



Technician Manual

GE & Kenmore Induction Cooktops

GE Models

JP392R

JP393R

JP692R

JP693R

Kenmore Models

911.4292990

911.4292590

911.4392990

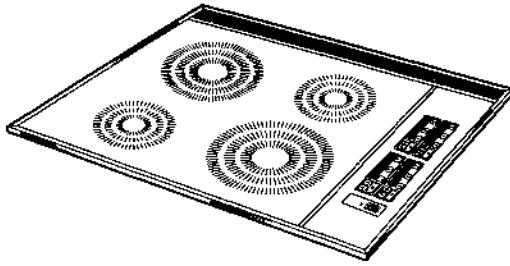
911.4392590

INDUCTION COOKTOP

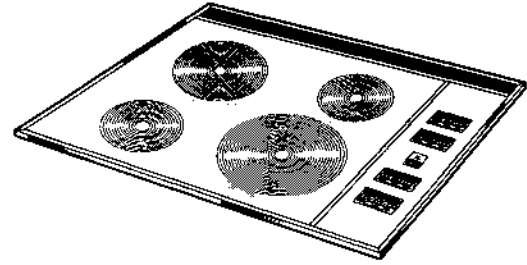
GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911.429 & 439

The above series of Induction Cooktops come in two sizes (30" & 36"), two colors (black on black & white on white) and carries two different brand names (GE Profile Line & Kenmore Line).

GE Profile Line



Kenmore Line



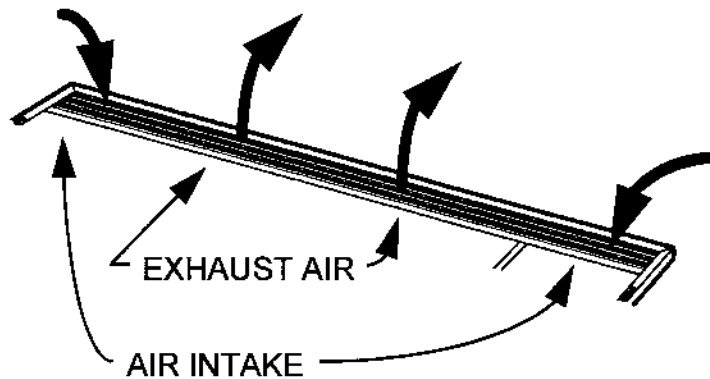
<u>Model No.</u>	<u>Width</u>	<u>Color</u>	<u>Model No.</u>	<u>Width</u>	<u>Color</u>
JP392R	30"	Black	911.4292990	30"	Black
JP393R	30"	White	911.4292590	30"	White
JP692R	36"	Black	911.4392990	36"	Black
JP693R	36"	White	911.4392590	36"	White

RATING PLATE

The Rating Plate can be found in two locations on the Induction Cooktop.

1. Located below the grill across the back of the cooktop in the right hand corner. Remove grill to see Model and Serial No.
2. Located on the bottom side of cooktop box.

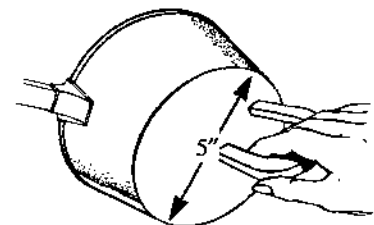
AIR FLOW



The grill across the rear of the cooktop allows proper air flow for cooling the electrical components. Air is drawn in at each end of the grill by two fans located on the bottom of the cooktop. The air is circulated across the electronic components in each module and then exhausted out the center of the grill.

COOKWARE

Induction cooking requires the use of cookware made of ferrous metals (materials to which magnets will stick) such as steel or iron. Pans must be at least 5" across the bottom for the cooktop to work.

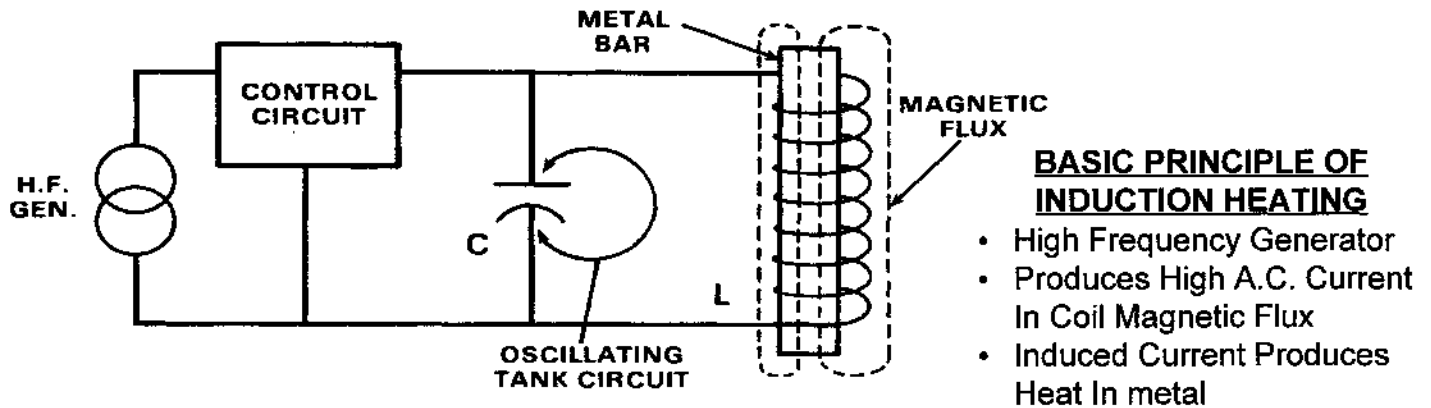


INDUCTION COOKTOP

GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911.429 & 439

BASIC PRICIPLES OF INDUCTION HEATING

A simplified circuit illustrates the basic principle of induction heating. A high frequency generator is used to supply a high alternating current to a vertical induction heating coil. If a piece of metal is introduced into the heating coil, the large currents induced in the metal by the alternative magnetic field produces high surface temperatures in the metal. The amount of heat of heat depends on the permability, electrical conductivity, and the geometry of the metal in the magnetic field.



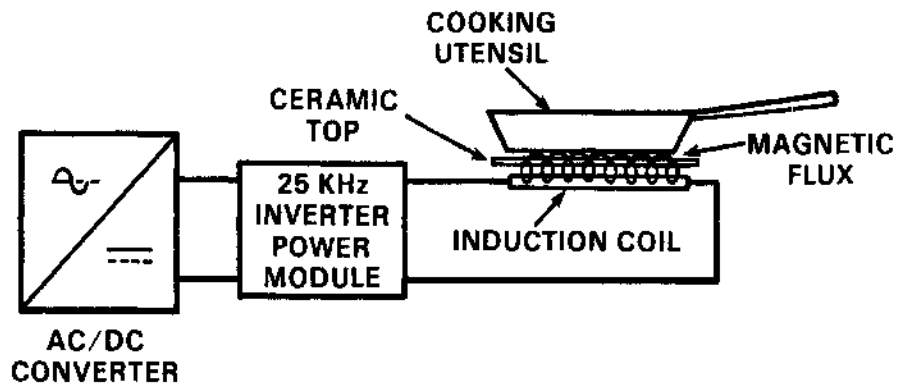
If the vertical induction coil is replaced by a "flat coil" and mounted under a ceramic surface, an induction cooking appliance is obtained.

The principle also is much like a transformer, with the induction coil the primary winding, and the utensil being the secondary winding.

The cooking utensil is placed on the ceramic plate, just above the induction coil. High frequency currents are then induced, through the ceramic plate, into the cooking utensil to provide the heat necessary to cook the food.

INDUCTION COOKING APPLIANCE

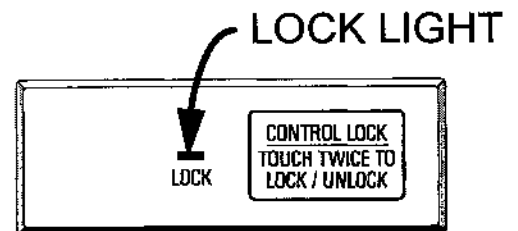
- Flat Coil Under Glass Top
- Utensil Replaces Bar
- Induced Current Produces Heat In Utensil
- Must Use Ferrous (Magnetic) Utensil



CONTROL LOCK FEATURE

A provision for preventing the operation of the cooktop has been designed into the control. When the cooktop is initially powered up or after power failure the control is in the LOCKED mode. A small green light above the word "lock" lights up. No Functions will Operate while the unit is in the locked mode. To unlock the control panel touch the Control Lock Pad twice within 3 seconds.

The control can also be locked by pressing the lock pad twice within 3 seconds. The control must be unlocked before it can be used.

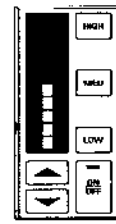


INDUCTION COOKTOP

GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911.429 & 439

CONTROL OPERATION

The touch control for each unit has 10 discrete power settings - 3 major power pads, and up/down slew pads for 7 additional power levels between the major settings. Each touch of a slew pad changes the setting one increment. If the slew pad is touched continuously, the bar segments continue to change.



GE Profile



Kenmore

POWER SETTINGS

The display contains 10 separate LED'S for the power setting selected. The chart below gives the % of 100% power for each setting. The numbers under setting represent the number of LED'S lit for the power level chosen. Settings between the major pads (Low, Med & High) is obtained by use of the slew pads.

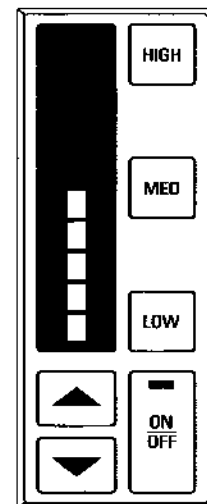
SETTING	Percentage of 100% Power
1 - LOW	3
2	8
3	14
4	21
5 - MED	29
6	39
7	51
8	65
9	81
10 - HIGH	100

INDUCTION HEATING COIL OPERATION

The control requires a two step set-up to turn a induction coil "ON" with a utensil in place.

- 1 Touch "ON/OFF" Pad - The control will "BEEP" and LED above "ON/OFF" PAD will light and module fans will come on.
- 2 Press "POWER" Pad (Major or Slew) - Display Bar will light for the power level selected. If a magnetic cooking utensil is not in place the control will beep & flash and induction unit will not turn on.

NOTE: If a power level is not selected within 15 seconds after touching the "ON" pad control will automatically turn "OFF".



DISPLAY FOR INDUCTION COIL "BEEPS & FLASHES"

Under the following conditions the display for a particular induction coil will beep & flash:

- Cooking Utensil Removed During Cooking - When the utensil is removed during the cooking mode the control will remove power to the induction coil and "Beep & Flash". If the utensil is placed back on the coil within one minute, the unit will resume normal cooking.
- Over Temperature - If coil over heats the unit will turn off. After cool down, unit will resume normal operation.
- No Utensil On Coil - The control will "Beep & Flash" for one minute and turn "OFF". If the utensil is placed on the coil within one minute, the unit will start normal cooking.
- Utensil Too Small - Cookware must be at least 5" in diameter or the coil will not sense the presents of the pan.
- Cookware Off Center - Coil will not sense the cookware as being the proper size.

INDUCTION COOKTOP

GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911,429 & 439

COOKTOP SERVICE POSITION

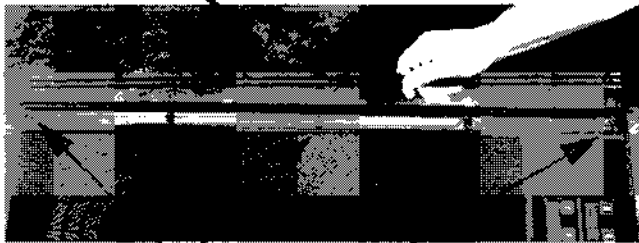
The cooktop can be raised for service.

WARNING DISCONNECT all **POWER** before opening Cooktop for service. The components on the power modules are electrically hot when power is connected.

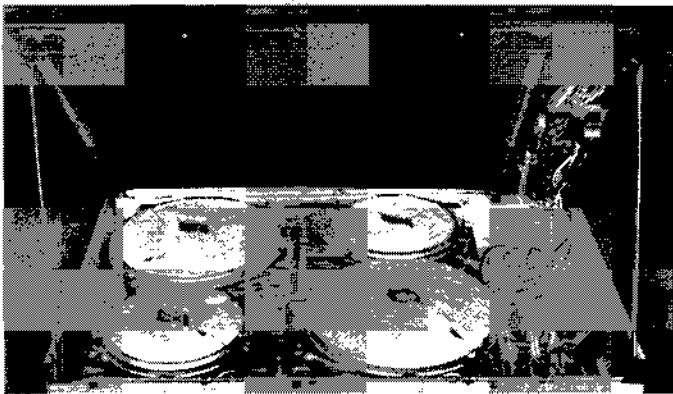
TO RAISE COOKTOP:

1. **DISCONNECT POWER**
2. Remove rear vent grill (Snapped in place)

GRILL



3 SCREWS



COOKTOP ASSEMBLY

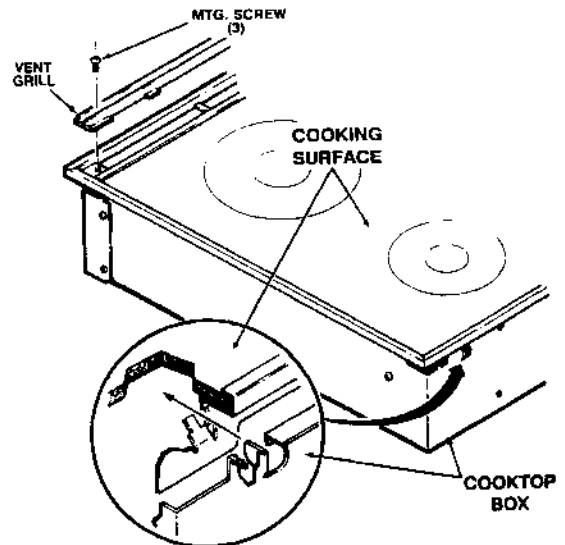
The ceramic glass top and control panel assembly make up the cooktop assembly. A frame around the outer edge hold the assembly together.

CONTROL PANEL ASSEMBLY

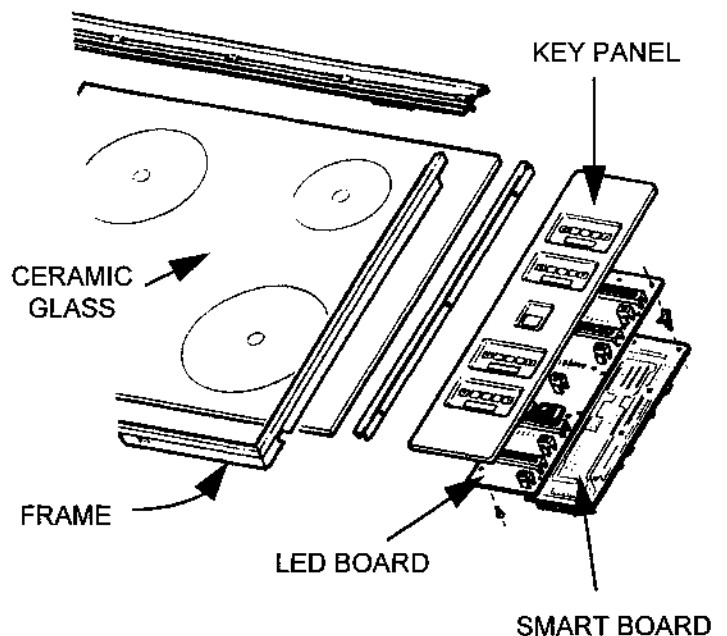
The control panel assembly consists of:

- Key Panel Assembly (replaced as complete assembly).
- Control Board (Smart Board).
- LED Board

3. Remove 3 screws from rear of Cooktop trim
4. Lift Cooktop at rear and move towards rear to unhook tabs at front.



5. Rest rear edge of Cooktop against rear of cooktop box and raise support arms.

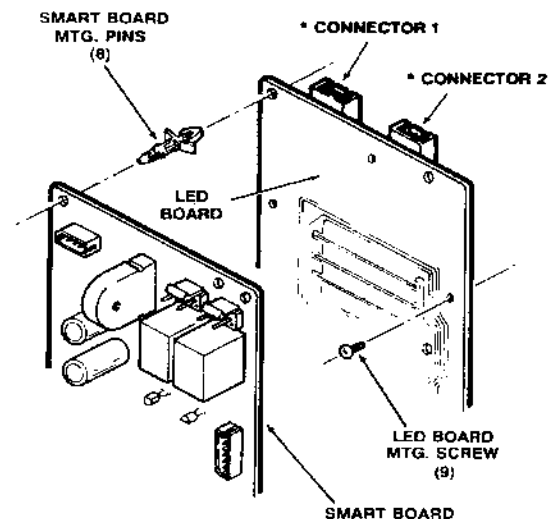
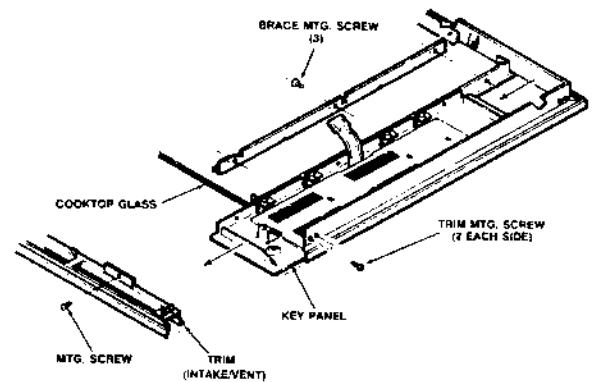


INDUCTION COOKTOP

GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911.429 & 439

TO REMOVE CONTROL PANEL ASSEMBLY:

- 1 DISCONNECT POWER to unit and raise cooktop. (See page 4)
- 2 Remove connectors from cooktop, lift cooktop off and lay face down on flat surface.
NOTE: Cover surface to prevent possible damage to cooktop or surface.
- 3 Remove 5 mounting screws securing intake / vent trim (2 screws on each side and one on top).
- 4 Remove 3 screws mounting center brace.
- 5 Flex side trim out slightly from control panel assembly and pull straight up. Care must be taken not to deform or damage trim.
NOTE: Foam tape around perimeter of control may stick to trim making it difficult to remove.



* LED BOARD CONNECTORS
(SEE SCHEMATIC WIRING DIAGRAM)

CONTROL PANEL ASSEMBLY

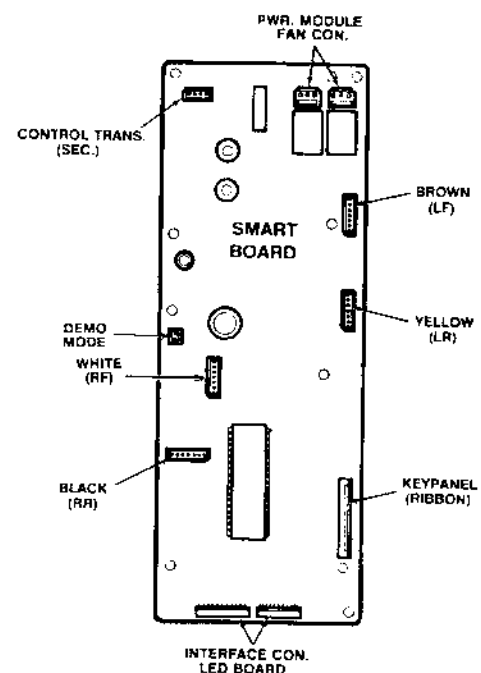
TO DISASSEMBLY CONTROL PANEL:

1. DISCONNECT POWER and remove cooktop assembly.
2. Remove Smart Board by:
 - Disconnect Smart Board to LED Board connectors and Ribbon Connector.
 - NOTE:** To release ribbon connector squeeze tabs on each end of connector and lift up.
 - Smart Board (held to LED board by plastic (standoffs) is removed by depressing spring finger on each of the standoffs.
 - NOTE:** Care must be taken not to damage board when removing.
3. LED Board is mounted to Key Panel by 9 screws.

CONTROL BOARD (SMART BOARD)

The control board contains the following connectors:

- Control Transformer Secondary.
- Left and Right Module Fan Motor Connectors.
- Color Coded Module Heating Unit Connectors: properly aligned and completely pushed on.
 - Left Front - Brown
 - Right Front - White
 - Left Rear - Yellow
 - Right Rear - Black
- Demo Connector
- Key Panel Ribbon Connector
- LED Board Connectors



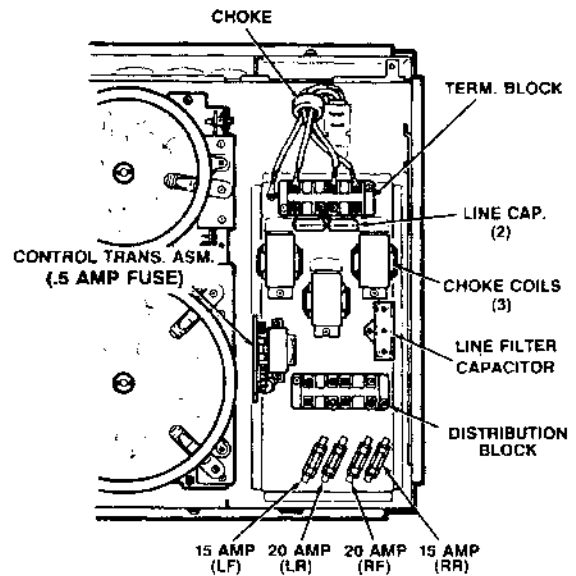
NOTE: For proper unit operation and to avoid damage to unit, Connectors must be properly aligned and completely pushed on.

INDUCTION COOKTOP

GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911.429 & 439

INPUT POWER COMPONENTS

All input power components are mounted on the cooktop box bottom right side. The components consist of Terminal Block, Line Capacitors, Choke Coils, Line Filter Capacitor, Distribution Block, Control Transformer Assembly and 15 and 20 Amp module fuses.



MODULE FUSES

The module power leads each contain either a 15 Amp (for 6" units or a 20 Amp (for 8" or 9" units) fuse. The four fuses are labeled and located on the case bottom near the distribution block.

The nominal wattage and current for each of the units are as follows:

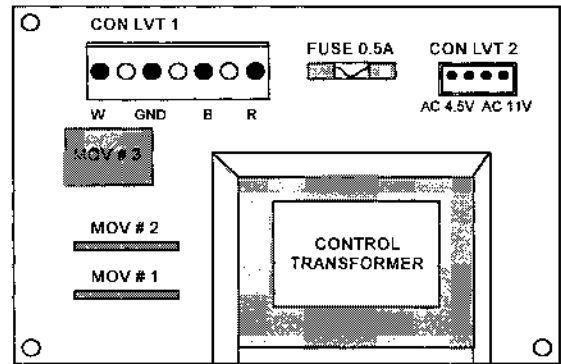
- Left Front - 1300W. @ 120V. and 11A.
- Left Rear - 1800W. @ 120V. and 15A.
- Right Front - 2200W. @ 120V. and 18A.
- Right Rear - 1300W. @ 120V. and 11A.

NOTE: Current can vary by +10% or -35% depending type of load used when checking current.

CONTROL TRANSFORMER ASSEMBLY

The Control Transformer and PC Board Assembly is mounted to the case bottom. Approximate voltages are:

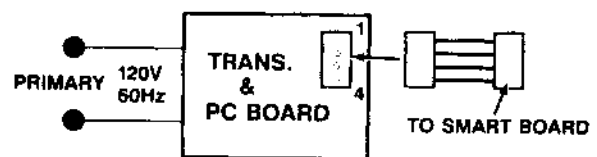
Connector Pin No.	Nominal Voltage
1 - 2	11.0V AC
3 - 4	4.5V AC



CONTROL TRANSFORMER CIRCUIT BOARD

TO TEST

Disconnect the connector from control transformer board. Connect appliance power and check output voltage.



INDUCTION COOKTOP

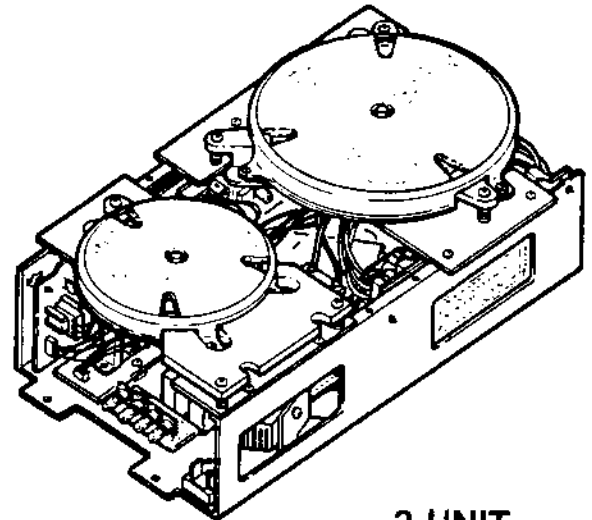
GE MODELS JP392R, JP393R, JP692R, JP693R & KENMORE MODELS 911, 429 & 439

POWER MODULES

The power modules are located inside the Cooktop case. The left module contains one 6" and one 8" heating coil, and the right contains one 6" and one 9" heating coil along with all of the electronic components associated with the module.

Each heating unit has its own smart board, filter coil, capacitors, and power transistor. The modules also contain a low voltage transformer, fan, and other miscellaneous parts.

NOTE: Left and Right power modules appear to be identical. (Left module contains one 8" and one 6" coil, right module contains one 9" and one 6" coil).



**2 UNIT
PWR. MODULE**

TO REMOVE POWER MODULE:

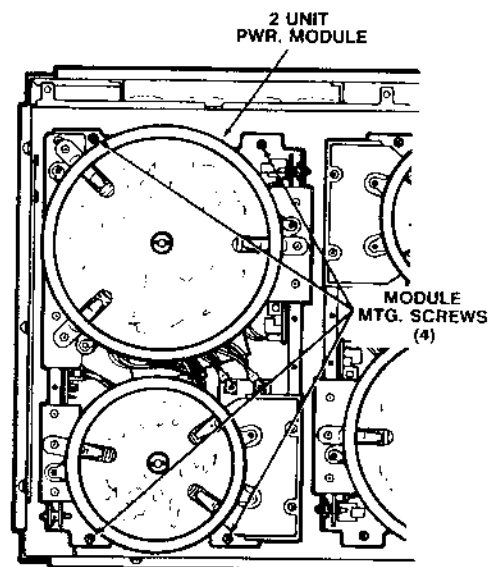
Each module is mounted inside the cooktop case by four screws.

WARNING

DISCONNECT POWER before opening Cooktop for service. Components are electrically hot when power is connected.

TO REMOVE

1. DISCONNECT POWER to cooktop.
2. Raise top assembly and disconnect plugs to control assembly.
3. Lift top assembly off.
4. Disconnect leads to power module.
 - a. Red or Black lead from fuse.
 - b. Neutral (White) from distribution block.
5. Remove 4 screws that secure module to case bottom.



INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

The following is intended to help guide you through trouble shooting the Induction Cooktop. Each step will identify how the cooktop should work and what corrective action is needed. It is important to follow the guide all the way through because in some instances one failure identified can be the results of another failure.

One of the most important steps will be to identify what is working and what is not..

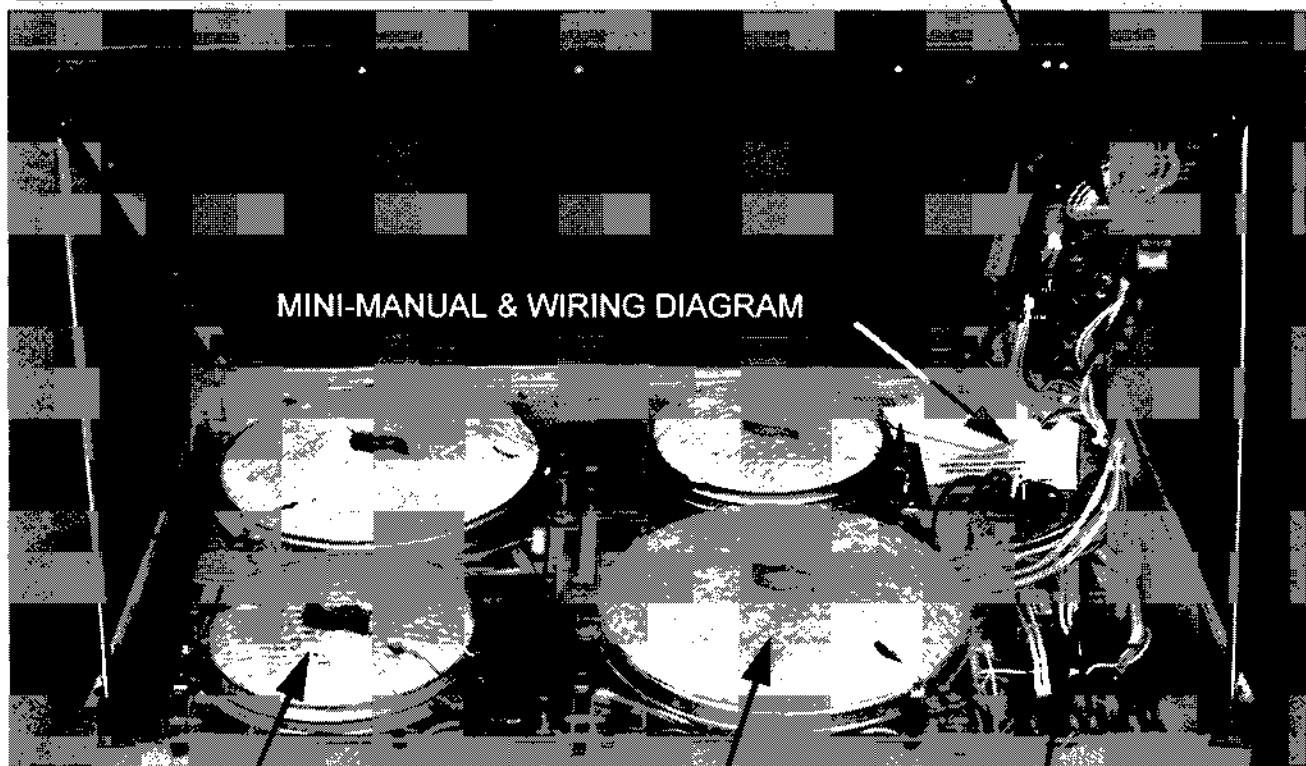
Example: Right Front Unit Does not Heat, or Display Beeps and Blinks, or Can not Unlock Cooktop.

Once the problem area has been identified you are ready to begin the repair procedure.

With the cooktop raised into the service position (See Page 4) you will be able to move to the problem areas and begin the repair.

SMART BOARD, LED BOARD
& KEY PANEL

COOKTOP SERVICE POSITION



LEFT
POWER
MODULE

RIGHT
POWER
MODULE

INPUT
POWER
COMPONENTS



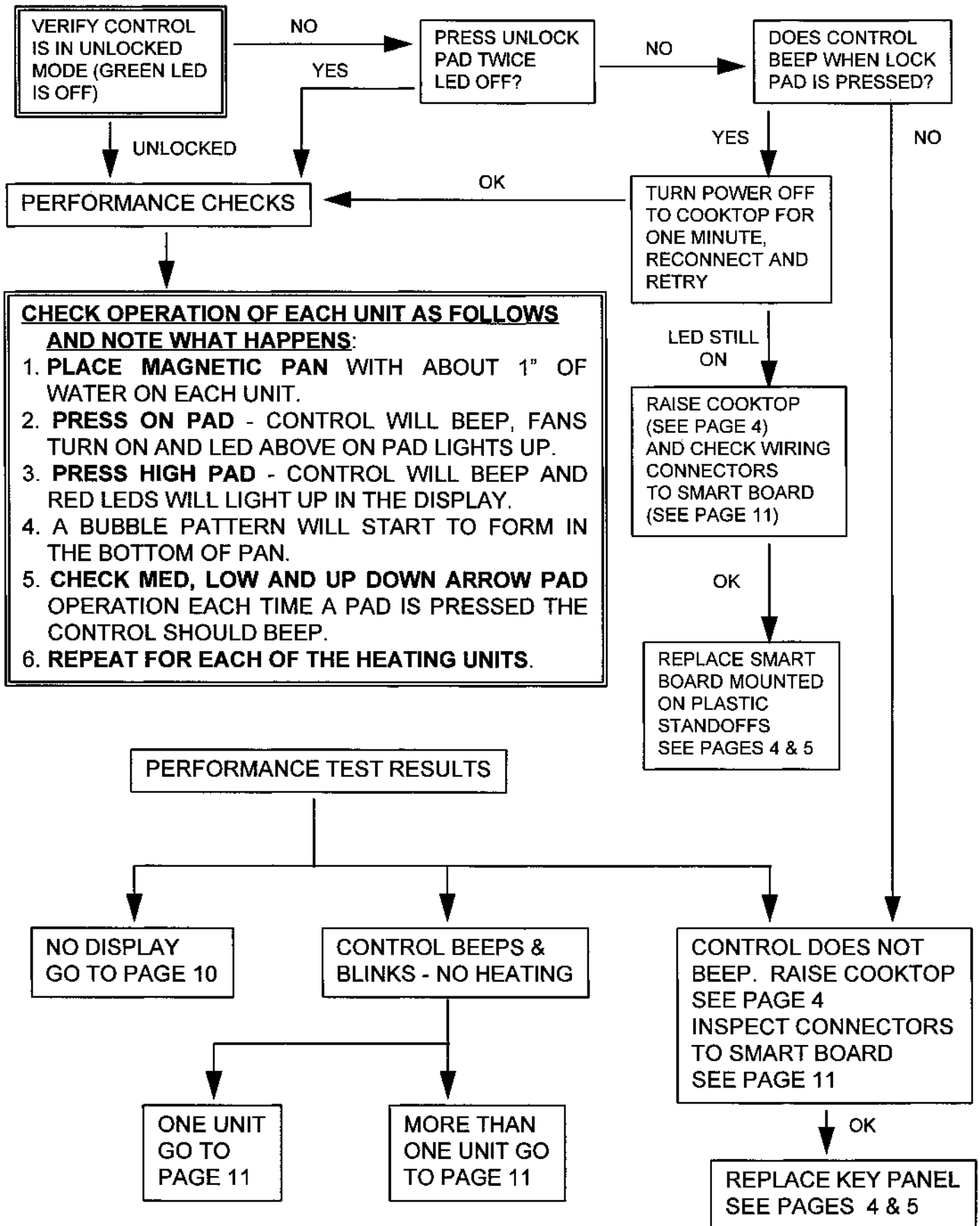
INPUT POWER
COMPONENTS

BACK OF CONTROL PANEL
GLASS COOKTOP

NOTE: If room permits cooktop can be rotated to the left for servicing.

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

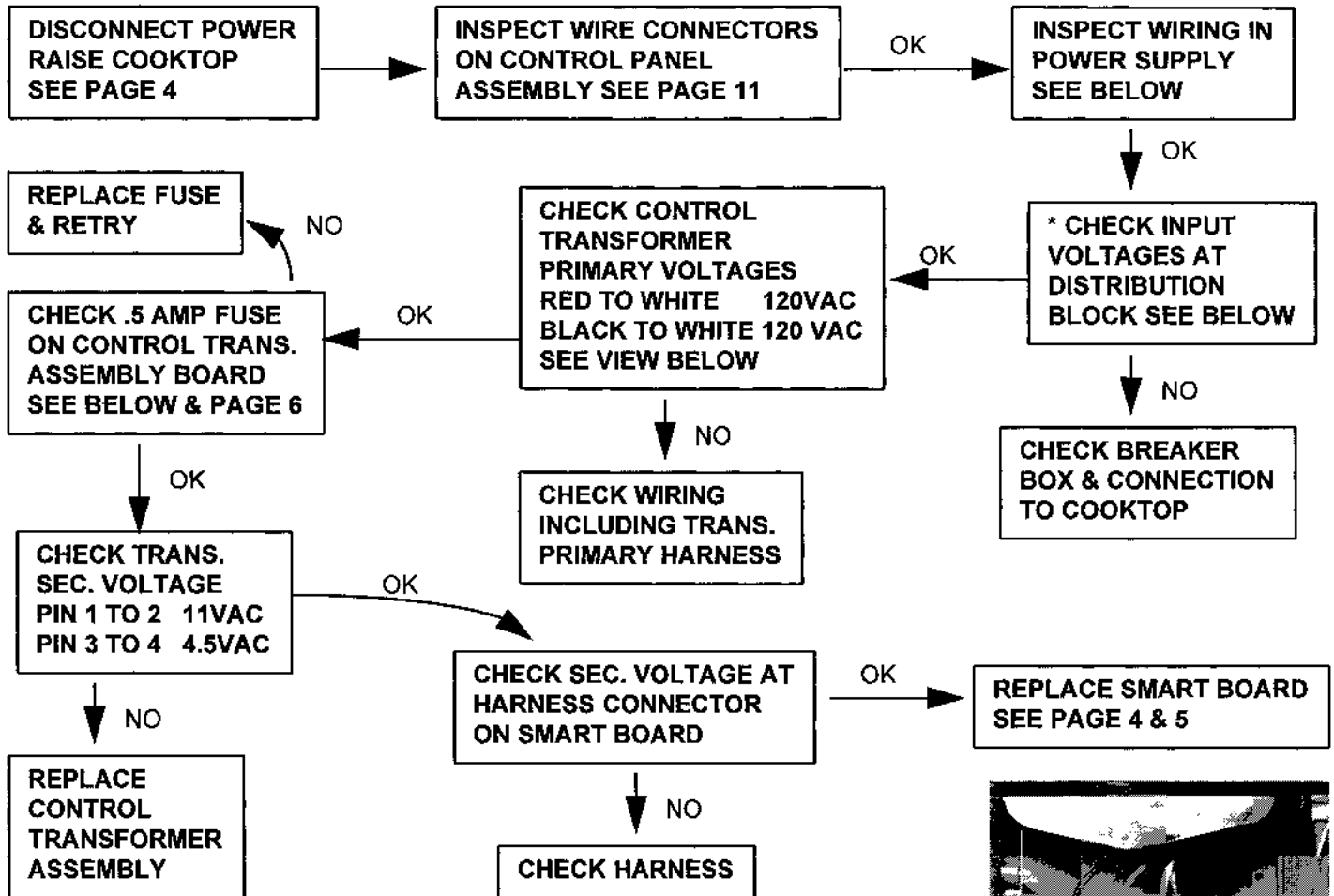
GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439



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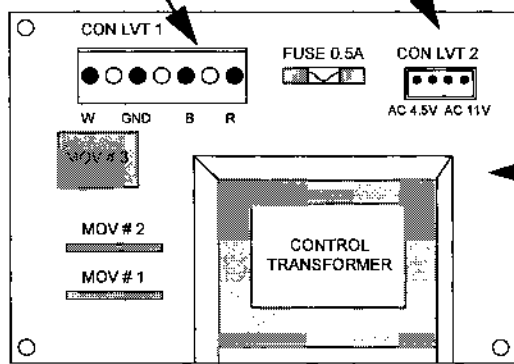
GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

NO DISPLAY



PRIMARY
CONNECTOR

SECONDARY
CONNECTOR

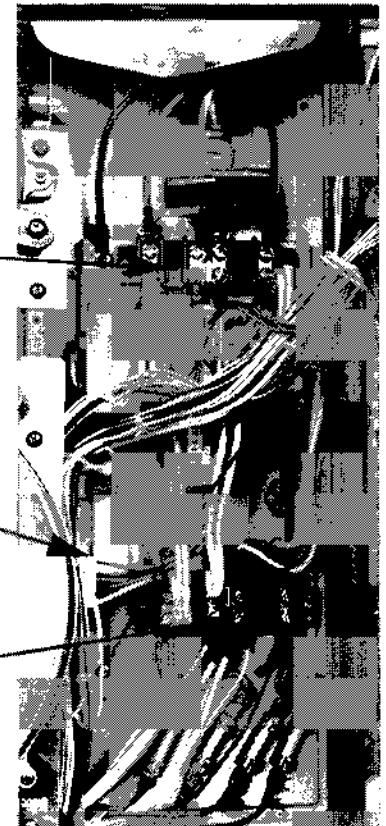


CONTROL TRANSFORMER CIRCUIT BOARD

* INPUT POWER TERMINAL
BLOCK
L1 to N - 120VAC
L2 to N - 120VAC
L1 to L2 - 240VAC

CONTROL TRANSFORMER
ASSEMBLY

* DISTRIBUTION BLOCK
L1 to N - 120VAC
L2 to N - 120VAC
L1 to L2 - 240VAC



* **Voltage Not Present** - Check at Input Power Terminal Block
"OK" - Check Power Supply Components

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

WARNING - DISCONNECT POWER before servicing - **"DO NOT TOUCH"** any electrical or ungrounded metal parts while servicing with power connected.

ONE UNIT NOT WORKING
INSPECT SMART BOARD
CONNECTORS SEE BELOW

OK

MAKE VISUAL INSPECTION OF
POWER MODULE THAT IS NOT
WORKING. SEE PAGES 20 & 21
LOOK FOR CONNECTORS OFF.

OK

GO TO
PAGE 12

**MORE THAN ONE
UNIT NOT WORKING**

LED BOARD CON 304 RIGHT MODULE
(GE) - BLACK & WHITE LEADS
(KENMORE) - BROWN & YELLOW LEADS

LED BOARD. CON 303 LEFT MODULE
(GE) - BROWN & YELLOW LEADS
(KENMORE) - BLACK & WHITE LEADS

CONTROL TRANS. CON 209
(RED & BLUE LEADS)

MODULE FANS CON 207 & 208
(WHITE LEADS)

INSPECT SMART BOARD
WIRING & CONNECTORS
SEE ILLUSTRATION

OK

MAKE VISUAL
INSPECTION OF POWER
MODULE THAT IS NOT
WORKING. SEE PAGES 20
& 21 LOOK FOR
CONNECTORS OFF.

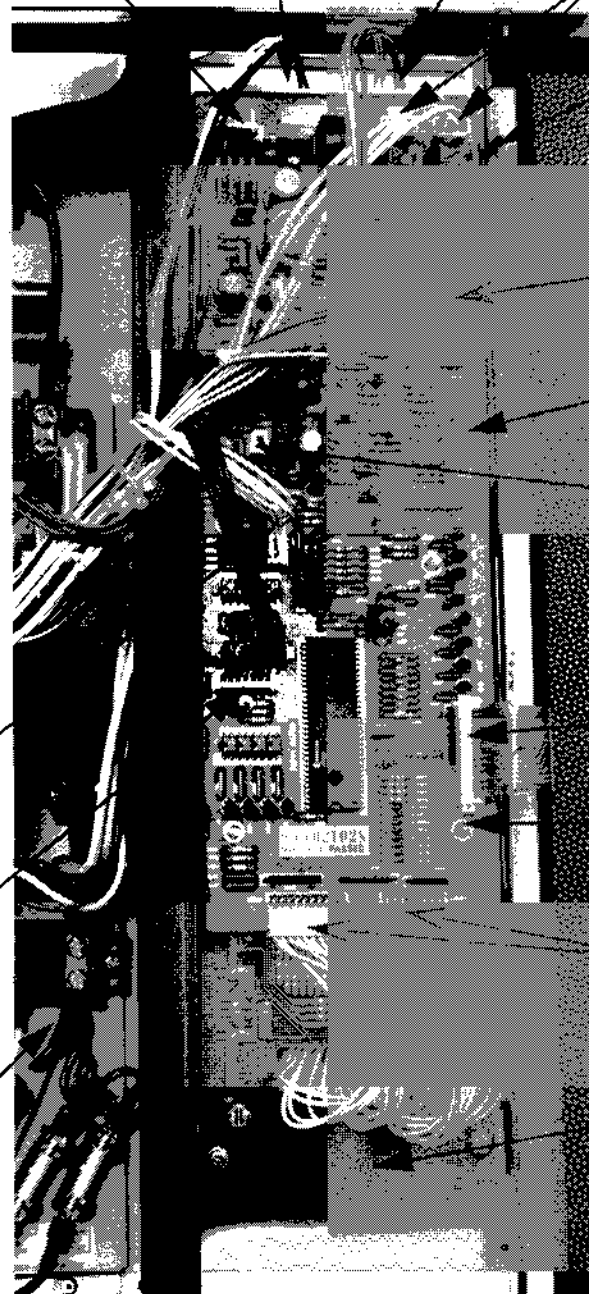
OK

REPLACE CONTROL
SMART BOARD
SEE PAGES 4 & 5

RIGHT FRONT UNIT
CON 203
(WHITE LEADS)

RIGHT REAR UNIT
CON 204
(BLACK LEADS)

INPUT POWER COMPONENT
COMPARTMENT



CONTROL GRND. LEAD
(GREEN LEAD)

LEFT FRONT UNIT
CON 206
(BROWN LEADS)

LEFT REAR UNIT
CON 205
(YELLOW LEADS)

DEMO MODE CON 211
(BLACK LEAD)

KEY PANEL RIBBON
CONNECTOR

CONTROL SMART
BOARD

LED BOARD INTERFACE
CON 201 & 202
(WHITE LEADS)

LED BOARD

CONTROL PANEL AS
VIEWED FROM BACK

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

WARNING - DISCONNECT POWER before servicing - "DO NOT TOUCH" any electrical or ungrounded metal parts while servicing with power connected.

CHECK FUSE TO UNIT NOT WORKING SEE ILLUSTRATION

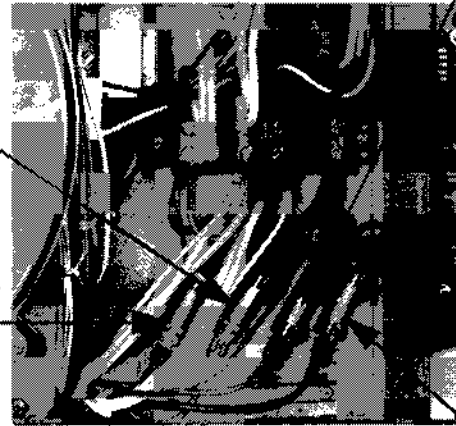
RIGHT FRONT
20 A. FUSE

MAKE THE FOLLOWING CHECKS:

1. Identify the fuse to the unit not working. Each unit fuse is clearly identified including part no. & *Amperage on case bottom.
 2. Check fuse with ohm meter. If fuse is blown, replace & retry unit.
- * **NOTE: USE ONLY THE TYPE FUSE IDENTIFIED FOR THAT UNIT.**
3. Fuse is not open or blows when replaced proceed to module checks. (PAGE 13)

LEFT REAR
20 A. FUSE

LEFT FRONT
15 A. FUSE

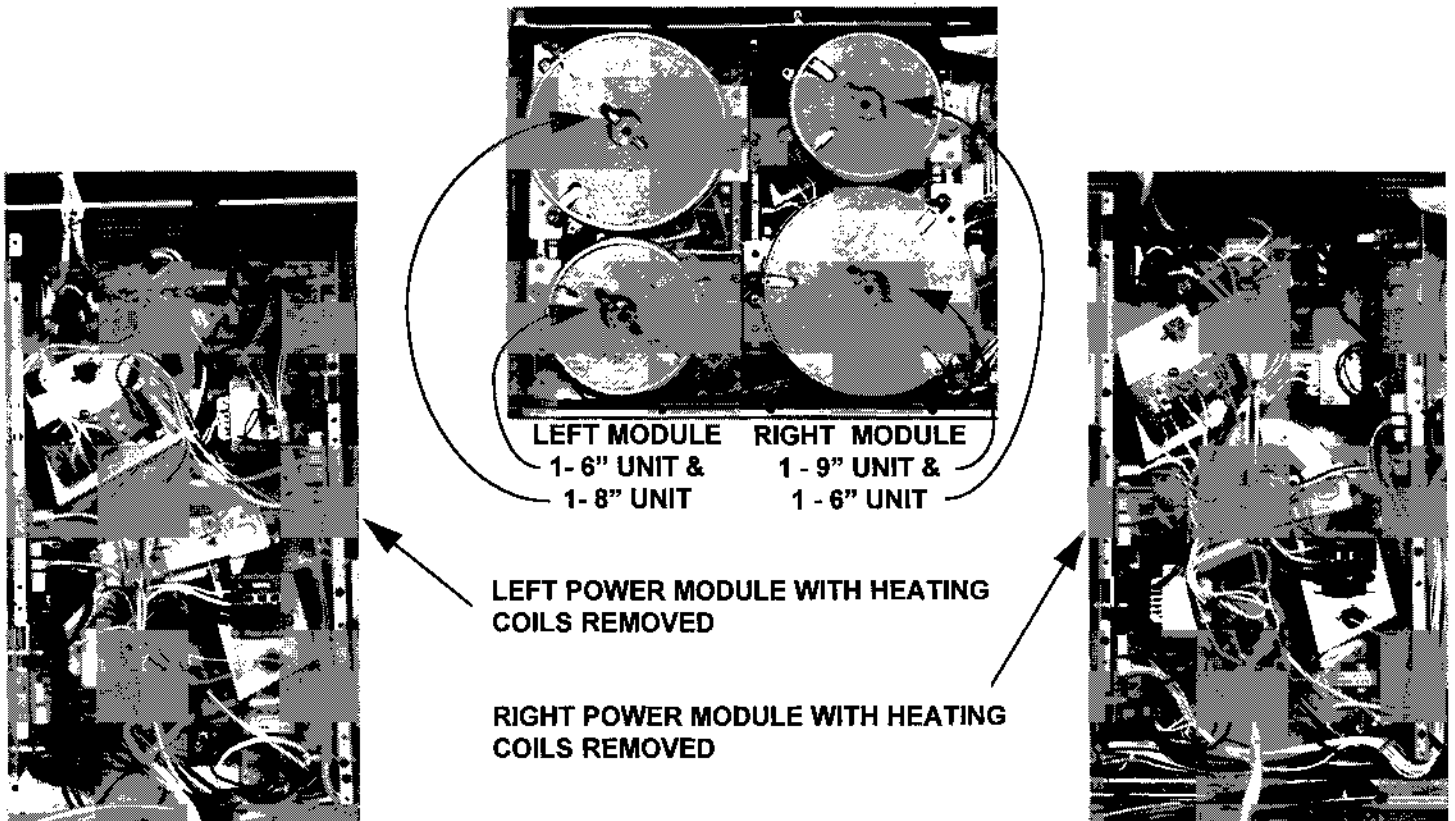


RIGHT REAR
15 A. FUSE

MODULE CHECKS:

FRONT OF INPUT POWER COMPARTMENT

The Modules in the cooktop are referred to as either a Right Module or Left Module. The Diagnostic procedure is the same for both modules. The main difference is coil size and component location. When replacing parts only use the parts specified for that particular unit (or section of module) being serviced. Both the Left & Right Module can be removed as a complete assembly by removing 4 screws securing it to the case bottom and disconnecting the wires to the control, fuses and distribution block.



INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

MODULE CHECKS CONTINUED: HEATING COILS

INSPECT HEATING COIL OF UNIT NOT WORKING.
 A.) DOES UNIT HAVE BURNT SMELL, B.) REMOVE INSULATION BLANKET FROM TOP OF COIL,
 C.) DOES UNIT HAVE DARK SPOTS ON THE COIL,
 D.) INSPECT PLASTIC FINGERS ON TOP OF COIL FOR DISTORTION OR SIGNS OF MELTING.

YES

NO

REPLACE MODULE. USUALLY INDICATES SEVERAL FAILURES RETURN REPLACED MODULE FOR REPAIRS

REMOVE COIL:
 1. REMOVE 4 SCREWS MOUNTING COIL TO MODULE FRAME.
 2. CAREFULLY DISCONNECT THERMISTOR PLUG & THERMAL FUSE PLUG FROM INVERTOR PC BOARD. SEE ILLUSTRATION
 3. LAY UNIT TO SIDE (NOTE - COIL WIRES STILL CONNECTED TO CAPS ON MODULE BASE.

PLASTIC FINGERS

HEATING COIL INSULATION BLANKET

4 COIL MOUNTING SCREWS

HEATING COIL

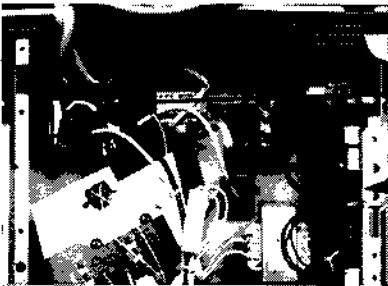
THERMISTOR (CON108) RED LEADS (CAN BE EITHER A 2 OR 5 PIN CONNECTOR)

THERMAL FUSE (CON 111) BLUE LEADS

INSPECT HEATING COIL CAPACITORS LOOK FOR SWOLLEN OR CRACKED CAPACITOR CASES.

CHECK THERMAL FUSE & THERMISTOR:
THERMAL FUSE (BLUE LEADS) WITH OHM METER CHECK AT CONNECTOR. - OPEN REPLACE.
THERMISTOR (RED LEADS) SET OHM METER ON HIGH SCALE & CHECK AT CONNECTOR. - OPEN OR SHORTED REPLACE.

TO REPLACE THERMAL FUSE OR THERMISTOR:
 REMOVE TWO SCREWS FROM CENTER BACK SIDE OF COIL. PLASTIC DISC FROM FRONT SIDE WILL SLIDE OUT WITH BOTH THE THERMAL FUSE & THERMISTOR. REINSTALL IN REVERSE ORDER MAKING SURE EACH COMPONENT IS INSTALLED THE SAME WAY IT WAS REMOVED.



COIL CAPACITORS (EACH HEATING COIL HAS TWO CAPACITORS)

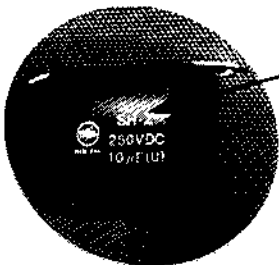
MODULE

BACK SIDE OF HEATING COIL

THERMAL FUSE CONNECTOR

2 MOUNTING SCREWS

THERMISTOR CONNECTOR



SWOLLEN CAPACITOR
 NOTE: WHEN REPLACING CAPACITOR, ONLY REPLACE WITH ONE CALLED OUT ON PARTS CATALOG PAGES. CAPACITORS HAVE DIFFERENT RATINGS. PROCEED TO NEXT PAGE.

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

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MODULE CHECKS CONTINUED: HEATING COILS "OK"

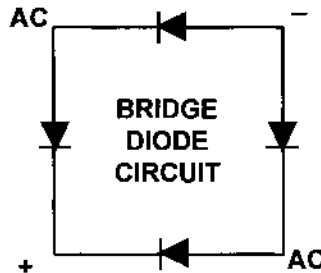
BRIDGE DIODE CHECKS:

1. LOCATE THE FUSE IN THE POWER SUPPLY AREA TO THE UNIT NOT WORKING. AND REMOVE THE FUSE.
2. SET OHMMETER ON HIGH SCALE AND PLACE ONE PROBE ON FUSE HOLDER SIDE WITH THE RED OR BLACK WIRE GOING TO THE MODULE. PLACE THE OTHER PROBE ON THE NEUTRAL (WHITE) LEAD ON THE DISTRIBUTION BLOCK.
3. OBSERVE METER READING. REVERSE PROBES AND OBSERVE METER READING

METER READING SHOULD SHOW HIGH RESISTANCE IN BOTH DIRECTIONS

IF A LOW RESISTANCE OR SHORT READING IS OBTAINED, MAKE CHECK AT BRIDGE DIODE LOCATED ON MODULE CASE BOTTOM.



DISTRIBUTION BLOCK
NEUTRAL LEADS FROM MODULES

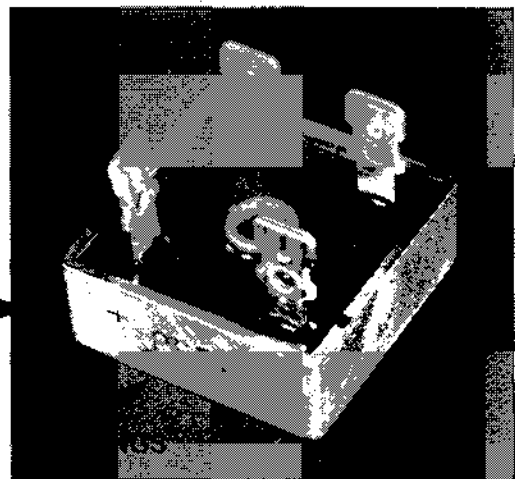


RED & BLACK MODULE LEADS TO FUSES

METER CHECKS AT BRIDGE DIODE:

Mark wires and remove from diode.

- Place the negative ohm meter lead on the PLUS terminal of the Bridge Diode and the other lead on the AC terminal. Observe reading.
- Place the positive ohm meter lead on the NEGATIVE terminal and the other lead on the AC terminal. Observe reading.
- If Shorted Replace.  **GO TO PAGE 15**
- If "OK" check GTR. 



NOTE: Replace all Bridge Diodes Marked CM2504 & CM3504 on models with Serial Nos. Starting with HH, LH, MH, RH, or SH manufactured in mid 1993.

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

MODULE CHECKS CONTINUED:

BRIDGE DIODE REPLACEMENT:

1. MARK AND REMOVE WIRES TO DIODE. MARK ON MODULE + TERMINAL LOCATION
2. REMOVE MOUNTING SCREW IN CENTER OF BRIDGE DIODE AND LIFT OUT.
3. ADD A THIN EVEN LAYER OF THERMAL HEAT SINK COMPOUND TO BOTTOM OF DIODE, MAKING SURE TO COVER ENTIRE SURFACE.
4. POSITION NEW DIODE (PLUS & MINUS) SAME AS OLD DIODE AND REINSTALL SCREW. MAKE SURE BOTTOM OF DIODE IS MAKING GOOD CONTACT WITH MOUNTING SURFACE.
5. REWIRE



MOUNTING SCREW

HEAT SINK COMPOUND BETWEEN DIODE BASE MODULE BASE

BRIDGE DIODE

BRIDGE AND MODULE CASE BOTTOM MUST MAKE GOOD CONTACT

GTR (Giant Transistor):

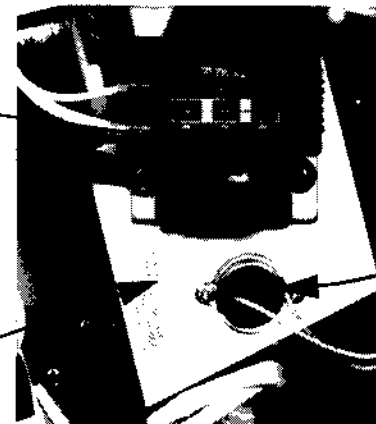
The GTR'S will be furnished as and assembly. The 6" unit GTR will consist of one GTR soldered to a circuit board. The 8" & 9" units each contain two GTR'S soldered to a circuit board. See Pages 19 & 20 for GTR location for each unit. The GTR'S are not in the same location on the Left and Right Modules. The procedure for checking the GTR'S is the same for all except as noted.



HEAT SINK TEMPERATURE LIMITER

GTR ASSEMBLY

HEAT SINK

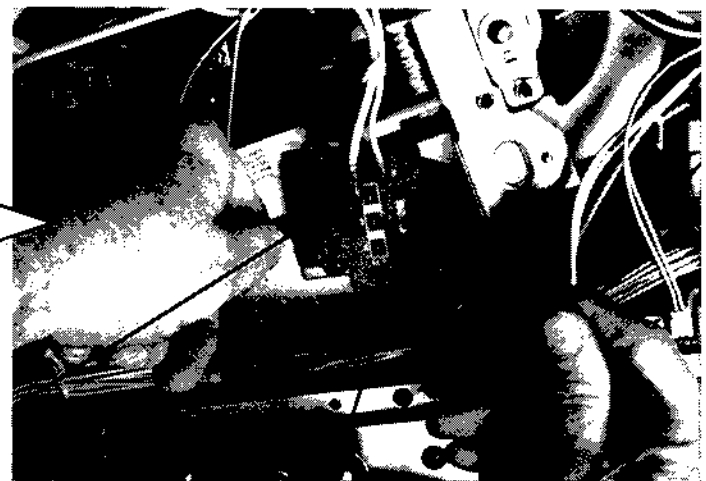


6" UNIT GTR

GTR CHECKS:

1. CONNECT POSITIVE LEAD FROM OHMMETER TO "C" ON GTR CIRCUIT BOARD AND NEGATIVE LEAD TO "E". GOOD GTR SHOULD READ HIGH RESISTANCE OR OPEN.
2. TO REPLACE GTR ASSEMBLY GO TO PAGE NO. 16

NEGATIVE LEAD



POSITIVE LEAD

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GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439
MODULE CHECKS CONTINUED: GTR REPLACEMENT

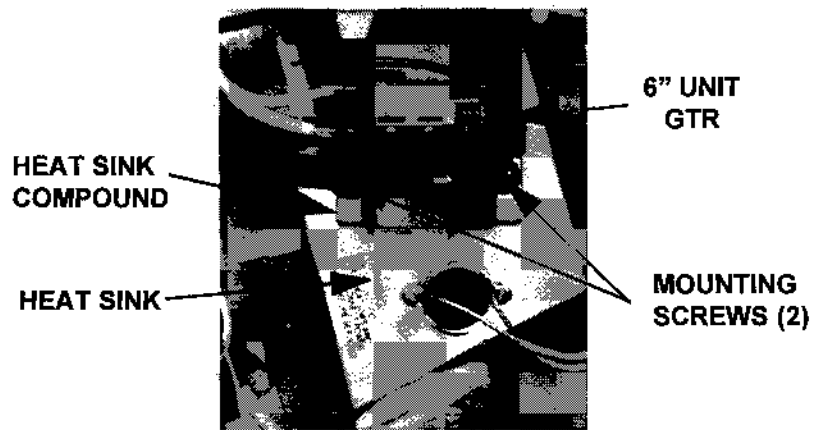
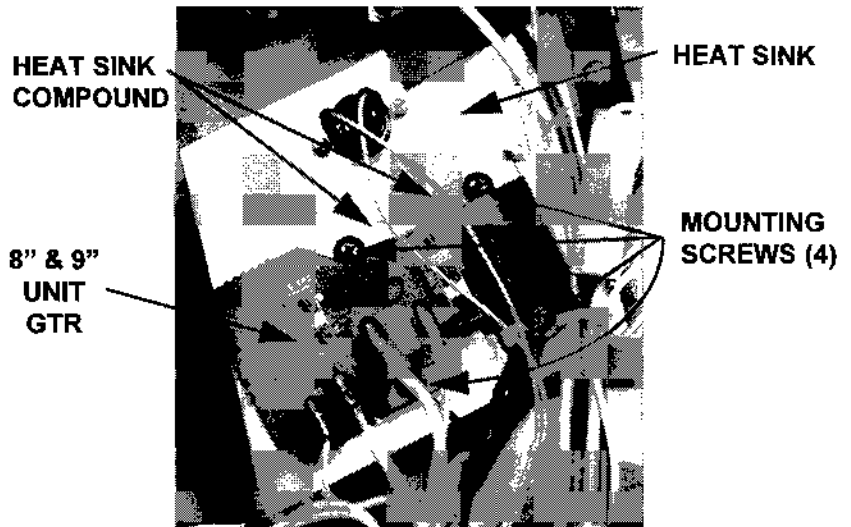
TO REPLACE GTR:

1. Mark wires and disconnect from circuit board.
2. Remove mounting screws and lift bad GTR Assembly off.
(2 screws on 6" unit GTR'S & 4 screws on 8" & 9" unit GTR'S.)
3. Place a thin even layer of Heat Sink Compound on bottom of GTR.
4. Firmly press the GTR down on the heat sink (Do not press on circuit board).
5. Replace screws again make sure the GTR is making good contact with the Heat Sink.

NOTE: A GTR not properly mounted to the Heat Sink will fail again.

6. Reconnect wires to GTR Circuit Board (Take care not to damage board).
7. Check wire connectors to Inverter Board, make sure all connections are tight and fully seated.
8. Release the three plastic mounting tabs across the top of the Inverter Board and carefully lean forward and inspect the back of the board in the area around thermistor plug.
9. If discoloration is present or fracture soldered joints replace board.

NOTE: replace only with board specified for that unit.



INVERTOR BOARD PLASTIC MOUNTING TABS (3)



EACH INVERTOR BOARD HAS A TOTAL OF 10 CONNECTORS



EACH BOARD HAS A WIRE JUMPER IDENTIFYING WHICH UNIT IT IS FOR

LOOK FOR DISCOLORATION IN THIS AREA



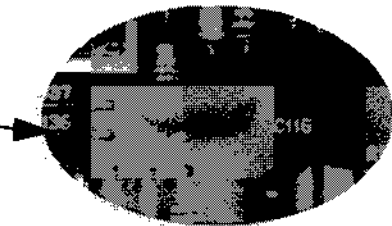
INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

MODULE CHECKS CONTINUED:

CHECK INVERTOR BOARD "C116" CAPACITOR:

Set ohmmeter on high scale and check capacitor on inverter board located near center bottom. See Illustration. If open or shorted replace inverter board.



**THERMAL CUTOUT
CONNECTOR**

GTR HEAT SINK THERMAL CUTOUT:

Each GTR Heat Sink has a thermal cutout mounted to it.

Check the cutout with ohmmeter, should show shorted. If open replace.

Check connector at Inverter Board to make sure that it is plugged in.



GTR HEAT SINK

**THERMAL
CUTOUT**

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

MODULE CHECKS CONTINUED

POWER MODULE LOW VOLTAGE TRANSFORMER:
EACH HEATING COIL HAS A LOW VOLTAGE TRANSFORMER AS PART OF ITS POWER SUPPLY. THEY ARE MOUNT TO THE MODULE BASE.
TO CHECK TRANSFORMER PRIMARY:
DISCONNECT TWO PIN CONNECTOR AND CHECK WITH OHMMETER. TRANSFORMER FOR 8" & 9" UNITS SHOULD READ APPROX. 25Ω AND 6" UNIT SHOULD READ APPROX. 40Ω.



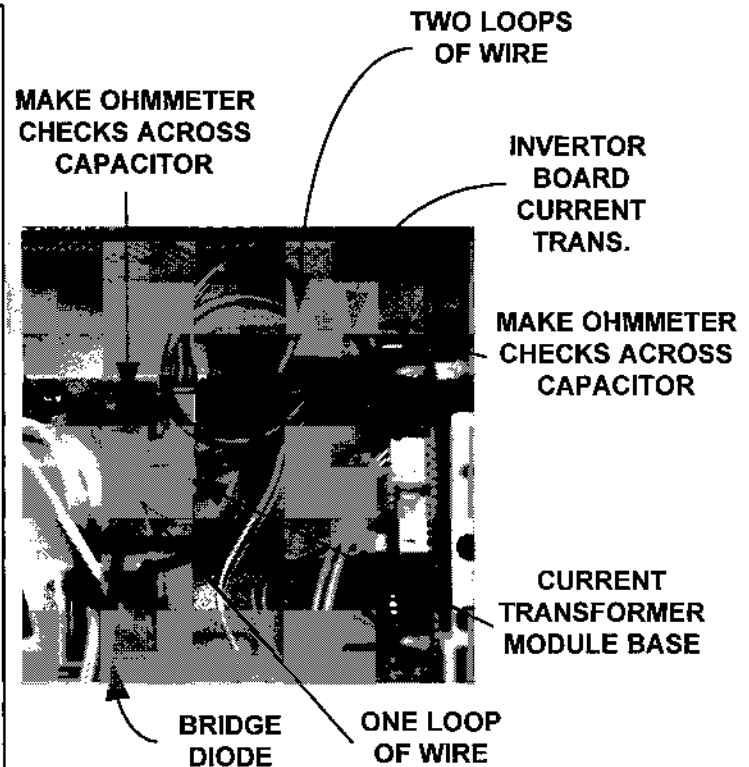
TRANSFORMER
PRIMARY 2 PIN
CONNECTOR

LOW VOLTAGE
TRANSFORMER

POWER MODULE CURRENT TRANSFORMERS:
EACH HEATING COIL POWER SUPPLY HAS TWO CURRENT TRANSFORMERS. ONE IS LOCATED ON THE INVERTOR BOARD AND THE OTHER ON A SMALL PCB MOUNTED TO THE MODULE CASE BOTTOM.

TO CHECK THE CURRENT TRANSFORMERS:

- 1A. INVERTOR BOARD CURRENT TRANSFORMER
- WITH OHMMETER CHECK COIL ACROSS CAPACITOR JUST ABOVE TRANSFORMER, SHOULD READ APPROX. 400 TO 450Ω. IF READING IS ABOVE 1000Ω REPLACE INVERTOR BOARD.
- 1B. CHECK WIRE LOOP - SHOULD HAVE TWO TURNS OF BLACK OR RED WIRE FROM BRIDGE DIODE.
- 2A. CURRENT TRANSFORMER LOCATED ON MODULE BASE - CHECK WITH OHMMETER ACROSS CAPACITOR ON PCB - SHOULD READ APPROX. 400 TO 450Ω. IF READING IS ABOVE 4000Ω REPLACE.
- 2B. SHOULD HAVE ONE LOOP OF WIRE COMING FROM INVERTOR BOARD CURRENT TRANSFORMER.



TWO LOOPS
OF WIRE

MAKE OHMMETER
CHECKS ACROSS
CAPACITOR

INVERTOR
BOARD
CURRENT
TRANS.

MAKE OHMMETER
CHECKS ACROSS
CAPACITOR

CURRENT
TRANSFORMER
MODULE BASE

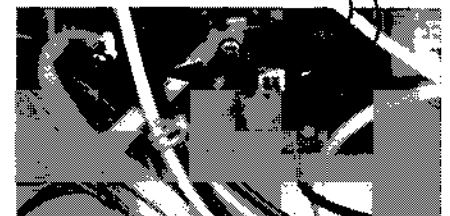
BRIDGE
DIODE

ONE LOOP
OF WIRE

ADJUSTMENT POTS WIRE CONNECTORS

POWER LEVEL ADJUSTMENT POTS WIRE CONNECTORS

CHECK TO MAKE SURE WIRE CONNECTORS ARE PROPERLY SEATED ON BOARD BEHIND POTS.
DO NOT ADJUST POTS.



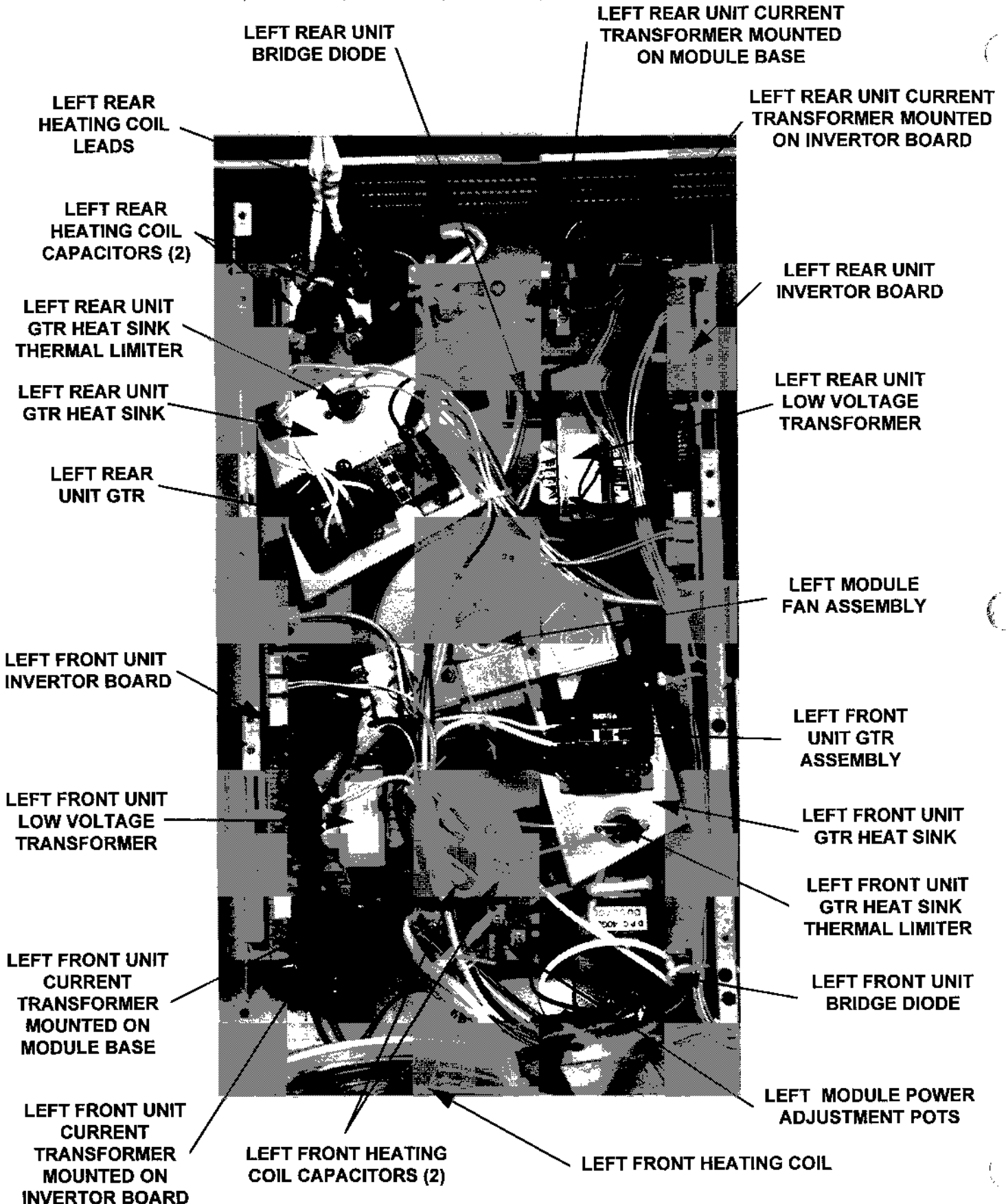
INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

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NOTES:

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LEFT REAR UNIT
BRIDGE DIODE

LEFT REAR UNIT CURRENT
TRANSFORMER MOUNTED
ON MODULE BASE

LEFT REAR
HEATING COIL
LEADS

LEFT REAR UNIT CURRENT
TRANSFORMER MOUNTED
ON INVERTOR BOARD

LEFT REAR
HEATING COIL
CAPACITORS (2)

LEFT REAR UNIT
INVERTOR BOARD

LEFT REAR UNIT
GTR HEAT SINK
THERMAL LIMITER

LEFT REAR UNIT
LOW VOLTAGE
TRANSFORMER

LEFT REAR UNIT
GTR HEAT SINK

LEFT REAR
UNIT GTR

LEFT MODULE
FAN ASSEMBLY

LEFT FRONT UNIT
INVERTOR BOARD

LEFT FRONT
UNIT GTR
ASSEMBLY

LEFT FRONT UNIT
LOW VOLTAGE
TRANSFORMER

LEFT FRONT UNIT
GTR HEAT SINK

LEFT FRONT UNIT
CURRENT
TRANSFORMER
MOUNTED ON
MODULE BASE

LEFT FRONT UNIT
GTR HEAT SINK
THERMAL LIMITER

LEFT FRONT UNIT
BRIDGE DIODE

LEFT FRONT UNIT
CURRENT
TRANSFORMER
MOUNTED ON
INVERTOR BOARD

LEFT MODULE POWER
ADJUSTMENT POTS

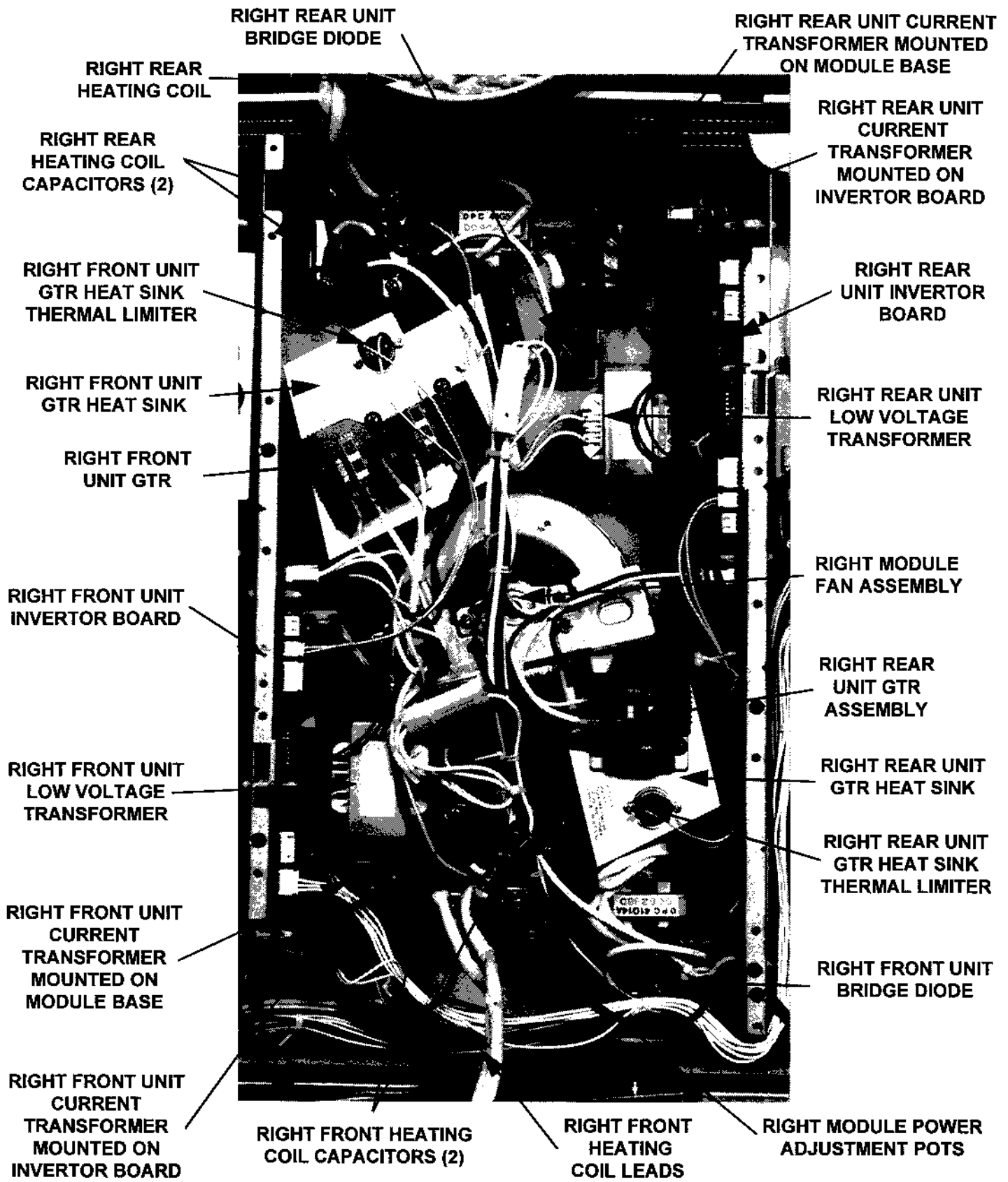
LEFT FRONT HEATING
COIL CAPACITORS (2)

LEFT FRONT HEATING COIL

LEFT POWER MODULE

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GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

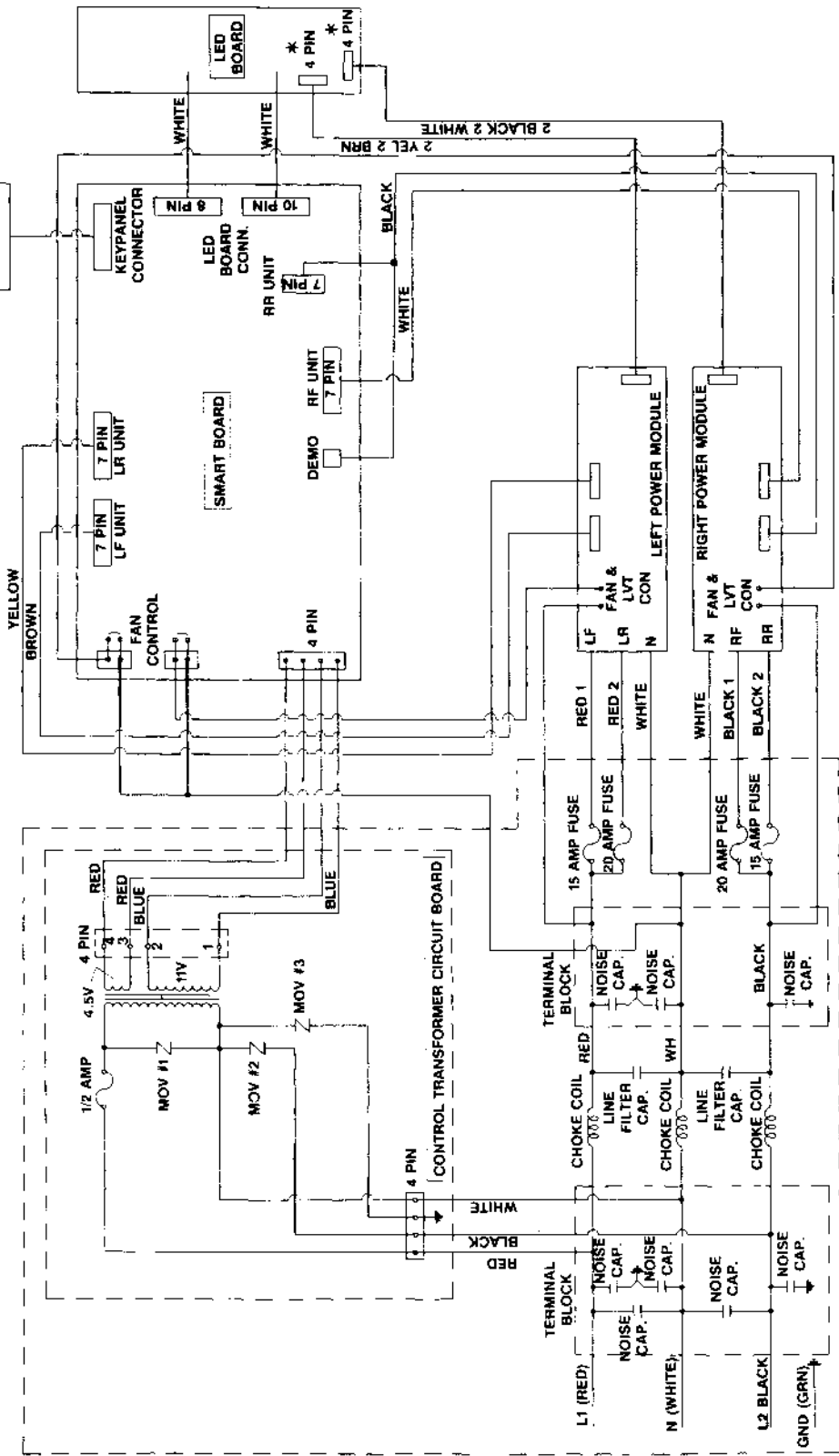


RIGHT POWER MODULE

INDUCTION COOKTOP TROUBLE SHOOTING GUIDE

GE MODELS JP392R, JP393R, JP692R, JP693R, KENMORE MODELS 911.429 & 439

INDUCTION COOKTOP SCHEMATIC/WIRING DIAGRAM



* LED BOARD CONNECTORS
1 & 2 LEAD COLORS

MODEL SERIES	LED 4 PIN CONNECTOR BLOCKS	CONNECTOR 1	CONNECTOR 2
JP SERIES		BLACK & WHITE LEADS	YELLOW & BROWN LEADS
429/439 SERIES		YELLOW & BROWN LEADS	BLACK & WHITE LEADS

