SAMSUNG

CLOTHES DRYER

Basic Model : DV52J8060EW/A2
DV52J8060GW/A2
(DV8000J DRYER PROJECT)

Model Name : DV52J8700E*
DV52J8700G*
(DV8700J DRYER PROJECT)

Model Code : DV52J8700EW/A2
DV52J8700EP/A2
DV52J8700EP/AC
DV52J8700GP/A2
DV52J8700GW/A2

SERVICE Manual

CLOTHES DRYER

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1. SAFETY INSTRUCTIONS

1-1. CAUTION FOR SAFETY DURING SERVICING

1. Do not allow the customer to repair the product.
   - The person may be injured or the product life may be shortened.

2. Execute A/S after unplugging the power supply unit.
   - Be careful of the electric shocks.

3. Do not plug several plugs in the same outlet.
   - It may cause a fire due to overheat.

4. Check for damage, pinching or burning of the power plug the outlet.
   - Replace it promptly if it has a problem.(It may cause the electric shocks or fire)

5. Do not clean the main body with water.
   - It may cause electric shocks and fire and shorten the product life)

6. The wiring harness shall be free from moisture and tightened during serving.
   - It shall not be deviated by certain impact.

7. Remove any dust or dirt on the housing section,wiring section,connection section during servicing.
   - Protect from possible cause of fire such as the tracking,shortage etc.

8. Check for any marks of moisture on the electrical parts, harness section etc.
   - Replace the parts or remove the moisture.

9. Check the assembly status of the parts after servicing.
   - Maintain the status before servicing.

10. Pull out the power cord by holding the plug.
    - Be careful of electric shocks and when the cord is damaged.

11. Unplug the power plug from the outlet when the dryer is not used.
    - Be careful of electric shocks and fire due to the strike of lightning.

12. Do not use or store sprays or flammable materials(including gasoline,alcohol etc.) around the dryer.
    - Be careful of explosions or fire due to electric sparks.

13. Do not put bowls of water or wet laundry on the dryer.
    - If water has penetrated into the dryer, this may cause electric shocks or fire.

14. Do not install the dryer outside exposed to moisture.
    - It may cause electric shocks and fire and shorten the product life.

15. Do not push the control buttons with an awl,pin, or sharp materials.
    - It may cause electric shocks and damage.

16. Check the dryer is leveled horizontally and installed properly on the floor.
    - The vibration may shorten the product life.

1-2. IMPORTANT SAFETY INFORMATION

To avoid risk of fire, electric shock, serious injury, or death when using your dryer, follow these basic precautions:

1. Read all instructions before using the dryer.

2. Install dryer according to Installation Instructions. Refer to the Grounding Instructions in the Installation Instructions for proper grounding of the dryer.

3. Do not dry articles that have been cleaned in, washed in, soaked in, or spotted with gasoline, drycleaning solvents, or other flammable or explosive substances. Vapors could ignite or explode.

4. Do not use the dryer to dry clothes which have traces of any flammable substance, such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc., or anything containing wax or chemicals, such as mops and cleaning cloths. Flammable substances may cause the fabric to catch fire by itself.

5. Do not store or use gasoline or other flammable vapors and liquids near this or any other appliance.

6. Do not allow children to play on or in dryer. Close supervision of children is necessary when the dryer is used near children, a safety rule for all appliances.

7. Before the dryer is removed for service or is discarded, remove doors to drying compartment.

8. Do not reach into the dryer if cylinder is rotating.

9. Do not install or store the dryer where it will be exposed to water and/or weather.

10. Do not tamper with dryer controls.

11. Do not repair or replace any part of the dryer or attempt any service, unless specifically recommended in user-maintenance instructions or in published user-repair instructions that you understand and have skills to carry out, if you are a consumer.

12. To reduce risk of electric shock or fire, do not use extension cords or adapters to connect the dryer to electrical power source.

13. Use the dryer only for its intended purpose, drying clothes.

14. Always disconnect the dryer from electrical supply before attempting any service. Disconnect the power cord by holding the plug, not the cord.

15. Do not use heat to dry articles containing foam rubber or similarly textured rubberlike materials.

16. Always clean the lint filter after every load. A layer of lint in the filter reduces drying efficiency and pro longs drying time.

17. Use only fabric softeners or products to eliminate static that are appropriate for automatic dryers.

18. Keep your dryer in good condition. Bumping or dropping the dryer can damage safety features. If damage occurs, have the dryer checked by a qualified service technician.

19. Replace worn power cords and/or loose plugs.

20. Do not tumble fiberglass curtains and draperies unless the label says it can be done. If they are dried, wipe out the cylinder with a damp cloth to remove particles of fiberglass.

21. Always read and follow manufacturers instructions on packages for laundry aids. Heed all warnings or precautions. To reduce risk of poisoning or chemical burns, keep products away from children at all times, preferably, in a locked cabinet.

22. Never operate the dryer with the guards and/or the panels removed.

23. Do not operate the dryer with missing or broken parts.

24. Do not bypass safety devices.

25. Keep area around the exhaust opening and adjacent surrounding areas free from accumulation of lint, dust, and dirt.

26. Interior of dryer and exhaust duct should be cleaned periodically by qualified service personnel.

27. The dryer will not operate with loading door open. DO NOT bypass the door safety switch by permitting the dryer to operate with door open. The dryer will stop tumbling when the door is opened. Do not use the dryer if it does not stop tumbling when door is opened or starts tumbling without pressing or turning the START mechanism. Stop using the dryer and contact a qualified service technician.

28. Remove laundry immediately after the dryer stops.

29. ALWAYS follow the fabric care instructions supplied by the garment manufacturer.

■ Electrical service information

Electrical Dryers	120/240 VAC, 60 Hz, 30 Amps, 3-wire or 4-wire installations
Gas Dryers	120 VAC, 60 Hz, 15 Amps, 3-wire installations

⚠ WARNING

To reduce the risk of fire, electric shock, serious injury or death, all wiring and grounding must conform with the latest edition of the National Electric Code, or the Canadian Electrical Code, and such local regulations as might apply. It is the customers responsibility to have the wiring and fuses checked by a qualified electrician to make sure your home has adequate electrical power to operate the dryer.

⚠ WARNING

To avoid risk of personal injury or death due to electrical shock:

- Observe all local codes and ordinances.
- Disconnect the electrical power to the unit before servicing.
- Ground the appliance properly.
- Check with a qualified electrician if you are not sure this appliance is properly grounded.
- DO NOT ground to a gas line.
- DO NOT ground to a cold water pipe if pipe is interrupted by plastic, nonmetallic gaskets, or other insulating (nonconducting) materials.
- DO NOT modify the plug on the power cord. If plug does not fit electrical outlet, have proper outlet installed by qualified electrician.
- DO NOT have a fuse in the neutral or ground circuit. A fuse in the neutral or ground circuit could result in an electrical shock.
- DO NOT use an extension cord with this appliance.
- DO NOT use an adapter plug with this appliance.
- DO NOT pinch the power cord.

⚠ WARNING

To reduce the risk of fire and exposure to combustion gases, the dryer MUST be exhausted to the outdoors.

DO NOT exhaust dryer air into a window well, gas vent, chimney or enclosed, unventilated area, such as an attic, wall, ceiling, crawl space under a building or concealed space of a building.

■ Gas dryer power supply

This equipment MUST be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electrical current. This unit is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

Consult a qualified electrician or servicer if grounding instructions are not completely understood, or if doubt exists as to whether the equipment is properly grounded.

Do not use an extension cord. If the product power cord is too short, have a qualified electrician install a three slot receptacle. This unit should be plugged into a separate 60 hertz circuit with the electrical rating as shown on the serial plate.

■ Proper grounding and polarization for 120 volts wall outlets

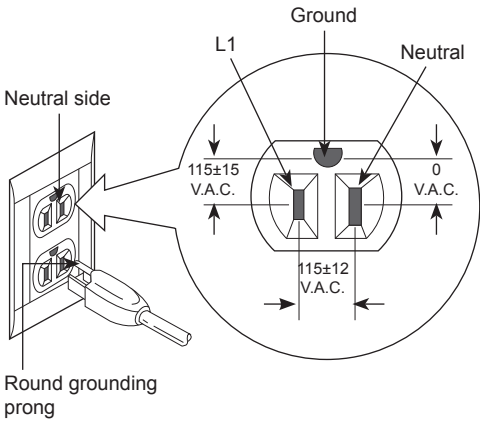
For the safety of our customers and the service technician ALL gas dryers have a three-prong power cord and MUST be connected to a properly polarized and grounded wall outlet. This information was written for those who do not understand grounding and polarization of a wall outlet. A 120 VAC wall outlet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



⚠ WARNING

To avoid death, personal injury or property damage, from fire or explosion, information in this manual must be followed exactly.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

⚠ WARNING

To reduce the risk of fire and exposure to combustion gases, the dryer MUST be exhausted to the outdoors.

DO NOT exhaust dryer air into a window well, gas vent, chimney or enclosed, unventilated area, such as an attic, wall, ceiling, crawl space under a building or concealed space of a building.

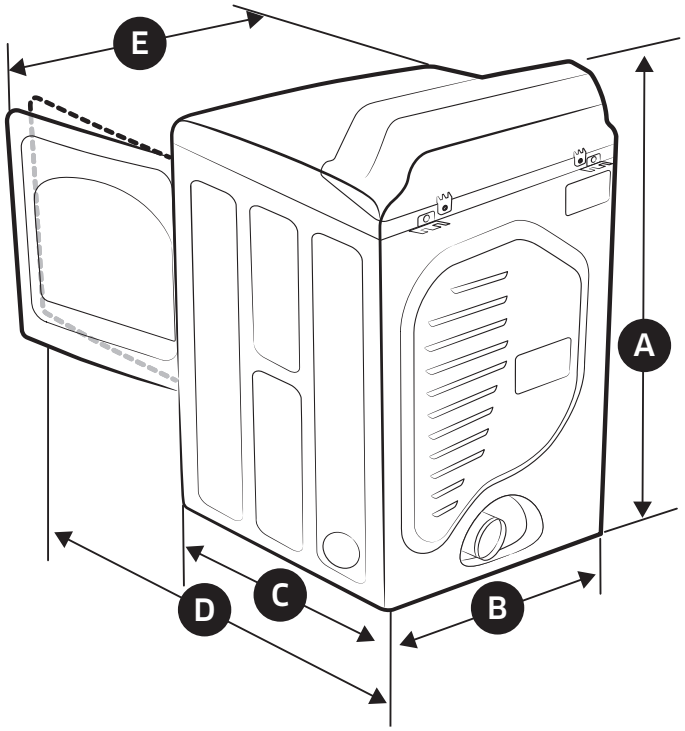
2. FEATURES AND SPECIFICATIONS

2-1. FEATURES

Features	Description
Largest Capacity	The largest capacity front-loading dryer, with a massive 7.4 cu. Ft. capacity, ensures fewer loads and can handle extra large items easily, which means more “me time”. Perfect match with the 5.2 cu. Ft. Washer.
Eco Dry	The new Samsung clothes dryer features an Ecodry function for energy saving. When you select Ecodry it automatically adjusts the drying cycle time and temperature to reduce energy consumption. So it uses less energy than the normal drying cycle.
VentSensor™	VentSensor™ automatically monitors the condition of your air duct to operate safely and efficiently. It will quickly notify you when it needs cleaning or might be obstructed, with the red LED indicator.
Various Drying Cycles & Fuzzy Logic Algorithm	Simply turn the Jog Dial to select one of the 13 automatic drying cycles, including normal, heavy duty and towels, or let the Fuzzy Logic Control measure the degree of dampness and automatically set the drying time. Precision drying has never been easier than with Samsung.
Steam Cycle	This cycle sprays a small amount of water into the dryer drum after several minutes of tumbling with heat. It reduces bad odors from clothing that are difficult to remove when washing with water, and also reduces wrinkles.
Time Saving	Our cycles are designed with you in mind. All our dryers are designed to dry your clothes in less time. Giving you time for more important things in life.
Energy Saving	Samsung dryers are super energy efficient, that you can dry up to 3.09 pounds of laundry with 1kWh. Also, both the large capacity and Fuzzy Logic Control save energy by automatically drying your clothes the most efficient way.
Easy Reversible Door	Our dryers will fit just about anywhere and without a door conflict. The direction of our easy reversible door can be changed.
Sanitize Cycle	This cycle sanitizes garments by infusing high temperature heat deep into the fabric during the drying cycle and eliminating 99.9% of certain bacteria.Use this cycle for clothing, bedding, towels, or other items needing sanitization. The Sanitize cycle is certified by NSF International, an independent third-party testing and certification organization.
4-way Vent (Electric Model only)	Customer can install the exhaust vent in the following four (4) positions: back, either side, bottom.

2-2. SPECIFICATIONS

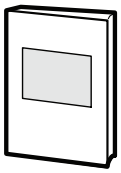
Model name			DV52J8700G* DV52J8700E*
Type			Front loading dryer
Dimension (inches (cm))	A. Height	Product	46.0 (116.8cm)
		Install	48.0
	B. Width	Product	27.0 (68.6)
		Install	29.0
	C. Depth	Product	30.0 (76.3)
		Install	35.0
	D. Depth with door open 90°	Product	49.80 (126.5)
		Install	54.82
	E. Width with door open 130°	Product	46.47 (118.0)
		Install	51.47
Water pressure (psi (kPa))			20 ~ 116 (137 ~ 800)
NET weight (lb (kg))			126 (57)
Heater rating	Gas (BTU/hr)		22000
	Electric (W)		5300



2-3. COMPARING SPECIFICATIONS WITH EXISTING MODELS

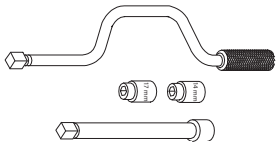
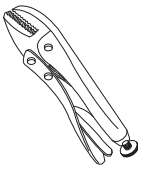
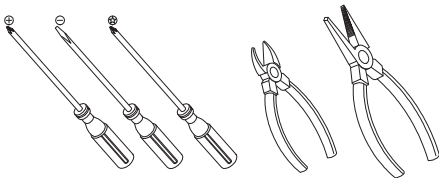
Project			DV8700J Dry		DV8000J Dry
Model name			DV52J8700GW	DV52J8700EW	DV52J8060EW DV52J8060GW
Image					
Capacity (cu.ft / DOE)			7.4	7.4	7.4
Power Resource			Gas	Electric	Electric/Gas
Matching Washer			WA52J*	WA52J*	WA52J*
Cycle Selection	Sensor Dry	NUMBER OF DRYING CYCLE	15	15	13
		Normal	Yes	Yes	Yes
		Eco Normal	Yes	Yes	Yes
		Heavy Duty	Yes	Yes	Yes
		Bedding	Yes	Yes	Yes
		Perm Press	Yes	Yes	Yes
		Wool	Yes	Yes	No
		Delicates	Yes	Yes	Yes
		Active Wear	Yes	Yes	Yes
		Towels	Yes	Yes	No
	Manual Dry	Air Fluff	Yes	Yes	Yes
		Time Dry	Yes	Yes	Yes
		Quick Dry	Yes	Yes	Yes
	Steam Cycles	Refresh	Yes	Yes	Yes
		Wrinkle Away	Yes	Yes	Yes
		Steam Sanitize	Yes	Yes	Yes
Option Selection		Vent Sensor	Yes	No	No / Yes
		ALC	No	No	No
		Steam	Yes	Yes	Yes
		Smart Care	Yes	Yes	Yes
		Drum Material	Stainless Steel	Stainless Steel	Stainless Steel
		Interior Drum Light	Yes	Yes	Yes
		Reversible Door	Yes	Yes	Yes
		Drying Rack	Yes	Yes	Yes
		Door Safety	Yes (Smoke)	Yes (Smoke)	Yes (Smoke)
		Filter Check Indicator	Yes	Yes	Yes
		Vent Exhaust (Electric / Gas)	3 ways	4 ways	4 / 3 ways
		Heating Element (KW)	5300W / 22,000 BTU /Hr	5300W / 22,000 BTU /Hr	5300W / 22,000 BTU /Hr
		Cycle Time (AHAM 8lbs)	75 min	75 min	75 min

2-4. OPTIONS SPECIFICATIONS

Item		Code	QTY	Remarks
	MANUAL-BOOK	DC68-03170M	1	Default
	Inlay-Holder Glass	DC64-02819A	1	Default

3. DISASSEMBLY AND REASSEMBLY

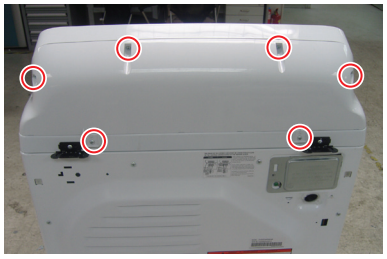
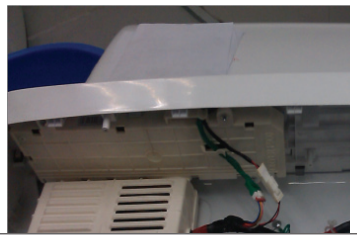
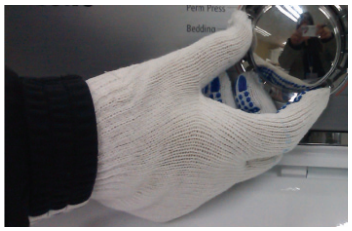
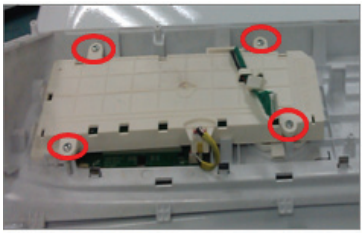
3-1. TOOLS FOR DISASSEMBLY AND REASSEMBLY

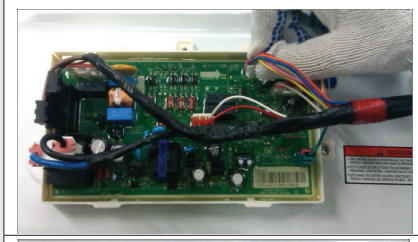
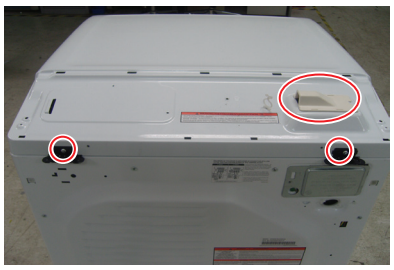
Tool		Type	Remarks
	Socket set with 6” extention	14 mm 17 mm	Fan (1) Roller Shaft (4)
	Wrench	8 mm	Tool to fix the Roller Shaft on removing the nuts.
	Vice pliers		Tool to protect the idle and abrasion of the bolt for the box driver.
	Other (Driver, Diagonal Cutter, Long Nose Pliers)		General tools for the after service.

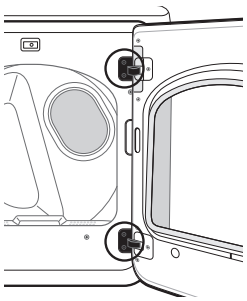
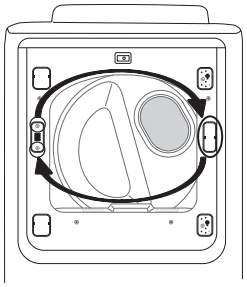
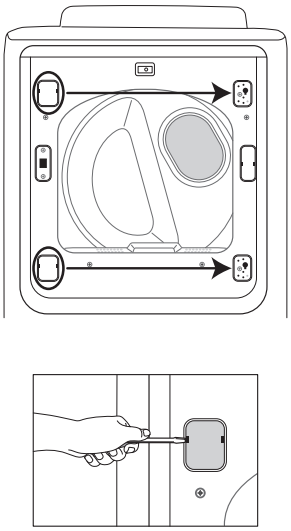
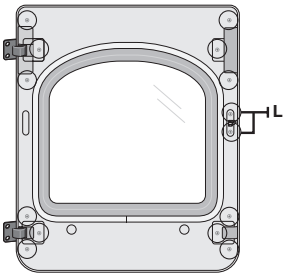
3-2. STANDARD DISASSEMBLY DRAWINGS

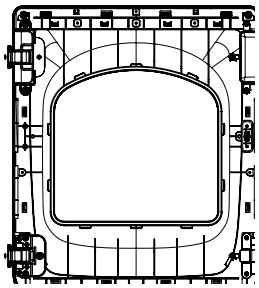
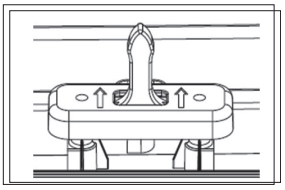
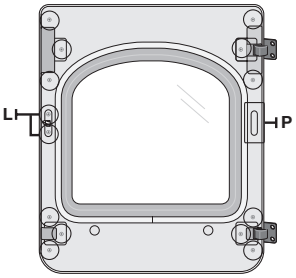
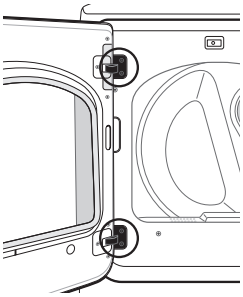
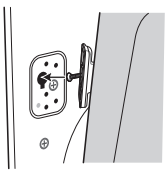
⚠ **To avoid risk of electrical shock, personal injury or death, disconnect the power to the Clothes Dryer.**

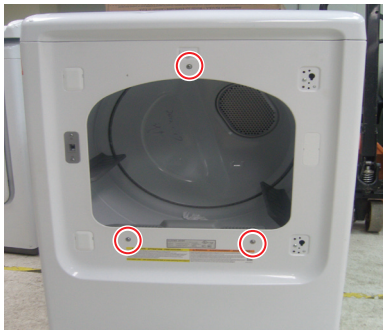
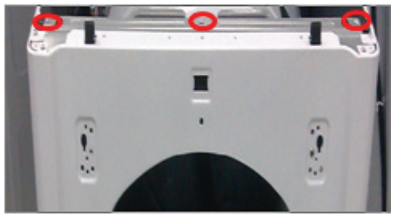
► This is a standard disassembly diagram and may differ from the actual product.
Use this material as a reference when disassembling and reassembling the product.

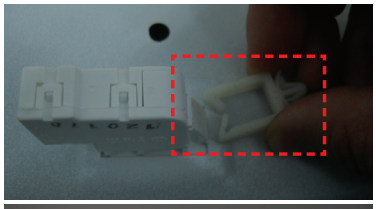
Part	Figure	Description
Panel Control Removal		1. Disconnect the power supply to the unit. 2. Remove 6 screws from the Cover Panel.
		3. Remove the Panel Control.
		4. Remove Each Housing.
		5. Remove the Knob.
		6. Remove 4 screws from the GUIDE-PCB(M). Be careful of external scratch on the Panel Control.

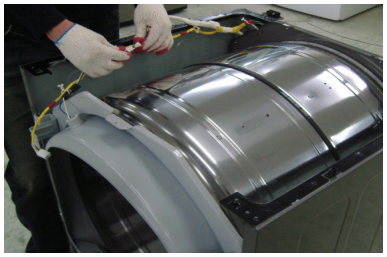
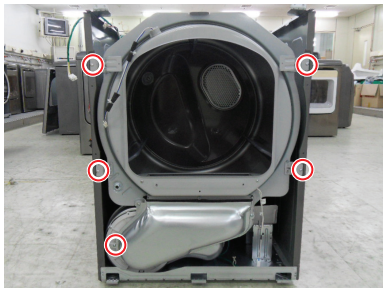
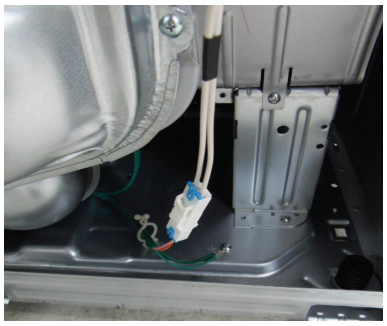
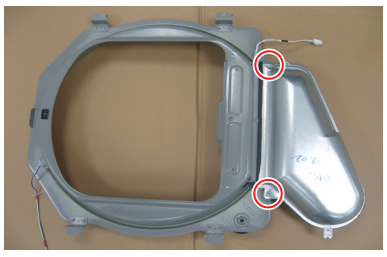
Part	Figure	Description
Main PCB Removal		1. Remove the Panel Control. 2. Separate 4 Hook From the Guide PCB.
		3. Remove the Housings.
		4. Remove 1 Screw from the Top Cover.
Top Cover Removal		1. Disconnect the power supply to the unit. 2. Remove the Panel Control and the Main PCB. 3. Remove the Cap-Cover Top and 2 screws from the Bracket Cover Top.
		4. Slide the Top Cover towards the front and lift from the unit. Scratch and impact to the top cover is prohibited.

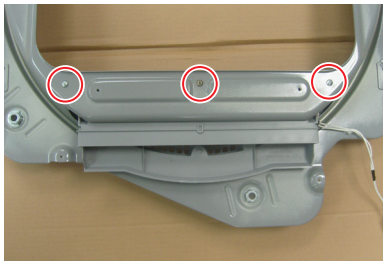
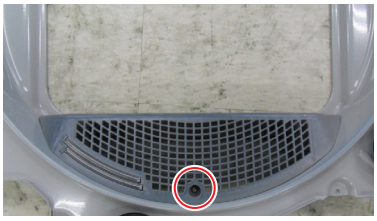
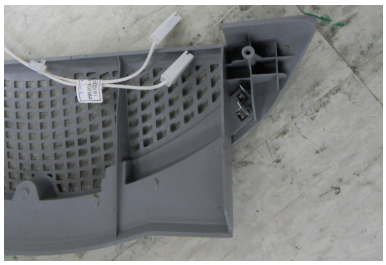
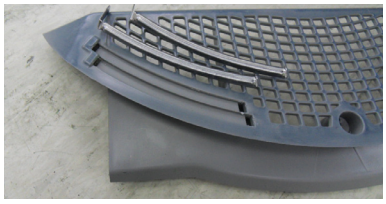
Part	Figure	Description
DOOR REVERSAL (Continued)		1. Unplug the power cord. 2. Remove the four hinge screws from the door. 3. Remove the door by lifting it.
		4. Remove the two screws from the holder-lever, and then remove the cover-holder. 5. Assemble the holder-lever on the opposite side using the screws that were removed from the holder-lever-in Step 4. 6. Assemble the cover-holder on the opposite side.
		7. Remove the two cover-hinges. 8. Assemble the two cover-hinges on the opposite side. Use a flat head screwdriver(-) to remove the cover-holder's cover-hinge.
		9. Remove the 14 screws. 2 screw (L) are longer than the other screws.

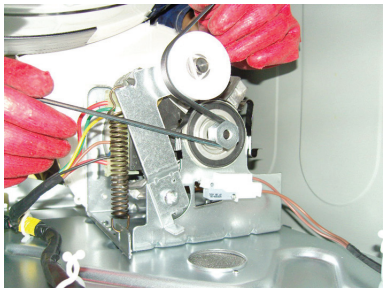
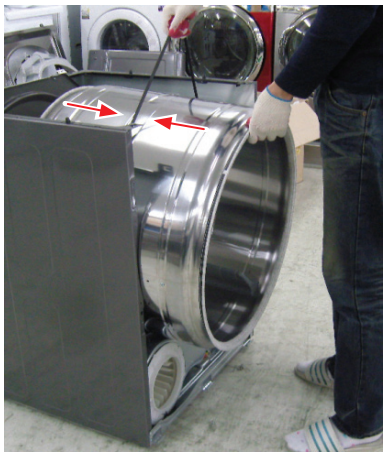
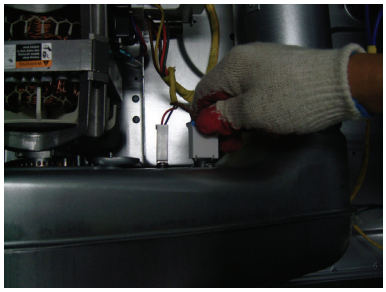
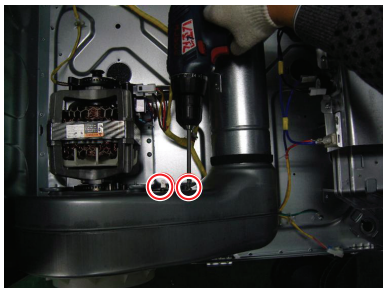
Part	Figure	Description
DOOR REVERSAL	 	10. Remove the holder-glass. 11. Exchange the positions of: : The cover-hinge and handle door : The holder-hinge and guiderholder glass 12. Remove the Cover-Lever and then install it on the opposite side. Refer to the illustrations on the right to aid you in the assembly process.
		13. Remove the cover-hole (P1). 14. Assemble the holder glass and then fasten the 14 screws that you removed in step 9. 15. Attach the cover-hole. A spare cover hole is in the assy manual.
	 	16. Install the door on the frame-front and then fasten the 4 screws that you removed in step 2. Check the positions of the screws you installed in the hinge door

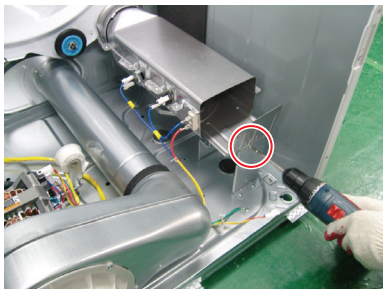
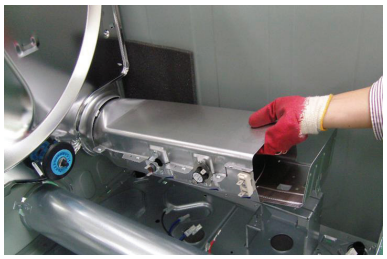
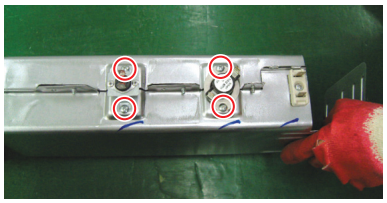
Part	Figure	Description
Frame Front Removal		1. Disconnect the power supply to the unit. 2. Remove the Panel Control, the Main PCB and the Cover Top. 3. Remove 3 screws from the Frame Front. When 1 screws of the top portion work because was added newly, keep in mind.
		4. Remove 3 screws.
		5. Remove the Door Switch Housing. When reassemble Door Switch to Frame Front, be careful for insert direction.
		6. Lift the Frame Front off the three tabs across the bottom and remove.

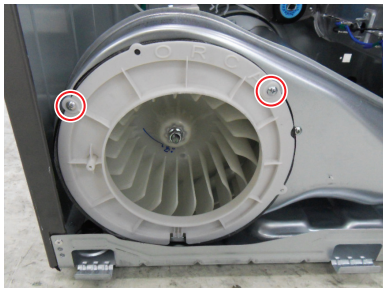
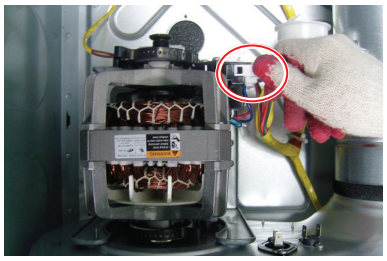
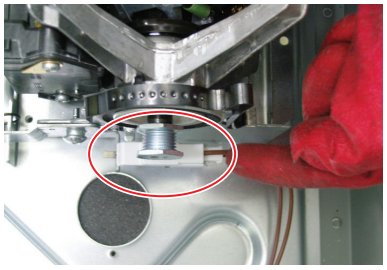
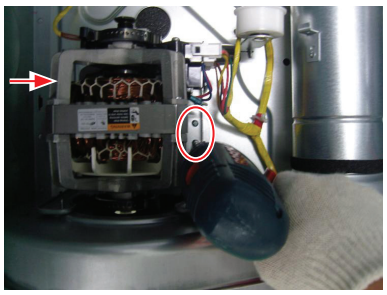
Part	Figure	Description
Frame Front Removal	 	[Method of Door S/W disjointing] 1. After separate Holder Wire in Door S/W, Door S/W Hook Press and is Pull to Frame Front whole surface.
	 	2. Pulls Door S/W to direction in 5 o'clock and separates Door S/W left part.
		3. Pull Door S/W to front side.

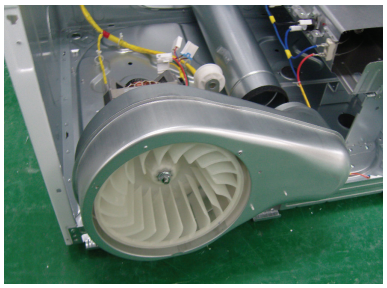
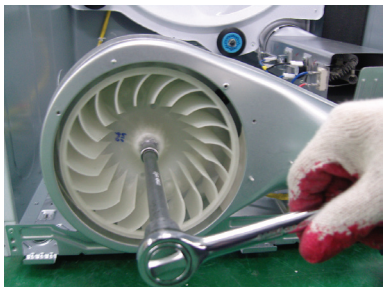
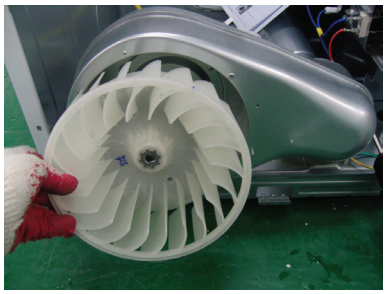
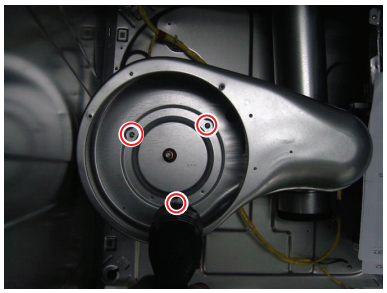
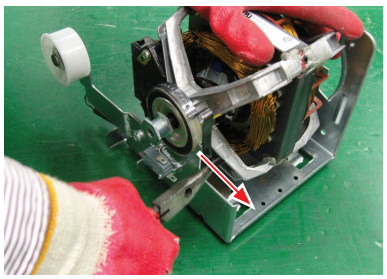
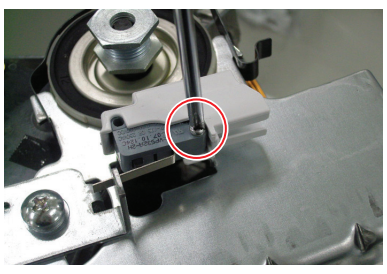
Part	Figure	Description
Drum Front Removal (Continued)		1. Disconnect the power supply to the unit. 2. Remove the Panel Control, the Main PCB, the Cover Top and the Frame Front. 3. Disconnect Interior Light wiring Harness.
		4. Remove the four Bracket Drum Front 5 screws.
		5. Disconnect the Moisture Sensor wiring Harness.
		6. Remove the Drum Front.
		7. Remove the filter.
		8. Remove 2 screws from the Duct Oulet.

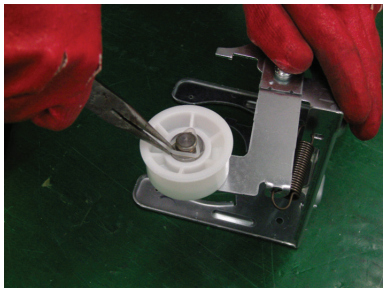
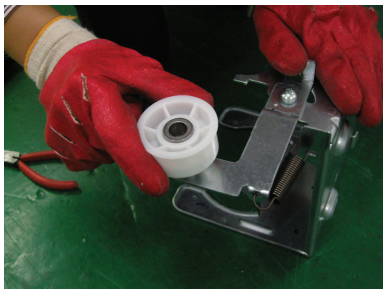
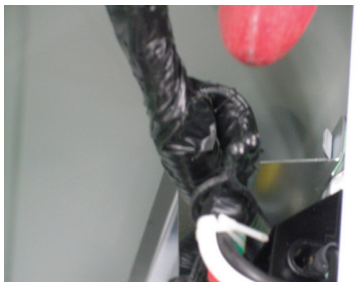
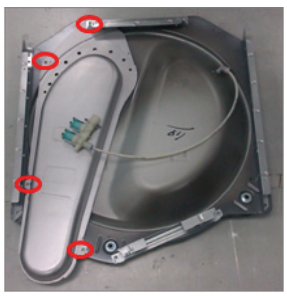
Part	Figure	Description
Drum Front Removal		9. Remove the Duct Outlet.
		10. Remove 3 screws from the Case Filter(F).
		11. Remove 1 screw from the Case Filter(B). Make sure the Filter does not get damaged by the Roller.
		12. Remove the Case Filter(B/F).
		13. Disconnect 2 Housing Sensor-Plate.
		14. Remove 2 Sensor-Plate.

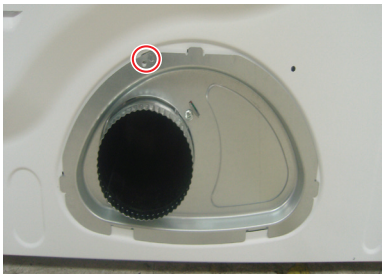
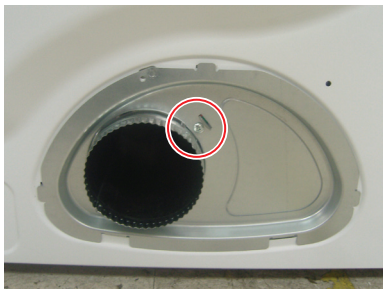
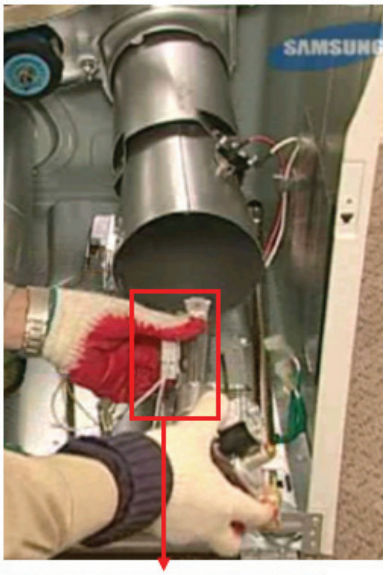
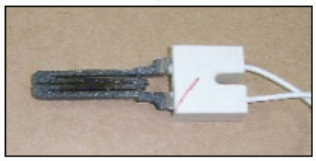
Part	Figure	Description
Drum Removal		1. Disconnect the Power Supply to the unit. 2. Remove the Panel Control, the Main PCB, the Cover Top, the Frame Front and the Drum Front. 3. Remove Belt.
		4. Remove the Drum. When reassemble the belt, make it located middle of the Drum.
Sensor (Thermistor, Thermostat) Removal		1. Disconnect the power supply to the unit. 2. Remove the Panel Control, the Main PCB, the Cover Top, the Frame Front, the Drum Front and the Drum. 3. Remove 2 Housing Sensor.
		4. Remove the Sensor. Do not apply excessive force to the terminal.

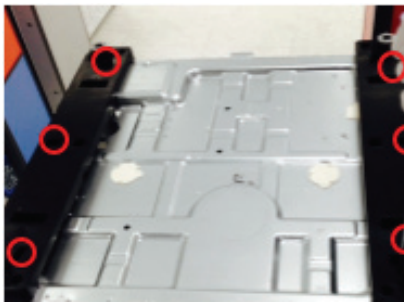
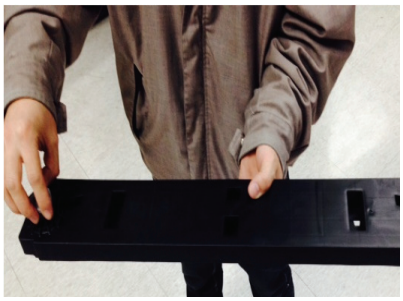
Part	Figure	Description
Heater Removal		1. Disconnect the power supply to the unit. 2. Remove the Panel Control, the Main PCB, the Cover Top, the Frame Front, the Drum Front and the Drum. 3. Removal 6 Housing Heater-Terminals.
		4. Remove 1 screw from the Heater.
		5. Separate the Heater from the Drum-back.
		6. Remove 4 screws from the Thermostats. Do not apply excessive force to the terminal.

Part	Figure	Description
Assy Motor Removal (Continued)		1. Disconnect the power supply to the unit. 2. Remove the Panel Control, the Main PCB, the Cover Top, the Frame Front, the Drum Front and the Drum. 3. Remove 2 screws from the Duct Connector.
		4. Remove 1 Housing Motor.
		5. Remove 1 Housing Belt Cut Off Switch.
		6. Remove 3 screws from the Motor-Bracket.

Part	Figure	Description
Assy Motor Removal (Continued)		8. Separate the Motor Assy at the Bottom Plate.
		9. Remove 1 Nut Fan. CW to remove. CCW to assemble.
		10. Remove the Fan.
		11. Remove 3 screws from the Cover-Duct Fan.
		12. Remove the 2 Spring Plate.
		13. Remove the 1 screw Belt cut Off Switch.

Part	Figure	Description
Assy Motor Removal		14. Remove the Holder Shaft.
		15. Remove the Roller-Idler.
Drum Back Removal		1. Disconnect the Power Supply to the unit. 2. Remove the Panel Control, the Main PCB, the Top. Cover, the Frame Front, the Drum Front and the Drum. 3. Remove 7 screws from the Drum Back.
		4. Separate the wire in the Wire Holder.
		5. Separate the Drum Back from the Frame.
		6. Remove 4 screws from the Air Duct. Be careful of the Bracket edge.

Part	Figure	Description
Duct Exhaust Removal		1. Disconnect the power supply to the unit. 2. Remove 1 screws from the Back-Cover.
		3. Remove 1 screw from the Duct-Exhaust. In case the screws for fixing a power code are dropped into the dryer, after removing Duct Exhaust, you can put it out through the hole.
Burner Removal(Gas Model)	 	1. After the knock-down to Motor/Assy-Motor, do the following. 2. Shut off gas supply. 3. Disconnect gas pipe. 4. Remove all the connectors. 5. Remove two screws (one at the front and the other one at the back) securing Burner to Frame. The Igniter Bar is fragile. So, take care when removing Burner Assy. 6. Remove the two screws attaching the housing to Burner Bracket. 7. Remove Burner Assy from the unit.

Part	Figure	Description
Assy Base-stand Removal		1. Remove 3 screws from each Assy Base-stand.
		2. Remove 2EA Assy Base-stand from Plate Bottom.
		3. Each Assy Base-stand Remove 2EA Leg.

4. TROUBLESHOOTING

4-1. INFORMATION CODES AND DIAGNOSTIC CODES

An occurrence of an Information code will make a sound of Information code melody for 5sec and continuously show one of the Information code Displays from the following Information codes.

Information code Display	Trigger	Action Taken
TC	The Thermistor resistance is very low or high.	• Check for a clogged lint screen. • Check if the vent system is restricted. • Check the thermistor resistance.
DC	The dryer is running with the door open.	• Close the door, and run the dryer again. • Check if the door sensor unit is loose or short.
DF	Incorrect door switch.	• Check if the door sensor unit is loose or short.
BC2	Incorrect button state.	• Check if the display PCB is loose or short.
FC	Invalid power source frequency.	• Check if you are using regular power source frequencies. • Check the power frequency sensor circuit.
9C1	Electronic control problem (Invalid Voltage).	• Check the PCB and wire harness. • Check if power is supplied properly.
AC	Electronic control problem (Invalid Communication).	• First check the PCB and wire harness. • Replace the PCB if the problem persists.
HC	Invalid heating Temp in running the dryer.	• Check the PCB and Thermistor.

4-2. TEST MODE

Continuous Run Mode :

1. Press Mixed Load Bell + Dry Level for 7 sec during Power On State (Normal User Mode) .
2. Once in Continuous Run Mode, display “CC” for 1 sec and the number of Cycle for 1 sec and the remaining time for 1 sec in turns.
3. The previous cycle will restart during Continuous Run Mode until the mode is deactivated.
4 During Continuous Run Mode, press Wrinkle Prevent + Dry Level for 7 seconds to return to normal user mode.

- **Data display mode :**

How to enter:

- After turning on the dryer, press Dry Level → Time → Temp. → Time within 2 seconds to enter the display mode.
- To change the mode, use the cycle selector.

Display mode number					
1	Main micom version	2	Display micom version	3	Touch-sensitive module version
4	Option value	5	Temperature data	6	Average temperature data for 1 minute
7	Temperature data for detecting if the vent is clogged	8	Average touch sensor data for 1 minute	9	Cycle count

Information code Recall

Information code Recall mode reminds users of the last Information code that was detected. Press and hold both the Wrinkle prevent and Dry Level buttons for 8 seconds to enter this mode. In Information code Recall mode, the last Information code that was detected appears. If no Information code has been found, nothing is displayed.

- **Smart Install**

Smart Install allows service personnel to check if the dryer is installed properly.

To enter Smart Install

Turn on the dryer, and press and hold the Adjust Time Up + Temp buttons for 7 seconds.

A message of “AS” appears.

Step 1. Check the touch sensor

Enter Smart Install mode, and open the door. The state of the touch sensor appears.

- 0 : Touch sensor open

- 1 : Touch sensor short

Put a wet cloth on the touch sensor to display “1”. Removing the cloth displays “0”.

Step 2. Check the motor and heater

Press the Start button to enter the diagnosis mode. The diagnosis result appears.

- OK : Both motor and heater work normally

- HE : Motor or heater doesn’t work normally

To exit Smart Install mode, turn off the dryer.

4-3. TROUBLE DIAGNOSIS

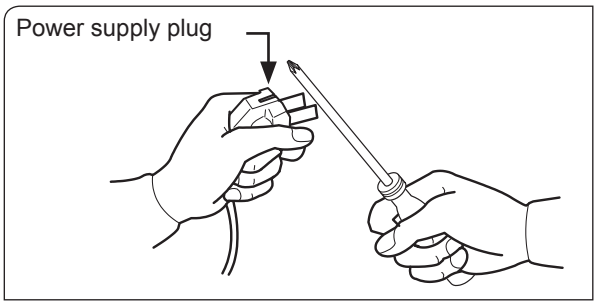
As the micom dry machine is configured for the complicate structure, there might be a service call.

The below information is prepared for exact trouble diagnosis and suitable repair guide.

● Caution for the repair and replacement

Please follow below instruction for the trouble diagnosis and parts replacement.

1. As some electronic components can be damaged by static electricity from the resin part of dryer or the human body, remove the potential difference of the human body and the dryer by contacting the power plug before you start working at PCB.



2. Since AC220~240V is applied to the triac T1 and T2 on P.C.B, the electric shock may occur by touching. Be careful the strong and weak electricity are mixed each other.
3. As the P.C.B assembly is designed for no trouble, do not replace the P.C.B assembly by the wrong diagnosis and follow the procedure of the trouble diagnosis when the micom is not operated normally.

No	Problem	What to do
1	Will Not Start or Run	• All wires are hooked up to their corresponding terminals. • Is the dryer is plugged in. • Blown fuse or circuit breaker. • Is the Door switch functional...door closed. Check for Information code 3 (See Table for code definition). • Start/Pause rotary selector dial functional. • Is the control Board operational. • Belt off or broken and Belt Cut-off Switch operates. • Is the motor functional. • Check motor winding resistance: 2.88ohms between pin #3 and 4, 3.5ohms between pin #4 and 5.
2	Motor runs/ tumbler will not turn	• Belt off or broken/damaged. • Idler tension spring too weak or stretched. • Idler pulley jammed or stuck.
3	Runs a few minutes and then stops	• Lint buildup around drive motor. • Low voltage present. • Blower impeller blocked in blower housing. • Check the actuator of motor.
4	Blows fuses or trips circuit breaker	- Is the belt connected well? - Is the winding of the motor continuous? (Rotor winding, stator winding, generator) - Is the motor protector normal? • If above points are not found, the PCB assembly is out of order. Replace it.
5	Blows fuses or trips circuit breaker (Gas Model)	• During ignition the dryer will draw 6 amps. With the burner ON, the dryer will draw 4.5 amps. If the dryer is drawing amperages above this, then the house wiring, fuse box or circuit breaker is suspected to be at fault. • Igniter harness loose and shorted to base. • Incorrect wiring or wire shorted to ground. • Drive motor winding shorting to ground.
6	Will not heat (motor runs)	Open heating element. • Hi-Limit trips easily or is open. • Regulating thermostat trips easily or is open. • Membrane switch open. • Check Thermistor.
7	Will Not Dry Gas Model Poor Gas Ignition	When the dryer is operated on a heat setting, the igniter should be energized and burner shall fire within 45 seconds at 120 VAC. The failure of a component in this system will usually be indicated by one of three symptoms (No.8, No.9, No.10)

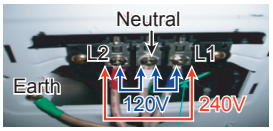
No	Problem	What to do
8	The igniter does not glow	If the igniter does not heat up, remove power and using an ohmmeter, check the following: • Open flame sensor • Open igniter • Shorted booster coil • Open wiring • Bad motor switch (Neutral supply) • No power from control (L1 supply)
9	Igniter glows - No gas ignition	If the igniter heats up but the main burner flame is not ignited, remove power and using an ohmmeter, check the following: • Open secondary coil • Open holding coil • Open wire harness • Stuck flame sensor (Stuck closed)
10	The gas is ignited but the flame goes out	If a normal ignition takes place and after a short while the flame goes out, check for the following: • Radiant sensor contacts opening prematurely. • Weak gas valve coil may open when stressed by higher Temps. • Weak Hi-Limit • Poor venting • Bad drum seals
11	Improper drying clothes wrinkled Rough texture long dry time	• The lint filter is not clean. • Any restriction in the exhaust. • The outside exhaust hood damper door stuck closed. • Is the exhaust too long, too many elbows, flex ductwork installed. • Poor intake air available for the dryer. • Incorrect tumbler speed. Tumbler belt slipping. • Blower impeller bound; check for foreign material in blower area. • Customer overloading dryer. • Check clothing labels for fabric content and cycle selected. • Clothes too wet due to insufficient spin out by washer.
12	Noisy and/Or Vibration	• “Thumping” Check for loose tumbler baffle, rear tumbler roller(s) worn or misaligned, out-of-round tumbler or high weld seam on tumbler. • “Ticking” Check for loose wire harness or object caught in blower wheel area. • Scraping Check for front or rear bulkhead felt seal out of position or worn tumbler front bearings. • “Roaring” Check for blower wheel rubbing on blower housing or bad motor bearings. • Popping or squealing sound. Check for a sticky or frayed belt.

4-3. SYMPTOMS, DIAGNOSES AND ACTIONS

- **The power does not work.**

Is the input AC voltage normal?

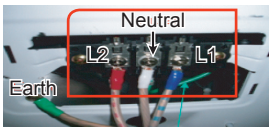
No → Set the input AC voltage.
(Check AC 120/240V)



Yes

Is the terminal block connection normal?

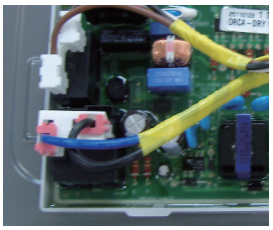
No → Directly connect the terminal block.
(Connect in the order of Live 2, Neutral, Live 1)



Yes

Is the housing connection normal?

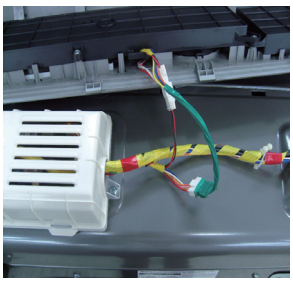
No → Connect the housing.
(Check 120V for AC power)



Yes

Is the wire among the main sub PCBs in good condition?

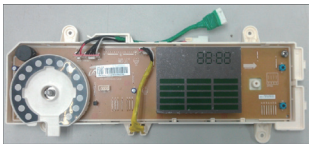
No → Check the wire.



Yes

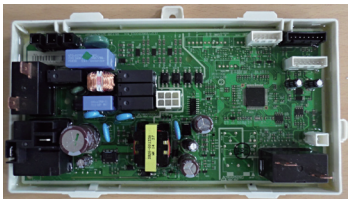
Is the sub PBA normal?

No → Replace the sub PBA.
(Check DC power, signal and key)

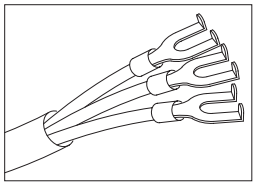


Yes

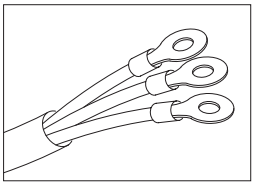
The problem is in the main PCB assembly. Please replace it.



Encourage Ring terminals use, but when use Spade terminals, that confirm whether confirmed finish.

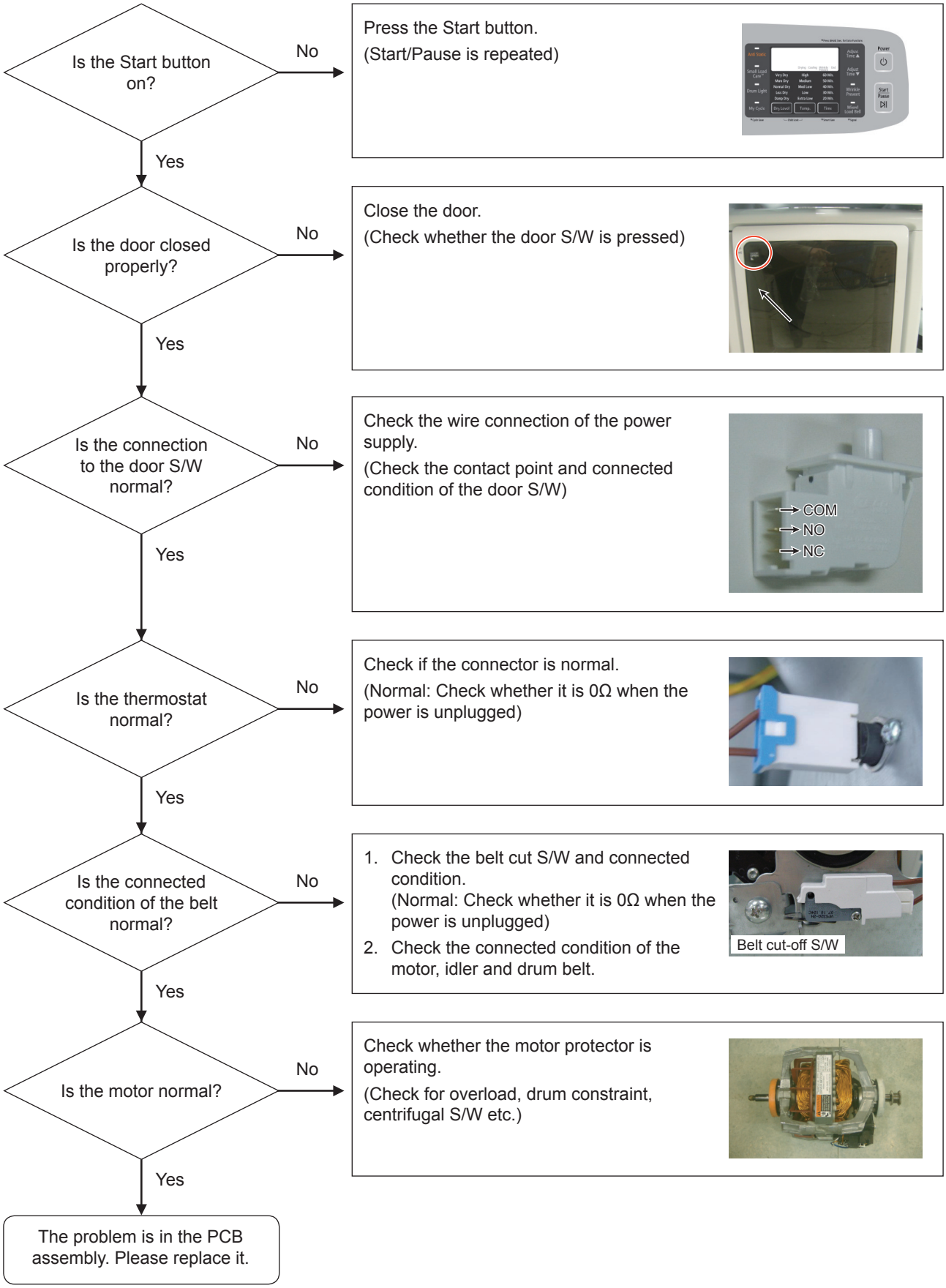


Spade terminals



Ring terminals

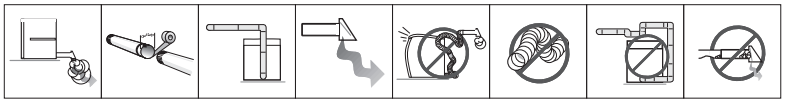
- **The drum does not work.**



- **The clothes are not dried.**

Is the vent properly installed?

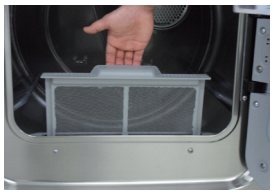
No → Install the vent so that it is not blocked to the outside.
(Check the exhaust hole)



Yes

Did you clean the filter before drying?

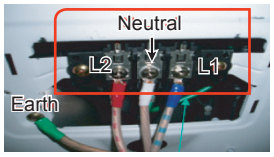
No → Clean the filter.
(Check if there are any alien particles in the filter)



Yes

Is the terminal block connection normal?

No → Connect the terminal block properly.
(Check the connection of Live 2, Neutral, Live 1)



Yes

Is the touch sensor normal?

No → Connect the touch sensor.
(Check the PCB and touch sensor)
▶ For further instructions, please refer to 38 page “ Sensor Bar &Temperature Sensor check”

Yes

Is the Tamp. Sensor normal?

No → Replace the thermistor
(Check the connection between the PCB and termistor and check for any disconnection)
▶ For further instructions, please refer to 38 page “ Sensor Bar &Temperature Sensor check”

Yes

Is the safety, Hi-limit thermostat normal?

No → Check the Safety, Hi-Limit thermostat.
(Check the cause of safety being off)

Yes

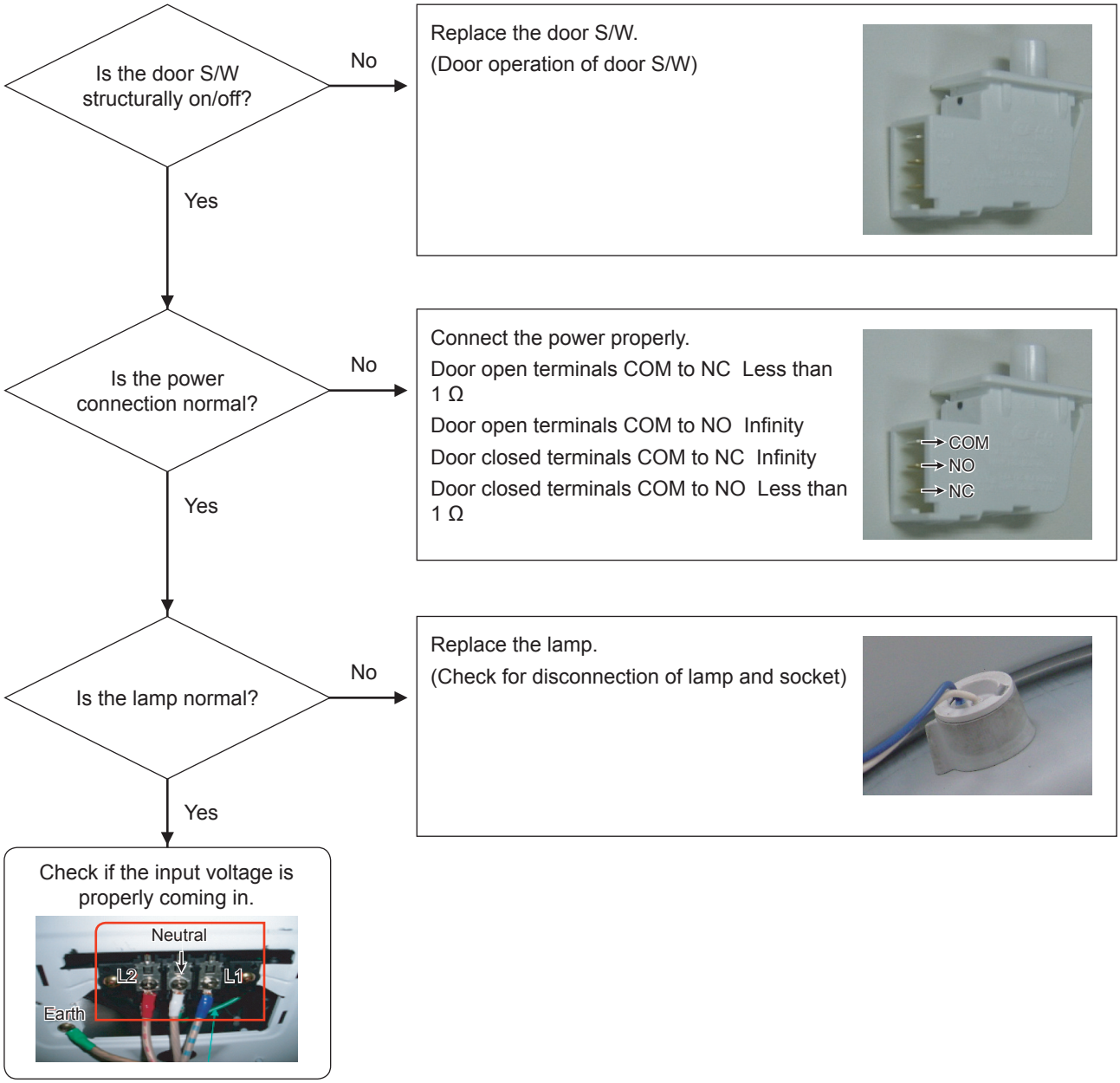
Is the heater normal?

No → Replace the heater
(Remove the power and check whether the heater coil has a resistance of about 10Ω)

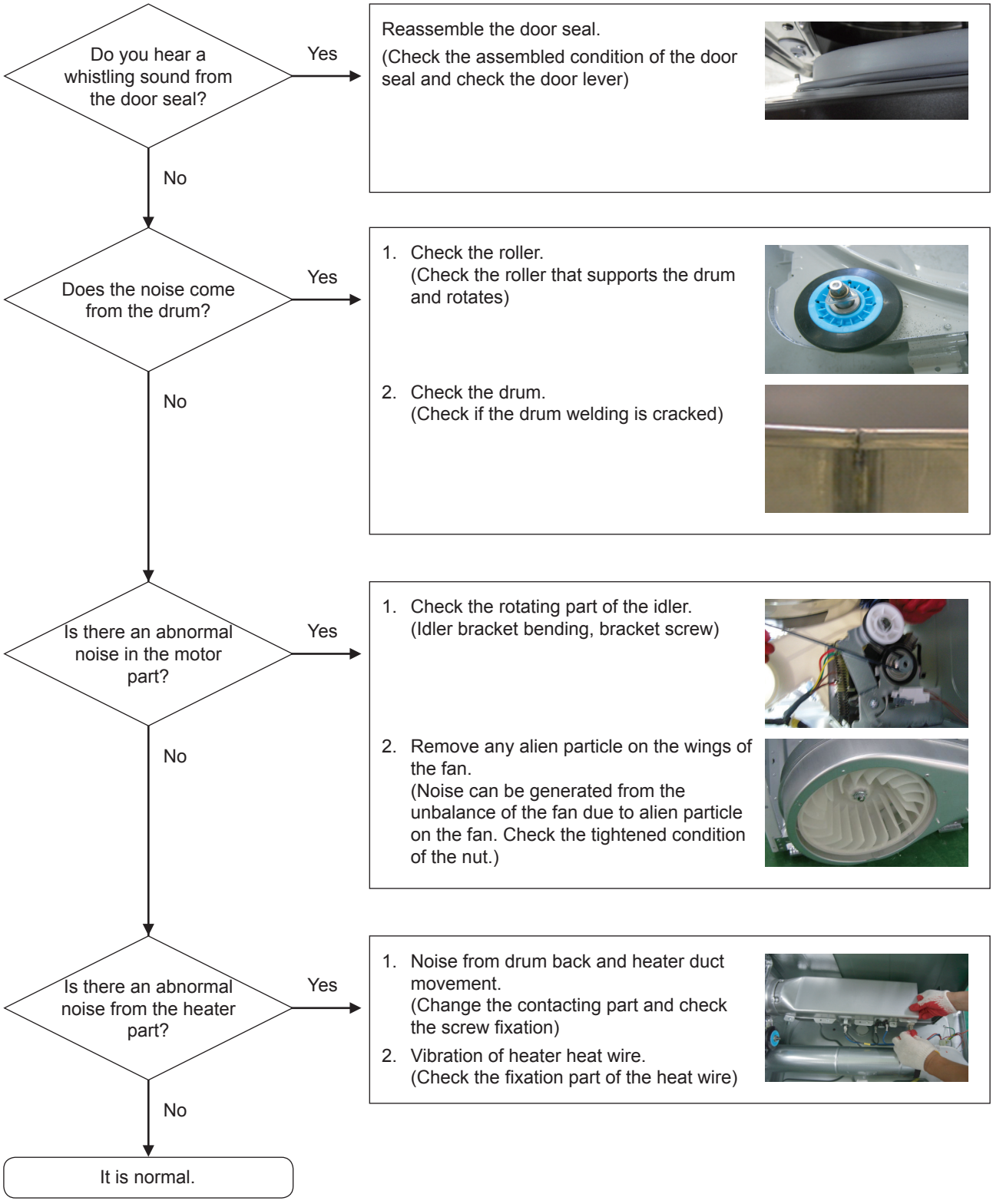
Yes

The problem is in the PCB assembly. Please replace it.

- **The lamp does not work.**



There is an abnormal noise in the dryer.



4-4. COMPONENT TESTING PROCEDURES

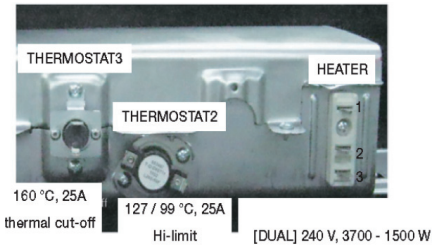
⚠ WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to dryer before servicing, unless testing requires power.

● Component electrical testing (with ohmmeter)

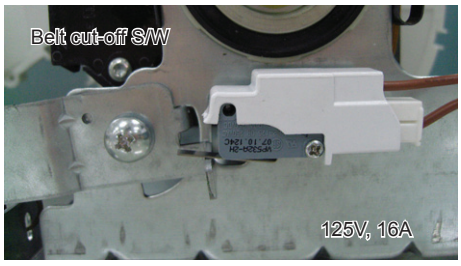
- Thermistor resistance 10K Ω at 25°C 77°F
- Thermostat 1 resistance < 1Ω

- Thermostat 3 resistance < 1Ω
  - If resistance is infinity, replace thermostat 3.
- Thermostat 2 resistance < 1Ω
  - If resistance is infinity, replace thermostat 2.
- 【DUAL】Heater resistance 13Ω (PIN 2-3) Heater
- resistance 34Ω (PIN 1-2)
  - If resistance is infinity, replace Heater.

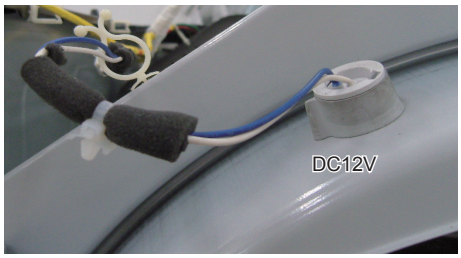


- Measure resistance of the following terminal
  1. Door : OPEN
     Terminal : “COM” - “NC” (1-3) < 1Ω
     Terminal : “COM” - “NO” (1-2) : ∞ Ω
  2. Door switch : CLOSE
     Terminal : “COM” - “NC” (1-3) : ∞ Ω
     Terminal : “COM” - “NO” (1-2) < 1Ω

- Belt Cut-off S/W
  - Lever open: Resistance value < 1Ω
  - Lever push: Resistance value ∞ Ω



- When voltage (DC12V) is linked, Lamp confirms that is lighted up.

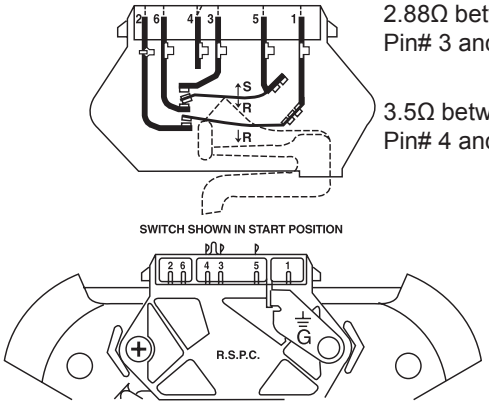


- Motor (Electronic & GAS)

Contacts (● : Contact closed)

Function	1M	2M	3M	4M	5M	6M
Start			●	●		
Run	●	●			●	●

● Centrifugal Switch (Motor)



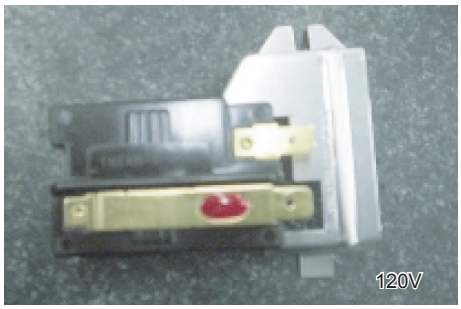
2.88Ω between
Pin# 3 and 4

3.5Ω between
Pin# 4 and 5

● GAS MODEL

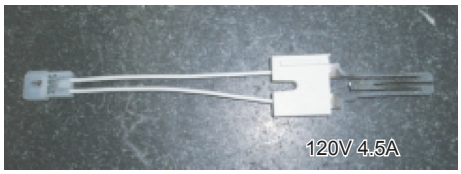
Radiant Sensor(10RS)

- Resistance value < 1 Ω
- If resistance is infinite, replace Radiant sensor



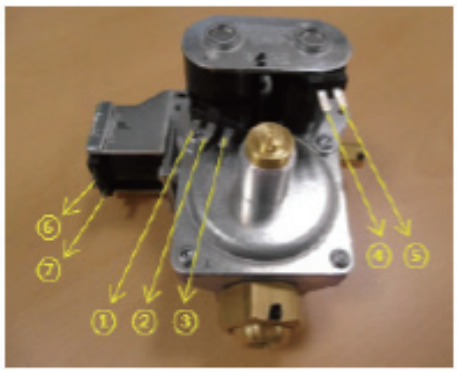
Igniter(101D)

- Resistance value 40~400 Ω
- If resistance is infinite, replace Igniter



Gas Valve(25M01A)

- Valve 1-2 : Resistance value 1,365Ω
- Valve 1-3 : Resistance value 560Ω
- Valve 4-5 : Resistance value 1,325Ω
- Valve 6-7 : Resistance value approx. 1000 Ω
- If resistance is infinity, replace Valve



Thermostat (60T21 Hi-Limit)230F-50F

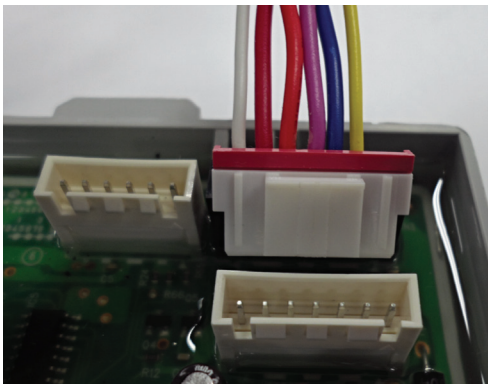
- Resistance value < 1 Ω
- If resistance is infinity, replace Thermostat

● Sensor Bars & temperature sensor check

Sensor Bars

Disconnect harness and test Pink wire Pin 4 to Orange wire Pin 5.

- Approx ∞Ω without laundry
- Approx 190Ω ± 10% with wet clothes



Cycling thermistor

Disconnect harness and test Blue wire Pin 3 to Red wire Pin 6.

- Approx 10 KΩ at 25 °C/77 °F

Vent thermistor 2 (Vent sensor model only)

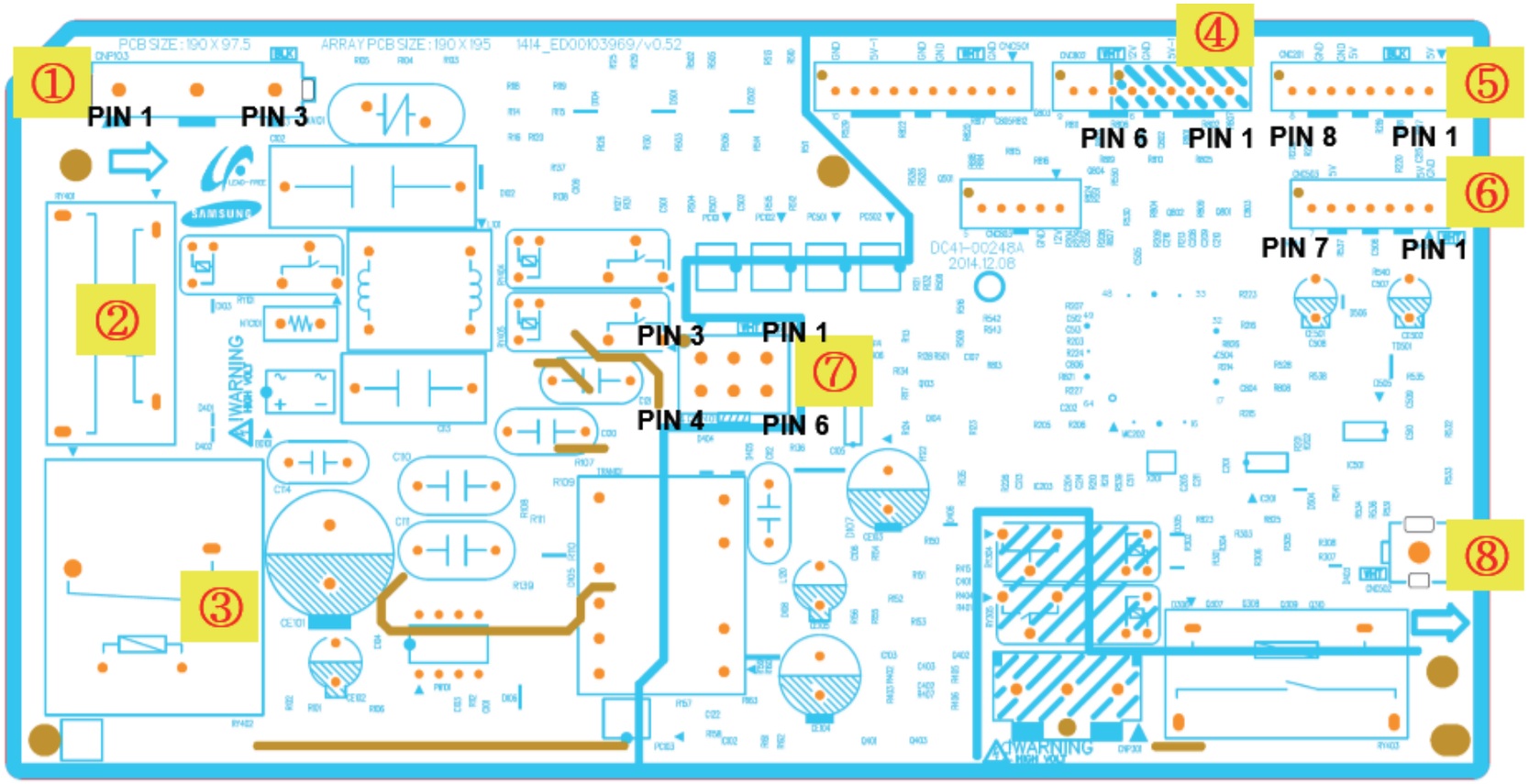
Disconnect the harness and measure the resistance between yellow wire pin# 2 and white wire pin# 7.

- Approx. 238.23 KΩ at 25 °C / 77 °F

5. PBA DIAGRAM

5-1. MAIN PBA

► This Document can not be used without Samsung's authorization.

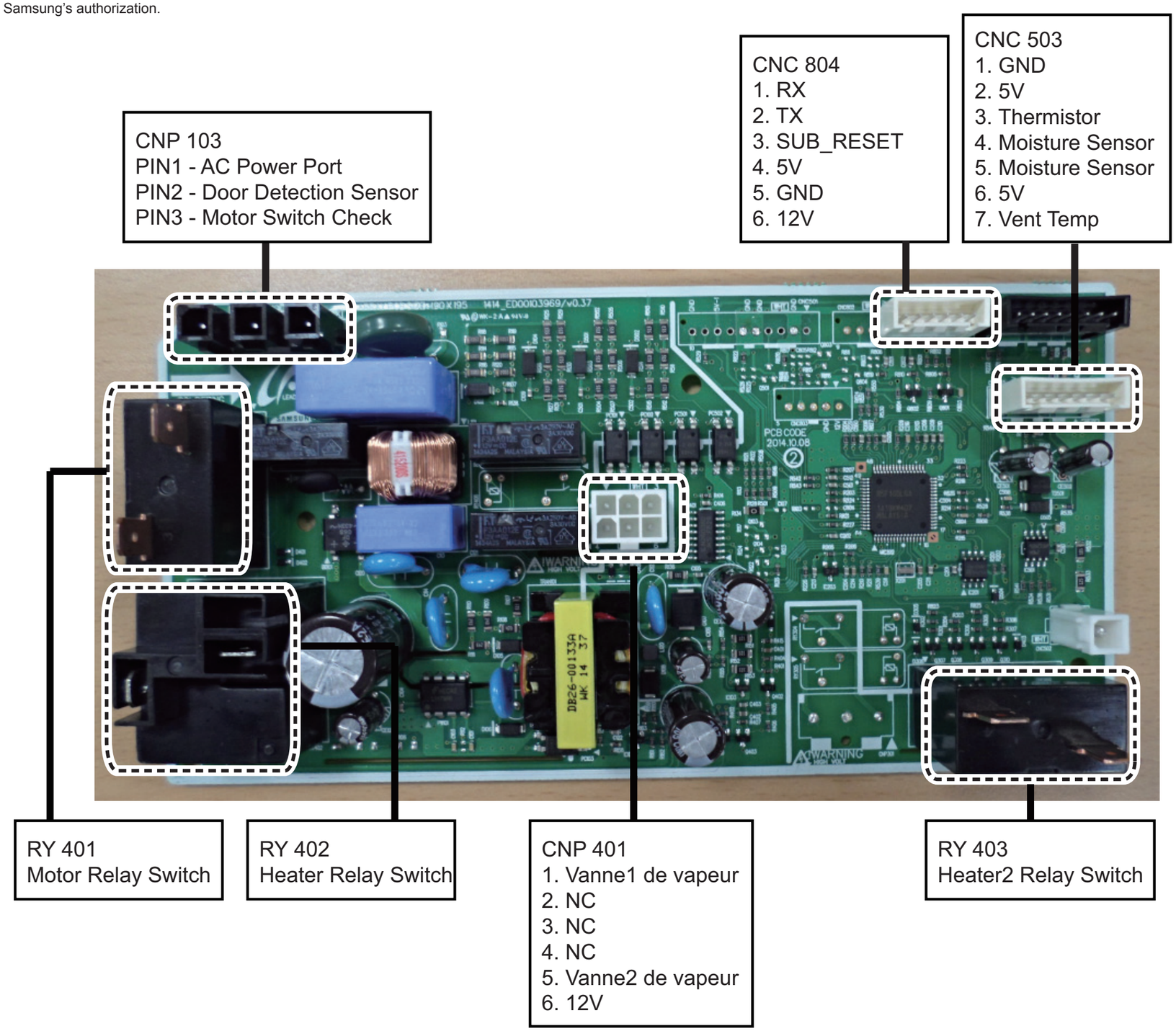


Location	Part No.	Function	
1	CNP103	AC connection connector	Supplies AC power to the PBA
2	RY401	Motor Relay Switch	The relay used for motor control
3	RY402	Heater Relay Switch	The relay used for heater control
4	CNC804	Sub PBA communication	The connector that controls communications with the Sub PBA corresponding to the Display.

Location	Part No.	Function	
5	CNC201	Micom writing & smart test connector	Used for micom writhing and smart test
6	CNC503	Dry sensing & thermistor control relay	Used for the temperature sensing
7	CNP401	Steam control connector	The connector used for the steam load control
8	CNC502	LC system control connector	The connector used for the lint clean load control

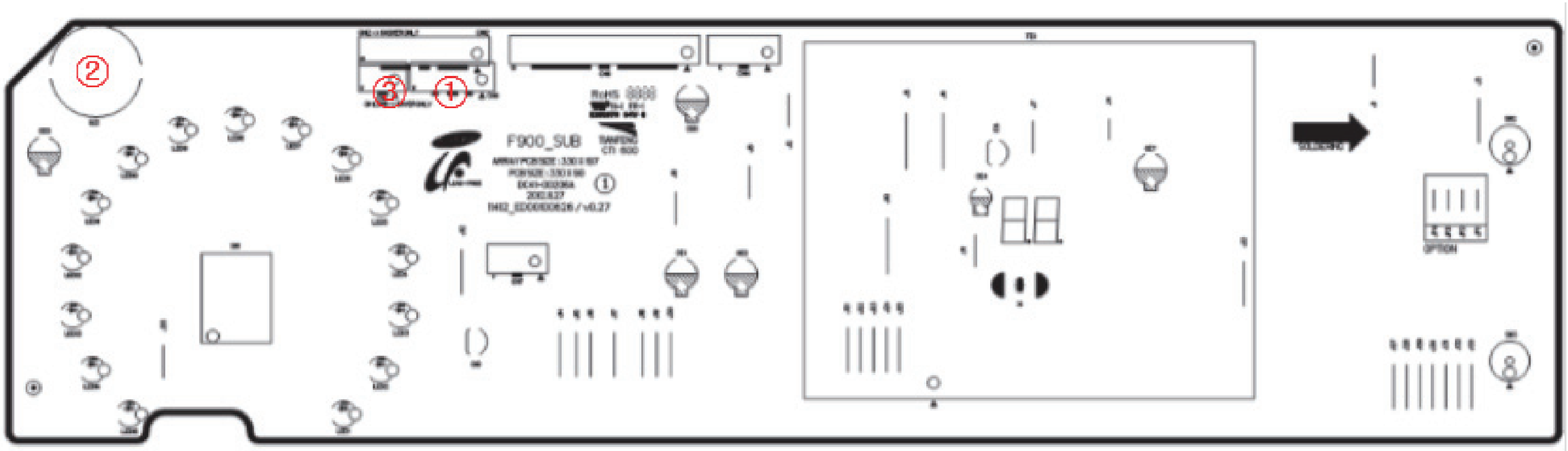
5-2. DETAILED DESCRIPTIONS OF CONTACT TERMINALS (MAIN PBA)

► This Document can not be used without Samsung's authorization.



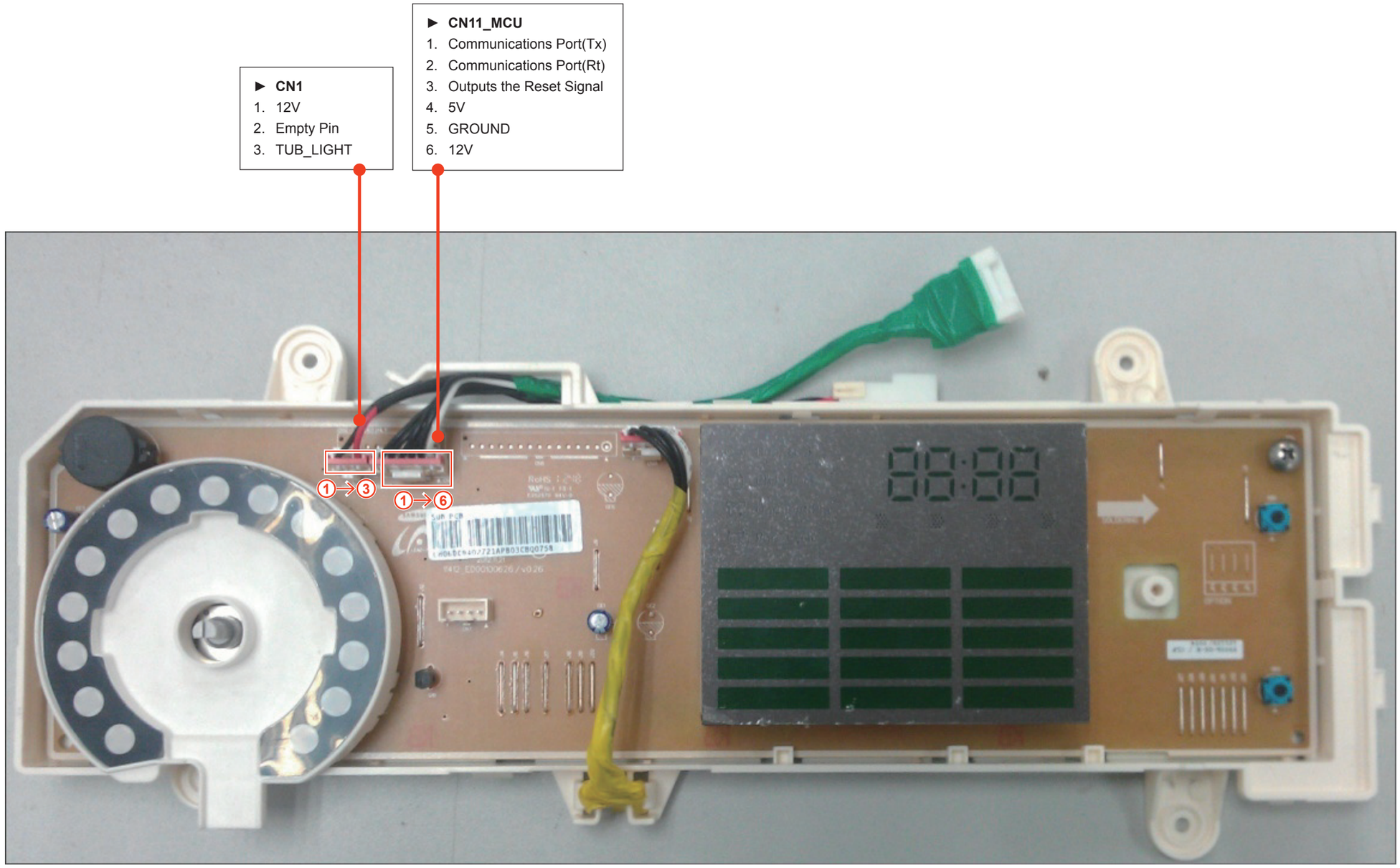
5-3. SUB PBA

► This Document can not be used without Samsung's authorization.



Location	Part No.	Function	Description
1	MCU CN11	Connect Main PBA	Receives power from the Main PBA and provides a communications function.
2	BZ1	BUZZER	Generates sound when the Menu key is pressed, the Encoder operates and the menu is closed.
3	CN1	Connect Lamp	-

5-4. DETAILED DESCRIPTIONS OF CONTACT TERMINALS (SUB PBA)



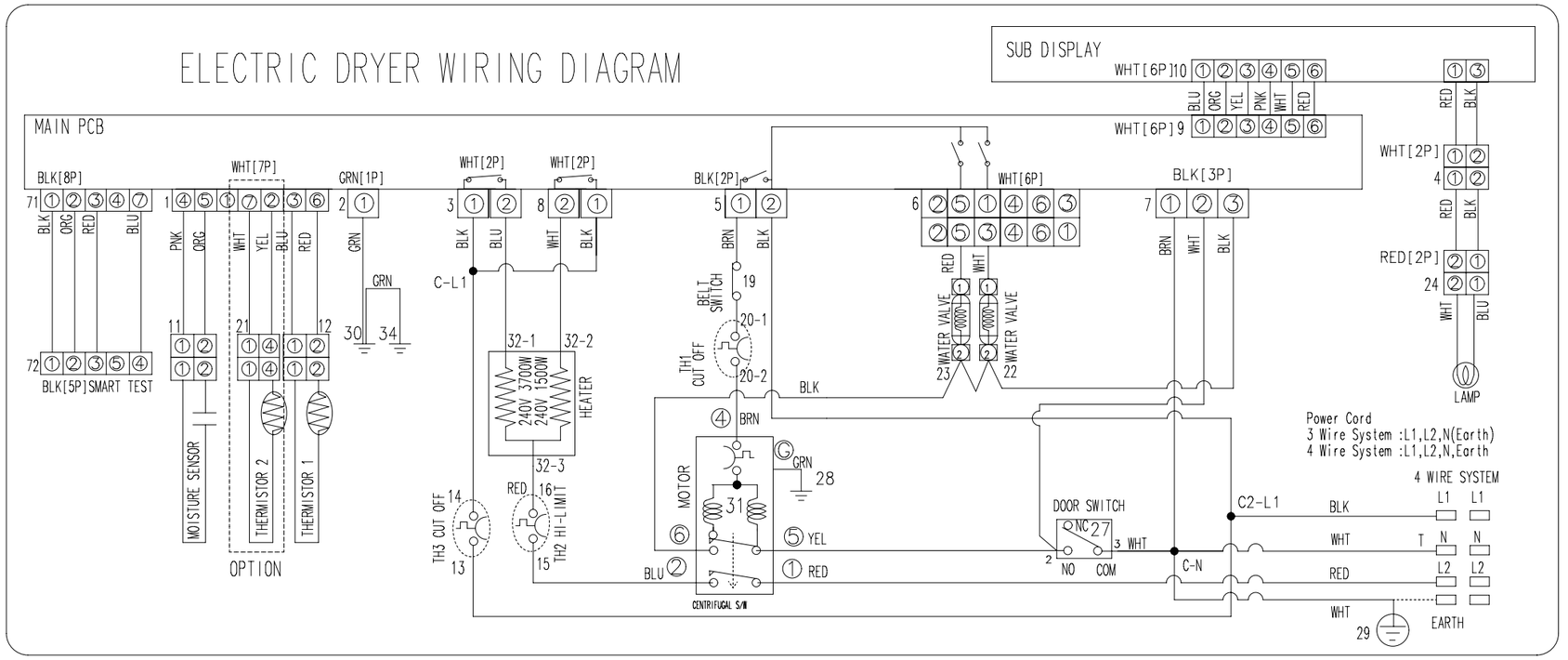
6. WIRING DIAGRAM

6-1. WIRING DIAGRAM (ELECTRIC DRYER: DV52J8060EW/A2)

► This Document can not be used without Samsung's authorization.

- **Reference Information**

BLK	BLACK
BLU	BLUE
GRN	GREEN
GRY	GRAY
NTR	NATURAL
ORG	ORANGE
PNK	PINK
RED	RED
SKYBLU	SKYBLUE
VIO	VIOLET
WHT	WHITE
YEL	YELLOW

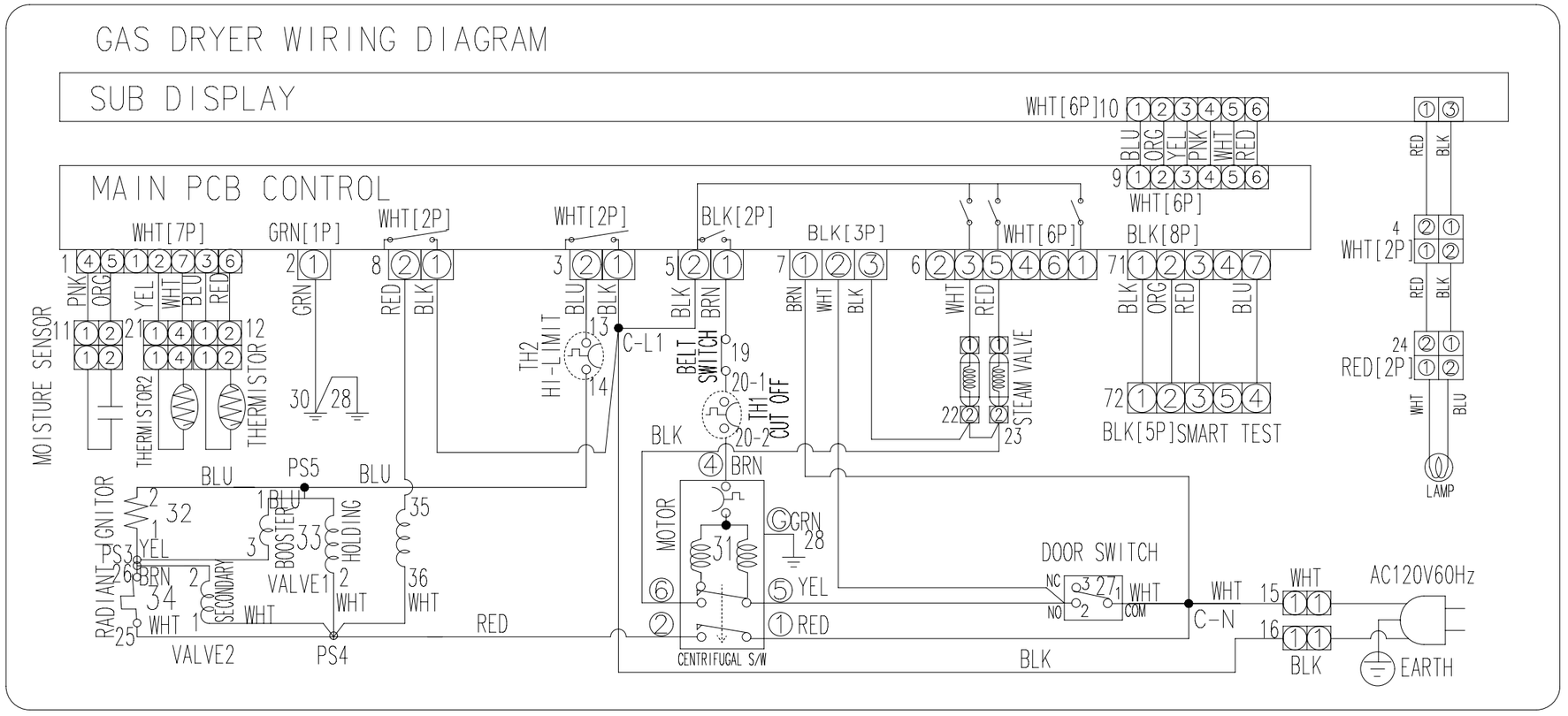


6-2. WIRING DIAGRAM (GAS DRYER: DV52J8060GW/A2)

► This Document can not be used without Samsung's authorization.

- **Reference Information**

BLK	BLACK
BLU	BLUE
GRN	GREEN
GRY	GRAY
NTR	NATURAL
ORG	ORANGE
PNK	PINK
RED	RED
SKYBLU	SKYBLUE
VIO	VIOLET
WHT	WHITE
YEL	YELLOW



7. REFERENCE

7-1. MODEL NUMBER NAMING RULES

①		②		③	④	⑤			⑥	⑦	⑧	⑨	
Product Type		Capacity (by Market)		Intro. Year	Series	Feature Table			Intro. Region. or TYPE	Color		Buyer	
					Grade	F-Code 1	F-Code 2	F-Code 3		Color Code			
D	V	5	2	J	8	7	0	0	G	W	/	A	2

① **Product type (CAN NOT CHANGE)** : Auto Dryer Washing machine (SAMSUNG's Guide Line)

② **Market Claim Capacity** : 5.2 cu.ft

③ **Intro. Year** : J - Intro.Year: 2015
K - Intro.Year: 2016

④ **Series** : Grade 8 : High

⑤ **Feature Table** : 7 : Smart check
0 : Filter clean alarm
0 : Drying Rack

⑥ **Intro. Region. or Dryer type** : G - Vent Gas
E - Vent Elec

⑦ **Color** : W - WHITE
P- INOX

⑧ / : CBU

⑨ **Buyer** : A2 : USA
AC : CANADA

06 FEB. 2015