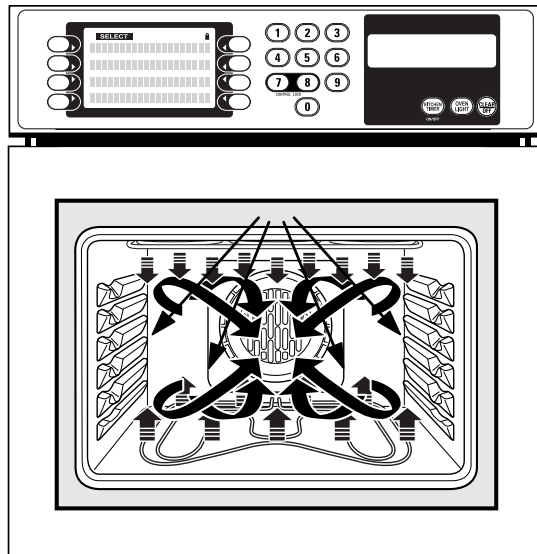




GE Consumer Products

TECHNICAL SERVICE GUIDE

2003 Slide-In, Single and Double Wall
Ovens with Trivection™ Cooking



MODEL SERIES:

JS998

JT930

JT980

ZET3038

ZET3058





IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- A. Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to tamper with the safety interlocks.
- B. Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- C. Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the:
 - Door (bent)
 - Hinges and latches (broken or loosened)
 - Door seals and sealing surfaces
- D. The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

GE Consumer Products

Technical Service Guide

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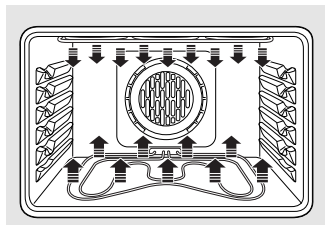
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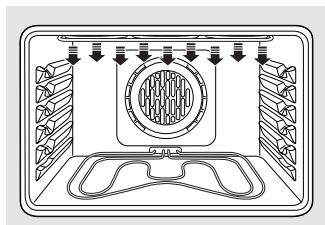
Introduction

The GE Profile oven with Trivection™ technology is a microwave-assist wall oven designed to cook food up to five times faster than a traditional oven. This oven gives the user the flexibility to cook food in traditional cooking modes (bake or broil), convection modes (convection bake and convection roast) or in speedcook modes (speed bake and speed broil). This oven features easy-to-use controls that will guide you through oven operations.



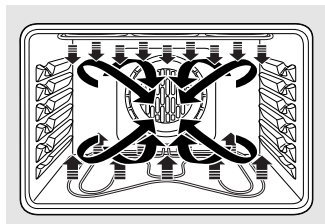
Bake

Baking is cooking with heated air. The upper and lower elements cycle back and forth to heat the air and maintain temperature. Used for traditional baking and roasting. Best for delicate items.



Broil

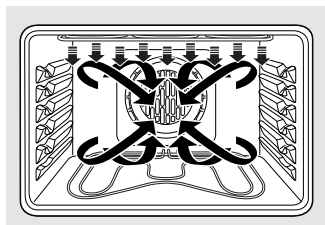
Heat is provided by the upper element to broil your food. May be used with the oven door open or closed.



Convection Bake—Multi and Single Rack

Heat is provided by the element in the back of the oven, along with the upper and lower elements. The air is circulated with a reversing fan system. The fan will change directions to provide optimal

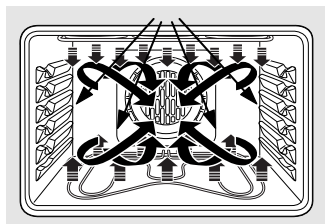
evenness and browning. The **Multi Rack** option is ideal for evenly baking foods when using more than one rack. The **1 Rack** option, used for one rack of food, cooks food faster than **BAKE** mode.



Convection Roast

Heat is provided by the upper element and circulated with the reversing fan system. The fan will change directions to provide optimal evenness and browning. Good for roasting large tender cuts of

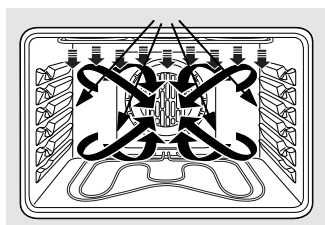
meat or poultry, uncovered. Roasts foods up to 25% faster.



Speed Bake

Heat is provided by the three elements and microwave. The exact combination of elements is automatically determined by the food category selected. Air is

circulated with the reversing fan system described above. **Ideal for baking and roasting foods up to five times faster.**



Speed Broil

Heat is provided by the upper element and microwave. Air is circulated with the reversing fan system described above. Oven door must be closed. **Ideal for broiling foods to medium to well done**

doneness levels two times faster than traditional broil.

Trivection™ technology.

It's all about great food.



Optional
backguard
available

JT980

- Trivection technology
- Extra-large 4.3 cu. ft. capacity
- Precise Air™ convection system (both ovens)
- Single-rack, multi-rack convection baking
- Auto Recipe™ conversion
- Chef's Guide™ glass touch controls
- Self-clean oven
- Light self-clean
- TrueTemp™ system
- Heavy-duty oven racks
- Dual halogen oven lights
- Warm mode
- Proof mode
- Certified Sabbath mode
- Big View windows
- Trivection cookbook

JT930

- Trivection technology
- Extra-large 4.3 cu. ft. capacity
- Precise Air convection system
- Single-rack, multi-rack convection baking
- Auto Recipe conversion
- Chef's Guide glass touch controls
- Self-clean oven
- Light self-clean
- TrueTemp system
- Heavy-duty oven racks
- Dual halogen oven lights
- Warm mode
- Proof mode
- Certified Sabbath mode
- Big View window
- Trivection cookbook

JS998

- Trivection technology
- Extra-large 4.3 cu. ft. capacity
- Precise Air convection system
- Single-rack, multi-rack convection baking
- Auto Recipe conversion
- Chef's Guide glass touch controls
- Self-clean oven
- Ceramic glass cooktop
- Light self-clean
- Dual 6"/9" ribbon element
- TrueTemp system
- Heavy-duty oven racks
- Dual halogen oven lights
- Warm mode
- Proof mode
- Certified Sabbath mode
- Big View window
- Trivection cookbook

GE Profile™ 30" Built-In Double Oven with Trivection Technology

		GE Profile™	
		JT980SH JT980WH JT980CH JT980BH	
Features		Trivection/Convection	
Oven	Upper Lower	Convection	
Oven capacity (cu. ft.)		4.3 Upper/4.1 Lower	
Trivection technology		●	
Speed baking		●	
Speed broiling		●	
Precise Air Convection System		●	
Multi-rack convection bake		●	
Single-rack convection bake		●	
Convection roast		●	
Auto Recipe Conversion		●	
Self-clean oven w/Delay Clean option		●	
Automatic self-clean oven door lock		●	
Light self-clean option		●	
TrueTemp System		●	
Variable broil/Six-pass broil element		●	
Dual bake element	Upper	●	
Eight-pass bake element	Lower	●	
Chef's Guide controls		Glass touch	
Programmable recipe recall		●	
Proof mode		●	
Warm mode		●	
Defrost mode		●	
Help mode		●	
Optional closed door broiling		●	
Temperature display		●	
Delay Bake Option		●	
C° and F° programmable		●	
Audible preheat signal		●	
Auto oven shut-off w/override		●	
Electronic clock and kitchen timer		●	
Control lock capability		●	
Oven lights		2 Halogen	
Certified Sabbath Mode		●	
Oven racks	Upper Lower	3 Heavy-duty	
Embossed rack positions		5 Upper/7 Lower	
Roasting rack		●	
Extra-large broiler pan with grid		●	
Appearance			
Color appearance*		SS WW CC BB	
Frameless oven doors		Stainless Steel White Glass Bisque Glass Black Glass	
Big View window		●	
Sculptured handles		Stainless look White Bisque Black	
Trivection cookbook		●	
Weights & Dimensions			
Approx. shipping wt. (lbs.)		322	
Oven cabinet width required (in.)		30	
Overall dimensions (WxHxD in inches)		29-3/4 x 52-7/8 x 23-1/2	
Overall oven interior dimensions (WxHxD in inches)	Upper Lower	24 x 17-1/2 x 17-1/2 24 x 16-1/4 x 18-1/4	
Power/Ratings			
KW rating @ 240V		8.9	
208V		6.7	
Amps @ 240V		40	
208V		40	
Convection wattage		2500	
Broiler/bake wattage		2500/2500	

*SS = Stainless steel, WW = White on white, CC = Bisque on bisque, BB = Black on black.

GE Profile 30" Built-In Single Oven with Trivection Technology

		GE Profile	
		JT930SH JT930WH JT930CH JT930BH	
Features		Trivection/Convection	
Oven		Trivection/Convection	
Oven capacity		4.3 cu. ft.	
Trivection technology		●	
Speed baking		●	
Speed broiling		●	
Precise Air Convection System		●	
Multi-rack convection bake		●	
Single-rack convection bake		●	
Convection roast		●	
Auto Recipe Conversion		●	
Self-clean oven w/Delay Clean option		●	
Automatic self-clean oven door lock		●	
Light self-clean option		●	
TrueTemp System		●	
Variable broil/Six-pass broil element		●	
Dual bake element		●	
Chef's Guide controls		Glass touch	
Programmable recipe recall		●	
Proof mode		●	
Warm mode		●	
Defrost mode		●	
Help mode		●	
Optional closed door broiling		●	
Temperature display		●	
Delay Bake Option		●	
C° and F° programmable		●	
Audible preheat signal		●	
Auto oven shut-off w/override		●	
Electronic clock and kitchen timer		●	
Control lock capability		●	
Oven lights		2 Halogen	
Certified Sabbath Mode		●	
Oven racks		3 Heavy-duty	
Embossed rack positions		5	
Roasting rack		●	
Extra-large broiler pan with grid		●	
Trivection cookbook		●	
Appearance			
Color appearance*		SS WW CC BB	
Frameless oven doors		Stainless steel White Glass Bisque Glass Black Glass	
Big View window		●	
Sculptured handle		Stainless look White Bisque Black	
Undercounter installation		●	
Weights & Dimensions			
Approx. shipping wt. (lbs.)		195	
Oven cabinet width required (in.)		30	
Overall dimensions (WxHxD in inches)		29-3/4 x 28-1/4 x 23-1/2	
Overall oven interior dimensions (WxHxD in inches)		24 x 17-1/2 x 17-1/2	
Power/Ratings			
KW rating @ 240V		5.9	
208V		4.4	
Amps @ 240V		30	
208V		30	
Convection wattage		2500	
Broiler/bake wattage		2500/2500	

*SS = Stainless steel, WW = White on white, CC = Bisque on bisque, BB = Black on black.

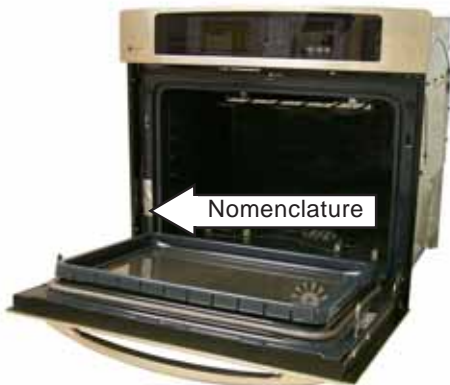
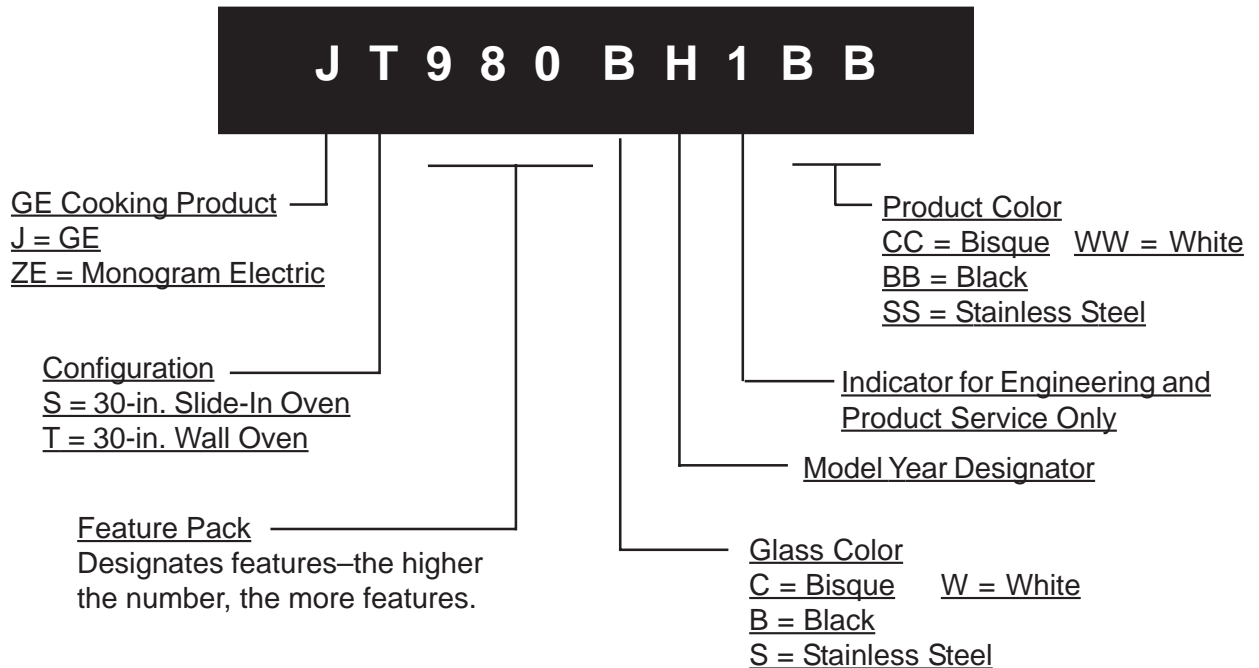
GE Profile 30" Slide-In Electric Range with Trivection Technology

		GE Profile	
		JS998SH JS998TH JS998KH JS998BH	
Features		Trivection/Convection	
Oven		Trivection/Convection	
Oven capacity		4.3 cu. ft.	
Trivection technology		●	
Speed baking		●	
Speed broiling		●	
Precise Air Convection System		●	
Multi-rack convection bake		●	
Single rack convection bake		●	
Convection roast		●	
Auto Recipe Conversion		●	
Self-clean oven w/Delay clean option		●	
Light self-clean option		●	
Automatic self-clean oven door lock		●	
Oven racks		3 Heavy-Duty	
TrueTemp system		●	
Variable broil/Six-pass broil element		●	
Dual bake element		●	
Ceramic-glass cooktop		Patterned Black True White True Bisque Patterned Black	
Overhanging cooktop		●	
Dual 6"/9" heating element		1 Ribbon (2500W)	
8" heating elements		1 Ribbon (2000)	
6" heating elements		2 Ribbon (1500W)	
Infinite heat controls		●	
Chef's Guide controls		Glass touch	
Programmable recipe recall		●	
Proof mode		●	
Warm mode		●	
Defrost mode		●	
Help mode		●	
Optional closed door broiling		●	
Temperature display		●	
Delay Bake option w/Cook & Hold		●	
C° or F° programmable		●	
Audible preheat signal		●	
Auto oven shut-off w/override		●	
Control lock capability		●	
Electronic clock/kitchen timer		●	
Hot surface indicator lights		4	
Heating element "ON" indicator light		●	
Certified Sabbath mode		●	
Interior oven lights		2 Halogen Stainless White Bisque Black	
Storage drawer		●	
Extra-large broiler pan with grid		●	
Roasting rack		●	
Trivection cookbook		●	
Appearance			
Color appearance*		SS WW CC BB	
Frameless glass oven door		Stainless steel White Bisque Black	
Big View window		●	
Sculptured handle		Stainless look White Bisque Black	
Weights & Dimensions			
Overall oven interior dimensions (WxHxD in inches)		24 x 17-1/2 x 17-1/2	
Approx. shipping weight (lbs.)		252	
Power/Ratings			
KW rating @ 240V		12.8	
208V		9.6	
Amps @ 240V		40	
208V		40	
Convection Wattage		2500	
Broiler/Bake Wattage		2500/2500	

*SS = Stainless steel, WW = White on white, CC = Bisque on bisque, BB = Black on black.

Nomenclature

Model Number



The nomenclature plate of the oven is located on the left side of the front frame.
 The Mini-manual is located in the control compartment taped to the right side wall.
 The nomenclature plate for the double wall oven is located on the lower oven left side of the front frame.

Serial Number

The first two numbers of the serial number identify the month and year of manufacture.

Example: **AF**123456S = January, 2003

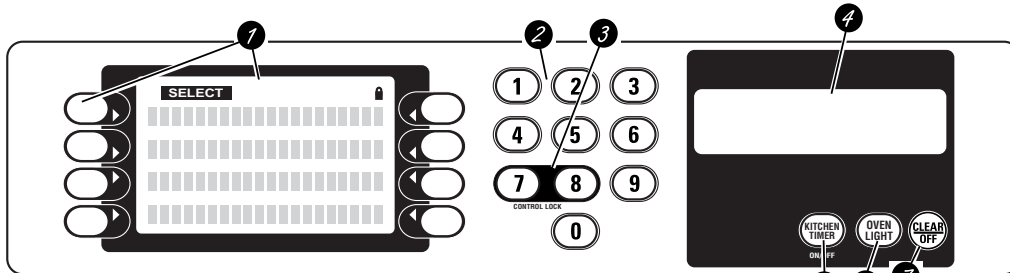
A - JAN	2005 - H
D - FEB	2004 - G
F - MAR	2003 - F
G - APR	2002 - D
H - MAY	2001 - A
L - JUN	2000 - Z
M - JUL	1999 - V
R - AUG	1998 - T
S - SEP	1997 - S
T - OCT	1996 - R
V - NOV	1995 - M
Z - DEC	1994 - L

The letter designating the year repeats every 12 years.

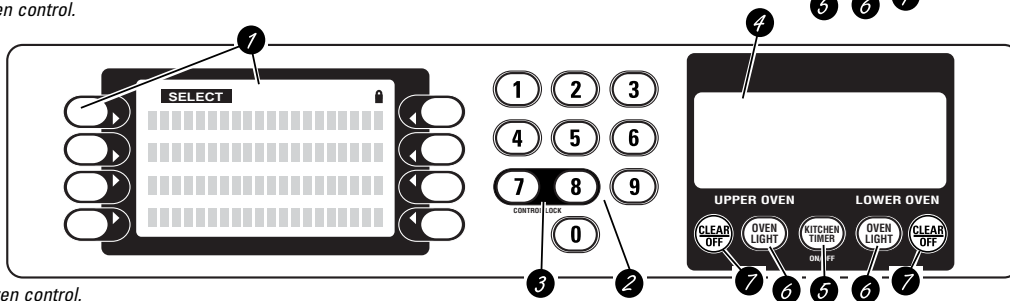
Example:
 T - 1974
 T - 1986
 T - 1998

Control Features

Using the Oven Controls



Single oven control.



Double oven control.



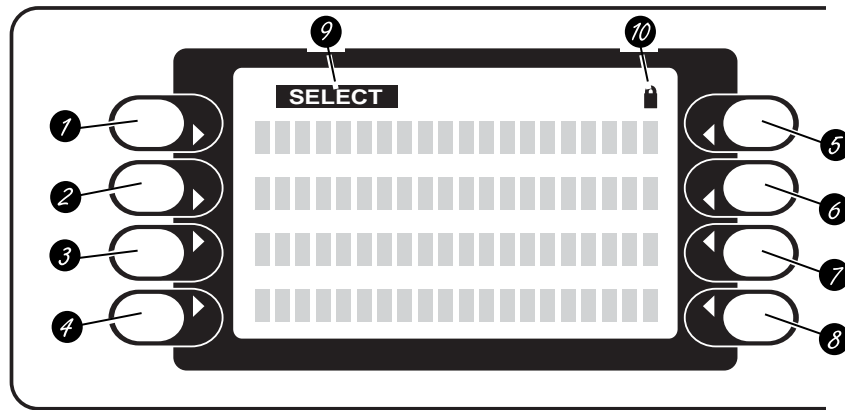
Oven Control Layout and Description

- 1 Control Screen & Keypad**
All cooking modes, special features and oven settings are directed and operated from the control screen. Directions for operating the oven and prompting for required information are displayed within the control screen.
- 2 Numeric Keypad**
Used to enter information requiring numbers such as time of day on the clock, timer, oven temperature, start time and length of operation for timed baking and self-cleaning.
- 3 Control Lockout**
Allows the user to lock the control so that the touch pads cannot be activated when pressed.
- 4 Time and Temperature Display**
All time and temperature information is displayed in this area as feedback to the user.
- 5 Kitchen Timer**
Turns the kitchen timer on and off.
Does not control the oven.
- 6 Oven Light**
Turns oven light on or off.
- 7 Clear/Off**
Cancels **ALL** oven operations **EXCEPT** the clock and timer.

If “F– and a number or letter” flash in the display and the oven control signals, this indicates a function error code. Press the **CLEAR/OFF** pad. Allow the oven to cool for one hour. Put the oven back into operation. If the function error code repeats, disconnect the power to the oven and call for service.

If your oven was set for a timed oven operation and a power outage occurred, the clock and all programmed functions must be reset.

The time of day will flash in the display when there has been a power outage.



Control Screen and Keypad

Press pad beside display to select item in display.

Oven Control Sleep Feature—Any time the oven is not in use (no cooking, no cleaning, no help and no timers) for more than 10 minutes, the oven control will go to sleep. While sleeping, the control display will not show any text; it will go blank. The clock will remain displayed in the time and temperature display unless the “no clock” option has been selected.

There will be no audible signal given to indicate that the control is entering the sleep feature.

The control will enter the sleep feature even when the control is locked.

The user **cannot** turn this feature **OFF**.

How to Exit the Sleep Feature—Touch any key. The function associated with that key will not be started, but the control display main menu will reappear.

1 Speedcook

In **Speedcook** mode, the user will be prompted to enter food category, temperature and cooking time.

Speed bake—Bakes food faster than traditional cooking modes.

Speed broil—Broils food faster than traditional Hi/Lo Broil.

2 Bake

Traditional bake mode.

3 Convection

Conv 1-Rack—Convection bake function used for baking on one rack.

Conv Multi—Convection bake function used for baking on more than one rack.

ConvRoast—Convection roast function.

4

Broil

LO & HI—Traditional broil function.

Speed broil

5

Features

Additional cooking-related features.

Defrost—This feature is used to thaw frozen foods.

Self-Clean—This feature cleans the oven. See the *Using the self-cleaning oven* section.

Warmer—This feature keeps hot, cooked food warm for up to 3 hours. It is not intended for reheating cold food.

Proof—This feature maintains a warm environment useful for rising yeast-leavened products. It is not intended to keep food warm or reheat cold food.

Warm (Cook & Hold)—When this feature is turned on, it will keep hot, cooked foods warm for up to 3 hours following a Timed Bake function.

Sabbath—Designed for use on the Jewish Sabbath and Holidays.

(Continued next page)



Control Screen and Keypad

6 Settings

This oven has additional settings that you may choose to use.

7

NOTE: On double wall ovens, **Recipes** is available only on the upper oven.

This oven feature allows the user to store up to six temperature/cooking time combinations. The user can then speed bake, bake or convection bake/roast one of the six stored favorite recipes without having to choose the settings each time.

8 Help

Provides basic information on each function and how to find the function. If selected from the home screen, it gives general help. If selected while performing a function, it gives help on that function. Select **Exit** to leave **Help**.

9 Select Prompt

Visual prompt to the user indicating that a selection needs to be made from the control screen.

10 Door Lock Indicator

Indicates that the oven door is locked for self-clean.

Operational Notes

- The cooking loads (bake, broil, convection elements, and microwave) are not energized for 15 seconds after the cycle is started.
- In SPEEDCOOK, the time countdown will not start until after the oven is preheated, the door is opened then closed and START is pressed. If START is not pressed, the microwave does not start and the timer does not count down.
- In SPEEDCOOK, if the door is opened during the cooking cycle, the timer, microwave and convection fan will stop. The elements will continue to cycle on when necessary. Once the door is closed, the convection fan and microwave will operate and the timer countdown will resume.
- In DEFROST, the microwave turns off and the cook time stops counting down when the oven door is opened. They will resume when the door is closed.
- PROOF will not operate when oven is above 125°F. OVEN TOO HOT will show in the display.
- In PROOF and DEFROST, the convection fan will rotate for 1 minute in one direction, then turn off for 10 minutes. After 10 minutes, the fan will rotate for 1 minute again, in the opposite direction.
- When the oven first starts heating, the temperature display will start at 100°F.
- The convection fan may cycle on and off and change direction while cooking to best distribute hot air in the oven. The convection fan shuts off when the oven door is opened.
- At least one cooling fan will automatically turn on during all cooking modes. This fan turns on to cool internal parts. It may run for up to 20 minutes (up to 85 minutes for double oven models) after the oven is turned off, regardless of oven temperature.
- On double oven models, you can set a delay clean in both ovens. However, the second oven set will automatically delay the start of cleaning until the end of the first oven's clean cycle.
- The RECIPES feature allows you to preset up to six temperature/cooking time combinations with this function. You can then bake, convection bake/roast or speed bake any of these six favorite recipes without choosing settings each time. You cannot program broil, defrost, warmer, proof, speed broil, delay bake or self-clean in RECIPES.
- The oven will remember RECIPES that have been programmed, even after a power outage. The cooking time you enter does not include preheat time. The oven will begin to count down the cooking time after the oven has completed preheating. RECIPES are only available on the upper oven of a double wall oven.

- On double oven models, you can use timed baking or roasting in one oven while using self-clean in the other; you can also use timed baking or roasting in both ovens at the same time. You will hear a fan while cooking with these features.

Control Lockout (Single and Double Wall Ovens)

- Press the 7 & 8 pads at the same time for 3 seconds. The screen will display CONTROL IS LOCKED.
- To unlock the control, press the 7 & 8 pads for 3 seconds. The display will return to the home screen.

Control Lockout (Slide-In Range)

- Press the CONTROL LOCK pad for 3 seconds. The screen will display CONTROL IS LOCKED.
- To unlock the control, press the CONTROL LOCK pad for 3 seconds. The display will return to the home screen.

If any cooking/cleaning modes are running, entering control lockout will cancel the cooking/cleaning modes. Then when exiting control lockout, it will go to the home screen.

Sabbath Feature

- This feature disables all but the bake and timed bake modes. Additionally the display does not show the temperature and the sound is disabled.
- The element and oven icons will light randomly within one minute to indicate that the oven is operating. All time functions will remain displayed and active.
- To access the sabbath feature, press the FEATURES pad, then the MORE pad.
- To turn this feature on, press the SABBATH pad.

- To turn this feature off, press the BACK pad for 3 seconds. The control returns to the FEATURES screen where SABBATH was originally selected.

Note: This feature remains active even after loss of power to the oven. The only way to exit SABBATH is to hold the BACK pad for 3 seconds.

If power is lost while the Sabbath mode is in a heating cycle, the heat will be off when the power is restored.

Sales Mode

- Becomes active upon powering up with 120V only (L1-L2 = 120V, L2 connected to N).
- This mode is NOT accessible on 240V/208V power input. Sales mode requires a special 120 VAC cord (oven L1 connected to power cord L, oven L2 and N connected to power cord N).
- Wall Oven cord kit is Pub # 3-A063
Slide-In cord kit is Pub #3-A073.

Time Settings

- To access the time settings, press the SETTINGS pad on the home screen, then press the appropriate time function pad.

Oven Calibration

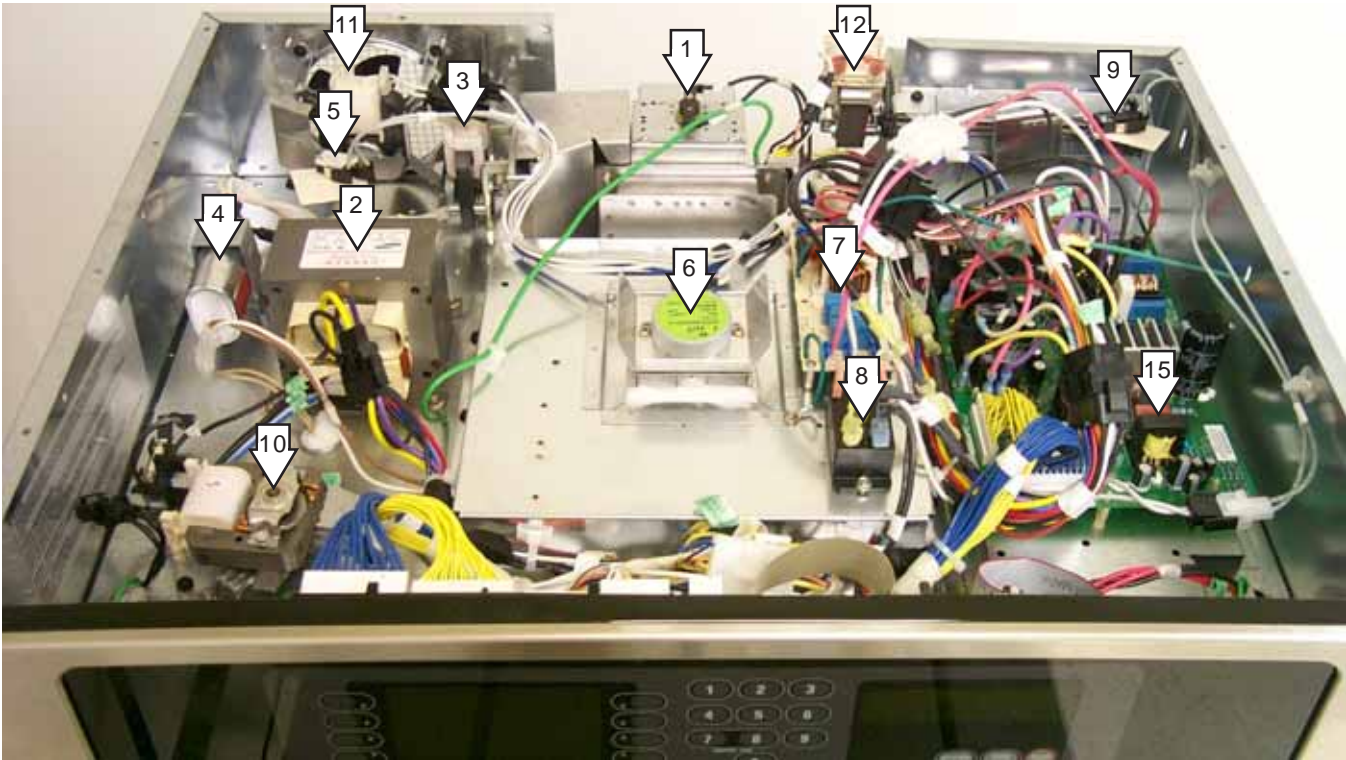
Oven calibration offset can be adjusted for the bake mode only. No other cooking modes are affected by changing the bake mode temperature.

1. Press the SETTINGS pad.
2. Press the MORE pad until \pm TEMP appears in the display.
3. Press the \pm TEMP pad. (Select upper or lower oven for double oven models.)
4. Press the INCREASE or DECREASE pads to change the cooking temperature in 1° increments up to $\pm 35^{\circ}\text{F}$.

Note: Oven calibration offset can also be accessed through the service mode under OFFSET. (See **Service Mode**.)

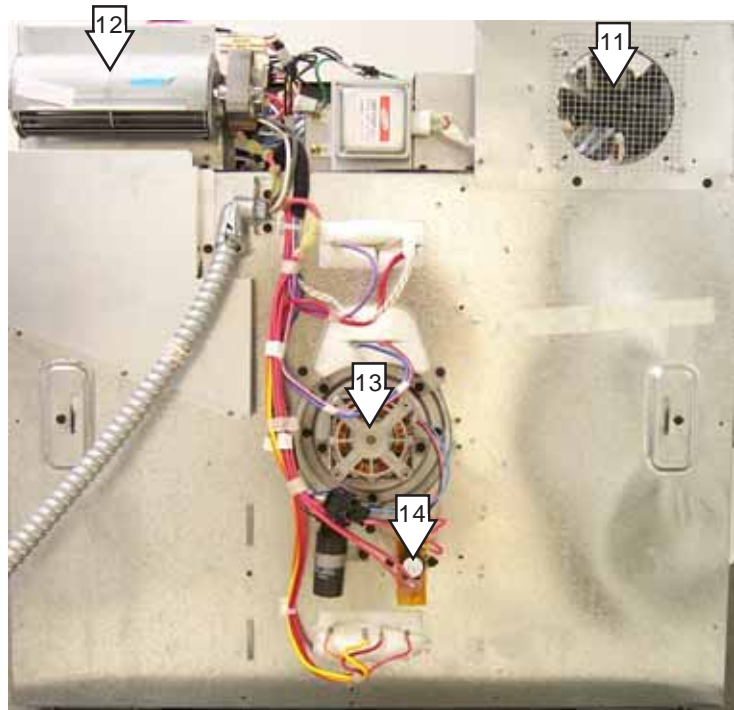
Component Locator Views

30-in. Single Wall Oven

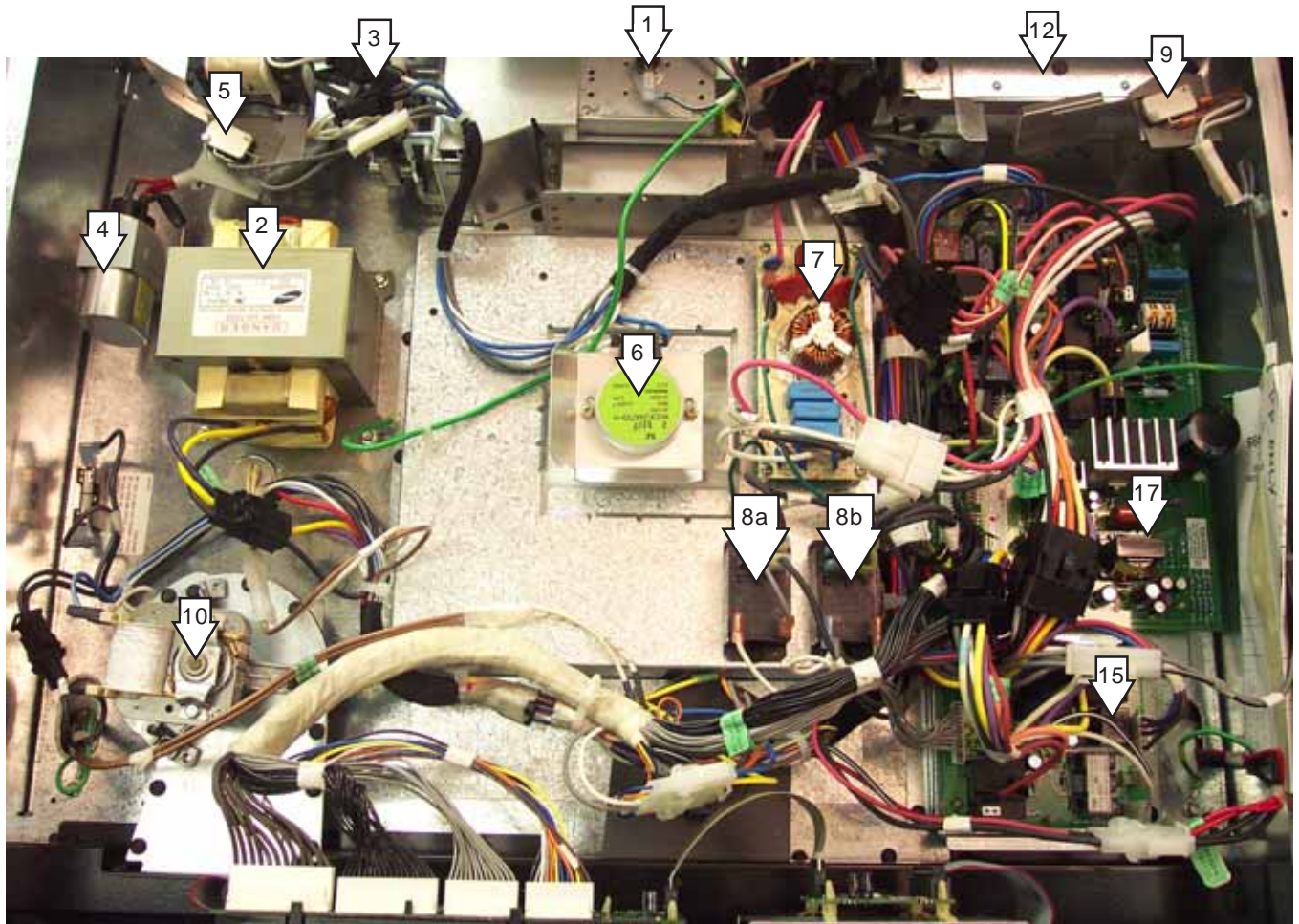


- 1 - Magnetron Thermal TCO (Thermal Cutout)
- 2 - High Voltage Transformer
- 3 - Magnetron Cooling Fan
- 4 - High Voltage Capacitor
- 5 - Left Sail Switch
- 6 - Stirrer Motor
- 7 - EMI Filter Board
- 8 - R1 Sail Switch Relay
- 9 - Right Sail Switch
- 10 - Oven Vent Fan
- 11 - High Voltage Transformer (HVT) Fan
- 12 - Right Cooling Fan
- 13 - Convection Fan
- 14 - High Limit Thermal One-Shot (TCO)
- 15 - Main Power Board (MPB)

Rear View

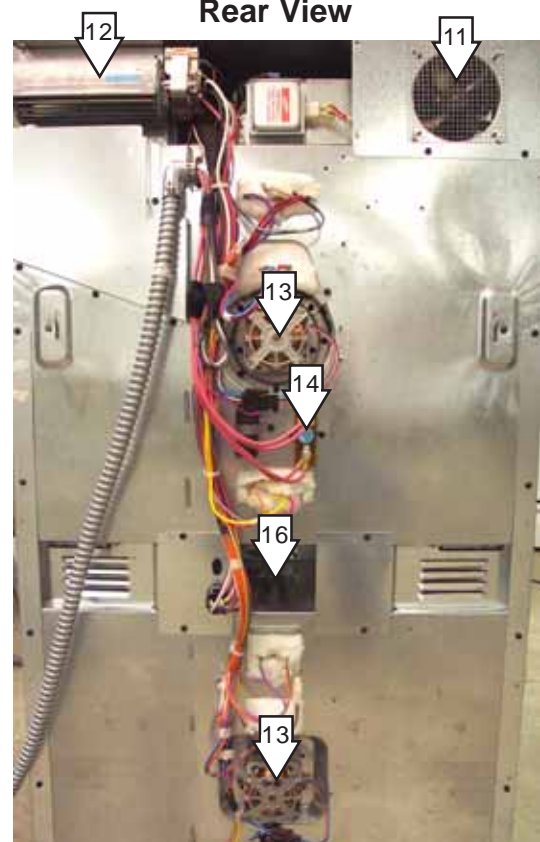


30-in. Double Wall Oven

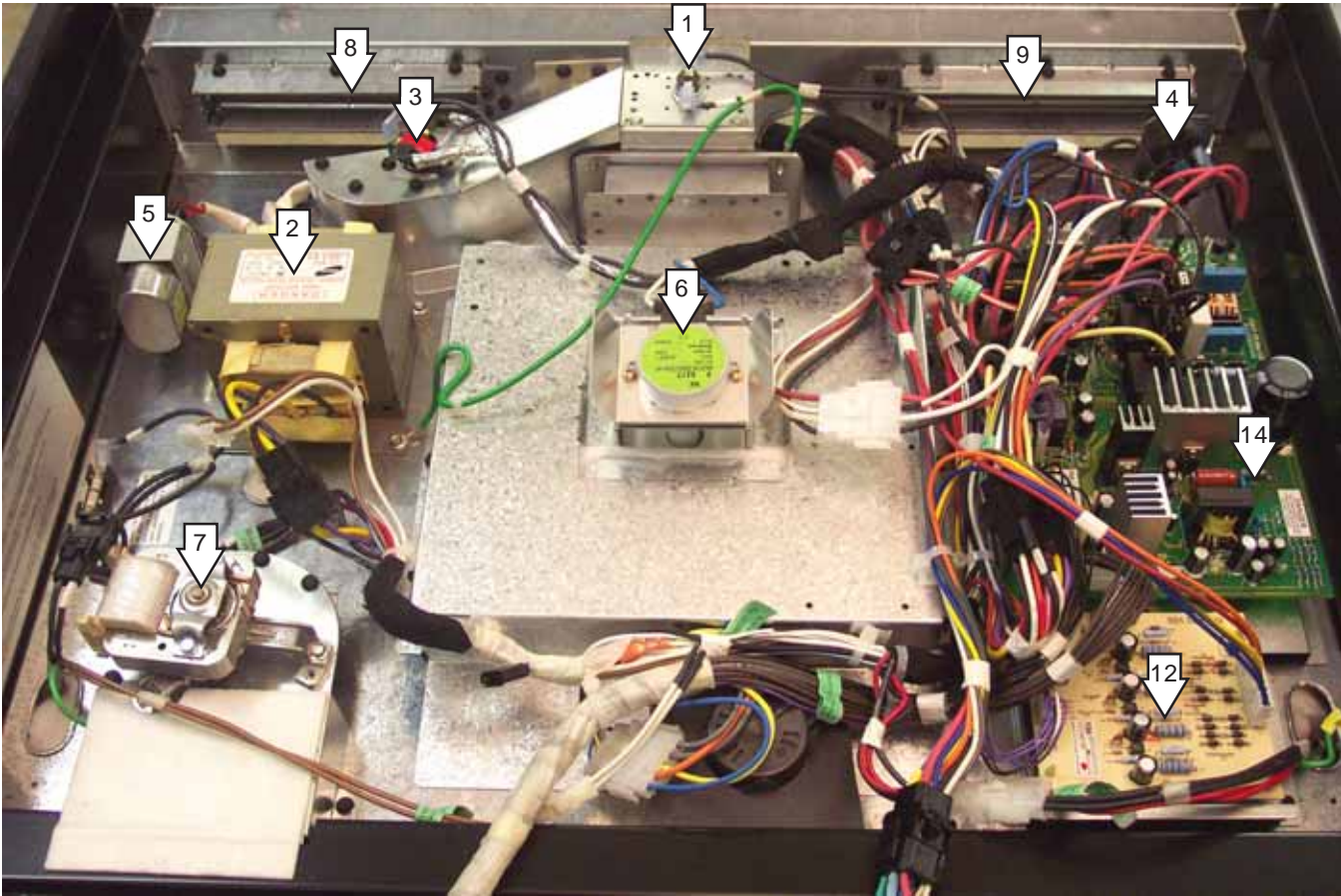


- 1 - Magnetron Thermal TCO (Thermal Cutout)
- 2 - High Voltage Transformer
- 3 - Magnetron Cooling Fan
- 4 - High Voltage Capacitor
- 5 - Left Sail Switch
- 6 - Stirrer Motor
- 7 - EMI Board
- 8 - (a) R2 and (b) R1 Sail Switch Relay
- 9 - Right Sail Switch
- 10 - Oven Vent Fan
- 11 - High Voltage Transformer (HVT) Fan
- 12 - Right Cooling Fan
- 13 - Convection Fan
- 14 - High Limit Thermal One-Shot (TCO)
- 15 - Lower Oven Relay Board
- 16 - Lower Oven Cooling Fan
- 17 - Main Power Board (MPB)

Rear View

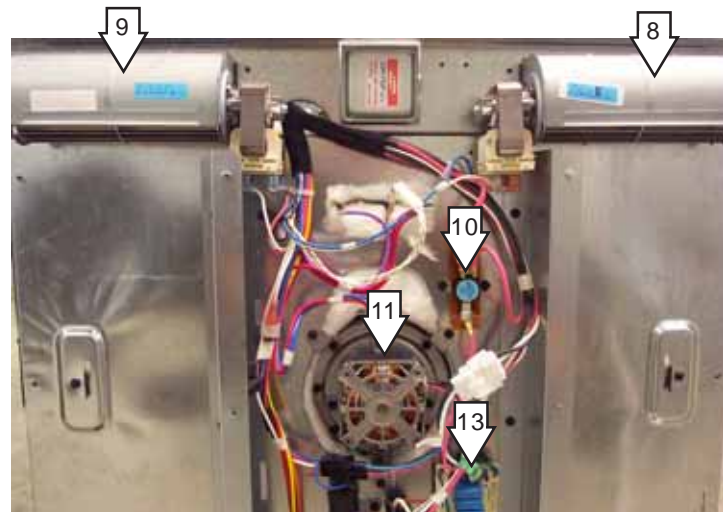


30-in. Slide-In Range (Shown with Cooktop Removed)



- 1 - Magnetron Thermal TCO
- 2 - High Voltage Transformer
- 3 - Left FAD (Fan Apparency Device) TCO
- 4 - Right FAD TCO
- 5 - High Voltage Capacitor
- 6 - Stirrer Motor
- 7 - Oven Vent Fan
- 8 - Left Cooling Fan
- 9 - Right Cooling Fan
- 10 - High Limit Thermal One-Shot (TCO)
- 11 - Convection Fan
- 12 - Current Limit Board (CLB)
- 13 - EMI Filter Board
- 14 - Main Power Board (MPB)

Rear View



Oven Components

Components Requiring Oven Removal

To replace the components listed below, the oven must be removed from its installation.

	Slide-In Range	Double Wall Oven	Single Wall Oven
Capacitor	●	●	●
Convection Fan Capacitor	●	●	●
Convection Fan Motor(s)	●	●	●
Diode	●	●	●
EMI Board	●	●	●
High Voltage Transformer	●	●	●
Left Cooling Fan	●	●	●
Lower Oven Cooling Fan	●	●	●
Magnetron	●	●	●
Magnetron Cooling Fan	●	●	●
Magnetron TCO	●	●	●
Main Power Board	●	●	●
One-Shot Thermostat	●	●	●
Right Cooling Fan	●	●	●
Sail Switches	●	●	NA

Note: When assembling, the elements, convection fan, and oven light contain special radiation screens and chokes. Be sure to replace these in the oven cavity. Take special care not to strip any screws when replacing these components.

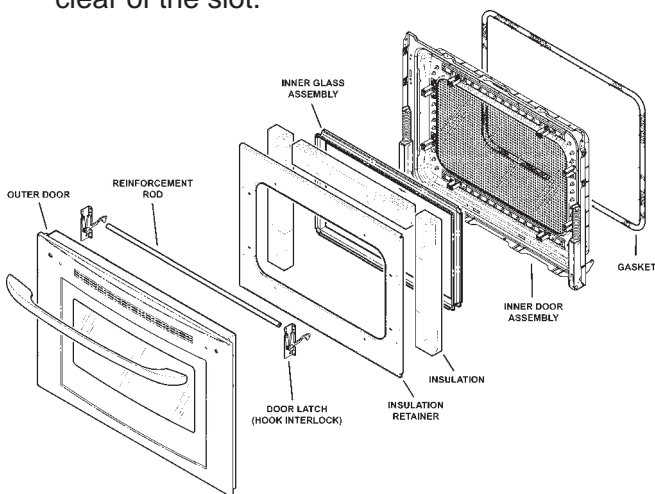
Trivection™ Door Assembly

WARNING: A microwave leakage test must be performed any time a door is removed, replaced, disassembled, or adjusted for any reason. **The maximum leakage is 4 MW/cm² (see Microwave Leakage Test).**

Caution: The door is very heavy. Use the correct lifting procedures. Do not lift the door by the handle.

To remove the Trivection™ door:

1. Fully open the door.
2. Remove the security screws and clips on each hinge with a Torx 20 (T20) screwdriver.
3. Pull the hinge locks down toward the door frame, to the unlocked position. (This may require a flat-blade screwdriver to start the hinge locks moving).
4. Firmly grasp both sides of the door at the top.
5. Close the door to the door removal position, which is halfway between the broil stop position and fully closed.
6. Lift the door up and out until the hinge arm is clear of the slot.



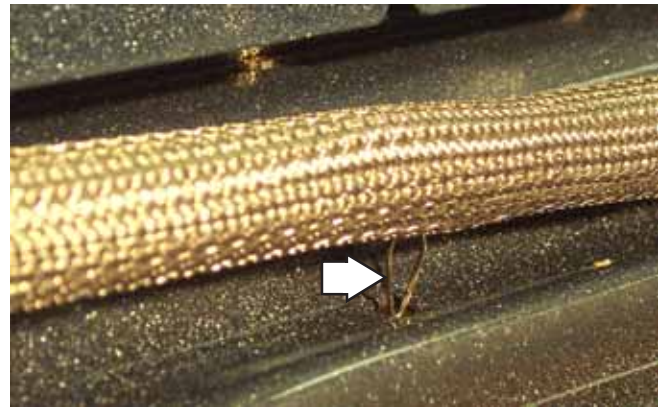
To remove the outer door:

1. Place the inner door side down on the work area.
2. Remove the eight T15 Torx screws from the outer door (two on each side, four across the bottom).
3. Lift the outer door and handle off the door assembly.

Caution: Care must be taken if reinstalling the door handle. Overtightening screws can damage handle. Hand-tighten screws and make sure handle fits snugly to door panel (do not use electric driver).

To remove the Trivection™ Door Gasket:

The door gasket is attached to the inner door panel by spring clips. In addition to being a self-clean gasket, the door gasket has a wire mesh to help seal microwave energy.



Cross the gasket and tuck loose ends into the slots at the bottom of inner panel as shown below.



Note: There is no gap at the bottom of the gasket on the Trivection™ oven door.

To remove the inner glass assembly:

1. Remove the eight 1/4-in. hex head screws holding the insulation retainer.
2. Remove the retainer and insulation.
3. Lift the inner glass assembly off the inner door.

Inner Glass Assembly



Note: Arrows on the side of the inner glass assembly indicate the direction in which the oven door glass is installed. The arrows should be pointing toward the oven cavity.

Inner Door Assembly

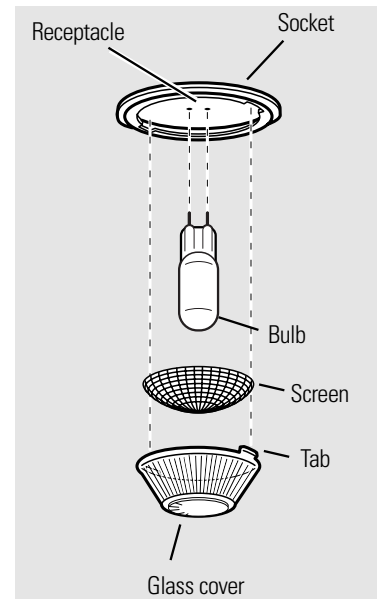
The inner door liner, glass and hinges are one assembly and should **NOT** be separated. All the screws on the inner door assembly have been torqued to a specific setting and Loctite® sealant applied to prevent microwave leakage.

To replace the Trivection™ door:

1. Firmly grasp both sides of the door at the top.
2. With the door at the same angle as the removal position, seat the indentation of the hinge arm into the bottom edge of the hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.
3. Fully open the door. If the door cannot be fully opened, the hinge is not properly seated.
4. Push the hinge locks up against the front frame of the oven cavity, to the locked position.
5. Reinstall the security screws on each hinge.
6. Close the oven door and check for proper alignment, rubbing, etc.
7. Perform the Microwave Leakage Test.

Note: On slide-in models, the door rubbing on the oven cavity may be due to the leveling legs. If the oven is not level it can "rack" the cavity and cause rubbing.

Oven Light Bulb Assembly



Note: The glass cover should be removed only when cold. Be sure to let the light cover and bulb cool completely. Do not touch a hot bulb with bare hands or a damp cloth.

Replace with a new 130V halogen bulb, not to exceed 50 watts.

Note: Bulbs are 50 watt in Trivection™ oven, and 30 watts in the lower oven of double oven.

To remove and replace the oven light bulb:

1. Turn the glass cover counterclockwise $\frac{1}{4}$ turn until the tabs of the glass cover clear the grooves of the socket.
2. Using gloves or a dry cloth, remove the bulb by pulling it straight out.
3. Using gloves or a dry cloth, remove the new bulb from its packaging. Do not touch the bulb with bare fingers.
4. Push the bulb straight into the receptacle all the way. Then replace the screen.

Note: The screen must be replaced or the life of the bulb will be reduced.

Trivection™ Bake, Broil and Convection Elements

WARNING: A microwave leakage test must be performed any time an element is removed, replaced, or adjusted for any reason. **The maximum leakage is 4 MW/cm² (see Microwave Leakage Test).**

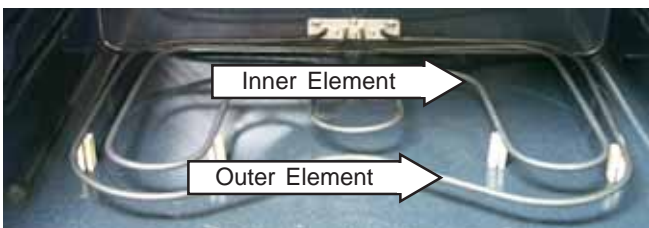
Caution: Use caution when removing element from inside oven cavity due to wire harness layout. There is a possibility of the wire terminals coming loose from the element when pulling the wires through the oven cavity.

Note: When reconnecting the elements, make sure the connectors are securely attached to the element terminals.

The bake and broil elements have special gaskets that keep microwave energy from leaking out of the oven cavity. Replace any worn or damaged gaskets.

Bake Element

- The bake element is composed of an inner and an outer element. It is replaced as one unit.
- The inside element is rated at 2500 watts, has an approximate resistance value of 22 Ω , and draws approximately 9 amps.
- The outside element is rated at 900 watts, has an approximate resistance value of 63 Ω , and draws approximately 3.2 amps.



- The bake element is held in place on the back oven wall by six 1/4-in. hex head screws.



Broil Element

- The broil element is rated at 2500 watts, has an approximate resistance value of 22 Ω , and draws approximately 9 amps.
- The broil element is held in place on the back oven wall by:
 - a. Eleven 1/4-in. hex head screws on the mounting plate.
 - b. Two 1/4-in. hex head screws on the left and right element brackets.



Convection Element

- The convection element is rated at 2500 watts, has an approximate resistance value of 22 Ω , and draws approximately 9 amps.
- The convection element is held in place on the back oven wall by:
 - a. Six 1/4-in. hex head screws on the mounting plate.
 - b. One 1/4-in. hex head screw on the bottom element bracket.



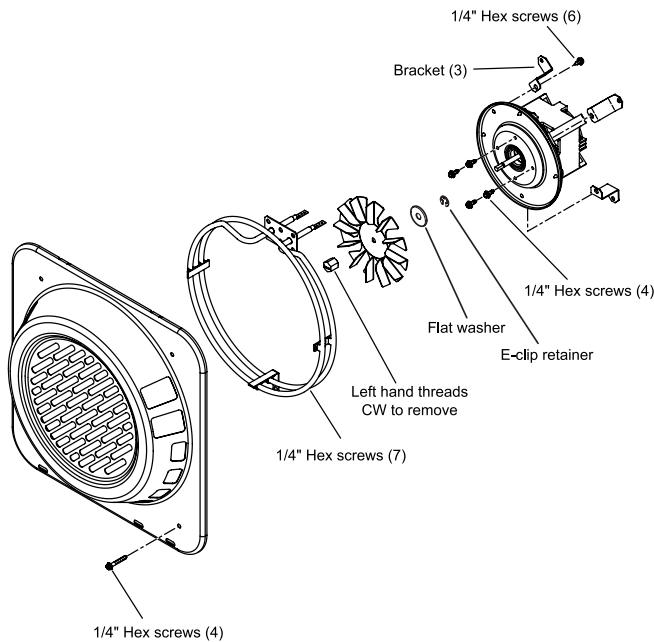
Note: Production will be using Torx (T20H) security screws on all elements in the Trivection™ oven in the near future.

Trivection™ Convection Fan Assembly

The convection fan assembly consists of the fan guard, element, fan blade, and motor.

Refer to the schematic in the back of this manual for circuitry for your specific model.

Trivection™ Convection Fan Assembly



- The element cover is held in place by four 1/4-in. hex head screws.
- The convection fan blade nut has left-hand threads. Turn nut clockwise to remove.

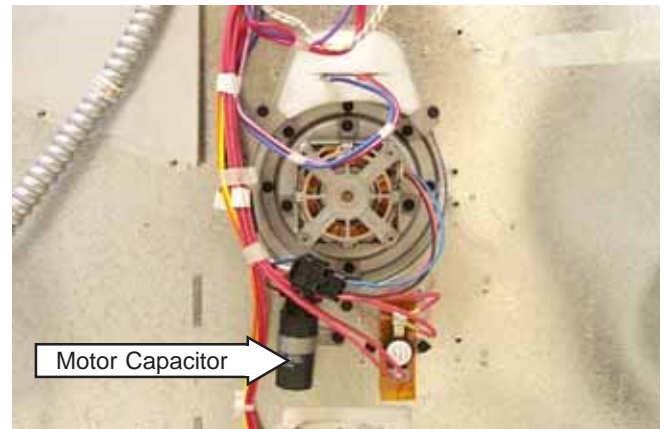
Trivection™ Convection Fan Motor

The convection fan motor is located on the back of the oven.

The convection fan motor has approximate resistance values between the following wires:

- Red and Blue: 118 Ω
- Red and Black: 58 Ω
- Blue and Black: 58 Ω

Wall Oven Shown

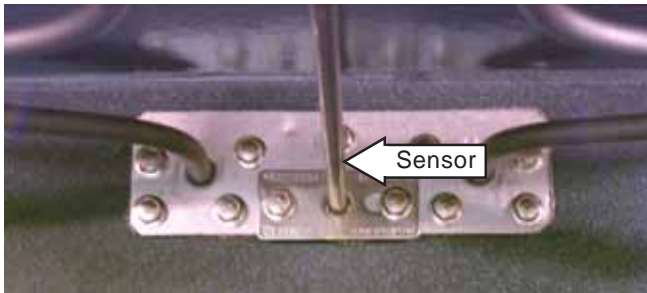


- To remove the convection fan motor:
 - a. Remove the four 1/4-in. hex head screws on the inside of the oven cavity.
 - b. On the back on the oven, remove the 3 outer 1/4-in. hex head screws from the 3 brackets that hold the convection motor in place.

Note: The convection fan assembly in the lower oven of the double oven mounts the same as previous convection fan assemblies.

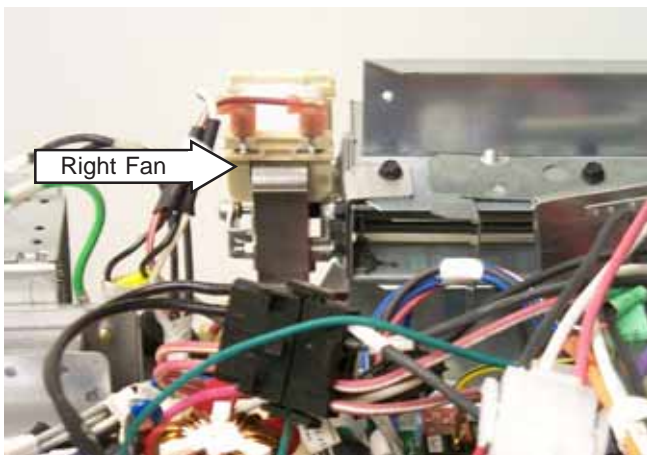
Oven Temperature Sensor (RTD)

The RTD (Resistive Thermal Device) has a resistance of 1100 Ω at room temperature and 2650 Ω at clean temperature.

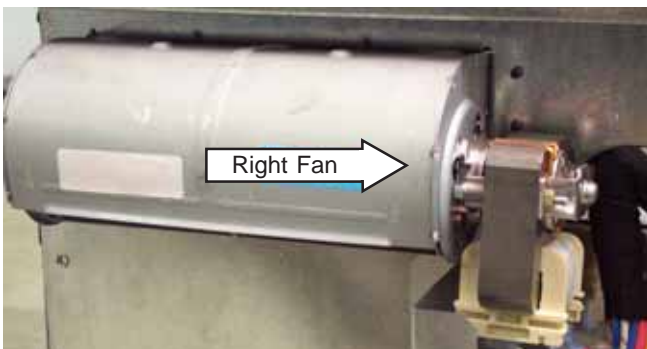


Right Cooling Fan

The right cooling fan is located in the right rear corner of the control compartment and has an approximate resistance value of 19 Ω .



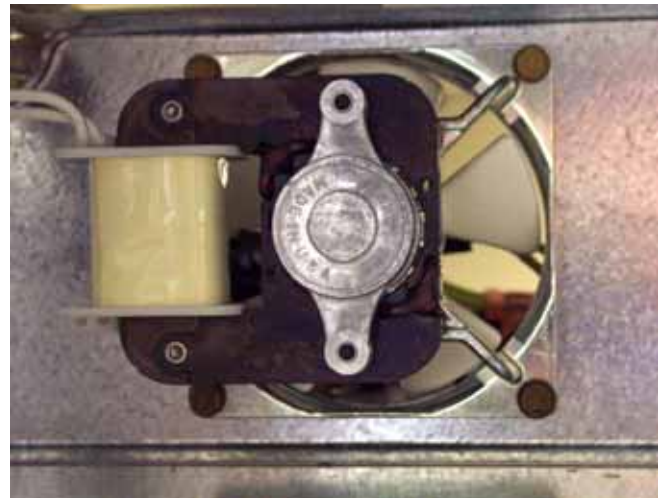
Rear View



Lower Cooling Fan (Double Wall Oven Only)

The lower cooling fan is located between the upper and lower ovens, and has an approximate resistance value of 68 Ω .

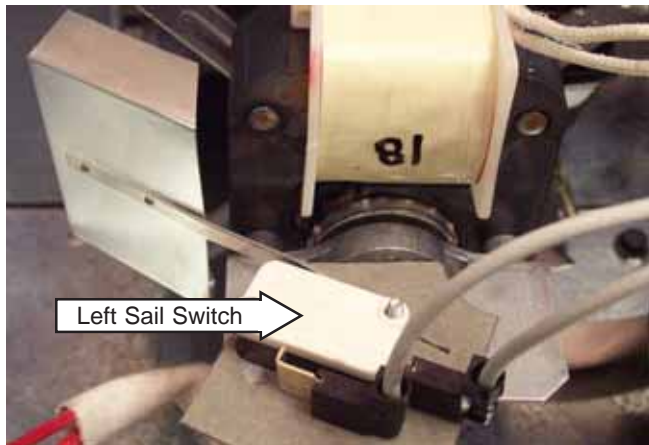
The fan can only be removed from the back of the oven.



Note: The right cooling fan and the lower cooling fan of the Double Wall Oven are controlled by a single relay.

Sail Switches (Double and Single Wall Ovens)

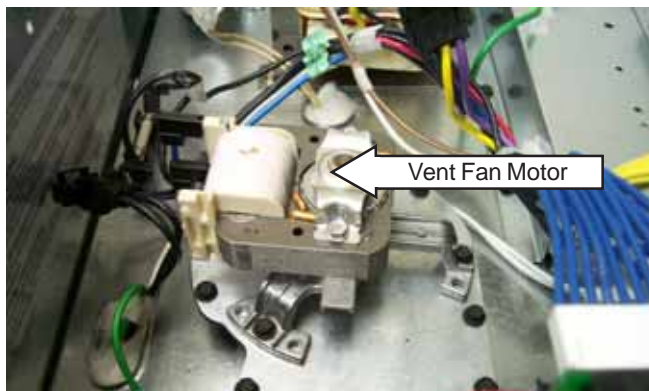
- The left and right sail switches are normally open limit switches located at the rear of the component compartment in front of the cooling fans.
- The sail switches monitor the presence of the airstream from the fans. If either fan (HVT fan or right cooling fan) malfunctions, the applicable sail switch opens and opens relay R1, which disables power to the microwave HVT and oven cooking elements. In addition, if the right cooling fan malfunctions on the double oven, the right sail switch opens and opens relay R2, which disables the lower oven cooking elements.
- The relay coil resistance is approximately 920 Ω .



- Both R1 relay and R2 relay (double oven only) are double pole single throw relays. Both contacts are used on R1, only one contact is used on R2.

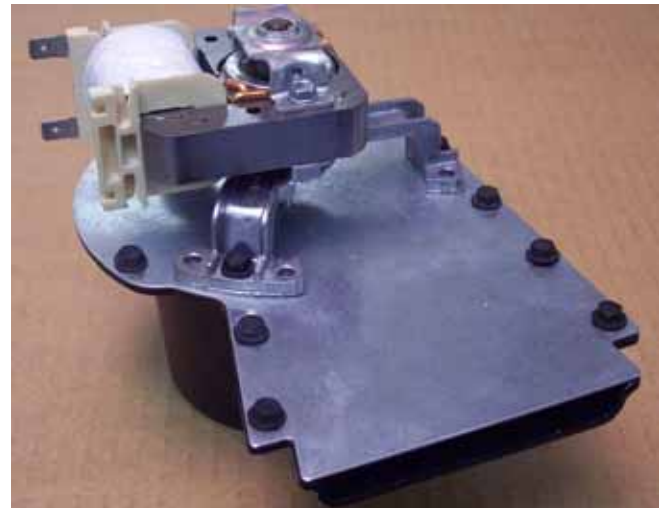
Oven Vent Fan

The oven is vented above the left side of the door.



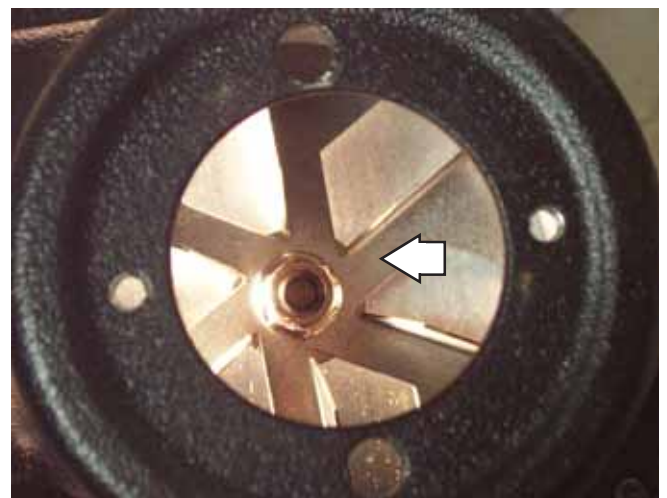
- It is normal for steam to come out of this vent and the area around the vent to become hot during oven use. It is important to keep the vent unblocked to ensure proper air circulation.
- The oven vent fan motor has an approximate resistance value of 20 Ω and rotates clockwise as viewed from the top.
- To remove the vent fan assembly, remove the four 1/4-in. hex nuts from inside the oven cavity.

Vent Fan



Note: All vent fan parts are available separately.

Vent Fan Blade

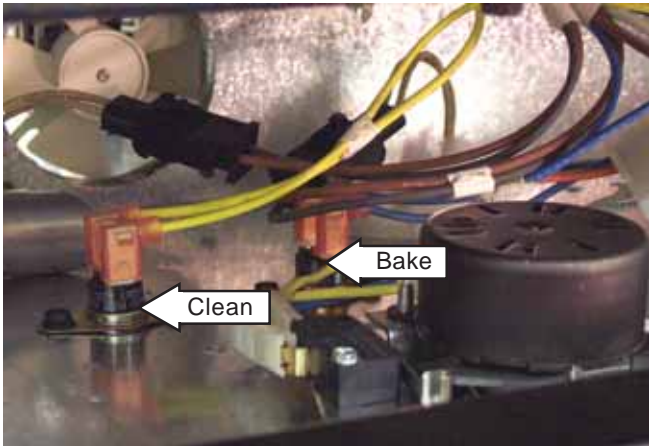


The vent fan blade nut has right-hand threads. Turn nut counterclockwise to remove.

Lower Oven Bake and Clean Thermal TCO's (Double Wall Ovens)

The bake and clean FAD's (Fan Apparency Device) TCO's are located between the upper and lower ovens on the floor of the component compartment in front of the fan motor. They are monitored by the controls software.

Both lower oven clean and bake FAD's are ignored by the control when the upper oven is in self-clean.



Bake FAD

- Is wired in series with the lower door unlock motor switch.
- Opens at 185°F and closes when cooled below 158°F.
- The bake FAD can only be detected by the control when in non self-clean operations (unlock switch closed, lock switch open).

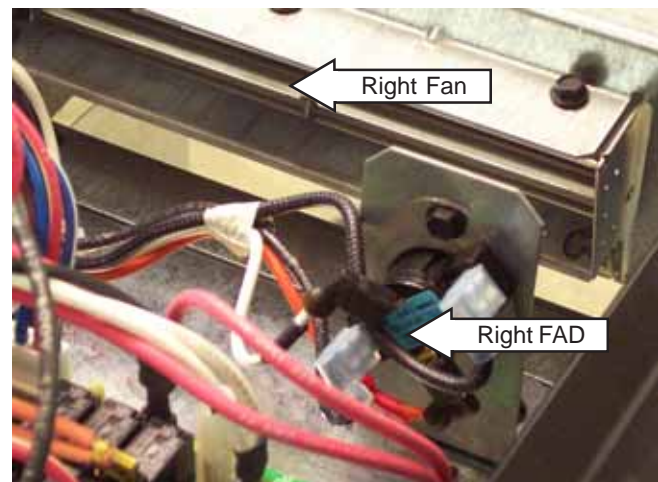
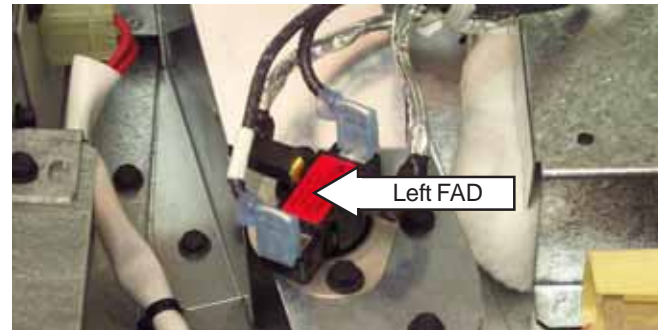
Higher Temperature (Clean) FAD

- Is wired in series with the common of the lock/unlock switch.
- Opens at 275°F and closes when cooled below 205°F.
- The clean FAD is always detected by the control.

If the thermal switch opens in any mode of operation, the control will display F9 failure code. When this condition exists, check for proper fan operation (look for obstructions), and inspect oven installation (make sure grille areas are not blocked), oven insulation and lock/unlock circuit of lower door lock.

Left and Right Thermal TCO's (Slide-In Range)

The left and right FAD's (Fan Apparency Device) TCO's are located at the rear of the component compartment, in front of the respective cooling fan.

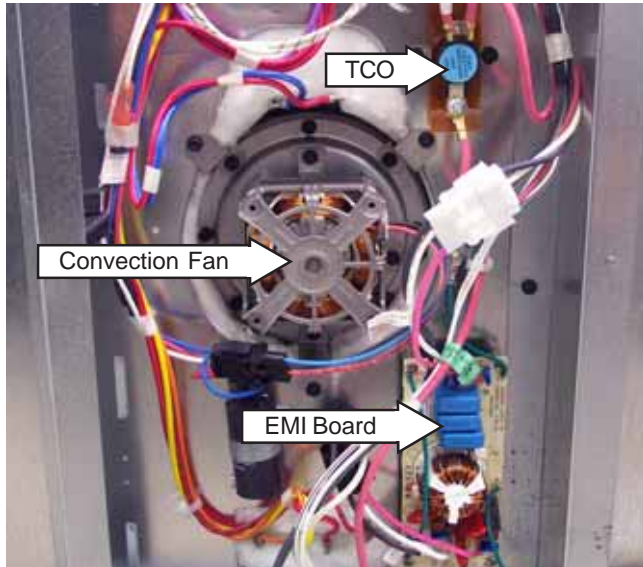


- Both remove power from the controls when open.
- Both are normally closed and wired in series with the magnetron TCO, supplying L1 to the main power board to power the controls.
- The left FAD opens at 185°F and closes when cooled below 158°F. The right TCO opens at 194°F and closes when cooled below 167°F.
- If either FAD opens, check for proper fan operation.
- Each FAD has an internal heater. N is connected to one side of the heaters, and L2 is connected to the other side through the convection DLB relay. The heaters are powered when the DLB relay is energized. The DLB relays are energized continuously in in Service Mode and any cooking or clean mode.

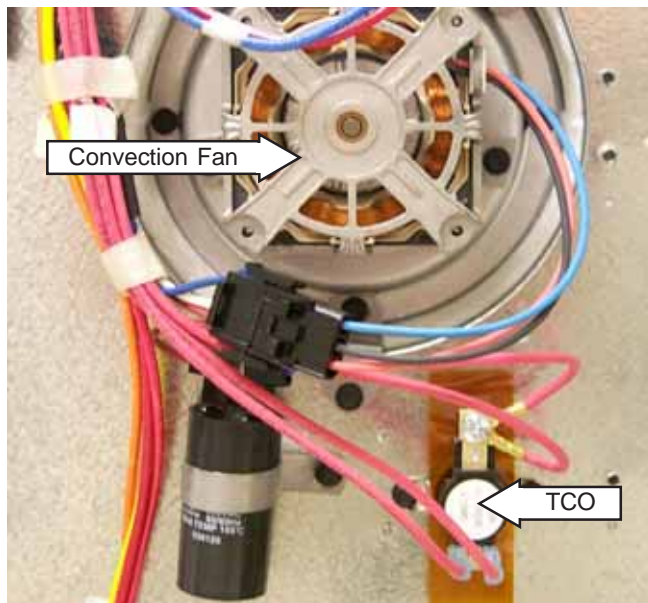
High Limit Thermal One-Shot TCO

The high limit thermal one-shot TCO is located on the rear of the oven behind the center cover and is wired in series with L2 from the terminal block.

Slide-In Range



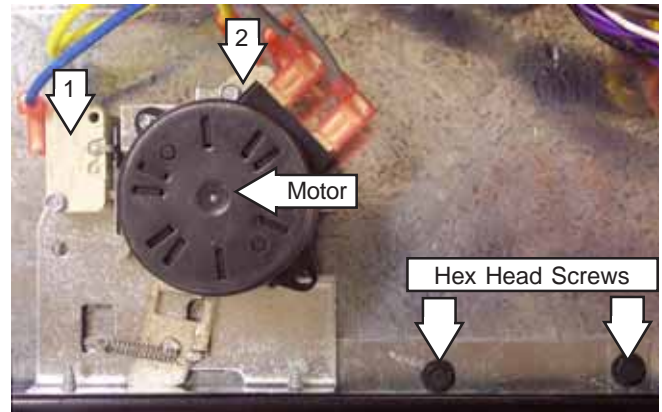
Single and Upper Double Wall Ovens



- These thermal switches are a non-resettable device and will open at 302°F, indicating a thermal runaway condition.
- If tripped, the oven must be removed from installation in order for the one-shot TCO to be replaced.
- Cause of overheating should be determined before replacing the TCO.

Self-Clean Latch Motor

To remove the self-clean latch motor assembly, remove the two 1/4-in. hex head screws.



1 - Unlock Switch

- Blue and yellow wires.
- Reads closed when the door is unlocked.

2 - Lock Switch

- Orange and yellow wires
- Reads infinity when the door is unlocked.

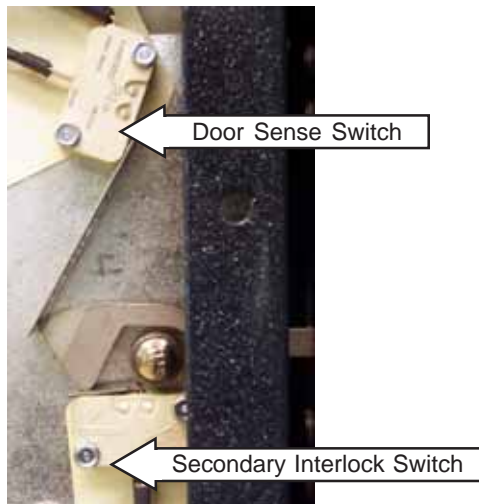
Door Switches

Safety Interlocks

The microwave interlock system has a left and a right interlock assembly.

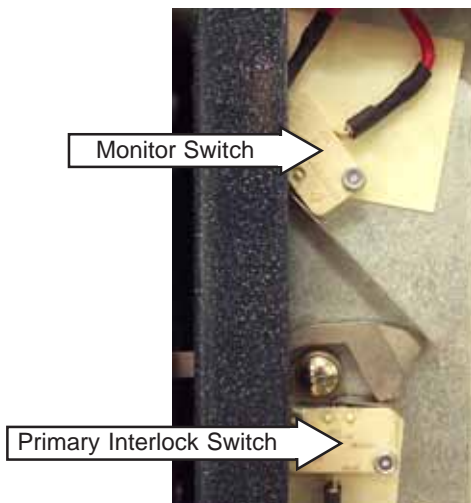
Left Interlock Switch Assembly - Door sense switch (NO) and secondary interlock switch (NO) with two 2 position connectors with black and brown wire outputs.

Left Side Door Switches



Right Interlock Switch Assembly - Interlock monitor switch (NC) and primary interlock switch (NO) with one 4-position connector with red and black wire outputs.

Right Side Door Switches



Note: Replace entire left side door switch assembly or right side door switch assembly. Do not replace the individual switches. Switch positions and interlock actuation distance are controlled by assembly of switch-to-mounting bracket. Do not replace or adjust individual switches on door switch assembly.

Oven Door Sense Switch

The oven door sense switch is located in the left interlock assembly on the Trivection™ oven.

Proper operation of the door sense switch is required for proper operation of the microwave, oven light, convection fan and the door lock.

To check the door sense switch:

1. Enter the service mode (see **Service Mode**).
2. Select DOOR POSITION option and observe the display as the door is opened and closed.
3. If the state (open/closed) does not change on the display, turn off power and check wiring and switch with ohmmeter.

Interlock and Monitor Switches

Proper operation of the interlock switches and monitor switch are required for proper operation of the microwave system. When troubleshooting or replacing interlock switch assembly, follow the procedure outlined below to verify proper switch operation.

To check the primary and secondary interlock switches:

1. With power off, attach meter probes to the leads of each switch.
2. Verify the following:
 - Closed door circuit must have *continuity*.
 - Opened door circuit must read *open*.

To check the monitor switch:

1. With power off, attach meter probes to the leads of each switch.
2. Verify the following:
 - Closed door circuit must read *open*.
 - Opened door circuit must have *continuity*.

Important: Any defective or misadjusted components in the interlock monitor, door seal, microwave generation and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.

Control Panel (Double and Single Wall Ovens)

Removal and Replacement

1. Remove the three 1/4-in. hex head screws securing the control panel to the vent trim.

Note: Screws are located under the control panel and can be accessed by opening the oven door and removing them from the bottom.

2. The panel has keyhole slots at the top and is held very tight. Carefully push the panel up, then pull out at the bottom.

Glass Touch Assembly (Slide-In Range)

Removal and Replacement

1. Disconnect power to the range.
2. Remove all surface unit knobs.
3. Unscrew the four plastic crystal retainers on the infinite switches by turning counter-clockwise.

Note: The retainers should only be hand tightened when reinstalling.

4. Lift the glass touch assembly 3 inches away from the control panel and unplug the ribbon cable from the assembly.

Note: The ribbon cable and connector are very fragile. Take extra care when removing. When reassembling, do not pinch the ribbon connector between the glass and control trim.

Control Panel Insert (Slide-In Range)

Removal and Replacement

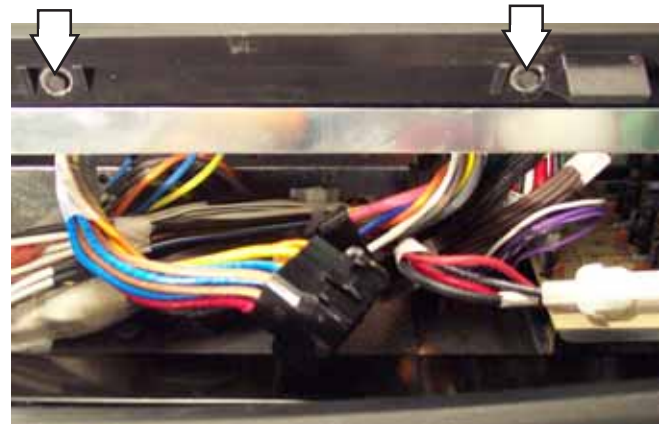
1. Remove the **Glass Touch Assembly**.
2. Remove the four 1/4-in. hex head screws securing the metal control panel insert to the control panel trim.
3. Disconnect the two wiring harnesses by unplugging the 9-pin and 15-pin connector blocks.
4. Disconnect the 4 connectors on the main logic board (MLB).

Note: When reassembling, carefully position the harness wires when reinserting the control panel insert.

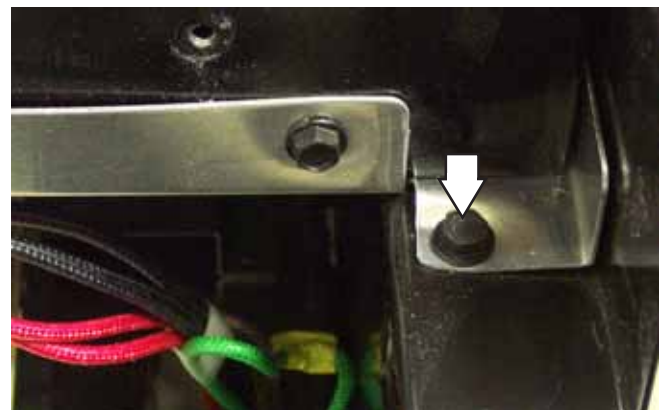
Cooktop (Slide-In Range)

Removing and Replacement

1. Remove the **Glass Touch Assembly**.
2. Remove the **Control Panel Insert**.
3. Remove the control panel trim by removing the five 1/4-in. hex head screws attached to the front edge of the cooktop and the five 1/4-in. hex head screws at the bottom attached to the vent trim.



4. Remove the two 1/4-in. hex head screws securing the cooktop to the body side extensions (1 screw per side).



5. Slide the cooktop assembly forward and lift the cooktop off.

Note: Take extra care with the harness when reinstalling the cooktop.

The 4 heating elements come in 3 sizes:

- Two 6-in. 240V, 1500W
- One 9-in. 240V, 2500W (dual unit 6-in. and 9-in.)
- One 8-in. 240V, 2000W

Microwave Components

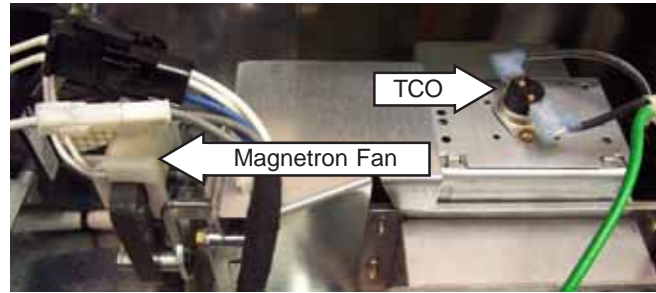
PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- A. Do not operate or allow the oven to be operated with the door open.
- B. If the oven operates with the door open, instruct the user not to operate the oven and contact the manufacturer immediately.
- C. Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and make repairs as necessary:
- D. Before turning on microwave power for any test or inspecting within the microwave generating compartments, check the magnetron, wave guide or transmission line and cavity for proper alignment, integrity and connections.
- E. Any defective or misadjusted components in the interlock monitor, door seal and microwave generation and transmission systems shall be repaired, replaced or adjusted by procedure described in this manual before the oven is released to the owner.
- F. A microwave leakage check to verify compliance with the federal performance standard should be performed on each oven prior to release to the owner.

WARNING: To prevent electrical shock, use extreme caution when diagnosing oven with outer covers removed and power on. The high voltage circuit of the magnetron power area (HVT, capacitor, diode, magnetron) is 4400V potential with respect to ground. Wait at least 5 minutes after disconnecting power before servicing the magnetron power area.

Magnetron Cooling Fan and Thermal TCO (Wall Ovens)

Note: The magnetron is covered under an additional 4 year warranty. The customer is responsible for any labor or in-home service during this time.



- The magnetron cooling fan motor has an approximate resistance value of 68 Ω .
- The magnetron TCO is located on top of the magnetron housing and is wired in series with L1 to the main power board.
- Check for proper magnetron cooling fan operation (blockage, blades not turning).
- When the temperature on the magnetron TCO reaches 320°F, the magnetron TCO opens and removes power to the controls. When cooled below 140°F, it closes and restores power to the controls.
- The magnetron fan, HVT fan, and magnetron stirrer are controlled by a single relay on the single and double wall ovens.

Left Cooling Fan (Slide-In Range)

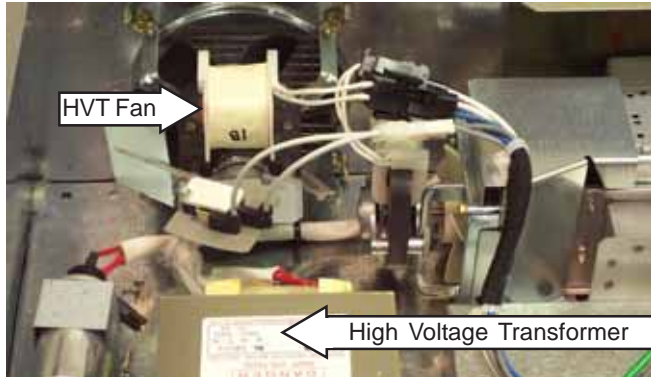
The left cooling fan cools the HVT and magnetron and is located in the left rear corner of the control compartment. It has an approximate resistance value of 13 Ω .

The left cooling fan and the magnetron stirrer are controlled with a single relay.



HVT Cooling Fan (Double and Single Wall Ovens)

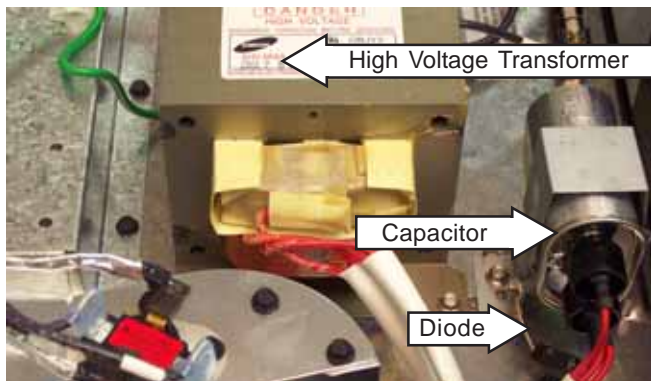
- Located in the left rear corner of the control compartment.
- Has an approximate resistance value of 14.5 Ω .



Magnetron Capacitor and Diode

Caution: The capacitor holds its 4400V charge for at least 2 minutes after power is removed. Always be certain that the capacitor is discharged before servicing. Mechanically discharge by placing an insulated handle screwdriver between the diode connection of the capacitor and oven chassis ground.

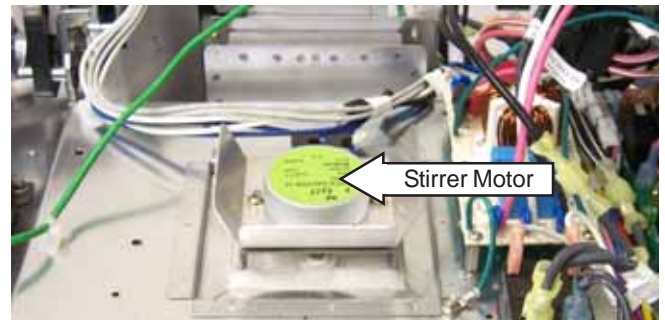
The magnetron capacitor and diode are located in the left rear corner of the control compartment next to the high voltage transformer.



Stirrer Motor

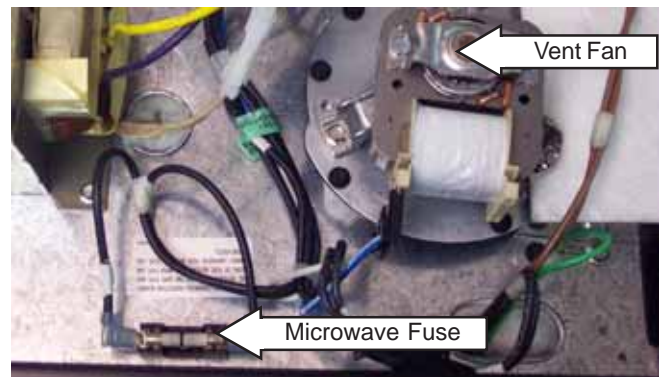
The stirrer motor drives the antenna assembly and is located in the center of the control compartment.

The stirrer motor has an approximate resistance value of 3.4K Ω . The motor rotation direction is random at each start.



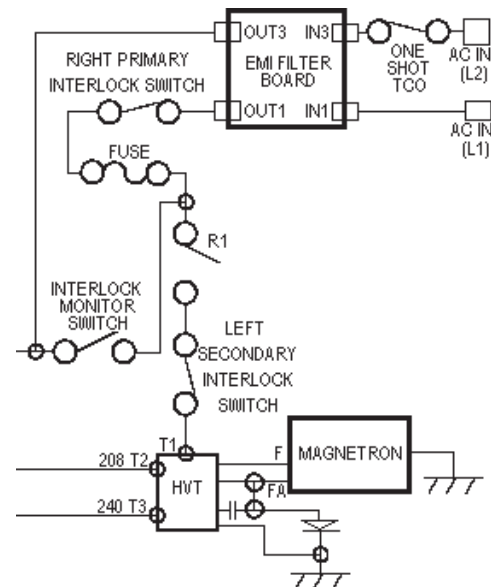
Microwave Fuse

The microwave fuse is located in the front corner of the control compartment next to the vent fan.



When replacing the microwave fuse, use only the 20 amp fuse, WB08T10027.

If the door interlock switches fail (monitor switch fails to open when door is closed, or the right primary interlock switch fails to open when door is opened), the fuse will open due to having 240V/208V across it. The fuse may open if there is arcing across the switches or they open/close too slowly. The fuse may also open due to a voltage or current spike during normal operation.



Control Boards Connector Locator

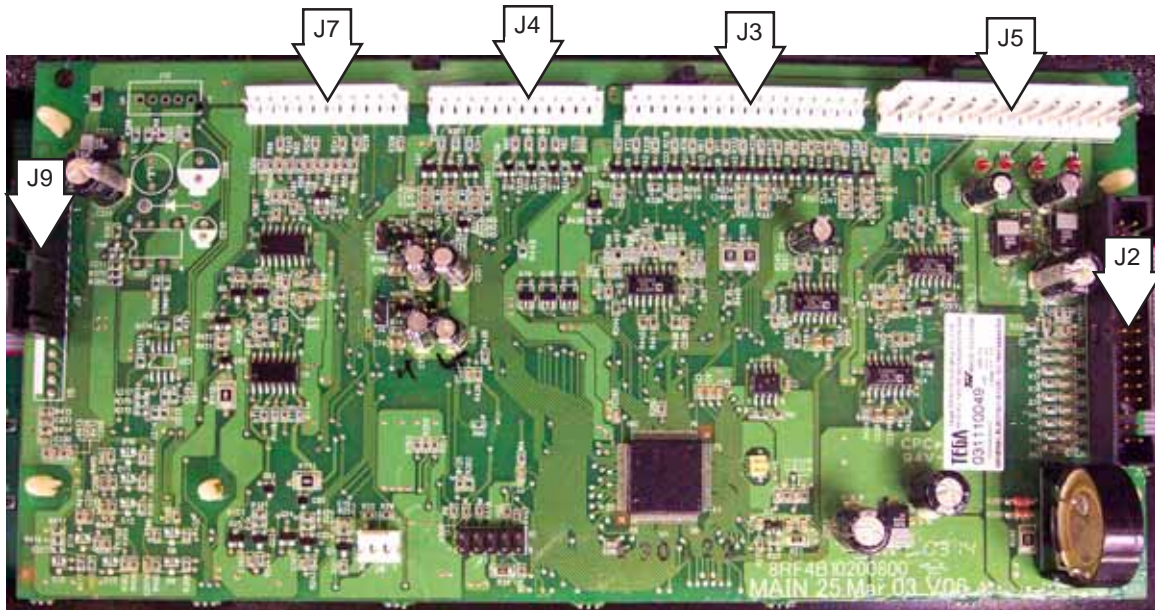
WARNING: Components are electrically HOT when voltage is connected to oven.

Main Logic Board

When installing a new main logic board, the type of oven (Profile, Monogram or Kenmore) needs to be entered once power is reconnected. Follow the instructions on the display.

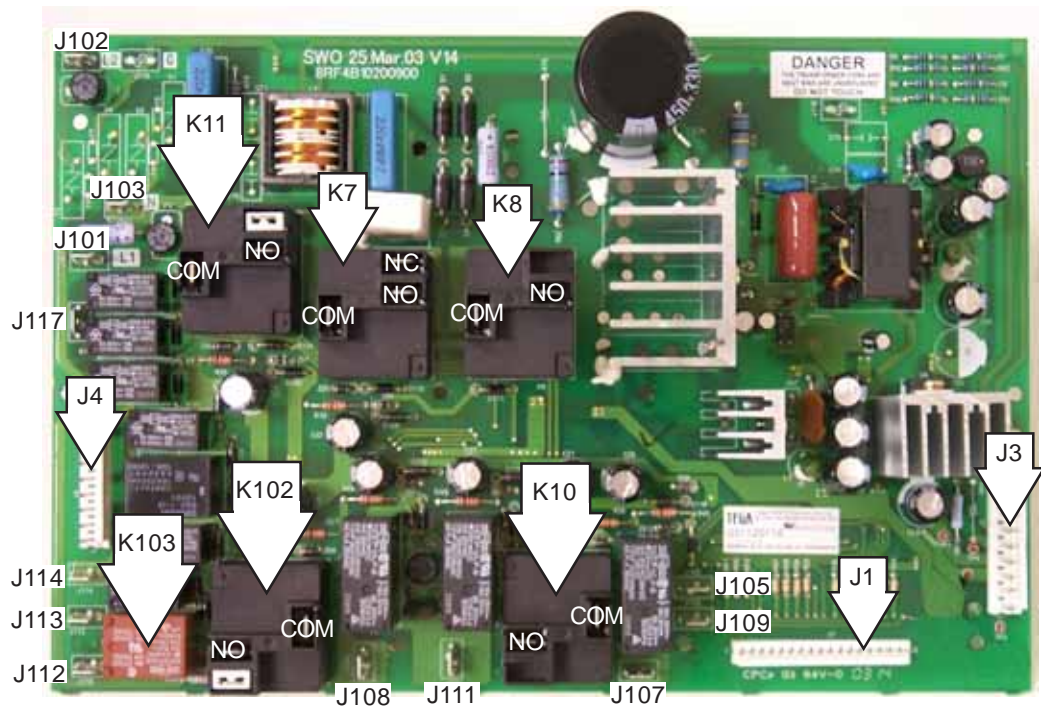
If the oven control type needs to be re-entered, enter special modes screen by pressing 0803 within 5 minutes of reconnecting power.

1. Press Factory1 to enter the factory mode.
2. Press CHANGE to choose a different oven type.
3. Press ACCEPT to confirm.
4. Press EXIT.



- J9** - DC power output and serial data bus to/from Glass Touch Signal Board J2
- J7** - Input from Switches and Sensors
- J4** - (Single Wall Oven) - No connection
(Double Wall Oven) - DC power output and relay control outputs to Lower Oven Relay Board J9
(Slide-In Oven) - 5 VDC power output and 4 surface unit status signals inputs to J4 Main Logic Board
- J3** - Relay control outputs to Main Power Board J1
- J5** - DC power input and line monitor signals from Main Power Board J3
- J2** - DC power output and data output to Text Display Board J1

Main Power Board



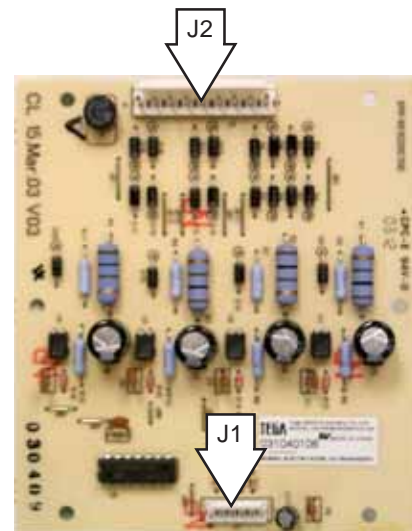
Note: Although the board is marked **SWO**, it is used in all ovens.

- J1** - Relay control inputs from Main Logic Board J3
- J3** - DC power output and line monitor signals to Main Logic Board J5
- K11** - L2 Double Line Break Relay for upper oven broil, bake, and bake 2 elements
- K7** - Broil ON/OFF Relay
- K8** - Bake ON/OFF Relay
- J4** - Output to 120 VAC loads (lamps/motors/fans)
- K102** - L2 Double Line Break Relay for convection element
- K10** - Convection Element ON/OFF Relay
- K103** - Bake 2 ON/OFF Relay

Current Limit Board (Slide-In Range Only)

- J2** - L2 and power signals from surface unit elements
- J1** - 5 VDC power input and 4 surface unit status signals output to J4 Main Logic Board

The current limit board receives power signals from the infinite switches and converts them to logic signals so the main logic board can detect on/off status.



Lower Oven Relay Board (Double Wall Oven Only)

K121 - Double Line Break (DLB) Relay (Broil/Bake/Convection)

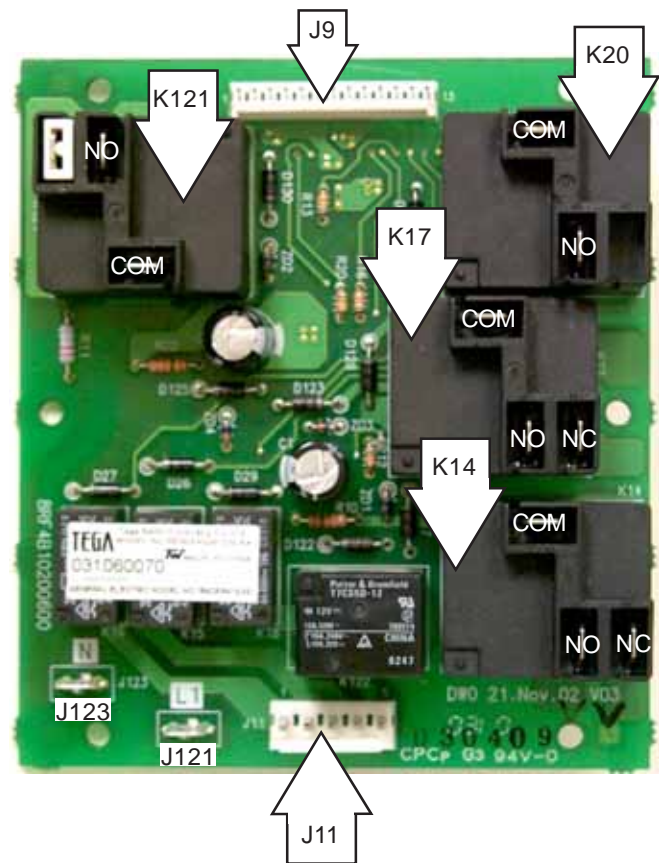
K20 - Convection Element ON/OFF Relay

K17 - Bake Element ON/OFF Relay

K14 - Broil Element ON/OFF Relay

J9 - DC power input and relay control inputs from Main Logic Board J4

J11 - Latch motor, oven lamps and convection fan outputs



Glass Touch Signal Board

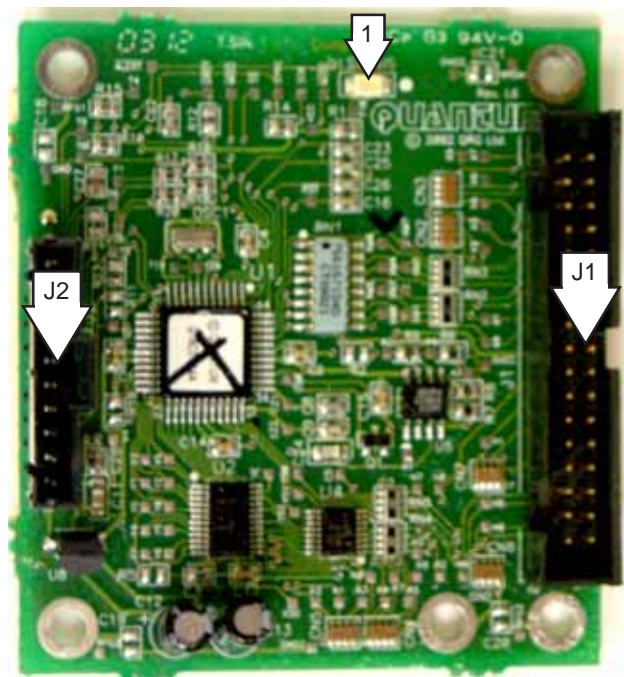
J1 - Input and output signals from/to Glass Touch Board J1

J2 - DC power input and serial data bus to/from Main Logic Board J9

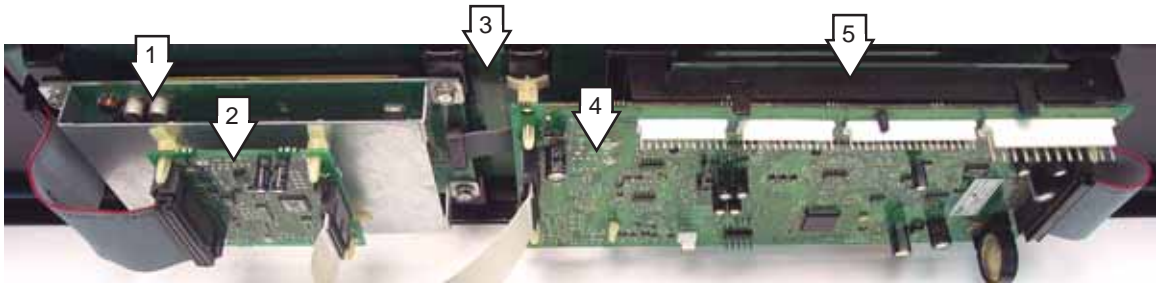
1 - LED Status Light

The glass touch signal board provides a serial communication interface between the glass touch board and the main logic board.

The glass touch signal board has an LED status light which should light anytime a pad is touched on the glass touch assembly.



Control Panel and Board Layout



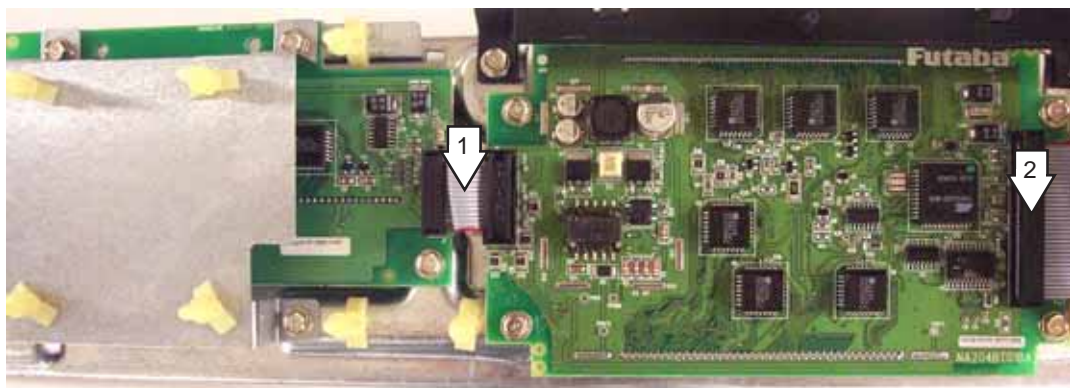
- 1 - Time/Temperature Display Board
- 2 - Glass Touch Signal Board
- 3 - Glass Touch Board
- 4 - Main Logic Board
- 5 - Text Display Board

Glass Touch Board



- J1 - Output and input signals from/to Glass Touch Signal Board J1

Text and Time/Temperature Display Boards



- 1 - DC power and serial data from Text Display Board to Time/Temperature Display Board (hard wired to Time/Temperature Display Board)
- 2 - DC power input and data Input from Main Logic Board J2 (hard wired to Text Display Board)

Diagnostics and Service Information

WARNING: To prevent electrical shock, use extreme caution when diagnosing oven with outer covers removed and power on. The high voltage circuit of the magnetron power area (HVT, capacitor, diode, magnetron) is 4400V potential with respect to ground. Wait at least 5 minutes after disconnecting power before servicing the magnetron power area.

WARNING: Heat sinks on main power board are electrically live. Take special precautions when troubleshooting the main power board with power on. If the main power board has failed, the board capacitor can hold a voltage charge on the heat sinks. Wait at least 5 minutes after disconnecting power before servicing the main power board.

FAILURE CODES		
Failure Code	Meaning	Corrections
F0	Keyboard error	<ul style="list-style-type: none"> Perform a key panel test, making sure to test EVERY pin combination for possible shorts. If there are no shorts or signs of delamination, the problem is probably with the control. Enter SERVICE MODE, then NEXT, then NEXT then DISPLAY (ON/OFF). Press Clear/Off key to reset. If working properly, enter BACK, then KEYS and test key functions.
F2	Temperature Runaway—oven temperature is above 630 F unlocked or 930 F locked	<ul style="list-style-type: none"> Check for welded element relay contacts. Check airflow to rear of unit.
F3	Open sensor/RTD	<ul style="list-style-type: none"> Disconnect power to unit and then disconnect oven sensor harness from control. Make sure sensor resistance (white leads) are –1080 at room temperature with 2 / change. (Pins 1 and 2 of the 12 position connector for upper wall oven, and pins 11 and 12 for lower wall oven found on the MLB J7 harness).
F4	Shorted sensor/RTD	<ul style="list-style-type: none"> Verify resistance. See F3 diagnosis. Measure each sensor lead from connector block to ground. If shorted, look for pinched or cut wire in sensor circuit. Check connector terminals. Look for deformity or corrosion on terminals. Repair or replace if necessary. If all above is OK, then replace the main logic board.
F5	Control Sensor Circuit—Supervisor Error	<ul style="list-style-type: none"> Check sensor circuit for intermittent high resistance. See F3 diagnosis. Press Clear/Off and reprogram control. If code reappears, replace control. <p>DO NOT REPLACE LOCK MOTOR.</p> <p>This tests:</p> <ol style="list-style-type: none"> Redundant measurement circuits on Main board do not match closely enough. Door latch motor (and microwave and convection fan) is not disabled by temperature measurement circuits at the proper temperature. <ul style="list-style-type: none"> Replace the main logic board
F8	EEPROM data error	If repeated, replace the main logic board.
F9	Lower oven Bake or Clean FAD detected	<ul style="list-style-type: none"> Suspect stalled cooling fan or restricted/blocked airflow to lower oven cooling fan. Check lower door latch lock and unlock switches.
FC	Door Latch Error	<ul style="list-style-type: none"> Problem with door lock circuit such as pinched wires between control and door lock switches on motorized lock circuits. Check wiring and test operation of switches. Error occurs when both lock and unlock switches are closed at the same time.
Fd	Display Error	<ul style="list-style-type: none"> Check main reconfigurable display connections. Replace main reconfigurable display. Replace main logic board if error does not clear.
<p>Note: When trying to enter temperatures lower than 170 F or greater than 550 F in any mode, or lower than 90 F or greater than 120 F in DEHYDRATE mode (some models only), display will momentarily show "Err" and then the default minimum or maximum temperature will be entered.</p>		

POWER MONITOR ERROR CODES		
During Power-Up (occurs only during power-up)		
Normal Power— No message	L1-L2 >150VAC	L1-N >90VAC AND <150VAC
SUPPLY OPEN NEUTRAL	L1-L2 NA	L1-N <90VAC
SUPPLY MISWIRED	L1-L2 <90VAC	L1-N >90VAC AND <150VAC
	L1-L2 NA	L1-N >150VAC
SENSE 120V ENTERING SALES MODE	L1-L2 >90VAC and <150VAC	L1-N >90VAC AND <150VAC
After Power-Up (can occur anytime during operation)		
Normal Power— No message	L1-L2 NA	L1-N >90VAC AND <150VAC
SUPPLY OPEN NEUTRAL	L1-L2 NA	L1-N <90VAC
SUPPLY MISWIRED	L1-L2 NA	L1-N >150VAC
LOW POWER	L1-L2 <150VAC	L1-N NA
<p>Note: Low Power supersedes Supply Open Neutral</p>		

Basics of Element Cycling

Trivection™ Oven

Cooking Mode	Elements	Convection Fan	Vent Fan	Left Cooling Fans	Right Cooling Fans
Bake	bake & broil as required	option to use in Preheat	ON	ON	ON
Broil	broil as required	NO	ON	ON	ON
Convection Bake Multi	convection as required	YES	ON	ON	ON
Convection Bake 1-Rack	bake & broil as required	YES	ON	ON	ON
Convection Roast	bake & broil as required	YES	ON	ON	ON
Self-Clean	bake & broil as required	NO	OFF	ON	ON
Speed bake	bake, convection, broil and microwave as required	YES - as required	ON	ON	ON
Speed broil	broil & microwave as required	YES - as required	ON	ON	ON
Defrost	microwave as required	YES - as required	ON	ON	ON
Proof (some models)	oven light	YES - as required	ON	-----	-----
Dehydrate (some models)	convection as required	YES	ON	ON	ON

Left cooling fan turns OFF after 5 minutes if the current oven operation does not require it ON.

The vent fan turns OFF after a minimum of 7 minutes and the sensor temperature <200 F for 2 minutes.

The right cooling fan turns OFF after a minimum of 7 minutes and the sensor temperature <200 F for 2 minutes or after about 20 minutes, whichever comes first.

NOTE: For the bake, broil or convection elements or the microwave to operate, BOTH THE LEFT AND COOLING FANS MUST BE ON and engage the sail switches.

Lower Oven

Bake	bake & broil as required	option to use in Preheat	NA	-----	ON
Broil	broil as required	NO	NA	-----	ON
Convection Bake Multi	convection as required	YES	NA	-----	ON
Convection Bake 1-Rack	bake & broil as required	YES	NA	-----	ON
Convection Roast	bake & broil as required	YES	NA	-----	ON
Self-Clean	bake & broil as required	NO	NA	-----	ON

Double Wall Oven - Left cooling fan turns OFF after 5 minutes if the current oven operation does not require it ON. The vent fan turns OFF after a minimum of 7 minutes and the sensor temperature <200°F for 2 minutes. The right & lower oven cooling fans turn OFF after a minimum of 7 minutes and the sensor temperature <200°F for 2 minutes or after about 20 to 85 minutes, whichever comes first (time varies depending on which oven was used last).

Single Wall Oven - Left cooling fan turns OFF after 5 minutes if the current oven operation does not require it ON. The vent fan turns OFF after a minimum of 7 minutes and the sensor temperature <200°F for 2 minutes. The right cooling fan turns OFF after a minimum of 7 minutes and the sensor temperature <200°F for 2 minutes or after about 20 minutes, whichever comes first.

Slide-In Range - The vent fan turns OFF after 22 minutes and the sensor temperature <200°F for 2 minutes. Both cooling fans turn OFF after about 20 minutes.

Note: For the Trivection™ oven bake, broil or convection elements or the microwave to operate, **BOTH THE LEFT AND RIGHT COOLING FANS MUST BE ON** and engage the sail switches.

Note: For the lower oven bake, broil or convection elements to operate, **THE RIGHT COOLING FAN MUST BE ON** and engage the right sail switch.

Service Mode

The service mode allows the service technician to make adjustments and run several important tests on critical oven components.

To enter the service mode:

1. Disconnect main power to the oven for at least 15 seconds.
2. Reconnect power and enter **0803** on the keypad within 5 minutes after the control initializes. The SPECIAL MODES screen is displayed.
3. Press the SERVICE pad on the SPECIAL MODES screen. The SERVICE MODE screen is displayed.
4. Press the NEXT and BACK pads to scroll through the test list. Choose a test by pressing the appropriate pad.

Service Mode Tests

COOKING LOADS - Verifies proper operation of cooking elements and convection fan. (See *Troubleshooting Cooking Loads in Service Mode* to perform tests.)

Note: There is a 5 second delay in the electronic control activating cooking loads in service mode.

DOOR LATCH - Verifies proper operation of door lock motor and switches. Press the LOCK pad: a red lock icon in the display flashes during transition from unlock to lock, then becomes solid on when the door is locked. Press the UNLOCK pad: the red lock icon flashes during transition from lock to unlock, then turns off when the door is unlocked.

DOOR POSITION - Verifies proper operation of door sense switch. Open and close the oven door: the Time/Temperature display indicates the door is open or closed.

RTD - Displays oven sensor temperature in red on Time/Temperature display of the control panel.

VENT FAN - Verifies proper operation of the ventilation fan. Press the ON and OFF pads to cycle the fan. The Time/Temperature display indicates the fan is ON or OFF.

MAG TAP - Forces the control to use either the 208 or 240 volt tap on the high voltage transformer. **DO NOT** use this service feature at this time. Allow the control to select the transformer voltage.

R COOLING FAN - Verifies proper operation of the right cooling fan. Press the ON and OFF pads to cycle the fan. The Time/Temperature display indicates the fan is ON or OFF.

L COOLING FANS - Verifies proper operation of the mag cooling fan, HVT fan and mag stirrer fan (Wall Ovens) or the Left Cooling fan (Slide-in range). Press the ON and OFF pads to cycle the fan. The Time/Temperature display indicates the fan is ON or OFF.

OVEN LIGHT - Verifies proper operation of oven light. Press the pads ON and OFF to cycle the light. The Time/Temperature display indicates the light is ON or OFF.

OFFSET - To adjust the oven calibration offset in bake mode. Press the INCREASE or DECREASE pads to change the cooking temperature in 1° increments up to ±35°F. Press the CONFIRM pad to set.

DISPLAY - Verifies operation of display segments. Press the ON and OFF pads to cycle the display test. Press the CLEAR/OFF key to return display to normal.

KEYS - Verifies proper operation of keypad. Press the number pads on the keypad to test. Each number appears in the Time/Temperature display as the corresponding pad is pressed.

LINE VOLTAGE - Displays line voltage L1-L2 in the upper temperature display.

F CODES - Displays up to last 7 ERC failure codes. **Note:** Always check failure codes, then clear them.

COOKTOP STAT (Slide-in range) - Indicates the ON/OFF status of the radiant surface elements. The ON indication will occur when the respective infinite switch hot light is lit.

CO SENSOR (Kenmore models only) - Turns the CO sensor and heater on and off.

Press the EXIT pad to return to the home screen.

Troubleshooting Cooking Loads in Service Mode

Cooking loads (bake, broil, convection elements and convection fan) can be energized individually through the service mode (press the key next to COOKING LOADS, then appropriate load).

Note: There is a 5-second delay in the electronic control activating cooking loads in service mode.

When the appropriate load is turned on in the service mode, first verify that the element is heating or the fan is turning. If load is not energized, check AC relay voltages according to the second column in the following tables:

Note: Oven **must** be in the service mode for proper reading. DC voltages are read between the reference pin in the table and ground. See note below table.

RELAY CONTROL TABLE - SINGLE WALL OVEN

SERVICE MODE Function	AC VOLTAGES	DC VOLTAGES			Notes
	Main Pwr Board Relay ON=120VAC (L1-N or L2-N) or 240VAC (L1-L2) OFF=0V	Relay Control ON = 0Vdc OFF = 12Vdc	Relay Control ON = 4.6Vdc OFF = -14Vdc *	Enable = 4.2Vdc Disable = -14.0Vdc	
Right Cooling Fan R CoolingFan -> On/Off	L2 = J4-8 (K1-NO) N = J103	MPB J1-10 MLB J3-10			Fan comes on when entering the cooking loads menu.
Left Cooling Fans Mag Stirrer Mag Fan HVT Fan L CoolingFans -> On/Off	L2 = J4-7 (K5-NO) N = J103	MPB J1-9 MLB J3-9			Fan comes on when entering the cooking loads menu.
Oven Light Ovenlight -> On/Off	L1 = J4-5 (K13-NO) N = J103	MPB J1-4 MLB J3-4			
Microwave CookingLoads -> MW	HVT T2 = L2 = J107 (K9-NO) OR HVT T3 = L2 = J105 (K9-NC) HVT T1 = L1 = J114		MPB J1-17 MLB J3-17 OR MPB J1-17 OFF MLB J3-17 OFF	MPB J1-1 MLB J3-1	K6 (Mag Main Relay) must be energized MPB J1-5 ON (4.6Vdc) MLB J3-5 ON (4.6Vdc) Note: MagTap is automatically selected by Line Voltage
Vent Fan VentFan -> On/Off	L2 = J4-9 (K106-NO) N = J103	MPB J1-3 MLB J3-3			Fan comes on when entering the cooking loads menu.
Convection Element CookingLoads -> ConvElem	L1 = K10-NO L2 = K102-NO (DLB)		MPB J1-8 MLB J3-8 MPB J1-12 MLB J3-12	MPB J1-1 MLB J3-1	
Convection Fan Clockwise CookingLoads -> ConvFan -> CW	L1 = J4-2 (K105-NC) N = J103	MPB J1-16 OFF MLB J3-16 OFF			K4 (Convection Fan Relay) must be energized MPB J1-15 ON (0Vdc) MLB J3-15 ON (0Vdc)
Convection Fan Counter Clockwise CookingLoads -> ConvFan -> CCW	L1 = J4-3 (K105-NO) N = J103	MPB J1-16 MLB J3-16			K4 (Convection Fan Relay) must be energized MPB J1-15 ON (0Vdc) MLB J3-15 ON (0Vdc)
Broil Element CookingLoads -> Broil	L1 = K7-NO L2 = K11-COM (DLB)		MPB J1-6 MLB J3-6 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	
Bake Element CookingLoads -> Bake	L1 = K8-NO L2 = K11-COM (DLB)		MPB J1-7 MLB J3-7 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	Broil element must be turned off
Bake2 Element CookingLoads -> Bake2	L1 = J113 (K103-NO) L2 = K11-COM (DLB)	MPB J1-18 MLB J3-18		MPB J1-1 MLB J3-1	Broil element must be turned off
Door Latch DoorLatch -> Lock/Unlock	L1 = J4-1 (K2-COM) N = J103	MPB J1-14 MLB J3-14			

Note: Ground reference for dc voltage measurements is J3-2 or J3-4 on MPB or J5-2 or J5-4 on MLB

MPB = Main Power Board
MLB = Main Logic Board

* OFF = 0Vdc if Disable = -14Vdc

RELAY CONTROL TABLE - SLIDE IN RANGE

SERVICE MODE Function	AC VOLTAGES		DC VOLTAGES		Notes
	Main Pwr Board Relay ON=120VAC (L1-N or L2-N) or 240VAC (L1-L2) OFF=0V	Relay Control ON = 0Vdc OFF = 12Vdc	Relay Control ON = 4.6Vdc OFF = -14Vdc *	Enable = 4.2Vdc Disable = -14.0Vdc	
Right Cooling Fan R CoolingFan -> On/Off	L2 = J4-8 (K1-NO) N = J103	MPB J1-10 MLB J3-10			Fan comes on when entering the cooking loads menu.
Left Cooling Fans Mag Stirrer Left Cooling Fan L CoolingFans -> On/Off	L2 = J4-7 (K5-NO) N = J103	MPB J1-9 MLB J3-9			Fan comes on when entering the cooking loads menu.
Oven Light Ovenlight -> On/Off	L1 = J4-5 (K13-NO) N = J103	MPB J1-4 MLB J3-4			
Microwave CookingLoads -> MW	HVT T2 = L2 = J107 (K9-NO) OR HVT T3 = L2 = J105 (K9-NC) HVT T1 = L1 = J114		MPB J1-17 MLB J3-17 OR MPB J1-17 OFF MLB J3-17 OFF	MPB J1-1 MLB J3-1	K6 (Mag Main Relay) must be energized MPB J1-5 ON (4.6Vdc) MLB J3-5 ON (4.6Vdc) Note: MagTap is automatically selected by Line Voltage
Vent Fan VentFan -> On/Off	L2 = J4-9 (K106-NO) N = J103	MPB J1-3 MLB J3-3			Fan comes on when entering the cooking loads menu.
Convection Element CookingLoads -> ConvElem	L1 = K10-NO L2 = K102-NO (DLB)		MPB J1-8 MLB J3-8 MPB J1-12 MLB J3-12	MPB J1-1 MLB J3-1	
Convection Fan Clockwise CookingLoads -> ConvFan -> CW	L1 = J4-2 (K105-NC) N = J103	MPB J1-16 OFF MLB J3-16 OFF			K4 (Convection Fan Relay) must be energized MPB J1115 ON (0Vdc) MLB J3-15 ON (0Vdc)
Convection Fan Counter Clockwise CookingLoads -> ConvFan -> CCW	L1 = J4-3 (K105-NO) N = J103	MPB J1-16 MLB J3-16			K4 (Convection Fan Relay) must be energized MPB J1-15 ON (0Vdc) MLB J3-15 ON (0Vdc)
Broil Element CookingLoads -> Broil	L1 = K7-NO L2 = K11-COM (DLB)		MPB J1-6 MLB J3-6 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	
Bake Element CookingLoads -> Bake	L1 = K8-NO L2 = K11-COM (DLB)		MPB J1-7 MLB J3-7 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	Broil element must be turned off
Bake2 Element CookingLoads -> Bake2	L1 = J113 (K103-NO) L2 = K11-COM (DLB)	MPB J1-18 MLB J3-18		MPB J1-1 MLB J3-1	Broil element must be turned off
Oven Door Latch DoorLatch -> Lock/Unlock	L1 = J4-1 (K2-COM) N = J103	MPB J1-14 MLB J3-14			

Note: Ground reference for dc voltage measurements is J3-2 or J3-4 on MPB or J5-2 or J5-4 on MLB

MPB = Main Power Board
MLB = Main Logic Board

* OFF = 0Vdc if Disable = -14Vdc

RELAY CONTROL TABLE - DOUBLE WALL OVEN

SERVICE MODE Function	AC VOLTAGES		DC VOLTAGES		Notes
	Main Pwr Board / DWO Board Relay ON=120VAC (L1-N or L2-N) or 240VAC (L1-L2) OFF=0V	Relay Control ON = 0Vdc OFF = 12Vdc	Relay Control ON = 4.6Vdc OFF = -14.0Vdc*	Enable = 4.2Vdc Disable = -14.0Vdc	
Right Cooling Fans Right Cooling Fan Up Cooling Fan Lwr R CoolingFans -> On/Off	L2 = J4-8 (K1-NO) N = J103	MPB J1-10 MLB J3-10			Fan comes on when entering the cooking loads menu.
Left Cooling Fans Mag Stirrer Mag Fan HVT Fan L CoolingFans -> On/Off	L2 = J4-7 (K5-NO) N = J103	MPB J1-9 MLB J3-9			Fan comes on when entering the cooking loads menu.
Oven Lights Upper Ovenlight -> up-arrow -> On/Off	L1 = J4-5 (K13-NO) N = J103	MPB J1-4 MLB J3-4			
Microwave CookingLoads -> up arrow -> MW	HVT T2 = L2 = J107 (K9-NO) OR HVT T3 = L2 = J105 (K9-NC) HVT T1 = L1 = J114		MPB J1-17 MLB J3-17 OR MPB J1-17 OFF MLB J3-17 OFF	MPB J1-1 MLB J3-1	K6 (Mag Main Relay) must be energized MPB J1-5 ON (4.6Vdc) MLB J3-5 ON (4.6Vdc) Note: MagTap is automatically selected by Line Voltage
Vent Fan VentFan -> On/Off	L2 = J4-9 (K106-NO) N = J103	MPB J1-3 MLB J3-3			Fan comes on when entering the cooking loads menu.
Convection Element Upper CookingLoads -> up arrow -> ConvElem	L1 = K10-NO L2 = K102-NO (DLB)		MPB J1-8 MLB J3-8 MPB J1-12 MLB J3-12	MPB J1-1 MLB J3-1	
Convection Fan Upper Clockwise CookingLoads -> up arrow -> ConvFan -> CW	L1 = J4-2 (K105-NC) N = J103	MPB J1-16 OFF MLB J3-16 OFF			K4 (Convection Fan Relay) must be energized MPB J1-15 ON (0Vdc) MLB J3-15 ON (0Vdc)
Convection Fan Upper Counter Clockwise CookingLoads -> up arrow -> ConvFan -> CCW	L1 = J4-3 (K105-NO) N = J103	MPB J1-16 MLB J3-16			K4 (Convection Fan Relay) must be energized MPB J1-15 ON (0Vdc) MLB J3-15 ON (0Vdc)
Broil Element Upper CookingLoads -> up arrow -> Broil	L1 = K7-NO L2 = K11-COM (DLB)		MPB J1-6 MLB J3-6 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	
Bake Element Upper CookingLoads -> up arrow -> Bake	L1 = K8-NO L2 = K11-COM (DLB)		MPB J1-7 MLB J3-7 MPB J1-11 MLB J3-11	MPB J1-1 MLB J3-1	Broil upper must be turned off
Bake2 Element Upper CookingLoads -> up arrow -> Bake2	L1 = J113 (K103-NO) L2 = K11-COM (DLB)	MPB J1-18 MLB J3-18		MPB J1-1 MLB J3-1	Broil upper must be turned off
Door Latch Upper DoorLatch -> up-arrow -> Lock/Unlock	L1 = J4-1 (K2-COM) N = J103	MPB J1-14 MLB J3-14			
Broil Element Lower CookingLoads -> down arrow -> Broil	L1 = K14-NO L2 = K121-COM (DLB)		LRB J9-4 MLB J4-4 LRB J9-7 MLB J4-7	LRB J9-2 MLB J4-2	
Bake Lower CookingLoads -> down arrow -> Bake	L1 = K17-NO L2 = K121-COM (DLB)		LRB J9-5 MLB J4-5 LRB J9-7 MLB J4-7	LRB J9-2 MLB J4-2	Broil Lower must be turned off
Convection Element Lower CookingLoads -> down arrow -> ConvElem	L1 = K20-NO L2 = K121-COM (DLB)		LRB J9-6 MLB J4-6 LRB J9-7 MLB J4-7	LRB J9-2 MLB J4-2	Broil Lower and Bake Lower must be turned off
Oven Light Lower Ovenlight -> down arrow -> On/Off	N = J11-1 (K16-NO) OR Plunger Switch - NO L1 = J114	MPB J9-10 MLB J4-10			
Door Latch Lower DoorLatch -> down arrow -> Lock/Unlock	N = J11-3 (K15-COM) AND Plunger Switch - NC L1 = J114	MPB J9-13 MLB J4-13			Door Latch Motor Disabled by Plunger Switch when Door is Open
Convection Fan Lower Clockwise CookingLoads -> down arrow -> ConvFan -> CW	L1 = J11-4 (K122-NC) N = J103	MPB J9-12 MLB J4-12			ConvFan Disabled by Plunger Switch when Door is Open K18 (Conv Fan Low Relay) must be energized LRB J9-11 ON (0Vdc) MLB J4-11 ON (0Vdc)
Convection Fan Lower Counter Clockwise CookingLoads -> down arrow -> ConvFan -> CCW	L1 = J11-5 (K122-NO) N = J103	MPB J9-12 MLB J4-12			ConvFan Disabled by Plunger Switch when Door is Open K18 (Conv Fan Low Relay) must be energized LRB J9-11 ON (0Vdc) MLB J4-11 ON (0Vdc)

Note: Ground reference for dc voltage measurements is J3-2 or J3-4 on MPB or J5-2 or J5-4 on MLB

MPB = Main Power Board
MLB = Main Logic Board
LRB = Lower Oven Relay Board

* OFF = 0Vdc if Disable = -14Vdc

** Lower oven cooling fan may take up to 90 min. to turn off.

To turn off all loads that are energized in COOKING LOADS, press the CLEAR/OFF key or exit the COOKING LOADS menu.

- If load is not turned off, additional loads can be turned on at the same time.
- If AC voltage measures OK, then check the load (element, fan, lock motor, HVT, etc.) and/or wiring to the load and repair/replace as required.
- If there is no AC voltage supplied to the load through the power relays per the wiring schematic, then check the DC power supply voltages from the main power board (MPB-J3 connector) to the main logic board (MLB-J5 connector) according to the following table:

CONTROLS DC POWER SUPPLY VOLTAGE TABLE

MPB	MLB	Signal Name	Min	Max
J3-1	J5-1	+12Vdc	11.00Vdc	12.75Vdc
J3-2	J5-2	12Vdc, 5Vdc Ground	—	—
J3-3	J5-3	+5Vdc	4.7Vdc	5.3Vdc
J3-4	J5-4	12Vdc, 5Vdc Ground	—	—
J3-5	J5-5	-14Vdc	-14.75Vdc	-12.75Vdc
J3-6	J5-6	Not Connected	—	
J3-7	J5-7	L1 thru 2M ohm/.47 uF cap on MPB	240VAC line monitor	
J3-8	J5-8	L1 thru 2M ohm/.47 uF cap on MPB	120VAC line monitor	
J3-9	J5-9	Not Connected	—	
J3-10	J5-10	NT thru 2M ohm/.47 uF cap on MPB	120VAC line monitor	
J3-11	J5-11	Not Connected	—	
J3-12	J5-12	L2 thru 2M ohm/.47 uF cap on MPB	240VAC line monitor	

- If voltages do not measure according to the table above, replace Main Power Board.
- If voltages measure OK, then measure DC voltages according to the previous relay control table (relay control signals columns 3, 4 and 5).
- If the MLB J3 pins do not provide the correct DC voltages, then replace the main logic board.
- If display is blank, the oven light does not operate when the oven door is opened, and the keypanel does not respond, first check DC power supply voltages. Next, check DC voltages at MLB J2: J2-2, J2-4, J2-6, J2-8. They should be +12VDC. If not, replace text display and/or time/temp display.
- If DC power supply voltages are OK, the display is blank, and the keyboard is not responding, replace MLB. If just the display is blank, replace the display. If only the keyboard is not responding, check glass touch display. If OK, replace MLB.
- If oven light does not turn on when door is opened, check oven light relay per relay troubleshooting table. If relay voltages are OK, check door sense switch (see **Door Switches**).

Microwave Leakage Test

1. Place 275 mL of water in a 600-mL beaker.
2. Place beaker in center of oven shelf.
3. Set meter to 2450-Hz scale.
4. Enter the service mode (see **Service Mode**), press the keypad next to COOKING LOADS, then press the keypad next to MW (microwave).
5. Time for 5 minute test.
6. Hold probe perpendicular to surface being tested and scan surface at rate of one inch/sec.
7. Test the following areas:
 - Entire perimeter of door and control panel.
 - Viewing surface of door window.
 - Exhaust vents.

Note: Maximum leakage is not to exceed 4 mW/cm².

8. Record data on service invoice and microwave leakage report.

Note: Maximum allowable leakage is 5 mW/cm² (4 mW/cm² is used to allow for measurement and meter accuracy). Inform manufacturer of any oven found to have emissions in excess of 5 mW/cm². Make repairs to bring the unit into compliance at no cost to the owner and try to determine cause. Instruct owner not to use oven until it has been brought into compliance.

Performance Testing

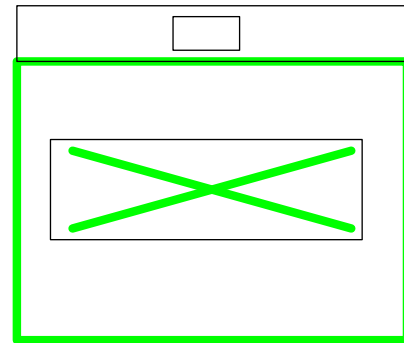
Standard test load will be 1 liter (1000-mL) of water with an initial temperature 59° ~ 75°F in a 1000-mL beaker (PN WB64X73).

1. Record initial water temperature.
2. Place beaker in center of middle oven shelf.
3. Enter the service mode (see **Service Mode**), press COOKING LOADS, then press the keypad next to MW.
4. Time for 2 minutes, then open door.
5. Record end water temperature.
6. The minimum difference between the initial and ending temperatures should be **12°F at 240 VAC**.

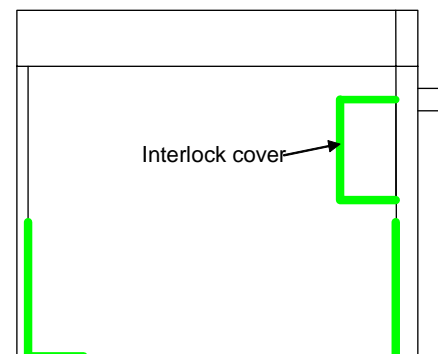
Note: Standard Microlite™ test blocks (sometimes called sparkle blocks) are not applicable.

Microwave Scan Pattern (Scan Highlighted Areas)

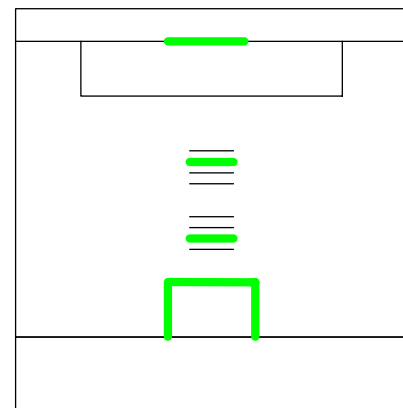
Front



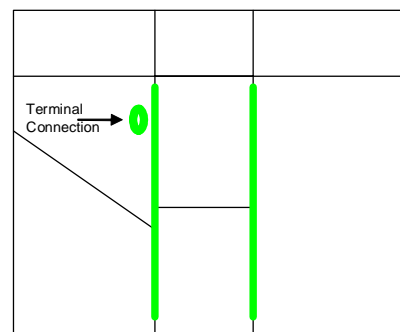
Sides



Back (Slide-In)



Back (Wall Ovens)



Troubleshooting

Trivection Oven

	Oven Dead - Keyboard and displays do not work	Oven Dead - Keyboard works - Displays do not work	Bake element does not work	Bake 2 element does not work	Broiler does not work	Convection does not work	Convection element does not work	Halogen lamps does not work	Latch motor does not work	Left cooling fan does not work	Right cooling fan does not work	No Microwave Power	Stirrer does not work	Vent fan does not work		
Main Power Board	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
Main Logic Board	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
Mag TCO	●															
FAD Left TCO	●															
FAD Right TCO	●															
Glass Touch Signal Board	●	●	●													
Glass Touch Assembly	●	●	●													
Text Display Board	●	●	●													
Time/Temp Display	●	●	●													
LH or RH Sail Switch	●															
R1 and R2 Relays	●															
Bake Element				●												
Bake 2 Element					●											
Broil Element						●										
Convection Element							●									
Convection Fan								●								
Halogen Lamps									●							
Motor Latch										●						
Left Cooling Fan											●					
Right Cooling Fan												●				
Magnetron													●			
HV Transformer														●		
RT Interlock Switch														●		
LT Interlock Switch														●		
Interlock Monitor Switch														●		
Fuse														●		
Mag Stirrer														●		
Vent Fan														●		
		Page 42	Page 44	Page 45	Page 46	Page 48	Page 50	Page 51	Page 52	Page 53	Page 54	Page 55	Page 56	Page 57	Page 58	Page 59

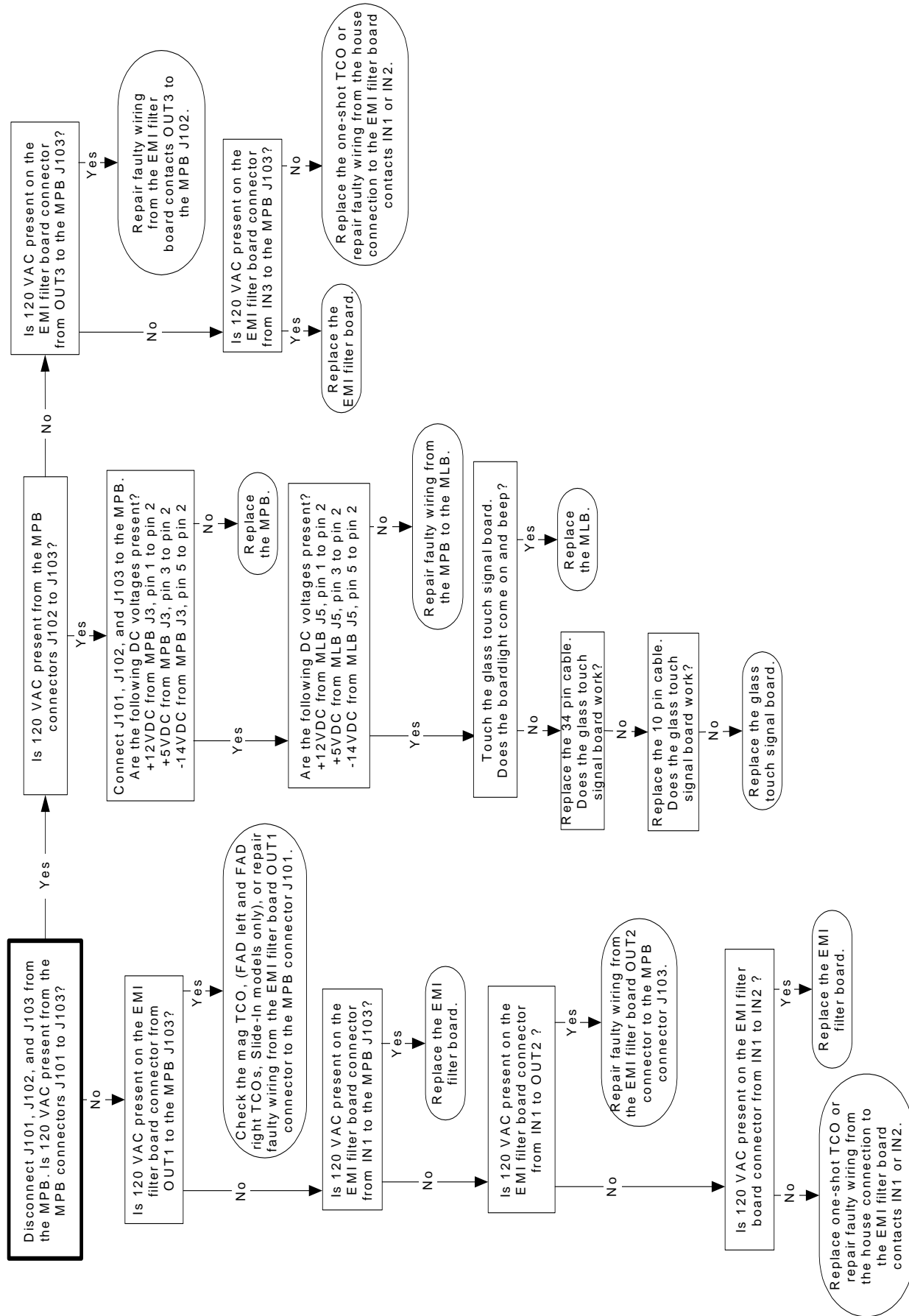
Lower Oven (Double Wall Oven)

Cooktop (Slide-In Oven)

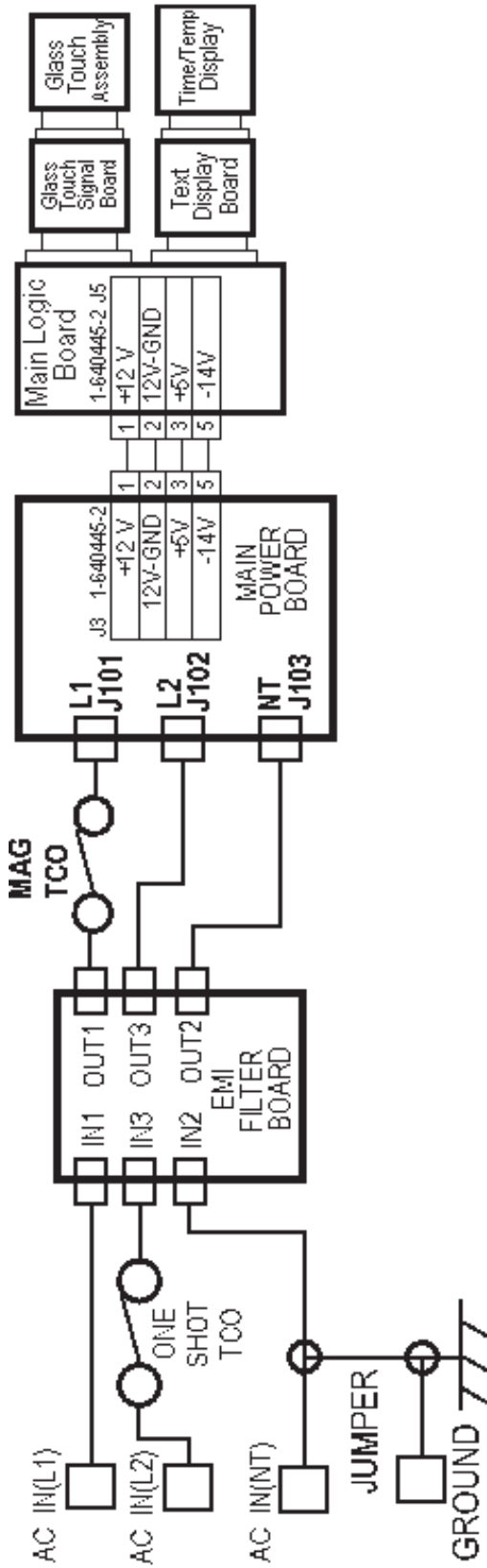
	Lower cooling fan does not work		Lower convection fan does not work		Lower door latch does not work		Lower door light does not work		Lower convection element does not work		Lower bake element does not work		Lower broiler element does not work	
Main Logic Board	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lower Oven Logic Board	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lower Broil Element	●													
Lower Bake Element		●												
Lower Convection Element			●											
Lower Halogen Lamps				●										
Plunger Switch				●	●	●								
Lower Motor Latch					●									
Lower Convection Fan									●					
Lower Cooling Fan													●	
		Page 60	Page 61	Page 62	Page 64	Page 65	Page 66	Page 67						

	RF elements, one or both does not work		LF, LR, or RR element does not work	
Surface Control	●			
LF Surface Control	●			
LF Surface Element	●			
LR Surface Control	●			
LR Surface Element	●			
RF Surface Control				●
RR Surface Control	●			
RR Surface Element	●			
RF Inner Surface Element				●
RF Outer Surface Element				●
		Page 68	Page 69	

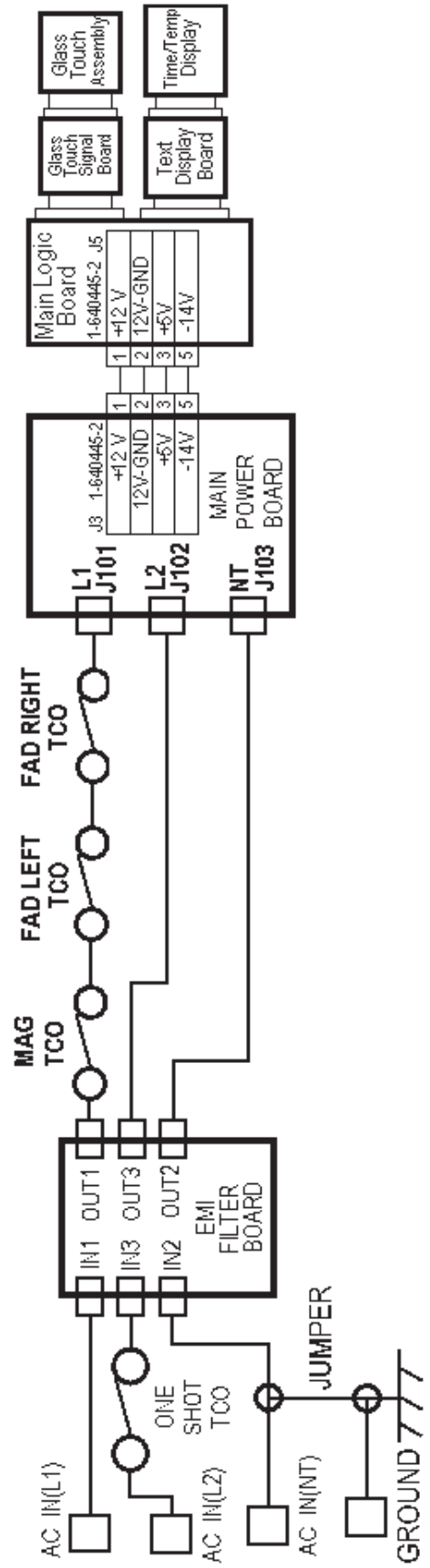
Oven Dead - Keyboard and Displays Do Not Work



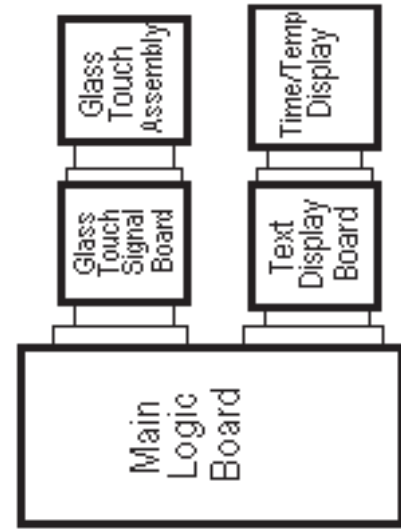
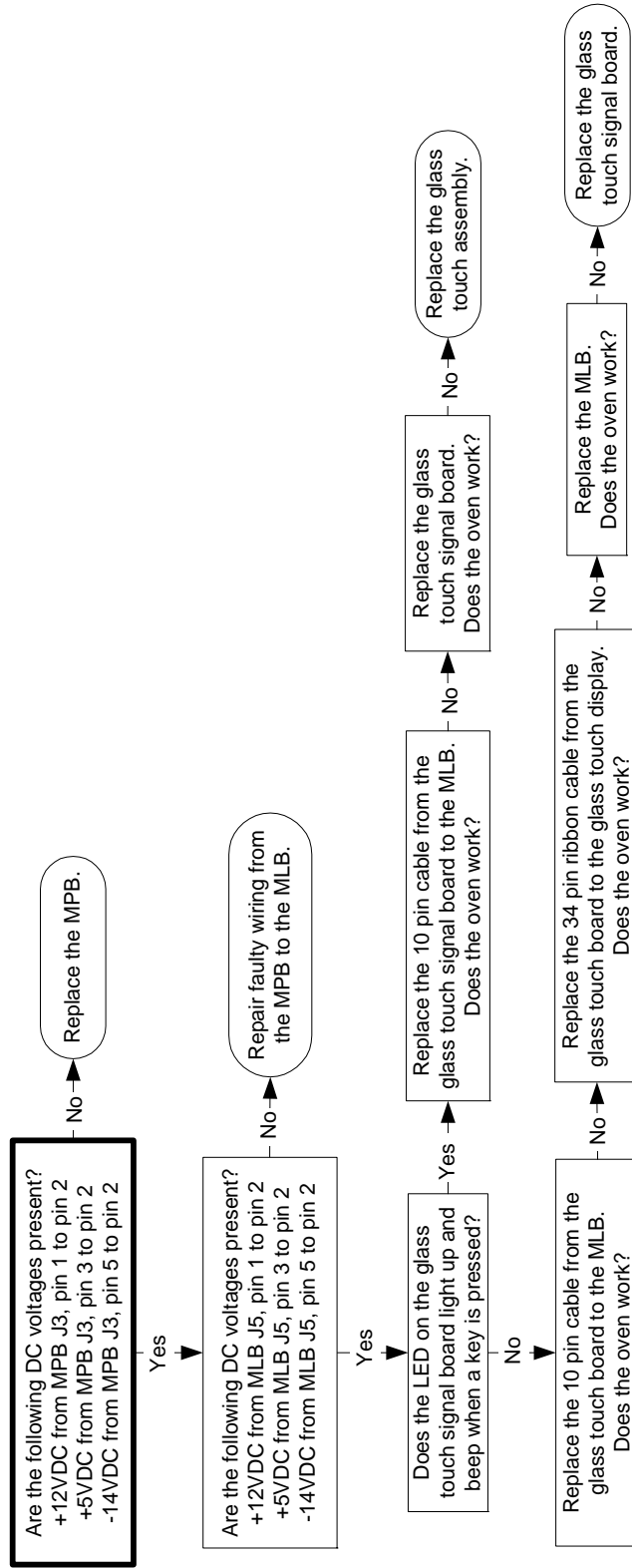
Single Wall Oven and Double Wall Oven Models



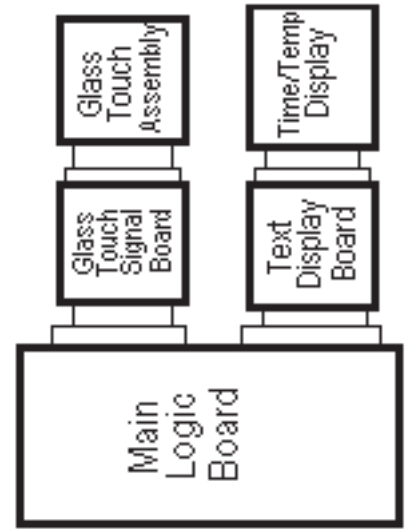
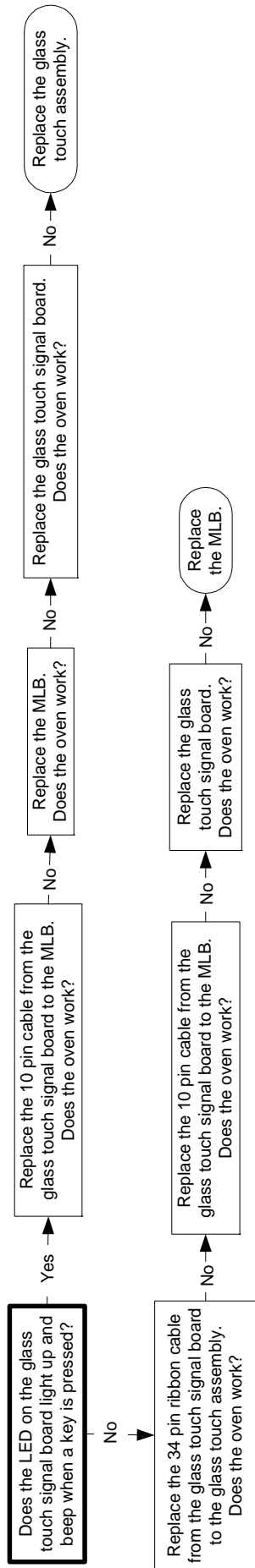
Slide-In Models



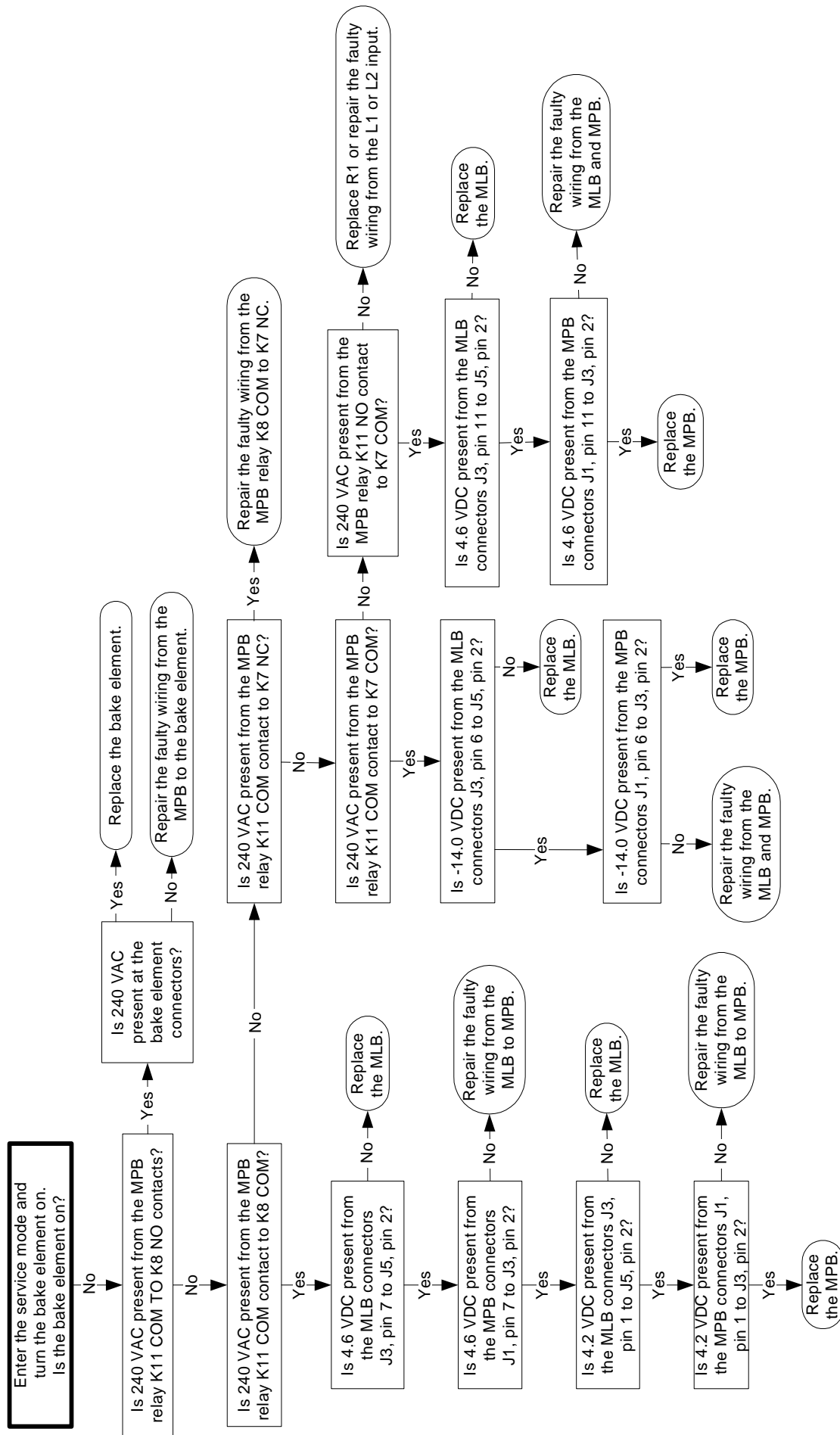
Oven Dead - Keyboard Works - Displays Do Not Work

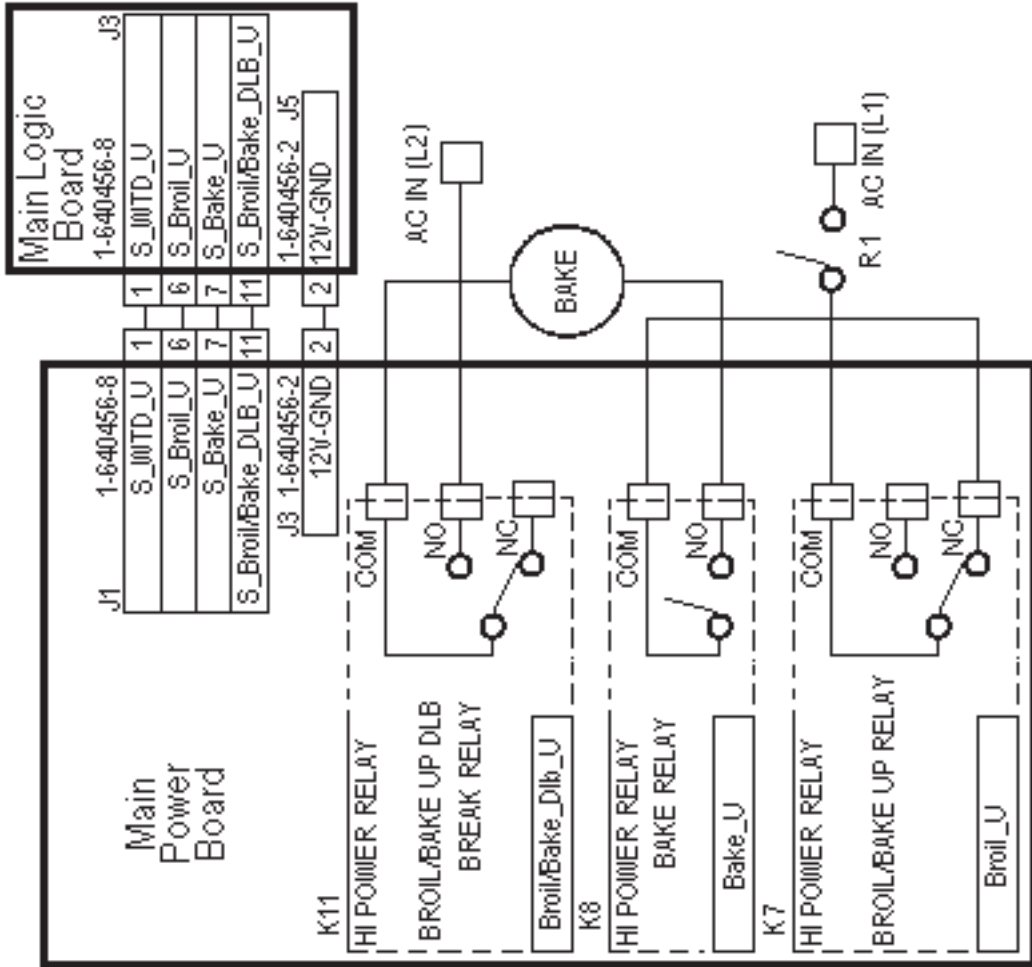


Oven Dead - Displays Work - Keyboard Does Not Work

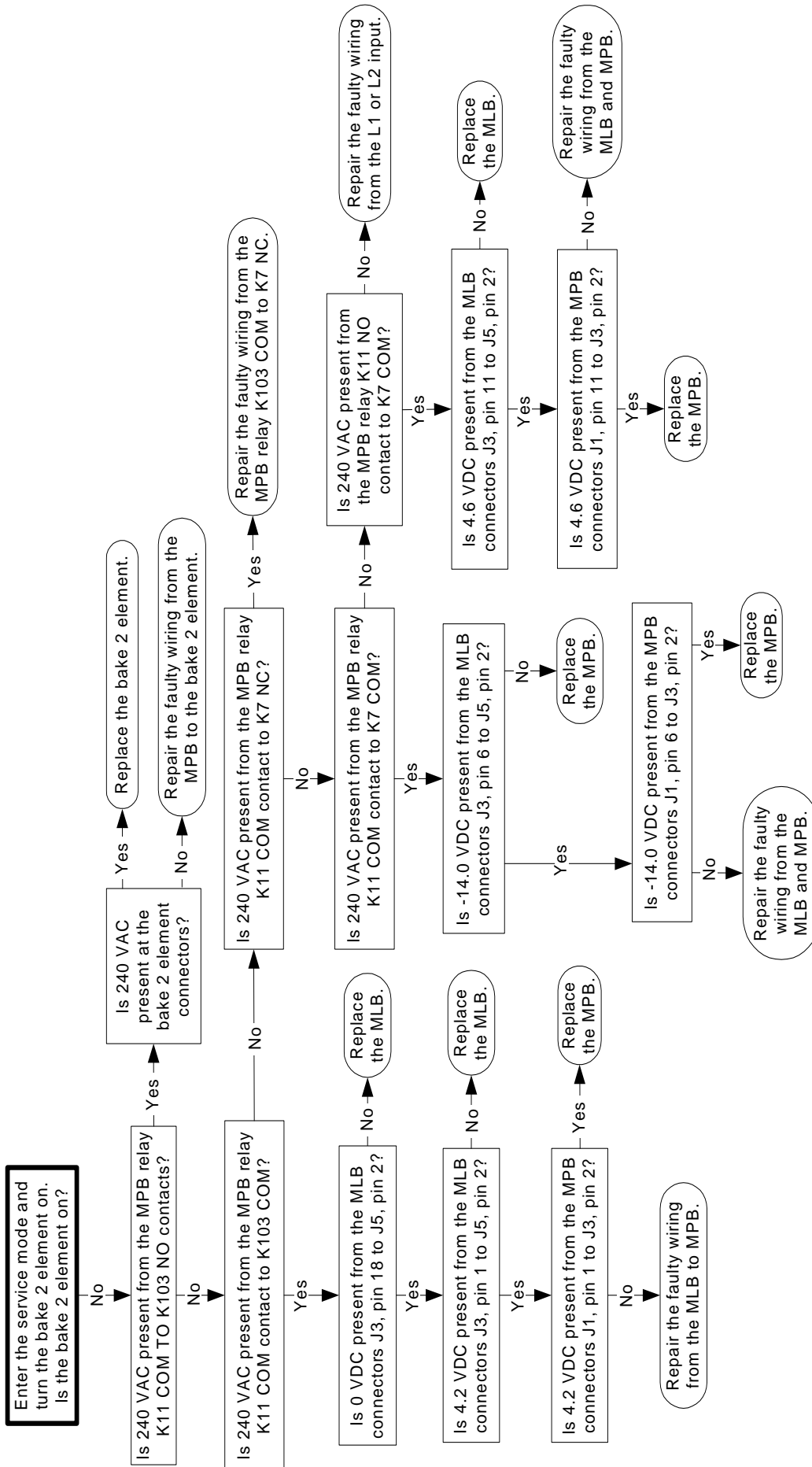


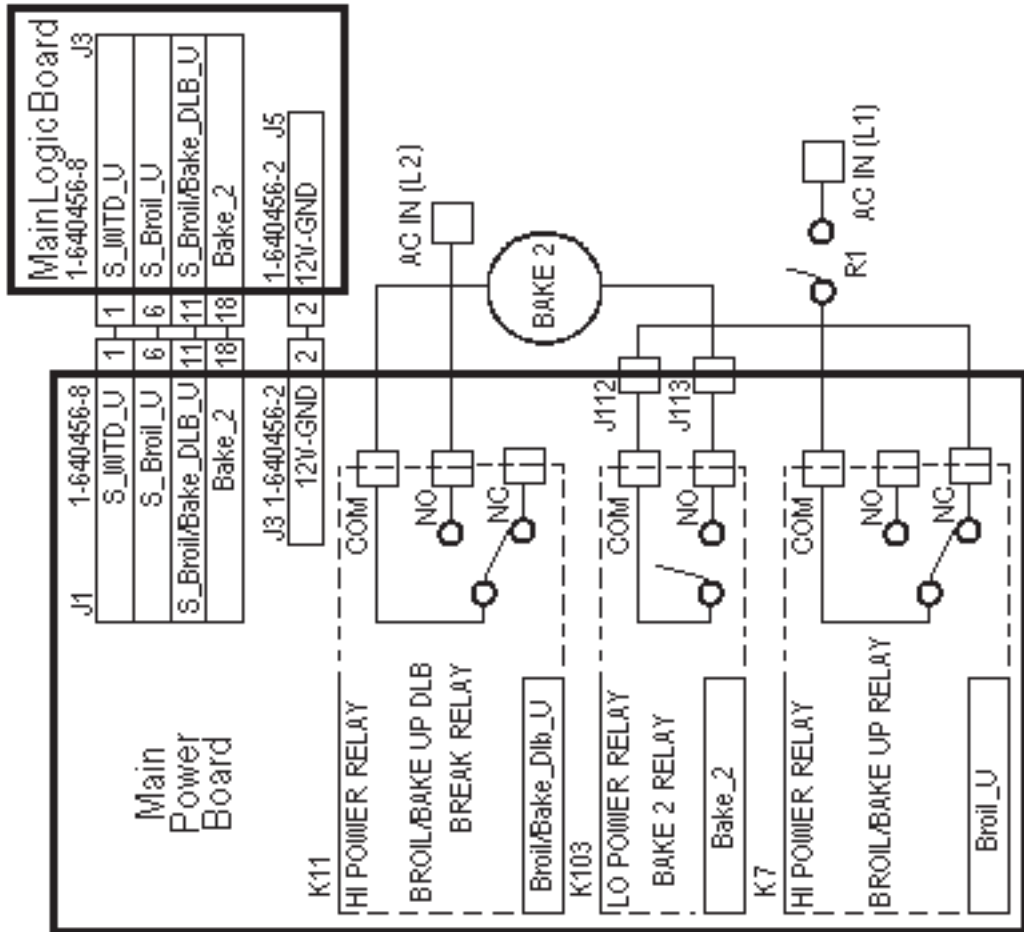
Bake Element Does Not Work



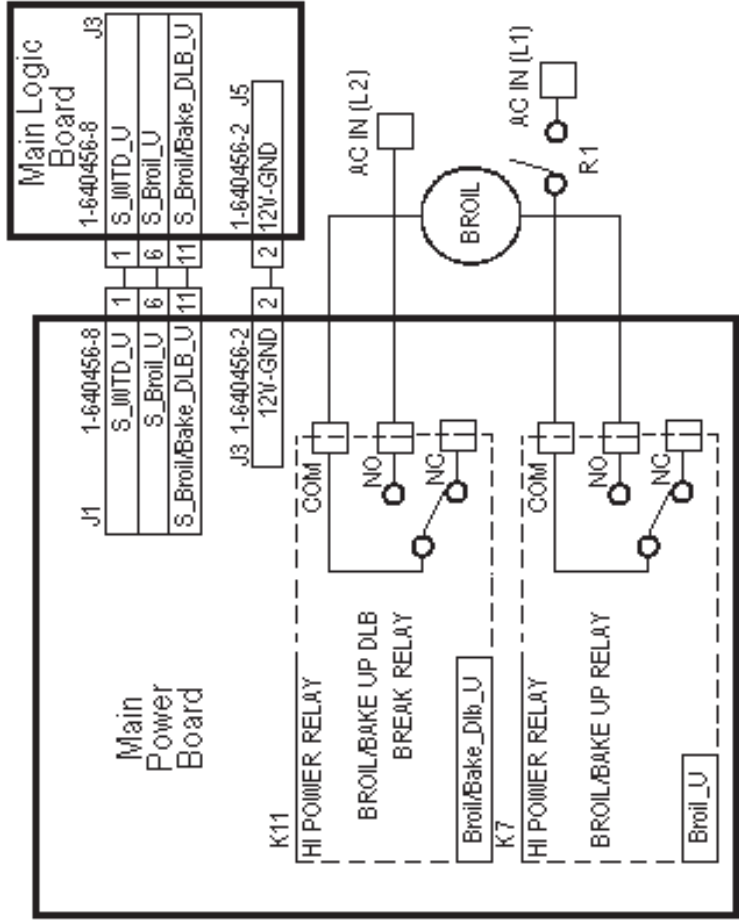
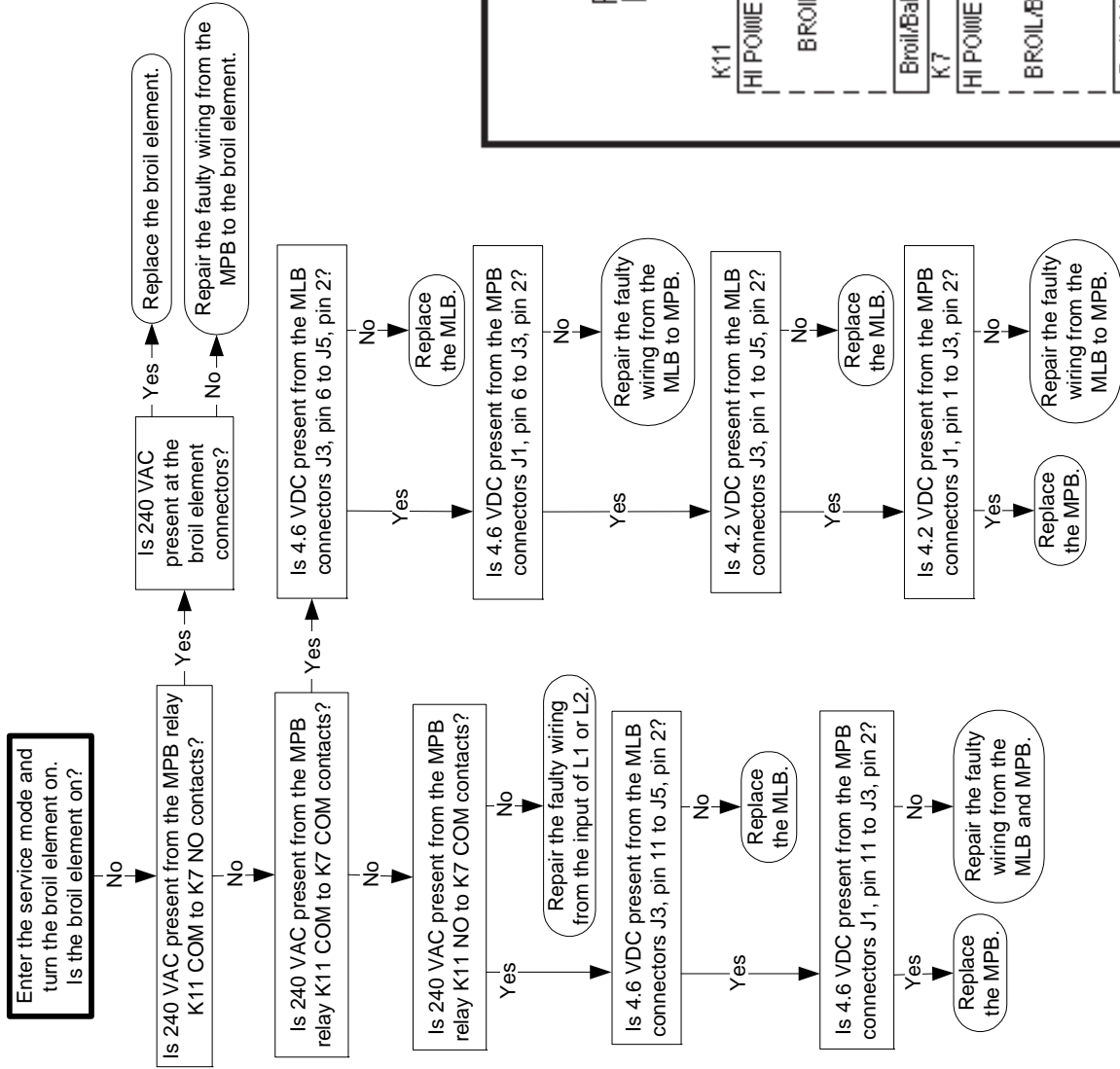


Bake 2 Element Does Not Work

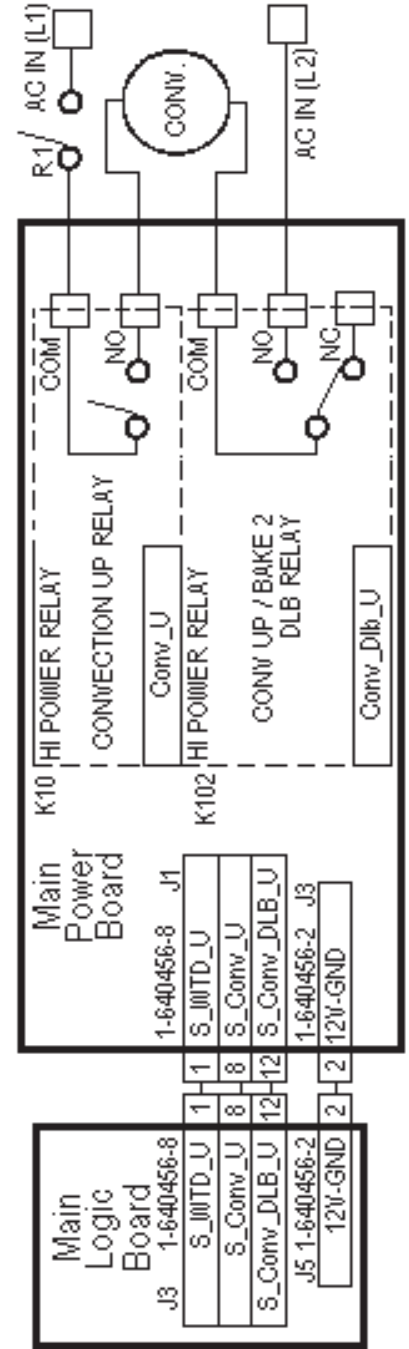
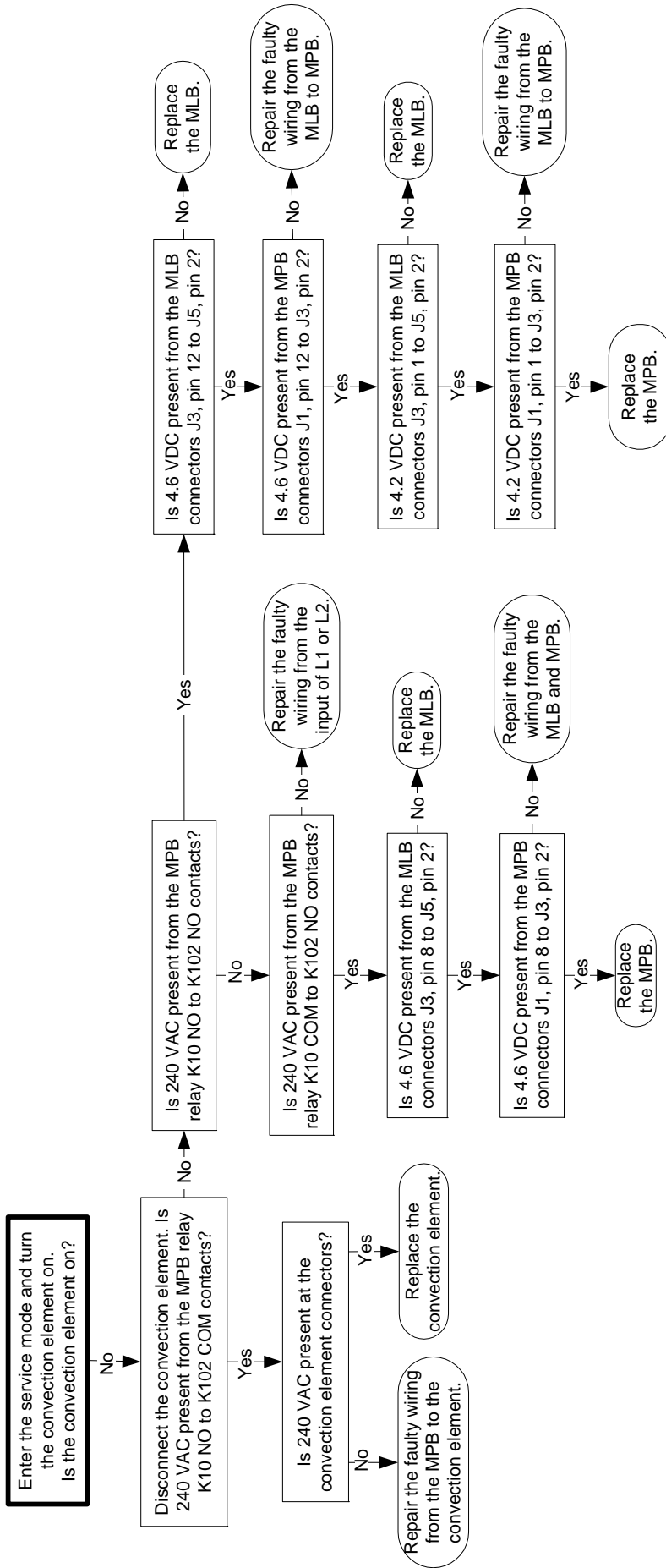




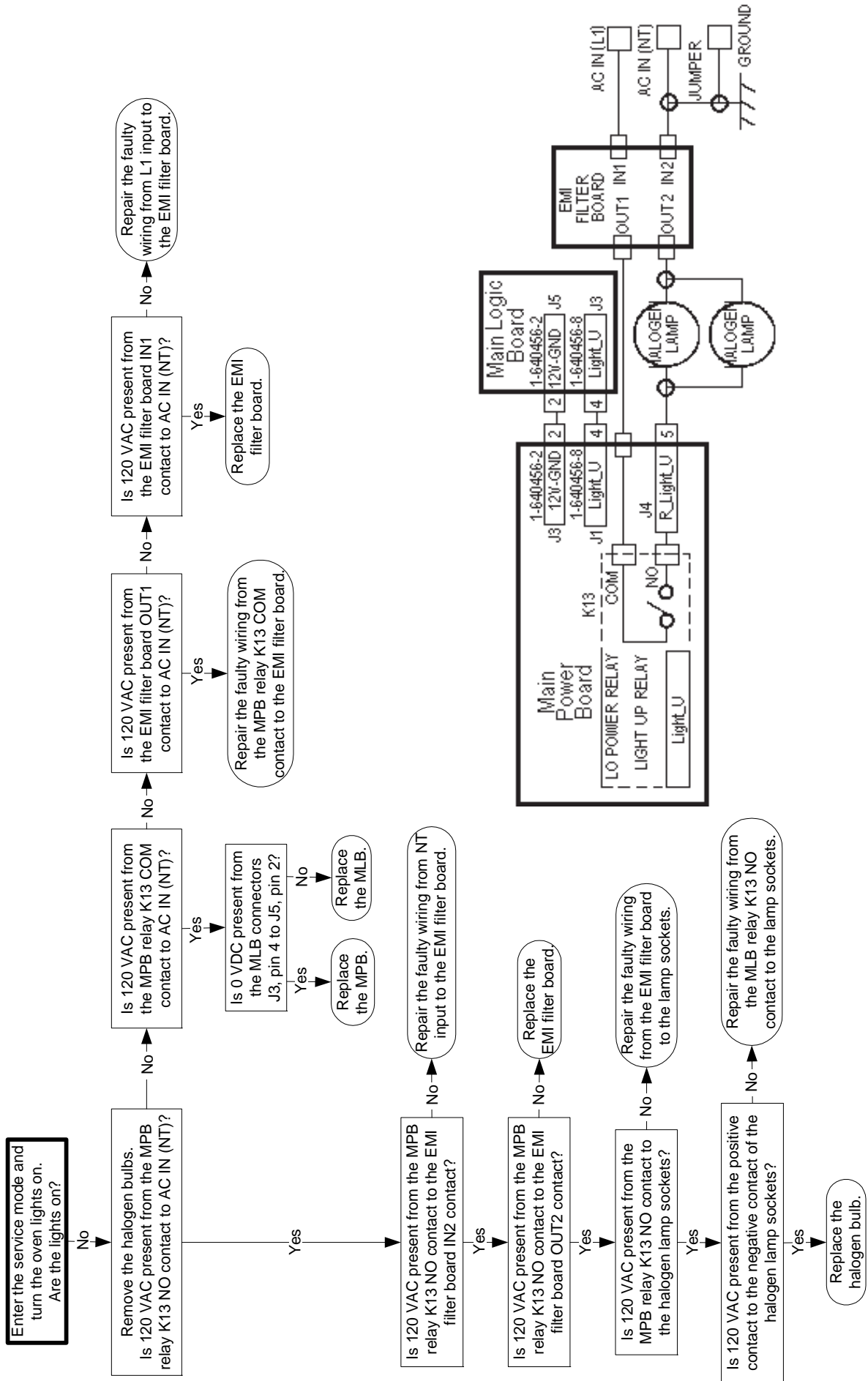
Broiler Does Not Work



Convection Element Does Not Work



Halogen Lamp Does Not Work



Latch Motor Does Not Work

Enter the service mode and set the latch to lock. Does the latch lock?

Yes

Disconnect the connector on the motor latch. Is 120 VAC present from the MPB relay K2 NO contact to AC IN (NT)?

No

Is 120 VAC present from the MPB relay K2 COM contact to AC IN (NT)?

Yes

Is 0 VDC present from the MLB connectors J3, pin 14 to J5, pin 2?

Yes

Replace the MPB.

No

Replace the MLB.

Repair the faulty wiring from NT input to the EMI filter board.

No

Is 120 VAC present from the MPB relay K2 NO contact to the EMI filter board IN2 contact?

Yes

Is 120 VAC present from the MPB relay K2 NO contact to the EMI filter board OUT2 contact?

No

Replace the EMI filter board.

Repair the faulty wiring from the EMI filter board to the motor latch.

No

Is 120 VAC present from the MPB relay K2 NO contact to the motor latch?

Yes

Is 120 VAC present from the positive contact to the negative contact of the motor latch?

Yes

Replace the motor latch.

Repair the faulty wiring from the MLB relay K2 NO contact to the motor latch.

No

Is 120 VAC present from the MPB relay K2 COM contact to AC IN (NT)?

Yes

Repair the faulty wiring from the MPB relay K2 COM contact to the EMI filter board.

No

Is 120 VAC present from the EMI filter board OUT1 contact to AC IN (NT)?

Yes

Replace the EMI filter board.

No

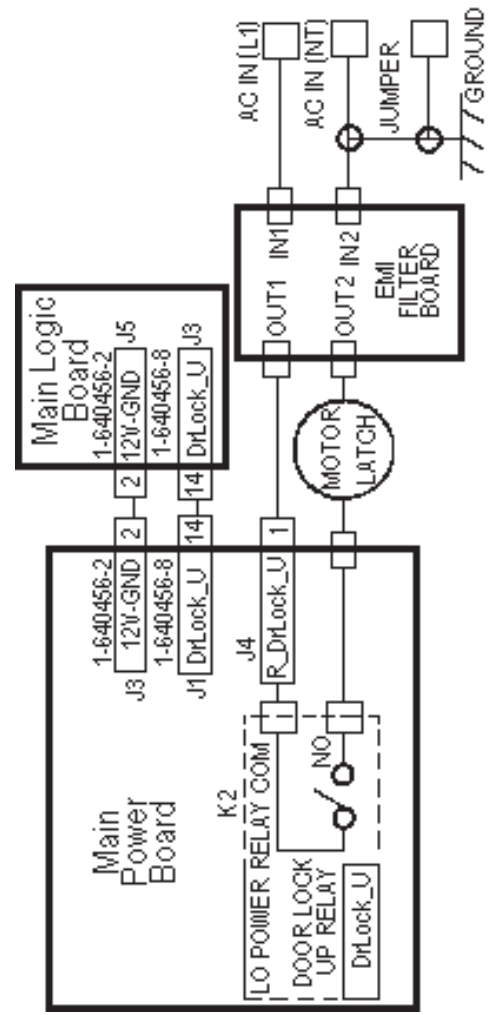
Is 120 VAC present from the EMI filter board IN1 contact to AC IN (NT)?

Yes

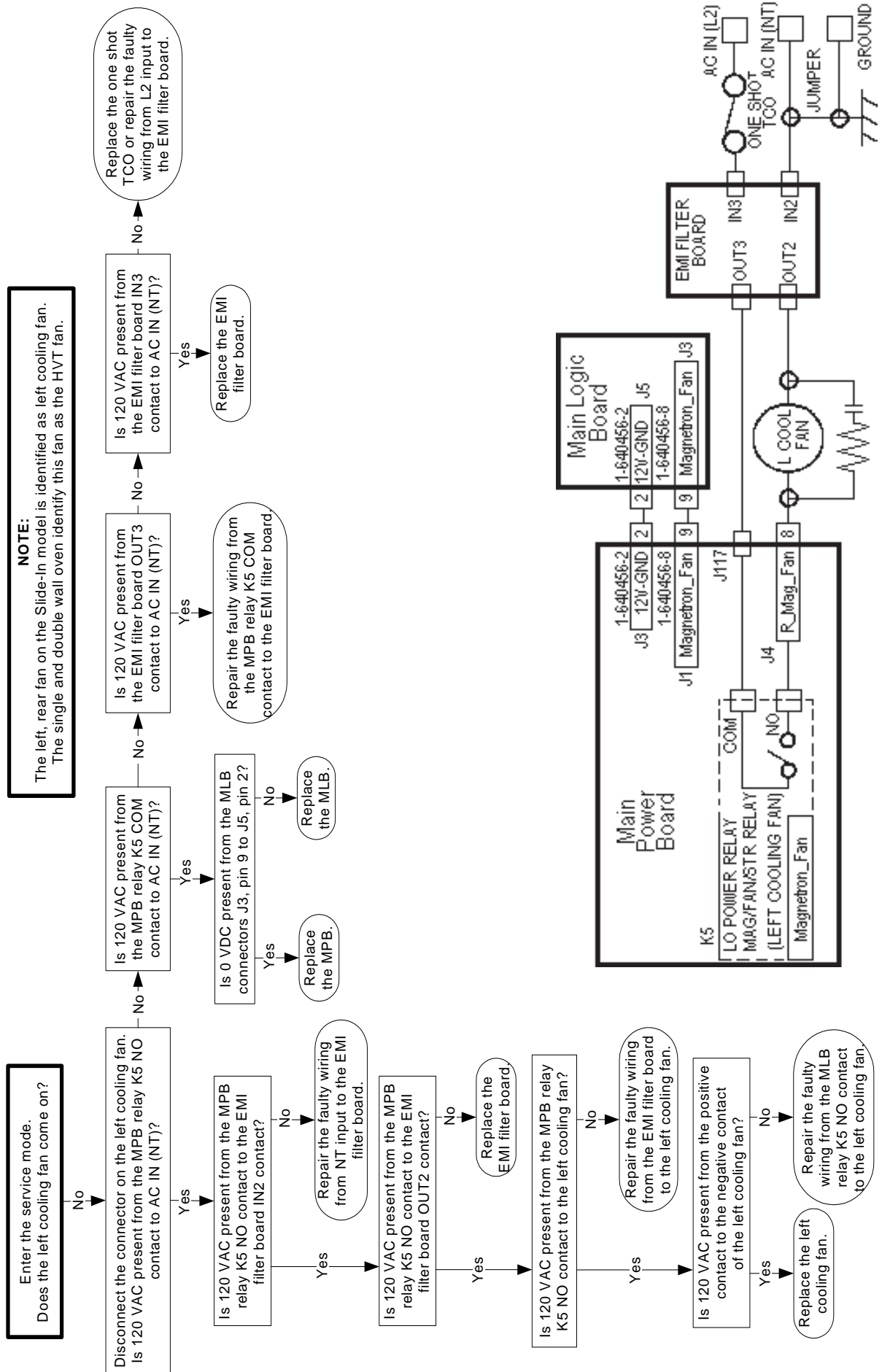
Replace the EMI filter board.

No

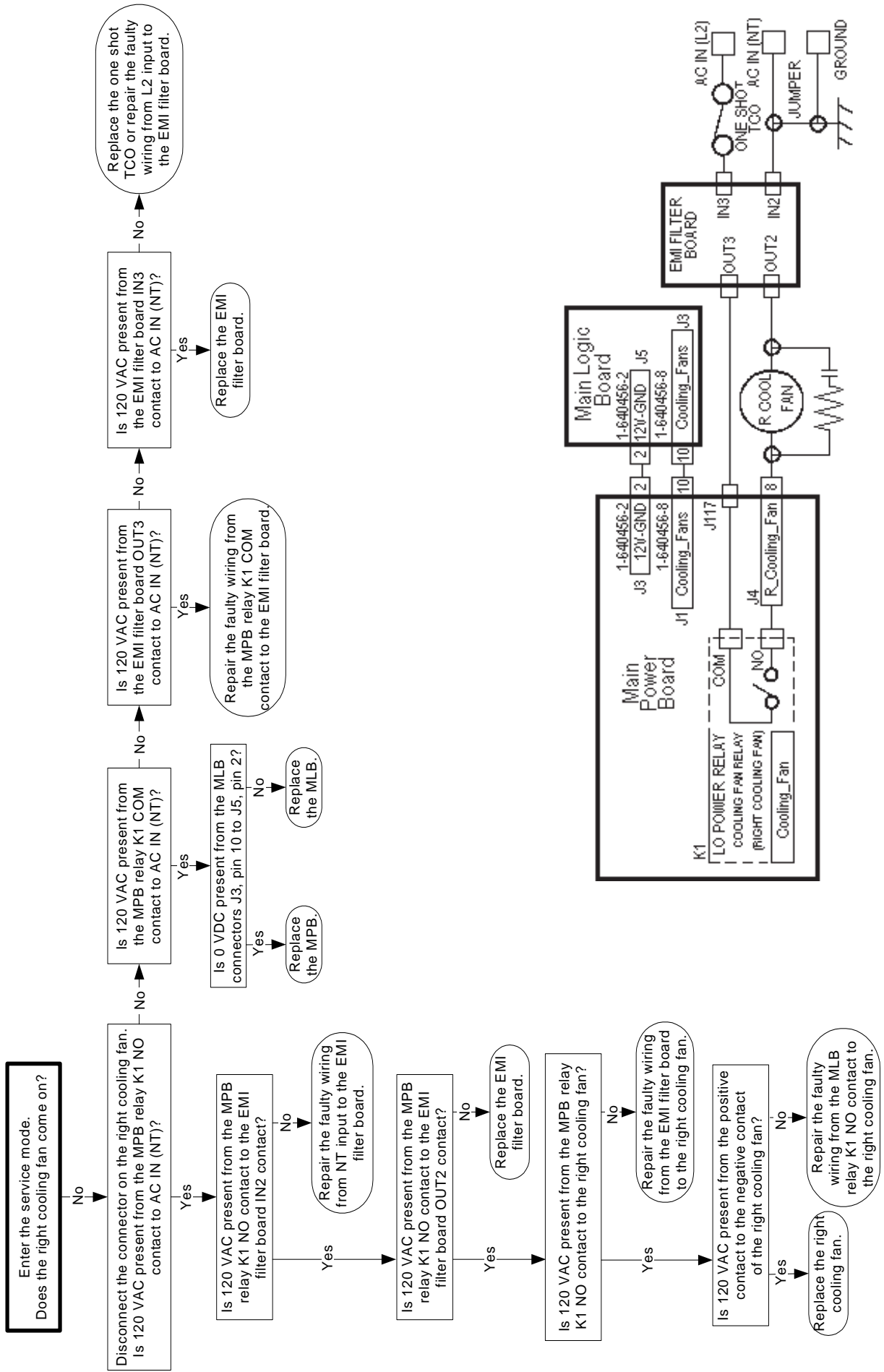
Repair the faulty wiring from L1 input to the EMI filter board.



Left Cooling Fan Does Not Work

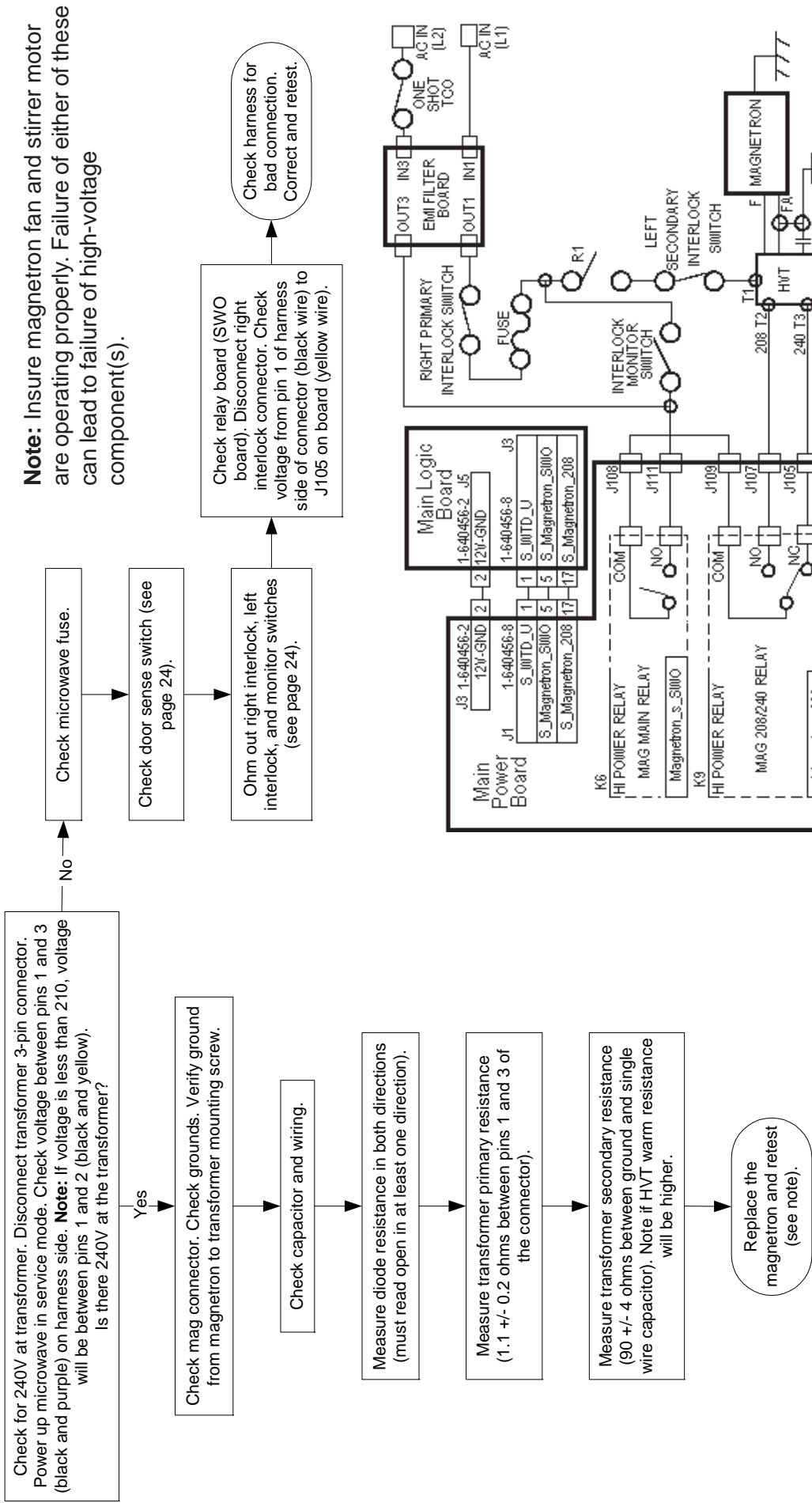


Right Cooling Fan Does Not Work

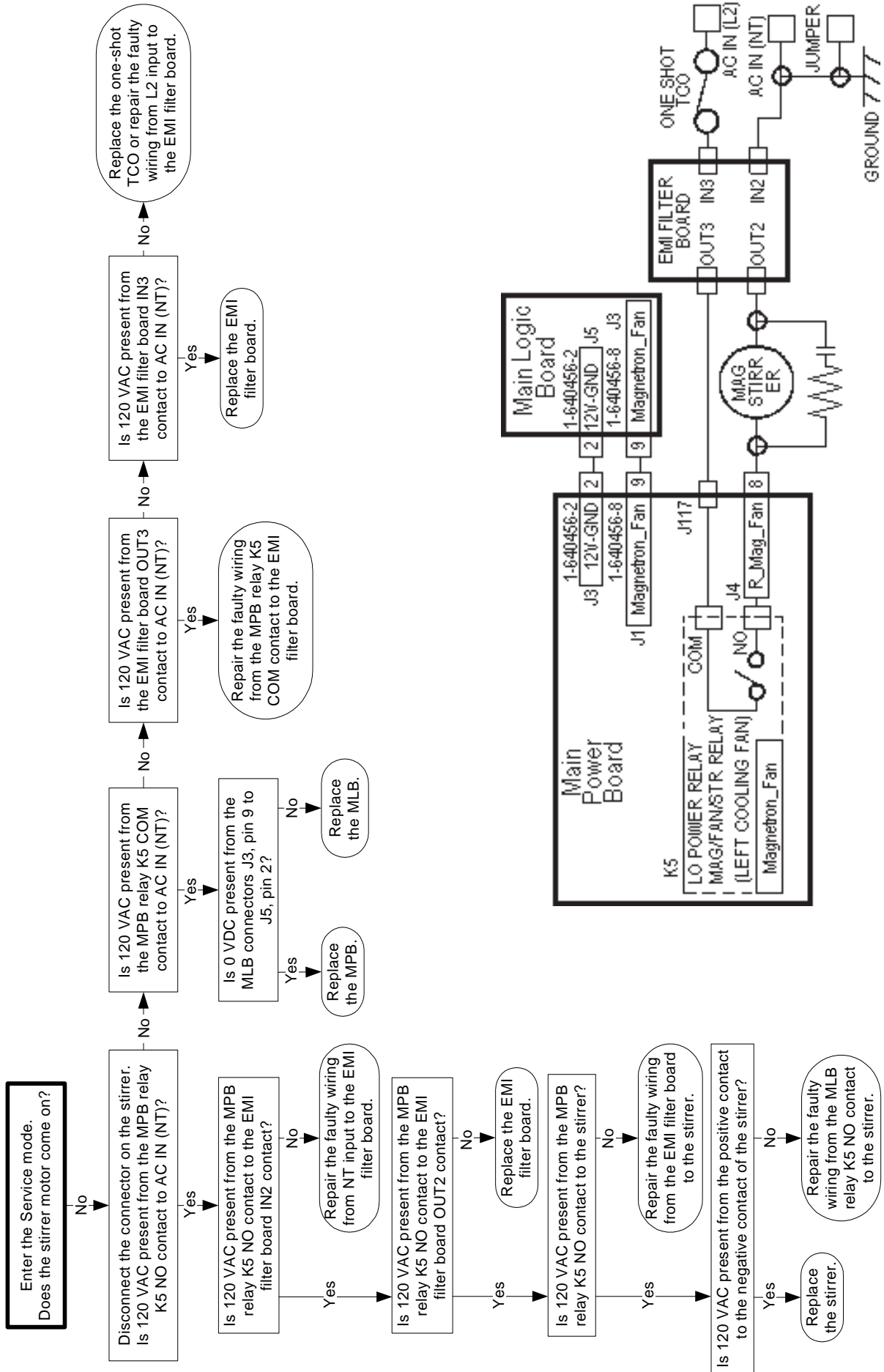


No Microwave Power

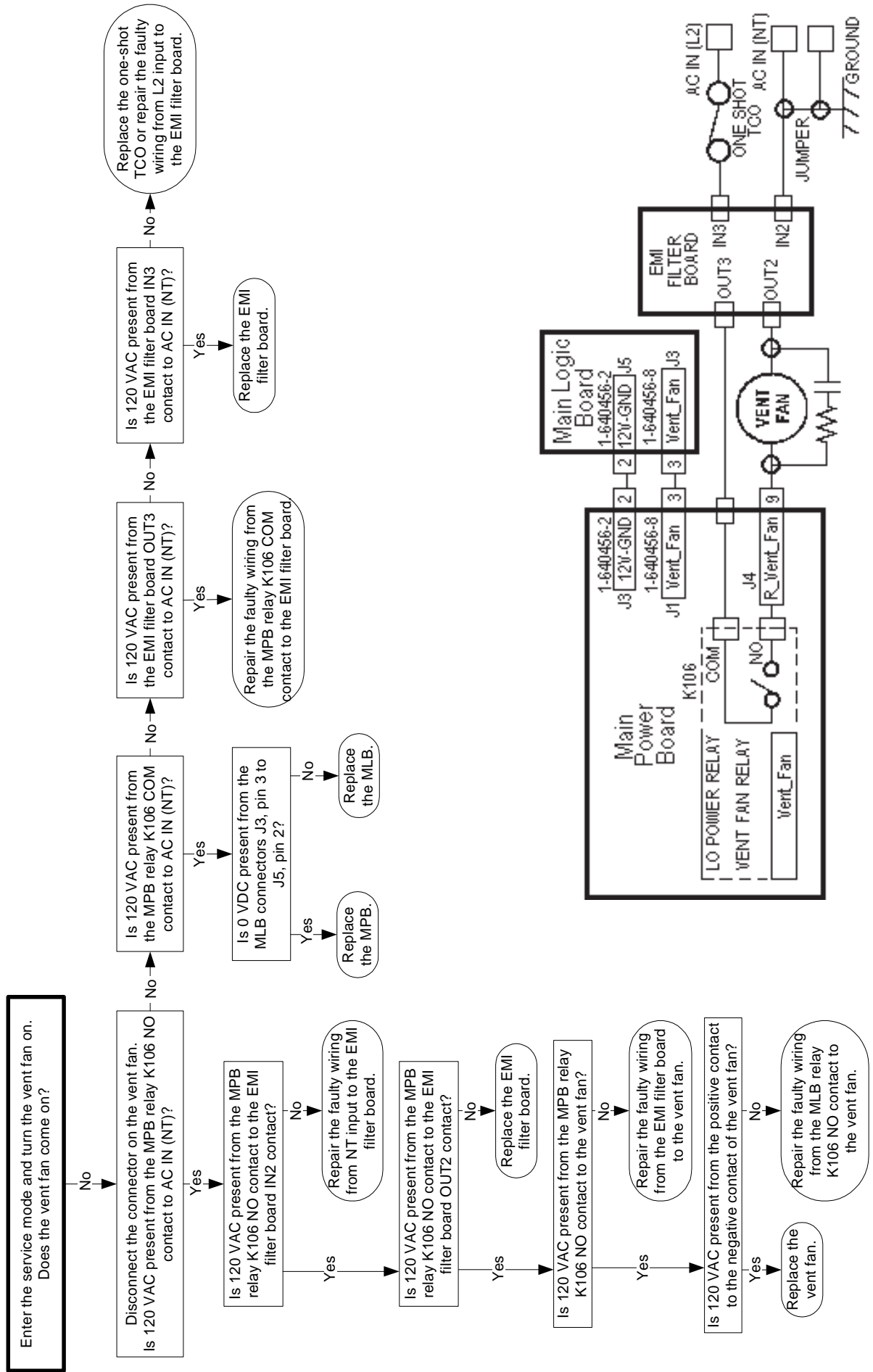
WARNING: High voltage system is at 4400V. Disconnect power and discharge capacitor before touching transformer, diode, capacitor, magnetron, or any wiring between these components.



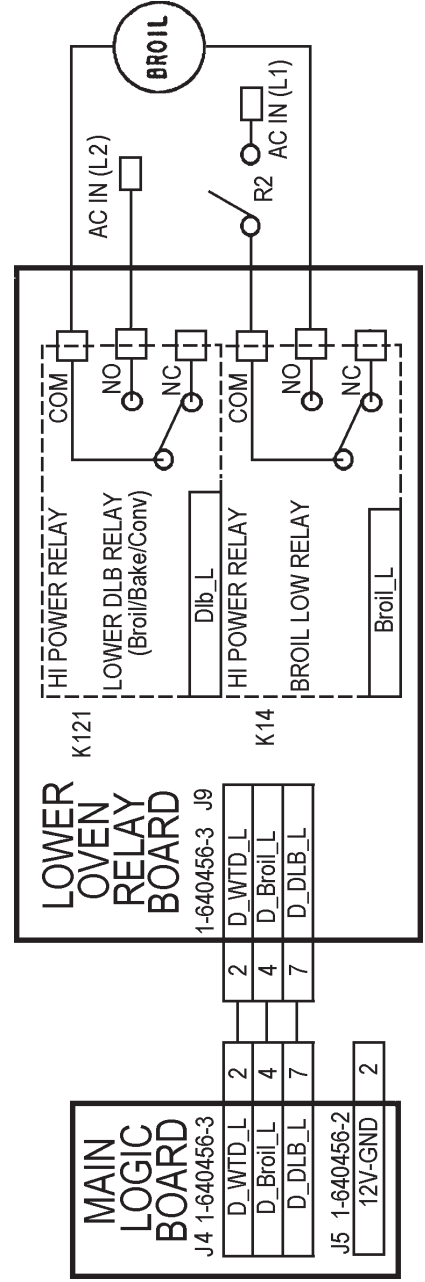
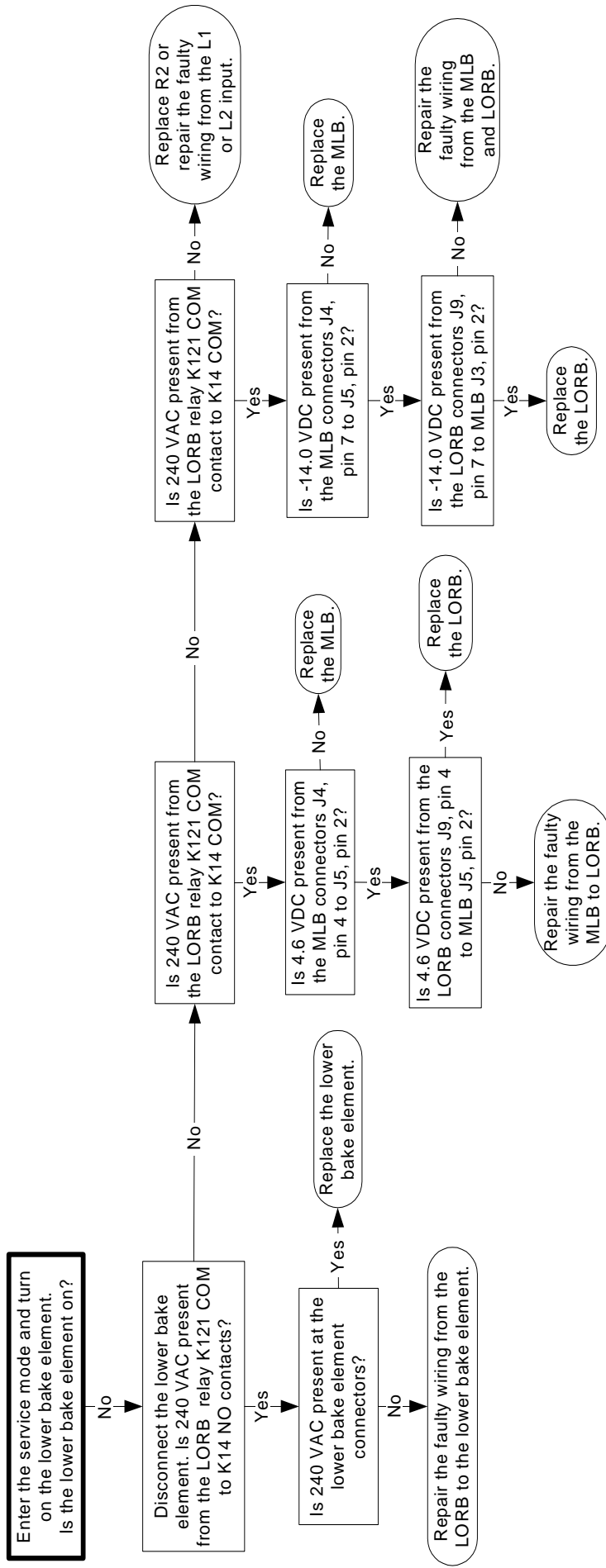
Stirrer Does Not Work

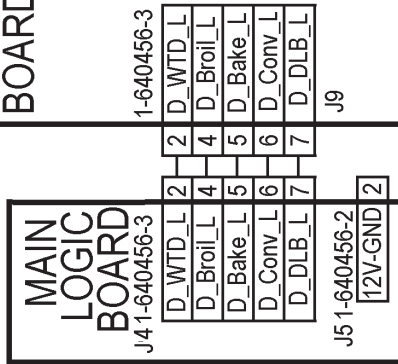
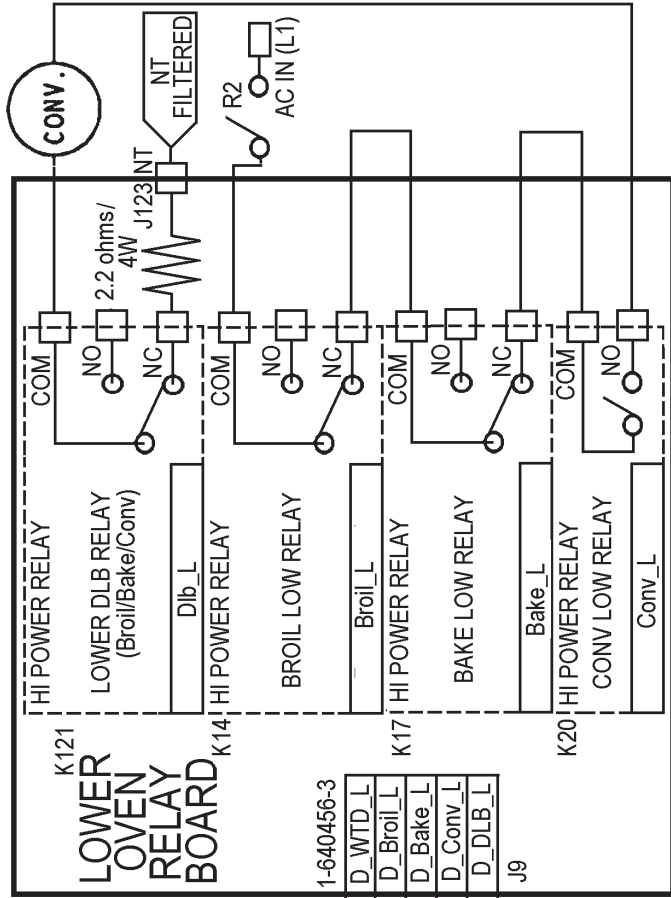


Vent Fan Does Not Work

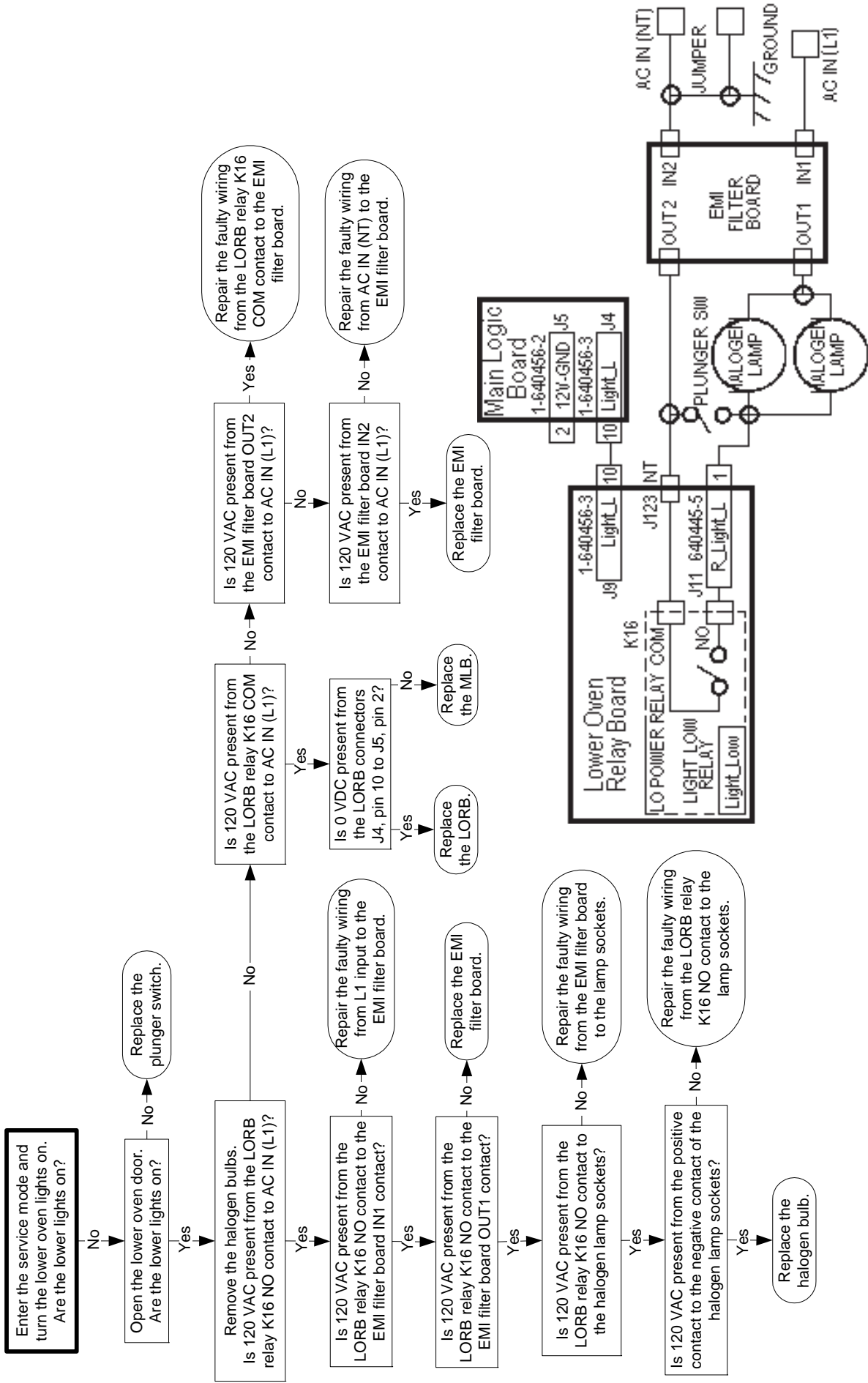


Lower Broiler Element Does Not Work

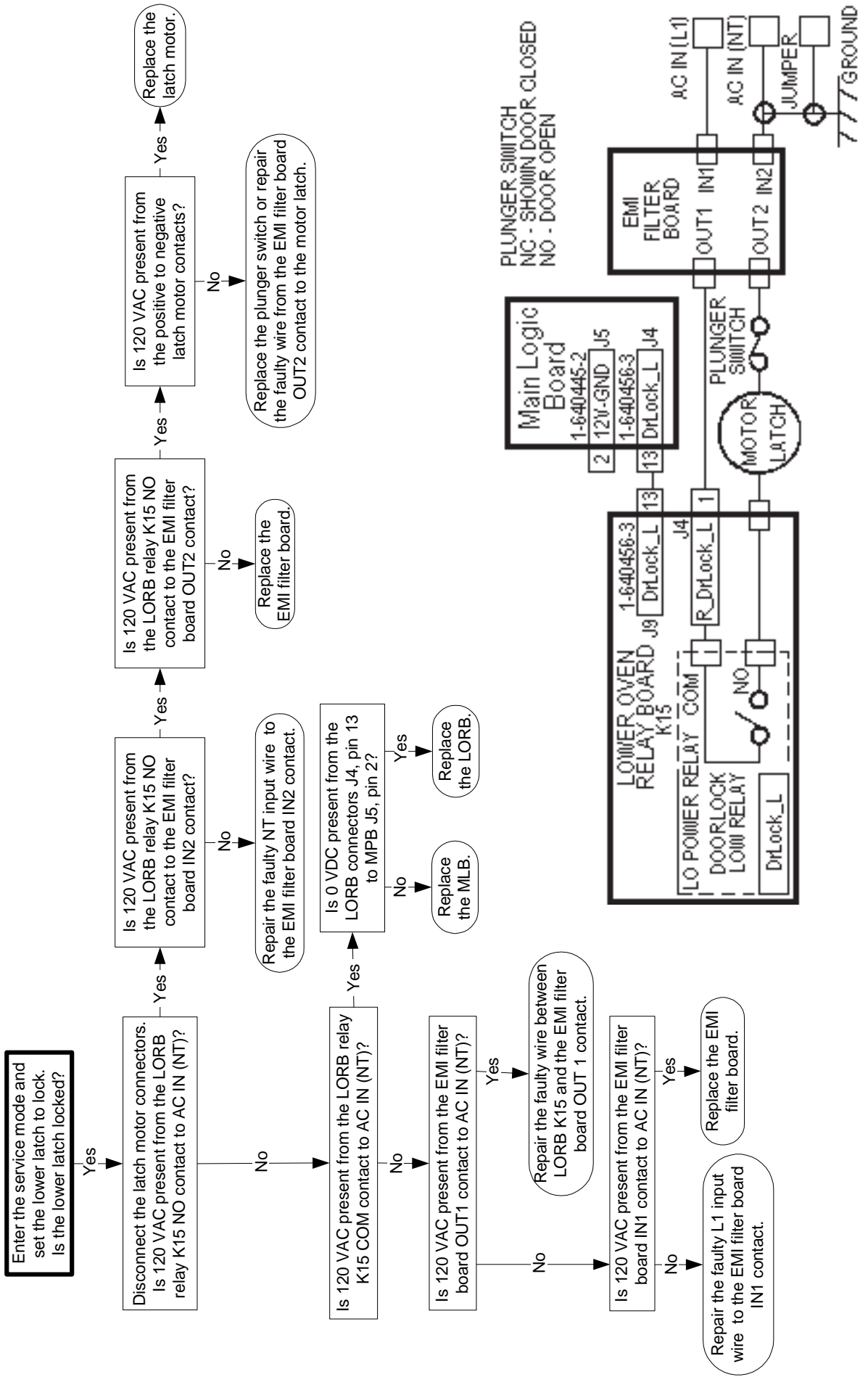




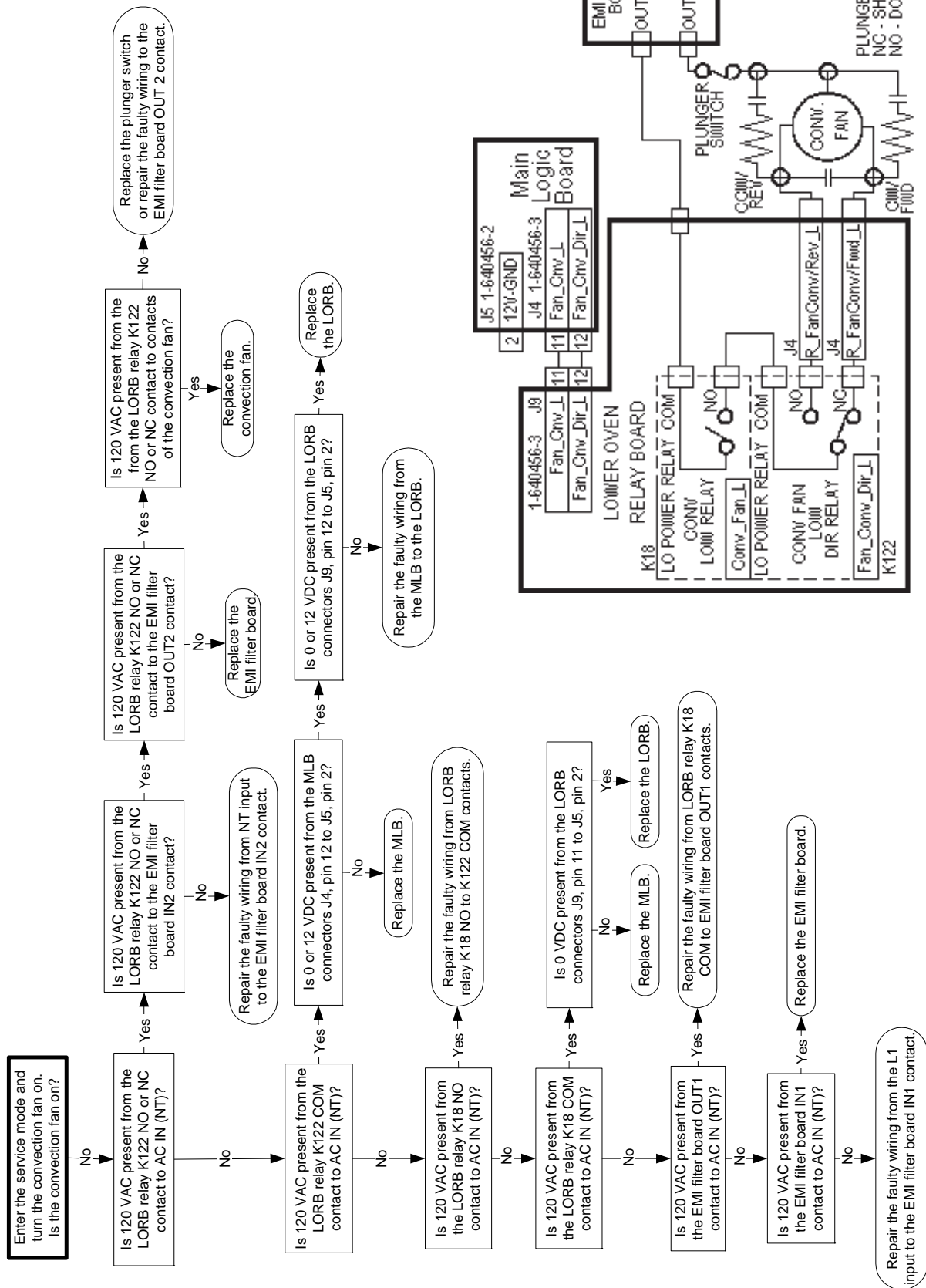
Lower Oven Light Does Not Work



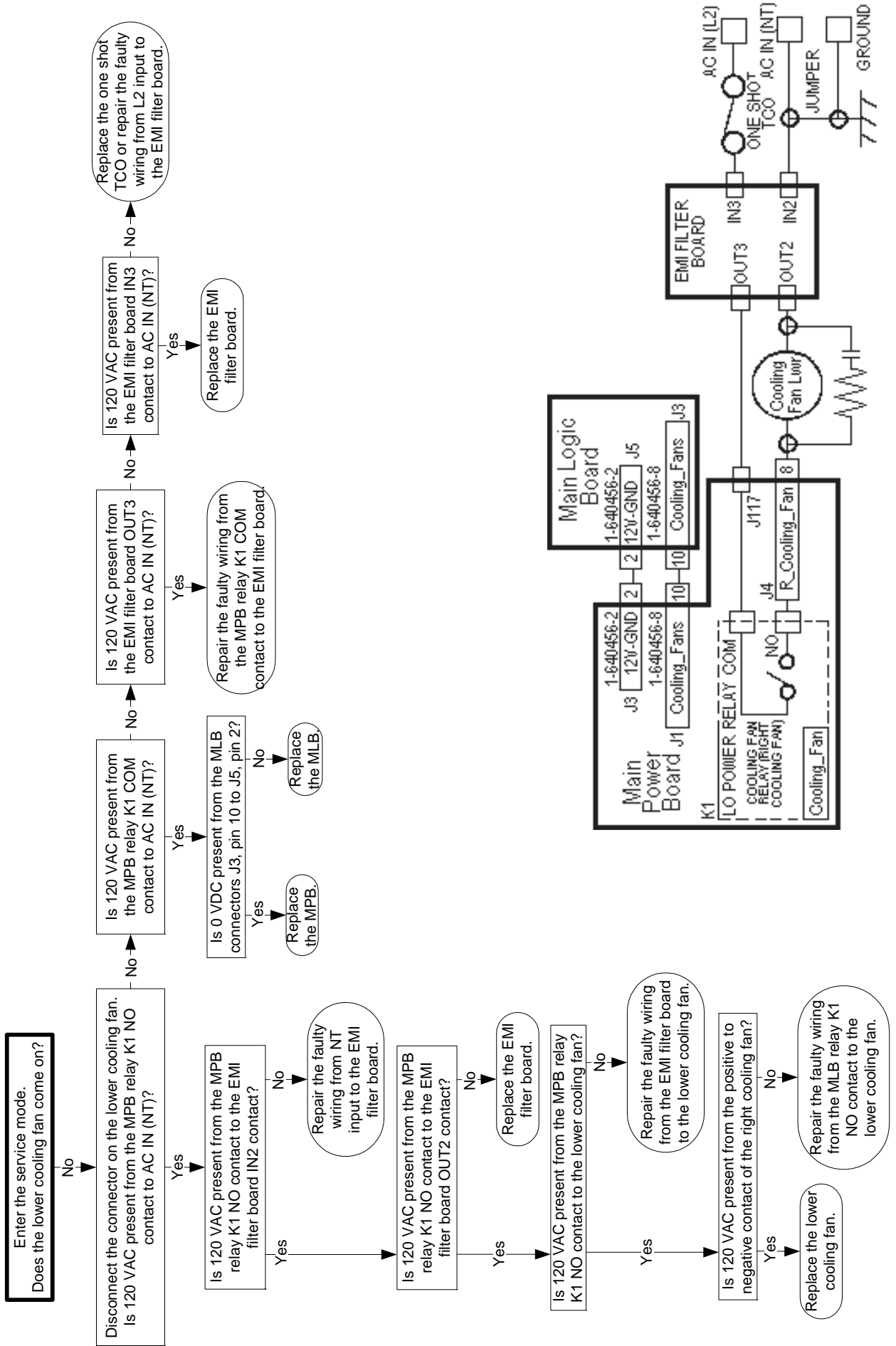
Lower Door Latch Does Not Work



Lower Convection Fan Does Not Work



Lower Cooling Fan Does Not Work



Left Front, Left Rear, or Right Rear Element Does Not Work

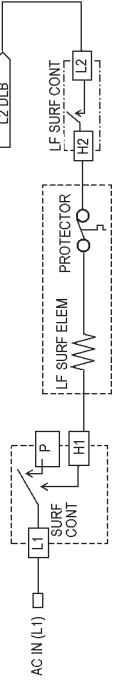
NOTE:
The H2 contact of the surface control cycles on and off to adjust the heat to the desired setting. Make sure that the H2 contact is energized when taking voltage measurements.

Turn the left front, left rear, or right rear burner on. Is the element on?

```

    graph TD
      Q1[Turn the left front, left rear, or right rear burner on. Is the element on?]
      Q1 -- No --> Q2[Is 240 VAC present from the L1 to the L2 surface control contacts?]
      Q1 -- Yes --> R1[Replace the element.]
      Q2 -- No --> R2[Repair the faulty wiring from the L1 or L2 input to the L1 or L2 contacts.]
      Q2 -- Yes --> Q3[Is 240 VAC present from the L2 to the H1 surface control contact?]
      Q3 -- No --> R3[Replace the surface control.]
      Q3 -- Yes --> Q4[Is 240 VAC present from the H1 to the H2 surface control contact?]
      Q4 -- No --> R4[Replace the surface control.]
      Q4 -- Yes --> Q5[Is 240 VAC present at the element input contacts?]
      Q5 -- No --> R5[Repair the faulty wiring from the surface control H1 or H2 contact to the element.]
      Q5 -- Yes --> R6[Replace the element.]
  
```

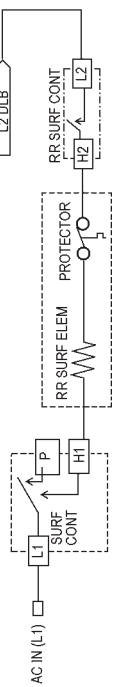
Left Front Surface Element



Left Rear Surface Element



Right Rear Surface Element



Right Front Element Does Not Work

Turn the right front burner on.
Is the right front element on?

No

Repair the faulty wiring from the L1 or L2 input to the L1 or L2 contacts.

Yes

Disconnect the right front elements.
Is 240 VAC present from the Si1 to the P1 surface control contact?

Yes

Replace the surface control.

No

Is 240 VAC present from the 4 to the P1 surface control contact?

Yes

Replace the surface control.

No

Is 240 VAC present from the 4 to the P1 surface control contact?

Yes

Replace the surface control.

No

Is 240 VAC present from the inner element?

Yes

Repair the faulty wiring from the inner element to the surface control.

No

Is 240 VAC present from the outer element?

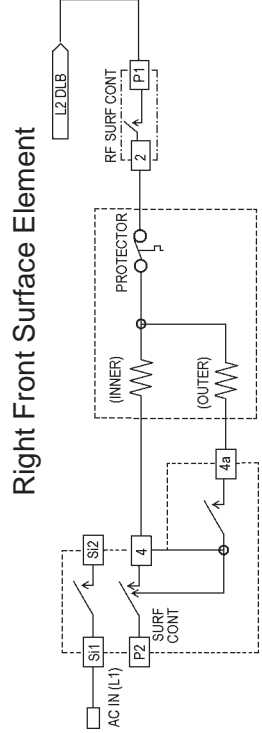
Yes

Repair the faulty wiring from the outer element to the surface control.

No

Replace the element.

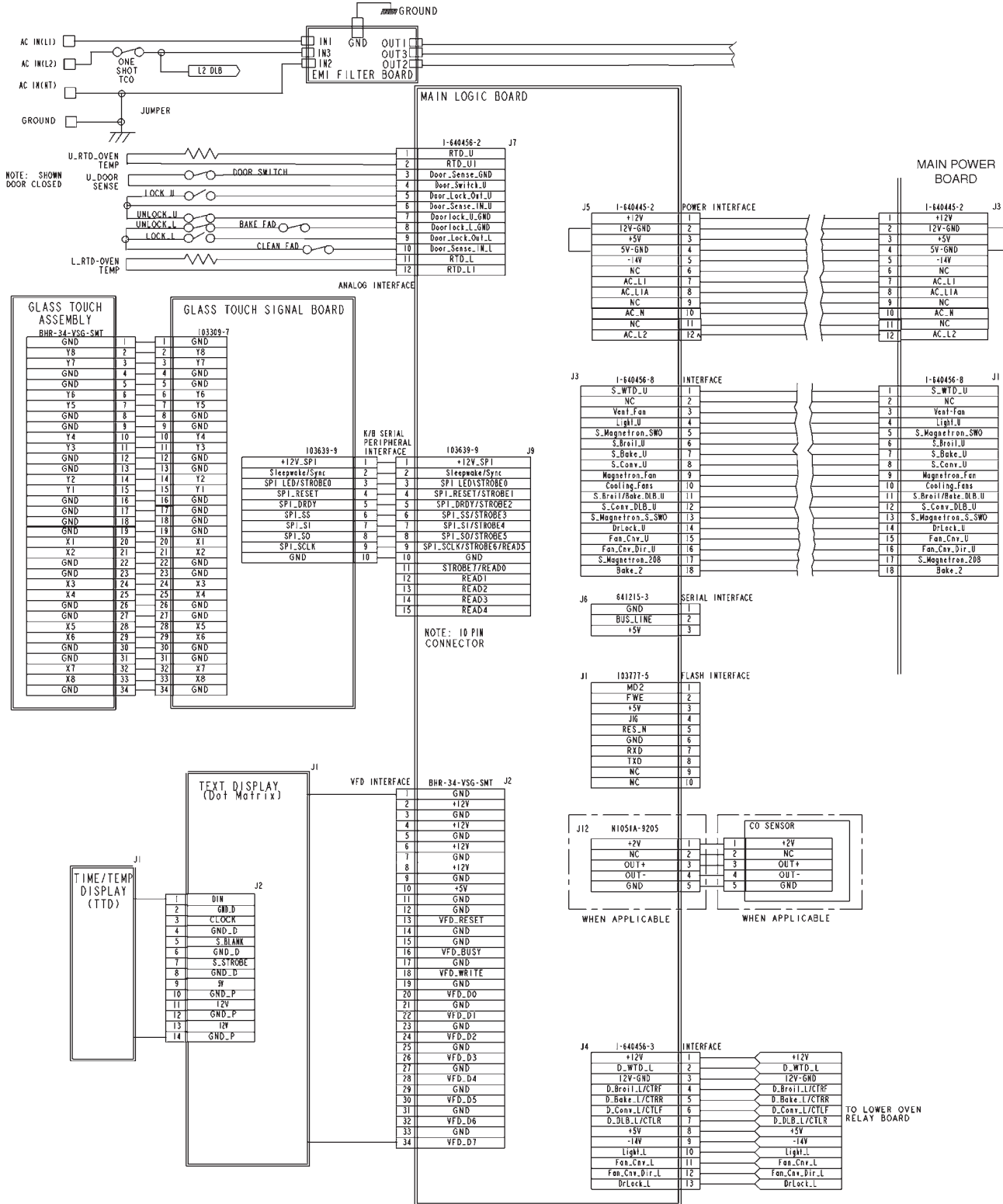
NOTE:
The 2 contact of the surface control cycles on and off to adjust the heat to the desired setting. Make sure that the 2 contact is energized when taking voltage measurements.



Right Front Surface Element

Schematics and Wiring Diagrams

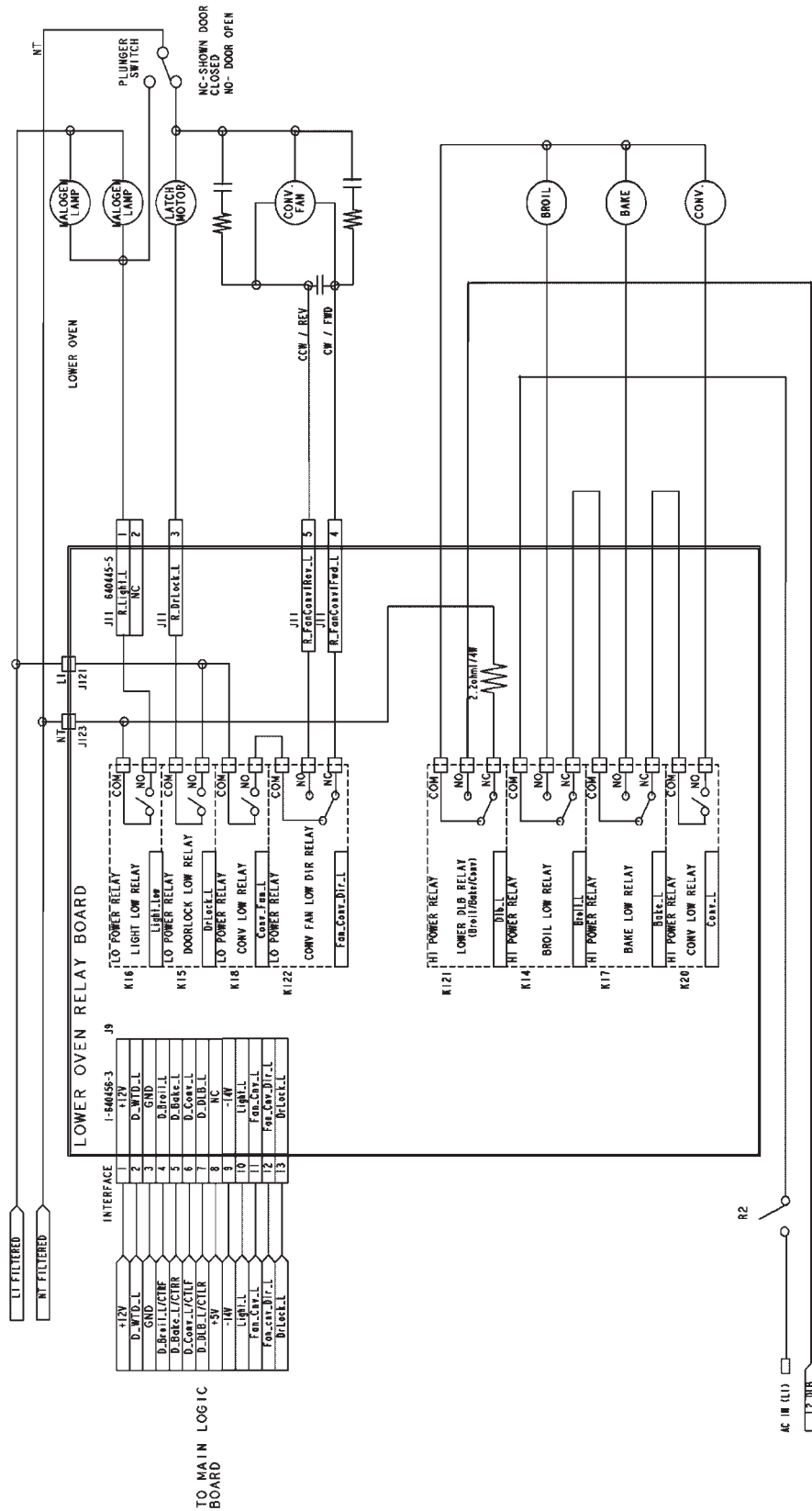
Double Wall Oven (1 of 3)



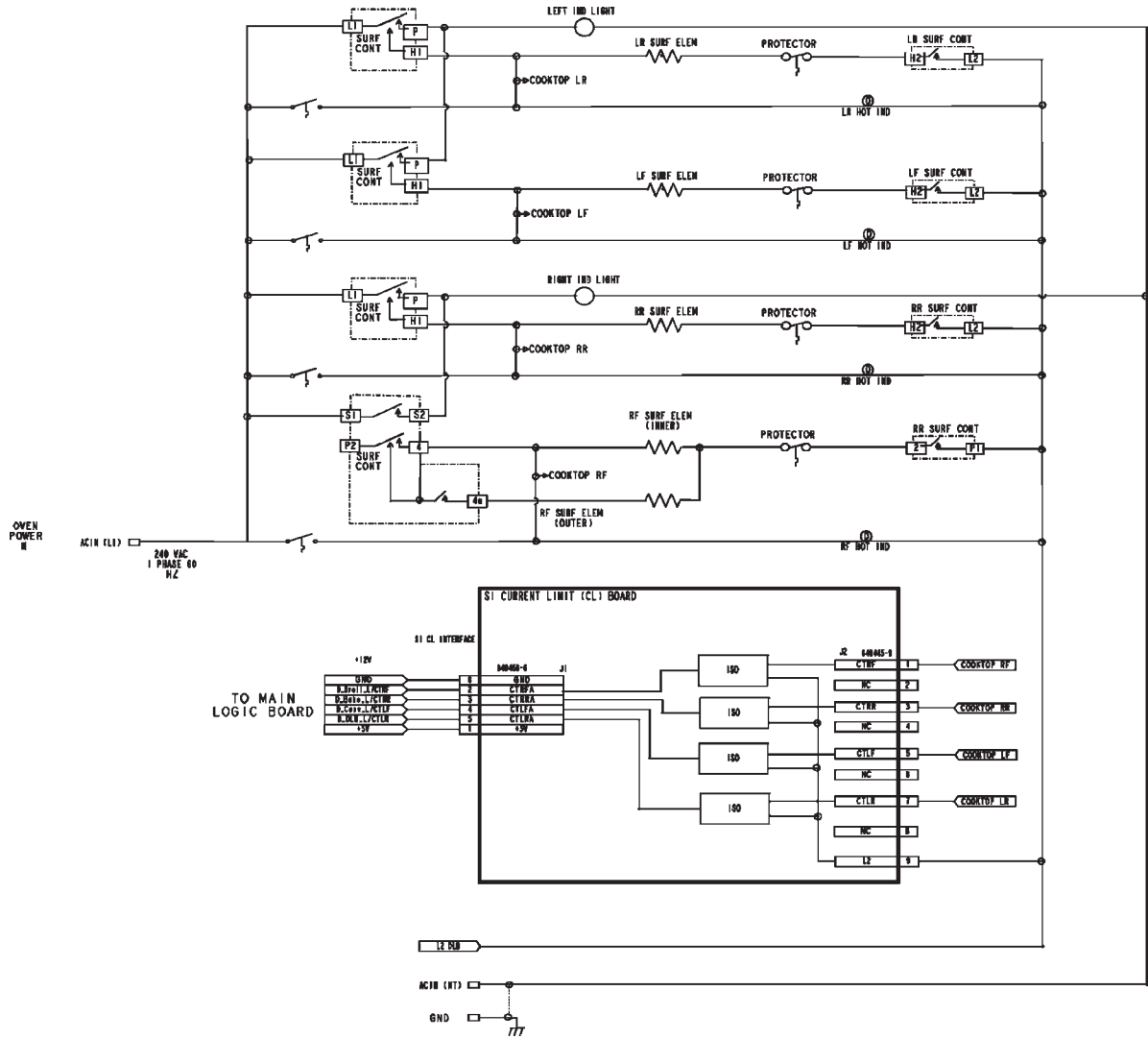
WARNING: Disconnect electrical power before servicing.

Caution: Label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation. Verify operation after servicing.

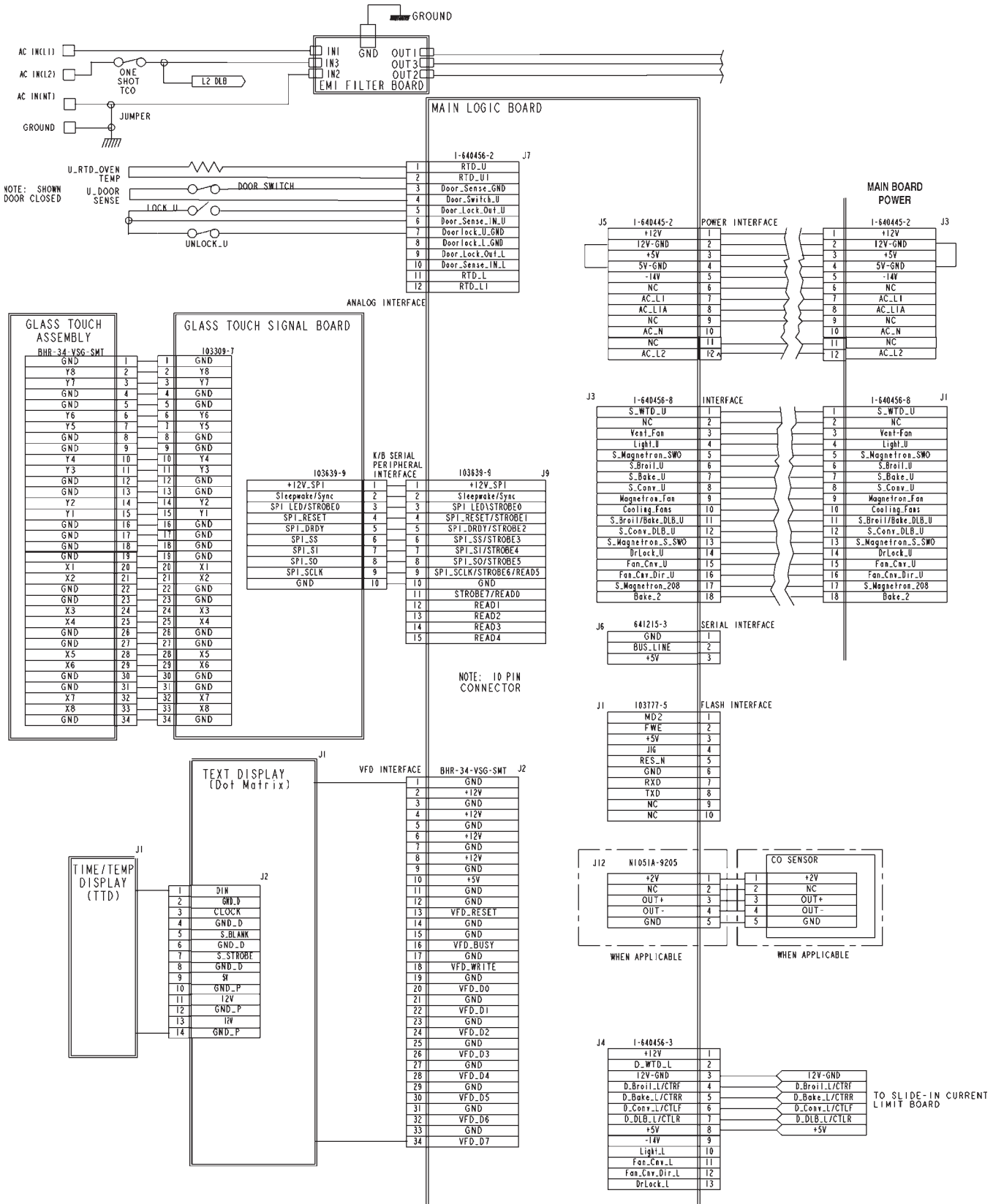
Double Wall Lower Oven (3 of 3)



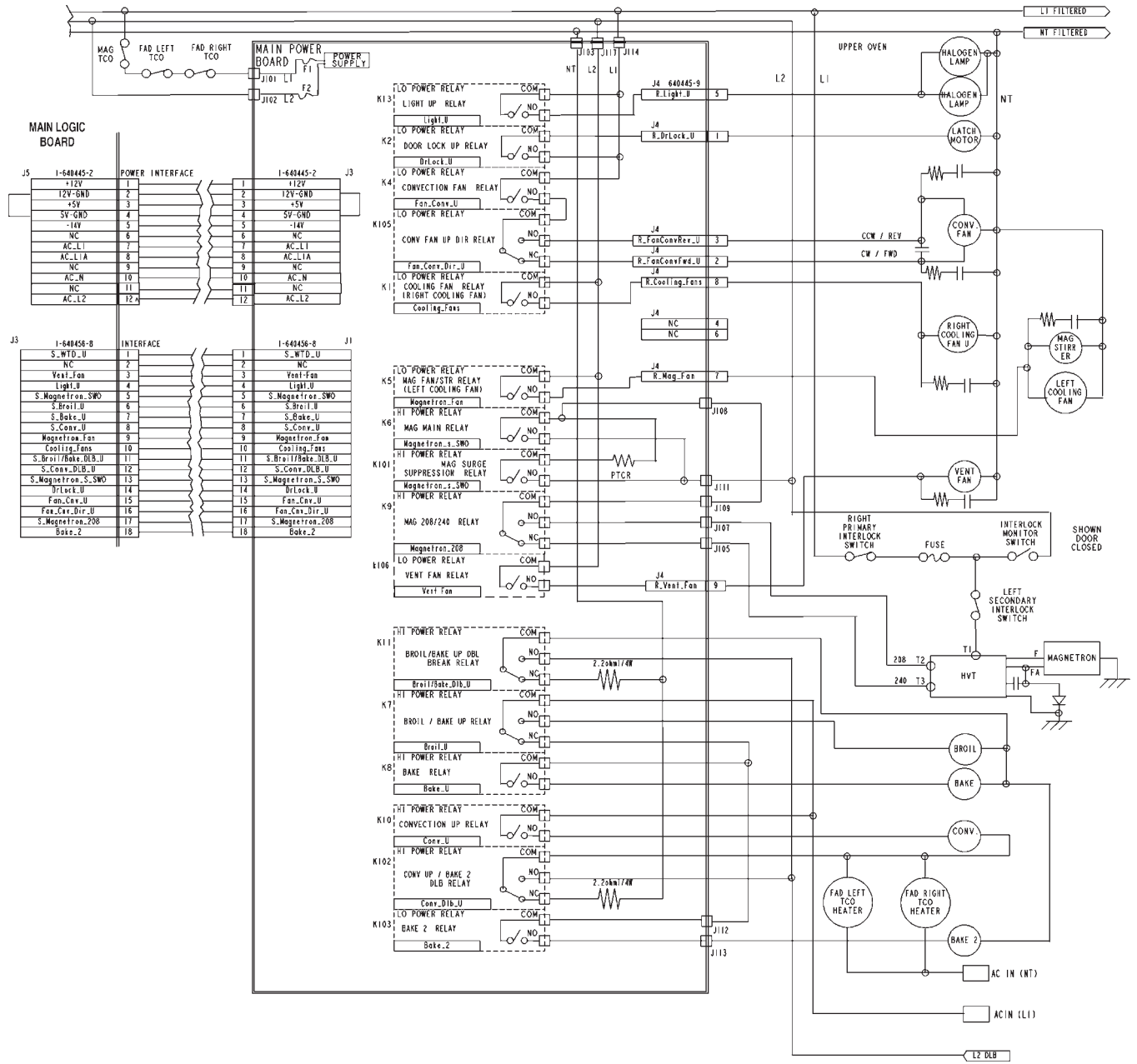
Slide-In Range Current Limit Board (1 of 3)



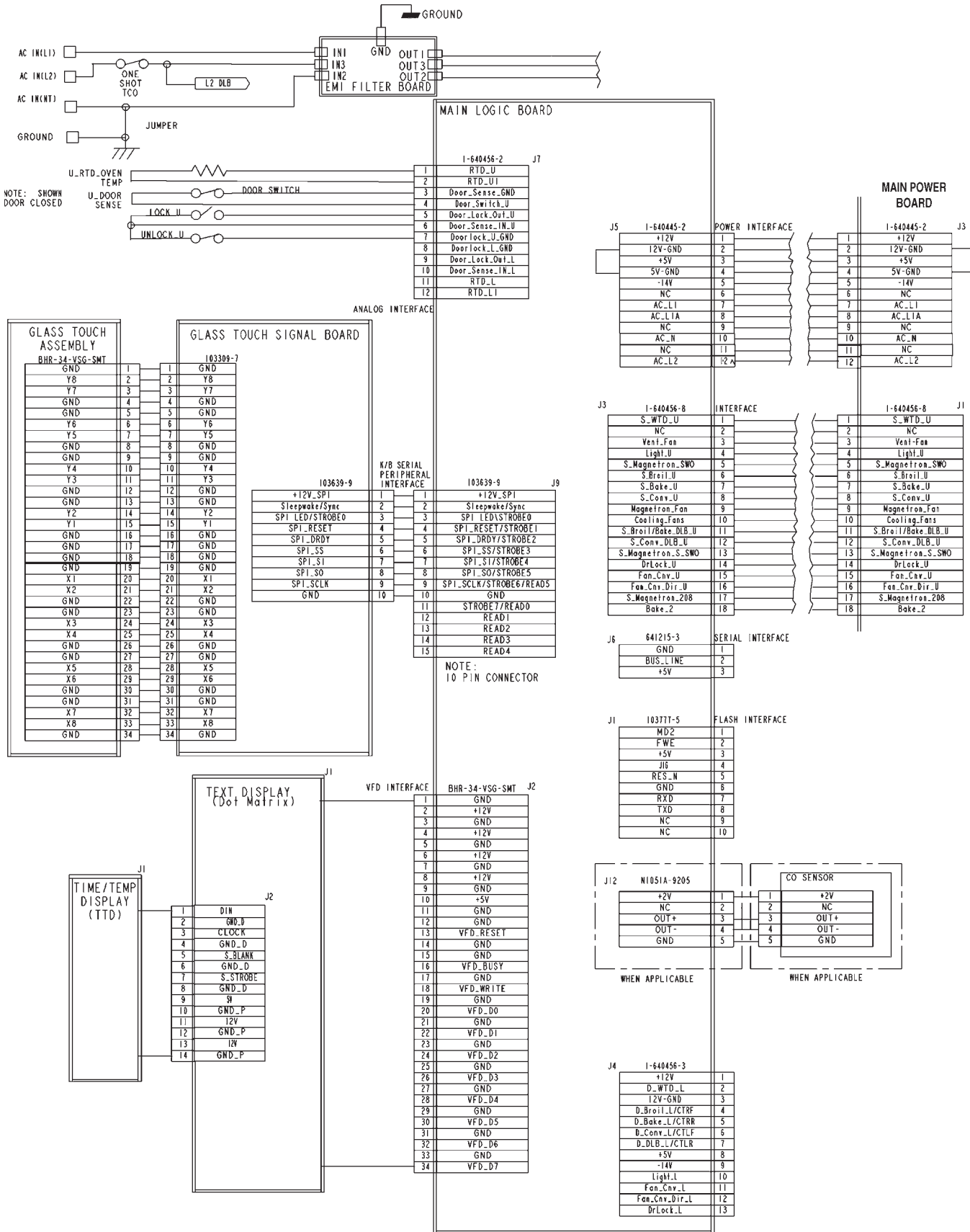
Slide-In Range (2 of 3)



Slide-In Range (3 of 3)



Single Wall Oven (1 of 2)



Single Wall Oven (2 of 2)

