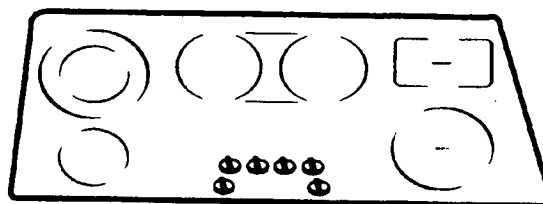
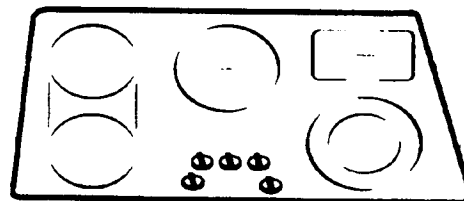
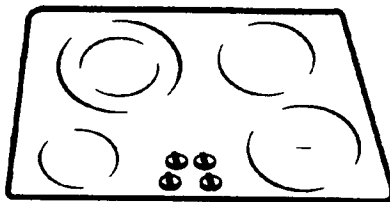
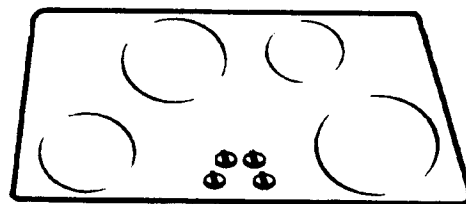


Thermador[®]

THE SCIENCE OF COOKING.[™]

GLASS CERAMIC COOKTOPS

MODELS: CEH30Q, CEH365Q,
CEH456Q, CER30Q, & CER36Q



SERVICE MANUAL

Thermador[®]
CORPORATION

5551 MCFADDEN • HUNTINGTON BEACH, CALIFORNIA 92649 • TELEPHONE: 1(800) 735-4328

Lit. No. 90-57-057

March, 1999

THIS MANUAL CONTAINS INFORMATION THAT IS NECESSARY FOR SERVICING THE THERMADOR® 30" 36" & 45" GLASS CERAMIC COOKTOPS,

MODELS: *CEH30Q, CEH365Q,
CEH456Q, CER30Q, & CER36Q*

THIS MANUAL IS DESIGNED TO BE USED ONLY BY QUALIFIED SERVICE PERSONNEL. THERMADOR RECOMMENDS THAT CUSTOMERS DO NOT SERVICE THEIR OWN UNITS, DUE TO THE COMPLEXITY AND THE RISK OF HIGH-VOLTAGE ELECTRICAL SHOCK.

THE INFORMATION IS ORGANIZED TO HELP THE SERVICER EASILY FIND WHAT IS NEEDED TO REPAIR THE UNIT.

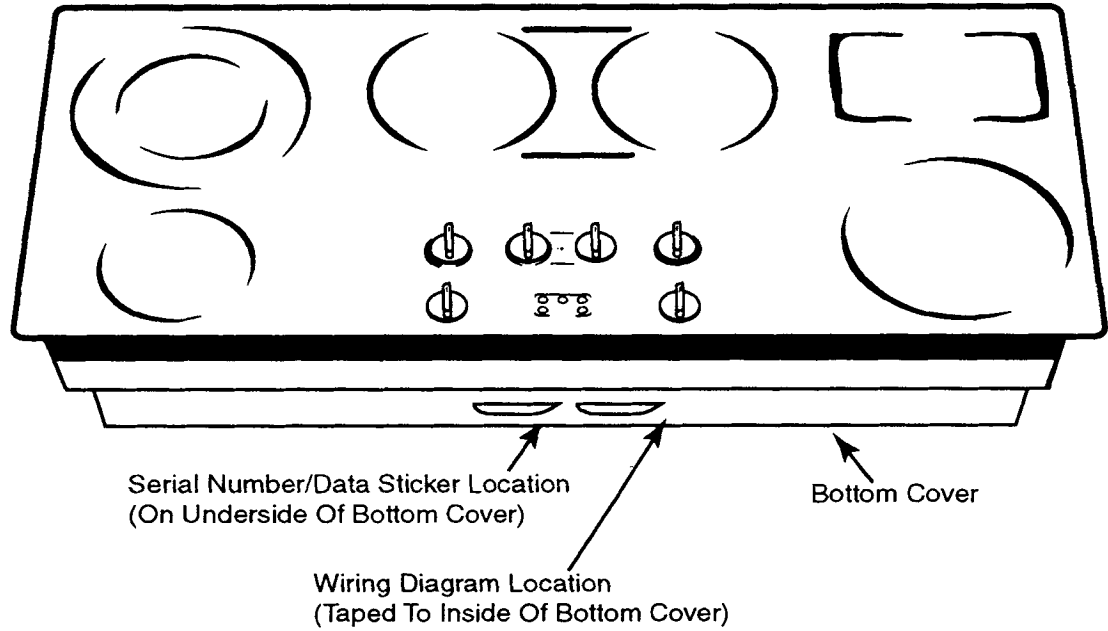
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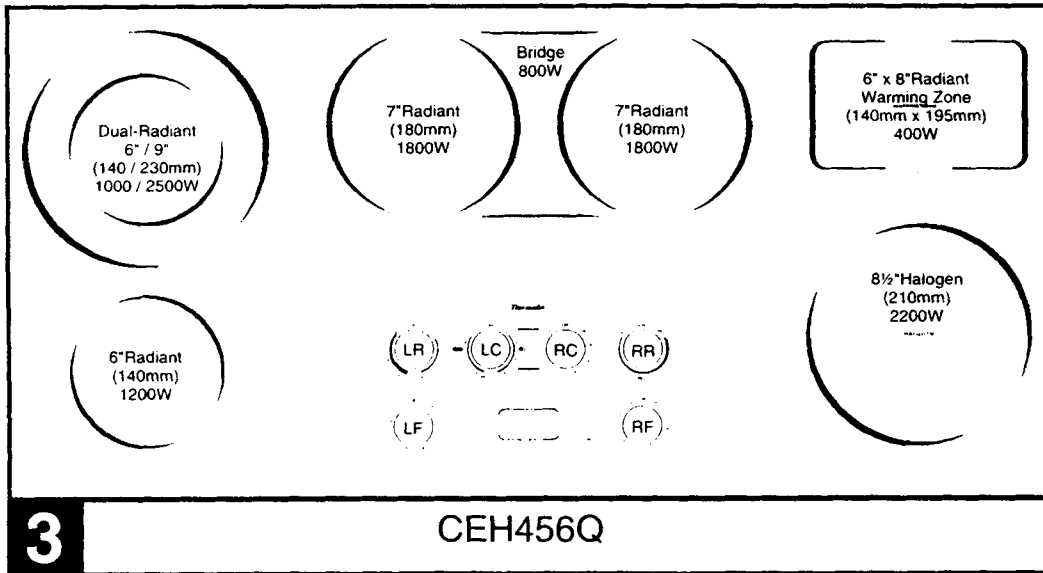
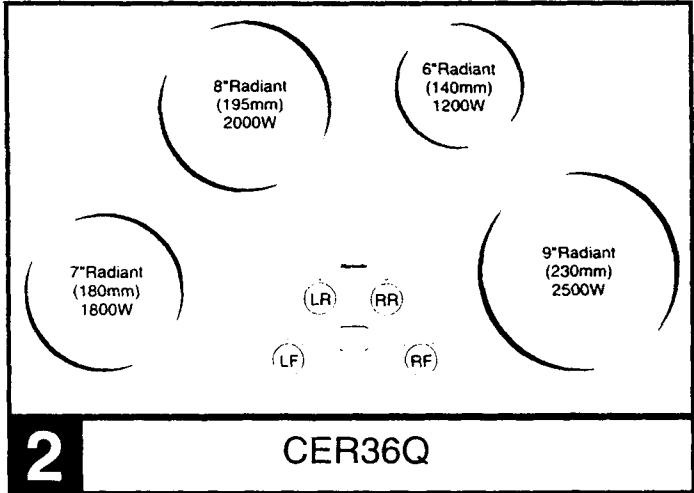
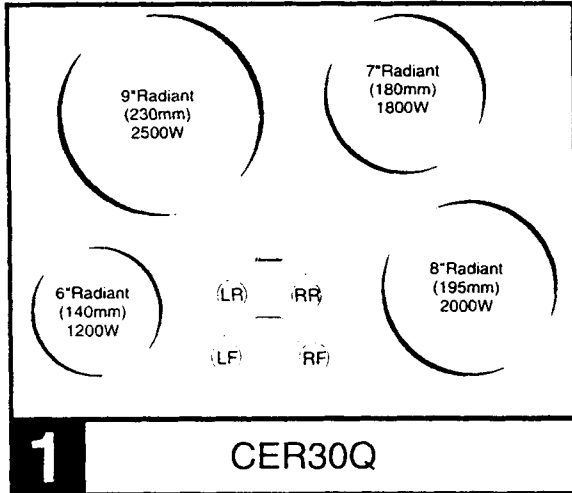
— NOTES —

GENERAL

SERIAL NUMBER/DATA STICKER & WIRING DIAGRAM LOCATIONS

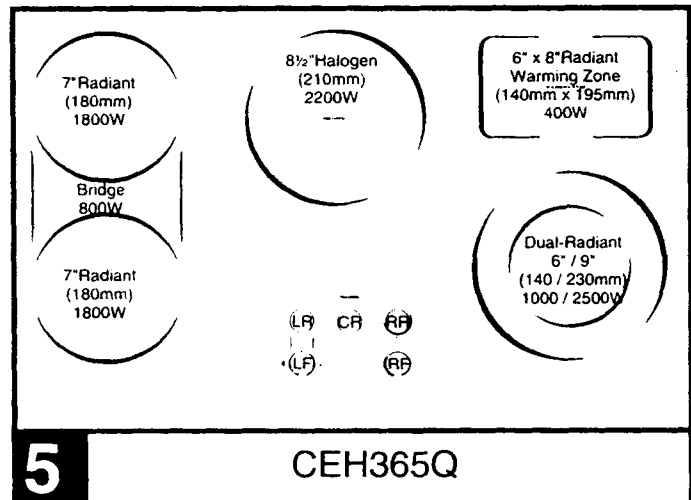
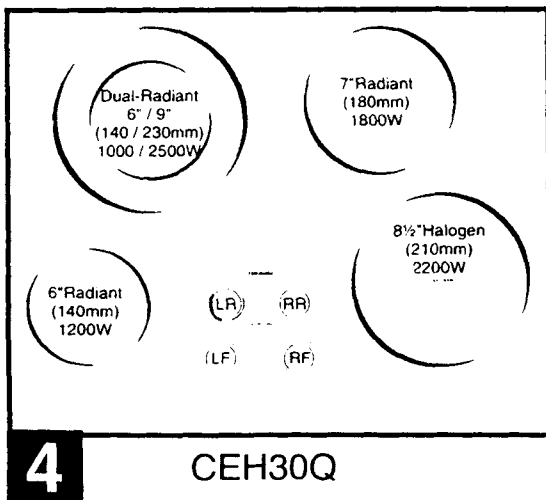


COOKTOP MODELS



Legend for Control Knobs

- LF = Left Front
- LR = Left Rear
- CR = Center Rear
- LC = Left Center
- RC = Right Center
- RR = Right Rear
- RF = Right Front



COOKTOP ELEMENT CONFIGURATION

Model CER30Q			
Wattage	Size (Inches)	Element Type	Location
1200	6	Radiant	Left Front
1800	7	Radiant	Right Rear
2000	8	Radiant	Right Front
2500	9	Radiant	Left Rear

Models CEH365Q			
Wattage	Size (Inches)	Element Type	Location
1800	7	Radiant With 800W Bridge	Left Front
1800	7	Radiant With 800W Bridge	Left Rear
2200	8-1/2	Halogen	Center
400	6 x 8	Radiant Warmer	Right Rear
1000 / 2500	6 x 9	Dual Radiant	Right Front

Model CER36Q			
Wattage	Size (Inches)	Element Type	Location
1200	6	Radiant	Right Rear
1800	7	Radiant	Left Front
2000	8	Radiant	Left Rear
2500	9	Radiant	Right Front

Model CEH456Q			
Wattage	Size (Inches)	Type	Location
1200	6	Radiant	Left Front
1000 / 2500	6 x 9	Dual Radiant	Left Rear
1800	7	Radiant With 800W Bridge	Left Center
1800	7	Radiant With 800W Bridge	Right Cente.
400	6 x 8	Radiant Warmer	Right Rear
2200	8-1/2	Halogen	Right Front

Model CEH30Q			
Wattage	Size (Inches)	Type	Location
1200	6	Radiant	Left Front
1800	7	Radiant	Right Rear
1000 / 2500	6 / 9	Dual Radiant	Left Rear
2200	8-1/2	Halogen	Right Front

SYMBOLS YOU WILL SEE IN THE MANUAL

The following symbols are provided throughout this manual. For reasons of personal safety

and proper operation and servicing of the cooktop, follow the instructions carefully each time you see one of the symbols.

WARNING

This symbol alerts you to such dangers as personal injury, burns, fire, and electrical shock.

CAUTION

This symbol alerts you to actions that could cause product damage (scratches, dents, etc.), and damage to your personal property.

IMPORTANT SAFETY INFORMATION

WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

THERMADOR ASSUMES NO RESPONSIBILITY FOR ANY REPAIRS MADE ON OUR PRODUCTS BY ANYONE OTHER THAN AUTHORIZED THERMADOR SERVICE TECHNICIANS.

THERMADOR® GLASS CERAMIC COOKTOP WARRANTY

Length of Warranty	Thermador will pay for:	Thermador will not pay for:
<p>FULL ONE YEAR</p> <p>For one year from date of installation or date of occupancy for a new previously unoccupied dwelling, any part which fails in normal home use will be repaired or replaced free of charge. Save all dated receipts or other evidence of date of installation/occupancy date.</p>	<p>All repair labor and replacement parts found to be defective due to materials and workmanship. Service must be provided by a Factory Authorized Service Agency, during normal working hours.</p>	<ol style="list-style-type: none"> 1. Service by an unauthorized agency. Damage or repairs by an unauthorized agency or use of unauthorized parts. 2. Service visits to: <ul style="list-style-type: none"> • Teach you how to use the appliance. • Correct the installation. You are responsible for providing electrical wiring and/or gas installation and other connecting facilities. • Reset circuit breakers or replace home fuses. 3. Damage caused from accident, abuse, alteration, misuse, incorrect installation or installation not in accordance with local codes, or improper storage of the appliance. 4. Repairs due to other than normal home use. 5. Any service visits and labor costs during the limited warranty.
<p>LIMITED THREE YEAR</p> <p>Covers the second through the fourth years from date of installation.</p>	<p>Replacement of the glass ceramic cooktop surface when breakage is due to thermal shock (sudden temperature change) for a period of three years following the expiration of the full warranty.</p>	

This warranty applies to appliances used in normal family households; it does not cover their use in commercial situations.

This warranty is for products purchased and retained in the 50 states of the U.S.A., the District of Columbia, and Canada. The warranty applies even if you should move during the warranty period. Should the appliance be sold by the original purchaser during the warranty period, the new owner continues to be protected until the expiration of the original purchaser's warranty period.

This warranty gives you specified legal rights. You may also have other rights which vary from state-to-state.

HOW TO OBTAIN SERVICE

For service, contact the factory authorized agency in your area, the dealer from whom you purchased the appliance, or write us at the address shown below.

We want you to be a satisfied customer. If a situation arises that has not been resolved to your satisfaction, please let us know. Write to:

Consumer Relations Department
5551 McFadden Avenue
Huntington Beach, CA 92649

or phone:

(800) 735-4328

Please be sure to include the Model Number, Serial Number (located on the data sticker), and the Date of Original Purchase/Installation.

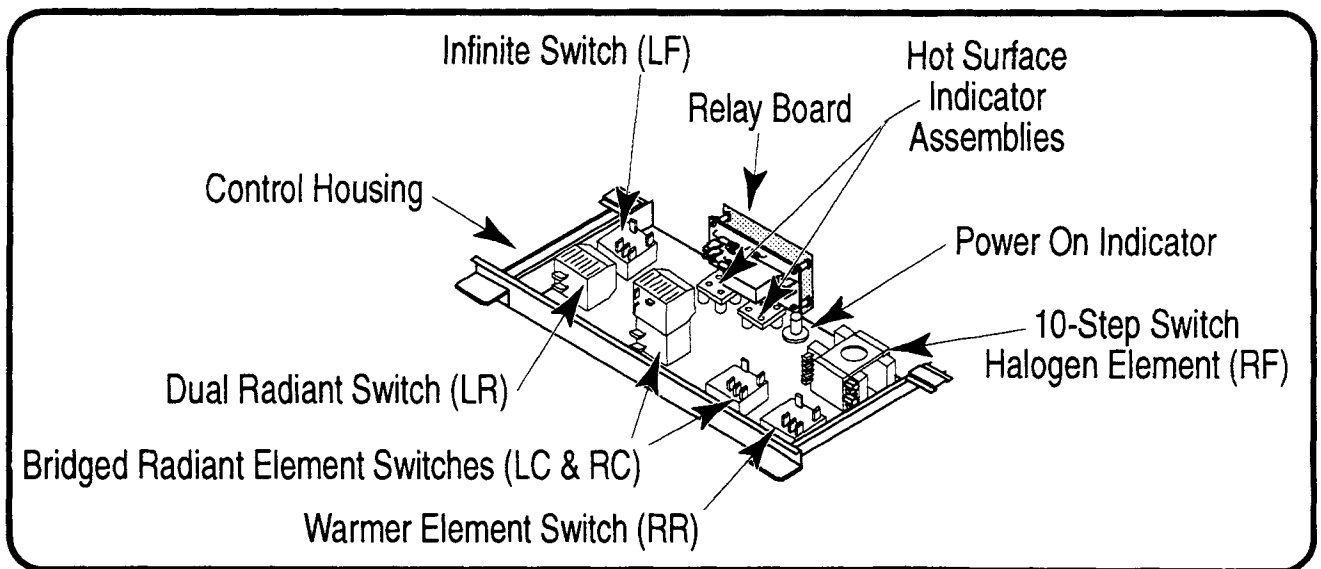
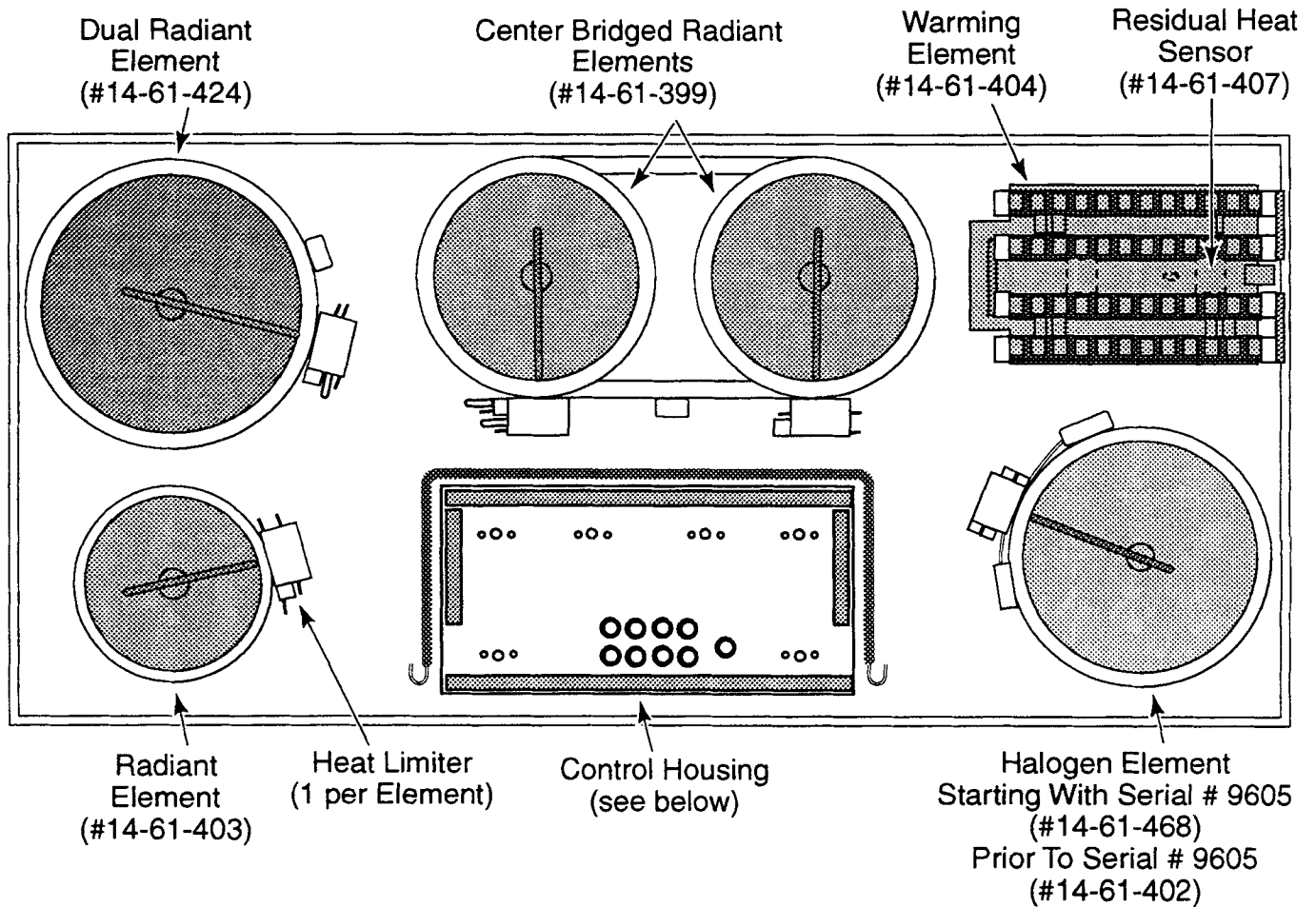
— NOTES —

SERVICING THE COMPONENTS

The serviceable components inside the 45" cooktops are included in this section of the manual. These procedures can also be used when servicing the 30" and 36" model components.

Refer to the section that deals with the component you wish to service. The component locations for the 45" cooktop are shown below.

45" COOKTOP COMPONENTS



REMOVING THE BOTTOM COVER & POWER WIRING

WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

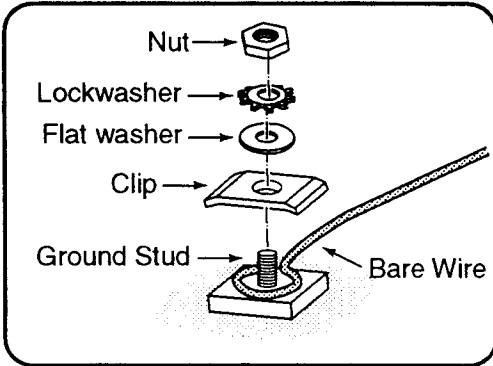
CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the cooktop from the cabinet and lay it face-down on a large padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
3. To remove the bottom cover, remove the four screws and lockwashers, unhook the two tabs at the back, (see inset 1), and lift the cover off the cooktop.
4. To remove the power wiring and conduit from the bottom cover:
 - a) Disconnect the three red, the three black, and single white power wires from the switch terminals.
 - b) Cut the white harness wire as close to the connector with the black power wire as possible.
 - c) Remove the screw, clip, flat washer, and lockwasher from the ground stud and remove the bare wire (see inset 2).
 - d) Unclip the conduit cover from the bottom cover (see inset 3) and pull the wiring out of the conduit.
 - e) After you replace the wiring and/or conduit, splice the white wire that you cut in step (b) to the harness with a twist-on connector (see inset 4).
5. Reassemble the cooktop.

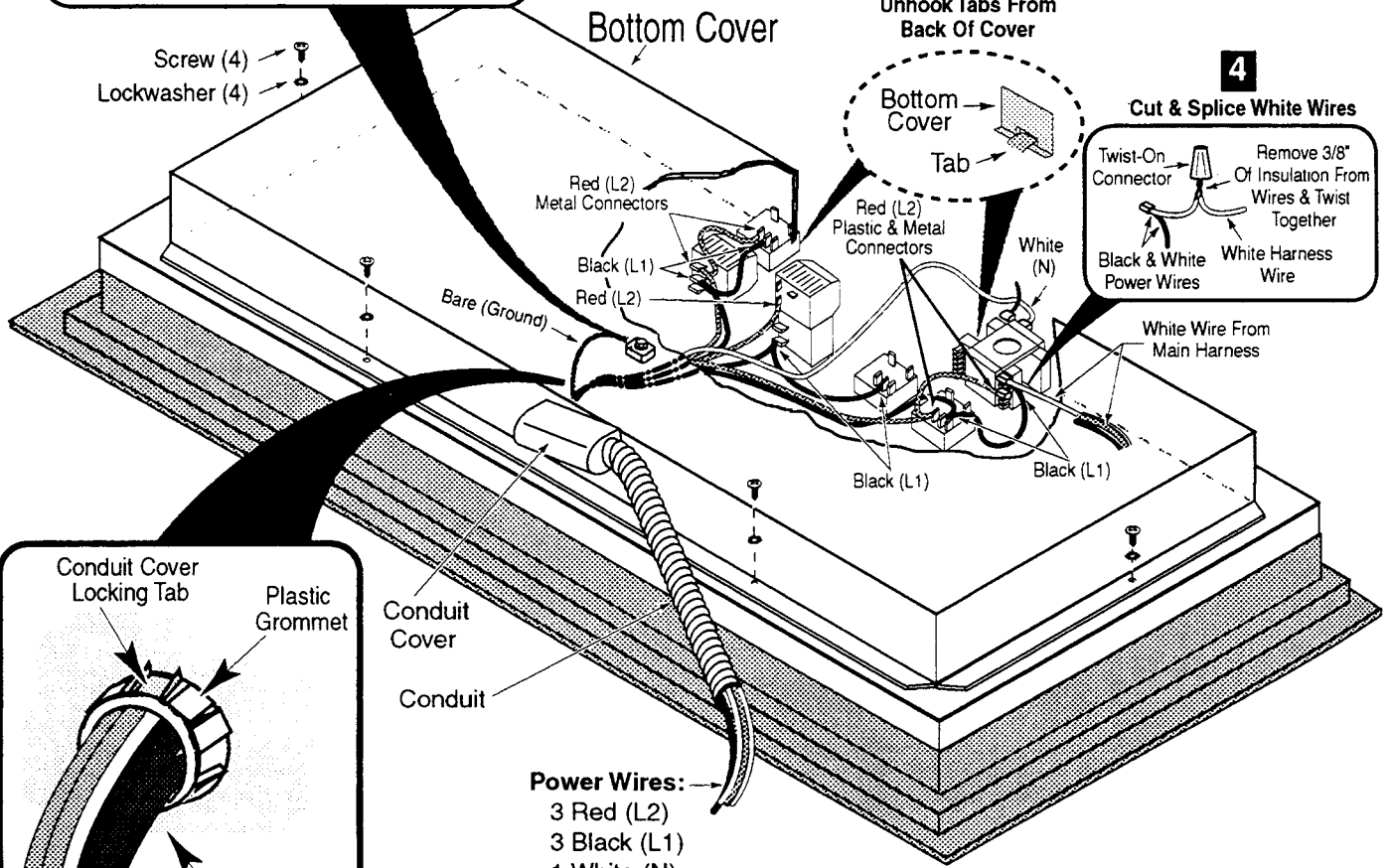
2

Remove Ground Wire



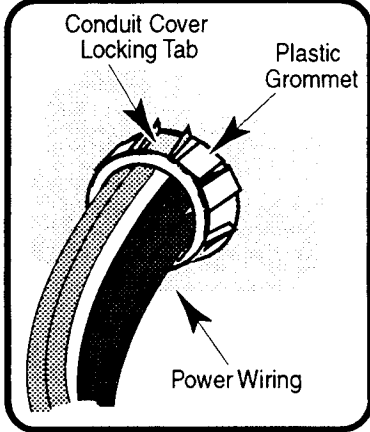
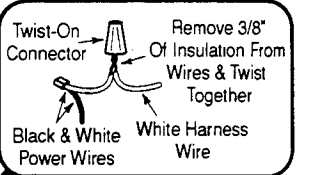
1

Unhook Tabs From Back Of Cover



4

Cut & Splice White Wires



Unclip Conduit Cover From Bottom Cover

3

- Power Wires:**
- 3 Red (L2)
 - 3 Black (L1)
 - 1 White (N)
 - 1 Bare (Ground)

REMOVING THE POWER ON INDICATOR & HOT SURFACE INDICATOR ASSEMBLY

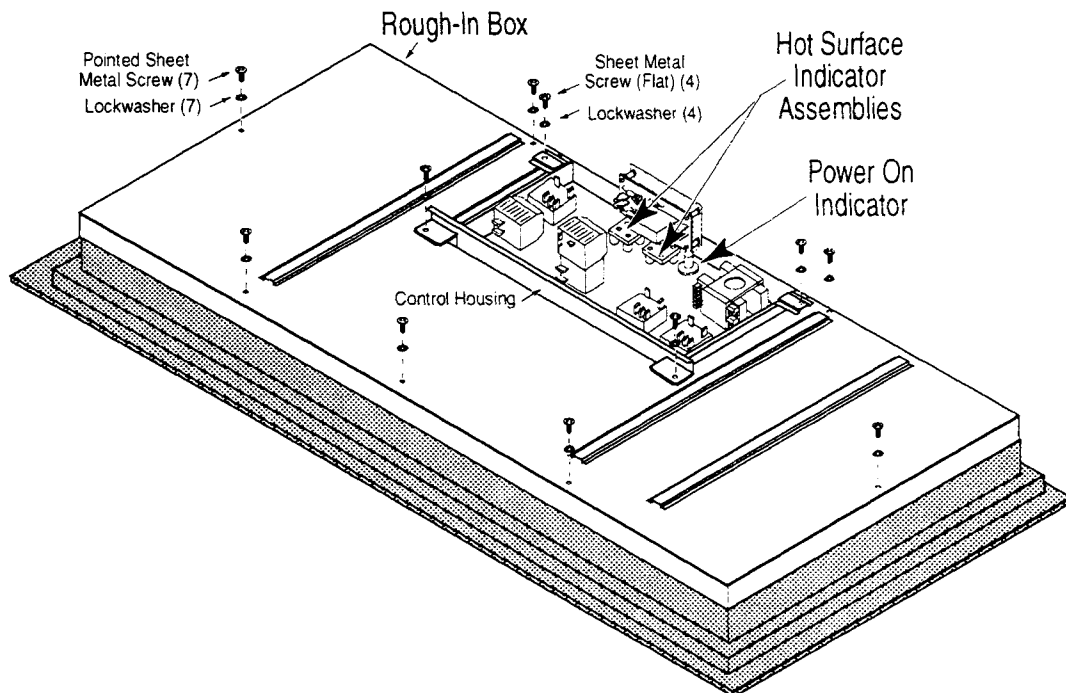
WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

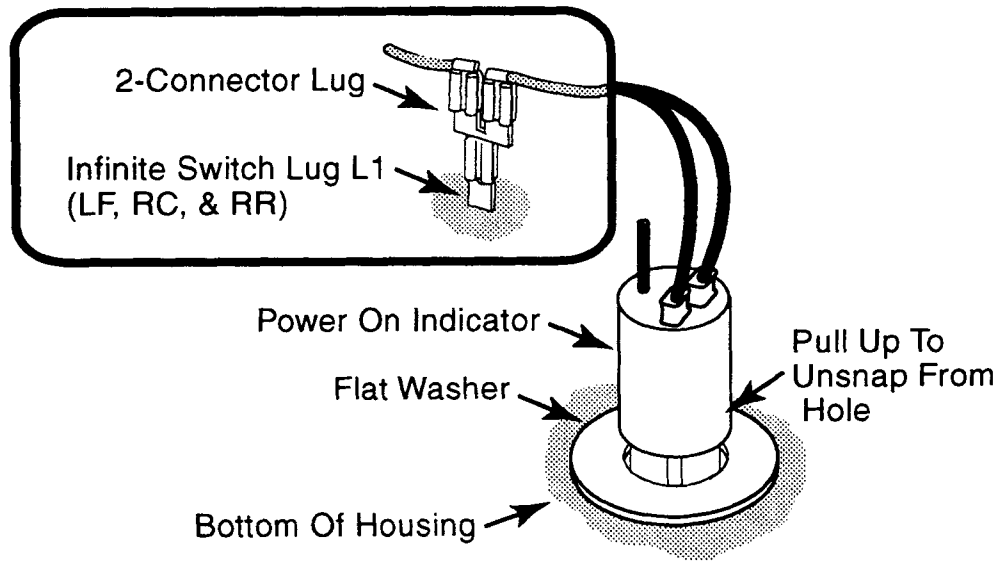
CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

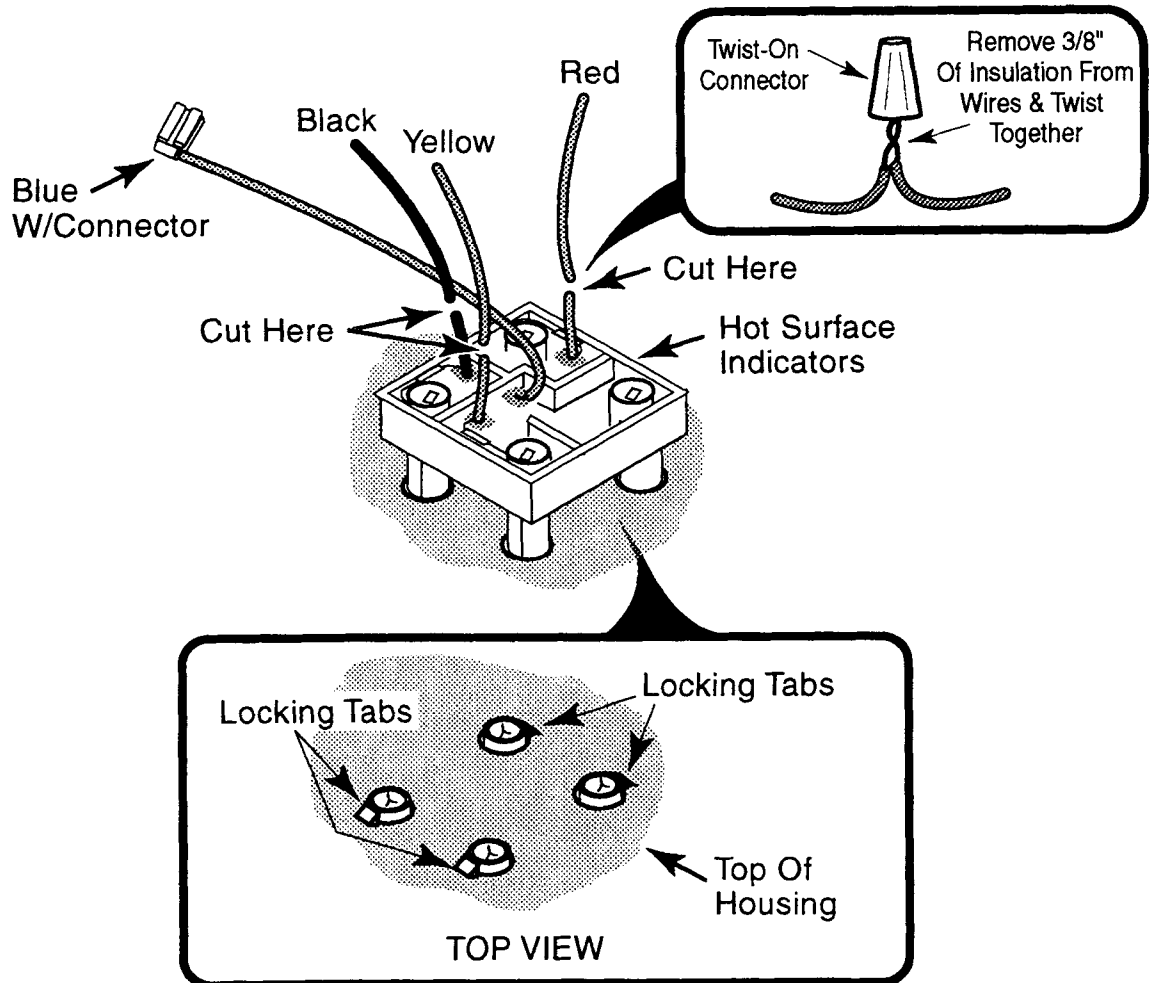
1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the cooktop from the cabinet and lay it face-down on a large padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
3. Remove the bottom cover from the cooktop and set it out of the way (see page 2-2).
4. **To remove the power on indicator:**
 - a) Grasp the indicator by the body, pull up firmly to unsnap the locking tabs from the hole in the control housing, (see the illustration at the top of the next page), and remove the indicator.
 - b) Disconnect the power on indicator wires from the the 2-connector lugs on the infinite switches.
5. **To remove a hot surface indicator assembly:**
 - a) Remove the knobs from the controls.
 - b) Remove the screws and lockwashers from the rough-in box (see the illustration below).
 - c) Remove the screws and lockwashers from the control housing.
 - d) Lift the control housing so that the control shafts slide out of the rubber grommets. NOTE: This may be a bit difficult since the grommets tend to grip the control surfaces.
 - e) From the top of the control housing, press in on the locking tabs on the hot surface indicator assembly you wish to remove, (see the illustration at the bottom of the next page) unclip them from the housing, and remove the assembly.
 - f) Cut the four wires near the connection points on the hot surface indicator assembly.
 - g) Splice the wires to the new hot surface indicator assembly with twist-on nuts.
6. Reassemble the cooktop.



POWER ON INDICATOR



HOT SURFACE INDICATORS



REMOVING THE LEFT REAR (LR) & LEFT CENTER (LC) STEPPED SWITCHES

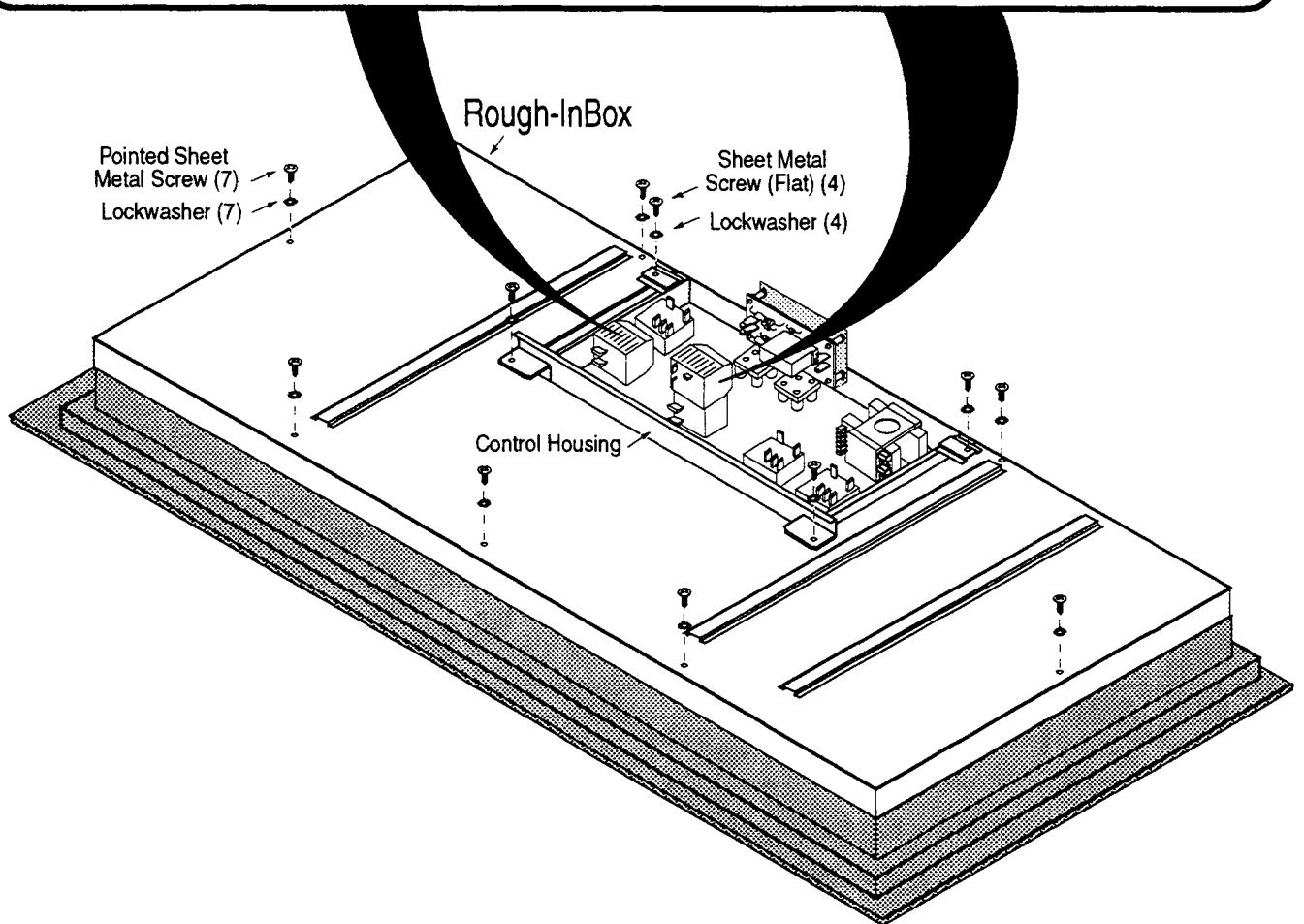
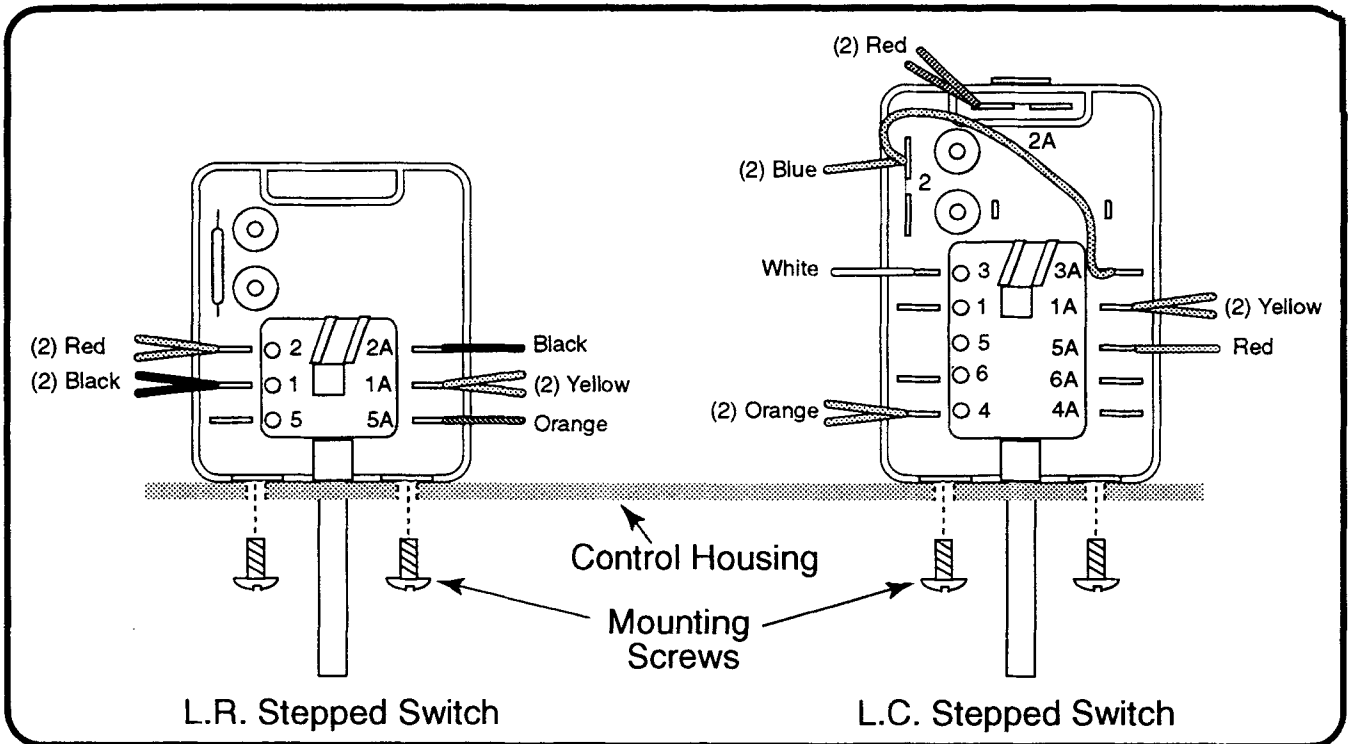
WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the knobs from the controls.
3. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
4. Remove the bottom cover from the cooktop and set it out of the way (see page 2-2).
5. Remove the screws and lockwashers from the rough-in box (see the illustration on the next page).
6. Remove the screws and lockwashers from the control housing.
7. Lift the control housing so that the control shafts slide out of the rubber grommets. NOTE: This may be a bit difficult since the grommets tend to grip the control surfaces.
8. Remove the two screws from the switch you wish to service, then disconnect the wires from the terminals.
9. Mount the new switch and reassemble the cooktop.



REMOVING THE LEFT FRONT (LF), RIGHT REAR (RR), & RIGHT CENTER (RC) INFINITE SWITCHES

WARNING

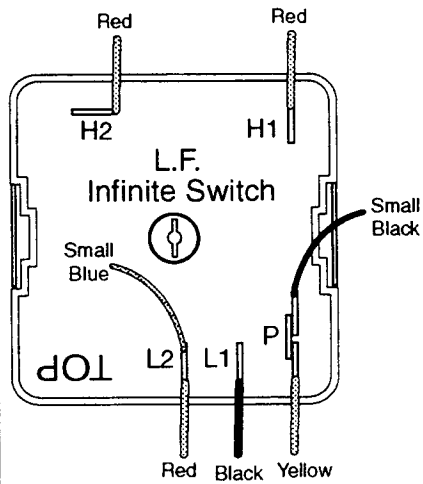
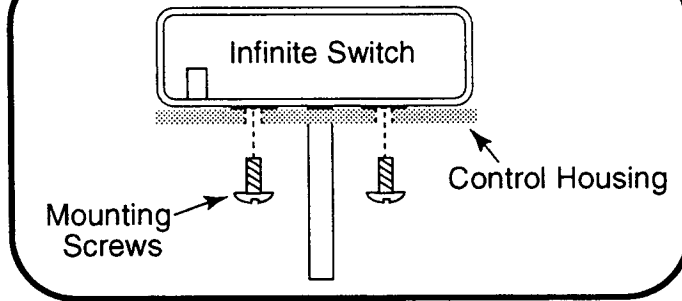
Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

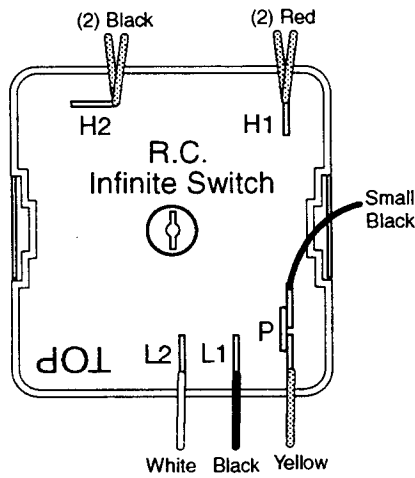
When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the knobs from the controls.
3. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
4. Remove the bottom cover from the cooktop and set it out of the way (see page 2-2).
5. Remove the screws and lockwashers from the rough-in box (see the illustration on the next page).
6. Remove the screws and lockwashers from the control housing.
7. Lift the control housing so that the control shafts slide out of the rubber grommets. NOTE: This may be a bit difficult since the grommets tend to grip the control surfaces.
8. Remove the two screws from the switch you wish to service, then disconnect the wires from the terminals.
9. Mount the new switch and reassemble the cooktop.

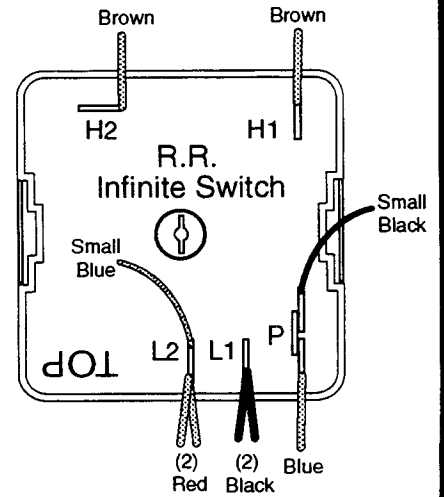
SWITCH MOUNTING



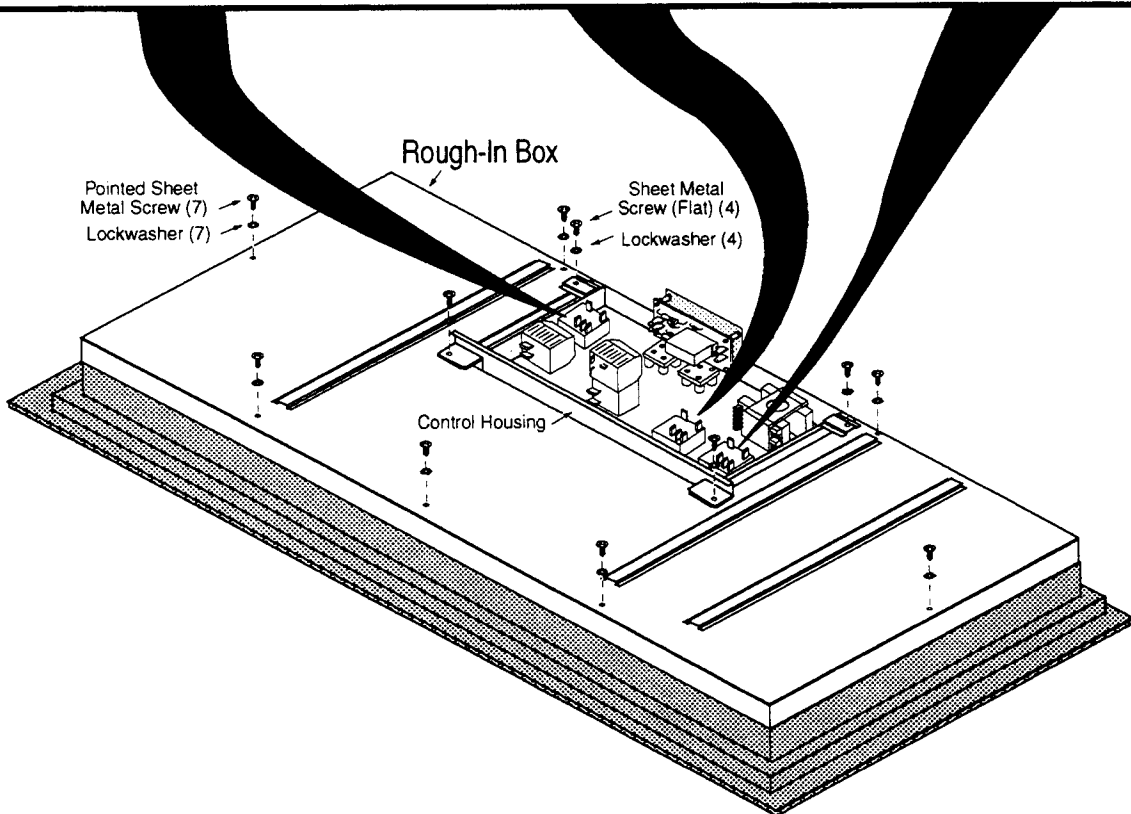
L.F. Infinite Switch



R.C. Infinite Switch



R.R. Infinite Switch



REMOVING THE 10-STEP SWITCH (RF)

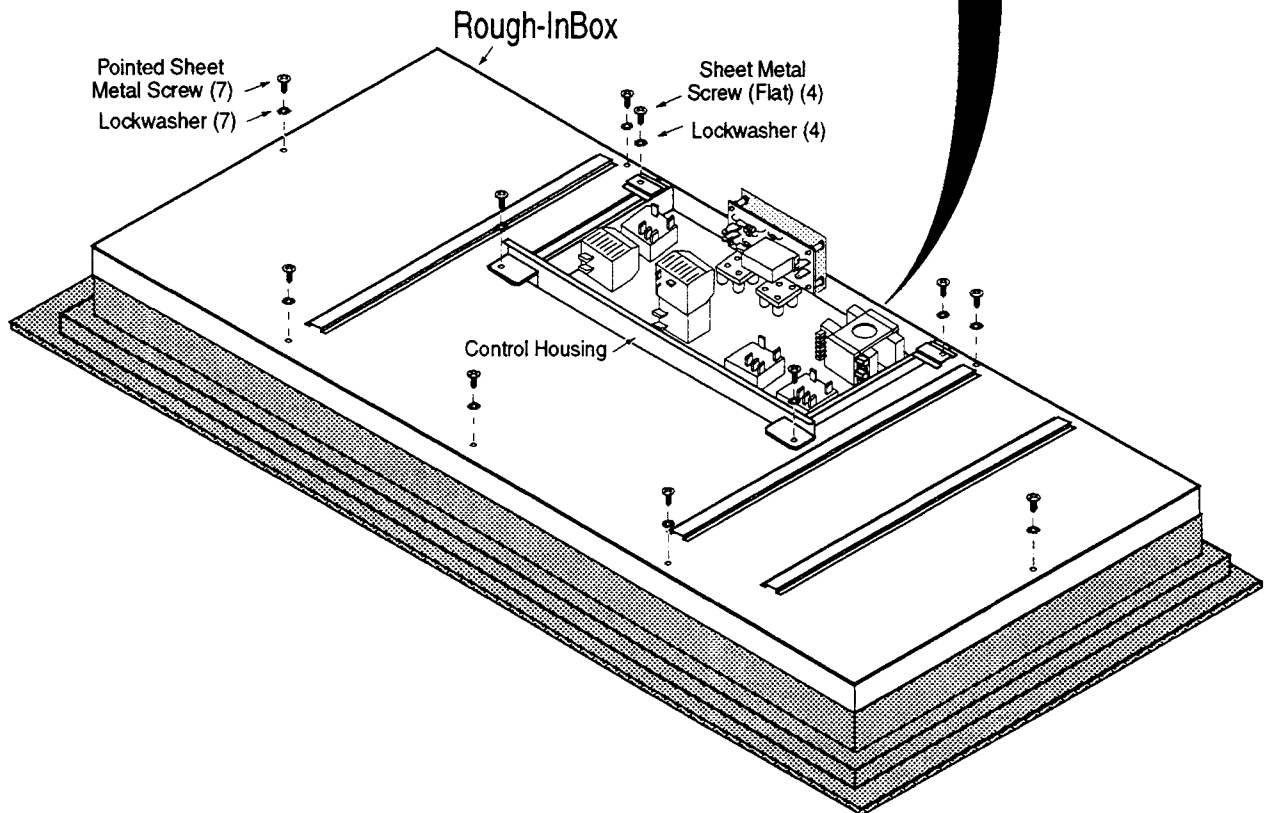
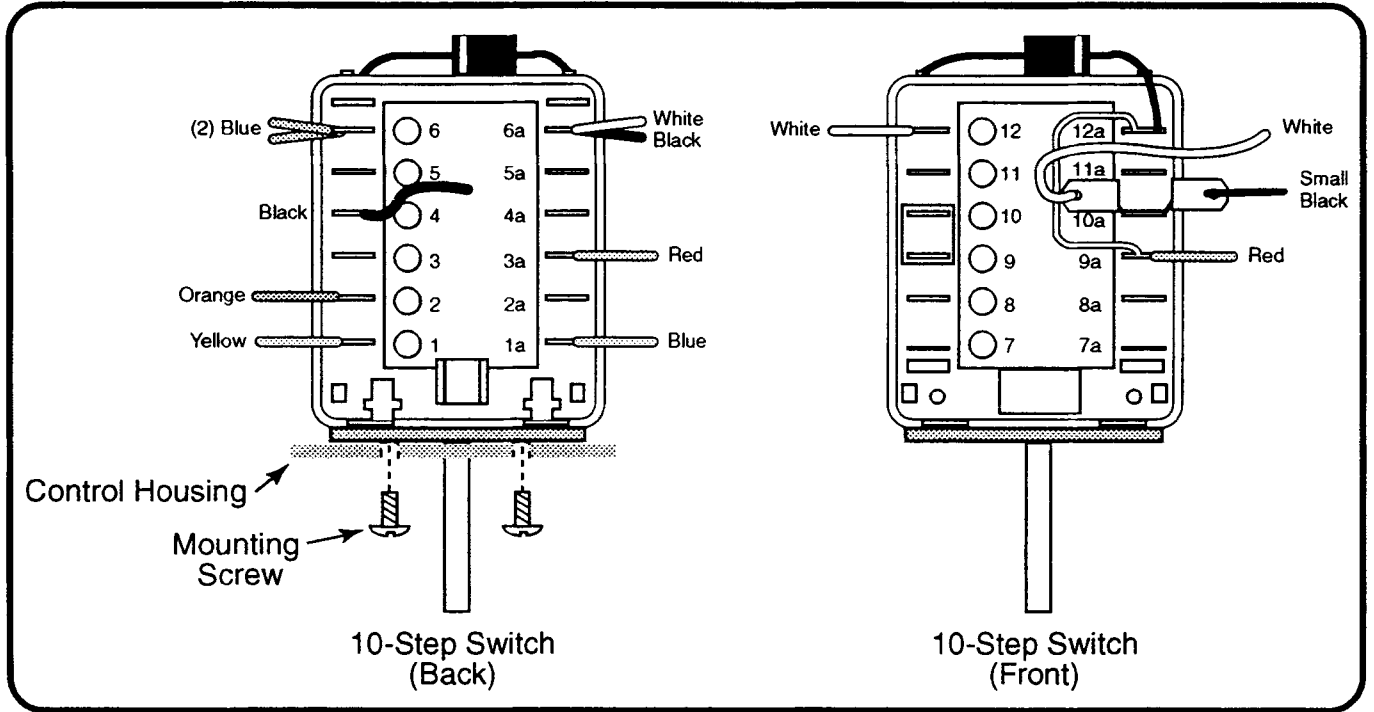
WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the knobs from the controls.
3. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
4. Remove the bottom cover from the cooktop and set it out of the way (see page 2-2).
5. Remove the screws and lockwashers from the rough-in box (see the illustration on the next page).
6. Remove the screws and lockwashers from the control housing.
7. Lift the control housing so that the control shafts slide out of the rubber grommets. NOTE: This may be a bit difficult since the grommets tend to grip the control surfaces.
8. Remove the two screws from the switch, then disconnect the wires from the terminals.
9. Mount the new switch and reassemble the cooktop.



REMOVING THE RELAY BOARD

WARNING

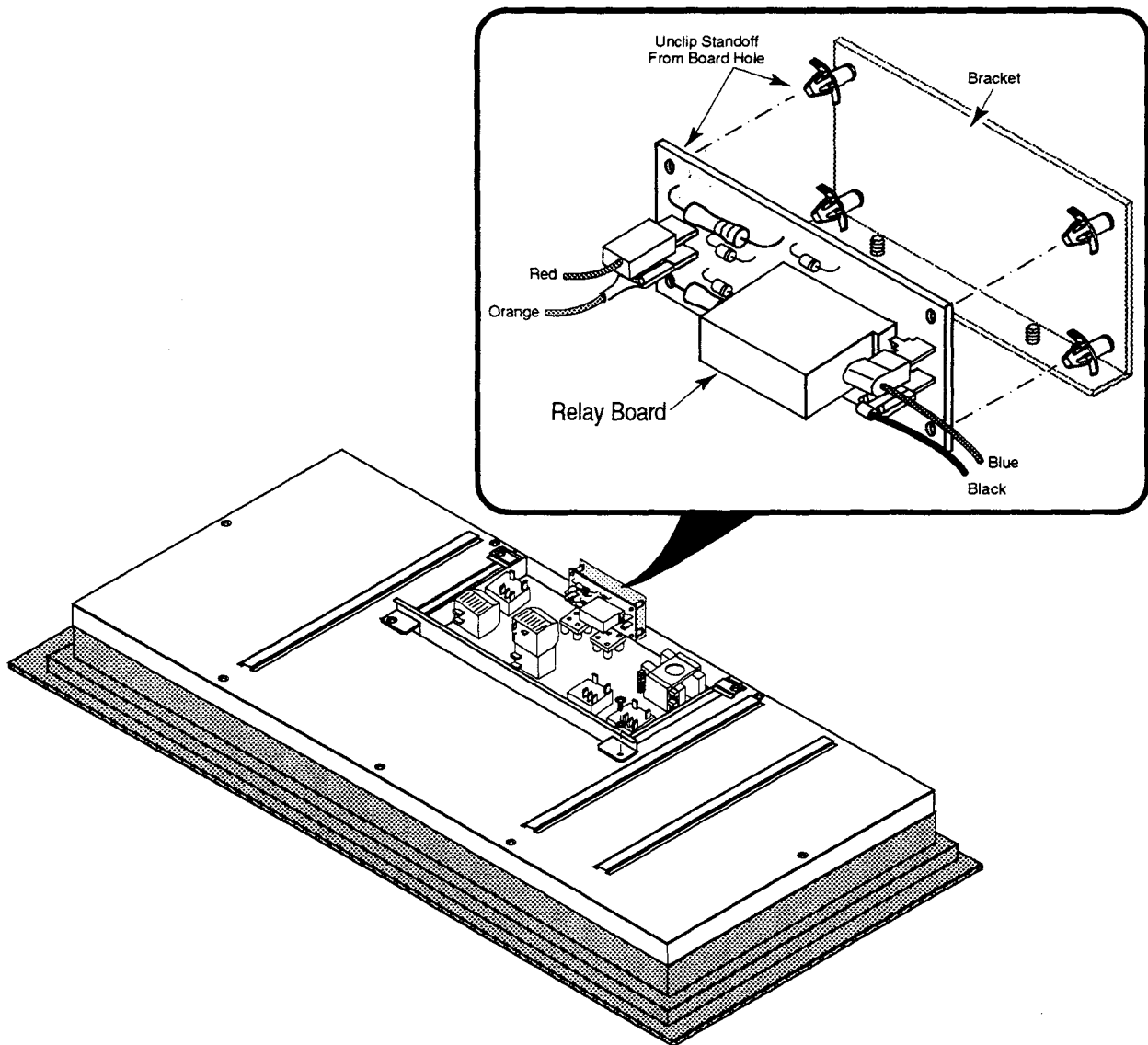
Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.

2. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
3. Remove the bottom cover from the cooktop and set it out of the way (see page 2-2).
4. Remove the wire connectors from the relay board and unclip the board from the stand-offs.
5. Clip the new relay board onto the standoffs and reassemble the cooktop.



REMOVING THE CERAMIC GLASS & FRAME ASSEMBLY

WARNING

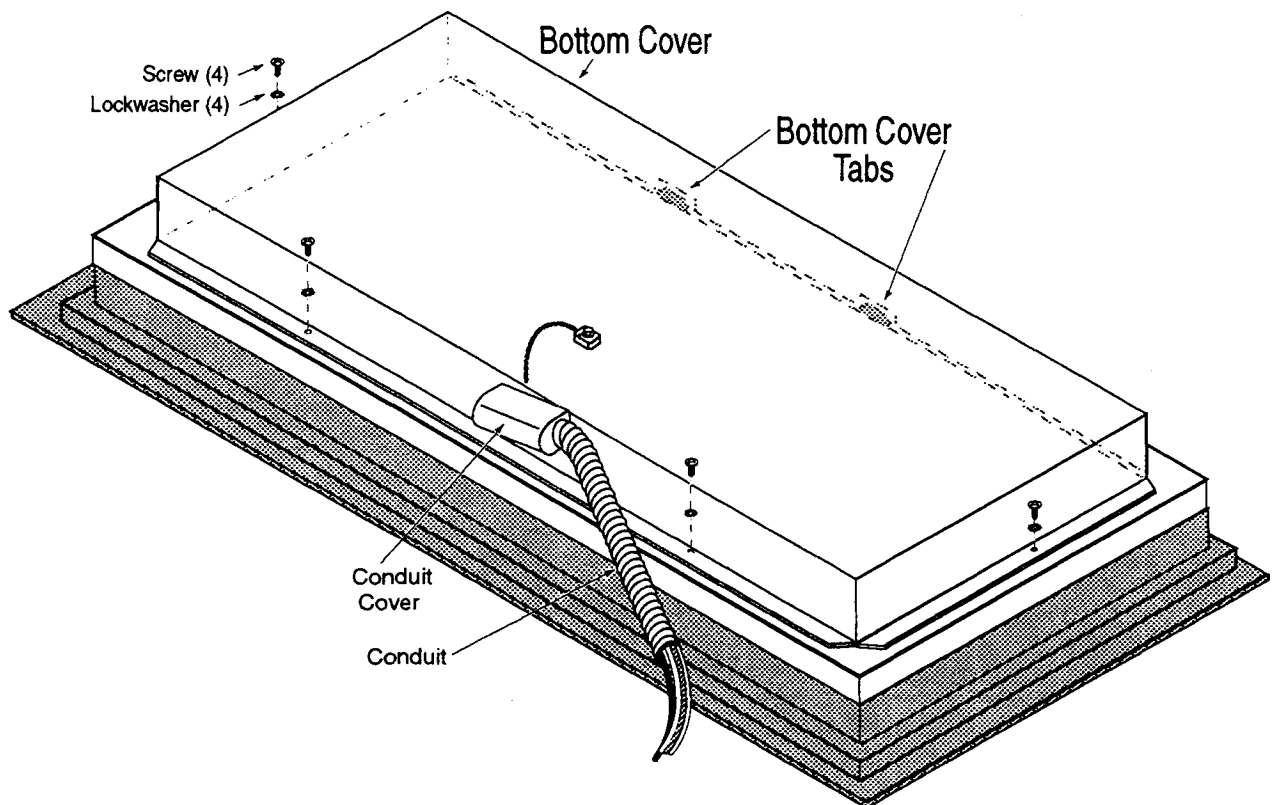
Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.

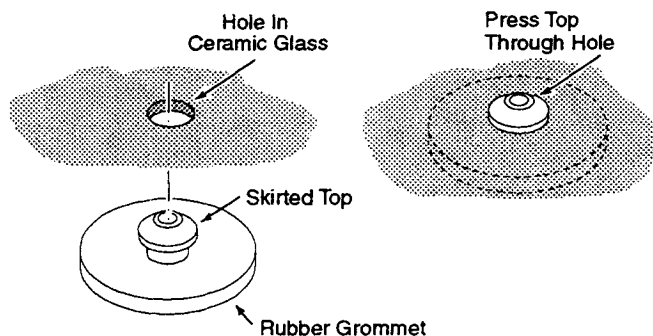
2. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
3. Remove the screws and lockwashers from the bottom cover, unhook the two tabs and flip the cover over toward the back, and set it out of the way.



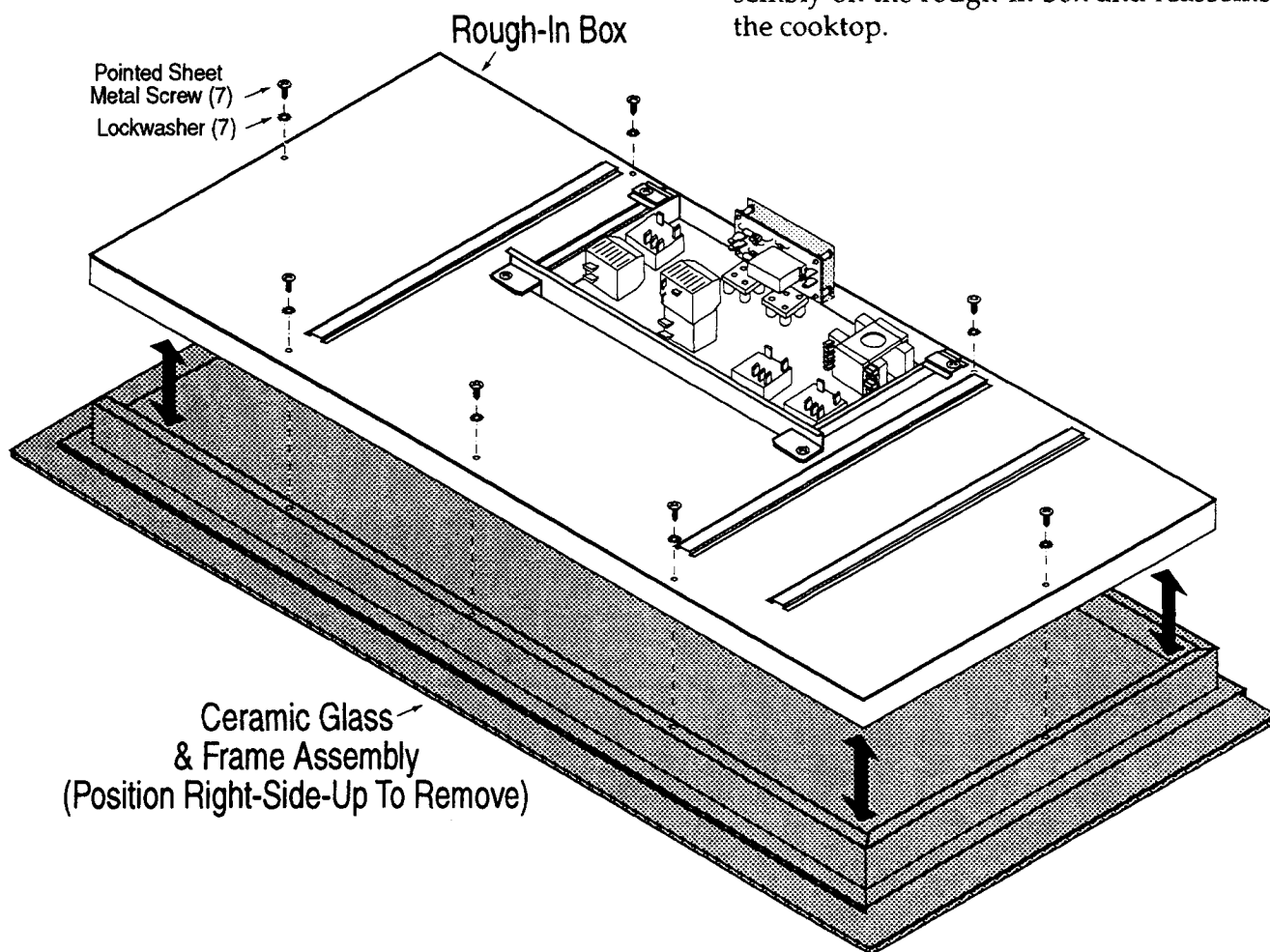
4. Remove the seven (pointed) sheet metal screws and lockwashers from the rough-in box.
5. Hold the ends of the rough-in box and the ceramic glass frame together with your hands so that they do not separate, carefully turn the assembly over, and lay in on the work surface.
6. Lift the ceramic glass and frame assembly off the rough-in box so that the control shafts slide off the rubber grommets and remove the glass.

NOTE: If you are servicing the elements, proceed to page 2-15.

7. Remove the rubber grommets from the ceramic glass and install them on the new glass.



8. Mount the new ceramic glass and frame assembly on the rough-in box and reassemble the cooktop.



REMOVING AN ELEMENT & HEAT LIMITER

⚠ WARNING

Turn off the power circuit to the cooktop at the main (house) junction box before servicing this unit.

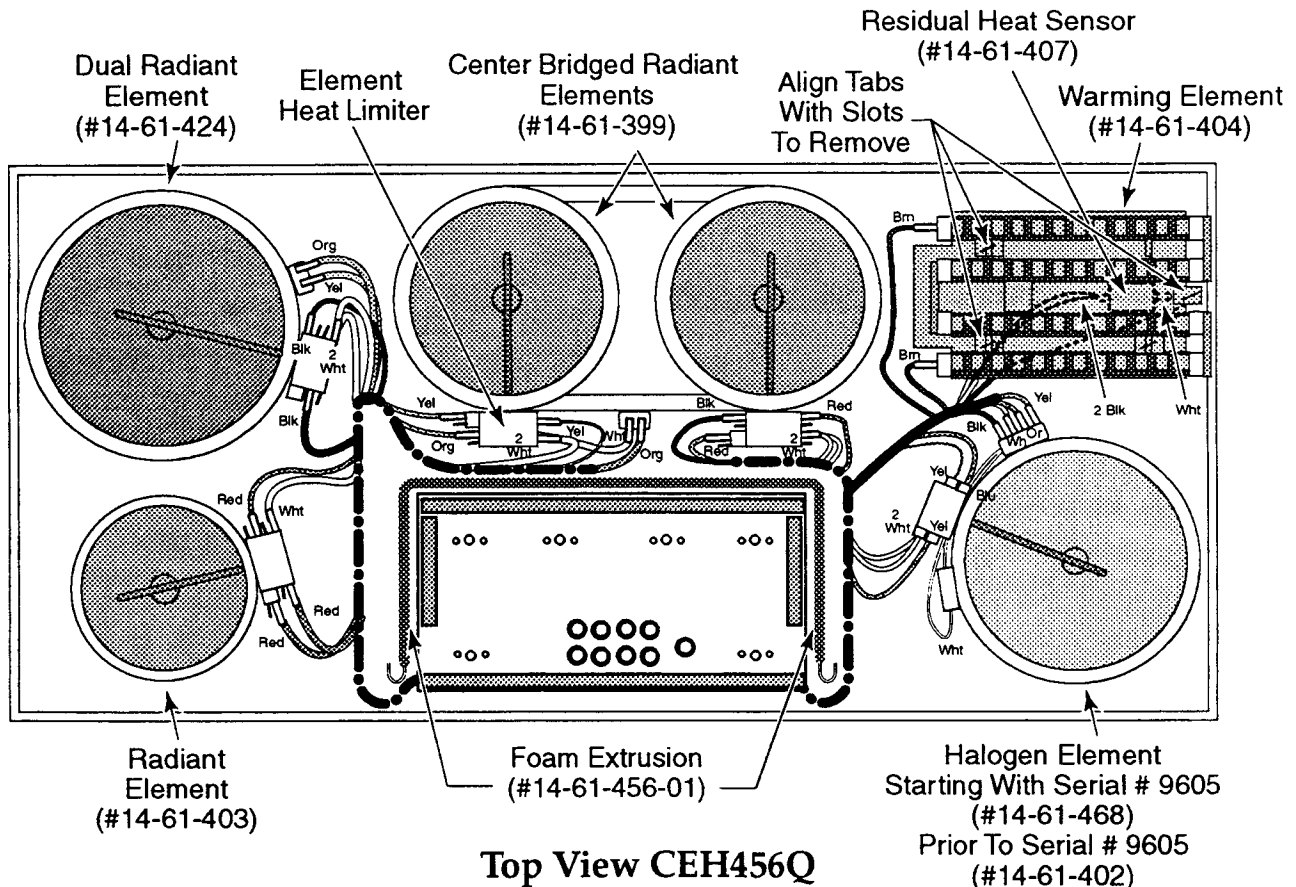
⚠ CAUTION

When you work on the cooktop, be careful when handling the sheet metal parts. There are sharp edges present and you can cut yourself if you are not careful.

1. Turn off the electrical power going to the cooktop and make sure that the surface is cool.
2. Remove the cooktop from the cabinet and lay it face-down on a padded surface to protect the glass. NOTE: If necessary, disconnect the cooktop power supply wires from the junction box.
3. Remove the ceramic glass & frame assembly from the rough-in box (see pages 2-13 & 2-14 for the procedure).

4. To remove an element & heat limiter, lift element off the spring holders and disconnect the wire connectors from the element and its heat limiter terminals.
5. To remove the warming element and the residual heat sensor, twist the three tabs and align them with the slots in the warming element housing, then lift the element off the housing and disconnect the wires. Unclip and remove the residual heat sensor and disconnect the wires. If necessary, refer to the Wiring Diagram in Section 4 for the terminal wiring.
6. Install the new element/heat limiter/residual heat sensor, and reassemble the cooktop. NOTE: The heat limiter is part of the element and can only be replaced with the element. The residual heat sensor is a separate item and can be replaced separately.

REASSEMBLY NOTE: Make sure that the foam extrusion is over the edges of the housing when mounting the ceramic glass and frame assembly to the cooktop.



— NOTES —

TROUBLESHOOTING

TESTING THE COMPONENTS

Resistance Measurements

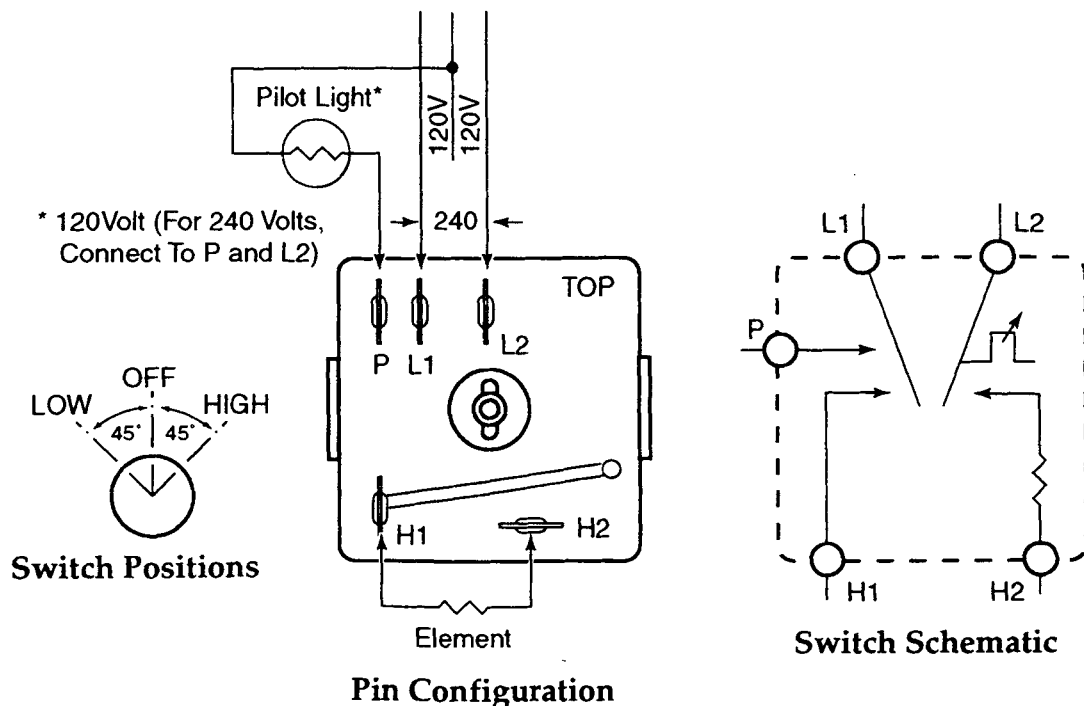
WARNING

TO AVOID ELECTRICAL SHOCK
DISCONNECT THE POWER TO THE
APPLIANCE BEFORE TESTING.

INFINITE SWITCH (LF, RC, & RR)

To test an infinite switch, perform the following steps (see page 2-8 to access the switch):

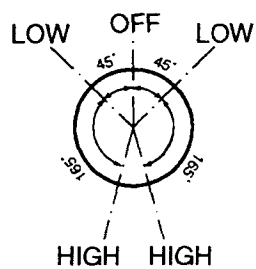
1. Turn off the power to the cooktop.
2. Disconnect the wires from all of the switch terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Turn the switch to High (CW) or Low (CCW) and you should obtain continuity readings between the following terminals (refer to the illustrations below):
 - L1 and P
 - L1 and H1
 - P and H1
 - L2 and H2
5. If the readings are not correct, the switch is defective and should be replaced.



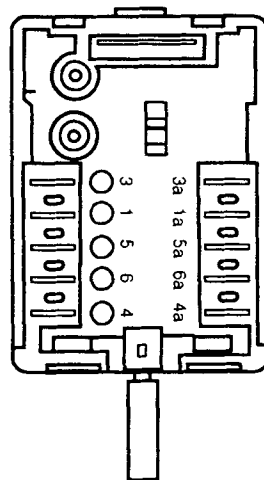
STEPPED SWITCH (LC & LR)

To test the stepped switch, perform the following steps (see page 2-6 to access the switch):

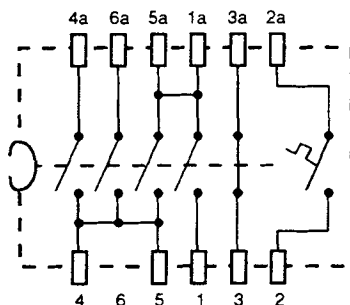
1. Turn off the power to the cooktop.
2. Disconnect the wires from all of the switch terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Turn the switch to Low (CW & CCW) and you should obtain continuity readings between the following terminals (refer to the illustrations below):
 - 2 and 2a
 - 3 and 3a
 - 4 and 4a
 - 1, 4, 5, & 6 and 1a, 4a, 5a, & 6a
5. If the readings are not correct, the switch is defective and should be replaced.



Switch Positions



Pin Configuration



Switch Schematic

10-STEP HALOGEN SWITCH (RF)

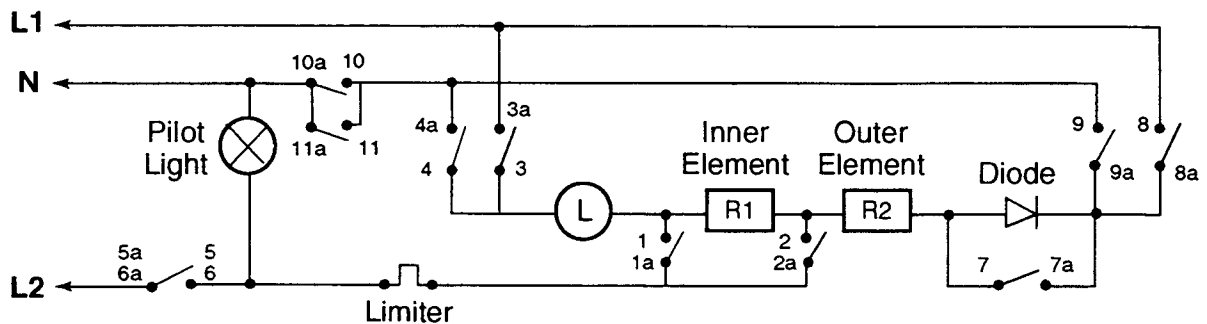
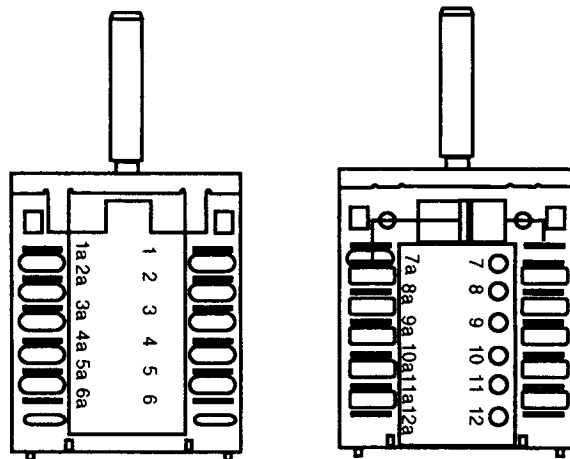
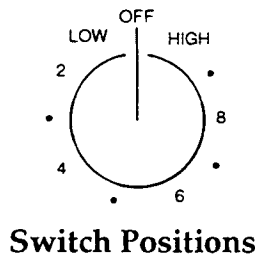
To test a 10-step halogen switch, perform the following steps (see page 2-10 to access the switch):

1. Turn off the power to the cooktop.
2. Disconnect the wires from all of the switch terminals.
3. Set the ohmmeter to the R x 1 scale.

4. Turn the switch to the positions shown in the following chart and you should obtain continuity readings between the indicated terminals.

		1	2	3 - 4	5 - 6	7	8	9 - 11	12
		5a-6a	7a-9a	10a-11a	12a				
OFF LOW — CLOCKWISE ROTATION ↓ HIGH	0								
	1	X			X			X	X
	2			X	X		X	X	
	3	X		X	X		X	X	
	4		X	X	X			X	
	5		X	X	X			X	X
	6	X		X	X		X	X	
	7	X		X	X		X		X
	8		X	X		X		X	X
	9		X	X	X		X		X
	HIGH	10	X	X	X	X	X		X

5. If the readings are not correct, the switch is defective and should be replaced.



Jumper Wires: 3a to 8
4a to 9

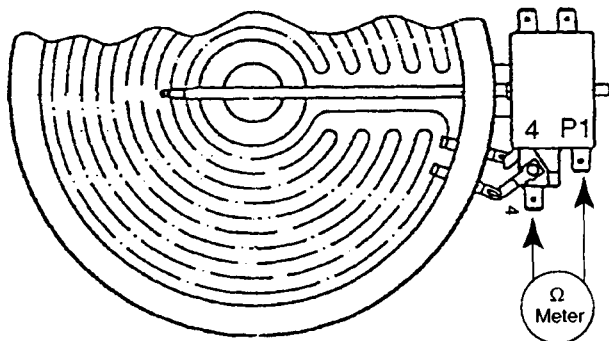
SINGLE ELEMENT (LF)

To test the single element, perform the following steps (see page 2-15 to access the element):

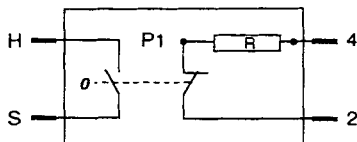
1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the elements, (if necessary, see page 2-13).
3. Disconnect the wires from the terminals of the single (left front) element.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter to limiter terminals **P1** and **4**. You should obtain the following resistance reading.

Thermador Part No.	AC Voltage Rating	Wattage (±5%)	Cold Resistance (±5%)
14-61-403	240	1200	(P1 - 4) = 45 Ω

6. If the readings are not correct, the element is defective and should be replaced.



Pin Configuration



Switch Schematic

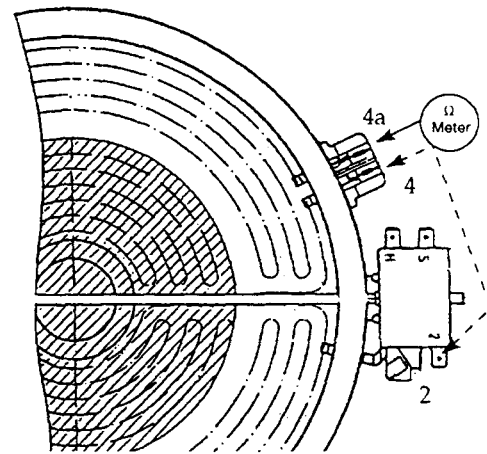
DUAL ELEMENT (LR)

To test the dual element, perform the following steps (see page 2-15 to access the element):

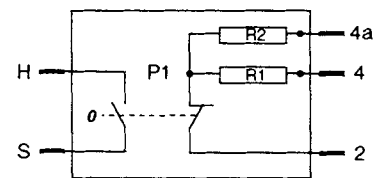
1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the elements, (if necessary, see page 2-13).
3. Disconnect the wires from the terminals of the dual (left rear) element.
4. Set the ohmmeter to the R x 1 scale.
5. Touch one ohmmeter lead to limiter terminal **4**. Touch the other lead to terminal **4a** and then to terminal **2**. You should obtain the following resistance readings.

Thermador Part No.	AC Voltage Rating	Wattage (±5%)	Cold Resistance (±5%)
14-61-424	240	2500 1000	(4 - 4a) = 90 Ω (4 - 2) = 55 Ω

6. If the readings are not correct, the element is defective and should be replaced.



Pin Configuration



Switch Schematic

BRIDGED ELEMENTS (LC, RC)

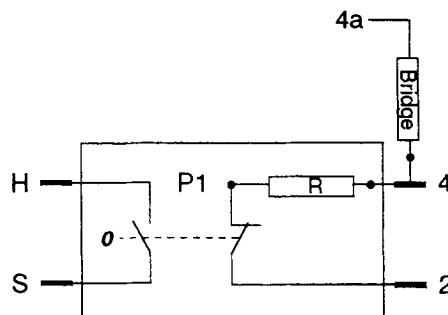
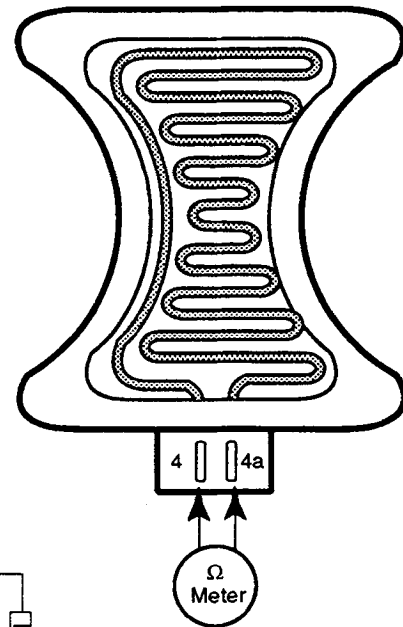
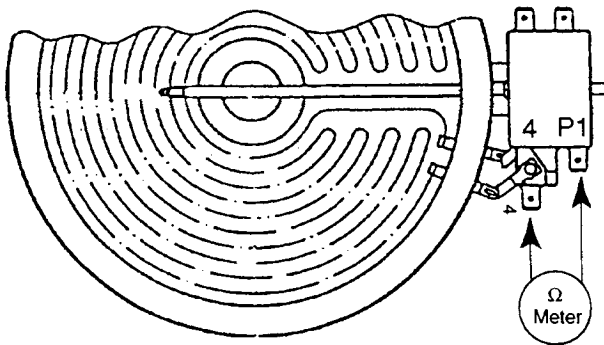
To test the bridged elements, perform the following steps (see page 2-15 to access the elements):

1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the two 1800 W (left and right center) elements and the 800 W bridged element, (if necessary, see page 2-13).
3. Disconnect one wire from the element terminals.
4. Set the ohmmeter to the R x 1 scale.

5. On each of the two 1800 W elements, touch the ohmmeter to limiter terminals **P1 and 4**. To check the bridge, touch the meter lead terminals **4 and 4a**. You should obtain the following resistance reading.

Thermador Part No.	Rating	Wattage (±5%)	Cold Resistance (±5%)
14-61-399	240	(2) 1800 Bridge - 800	(4 - P1) = 30 Ω (4 - 4a) = 70 Ω

6. If the readings are not correct, the element is defective and should be replaced.



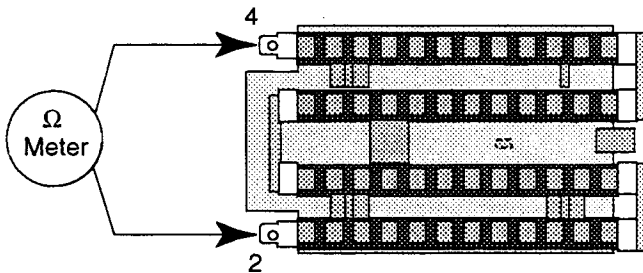
Schematic

WARMING ELEMENT (RR)

To test the warming element, perform the following steps (see page 2-15 to access the element):

1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the warming element, (if necessary, see page 2-13).
3. Disconnect the brown wires from the warming element terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter to terminals 2 and 4. You should obtain the following resistance reading.

Thermador Part No.	AC Voltage Rating	Wattage ($\pm 5\%$)	Cold Resistance ($\pm 5\%$)
14-61-404	240	400	(2 - 4) = 135 Ω

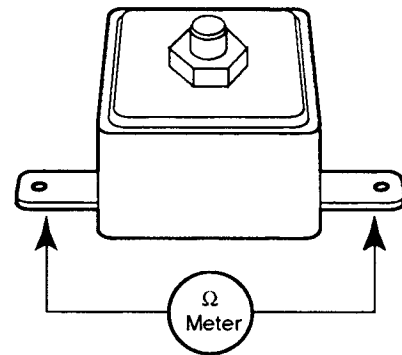


6. If the readings are not correct, the warming element is defective and should be replaced.

RESIDUAL HEAT SENSOR

To test the residual heat sensor, perform the following steps (see page 2-15 to access the sensor):

1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the warming element, (if necessary, see page 2-13).
3. Lift the warming element to access the residual heat sensor.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter to the residual heat sensor terminals. The meter should show continuity (contacts closed) at room temperature. If the meter does not indicate continuity, (contacts open), replace the sensor. Normally, the residual heat sensor contacts open @ 65°C / 149°F and will close again when the temperature drops below that point.



HALOGEN ELEMENT (RF)

NOTE: There are two types of halogen elements that are used on the cooktops, depending on the model number. Cooktops with serial numbers prior to #9605 use halogen element #14-61-402. Cooktops with serial numbers starting with #9605 use halogen element #14-61-468. The wiring for each of these elements is shown below.

To test the halogen element, perform the following steps (see page 2-15 to access the element):

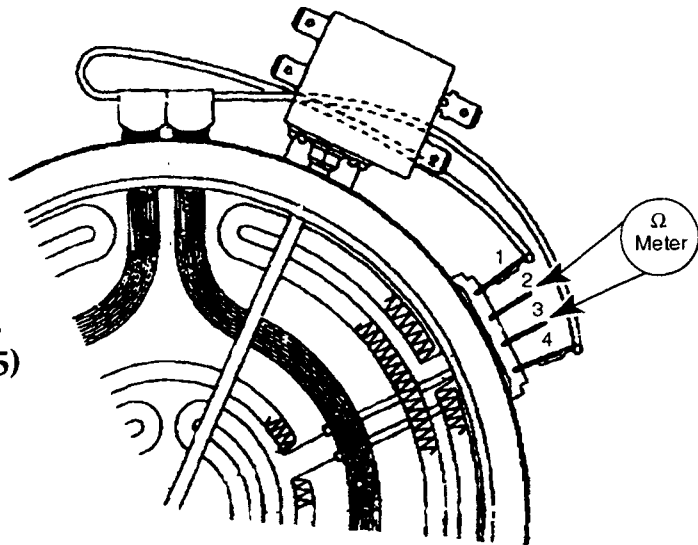
1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the halogen element, (if necessary, see page 2-13).

3. Disconnect the wires from the terminals of the halogen element.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter to middle terminals 2 and 3. You should obtain the following resistance reading.

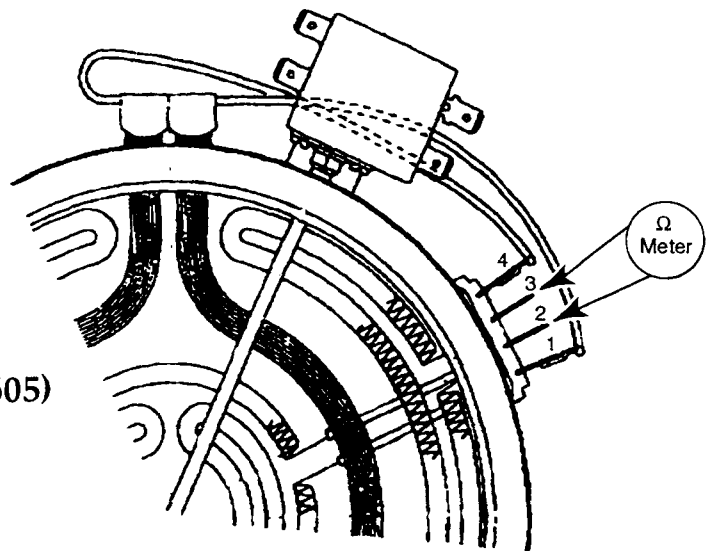
Thermador Part No.	AC Voltage Rating	Wattage ($\pm 5\%$)	Cold Resistance ($\pm 5\%$)
14-61-402 14-61-468	240	2200	(2 - 3) = 46 Ω

6. If the readings are not correct, the element is defective and should be replaced.

**Element #14-61-402
(Prior To Serial #9605)**



**Element #14-61-468
(Starting With Serial #9605)**



Current Measurements



TO AVOID ELECTRICAL SHOCK

THE CHECKS IN THIS SECTION REQUIRE THE USE OF ELECTRICAL POWER, SO BE SURE TO EXERCISE EXTREME CARE.

The following service procedures allow the technician to check the entire circuit going to each element by measuring the current going through them. To make these tests, a clip-on ammeter capable of handling up to 20-amperes will be necessary.

1. Turn off the power to the cooktop.
2. Remove the cooktop glass so that you can access the elements, (if necessary, see page 2-13).
3. Set the ammeter to measure up to 20 amperes.
4. Clip the ammeter around the wiring near the limiter on the element you wish to check.
5. Make sure that there is nothing that can short to the electrical terminals when you apply power in the next step. Keep your hands away from the wiring while power is applied. Disconnect the meter only after power is turned off to the cooktop.
6. Apply power to the cooktop.
7. Proceed to the element charts on the following pages that pertain to the element you wish to test. To use a chart, turn on the control to the position indicated in the test, then compare the readings in the chart with those indicated on the ammeter.
8. If the readings are not within the specified ranges, check the cold resistance of the element and the element switch. If they test okay, check the wiring and connectors.

RADIANT ELEMENTS

- 1200 Watt Radiant Element - Models: CER, CEH30, CER456 (LF), & CER36 (RR)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	5.25
Minimum Current (Amperes)	4.75

- 1800 Watt Radiant Element - Models: CER, CEH30 (RR), CER36 (LF), CEH365 (LF & LR), CEH452 (LC & RC)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	7.90
Minimum Current (Amperes)	7.1

- 4400 Watt Bridge Element - Models: CEH365 (LF), CEH456 & CRL (LC)	
Switch Setting (CCW)	Low or High
Maximum Current (Amperes)	19.25
Minimum Current (Amperes)	17.40

- 2000 Watt Radiant Element - Models: CER30 (RF) & CER36 (LR)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	8.75
Minimum Current (Amperes)	7.95

- 2500 Watt Radiant Element - Models: CER30 (LR) & CER36 (RF)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	10.95
Minimum Current (Amperes)	9.90

- 1000 / 2500 Watt Dual Radiant Element - Models: CEH30 (LR), CEH365 (RF), & CEH456 (LR)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	4.40
Minimum Current (Amperes)	3.95

- 4000 Watt Bridge Element - Models: CEH365 (LF), CEH456 & CRL (LC)	
Switch Setting (CCW)	Low or High
Maximum Current (Amperes)	10.95
Minimum Current (Amperes)	9.90

- 400 Watt Radiant Warming Element - Models: CEH365 (RR), & CEH456 (RR)	
Switch Setting (CW)	Low or High
Maximum Current (Amperes)	1.75
Minimum Current (Amperes)	1.55

HALOGEN ELEMENT

When testing the halogen element, check the element at each of the nine settings. During the test, the element should not flicker on and off, nor

should the brightness decrease significantly as the control is increased or decreased from step-to-step. The sum of the currents in both legs of the circuit must be between the specified value.

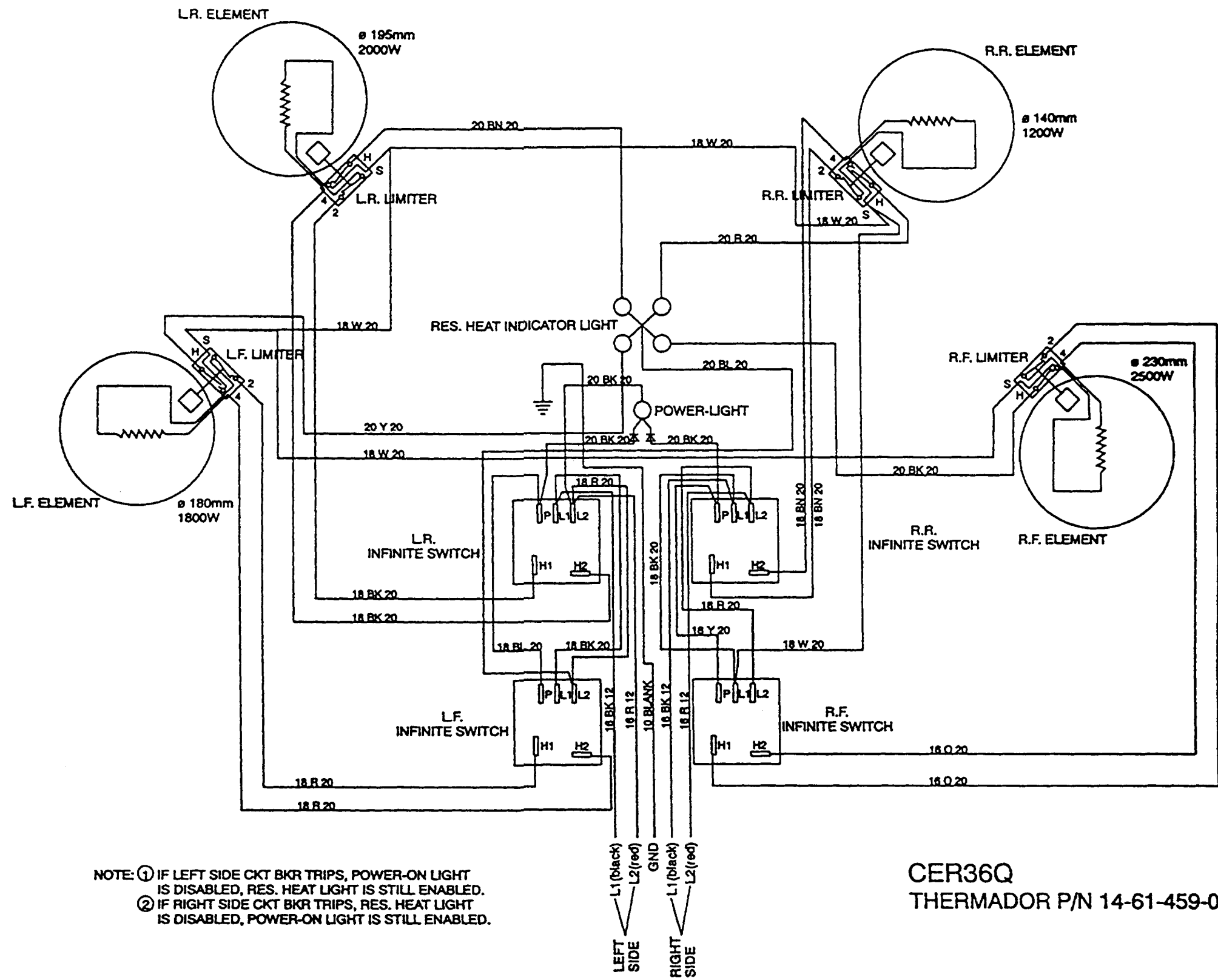
Halogen Elements										
Switch Setting	Low	2	3	4	5	6	7	8	9	High
Maximum Current	1.2	1.7	2.2	3.1	4.5	5.8	7.9	9.5	13.3	19.5
Minimum Current	.9	1.3	1.8	2.8	4.0	5.2	7.1	8.5	12.0	17.5

HEAT LIMITERS

Each element uses a heat limiter to prevent the element from becoming too hot. The limiters control the amount of heat to the glass cooktop by switching on and off, depending on the control

switch setting. The time span between the on and off cycles for the various limiters are shown in the following chart. The ammeter will indicate current flow when the limiter is switched ON, (contacts closed) and no current flow when the limiter is OFF (contacts open).

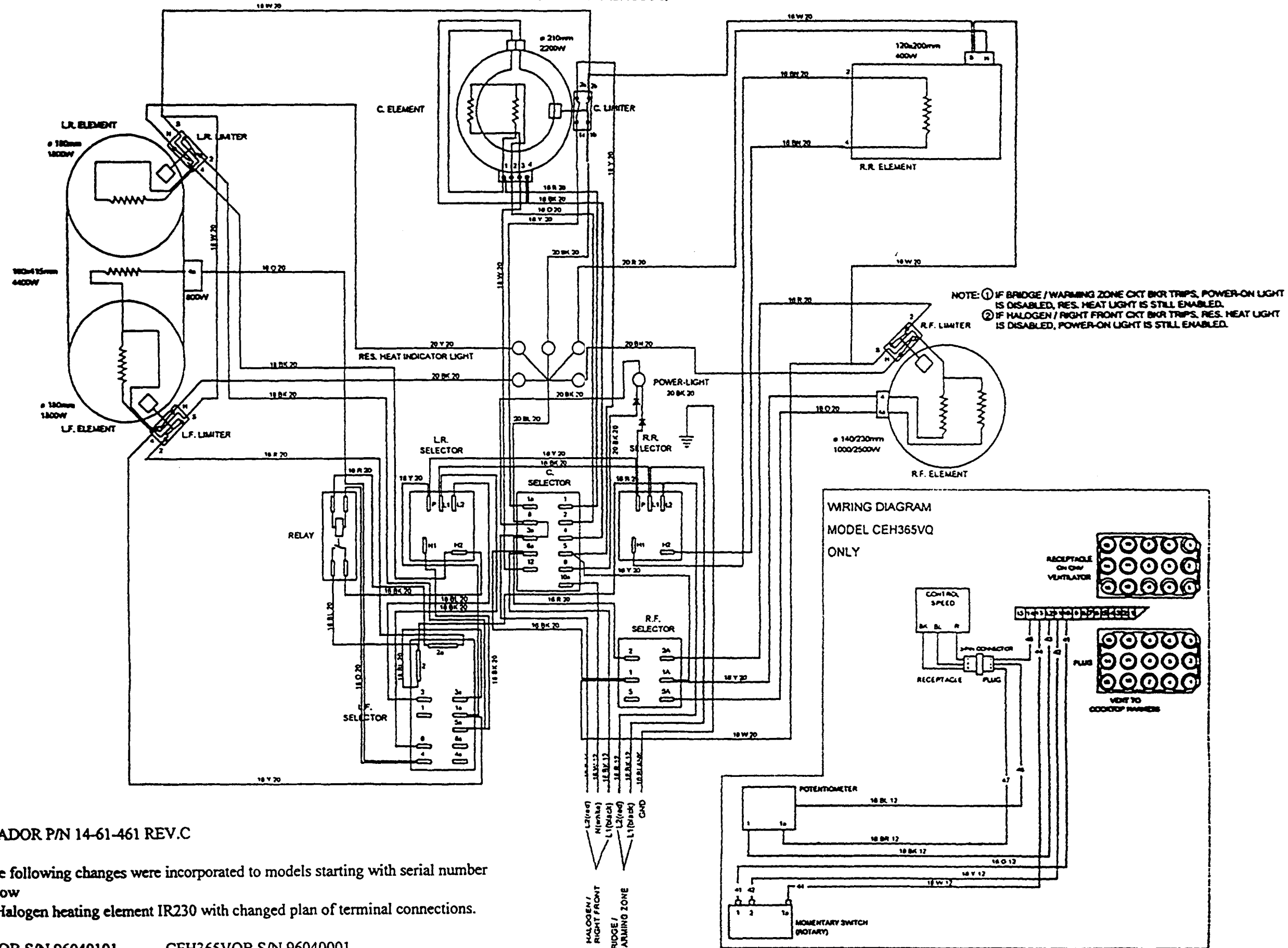
Element Type	Models Used	On Time	
		Minimum	Maximum
1200W Radiant	CER30 (LF), CEH30 (LF), CER36 (RR), & CEH456 (LF)	2	3
1800W Radiant (Test Individually)	CER30 (RR), CEH30 (RR), CER36 (LF), CEH365 (LF & LR), & CEH456 (LC & RC)	4	5
2000W Radiant	CER30 (RF) & CER36 (LR)	4	5
2500W Radiant	CER30 (LR) & CER36 (RF)	3.5	5
1000W / 2500W Radiant (Test @ 2500W)	CEH30 (LR) & CEH365 (RF), & CEH456 (LR)	3.5	5
2000W Halogen	CEH30 (RF) & CEH365 (RC), & CEH456 (RF)	3.5	5



NOTE: ① IF LEFT SIDE CKT BKR TRIPS, POWER-ON LIGHT IS DISABLED, RES. HEAT LIGHT IS STILL ENABLED.
 ② IF RIGHT SIDE CKT BKR TRIPS, RES. HEAT LIGHT IS DISABLED, POWER-ON LIGHT IS STILL ENABLED.

CER36Q
 THERMADOR P/N 14-61-459-01

CEH365V-Q/CEH365Q



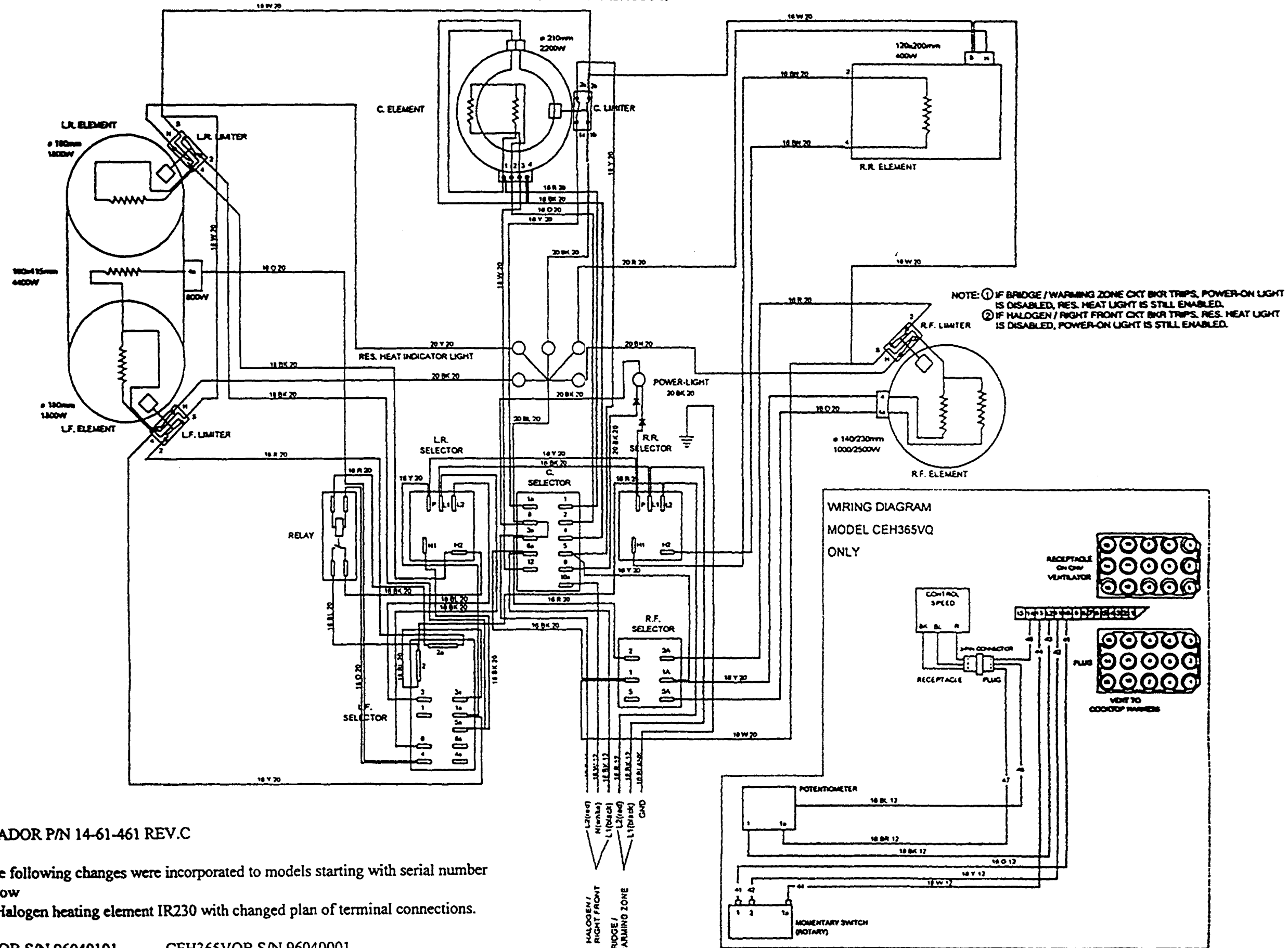
THERMADOR P/N 14-61-461 REV.C

Note: The following changes were incorporated to models starting with serial number listed below
 Change Halogen heating element IR230 with changed plan of terminal connections.

CEH365QB S/N 96040101
 CEH365QW S/N 96040001

CEH365VQB S/N 96040001
 CEH365VQW S/N 96050001

CEH365V-Q/CEH365Q

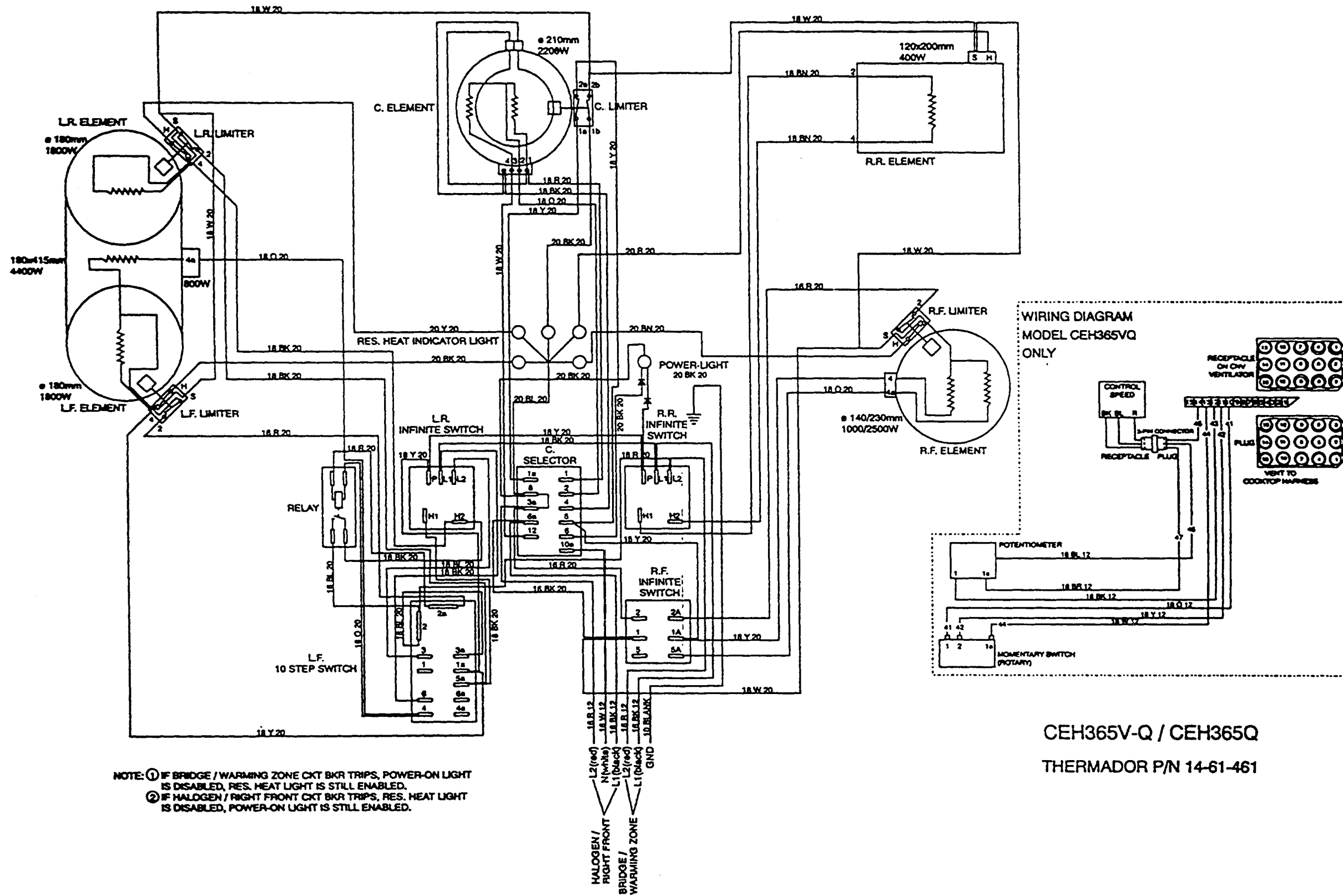


THERMADOR P/N 14-61-461 REV.C

Note: The following changes were incorporated to models starting with serial number listed below
 Change Halogen heating element IR230 with changed plan of terminal connections.

CEH365QB S/N 96040101
 CEH365QW S/N 96040001

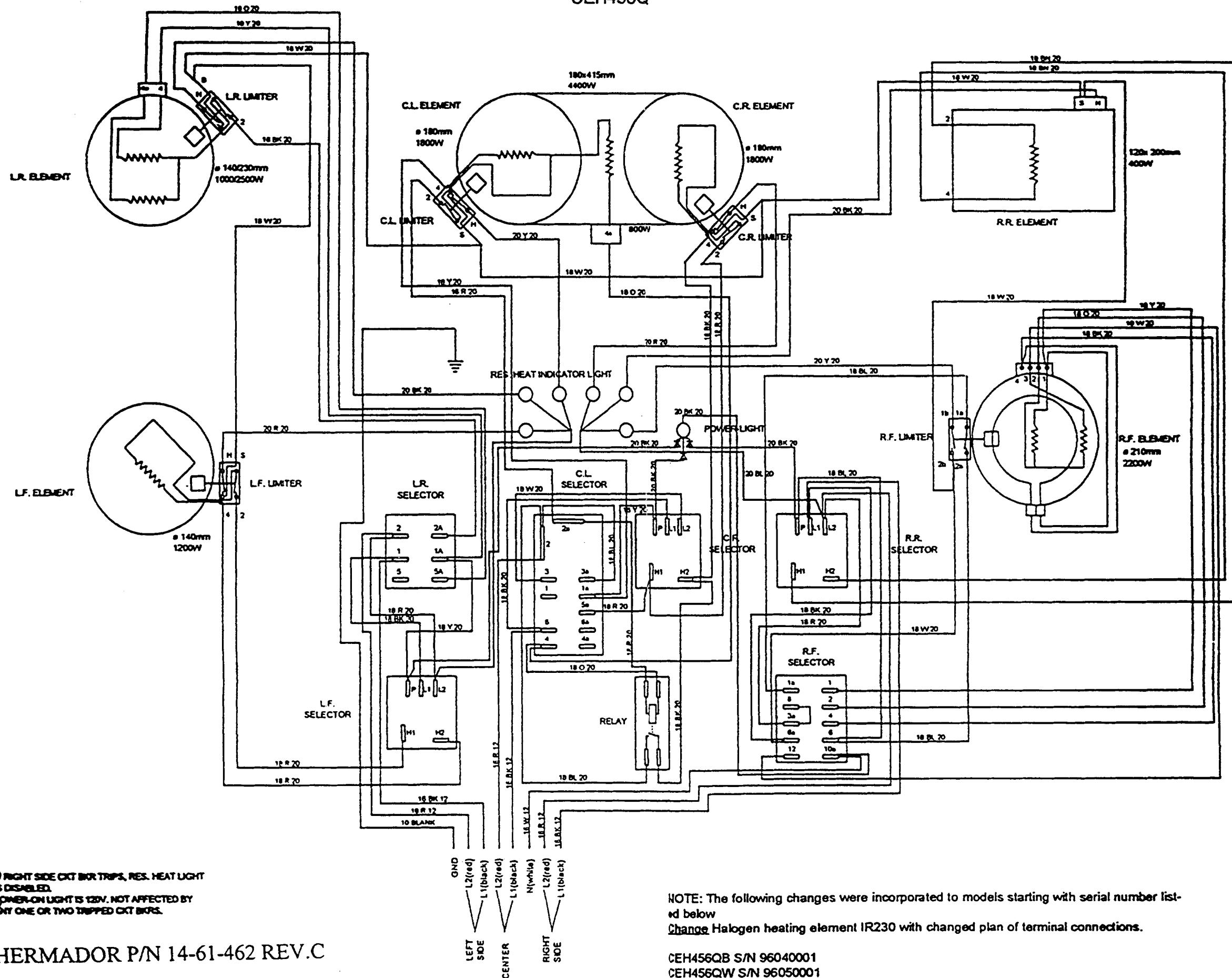
CEH365VQB S/N 96040001
 CEH365VQW S/N 96050001



NOTE: ① IF BRIDGE / WARMING ZONE CKT BKR TRIPS, POWER-ON LIGHT IS DISABLED, RES. HEAT LIGHT IS STILL ENABLED.
 ② IF HALOGEN / RIGHT FRONT CKT BKR TRIPS, RES. HEAT LIGHT IS DISABLED, POWER-ON LIGHT IS STILL ENABLED.

CEH365V-Q / CEH365Q
 THERMADOR P/N 14-61-461

CEH456Q



NOTE: 1 RIGHT SIDE CXT BRK TRIPS, RES. HEAT LIGHT IS DISABLED.
 2 POWER ON LIGHT IS 120V, NOT AFFECTED BY ANY ONE OR TWO TRIPPED CXT BRKS.

NOTE: The following changes were incorporated to models starting with serial number listed below
 Change Halogen heating element IR230 with changed plan of terminal connections.

THERMADOR P/N 14-61-462 REV.C

CEH456QB S/N 96040001
 CEH456QW S/N 96050001

