

⚠ 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:

- Is the power cord firmly plugged into a live circuit with proper voltage?
- 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 or DVM 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.
- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- 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 power cord **unplugged** from outlet.

DIAGNOSTIC TESTS

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

ACTIVATING THE DIAGNOSTIC TEST MODE

1. Be sure the dryer is in Standby Mode (plugged in and all indicators off).
2. Press the following button sequence:
MORE TIME → LESS TIME → MORE TIME → LESS TIME
 - all within 5 seconds.
3. All indicators on the console are illuminated with "88" showing in the "ESTIMATED TIME REMAINING" (two-digit) display, if this test mode has been entered successfully.

IMPORTANT

Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the machine control electronics. 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 machine control electronics by edges only.
- When repackaging failed machine control electronics in anti-static bag, observe above instructions.

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 More Time and Less Time 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 console electronics and housing. See Accessing & Removing the Electronic Assemblies, page 10.

If no indicators come on after pressing the Manual Cycle buttons, go to TEST #1 (Supply Connections), page 4.

Indication 2: E1 or E2 flashes from the display.

Action: Proceed to TEST #3a (Thermistor Test), page 6.

Indication 3: E3 flashes from the display.

Action: Check that the correct machine control electronics and Console Electronics and Housing are installed. Do so by removing these components to view the part numbers and compare

them to the part numbers in the Components Table on page 2. See Accessing & Removing the Electronic Assemblies, page 10. Replace components if necessary.

Diagnostic: Console switches and indicators

Pressing each button should cause a beep tone and control one or more LEDs as shown in figure 1, Console Diagnostics, page 2. Pressing the Start button will also control the motor and heater, while the two-digit display will indicate "01".

Diagnostic: Moisture Sensor

Locate two metal strips on the face of the lint screen housing. Bridge these strips with a wet cloth or a finger. If a beep is heard and "03" is displayed on the console, 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 7.

Diagnostic: Door Switch

Opening the door should cause a beep tone and a number and letter to be indicated in the two-digit display. Closing the door firmly should cause a beep tone and the display to go blank or indicate "88".

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.
E1	THERMISTOR OPEN	"E1" flashes if the thermistor is open. See TEST #3a, page 6.
E2	THERMISTOR SHORTED	"E2" flashes if the thermistor has shorted. See TEST #3a, page 6.

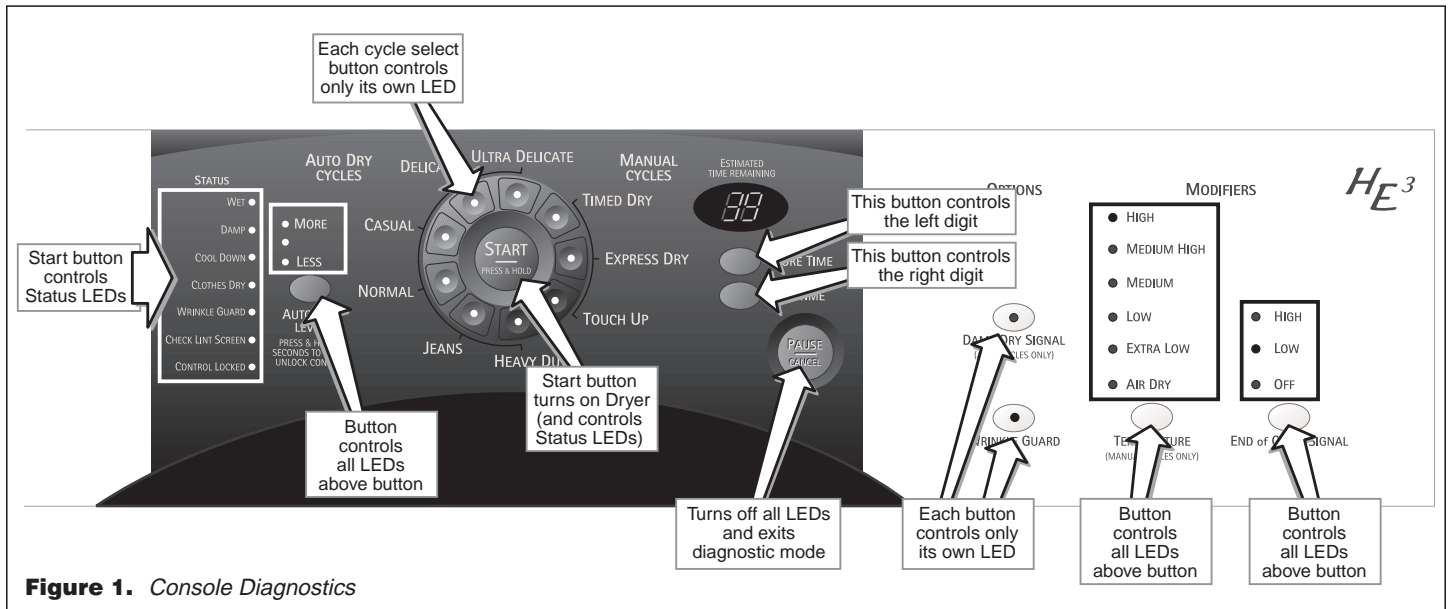
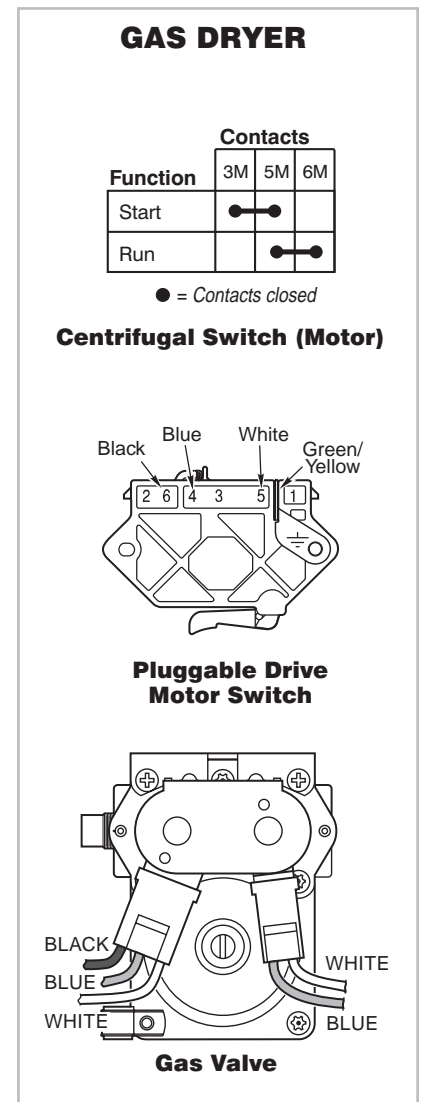
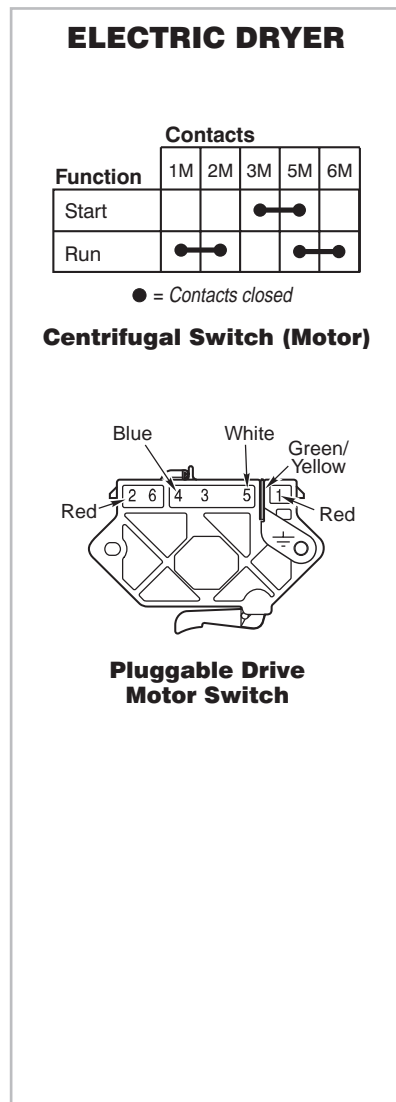


Figure 1. Console Diagnostics

Drum Size:	Drum Speed:
7.0 cubic feet	51.5 ± 3 RPM CW

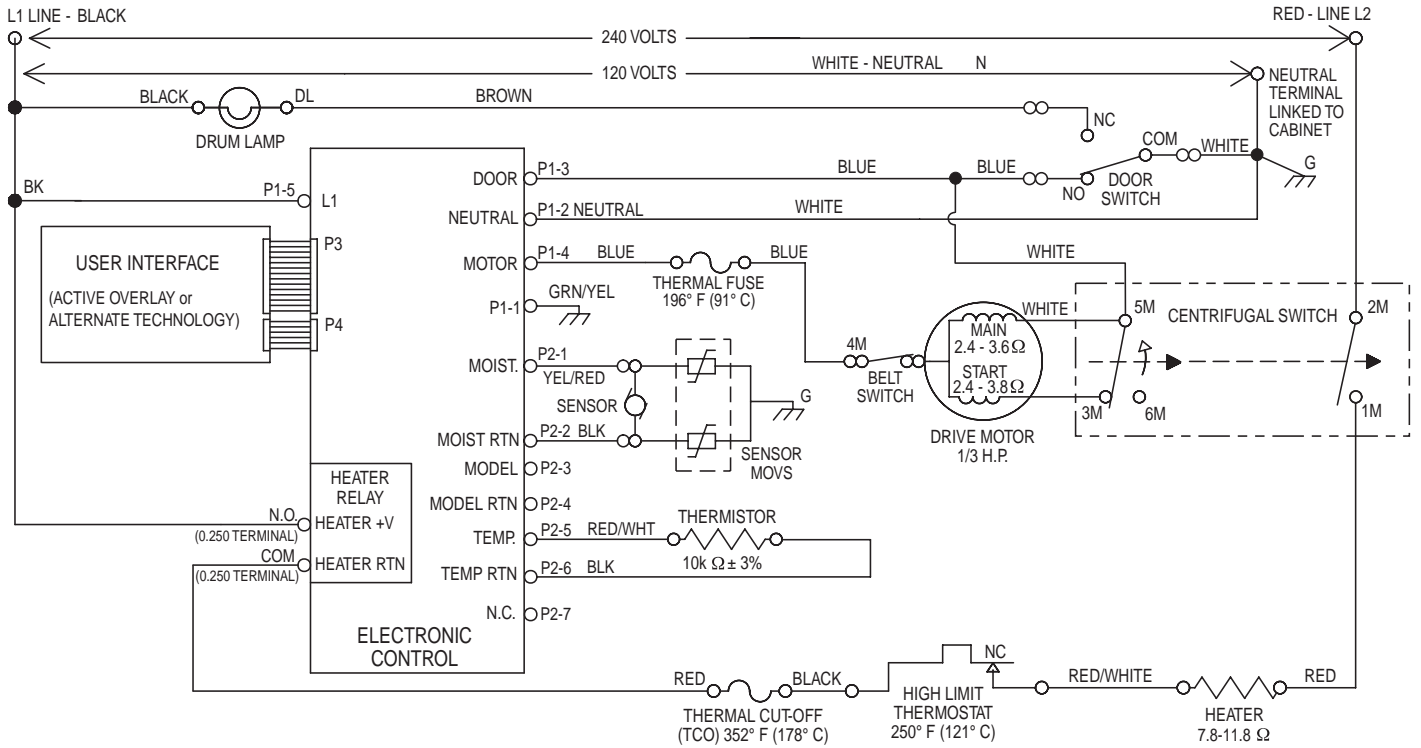
COMPONENT	PART NUMBER	
	Electric Dryers	Gas Dryers
Console Electronics and Housing for White/Graphite Models:	82822	8529879
	84832	8529879 ¹
	92822	8529879
	94832	8529879 ¹
for Bisque/Graphite Models:	82824	8529880
	84834	8529880 ¹
	92824	8529880
	94834	8529880 ¹
for Graphite/Black Models:	82826	8529881
	84836	8529881 ¹
	92826	8529881
	94836	8529881 ¹
Machine Control Electronics	3980062	3980062
Main Wire Harness	8299926	8299927
Digital Wire Harness	8299925	8299929
Wire Harness, Moisture Sensor	3406653	3406653
Wire Harness, Gas Valve	—	3401850
Door Switch	8519323	8519323
Wire and Door Switch Assembly	8283288	8283288
Belt Switch	3394881	3394881
Thermal Cut-Off	8318314	—
Thermal Fuse	3390719	3390719
Heat Element Assembly	8527865	—
Gas Burner Assembly	—	8318276
High Limit Thermostat	3391914	3403140
Drive Motor	3395654	3395654
Thermistor - NTC 10k Ohms	3976615	3976615

¹ Add Model Selector p/n 8519455. Insert Model Selector into rear of the console electronics.

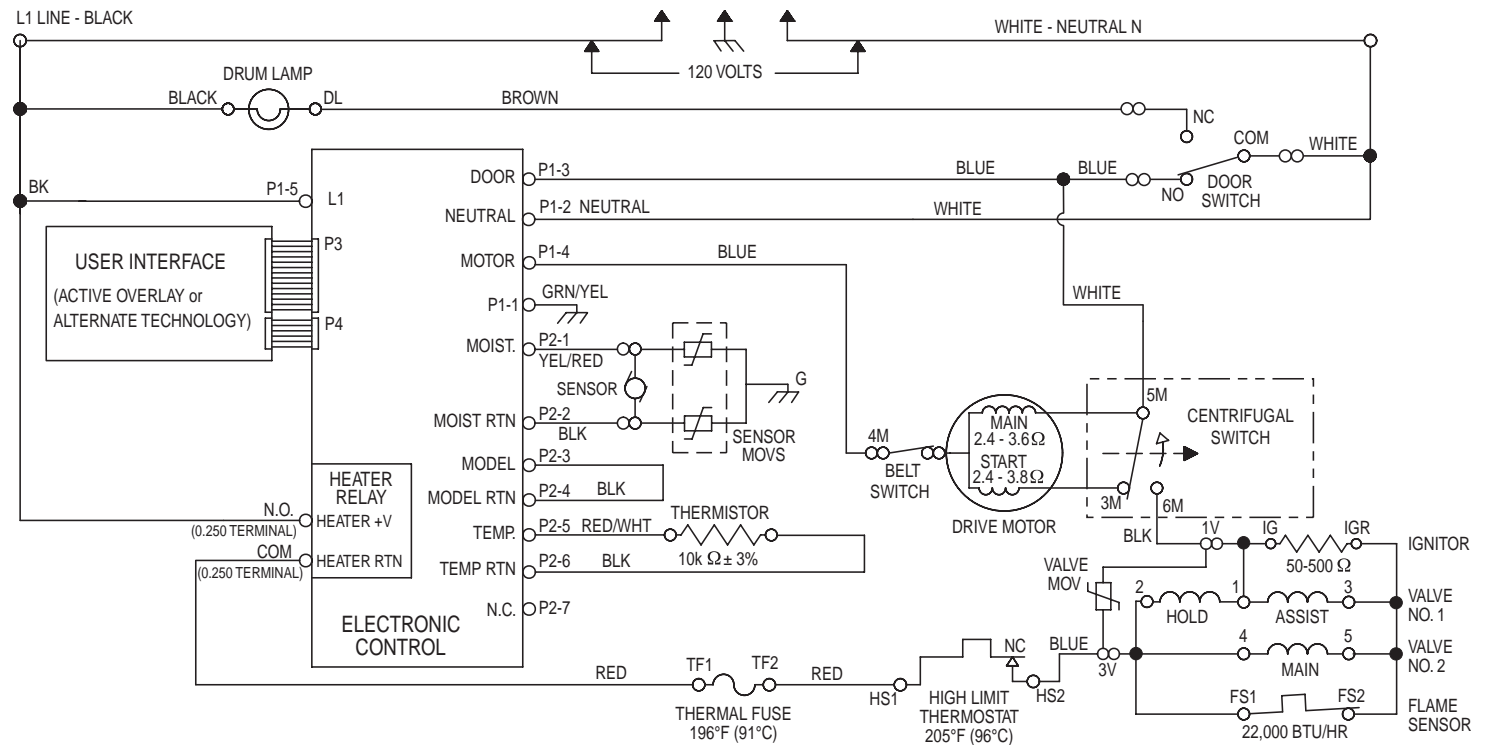


ELECTRIC DRYER WIRING DIAGRAM

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



GAS DRYER WIRING DIAGRAM



TROUBLESHOOTING GUIDE

Some tests will require accessing components. See figure 14, page 9, 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 buttons are pressed.)	<ol style="list-style-type: none"> 1. Supply connections. See TEST #1 below. 2. Check harness connections. 3. Control electronics and housing. See TEST #5, page 8.
WON'T START CYCLE WHEN START BUTTON IS PRESSED.	<ol style="list-style-type: none"> 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 5. 3. See TEST #6, page 9.
WON'T SHUT OFF WHEN EXPECTED.	<ol style="list-style-type: none"> 1. Check PAUSE/CANCEL button. See TEST #5, page 8. 2. Control Electronics and housing. See TEST #5, page 8. 3. Moisture Sensor. See TEST #4, page 7.
CONTROL WON'T ACCEPT SELECTIONS.	Control electronics and housing. See TEST #5, page 8.
WON'T HEAT.	<ol style="list-style-type: none"> 1. Heater. See TEST #3, page 5. 2. Check harness connections. 3. Check installation.
HEATS IN AIR CYCLE.	Thermistor. See TEST #3a, page 6.
SHUTS OFF BEFORE CLOTHES ARE DRY.	Moisture Sensor. See TEST #4, page 7.

TROUBLESHOOTING TESTS

NOTE: These checks are done with the dryer 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 (electric dryer) or wire harness connection (gas dryer).

Remove the cover plate from the top right corner of the back of the dryer, before doing the checks. See figure 2.

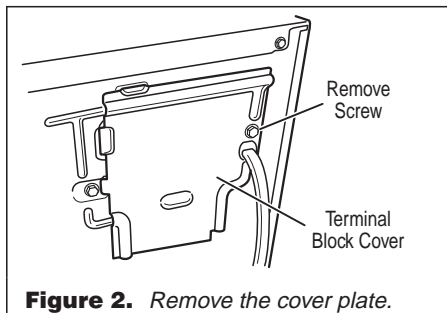


Figure 2. Remove the cover plate.

ELECTRIC DRYER

1. 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 2.
2. 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.
3. Access the machine control electronics without disconnecting any wiring to the control board. See page 10, figure 17.
4. With an ohmmeter, check for continuity between the L1 terminal of the plug (found in step 2) and P1-5 (black wire) on the machine control board.
 - ➔ If there is continuity, go to step 5.
 - ➔ 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.
5. Check for continuity between the neutral (N) terminal of the plug and P1-2 (white wire) at the control board.
 - ➔ If there is continuity, go to step 6.
 - ➔ If there is no continuity and the mechanical connections of the wire are secure, replace the main wire harness.
6. Replace the machine control electronics. See Removing the Machine Control Electronics, page 10.

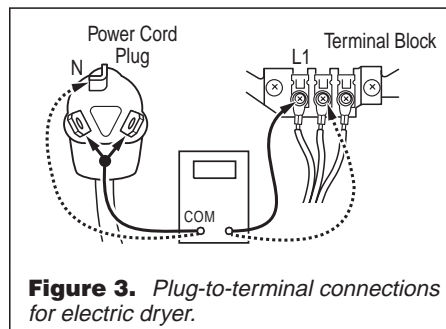


Figure 3. Plug-to-terminal connections for electric dryer.

- ➔ When this is found, go to step 3.
- ➔ 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.

GAS DRYER

1. After removing the cover plate, check that the power cord is firmly connected to the dryer's wire harness. See figure 4.

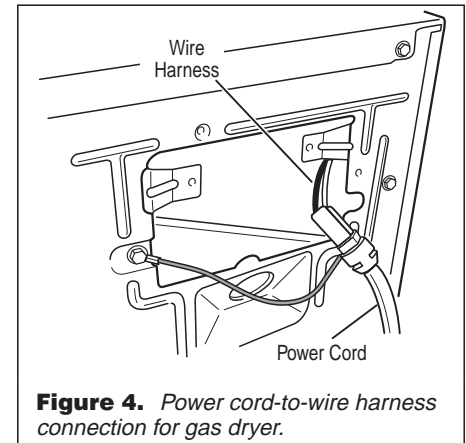


Figure 4. Power cord-to-wire harness connection for gas dryer.

2. Access the machine control electronics without disconnecting any wiring to the control board. See page 10, figure 17.
3. With an ohmmeter, check for continuity between the neutral (N) terminal of the plug and P1-2 (white wire) on the machine control board. The left-hand side of figure 5 shows the position of the neutral terminal (N) on the power cord's plug.
 - ➔ If there is continuity, go to step 4.
 - ➔ If there is no continuity, disconnect the white wire of the harness from the power cord at the location illustrated in figure 4. Test the continuity of the power cord's neutral wire as illustrated in Figure 5. If an open circuit is found, replace the power cord. Otherwise, go to step 4.

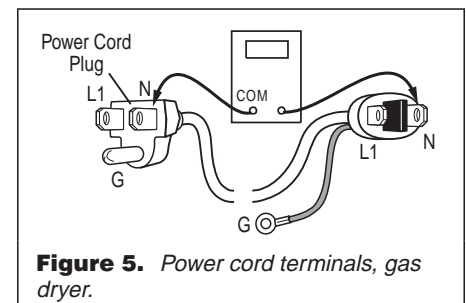


Figure 5. Power cord terminals, gas dryer.

4. In a similar way, check the continuity between the L1 terminal of the plug and P1-5 (black wire) on the control board.
 - ➔ If there is continuity, replace the control board.
 - ➔ If there is no continuity, check the continuity of the power cord in a similar way to that illustrated in figure 5, but for power cord's L1 wire.
 - ➔ If an open circuit is found, replace the power cord. Otherwise, go to step 5.
5. Replace the main harness.

TEST #2
Motor Circuit Test

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

Part of Motor System	Electric Dryer	Gas Dryer
- Harness/connection	✓	✓
- Thermal fuse	✓	no
- Belt/belt switch	✓	✓
- Motor	✓	✓
- Door switch	✓	✓
- Machine control electronics. See ESD information, page 1.	✓	✓

1. Disconnect dryer from power. Access the machine control electronics and measure the resistance across P1-3 and P1-4. See Accessing & Removing the Electronic Assemblies, page 10.
 - ➔ If resistance across P1-3 and P1-4 is in the range of 2 to 4 ohms, replace the machine control electronics.
 - ➔ Otherwise, go to step 2.

2. Check the wiring and components in the path between these measurement points by referring to the appropriate wiring diagram (gas or electric) on page 3.

ELECTRIC DRYER ONLY: Check the thermal fuse. See TEST #3b, page 7.

ALL DRYERS: Continue with step 3 below to test the remaining components in the motor circuit.

3. Check the belt switch and motor. Access the belt switch and motor by removing the back panel. See page 11. Carefully remove the drum belt from the spring-loaded belt switch pulley, gently letting the belt switch pulley down. See figure 6.

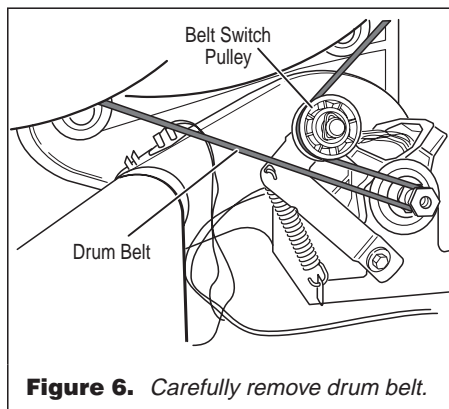


Figure 6. Carefully remove drum belt.

4. Remove the white connector from the drive motor switch. See figure 7.

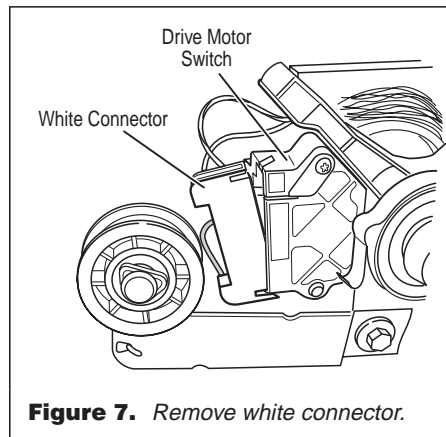


Figure 7. Remove white connector.

5. Using figure 8, check for the resistance values of the motor's Main and Start winding coils as shown below.

NOTE: Main and Start winding coils must be checked at the motor.

WINDING	RESISTANCE (Ω)	CONTACT POINTS OF MEASUREMENT
MAIN	2.4 Ω - 3.6 Ω	Blue wire in back and white/orange wire
START	2.4 Ω - 3.8 Ω	Blue wire in back and violet wire

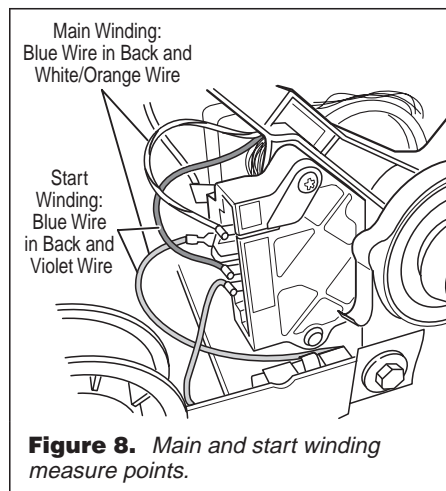


Figure 8. Main and start winding measure points.

- ➔ If the resistance at the motor is correct, then there is an open circuit between the motor and machine control electronics. Check for failed belt switch.
6. Check the belt switch by measuring resistance between the two blue wires, as shown in figure 9, while pushing up the belt switch pulley.
 - ➔ If the resistance reading goes from infinity to a few ohms as pulley arm closes the switch, belt switch is OK. If not, replace the belt switch.
 - ➔ If belt switch is OK and there is still an open circuit, check and repair the wiring harness.

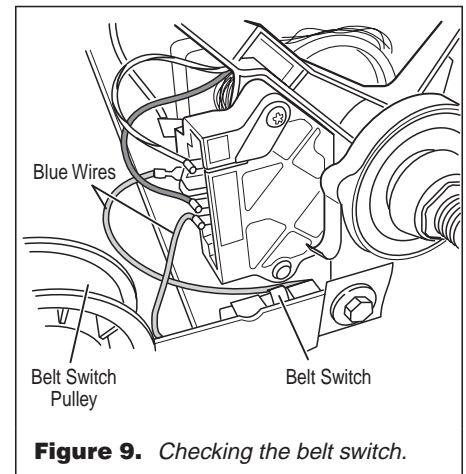


Figure 9. Checking the belt switch.

- ➔ If the Start winding is in question and the resistance is much greater than 4 Ωs, replace the motor.

7. Door Switch problems can be uncovered in the Diagnostic Door Switch Test on page 1; however, if this was not done, the following can be done without applying power to the dryer. Connect an ohmmeter across P1-2 (neutral, white wire) and P1-3 (door, blue 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
Heater Test

NOTE: These tests are done with dryer disconnected from power.

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:

Part of Heating System	Electric Dryer	Gas Dryer
- Harness/connection	✓	✓
- Heater relay	✓	✓
- Thermal cut-off	✓	no
- Thermal fuse	no	✓
- High limit thermostat	✓	✓
- Heat element assembly	✓	no
- Gas burner assembly	no	✓
- Centrifugal switch	✓	✓
- Thermistor	✓	✓
- Machine control electronics. See ESD information, page 1.	✓	✓
- Console electronics	✓	✓
- Gas supply	no	✓

Dryer does not heat:

Remove the toe panel to access the thermal components. See figure 15, page 10. Locate the components for the electric and gas dryers using figure 10 below.

ELECTRIC DRYER:

1. Using an ohmmeter and referring to the wiring diagram, measure the resistance from the red wire at the thermal cutoff to the red wire at the heater.
 - ➔ If the resistance is about 10 ohms, go to step 3.
 - ➔ If an open circuit is detected, go to step 2.
2. Visually check the wire connections to the thermal cutoff, high limit thermostat, and heater. If connections look good, check for continuity across each of these components. Replace the one that is electrically open.
3. If no open circuit is detected, measure the resistance between P2-5 (red/white wire) and P2-6 (black wire) at the machine control board.
 - ➔ If 6-7 k ohms are measured, replace the machine control electronics.
 - ➔ If the resistance is less than 1 k ohm, replace the thermistor.

GAS DRYER:

1. Perform TEST #3b, page 7. If the thermal fuse is OK, go to step 2.
2. Locate the high limit thermostat. See figure 10. Measure the continuity through it by connecting the meter probes on the red wire and blue wire.

- ➔ If there is an open circuit, replace the high limit thermostat.
 - ➔ Otherwise, go to step 3.
3. Perform TEST #3d (Gas Valve Test), page 7. If this is OK, replace the machine control electronics.

Heat will not shut off:

1. Access the machine control electronics, and measure the resistance between P2-5 (red/white wire) and P2-6 (black wire). See Accessing & Removing the Electronic Assemblies, page 10.
 - ➔ If 6-7 k ohms are measured, replace the machine control electronics.
 - ➔ If the resistance is much greater than 7 k ohms, replace the thermistor.

TEST #3a

Thermistor Test

The machine control electronics monitors the exhaust temperature using the thermistor, 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 the dryer and set the following configuration:
 - ➔ Door - must be firmly closed
 - ➔ Press TIMED DRY
 - ➔ Press END OF CYCLE SIGNAL (HIGH)
 - ➔ Press START
2. If after 60 seconds, E1 or E2 flashes in the display and the dryer shuts off, the

thermistor or wire harness is either shorted or open.

- ➔ Disconnect dryer from power. Check wire connections at the machine control electronics and thermistor. See Accessing the Machine Control Electronics on page 10, and for thermistor location see figure 10 below.
- ➔ If wire connections are good, remove the two wires from the thermistor and replace the thermistor. See figure 10. Plug dryer back into supply outlet.

3. If E1 or E2 does not flash in the display, the connections to the thermistor are good. Therefore, check the thermistor'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		
TEMPERATURE SETTING	HEAT TURNS OFF	HEAT TURNS ON
HIGH	155° ± 10°F (68° ± 6°C)	10 - 15°F (6 - 8°C) below the heat turn off temperature
MEDIUM HIGH	150° ± 10°F (66° ± 6°C)	
MEDIUM	140° ± 10°F (60° ± 6°C)	
LOW	125° ± 10°F (52° ± 6°C)	
EXTRA LOW	105° ± 5°F (41° ± 3°C)	

4. If the exhaust temperature is not within specified limits, check the resistance of the thermistor.

NOTE: All thermistor resistance measurements must be made while dryer is disconnected from power.

The table below gives the resistance values that should be observed for the various temperature settings.

TEMP. SETTING	TEMPERATURE	Thermistor resistance value at heater shutoff (digital or analog meter) kΩ	
HIGH	155° ± 10°F (68° ± 6°C)	2.5	1.5
MEDIUM HIGH	150° ± 10°F (66° ± 6°C)	3.0	2.7
MEDIUM	140° ± 10°F (60° ± 6°C)	4.0	3.0
LOW	125° ± 10°F (52° ± 6°C)	5	4.3
EXTRA LOW	105° ± 5°F (41° ± 3°C)	6	5

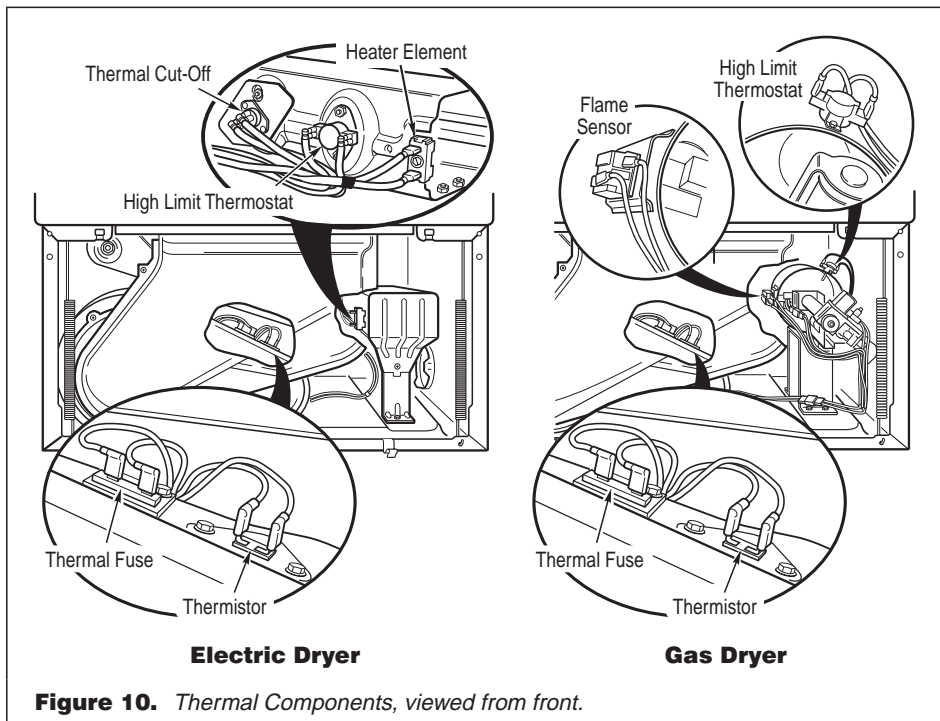


Figure 10. Thermal Components, viewed from front.

If needed, the following table gives temperatures and their associated resistance values.

THERMISTOR RESISTANCE			
TEMP. °F (°C)	RES. kΩ	TEMP. °F (°C)	RES. kΩ
50° (10°)	19.9	80° (27°)	9.2
60° (16°)	15.3	90° (32°)	7.4
70° (21°)	11.9	100° (38°)	5.7

→ If the thermistor resistance checks within normal limits, replace the machine control electronics.

TEST #3b
Thermal Fuse Test

1. Disconnect dryer from power.
2. Access the thermal fuse by first removing the toe panel. See Removing the Toe Panel, page 10, and figure 10 on page 6 for thermal fuse location.

ELECTRIC DRYER: The thermal fuse is wired in series with the dryer drive motor. If the thermal fuse is open, replace it.

GAS DRYER: The thermal fuse is wired in series with the dryer gas valve. If the thermal fuse is open, replace it.

TEST #3c
Thermal Cut-Off Test, Electric Dryer Only

If the dryer does not heat while 240 volts is being delivered to it, check the status of the thermal cut-off.

1. Disconnect dryer from the 240V supply.
2. Access the thermal cut-off by first removing the toe panel. See Removing the Toe Panel, page 10.
3. Using an ohmmeter, check the continuity across the thermal cut-off. See figure 10 for location.
 - If the ohmmeter indicates an open circuit, replace the failed thermal cut-off and high limit thermostat. In addition, check for failed heat element, or blocked or improper exhaust system.

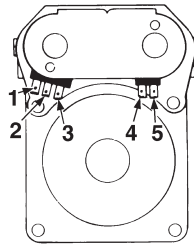
TEST #3d
Gas Valve Test, Gas Dryer Only

Access the gas valve by first removing the toe panel. See Removing the Toe Panel, page 10.

Use an ohmmeter to determine if a gas valve coil has failed. Remove harness plugs. Measure resistance across terminals. Readings should match those

shown in the following chart. If not, replace coil.

Terminals	Resistance
1 to 2	1365Ω ± 25
1 to 3	560Ω ± 25
4 to 5	1220Ω ± 50



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

TEST #4
Moisture Sensor Test

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:

- Harness/connection
- Metal sensor strips
- Machine control electronics

1. Enter the **Diagnostic Test** mode. See procedure on page 1.
2. Open the dryer door. If a beep tone is heard and a software revision number is displayed on the console as soon as the door is opened, 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 face of the lint screen housing. Bridge these strips with a wet cloth or finger.
 - If a beep tone is heard and a software revision number is displayed on the console, the sensor passes the test. Go to step 4.
 - If not, disconnect dryer from power. Access the moisture sensor wires by removing the toe panel (page 10, figure 15) and disconnecting the sensor wires from the harness (figure 11). Go to step 7.

4. Disconnect dryer from power. Access the machine control electronics. See page 10. Remove the connector P2 from the circuit board. Measure the resistance across terminals 1 (yellow/red wire) and 2 (black wire).
 - If the ohmmeter does not indicate (infinity) open circuit, go to step 5.
 - Otherwise, measure the resistance across between pins 1 and 2 of

connector P2 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.

5. Access the moisture sensor by removing the toe panel (see Removing the toe panel, page 10). Disconnect the sensor from the wire harness. See figure 11.

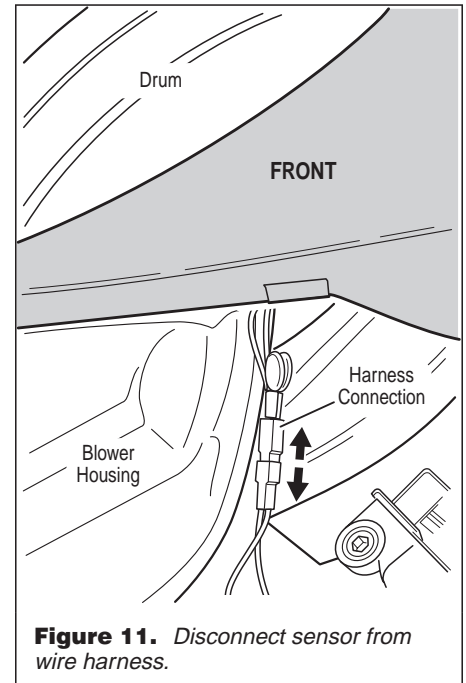
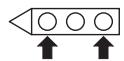
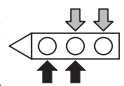


Figure 11. Disconnect sensor from wire harness.

Measure the resistance across the outermost contacts of the cable that includes the two red MOVs.



- If a small resistance is measured, replace this component (Wire Harness, Moisture Sensor).
 - Otherwise go to step 6.
6. Measure the resistance across the pins of the mating connector. If a small resistance is measured here, replace this harness (Digital Wire Harness).
 7. Measure the resistance across each of the outermost contacts and the center terminal (ground connection).
 - If a resistance less than infinity is measured, replace this component (Wire Harness, Moisture Sensor).
 8. If moisture sensor diagnostic test passes, check the thermistor: Perform TEST #3a, page 6.
 - If the problem persists after replacing the moisture sensor and thermistor, replace the machine control electronics.



CHECKING FUNCTIONS OF BUTTONS

Before replacing the machine control electronics, check for proper button function as follows:

- Disconnect the power cord from the outlet.
- See Accessing the Machine Control Electronics on page 10 and remove connectors P3 and P4 from the machine control electronics (see figure 13, page 9, for connector locations).

Using the table at right, measure the resistance across the switch when the button is pressed.

NOTE: The meter must be connected with the proper polarity.

- ➔ If the meter responds to the button being pressed, it indicates the button is operating. The button is a momentary connection, so the meter can respond only while the button is being pressed.
- ➔ If any switches fail this test, replace the console electronics and housing.
- ➔ If all switches test OK, replace the machine control electronics. See page 10.

BUTTON	+ LEAD	- LEAD
HEAVY DUTY	P3-14	P3-11
JEANS	P3-14	P3-9
NORMAL	P3-13	P3-11
TEMPERATURE	P3-12	P3-8
CASUAL	P3-12	P3-11
ULTRA DELICATE	P3-14	P3-10
EXPRESS DRY	P3-13	P3-10
DELICATE	P3-12	P3-10
TIMED DRY	P3-13	P3-9
DAMP DRY SIGNAL	P3-14	P3-8
WRINKLE GUARD	P3-13	P3-8
TOUCH UP	P3-12	P3-9
AUTO DRY LEVEL	P3-14	P3-7
MORE TIME	P3-13	P3-7
LESS TIME	P3-12	P3-7
END OF CYCLE SIGNAL	P3-12	P4-2
START	P3-14	P4-2
PAUSE/CANCEL	P3-13	P4-2

TEST #5 Button and LED Test

Refer to the **Diagnostic Test** on page 1 and activate the Diagnostic Test Mode. Check for the following situations:

- ✓ None of the LEDs light up
- ✓ A particular group of LEDs does not light up
- ✓ A single LED does not light up
- ✓ No beep sound is heard
- ✓ No dryer function is activated when a particular button is pressed
- ✓ E3 error code is displayed

None of the LEDs light up:

1. See Diagnostic Guide/Before Servicing... on page 1.
2. Visually check that connectors P3 and P4 are inserted all the way into the machine control electronics. See Accessing the Machine Control

Electronics on page 10. If these connections are good, perform the checks described in Checking Functions of Buttons in box above.

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 console electronics and housing.

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 console electronics and housing.

No beep sound is heard:

If the associated LEDs do light up, it is possible that the beeper circuit has failed. Check button functioning (see box above) before replacing the machine control electronics.

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 button functioning (see box above) before replacing the machine control electronics.

E3 error code is displayed:

If the E3 error code is displayed, there is a user interface or software mismatch. It is also possible that a component on the console electronics or the machine control electronics has failed. Check button functioning (see box above) before replacing the machine control electronics.

TEST #6

Door Switch Test

Go into the Diagnostic Test Mode. See page 1. Functionality is verified with a beep each time the door is closed and opened, and a number and letter appears in the display (i.e., "0E", "0G", "1E", or "2G" etc.).

- ➔ If any of the above conditions are not met, or if one of the dryer model codes listed above is displayed when the door is **closed**, check that the wires between the door switch and machine control electronics are connected. See figure 12 below for switch location, and see Accessing the Machine Control Electronics, page 10.

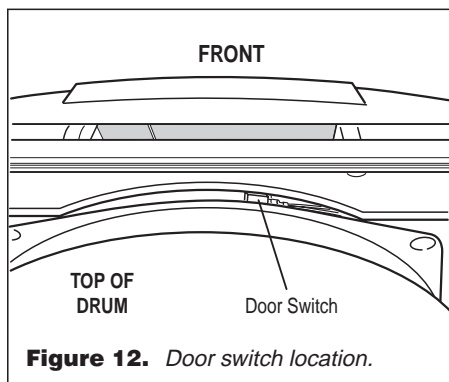


Figure 12. Door switch location.

- ➔ 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, then replace the machine control electronics.

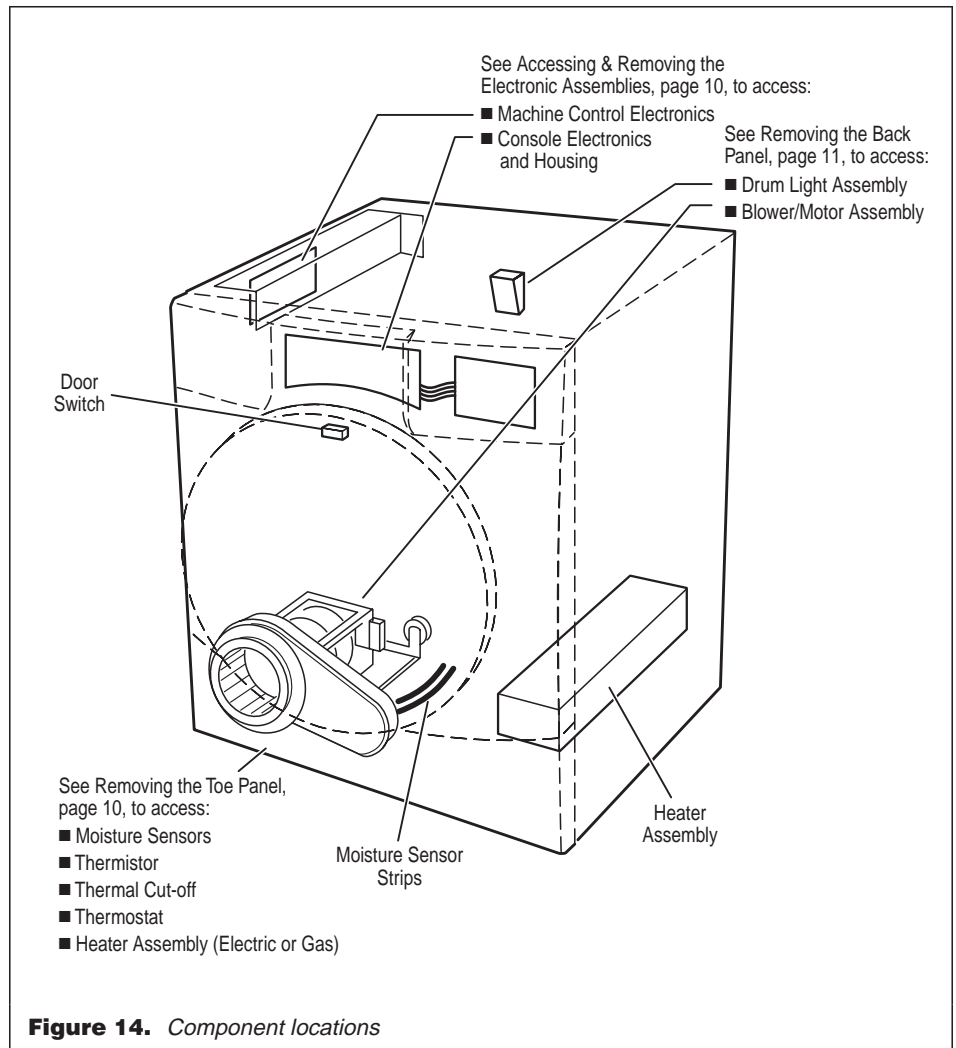


Figure 14. Component locations

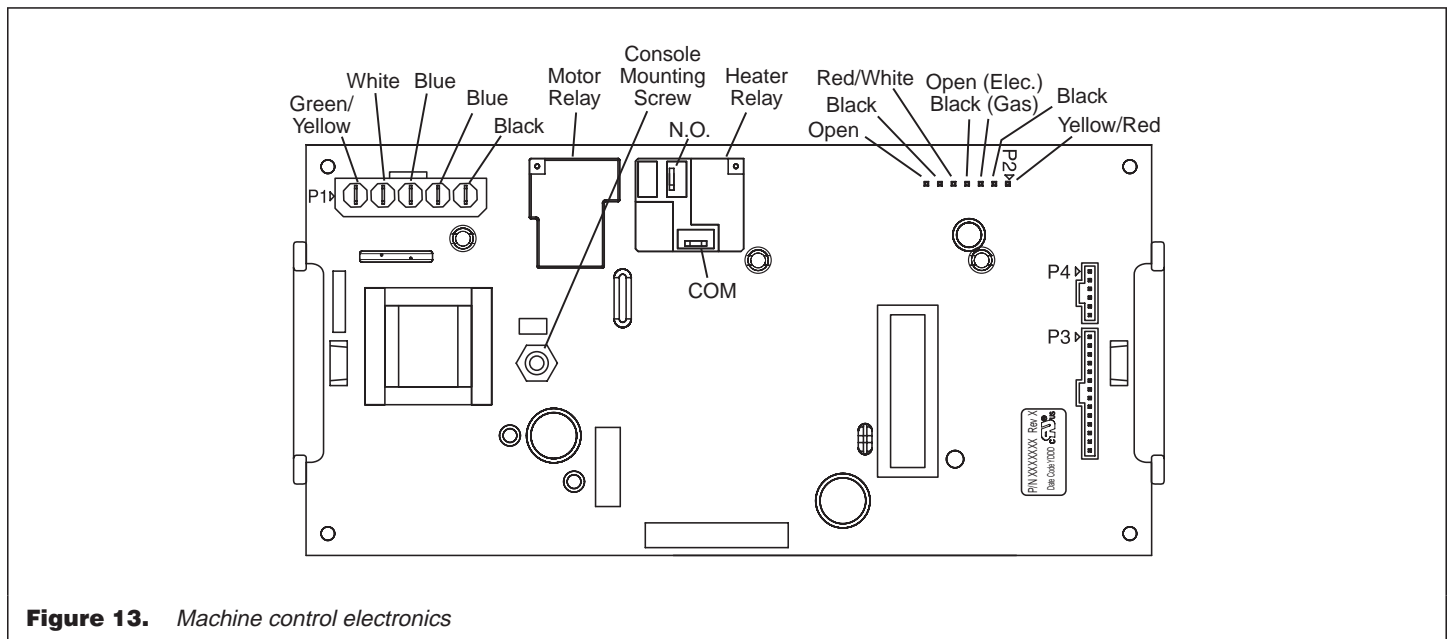


Figure 13. Machine control electronics

REMOVING THE TOE PANEL

1. Remove two screws below the toe panel.
2. Slide the toe panel down, then pull it out from the bottom. See figure 15.

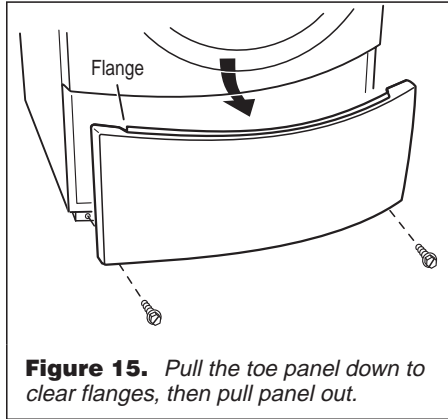


Figure 15. Pull the toe panel down to clear flanges, then pull panel out.

ACCESSING & REMOVING THE ELECTRONIC ASSEMBLIES

There are two electronic assemblies; the Console Electronics and Housing, and the Machine Control Electronics. See figure 16.

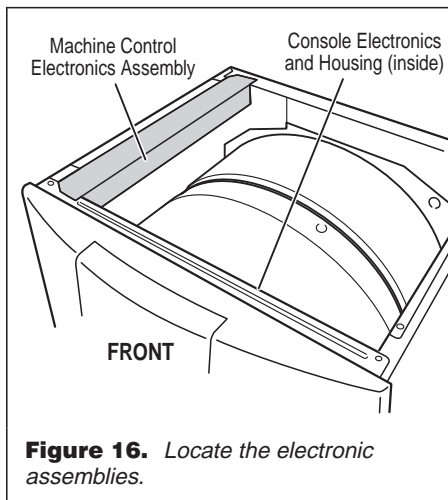


Figure 16. Locate the electronic assemblies.

Accessing the Machine Control Electronics

1. After locating the machine control electronics, remove the three screws that hold the machine control bracket in place and remove assembly. See figure 17.

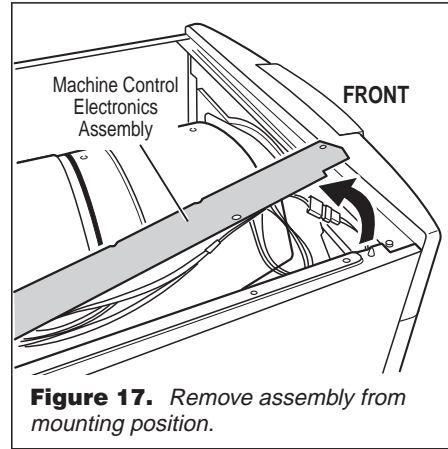


Figure 17. Remove assembly from mounting position.

2. As you remove the assembly from its mounting position, rotate the assembly up to access the machine control circuit board, and set it on the side panel. See figure 18.

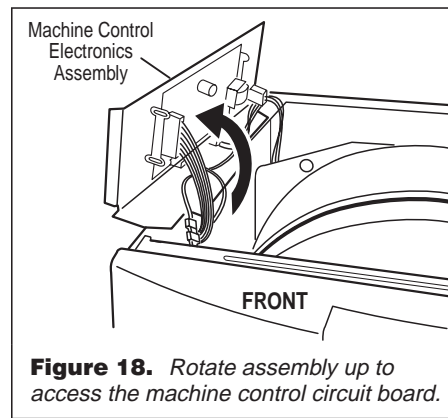


Figure 18. Rotate assembly up to access the machine control circuit board.

Removing the Machine Control Electronics

Remove all the wire connections to the machine control board. See figure 13, page 9.

There are two plastic legs on each side of the circuit board that fasten it to the mounting bracket. With pliers, squeeze the leg while pulling up until it becomes unlatched from the mounting bracket. Do this at all four plastic legs, then lift the circuit board from mounting bracket.

Accessing the Console Electronics and Housing

1. After locating the machine control electronics, disconnect the ribbon cables that run between the console and the machine control board. Make the disconnection at the machine control side. Remove the two screws that fasten the console assembly to dryer. Then remove the console assembly, sliding it up and off from the front of the machine. See figure 19.

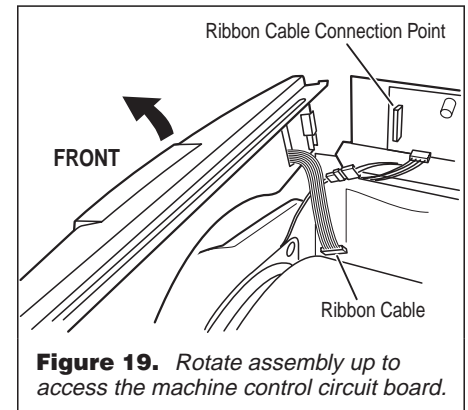
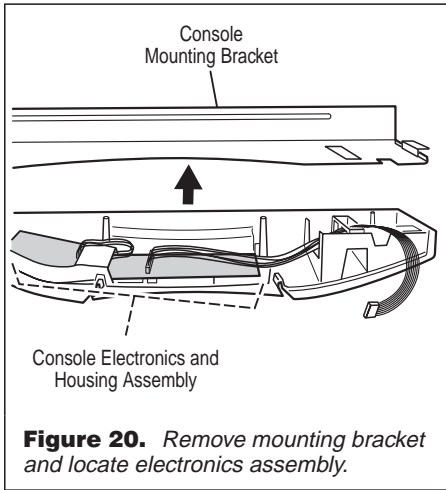
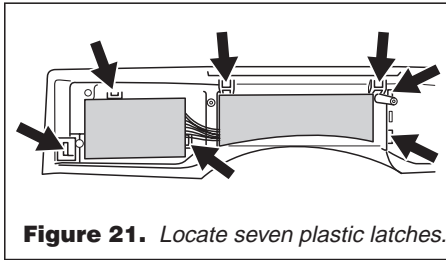


Figure 19. Rotate assembly up to access the machine control circuit board.

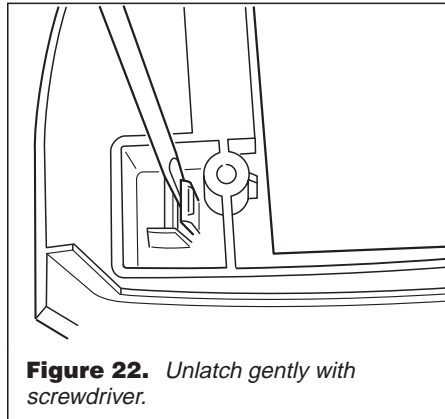
- Remove the screws that fasten the console mounting bracket onto the assembly. Lift up and remove the bracket to locate the electronics assembly. See figure 20.



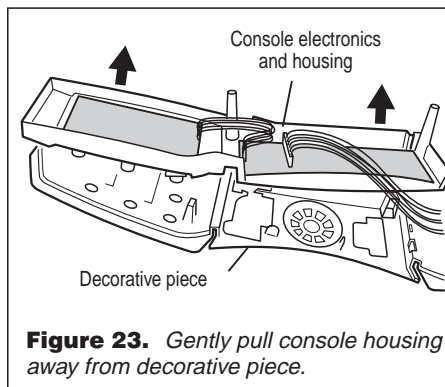
- The console electronics and housing assembly is held to the decorative piece by seven plastic latches. See figure 21.



- Unlatch them gently with a screw driver while pulling the electronics housing assembly out. See figure 22.



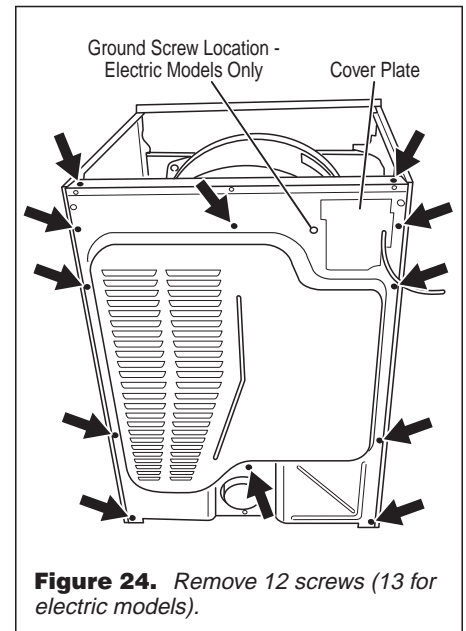
- Gently pull the console electronics housing away from the decorative piece. See figure 23.



REMOVING THE BACK PANEL

After removing the top panel, remove the cover plate. Then remove ten screws from the back panel, plus two screws on the back panel's top edge, which connect the back panel to the side panels' top edges. See figure 24.

ELECTRIC DRYER: In addition to the above, remove the ground wire and screw from back panel. Also disconnect the power cord from the terminal block, and then remove the terminal block from the back panel.



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

4,385,452	4,720,925	4,899,264	5,560,120
4,430,809	4,754,556	4,899,464	5,636,453
4,663,861	4,821,535	4,908,959	5,651,188
4,669,200	4,840,285	5,066,050	5,664,339
4,700,495	4,865,366	5,243,771	D314,261

D314,262
