⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

IMPORTANT: Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an antistatic wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance

  -OR-

  Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.
- Before removing the part from its package, touch the antistatic bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in antistatic bag, observe above instructions.

Fahrenheit (°F) to Celsius (°C) Conversion

The temperature is preset in Fahrenheit; however, it can be changed to Celsius.

To Change: Press OPTIONS and then “1” to toggle temperature between Fahrenheit and Celsius settings.

When in Fahrenheit, “°F” follows the oven temperature.

When in Celsius, “°C” follows the oven temperature.

Adjust Oven Temperature Calibration:

1. Press OPTIONS and then “6” to set the calibration.
2. On double ovens only, press UPPER OVEN or LOWER OVEN to select oven.

   Each oven calibration can be independently set.
3. Press “3” to increase and “6” to decrease the temperature.
4. Press START to end calibration.

Diagnostics

- Is the oven in “Sabbath Mode”? If so, “SAB” will appear in the digital display. Press OPTIONS and “7” to end Sabbath mode. This will return the oven to BAKE mode for an untimed bake.

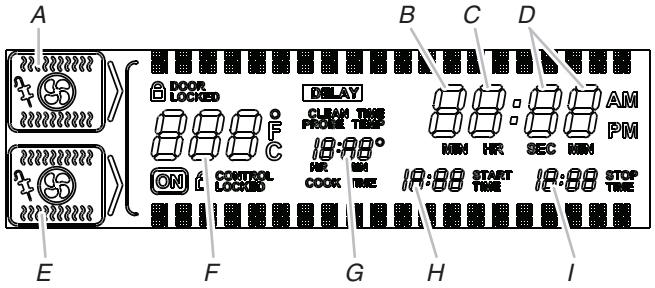
Unplug oven or disconnect power before performing the following checks:

- A potential cause of a control not functioning is corrosion on connections. Observe connections and check for continuity with an ohmmeter.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000Ω per volt DC or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough. Damaged harness must be entirely replaced. Do not rework a harness.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

Programming the Cavity Size

1. Unplug oven or disconnect power.
2. Wait 10 seconds, then plug in oven or reconnect power.
3. Enter Diagnostics mode by pressing OFF, OFF, START.
4. Press key #6 to show cavity size select screen.
5. To edit, press CLOCK key.
6. Scroll through cavity sizes by pressing key #6 until required size is displayed.
7. Once correct size is displayed, press the START key to accept modification.

Failure/Error Display Codes



A. Upper oven cavity display
B. Latch switch state
C. Door switch state
D. Model select state
E. Lower oven cavity display
F. Main cavity temperature
G. Secondary cavity temperature
H. Meat probe temperature
I. Warm drawer temperature (if applicable)

Model Select State	Description
01	Thermal convection upper/Thermal convection lower
05	Thermal convection upper/Standard clean lower
07	Standard clean upper/Standard clean lower

NOTES:

- Always disconnect power before touching internal parts of the oven.
- Upon replacement, immediately return old electronic oven control using the mailing label supplied with each new control.
- For double ovens, the failure code will be displayed in the clock field of the display. The cavity with the most recent fault will be shown in the display and will be represented by the icon for upper or lower ovens.

  To determine the fault code for the upper oven, press the Upper Oven key on the keypad. For the lower oven fault code, press the Lower Oven key on the keypad. To clear the fault code, press OFF.

To Enter Diagnostics Mode:

Before proceeding with any corrective action, perform the following steps to enter the Diagnostics mode.

1. To recall last failure code, if not displayed, press the OFF key to place the oven in an idle state.
2. Enter Diagnostics mode and verify error codes by pressing OFF, OFF, START.
3. If control does not enter Diagnostics, repeat steps.

Screen 1:

- Main clock hours display shows latch state in first display position, and door state in second position. Upper cavity is displayed. To display lower cavity, press Lower Oven key.
- Main clock minutes display shows the model select state associated with control system.
- Main temperature display shows the cavity temperature.
- Lower text line shows software versions for appliance manager (AM), user interface (UI) and EEPROM version.

Press key #6 to scroll to next screen.

Screen 2:

Displays programmed to cavity size.

Press key #6 to scroll to next screen.

Screen 3:

Displays the last error code in memory. If GOOD is displayed, there is not an error coded in memory.

To Clear Last Error Code

1. Unplug oven or disconnect power.
2. Wait 10 seconds, reconnect or plug in oven.
3. Enter Diagnostics mode by pressing OFF, OFF, START.
4. Press key #6 to show cavity size select screen.
5. Press key #6 to show error code.
6. To edit press CLOCK key.
7. Press START key to clear last error. Control should display GOOD.

Troubleshooting Key strokes

- Press the Bake key to activate Bake relay.
- Press Broil key once to activate Outer Broil, press again for Inner Broil.
- Press Convect Bake key to activate Convect Ring and Fan.
- Press Self Clean key to activate Latch Motor.
- Press Cook time key once to activate low speed, press again for high speed.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F0	**E0**	No error(s) found
SUGGESTED CORRECTIVE ACTION PROCEDURE		
(Good) No corrective action required		
F1 Internal	**E0**	Replace oven user interface
SUGGESTED CORRECTIVE ACTION PROCEDURE		

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. Unplug oven or disconnect power.
2. Replace the user interface.
3. Replace all parts and panels before operating.
4. Plug in oven or reconnect power.
5. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F1 Internal	**E1**	Replace oven appliance manager
SUGGESTED CORRECTIVE ACTION PROCEDURE		

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. Unplug oven or disconnect power.
2. Check wiring to both switches on the door latch between the latch and the control. If wires to either switch contact ground, they can cause this error.
3. Check wiring to oven temperature sensor(s). If OK, check resistance values for oven temperature sensor(s) to ensure they are in the correct range. Sensors having resistance values out of range will cause this error.
4. Check oven door switch. If there is no error, go to Step 5.
5. Replace oven appliance manager.
6. Replace all parts and panels before operating.
7. Plug in oven or reconnect power.
8. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F2 Keypad	**E0**	Keypad disconnected
	E1	Stuck key/Shorted key

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. Unplug oven or disconnect power.
2. Check that the keypad is firmly connected.
3. Replace all parts and panels before operating.
4. Plug in oven or reconnect power.
5. Observe for longer than 1 minute.
6. If error remains, then go to Step 7.
7. Unplug oven or disconnect power.
8. Replace keypad.
9. Replace all parts and panels before operating.
10. Plug in oven or reconnect power.
11. Observe for longer than 1 minute.
12. If error remains, then go to Step 13.
13. Unplug oven or disconnect power.
14. Replace cable between user interface and keypad.
15. Replace all parts and panels before operating.
16. Plug in oven or reconnect power.
17. Observe for longer than 1 minute.
18. If error remains, go to Step 19.
19. Unplug oven or disconnect power.
20. Replace oven user interface.
21. Replace all parts and panels before operating.
22. Plug in oven or reconnect power. Wait for 1 minute.
23. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F3 Sensors	**EO**	Upper oven sensor shorted or open
	E1	Lower oven sensor shorted or open
	E3	Meat probe shorted

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. Verify in Diagnostics temperature reading on sensor.
2. If dashes appear in main temperature display, proceed to Step 3.
3. Unplug oven or disconnect power.
4. Remove back panels and ensure the indicated temperature sensor is plugged in properly and fully inserted.

   If it is not, plug it in to the connector and go to Step 11.

   If it is plugged in, go to Step 5.
5. Check connector P2 on the appliance manager. Make sure it is plugged in and fully seated.

   If it is not, make the proper connection and go to Step 11.

   If it is already properly connected, go to Step 6.
6. Visually inspect the wires between P2 on the appliance manager and the indicated temperature sensor. Make sure the wires are not cut or pinched. If the wires appear to be intact, unplug the P2 connector on the appliance manager. Go to Step 7.
7. Measure indicated temperature sensor resistance value (measure between appropriate P2 connector pins). For the following sensors, the resistance value should read:

   Upper Oven Sensor - Between 931 and 2869Ω (Approximately 1080Ω at room temperature)

   Lower Oven Sensor - Between 931 and 2869Ω (Approximately 1080Ω at room temperature)

   Meat Probe Sensor - Between 1,300 and 103,000Ω (Approximately 59,000Ω at room temperature) (Insert meat probe into meat probe jack located inside the oven cavity prior to reading resistance.)

   Measure any P2 connector pin to chassis. Resistance value should read "open." If it does not, replace sensor harness. Repeat Step 7.

   If the indicated temperature sensor does not meet these requirements, go to Step 8.

   If the temperature sensor does meet the requirements, go to Step 11.
8. For UPPER and LOWER sensors:

   Replace appropriate temperature sensor. Repeat Step 7.

   If the requirements are not met, replace sensor harness. Repeat Step 7.

   If the requirements are still not met, go to Step 9.

   For MEAT PROBE sensor:

   Replace meat probe sensor. Repeat Step 7.

   If the requirements are not met, replace sensor harness. Repeat Step 7.

   If the requirements are still not met, replace the meat probe jack. Repeat Step 7.

   If the meat probe sensor is still not meeting the requirements, go to Step 9.
9. Replace the appliance manager. Ensure all connectors are properly seated.
10. Ensure all wiring connections are made.
11. Replace all parts and panels before operating.
12. Plug in oven or reconnect power.
13. Observe for longer than 1 minute.
14. Enter into Diagnostics mode by pressing OFF > OFF > START and read sensor for upper oven sensor and meat probe on immediate display.

F3 Sensors	**E2**	Warming drawer sensor shorted or open

PROCEDURE: Oven is not equipped with this feature. If error occurs, before proceeding press OFF > OFF > START to enter into Diagnostics mode and verify the error codes. If error code returns, replace user interface with correct control associated with this product.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F5 Inputs	**EO**	Door and latch switch do not agree
	E1	Door latch not operating

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

To Verify Door Switch:

1. While in Diagnostics, open the oven door. "0" should appear in the second clock digit from the left. Close the oven door. The clock digit should toggle to "1."

   If the digit did not toggle, go to Step 2.

   If the digit did not toggle after replacing the door switch, go to Step 4.

   If the digit did not toggle after replacing the door switch harness, go to Step 6.

   If the digit did toggle, door switch is operating correctly.
2. Unplug oven or disconnect power.
3. Replace door switch. (If door switch is integral to the door latch motor assembly, replace the entire door latch motor assembly.) Go to Step 8.
4. Unplug oven or disconnect power.
5. Check integrity of all harness wires and connections between the appliance manager and the door/latch assembly. Ensure no shorted wires to chassis.

   If the wiring is bad, replace the door switch harness. Go to Step 8.

   If the wiring is good, go to Step 8.
6. Unplug oven or disconnect power.
7. Replace appliance manager. Go to Step 8.
8. Replace all parts and panels before operating.
9. Plug in oven or reconnect power.
10. Enter into Diagnostics mode by pressing OFF > OFF > START. Repeat Step 1 above.

To Verify Door Latch Switch/Motor Assembly:

1. While in Diagnostics, press the CLEAN key within the first 120 seconds of powering up to cycle the latch motor to the locked position. "1" should appear in the first clock digit from the left when locked. Press the CLEAN key to cycle the latch motor to the unlocked position. The clock digit should toggle to "0."

   If the digit did not toggle, go to Step 2.

   If motor runs continuously, wait until motor reaches the unlocked position, open the door, press the OFF key, go to Step 2.

   If motor did not run, go to Step 8.

   If the digit did not toggle after replacing the door latch motor assembly, go to Step 4.

   If the digit did not toggle after replacing the door latch switch harness, go to Step 6.

   If the digit did toggle, door latch switch is operating correctly.
2. Unplug oven or disconnect power.
3. Replace door latch motor assembly. Go to Step 11.
4. Unplug oven or disconnect power.
5. Check integrity of all harness wires and connections between the appliance manager and the door latch switch. Ensure no shorted wires to chassis.

   If the wiring is bad, replace the door latch switch harness. Go to Step 11.

   If the wiring is good, go to Step 11.
6. Unplug oven or disconnect power.
7. Replace appliance manager. Go to Step 11.
8. Unplug oven or disconnect power.
9. Check integrity of latch mechanism from cam to latch pawl and door slot. Ensure that pawl aligns with the door slot. Correct any mechanical malfunction.
10. Check continuity of the latch motor and of electrical connections between appliance manager P8 and motor. If continuity is present, replace appliance manager. Go to Step 11. If continuity is not present, go to Step 11.
11. Replace all parts and panels before operating.
12. Plug in oven or reconnect power.
13. Enter into Diagnostics mode by pressing OFF > OFF > START. Repeat Step 1 above.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F6 Systems	**EO**	Lost communication

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode." Ensure AM software, UI software and EEPROM CHECKSUM versions appear on the lower text line. If AM software version does not appear, UI and AM may not be communicating.

1. Unplug oven or disconnect power.
2. Unplug meat probe and plug in oven or reconnect power. If error goes away, the meat probe sensing line is grounded.
3. Unplug oven or disconnect power.
4. Check the harness and probe jack for a short to ground.
5. Open the back panels and make sure the P6 connector on the appliance manager and the P2 connector on the user interface are fully inserted.

   If they are not fully inserted, plug in connectors and go to Step 9.

   If they are fully plugged in, go to Step 6.
6. Visually inspect all of the wires between P6 on the appliance manager and P2 on the user interface. Make sure the wires are not cut or pinched. If the wires appear to be intact, perform a continuity check between P6-1 of the appliance manager and P2-1 of the user interface board. Do the same for P6-2 (AM) to P2-2 (UI), P6-4 (AM) to P2-4 (UI), and P6-5 (AM) to P2-5 (UI). All of the checks should result in a reading of less than 5 Ω.

   If any of these checks fail, go to Step 8.

   If these checks pass, reconnect P2, then go to Step 7.
7. Replace the appliance manager. Ensure all connectors are properly seated; then go to Step 9.
8. Replace the wiring harness (signal) and go to Step 9.
9. Ensure all wiring connections are made.
10. Replace all parts and panels before operating.
11. Plug in oven or reconnect power.
12. Observe for longer than 1 minute.
13. If the error does not appear, initiate a bake cycle. Let the cycle run at least 1 minute.

    If no error occurs, cancel the cycle. The problem has been repaired.

    If the error occurs again, restart the troubleshooting procedure at Step 1 (except in Step 7 replace the user interface board if the appliance manager has already been replaced).

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F6 Systems (continued)	E1	Cook oven over temperature
	E2	Clean oven over temperature

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. If oven is off, turn oven on and inspect all of the elements, convect ring, bake and broil. Visually inspect all elements to ensure they are not operating.
2. Unplug oven or disconnect power. Wait 10 seconds.
3. Plug in oven or reconnect power.
4. Enter into Diagnostics mode by pressing OFF > OFF > START.
5. Press the BAKE key to cycle the Bake relay on and off as long as Diagnostics mode is within the first 120 seconds of powering up.

   If the Bake relay does not cycle on and off, go to Step 6.

   If the element does not cycle with the relay, go to Step 11.

   If the element does cycle on and off, go to Step 9.
6. Unplug oven or disconnect power for 30 seconds.
7. Plug in oven or reconnect power.
8. Enter into Diagnostics mode by pressing OFF > OFF > START. Press the BAKE key and cycle relay on and off.

   If the Bake relay does not cycle on and off, go to Step 13.

   If the element does not cycle with the relay, go to Step 11.

   If the element does cycle on and off, go to Step 9.
9. Enter into Diagnostics mode by pressing OFF > OFF > START. Press the BROIL key to cycle the Broil relays. Ensure outer broil relay energizes by inspecting the outer broil element. Press BROIL key again for inner broil element. Ensure inner broil relay energizes by inspecting the inner broil element.

   If the Broil relay does not turn on and off, go to Step 13.

   If the element does not cycle with the relay, go to Step 11.

   If the element or gas valve did cycle on and off, go to Step 10.
10. Enter into Diagnostics mode by pressing OFF > OFF > START. Press the CONVECT BAKE key to cycle the convect bake relay on and off.

    If the Convect Bake relay does not turn on and off, go to Step 13.

    If the element does not cycle with the relay, go to Step 11.

    If the element did cycle on and off, go to Step 11.
11. Unplug oven or disconnect power.
12. Check integrity of all harness wires and connections between the appliance manager and the electric elements. Ensure all wiring and connections between the appliance manager and elements, and the appliance manager and user interface are intact and properly seated and that no wires are shorted or damaged

    If the wiring connections are not intact, go to Step 17.

    If the wiring is good, go to Step 14.
13. Unplug oven or disconnect power.
14. Replace the appliance manager. Go to Step 16.
15. Unplug oven or disconnect power.
16. Replace the user interface board. Go to Step 17.
17. Replace the harness.
18. Replace all parts and panels before operating.
19. Plug in oven or reconnect power.
20. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F6 Systems (continued)	E3	Mini oven/warm drawer over temperature

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Oven is not equipped with this feature. If error occurs, before proceeding press OFF > OFF > START to enter into Diagnostics mode and verify the error codes. If error code returns, replace user interface with correct control associated with this product.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F6 Systems (continued)	E4	User interface/ appliance manager mismatch

SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode."

1. Unplug oven or disconnect power. Wait 10 seconds.
2. Plug in oven or reconnect power.
3. Enter into Diagnostics mode by pressing OFF > OFF > START.
4. Press BAKE. Ensure Bake relay energizes by inspecting Bake element.
5. Press BROIL 1 time for outer broil element. Ensure Outer Broil relay energizes by inspecting the Outer Broil element.
6. Press BROIL again for Inner Broil element. Ensure Inner Broil relay energizes by inspecting the Inner Broil element.
7. Press SELF CLEAN to drive door latch to lock door. Press again to reset door latch to normal state.
8. Press COOK to activate the low speed cooling fan. Press again for high speed.
9. If all functions do not work properly, go to Step 13.
10. If all functions are working, the Appliance Manager and User Interface are working properly.
11. Exit Diagnostics by pressing OFF.
12. Press BAKE and ensure that the Bake relay energizes and the control enters the Bake Preheat. Wait up to 60 seconds to ensure error has been resolved. If error returns, proceed to Step 13.
13. Unplug oven or disconnect power.
14. Remove covers for access to oven controls.
15. Replace the appliance manager. Ensure all connections are properly seated.
16. Replace all parts and panels before operating.
17. Plug in oven or reconnect power.
18. Press BAKE and ensure that Bake relay energizes and the control enters into Bake/Preheat. Wait up to 60 seconds to ensure error has been resolved. If error returns, go to Step 19.
19. Unplug oven or disconnect power.
20. Replace the user interface. Ensure all connections are properly seated. Go to Step 21.
21. Replace all parts and panels before operating.
22. Plug in oven or reconnect power.
23. Press BAKE and ensure the Bake relay energizes and the control enters into Bake/Preheat. Wait up to 60 seconds to ensure error has been resolved.
24. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	LIKELY FAILURE CONDITION
F6 Systems (continued)	E5	No cavity size command

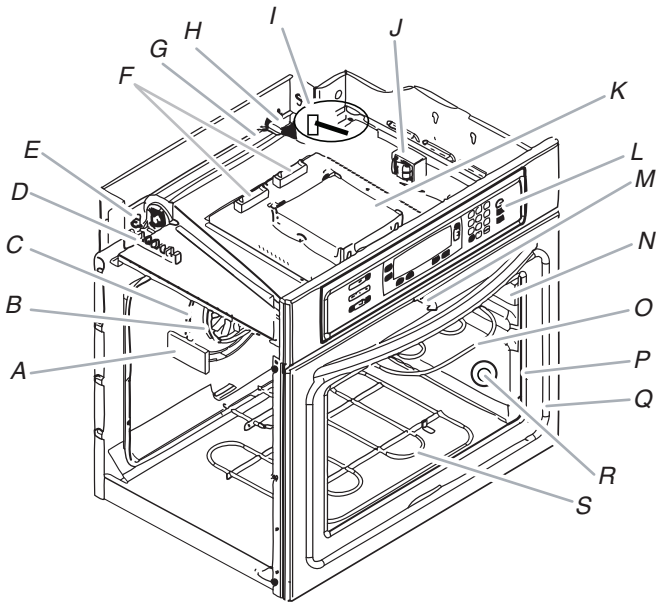
SUGGESTED CORRECTIVE ACTION PROCEDURE

PROCEDURE: Before proceeding, perform steps 1 through 3 of "To Enter Diagnostics Mode." Control should immediately power up in Cavity Size Select mode. Using key "6" (DOWN) and key "3" (UP) scroll through to locate the corresponding cavity size.

Once located press the START key to accept the proper cavity size for the oven being programmed. Control should reinitialize to cavity size selected. If error returns at least 60 seconds after cavity size has been set, go to Step 1.

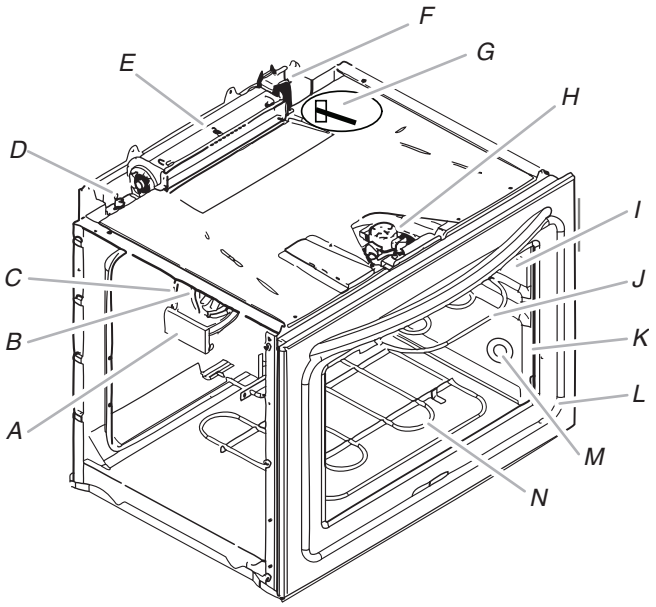
1. Unplug oven or disconnect power. Wait 10 seconds.
2. Plug in oven or reconnect power.
3. Enter into Diagnostics mode by pressing OFF > OFF > START. Press "6" (DOWN) once main diagnostic screen appears. Screen should identify cavity size for oven being programmed. If this is incorrectly shown, press CLOCK to edit current programmed size. Press "6" (DOWN) to locate proper cavity size. Once located, press START to accept the new cavity size. Control will reset and initialize the new cavity size programmed. Wait for 60 seconds to ensure error has been corrected.
4. If error is corrected, go to Step 8.
5. If error returns, go to Step 6.
6. Unplug oven or disconnect power.
7. Replace user interface ensuring all connections are properly seated and go to Step 8.
8. Replace all parts and panels before operating.
9. Plug in oven or reconnect power.
10. Control may power up in Cavity Size Select mode. Set cavity size as outlined in Step 3 by locating proper cavity size and pressing START once located. Wait for 60 seconds to ensure error has been corrected.
11. Verify operation is normal. Enter into Diagnostics mode by pressing OFF > OFF > START and complete checks

Upper Oven Component Locations



A. Halogen light
B. Convection fan motor (on some models)
C. Convection ring element (on some models)
D. Terminal block
E. Oven shutdown thermal cutoff (non-resettable)
F. Blower speed resistor
G. Blower
H. Blower motor
I. Upper temperature sensor (on rear panel)
J. Control power transformer
K. Appliance manager
L. Keypad (user interface board placed behind it)
M. Door lock latch
N. Halogen light
O. In/Out broil element
P. Oven door glass
Q. Door gasket
R. Meat probe (on some models)
S. Hidden bake element

Lower Oven Component Locations



A. Halogen light
B. Convection fan motor (on some models)
C. Convection ring element (on some models)
D. Oven shutdown thermal cutoff (non-resettable)
E. Blower
F. Blower motor
G. Lower temperature sensor (on rear panel)
H. Door lock latch
I. Halogen light
J. In/Out broil element
K. Oven door glass
L. Door gasket
M. Meat probe (on some models)
N. Hidden bake element

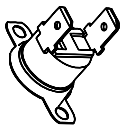
Oven Shutdown Thermal Cutoff (non-resettable)

The oven shutdown thermal cutoff (non-resettable) is located at the back of the oven. It will shut down the elements if the temperature at the back of the oven exceeds component limits.

Verify that the oven shutdown thermal cutoff (non-resettable) is OK.

To replace this thermal cutoff (non-resettable):

1. Refer to the following chart for the correct Part Number.

Part Number	Opening Temp.	Resetting/ Closing Temp.	Marking (with Black Letters)
8304452 	221ºF ± 7.2ºF (105ºC ± 4ºC)	Non-resettable	Green

2. Unplug oven or disconnect power.
3. Replace the oven thermal cutoff (non-resettable).
4. Replace all parts and panels before operating.
5. Plug in oven or reconnect power.

Electrical Components Key

Oven Components	Front/Top/Rear Serviceable
User interface board	Front
Appliance manager	Top
Control power transformer	Top
Keypad	Front
Halogen lights	Front
DLB relay	Top
Latch switch	Front
Door switch	Front
Door lock latch	Front
Light power supply	Top
Oven temperature sensor	Rear
Meat probe sensor	Probe - Front Jack - Rear
Blower motor	Rear
Oven shutdown thermal cutoff (non-resettable)	Rear
Oven convection fan motor	Rear
Oven convection ring element	Front
Bake element	Rear
In/Out broil element	Front
Blower speed resistor	Top

Relay Logic Upper and Lower Oven

Modes	Relays							
	Bake	**In Broil**	**Out Broil**	**Conv Elem**	**Conv Fan**	**Dlb Rly**	**Oven Lt**	**Blower**
Off	Off	Off	Off	Off	Off	Off	On or Off	On or Off
Bake Pre-B	On	Cycling*	On	Off	Off	On	On or Off	On (Low speed)
Bake Pre-A	On	Cycling*	Cycling*	Off	Off	On	On or Off	On (Low speed)
Bake SS	Cycling*	Cycling*	Cycling*	Off	Off	On	On or Off	On (Low speed)
CBake Pre-B	On	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
CBake Pre-A	Cycling*	Off	Cycling*	On	On	On	On or Off	On (Low speed)
CBake SS	Cycling*	Off	Cycling*	On	On	On	On or Off	On (Low speed)
FBroil Pre-B	Off	On	On	Off	Off	On	On or Off	On (Low speed)
FBroil Pre-A	Off	On	On	Off	Off	On	On or Off	On (Low speed)
FBroil SS	Off	Cycling*	Cycling*	Off	Off	On	On or Off	On (Low speed)
InBroil Pre-B	Off	On	Off	Off	Off	On	On or Off	On (Low speed)
InBroil Pre-A	Off	On	Off	Off	Off	On	On or Off	On (Low speed)
InBroil SS	Off	Cycling*	Off	Off	Off	On	On or Off	On (Low speed)
CBroil Pre-B	Off	On	On	Off	On	On	On or Off	On (Low speed)
CBroil Pre-A	Off	On	On	Off	On	On	On or Off	On (Low speed)
CBroil SS	Cycling*	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
CRoast Pre-B	On	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
CRoast Pre-A	On	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
CRoast SS	Off	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
BProof Pre-B	Cycling*	Off	Off	Off	Off	On	On or Off	On (Low speed)
BProof Pre-A	Cycling*	Off	Off	Off	Off	On	On or Off	On (Low speed)
BProof SS	Cycling*	Off	Off	Off	Off	On	On or Off	On (Low speed)
Dehydrate Pre-B	Cycling*	Cycling*	Cycling*	Off	On	On	On or Off	On (Low speed)
Dehydrate Pre-A	Off	Off	Off	Cycling*	On	On	On or Off	On (Low speed)
Dehydrate SS	Off	Off	Off	Cycling*	On	On	On or Off	On (Low speed)
Clean	Cycling*	Cycling*	Cycling*	Off	Off	On	Off	On (High speed)

*(Maximum period: 60 seconds)

Component Tests at the Oven Control Panel

Lower Oven

Components	Front/Rear/ Top Serviceable	Check Points	Results
Door switch	Front	P1-2 (BR) to P1-3 (OR)	Door open = open circuit Door closed = closed circuit
Latch motor	Front	P9-3 (Y) to Neutral (W)	4800Ω
Oven temperature sensor	Rear	P2-3 (GY) to P2-4 (GY)	109Ω at 75°F (23.9°C)
Blower	Rear	P9-2 (GY) to Neutral (W)	181Ω to 240Ω 8Ω to 12Ω
Oven shutdown thermal cutoff (non-resettable)	Rear	Bake (R) and In Broil (OR) to Red/White wire at double line break relay	Closed Circuit
Bake element	Rear	T5-3 (R) to In Broil (OR) T5-3 (R) to double line break relay (R/W)	26 - 30Ω
Inner broil element	Front	T5-4 (OR) to Bake (R) T5-4 (OR) to double line break relay (R/W)	31- 36Ω
Outer broil element	Front	T5-1 (BU) to Red/ White wire at double line break relay	53 - 59Ω
Convection ring element	Front	T5-2 (Y) to Red/ White wire at double line break relay	33 - 37Ω
Convection fan motor	Rear	P9-1 (OR/W) to Neutral (W)	8 - 12Ω
Latch switch	Front	P1-1 (T) to P1-2 (BR)	Door unlocked = open circuit Door locked = closed circuit
Meat probe jack	Rear	P2-7 (Y) to P2-8 (G)	Probe into jack - check for 78kΩ at room temperature

Upper Oven

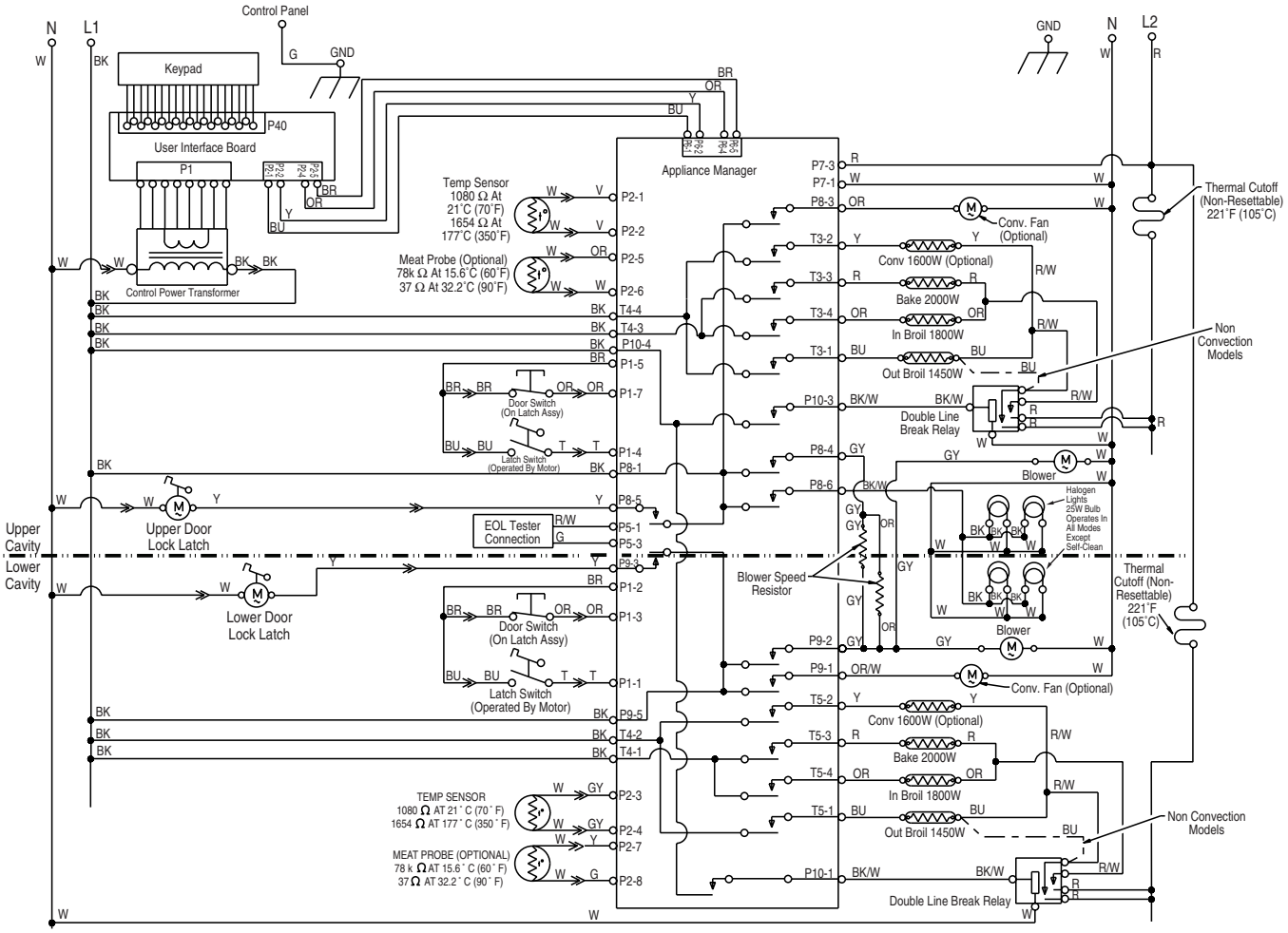
Components	Front/Rear/ Top Serviceable	Check Points	Results
Door switch	Front	P1-5 (BR) to P1-7 (OR)	Door open = open circuit Door closed = closed circuit
Latch motor	Front	P8-5 (Y) to Neutral (W)	4800Ω
Oven temperature sensor	Rear	P2-1 (V) to P2-2 (V)	1091Ω at 75°F (23.9°C)
Blower	Rear	P9-2 (GY) to Neutral (W)	181Ω to 240Ω
Oven shutdown thermal cutoff (non-resettable)	Rear	Bake (R) and In Broil (OR) to Red/White wire at double line break relay	Closed Circuit
Bake element	Rear	T3-3 (R) to In Broil (OR) T3-3 (R) to double line break relay (R/W)	26 - 30Ω
Inner broil element	Front	T3-4 (OR) to Bake (R) T3-4 (OR) to double line break relay (R/W)	31- 36Ω
Outer broil element	Front	T3-1 (BU) to Red/ White wire at double line break relay	53 - 59Ω
Convection ring element	Front	T3-2 (Y) to Red/ White wire at double line break relay	33 - 37Ω
Convection fan motor	Rear	P8-3 (OR) to Neutral (W)	8 - 12Ω
Latch switch	Front	P1-4 (T) to P1-5 (BR)	Door unlocked = open circuit Door locked = closed circuit
Meat probe jack	Rear	P2-5 (OR) to P2-6 (W)	Probe into jack - check for 78kΩ at room temperature
Control power transformer	Top	Primary winding Secondary winding (Connected on User interface board) P1-1 to P1-3 P1-4 to P1-5 P1-7 to P1-8	22.9Ω +/- 10% 0.71Ω +/- 10% 0.742Ω +/- 10% 2.37Ω +/- 10%
Blower speed resistors	Top	P8-4 (GY) to P9-2 (GY)	86Ω +/- 5%

NOTES: The oven shutdown thermal cutoff (non-resettable) is located at the top of the oven. It will shut down all elements if the temperature at the top of the oven exceeds component limits. The upper and lower Blower Speed Resistors are connected in parallel.

Wiring Diagram

NOTES:

- When replacing the electronic control, be sure to program the cavity size. See “Programming the Cavity Size.”
- Dots indicate connections or splices.
- Circuit shown in STANDBY/OFF mode with oven door closed.
- Pin locations in parentheses represent the lower cavity.



LEGEND

Ground (Chassis)	Plug With Female Connector	Receptacle With Male Connector	Light	AC Drive Motor	Relay Coil	Relay Contact

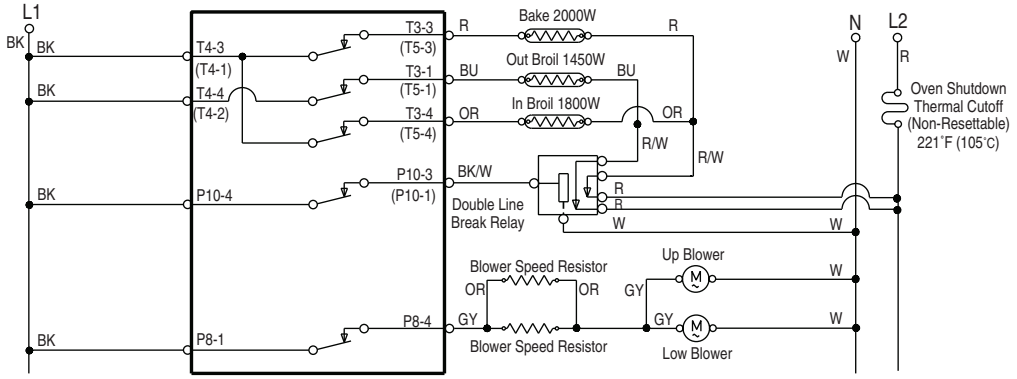
Heating Element	Enclosed Thermistor	Operated By Door	Thermal Cutoff (Non-Resettable)	Resistor	Solenoid

Strip Circuits

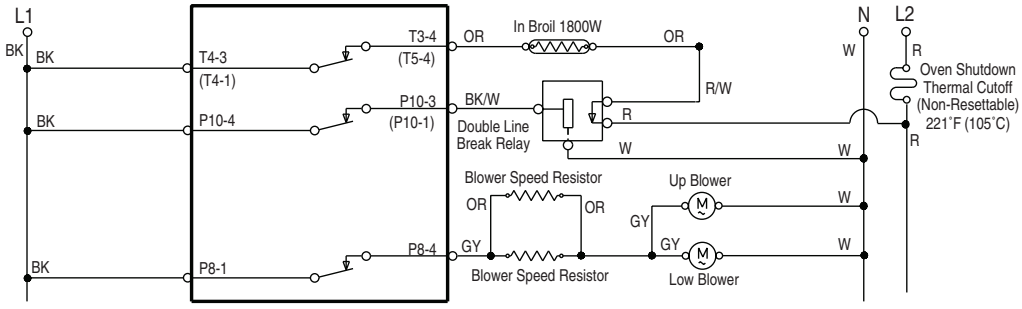
The following individual circuits are for use in diagnoses, and are shown in the ON position. Do not continue with the diagnosis of the appliance if a fuse is blown, a circuit breaker is tripped, or if there is less than a 240 +10%/-15% volt power supply at the wall outlet.

NOTE: Pin locations in parentheses represent the lower cavity.

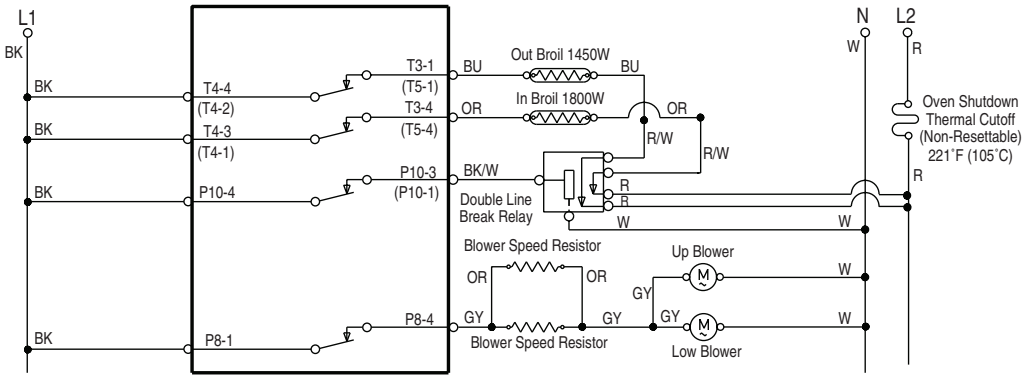
Bake Preheat B, Bake Preheat A, Bake SS



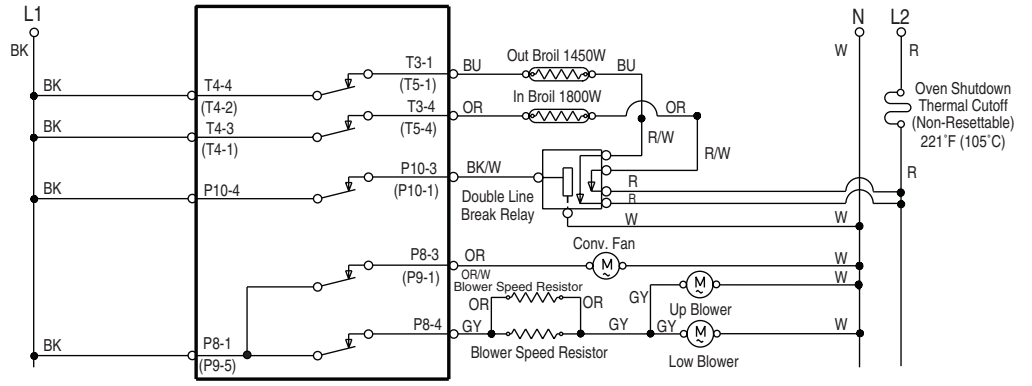
Inner Broil Preheat B, Inner Broil Preheat A, Inner Broil SS



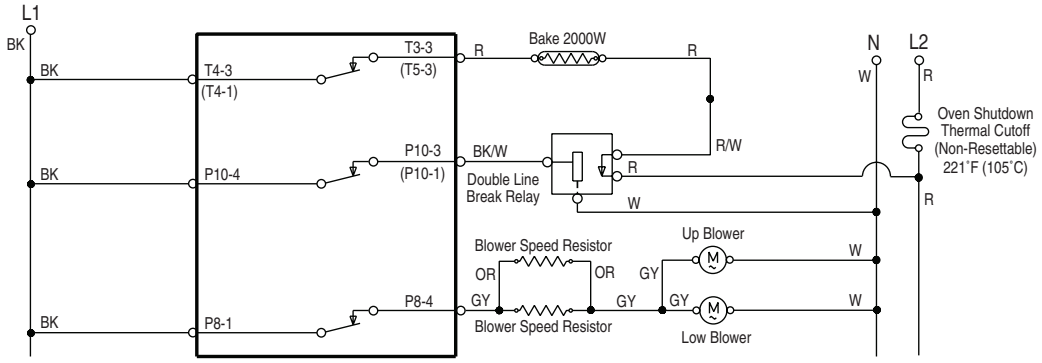
Full Broil Preheat B, Full Broil Preheat A, Full Broil SS



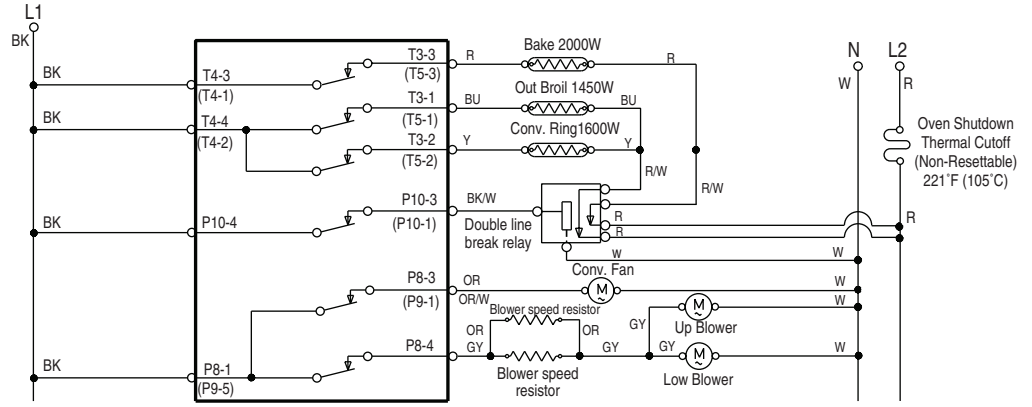
Convect Broil Preheat B, Convect Broil Preheat A, Convect Broil SS (convection models only)



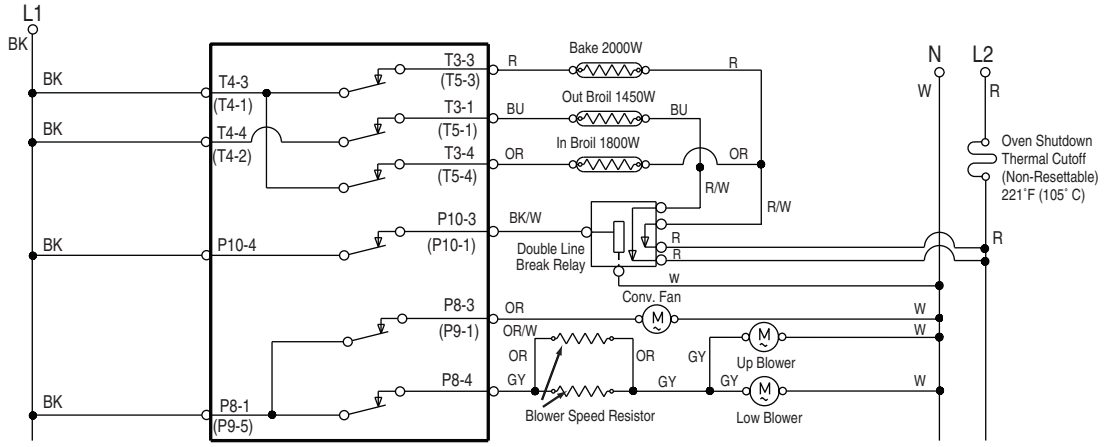
Bread Proof Preheat B, Bread Proof Preheat A, Bread Proof SS



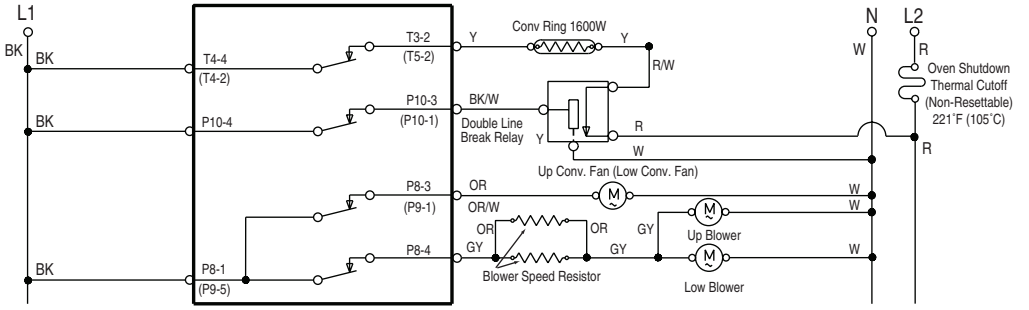
Convect Bake Preheat A, Convect Bake SS (convection models only)



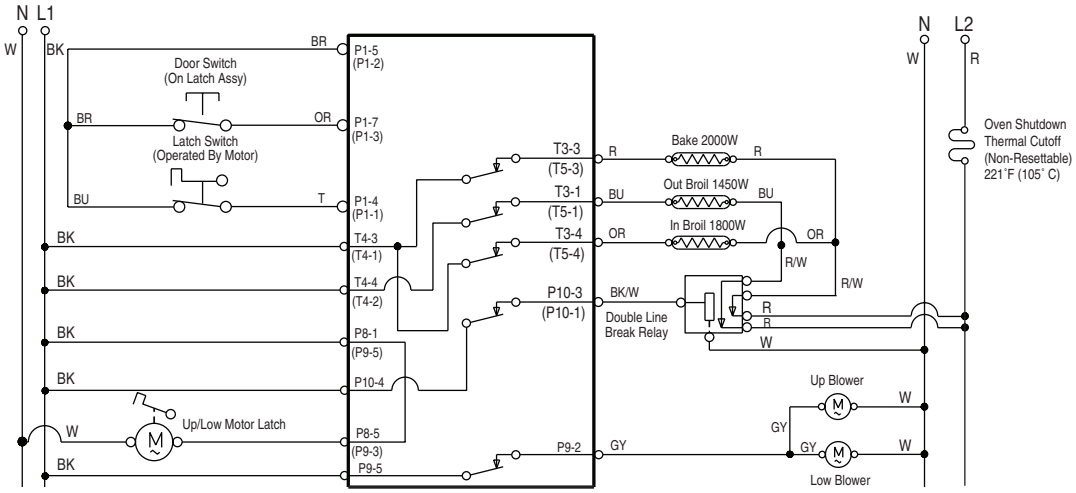
Convect Bake Preheat B, Convect Roast Preheat B, Convect Roast Preheat A, Convect Roast SS, Dehydrate Preheat B (convection models only)



Dehydrate Preheat SS, Dehydrate Preheat A (convection models only)



Clean



W10220954A

NOTE: This sheet contains important Technical Service Data.

FOR SERVICE TECHNICIAN ONLY
DO NOT REMOVE OR DESTROY