24” FREE-STANDING GAS RANGE WITH ELECTRIC IGNITION

IMPORTANT SAFETY NOTICE

THIS INFORMATION IS INTENDED FOR USE BY INDIVIDUALS POSSESSING ADEQUATE BACKGROUNDS OF ELECTRICAL, ELECTRONIC AND MECHANICAL EXPERIENCE. ANY ATTEMPT TO REPAIR A MAJOR APPLIANCE MAY RESULT IN PERSONAL INJURY AND PROPERTY DAMAGE. THE MANUFACTURER OR SELLER CANNOT BE RESPONSIBLE FOR THE INTERPRETATION OF THIS INFORMATION, NOR CAN IT ASSUME ANY LIABILITY IN CONNECTION WITH ITS USE.

DISCONNECT POWER BEFORE SERVICING
IMPORTANT: RECONNECT ALL GROUNDING DEVICES.

ALL PARTS OF THIS APPLIANCE CAPABLE OF CONDUCTING ELECTRICAL CURRENT ARE GROUNDED. IF GROUNDING WIRES, SCREWS, STRAPS, CLIPS, NUTS, OR WASHERS USED TO COMPLETE A PATH TO GROUND ARE REMOVED FOR SERVICE, THEY MUST BE RETURNED TO THEIR ORIGINAL POSITION AND PROPERLY FASTEDED.

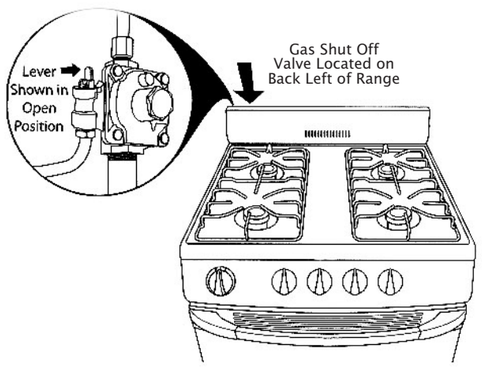
BURNER OUTPUT RATINGS: BTU/HR		
Burner	BTU Rate	Orifice Size
Surface	9,100	#54 (0.057”)
Oven	13,000	#51 (0.068”)

LP (PROPANE) GAS, 10” WCP		
Burner	BTU Rate	Orifice Size
Surface	8,000	#66 (0.033”)
Oven	13,000	#58 (0.042”)

GAS SUPPLY SHUT-OFF

The range itself is not equipped with its own shut-off valve.
If properly installed, a shut-off valve will be located behind the range near the middle (of the range).

There is a shut-off valve located on the appliance pressure regulator. This valve will shut-off gas to the oven only and does not affect top burners.



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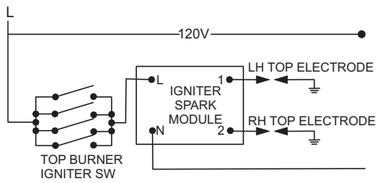
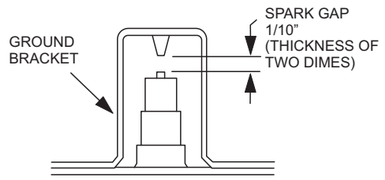
TOP BURNERS

2 + 0 Spark Ignition System
Spark Circuit Explanation - The top burners are ignited by a spark ignition system. The system consists of a spark module, two spark electrodes and four spark switches. The four spark switches are mounted to the four top burner valves.
When a top burner valve is turned to the lite position, the spark switch on that valve closes, completing a 120 volt circuit to the primary of the spark module. With this circuit compelted, the secondary of the spark module generates an output of approximately 15,000 VDC. The 15,000 VDC output is released from the module to the spark electrodes in pulses at the rate of 2 pulses per second. Each pulse results in a spark jumping across a 1/10 inch gap from the tip of the electrodes to ground. Sparking will occur at both electrodes regardless of which valve is in the lite position.

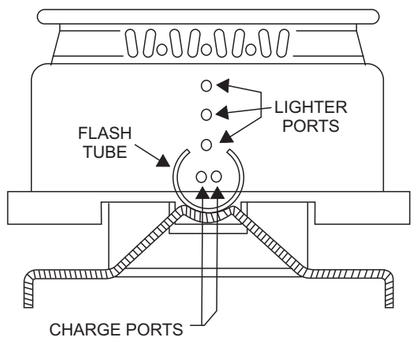


TOP BURNER SPARK IGNITION CIRCUIT

SPARK ELECTRODE



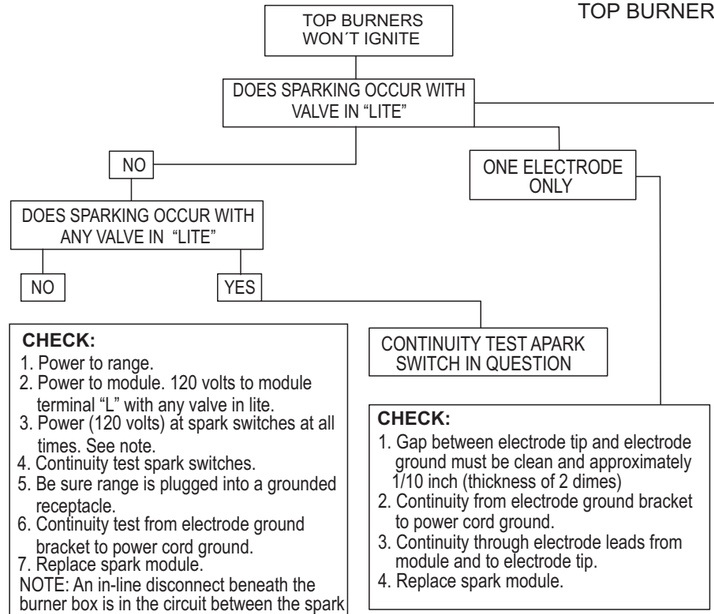
Cleaning the Ports - Charge ports and lighter ports can become clogged with steel wool particles or debris from spillovers.
The ports can be cleaned using a strand of wire or similar object DO NOT ENLARGE THE PORTS when cleaning.



SPARK MODULE LOCATIONS

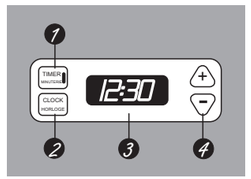
Note: The spark module is mounted with two tabs which snap into corresponding slots. To remove the module, use a flat blade screw driver to bend the tabs toward the module body and free the tab from the slot.

TOP BURNER PROBLEM SOLVING CHART



HIGH ALTITUDE OUTPUT RATINGS: BTU / HR			
NATURAL GAS - 4” W.C.P.			
	High Altitude Rate	Orifice Size	Prod. Service Number
@ 3,000 FT	8050	0.054”	WB28K10304
@ 6,000 FT	7100	0.050”	WB28K10305

HIGH ALTITUDE OUTPUT RATINGS: BTU / HR			
LP (Propane) GAS - 10” W.C.P.			
	High Altitude Rate	Orifice Size	Prod. Service Number
@ 3,000 FT	7050	0.031”	WB28K0046
@ 6,000 FT	6250	0.029”	WB28K10306



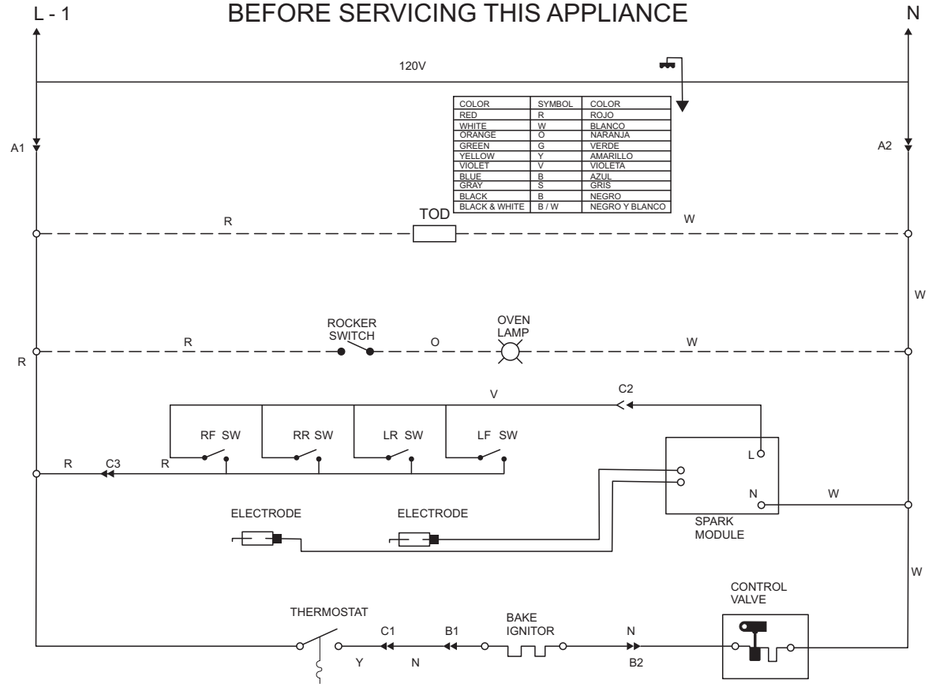
Appearance may vary.

Clock and Timer *(on some models)*

1. *TIMER Pad* Touch this pad to select the timer feature.
2. *CLOCK Pad* Touch this pad before setting the clock.
3. *Display* Shows the time of day and the time set for the timer, cook time or start time.
4. *SET +/- Pads* These pads allow you to set the clock and timer.

SCHEMATIC DIAGRAM

WARNING
POWER MUST BE DISCONNECTED BEFORE SERVICING THIS APPLIANCE



NOTE: – – – THIS CIRCUIT IS NOT FOR ALL MODELS

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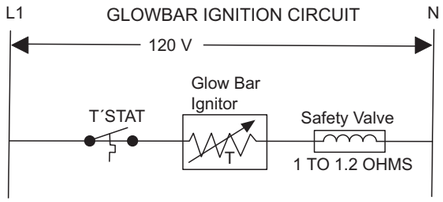
OVEN BURNER IGNITION SYSTEM

The oven burner is ignited by a glowbar ignition system. The igniter is a “Norton” style glowbar. The ignition circuit consists of the thermostat, the igniter and the oven safety valve (gas valve). The three components are wired in series.

THE MOST IMPORTANT POINTS TO KNOW ABOUT THE IGNITION SYSTEM ARE:

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

From a cold start, the igniter needs 30-60 seconds, with voltage applied, to reduce its electrical resistance enough to provide a minimun of 2.9 amps of current flow in the series circuit. This is the required current flow needed for the safety valve to open to supply gas to the burner. The glowbar should provide a steady current flow of between 3.2 and 3.6 amps flowing in the circuit. at that point the igniter temperature is between 1800 to 2500 degrees F. The igniter will remain energized at the times during burner operation. If the igniter glows red but does not draw at least 2.9 amps the fault is usually with the igniter not the valve. Always check the oven shut-pff valve fot a “No oven” condition.



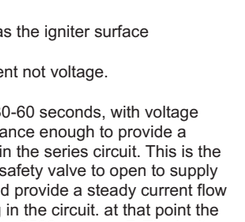
IMPORTANT: Do not place 120 volts directly accross the safety valve when testing. The resulting current through the valve would destroy the internal heater circuit.

NOTE: An open gas valve heater circuit usually indicates excessive current flow in the ignition circuit. Replacement of the igniter and valve is recommended.

OVEN BURNER ADJUSTMENTS

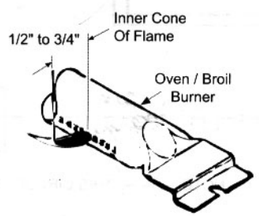
The oven burner is equipped with an air shutter and a universal (NAT or LP) orifice hood and orifice needle.

1. Air Shutter Adjustment
   A. Remove oven door, over bottom, broiler drawer and oven valve shield.
   B. Remove flame spreader from top of burner.
   C. Turn thermostat to any BAKE temperature, observe fleme: Soft, yellow flames indicate too little primary air - open air shutter more. If condition cannot be corrected with air shutter wide open, see Flame Size. Harsh, blowing flames indicate too much air. Reduce air shutter opening.



NOTE: Turn the oven off before attempting to adjust the air shutter. Turn the burner on after shutter adjustment to check flame size and quality. Repeat adjustment as necessary.

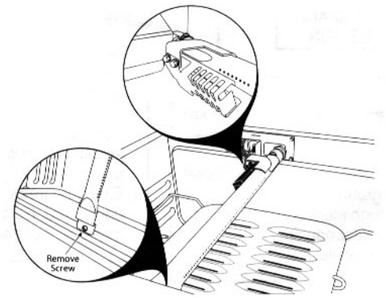
2. Flame size - The inner burner flame should be between ½ to 3/4 inches in length with little or no yellow tipping (observed with flame spreader removed)



A. Flame Size Reduction.- If air shutter adjustments fail to provide proper flame length or flame characteristics, the gas flow to the burner can be reduced (no Natural Gas installations only) by turning the orifice hood slightly in teb LP direction. For best results, remove the flame spreader and observe the flame while turning the hood.

BAKE BURNER REMOVAL

- Remove oven door and broiler pan and rack, oven bottom and oven racks (Figure B)
- Remove the 2 screws that hold the safety valve cover.
- Remove the screw at the front of the burner (see illustration below).
- Disconnect the two pin connector for the igniter wires.
- Remove the bake burner.

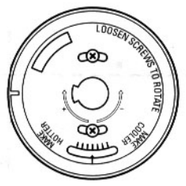


OVEN TEMPERATURE CALIBRATION

NOTE: Calibration adjustments are made by moving the knob skirt. DO NOT make any adjustments to the thermostat itself.
IMPORTANT: Before making any temperature adjustments, be sure the oven thermostat capillary bulb is properly positioned in the bulb mounting clips. If capillarybulb is out of position and contacts oven wall, calibration will be incorrect. An usually dirty capillary bulb will also affect thermostat calibration.

TO ADJUST KNOB:

(As covered in the Owner´s Manual)

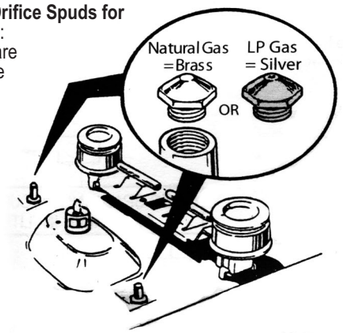


1. Loosen screws.
2. Hold knob skirt and move knob so that the top screws (nearest arrow) moves to HOTTER to increase temperature or COOLER to decrease temperature, each notch or “click” is 10 degrees change. Maximum change from factory setting is +/- 50 degrees.

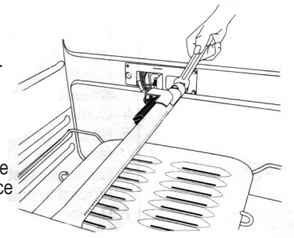
CONVERSION TO LP (PROPANE) GAS:

Convert the appliance pressure regulator. Unscrew the plastic protected hex-nut cap. Remove protective plastic cap off the threaded matal cap. Pull the plastic washer off threads on the other side of the metal cap. Push the cap onto the end of the metal cap displaying the type of gas you are reconverting to. Press attached plastic washer onto the threads on the other side of the metal cap. Screw the Hex-nut cat back into the regulator. Don´t overtighten.

Install the LP Orifice Spuds for
The top Burners:
Four LP spuds are supplied with the range and are mounted in a bracket next to the regulator.



Convert the Oven Burner Orifice to LP:
Using a ½”open end wrench, turn the orifice clockwise until the orifice tightens as damage to the orifice pin below the orifice hood may result.



Light the Oven Burner and Adjust the Air Shutter as Needed (as covered under the “Oven Burner Adjustments” section of this manual).

IGNITER (GLOWBAR) REPLACEMENT

The igniter/ Glowbar and its protective cage are one assembly on this Norton style igniter. The round Carborondum igniter CANNOT be substituted for the rectangular Norton igniter.

- Remove the burner from the oven.
- See “Bake Burner Removal” in this manual.
- Remove the 1/4” hex head screws securing the igniter to the burner.
- Unplug the 2 pin harness and remove the old igniter.
- Uninstall the glow bar deflector from the old igniter and install in on the new igniter.
- Install the new igniter. If igniter scres appear to be short you are installing the glowbar incorrectly. Rotate the igniter and re-install.
- Re-install 1/4” hex head screws to secure igniter.
- Re-install the burner.

SWITCH REMOVAL

- Remove the cooktop from the range.
- Remove the manifold panel.
- For any switch, rotate the square switch 15-20 degrees counter-clockwise and pull the switch off the manifold.

BROILER DOOR REMOVAL

- Open broiler drawer and insert pin into inge (Figure A). Use a Phillips head screwdriver to remove the 2 screws on the broiler drawer. Slide the drawer off the honge. Do the same for the other hinge.

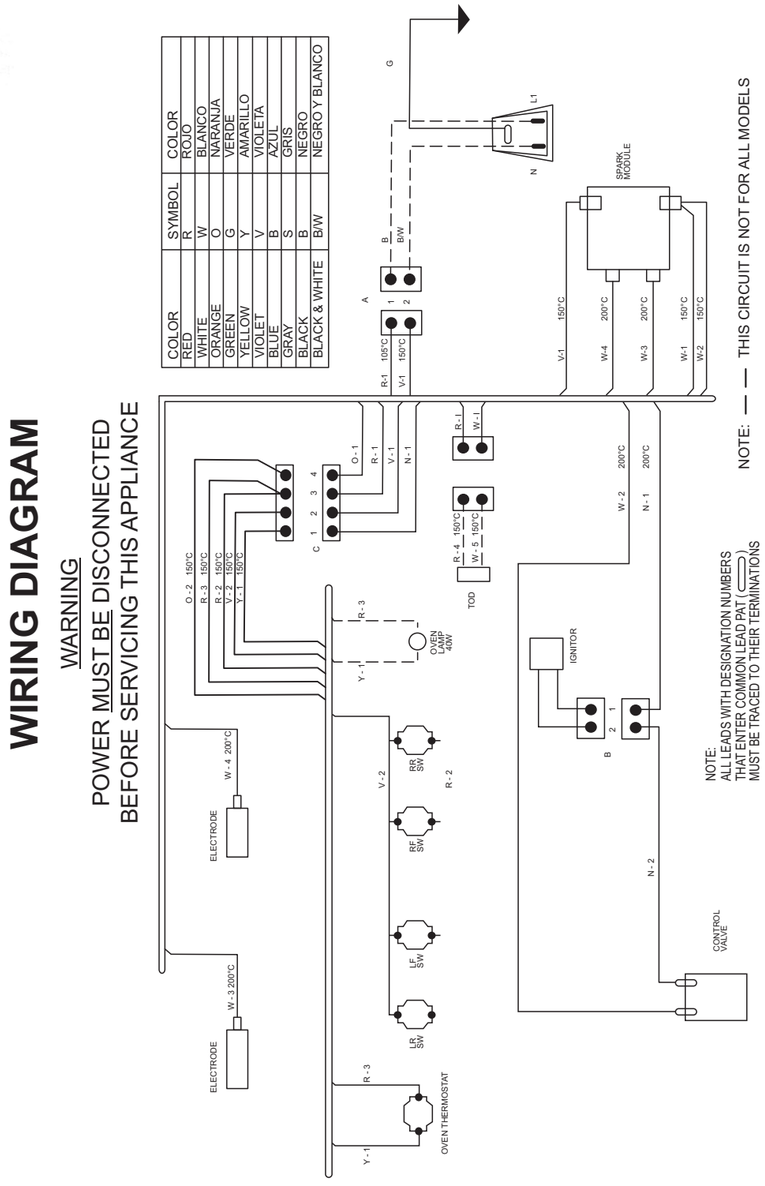
SURFACE: UNIT VALVE REMOVAL

1. Remove the switch from the valve (see switch removal section).
2. For the desired valve, remove the hex screw on manifold with a 1/4” wrench.
3. Lift burners off the orifices and find the orifice to the desired valve.
4. Remove hex nut from orifice holder with a 3/4 socket wrench.
5. Push orifice down through burner nox and remove the tube assembly from the range.
6. Use a ½”wrench to remove brass nut from valve and remove the valve.

WIRING DIAGRAM

WARNING
POWER MUST BE DISCONNECTED
BEFORE SERVICING THIS APPLIANCE

COLOR	SYMBOL	COLOR
RED	R	ROJO
WHITE	W	BLANCO
ORANGE	O	NARANJA
GREEN	G	VERDE
YELLOW	Y	AMARILLO
VIOLET	V	VIOLETA
BLUE	B	AZUL
GRAY	S	GRIS
BLACK	B	NEGRO
BLACK & WHITE	B/W	NEGRO Y BLANCO



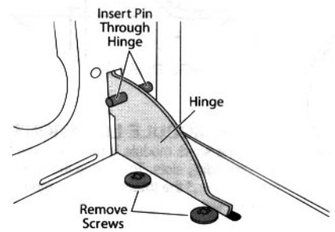


Figure A

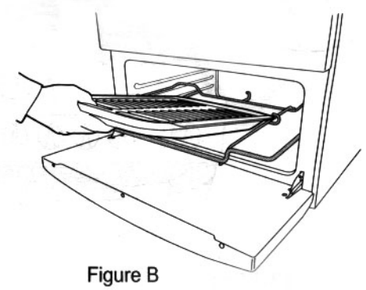


Figure B