

Service Manual

This manual is to be used by qualified appliance technicians only. Viking does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

D3 Series Electric Cooktop

This Base Manual covers general and specific information including, but not limited to the following models:

RDECU2065BSB

RDECU2665BSB

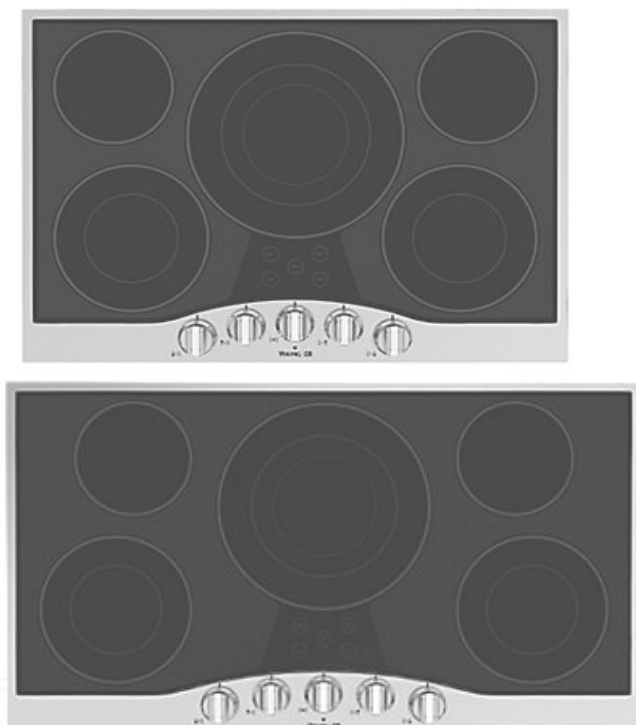


Table of Contents



Important Information	3
Safety Information.....	3
Warnings	4
Electrical Requirements	4
Tip Over Hazard.....	4
General Information.....	5
RDECU2065BSB 30" Cooktop	6
RDECU2665BSB 36" Cooktop	6
Disassembly	7
Smooth Top Removal.....	7
Infinite Switch Removal.....	8
Element Removal.....	8
Terminal board Removal	9
Troubleshooting.....	10
Single Infinite Switch Connections	10
Single Infinite Switch Voltage Measurements	11
Dual Infinite Switch Connections	12
Dual Infinite Switch Voltage Measurements.....	13
Triple Infinite Switch Connections	14
Triple Infinite Switch Voltage Measurements	15
Schematic.....	16
Wiring Diagram.....	17

SAVE THESE INSTRUCTIONS

Important Information

REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL AND TECHNICAL SHEETS BEFORE BEGINNING REPAIRS.

Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime, a product may require service. Products should be serviced only by a qualified service technician that is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments, and the appropriate service manual.

Safety Information

We have provided many important safety messages in this manual and on the appliance. Always read and obey all safety messages. This is the safety alert symbol.



This symbol alerts you to hazards that can kill or hurt you and others. All safety messages will be preceded by the safety alert symbol and the word “DANGER”, “WARNING”, or “CAUTION”. These words mean:

DANGER

IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

WARNING

Hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION

Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

WARNING

To avoid risk of serious injury or death, repairs should not be attempted by unauthorized personnel.

CAUTION

VIKING will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, you must assume responsibility for any personal injury or property damage which may result.

Technical support for authorized servicers:

1-800-914-4799

Address your written correspondence to:

Viking Preferred Service
 1803 HWY 82 West
 Greenwood, MS 38930

Important Information



Warnings

Read and follow all instructions before using this appliance to prevent the potential risk of fire, electric shock, personal injury, or damage to the appliance as a result of improper usage of the appliance. Use appliance only for its intended purpose as described in this manual.

To ensure proper and safe operation: appliance must be properly installed and grounded by a qualified technician. DO NOT attempt to adjust, repair, service, or replace any part of your appliance unless it is specifically recommended in this manual. All other servicing should be referred to a qualified servicer.

Make sure that incoming voltage is the same as unit rating. An electric rating plate specifying voltage, frequency, wattage, amperage, and phase is attached to the product.

Electrical Requirements

Assure that the electrical installation is adequate and in conformance with the National Electrical Code, ANSI/NFPA 70-latest edition or Canadian Electrical Code C22.1-1998 and C22.2 No. 0-M91 (or latest edition), and all local codes and ordinances. The cooktop is provided with a 240 Volt, 3 wire conduit that must be hardwired in accordance with local codes.



WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power prior to any disassembly. Failure to do so can result in death or electrical shock.



WARNING

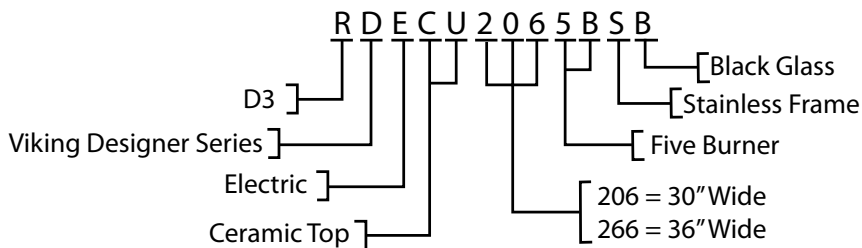
BURN HAZARD

DO NOT touch cooking surface after use. Doing so can result in burns.

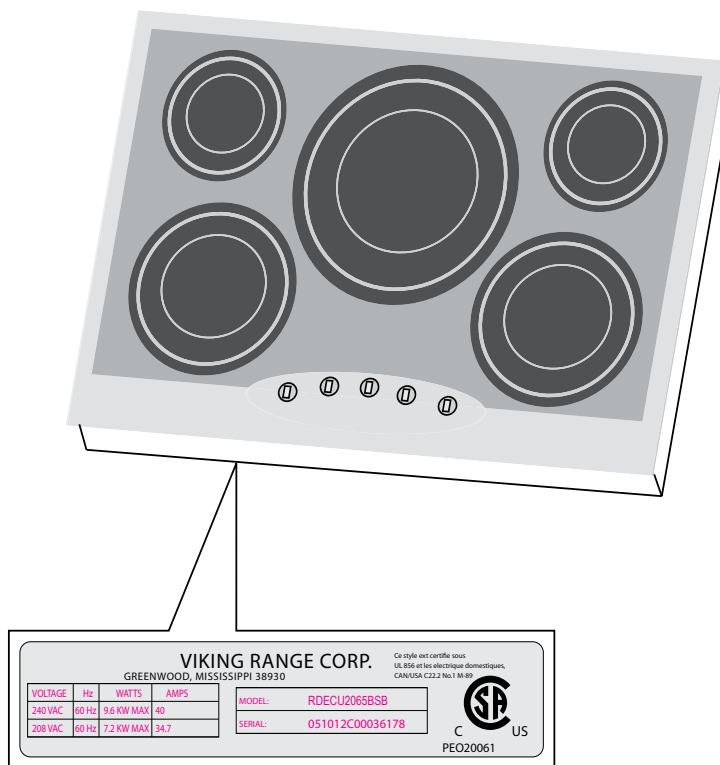
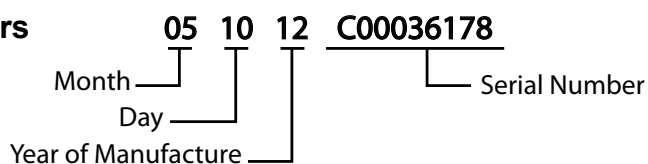
Model–Serial Number Matrix

The serial number and model number for your appliance are located on the identification plate mounted on the underside of the cooktop.

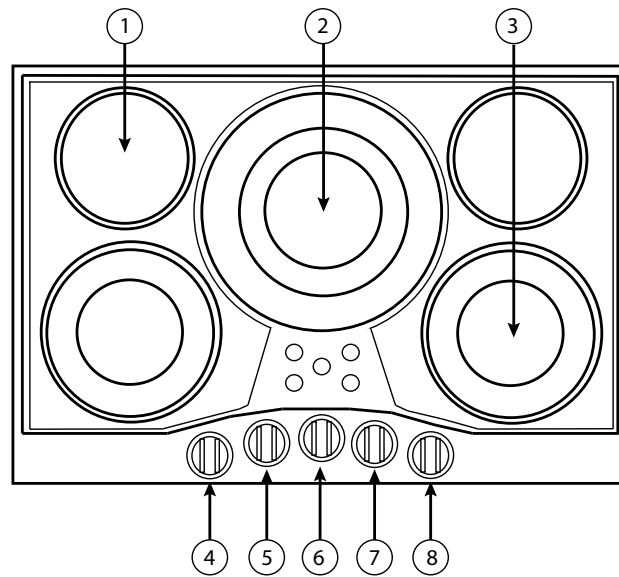
Model Numbers



Serial Numbers

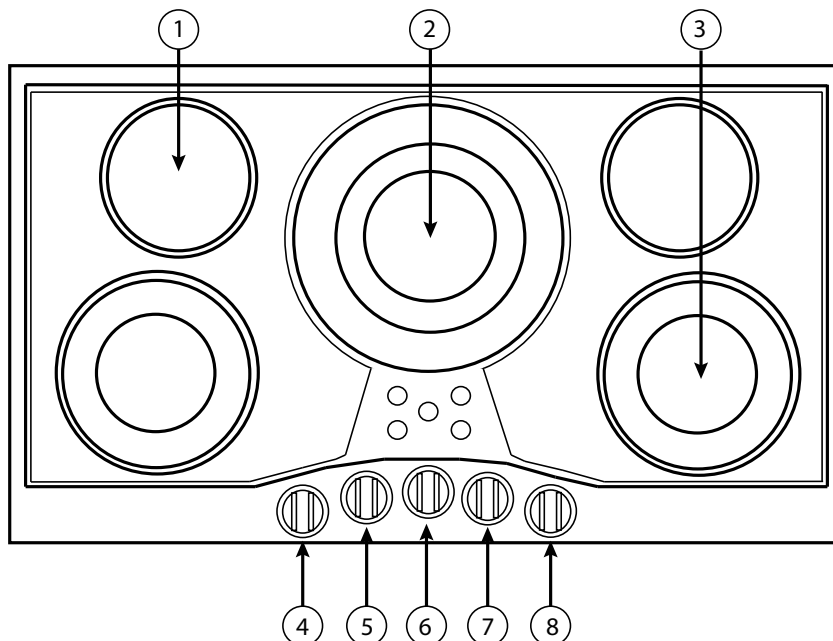


RDECU2065BSB 30" Cooktop



1. 6-1/2" 1200 watt element
2. 11-7/8" 1100/1000/1100 watt element
3. 8-1/2" 2000/1000 watt element
4. Left front element control knob
5. Left rear element control knob
6. Center element control knob
7. Right rear element control knob
8. Right front element control knob

RDECU2665BSB 36" Cooktop



⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Disassembly

Smooth Top Removal

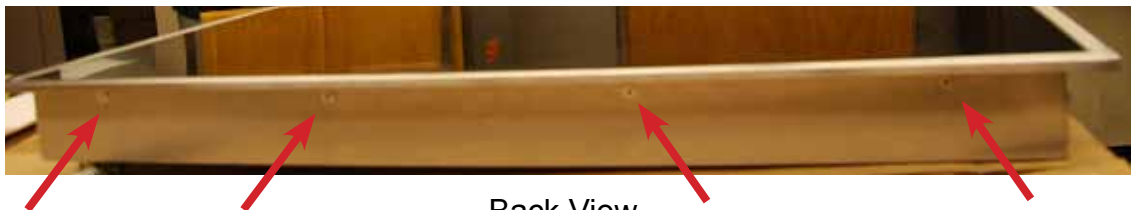
1. Disconnect power to cooktop by turning circuit breaker off to unit.
2. Remove cooktop from countertop, making sure that countertop surface is protected from damage by using blankets or pads.
3. Remove 2 screws from left, 2 screws from right and 4 screws from rear see illustrations below.



Left Side



Right Side



Back View

4. Remove knobs from cooktop
5. Remove screws, 2 per switch, from all burner switches they are under knobs, see photo below.



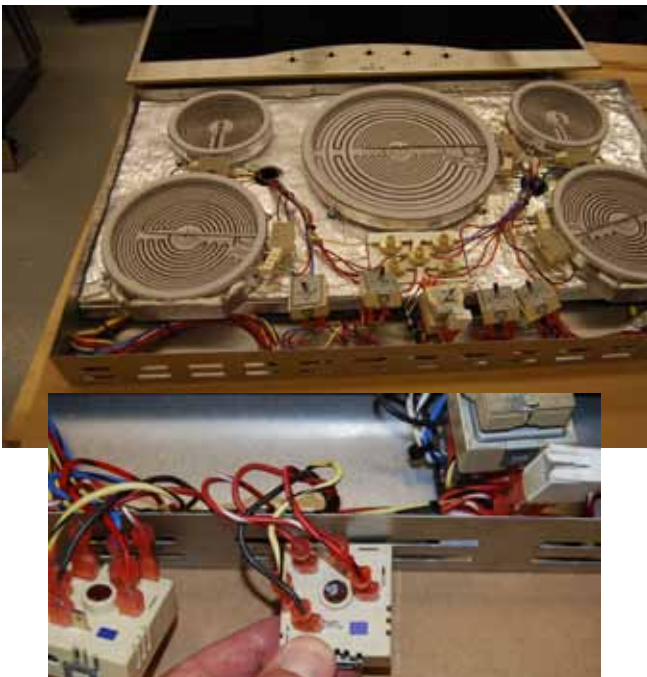
6. Lift front of glass top up and slide power lamp off of lens cover, push all switches down and out of glass top, lift glass top assembly off of unit and place in a secure place to prevent damage to top and customer's property.

WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

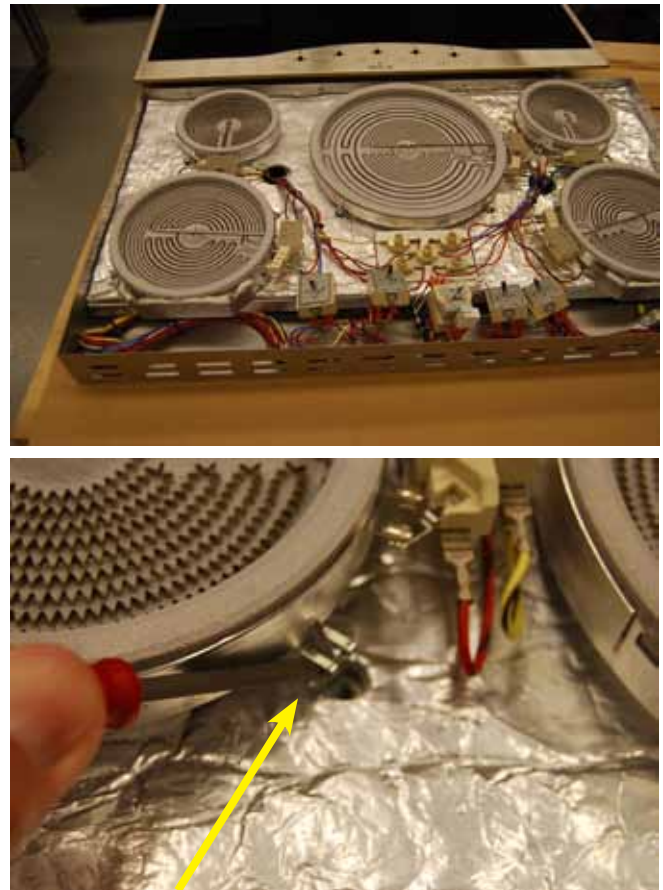
Infinite Switch Removal

1. Remove smooth top assembly, see Page 7.
2. Remove faulty infinite switch wiring one connection at a time. Install each connection on new switch as it is removed from faulty switch.



Element Removal

1. Remove smooth top assembly, see Page 7.
2. Remove faulty element by releasing tabs on bottom of element.
3. Remove one wire at a time, transferring the wires to the new element as they are removed from the faulty element.
4. Verify new element mounting tabs match old element and reattach in the same location in the burner box. Failure to position new element in same alignment as old element could result in poor performance.

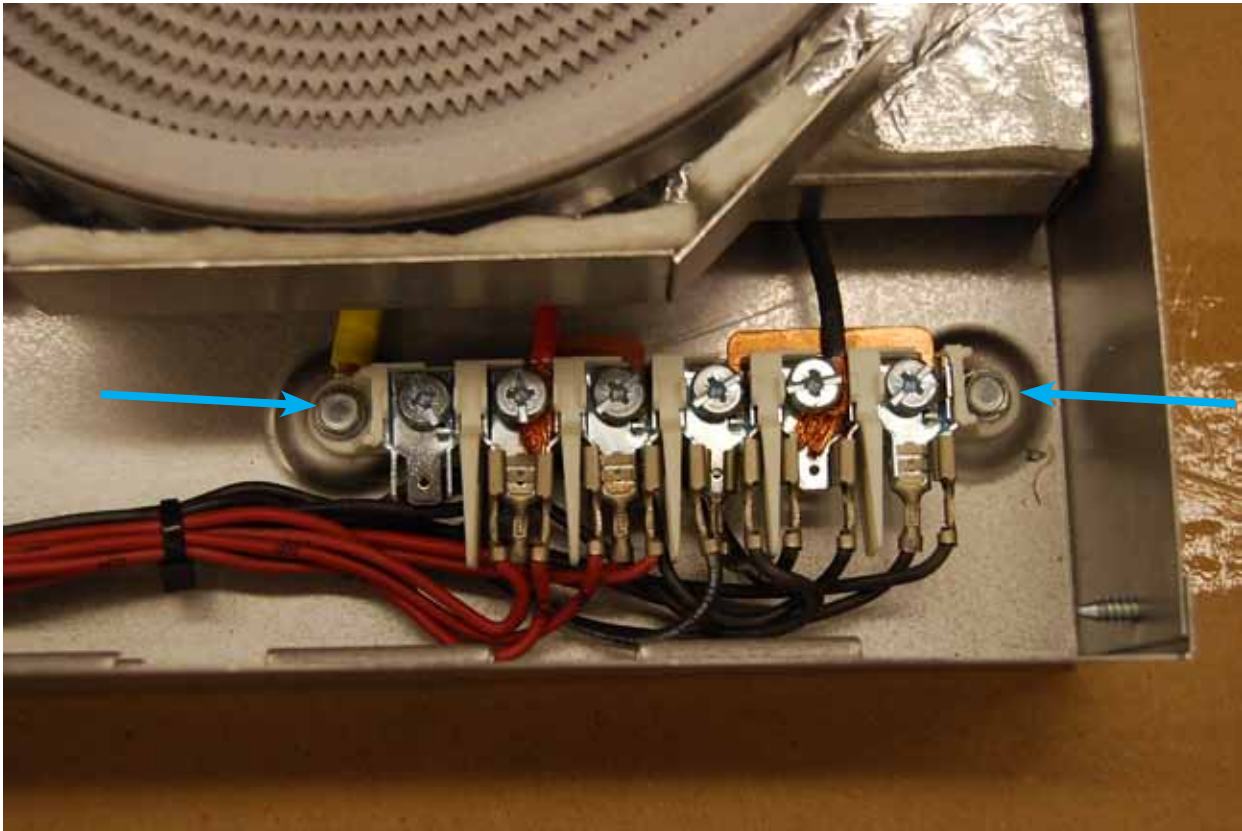


⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Terminal board Removal

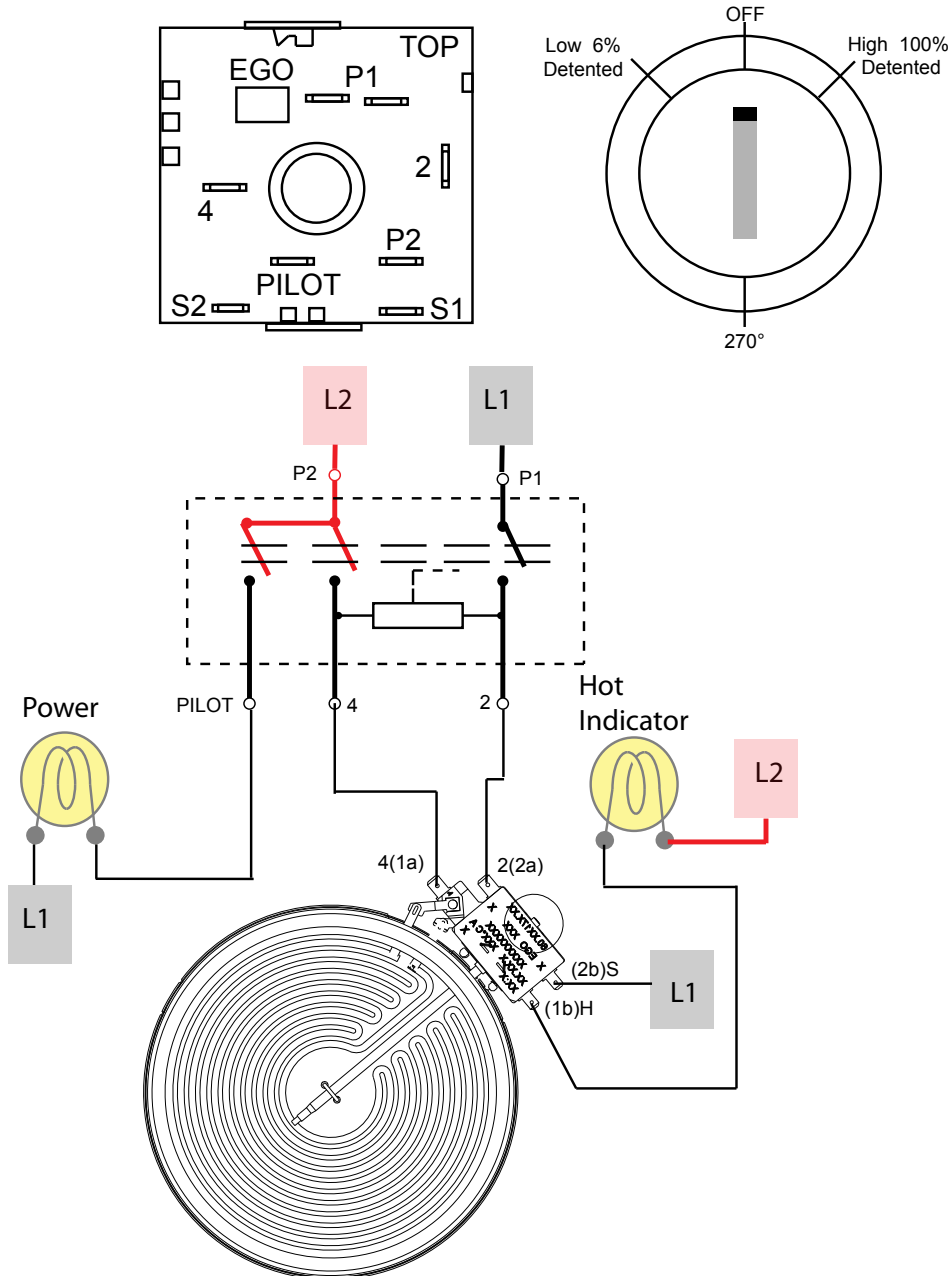
1. Remove smooth top assembly, see Page 7.
2. Remove faulty terminal board by removing the two outside screws shown with arrows below.
3. Remove wires one at a time and transfer to new terminal block as they are removed from the faulty terminal block.
4. Be sure to reattach the ground terminal between the terminal block and the metal burner box. Do not put the terminal on top of the plastic terminal block.



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Single Infinite Switch Connections



**WARNING**

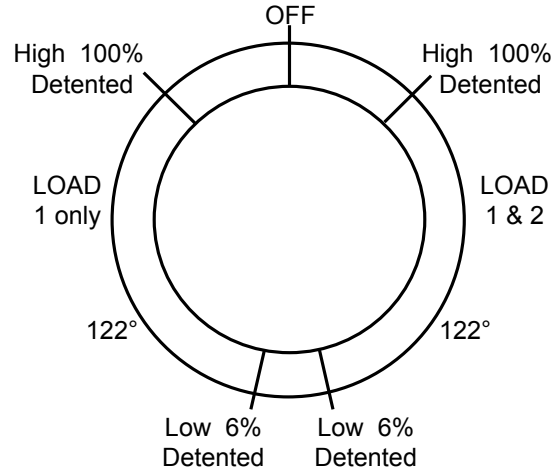
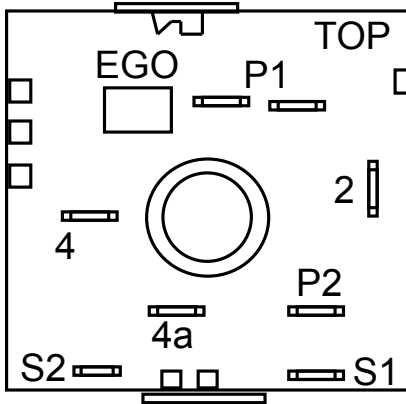
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Single Infinite Switch Voltage Measurements

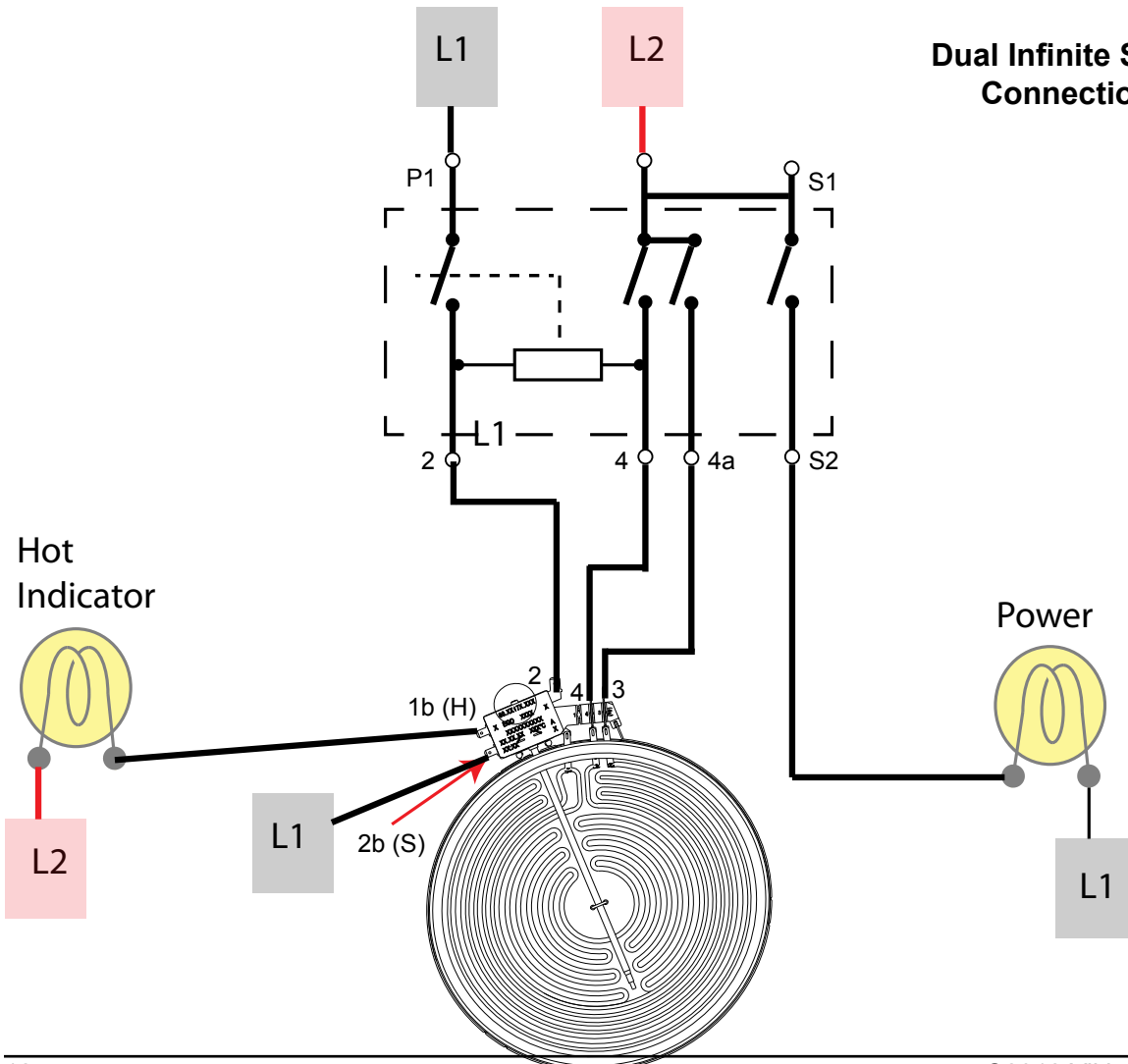
Switch contact	Signal	Voltage	Wire color code
P1	L1	120 VAC to neutral	Black
P2	L2	120 VAC to neutral	Red
P1 to P2	Line voltage input	240 VAC	Black to Red
2	L1 when thermostat closes to element	120 vac when thermostat closes to neutral	Yellow/Black
4	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	Red/Black
Pilot	L2 to Power Light when thermostat closes	120 vac when thermostat closes to neutral	Red/White

⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.



Dual Infinite Switch Connections



**WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

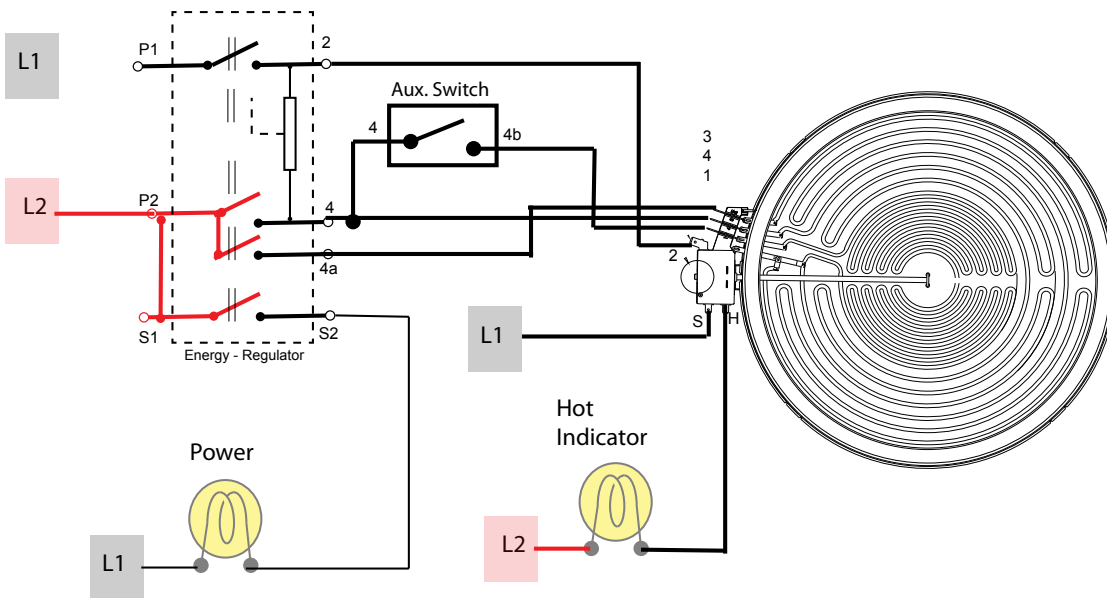
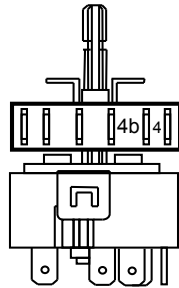
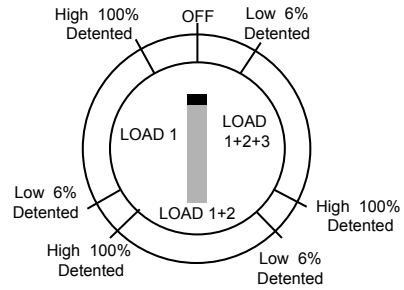
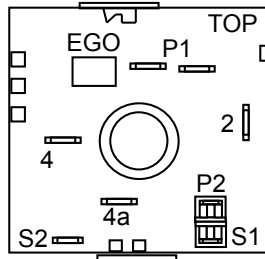
Dual Infinite Switch Voltage Measurements

Switch contact	Signal	Voltage	Wire color code
P1	L1	120 VAC to neutral	Black
P2	L2	120 VAC to neutral	Red
P1 to P2	Line voltage input	240 VAC	Black to Red
2	L1 when thermostat closes to element	120 vac when thermostat closes to neutral	Yellow/Black
4	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	Red/Black
4a	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	Blue/Black
S2	L2 to Power Light when thermostat closes	120 vac when thermostat closes to neutral	Red/White

⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Triple Infinite Switch Connections



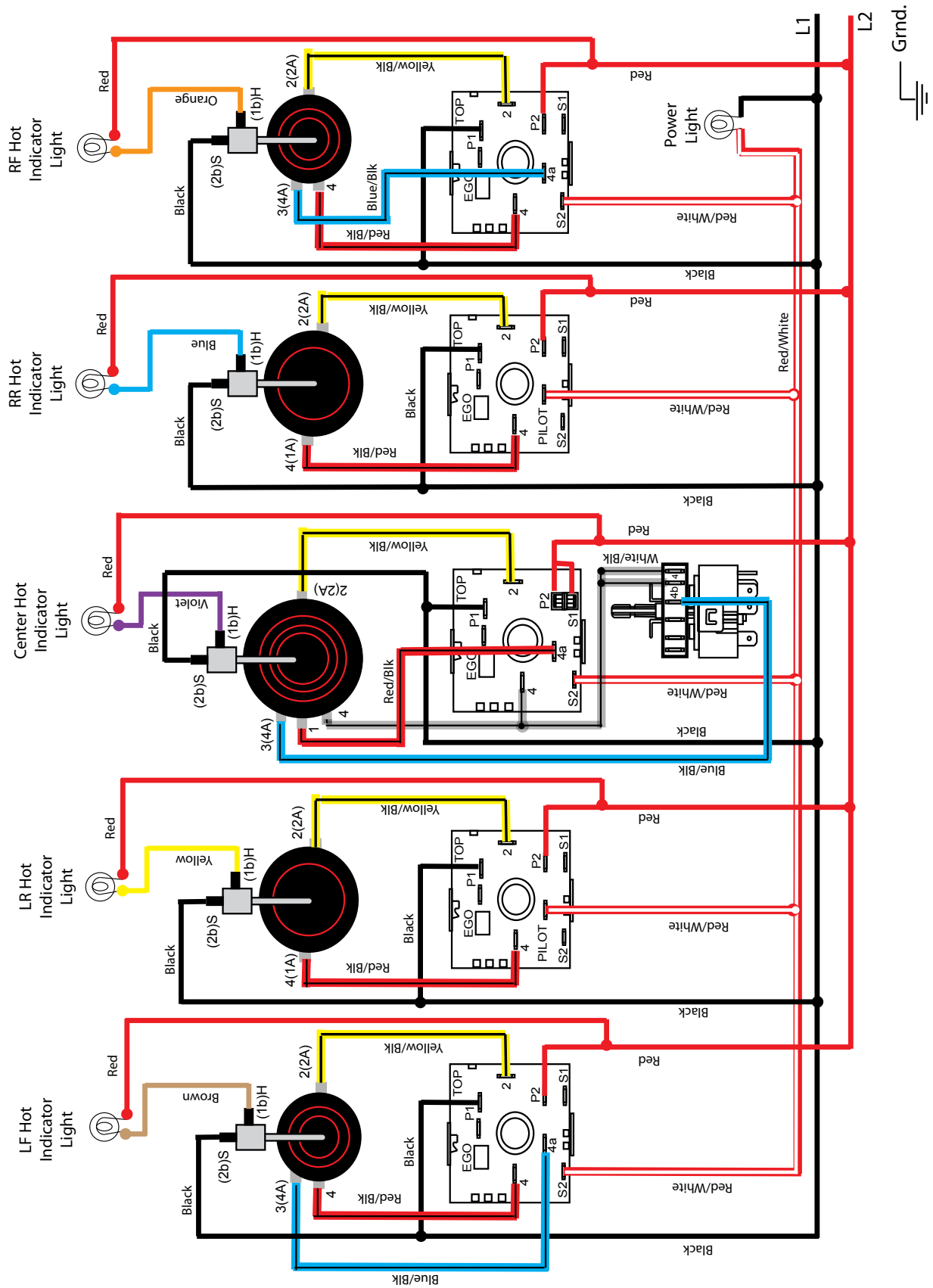


WARNING

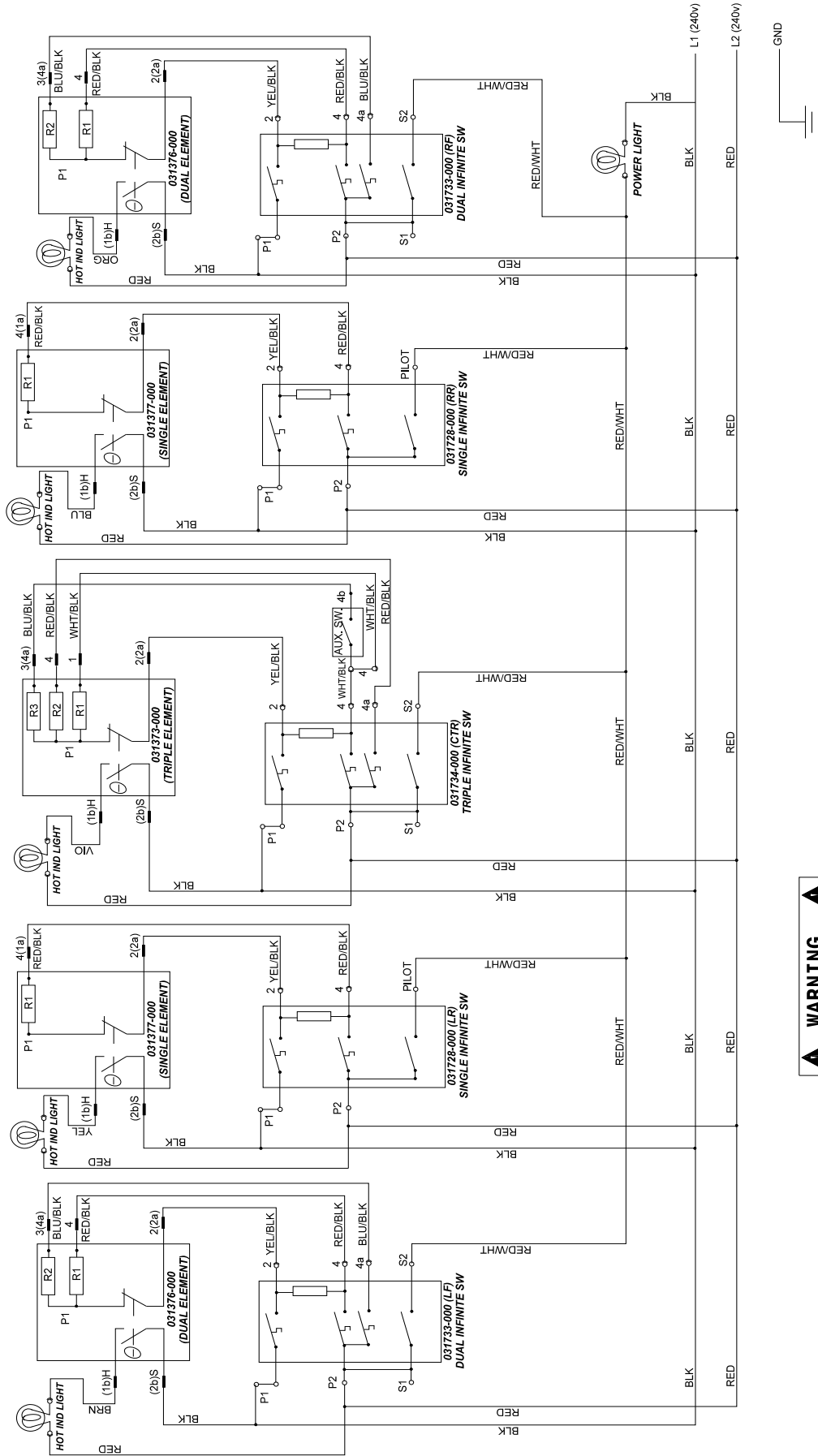
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

Triple Infinite Switch Voltage Measurements

Switch contact	Signal	Voltage	Wire color code
P1	L1	120 VAC to neutral	Black
P2	L2	120 VAC to neutral	Red
P1 to P2	Line voltage input	240 VAC	Black to Red
2	L1 when thermostat closes to element	120 vac when thermostat closes to neutral	Yellow/Black
4	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	White/Black
4a	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	Red/Black
S2	L2 to Power Light when thermostat closes	120 vac when thermostat closes to neutral	Red/White
Aux Switch 4	L2 when thermostat closes to element	120 vac when thermostat closes to neutral	White/Black
Aux Switch 4b	L2 when thermostat Aux Switch closes to element	120 vac when thermostat Aux Switch closes to neutral	Blue/Black



**RDECU2065B/2665B WIRING DIAGRAM
ELECTRIC COOKTOP D3**



WARNING
 NON RESPECT OF POLARITY
 WILL RESULT ELECTRONIC
 THERMOCOUPLE NON
 DETECTION OF FLAME AND
 SHUTDOWN BURNER.
 Respect Polarity