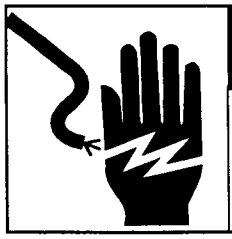

⚠ WARNING

Electrical Shock Hazard

Disconnect from electric supply before servicing. Failure to do so could result in serious injury or death.

Electronic Control Failure Codes

NOTE:

1. All diagnoses of this oven must begin with normal check of line voltage, blown fuses, and defective components.
2. All units that are defective the first few days of use should be checked for loose or miswiring.
3. All checks should be made with a meter having sensitivity of 20,000 ohms per volt or greater.

NOTE: Connections may be intermittent due to a corrosive buildup between the connections to the terminals, or by being bent by the insertion of a probe, etc.

F1 Failed Transistor in Electronic Control

If code cannot be cancelled, replace Electronic Control.

F2 "Runaway" Oven Temperature

If oven temperature exceeds 590° F with door in unlocked position, or 990° with door in locked position check for the following:

- Welded relay contacts.

If failure code is displayed even though oven temperature **does not** exceed 590° F with door in unlocked position, or 990° with door in locked position, check for the following:

- A high resistance connection or any other cause of high resistance in the sensor circuit.
- A source of electrical interference such as from a cordless telephone plugged into the same circuit as the range.
- Open thermal switch (self resetting) on rear wall of control area. Switch is normally closed and will open if area overheats due to inoperative cooling fan. Check fan operation.
- Strong signals (such as from a nearby ham radio, etc.) picked up by the sensor wire harness can result in a false F2 code.

NOTE: Remember that the Electronic Control measures resistance of sensor circuit, not actual oven temperature.

F3 Shorted Sensor Circuit

Measure sensor circuit resistance at sensor/lock switch disconnect plug at Electronic Control. Ohmmeter should read approximately 1100 ohms at room temperature. Measure lead to lead and from each lead to chassis ground. Check for:

- Shorted sensor. Measure resistance directly across sensor (pull sensor into oven about 10 inches for access to sensor disconnect).
- Both sensor leads shorted to ground.

F4 Open Sensor Circuit

Measure sensor circuit resistance of sensor/lock switch connector at the Electronic Control. Ohmmeter should read approximately 1100 ohms at room temperature. If the circuit is open, check for:

- Open sensor. Measure directly across sensor (pull sensor into oven about 10 inches for access to sensor disconnect).
- Cut or pinched sensor harness wire.
- Melted sensor disconnect (behind oven). Sensor disconnect may melt during SELF-CLEAN cycle if improperly positioned against oven cavity.
- Loss of contact within sensor harness connectors at back of oven or at Electronic Control.
- One or both sensor leads shorted to ground.

If circuit appears normal (reads approximately 1100 ohms):

- Reinstall sensor disconnect plug to Electronic Control and measure sensor resistance from connector pin solder joints on back of Electronic Control circuit board. If circuit is open, problem is in connector plug. Remove terminals from connector plug and bend terminals to restore contact pressure.

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Door Switch Circuit

If "Door" appears in the display, check for following conditions:

- BAKE mode selected with door latched.
- Continuous beeping sound.
- CLEAN mode selected with door unlatched.

NOTE: Check door switch circuit in each case.

Relay Board

Do not contact the printed circuit side of the relay board when power is applied. Do not apply power to the apppliance when the relay board is not securely mounted in position. Electrical contact surfaces may be exposed on the relay board and could result in the risk of accidental electric shock or damage to components.

To Test Bake Element Relay Contacts:

1. Disconnect the appliance from power.
2. Remove the wires from terminals E4 and E5 of the relay board.

CAUTION: Insulate the exposed portion of the terminal connector on the removed wires with insulating electrical tape to prevent the risk of accidental electrical shock or damage to the components.

3. An ohmmeter reading across relay board terminals E4 and E5 should show no continuity.
4. Reconnect the appliance to power.
5. Program the electronic control for BAKE and select a temperature setting higher than the present oven temperature.
6. Continuity should be indicated when the relay is activated by the electronic control.
7. Press the OFF/CLEAR pad to exit BAKE mode.
8. Disconnect the appliance from power once again.
9. Remove insulating electrical tape before reattaching removed wires.

To Test Broil Element Relay Contacts:

1. Disconnect the appliance from power.
2. Remove the wires from terminals E6 and E7 of the relay board.
3. An ohmmeter reading across terminals E6 and E7 of the relay board should show no continuity.

CAUTION: Insulate the exposed portion of the terminal connector on the removed wires with insulating electrical tape to prevent the risk of accidental electrical shock or damage to the components.

4. Connect the appliance to power.
5. Test operation for BAKE mode:
   - Program the electronic control for BAKE at a temperature setting higher than the present oven temperature.
   - Continuity should be indicated during intervals when the relay is activated by the electronic control.
   - If operation for BROIL will not be tested, proceed to step 7.
6. Test operation for BROIL mode:
   - Program the electronic control for BROIL.
   - Continuity should be indicated when the relay is activated by the electronic control.
7. Press the OFF/CLEAN button to exit the BAKE or BROIL mode.
8. Disconnect the appliance from power.
9. Remove insulating electrical tape before reattaching removed wires.

To Check Transformer Primary Winding Contintuity:

1. Disconnect the appliance from power.
2. Remove the wires from terminals E1 and E2 of the relay board.
3. An ohmmeter reading across terminals E1 and E2 should show about 130 ohms.
4. Reattach removed wires.

Door Lock Switch Test

1. Disconnect the appliance from power.
2. Remove the wires from the door lock switch.
3. Connect an ohmmeter to the NO and COM terminals of the switch
4. Continuity should be indicated when the switch lever is in the depressed position. No continuity should be indicated when the switch lever is not depressed.
5. Reassemble in the reverse order. Reattach removed wires.

Touch Pad Ohmmeter Test

The Electronic Control will sound a tone when a pad is touched. Determine which pad or pads are not working before making an ohmmeter test.

Pull the ribbon connector locking tab out from the control to free the ribbon connector.

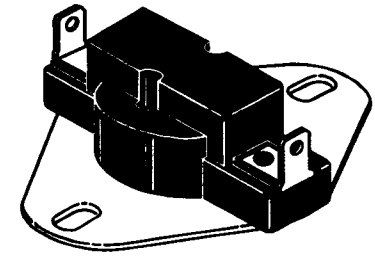
Test the resistance of the touch pads at the ribbon connector end as shown in the following table. Be sure the function pad is pressed when testing.

Function	Conductors	Ohms
BROIL	4 to 7	0 to 80
BAKE	5 to 7	0 to 80
CLEAN	6 to 7	0 to 80
CLOCK (SET)	3 to 8	0 to 150
COOK TIME	4 to 8	0 to 150
TIMER (ON/OFF)	5 to 8	0 to 150
STOP TIME	6 to 8	0 to 150
CLEAR/OFF	1 to 2	0 to 150

Oven Temperature Calibration

1. Push the BAKE pad. Turn the Set Knob clockwise to a temperature setting above 500° F.
2. Immediately push and hold the BAKE pad again until the display shows "00".
3. Turn the Set Knob until the desired temperature change (between -35° F and +35° F) shows in the display.
4. Push the OFF/CLEAR pad to enter the new temperature and return to normal operation.

High Limit Switch

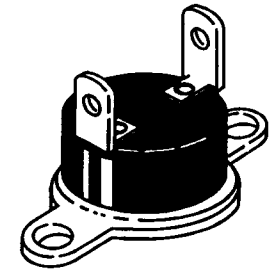


The high limit switch is a normally closed single pole, single throw switch with an opening temperature of approximately 225° F. The switch is attached to the top insulation retainer, in front of the fan.

The high limit switch is in series with the Bake and Broil elements. When the operating temperature of the switch is reached, the switch opens and operation of the Bake element and the Broil element is prevented. Power to operate the elements and oven signal light is restored when the switch cools to closing temperature and the contacts close.

Continuity should be indicated when the switch is below the operating temperature.

Fan (Blower) Disc Switch

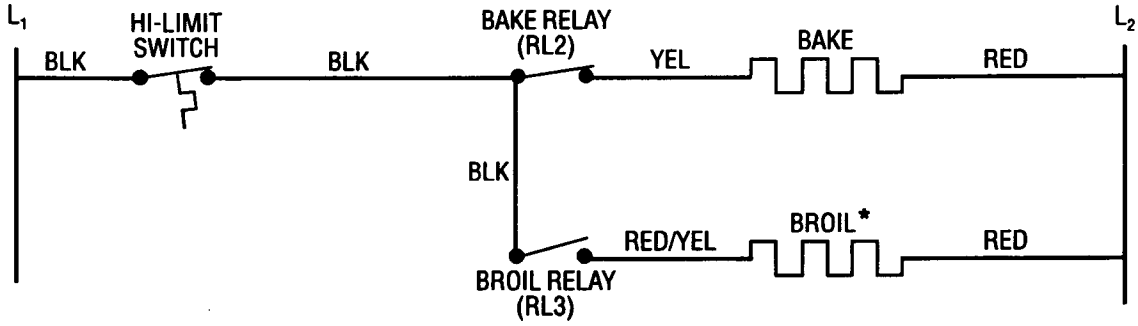


The unit is equipped with a fan disc switch (blower switch). The switch is a normally open single pole, single throw switch that closes at 160° F and opens at 145° F. The switch is located on the top insulation retainer, midway between the fan and clock.

Strip Circuits

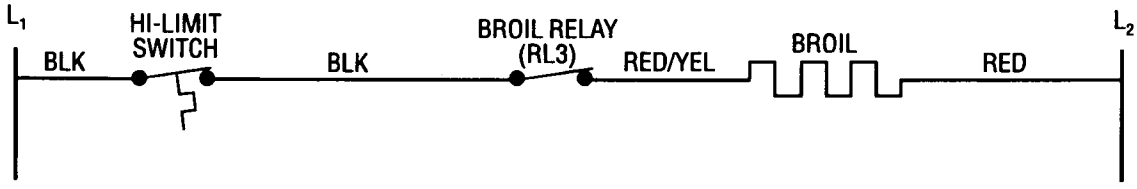
The following individual circuits are for use in diagnosis. Before starting diagnosis, check the line voltage and for blown fuses.

BAKE & TIME BAKE

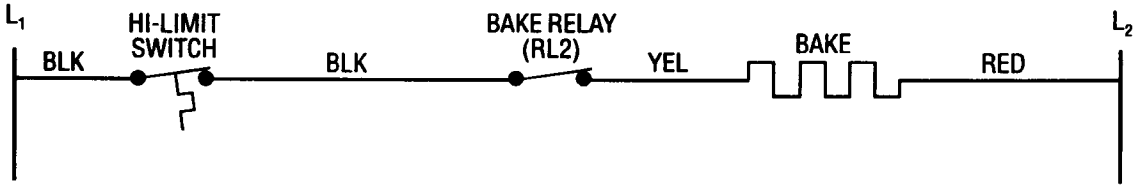


* Broil element is on approximately 8% of the time during BAKE mode. RL2 and RL3 relays will be on at the same time. During first (pre-heat) cycle, only the Bake element is on.

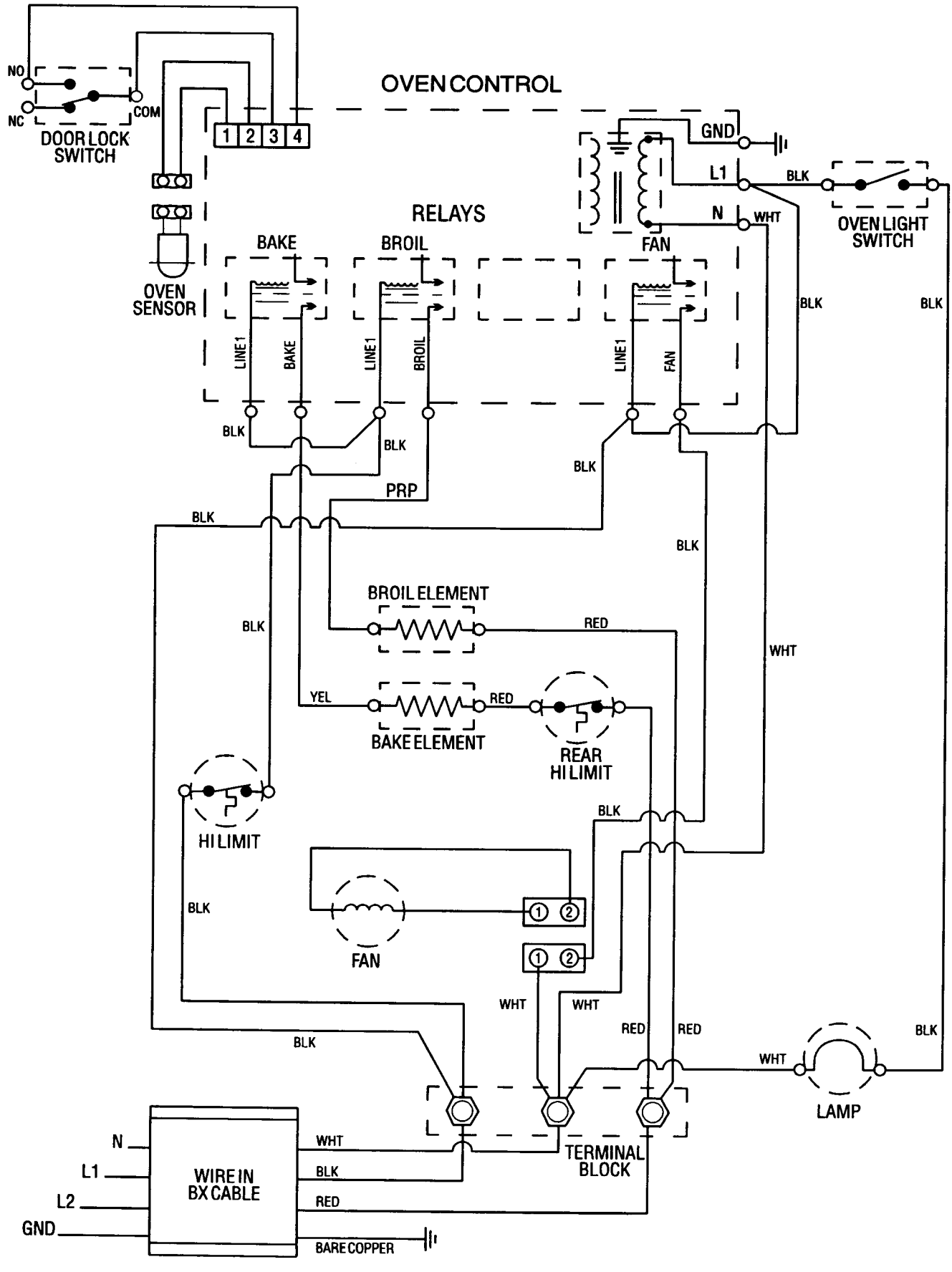
BROIL & CLEAN (until first OFF cycle)



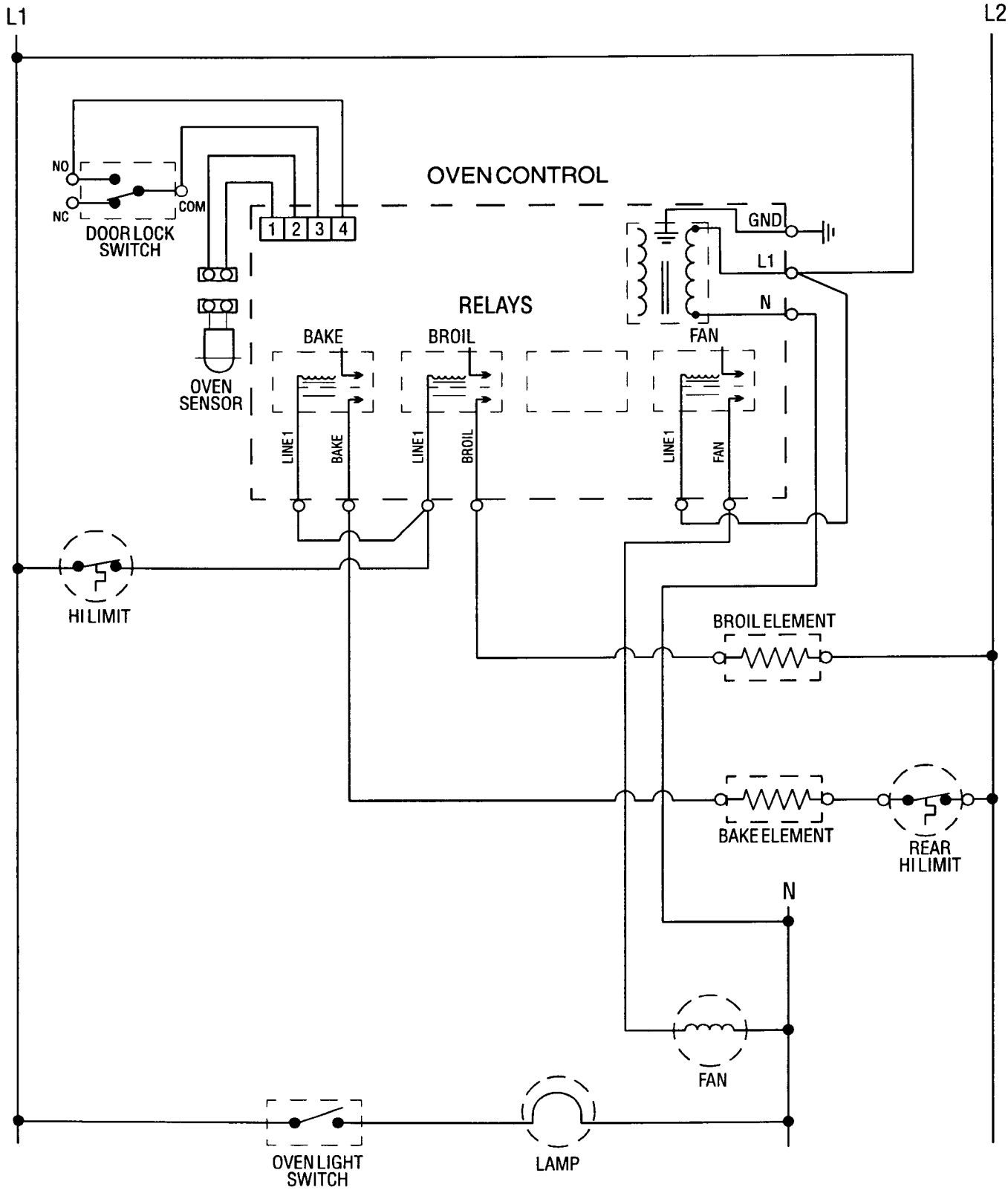
CLEAN



Wiring Diagram



Wiring Schematic



TECH SHEET - FOR SERVICE TECHNICIAN'S USE ONLY

FUNCTION	DOOR LOCK SWITCH	RELAY CONTACTS	
	N.O.	Line 1/BROIL	Line 1/BAKE
OFF	Open	Open	Open
BAKE	Open	See Note 1	Cycles
BROIL	Open	See Note 2	Open
TIME BAKE	Open	See Note 1	Cycles
CLEAN	Closed	See Note 3	See Note 3

NOTES:

1. Cycles at 8% rate.
2. HI BROIL - cycles at full rate.
   LO BROIL - cycles at 80% rate.
3. First 30 minutes, only Line 1/BROIL operates, cycling at 80% rate.
   After 30 minutes, only Line 1/BAKE operates, cycling at full rate.

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NOTE: This sheet contains important Technical Service Data

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