

⚠ 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.

DIAGNOSTIC GUIDE

Before servicing, check the following:

- Make sure there is power at the wall outlet.
- Has a household fuse blown or circuit breaker tripped? Time delay fuse?
- Is dryer vent properly installed and clear of lint or obstructions?
- All tests/checks should be made with a VOM (volt-ohm-milliammeter) or DVM (digital-voltmeter) having a sensitivity of 20,000 ohms per volt DC or greater.
- Check all connections before replacing components. Look for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- A potential cause of a control not functioning is corrosion on connections. Observe connections and check for continuity with an ohmmeter.
- Connectors: Look at top of connector. Check for broken or loose wires. Check for wires not pressed into connector far enough to engage metal barbs.
- Resistance checks must be made with dryer unplugged or power disconnected.

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 anti-static 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 anti-static 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 anti-static bag, observe above instructions.

DIAGNOSTIC TESTS

These tests allow factory or service personnel to test and verify all inputs to the machine control electronics. You may want to do a quick and overall checkup of the dryer with these tests before going to specific troubleshooting tests.

DIAGNOSTIC TEST #1 – CONTROLS OPERATION

Activating the Diagnostic Test #1 Mode

1. Be sure the dryer is in standby mode (plugged in and all indicators off).
2. Press the following button sequence all within 5 seconds:
 Manual Dry Time (+) → Manual Dry Time (–) → Manual Dry Time (+) → Manual Dry Time (–)
3. After a 2 second pause, all indicators on the console are illuminated with the software revision showing in the Estimated Time Remaining display, if this test mode has been entered successfully.

If unsuccessful entry into diagnostic mode, actions can be taken for specific indications:

Indication 1: None of the indicators or display turns on.

Action: Select any Manual Cycle.

→ If indicators come on, then try to change the dryer time by pressing the Manual Dry Time (+) and (–) buttons. If either button fails to change the time, something is faulty with one of those buttons, and it is not possible to enter the diagnostic mode. Remove the user interface assembly. See Accessing & Removing the Electronic Assemblies, page 6.

→ If no indicators come on after pressing the Manual Cycle buttons, go to TEST #1, page 3.

Indication 2: E1 or E2 flashes from the display.

Action: Proceed to TEST #3a, page 4.

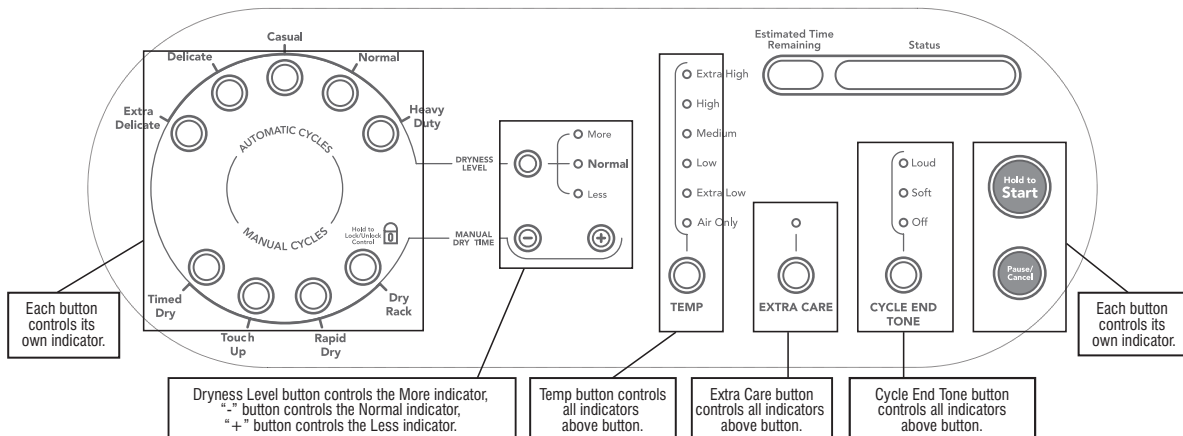


Figure 1. Console Diagnostics

Diagnostic: Console switches and indicators

Pressing each button or turning the cycle selector to each cycle should cause a beep tone and control one or more LEDs as shown in figure 1, page 1. The Estimated Time Remaining display will indicate a software project i.d. number.

Diagnostic: Moisture Sensor

Locate two metal strips on the inside right wall or the door well. Bridge these strips with a wet cloth or a finger. If a continual beep is heard, the sensor is OK. If not, or if a beep tone is heard before bridging the moisture strips, go to TEST #4, step 2, page 5.

Diagnostic: Door Switch

Opening the door should cause **ELEC** to be displayed. Closing the door firmly should cause the display to indicate the software revision.

DEACTIVATING THE DIAGNOSTIC TEST #1 MODE

Press Pause/Cancel to exit Diagnostic Test #1 mode.

DIAGNOSTIC TEST #2 - MACHINE OPERATION

ACTIVATING THE DIAGNOSTIC TEST #2 MODE

1. Be sure the dryer is in Standby Mode (plugged in and all indicators off).

2. Press the following button sequence, all within 3 seconds:

Dryness Level → Manual Dry Time (–) → Dryness Level → Manual Dry Time (–)

3. After a 2 second pause, **Diag** will be displayed in the Estimated Time Remaining display for 1 second, if this test mode has been entered successfully.
4. Select any cycle and press Start to run the dryer.
5. The table below shows diagnostic information that can be obtained while the dryer is operating and by pressing and holding the buttons shown:

Press button:	Results shown in Estimated Time Remaining display:
Extra Delicate →	Exhaust temperature
Casual →	Tumbler rotation speed
Delicate →	Blower rotation speed
Heavy Duty →	Number of wet hits
Timed Dry →	Number of running hours
Rapid Dry →	Software revision

DEACTIVATING THE DIAGNOSTIC TEST #2 MODE

Press Pause/Cancel at any time to exit Diagnostic Test #2 mode.

NOTE: Diagnostic mode will automatically exit after 5 minutes of inactivity since the last input from the user.

PROGRAMMING THE CONTROLS

If a new control board has been installed, follow the steps below to select the appropriate fuel (gas or electric).

Menu Mode

This is an operation that is performed at the factory to calibrate the temperature regulating sensor/circuit and toggles between a gas and electric machine (different routines for auto cycle).

ACTIVATING THE MENU MODE

1. Be sure the dryer is in Standby mode (plugged in and all indicators off).
2. Press the following button sequence, all within 3 seconds:

Extra Care → Extra Care → Dryness Level → Pause/Cancel

3. The Menu mode is active until Pause/Cancel is pressed. After Pause/Cancel is pressed, the unit will go into Standby mode.

- Pressing Extra Delicate will set to a **GAS** model.
- Pressing Delicate will set to an **ELECTRIC** model.

4. Press Start to store setting changes.

DEACTIVATING THE MENU MODE

Pressing Pause/Cancel will exit the Menu mode and enter the Standby mode.

DISPLAY FAULT/ERROR CODES

The error codes below would be indicated when attempting to start a drying cycle, or after activating the Diagnostic Test mode.

DISPLAY	DESCRIPTION	EXPLANATION AND RECOMMENDED PROCEDURE
PF	POWER FAILURE	PF flashes to indicate that a power failure occurred while the dryer was running. Press Start to continue the cycle, or press Pause/Cancel to clear the display. Refer to TEST #1, page 3.
E1	TEMPERATURE SENSOR OPEN	E1 flashes in the numeric display when the temperature sensing circuit is open. Refer to TEST #3a, page 4.
E2	TEMPERATURE SENSOR SHORTED	E2 flashes in the numeric display when the temperature sensing circuit is shorted. Refer to TEST #3a, page 4.
E3	BLOWER ROTATION FAILURE	If during a cycle the blower rotational speed drops below 500 rpms, all outputs will be turned off and error code E3 will be displayed. Refer to Diagnostics Tests, Diag Test #2 above.
E4	TUMBLER ROTATION FAILURE	If during a cycle the tumbler rotational speed drops to 0, all outputs will be turned off and error code E4 will be displayed. Refer to Diagnostics Tests, Diag Test #2 above.
E5	DRY RACK SENSOR	If during a Dry Rack cycle the signal is lost, all outputs are turned off and E5 is displayed. Refer to TEST #8, page 6.
E6	EXHAUST HIGH LIMIT FAULT	If the exhaust temperature goes above 190°F (87.7°C) all outputs will turn off and E6 will be displayed. Refer to TEST #3b, page 5.

TROUBLESHOOTING GUIDE

Some tests will require accessing components. See figure 2, page 3 for component locations.

PROBLEM	POSSIBLE CAUSE / TEST
NOTE: Possible Cause/Tests MUST be performed in the sequence shown for each problem.	
WON'T POWER UP. (No response when Control On button is pressed.)	1. Supply connections. See TEST #1, page 3. 2. Check harness connections. 3. User interface assembly. See TEST #5, page 5.
WON'T START CYCLE WHEN START BUTTON IS PRESSED.	1. If number display flashes, check to be sure the door is completely shut, and press and hold down Start for about 1 second. 2. See TEST #2, page 3. 3. See TEST #6, page 5.
WON'T SHUT OFF WHEN EXPECTED.	1. Check Pause/Cancel button. See TEST #5, page 5. 2. User interface assembly. See TEST #5, page 5. 3. Moisture Sensor. See TEST #4, page 5.
CONTROL WON'T ACCEPT SELECTIONS.	User interface assembly. See TEST #5, page 5.
WON'T HEAT.	1. Heater. See TEST #3, page 4. 2. Check harness connections. 3. Check installation.
HEATS IN AIR CYCLE.	Temperature sensor. See TEST #3a, page 4.
SHUTS OFF BEFORE CLOTHES ARE DRY.	Moisture sensor. See TEST #4, page 5.

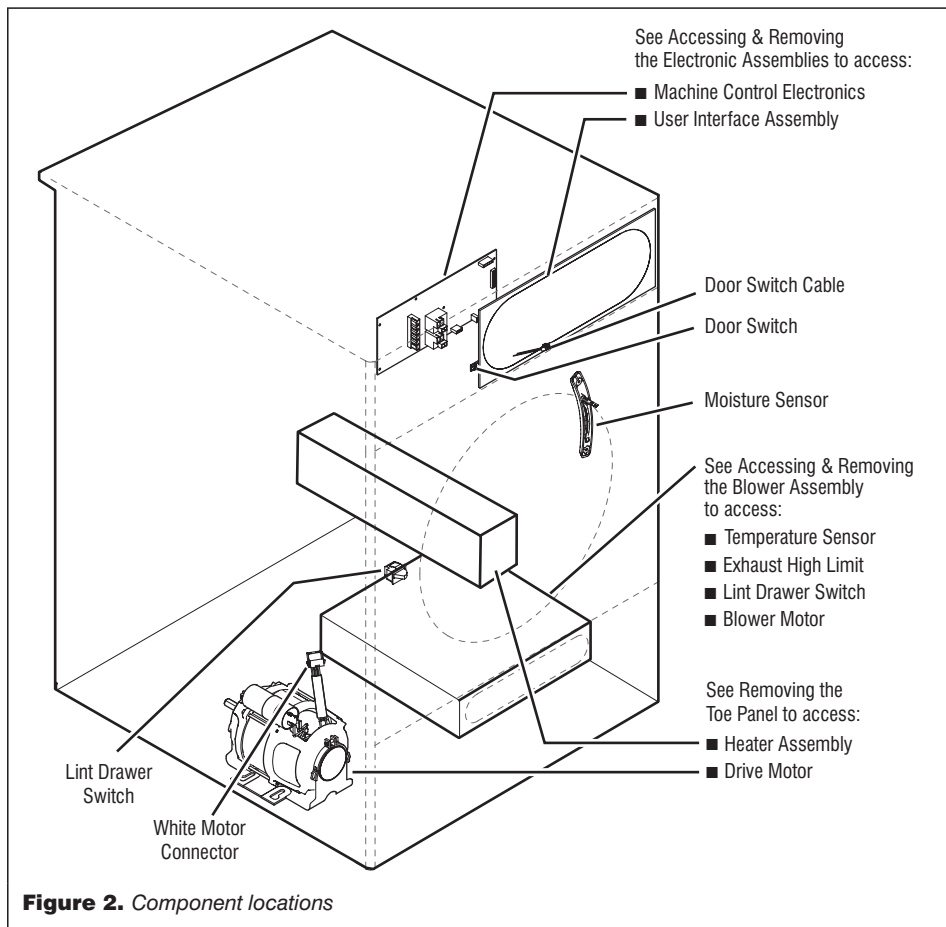


Figure 2. Component locations

TROUBLESHOOTING TESTS

NOTE: These checks are done with the dryer unplugged or disconnected from power.

TEST #1 Supply Connections

This test assumes that proper voltage is present at the outlet, and visual inspection indicates that the power cord is securely fastened to the terminal block.

1. Unplug dryer or disconnect power.
2. Remove the cover plate from the top right corner of the back of the dryer.
3. With an ohmmeter, check for continuity between the neutral (N) terminal of the plug and the center contact on the terminal block. See figure 3.
 - ➔ If there is no continuity, replace the power cord and test the dryer.
 - ➔ If there is continuity, go to step 4.
4. In a similar way, check which terminal of the plug is connected to the left-most contact on the terminal block and make a note of it. This will be L1 (black wire) in the wiring diagram. See figure 3.
 - ➔ When this is found, go to step 5.
 - ➔ If neither of the plug terminals have continuity with the left-most contact of the terminal block, replace the power cord and test the dryer.

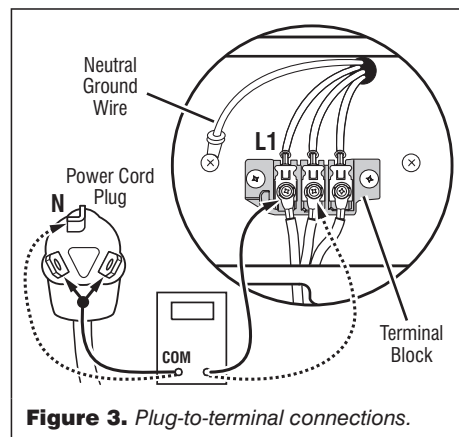


Figure 3. Plug-to-terminal connections.

5. Access the machine control electronics without disconnecting any wiring to the control board. See Accessing & Removing the Electronic Assemblies, page 6.
6. With an ohmmeter, check for continuity between the L1 terminal of the plug (found in step 4) and P2-3 (black wire) on the machine control board.
 - ➔ If there is continuity, go to step 7.
 - ➔ If there is no continuity, check that wires to the terminal block are mechanically secure. If so, replace the main wire harness and test the dryer.
7. Check for continuity between the neutral (N) terminal of the plug and P2-2 (white wire) at the control board.

- ➔ If there is continuity, go to step 8.
 - ➔ If there is no continuity and the mechanical connections of the wire are secure, replace the main wire harness.
8. If the dryer still does not operate, replace the machine control electronics. See Accessing & Removing the Electronic Assemblies, page 6.

TEST #2 Drive Motor Circuit

This test will check the wiring to the motor and the motor itself. The following items are part of this system:

- Harness/connection
- Drive Motor
- Motor Capacitor
- Machine control electronics. See ESD information, page 1.

1. Unplug dryer or disconnect power.
2. Access the machine control electronics and measure the resistance across P2-2 and P2-5. See Accessing & Removing the Electronic Assemblies, page 6.
 - ➔ If resistance across P2-2 and P2-5 is in the range of 1–6 ohms, replace the machine control electronics.
 - ➔ Otherwise, go to step 3.
3. Check the wiring and components in the path between these measurement points by referring to the wiring diagram on page 8.
4. Check the drive motor and motor capacitor. Access the drive motor by removing the toe panel. See Removing the Toe Panel, page 7.
5. Disconnect the white motor connector from the drive motor. See figure 4.

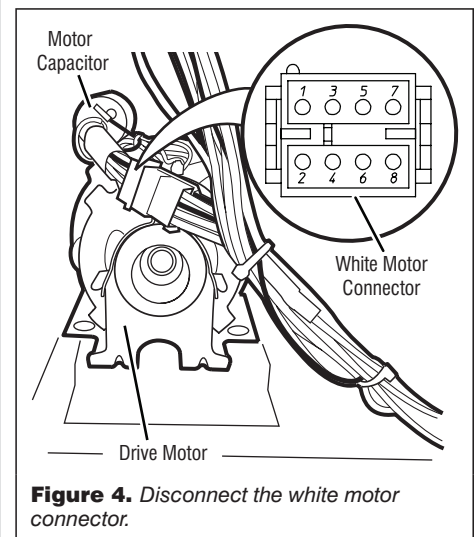


Figure 4. Disconnect the white motor connector.

6. Check the resistance value of the motor capacitor. See figure 5, page 4 for location.

IMPORTANT: Discharge the capacitor by touching a 20,000 ohm resistor to the motor capacitor terminals and the capacitor case.

 - a) Set the ohmmeter to the R X 10k scale.
 - b) Contact the motor capacitor terminals. The resistance should be low at first and then gradually increase towards infinity.
 - ➔ If the resistance at the motor capacitor is correct, go to step 7.

- If the resistance at the motor capacitor is not correct, replace the capacitor.
- 7.** Check the resistance value of the motor's Main winding coil by contacting points 7 and 8 of the white motor connector, as shown in figure 4, page 3.
- If the resistance at the drive motor is in the range of 2.4–3.6 ohms, there is an open circuit between the motor and the machine control electronics. Replace the main wiring harness.
- If the resistance at the drive motor is much greater than 4 ohms, replace the drive motor.
- 8.** Door Switch problems can be uncovered in the Diagnostic Tests on page 2; however, if this was not done, the following can be done without applying power to the dryer. Connect an ohmmeter across P6-2 (black wire) and P6-1 (black wire). With the door properly closed, the ohmmeter should indicate a closed circuit (0–2 ohms). If not, replace the door switch assembly.

TEST #3 Heating Circuit

This test is performed when either of the following situations occur:

- ✓ Dryer doesn't heat
- ✓ Heat won't shut off

This test checks the components making up the heating circuit. The following items are part of this system:

- Harness/connection
- Heater relay
- Thermal cut-off (TCO)
- High limit thermostat
- Heater element (inside heater assembly)
- Temperature sensor
- Machine control electronics. See ESD information, page 1.

Dryer does not heat:

- 1.** Unplug dryer or disconnect power.
- 2.** Remove the toe panel to access the thermal components. See Removing the Toe Panel, page 7. Locate the components using figure 5.
- 3.** Perform TEST #3b. If the exhaust high limit manual reset is OK, go to step 4.
- 4.** Locate the high limit thermostat. See figure 5. Measure the continuity through it by connecting the meter probes to the red and black wires.
 - If there is an open circuit, replace the high limit thermostat.
 - Otherwise, go to step 5.
- 5.** Locate the thermal cut-off (TCO). See figure 5. Measure the continuity through it by connecting the meter probes to the red wires.
 - If there is an open circuit, replace the thermal cut-off (TCO).
 - Otherwise, go to step 6.
- 6.** Perform TEST #3c. If this is OK, replace the machine control electronics.

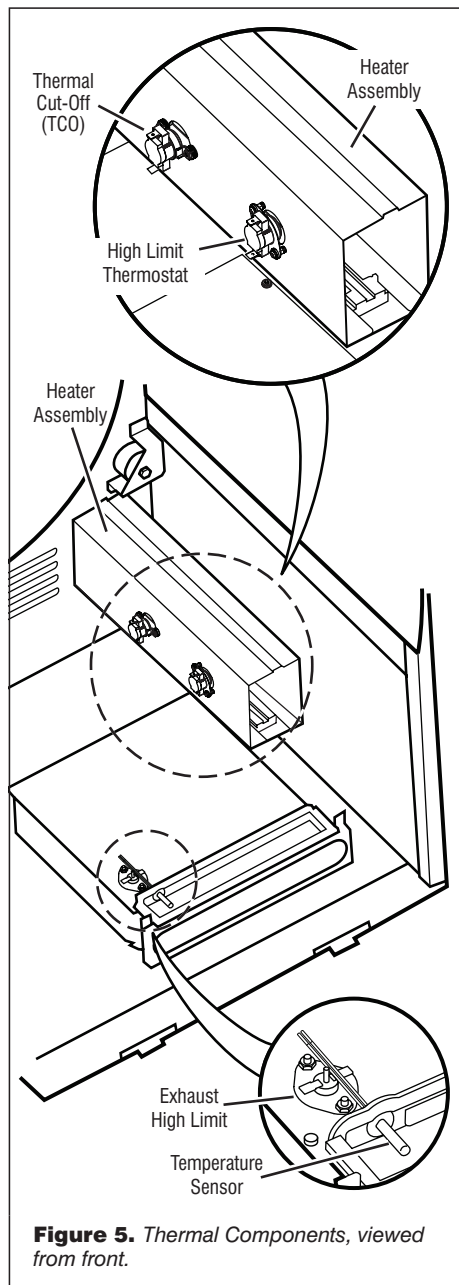


Figure 5. Thermal Components, viewed from front.

Heat will not shut off:

- 1.** Unplug dryer or disconnect power.
- 2.** Access the machine control electronics. See Accessing & Removing the Electronic Assemblies, page 6. Measure the resistance between P3-15 (red wire) and P3-16 (black wire).
- 3.** Set the multi-meter to the diode check setting.
- 4.** Touch the red lead of the meter to the black wire of the temperature sensor and the black lead of the meter to the white wire of the sensor. The meter should read open (infinite).
- 5.** Next, reverse the leads so the black meter lead contacts the black wire and the red meter lead contacts the white wire. You should read approximately 1.8 on the meter.

- 6.** With the meter still connected, grasp the probe tightly in your hand and the meter reading should slowly decrease as your hands warm the probe.

If any of these tests fail, replace the temperature sensor.

TEST #3a Temperature Sensor

The machine control electronics monitors the exhaust temperature using the temperature sensor, and cycles the heater relay on and off to maintain the desired temperature.

Begin with an empty dryer and a clean lint screen.

- 1.** Plug in dryer or reconnect power.
- 2.** Set the following configuration:
 - Door – must be firmly closed.
 - Select Timed Dry cycle.
 - Press Cycle End Tone and select Loud.
 - Press Start.
- 3.** If after 60 seconds, **E1** or **E2** flashes in the display and the dryer shuts off, the temperature sensor or wire harness is either shorted or open.
 - Unplug dryer or disconnect power.
 - Check wire connections at the machine control electronics and temperature sensor. See Accessing & Removing the Electronic Assemblies, page 6, and figure 5 for temperature sensor location.
 - If wire connections are good, remove the two wires from the temperature sensor and replace the temperature sensor. See figure 12, page 7.
 - Plug in dryer or reconnect power.
- 4.** If **E1** or **E2** does not flash in the display, the connections to the temperature sensor are good. Therefore, check the temperature sensor's resistance value at any or all of the temperature levels in question, using the Timed Dry cycle, and the following process:

Hold a glass bulb thermometer capable of reading from 90° to 180°F (32° to 82°C) in the center of the exhaust outlet. The correct exhaust temperatures are as follows:

EXHAUST TEMPERATURES		
TEMP. SETTING	HEAT TURNS OFF* °F (°C)	HEAT TURNS ON °F (°C)
Extra High	165° ± 5° (73.9° ± 3°)	10–15° (6–8°) below the heat turn off temperature
High	160° ± 5° (71.1° ± 3°)	
Medium	150° ± 5° (65.6° ± 3°)	
Low	135° ± 5° (57.2° ± 3°)	
Extra Low	120° ± 5° (48.9° ± 3°)	

* The measured overshoot using the glass bulb thermometer in the exhaust outlet can be 30°F (17°C) higher.

- 5.** If the exhaust temperature is not within specified limits, go to the Operational Test to verify the temperature sensor is functional.

TEST #3b Exhaust High Limit Manual Reset

1. Unplug dryer or disconnect power.
2. Access the machine control electronics. See Accessing & Removing the Electronic Assemblies, page 6. Measure the resistance across P3-3 and P3-4.
 - ➔ If the resistance across P3-3 and P3-4 is 1–6 ohms, replace the machine control electronics.
 - ➔ Otherwise, go to step 3.
3. Check the wiring and connectors in the path between these measurement points by referring to the wiring diagram on page 8.

TEST #3c Heater Element

1. Unplug dryer or disconnect power.
2. Access the heater element by first removing the toe panel. See Removing the Toe Panel, page 7.
3. Use an ohmmeter to determine if the heater element has failed. Remove harness plugs. Measure resistance across terminals.
 - ➔ Readings should be between 7 ohms and 15 ohms.
 - ➔ If not, then replace the heater element.

IMPORTANT: Be sure all harness wires are looped back through the strain relief after checking or replacing the element.

TEST #4 Moisture Sensor

NOTE: This test is started with the machine completely assembled.

This test is performed when an automatic cycle stops too soon, or runs much longer than expected.

NOTE: Dryer will shut down automatically after 2½ hours.

The following items are part of this system:

- Metal sensor strips
- Machine control electronics

1. Enter the Diagnostic Test #1 mode. See procedure on page 1.
2. If a continual beep tone is heard as soon as the diagnostic mode is started, a short circuit exists in the moisture sensor system.
 - ➔ If this doesn't happen, go to step 3.
 - ➔ Otherwise, go to step 4.

NOTE: Over drying may be caused by a short circuit in the sensor system.
3. Locate the two metal sensor strips on the inside right wall of the door well. Bridge these strips with a wet cloth or finger.
 - ➔ If a continual beep tone is heard, the sensor passes the test. Go to step 4.
 - ➔ If a continual beep tone is not heard, go to step 6.

4. Unplug dryer or disconnect power.
5. Access the machine control electronics. Remove the connector P3 from the circuit board. Measure the resistance across terminals 9 and 10.

- ➔ If the ohmmeter does not indicate (infinity) open circuit, go to step 7.
- ➔ Otherwise, measure the resistance across pins 9 and 10 of connector P3 on the machine control board. If a resistance less than 1 MΩ is measured (with analog or digital ohmmeter), inspect the control board for any debris bridging these pins. If no debris, replace the machine control electronics.

6. Unplug dryer or disconnect power.
7. Access the moisture sensor by removing the 2 moisture sensor screws, then disconnect the moisture sensor wire connector.
8. Measure the resistance across the pins of the moisture sensor. If a small resistance is measured here, replace the moisture sensor.
9. Measure the resistance across the moisture sensor wires.
 - ➔ If a resistance less than infinity is measured, replace this component (Wire Harness, Moisture Sensor).
10. If moisture sensor diagnostic test passes, check the temperature sensor: Perform TEST #3a, page 4.
 - ➔ If the problem persists after replacing the moisture sensor and temperature sensor, replace the machine control electronics.

TEST #5 Button and LED

Refer to the Diagnostic Tests on page 1 and activate the Diagnostic Test #1 mode. Check for the following situations:

None of the LEDs light up:

1. See "Diagnostic Guide/Before servicing..." on page 1.
2. Visually check that connector P1 is inserted all the way into the machine control electronics. See Accessing & Removing the Electronic Assemblies on page 6.
 - ➔ If these connections are good, test the user interface by using TEST #5a.
 - ➔ If this test passes, replace the machine control electronics.
 - ➔ Otherwise, replace the user interface assembly.

A particular group of LEDs does not light up:

A group or combination of LEDs share a common electronic connection. If this connection is open, all of the LEDs in the group will be disabled. Replace the user interface assembly.

A single LED does not light up:

Press the button associated with the LED several times. If the LED does not light up, the LED has failed. Replace the user interface assembly.

No beep sound is heard:

If the associated LEDs do light up, it is possible that the beeper circuit has failed. Replace the user interface assembly.

No dryer function is activated when a particular button is pressed:

If the associated LEDs do light up, it is possible that the machine control electronics has failed. Check functions of buttons by performing TEST #5a before replacing the machine control electronics.

TEST #5a LED and TouchPad (UI Only)

This operation allows a cursory check of the user input switches, indicators, and sensor as described below. This routine is a test of the User Interface only. When in this mode, the communication to the control is halted. To start the key test mode:

1. Unplug dryer or disconnect power.
2. Press and hold the Start and Cycle End Tone buttons, and while still holding these buttons, perform step 3:
3. Plug in dryer or reconnect power.
4. All LEDs will light up and the message "YOU ARE IN TEST MODE! Chase the LEDs!!!" will scroll across the display.
5. Press Start to run the test.
6. After pressing Start, touch the appropriate lighted cycles and options. Continue through all the selections until the Cancel button. This test will then exit upon completion.

If there are any failures during this testing, replace the user interface assembly.

TEST #6 Door Switch

Go into the Diagnostic Test #1 mode, page 1. Functionality is verified by the appearance of an alpha numeric code in the display ("Software revision" – door closed, "ELEC" – door open etc.).

- ➔ If any of the above conditions are not met, or if "ELEC" is displayed when the door is closed, check that the wires between the door switch and machine control electronics are connected. See figure 2, page 3 for switch location, and see Accessing & Removing the Electronic Assemblies, page 6.
- ➔ If the connections are OK, replace the wire and door switch assembly and retest.
- ➔ If wire and door assembly have been replaced and dryer still does not start, replace the machine control electronics.

TEST #7 Lint Drawer Switch

This test will check the wiring to the lint drawer switch and the lint drawer switch itself.

1. Unplug dryer or disconnect power.
2. Access the machine control electronics. See Accessing & Removing the Electronic Assemblies, page 6. Then measure the resistance across P3-7 and P3-8.
3. Close the lint drawer and measure the resistance. It should indicate a closed circuit.

4. Now open the lint drawer and measure the resistance. It should indicate an open circuit.
 - ➔ If any of the above conditions are not met check that the wires between the lint drawer switch and machine control electronics are properly connected.
 - ➔ If the connections are OK, replace the lint drawer switch and retest.
 - ➔ If wires and lint drawer switch assembly have been replaced and dryer still does not start, then replace the machine control electronics.

TEST #8 Dry Rack Sensor

This test will check the wiring to the dry rack sensor and the dry rack sensor itself.

1. Unplug dryer or disconnect power.
2. Access the machine control electronics. See Accessing & Removing the Electronic Assemblies, page 6. Then measure the resistance across P3-11 and P3-12.
3. Insert the dry rack and measure the resistance. It should indicate a closed circuit.
4. Now remove the dry rack and measure the resistance. It should indicate an open circuit.
 - ➔ If any of the above conditions are not met check that the wires between the dry rack sensor and machine control electronics are properly connected.
 - ➔ If the connections are OK, replace the dry rack sensor and retest.
 - ➔ If wires and dry rack sensor have been replaced and error code **E5** persists or the drum will not tumble, then replace the machine control electronics.

ACCESSING & REMOVING THE ELECTRONIC ASSEMBLIES

There are two electronic assemblies; the user interface assembly, and the machine control electronics. See figure 6.

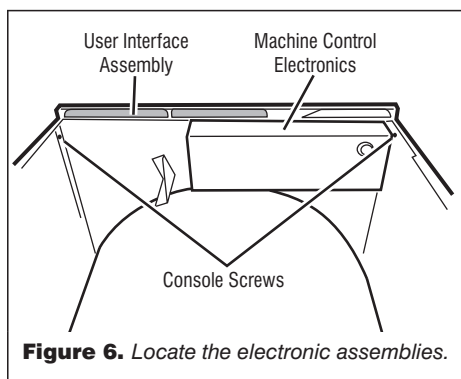


Figure 6. Locate the electronic assemblies.

1. Unplug dryer or disconnect power.
2. After removing the top panel, remove the console screws located in the upper corners of the console. See figure 6.

3. Slide the console so that the console pins located at the bottom corners of the console move up and out from the slots, removing the console from the front of the machine. See figure 7.

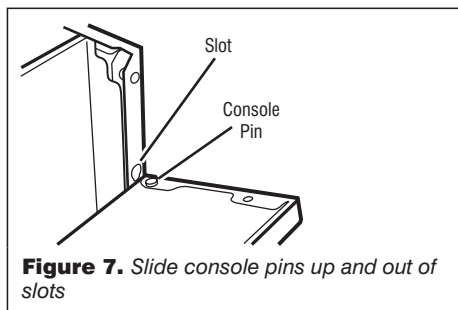


Figure 7. Slide console pins up and out of slots

4. Disconnect the door switch cable from the control board and disconnect the UI (User Interface) cable from the UI. Also cut the cable tie holding the UI cable to the console. See figure 8.

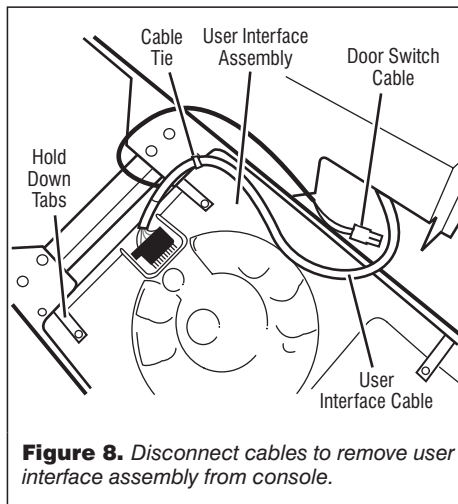


Figure 8. Disconnect cables to remove user interface assembly from console.

Removing the User Interface Assembly

5. Remove the hold down tabs. See figure 8.
6. Remove the user interface assembly.

Removing the Machine Control Electronics Assembly

5. Referring to figure 9, loosen the 4 screws for cover, then slide cover to the right and out from the machine control board.
6. Remove all the wire connections to the machine control board. See figure 10.
7. Remove screws that fasten the control board to the mounting bracket, and pull it from the mounting bracket.

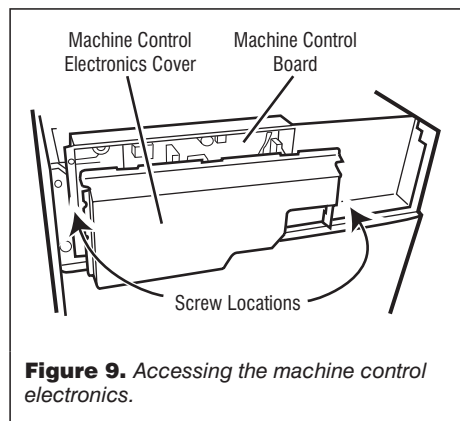


Figure 9. Accessing the machine control electronics.

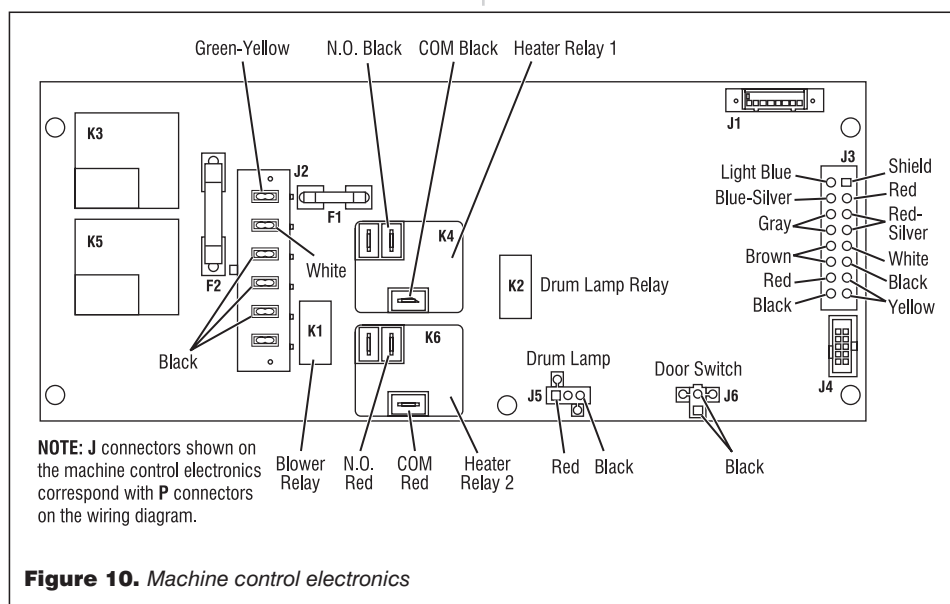


Figure 10. Machine control electronics

REMOVING THE TOE PANEL

1. Unplug dryer or disconnect power.
2. Remove four screws from the top of the toe panel.
3. Slide the toe panel down, then pull it out from the bottom.

REMOVING THE BACK PANEL

1. Unplug dryer or disconnect power.
2. Remove the top panel.
3. Remove the three screws from each side of the back panel.
4. Remove three screws from around the exhaust vent, one from the top, and one on each side.
5. Remove the five screws that are around the power cord access.

NOTE: There are 14 screws total for the back panel, not including the top panel screws.

ACCESSING & REMOVING THE BLOWER ASSEMBLY

The blower assembly includes the temperature sensor, exhaust high limit, lint drawer switch, and blower motor. See figure 11.

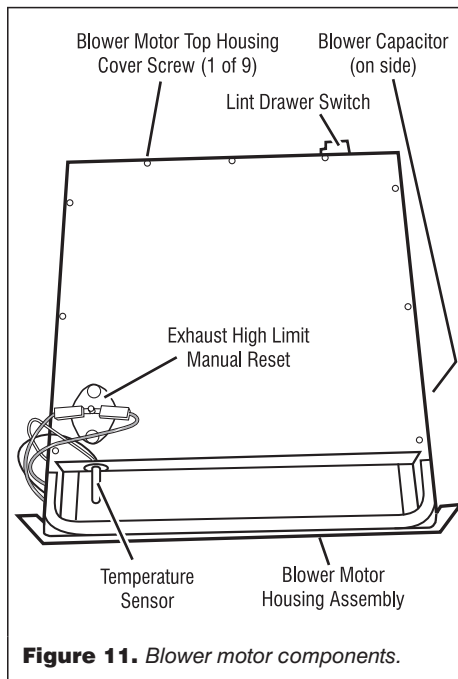


Figure 11. Blower motor components.

Accessing the Blower Assembly components

1. Unplug dryer or disconnect power.
2. Remove the back panel and the duct support bracket from the dryer.
3. Remove the toe panel from the dryer front.
4. Remove the 2 blower motor housing screws from the dryer front.

5. To remove the temperature sensor:

- a) Pull the blower motor housing assembly far enough forward so you can access the temperature sensor.
- b) Disconnect the two red-silver wires from the exhaust high limit manual reset terminals. See figure 12.
- c) Unlatch and disconnect the 4-pin harness connector from the temperature sensor connector.
- d) Disconnect the 4-pin sensor connector from the mounting bracket.
- e) Remove the front clip from the temperature sensor. To do this, hold the clip with a pair of pliers, and twist the sensor with your fingers while pushing it out of the clip.

6. To remove the lint drawer switch:

- a) Unlatch and disconnect the 4-pin harness connector from the temperature sensor connector. See figure 12.

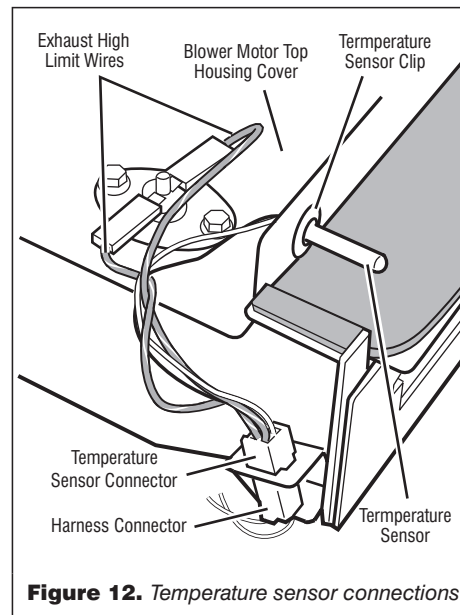


Figure 12. Temperature sensor connections.

- b) Remove the wires from the hook in the blower motor housing. See figure 13.

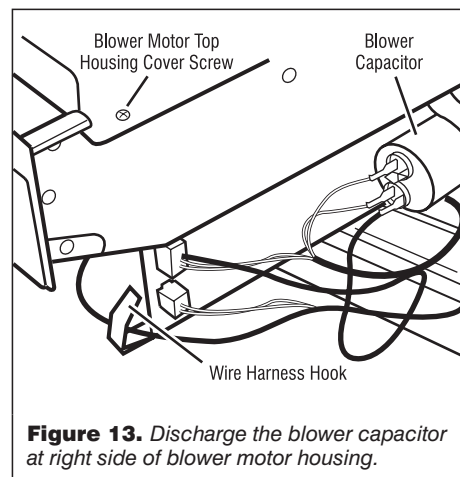


Figure 13. Discharge the blower capacitor at right side of blower motor housing.

- c) Pull the blower motor housing assembly far enough forward so you can access the lint drawer switch. See figure 11.
- d) **IMPORTANT:** Discharge the blower capacitor by touching a 20,000 Ω resistor to the terminals and chassis. See figure 13.
- e) Remove the blower motor top housing cover screws and position the assembly out of the way.
- f) Disconnect the two yellow wires from the lint drawer switch terminals.
- g) Bend the three lint drawer switch's metal tabs straight out.
- h) Release the bottom and top locking tabs on the switch and push it out of its housing cutout.

7. To remove the blower motor:

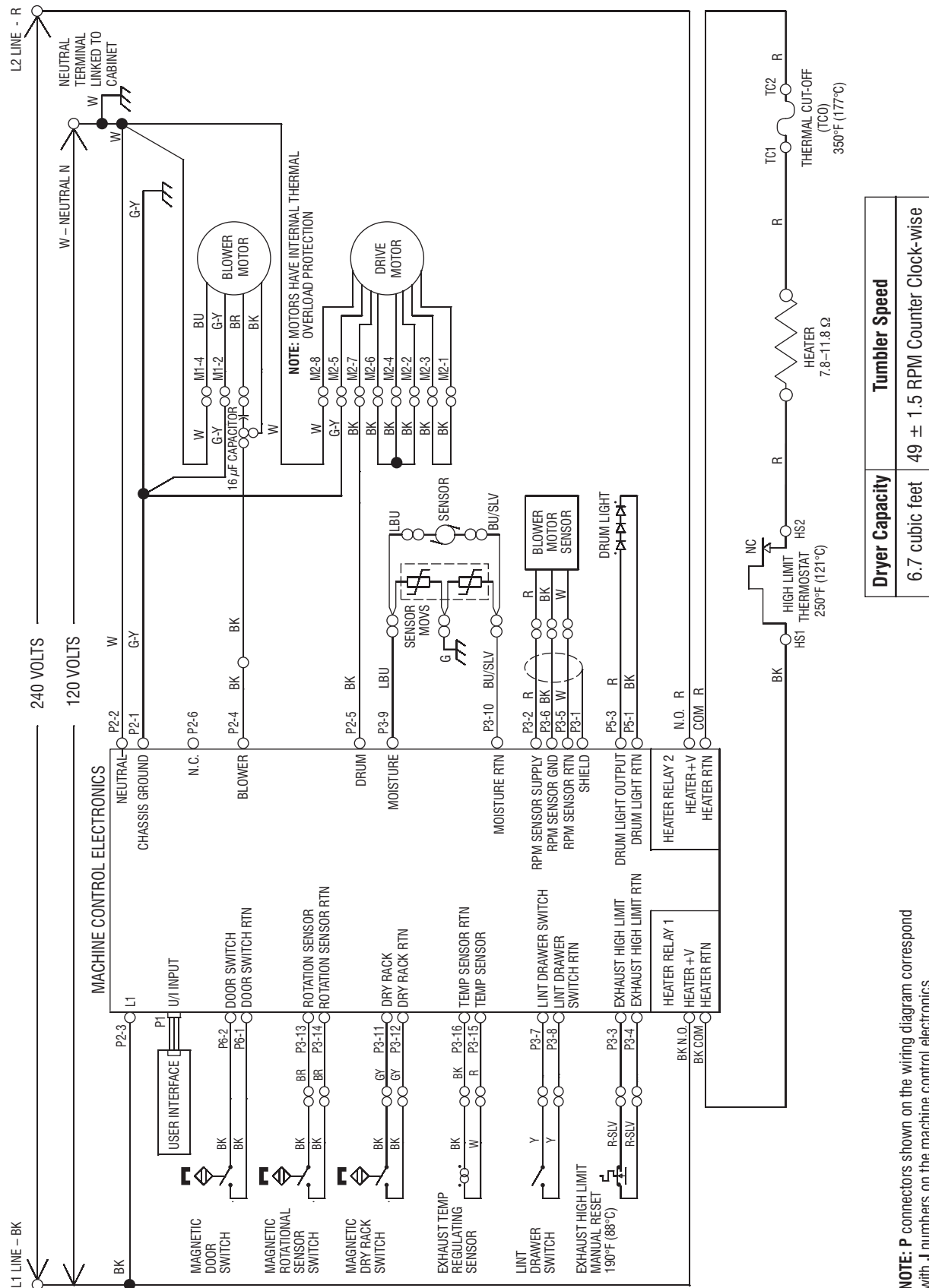
- a) Remove the blower motor housing assembly and the top housing cover by following steps 6a through 6e.
- b) Remove the four 3/8" (7mm) nuts, split washers, and flat washers from the top blower motor housing. Lift the top housing off the motor, and position it to the left side.
- c) Release and disconnect the following connectors:
 - ✓ 2 blower motor harness connectors
 - ✓ 2 blower motor harness plugs from the mounting bracket
 - ✓ 3 blower capacitor wires
- d) Turn the blower motor assembly over, and position it so that you can access the bottom screws.
- e) Remove the four 3/8" (7mm) motor mounting plate nuts, and the five motor mounting screws from the blower motor assembly.
- f) Remove the mounting plate and pull the motor wiring through the opening.
- g) Lift the motor and fan from the housing.

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

4669200	4989347	6446357	D314261
4700495	5066050	6597144	D314262
4754556	5560120	6604298	D457991
4840285	5809828	6685241	D457992
4865366	6020698	6732447	D495453
4899464	6047486	6784673	
4908959	6199300	6819255	

ELECTRIC DRYER WIRING DIAGRAM

IMPORTANT: Electrostatic (static electricity) discharge may cause damage to electronic control assemblies. See page 1 for details.



NOTE: P connectors shown on the wiring diagram correspond with J numbers on the machine control electronics.