## ⚠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. Press “3” to increase and “6” to decrease the temperature.
3. 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.

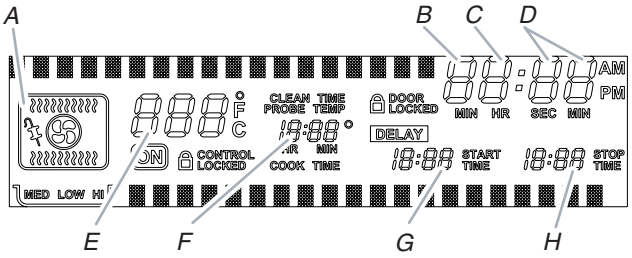
Unplug range or disconnect power before performing the following checks:

- 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 range or disconnect power.
2. Wait 10 seconds, then plug in range 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. Oven cavity display*
*B. Latch switch state*
*C. Door switch state*
*D. Model select state*
*E. Main cavity temperature*
*F. Secondary cavity temperature*
*G. Meat probe temperature*
*H. Warm drawer temperature (if applicable)*

| Model Select State | Description |
|---|---|
| 01 | Thermal convection oven |
| 07 | Self-clean oven |

**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.

## 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.
- 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 code in memory.

**To Clear Last Error Code**

1. Unplug range or disconnect power.
2. Wait 10 seconds, and reconnect or plug in range.
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 Default** | **E0** | No error(s) found |
| **SUGGESTED CORRECTIVE ACTION PROCEDURE** | | |
| (Good) No corrective action required | | |
| **F1 Internal** | **E0** | Check oven user interface |
| **SUGGESTED CORRECTIVE ACTION PROCEDURE** | | |

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

1. Unplug range or disconnect power.
2. Replace the user interface.
3. Replace all parts and panels before operating.
4. Plug in range or reconnect power.
5. Verify operation is normal. Press OFF, OFF, START to re-enter the Diagnostics Mode and complete checks.

| | | |
|---|---|---|
| **F1 Internal** | **E1** | Check oven appliance manager |
| **SUGGESTED CORRECTIVE ACTION PROCEDURE** | | |

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

1. Unplug range or disconnect power.
2. Check oven door switch. If there is no error, go to Step 3.
3. Replace oven appliance manager.
4. Replace all parts and panels before operating.
5. Plug in range or reconnect power.
6. Verify operation is normal. Press OFF, OFF, START to re-enter the Diagnostics Mode and complete checks.

| | | |
|---|---|---|
| **F2 Keypad** | **E0** | Keypad disconnected |
| | **E1** | Stuck key/Shorted key |
| **SUGGESTED CORRECTIVE ACTION PROCEDURE** | | |

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

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

| FAILURE (Leftmost 2 Clock Digits) | ERROR (Rightmost 2 Clock Digits) | LIKELY FAILURE CONDITION |
|---|---|---|
| **F3 Sensors** | **E0** | Main oven sensor open or shorted |
| | **E3** | Meat probe shorted |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

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

   If it is not plugged in properly and fully inserted, 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 plugged in and fully seated, 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:

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

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

   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 MAIN sensor:

   Replace appropriate temperature sensor. Repeat Step 7.

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

   If the requirements are met, go to Step 11.

   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 placed and firmly connected.
10. Ensure all wiring connections are made.
11. Replace all parts and panels before operating.
12. Plug in range or reconnect power.
13. Observe for longer than 1 minute.
14. Enter into Diagnostics mode and read sensor for main oven sensor and meat probe on immediate display.

| F3 Sensors | E1 | Lower main oven sensor shorted or open |
|---|---|---|
| | **E2** | Warming drawer sensor shorted |

SUGGESTED CORRECTIVE ACTION PROCEDURE

**PROCEDURE:** Range 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** | **EO** | Door and latch switch do not agree |
| | **E1** | Door latch not operating |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

**To Verify Door Switch:**

1. While in Diagnostics mode, open the oven door. The second digit on the clock display should toggle between “1” and “0” as the door opens and closes. When the door is closed, the display should show “1,” when the door is open, the display should show “0.”

   If the second digit on the clock display 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 range 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 range or disconnect power.
5. Check integrity of all harness wires and connections between the appliance manager and the door/latch assembly. Ensure that there are 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 range or disconnect power.
7. Replace appliance manager. Go to Step 8.
8. Replace all parts and panels before operating.
9. Plug in range 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 CLEAN within the first 120 seconds of powering up to cycle the latch motor to the locked position. “1” should be displayed in the first clock digit when locked. Press CLEAN to cycle the latch motor to the unlocked position. The first clock digit should toggle to “0” when door is unlocked.

   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 range or disconnect power.
3. Replace door latch motor assembly. Go to Step 11.
4. Unplug range or disconnect power.
5. Check integrity of all harness wires and connections between the appliance manager and the door latch switch. Ensure that there are 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 range or disconnect power.
7. Replace appliance manager. Go to Step 11.
8. Unplug range or disconnect power.
9. Check integrity of latch mechanism, ensuring alignment of latch assembly and door slot. Correct any mechanical malfunctions.
10. Check continuity of the latch motor and electrical connections between the appliance manager P8 and motor.

    If the continuity is not present, replace appliance manager. Go to Step 11.

    If the continuity is present, go to Step 11.
11. Replace all parts and panels before operating.
12. Plug in range 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 | EO | Lost communication |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes. Ensure AM software, USIF software and EEPROM checksum versions appear on the lower text line. If AM software versions do not appear, UI and AM may not be communicating.

1. Unplug range or disconnect power.
2. 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 not, plug in connectors and go to Step 6.
   - If fully plugged in, go to Step 3.
3. 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 5Ω.
   - If any of these checks fail, go to Step 5.
   - If these checks pass, reconnect P2, then go to Step 4.
4. Replace the appliance manager. Go to Step 6.
5. Replace the wiring harness (signal). Go to Step 6.
6. Ensure all wiring connections are made.
7. Replace all parts and panels before operating.
8. Plug in range or reconnect power.
9. Observe for longer than 1 minute.
10. 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 4 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 | E1 | Cook oven over temperature |
| | E2 | Clean oven over temperature |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

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 range or disconnect power. Wait 10 seconds.
3. Plug in range 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.
6. If the Bake relay does not cycle, go to Step 7.
7. Unplug range or disconnect power for 30 seconds.
8. Plug in range or reconnect power.
9. Enter the 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 14.
   - If the element does not cycle with the relay, go to Step 12.
   - If the element does cycle on and off, go to Step 10.
10. Enter the diagnostics mode by pressing OFF, OFF, START. Press the BROIL key 1 time for outer broil element. 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 14.
    - If the element does not cycle with the relay, go to Step 12.
    - If the element does cycle on and off, go to Step 11.
11. Enter the diagnostics mode by pressing OFF, OFF, START. Press the CONVECT key to cycle the convect relay on and off.
    - If the Convect relay does not turn on and off, go to Step 14.
    - If the element does not cycle with the relay, go to Step 12.
12. Unplug range or disconnect power.
13. 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 is good, go to Step 15.
    - If the wiring connections are not intact, go to Step 17.
14. Unplug range or disconnect power.
15. Replace the appliance manager. Go to Step 16.
16. Replace user interface board. Go to Step 17.
17. Replace the harness.
18. Replace all parts and panels before operating.
19. Plug in range or reconnect power.
20. Verify operation is normal. Press OFF, OFF, START to re-enter Diagnostics Mode and complete checks.

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

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Range 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 | E4 | User interface/ appliance manager mismatch |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

1. Unplug range or disconnect power. Wait 10 seconds.
2. Plug in range 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 1 minute to ensure error has been resolved. If error returns, proceed to Step 13.
13. Unplug range or disconnect power.
14. Remove covers for access to oven controls.
15. Replace the appliance manager. Ensure all connections are properly seated. Go to Step 16.
16. Replace all parts and panels before operating.
17. Plug in range or reconnect power.
18. Press BAKE and ensure that Bake relay energizes and the control enters into Bake/Preheat. Wait up to 1 minute to ensure error has been resolved. If error returns, go to Step 19.
19. Unplug range 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 range or reconnect power.
23. Press BAKE and ensure the Bake relay energizes and the control enters into Bake/Preheat. Wait up to 1 minute to ensure error has been resolved.

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

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes. 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 1 minute after cavity size has been set, go to Step 1.

1. Unplug range or disconnect power. Wait 10 seconds.
2. Plug in range 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 1 minute to ensure error has been corrected.

   If error is corrected, go to Step 6.

   If error returns, go to Step 4.
4. Unplug range or disconnect power.
5. Replace user interface ensuring all connections are properly seated and go to Step 6.
6. Replace all parts and panels before operating.
7. Plug in range or reconnect power.
8. 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 1 minute to ensure error has been corrected.

| FAILURE (Leftmost 2 Clock Digits) | ERROR (Rightmost 2 Clock Digits) | LIKELY FAILURE CONDITION |
|---|---|---|
| F8 | E0 | Blower low speed too low |
| | E2 | Blower high speed too low |

**SUGGESTED CORRECTIVE ACTION PROCEDURE**

**PROCEDURE:** Before proceeding, press OFF, OFF, START to enter Diagnostics Mode and verify the error codes.

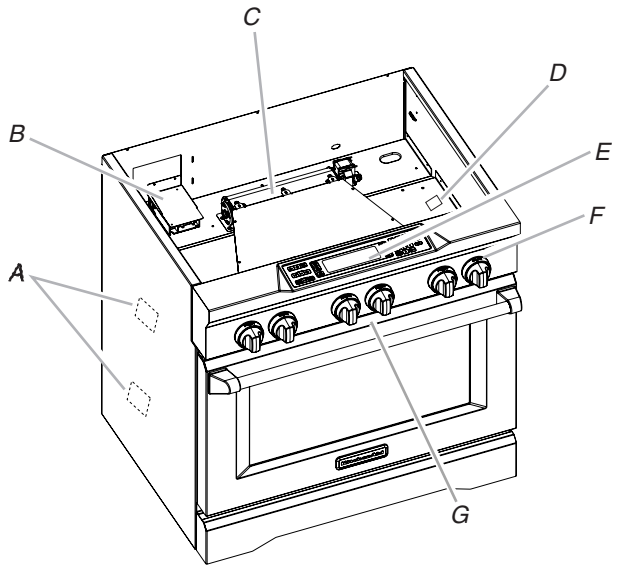
**To verify blower:**

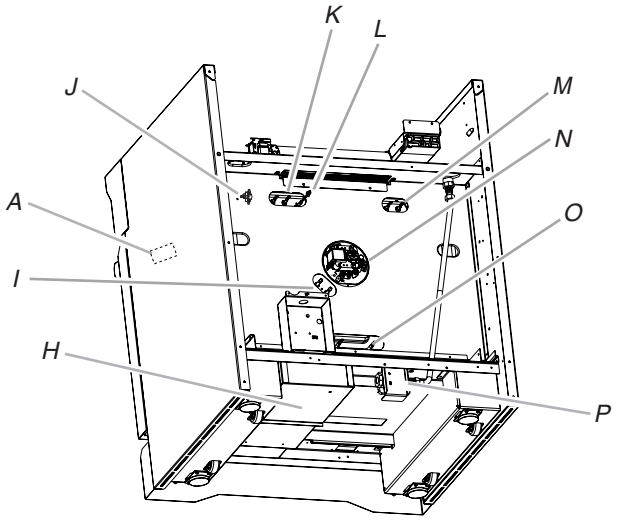
1. Unplug range or disconnect power.
2. Verify power connection to blower.
3. Verify connections to speed sensor.
4. Verify speed sensor is mounted properly.
5. Verify that there are no obstructions restricting blower operation.

   If error is corrected, go to Step 7.

   If error occurs again and all connections and sensor mounting is correct and no obstructions are observed, go to Step 6.
6. Replace the blower.
7. Replace all parts and panels before operating.
8. Plug in range or reconnect power.
9. Verify operation is normal.

## Component Locations

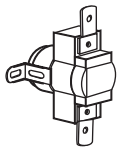



*A. Halogen lights*
*B. Ignition module*
*C. Blower*
*D. Transformer*
*E. User interface*
*F. Gas valve micro switch*
*G. Door latch*
*H. Appliance manager (control)*
*I. Convection element*
*J. Oven shutdown thermal cutoff (non-resettable)*
*K. Inner broil element*
*L. Temperature sensor*
*M. Outer broil element*
*N. Convection fan*
*O. Bake element*
*P. Gas pressure regulator*

## 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. | Marking (with Black Letters) |
|---|---|---|
| 4449751 | 338ºF ± 11.7ºF (170ºC ± 6.5C) | Red label |

2. Unplug range or disconnect power.
3. Replace the oven thermal cutoff (non-resettable). Refer to the chart for the correct Part Number.
4. Replace all parts and panels before operating.
5. Plug in range or reconnect power.

## Serviceability

| Oven Components | Front/Rear/Bottom Serviceable |
|---|---|
| User interface display | Front |
| Appliance manager | Bottom |
| Control power transformer | Front |
| Keypad | Front |
| Halogen lights | Front |
| Door switch | Front |
| Latch switch | Front |
| Latch motor | Front |
| Oven temperature sensor | Front |
| Meat probe sensor | Probe - front<br>Jack - rear |
| Blower motor | Rear |
| Thermal cutoff (non-resettable) | Rear |
| Oven convection fan motor | Rear |
| Oven convection ring element | Front |
| Bake element | Rear |
| Inner/outer broil element | Front |

## Relay Logic

| Modes | Relays | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Bake** | **In Broil** | **Out Broil** | **Conv Elem** | **Conv Fan** | **Dlb Relay** | **Oven Light** | **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 | Off | 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 | Cycling* | 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) |
| Clean | Cycling* | Cycling* | Cycling* | Off | Off | On | Off | On (High speed) |

*Maximum period: 60 seconds

## Component Tests at the Oven Control Panel

| Component | Front/Rear Serviceable | Check Points | Results |
|---|---|---|---|
| Door switch | Front | P1-7 (BR) to P1-5 (T) | Door open = open circuit<br>Door closed = closed circuit |
| Latch motor | Front | P8-5 (OR) to Neutral (W) | 2450Ω at 70°F (21°C) |
| Oven temperature sensor | Rear | P2-1 (V) to P2-2 (V) | 1080Ω at 70°F (21°C) |
| Blower motor - low<br>Blower motor - high | Rear<br>Rear | P8-4 (R) to Neutral (W)<br>P9-2 (BK) to Neutral (W) | 24+/- 5%<br>13 +/- 5% |
| Oven shutdown TOD | Rear | Output side of double line break relay (R) to (R) at terminal block | Closed Circuit |
| Bake element | Rear | T3-3 (R) to output side of double line break relay T2-1 (R/W) | 18 - 25Ω |
| Broil element - inner | Front | T3-4 (OR) to output side of double line break relay T1-1 (R/W) | 15 - 18Ω |
| Broil element - outer | Front | T3-1 (BU) to output side of double line break relay T1-1 (R/W) | 20 - 27Ω |
| Convection ring element | Front | T3-2 (Y) to output side of double line break relay T2-1 (R/W) | 19 - 38Ω |
| Convection fan motor | Rear | P8-3 (OR) to Neutral (W) | 8 - 12Ω |
| Latch switch | Front | P1-4 (BU) to P1-5 (T) | Door unlocked = open circuit<br>Door locked = closed circuit |

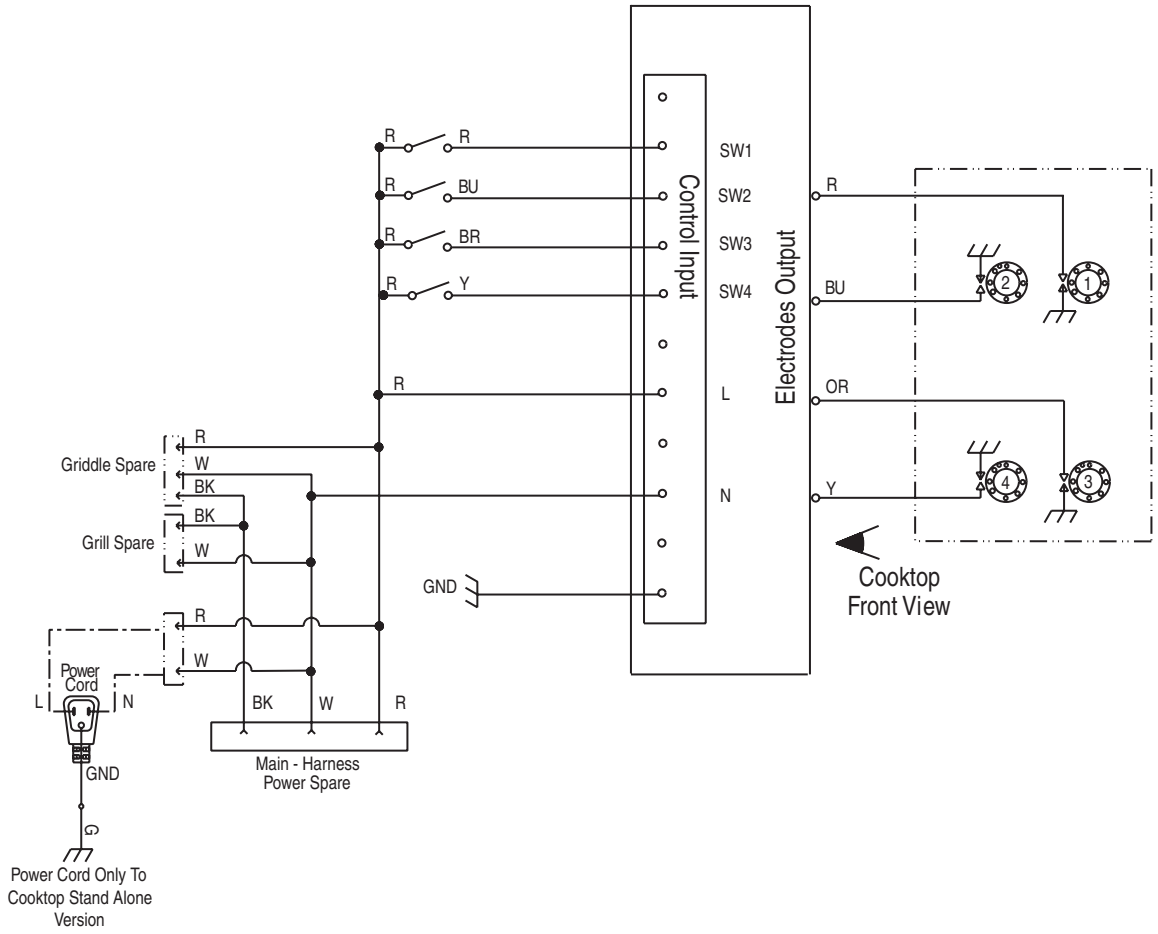
**NOTE:** The oven shutdown thermal cutoff (non-resettable) is located at the back of the range. It will shut down all elements if the temperature at the top of the oven exceeds component limits.

# Wiring Diagram

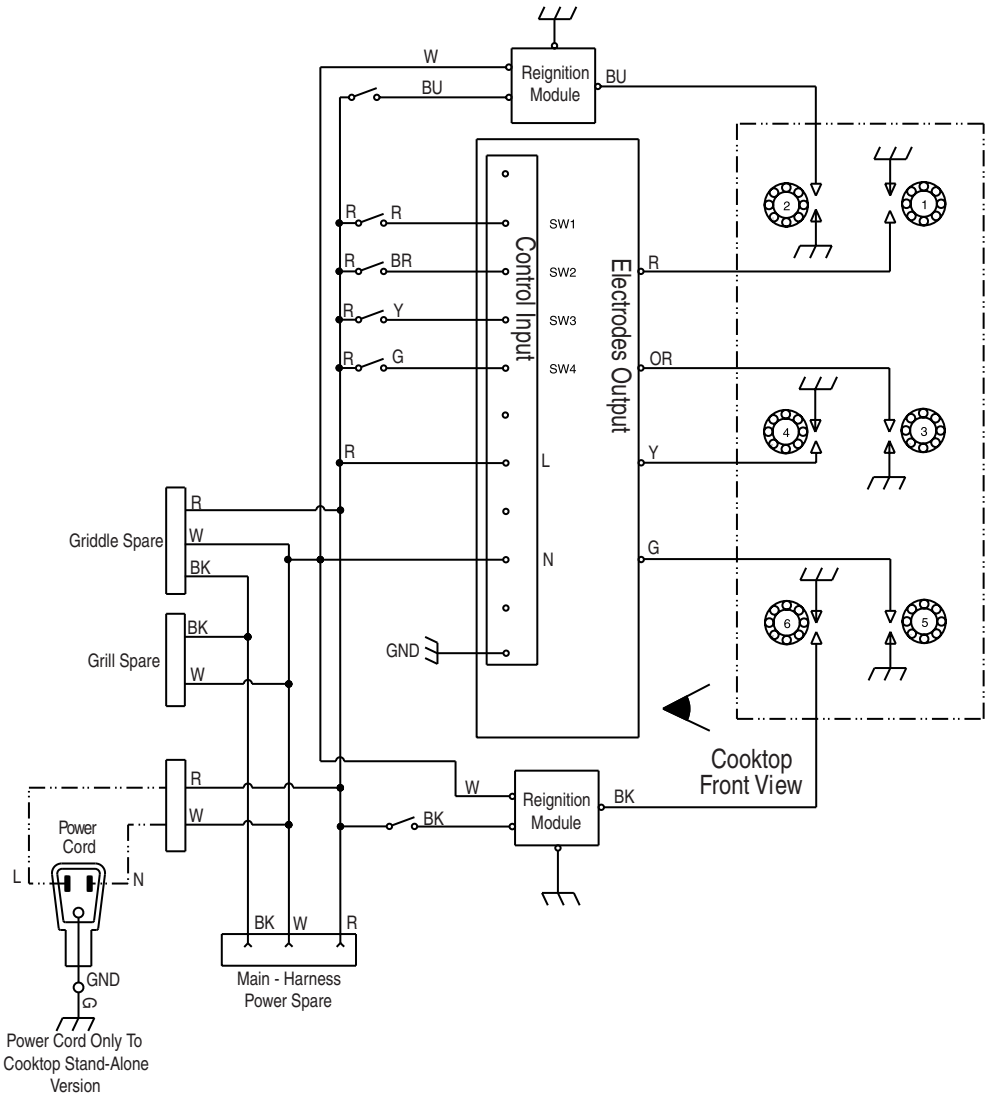
**Caution**: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

## Cooktop Schematics

**4 Burner Cooktop**



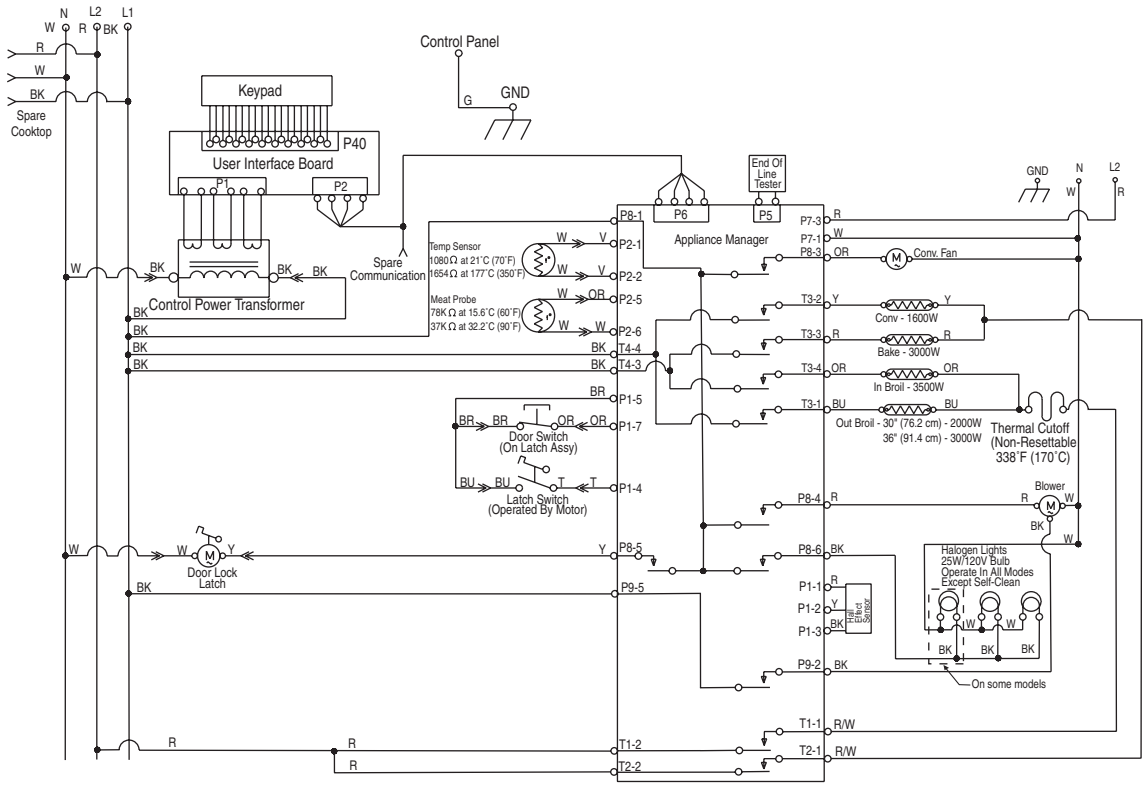
**6 Burner Cooktop**



## Oven Schematic

**NOTES:**

- End of line tester is for manufacturing purpose only.
- Dots indicate connections or splices.
- Circuit shown in STANDBY/OFF mode with oven door closed.



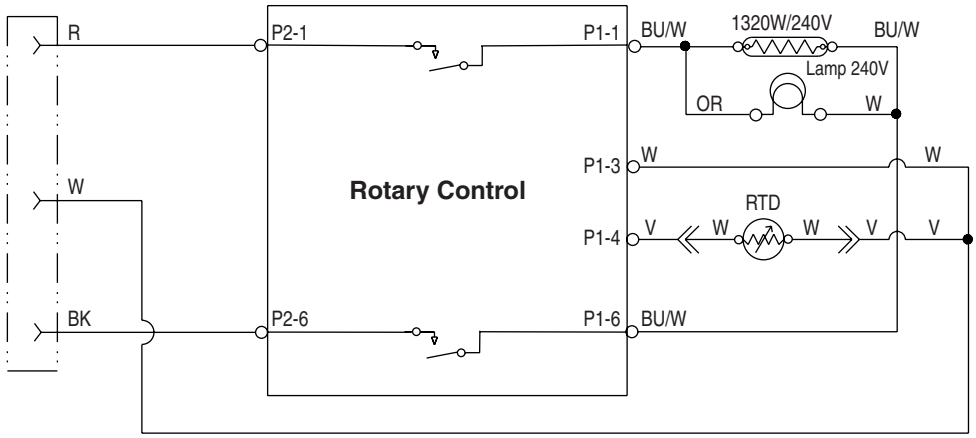

## LEGEND

| 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) | Thermostat |
|---|---|---|---|---|---|---|---|---|---|---|---|

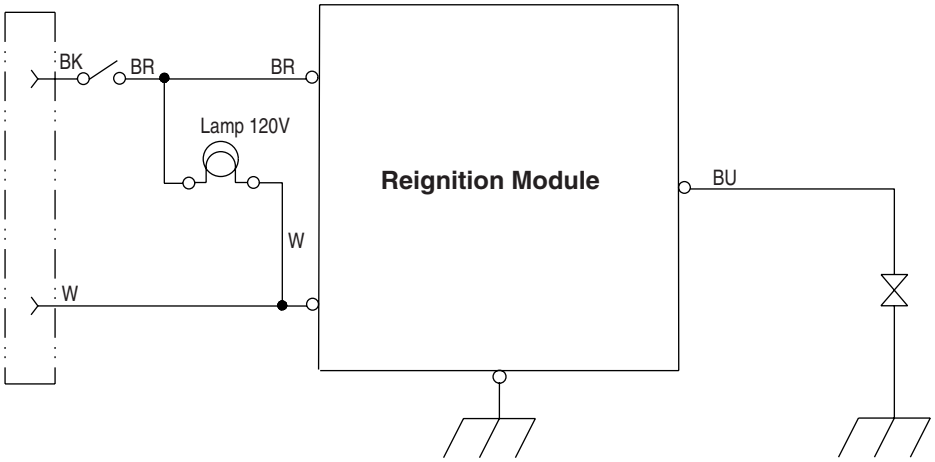
## Strip Circuits

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.

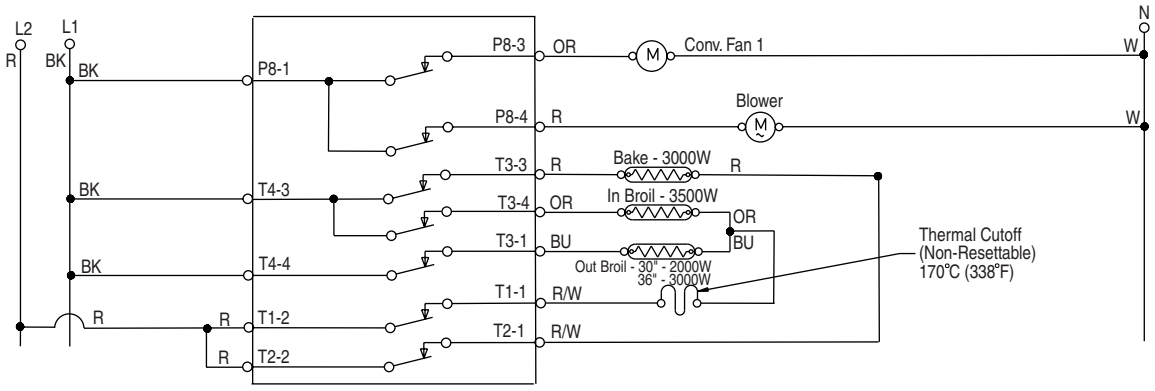
**Griddle 240V Control Wiring Diagram To Cooktop Stand-Alone and Freestanding**



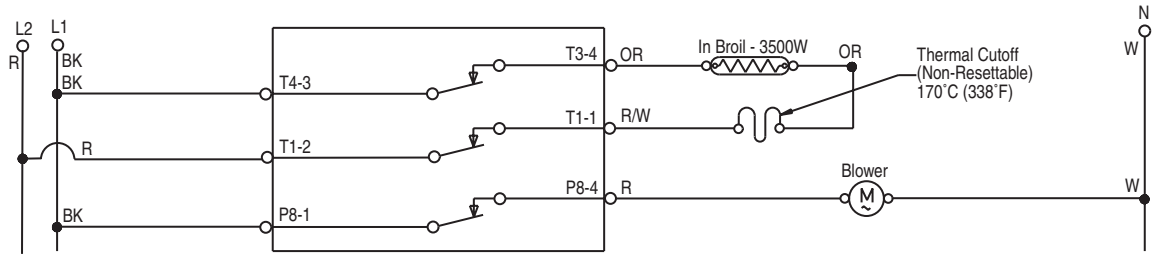

**Grill Reignition Wiring Diagram To Cooktop Stand-Alone and Freestanding**



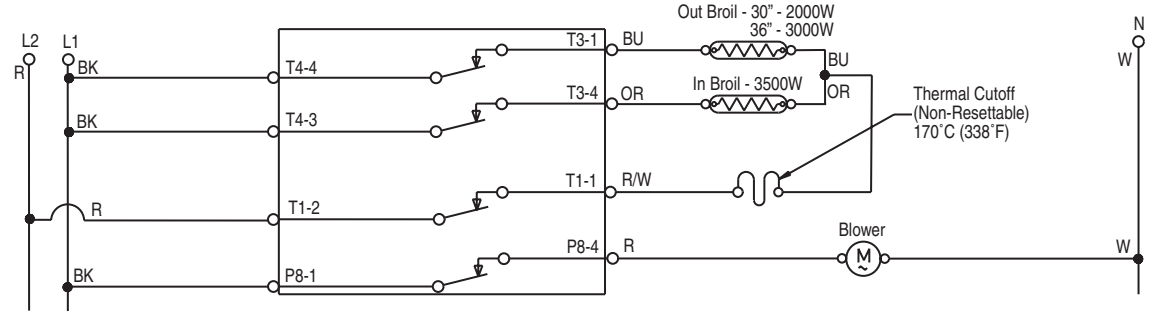

**Bake Preheat B, Bake Preheat A, Bake SS, Convect Bake Preheat B, Convect Roast Preheat B, Convect Roast Preheat A, Convect Roast SS**



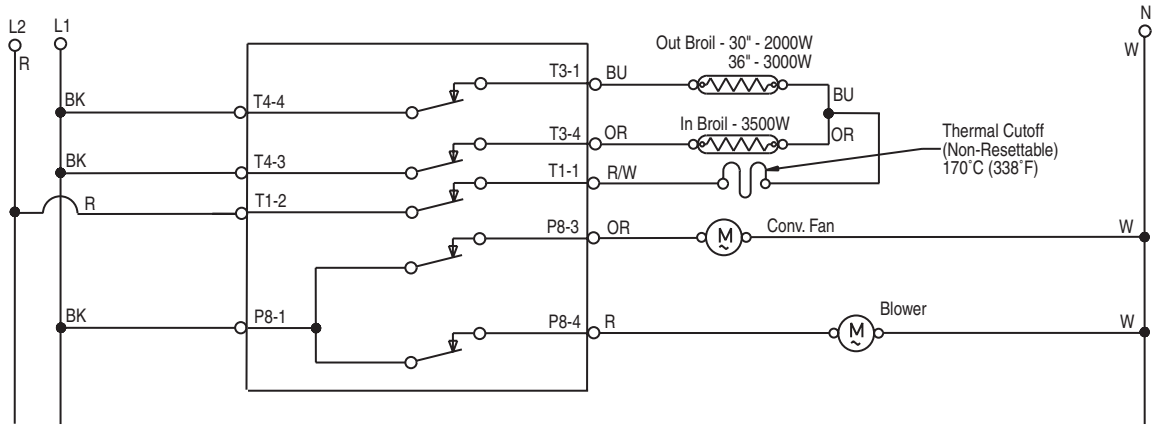
**Inner Broil Preheat B, Inner Broil Preheat A, Inner Broil SS**



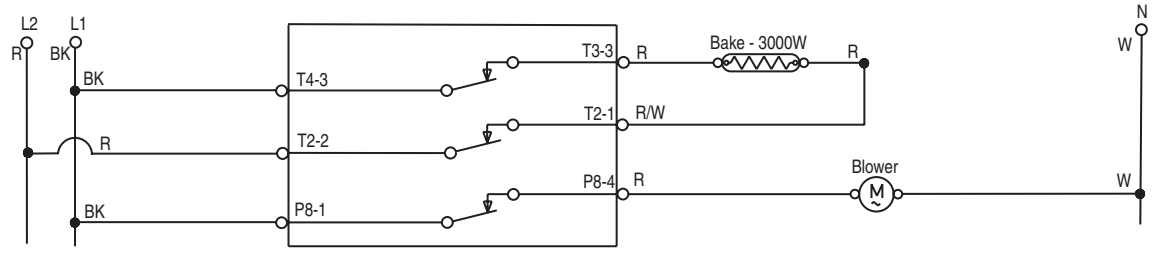

**Full Broil Preheat B, Full Broil Preheat A, Full Broil SS**



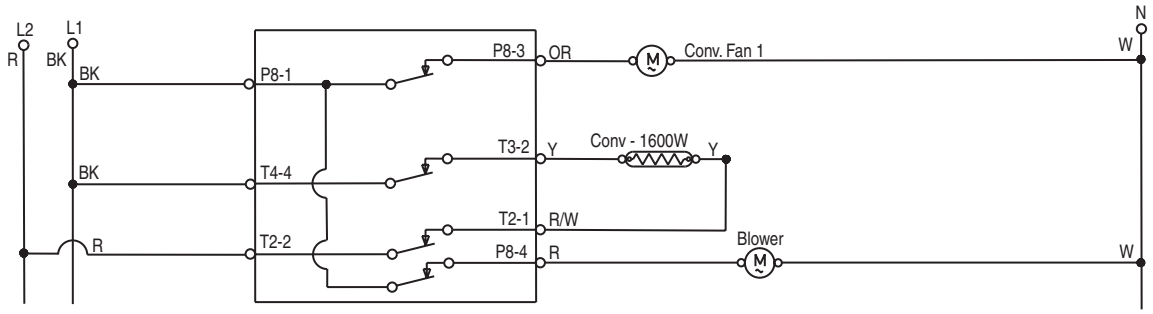

**Convect Broil Preheat B, Convect Broil Preheat A, Convect Broil SS**



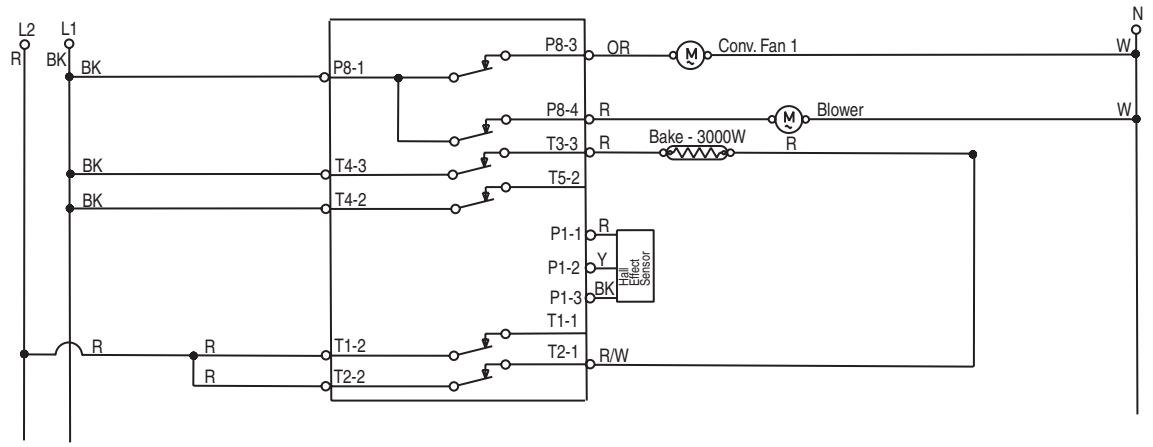

**Bread Proof Preheat B, Bread Proof Preheat A, Bread Proof SS**



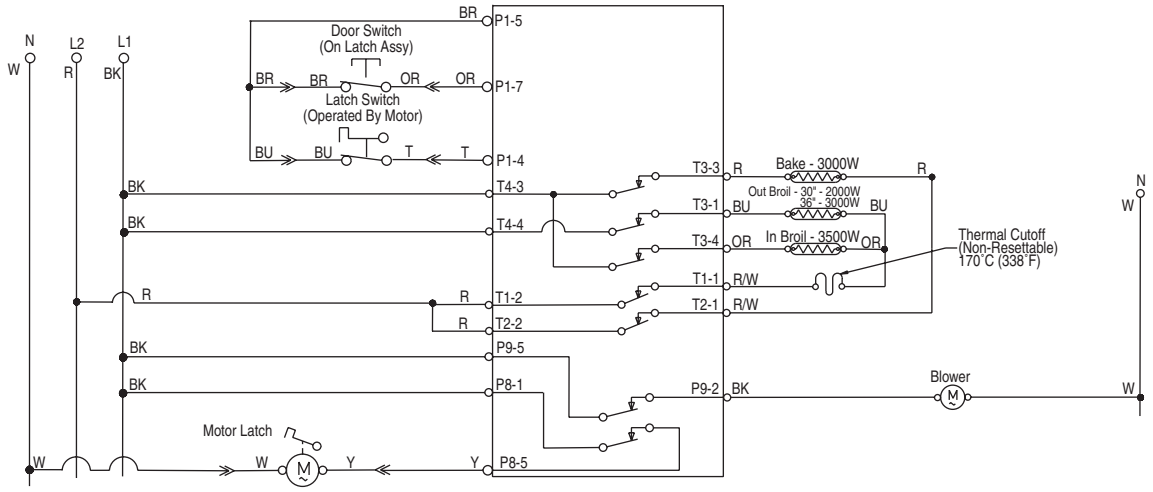
## Convect Bake Preheat A, Convect Bake SS




## Keep Warm




## Self-Clean



**W10403294A**

**NOTE:** This sheet contains important Technical Service Data.

**FOR SERVICE TECHNICIAN ONLY**
**DO NOT REMOVE OR DESTROY**