⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all panels before operating.

Failure to do so could result in death or electrical shock.

IMPORTANT

Electrostatic Discharge (ESD) Sensitive Electronics

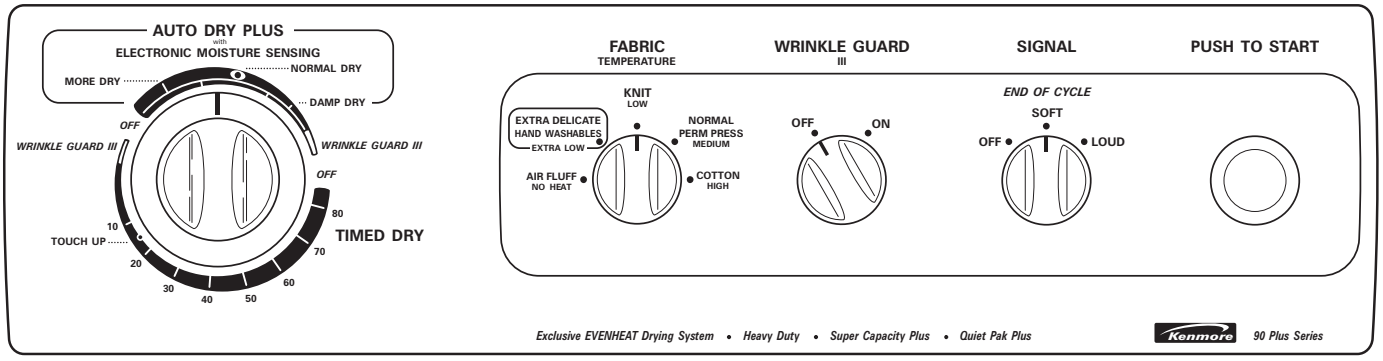
Do not open package until it is time to install the electronic board.

ESD problems are present everywhere. ESD may damage or weaken the electronic board. The new board 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 it's 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 board by edges only.
- When repackaging failed electronic board in anti-static bag, observe above precautions.



⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all panels before operating.

Failure to do so can result in death or electrical shock.

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

Drum Size:

- 7.0 cubic feet

Drum Speed:

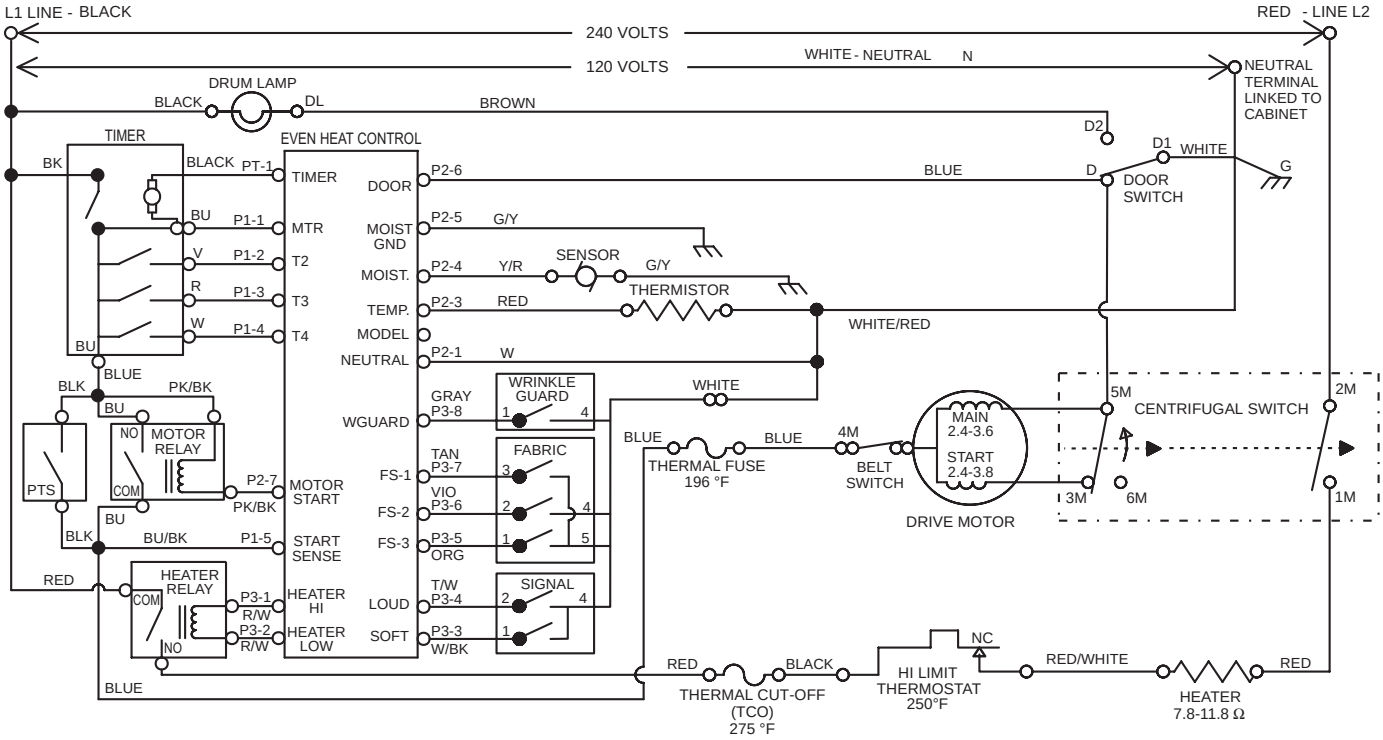
- 48 ± 3 RPM CCW

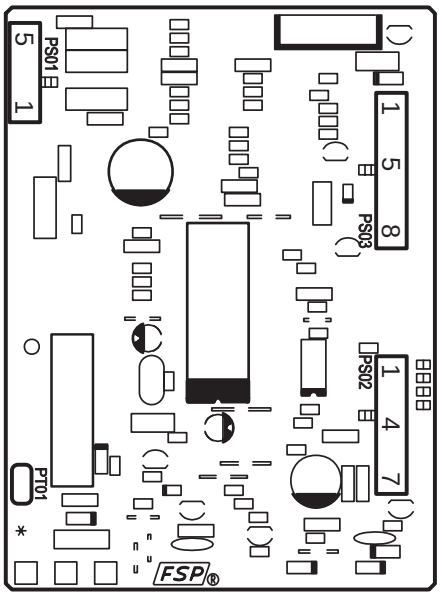
FUNCTION	CONTACTS 1M	2M	3M	5M	6M
START			●	●	
RUN	●	●		●	●

● = CONTACTS CLOSED

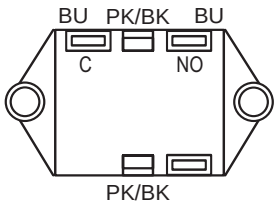
Centrifugal Switch (Motor)

Electric Dryer Wiring Diagram

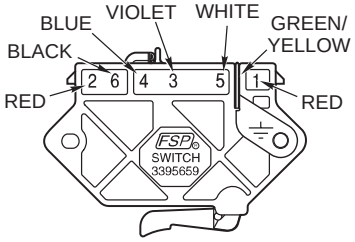




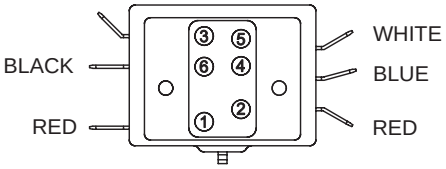
Even Heat Electronic Control Assembly



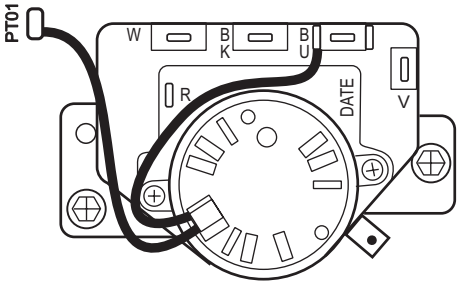
Motor Relay



Pluggable Drive Motor Switch

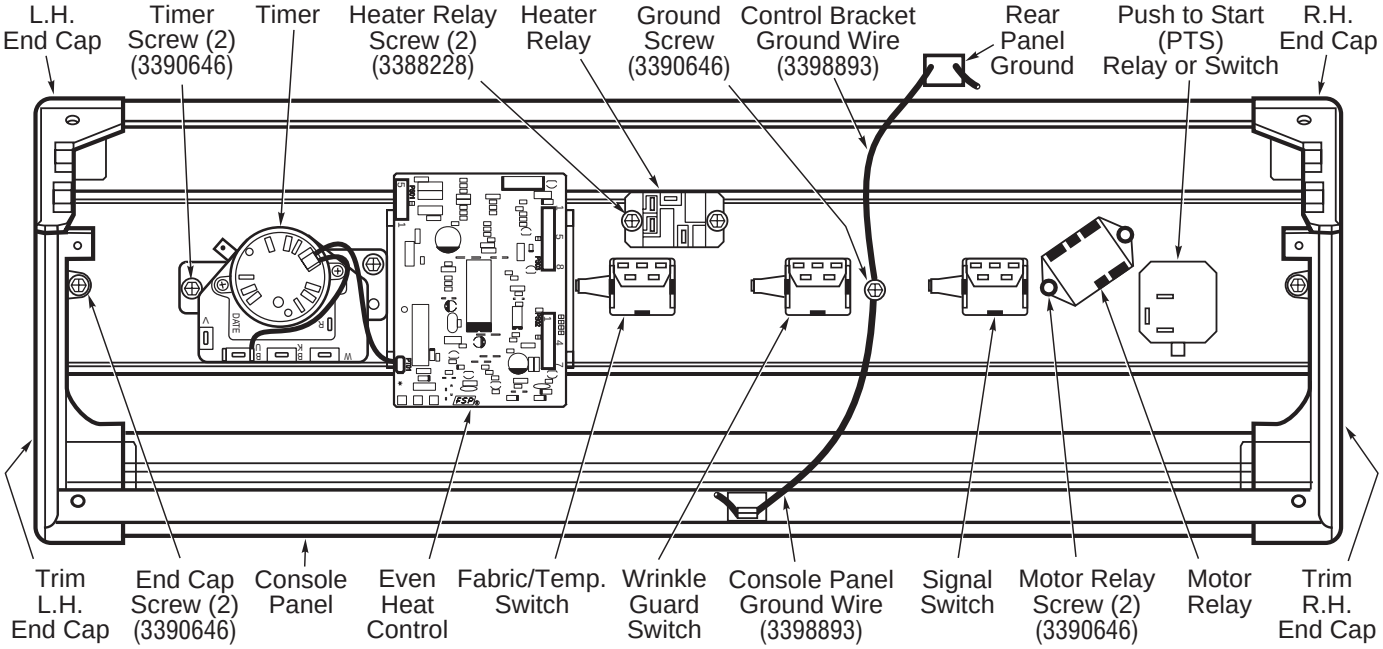


Drive Motor Switch



Timer

Component Location



COMPONENT	Part Number	
	Model No. 67932790 (White)	Model No. 67934790 (Almond)
Console Panel (Basic)	3406530	3406531
End Cap - R. H.	3949274	3949275
End Cap Trim - R. H.	3951009	3951010
End Cap - L. H.	3949280	3949281
End Cap Trim - L. H.	3951013	3951014
P.T.S. Relay/Switch	3395382	3395382
P.T.S. Knob *	3402566	3402568
Control Knob *	3402572 (3)	3402574 (3)
Signal Switch	3405151	3405151
Wrinkle Guard Switch	3405152	3405152
Temperature Switch	3399643	3399643
Motor Relay	697812	697812
Heater Relay	3405281	3405281
Even Heat Control Assembly	3402605	3402605
Timer	3402659	3402659
Timer Knob *	3402594	3402596
Harness *	3406291	3406291
Door Switch *	3392266	3392266
Thermal Cut-Off *	3398671	3398671
Thermal Fuse *	3390719	3390719
Heat Element Assembly *	3392661	3392661
Hi-Limit Thermostat *	3390291	3390291
Drive Motor *	3395654	3395654
Thermistor - NTC 10K Ohms *	3406294	3406294

* not shown

Damp Dry Test

Begin with an empty dryer and clean lint screen.

1. Set the following configuration:
   - Timer - DAMP DRY
   - Fabric/Temperature switch - COTTON HIGH
   - Wrinkle Guard switch - OFF
   - Signal switch - LOUD
   - Door - must be closed
2. Press the PUSH TO START switch. After approximately 16 seconds, the Timer will start to advance to the OFF position, and the “End of Cycle” signal will sound. If one or more of these functions do not occur, proceed to the Factory Test.

Factory Test

The Factory Test allows factory/service personnel to test and verify all inputs to the Even Heat Control. The basic operation of this test is to notify the operator with an audible beep every time the status of an input to the control changes state.

Activating the Test Mode

1. Set the following configuration:
   - Door - must be open
   - Fabric/Temperature switch - AIR FLUFF
   - Signal switch - LOUD
   - Timer - TIMED DRY or AUTO DRY PLUS selection

2. Turn the Wrinkle Guard switch from OFF to ON three times within a five second period. A single beep will sound to indicate that the factory test mode is activated.

NOTE: If any of these initial conditions are not satisfied, the control will not enter the test mode.

Test Mode Functionality

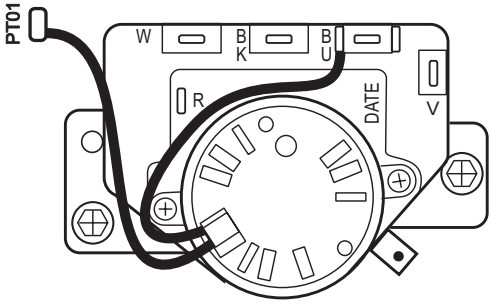
When the control is in the Factory Test mode, every input change of state will result in a beep (with the exception of the Signal switch). This includes:

- Door switch
- Moisture Sensor
  (short/open Sensor will result in a beep)
  NOTE: A moistened finger or damp cloth may also be used.
- Fabric/Temperature switch
- Wrinkle Guard switch
- Push To Start (PTS) switch
  (with the door switch closed)
- Timer
  (any cam input change will result in a beep)
  NOTE: Timer will advance during test.

If any of the inputs do not result in a beep, proceed to the following component tests.

Timer Test

Reference contact continuity to Timer - BK.



Timer Encoding Table

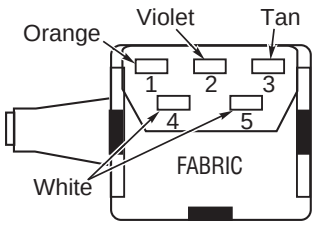
TIMED DRY MODE				
TIMER CONTACTS	**TIMED DRY**	**COOL DOWN**	**WRINKLE GUARD**	**OFF**
W	O	O	O	O
R	X	X	O	O
V	O	X	X	O
BU	X	X	X	O

AUTO DRY PLUS MODE					
TIMER CONTACTS	**MORE DRY**	**NORM. DRY**	**DAMP DRY**	**WRINKLE GUARD**	**OFF**
W	X	X	O	O	O
R	O	O	O	O	O
V	X	O	O	X	O
BU	X	X	X	X	O
O=OPEN X=CLOSED					

Fabric/Temperature Switch Test

Remove the wires from the switch to complete this test.

Reference contact continuity to Pin 4 (White).



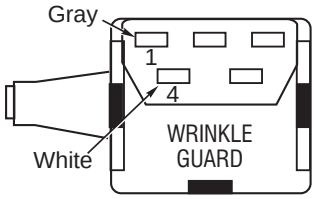
Fabric/Temperature Switch Table

SWITCH POSITION	CONTACTS			FUNCTION
	3	2	1	
9 O'clock	O	O	O	AIR FLUFF
10 O'clock	O	O	X	DELICATE
12 O'clock	O	X	O	KNITS
2 O'clock	O	X	X	PERM PRESS
3 O'clock	X	O	O	COTTON
O=OPEN X=CLOSED				

Wrinkle Guard Switch (On/Off) Test

Remove the wires from the switch to complete this test.

Reference contact continuity to Pin 4 (White).



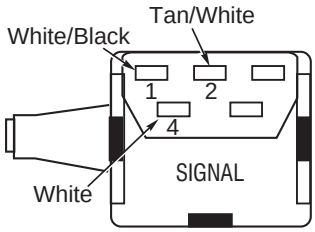
Wrinkle Guard Switch Table

SWITCH POSITION	CONTACTS	FUNCTION
Eleven O'clock	Open	Wrinkle Guard Off
One O'clock	Closed	Wrinkle Guard On
O=OPEN X=CLOSED		

"End of Cycle" Signal Switch Test

Remove the wires from the switch to complete this test.

Reference contact continuity to Pin 4 (White).



Signal Switch Table

SWITCH POSITION	CONTACTS		FUNCTION
	1	2	
Ten O'clock	O	X	OFF
Twelve O'clock	X	O	SOFT End of Cycle Signal
Two O'clock	O	X	LOUD End of Cycle Signal
O=OPEN X=CLOSED			

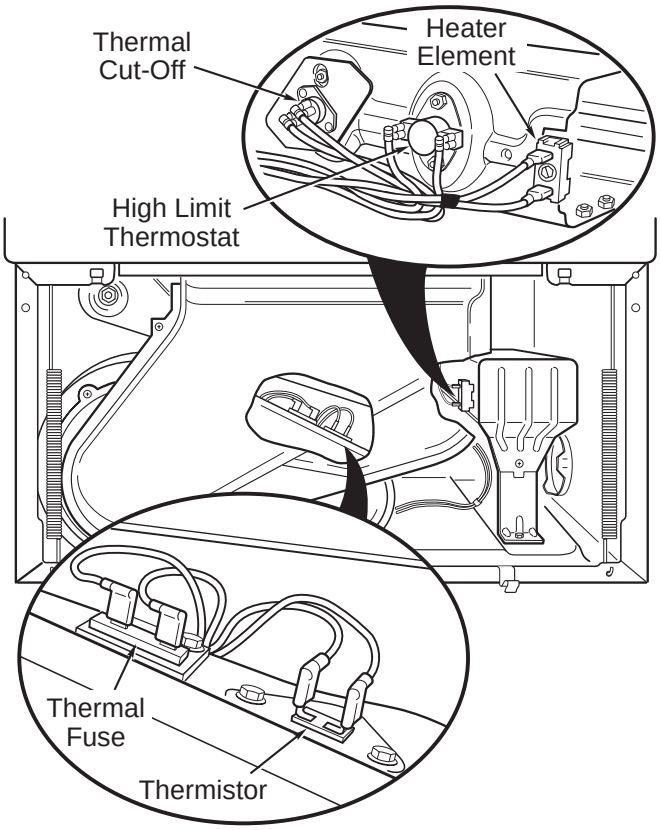


Figure 1

Heater Box High-Limit Thermostat Test

Remove the thermistor from the fan housing and plug the hole. Protect the thermistor and leads from grounding against any metal parts. See Figure 1. Completely block the exhaust outlet. Turn dryer on and allow the high-limit thermostat to cycle once, then measure the time elapsed until the high-limit thermostat trips. It should trip between 21 and 38 seconds.

WARNING: Be sure to reinstall the thermistor after testing thermostat.

Thermal Fuse Test

A thermal fuse is used on this model. The thermal fuse is wired in series with dryer drive motor. If the thermal fuse opens, power is shut off to the motor. (Centrifugal switch in motor also opens heater circuit.)

Once the thermal fuse has opened, it must be replaced. Check for failed thermistor or other cause of failure. Replace failed parts. Refer to Figure 1.

Thermistor Test

An electronic temperature sensor called a thermistor is used in this model in place of an operating thermostat. The Even Heat Control monitors the exhaust temperature using the thermistor and cycles the heater relay on and off to maintain the desired temperature.

Procedure

Begin with an empty dryer and a clean lint screen.

1. Set the following configuration:

- Timer Dial - TOUCH UP
- Fabric/Temperature switch - COTTON HIGH
- Wrinkle Guard switch - OFF
- Signal switch - LOUD
- Door - must be closed

2. Press the Push To Start switch.

a. If you hear three short beeps and the dryer shuts off after several seconds, the thermistor is either shorted or open and must be replaced. To replace the thermistor, unplug the dryer and remove the front toe panel. Remove the two wires and replace the thermistor as shown in Figure 1.

b. If the dryer appears to operate correctly, proceed to step 3.

3. Remove exhaust duct and start the dryer.

a. Turn Fabric/Temperature switch to desired temperature to be tested, and select 20 minutes on the Timed Dry dial. Hold a glass bulb thermometer capable of reading from 90°F to 180°F in the center of the exhaust outlet. Measure exhaust temperatures with heater off and on. The correct exhaust temperatures are as follows:

FABRIC/TEMP. SWITCH SETTING	HEAT TURNS OFF	HEAT TURNS ON
COTTON HIGH	150°±10°F	10° - 15°F below heat off
NORMAL PERM PRESS MEDIUM	140°±10°F	10° - 15°F below heat off
KNIT LOW	125°±10°F	10° - 15°F below heat off
EXTRA DELICATE EXTRA LOW	115°±10°F	10° - 15°F below heat off

b. If the exhaust temperature is not within the specified limits, replace the Thermistor.

c. If the exhaust temperature is still outside of the limits, replace the Even Heat Control.

Thermal Cut-Off

This unit is equipped with a “one-shot” thermal cut-off. See Figure 1. If the dryer does not heat and there are 240 Volts to the dryer, disconnect the dryer from its electrical source and check thermal cut-off for continuity. If continuity is open, thermal cut-off has failed and must be replaced.

NOTE: If the heater box thermal cut-off has failed, replace the cut-off and high-limit thermostat. In addition, check for defective heater element, blocked or improper exhaust system.

PROBLEM: Dryer Will Not Run

(Refer to Motor Strip Circuit, page 8)

If the motor will not start, check the following:

- **LINE VOLTAGE**
- **HARNESS/CONNECTION**
- **MOTOR RELAY**
- **PUSH TO START SWITCH**
- **THERMAL FUSE**
- **BELT/BELT SWITCH**
- **MOTOR**
- **DOOR SWITCH**
- **EVEN HEAT CONTROL**

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

Procedure:

1. Set the following configuration:
   - Door - must be closed
   - Timer - TIMED DRY
   - Fabric/Temperature switch - AIR FLUFF
2. Check the voltage at the Timer: (reference Neutral)
   - **a.** At Timer BK voltage should be 120VAC. If not, check the input voltage line (L1).
   - **b.** If voltage is okay at BK, check Timer voltage at BU. If voltage is not 120VAC, replace Timer.
3. Check for 120VAC at PTS switch and Motor Relay. 120VAC should be present at:
   - one side of the PTS Switch
   - one side of the Motor Relay (large terminals)
   - both sides of the Motor Relay Coil

   If 120VAC is not present at these locations, check the harness connections. If harness connections are good, go to Step 4.
4. Press and hold the PUSH TO START switch.
   - **a.** Check the voltage at the PTS switch. If 120VAC is not present at both terminals, replace PTS switch.
   - **b.** Check the voltage at the Motor Relay at the following terminals:
     - both sides of the Motor Relay (large terminals)
     - one side of the Motor Relay Coil

     If 120VAC is not present at these terminals, replace the Motor Relay.
5. If the motor does not start, check the Door switch (D to D1). There should be a short circuit when the door is closed. If not, replace the Door switch.
6. Press the PUSH TO START switch. If the motor starts but does not continue to run, replace the Even Heat Control.
7. Press and hold the PUSH TO START switch. If motor does not start, replace motor.

PROBLEM: Dryer Will Not Heat

(Refer to Heater Strip Circuit, page 8)

If the heat will not turn on, check the following:

- **LINE VOLTAGE (240V)**
- **HARNESS/CONNECTION**
- **HEAT RELAY**
- **THERMAL CUT-OFF**
- **HI LIMIT THERMOSTAT**
- **HEATER**
- **CENTRIFUGAL SWITCH**
- **THERMISTOR**
- **EVEN HEAT CONTROL**

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

Procedure:

1. Set the following configuration:
   - Door - must be closed
   - Fabric/Temperature switch - COTTON
   - Timer - TIMED DRY
2. Press the PUSH TO START switch. The dryer will start, and the heater will take several seconds to turn on.
3. Check the voltage at the Heater Relay:
   - P3-1 to P3-2 should be 48VDC
   - COM to NO should be ~0VAC
   - **a.** If the voltage is 48VDC at the P3-1 to P3-2 terminals, and ~240VAC at the COM and NO terminals, replace the Relay.

b. If the voltage is 0VDC at the P3-1 to P3-2 terminals, replace the thermistor.

c. If, after replacing the thermistor, the voltage is still 0VDC at the P3-1 to P3-2 terminals, replace the Even Heat Control.

PROBLEM: Dryer Heats During Air Fluff/No Heat Cycle

(Refer to Heater Strip Circuit, page 8)

If the dryer heats when the Fabric/Temperature switch is set to AIR FLUFF (No Heat), check the following:

- **HARNESS/CONNECTION**
- **HEAT RELAY**
- **EVEN HEAT CONTROL**

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

Procedure:

1. Set the following configuration:

- Door - must be closed
- Fabric/Temperature switch - AIR FLUFF
- Timer - TIMED DRY

2. Press the PUSH TO START switch.

a. Check voltage on Heater Relay. If P3-1 to P3-2 is 0VDC, replace the Heater Relay.

b. If P3-1 to P3-2 is 48VDC, replace the Even Heat Control.

PROBLEM: Dryer Won't Shut Off

(Refer to Motor and Moisture Sensor Strip Circuits, page 8)

If the dryer will not shut off, check the following:

- **PUSH TO START (PTS) SWITCH**
- **HARNESS/CONNECTION**
- **MOTOR RELAY**
- **MOISTURE SENSOR**
- **EVEN HEAT CONTROL**

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

Procedure:

1. Set the Timer to OFF. If the dryer starts running as soon as it is plugged in, replace the Timer.

2. Set the following configuration:

- Dryer - power cord plugged in
- Door - must be closed
- Fabric/Temperature switch - COTTON
- Timer - TIMED DRY for less than 10 minutes

3. If the dryer starts running before the PUSH TO START switch is pressed, replace the PTS switch.

4. If, after replacing the PTS switch, the dryer still starts before the PUSH TO START switch is pressed, replace the Motor Relay.

5. If the dryer does not stop after the set time elapses, check the Motor Relay.

a. If the voltage is 0VDC at COM to NO, replace the Motor Relay.

b. If the voltage is 120VDC at COM to NO, replace the Even Heat Control.

6. If the dryer will not terminate its cycle when set to AUTO DRY PLUS, check the Moisture Sensor.

a. If Y/R is a short circuit with no load, look for a short in the Sensor or Y/R wire. Replace Sensor if shorted.

b. If the Sensor and Y/R are good, replace the Even Heat Control.

PROBLEM: Dryer Shuts Off Before Clothes Are Dry

(Refer to Motor Thermistor Test, page 5, and Moisture Sensor Strip Circuit, page 8)

If the dryer shuts off too soon when set to the AUTO DRY PLUS cycle, check the following:

- **HARNESS/CONNECTION**
- **MOISTURE SENSOR**
- **EVEN HEAT CONTROL**

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

Procedure:

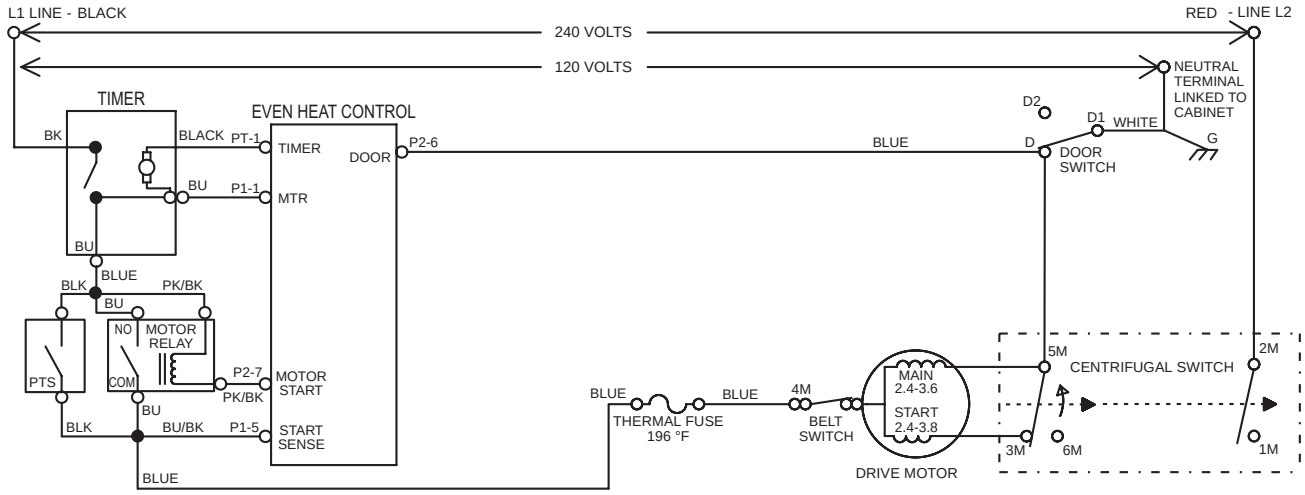
1. Test the Moisture Sensor by following the procedure outlined in "Factory Test".

- If Moisture Sensor fails the "Factory Test" (does not produce a beep sound), replace Moisture Sensor.

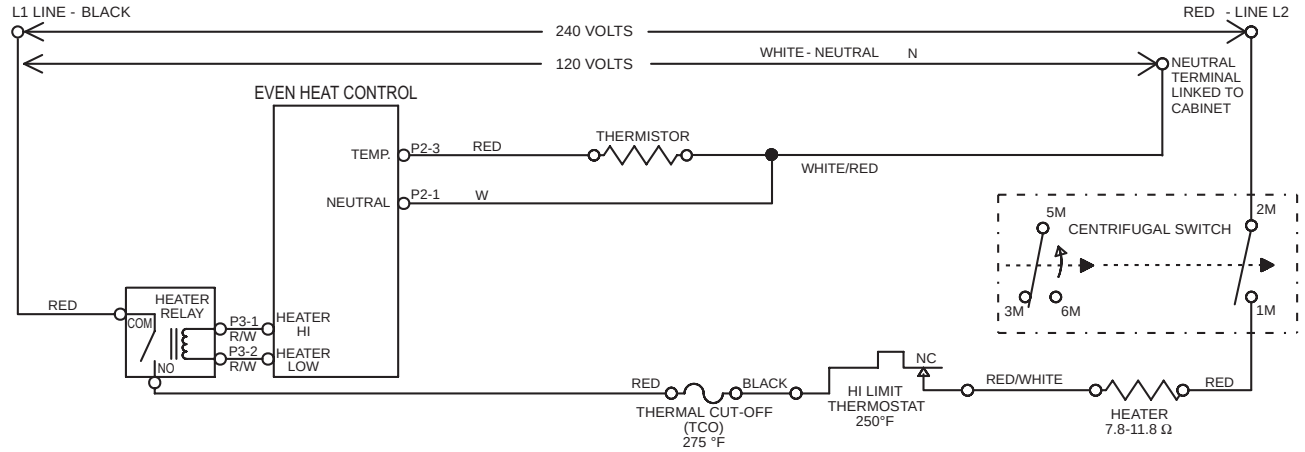
2. If Factory Test is passed, verify thermistor by performing the test procedures outlined in "Thermistor Test".

3. If problem persists after replacing Moisture Sensor and thermistor, replace the Even Heat Control.

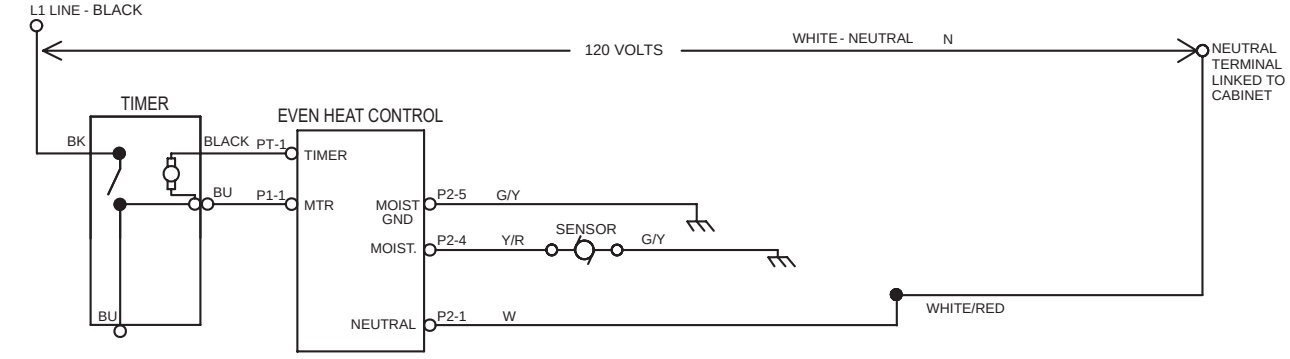
MOTOR STRIP CIRCUIT



HEATER STRIP CIRCUIT



MOISTURE SENSOR STRIP CIRCUIT



PART NO. 3406532

NOTE: This sheet contains important Technical Service Data

FOR SERVICE TECHNICIAN ONLY
DO NOT REMOVE OR DESTROY