



# ⚠ 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.**

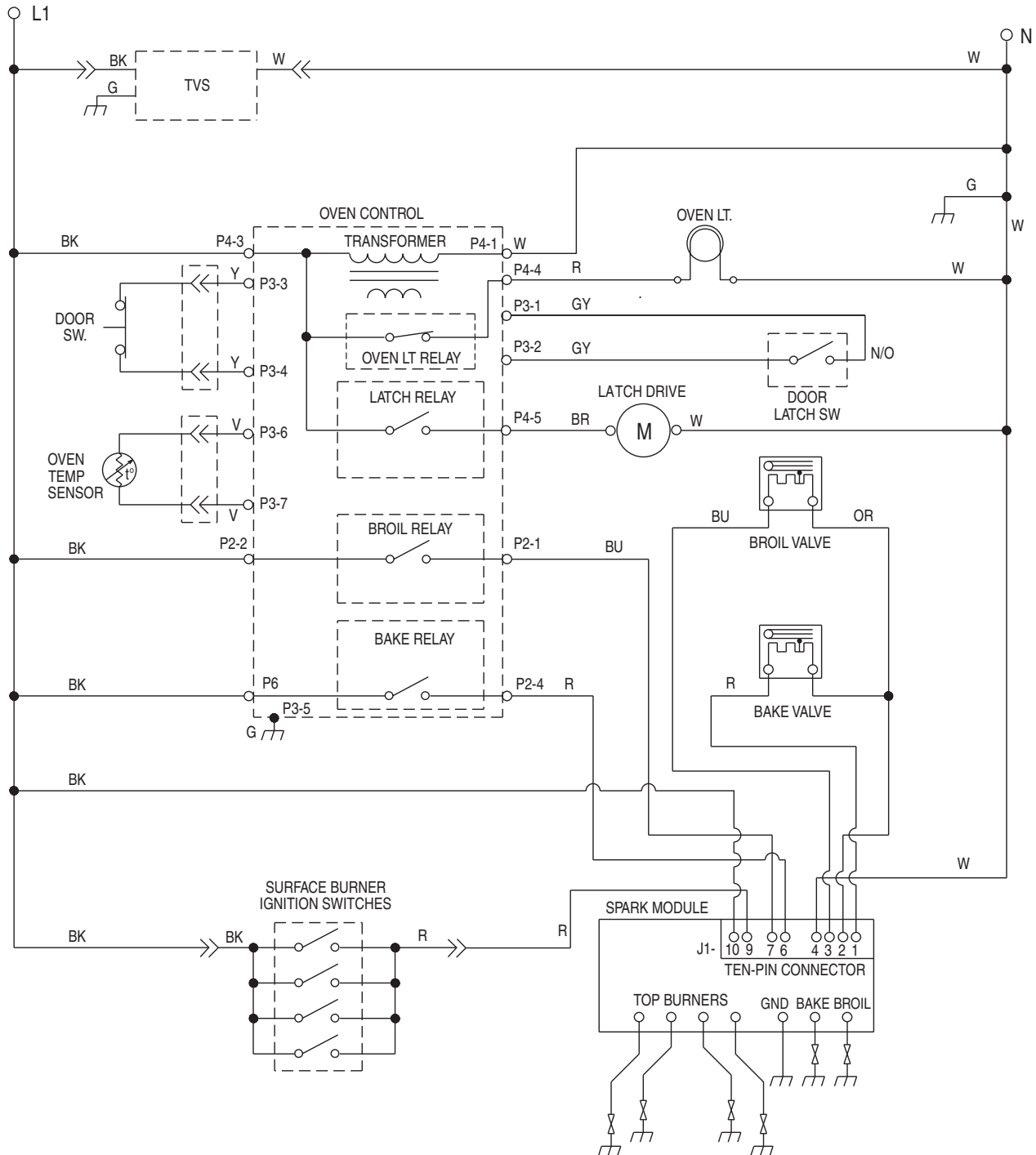
Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS:

3,659,578	3,877,460	4,467,184
3,788,300	4,102,322	4,565,967
3,832,988	4,364,589	4,613,739

OTHER PATENTS PENDING.

**NOTE:** Schematic shows door latch switch in the COOK position with oven door open, oven off and light on.



## DIAGNOSTICS

Unplug range or disconnect power before performing the following checks:

- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per volt DC or greater.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

### Temperature Adjustment If Control Has Touch Pads Only

- Press and hold BAKE pad for five (5) seconds. Current offset, if any, is shown in 3-digit display. CAL is shown in 4-digit display (3 digits on right).
- Pressing the TEMP pad "up" arrow (s) adjusts the temperature in 10°F increments in the following sequence: 0°, 10°, 20°, 30°, -30°, -20°, -10°, 0°, and so on.
- Press START/ENTER pad to activate the desired temperature adjustment. If the START/ENTER pad is not pressed within 5 minutes, adjustment is ignored.
- BAKE temperature adjustment cannot result in operating temperatures higher than 500°F or lower than 170°F, as measured at oven cavity center.
- Once the BAKE temperature has been adjusted, BROIL temperatures are automatically offset to the same degree.
- CLEAN temperature is also offset automatically when BAKE temperature is adjusted. If BAKE temperature has been raised, CLEAN temperature is offset +5°F. If BAKE temperature has been lowered, CLEAN temperature is offset -5°F.

### Temperature Adjustment If Control Has Temperature Knob

- Press and hold CLOCK pad for five (5) seconds. Current offset, if any, is shown in 3-digit display.
- Pressing the "up" arrow (s) adjusts the temperature in 10°F increments in the following sequence: 0°; 10°; 20°; 30°; -30°; -20°; -10°; 0°; and so on.
- Press the CLOCK pad to activate the new temperature adjustment.
- If the CLOCK pad is not pressed within 1 minute, the adjustment is accepted and display reverts to idle.
- BAKE temperature adjustment cannot result in operating temperatures higher than 500° F, or lower than 170° F, as measured at oven cavity center.
- Once the BAKE temperature has been adjusted, BROIL temperatures are automatically offset to the same degree.

## FAILURE/ERROR DISPLAY CODES

4-DIGIT DISPLAY	3-DIGIT DISPLAY	LIKELY FAILURE CONDITION	SUGGESTED CORRECTIVE ACTION PROCEDURE
F1	E0	EEPROM communications error	<ol style="list-style-type: none"> <li>1. Verify failure, if not displayed, using CANCEL/OFF key. Press key for 5 seconds until last error code is displayed.</li> <li>2. Unplug range or disconnect power longer than 30 seconds.</li> <li>3. Plug in range or reconnect power.</li> <li>4. Observe for longer than 1 minute.</li> <li>5. If failure remains, go to step 6.</li> <li>6. Unplug range or disconnect power.</li> <li>7. Replace control.</li> </ol>
	E1	EEPROM checksum failure	
	E2	UL A/D error(s)	
F2	E0	Shorted key	<ol style="list-style-type: none"> <li>1. Verify failure, if not displayed, using CANCEL/OFF key. Press for 5 seconds.</li> <li>2. Unplug range or disconnect power.</li> <li>3. If applicable, ensure membrane tail is seated in connector on back of control.</li> <li>4. Plug in range or reconnect power and observe for longer than 1 minute.</li> <li>5. If failure remains, go to step 6.</li> <li>6. Unplug range or disconnect power.</li> <li>7. Replace control.</li> </ol>
	E1	Keytail unplugged	
F3	E0	Oven sensor opened	<ol style="list-style-type: none"> <li>1. Unplug range or disconnect power.</li> <li>2. Disconnect sensor from harness.</li> <li>3. Measure sensor value (between connector pins) between 1000 Ω @ 32° F and 2697 Ω @ 900° F (room temperature approx. = 1080 Ω). Also measure from sensor connector to sensor casing for possible short. If measurement does not correlate to real temperature, or if short is found, replace sensor.</li> <li>4. Trace wires and connectors to sensor from control, then back to control. If wire or connection is damaged, replace the harness.</li> <li>5. Reconnect the sensor to the harness.</li> <li>6. Plug in range or reconnect power.</li> <li>7. Press BAKE and START/ENTER. Observe for longer than 1 minute. If failure remains, go to step 8.</li> <li>8. Unplug range or disconnect power.</li> <li>9. Replace control.</li> </ol>
	E1	Oven sensor shorted	
	E2	BAKE/BROIL range over temperature	
	E3	CLEAN range over temperature	
F5	E0	Door and switches do not agree	<ol style="list-style-type: none"> <li>1. Unplug range or disconnect power.</li> <li>2. Check wires and connectors from control to door switch, then from door switch to control.</li> <li>3. If no damage to wires or connectors, replace door switch.</li> <li>4. Plug in range or reconnect power.</li> <li>5. Press CANCEL/OFF key. Program and start the CLEAN mode, and observe for 1 minute to ensure that operation is normal.</li> </ol>

**FAILURE/ERROR DISPLAY CODES**

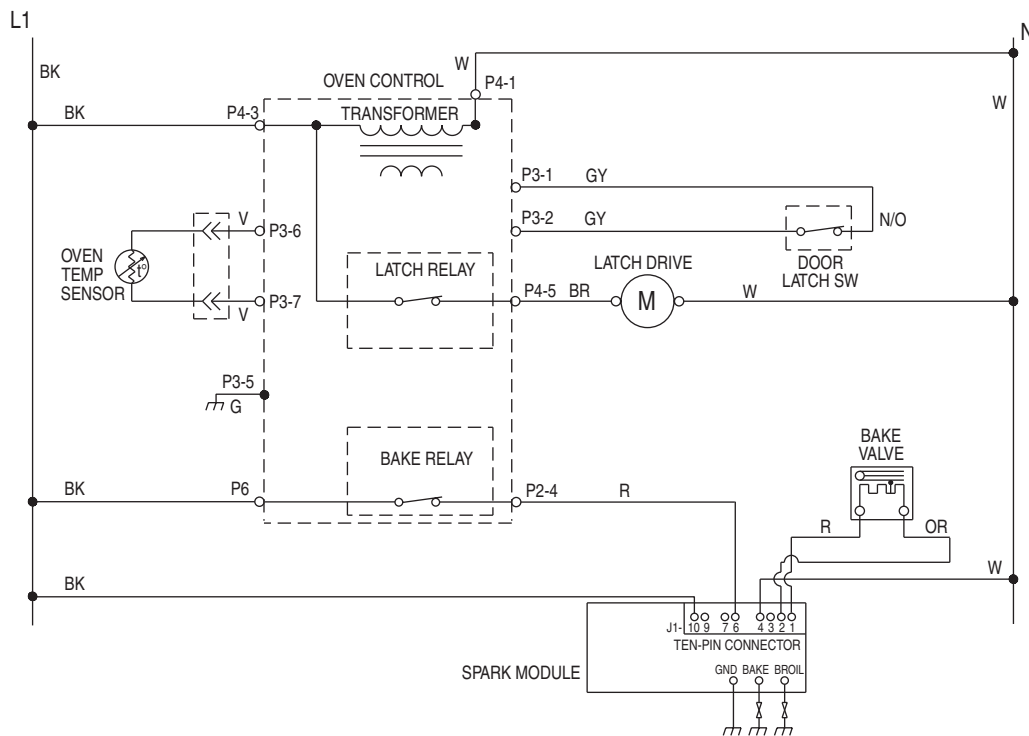
4-DIGIT DISPLAY	3-DIGIT DISPLAY	LIKELY FAILURE CONDITION	SUGGESTED CORRECTIVE ACTION PROCEDURE
<b>F5</b>	<b>E1</b>	Door latch not operating	<ol style="list-style-type: none"> <li>1. Verify error code by pressing and holding CANCEL/OFF key for 5 seconds. Momentarily (less than 5 sec.) press CANCEL/OFF key again to remove error code display.</li> <li>2. If the door is not latched (locked), ensure that it is completely closed. Press CLEAN then START/ENTER. Verify that the latch motor is operating.</li> <li>3. Unplug range or disconnect power.</li> <li>4. If motor did operate, check integrity of latch mechanism from cam/eccentric, through actuating rod, to latch pawl and door slot. Ensure that pawl aligns with the door slot. Correct any mechanical malfunction. Go to step 6.</li> <li>5. If motor did not operate, check continuity of the latch motor and of electrical connections between oven control and motor. If continuity is present, replace control.</li> <li>6. Plug in range or reconnect power.</li> <li>7. Put range into CLEAN mode to verify proper operation.</li> </ol>
<b>F5</b>	<b>E2</b>	Latch error during CLEAN	<ol style="list-style-type: none"> <li>1. Unplug range or disconnect power.</li> <li>2. Check wires and connectors from control to door switch, then from door switch to control.</li> <li>3. If no damage to wires or connectors, replace door switch.</li> <li>4. Plug in range or reconnect power.</li> <li>5. Press CANCEL/OFF key. Program and start the CLEAN mode, and observe for 1 minute to ensure that operation is normal.</li> </ol>
<b>OVEN ON LED flashing*</b>		The oven knob is not in the OFF position when the unit is powered up	Turn oven knob to OFF and then turn to the desired temperature.
<b>DOOR LOCKED/CLEANING and HEATING LED flashing*</b>		Center tap voltage failure	<ol style="list-style-type: none"> <li>1. Unplug range or disconnect power.</li> <li>2. Replace control.</li> </ol>

\*Knob 150 controls only

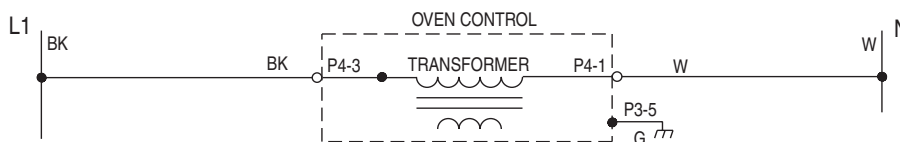
**STRIP CIRCUITS**

The following individual circuits are for use in diagnosis, 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 120 volt power supply at the wall outlet.

**CLEAN**



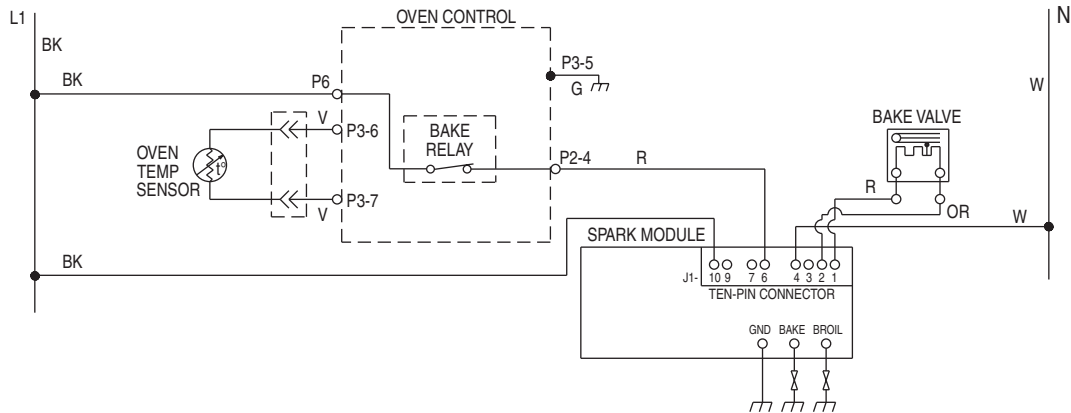
**CONTROL POWER**



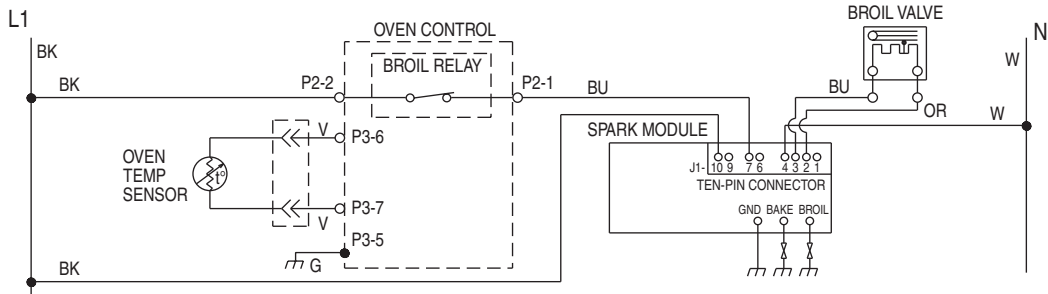
**STRIP CIRCUITS**

The following individual circuits are for use in diagnosis, 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 120 volt power supply at the wall outlet.

**BAKE**

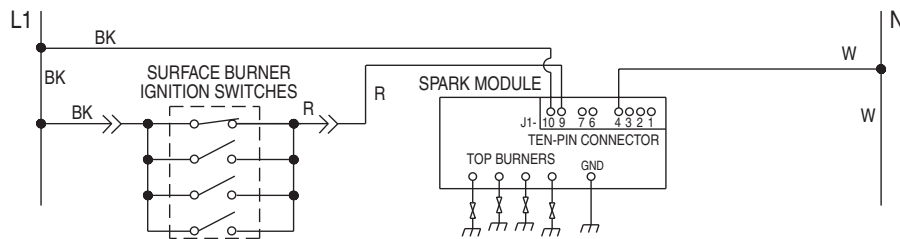


**BROIL**



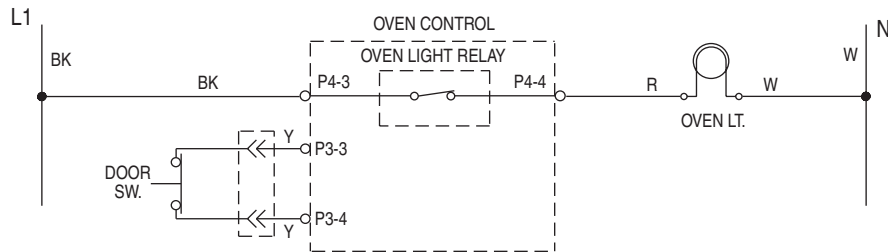
**SURFACE UNIT**

(TYPICAL)



**OVEN LIGHT**

(IF EQUIPPED)



**PART NO. 9758087**

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

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