



Original Radiant



New Radiant



Griddle

The griddle must be level or tilted slightly forward for optimum performance. This should have been done during installation, if it wasn't it can be leveled by removing the griddle plate and frame then adjusting the leveling screws at the front and rear of the griddle opening.



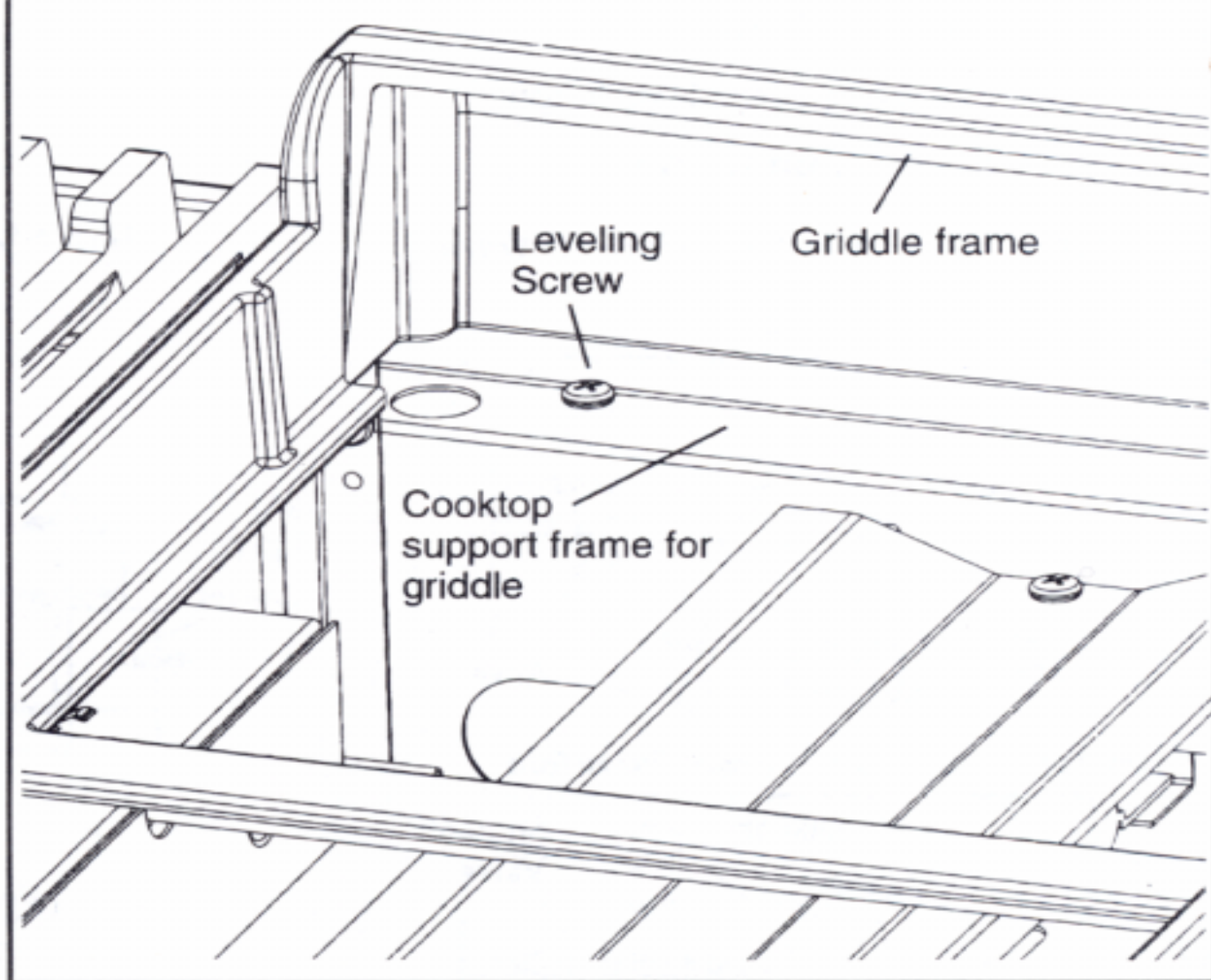
Operation



Griddle Cooking Chart

FOOD	SETTING
Bacon, Ham, Pork Chops	350 to 375 degrees F
Eggs	300 to 325 degrees F
Pancakes, French Toast	350 to 375 degrees F
Potatoes, Hash Brown	400 to 425 degrees F
Sandwiches, Sausage	350 to 375 degrees F

Fig. 10 Griddle leveling screws



Operation...Griddle



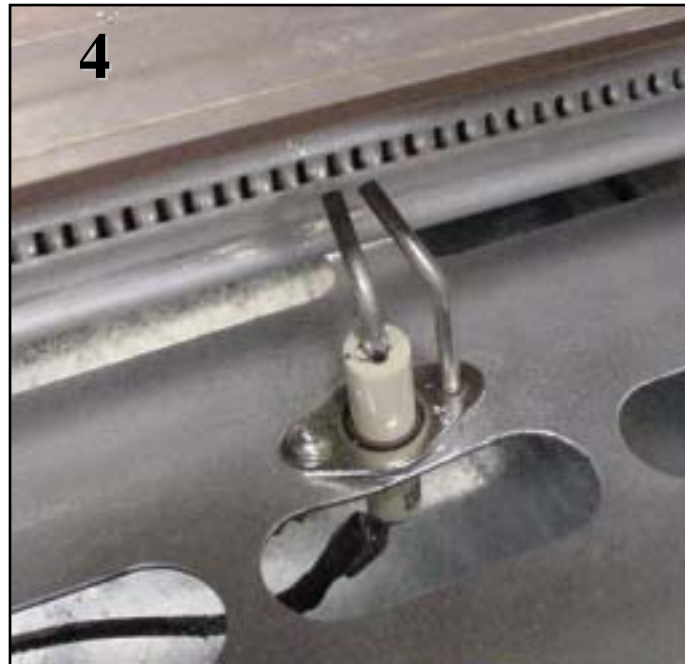
1 When griddle is turned on thermostat contacts close sending 120 VAC to the gas igniter module



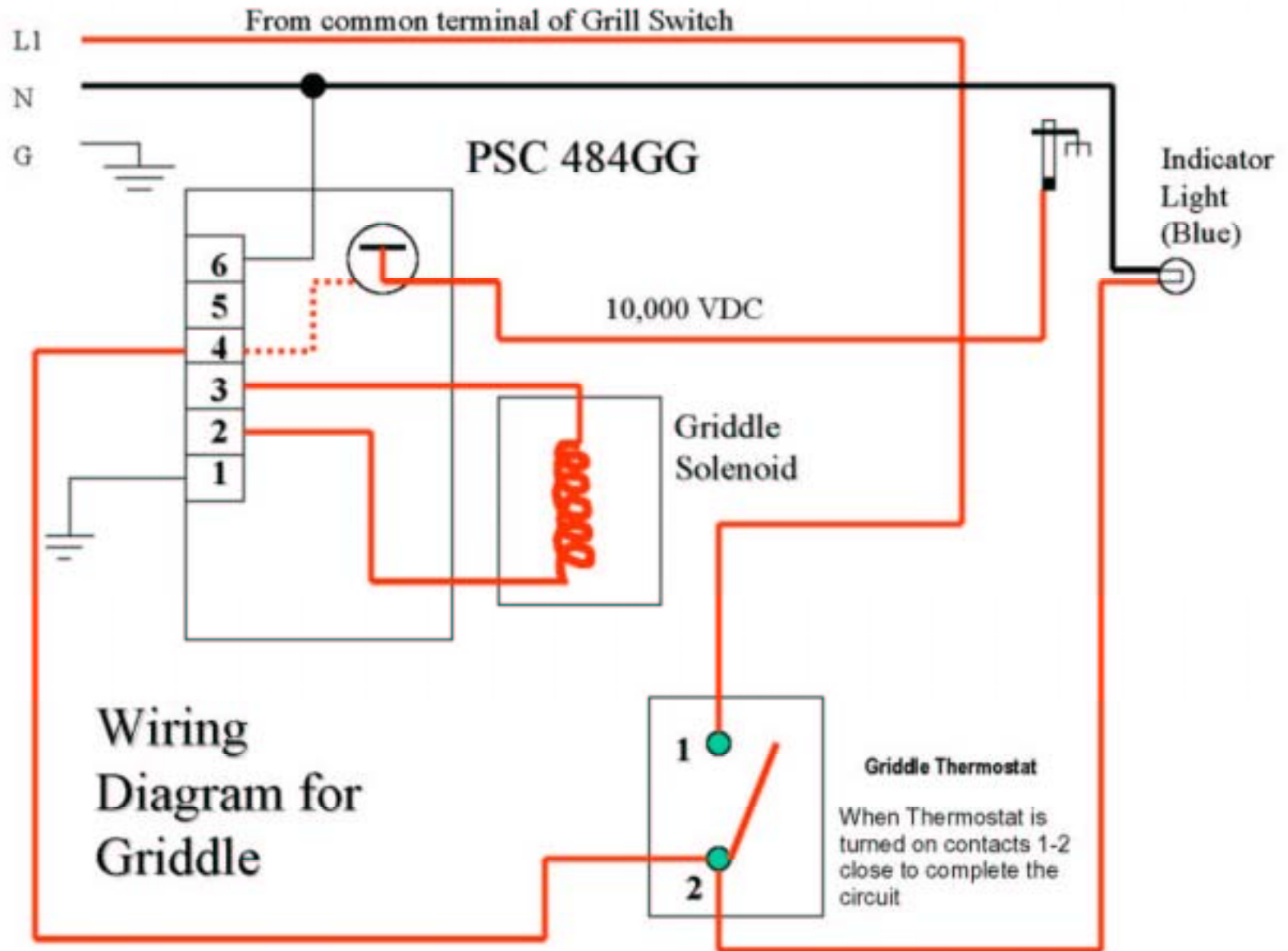
2 Griddle Gas Igniter Module receives 120 VAC input, sends 120 VAC to griddle solenoid gas valve & 14,000 VDC to igniter.



3 Griddle Solenoid Gas Valve Activated by 120 VAC from gas igniter module



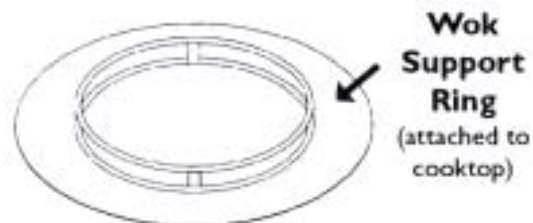
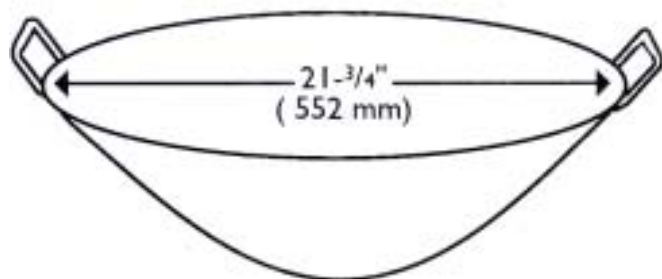
4 Spark occurs between the electrode and grounding fork. If gas does not ignite within 8 seconds module shuts down gas solenoid Note: If the electrode is noisy, shorten the gap between the electrode and the grounding fork to 1/16th inch



WOK OPERATION

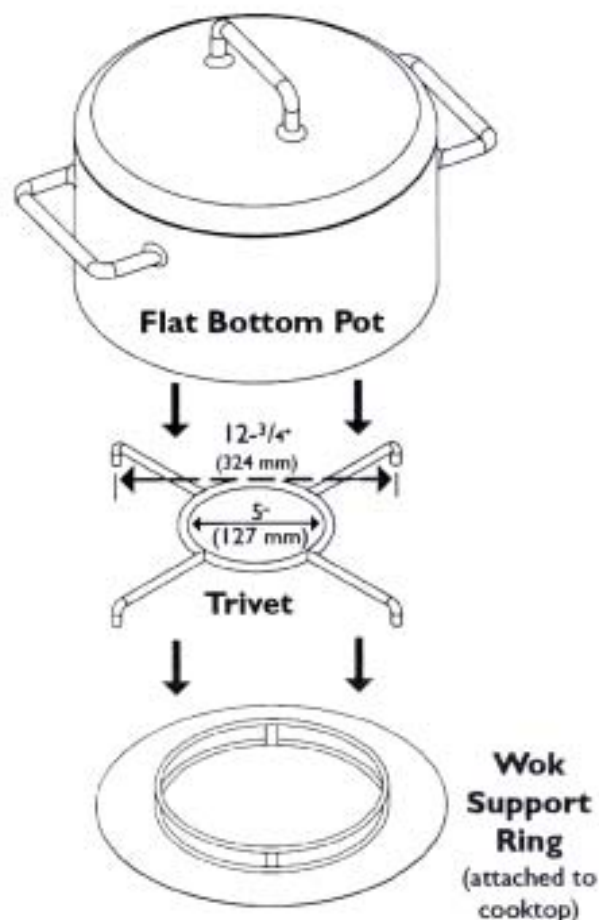
WOK ASSEMBLY

1. Remove all packaging materials and temporary labels from the wok pan.
2. Make sure that the plastic ties used for shipping have been removed.



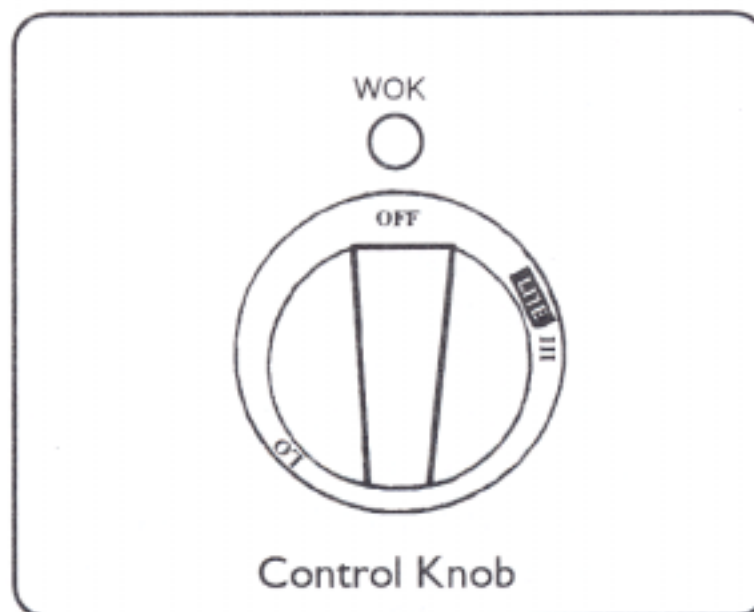
3. Check that the support ring is properly placed above the burner.
4. Place wok pan into support ring before turning on the burner.
5. Turn the control knob to the LITE position. After 45 to 60 seconds, turn to the heat setting.
6. It is normal for the wok pan to discolor and darken with use. This indicates that it is well seasoned.

Wok Trivet



- Use the trivet to support a flat-bottom wok or a large stock pot.
- Assemble as shown in the drawing above.

CONTROL KNOB



- There are no fixed positions on the knob between HI and LO.
- Press and turn the knob counter-clockwise to the LITE position.
- An audible click will be heard as the igniter lights the pilot light.
- When the burner ignites, adjust the knob to the heat setting.

Operation... Wok

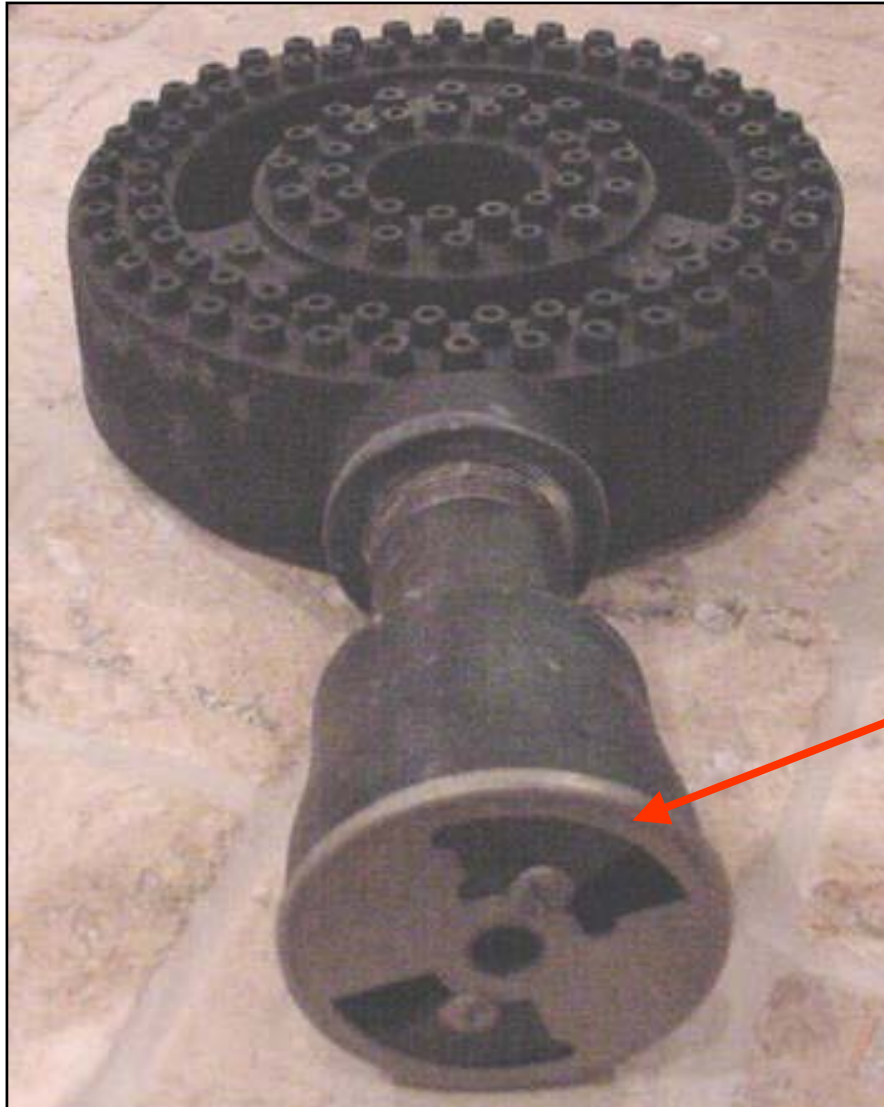


When control knob is turned to Lite position micro switch activates spark module and gas flows to pilot lite. When therma-couple is satisfied main safety valve opens and gas flows from main orifice to burner

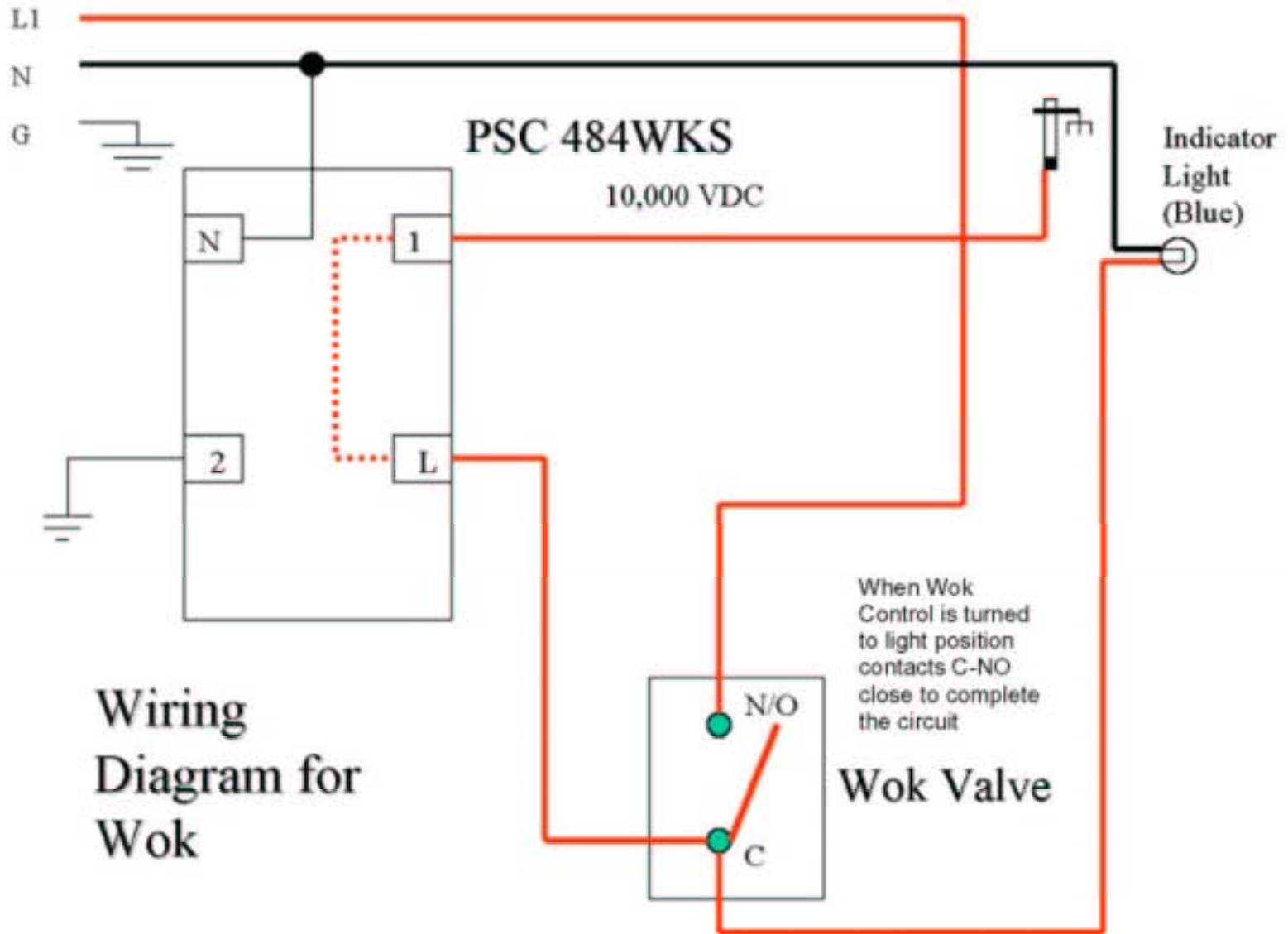


wok

Product Description



Wok Burner air intake can be adjusted by loosening the screws and rotating the sleeve



Disassembly...Star Burner

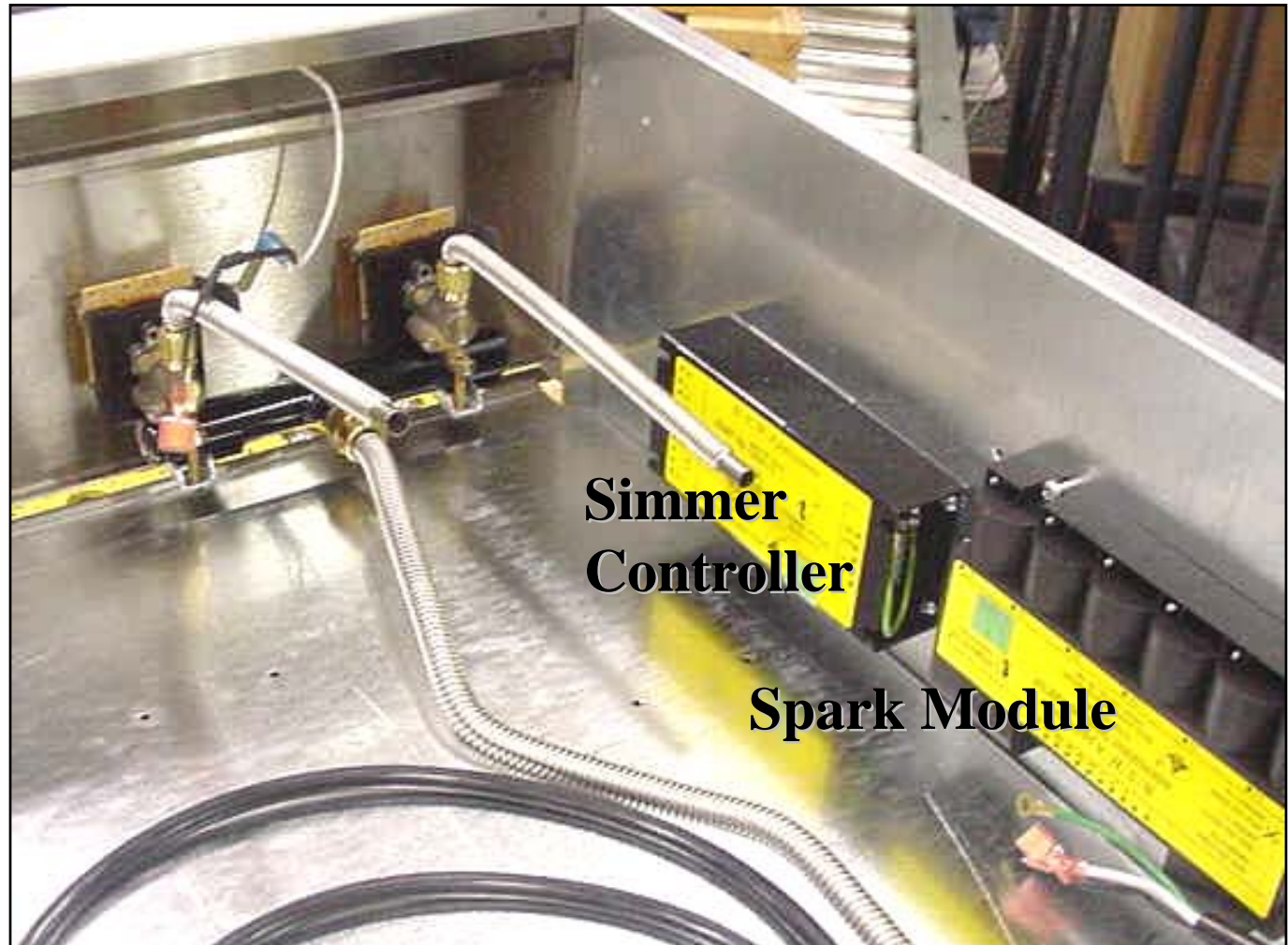


Disassembly...Star Burner components

After removing left side spill tray - Spark Module, Simmer Controller and Potentiometers and valves can be accessed

Note Potentiometers can only be removed from inside rough-in box, and only by removing valve from manifold first

Front of Unit



When replacing a Simmer Control only loosen the 2 left side screws, then remove the 2 right side screws.



When installing, first put the connector block on the module, then slide the module over the 2 screws on the left side and then install the right side screws.

Simmer Control

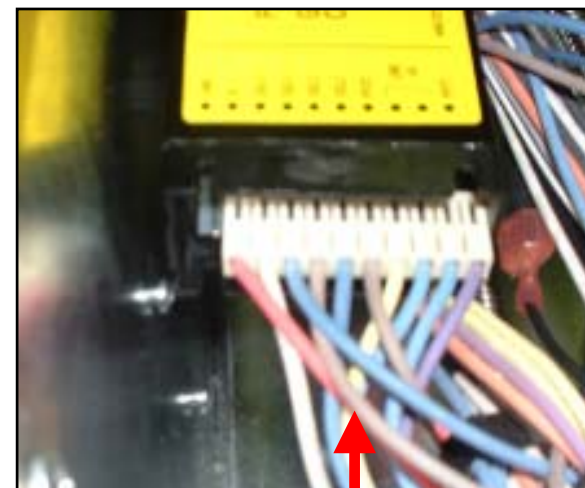
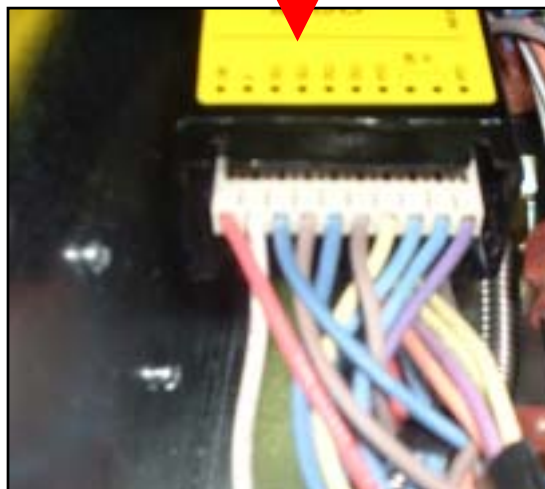
Make sure that the connector block is in the center



WRONG

If not centered when you turn the power on the control will trip the breaker

Correct



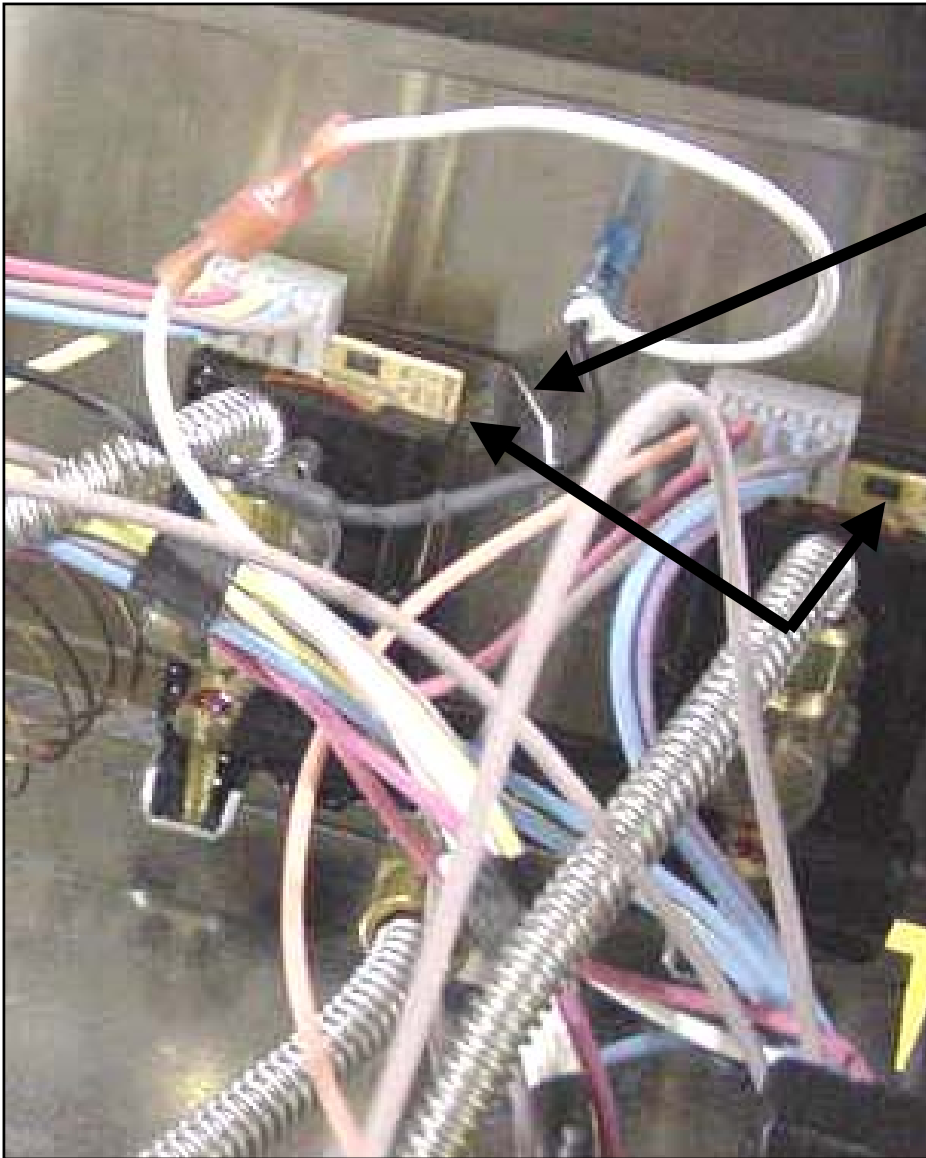
WRONG



Valve & Potentiometer removal

First remove both control knobs to access the screws in the bezel. Remove only the screw at the eight O'clock position and not the screw at the 2 O'clock position, this one should only be loosened. The brackets which hold the manifold in place (one for each side of the mini-manifold) can now be lifted up from behind the control panel to the 12 O'clock position to allow the mini-manifold to be pulled out.

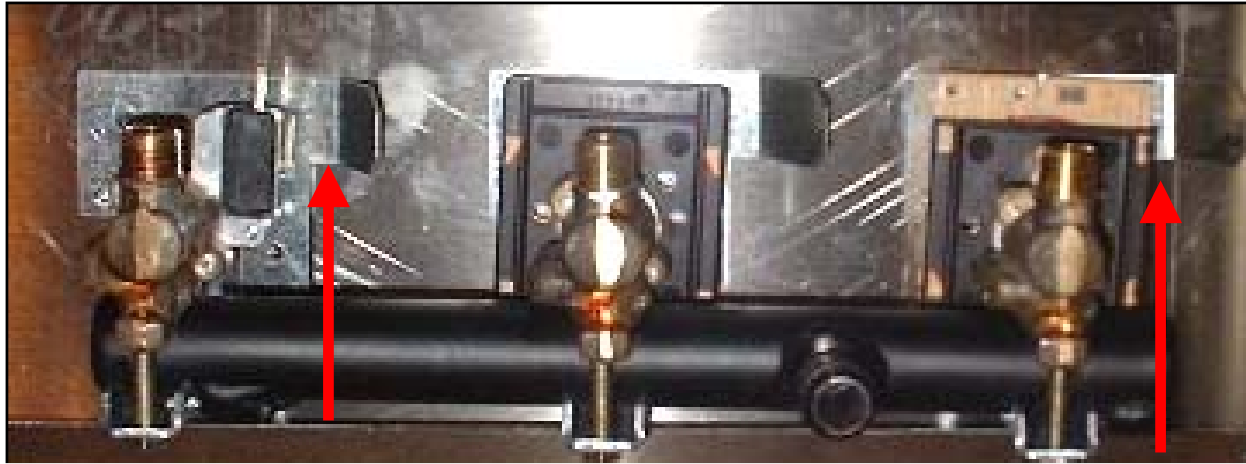




Manifold Retaining
Bracket (mounts behind
manifold bracket & in
front of potentiometer,
when viewed from front
of unit)

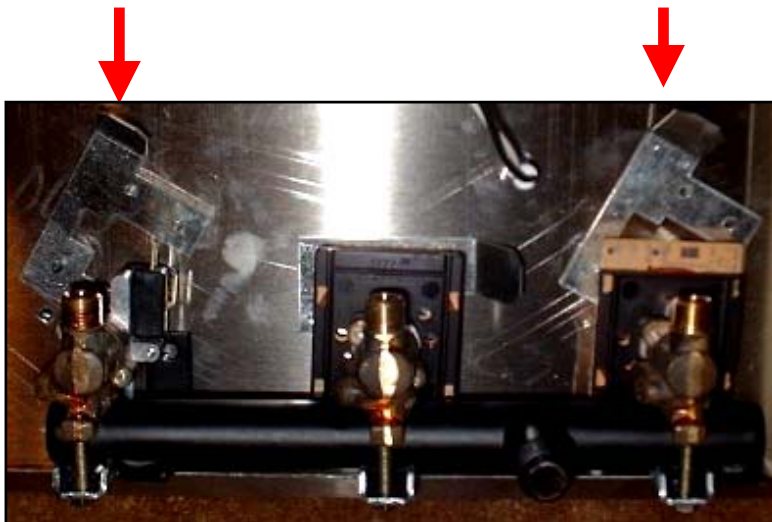
Potentiometers

Valve Replacement

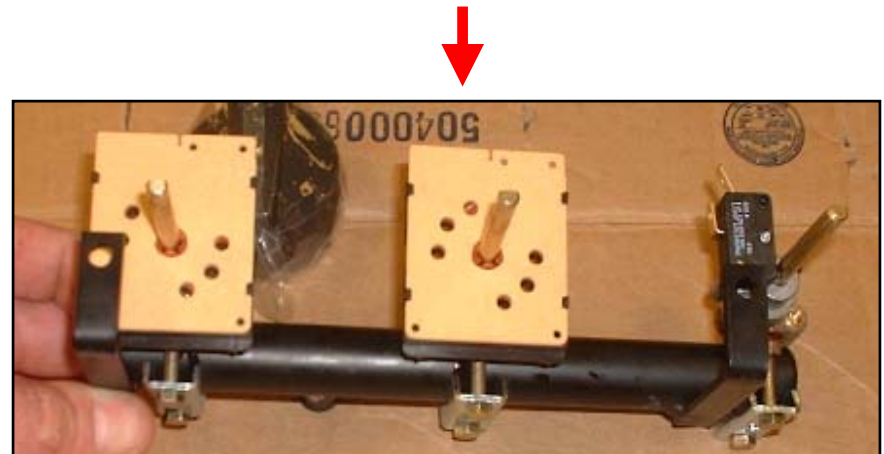


Hold the lever on the bracket

Pivot the 2 outside brackets to the left

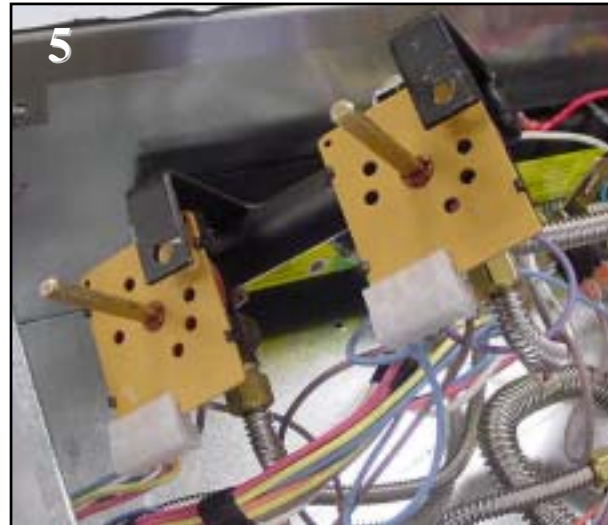


Remove Manifold with valves from unit

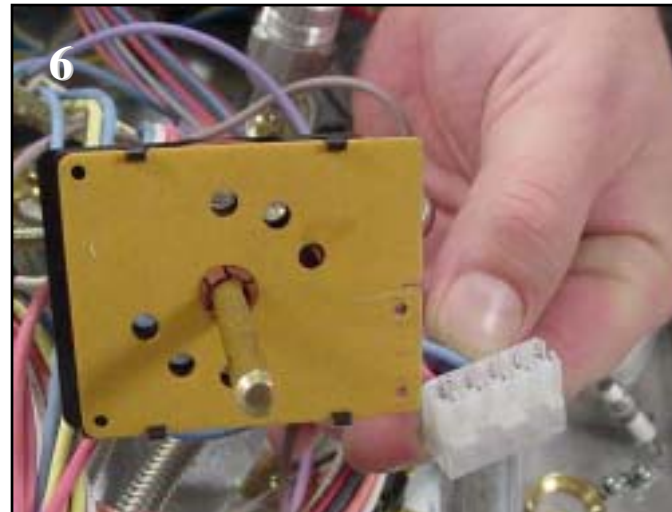




4 Remove screw holding the solenoid bracket to make it easier to pull mini-manifold out towards the rear of the unit.

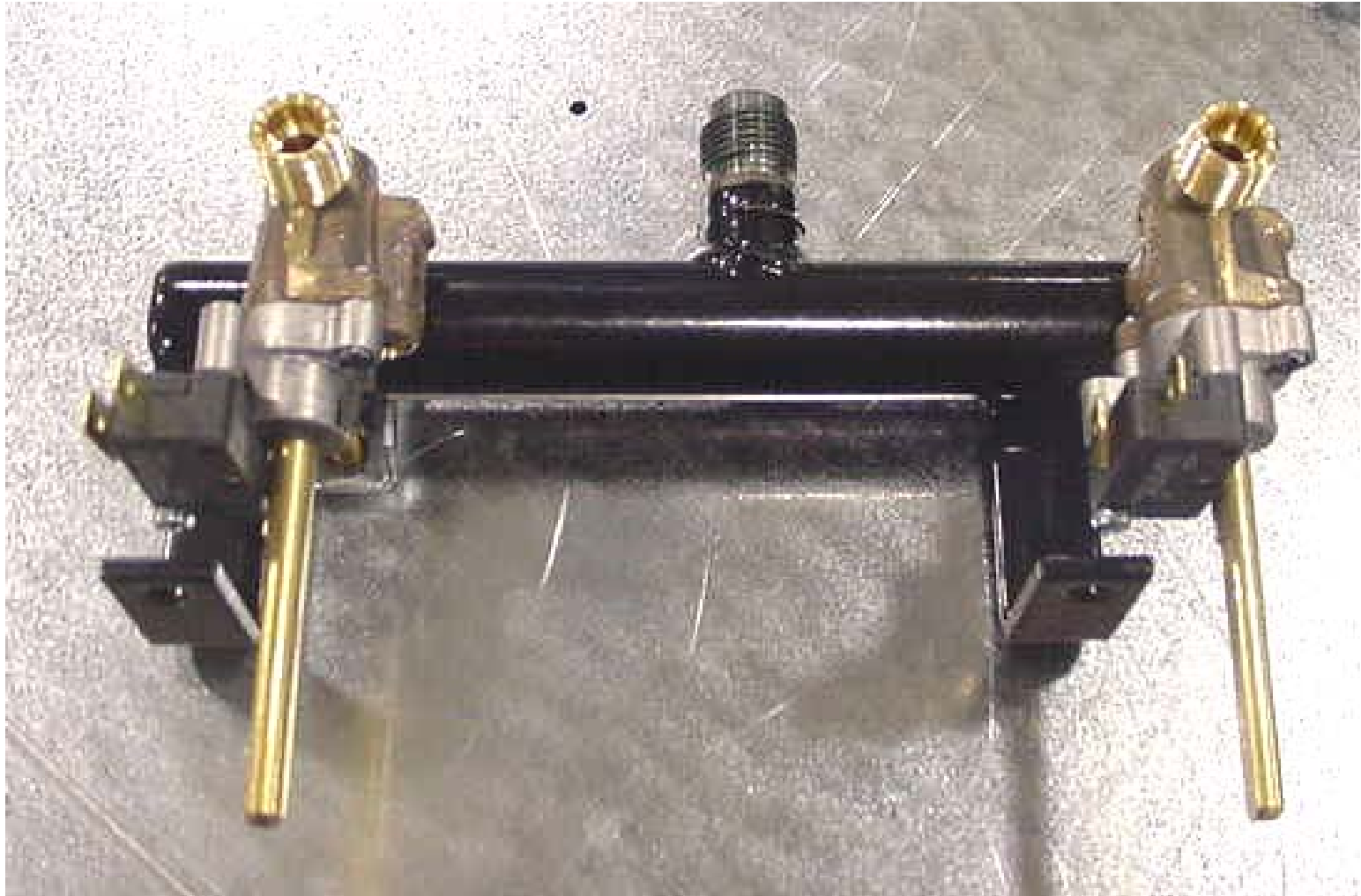


5 Valve has to be removed from the manifold in order to pull the potentiometer off of the shaft, because of the L shaped bracket



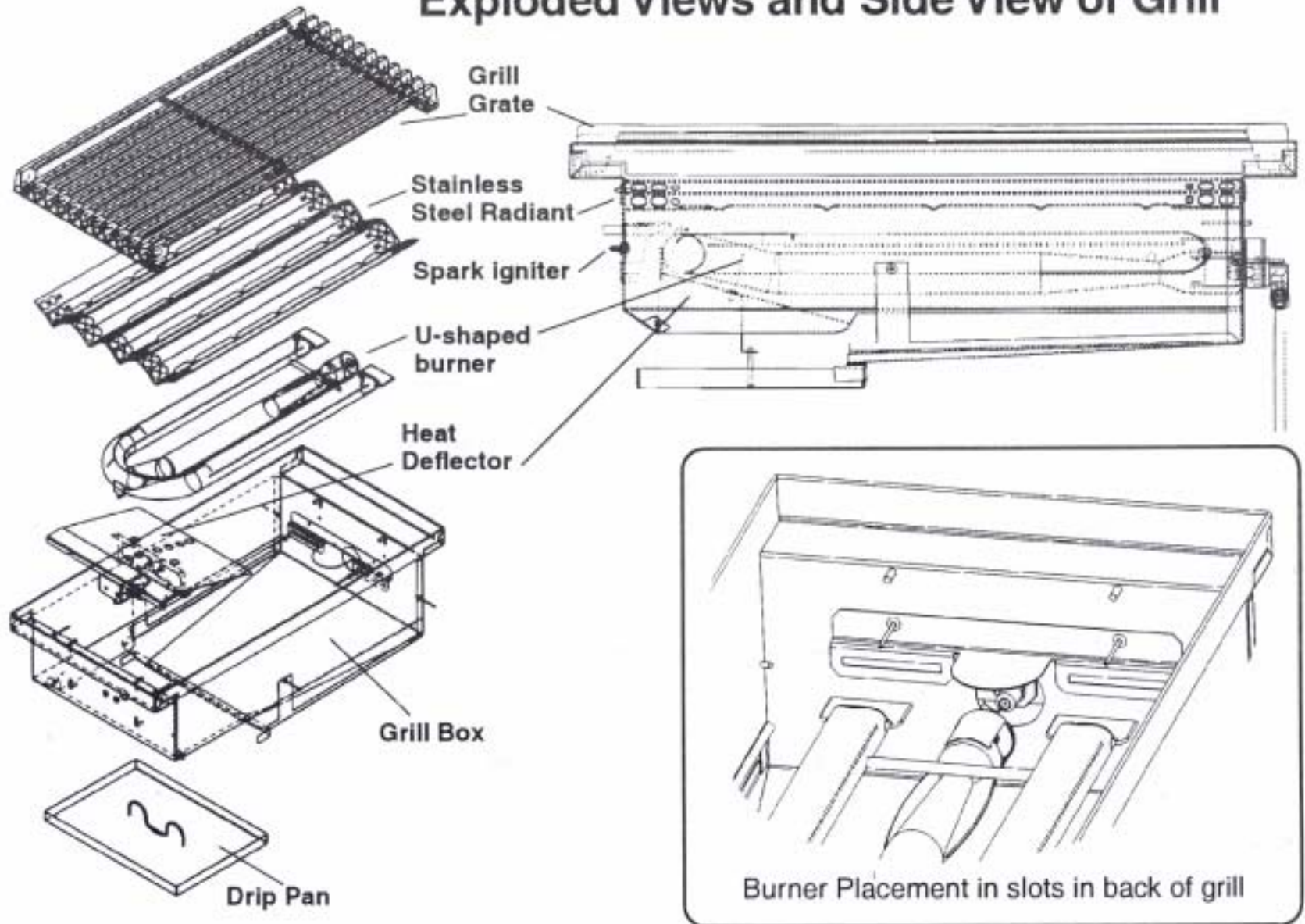
6 Remove the connector and pull potentiometer off of the shaft and replace.

Disassembly...Star Burner components



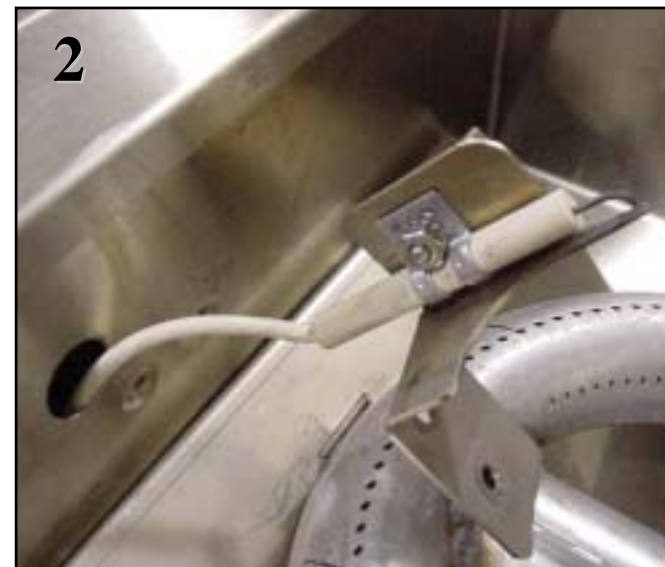
Regular Burner valves and micro switches showing how they are mounted onto mini manifolds

Exploded Views and Side View of Grill



Disassembly...Grill

Grill U shaped burner showing the right Angle bracket which secures the grill igniter. The igniter is wired to S5 on the 6-point spark module used by the surface burners.

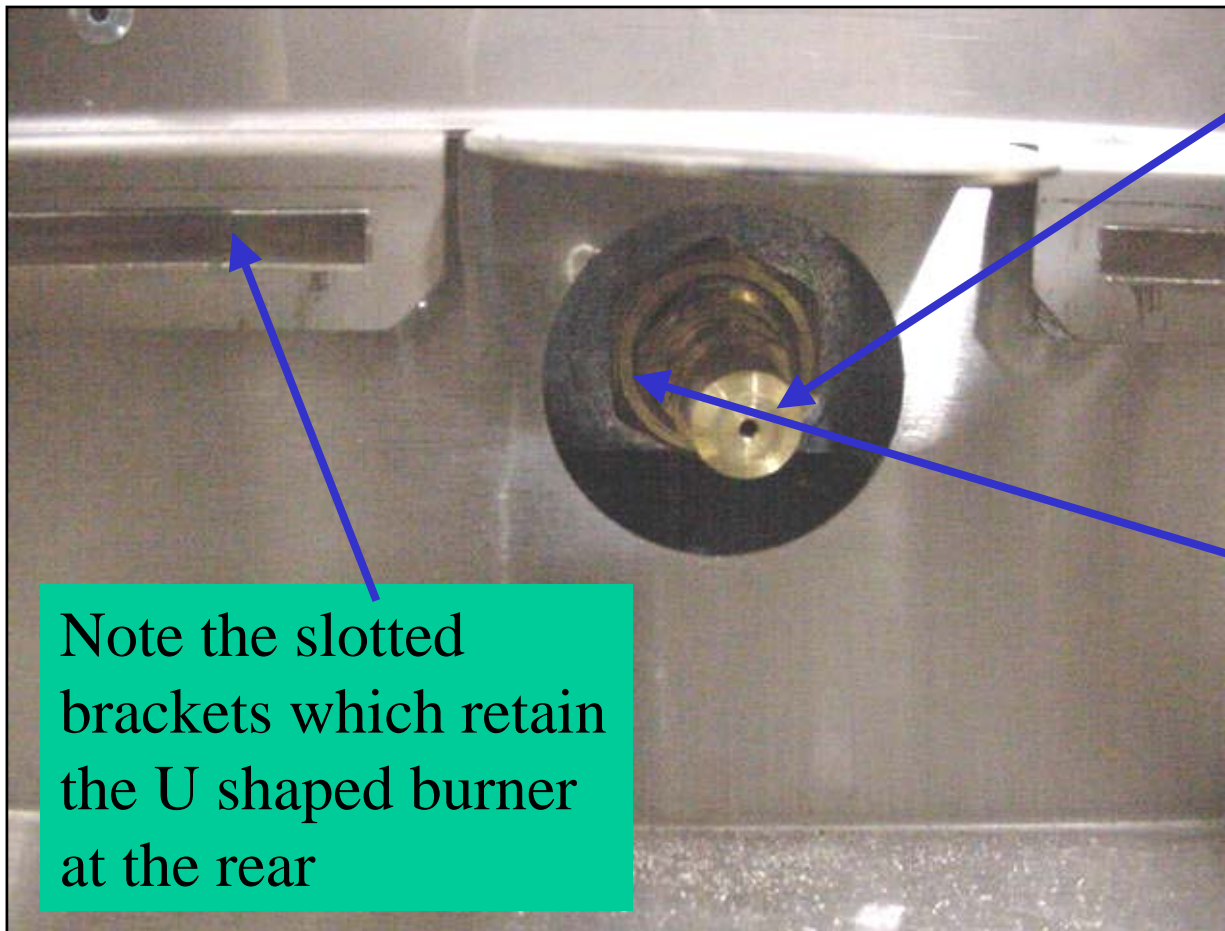


Burner pulls away from orifice and retaining slots



Igniter is secured to underside of bracket with a set screw and retaining nut.

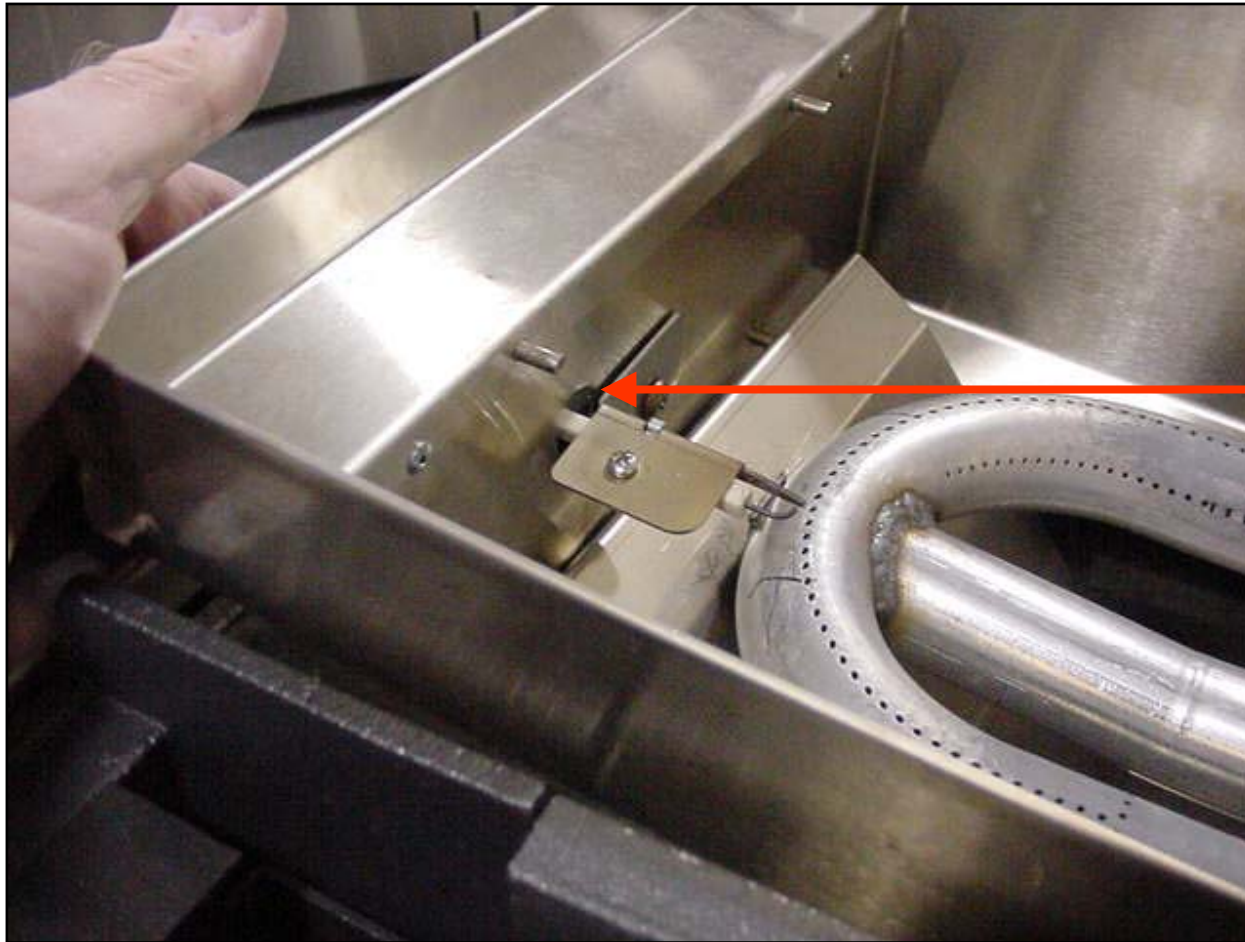
Disassembly...Grill



Note the slotted brackets which retain the U shaped burner at the rear

Grill orifice is located at the rear of the rough-in box it is a fixed orifice. The orifice assembly is secured to the back of the grill can with a 15/16 inch brass hexagon retaining nut. This nut has to be removed before attempting to remove the grill can

Disassembly...Grill

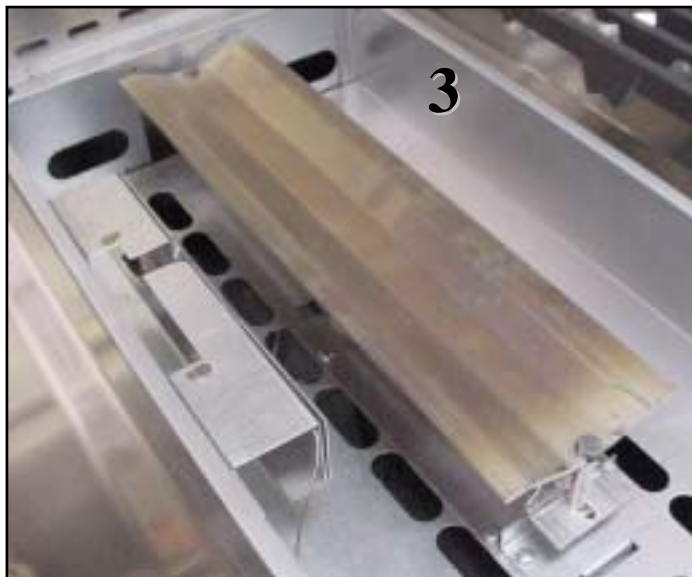
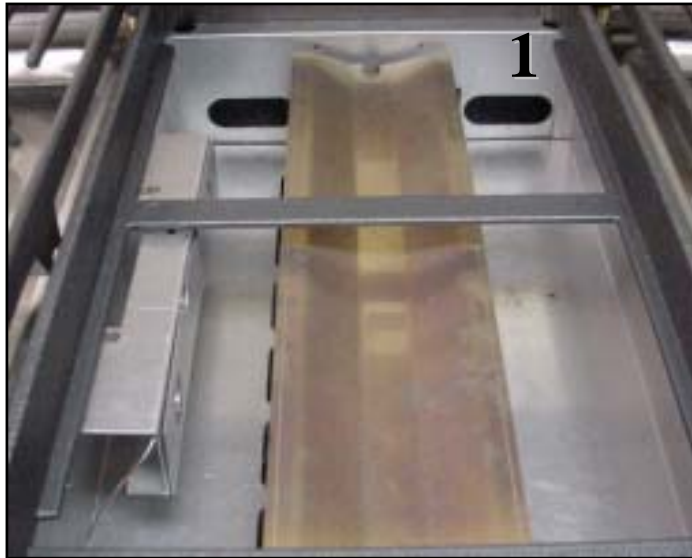


Igniter wire has to be disconnected from spark module (located under left spill tray) and fed through hole in grill can if replacement of igniter is required

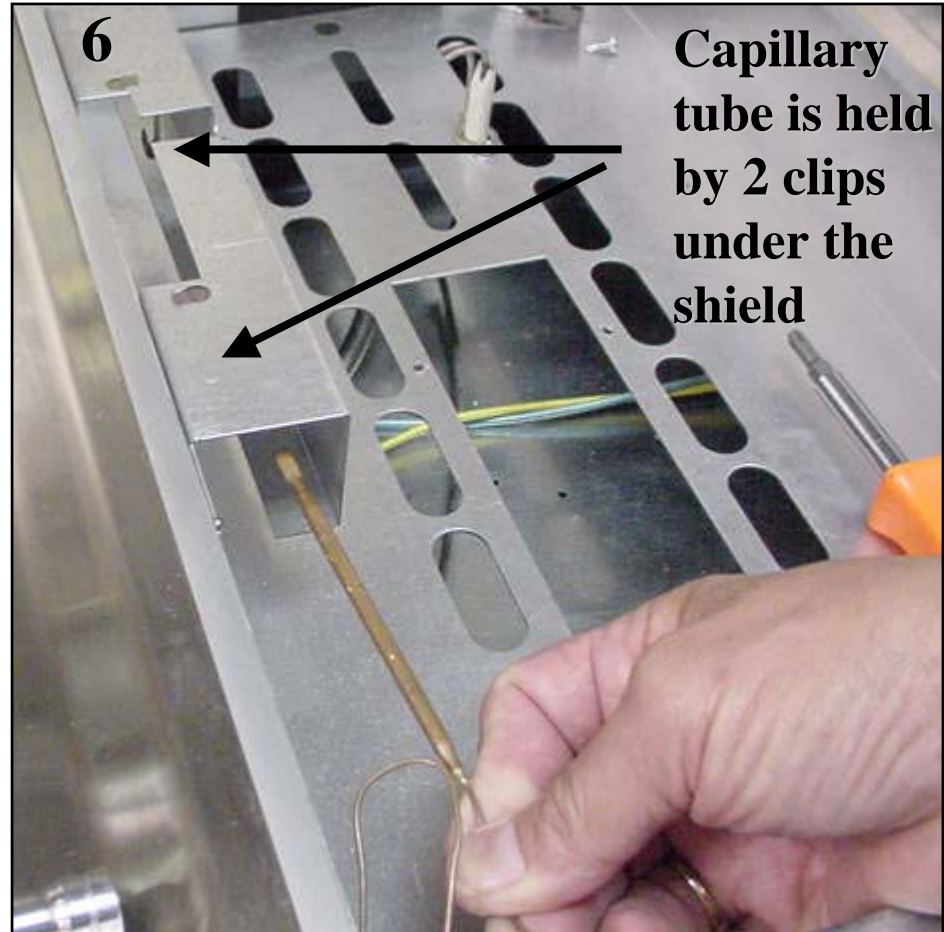
New Style Retainer for Burner



Disassembly...Griddle components

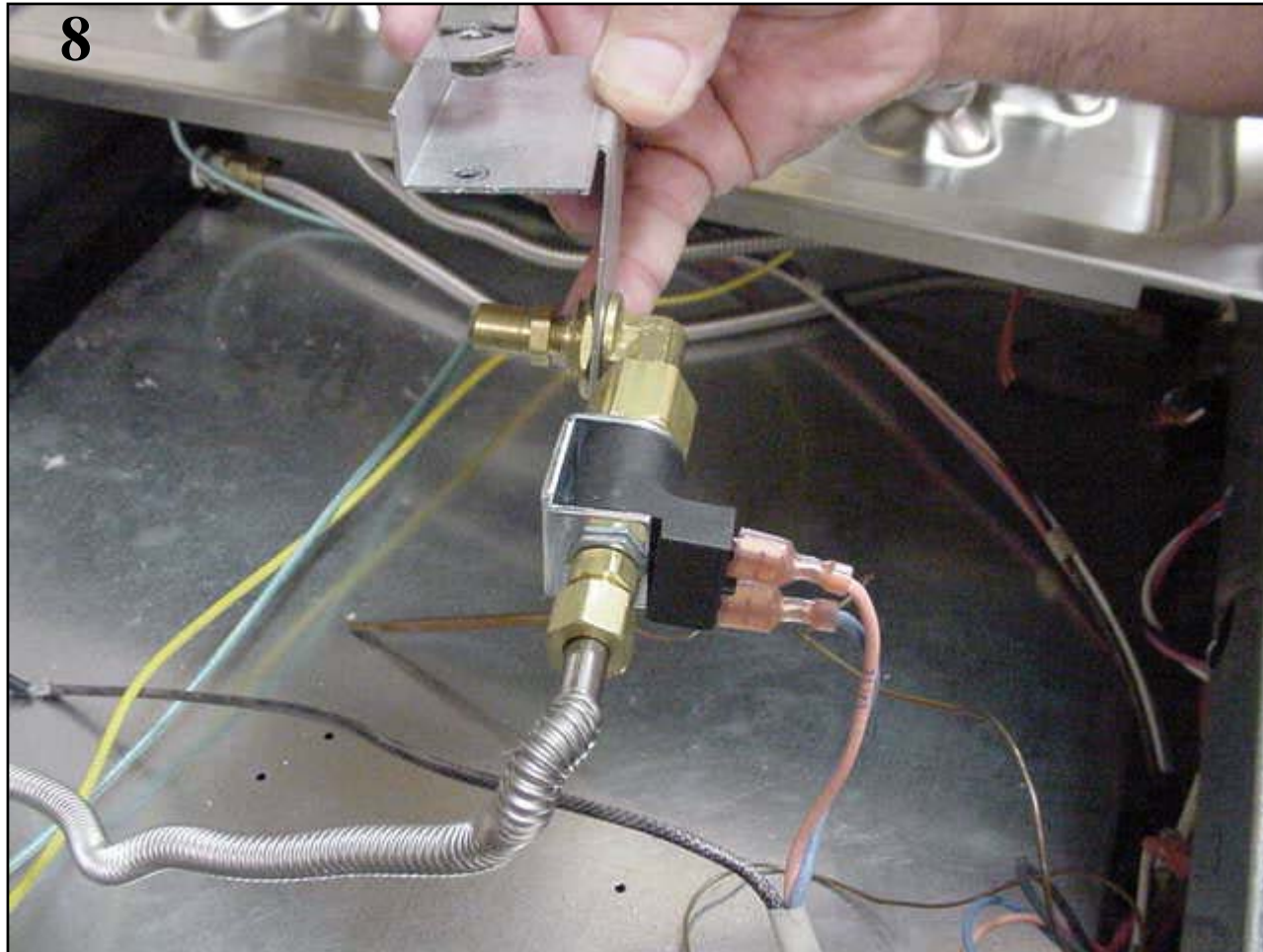


Disassembly...Griddle components



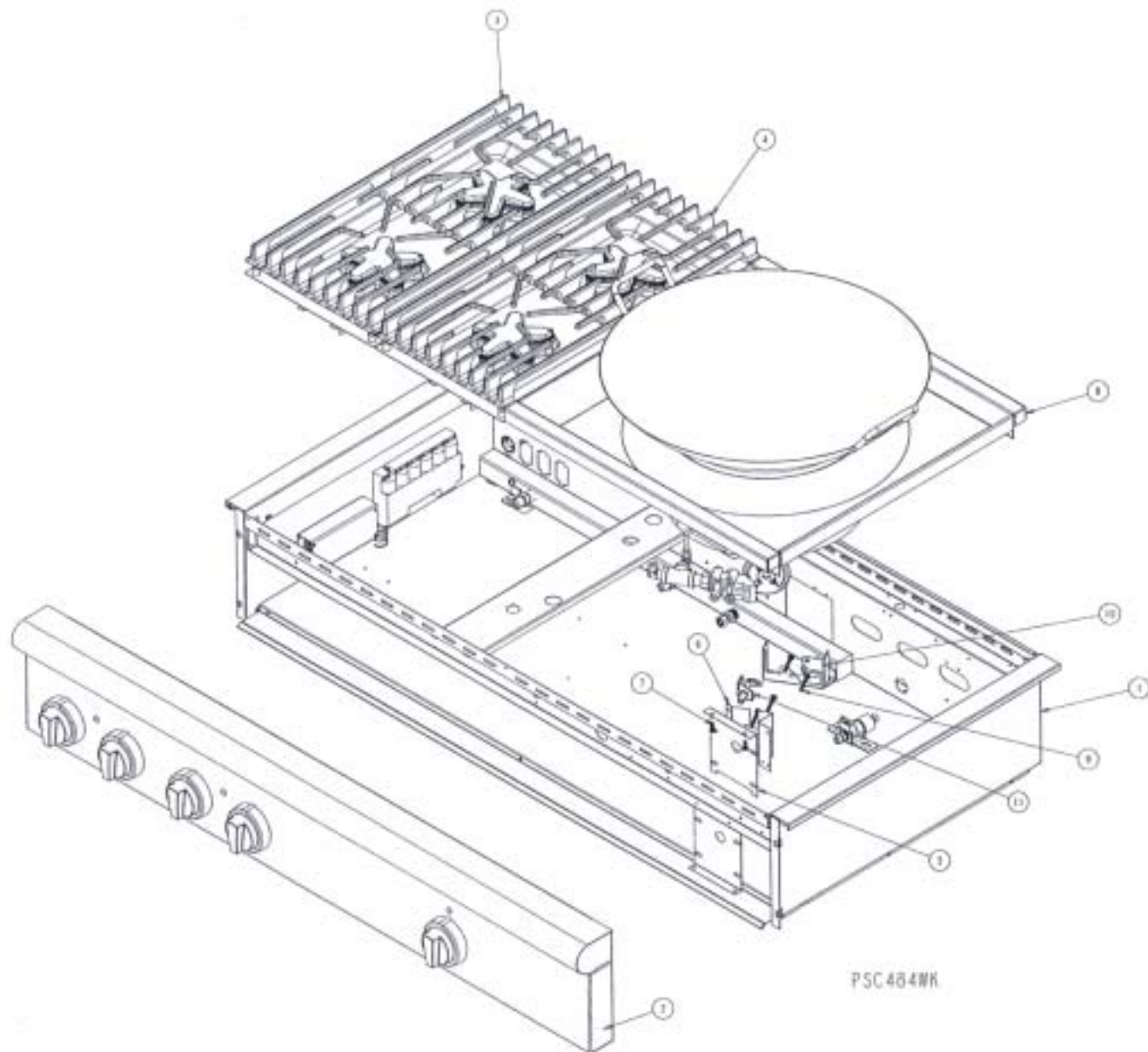
Removal of burner, igniter and thermostat capillary tube

Disassembly...Griddle components



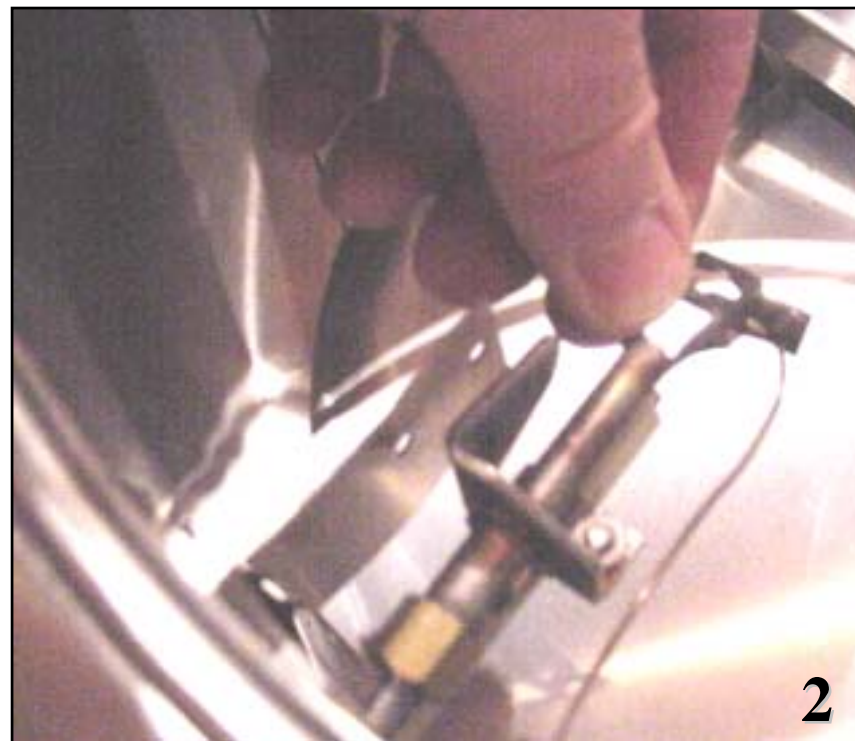
**Front
of
unit**

Securing bracket, solenoid and griddle orifice



Disassembly... Wok

Wok burner lifts out.
Before removing the wok
top panel frame the pilot
lite assembly has to be
removed from the
retaining bracket



Component Description... Wok

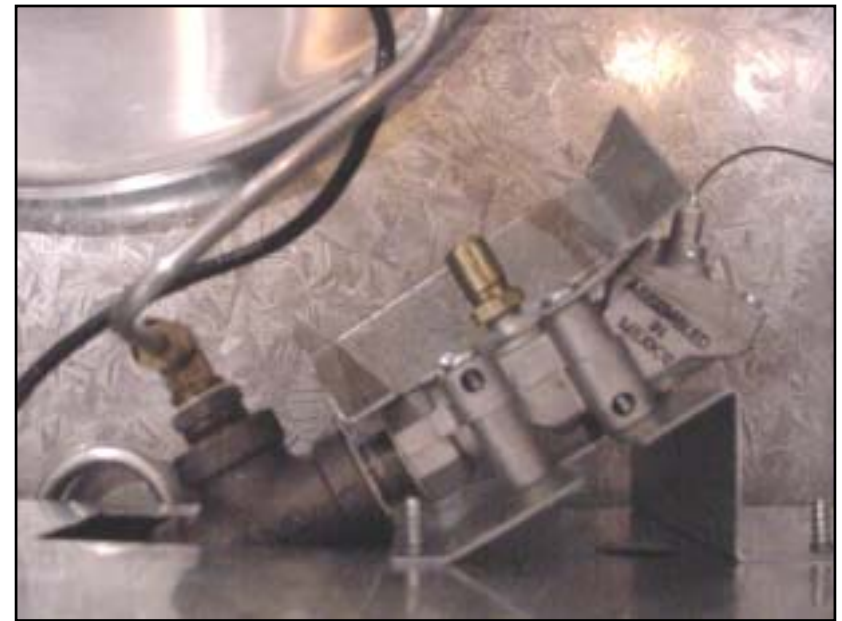


Wok Top Panel Assembly Frame can now be lifted out to access the safety valve, orifice and ignition components



Disassembly...Wok

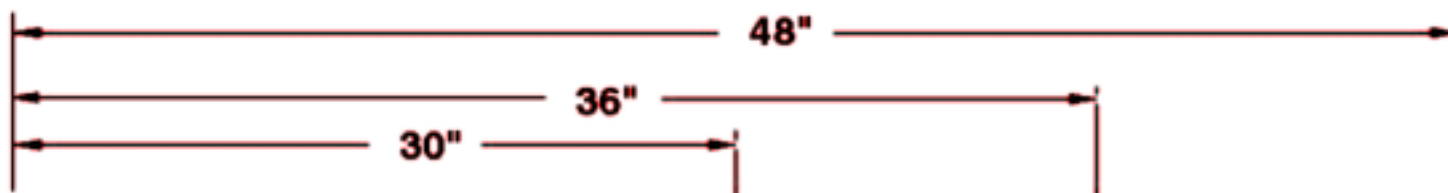
Safety Valve Assembly



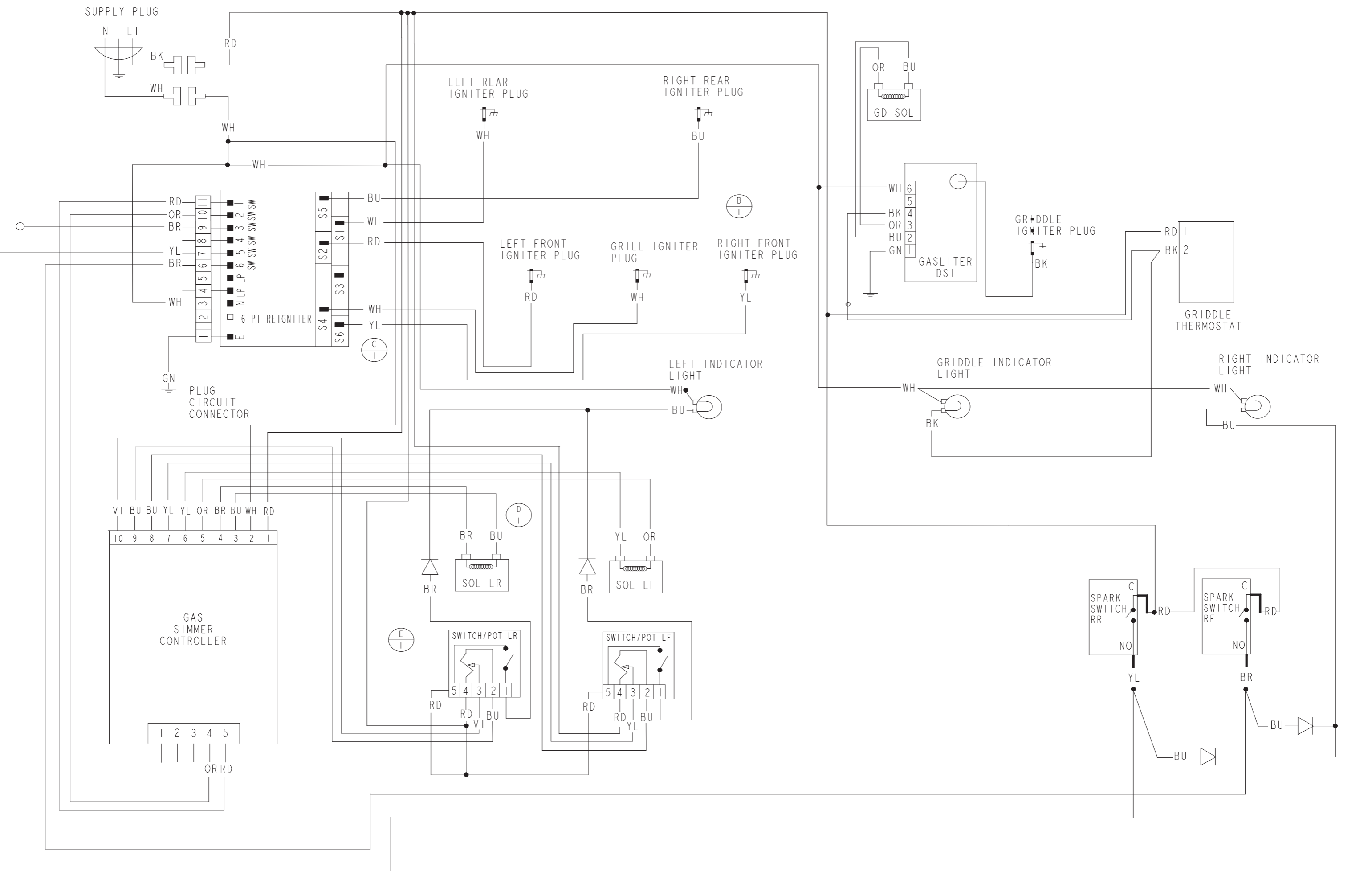
Looking down onto Safety Valve Assembly



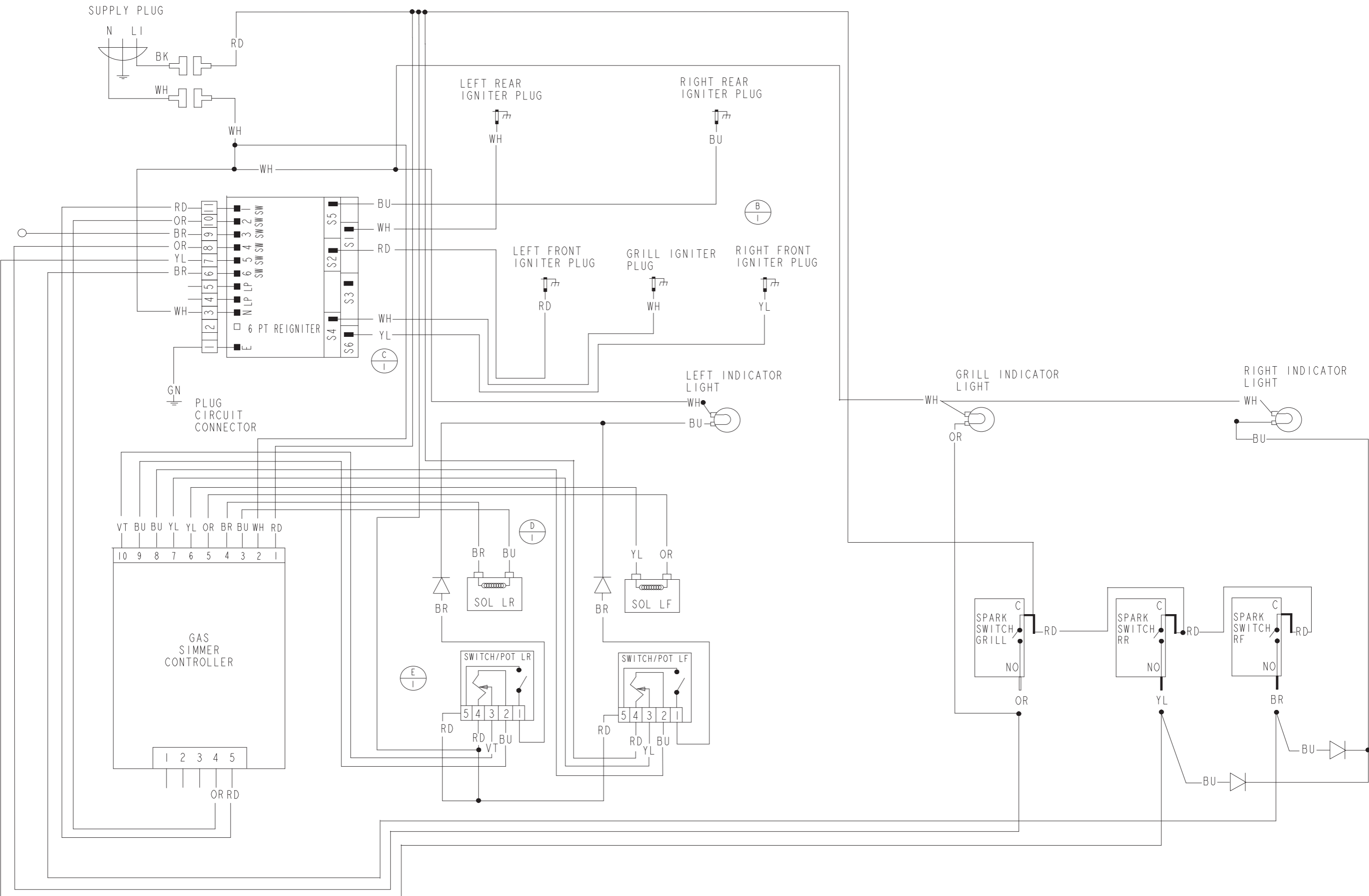
Leveling screws

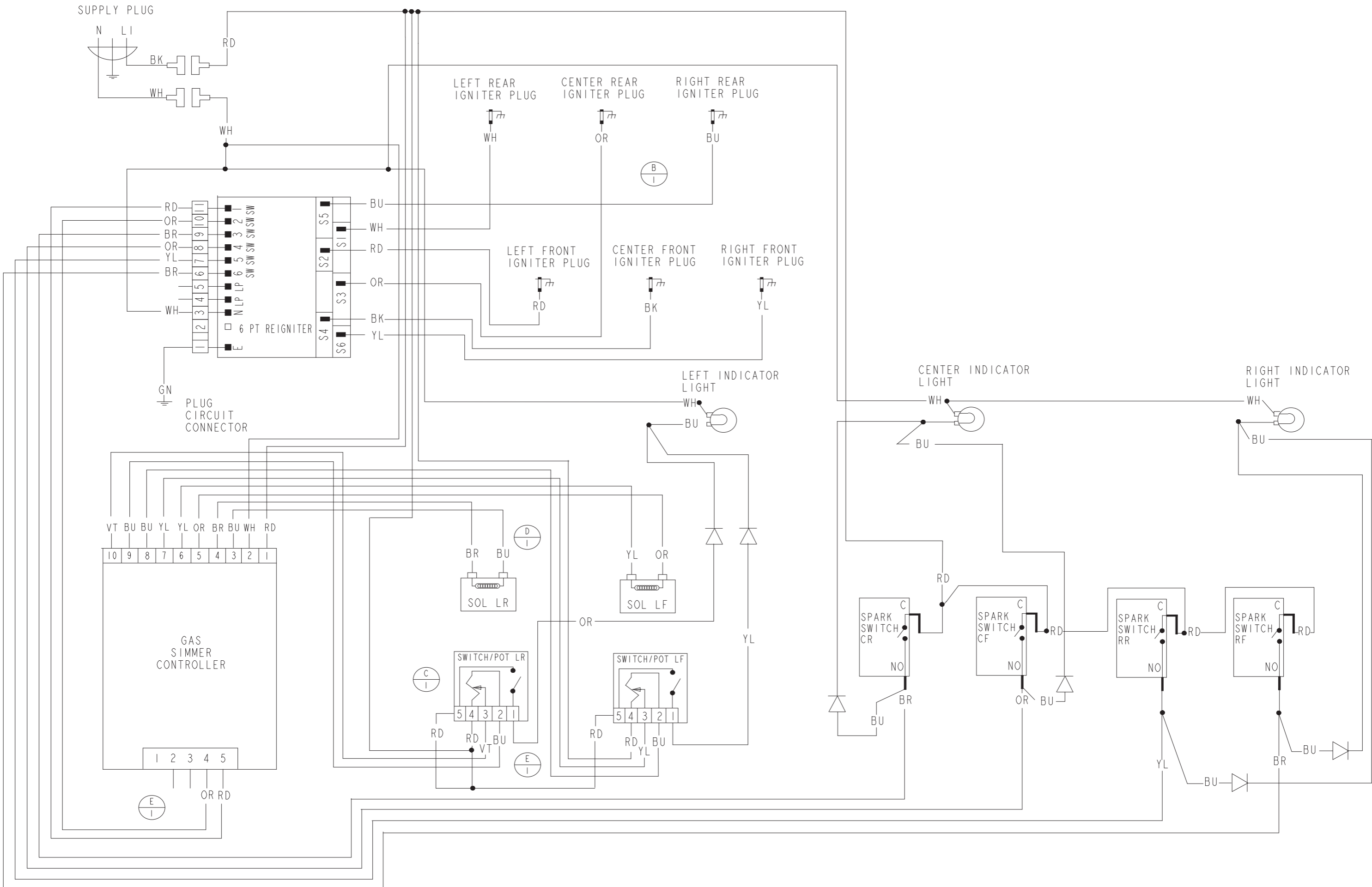
PSC,PDR,PGR IGNITER WIRES

WHITE 16" 432037	ORANGE 29" 418108	BLUE 45" 239377	VIOLET 52" 239490
RED 16" 219798	BLACK 29" 219801	YELLOW 45" 239378	BROWN 60" 239491



WIRING DIAGRAM
PSC364 GD
REV E
THERMADOR
P/N 5040000139

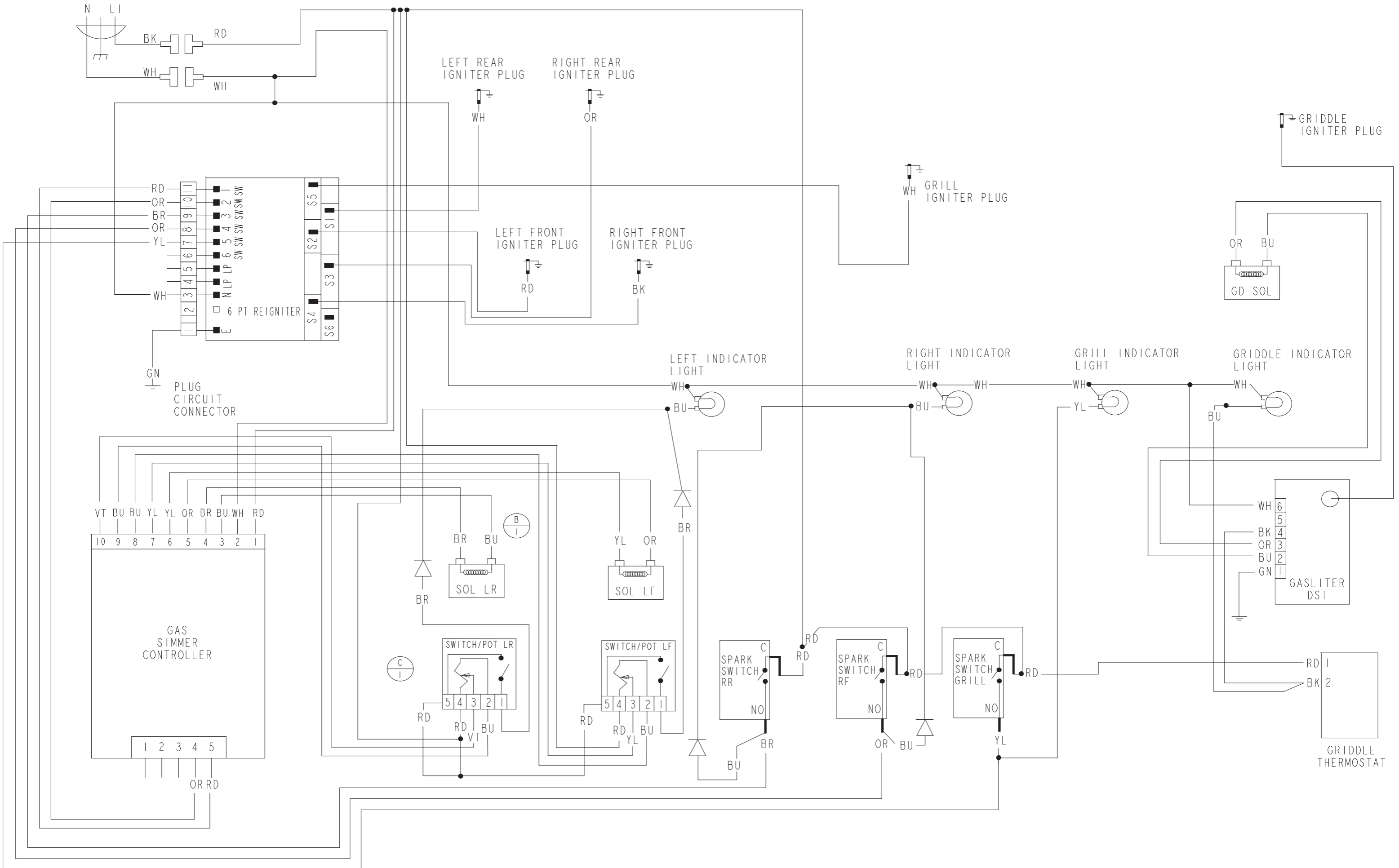




WIRING DIAGRAM
PSC366
REV E

THERMADOR
P/N 5040000140

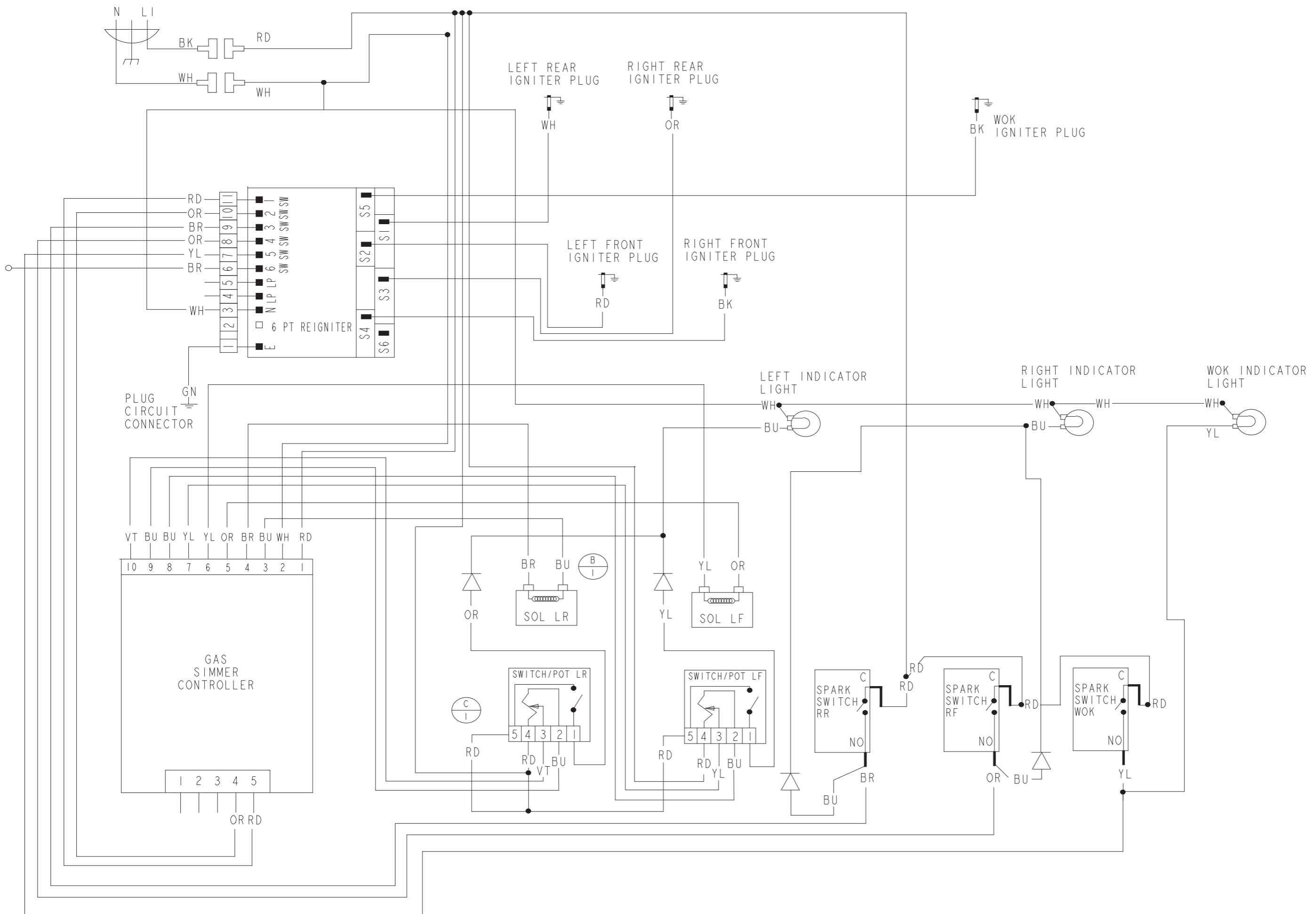
SUPPLY PLUG



WIRING DIAGRAM
PSC484 GG
REV C

THERMADOR
P/N 5040003796

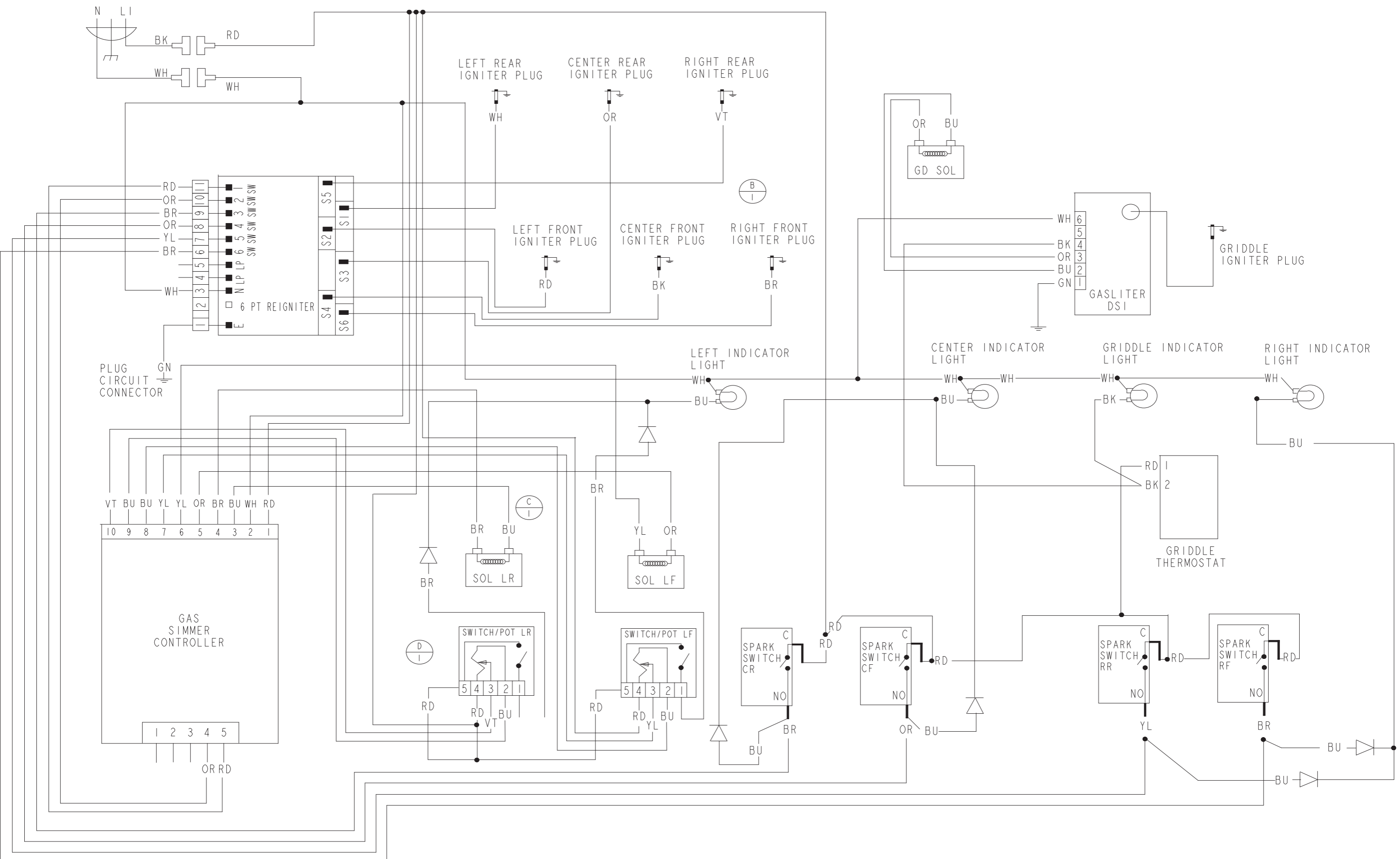
SUPPLY PLUG



WIRING DIAGRAM
PSC484 WK
REV C

THERMADOR
P/N 5040003797

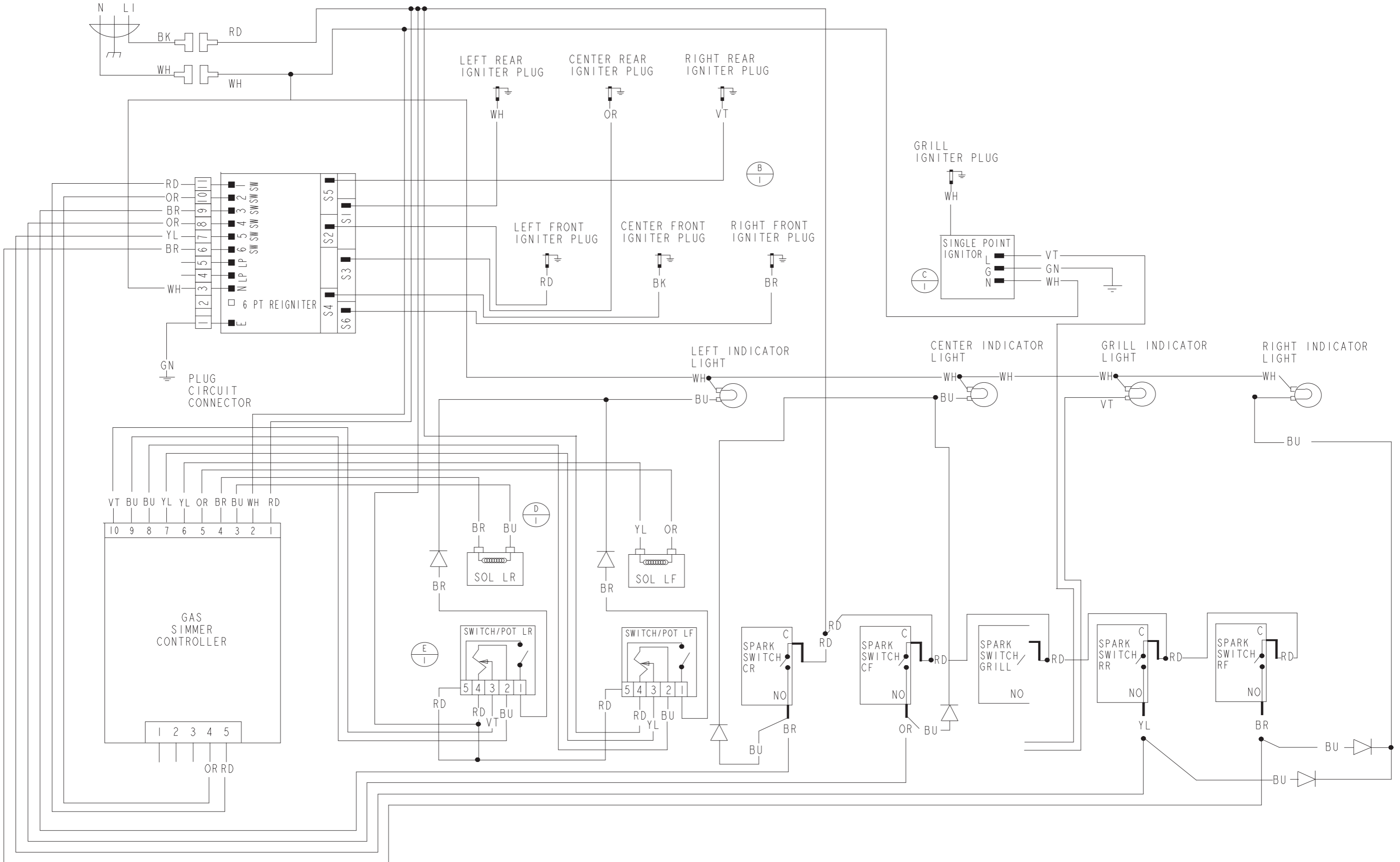
SUPPLY PLUG



WIRING DIAGRAM
PSC486 GD
REV D

THERMADOR
P/N 5040003798

SUPPLY PLUG



Range Oven Section



PDR/PGR Series

Range Section

- Model Numbers
- Product Description
- Installation
- Operation
- Disassembly
- Reassembly
- Wiring Diagram
- Service Tips



Model Numbers

30 Inch Models

PDR364GDZS

PGR304ZS

PGR304LP

36 Inch Models

PDR364GDZS

PDR364GLZS

PDR366ZS

PGR364GDZS

PGR364GDLP

PGR364GLZS

PGR364GLLP

PGR366ZS

PGR366LP

48 Inch Models

PDR484GGZS

PDR486GDZS

PDR486GLZS

PGR484GGZS

PGR484GGLP

PGR486GLZS

PGR486GLLP

PGR486GDZS

PGR486GDLP

Dual Fuel Ranges:

Product Description

Main Oven:

Featuring 4.6 cu ft oven with 4000 watt broil element - 2400 watt hidden bake element - third element 2750 watt convection. Thermal bake, broil, convection and self-cleaning modes

Auxiliary Oven:

2.5 cu ft oven with 3600 watt broil and 2250 watt bake elements, thermal bake, broil, warming and proofing modes

All Gas Ranges:**Main Oven:**

Featuring gas convection oven. 30 inch is 4.6 cu ft with 25,000 BTU/hr bake burner.

36 inch range and the main oven of the 48 inch range feature 5.1 cu ft with 30,000 BTU/hr bake burner. They all have convection bake, thermal bake, pyrolytic self-clean and a dual 17,000 BTU/hr high intensity infrared broiler

Auxiliary Oven:

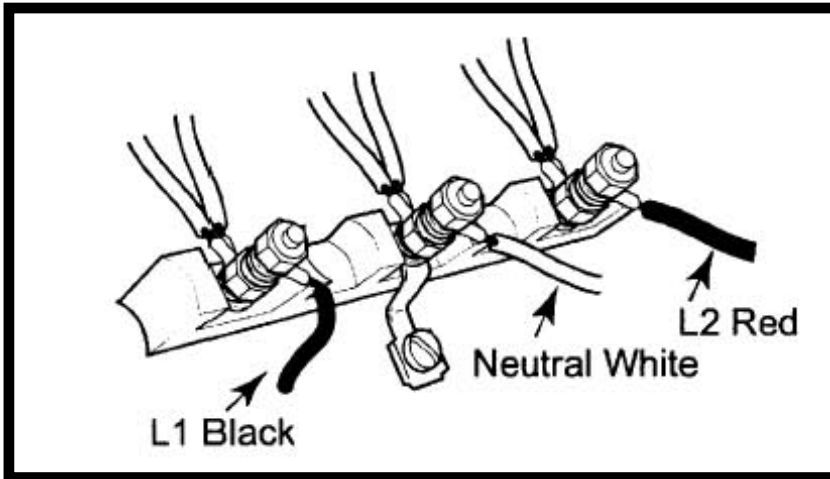
2.5 cu ft with 15,000 BTU/hr bake burner and 8,500 BTU/hr infrared broiler



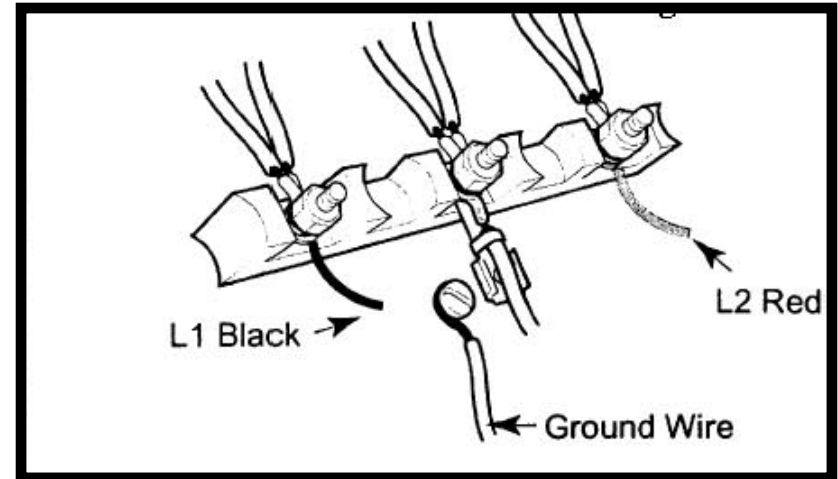
Installation

Electrical Connection

3 wire connection



4 wire connection



Installation

Natural Gas Requirements:

Inlet connection $\frac{3}{4}$ " N.P.T (Min: $\frac{3}{4}$ " Flex line)

Supply Pressure 6" to 14" water column

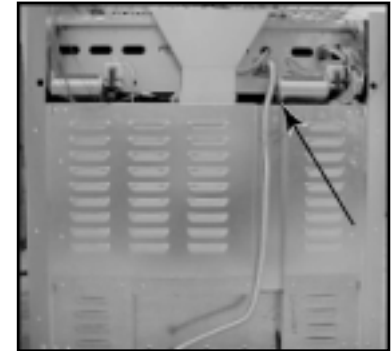
Manifold Pressure Natural: 5 inch water column

Propane Gas Requirements:

Inlet connection $\frac{3}{4}$ " N.P.T (Min: $\frac{3}{4}$ " Flex line)

Supply Pressure 11" to 14" water column

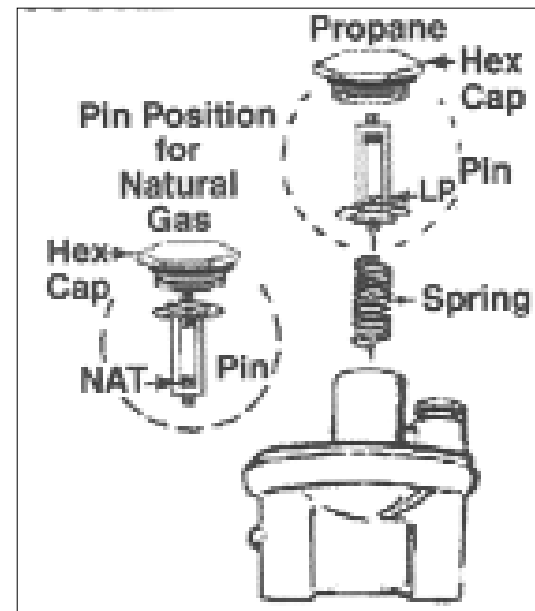
Manifold Pressure LP: 10 inch water column



a) REMOVE THE HEXAGON CAP from the top of the regulator.

b) REMOVE THE PLASTIC BUTTON IN THE CAP AND TURN IT OVER, pressing it firmly in place so that the letters "LP" can now be seen upright in the stem.

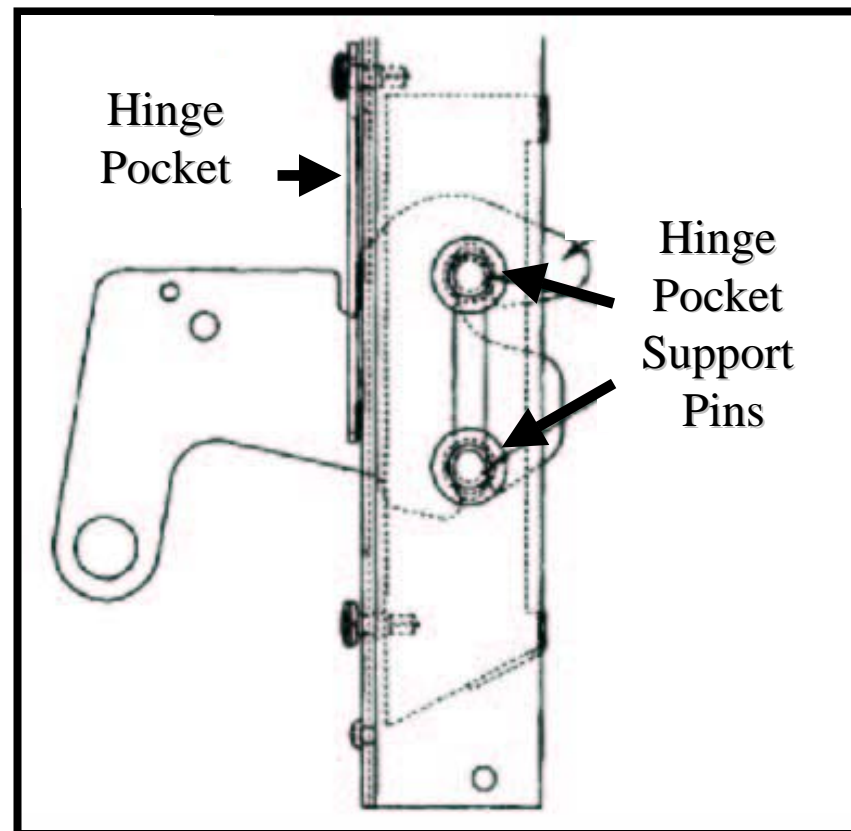
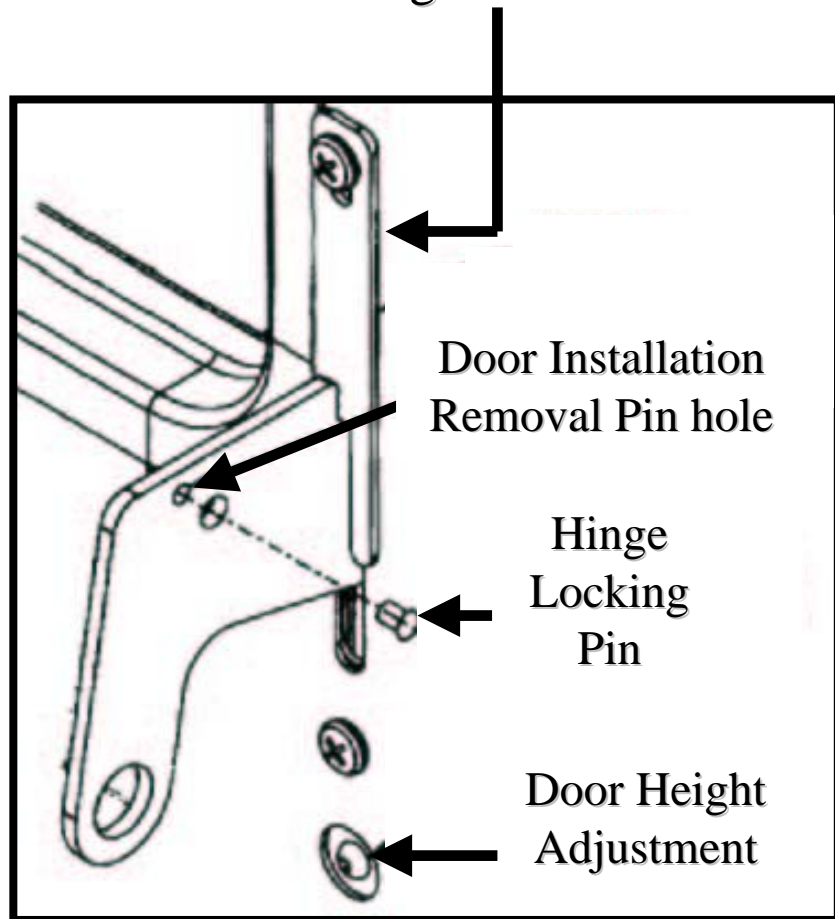
c) REPLACE THE CAP and button assembly into the top of the regulator sealing it firmly. Make certain spring is still in place.



Note: Only the dual fuel ranges can be converted to propane. The all gas ranges are either natural or propane specific

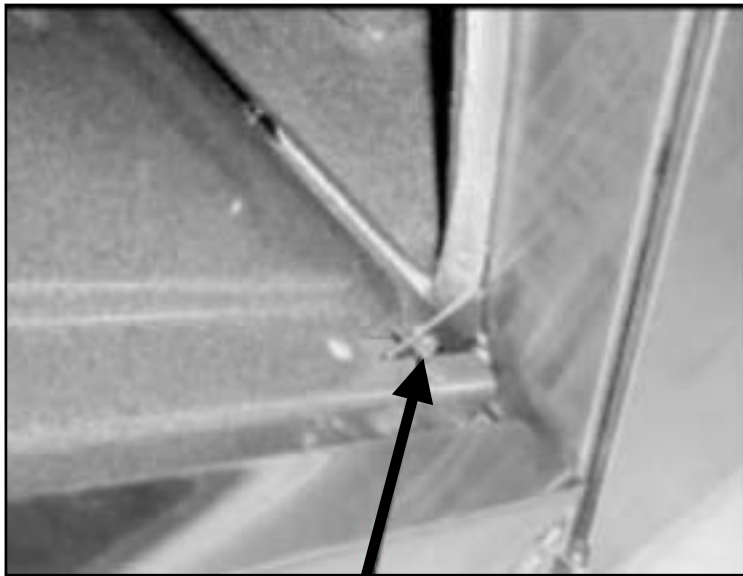
Door Removal and Installation

After installing the door make sure the hold down brackets are installed.



The hinge locking pin must be put in the hole on the hinge before you remove the door

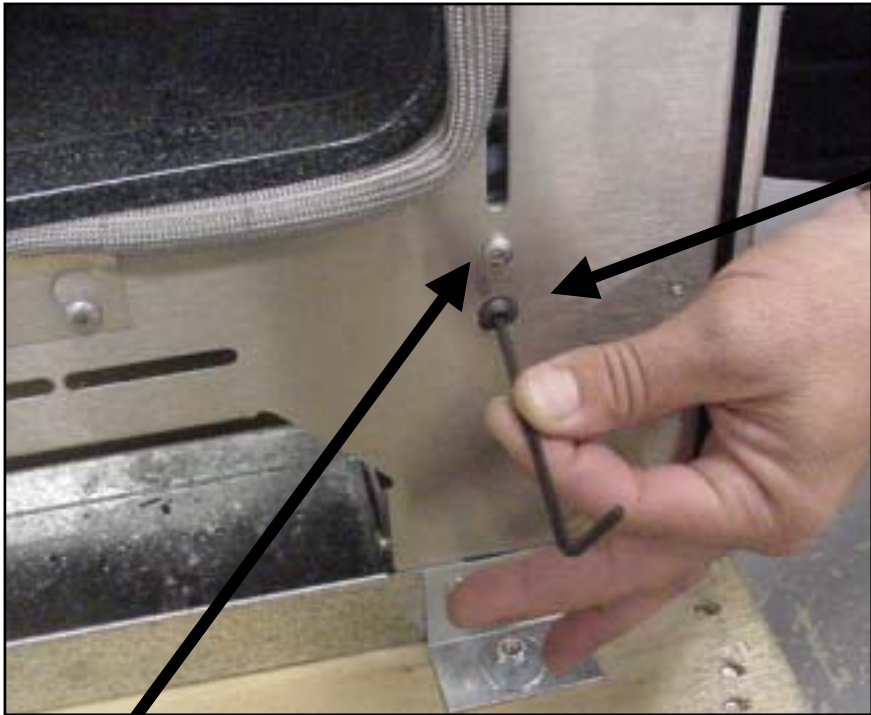
Door Removal and Installation



Door Installation
Locking Pin



Door off with Installation
Removal Pin in hole



Door can be adjusted up or down with adjusting screw (allan-wrench)

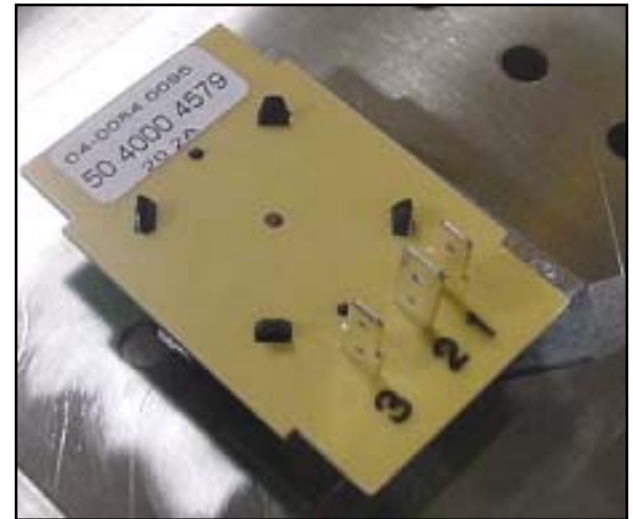
By removing these screws the hinge pockets can be removed from the front by reaching up inside the kick plate area



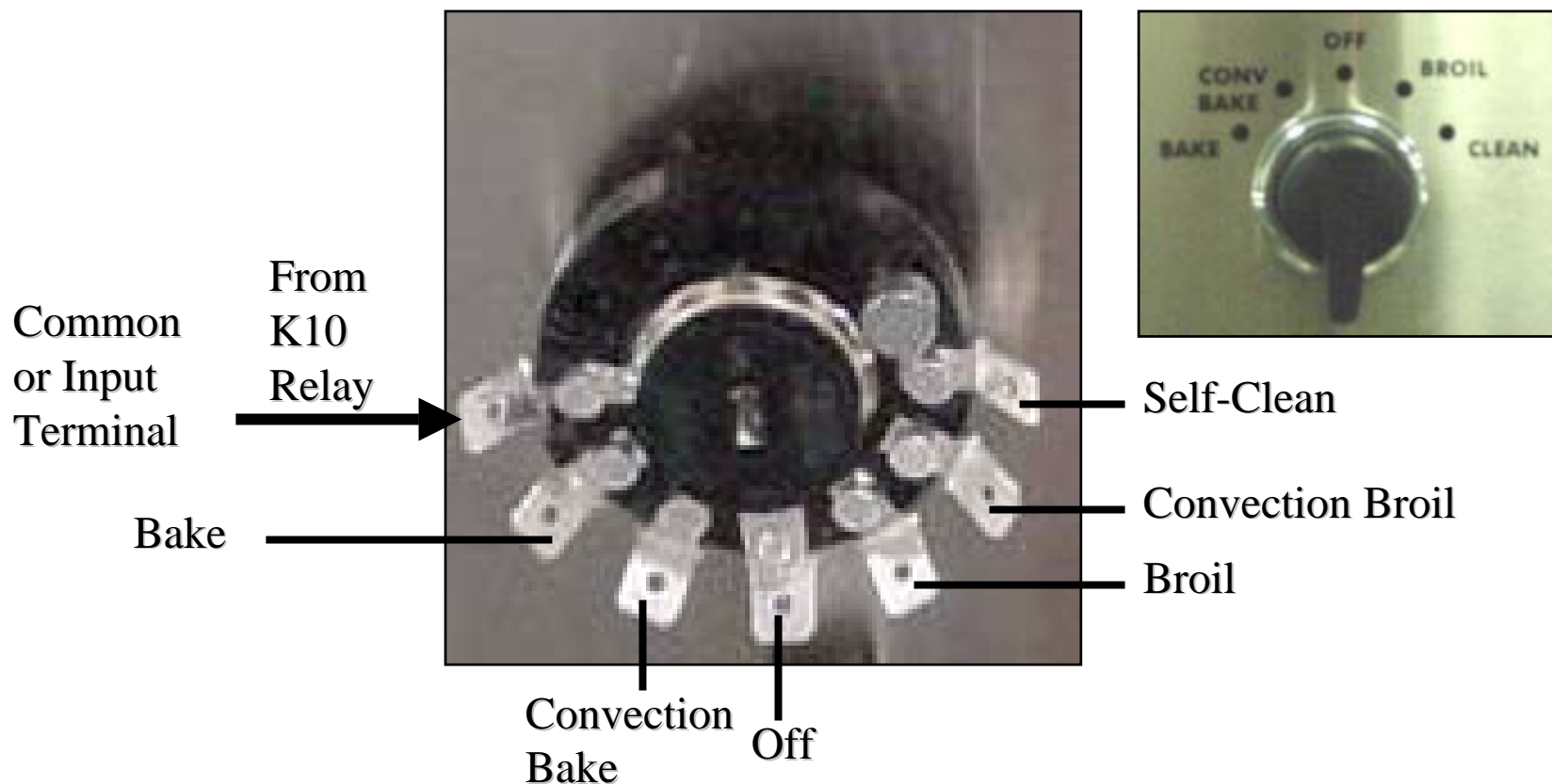
Operation



**These four components
have to be in the circuit
for the oven to
heat....They are.....**



Selector Switch / Function Switch

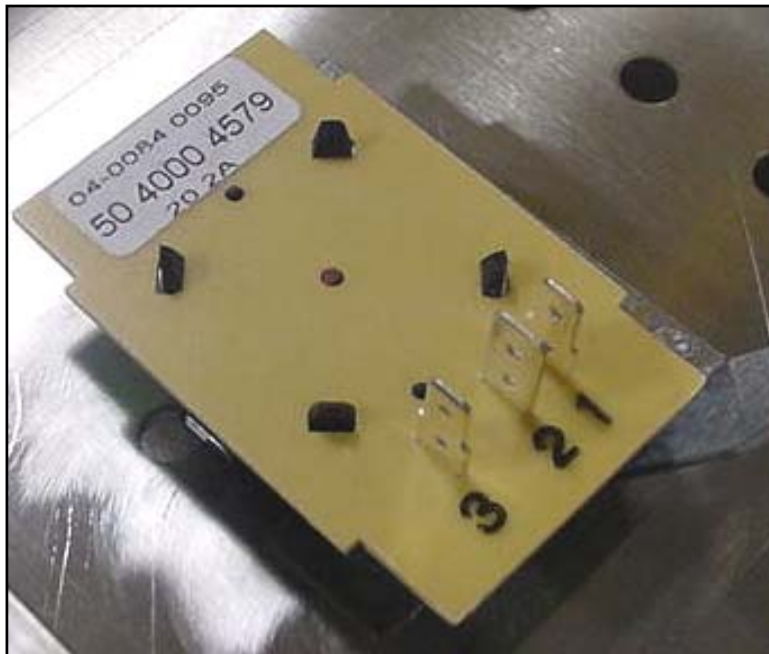


**Outputs to Control Board,
tells control board what
to energize.**

Oven temperature Potentiometer / Thermostat

50K Ohm Potentiometer

Varies resistance to control board based upon desired temperature



Examples of resistance values

0 to 2500 ohms @ off position

2500 to 4900 ohms @ 140 degree mark

20,000 to 21,000 ohms @ 350 degrees

28,400 to 30,700 ohms @ 450 degrees

36,700 to 39,400 ohms @ broil position 550 degrees

39,400 to 50,000 ohms @ clean position 830 degrees

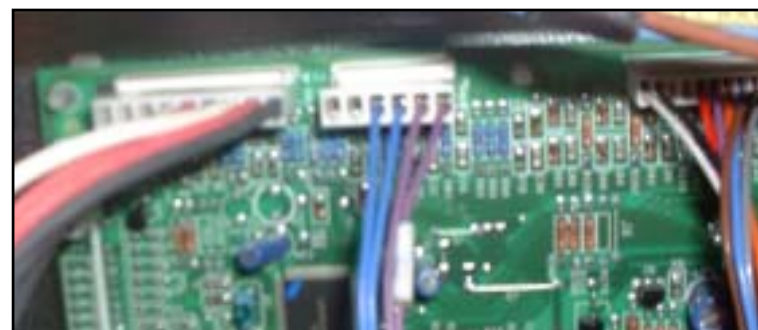
Greater then 50,000 ohms @ off invalid cook temp.

There is no temperature off set for customer temperature complaints on the potentiometer.

Oven Sensor

Approximately 1050 Ohms at room temperature

**1050
Ohms**



**The 2 blue leads
connect to
Aux oven sensor**

**The 2 violet leads
connect to
main oven sensor**

1250 ohms @ 150 degrees

1650 ohms @ 350 degrees

1750 ohms @ 400 degrees

1850 ohms @ 450 degrees

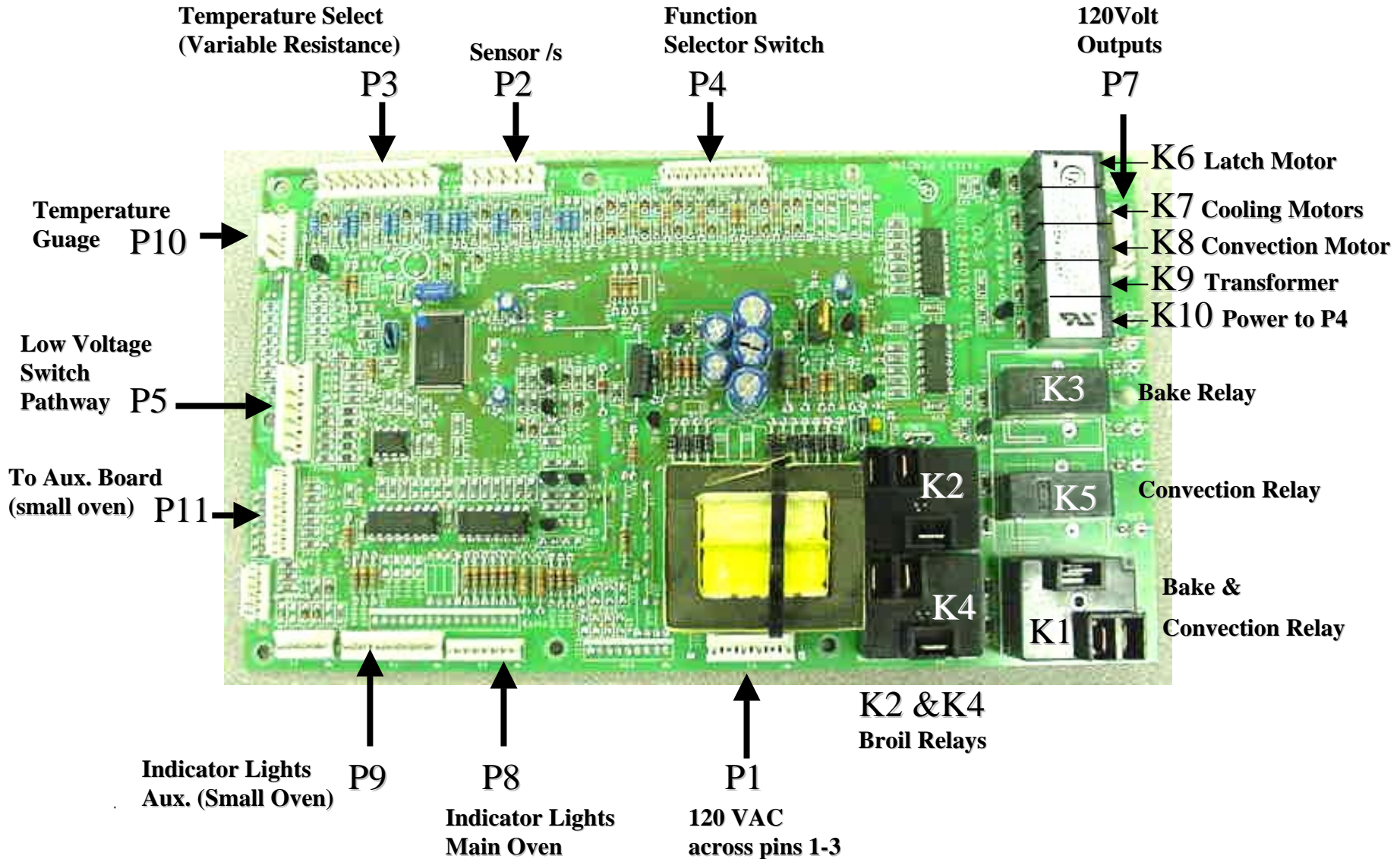
Electronic control board

Located at the back lower left side of the oven.



The control board regulates the temperature based on the signal it receives from the oven sensor and the resistance input from the thermostat (potentiometer)

Main Oven Relay Board





Function Switch is set to Bake: Thermostat is set to 250 degrees F. Oven & Heating lights are on. Temperature Guage ramps up towards temperature selected.

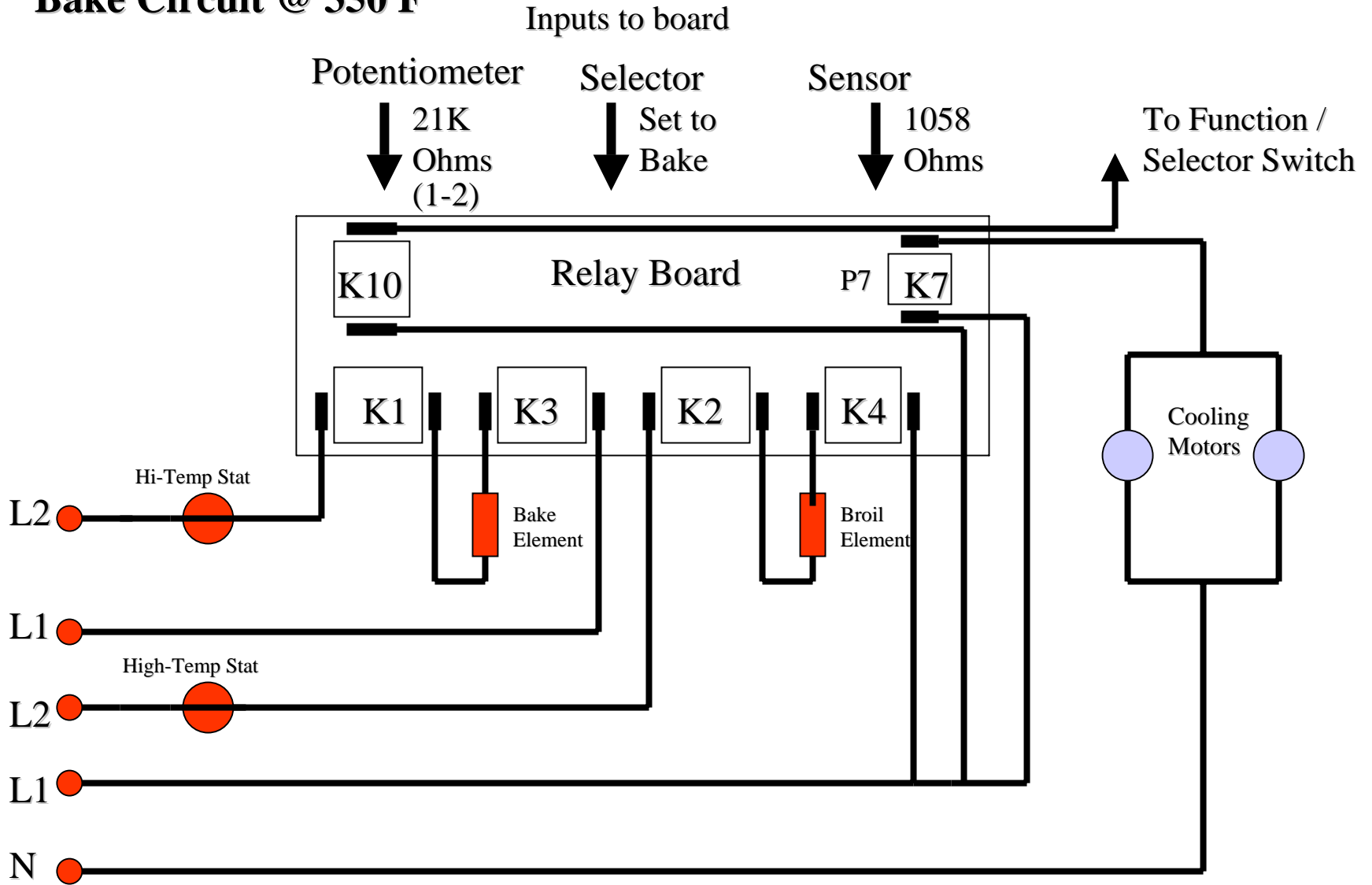


Oven reaches temperature selected, heating light goes off. Temperature gauge locks onto temperature selected at thermostat & does not show the temperature swing going on inside the oven cavity unless thermostat temperature is changed or the door is opened

Bake Cycle Scenario

User turns selector switch to bake position	No response
User turns temp selector to to desired temp.	Control executes pre-heat Oven on LED illuminates Oven heat LED illuminates when any element is on Temperature indicator steps up toward set temperature Cooling fan turns on
Oven reaches set Temperature	Control recognizes set temp through sensor Oven on LED illuminates Oven heat LED illuminates when any element is on Temperature indicator displays set temperature Cooling fan remains on
User turns off	Oven on LED goes out Oven heat LED goes out Temp. indicator steps down towards off temperature Cooling fan remains on
Oven temp. drops below 325F	Cooling fan turns off

Bake Circuit @ 350 F



Broil Cycle Scenario

Thermador

User turns selector switch to broil position	No response
User turns temp selector to to broil temp.	Control executes pre-heat Oven on LED illuminates Oven heat LED illuminates when any element is on Cooling fan turns on
After five minutes	Temperature indicator moves to broil
User turns off	Oven on LED goes out Oven heat LED goes out Temperature indicator drops slowly Cooling fan remains on
Oven temp. drops below 325F	Cooling fan turns off

Self Clean Cycle Scenario

User turns selector switch to clean position	No response
User turns temp selector to clean position	Oven on led illuminates Control checks door position switch Door latch motor turns on Door latch motor turns off
Control Senses the door has locked	Convection motor turns on (gas turns on after 6 min.) Door lock LED Illuminates Cooling fans turn on Aux Oven Disabled Power L1 at p18 (Griddle/Grill) disabled
After five minutes	Clean cycle begins Oven heat LED illuminates when any element is on Temperature indicator climbs to clean position
Control completes clean cycle	Cooling motors remain on Temperature indicator displays clean Door lock LED remains Illuminated All heating elements turn off Oven On LED extinguishes

Self Clean Cycle Scenario

Control completes clean - times out

Oven heat LED extinguishes

Temperature indicator drops slowly

Cooling motors remain on

Convection motor remain on

Oven temperature drops below 500F

Door latch motor turns on

Cooling motors remain on

Control senses the door has been unlocked

Door lock LED extinguishes

Door latch motor turns off

Oven temp. drops below 325F

Cooling fan turns off.

Oven Time Chart

Indicates how many seconds the elements are on during a 60 second cycle in specific mode.

Mode	Bake On	Broil On	Convection On
Convection Broil Preheat	0	60	0
Convection Broil	0	60	0
Convection Bake Preheat	15	45	0
Convection Bake	15	0	45
Bake Preheat	60	60	0
Bake	60	8	0
Broil Preheat	0	60	0
Broil	0	60	0
Clean Preheat	0	60	0
Clean	60	30	0

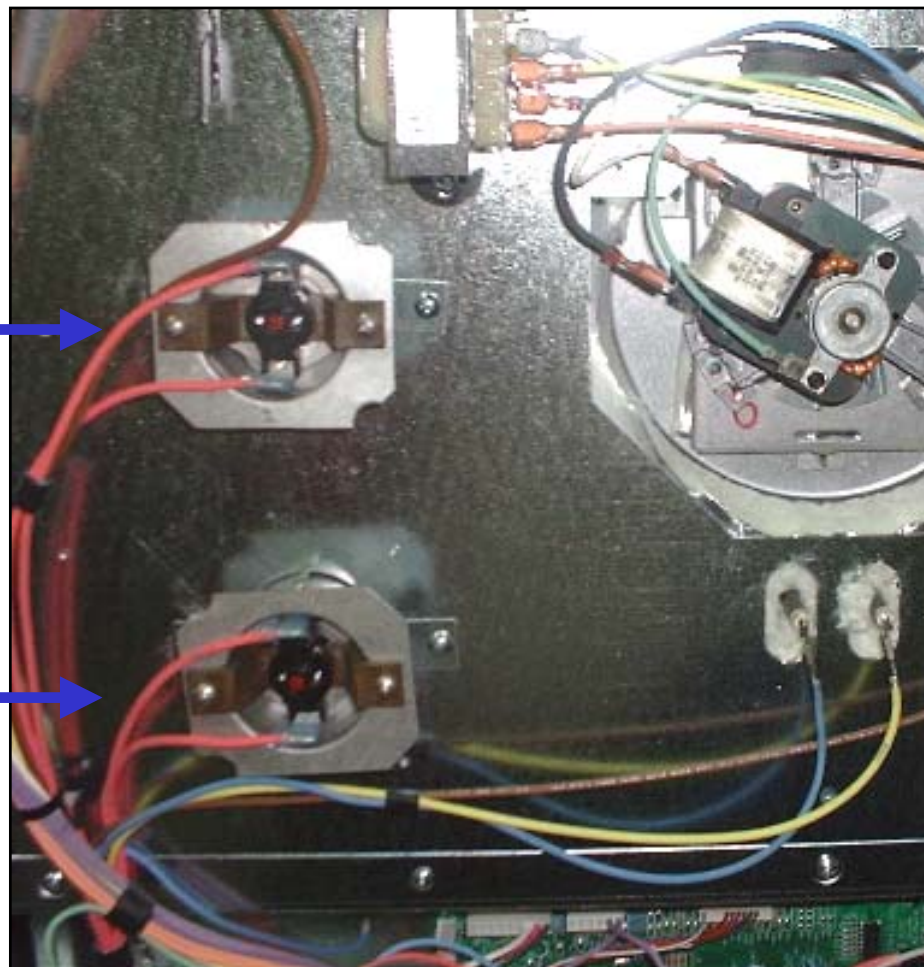
Safety Thermostats

Two Safety Thermostats that can be reset

**If the top safety trips this
opens L2 to the Broil Element**

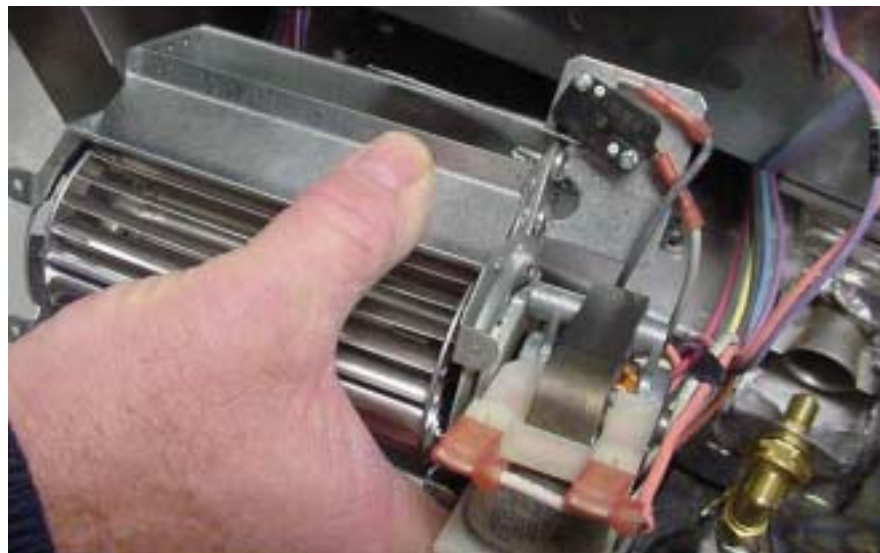


**If the bottom safety trips this opens
L2 to the Bake and Convection Element**



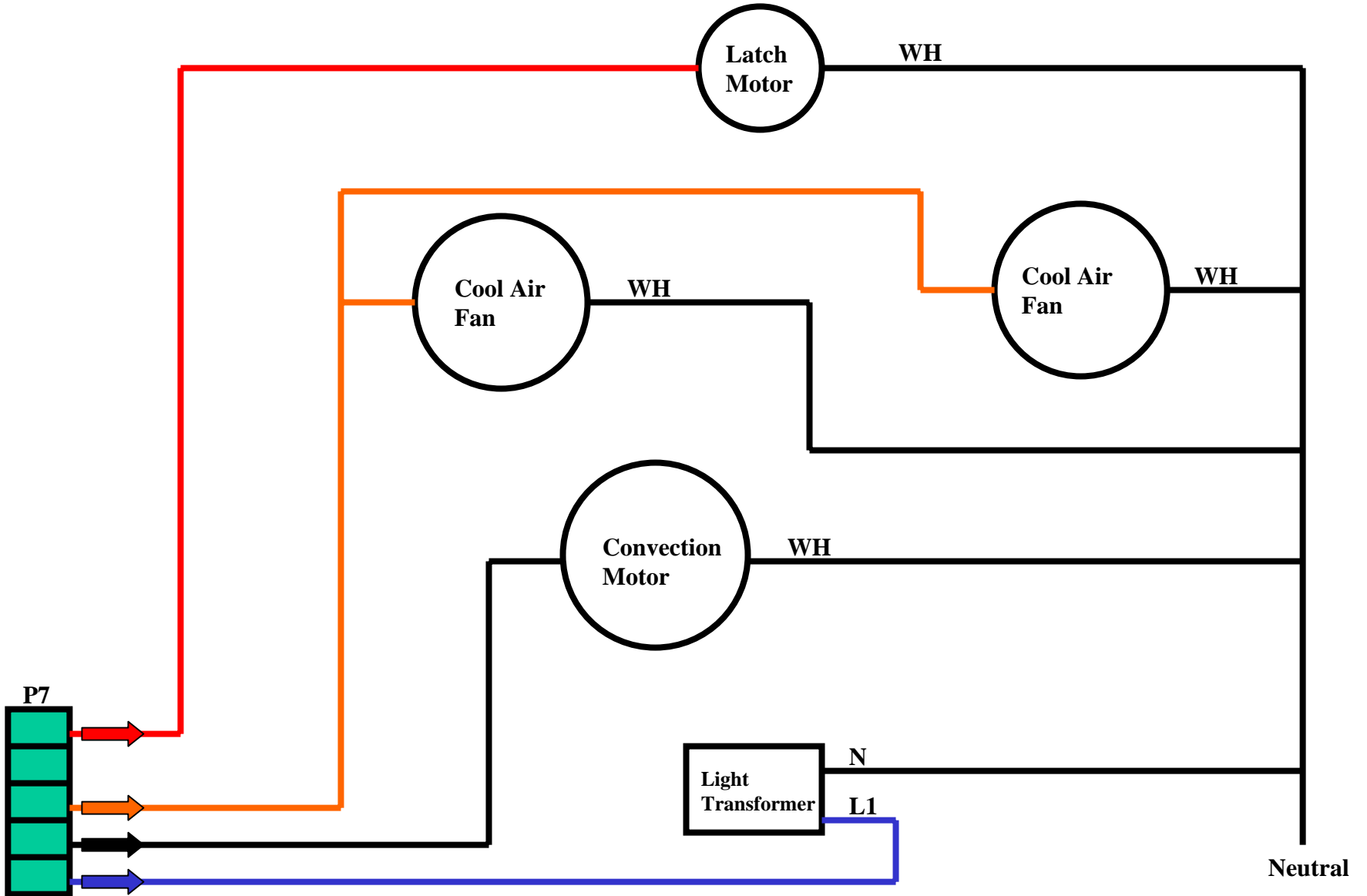
Cooling fan with air switch

Note: Air switches must close for self clean to take place or an error code E9 will be generated. There are two cooling fans and two air switches both must close.



Air switch paddle can be seen through the gap between control panel and oven cavity showing the air flow

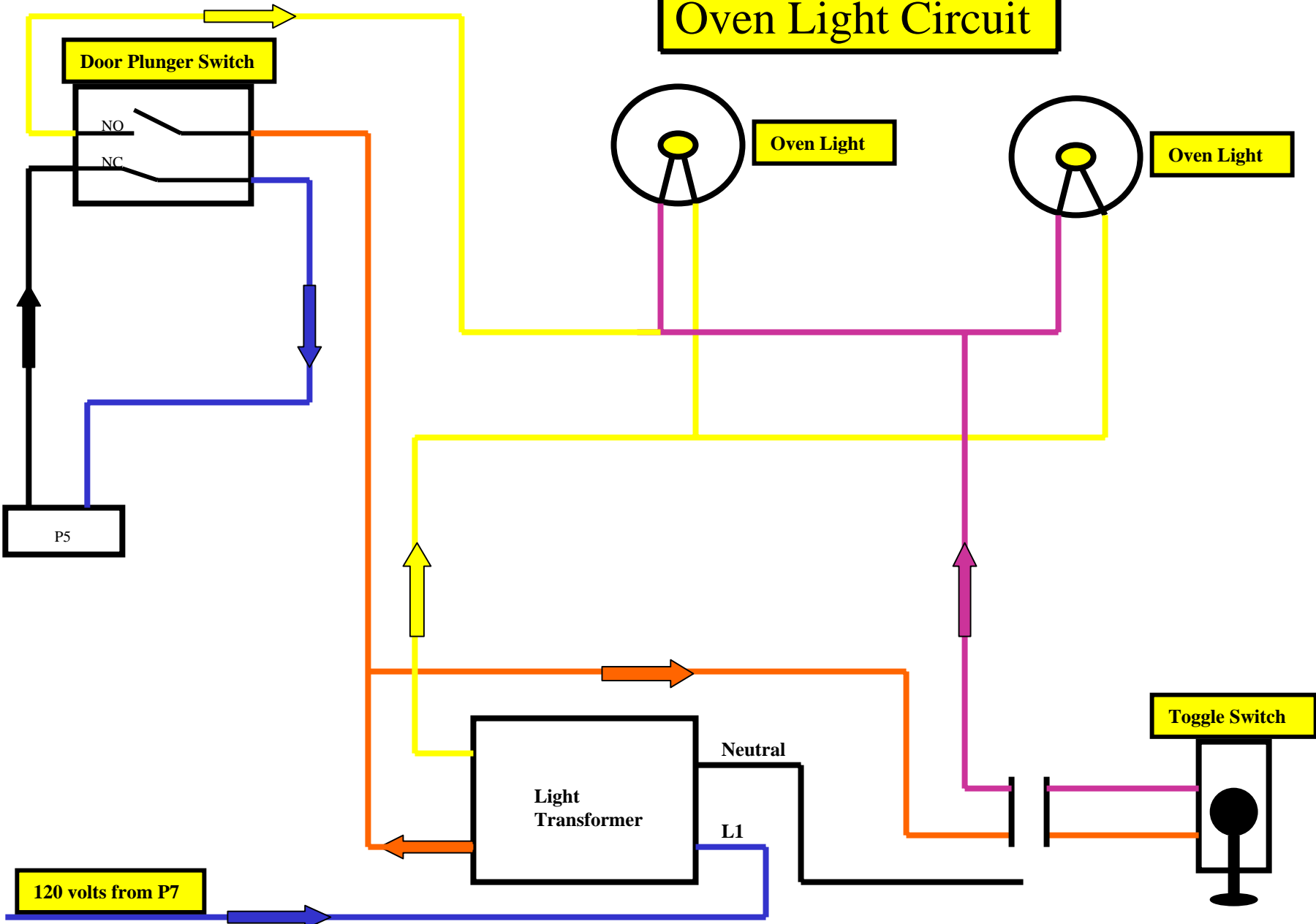
P7 120 Volt Outputs



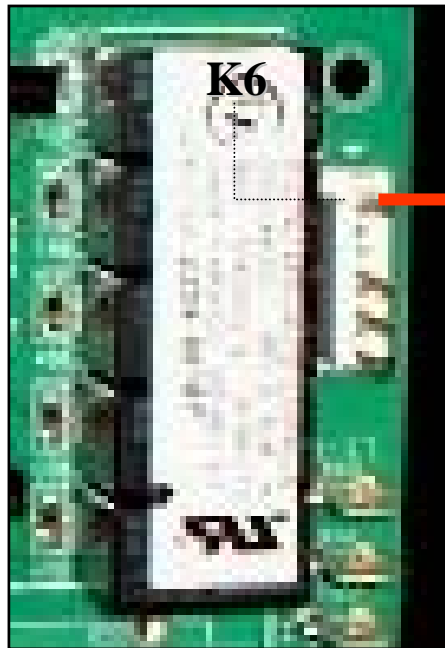


Frame switch turns on the lights when door is opened, also is a monitor switch for self-clean. Switch must be closed for unit to self-clean. Note it does not turn off the convection fan if the door is opened.

Oven Light Circuit

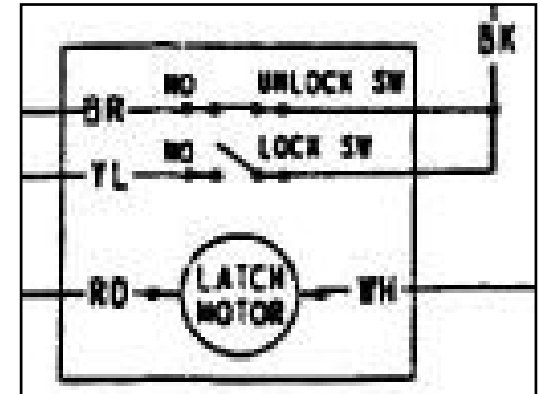
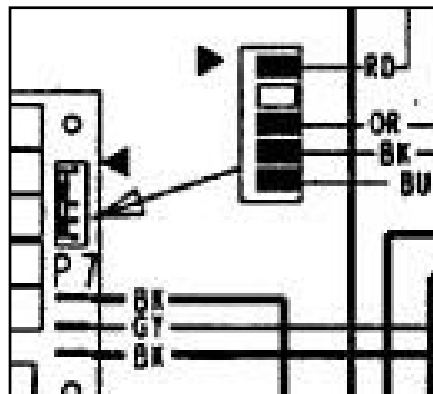
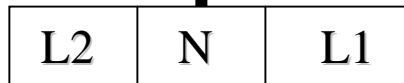


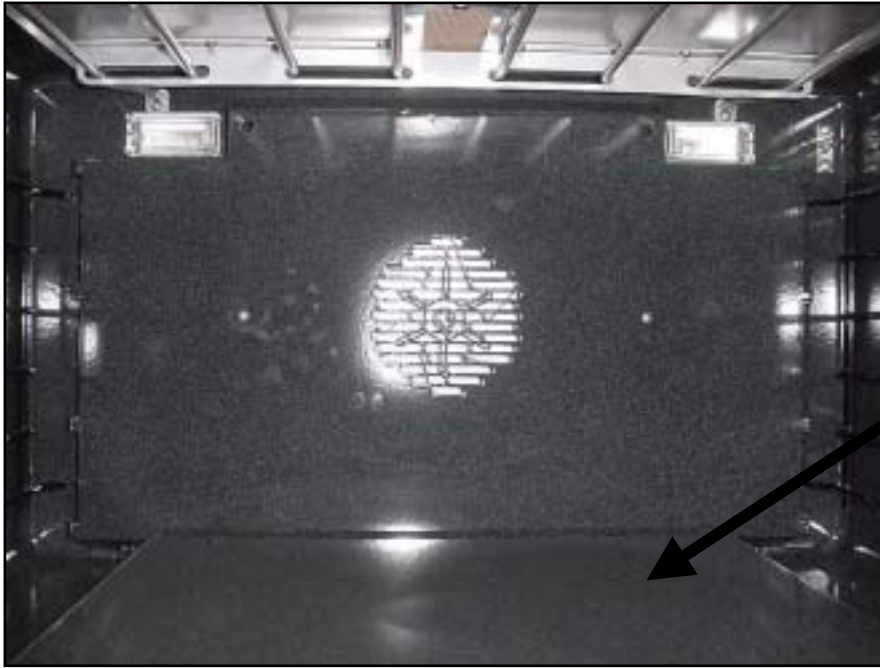
Latch Motor Circuit



P7

120 VAC

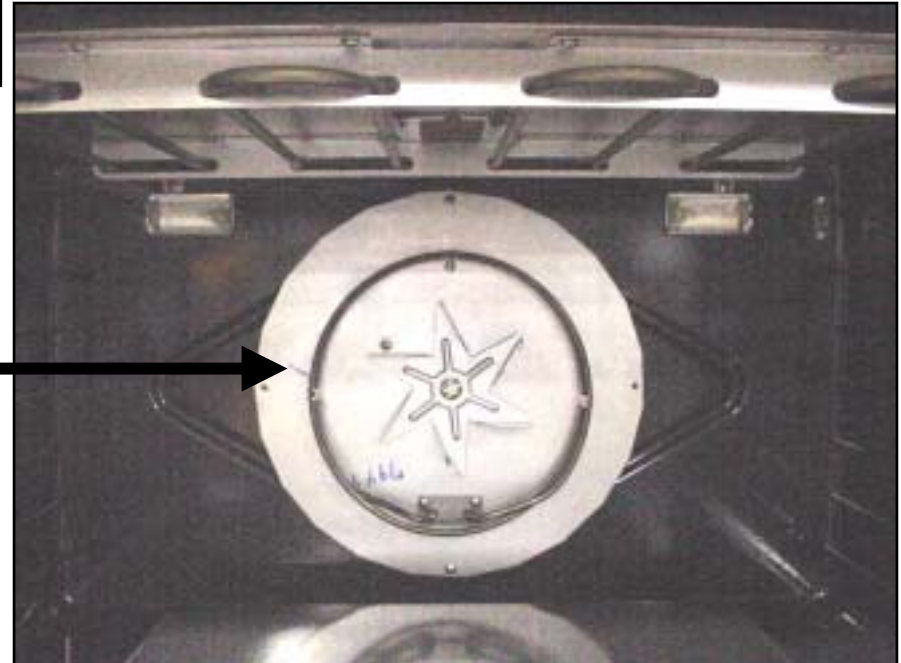




Main Oven Cavity
(Electric)

Note concealed bake
element, position of
halogen lights and
convection baffle

Convection baffle removed
showing the convection
element

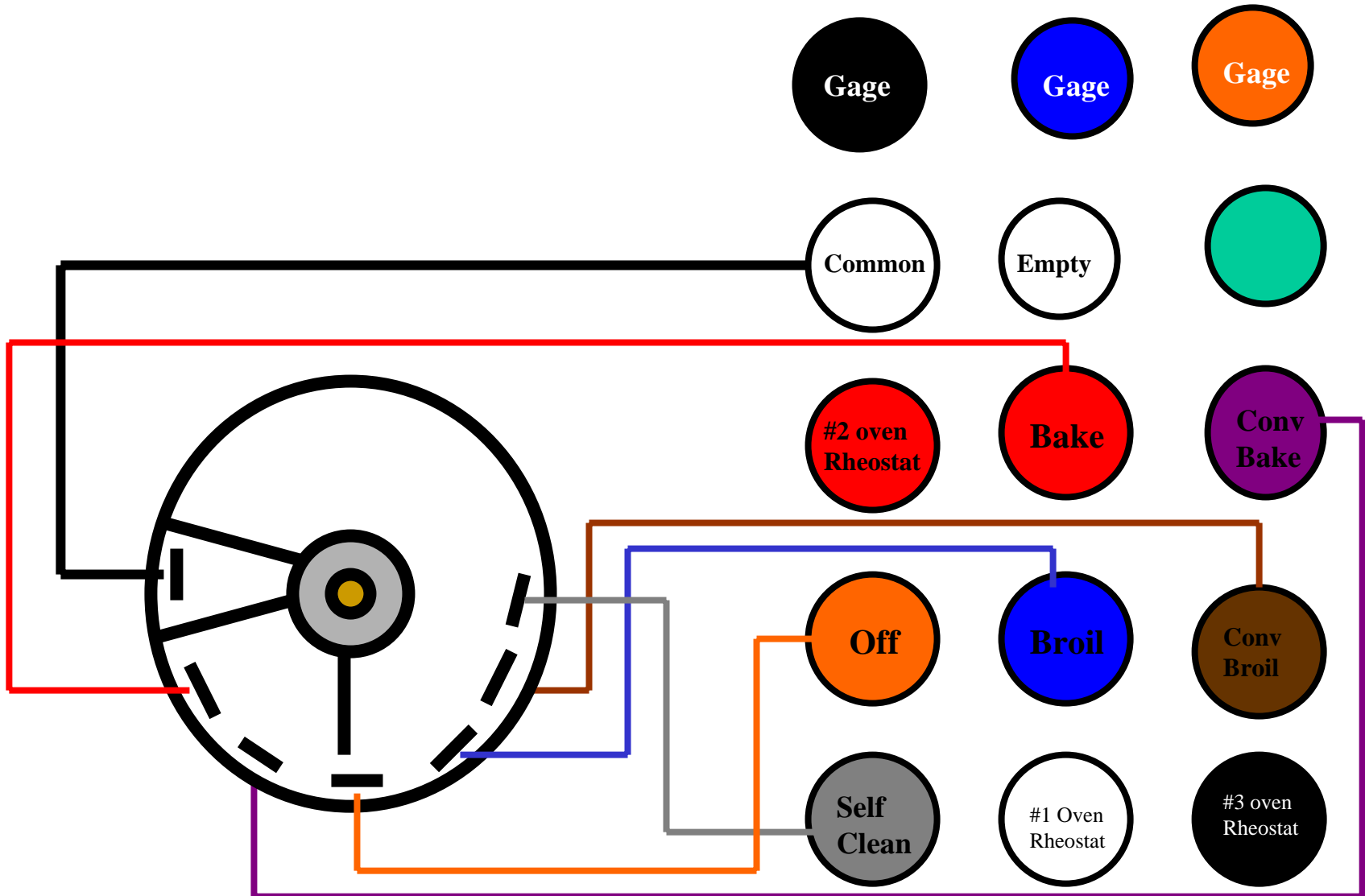


Molex connections between the cooktop section and the oven section



Function Switch

Male side of red connector block.
View from under left spill tray

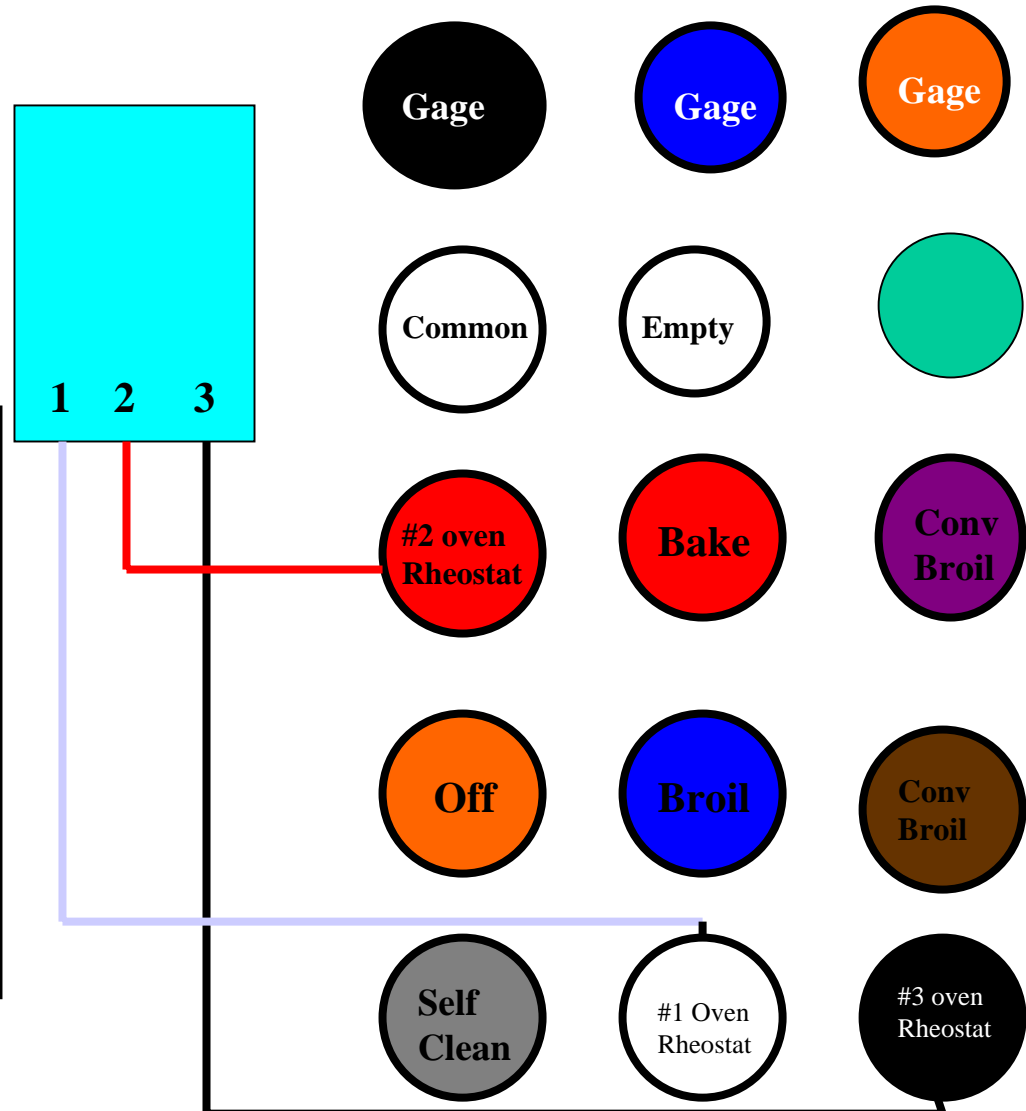


Oven Temperature Potentiometer

Readings between 1 to 3
 Clean = 800 ohms
 Broil = 20k ohms
 350 = 35k ohms
 Off = 6k ohms

Readings between 2 and 1
 0 to 2500 ohms @ off position
 2500-4900 ohms @ 140 degree mark
 20,000 to 21,000 ohms @ 350 degrees
 28,400 to 30,700 ohms @ 450 degrees
 36,700 to 39,400 ohms @ broil position
 39,400 to 50,000 ohms @ clean position
 Greater than 50,000 ohms @ off invalid cook temp.

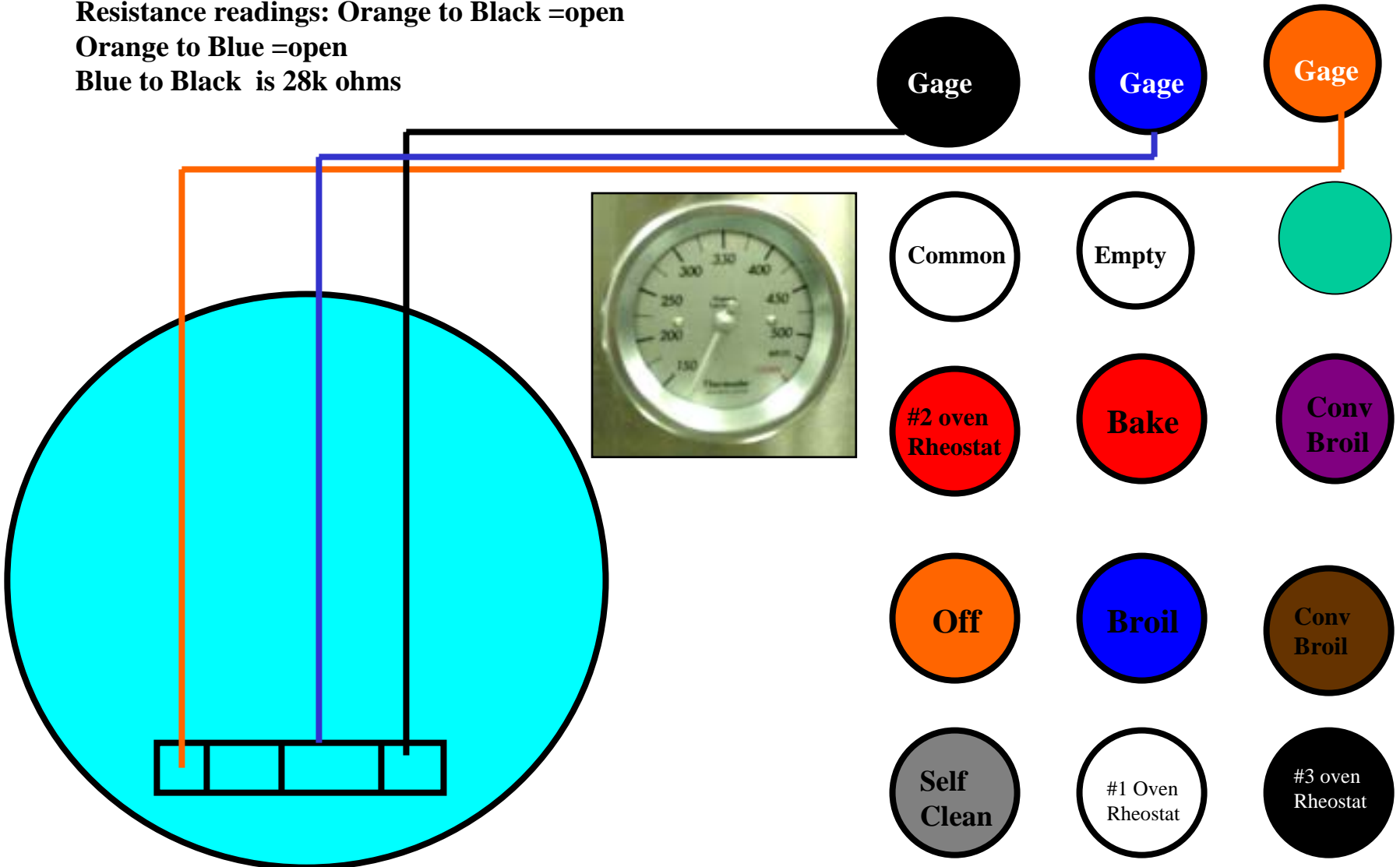
Male side of red connector block.
 View from under left spill tray



Temperature Indicator

Resistance readings: Orange to Black =open
Orange to Blue =open
Blue to Black is 28k ohms

Male side of red connector block.
View from under left spill tray

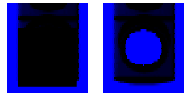


System Element and Load Ratings

The table below specifies the element and load ratings for the control system.

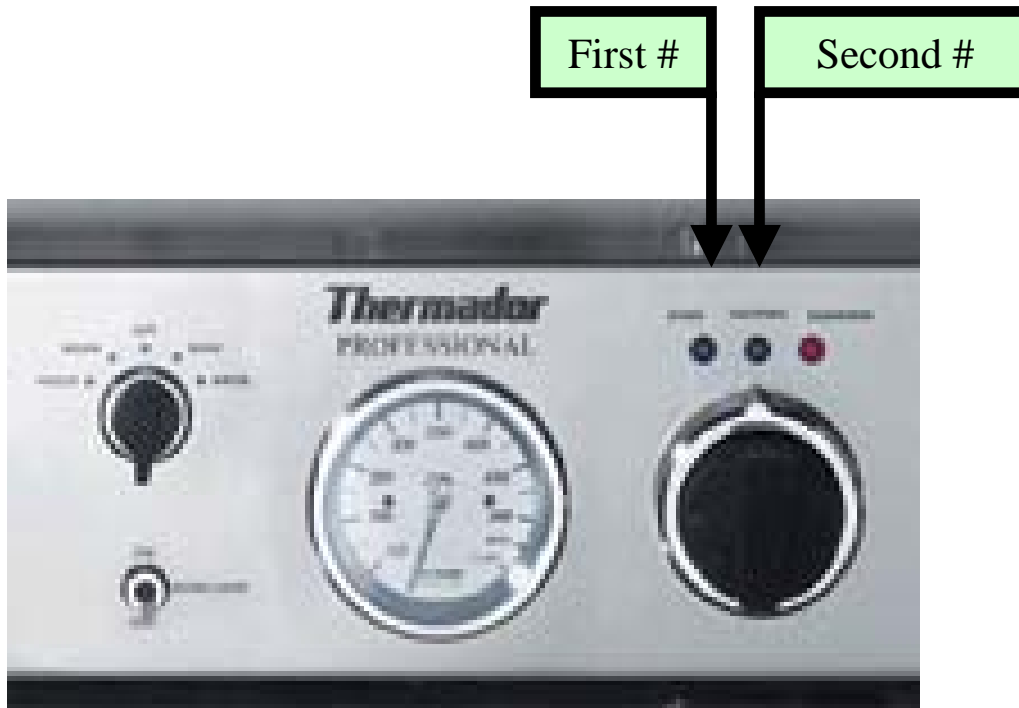
Element or Load	Electric Rating	Gas Rating
Main Oven Bake Element (2200W)	9.17A @ 240Vac	4.0A max @ 120Vac (250mA min)
Main Oven Broil Element (4000W)	16.67A @ 240Vac	4.0A max @ 120Vac (250mA min)
Main Oven Convection Element (2600W)	10.83A @ 240Vac	4.0A max @ 120Vac (250mA min)
Secondary Oven Bake Element (2200W)	9.17A @ 240Vac	4.0A max @ 120Vac (250mA min)
Secondary Oven Broil Element (4000W)	16.67A @ 240Vac	4.0A max @ 120Vac (250mA min)
Griddle Element	Not Applicable	4.0A max @ 120Vac (250mA min)
Door Latch Motor (locked rotor @ 1A)	1.0A max @ 120Vac	Not Applicable
Cooling Fan (locked rotor @ 1A)	1.0A max @ 120Vac	Not Applicable
Convection Blower Motor (locked rotor @ 1A)	1.0A max @ 120Vac	Not Applicable
Main Oven Light	1.0A max @ 120Vac	Not Applicable

Fault Codes



When a fault occurs, the control will first flash the blue “oven” and then the blue “heating” light, count how many times each light flashes.

The Fault codes have two numbers, the blue “oven” light indicates the first # in the code and the blue “heating” light indicates the second # in the code.



Error	Code	Description
E1	22	EEPROM error
E2	01	Control not calibrated
E3	10	Sensor open
E4	12	Sensor shorted
E5	21	Potentiometer failure
E6	32	Over temp-cooking
E7	23	Over temp-cleaning
E9	43	No cooling fans
E11	44	Door latch fault
E12	11	Exp. board not connected
E13	13	Vcc lift off error
E14	55	Selector switch error

The table below specifies the fault codes to be incorporated in the control system.

ERROR	CODE	DESCRIPTION	CHECKED	DEBOUNCE		ACTION
				SET	CLEAR	
E1	22	EEPROM Error	EEPROM Read	3 tries	N/A	Both ovens off
E2	01	Control Not Calibrated	Initialization	3 tries	N/A	Both ovens off
E3	10	Temperature Sensor Open Circuit	Active Cook	60 sec	5 sec	Affected oven off
E4	12	Temperature Sensor Short Circuit	Active Cook	60 sec	5 sec	Affected oven off
E5	21	Potentiometer Failure	Active Cook	60 sec	5 sec	Affected oven off
E6	32	Over Temp while Cooking, 625°F	Door Unlocked	60 sec	5 sec	Affected oven off
E7	23	Over Temp while Cleaning, 900°F	Door Locked	60 sec	5 sec	Stop clean function
E9	43	Cooling Fan Not Operating	Active Clean	60 sec	5 sec	Stop clean function
E11	44	Door Latch Fault	Always	3 tries	1 try	Stop clean function
E12	11	Expansion Board Not Connected	Secondary Cook	60 sec	5 sec	Disable secondary oven
E13	13	Vcc Lift-Off Error	Active Cook	60 sec	5 sec	Both ovens off
E14	55	Selector Switch Error	Always	50 sec	5 sec	Affected oven off

Oven Fault Code Scenario (Over Temperature while Cooking)

Description: This is an example of how the control responds when a defined fault condition is determined to exist. In this example, the sensed fault is an over temperature while cooking condition.

Initial Conditions: All selector switches in Off position. Oven cavity is idle, cool and the door is unlocked.

INPUT	RESPONSE
User turns Function Select to BAKE position	No response.
User turns Temp Select to desired temperature	Control executes the appropriate pre-heat algorithm. Oven On LED illuminates. Oven Heat LED illuminates when any element is on. Temperature gauge ramps toward set temperature. Cooling Fan turns on.
Oven reaches set temperature	Control executes the appropriate cook algorithm. Oven On LED remains illuminated. Oven Heat LED illuminates when any element is on. Temperature gauge indicates set temperature. Cooling Fan remains on.
Control senses over temperature condition for 60 seconds	All heating elements turned off. Oven disabled until fault condition no longer sensed. Oven On & Oven Heat LEDs flash '32' to indicate fault. Temperature gauge ramps toward "off" temperature. Cooling Fan remains on.
Control senses over temperature condition has cleared	All heating elements remain off. Oven enabled for future use. Oven On & Oven Heat LEDs extinguish. Temperature gauge ramps toward "off" temperature. Cooling Fan remains on.
Oven temperature drops below Cool Fan Turn Off limit	Cooling Fan turns off.

System Operating Parameters

The table below specifies operating parameters not captured elsewhere in this document.

Parameter	Value
Valid oven cook temperature range for bake feature	140°F - 525°F
Oven temperature for proof feature	100°F
Oven temperature for keep warm feature	140°F
Oven temperature for broil feature	550°F
Over-temperature for a cook function	625°F
Oven temperature for clean function	830°F
Over-temperature for a clean function	900°F
Door unlock temperature after clean cycle	400°F
Valid griddle temperature	150°F to 550°F
Temperature sensor – valid range	-40°F to 1100°F
Temperature sensor leakage current	0.5mA maximum
Resistance of OPEN status switch (see Note 1)	1M Ω minimum
Resistance of CLOSED status switch (see Note 1)	10 Ω maximum

Note 1: The referenced status switches include the door lock, door unlock, door position, and airflow switch.



Replacing the Relay Board

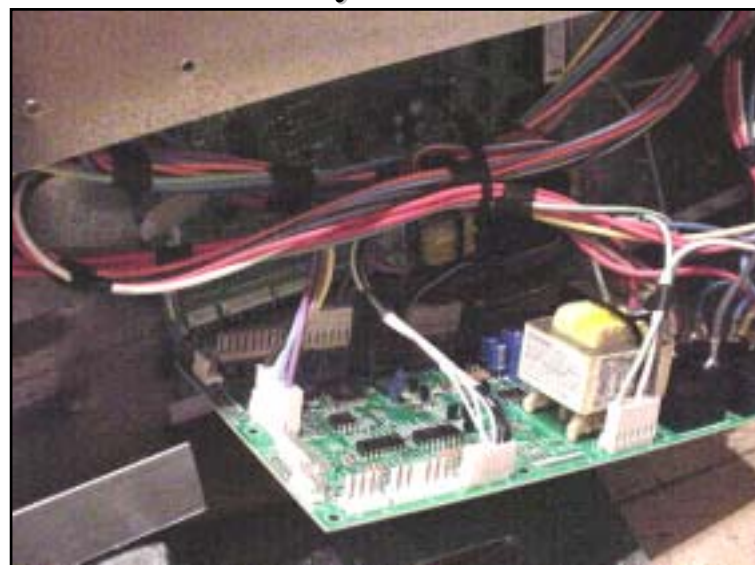
Pull out range to gain access to rear of unit

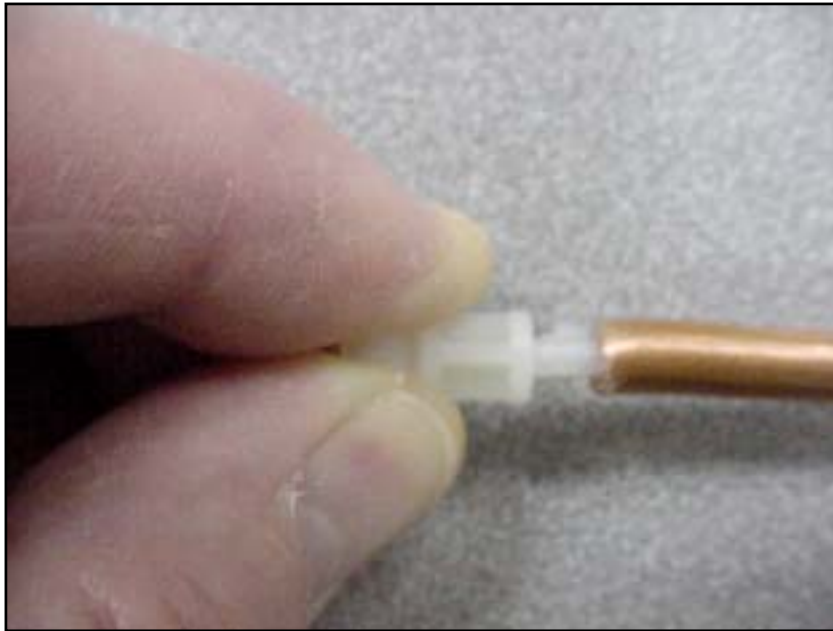


Remove both lower panel covers to access relay board



Release the relay board from the support posts and fold over. Mount the new board, remove wires & plugs one at a time from old board & transfer to new board.





To help in removing the board from the support posts use a piece of $\frac{1}{4}$ inch copper pipe ($\frac{1}{8}$ inch inside diameter)



Here are the numbers for the boards:

5040008059 = 431901 = PDR30

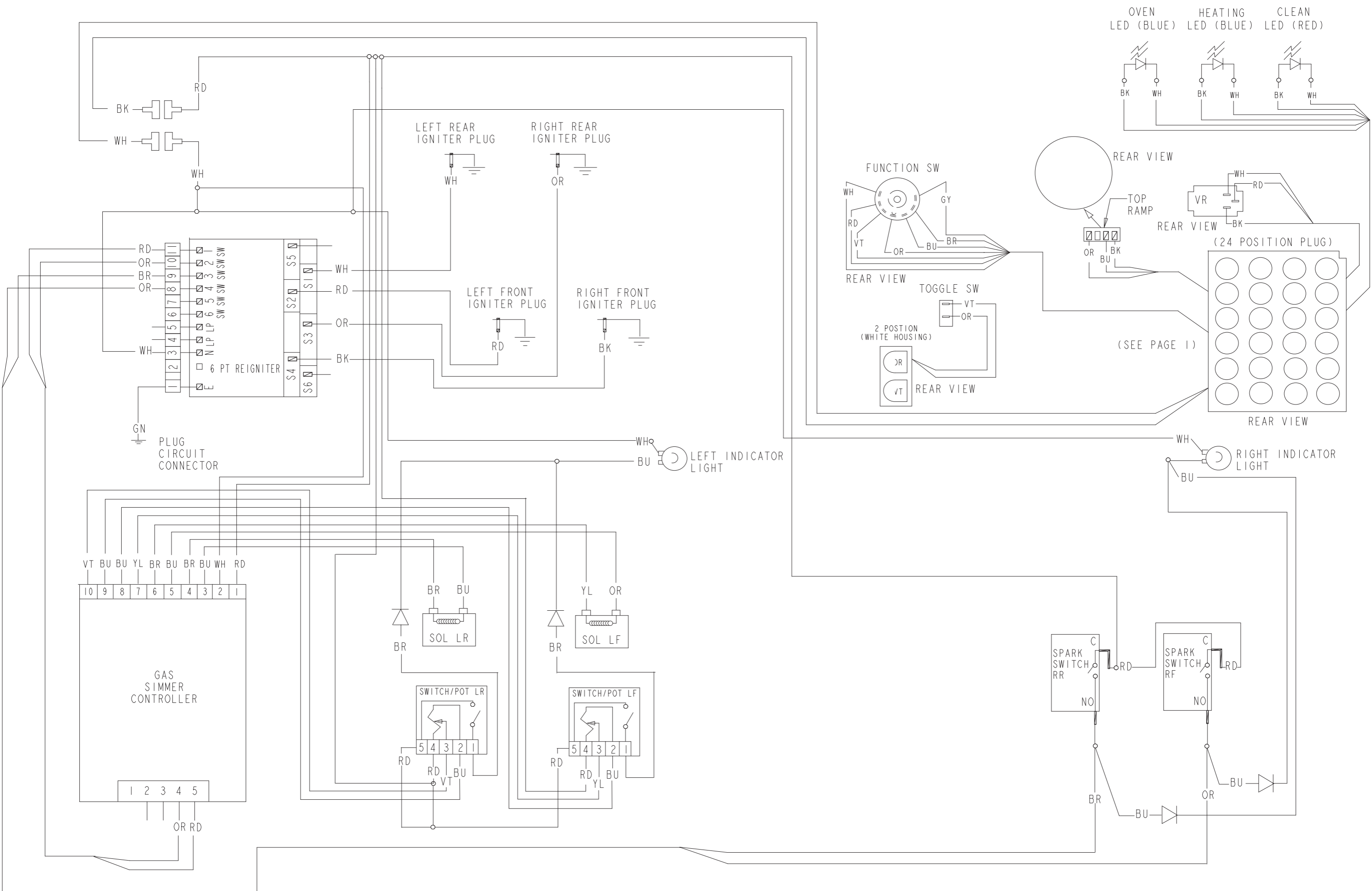
5040008060 = 431902 = PDR36

5040008061 = 431903 = PDR48

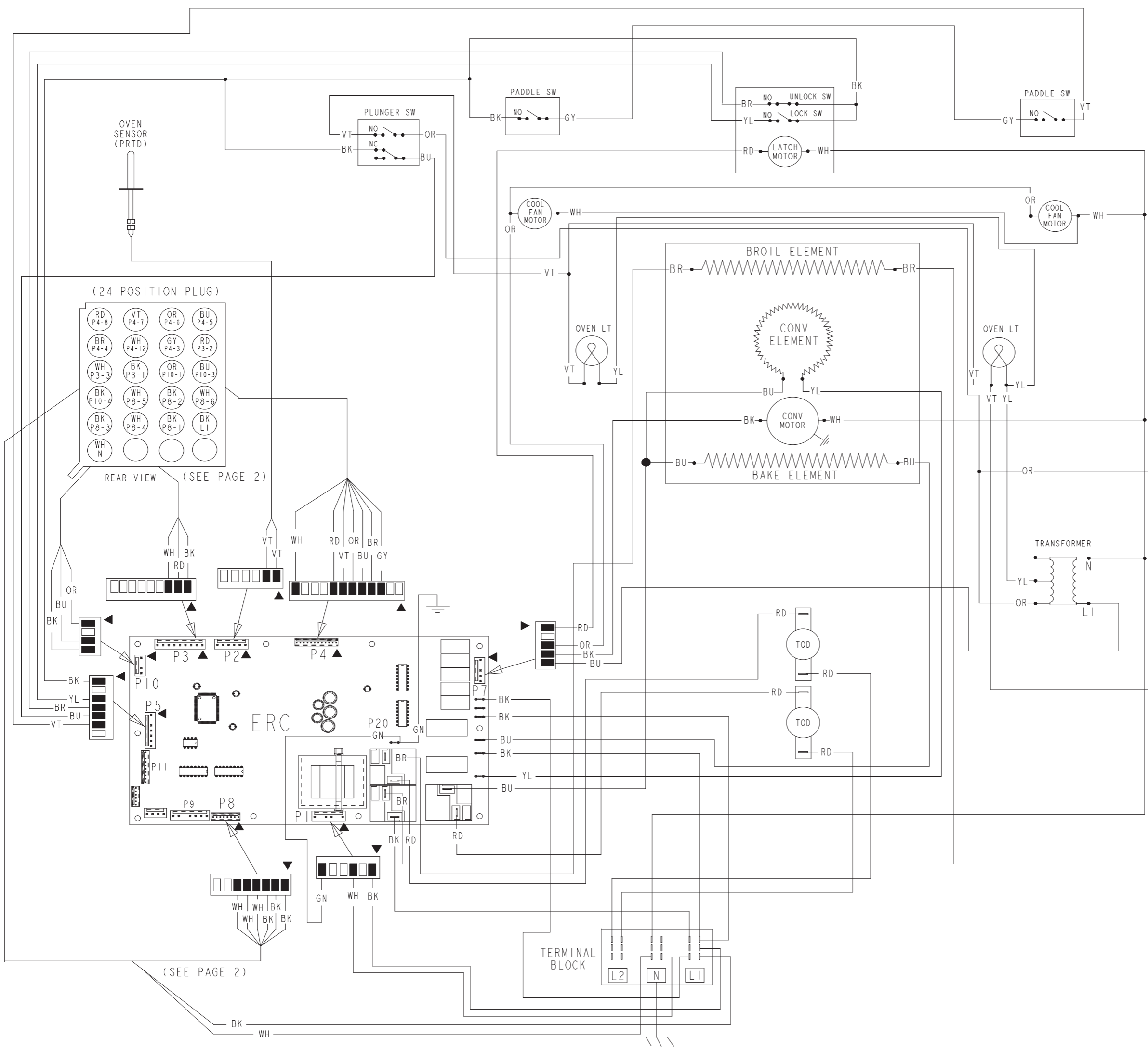
5040008062 = 431904 = PGR30

5040008063 = 431905 = PGR36

5040008064 = 431906 = PGR48



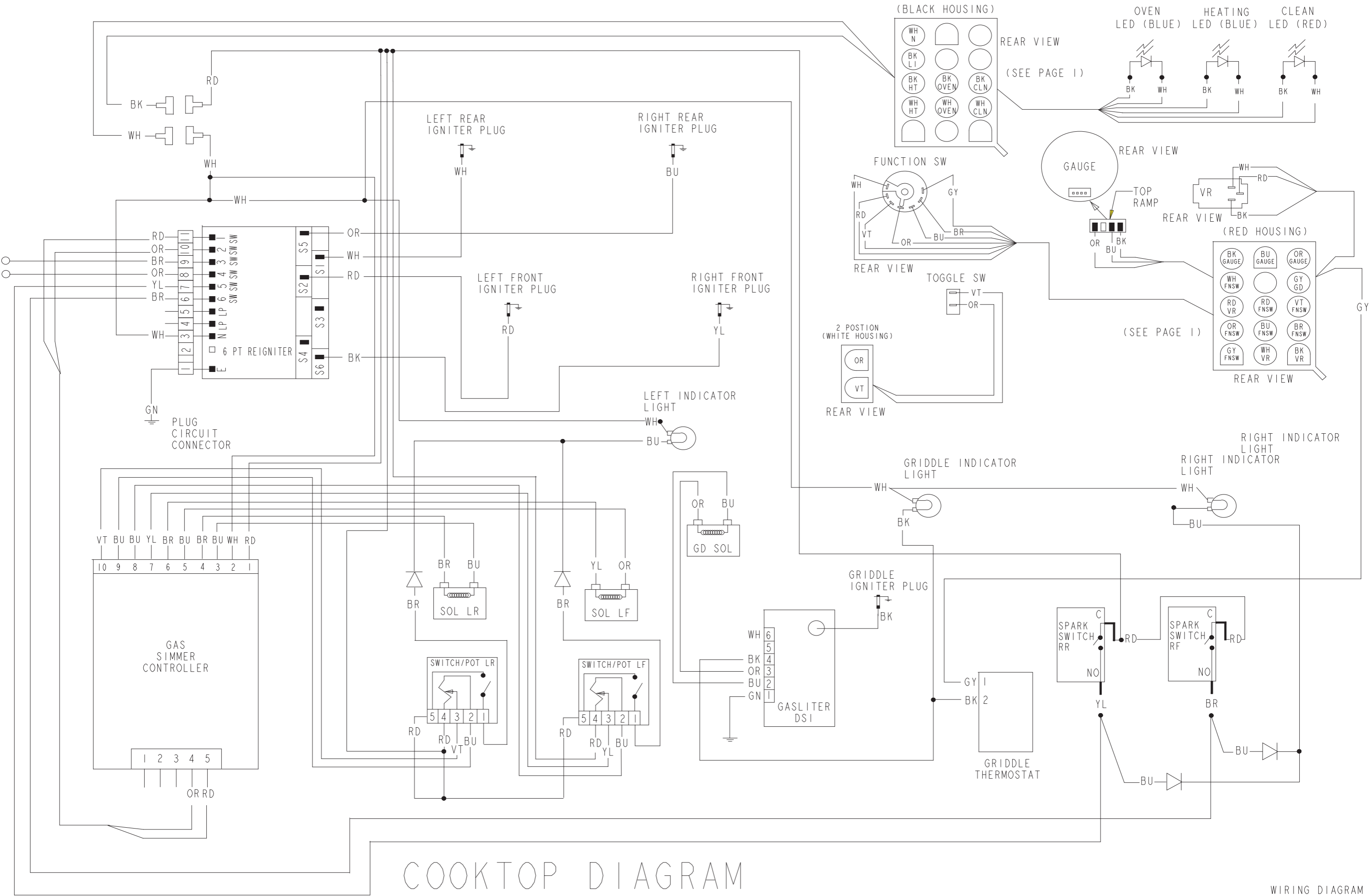
COOKTOP DIAGRAM



ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED
 240V/208V CIRCUIT IN BOLD
 ► DENOTES PIN 1

RANGE DIAGRAM

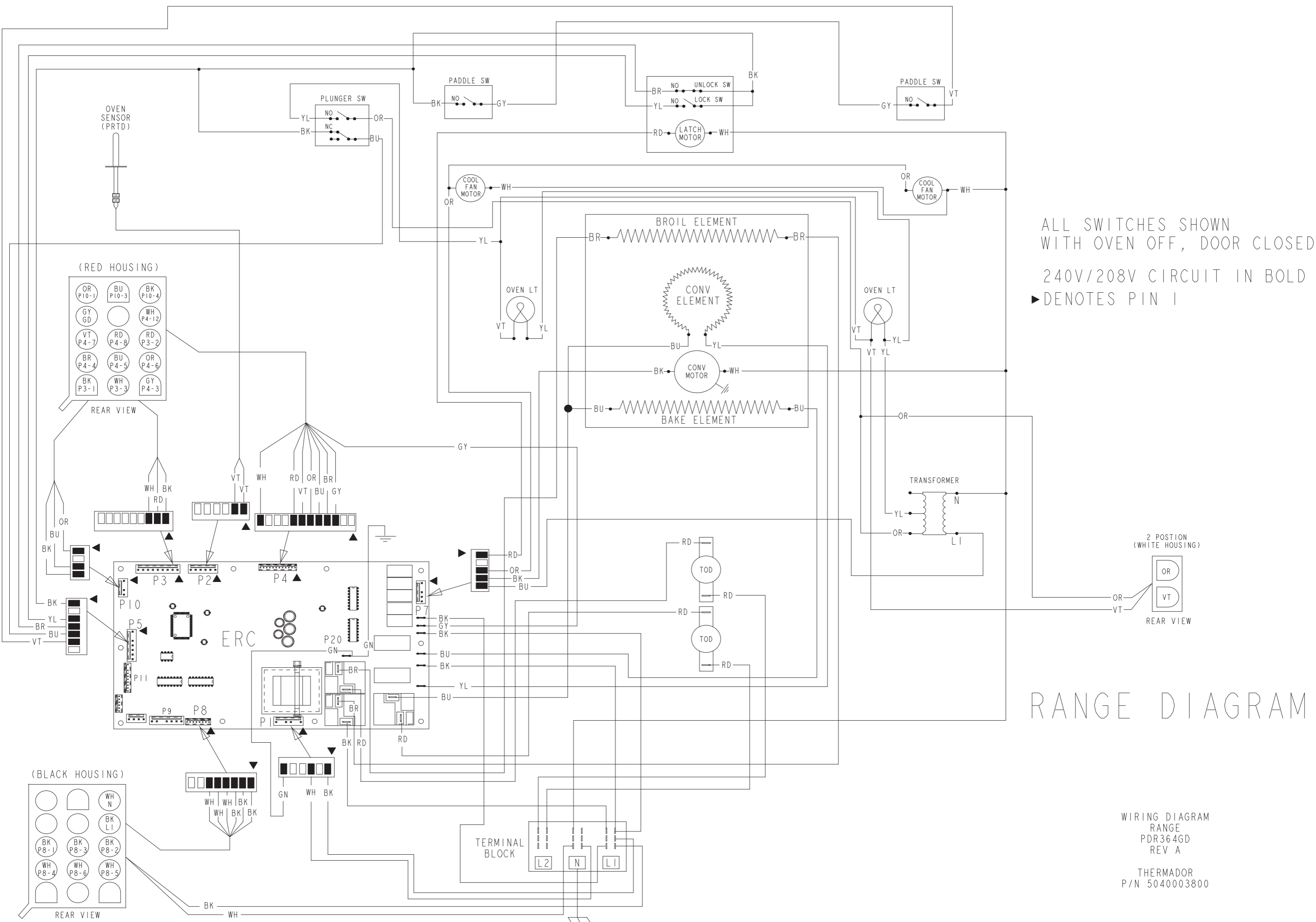
WIRING DIAGRAM
 RANGE
 PDR304
 REV C
 THERMADOR
 P/N 5040003799



COOKTOP DIAGRAM

WIRING DIAGRAM
 RANGE COOKTOP
 PDR364GD
 REV A

THERMADOR
 P/N 5040003800

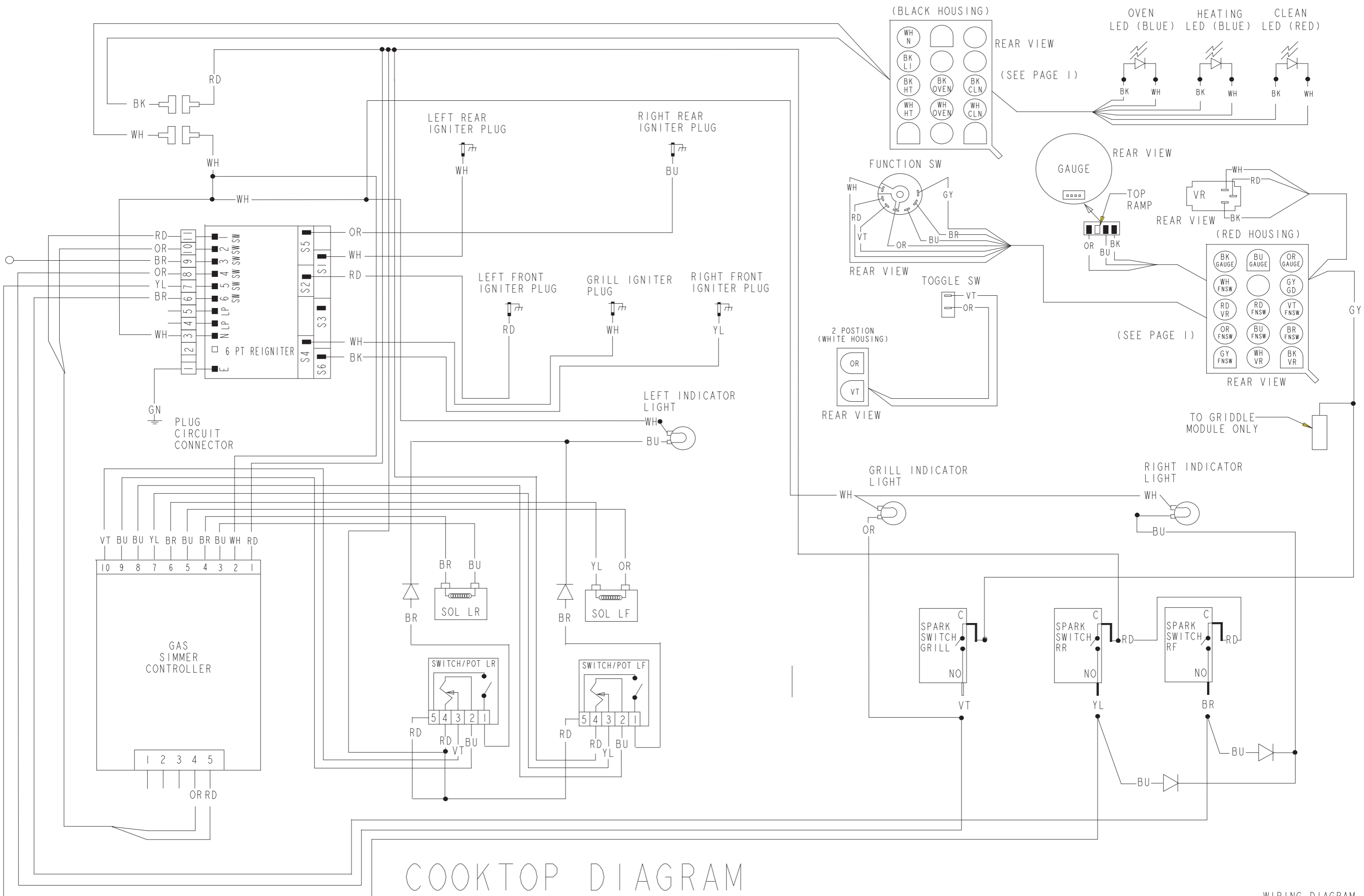


ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED
240V/208V CIRCUIT IN BOLD
► DENOTES PIN 1

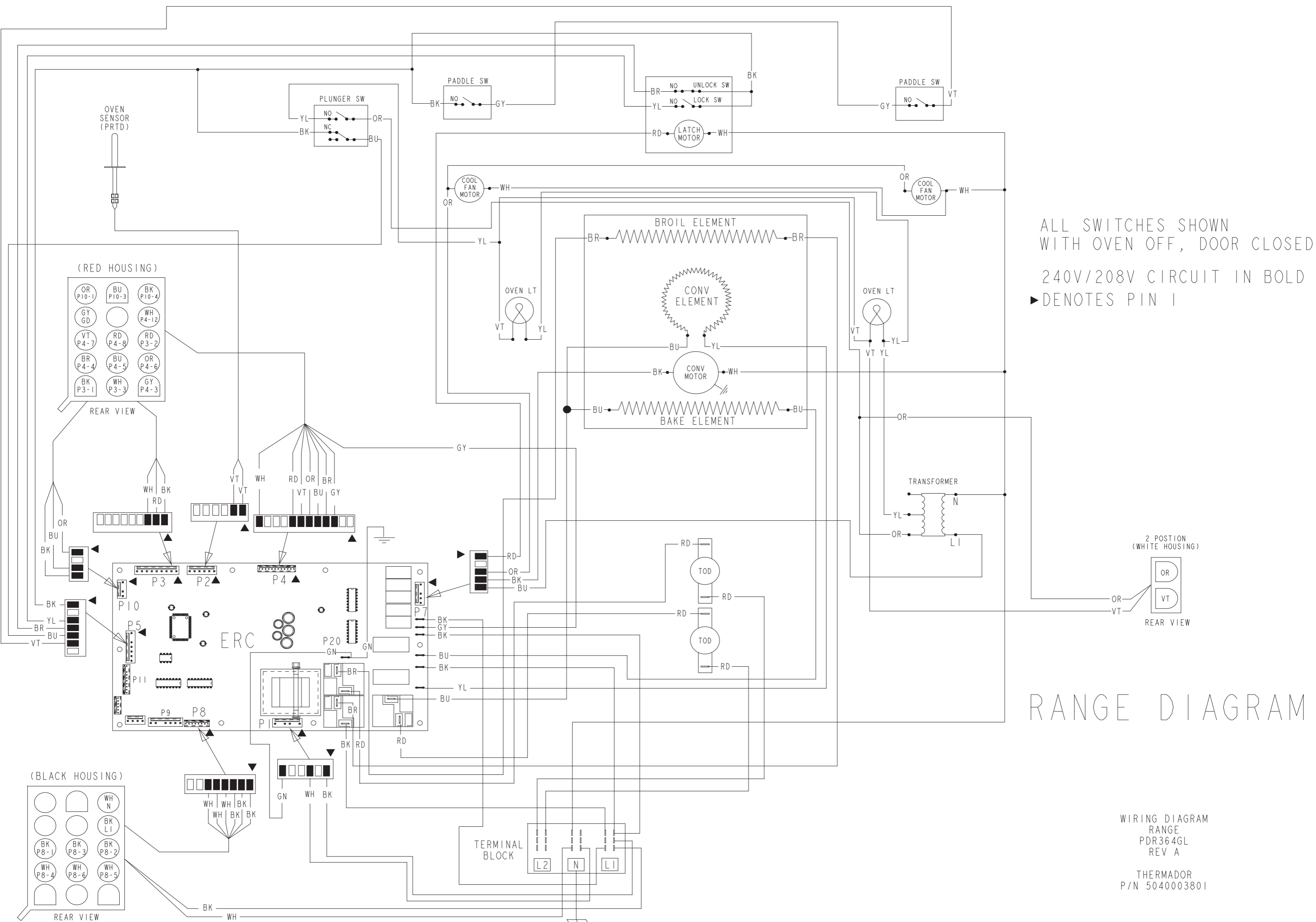
RANGE DIAGRAM

WIRING DIAGRAM
RANGE
PDR364GD
REV A

THERMADOR
P/N 5040003800



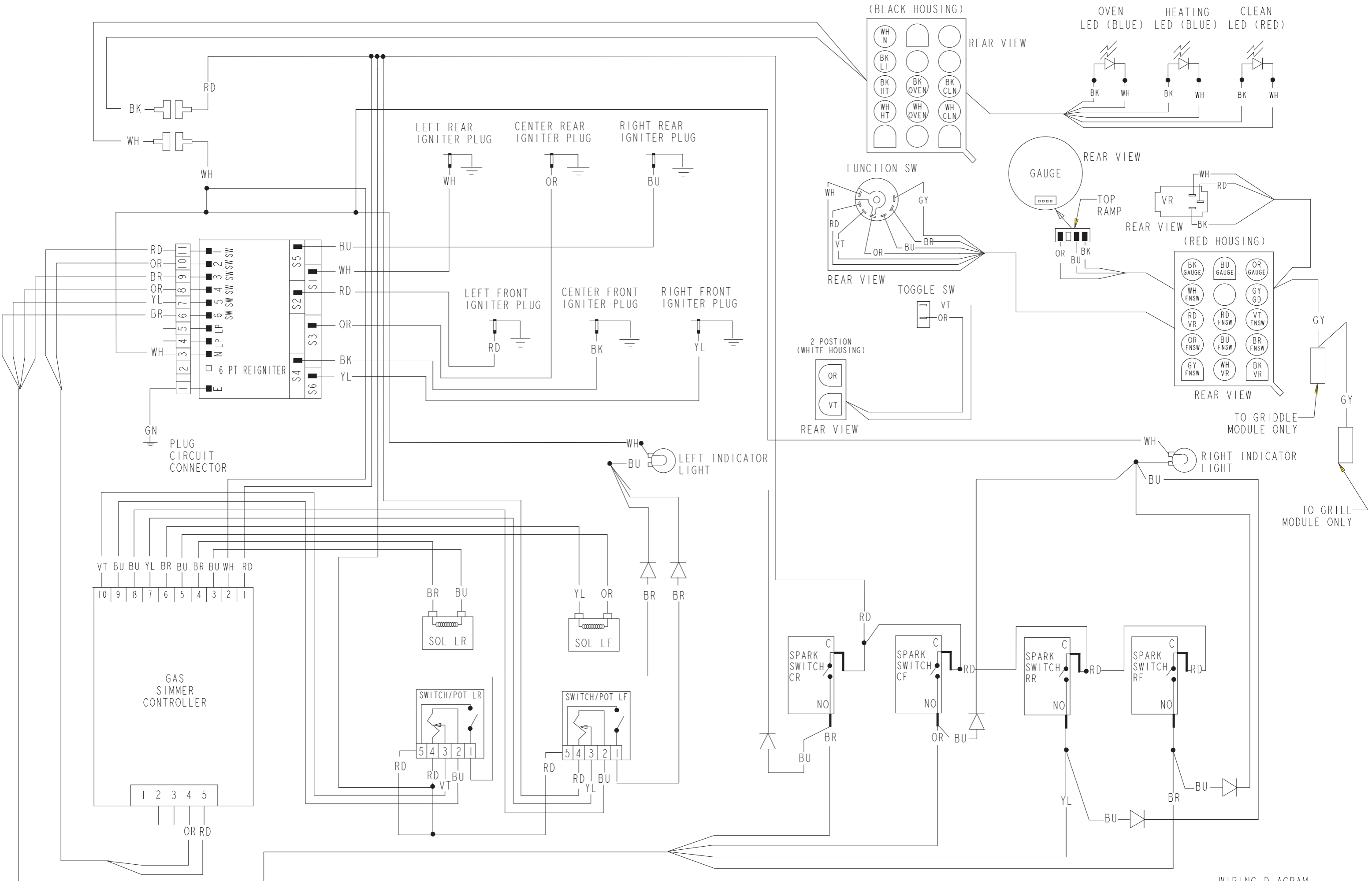
COOKTOP DIAGRAM



ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED
240V/208V CIRCUIT IN BOLD
► DENOTES PIN 1

RANGE DIAGRAM

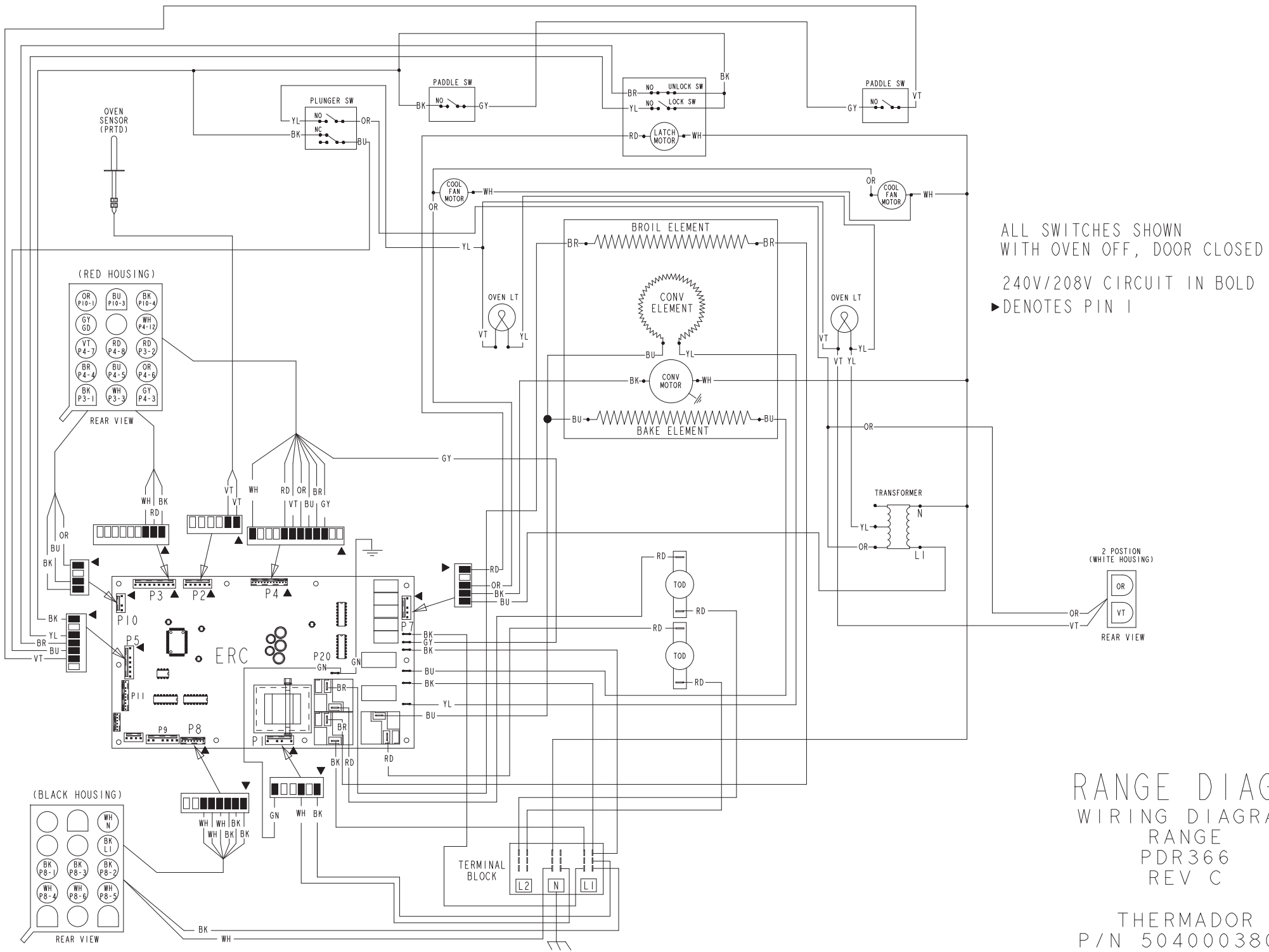
WIRING DIAGRAM
RANGE
PDR364GL
REV A
THERMADOR
P/N 5040003801



COOKTOP DIAGRAM

WIRING DIAGRAM
 RANGE COOKTOP
 PDR366
 REV C

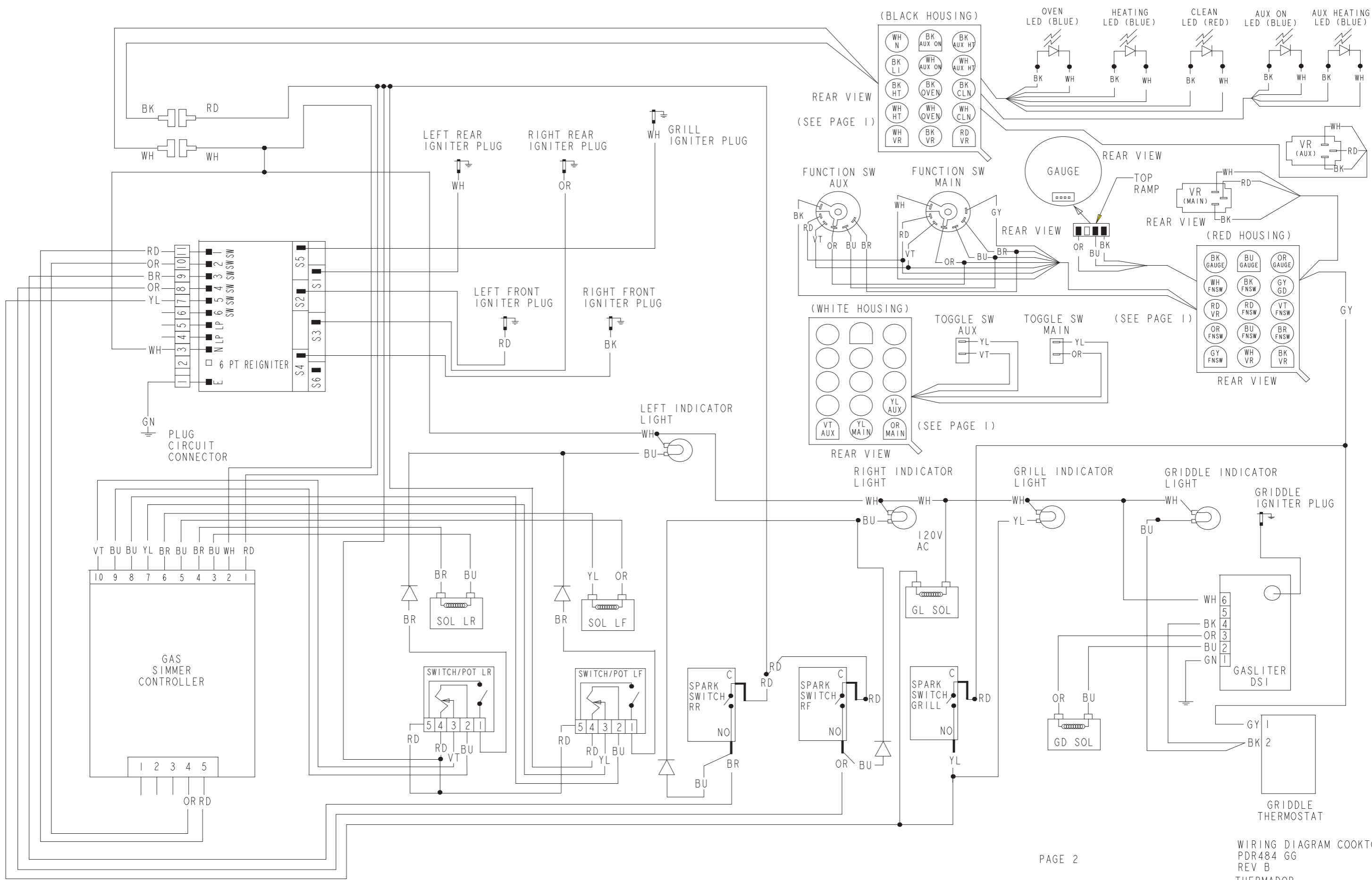
THERMADOR
 P/N 5040003802

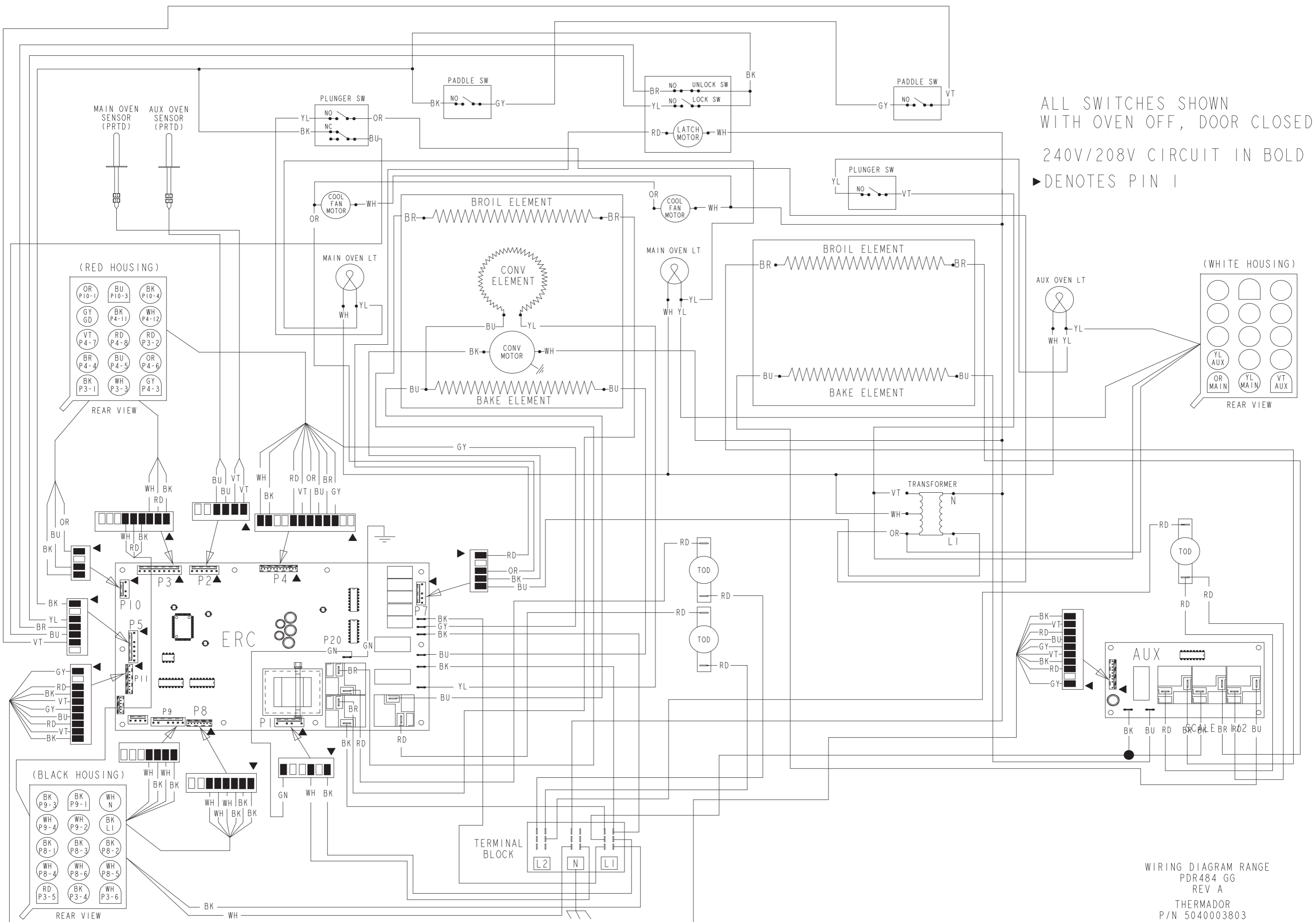


ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED
240V/208V CIRCUIT IN BOLD
▶ DENOTES PIN 1

RANGE DIAGRAM
WIRING DIAGRAM
RANGE
PDR366
REV C

THERMADOR
P/N 5040003802



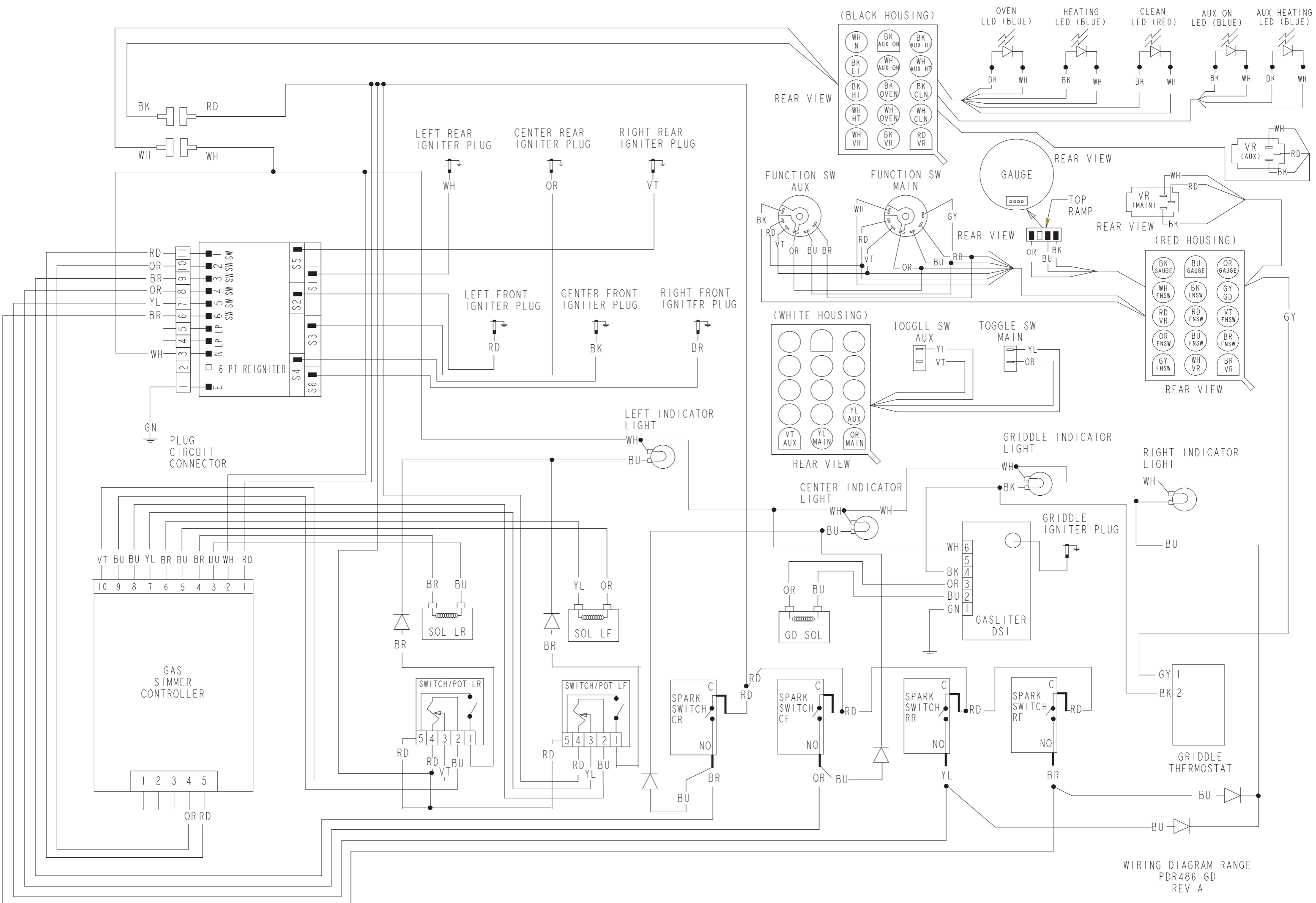


ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED

240V/208V CIRCUIT IN BOLD

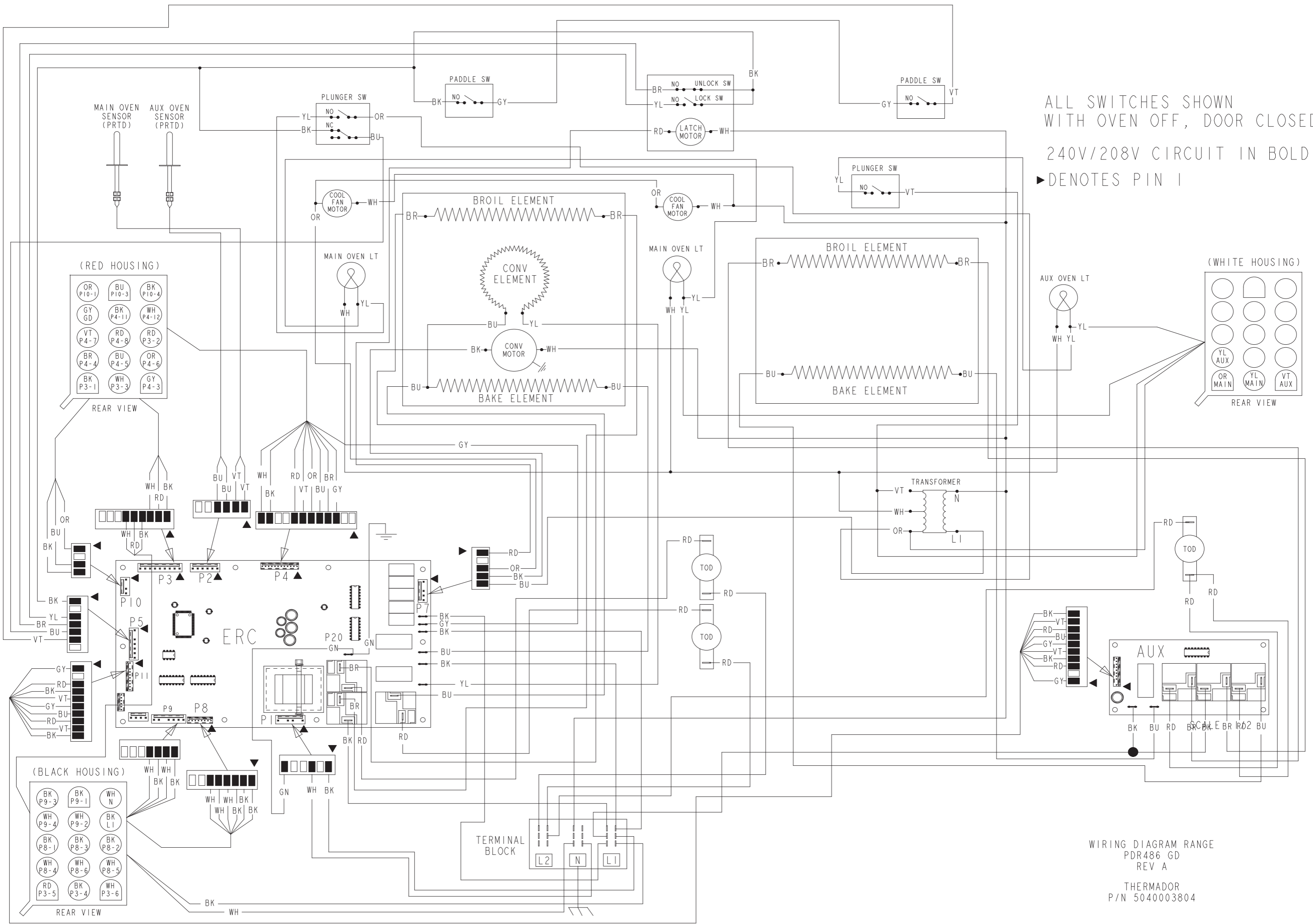
▶ DENOTES PIN 1

WIRING DIAGRAM RANGE
PDR484 GG
REV A
THERMADOR
P/N 5040003803



WIRING DIAGRAM RANGE
PDR486 GD
REV A

THERMADOR
P/N 5040003804



ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED

240V/208V CIRCUIT IN BOLD

▶ DENOTES PIN 1

(RED HOUSING)

OR P10-1	BU P10-3	BK P10-4
GY GD	BK P4-11	WH P4-12
VT P4-7	RD P4-8	RD P3-2
BR P4-4	BU P4-5	OR P4-6
BK P3-1	WH P3-3	GY P4-3

(WHITE HOUSING)

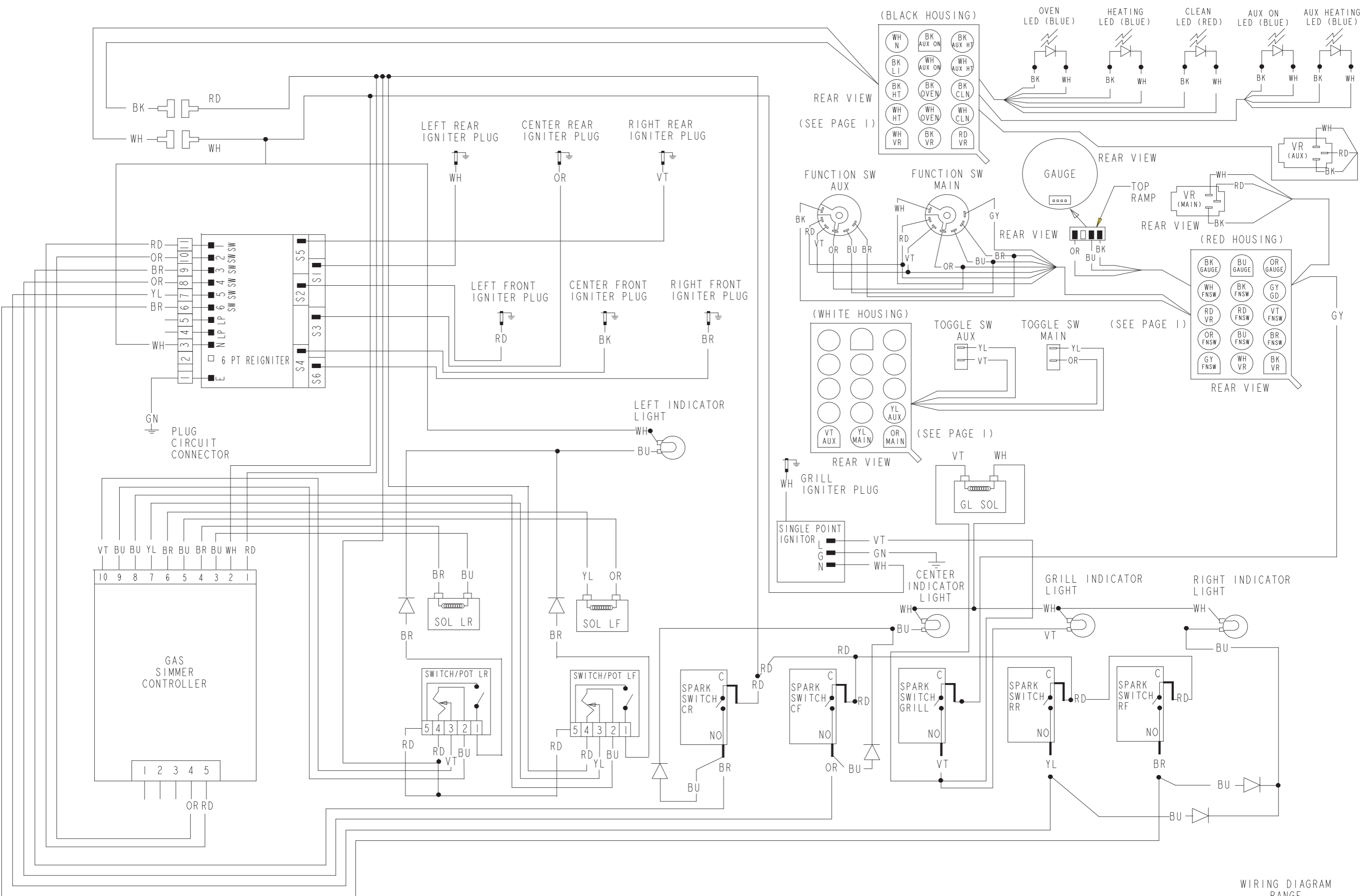
YL AUX		
OR MAIN	YL MAIN	VT AUX

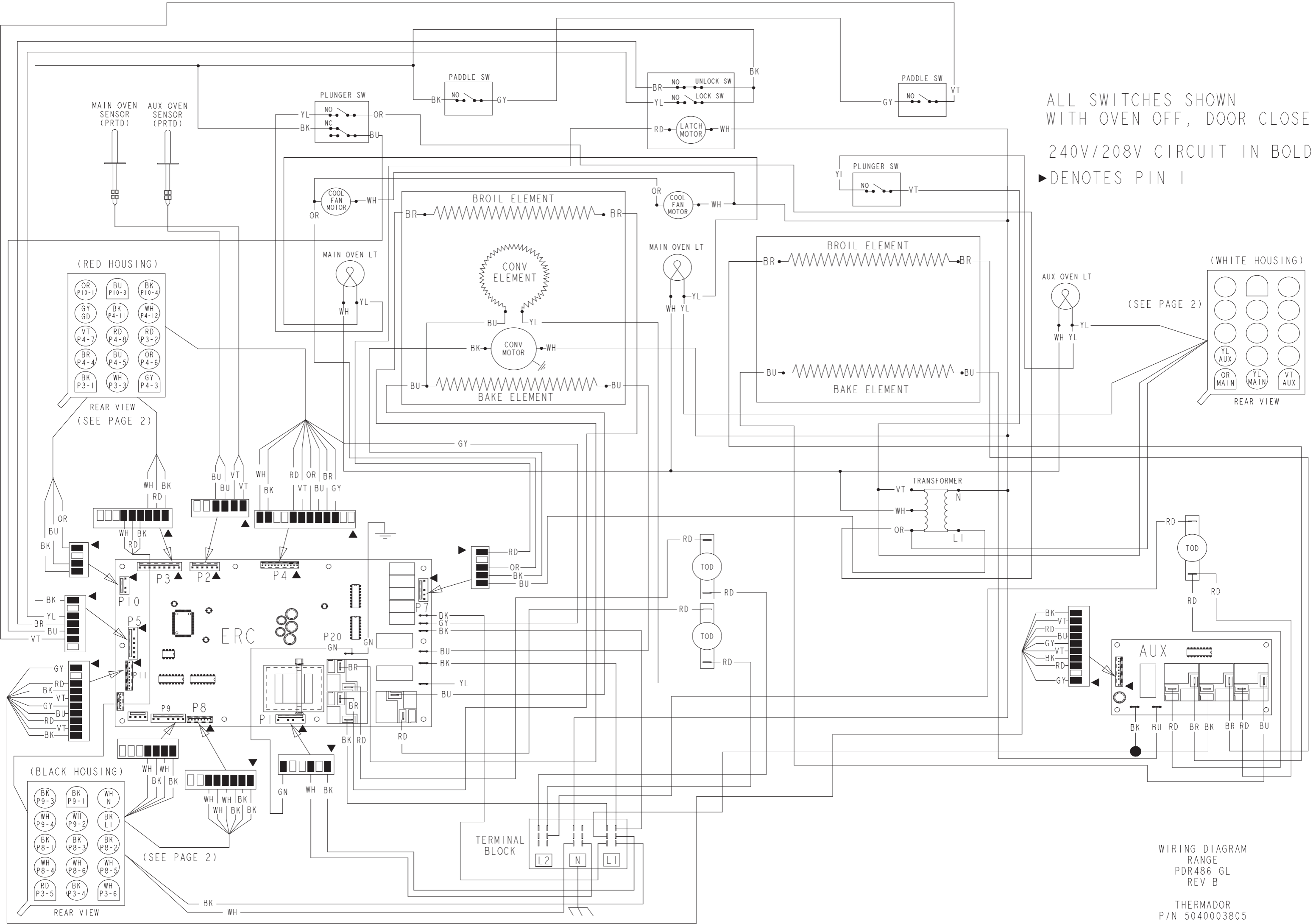
(BLACK HOUSING)

BK P9-3	BK P9-1	WH N
WH P9-4	WH P9-2	BK L1
BK P8-1	BK P8-3	BK P8-2
WH P8-4	WH P8-6	WH P8-5
RD P3-5	BK P3-4	WH P3-6

WIRING DIAGRAM RANGE
PDR486 GD
REV A

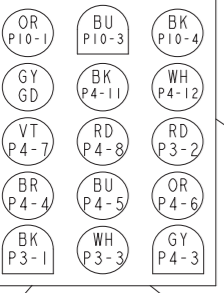
THERMADOR
P/N 5040003804





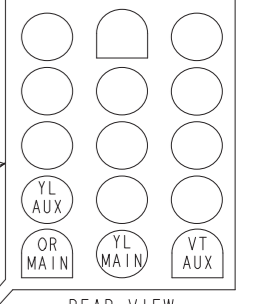
ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED
 240V/208V CIRCUIT IN BOLD
 ► DENOTES PIN 1

(RED HOUSING)



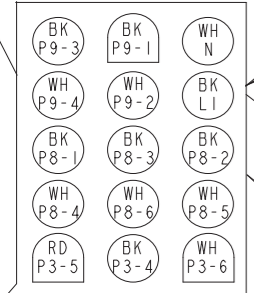
REAR VIEW (SEE PAGE 2)

(WHITE HOUSING)



REAR VIEW

(BLACK HOUSING)



(SEE PAGE 2)

REAR VIEW

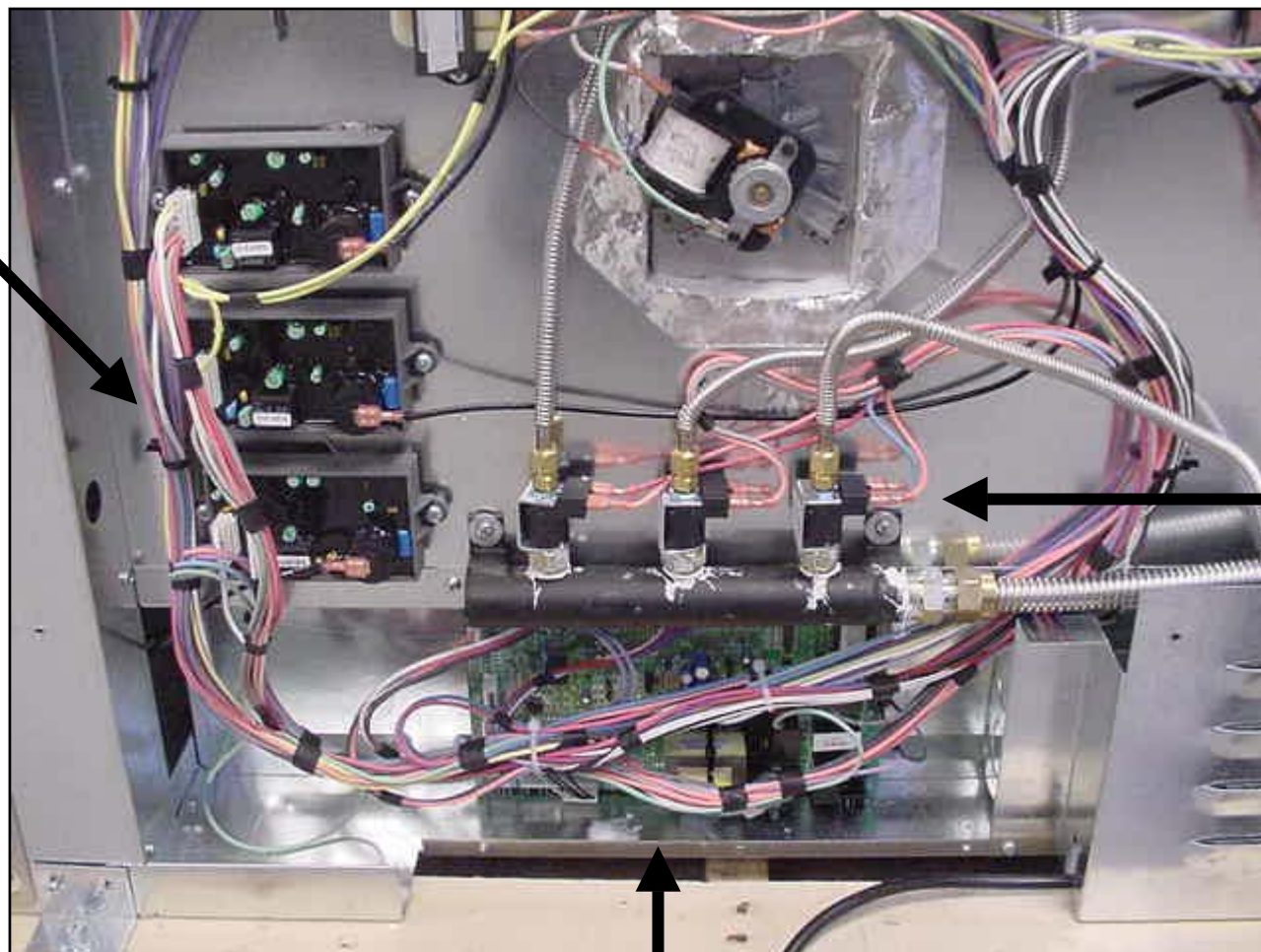
WIRING DIAGRAM
 RANGE
 PDR486 GL
 REV B

THERMADOR
 P/N 5040003805

PGR Range

Rear of the PGR Range

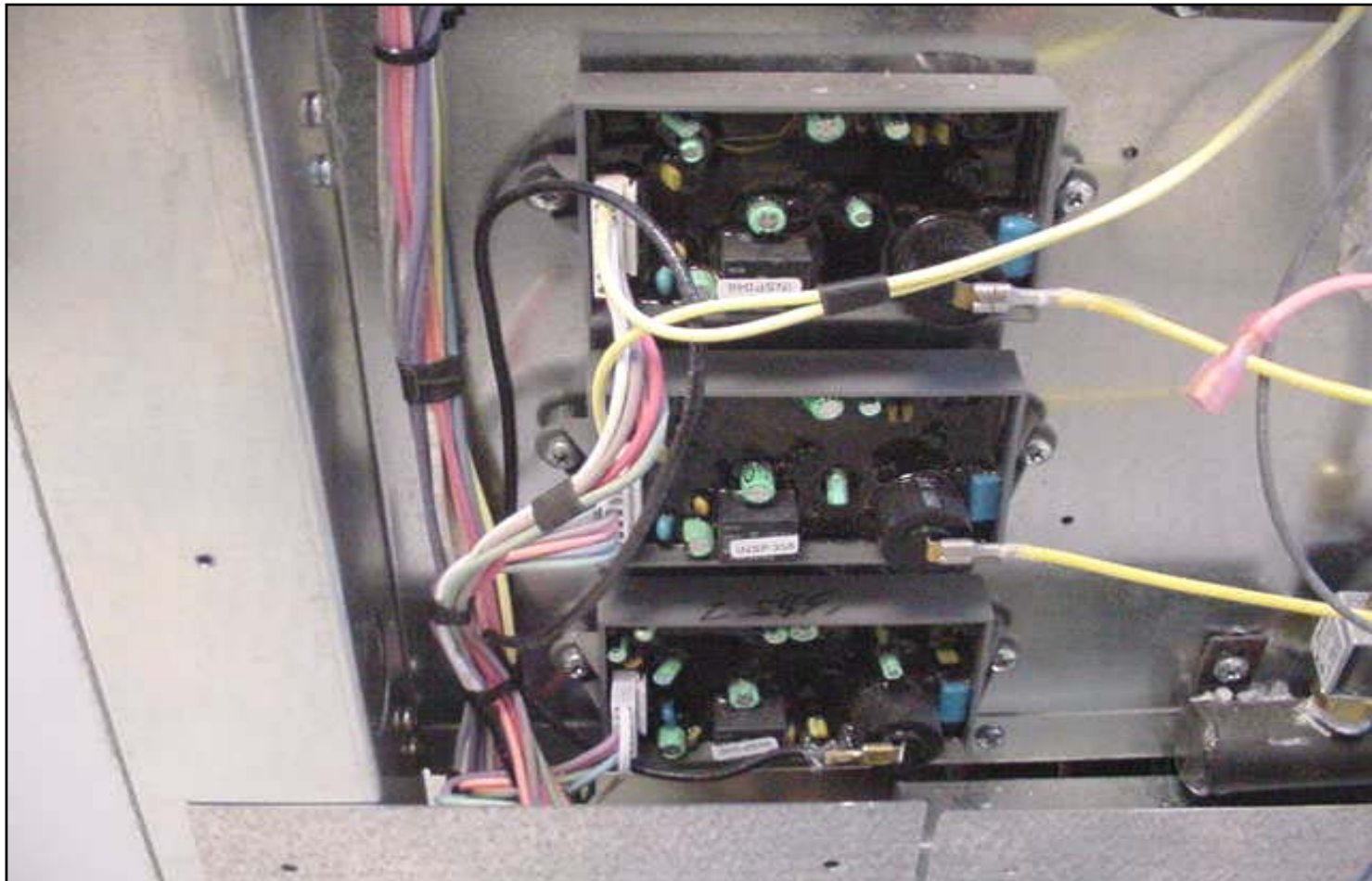
Gas Lines
for the two
Infra-red
broilers and the
oven bake
burner



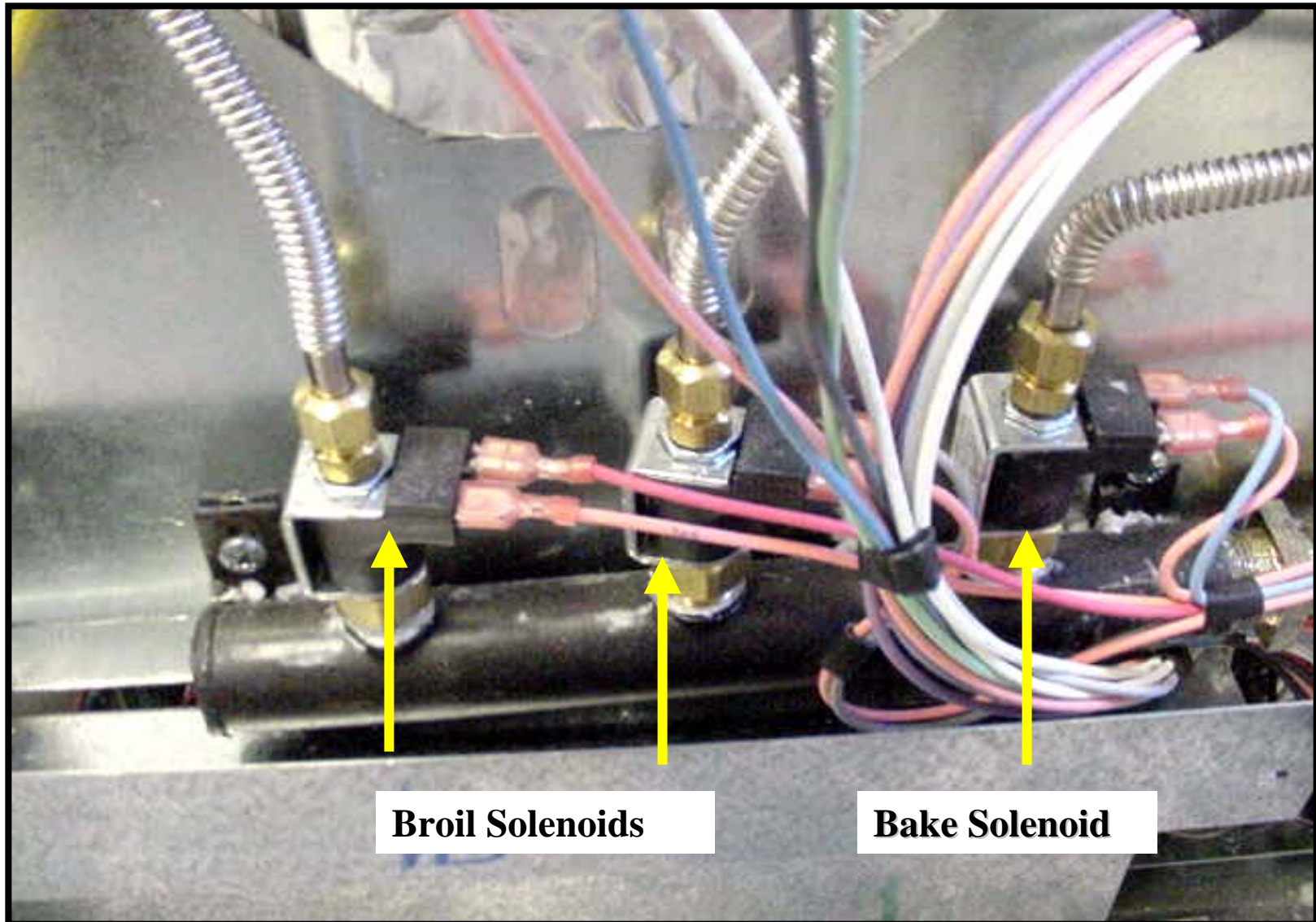
Solenoid
valves for the
Infra-
red
broilers and the
oven bake
burner

Oven Relay Board

Gas Liter Modules are 120 volt AC input that is converted to 14,000 volts DC. At this time 120volts AC is sent to the gas solenoids opening gas flow to burners. Module is a single point re-ignition sensing flame. Each module has an 8 second lock out if flame is not sensed.



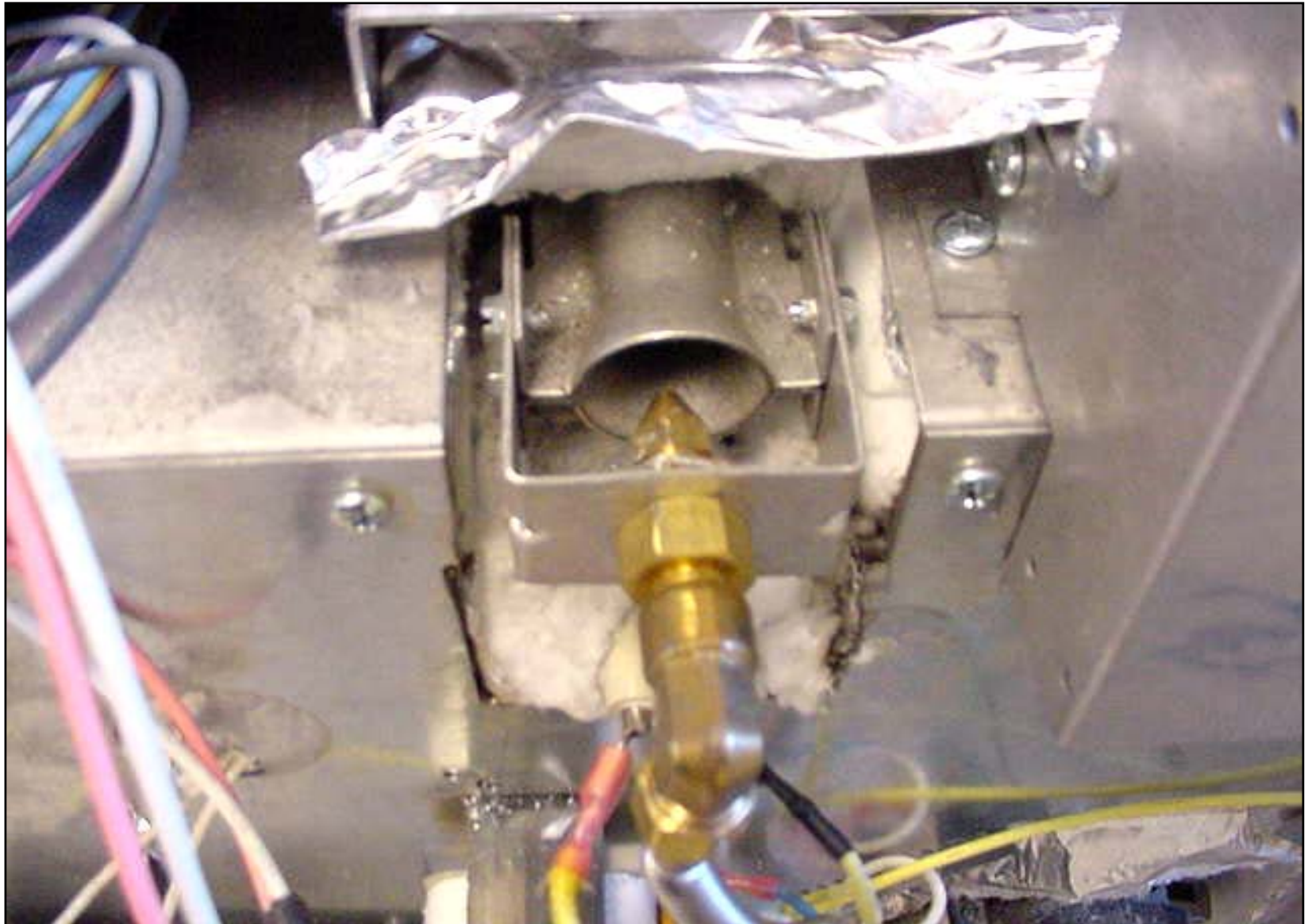
Gas solenoid valves are operated by 120 volts AC.



Broil Solenoids

Bake Solenoid

Input to infrared broiler



Broiler inputs and oven vent.

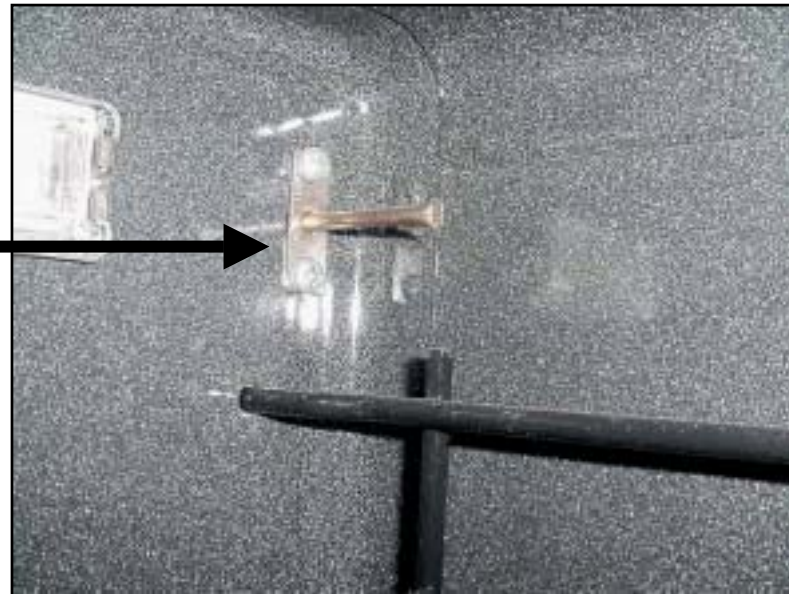




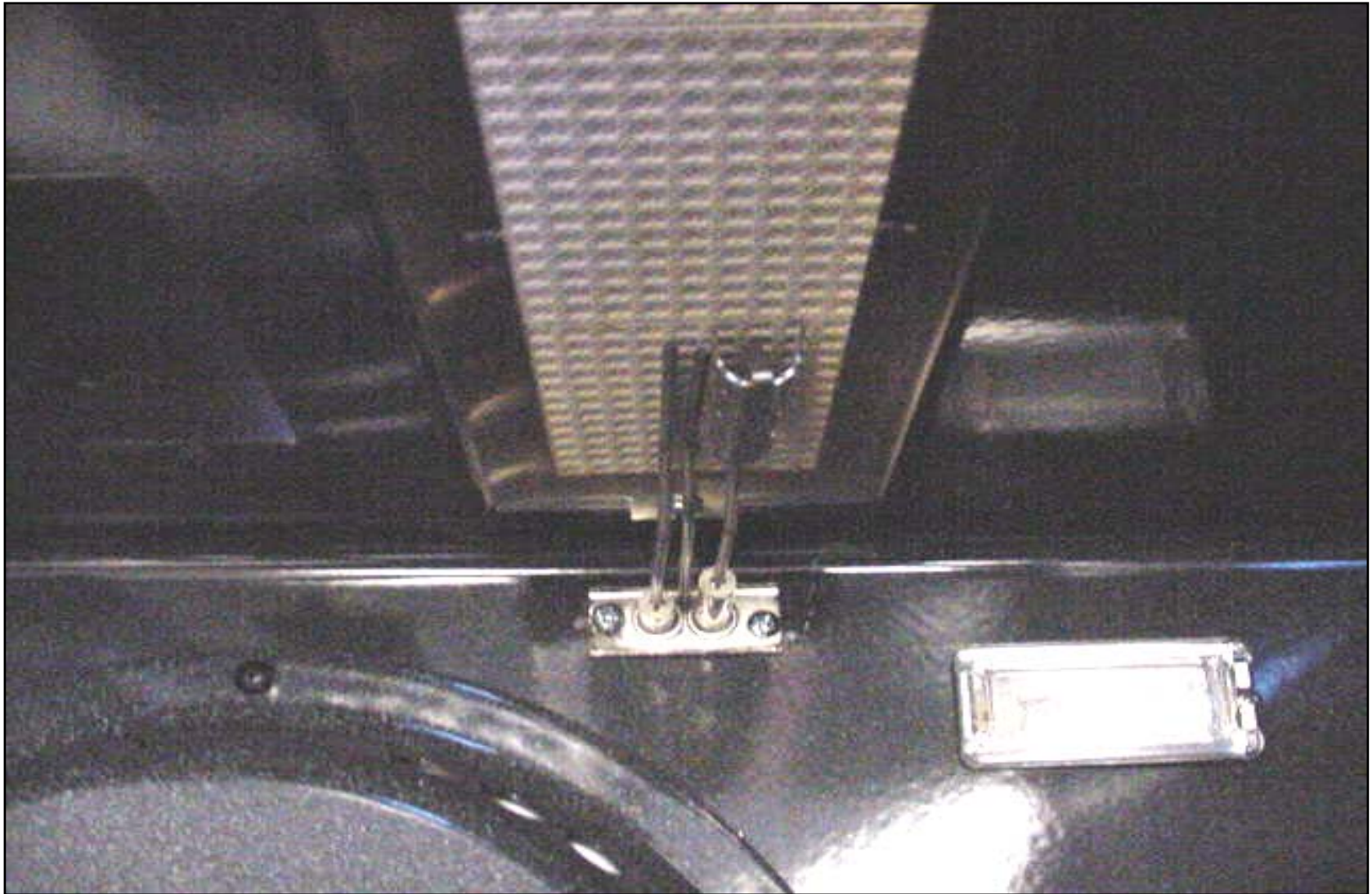
Infra-red Broilers

Igniter for broiler

Oven Sensor



Enhanced Broiler Igniter



Enhanced Broil Ignition Service Kit.....Part 1

Contents:

- 1- Ignition Module part # 418880
- 1- Broil Electrode Assembly part # 491089

Note: This kit contains 1 module and electrode set. The 30” & 36” ranges have two broil burners and thus will require 2 broil ignition kits, while the 48” range will require 3 kits.

The kit will enhance broil ignition performance. The new ignition module has increased flame sensitivity to minimize the possibility of nuisance outage, and the broil electrode design incorporates a “basket” surrounding the spark rod to collect and hold gas for improved ignition. Both of these components are completely compatible for installation on existing product without modifications to the appliance.

Installation Tips for Broil Electrode

With the broil electrode assembly installed into the back of the oven cavity, the electrode’s rods and “basket” should be positioned to within 1/16 inch or almost flush with the infrared burner’s ceramic face. The electrode assembly **MUST NOT** sag downward, away from the broil burner.

The broil electrode’s rods may require re-positioning for optimum ignition and flame sensing. The electrode’s spark rod should be centered within the basket, along the burner face. The tip of the electrode’s sense rod (left side of electrode in the picture next page) may need to be re-positioned downward approximately 1/8 to 3/16 inch away from the burner face for optimum flame-recognition performance.

Enhanced Broil Ignition Service Kit.....Part 2

Ignition Module



New Broil Electrode Assembly

Oven Burner



Flame
Spreader

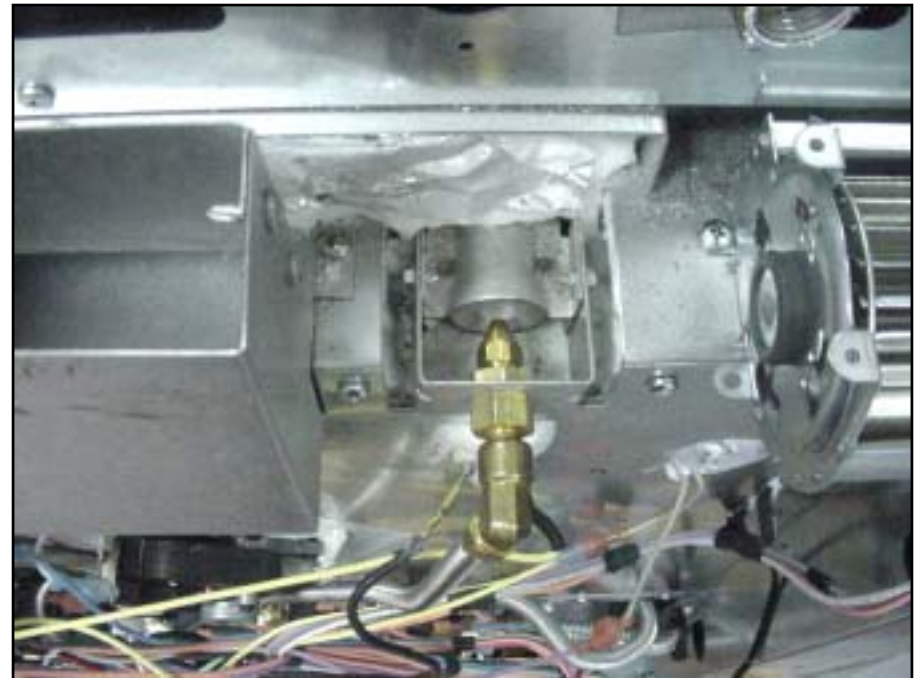
Igniter





Rear of unit showing gas connection, cooling fan and moxex plugs

Infrared broiler orifice



How the Oven Works



Turn the selector to bake and the thermostat to 350 F. K10 relay closes sending 120VAC to input terminal of selector and out through the bake contact to P7. The bake relay K3 is then energized and sends 120AC to the gas liter. The gas liter energizes the gas solenoid valve opening it and allowing gas to flow, at the same time sending 14,000VDC to the igniter igniting the burner.



Bake Circuit @ 350 F

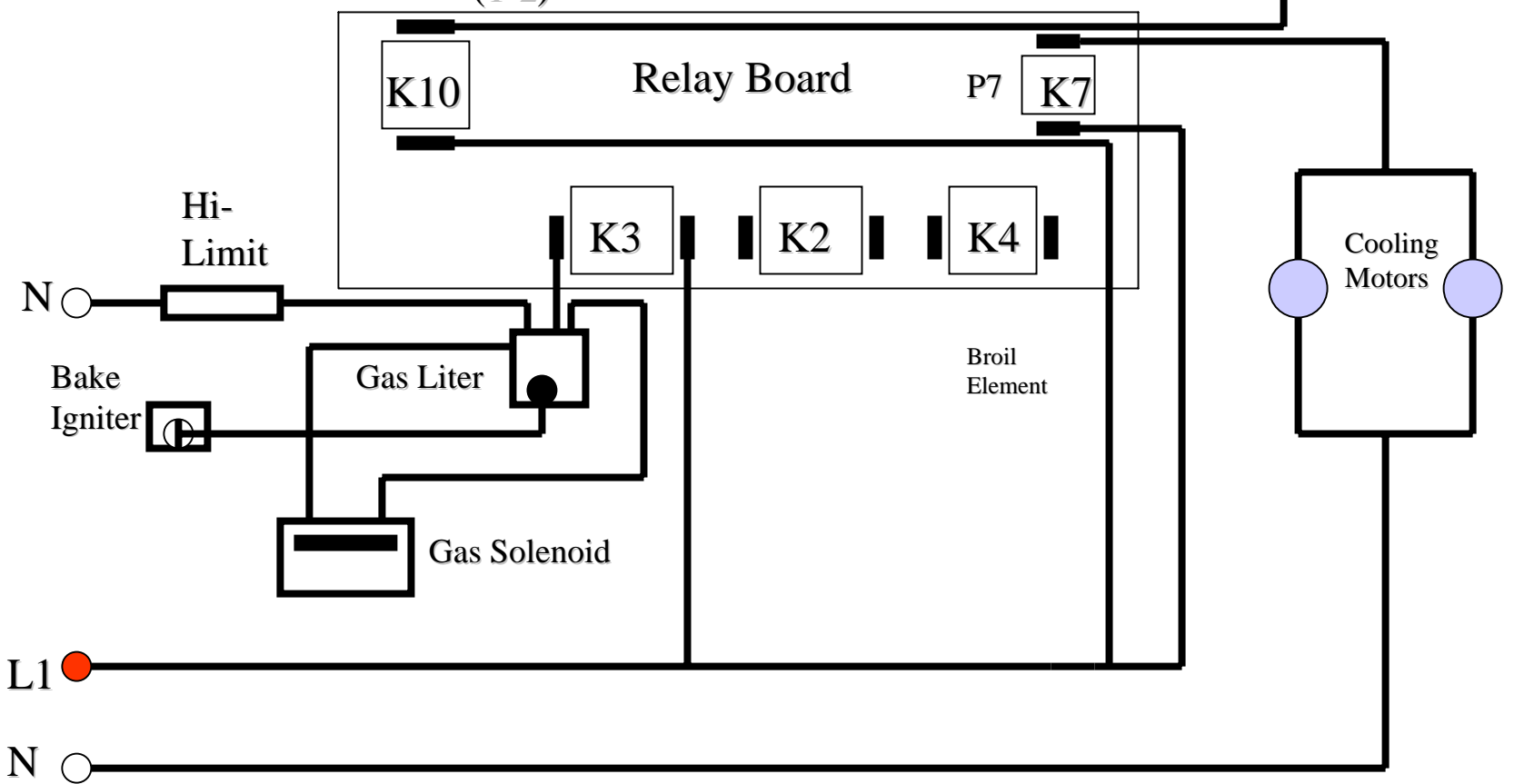
Inputs to board

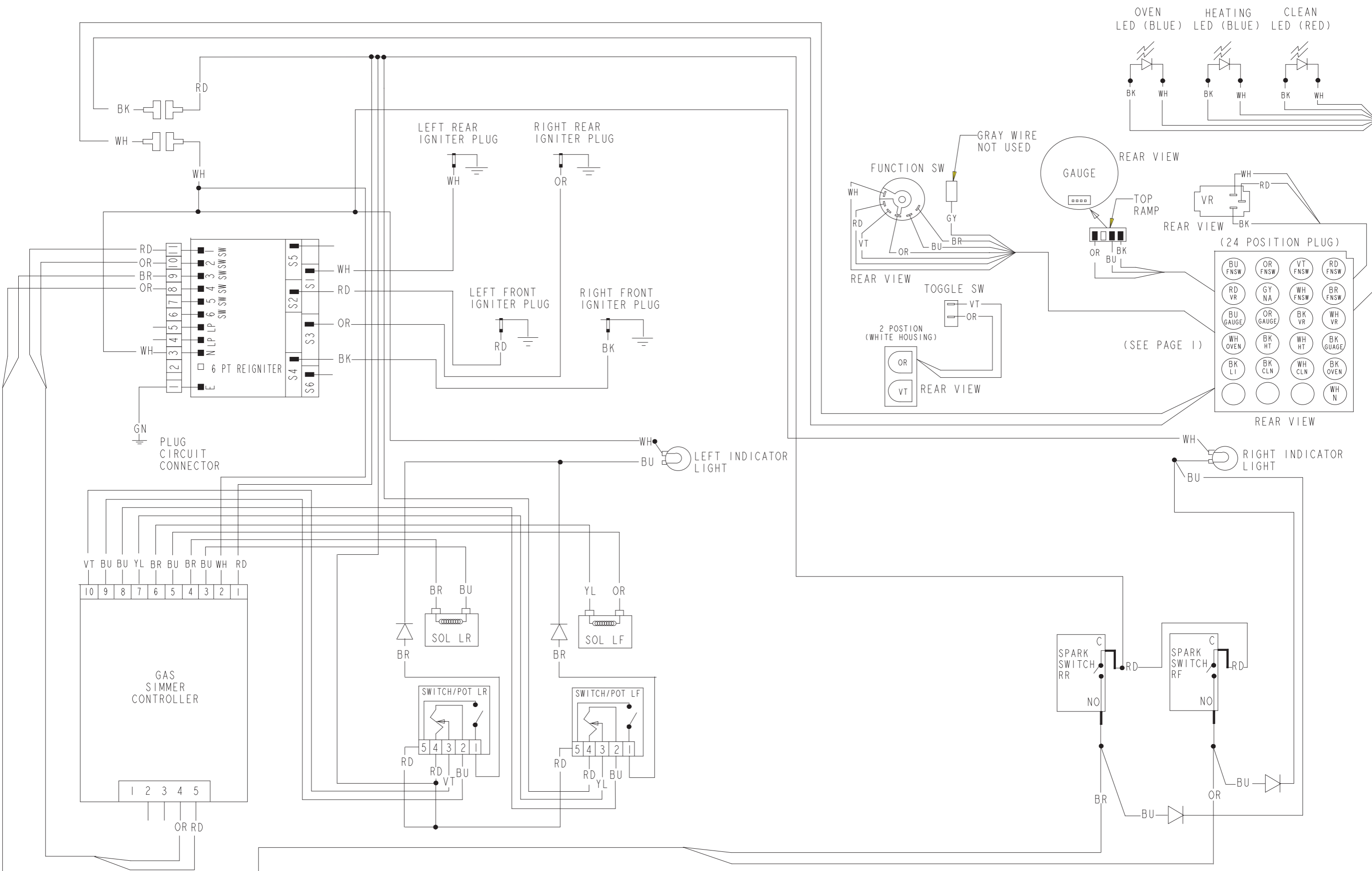
Potentiometer
21K
Ohms
(1-2)

Selector
Set to
Bake

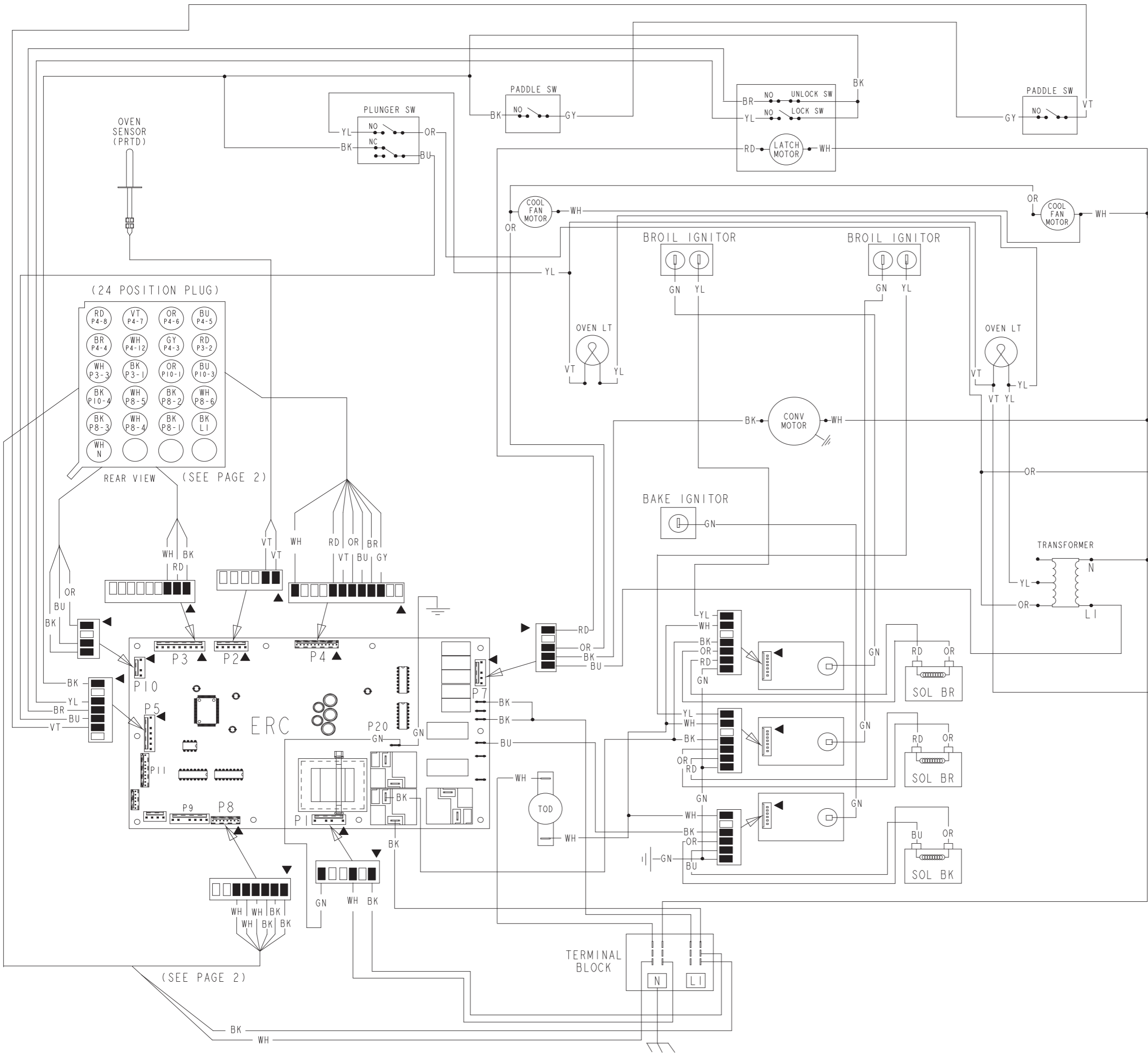
Sensor
1058
Ohms

To Function /
Selector Switch





COOKTOP DIAGRAM



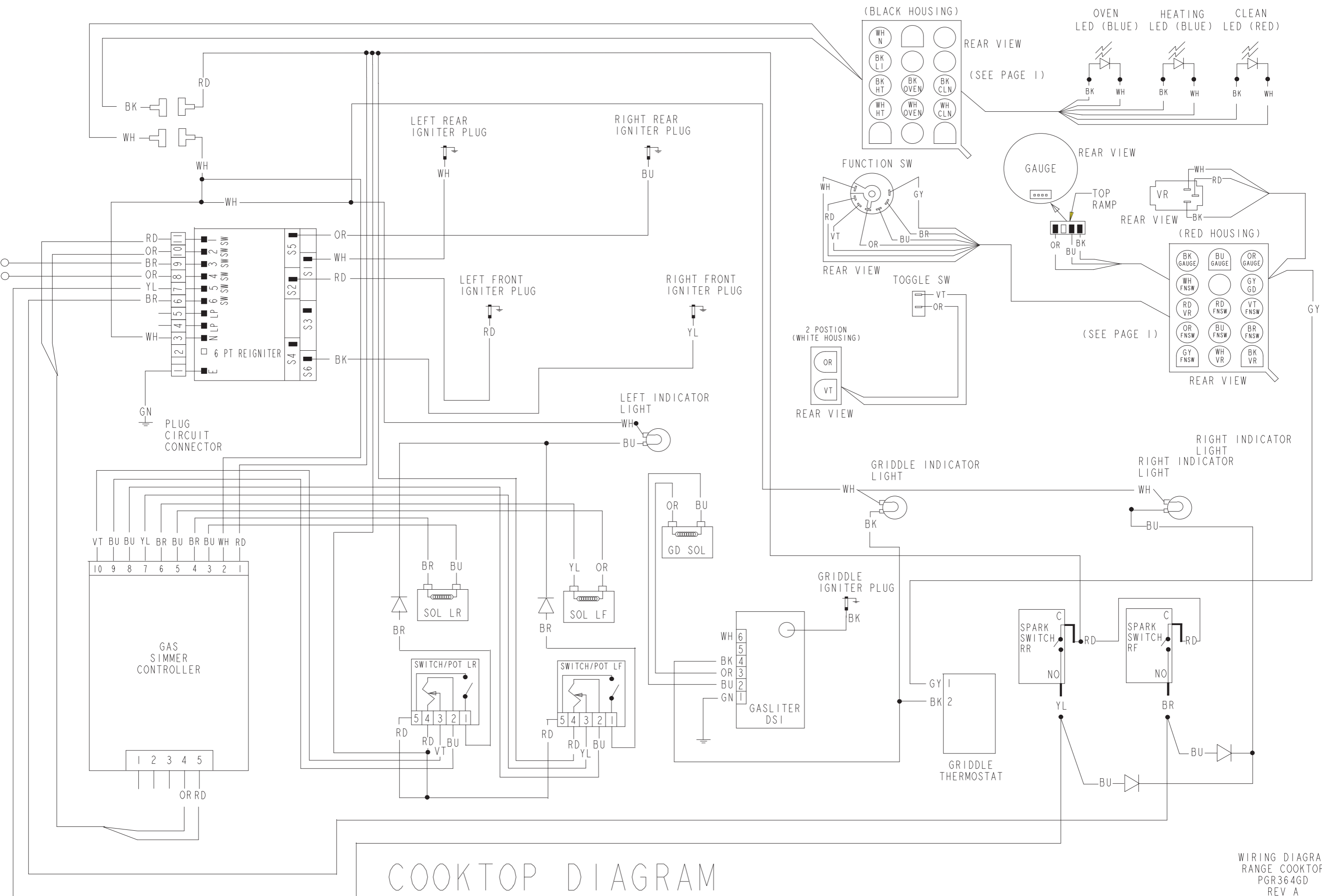
ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED

▶ DENOTES PIN 1

RANGE DIAGRAM

PAGE 1

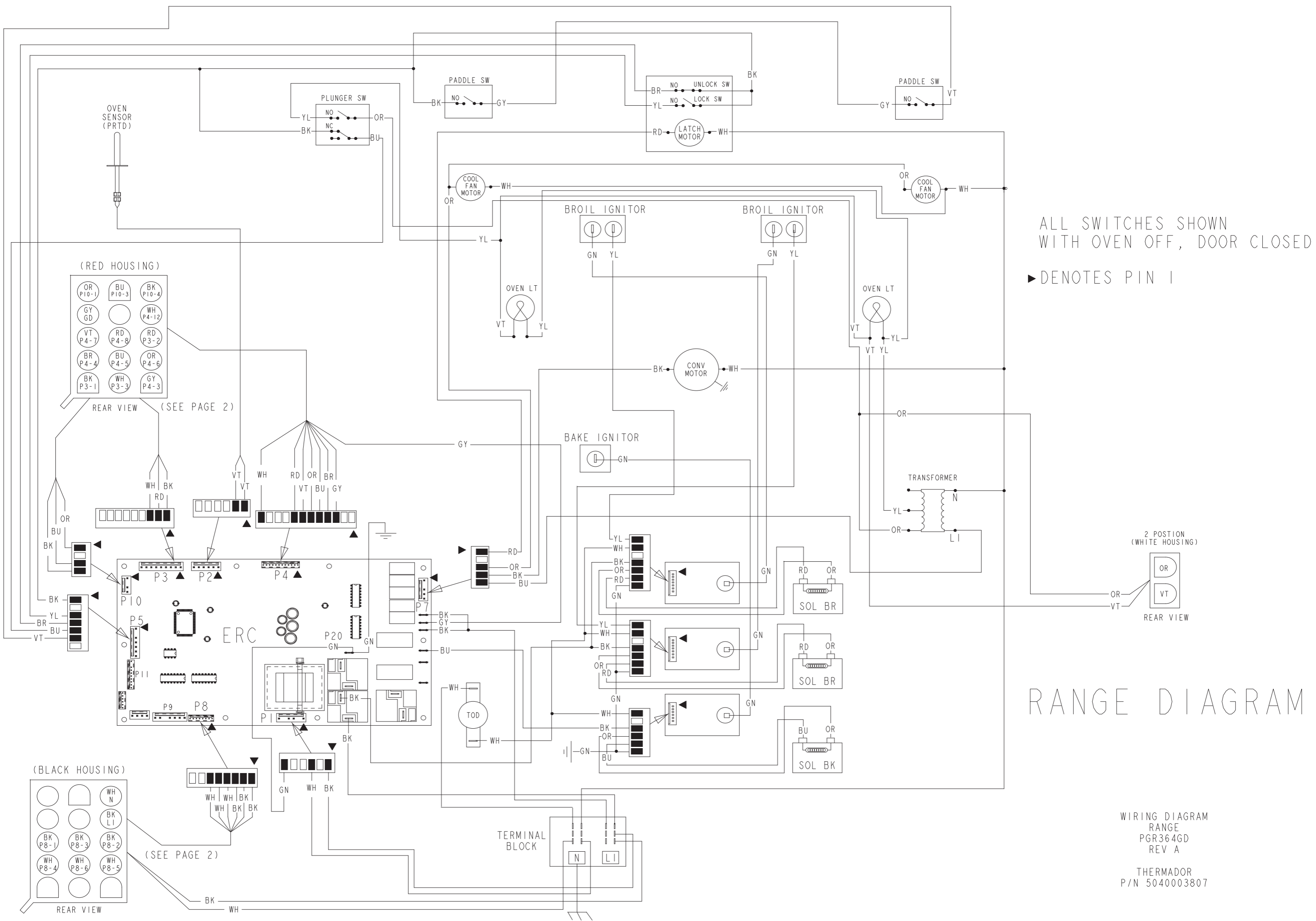
WIRING DIAGRAM
 RANGE
 PGR304
 REV A
 THERMADOR
 P/N 5040003806



COOKTOP DIAGRAM

WIRING DIAGRAM
RANGE COOKTOP
PGR364GD
REV A

THERMADOR
P/N 5040003807

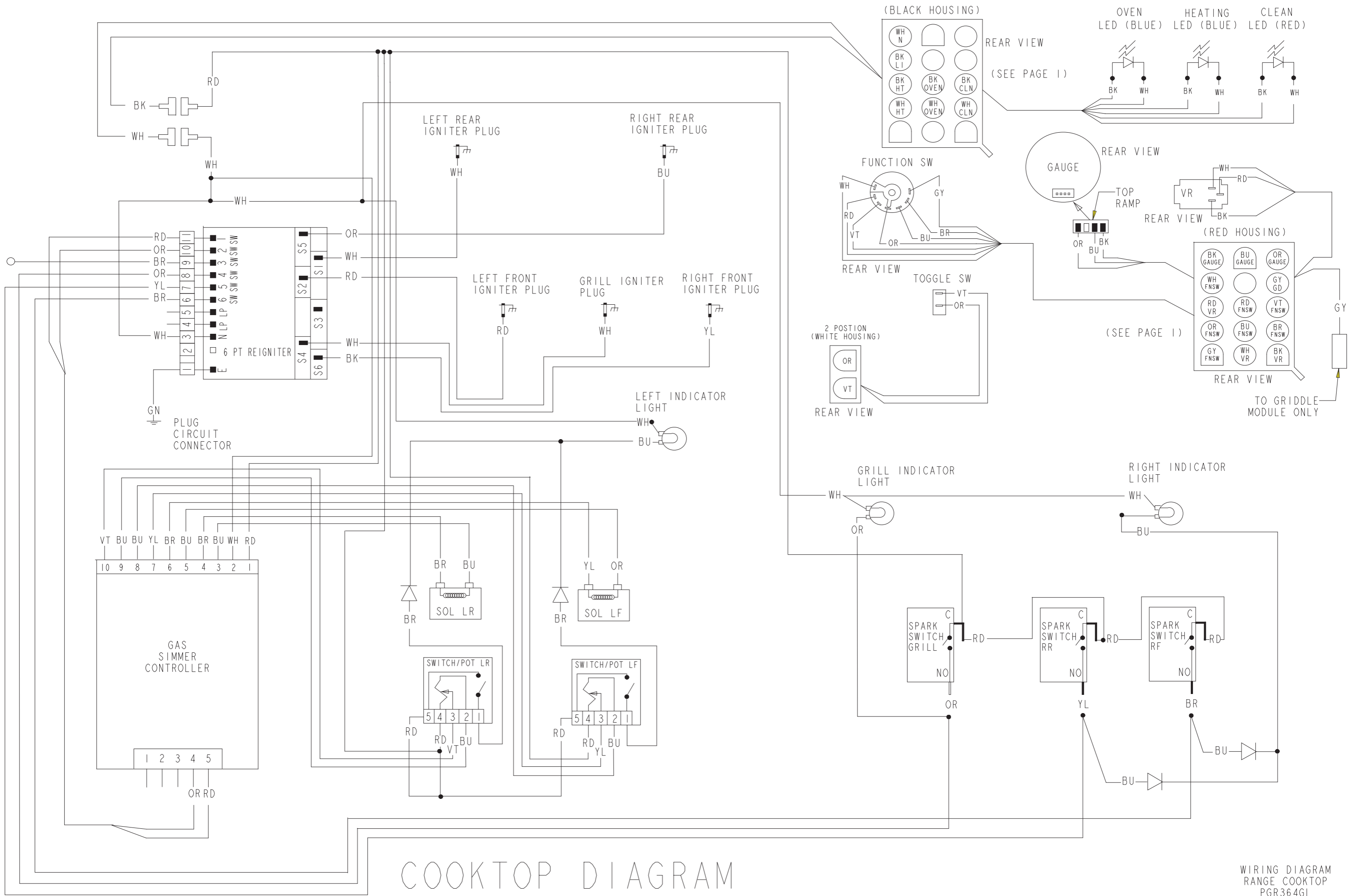


ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED

▶ DENOTES PIN 1

RANGE DIAGRAM

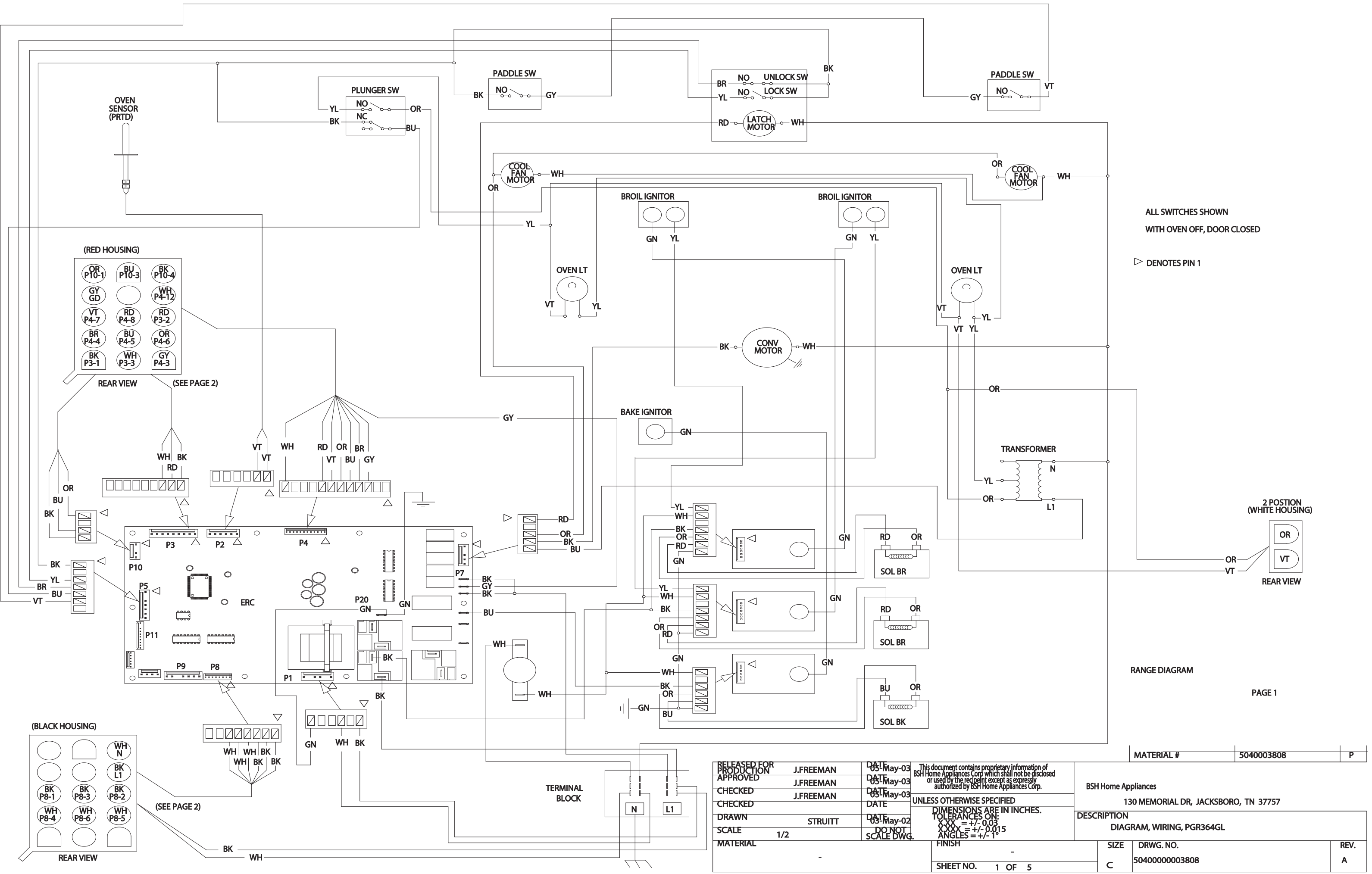
WIRING DIAGRAM
 RANGE
 PGR364GD
 REV A
 THERMADOR
 P/N 5040003807



COOKTOP DIAGRAM

WIRING DIAGRAM
 RANGE COOKTOP
 PGR364GL
 REV A

THERMADOR
 P/N 5040003808



ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED

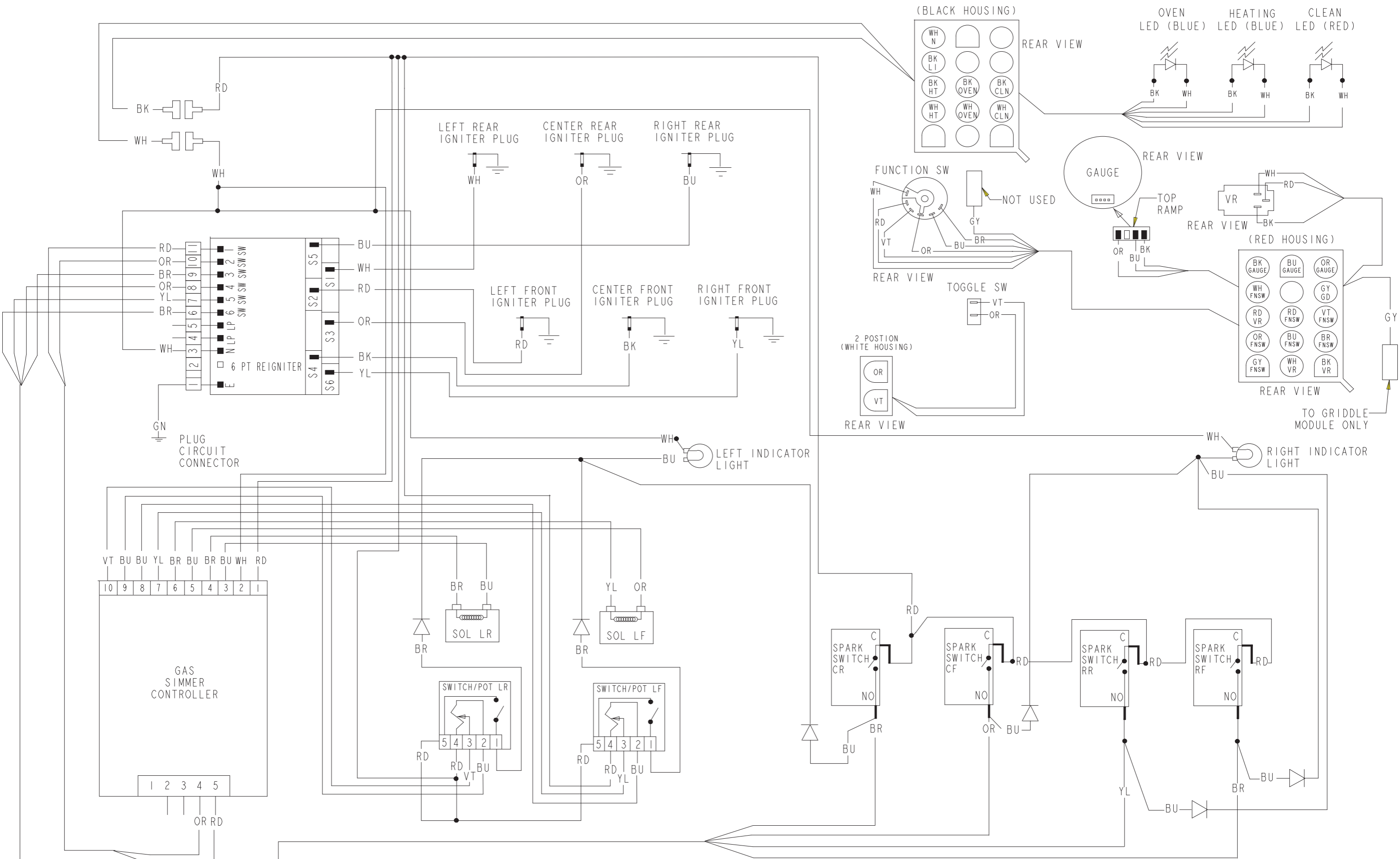
▷ DENOTES PIN 1

RANGE DIAGRAM

PAGE 1

MATERIAL # 5040003808 P

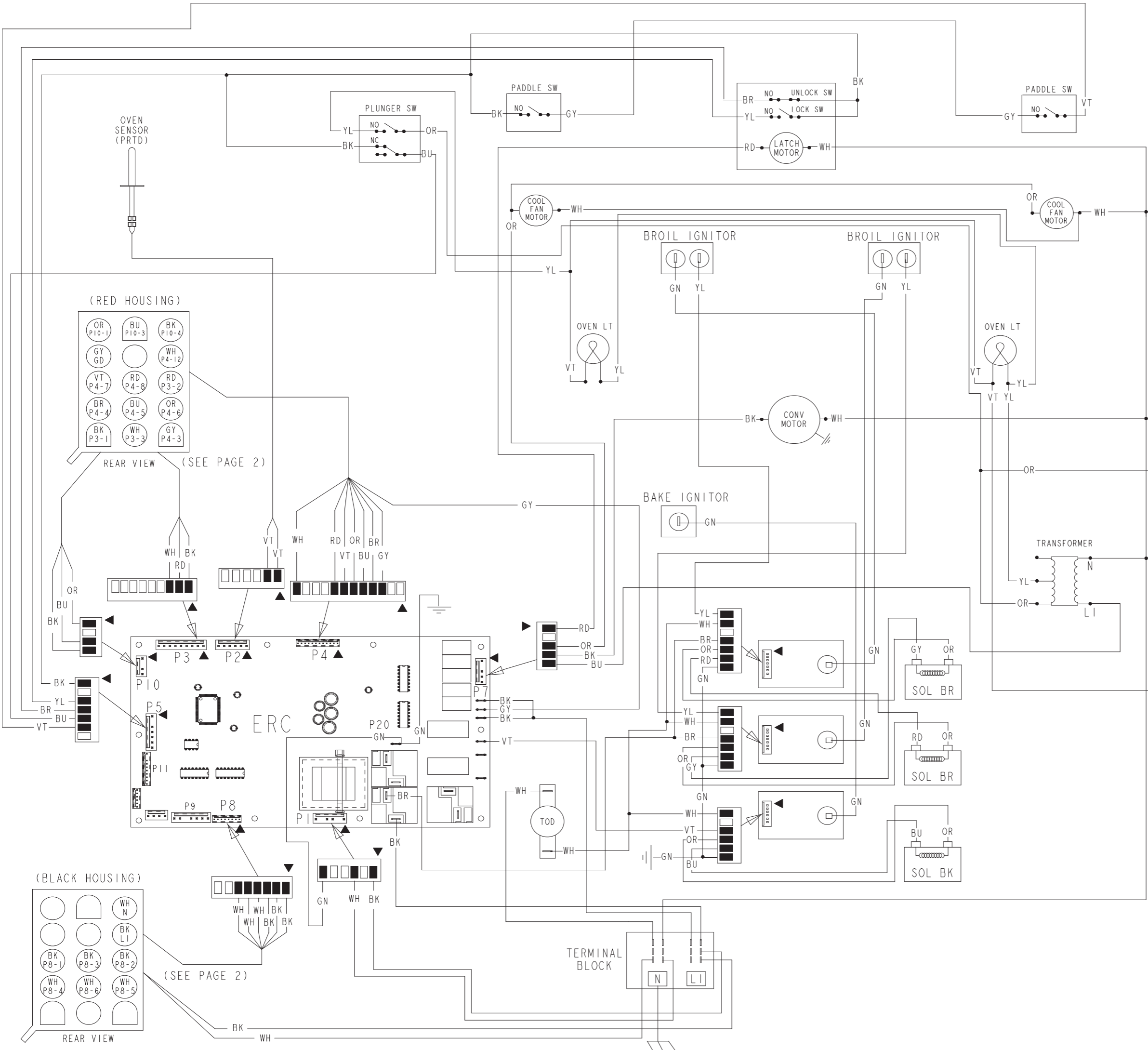
RELEASED FOR PRODUCTION APPROVED J.FREEMAN CHECKED J.FREEMAN CHECKED J.FREEMAN DRAWN STRUITT SCALE 1/2 MATERIAL -	DATE 03-May-03 DATE 03-May-03 DATE 03-May-03 DATE 03-May-02 DO NOT SCALE DWG.	This document contains proprietary information of BSH Home Appliances Corp which shall not be disclosed or used by the recipient except as expressly authorized by BSH Home Appliances Corp. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. XXXX = +/- 0.03 XXXX = +/- 0.015 ANGLES = +/- 1°	BSH Home Appliances 130 MEMORIAL DR, JACKSBORO, TN 37757 DESCRIPTION DIAGRAM, WIRING, PGR364GL	SIZE C DRWG. NO. 5040000003808 REV. A
SHEET NO. 1 OF 5				



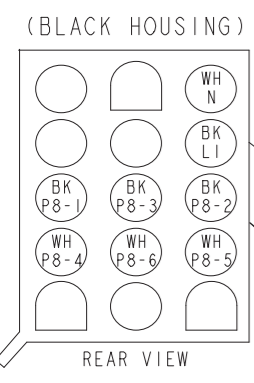
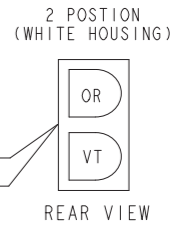
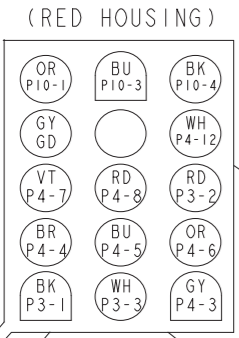
COOKTOP DIAGRAM

WIRING DIAGRAM
 RANGE COOKTOP
 PGR366
 REV A

THERMADOR
 P/N 5040003809

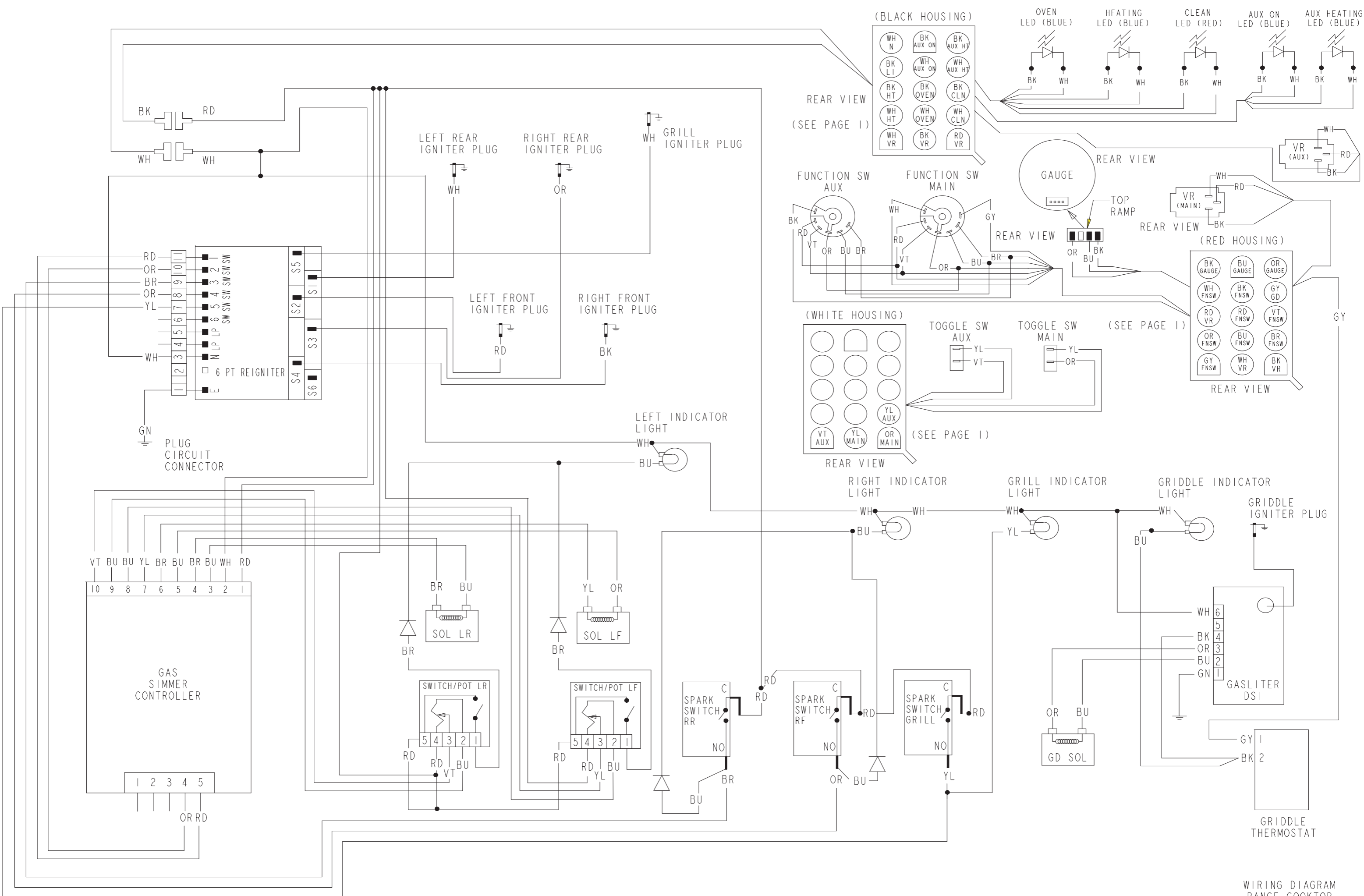


ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED
 ► DENOTES PIN 1

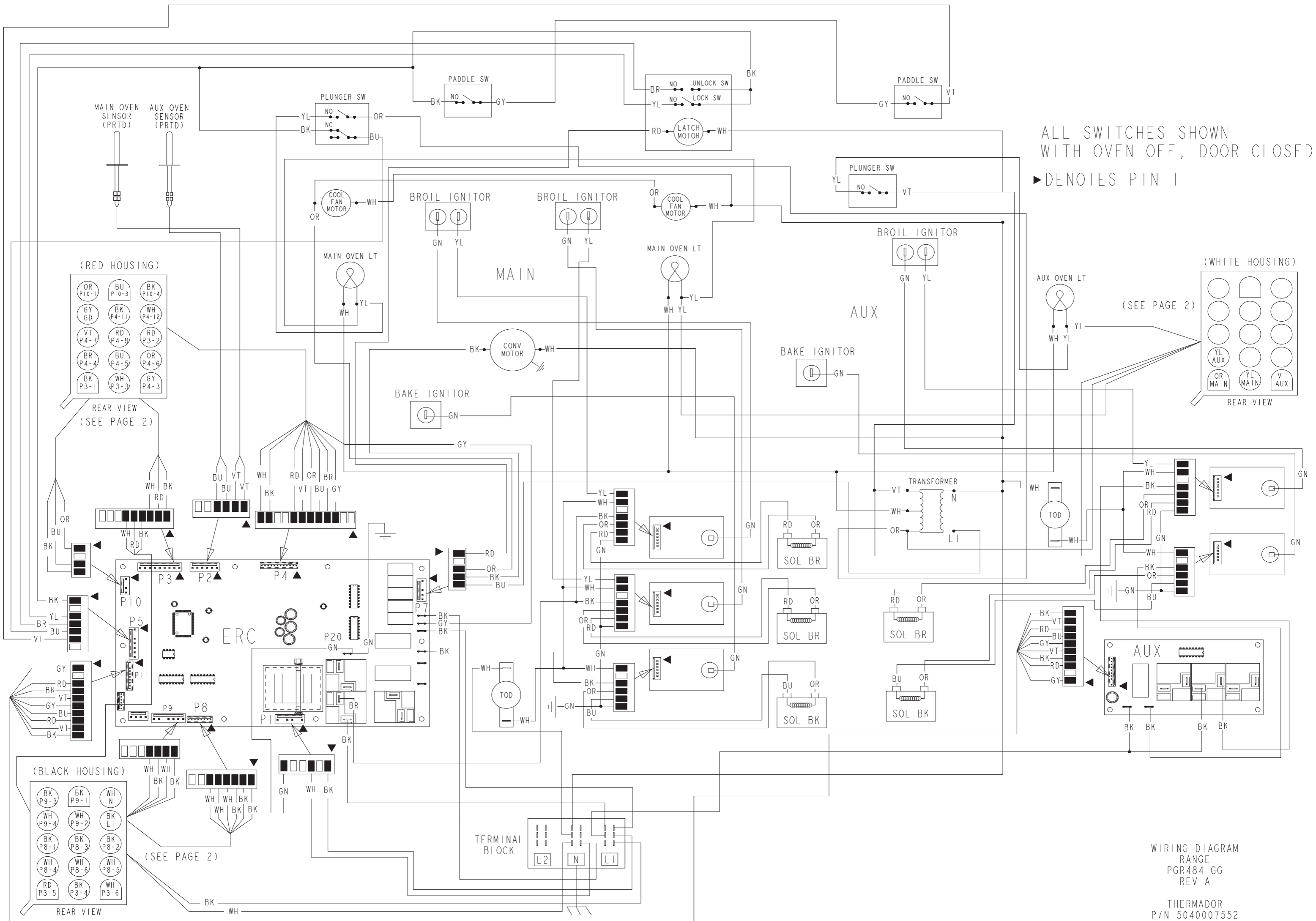


RANGE DIAGRAM

WIRING DIAGRAM
 RANGE
 PGR366
 REV A
 THERMADOR
 P/N 5040003809



WIRING DIAGRAM
 RANGE COOKTOP
 PGR484 GG
 REV A



ALL SWITCHES SHOWN WITH OVEN OFF, DOOR CLOSED
 ▶ DENOTES PIN 1

(SEE PAGE 2)

(RED HOUSING)

(WHITE HOUSING)

REAR VIEW (SEE PAGE 2)

REAR VIEW

ERC

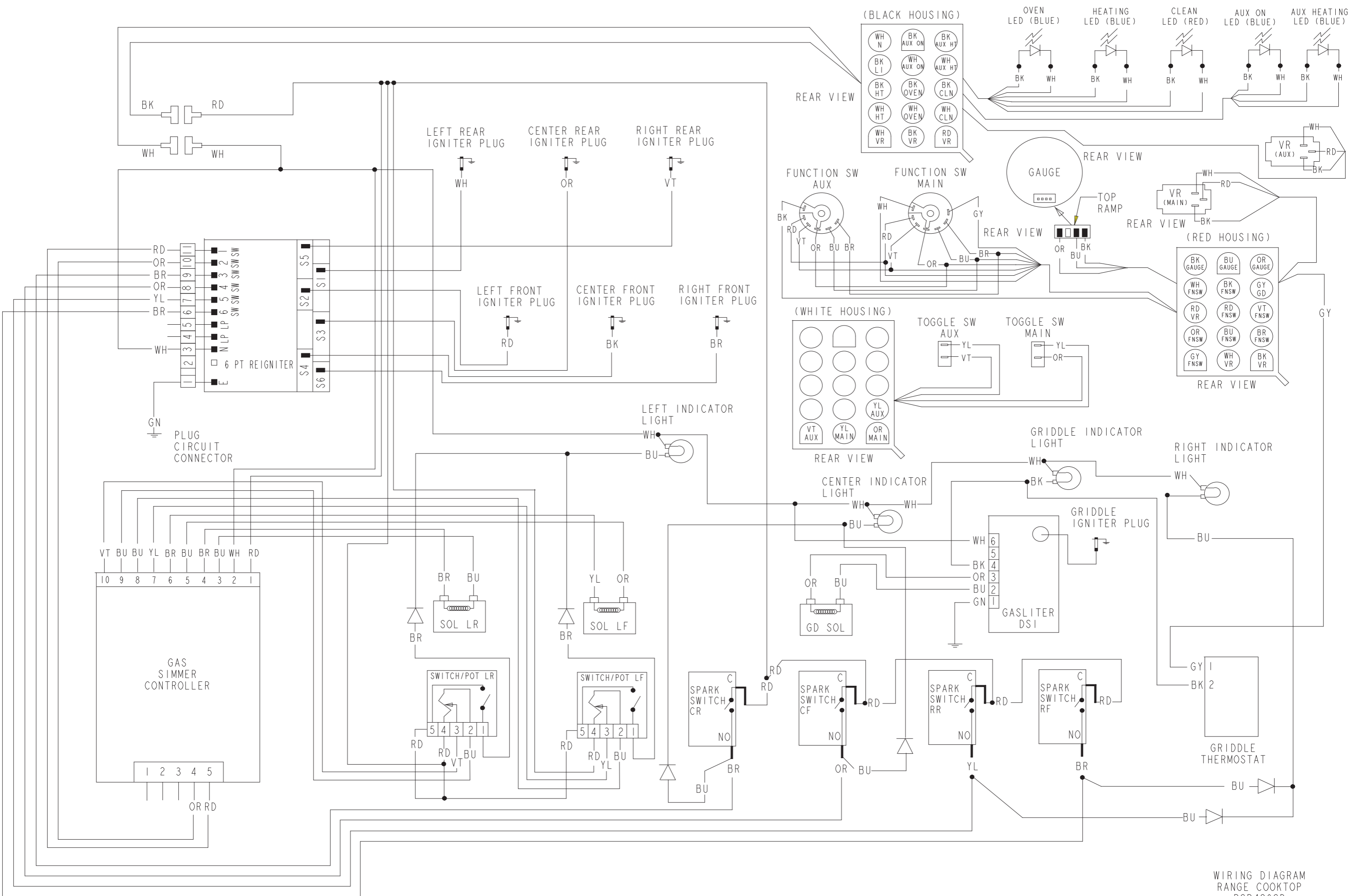
TERMINAL BLOCK

WIRING DIAGRAM
 RANGE
 PGR484 GG
 REV A

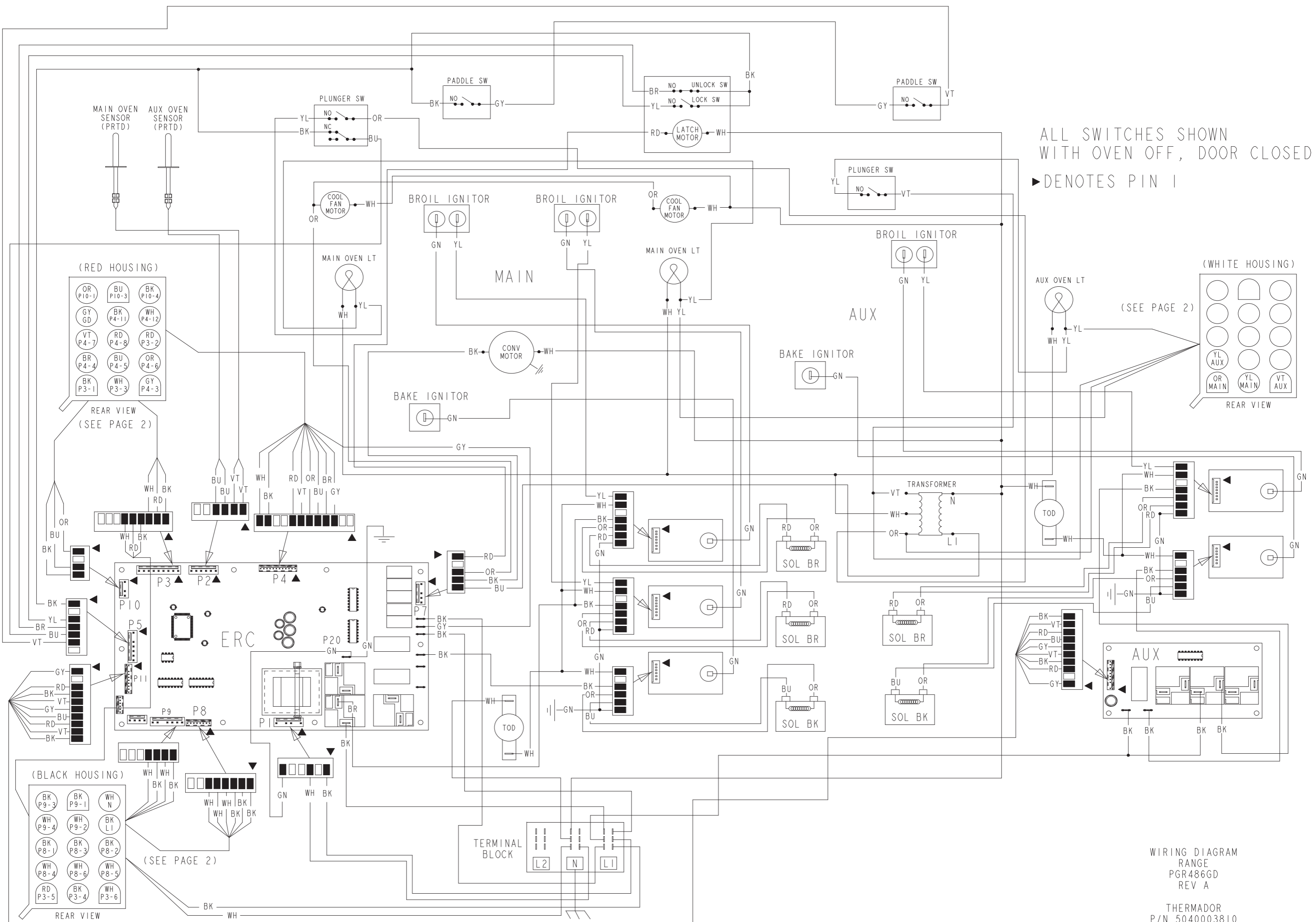
THERMADOR
 P/N 5040007552

(SEE PAGE 2)

REAR VIEW

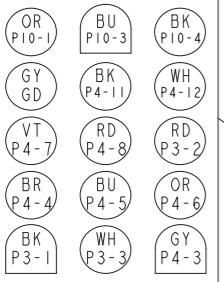


WIRING DIAGRAM
 RANGE COOKTOP
 PGR486GD
 REV A



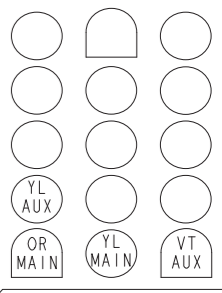
ALL SWITCHES SHOWN
WITH OVEN OFF, DOOR CLOSED
▶ DENOTES PIN 1

(RED HOUSING)



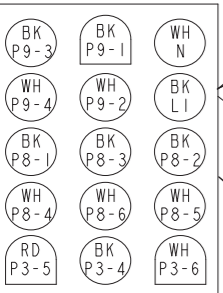
REAR VIEW
(SEE PAGE 2)

(WHITE HOUSING)



REAR VIEW

(BLACK HOUSING)



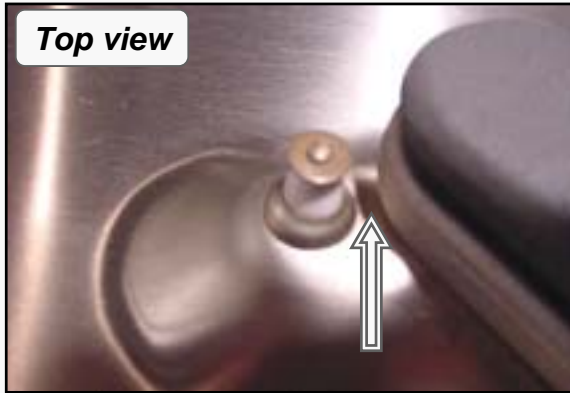
(SEE PAGE 2)

REAR VIEW

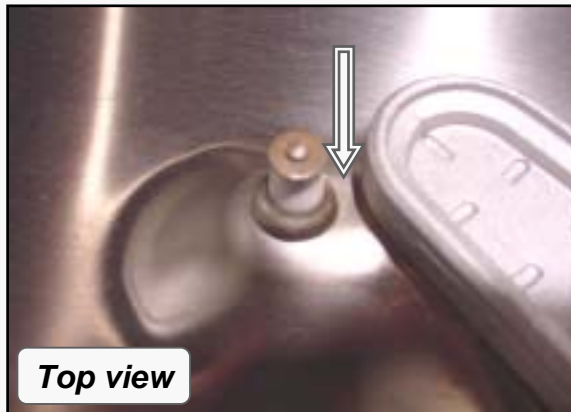
WIRING DIAGRAM
RANGE
PGR486GD
REV A

THERMADOR
P/N 5040003810

Improving Star Burner Ignition (1)



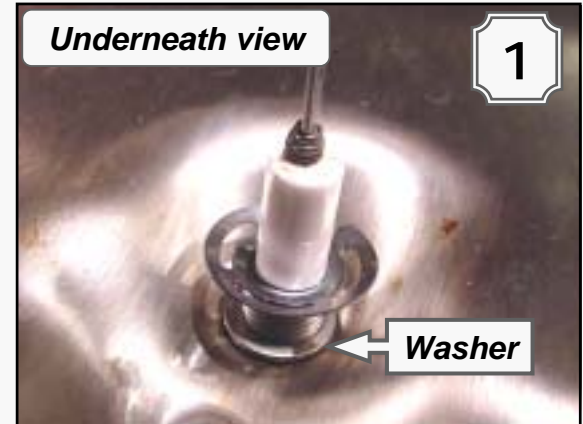
Note gap between star burner base & igniter -- can cause problems re-igniting during XLO (since gas pressures are lower).



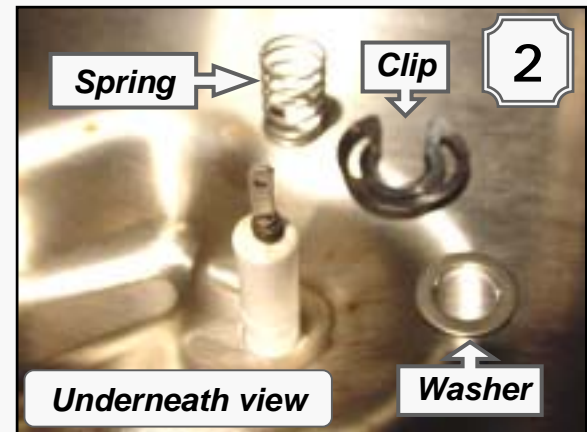
Occasional gaps between igniters and star burners can cause re-ignition problems (more often with XLO). Igniters can be too low and too far away from burners.

Fixing this includes:

- moving star burners next to igniters*
- raising igniters by moving washer from underneath spill tray to top of spill skirt under igniter skirt*



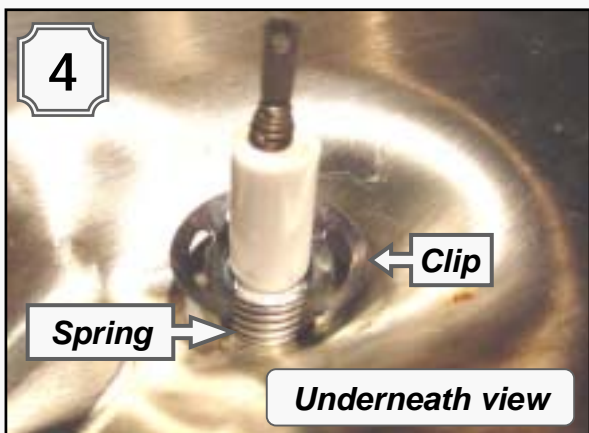
Remove burner bases & trim strips, disconnect wires from igniters and turn spill tray over. Note washer on underside of spill tray.



Remove retaining clip, spring & washer



Place washer under igniter cap.

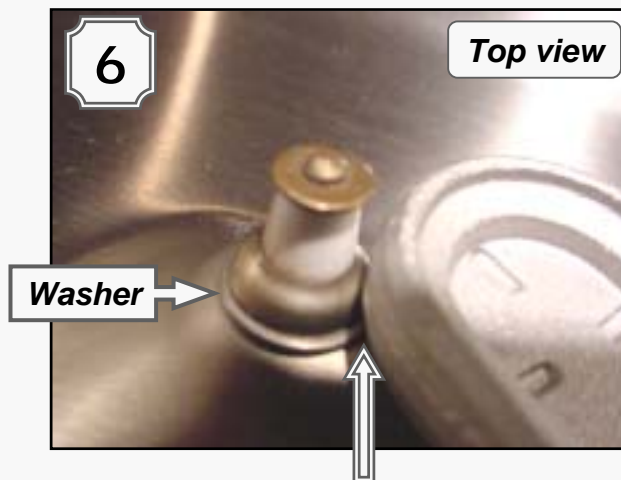


Reassemble igniter by:

- **Inserting igniter through hole from top side of spill tray.**
- **Reattaching spring and securing igniter with clip from underside of spill tray.**

5

Reassemble spill tray and re-connect spark wires.

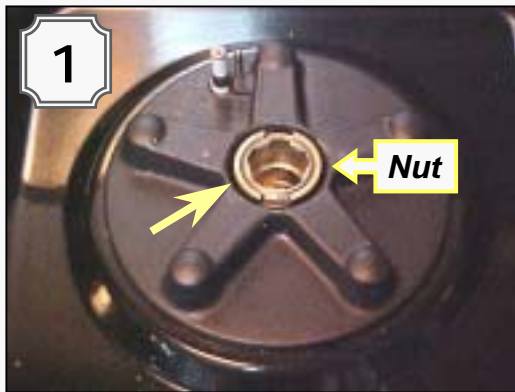


Washer now boosts the igniter higher so its closer to the burner. Reassemble burner base so the finger of the burner base butts up against the igniter base (skirt).

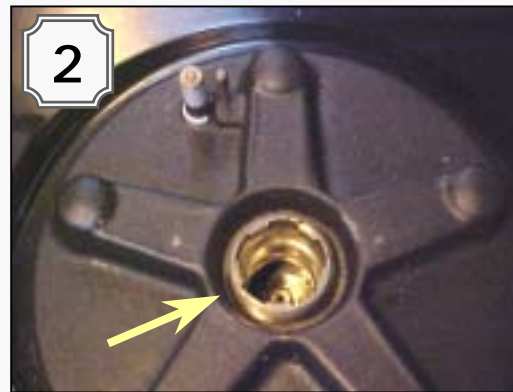
NOTE: This applies to PSC Pro gas cooktops and PDR Pro gas ranges

Improving Star Burner Ignition (2)

Intermittent or non-existent igniter sparking may be caused by poor burner base grounding. The nut holding the venturi to the burner base grounds the burner base to the stove through the brass venturi connected to the chassis. The burner base coating may insulate the base, preventing the nut from grounding the base. Removing the burner base coating (around the nut) will provide adequate burner base grounding.



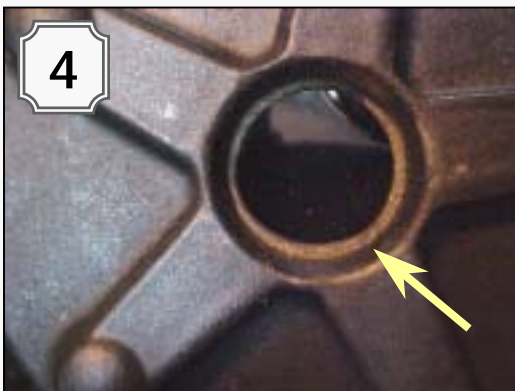
Remove nut



Lift base from top



Using emery cloth, sand mating area to remove coating



Clean mating surface down to bare metal



Check nut -- sand if necessary to insure a good ground

Once all mating surfaces are cleaned to bare metal, reassemble base to top and tighten nut.

NOTE: This applies to PSC Pro gas cooktops and PDR Pro gas ranges.