

# ELECTRIC & GAS DRYER SERVICE MANUAL

#### **CAUTION**

READ THIS MANUAL CAREFULLY TO DIAGNOSE TROUBLES CORRECTLY BEFORE OFFERING SERVICE.

MODEL: DLE2512W/DLG2522W

**DLE2514W/DLG2524W** 



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## **IMPORTANT SAFETY NOTICE**

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. 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.

# **A** WARNING!

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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# **SPECIFICATIONS**



■ Name : Electric and Gas Dryer

■ Power supply : Please refer to the rating label regarding detailed

information.

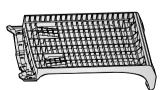
■ Size : 68.6 X 96.5 X 73.0 (cm)

■ Dryer capacity : IEC 7.0 cu.ft.

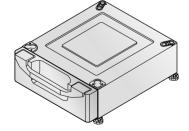
■ Weight : 126(lbs)

Specifications are subject to change by manufacturer.

### ■ ACESSORIES -







Dryer rack (1 each)

Stacking kit (1 each)
Purchased Separately

Pedestal (1 each)
Purchased Separately

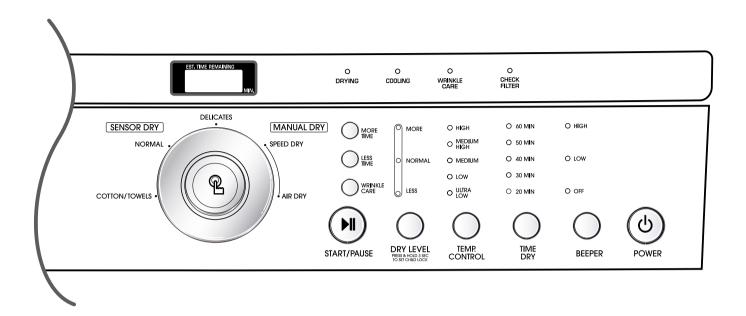
See page 6 for how to use.

See page 7 for how to use.

See page 8 for how to use.

ITEM		DLE2512W DLG2522W			
		Color	Blue V	Vhite	
Material & Finishes	Т	op Plate	Pain	ted	
	D	oor Trim	Silver	Blue White	
POWER	SUP	PLY	120V / 24	10V 60Hz (26A)	
ELECTRICIT	Γ\/	MOTOR	250V	V (4.5A)	AC 120V
CONSUMPT		HEATER	5400W	(22.5A)	AC 240V (ELECTRIC TYPE)
		LAMP	15 W (1	25mA)	AC 120V
		GAS VALVE	13 W (110	0mA) x 2	AC 120V(GAS TYPE)
CONTR	ROL T	YPE	Electr	onic	
DRUM (	CAPA	CITY	7.0 c	u.ft.	
Weight (lb	s) : N	let / Gross	124 / 144		
No. of	Progr	ams	5		
No. of [	Ory O	ptions	3		
No. of Tempe	eratur	e Controls	5		
No. of [	Ory Le	evels	3		
Sound	d leve	ls	High / Lo		
Sensor	١	Moisture	Avaia	able	Electrode sensor
Selisoi	Ter	mperature	Avaia	able	Termistor
Revers	sible [	Door	Avaia	able	
D	rum		Double Coa	Double Coated Steel	
Drye	Dryer Rack		Avaia	able	
Chil	Child Lock		Avaia	able	
Interior Light		Avaiable			
Product	(Wxl	HxD)	27" x 38.	7" x 29.6"	
Packing	(Wxl	HxD)	29 <sup>1</sup> / <sub>2</sub> " x 4 <sup>4</sup>	4 <sup>3</sup> / <sub>4</sub> x 30 <sup>3</sup> / <sub>4</sub>	

# **FEATURES AND BENEFITS**

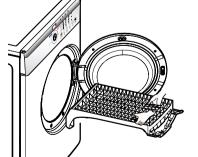


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# **INSTALLATION INSTRUCTIONS**

# Dryer Rack Installation Instructions

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



Put the dryer rack into the drum



Make sure that dryer is evenly placed right onto the drum inside and door rim.



### **Stacking Kit Installation Instructions**

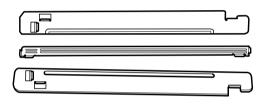
To ensure safe and secure installation, please observe the instructions below.

#### **WARNING**

Do not attempt installation with one person.

Incorrect installation procedure can cause serious accidents and physical Injuries.

The weight of the dryer and the height of installation makes the stacking procedure too risky for one person. This procedure should be performed by 2 or more experienced service personnel.

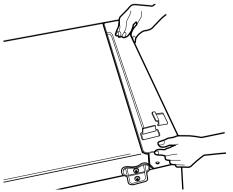


Stacking kit

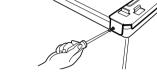
- Place washer firmly on a stable, even and solid floor as product installation instructions describes in owner's manual.
- Peel protective paper off the tape from the stacking kit side bracket.



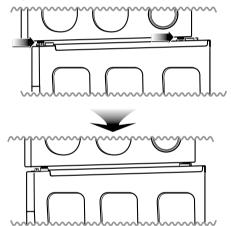
Fit the stacking kit side bracket firmly to the side of top plate by attaching the double-faced tape to top plate as picture shows.



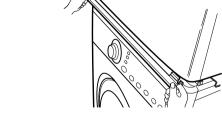
Secure stacking kit side bracket to the washer with a screw on the back of bracket. Repeat Steps 2, 3, 4 for the other side.



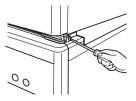
Place the dryer on top of the washer by fitting legs as shown in the picture. Avoid finger injuries - be careful not to pinch fingers between the washer and dryer. Slide washer slowly backwards to the stopper of kit.



Insert the front stacking kit. Push the front stacking kit back to the stoppers of side stacking kit.



Screw both sides of the front kit.

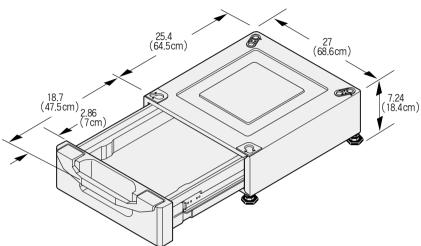


 Do not use stacking kit with a gas dryer in potentially unstable conditions like a mobile home.

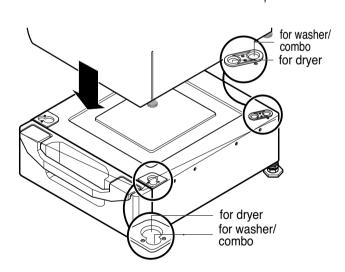
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## **Pedestal Installation Instructions**

For washer, dryer, and combo LG 27"



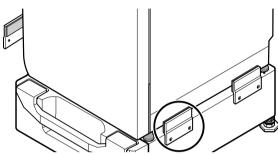
- Remove pedestal, installation hardware, and instructions from the shipping carton.
- Position dryer on top of the pedestal.



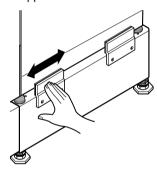
Remove the paper from the bracket.

Attach the double-faced tape of the bracket to the dryer as shown so the bent parts of the brackets align with the edge and can be attached to the pedestal with screws.

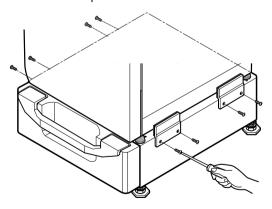
**NOTE:** Attach the lower side first.



Be sure to press the adhesive parts of the brackets firmly to the appliance.



Install the eight (8) screws(supplied) to attach the brackets to the pedestal.



Move the dryer to the desired place.

**NOTE**: The appliance and pedestal assembly must be placed on a solid and level floor for proper operation. Adjust the legs of the appliance and pedestal by turning with a wrench. Then, adjust the lock unt toward the pedestal while holding the pedestal leg using a wrench.

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



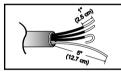
# 4-wire receptacle (NEMA type14-30R)

Use the instructions at this section if your home has a 4-wire receptacle (NEMA type 14-30R) and you will be using a UL listed, 120/240 volt minimum, 30 amp, dryer power supply cord.



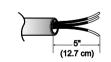
# 3-wire receptacle (NEMA type10-30R)

Use the instructions at this section if your home has a 3-wire receptacle (NEMA type 10-30R) and you will be using a UL listed, 120/240 volt minimum, 30 amp, dryer power supply cord.



#### 4-wire direct

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



#### 3-wire direct

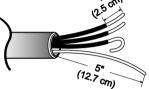
If this type is available at your home, you will be connecting to a fused disconnect or circuit breaker box

#### 4-wire connection: Direct wire

**Important:** use 4-wire connection in the places such as mobile homes and areas where 3-wire connections is not available.

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

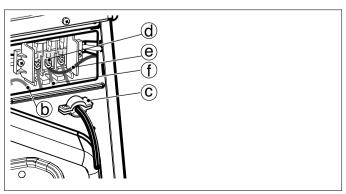
First, peel 5 inch (12.7cm) of covering material from end. Make a 5 inch of ground wire bared. After cutting 1½ inch (3.8cm) from 3 other wires. peel insulation back 1inch (2.5cm). Make ends of 3 wires a hook shape.



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.

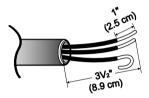


#### 3-wire connection: Direct wire

**Important :** use 3-wire connection in the places such as mobile homes and areas where 3-wire connections is not available.

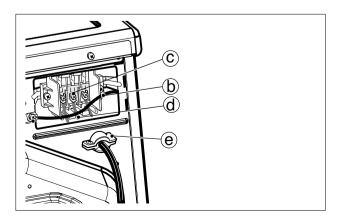
Prepare minimum 5ft(1.52m) of length in order for dryer to be replaced.

First, peel 3 ½ inch (8.9cm) of covering material from end and bare 1 inch from the ends.



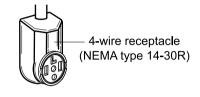
Then, put the hooked shape end of the wire under the screw of the terminal block(hooked end facing rightward) and pinch the hook together and screw tightly.

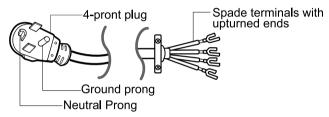
- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect red and black wire to the left and right terminal block screws.
- 3. Make sure that the strain relief screw is tightened and be sure that all terminal block nuts are on tight and power cord is in right position.

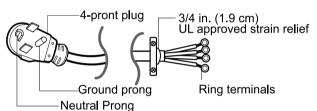


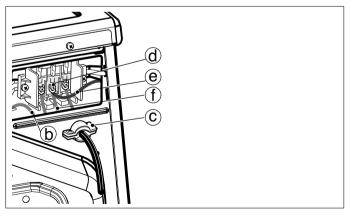
# **Option 1:** 4-wire connection with a Power supply cord.

• 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.





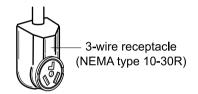


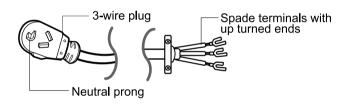


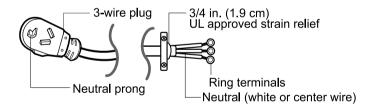
- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect red and black wire to the left and right terminal block screws.
- 3. Connect ground wire(green) of power cord to external ground screw and move neutral ground wire of appliance and connect it to center screw.
- 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.

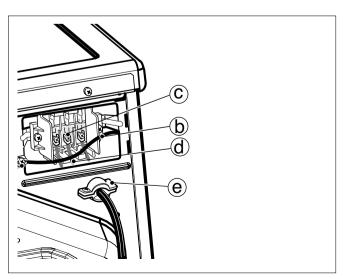
# **Option 2:** 3-Wire Connection with a Power Supply Cord

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.** 



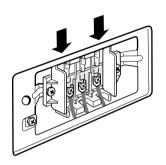


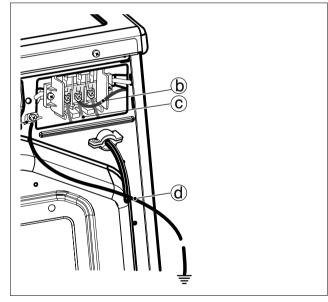




# **Option 3:** Optional 3-wire connection.

 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.



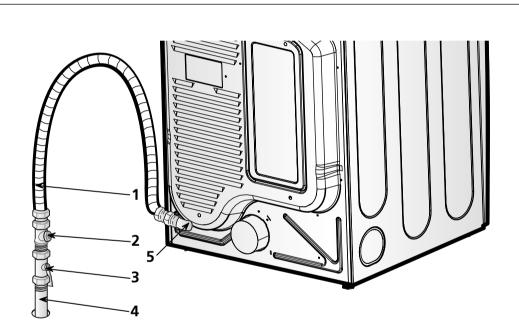


- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect ground wire of appliance and neutral wire of power cord to center terminal block screw.
- 3. Connect red and black wire to the left and right terminal block screws.
- 4. Make sure that the strain relief screw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

### 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.
- 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.



- New Stainless Steel Flexible Connector Use only if allowed by local codes (Use Design A.G.A. Certified Connector)
- 2 1/8" N.P.T. Pipe Plug (for checking inlet gas pressure)
- 3 Equipment Shut-Off Valve-Installed within 6' (1.8 m) of dryer
- 4 Black Iron Pipe Shorter than 20' (6.1 m) - Use 3/8" pipe Longer than 20' (6.1 m) - Use 1/2" pipe
- 5 3/8" N.P.T. Gas Connection

# **DRYER CYCLE PROCESS**

Default			Conditions of operation and termination						
	Cycle	Т	Der	D:1	Dryi	ng	Cod	oling	Wrinkle care
	Temp- erature		Dry Level	Display time	Electro- sensor	Temp- Control	Default time	Temp- Control**	Time
	COTTON/ TOWELS	MID HIGH	(Normal)	55min	Saturation	66±4°C	(5min)	47±5°C	
Sensor Dry*	NORMAL	MEDIUM	(Normal)	41min	Saturation	60±4°C	(5min)	47±5°C	3Hr
	DELICATES	LOW	(Normal)	32min	Saturation	52±3°C	(5min)	38±5°C	
Manual	SPEED DRY	(HIGH)	_	25min	Saturation	(70±5°C)	(5min)	(47±5°C)	3Hr
Dry **	AIR DRY	_	_	30min	Saturation	No heater	N/A	N/A	3111
									Off Time: 6min
		Ind	Мо	tor					
Load Heater		ater	Temperati	ure Contr	ol for eac	ch cycle			

<sup>\*</sup> Sensor dry : "Dry Level" is set by users.

Default settings can be adjusted by users.

 $<sup>^{\</sup>star\star}$  Manual dry : "Temperature control" is set by users.

# **COMPONENT TESTING INFORMATION**

**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	If thermal fuse is open must be replaced	<ul> <li>Heater case- Safety</li> </ul>
	① Open at 266 ± 12°F (130 ± 7°C)	① Resistance value ≒ ∞	Electric type
• Check Top Marking: N130	② Auto reset -31°F (-35°C) Same shape as Outlet Thermostat.	② Continuity (250°F $\downarrow$ ) < 1 $\Omega$	
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 ≒ ∞	• Electric type
	② Close at 221 ± 9°F (105 ± 5°C)	② Resistance value < 5Ω	
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 ≒ ∞	Electric type
• Check Top Marking :	② Close at 149 ± 9°F (65 ± 5°C)	② Resistance value < 5Ω	
N85	Same shape as Thermal cut off.		
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		The state that Knob is
	1) Door switch knob : open ① Terminal : "COM" - "NC" (1-3) ② Terminal : "COM" - "NO" (1-2) 2) Door switch push : push ② Terminal : "COM" "NC" (1-2)	② Resistance value ≒ ∞	pressed is opposite to Open condition.
	① Terminal : "COM" - "NC" (1-3) ② Terminal : "COM" - "NO" (1-2)	① Resistance value ≒ ∞ ② Resistance value < 1Ω	
6. Idler switch	Measure resistance of the following terminal: "COM - NC"	<ol> <li>lever open</li> <li>① Resistance value &lt; 1Ω</li> <li>Lever push (close)</li> <li>② Resistance value ≒ ∞</li> </ol>	

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	① Resistance value : 10Ω ② Resistance value : 10Ω ③ Resistance value : 20Ω	• Electric type
8. Thermistor	Measure resistance of terminal to terminal Temperature condition: 58°F ~ (10~40°C) 58°F ~ 104F (10~40°C)	Resistance value : 10Ω	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	① Resistance value : > 1.5kg ~ ② Resistance value : > 1.5~2.5kg	• 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	① Resistance value ≒ ∞ ② Resistance value < 1Ω	• Gas type

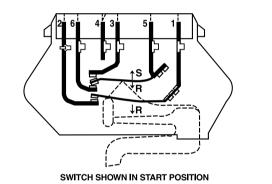
Component	Test Procedure	Check result	Remark
13. Outlet Thermostat (Auto reset)	Measure resistance of terminal to terminal		Gas type Gas funnel
	① Open at 203 ± 7°F (95 ± 5°C) ② Close at 158 ± 9°F (70 ± 5°C)	<ol> <li>Resistance value = ∞</li> <li>Continuity &lt; 1Ω</li> </ol>	
Check Top Marking:     N95			
13. Outlet Thermostat (Manual reset)	Measure resistance of terminal to terminal	If thermal fuse is open must be replaced	Gas type Gas funnel
<b>65 10</b>	① Open at 212 ± 12°F (100 ± 7°C)	① Resistance value ≒ ∞	
# 1 #	② Manual reset	② Continuity < 1Ω	
Check Top Marking:     N100			

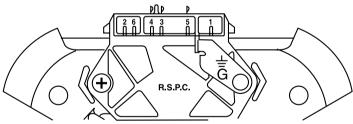
# **MOTOR DIAGRAM AND SCHEMATIC**

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

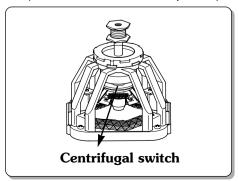
■ Contact On / Off by Centrifugal Switch

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

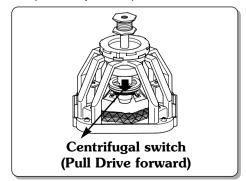




■ STOP MODE (When Motor does not operate)



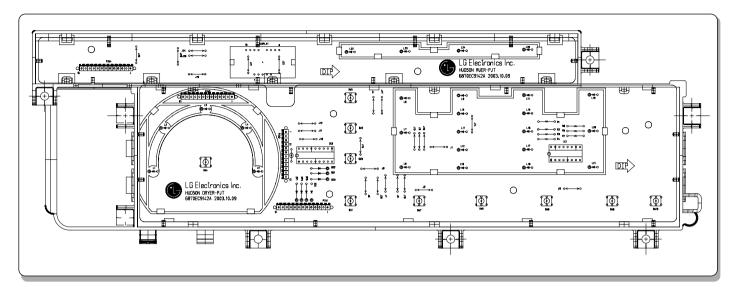
■ RUN MODE (Motor operates)



---- Open Close

# **CONTROL LAY-OUT**

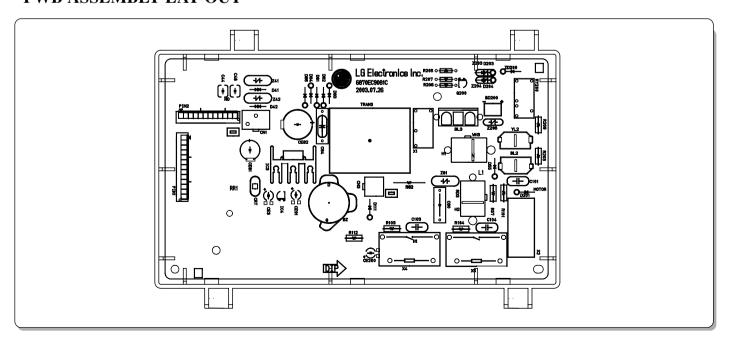
#### PWB ASSEMBLY DISPLAY LAY-OUT



#### **\*\* MODEL DISPLAY AS DIAGNOSTIC TEST**

MODEL		OPTION PART		LED	P/No	
MODEL	OR 1	OPX2	OXP 3	DISPLAY	F/NO	
DLE2512W				10.50	69715011004	
DLE2514W	×	0	X	18:FO	6871EC1120A	
DLG2522W						
DLG2524W				19:FO	6871EC1120B	

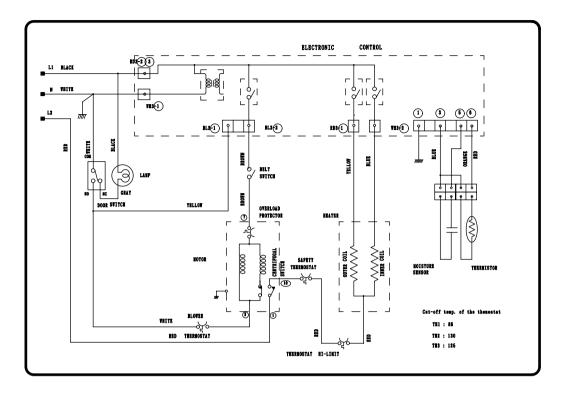
#### PWB ASSEMBLY LAY-OUT



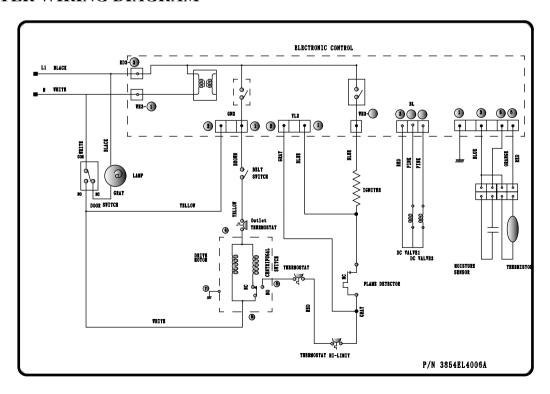
8

# **WIRING DIAGRAM**

#### ELECTRIC DRYER WIRING DIAGRAM



#### GAS DRYER WIRING DIAGRAM



# 9

# **DIAGNOSTIC TEST**

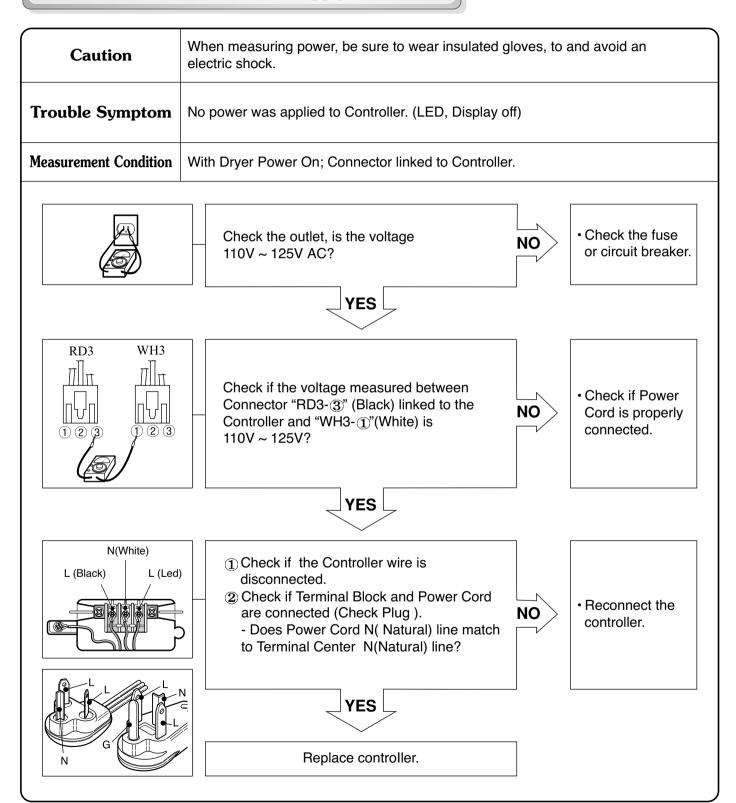
- 1. This TEST should be used for Factory test /Service test. Do not use this DIAGNOSTIC TEST other than specified.
- 2. Activating the Heater manually with the Door open may trip the Thermostat attached to the Heater, therefore do not activate it manually. (Do not press the door switch to operate the 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	(B:FC	Won't power up Defective LED	See test 1 Display : See page
None	& Temperature	EE	Thermistor open	See test 2
	sensor	<u> </u>	Thermistor close	366 (68) Z
			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.	■ ELECTRIC TYPE : Heater runs ■ GAS TYPE : GAS Valve runs (Display the Temperature of Inside drum.)	Gas valve See test 7
3 times	■ELECTRIC TYPE  Motor + Heater 1  +Heater 2 (5400W)  ■GAS TYPE  Motor Type	Current Temp. (5 ~ 70)		
4 times	Control Off		Auto Off	
During check,	Motor & Heater Off + Lamp On +	dE	Door switch	See test 6
If the door is open.	Buzzer beeps seven times		Lamp	
During check, If the door is closed.	Motor on & Heater Off + Lamp Off	70 ~ 239	<ul> <li>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.</li> <li>Press Start 2 times and then open the door. Proceed again from the step 1 all the way to the step 4.</li> <li>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.</li> </ul>	

### ■ **Test 1** 120VAC Electrical supply



# ■ **Test 2** Thermistor Test --- Measure with Power Off

Caution	Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with the Ground.)					
Trouble Symptom	<ol> <li>During Diagnostic Test, tE1 and tE2 Error occur.</li> <li>During operation, Heater would not turn off, or remains on.</li> <li>Difference between actual and sensed temperature is significant.</li> </ol>					
Measurement Condition	After turning Power off, measure the resistance.					
Take 6pin Connector from the Controller.	Check if resistance is in the range of Table 1 when measuring 6pin connector Pin ③ (Blue wire) and Pin ⑥ (Red wire) connected to Controller.  YES  • Check if Control and 6Pin connector is properly connected. • Replace Controller.					
	Check if resistance is in the range of Table 1 when measuring resistance between terminals after separating Harness From Thermistor assembly Connector.  YES  Check if resistance is in the range of Table 1 NO Replace Thermistor.					
	Check Harness-linking connector.					

#### ■ Table 1. Resistance for Thermistor Temperature.

Air TEMP.[°F (°C)]	<b>RES.</b> $[k\Omega]$	Air TEMP.[°F (°C)]	<b>RES.</b> $[k\Omega]$	Air TEMP.[°F (°C)]	<b>RES.</b> $[k\Omega]$
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

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	Drum will not rotate; No fan will function; No Heater will work.						
Measurement Condition	Turn the Dryer's Power Off, then measure resistance.						
WH3 BL2	Is resistance below 3Ω between Connector "WH3-①" (White wire) and "BL2-②" (Brown wire)?   ** Measure while door is closed.  **NO	Replace Control.     (Relay check)     Check Controller connector.      Check if Door flame					
BL2	Is resistance below 3Ω between Connector "WH3-①" (White wire) and "BL2-①" (Yellow wire)?  ** Measure while door is closed.  YES	presses door switch knob.  • Check Door Switch.  • Check Harness connection.					
	Is resistance below 3Ω between Connector "BL2-①" (Yellow wire) and "BL2-②" (Brown wire)?	Replace Control.     (Relay check)     Check Controller connector.					
	Is resistance below 1Ω between terminals of Outlet Thermostat attached to blower housing?	• Replace Outlet • Thermostat. (Refer to 'Component')					
	Does Idle Switch attached to Motor Bracket operate Level by drum belt? (Not operating Lever is normal.)	Check Idler Assembly. Drum Belt cuts off Trum Belt takes off from Motor Pulley.					
Idler Switch Lever Idler Switch	Is resistance below $1\Omega$ between Idler Switch terminals?	• Replace Idler Switch.					
	Check Motor.(Refer to 'Motor Diagram & Check')     Check if Control Connector is contacted.						

# ■ Test 4 Moisture sensor

(when	e measuring resistance, be sure to turn Power off, and do voltage discharge.  n discharging, contact the metal plug of Power cord with earth line.)				
Trouble Symptom Degree	Trouble Symptom Degree of dryness does not match with Dry Level.				
Measurement Condition Turn th	the Dryer's Power Off, then measure resistance.				
Metal or Wire  What is the second of the sec	Short with metal to 6pin connector's Pin ③ (BLUE wire) and Pin ⑤ (ORANGE wire) to Controller.  When measuring resistance in Electric load, is resistance below 1Ω?  **NO*  One of the contacting cloth to Electro load: Is the measurement within the range of Table 2 during Diagnostic Test?  Is the measurement within the range of Table 2 and Check.				
Damping cloth	when measuring the voltage in 6pin connector's Pin ③ (BLUE wire) and Pin ⑤ (ORANGE wire)?  YES				
	Normal Condition				

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

IMC	Display Value	Voltage(DC) (between 6Pin terminal 3,5)	Remark
70% ~ 40%	50 ~ 130	2.5V	Weight after removing from Washing Machine
40% ~ 20%	100 ~ 20	2.0V ~ 4.0V	Damp Dry
10% ~ Dried clothes	205 ~ 240	Over 4.0V	Completely-dried clothes

# ■ Test 5 Door switch test

Caution	Before measuring resistance, be sure to turn Power off, and (When discharging, contact the metal plug of Power cord wi	o o		
Trouble Symptom  Door Opening is not sensed.(During operation, when opening Door, Drum motor an Heater run continuously; Door Close is not sensed.  (Drum motor will not operate. Display will flash at 0.5 second intervals.)				
Measurement Condition	After turning Dryer Power Off, measure resistance.			
RD3 WH3	Measure while Door is closed. Check if resistance is below 250Ω between "WH3-①" (White wire) and "RD3-②"(Black wire) Connector WH3, RD3 after taking WH3, RD3 out from Controller.	• Door switch Check (Refer to Component testing.)		
	NO L	• Check Lamp.		
	Measure while Door is open. Check if resistance is 300~60Ω between "WH3-①" (White wire) and "RD3-②" (Black wire) Connector WH3, RD3 after taking WH3, RD3 out from Controller.	(When opening Lamp, replace then measure again.) • Door switch Check(Refer to Component		
	YES	testing.)		
WH3 BL2	Measure while Door is open. Check if resistance is below 1Ω between "BL2-①" (Yellow wire) and "WH3-①" (White wire) after taking Connector WH3, BL2 out from Controller.	• Door switch Check (Refer to Component testing.)		
	NO			
	Measure while Door is closed. Check if resistance is below 1Ω between "BL2-①" (Yellow wire) and "WH3-①" (White wire) after taking Connector WH3, BL2 out from Controller.	• Door switch Check (Refer to Component testing.)		
	YES			
	Check Controller. Check Harness-linking connector.			

# ■ **Test 6** Heater switch test - Electric Type

Caution	Before measuring resistance, be sure to turn Power of (When discharging, contact the metal plug of Power		
Trouble Symptom	While operating, Heating will not work. Drying time takes longer.		
Measurement Condition	After turning Power off, measure the resistance.		
	<ol> <li>Is resistance between Heater terminal         <ul> <li>and ② below 18 ~ 22Ω?</li> </ul> </li> <li>Is resistance between Heater terminal         <ul> <li>and ③ below 18 ~ 22Ω?</li> </ul> </li> <li>Is resistance between Heater terminal         <ul> <li>and ③ below 9 ~ 11Ω?</li> </ul> </li> </ol>	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 $1\Omega$ between terminal TH3 (HI-Limit Thermostat).	NO	• Replace TH3 (HI-Limit Thermostat).
	YES	_	
	Check Motor. Check if the value of measured resistance is below $1\Omega$ between terminal ① and ① at RUN condition.	NO	Check Motor and replace it.
	YES	_	
	Check Controller. Check Harness-linking Connector.		

# ■ **Test 7** GAS Valve test - Gas Type

Caution When measuring power, be sure to wear insulated gloves, to avoid electric shock.					
Trouble Symptom While operating, Heating will not work. Drying time takes longer.					
Measurement Condition	With dryer power on				
Valve 1	Power On & Start (Normal Cycle)  NO  When measuring Valve 1 voltage, More than AC 90V?	NO	• Check thermostat Hi limit Safety		
	YES		Til illilic Galety		
Igniter	Igniter operates? (after 1 min, Igniter becomes reddish)	NO	Check Igniter &     Frame detect		
Valve 2	When measuring Valve 2 voltage, Value is more than AC 90V? (10 sec after Igniter off)	YES	Check Gas connection or Gas supply		
	When measuring terminal resistance on "Valve 1", "Valve 2", Value is more than 1.5 $\sim$ 2.5 k $\Omega$ ? (Measure after Off )	YES	Change Valve		
	NO				
	Harness check     Controller change				

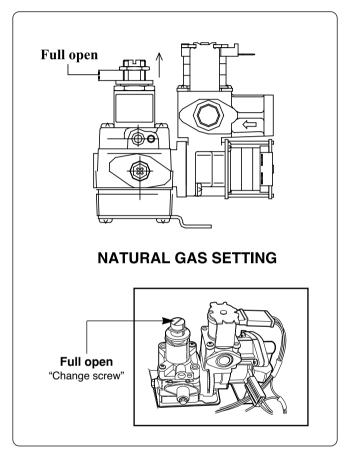
# **CHANGE GAS SETTING (NATURAL GAS, PROPANE GAS)**

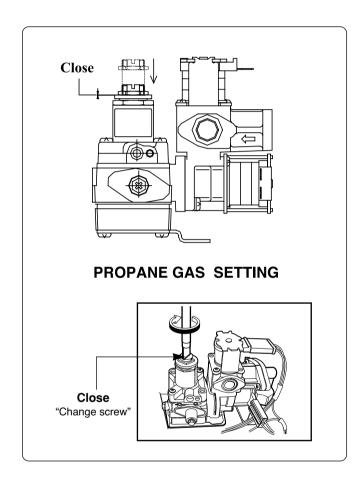
### **A** Warning

After Natural Gas Setting, applying Propane Gas Orifice or wrong use of Natural Gas Orifice will result in fire. Conversion must be made by a qualified technician.

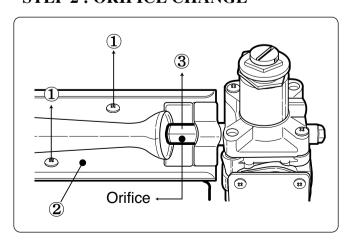
**Initially**, Natural Gas mode is set. Propane Gas Orifice is on sale as a Service Part to authorized servicers only.

#### **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.

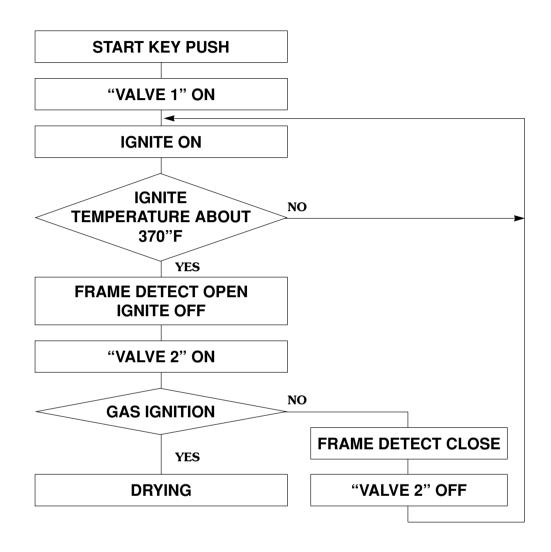
Gas type	Orifice P/No	Marking	Shape
Natural Gas	4948EL4001B	NCU	
Propane Gas	4948EL4002B	PCU	

\* Kit contents : Orifice (Dia. = 1.613mm, for Propane Gas)

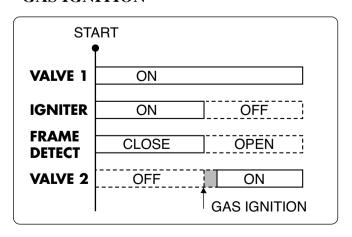
: Replace Label

: Instruction sheet

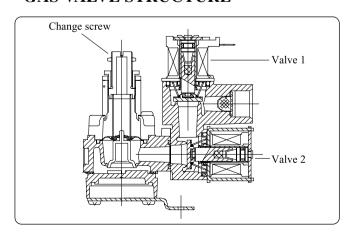
### **■** GAS VALVE FLOW



#### **GAS IGNITION**



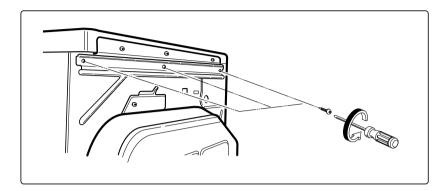
#### **GAS VALVE STRUCTURE**



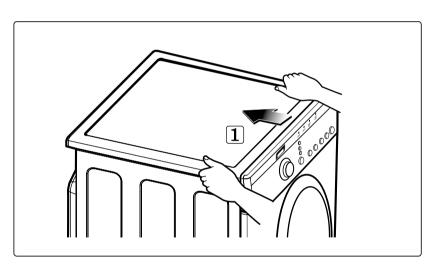
# **DISASSEMBLY INSTRUCTIONS**

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

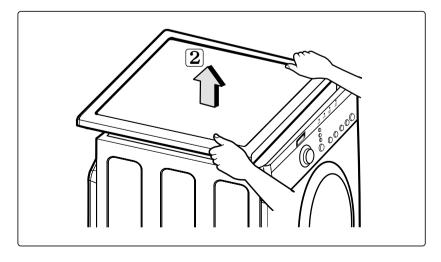
### **TOP PLATE**



1. Remove 3 screws on the upper plate.

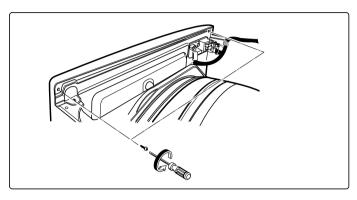


2. Push the top plate back ward.

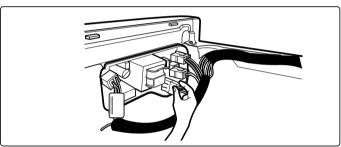


3. Lift the top plate

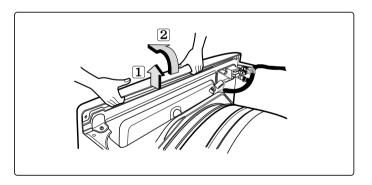
### **CONTROL PANEL ASSEMBLY**



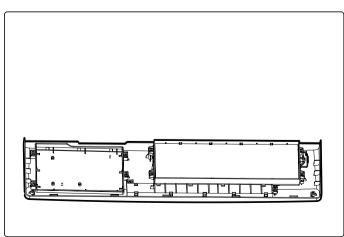
**1.** Remove 2 screws on the control panel frame.



2. Disconnect the connectors.

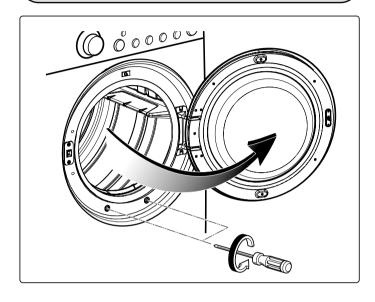


**3.** Pull the control panel assembly upward and then forward.

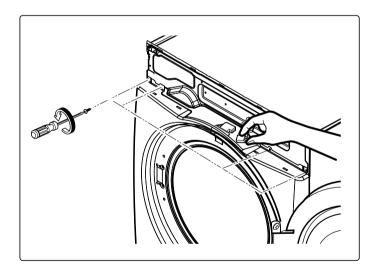


- **4.** Remove 9 screws on the PWB(PCB) assembly, display.
- **5.** Remove 4 screws on the PWB(PCB) assembly, main.
- 6. Disassemble the control panel assembly.

### **COVER CABINET**

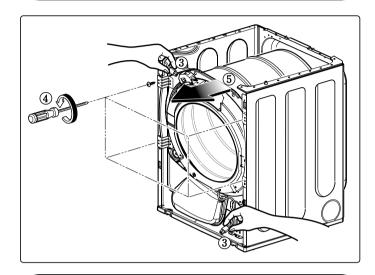


- **1.** Disassemble the top plate.
- 2. Disassemble the control panel assembly.
- **3.** Disassemble the door assembly.
- **4.** Remove 2 screws.



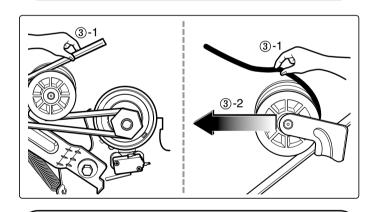
- **5.** Remove 4 screws from the top of cabinet cover.
- **6.** Disconnect the harness of door switch.

### TUB DRUM [FRONT]



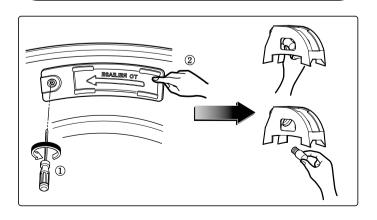
- 1. Disassemble the top plate.
- 2. Remove Cover Cabinet.
- **3.** Disconnect the door lamp and electrode sensor connector.
- 4. Remove 4 screws.
- **5.** Disassemble the Tub Drum [Front].

#### **DRUM ASSEMBLY**



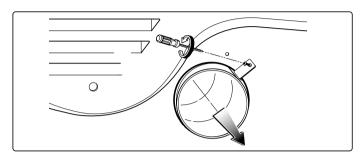
- 1. Disassemble the top plate.
- **2.** Remove the Cabinet Cover and Tub drum [front].
- **3.** Loosen belt from motor and idler pulleys.
- **4.** Carefully remove Drum out.

#### CHANGING THE DRUM LAMP

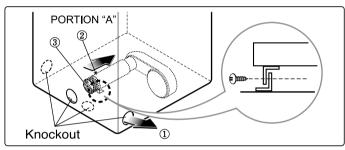


- 1. Disassemble the door.
- **2.** Remove a screw by holding the drum lamp shield in place.
- 3. Slide the shield up and remove.
- **4.** Remove the bulb and replace with a 15 watt, 120 volt candelabra-base bulb.
- 5. Replace the lamp shield and screw.

#### **DRYER EXHAUST CHANGE**

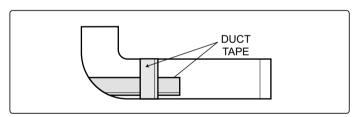


1. Remove a screw and exhaust duct.

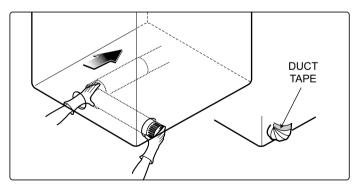


**2-1.** Detach and remove a knockout at the botton, left or right side as desired. (Right Side Vent not available on Gas dryer)

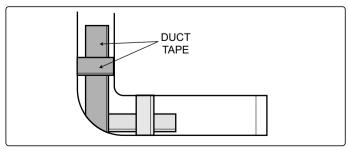
(1), (2), (3) the order of work.



**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)

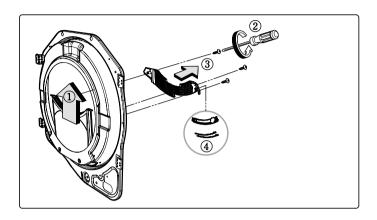


**3-1.** Pre-assemble 4" elbow with 4" duct. Wrap duct tape around joint.



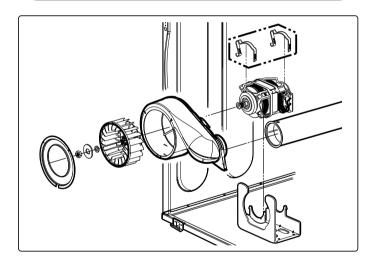
**3-2.** Insert elbow duct assembly first through the side opening and connect the elbow to the internal duct.

#### FILTER ASSEMBLY



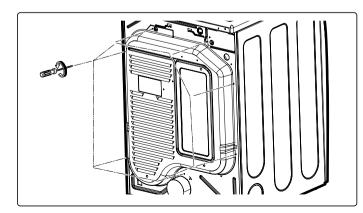
- **1.** Remove the filter.
- 2. Remove 3 screws.
- 3. Remove Cover Gride.
- 4. Disconnect electrode sensor.

#### **BLOWER HOUSING**



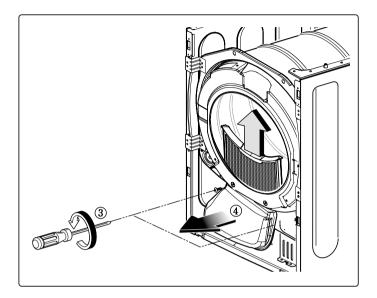
- **1.** Disassembly the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- **3.** Remove the Drum assembly.
- **4.** Remove 2 screws and cover(Air guide).
- **5.** Remove the bolt and washer.
- **6.** Remove the fan.
- 7. Disconnect the motor clamp and motor.

#### **BACK COVER**



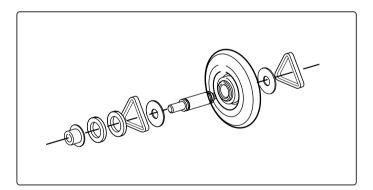
- 1. Disassemble the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- 3. Remove the Drum assembly.
- **4.** Remove 7 screws.
- **5.** Remove the Tub Drum [Rear] towards the front.

#### **AIR DUCT**



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

#### **ROLLERS**

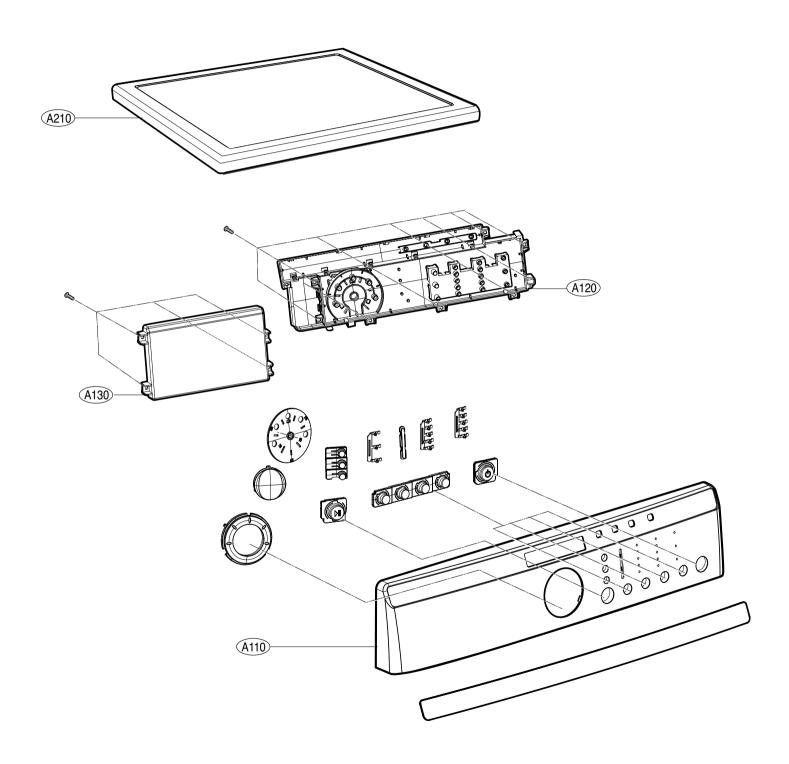


- 1. Disassemble the top plate.
- 2. Remove the Cover Cabinet and Tub Drum [Front].
- **3.** Remove the Drum assembly and Tub Drum [Rear].
- **4.** Disconnect Air duct from the Tub Drum [Front].
- **5.** Remove the roller from the Tub Drum [Front] and Tub Drum [Rear].

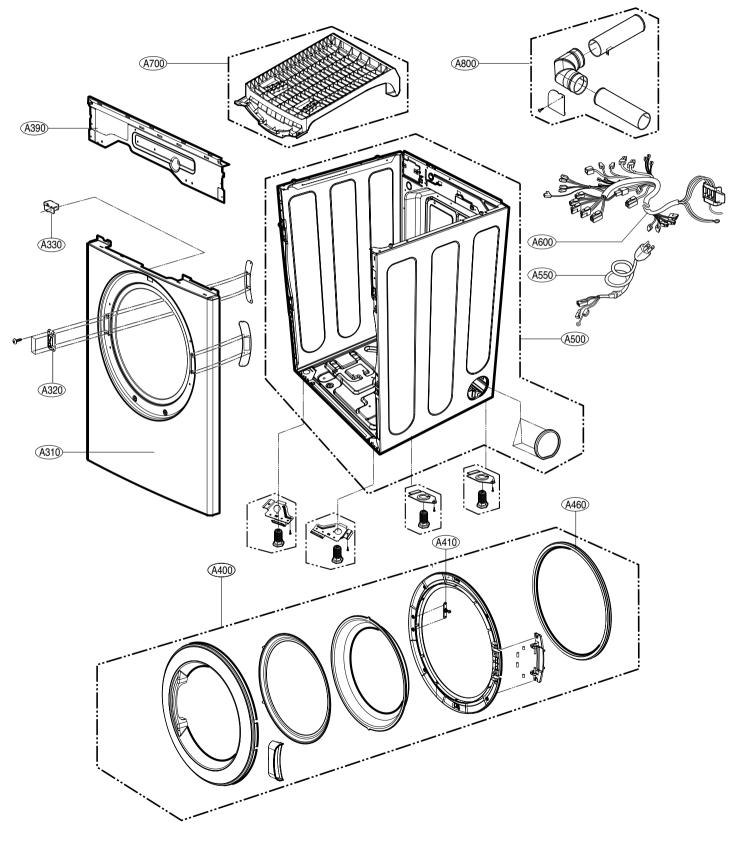
# 12

# **EXPLODED VIEW**

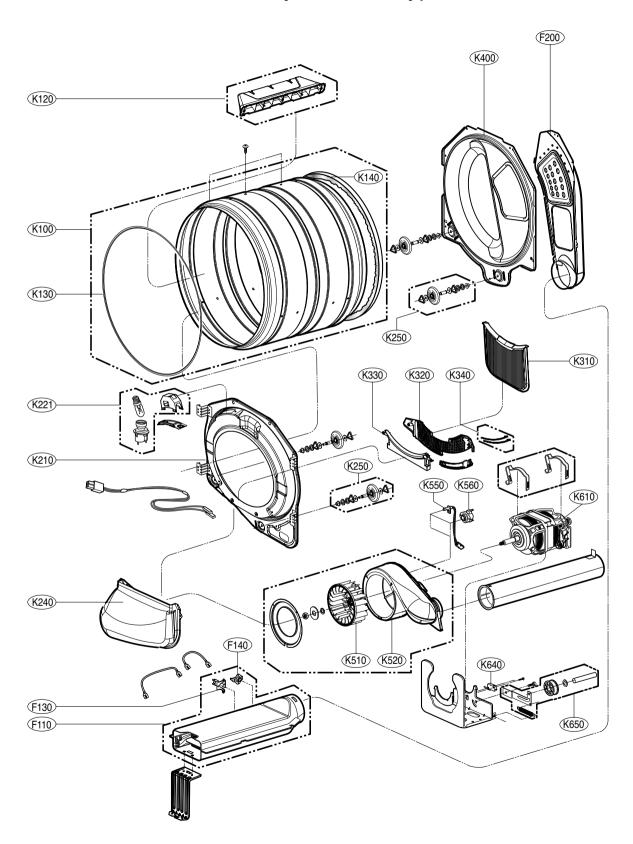
# 12-1. Control Panel & Plate Assembly



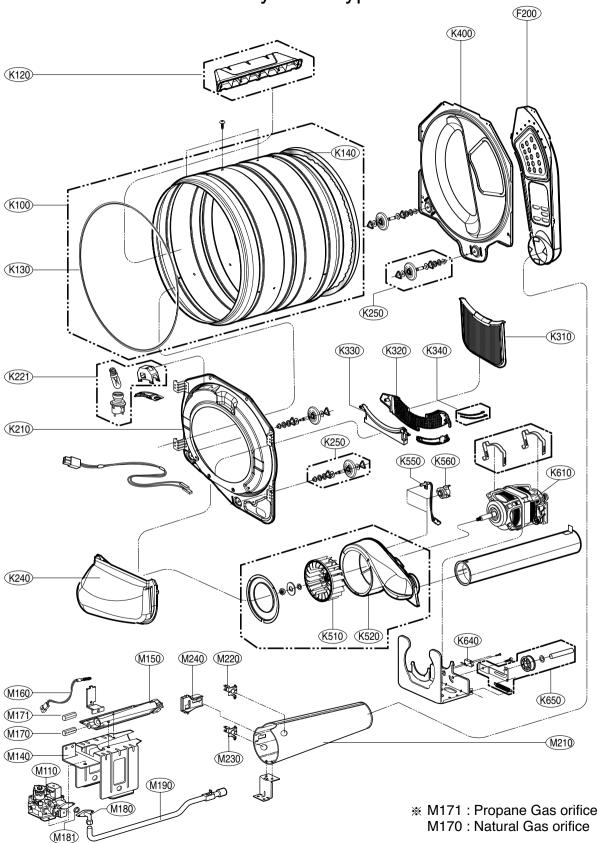
# 12-2. Cabinet & Door Assembly



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



12-3-2. Drum & Motor Assembly: Gas type



# 13

# **REPLACEMENT PARTS LIST**

CAUTION: Before replacing any part of these components, read carefully the safety precautions in this manual.

; Æ Note: S(Safety Parts), AL(Alternative parts)

	LG MODEL : TD-V10062E,TD-V10060E					
AL	LOC	Description Model P/N				
AL	LOC	Description	DLE2512W	DLE2514W	QTY	
	A500	CABINET ASSEMBLY	3091EL0003A	3091EL0003A	1	
	K610	MOTOR ASSEMBLY.WM	4681EL1002A	4681EL1002A	1	
	K650	PULLEY ASSEMBLY, MOTOR	4561EL3002A	4561EL3002A	1	
	K640	SWITCH,MICRO	3W40025D	3W40025D	1	
	K510	BLOWER ASSEMBLY	5835EL1002A	5835EL1002A	1	
	K520	HOUSING ASSEMBLY(MECH),BLOWER	3661EL1001C	3661EL1001C	1	
	K550	THERMISTOR ASSEMBLY	6323EL2001B	6323EL2001B	1	
	K560	THERMOSTAT ASSEMBLY	6931EL3002A	6931EL3002A	1	
	K400	TUB, DRUM[BACK]	3044EL002C	3044EL002C	1	
	F200	DUCT ASSEMBLY	5209EL1001C	5209EL1001C	1	
	K250	ROLLER ASSEMBLY	4581EL3001A	4581EL3001A	2	
	F110	HEATER ASSEMBLY	5301EL1001E	5301EL1001E	1	
	F130	THERMOSTAT ASSEMBLY	6931EL3003D	6931EL3003D	1	
	F140	THERMOSTAT ASSEMBLY	6931EL3001E	6931EL3001E	1	
	A600	HARNESS,PWB	6877EL1007A	6877EL1007B	1	
	K100	TUB ASSEMBLY, DRUM	3045EL1002D	3045EL1002D	1	
	K140	SEAL	4036EL3001A	4036EL3001A	2	
	K120	LIFTER	4432EL1002B	4432EL1002B	3	
	K130	BELT,POLY-V	4400EL2001A	4400EL2001A	1	
	K210	TUB ,DRUM[FRONT]	3044EL1001A	3044EL1001A	1	
	K221	LAMP ASSEMBLY	6913EL3002C	6913EL3002C	1	
	K250	ROLLER ASSEMBLY	4581EL3001A	4581EL3001A	2	
	K240	DUCT ASSEMBLY	5209EL1002A	5209EL1002A	1	
	K320	COVER,GUIDE	3550EL1006B	3550EL1006B	1	
	K340	SENSOR	6500EL3001A	6500EL3001A	2	
	K330	GUIDER,FILTER	4974EL1003B	4974EL1003B	1	
	K310	FILTERASSEMBLY,LINT	5231EL1003B	5231EL1003B	1	
		FRAME ASSEMBLY	3211EL1005A	3211EL1005A	1	
		COVER,CABINET	3550EL0006A	3550EL0006A	1	
	A330	SWITCH ASSEMBLY,DOOR	6601EL3001A	6601EL3001A	1	
		LATCH ASSEMBLY	4027EL1001A	4027EL1001A	1	
		DOOR ASSEMBLY	3581EL0003B	3581EL0003A	1	
		LATCH,HOOK	4026EL3007A	4026EL3007A	1	
	A460	GASKET	4986EL2004D	4986EL2004D	1	
		TOP PLATE ASSEMBLY	3457ER1006E	3457ER1006E	1	
		PANEL,CONTROL	3720EL0002A	3720EL0002A	1	
	A130	PWB(PCB) ASSEMBLY	6871EC1121C	6871EC1121C	1	
	A120	PWB(PCB) ASSEMBLY, DISPLAY	6871EC1120A	6871EC1120A	1	
	A700	RACK	3750EL1001B	3750EL1001B	1	
	A800	SIDE VANTING KIT	383EEL9001B	383EEL9001B	1	

CAUTION: Before replacing any part of these components, read carefully the safety precautions in this manual.

 $_{i}\, \emph{\textbf{x}}$  Note : S(Safety Parts), AL(Alternative parts)

	LG MODEL : TD-V10062G,TD-V10060G				
AL	LOC	Description Model P/N			
AL		Description	DLE2522W	DLE2524W	QTY
	A500	CABINET ASSEMBLY	3091EL0003B	3091EL0003B	1
	K610	MOTOR ASSEMBLY.WM	4681EL1002A	4681EL1002A	1
	K650	PULLEY ASSEMBLY, MOTOR	4561EL3002A	4561EL3002A	1
	K640	SWITCH,MICRO	3W40025D	3W40025D	1
	K510	BLOWER ASSEMBLY	5835EL1002A	5835EL1002A	1
	K520	HOUSING ASSEMBLY(MECH),BLOWER	3661EL1001C	3661EL1001C	1
	K550	THERMISTOR ASSEMBLY	6323EL2001B	6323EL2001B	1
	K560	THERMOSTAT ASSEMBLY	6931EL3002A	6931EL3002A	1
	K400	TUB, DRUM[BACK]	3044EL002C	3044EL002C	1
	F200	DUCT ASSEMBLY	5209EL1001C	5209EL1001C	1
	K250	ROLLER ASSEMBLY	4581EL3001A	4581EL3001A	2
	F110	HEATER ASSEMBLY	5301EL1001E	5301EL1001E	1
	F130	THERMOSTAT ASSEMBLY	6931EL3003D	6931EL3003D	1
	F140	THERMOSTAT ASSEMBLY	6931EL3001E	6931EL3001E	1
	A600	HARNESS,PWB	6877EL1008A	6877EL1008A	1
	K100	TUB ASSEMBLY, DRUM	3045EL1002D	3045EL1002D	1
	K140	SEAL	4036EL3001A	4036EL3001A	2
	K120	LIFTER	4432EL1002B	4432EL1002B	3
	K130	BELT,POLY-V	4400EL2001A	4400EL2001A	1
	K210	TUB ,DRUM[FRONT]	3044EL1001A	3044EL1001A	1
	K221	LAMP ASSEMBLY	6913EL3002C	6913EL3002C	1
	K250	ROLLER ASSEMBLY	4581EL3001A	4581EL3001A	2
	K240	DUCT ASSEMBLY	5209EL1002A	5209EL1002A	1
	K320	COVER,GUIDE	3550EL1006B	3550EL1006B	1
	K340	SENSOR	6500EL3001A	6500EL3001A	2
	K330	GUIDER,FILTER	4974EL1003B	4974EL1003B	1
	K310	FILTERASSEMBLY,LINT	5231EL1003B	5231EL1003B	1
	A390	FRAME ASSEMBLY	3211EL1005A	3211EL1005A	1
	A310	COVER, CABINET	3550EL0006A	3550EL0006A	1
	A330	SWITCH ASSEMBLY,DOOR	6601EL3001A	6601EL3001A	1
	A320	LATCH ASSEMBLY	4027EL1001A	4027EL1001A	1
	A400	DOOR ASSEMBLY	3581EL0003B	3581EL0003A	1
	A410	LATCH,HOOK	4026EL3007A	4026EL3007A	1
	A460	GASKET	4986EL2004D	4986EL2004D	1
	A210	TOP PLATE ASSEMBLY	3457ER1006E	3457ER1006E	1
	A110	PANEL,CONTROL	3720EL0002A	3720EL0002A	1
	A130	PWB(PCB) ASSEMBLY	6871EC1121D	6871EC1121D	1
	A120	PWB(PCB) ASSEMBLY, DISPLAY	6871EC1120B	6871EC1120B	1
		RACK	3750EL1001B	3750EL1001B	1
		SIDE VANTING KIT	383EEL9001B	383EEL9001B	1