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ELECTRIC & GAS DRYER SERVICE MANUAL

CAUTION

READ THIS MANUAL CAREFULLY IN ORDER TO PROPERLY DIAGNOSE PROBLEMS AND TO SAFELY PROVIDE QUALITY SERVICE ON THESE DRYERS.

MODEL : DLE2701V/DLG2702V





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P/No.:3828EL3005D

IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing skill and experience in electrical, electronic, and mechanical appliance repair. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.



To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light a match, or cigarette, or turn on any gas or electrical appliance.
- Do not touch any electrical switches. Do not use any phone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions carefully.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT

Electrostatic Discharge (ESD)

Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

Use an anti-static wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance.

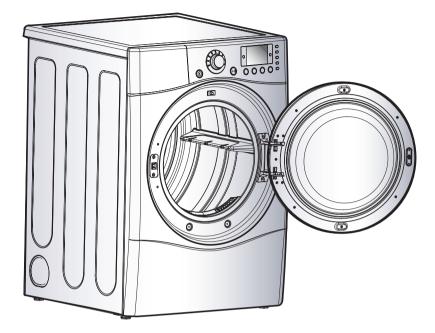
- OR -

Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.

- Before removing the part from its package, touch the anti-static bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in anti-static bag, observe above instructions.

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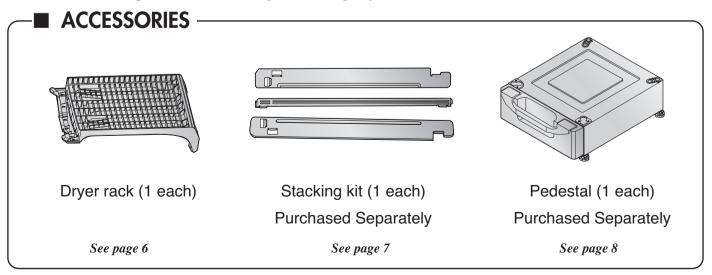


■ Name: Electric and Gas Dryer

• Power supply: Please refer to the rating label regarding detailed information.

- Size: 27 X 29.9 X 38.7 (inch)
- Dryer capacity: IEC 7.3 cu.ft.
- Weight: 126(Ibs)

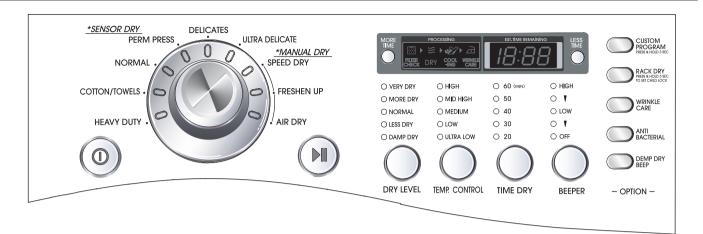
Specifications are subject to change by manufacturer.

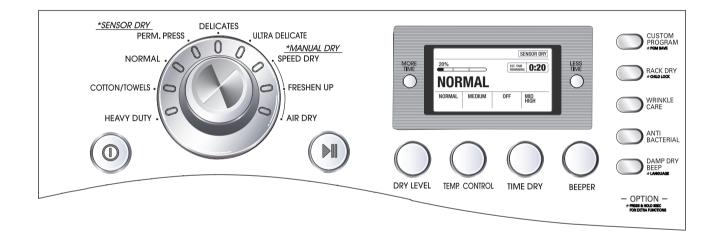


ľ	ITEM		DLE2701V / DLG2702V	REMARK
	Color		STAINLESS SILVER	
Material & Finish	Т	op Plate	Porcelain	
	D	oor Trim	Chromate	
POWER	SUP	PLY	120V/240V 60Hz (26A)	
		MOTOR	250W (4.5A)	AC 120V
ELECTRICIT CONSUMPT		HEATER	5400W (22.5A)	AC 240V (ELECTRIC MODEL)
		LAMP	15 W (125mA)	AC 120V
		GAS VALVE	13 W (110mA) x 2	AC 120V (GAS MODEL)
CONTR	ROL T	YPE	Electronic	
DRUM (CAPA	CITY	7.3 cu.ft.	
Weight (Ib	s) - N	let/Gross	124/144	
No. of	Progr	ams	9	
No. of E	Dry O	ptions	3	
No. of Tempe	eratur	e Controls	5	
No. of [Dry Le	evels	5	
Sound	l leve	ls	High/Low/Off	
Canaar	Ν	/loisture	Available	Electrode sensor
Sensor	Те	mperature	Available	Thermistor
Revers	ible [Door	Available	
D	rum		Stainless Steel	
Drye	Dryer Rack		Available	
Chil	d Loc	k	Avaiable	
Interi	or Lig	ght	Avaiable	
Product	(Wxł	HxD)	27" x 42 3/4" x 28 1/3"	
Packing	(WxI	HxD)	29 1/2" x 44 3/4" x 30 3/4"	

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FEATURES AND BENEFITS

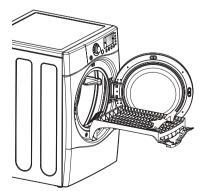


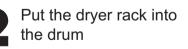


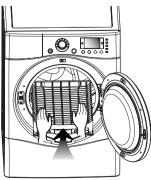
INSTALLATION INSTRUCTIONS

Dryer Rack Installation Instructions

Open the door. Hold the dryer rack with both hands.









Check and be sure that the front of the rack is properly seated behind the lint filter.



Stacking Kit Installation Instructions

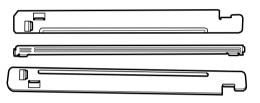
To ensure safe and secure installation, please observe the instructions below.

WARNING

Do not attempt this alone!

At least two people are required to lift and position the dryer on top of a washing machine!

Failure to heed this warning can result in serious physical injury and damage to the appliance.



Stacking kit

Place the washer firmly on a stable, even and solid floor as product installation instructions describe in the owner's manual.

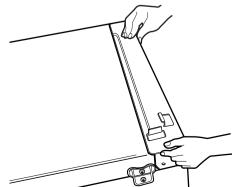


Peel the protective paper from the tape on the side bracket.



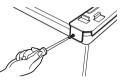


Fit the side bracket firmly to the side of the top plate by attaching the double-faced tape to the top plate as picture shown.

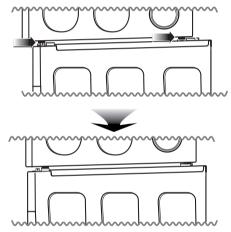




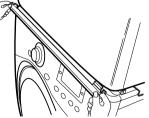
Secure the side bracket to the washer with a screw on the back of the bracket. Repeat Steps 2, 3, & 4 for the other side.



Place the dryer on top of the washer by placing the legs as shown. Be careful not to pinch fingers between the washer and dryer. Slide the dryer back against the stop on the side rail.

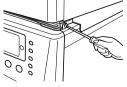


Insert the front rail of the stacking kit. Push the front rail back against the stops on the side brackets.

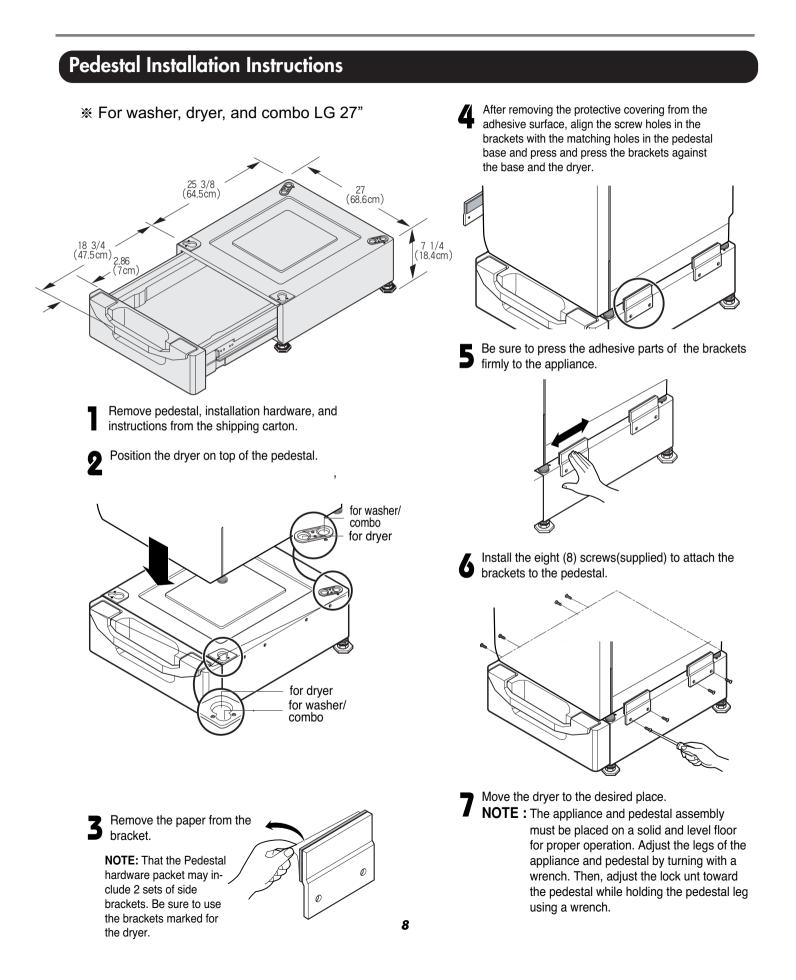




Screw both sides of the front rail to the side brackets.



• Do not use a stacking kit with a gas dryer in potentially unstable conditions like a mobile home.



Electric Dryer Only

Review the following options to determine the appropriate electrical connection for your home:



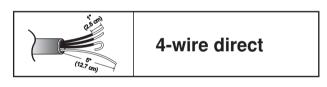
4-wire receptacle (NEMA type14-30R)

Use the instructions under option 1 if your home homehas a 4-wire receptacle (NEMA type 14-30R).



3-wire receptacle (NEMA type10-30R)

Use the instructions under option 2 or 3 if your home has a 3-wire receptacle (NEMA type 10-30R). Use option 2 if local codes and ordinances permit the connection of a chassis ground to the neutral connector. If this is not permitted, use option 3.



If this type is available at your home. you will be connecting to a fused disconnect or circuit breaker box



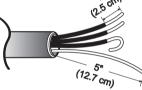
If this type is available at your home. you will be connecting to a fused disconnect or circuit breaker box

4-wire connection : Direct wire

Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

Prepare minimum 5ft(1.52m) of length in order for dryer to be replaced.

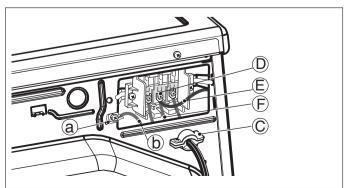
First, peel 5 inch (12.7cm) of covering material from end. Make a 5 inch of ground wire bared. After cutting $1^{1}/_{2}$ inch (3.8cm) from 3 other wires. peel insulation back 1inch (2.5cm). Make ends of 3 wires a hook shape.



Then, put the hooked shape end of the wire under the screw of the terminal block(hooked end facing rightward) and pinch the hook together and screw tightly.



- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect red and black wire to the left and right terminal block screws.
- 3. Connect ground wire(green) of power cord to external ground screw and move neutral ground wire of appliance and connect it to center screw.
- 4. Make sure that the strain relief screw is tightened. and be sure that all terminal block nuts are on tight and power cord is in right position.

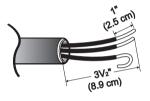


3-wire connection : Direct wire

Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

Prepare minimum 5ft(1.52m) of length in order for dryer to be replaced.

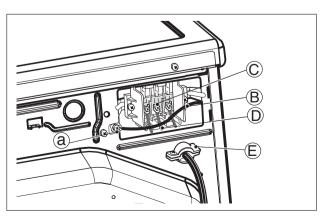
First, peel 3 $\frac{1}{2}$ inch (8.9cm) of covering material from end and bare 1 inch from the ends.



Then, put the hooked shape end of the wire under the screw of the terminal block(hooked end facing rightward) and pinch the hook together and screw tightly.

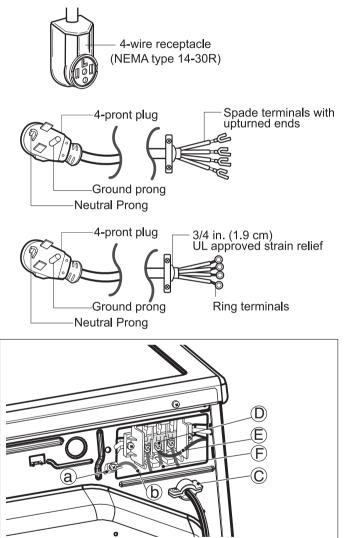


- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect red and black wire to the left and right terminal block screws.
- 3. Make sure that the strain relief screw is tightened and be sure that all terminal block nuts are on tight and power cord is in right position.



Option 1: 4-wire connection with a Power supply cord.

• If your local codes or ordinances do not allow the use of a 3 wire connection, or you are installing your dryer in a mobile home, you must use a 4-wire connection.

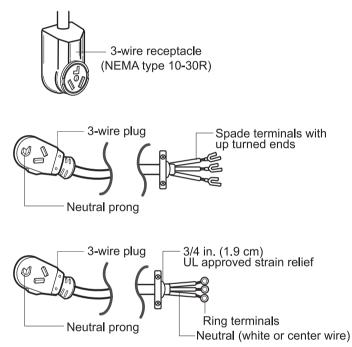


- 1. Connect the neutral wire (white) of the power cord to the center terminal block screw.
- 2. Connect the red and black wires to the left and right terminal block screws.
- 3. Connect the ground wire (green) of the power cord to the external ground screw. Remove the neutral ground wire of appliance and connect it to center screw.
- 4. Make sure that the strain relief screw is tightened and that all terminal block nuts are tight and the power cord is in the right position.

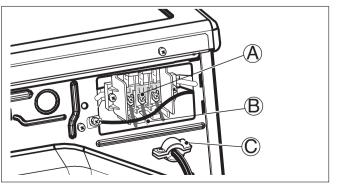
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Option 2: 3-Wire Connection with a Power Supply Cord

If your local codes or ordinances permit the connection of a frame-grounding conductor to the neutral wire, use these instructions. If your local codes or ordinances do not allow the connection of a frame-grounding conductor to the neutral wire, use the instructions under **Section 3: Optional 3-wire connection.**

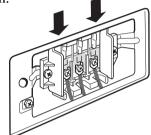


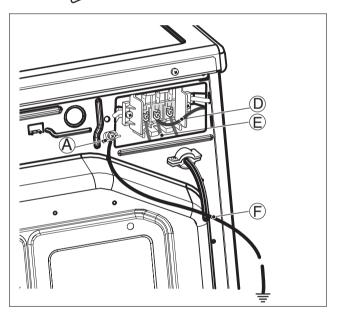
- 1. Connect the neutral (white or center) wire (B) to the center, silver colored, screw (A) and tighten securely.
- 2. Connect the other two power cord wires (red and black) to the left and right terminal block screws and tighten securely.
- 3. Tighten the strain relief screws (C) securely.



Option 3: Optional 3-wire connection.

• If your local codes or ordinances do not allow the connection of a frame-grounding conductor to the neutral wire, use the instructions under this section.



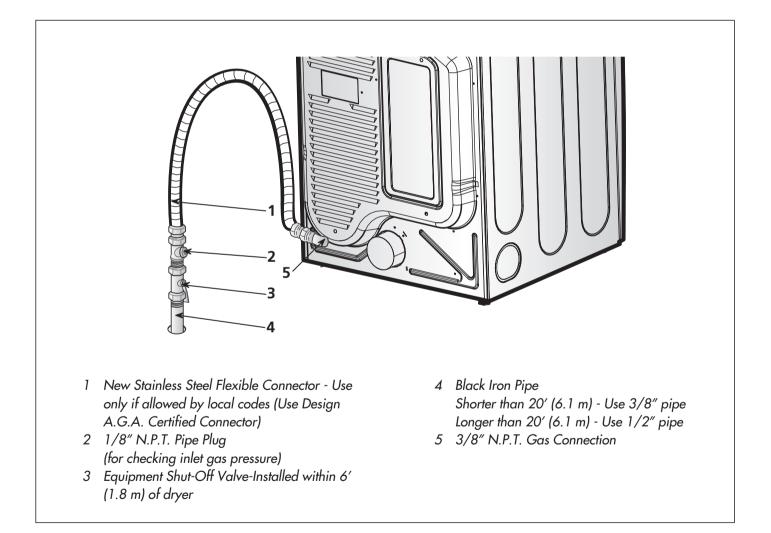


- 1. Remove the appliance ground wire (D) (green) from the external ground connector screw and reconnect it, together with the center, white, neutral wire (E) to the center, silver colored, terminal block screw.
- 2. Connect the other two power cord wires (red and black) to the left and right terminal block screws and tighten securely.
- 3. Tighten the strain relief screws securely.
- 4. Connect an independent ground wire (F) from the external ground connector screw to a proper ground. (The ground wire must be long enough to allow the appliance to be moved, if necessary, for service or cleaning.)

3-2. Connect Gas Supply Pipe (Gas Dryer ONLY)

For further assistance, refer to section on Gas Requirements.

- 1. Make certain your dryer is equipped for use with the type of gas in your laundry room. Dryer is equipped at the factory for Natural Gas with a 3/8" N.P.T. gas connection.
- 2. Remove the shipping cap from the gas connection at the rear of the dryer. Make sure you do not damage the pipe thread when removing the cap.
- 3. Connect to gas supply pipe using a new flexible stainless steel connector.
- 4. Tighten all connections securely. Turn on gas and check all pipe connections (internal & external) for gas leaks with a non-corrosive leak detection fluid.
- 5. For L.P. (Liquefied Petroleum) gas connection, refer to section on Gas Requirements.



4

DRYER CYCLE PROCESS

	Default		Conditions of operation and termination						
	Cycle		Dry		Drying		Coc	oling	Wrinkle care
		Temp- erature			Electro- sensor	Temp- Control	Default time	Temp- Control**	Time
	HEAVY DUTY	HIGH	(Normal)	54min	Saturation	68±4°C	(5min)	47±5°C	
	COTTON/ TOWELS	MID HIGH	(Normal)	55min	Saturation	66±4°C	(5min)	47±5°C	
Sensor	NORMAL	MEDIUM	(Normal)	41min	Saturation	60±4°C	(5min)	47±5°C	
Dry *	PERM PRESS	LOW	(Normal)	36min	Saturation	52 ± 3°C	(5min)	47±5°C	3Hr
	DELICATES	LOW	(Normal)	32min	Saturation	52±3°C	(5min)	38±5°C	
	ULTRA DELICATE	ULTRA LOW	(Normal)	34min	Saturation	45±3°C	(5min)	38±5°C	
	SPEED DRY	(HIGH)	-	25min	Saturation	(70±5°C)	(5min)	(47±5°C)	
Manual Dry **	FRESHEN UP	(MID HIGH)	Ι	20min	Saturation	(66±5°C)	(5min)	(47±5°C)	3Hr
	AIR DRY	-	-	30min	Saturation	No heater	N/A	N/A	
			Ма	4.0.0					Off Time: 6min
		T - 1	MO	otor					On Time: 10sec
	Load		Hea	ater	Temperati	ure Contr	ol for eac	ch cycle	

* Sensor dry : "Dry Level" is set by users.

Default settings can be adjusted by users.

^{**} Manual dry : "Temperature control" is set by users.

A CAUTION When checking the Component, be sure to turn the power off, and do voltage discharge sufficiently.

Component	Test Procedure	Check result	Remark
1. Thermal cut off	Measure resistance of terminal to terminal ① Open at 266 ± 12°F (130 ± 7°C) ② Auto reset 31°F (35°C)	 If thermal fuse is open must be replaced ① Resistance value ≒ ∞ ② Continuity (250°F ↓) < 1Ω 	 Heater case- Safety Electric type
Check Top Marking: N130	Same shape as Outlet Thermostat.	(· · · · · · · · · · · · · · · · · · ·	
2. Hi limit Thermostat (Auto reset)	Measure resistance of terminal to terminal		• Heater case - Hi limit
	① Open at 257 ± 9°F (125 ± 5°C)	① Resistance value $\Rightarrow \infty$	 Electric type
	② Close at 221 ± 9°F (105 ± 5°C)	② Resistance value < 5 Ω	
3. Outlet Thermostat (Auto reset)	Measure resistance of terminal to terminal		 Blow housing - Safety
	① Open at 185 ± 9°F (85 ± 5°C)	① Resistance value $= \infty$	Electric type
Check Top Marking: N85	 2 Close at 149 ± 9°F (65 ± 5°C) Same shape as Thermal cut off. 	② Resistance value < 5 Ω	
4. Lamp holder	Measure resistance of terminal to terminal	Resistance value: $80\Omega \sim 100\Omega$	
5. Door switch	Measure resistance of the following terminal 1) Door switch knob: open		The state that Knob is pressed is
	 Door switch knob. open Terminal: "COM" - "NC" (1-3) Terminal: "COM" - "NO" (1-2) Door switch push: push 	 Resistance value < 1Ω Resistance value ≒ ∞ 	opposite to Open condition.
	 Terminal: "COM" - "NC" (1-3) Terminal: "COM" - "NO" (1-2) 	 Resistance value ≒ ∞ Resistance value < 1Ω 	
6. Idler switch	Measure resistance of the following terminal: "COM - NC"	 lever open ① Resistance value < 1Ω Lever push (close) ② Resistance value ≒ ∞ 	

Component	Test Procedure	Check result	Remark
7. Heater	Measure resistance of the following terminal ① Terminal: 1 (COM) - 2 ② Terminal: 1 (COM) - 3 ③ Terminal: 2 - 3	 Resistance value: 10Ω Resistance value: 10Ω Resistance value: 20Ω 	Electric type
8. Thermistor	Measure resistance of terminal to terminalResistance value: 10Ω Temperature condition: $58^{\circ}F \sim (10{\sim}40^{\circ}C)$ $58^{\circ}F \sim 104F (10{\sim}40^{\circ}C)$		 Heater case - Hi limit Electric type
9. Motor			• See Page 13
10. Gas valve valve 1	Measure resistance of the following terminal ① Valve 1 terminal ② Valve 2 terminal	 Resistance value: > 1.5 kΩ Resistance value: > 1.5~2.5 kΩ 	• Gas type
11. Igniter	Measure resistance of terminal to terminal	Resistance value: 100~800Ω	• Gas type
12. Frame Detect	Measure resistance of terminal to terminal ① Open at 370°F ((Maximum) ② Close at 320°F	 Resistance value ≒ ∞ Resistance value < 1Ω 	• Gas type

Component	Test Procedure	Check result	Remark
 13. Outlet Thermostat (Auto reset) • Check Top Marking: N95 	Measure resistance of terminal to terminal ① Open at 203 ± 7°F (95 ± 5°C) ② Close at 158 ± 9°F (70 ± 5°C)	 Resistance value ≒ ∞ Continuity < 1Ω 	 Gas type Gas funnel
 14. Outlet Thermostat (Manual reset) • Check Top Marking: N100 	Measure resistance of terminal to terminal ① Open at 212 ± 12°F (100 ± 7°C) ② Manual reset	If thermal fuse is open must be replaced ① Resistance value ≒ ∞ ② Continuity < 1Ω	 Gas type Gas funnel
15. Semi-Conductor	Measure resistance of terminal to terminal ① Red-White : $300 \pm 20 \Omega$ ② White-Black : $300 \pm 20 \Omega$	 1) Resistance value ≒ ∞ 2) Continuity < 1Ω 	 Elect type Gas type

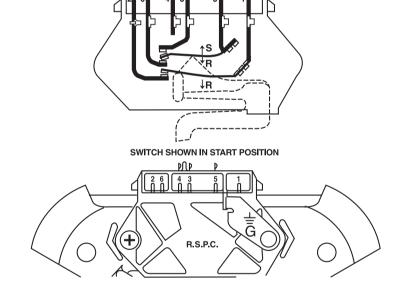
NOTE When checking Component, be sure to turn Power off, then do voltage discharge sufficiently.

Contact On / Off by Centrifugal Switch

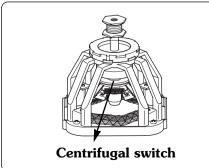
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Term	Terminal No				4			
Mode	Resistance	1	2	2 3		5	6	Remark
	2 ~ 3Ω				•	•		Motor
Motor STOP	≒ ∞	•	•••••					Heater (Electric Models)
				•			•	Gas Valve (Gas Models)
	3 ~ 5Ω				•	•		Motor
Motor RUN	< 1Ω	•	•					Heater (Electric Models)
	< 1Ω			•			•	Gas Valve (Gas Models)

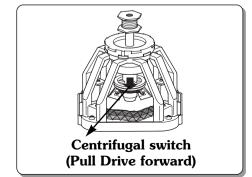
···· Open – Close



 STOP MODE (When Motor does not operate)

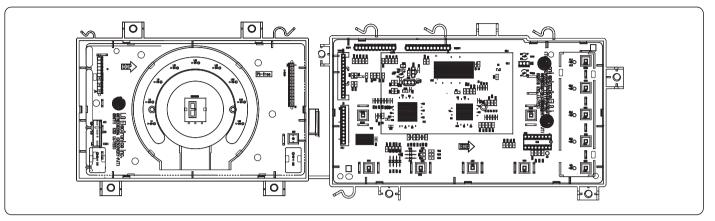


 RUN MODE (Motor operates)



CONTROL LAY-OUT

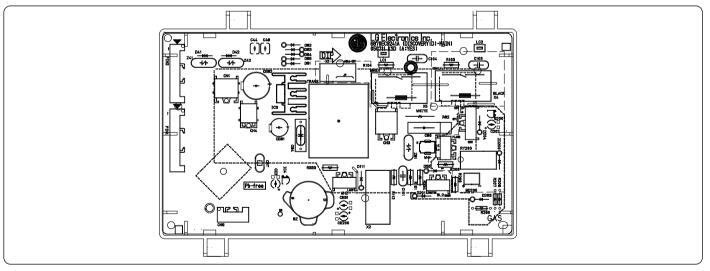
PWB ASSEMBLY DISPLAY LAYOUT



*** MODEL DISPLAY AS DIAGNOSTIC TEST**

MODEL	(OPTION PART		LED	P/No
MODEL	DP 1	DP 3	OP 5	DISPLAY	1/110
DLE8377WM/ DLE8377NM	Х	х	х	ELETRIC	6871EL1011A
DLG388WM/ DLG8388NM	Ο	х	х	GAS	6871EL1011B

PWB ASSEMBLY LAYOUT



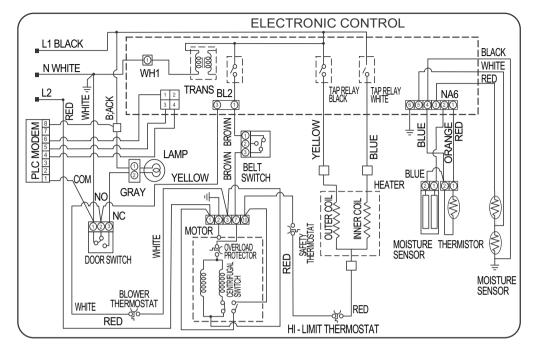
*** MODEL AS DIAGNOSTIC TEST**

MODEL	"a" RLY200	"b"x5	"c" TRANS	MICOM	P/No
DLE8377WM/ DLE8377NM	0	0	6170EC1006F	Х	6871EL1013C
DLG388WM/ DLG8388NM	x	х	6170EC1006F	х	6871EL1013D

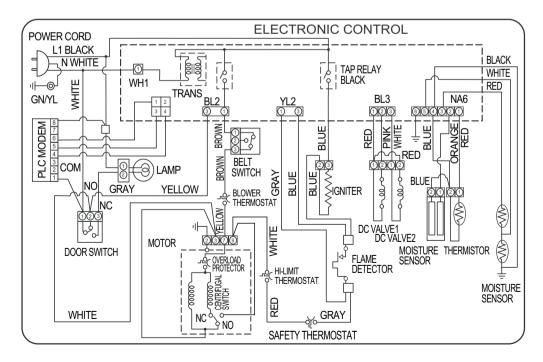
8

WIRING DIAGRAM

ELECTRIC DRYER WIRING DIAGRAM



GAS DRYER WIRING DIAGRAM



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DIAGNOSTIC TEST

1. This TEST should be used for Factory test /Service test. Do not use this DIAGNOSTIC TEST other than specified.

2. Activating the Heater manually with the Door open may trip the Thermostat attached to the Heater, therefore do not activate it manually. (Do not press the door switch to operate the heater while the door is open)

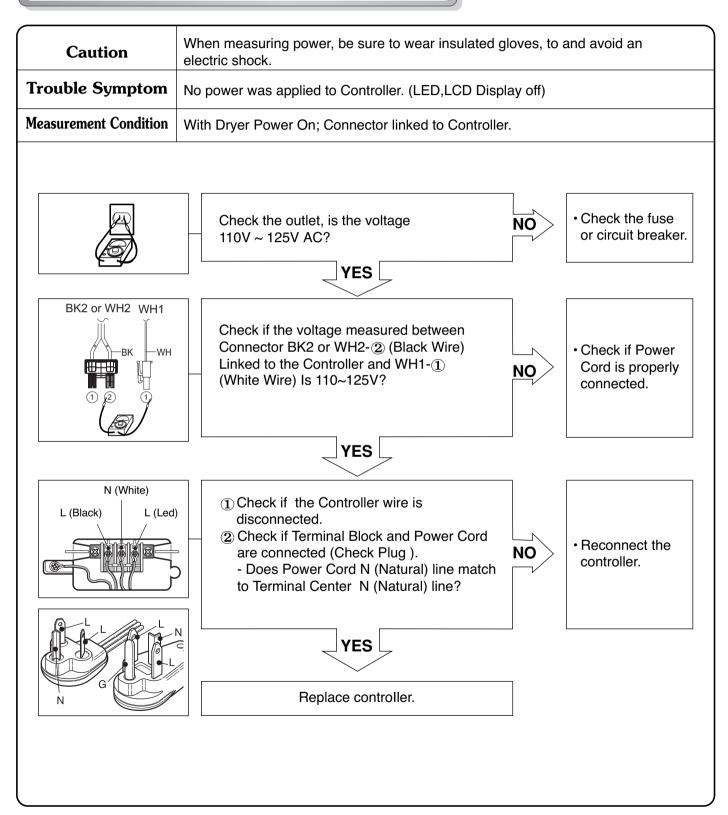
■ ACTIVATING THE DIAGNOSTIC TEST MODE

1. Unit must be in Standby (unit plugged in, display off)

2. Press POWER while pressing MORE TIME, and LESS TIME simultaneously.

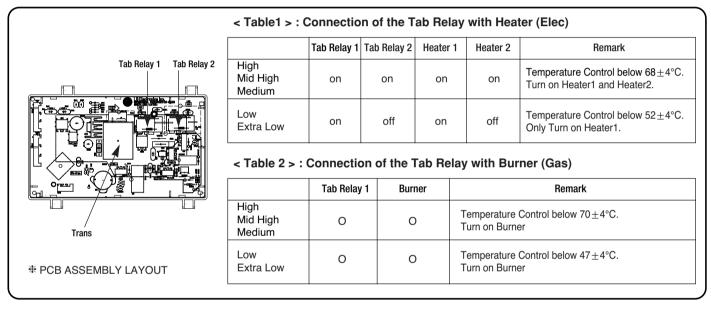
Pressing the START/PAUSE button	CHECKING ACTION	DISPLAY	CHECKING POINT	REMARK
	Electric control	LQC TEST	Won't power up Detective LED or LCD	See test 1 Display: See page
None	& Temperature	tE1	Thermistor open	See test 2
	sensor	tE2	Thermistor close	000 1031 2
			Motor runs	See test 3
Once	Motor	70 ~ 239 Measured Moisture Value.	Displays Moisture Sensor Operation: If moisture sensor is contacted with damp cloth. The display number is below 180, in normal condition.	See test 4
Twice	 ELECTRIC TYPE Motor + Heater 1 (2700W) GAS TYPE Motor + Valve 	Current Temp.	Current Temp. Current Temp. Cu	
3 times	 ELECTRIC TYPE Motor + Heater 1 +Heater 2 (5400W) GAS TYPE Motor+Valve 	Current Temp. (5 ~ 70)		
4 times	Motor, Heater	50~230 Measured "SE"(Error Display)	Motor, Heater Off Semi-conductor	See test 8
5 times	Control Off			Auto Off
During check, If the door is open.	Motor & Heater Off + Lamp On + Buzzer beeps seven times	"dE" or "Error" (THE DOOR IS OPEN.PLEASE CLOSE THE DOOR COMPLETELY)	Door switch Lamp	See test 6
During check, If the door is closed.	Motor on & Heater Off + Lamp Off	70 ~ 239	 Press Start button 1 time and then open the door. Proceed again with the step 1 (by pressing start 1 time), step 2 (by pressing start 2 times), step 3 (by pressing start 3 times) and step 4 (by pressing start 4 times) in sequence. Press Start 2 times and then open the door. Proceed again from the step 1 all the way to the step 4. Press Start 3 times and then open the door Proceed with the step 1 and skip the step 2 and press step 3 twice and finish with step 4 by making sure the all the electric devices shut off in the end. 	

Test 1 120V AC Electrical supply



Caution When measuring power, be sure to wear insulated gloves, to and avoid an electric shock.					
Trouble Symptom Check the Tab Relays Connection properly.					
Measurement Condition With Dryer Power On; Connector linked to Controller.					

1.Power Connection



2. Status Mode Of The Connection

< Table1 > : Connection of Tab Relay with the Tab Relay of the PCB ASSEMBLY (Elec)

	Oalar	Connecti	ion	Demorik
	Color	Harness	PCB	Remark
Connector Housing	Black	Yellow Wire 1 Black Wire Connector Housing	Tap relay 1	Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay)
	White	Blue Wire	Tap relay 2	Check the Matching color Between Harness wire and Tab Relay. (White Housing – White Tab Relay)

	Color	Harness	РСВ	Remark
Connector Housing	Black	Blue Wire Black Wire Connector Housing	Tap relay 1	Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay)

< Table 2 > : Connection of Tab Relay with PCB ASSEMBLY (Gas)

3. Status Mode Of wrong Connection

< Table1 > : Wrong Connection of the Tab Relay and Connect
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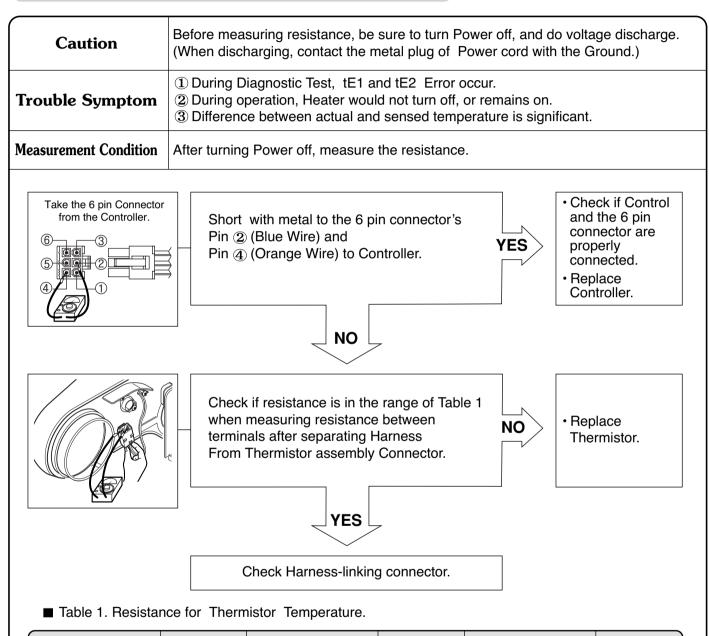
Items	Case	Heater1 Operation(black)	Heater2 operation(White)	PCB condition Of operation
1.Black and White Housing	Wire ①, ② CROSS	Off	Off	Power Off
2.Black Housing	Wire ①, ② CROSS	Off	Off	Power Off
3.White Housing	Wire ①, ② CROSS	Normal	Normal	Power On
* 4.Black and White Housing	Housing CROSS	Heater2	Heater1	Power On
5.Black and White Housing	Housing and Wire ①, ② CROSS	Off	Off	Power Off

< Table2 > : Wrong Connection of the Tab Relay and Connector Housing (Gas)

Items	Case	Heater1 Operation(black)	Heater2 operation(White)	PCB condition Of operation
1.Black and White Housing	Wire ①, ② CROSS	Off	Off	Power Off

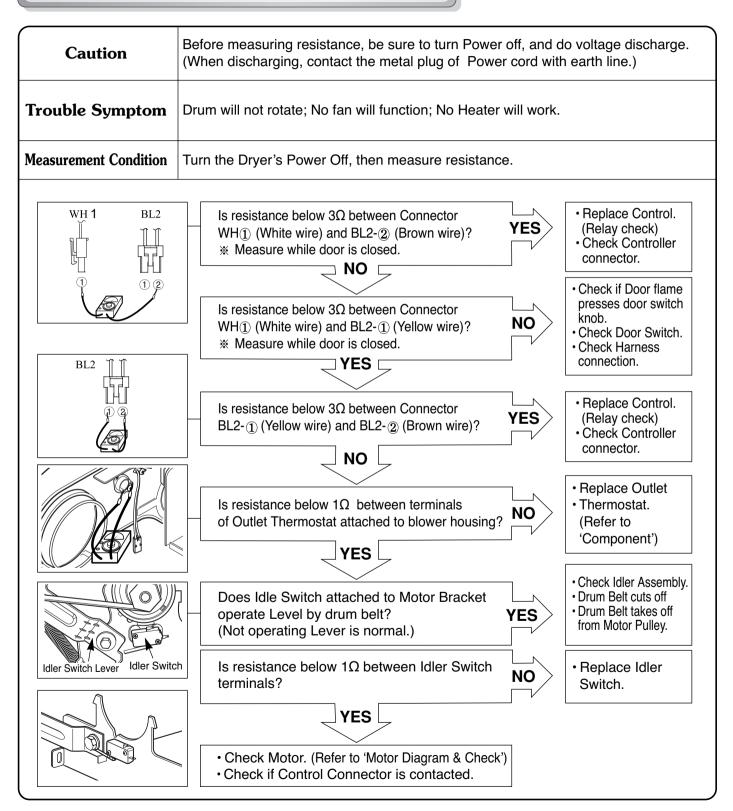
- In case of power failure(<Table 1>-1,2,5,<Table 2>-1), Please check the Connection of "2.Status Table of Connection". In case of power failure(<Table 1>-4), please check the Connection of "2. Status Table of Connection". Because improper Connection of the equipment-dryer can be damaged of changing heater.

Test 2 Thermistor Test --- Measure with Power Off



Air TEMP.[°F (°C)]	RES. [kΩ]	Air TEMP.[°F (°C)]	RES. $[k\Omega]$	Air TEMP.[°F (°C)]	RES. [kΩ]
50°F (10°C)	18.0	90°F (32°C)	7.7	130°F (54°C)	2.9
60°F (16°C)	14.2	100°F (38°C)	6.2	140°F (60°C)	3.0
70°F (21°C)	11.7	110°F (43°C)	5.2	150°F (66°C)	2.5
80°F (27°C)	9.3	120°F (49°C)	4.3	160°F (71°C)	2.2

Test 3 Motor test



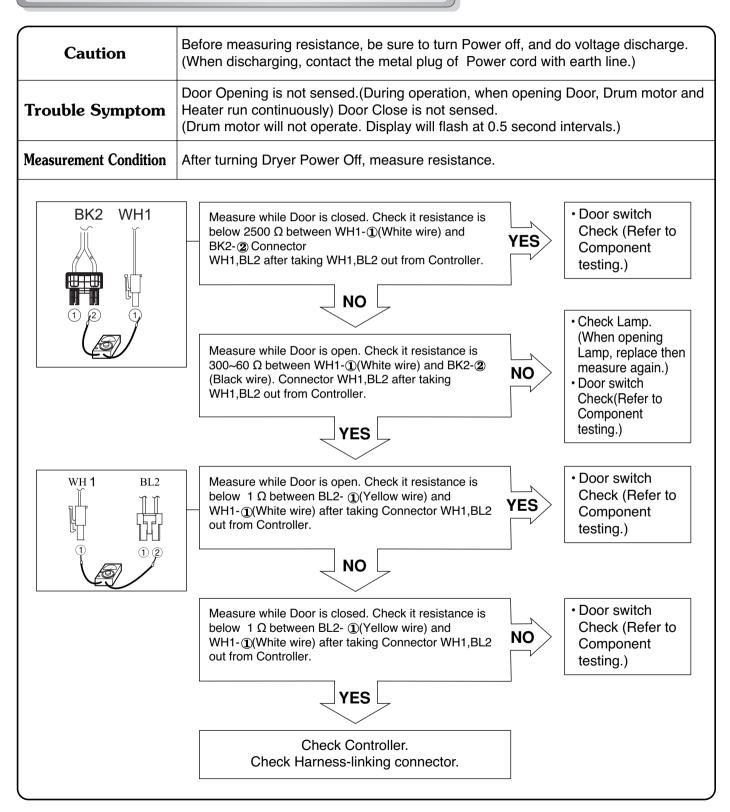
■ Test 4 Moisture sensor

Caution	Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with earth line.)					
Trouble Symptom	Degree of dryness does not match with Dry Level.					
Measurement Condition	Turn the Dryer's Power Off, then measure resistance	е.				
Take 6pin Connector from the Controller.	Short with metal to the 6 pin connector's Pin ② (Blue Wire) and Pin ④ (Orange Wire) to Controller. When measuring resistance in Electric load, is resistance below 1Ω? YES	NO	 Check Electro Load and Harness Connector. Check Harness- linking connector. 			
	 When contacting cloth to Electro load: 1. Is the measurement within the range of Table 2 during Diagnostic Test? 2. Is the measurement within the range of Table 2 when measuring the voltage in the 6 pin connector's Pin (3) (BLUE wire) and Pin (5) (ORANGE wire)? 	NO	Replace Control and Check.			
	Normal Condition					

■ Table 2. IMC Ratio and Display Value / Voltage (IMC: Initial Moisture Content)

IMC	Display Value	Voltage (DC) (between 6 Pin terminal 3,5)	Remark
70% ~ 40%	50 ~ 130	2.5V	Weight after removing from Washing Machine
40% ~ 20%	130 ~ 20	2.0V ~ 4.0V	Damp Dry
10% ~ Dried clothes	205 ~ 240	Over 4.0V	Completely-dried clothes

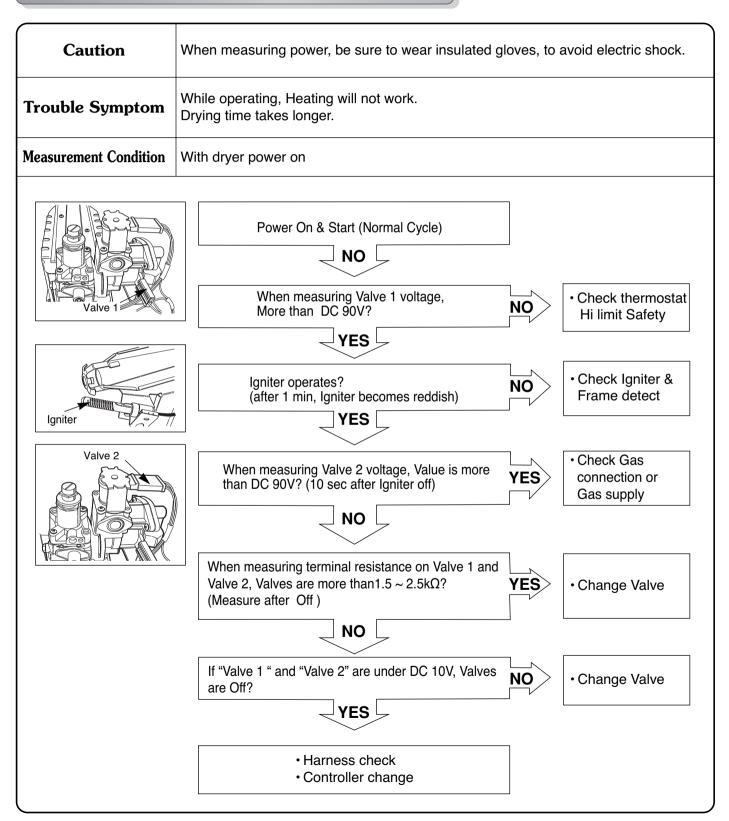
Test 5 Door switch test



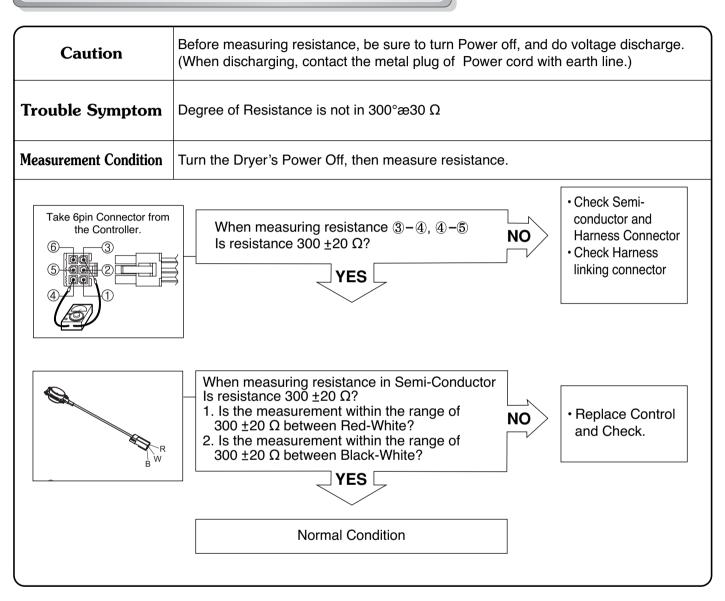
Test 6 Heater switch test - Electric Type

Caution	Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with earth line.)					
Trouble Symptom	While operating, Heating will not work. Drying time takes longer.					
Measurement Condition	After turning Power off, measure the resistance.					
	 Is resistance between Heater terminal and ② below 18 ~ 22Ω? Is resistance between Heater terminal 	NO	Replace Heater.			
	YES					
TH3 TH2	Check if the value of measured resistance is below 1Ω between terminal TH2 (Safety Thermostat).	NO	Replace TH2 (Safety Thermostat).			
	Check if the value of measured resistance is below 1Ω between terminal TH3 (HI-Limit Thermostat).	NO	Replace TH3 (HI-Limit Thermostat).			
	YES					
	Check Motor. Check if the value of measured resistance is below 1Ω between terminal (1) and (10) at RUN condition.	NO	Check Motor and replace it.			
	YES	_				
	Check Controller. Check Harness-linking Connector.					

Test 7 GAS Valve test - Gas Type



Test 8 Semi Conductor





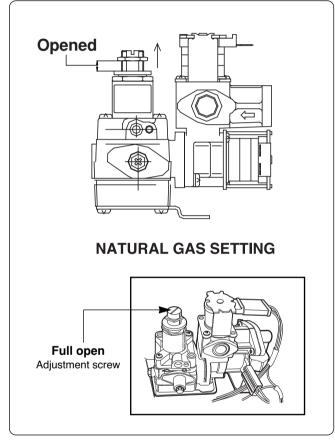
CHANGE GAS SETTING (NATURAL GAS, PROPANE GAS)

A Warning

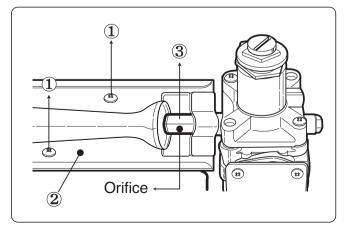
Changing orifices and gas valve adjustments improperly can result in an explosion and/or fire. Conversion must be made by a qualified technician.

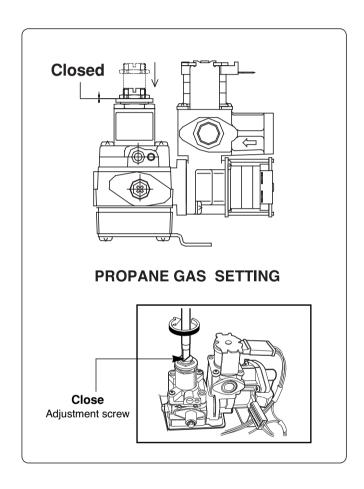
Initially, Natural Gas mode is set. Propane Gas Orifice is on sale as a Service Part to authorized servicers only.

STEP 1 : VALVE SETTING



STEP 2 : ORIFICE CHANGE



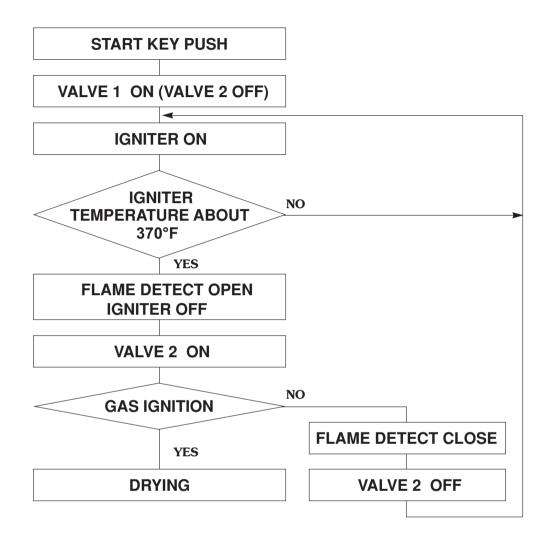


- 1 Remove 2 screws.
- ② Disassemble the pipe assembly.
- (3) Replace Natural Gas orifice with Propane Gas orifice.

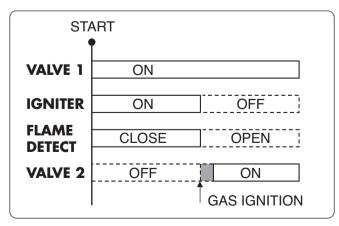
Gas type	Orifice P/No	Marking	Shape
Natural Gas	4948EL4001B	NCU	
Propane Gas	4948EL4002B	PCU	

Kit contents: Orifice (Dia. = 1.613mm, for Propane Gas) Replace Label Instruction Sheet

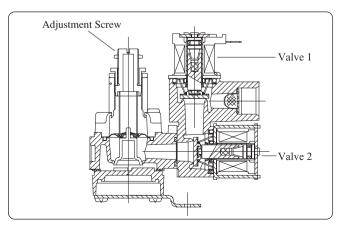
■ GAS VALVE FLOW



GAS IGNITION



GAS VALVE STRUCTURE



11

DISASSEMBLY INSTRUCTIONS

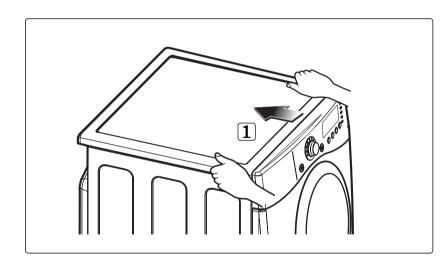
* Disassemble and repair the unit only after pulling out power plug from the outlet.

TOP PLATE

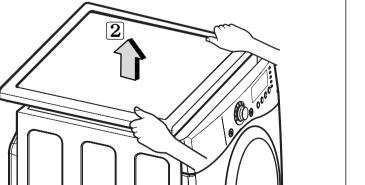
A WARNING !

When you disassemble the top plate, be sure to take gloves and careful plate's edge. Failure to do so can cause serious injury.

1. Remove 3 screws on the upper plate.

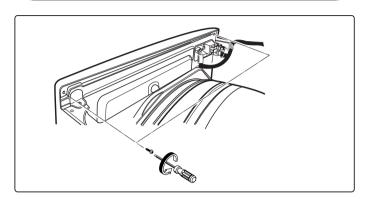


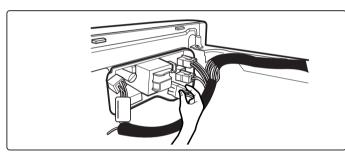
2. Push the top plate back ward.

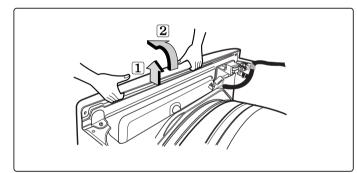


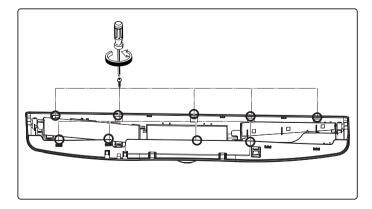
3. Lift the top plate

CONTROL PANEL ASSEMBLY









A WARNING !

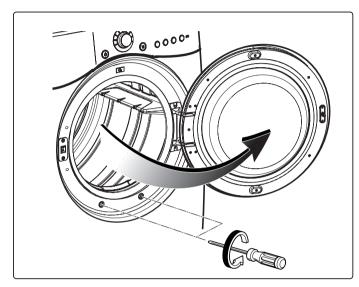
When you disassemble the control panel, be sure to take gloves and careful panel frame's edge. Failure to do so can cause serious injury.

- **1.** Remove 2 screws on the control panel frame.
- **2.** Disconnect the connectors.

3. Pull the control panel assembly upward and then forward.

- **4.** Remove 9 screws on the PWB(PCB) assembly, display.
- **5.** Remove 4 screws on the PWB(PCB) assembly, main.
- 6. Disassemble the control panel assembly.

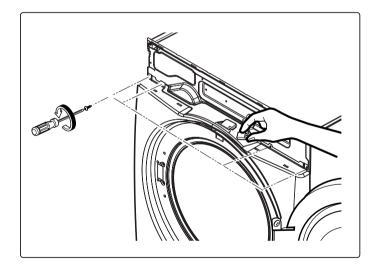
COVER CABINET



A WARNING !

When you disassemble the door switch connector, be sure to take gloves and careful cabinet edge. Failure to do so can cause serious injury.

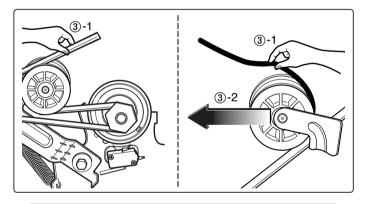
- **1.** Disassemble the top plate.
- **2.** Disassemble the control panel assembly.
- **3.** Disassemble the door assembly.
- **4.** Remove 2 screws.



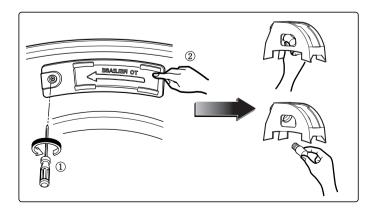
- **5.** Remove 4 screws from the top of cabinet cover.
- **6.** Disconnect the harness of door switch.

TUB DRUM [FRONT]

DRUM ASSEMBLY



CHANGING THE DRUM LAMP



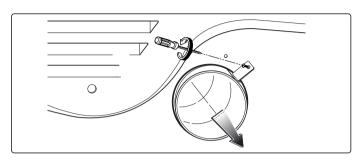
A WARNING !

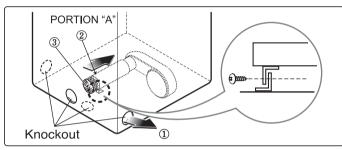
When you disassemble the lamp connector, be sure to take gloves and careful cabinet edge. Failure to do so can cause serious injury.

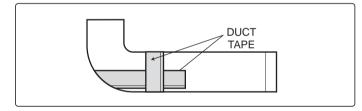
- **1.** Disassemble the top plate.
- **2.** Remove Cover Cabinet.
- **3.** Disconnect the door lamp and electrode sensor connector.
- 4. Remove 4 screws.
- 5. Disassemble the Tub Drum [Front].
- **1.** Disassemble the top plate.
- **2.** Remove the Cabinet Cover and Tub drum [front].
- **3.** Loosen belt from motor and idler pulleys.
- **4.** Carefully remove the drum.

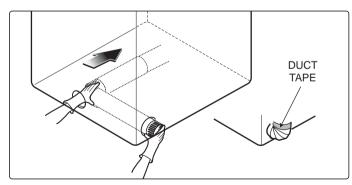
- **1.** Disassemble the door.
- **2.** Hold the lamp shield in place while removing the screw.
- **3.** Slide the shield up and remove.
- **4.** Remove the bulb and replace with a 15 watt, 120 volt candelabra-base bulb.
- 5. Replace the lamp shield and screw.

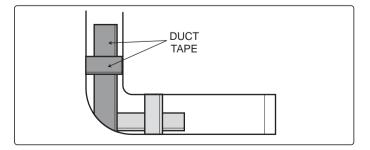
DRYER EXHAUST CHANGE











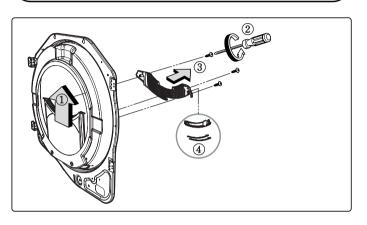
A WARNING !

When you disassemble and install ventilation, be sure to take gloves and careful exhaust edge. Failure to do so can cause serious injury.

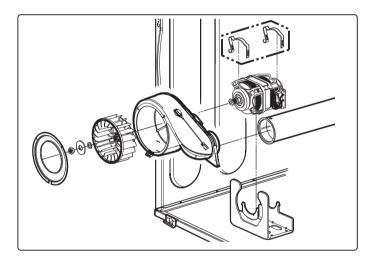
- **1.** Remove a screw and the exhaust duct.
- 2-1. Detach and remove a knockout at the botton, left or right side as desired. (Right Side Vent not available on Gas dryer)
 (1), (2), (3) the order of work.
- **2-2.** Reconnect the another duct [11 in (28cm)] to the blower housing, and attach the duct to the base. (Duct is a SVC part)
- **3-1.** Pre-assemble 4" elbow with 4" duct. Wrap duct tape around joint.

3-2. Insert the elbow duct assembly through the side opening and connect the elbow to the internal duct.

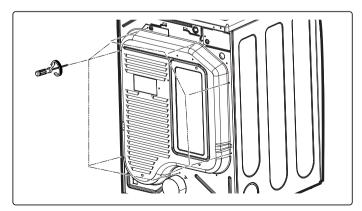
FILTER ASSEMBLY



BLOWER HOUSING

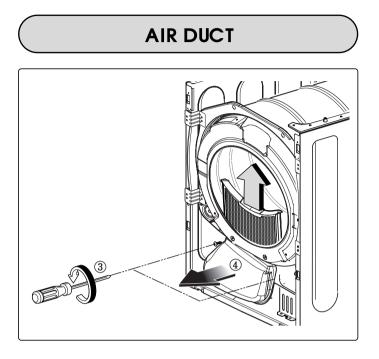


BACK COVER



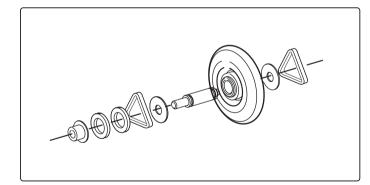
- **1.** Remove the filter.
- 2. Remove 3 screws.
- **3.** Remove the Cover Grid.
- 4. Disconnect the electrode sensor.

- **1.** Disassemble the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- **3.** Remove the Drum assembly.
- 4. Remove 2 screws and cover (Air guide).
- 5. Remove the bolt and washer.
- **6.** Remove the fan.
- 7. Disconnect the motor clamp and motor.
- **1.** Disassemble the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- **3.** Remove the Drum assembly.
- **4.** Remove 7 screws.
- 5. Remove the Back Cover.



- **1.** Disassemble the top plate.
- **2.** Remove the Cover Cabinet.
- **3.** Remove the filter and 2 screws.
- 4. Remove the air duct.

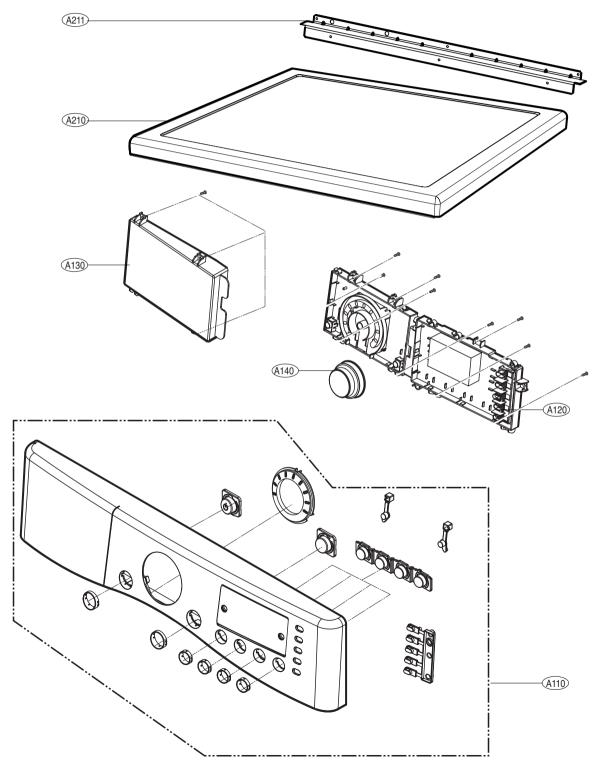
ROLLERS

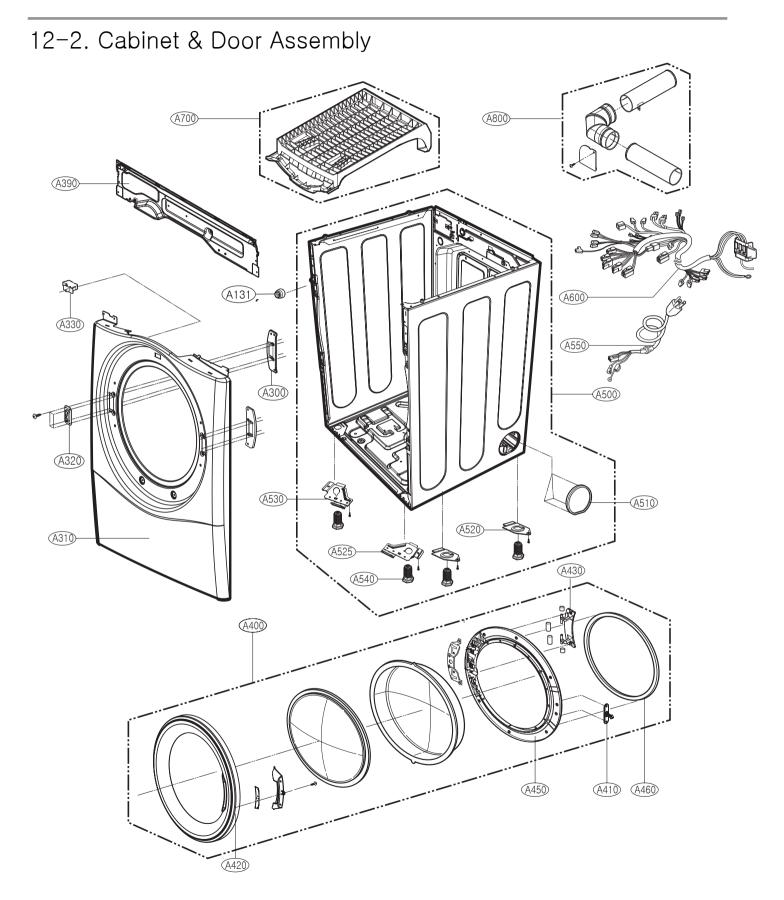


- **1.** Disassemble the top plate.
- 2. Remove the Cover Cabinet and Tub Drum [Front].
- 3. Remove the Drum assembly and Tub Drum [Rear].
- 4. Disconnect the Air duct from the Tub Drum [Front].
- **5.** Remove the roller from the Tub Drum [Front] and Tub Drum [Rear].

12 EXPLODED VIEW

12-1. Control Panel & Plate Assembly





12-3-1. Drum & Motor Assembly: Electric Type

