



Model: DV405ETPA
DV405GTPA****

Bulletins:

Fast Track Troubleshooting

IMPORTANT SAFETY NOTICE – “For Technicians Only” This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

Publication # Dr DV405ETPA Production Date 9/17/13

Support Information:

HELP: 1-888-751-4086 (Tech Sup. – ASC/SSD)

1-866-894-0637 (Tech Sup. - FE/ME)

GSPN: http://service.samsungportal.com/EP/web/portal/jsp/EP_Default1.jsp

PLUS ONE: <http://my.plus1solutions.net/clientPortals/samsung>

Dryer Q&A

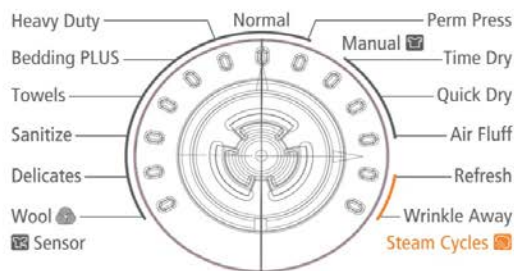
Q. What does it mean when chasing light appear in the display?	A. The chasing lights appear in the display when Wrinkle Prevent is selected. This lets you know that the dryer is tumbling intermittently for 95 minutes with room temperature air after the cycle is complete to reducing wrinkling. The load is dry and can be removed at any time during Wrinkle Prevent.
Q. Why is the estimated drying time so long?	A. The initial estimated drying time will be longer because the dryer has not yet detected the amount of moisture in the load. After the dryer has been running for several minutes, a more accurate estimate will be displayed. Remember, the times are estimated. The actual drying time may be longer or shorter, depending on the load.
Q. My dryer seems to run longer than I expect. Why?	A. The dryer automatically senses the dryness level of load. Be careful to avoid overloading your dryer. For best drying results, avoid mixing heavy and lightweight items in the same load.
Q. My dryer has an unpleasant Odor	A. The lint trap has not been cleaned. If the lint trap is not cleaned it can block moisture from escaping from the drum and the air inside is recycled, through the old lint. This concept also applies to lint clogging the exhaust duct. Both conditions can also lead to moisture being trapped in the drum, which will prevent the dryer from drying clothes completely. B. The clothes from the washing machine were sitting in the washing machine for too long and started to mildew or sour, or there was an odor from the washing machine. When sour clothes are first pulled out of the washing machine, the smell may be less noticeable. However, once heat is applied, the smell is intensified. C. A small animal (birds, Mice, lizards, etc) has climbed into the exhaust vent. Small animals are drawn to the exhaust vent because of the warmth. It is very important to cover this vent with a laundry exhaust vent cover.

ELECTRIC AND GAS DRYER				
Weather Hood Type				
Recommended			Use only for short-run installation	
 4" (10.16 cm)			 2.5" (6.35 cm)	
No. of 90° elbows	Rigid	Metallic Flexible*	Rigid	Metallic Flexible*
0	24.4 m (80 ft.)	12.4 m (41 ft.)	22.6 m (74 ft.)	10.1 m (33 ft.)
1	20.7 m (68 ft.)	11.2 m (37 ft.)	18.9 m (62 ft.)	8.8 m (29 ft.)
2	17.4 m (57 ft.)	10.1 m (33 ft.)	15.5 m (51 ft.)	7.6 m (25 ft.)
3	14.3 m (47 ft.)	9.0 m (29 ft.)	12.5 m (41 ft.)	6.5 m (21 ft.)

* Do not use non-metallic flexible duct.



Service Mode



Service Mode:
Hold together for
3 Seconds

How to enter Service Mode:

- To enter Service Mode , press Mixed Load Bell + Temp. Keys 3 seconds in normal mode until it sends out a beeping sound.
- If pressing Mixed Load Bell + Temp. Keys in Service mode , it will return Normal mode.
- Even though entering Service mode, the operating cycle will not be influenced.

-Sensor Bars This is the default mode after entering service mode. Put your hand on the sensor bars to check if the number changes or not. If the number changes on the display the sensor bars are working.

Continuous Run

How to Enter :

Press Mixed Load Bell +Dry Level for 7 sec during Power On State (normal user mode).

Once in Continuous Run Mode, display "CC" for 1 sec and the remaining time for 2 sec in turns.

The previous cycle will restart during Continuous Run Mode until the mode is deactivated.

During Continuous Run Mode, press Mixed Load Bell +Dry Level for 7 seconds to go back to normal user mode.

Software Version

How to Enter:

At Service Mode, press Temp until it sends out a beeping sound
ex) In case of "U1 05", U1 means major version "U1", 05 means minor version "05".

If press Temp key In Software Version Mode, it will return Service Mode.

Definition of Software Version Mode

- It is to retrieve its software version

Cycle Count

How to Enter:

Press the Mixed loaded bell key in Service Mode.

Definition of Sensor Bar Touch Data Mode:

This mode will bring up the total number of cycles that the Unit has done.

Data Display

How to enter:

With Power On, press Adjust Up Key + Adjust Down Key for 7 seconds until it sends out a beeping sound .

If not pressed any keys for 5 minutes, it will be set back from Data Display Mode

If pressing Adjust Up Key in this mode ,Display Mode ID will be increased.

If pressing Adjust Down Key in this mode ,Display Mode ID will be decreased

Display Mode 0 : Temperature data

Display Mode 1 : Average Touch Sensor data for 1 minute

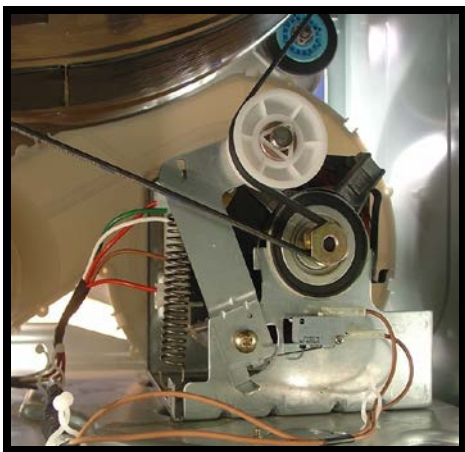
Display Mode 2 : Average Temperature data for 1 minute

Error Codes

Error Display	Trigger	Action Taken
tE	The Thermistor resistance is very low or high.	Check for: - Clogged lint screen. - Restricted vent system. - Check Thermistor resistance.
HE	Invalid heating Temp in running the dryer	Check for: - Restricted vent system. - Check Thermistor resistance.
dE	Running the dryer with door open	Check for: - Close the door, and run the dryer. - Loose or open wire terminals in Door Sense circuit.
dF	Invalid door state for more than 256 milliseconds	Check for: - Loose or open wire terminals in Door Sense circuit.
bE2	Invalid state of key circuit short for 30 secs	Check for: - Display PCB key circuit short or not.
FE	Invalid power source Frequency	Check for: - Not using regular power source frequency. - Invalid power frequency sense circuit.
2E	Electronic Control Problem (Over Voltage Error)	Check for: - Check PCB and Wire harness. - Check Power supply.
AE	Electronic Control Problem (Communication Error)	Check for: - Check PCB and Wire harness. - Replace PCB.
Et	Invalid state of Eeprom communication	Check for : - PCB with Eeprom circuit.

Reference Info

Belt Position



■ Proper grounding and polarization for 120 volts wall outlets

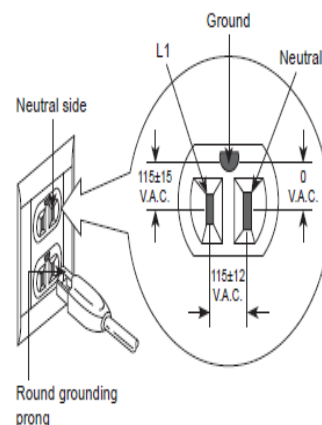
For the safety of our customers and the service technician ALL gas dryers have a three-prong power cord and MUST be connected to a properly polarized and grounded wall outlet. This information was written for those who do not understand grounding and polarization of a wall outlet. A 120 VAC wall outlet must always be wired as shown right.

Polarization - This means that the larger slot must be neutral and the small slot must be hot (live).

Mispolarized - The outlet is miswired so that the larger slot is hot (live) and the smaller slot is neutral.

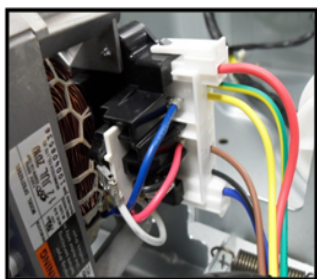
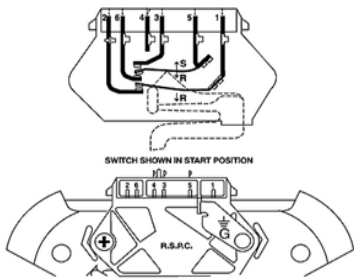
Grounded - This means the round hole connection is connected to ground through a connection to the main power panel.

Ungrounded - The round hole connection is not connected to a ground and/or the main power panel.



Troubleshooting

Checking the Motor



- Unplug the harness connector and the test motor circuits.
- Pin 3 and Pin 4 (Windings) should read ~2.88 Ω
- Pin 4 and Pin 5 (Windings) should read ~2.88 Ω
- Pin 1 and Pin 2 (Centrifugal switch) should read ∞

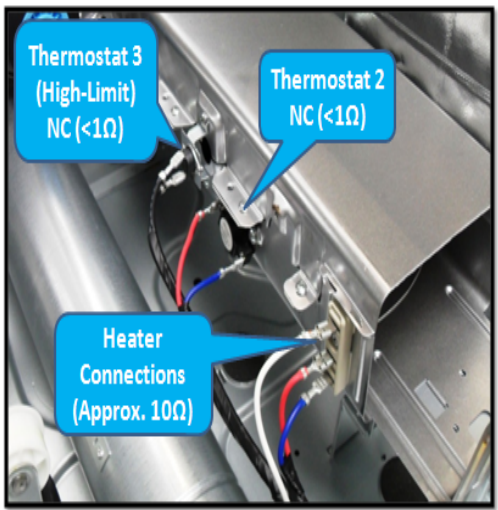
Belt Tension Sensor Switch



While inspecting the motor, check and adjust the belt tension switch. Replace if necessary while the motor is out of the machine

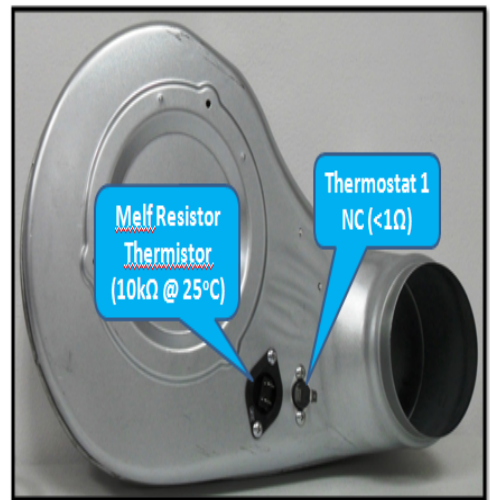
Electric Dryer

Heater Component Check



- Thermostat 2 is normally closed and directly tied to the heater connections; it will open up if the heating element gets too hot
- Thermostat 3 (High-Limit) is normally closed and will open up and shut down the dryer if it detects an excessively high temperature
- **A defective High-Limit thermostat will prevent the dryer from operating**

Blower Housing Component Check



- Thermostat 1 is normally closed and will open up if the temperature in the exhaust fan gets too hot (trapped lint fire)
- The Melf resistor thermistor monitors the temperature in the dryer, and feeds the information back to the Main PCB; this controls the function of the heating element

Troubleshooting

GAS

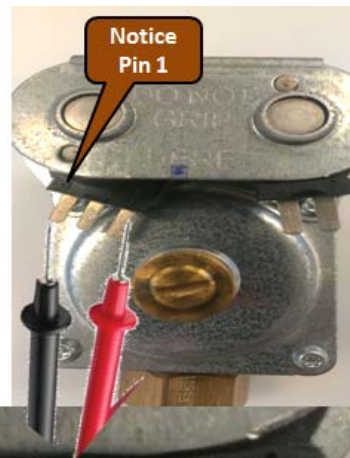
Heating on Gas Dryer



- Valve Pin 1-2: Resistance value 1.2K ohm
- Valve Pin 1-3: Resistance value 0.5K ohm
- Valve Pin 4-5: Resistance value 1.2K ohm
- Valve Pin 2-3: Resistance value 1.9K ohm

•If resistance is infinity (OL). Replace valve

*If you hear noise coming from the gas valve do not try and fix the valve
replace the whole valve*



Flame Radiant Sensor is mounted on the Duct Ass'y



Igniter mounts on the Burner Ass'y

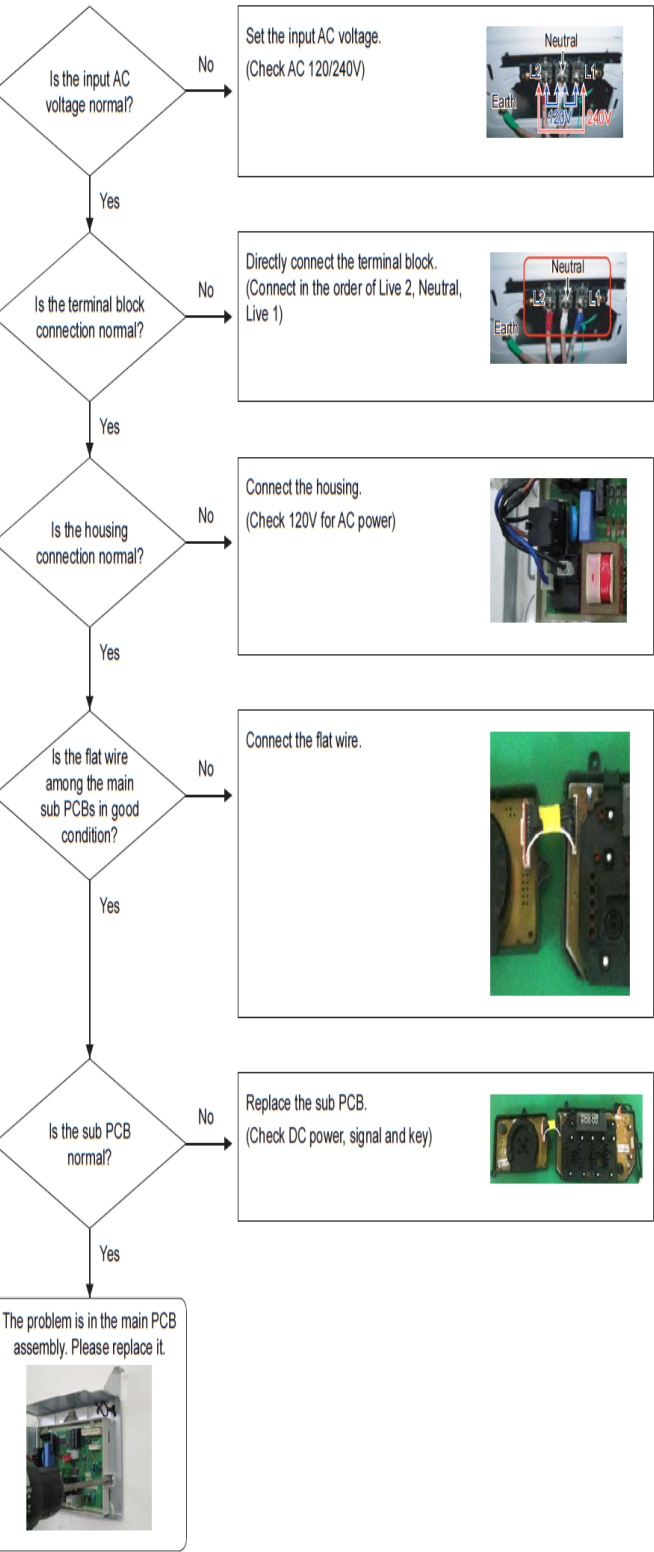


High Limit Thermostat

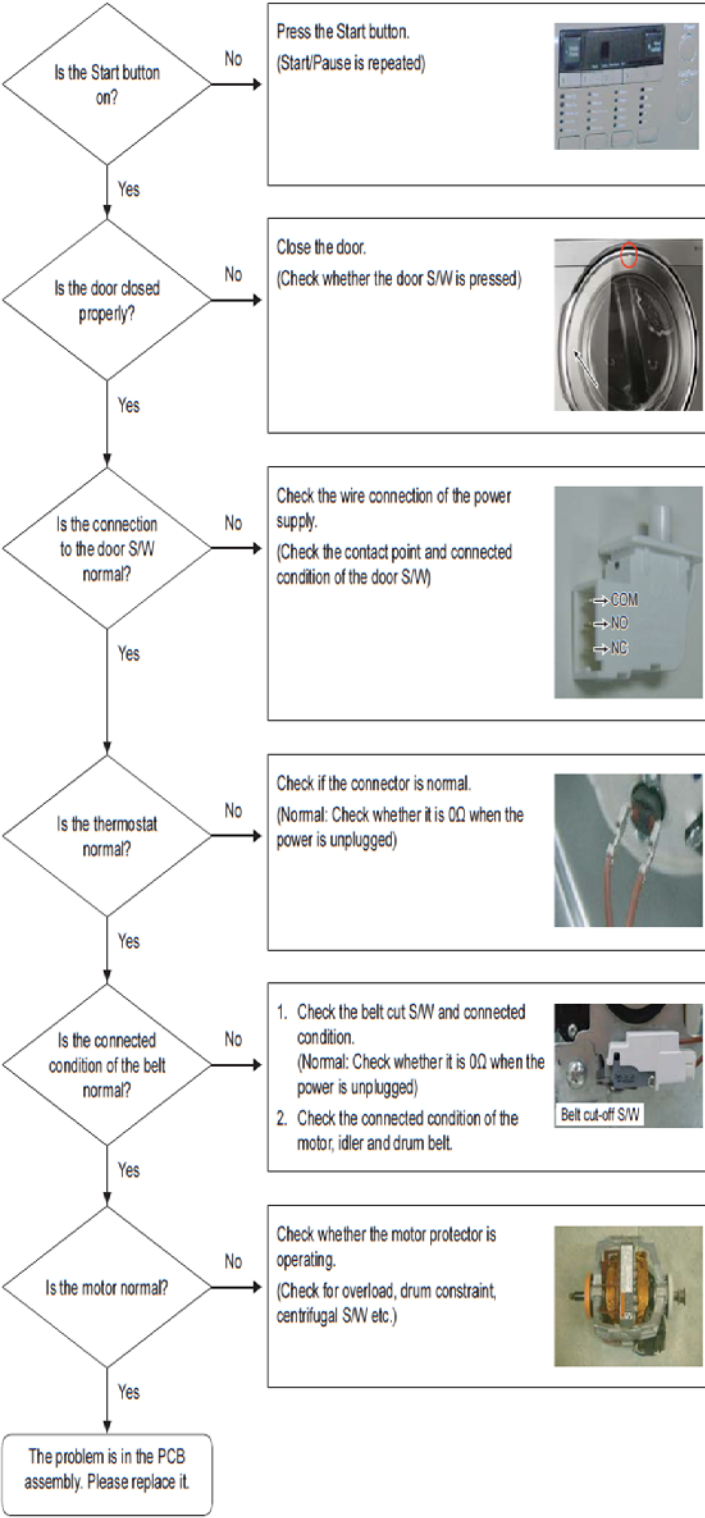


Troubleshooting

■ The power does not work.

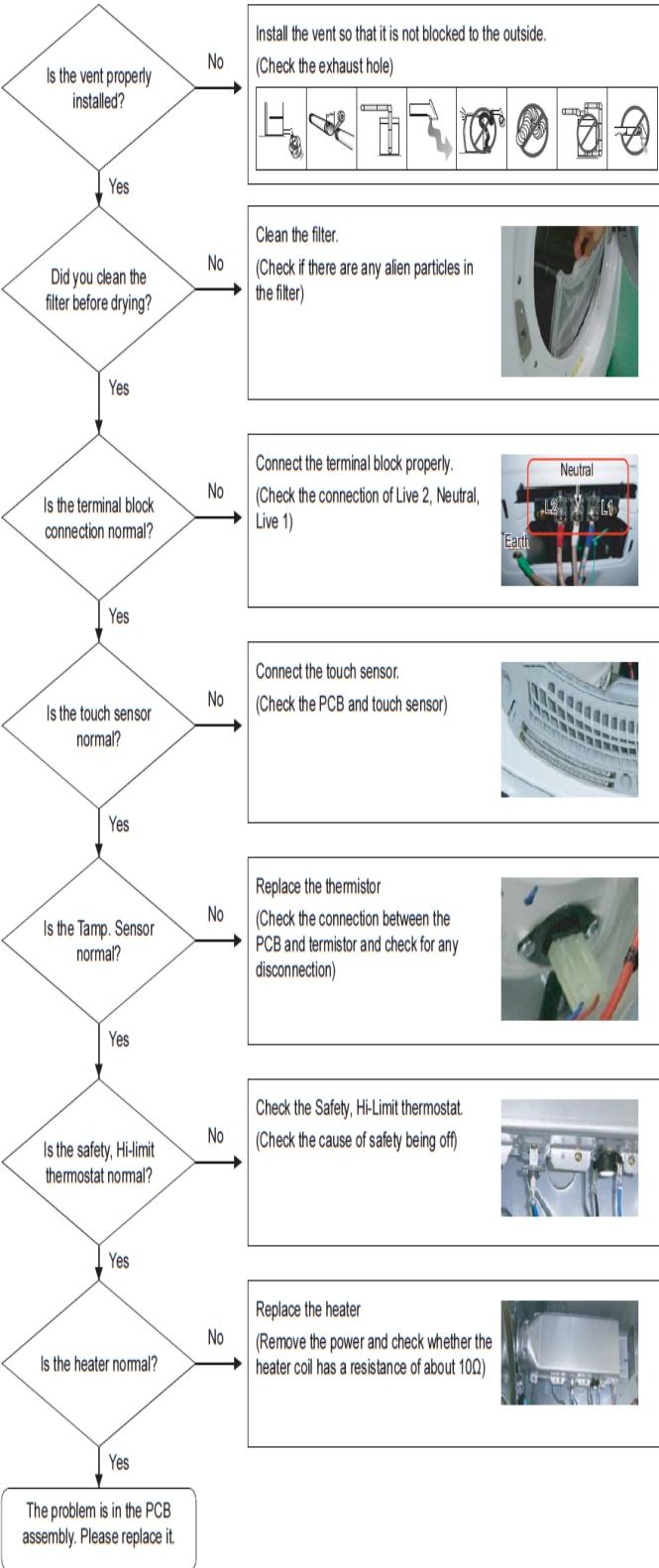


■ The drum does not work.

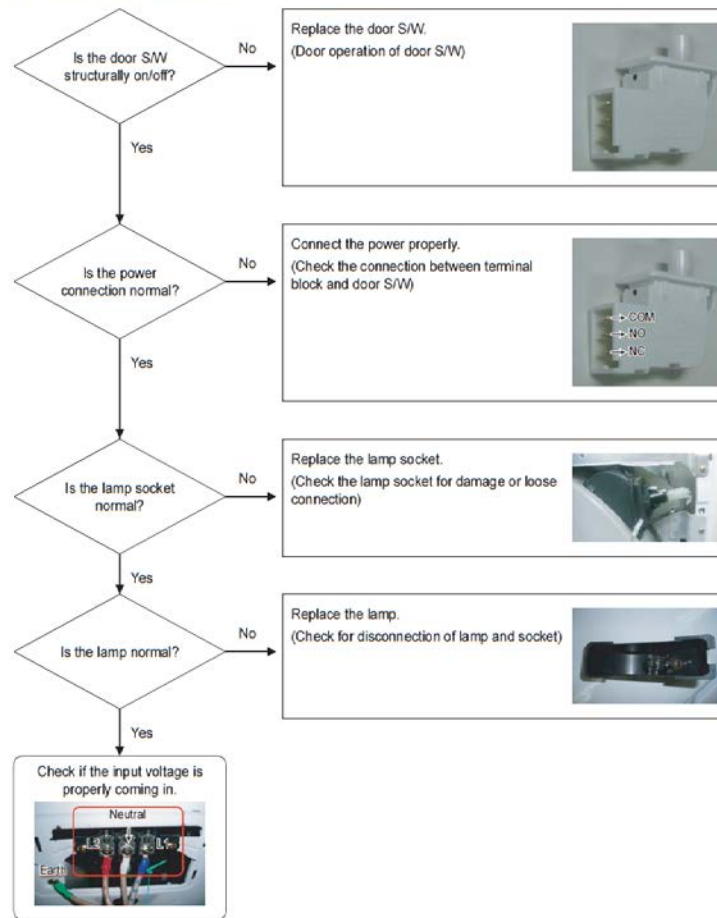


Troubleshooting

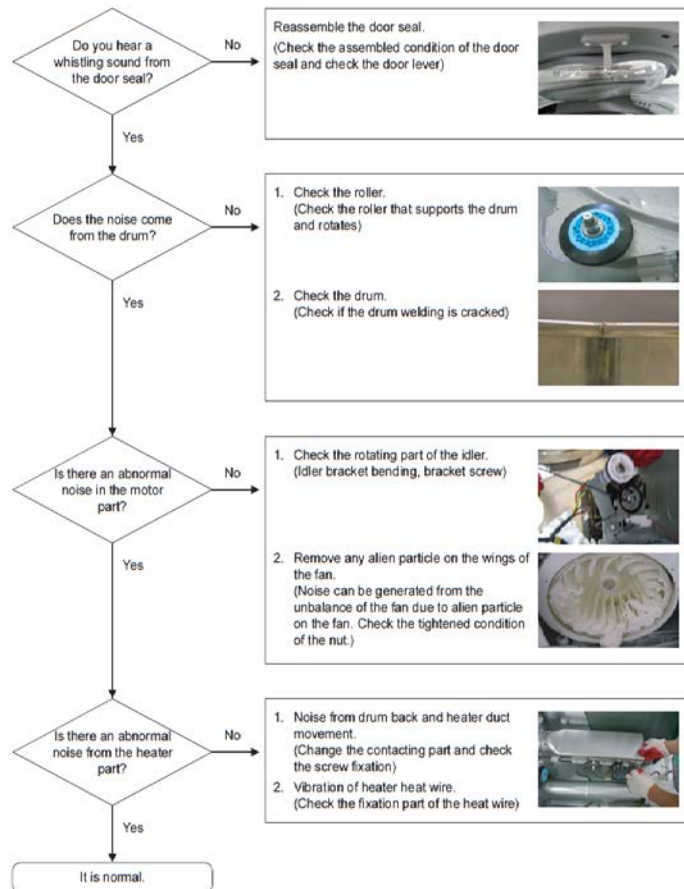
The clothes are not dried.



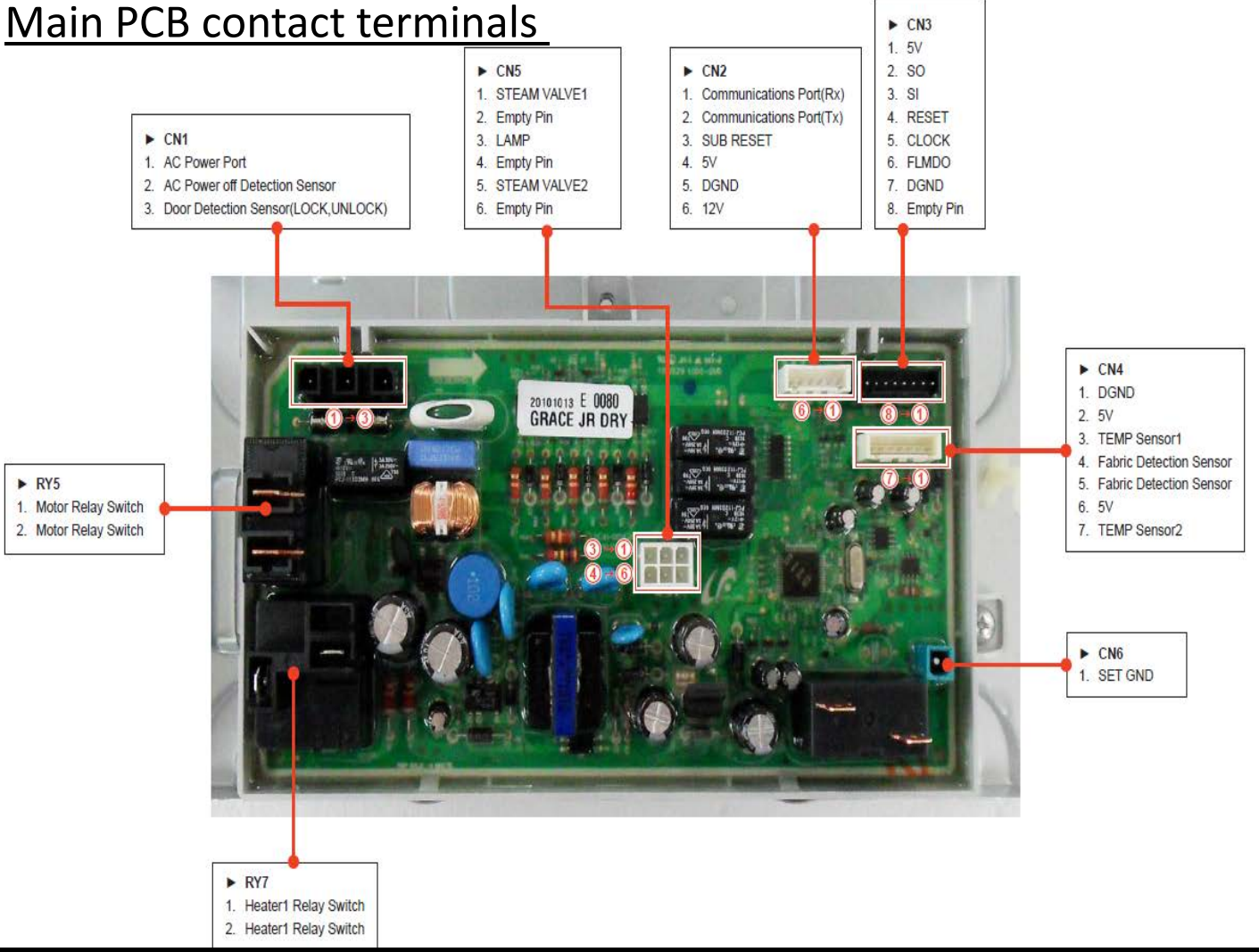
The lamp does not work.



There is an abnormal noise in the dryer.



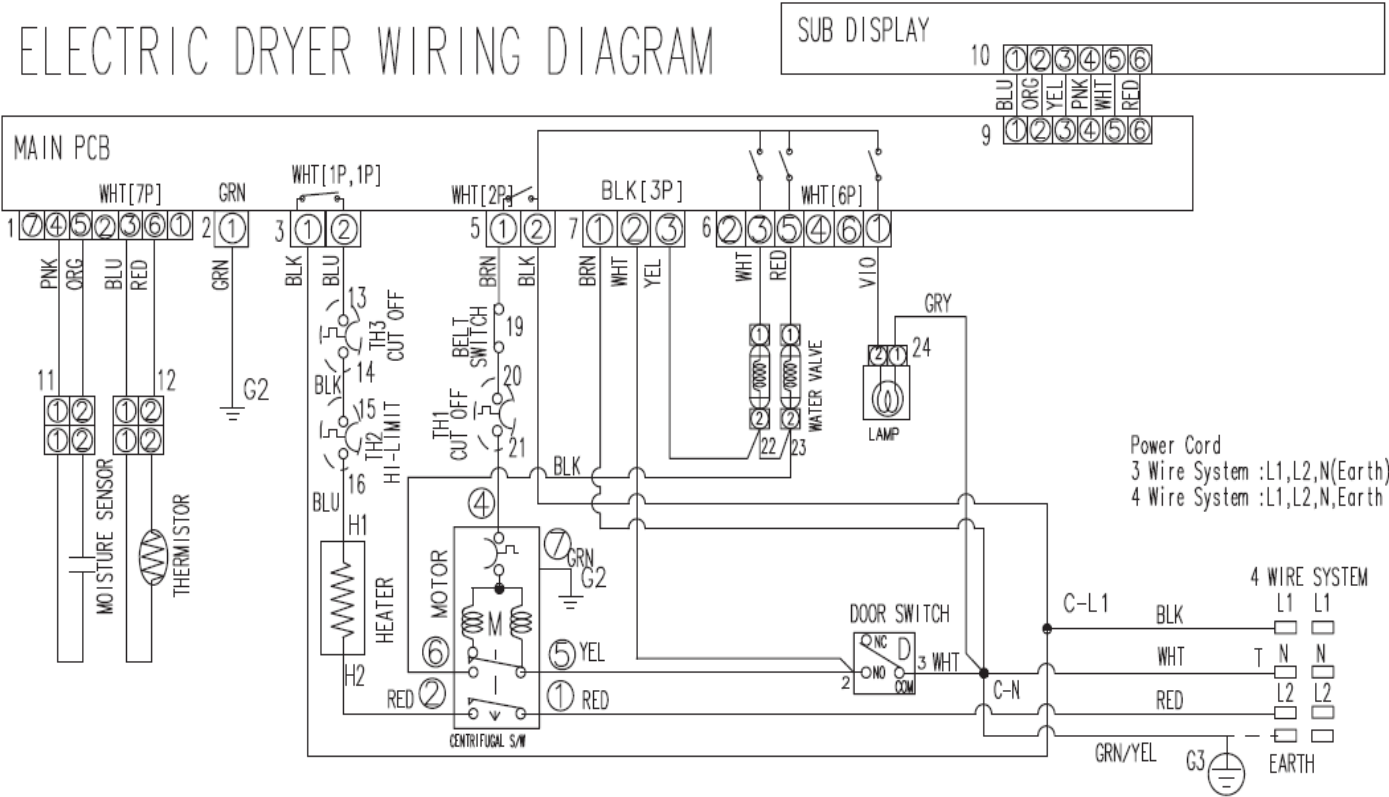
Main PCB contact terminals



SUB PCB contact terminals



ELECTRIC DRYER WIRING DIAGRAM



GAS DRYER WIRING DIAGRAM

