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# LG DLG2141W Owner's Manual

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**LG**

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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 : Electric  
DLE2140\***

**Gas  
DLG2141\***



JULY 2010 PRINTED IN KOREA

P/No.: MFL62119927

## 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.

### **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.

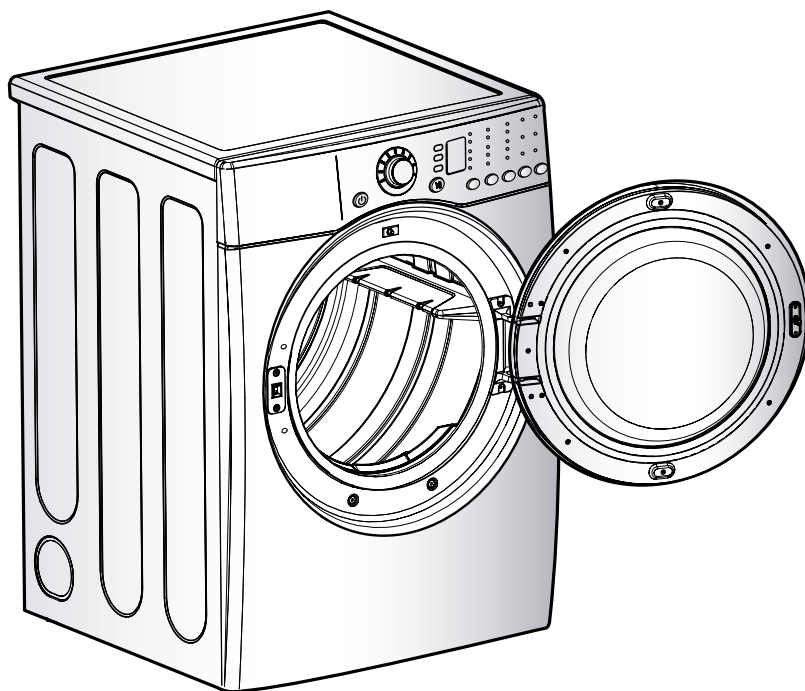
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# 1

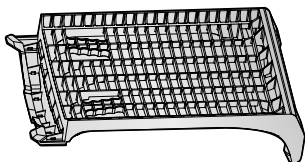
## SPECIFICATIONS



- 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 7.1 cu.ft.
- Weight: 126(lbs)

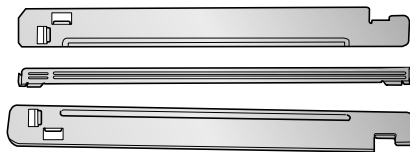
Specifications are subject to change by manufacturer.

### ■ ACCESSORIES



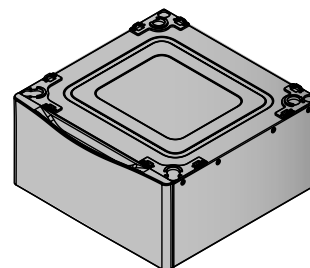
Dryer rack (1 each)  
Purchased Separately

*See page 6*



Stacking kit (1 each)  
Purchased Separately

*See page 7*



Pedestal (1 each)  
Purchased Separately

*See page 8*

| ITEM                        |             | DLE2140* / DLG2141*                        | REMARK   |
|-----------------------------|-------------|--|--|
| Material & Finish           | Color       | Blue White                                 |  |
|                             | Top Plate   | Powder coating                             |  |
|                             | Door Trim   | Blue White                                 |  |
| POWER SUPPLY                |             | 120/240V 60Hz (26A)<br>120/208V 60Hz (23A) |  |
| ELECTRICITY CONSUMPTION     | MOTOR       | 250W (4.5A)                                | AC 120V  |
|                             | HEATER      | 5400W (22.5A)<br>4100W (21A)               | AC 240V (ELECTRIC MODEL)<br>AC 208V (ELECTRIC MODEL) |
|                             | LAMP        | 15 W (125mA)                               | AC 120V  |
|                             | GAS VALVE   | 13 W (110mA) x 2                           | AC 120V (GAS MODEL)                                  |
| CONTROL TYPE                |             | Electronic                                 |  |
| DRUM CAPACITY               |             | 7.1 cu.ft.                                 |  |
| Weight (lbs) - Net/Gross    |             | 126/144                                    |  |
| No. of Programs             |             | 7  |  |
| No. of Dry Options          |             | 3  |  |
| No. of Temperature Controls |             | 5  |  |
| No. of Dry Levels           |             | 5  |  |
| Sound levels                |             | High/Low/Off                               |  |
| Sensor                      | Moisture    | Available                                  | Electrode sensor                                     |
|                             | Temperature | Available                                  | Thermistor   |
| Reversible Door             |             | Available                                  |  |
| Drum                        |             | Alcosta Steel                              |  |
| Dryer Rack                  |             | Available                                  |  |
| Child Lock                  |             | Available                                  |  |
| Interior Light              |             | Available                                  |  |
| Product (WxHxD)             |             | 27" x 38.74" x 29.9"                       |  |
| Packing (WxHxD)             |             | 29.5" x 44.1" x 31.3"                      |  |

## 2

# FEATURES AND BENEFITS

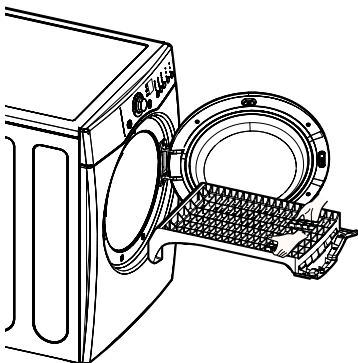


## 3

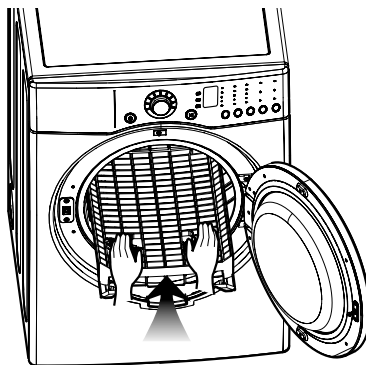
# INSTALLATION INSTRUCTIONS

## Dryer Rack Installation Instructions

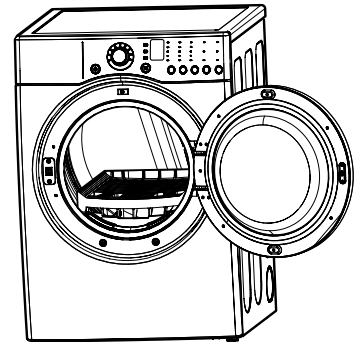
- 1** **Open the door.**  
Hold the dryer rack with both hands.



- 2** Put the dryer rack into the drum



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



## Stacking Kit Installation Instructions

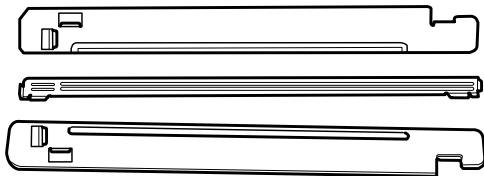
To ensure safe and secure installation, please observe the instructions below.

### WARNING

#### **Do not attempt this alone!**

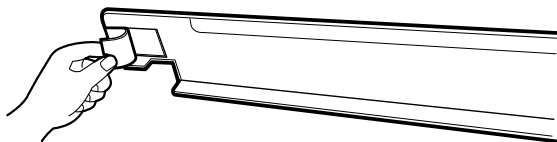
At least two people are required to lift and position the dryer on top of a washing machine!

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

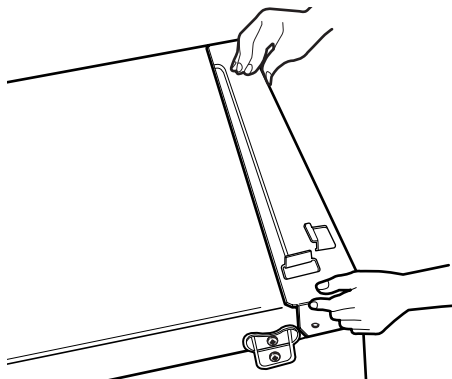


Stacking kit

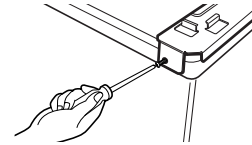
- 1** Place the washer firmly on a stable, even and solid floor as product installation instructions describe in the owner's manual.
- 2** Peel the protective paper from the tape on the side bracket.



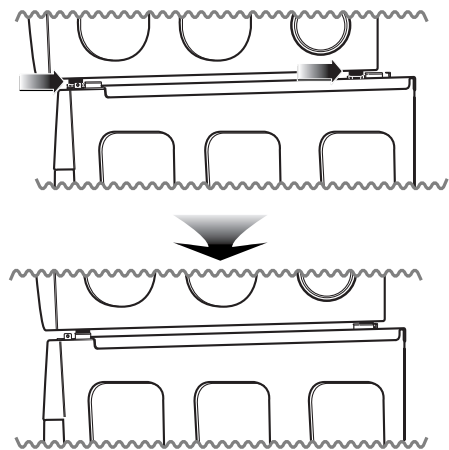
- 3** Fit the side bracket firmly to the side of the top plate by attaching the double-faced tape to the top plate as picture shown.



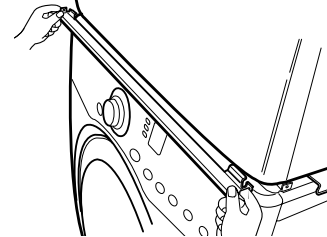
- 4** Secure the side bracket to the washer with a screw on the back of the bracket. Repeat Steps 2, 3, & 4 for the other side.



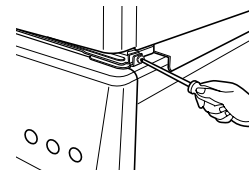
- 5** Place the dryer on top of the washer by placing the legs as shown. Be careful not to pinch fingers between the washer and dryer. Slide the dryer back against the stop on the side rail.



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



- 7** Screw both sides of the front rail to the side brackets.

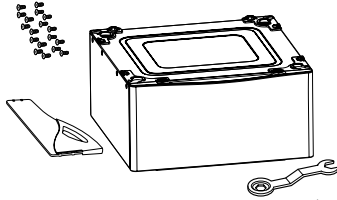


- Do not use a stacking kit with a gas dryer in potentially unstable conditions like a mobile home.

# Pedestal Installation Instructions

## The pedestal accessory includes:

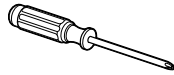
- Drawer divider (1)
- Wrench (1)
- Screws (18) †
- T-clips (4) ††



† Dryer installation only uses 8 screws  
 †† For dryer only

## Tools Needed for Installation:

- Phillips-head screwdriver
- Wrench (supplied)

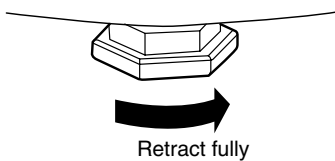


To ensure safe and secure installation, please thoroughly follow the instructions below.

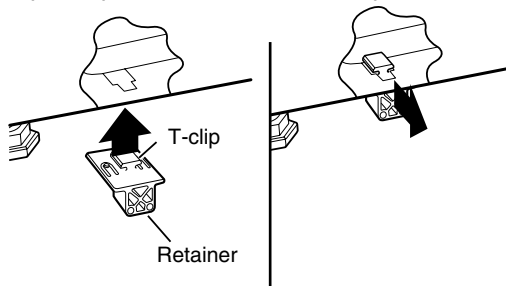
## ⚠ WARNING

- **Incorrect installation can cause serious accidents.**
- **The appliances are heavy. Two or more people are required when installing the pedestal.** There is a risk of serious back injury or other injuries.
- **Do not allow children to play in or on the drawer.** There is a risk of suffocation or injury.
- **Do not step on the handle.** There is a risk of serious injury.
- **If appliances are already installed, disconnect them from all power, water, or gas lines and from draining or venting connections.** Failure to do so can result in electrical shock, fire, explosion, or death.
- **When installing, gloves must be put on.**

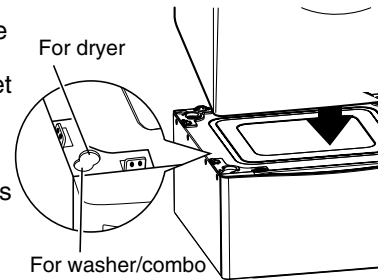
- 1 Make sure the leveling feet of the dryer are fully retracted.  
**NOTE:** The appliance and pedestal assembly must be placed on a solid, sturdy, level floor for proper operation.



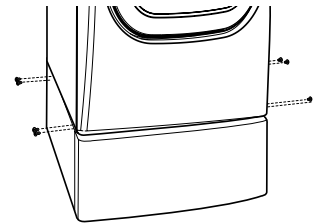
- 2 Insert the T-clip of the 4 retainers into the dryer base as shown. Press up on the back of the clip and pull outward to lock into place.



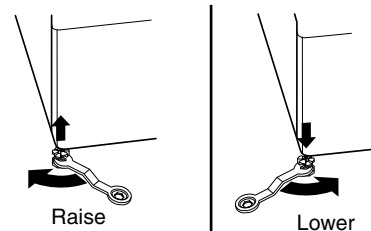
- 3 Place the dryer on the pedestal. Make sure the front and back feet are in the correct positions. The dryer feet will fit into the innermost positions as shown.



- 4 Make sure the screws on the pedestal align with the holes in the retainers, then install 4 screws on each side to securely attach the appliance to the pedestal.  
**NOTE:** If the screws are not installed properly, noise and vibration may result.  
 Move the appliance to the desired location.



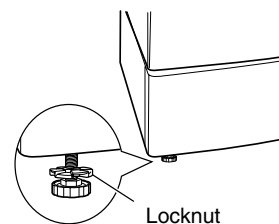
- 5 Loosen the locknuts on all 4 leveling feet of the pedestal until you can turn them with the wrench. Turn clockwise to raise or counterclockwise to lower until the pedestal is level and all 4 feet are solidly against the floor.



- 6 Securely tighten all locknuts by hand.  
**NOTE:** Noise and vibration may result if locknuts are not tightened.

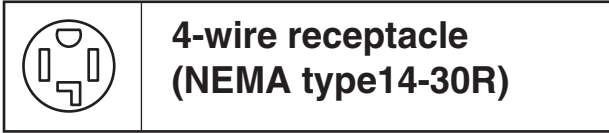
Be sure to connect the appliances to all water, power, or gas lines and draining or venting connections before operation.

If there is excessive vibration during the first operation after installation, slightly adjust the leveling feet.



## Electric Dryer Only

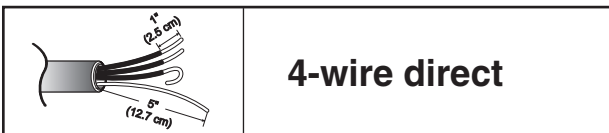
Review the following options to determine the appropriate electrical connection for your home:



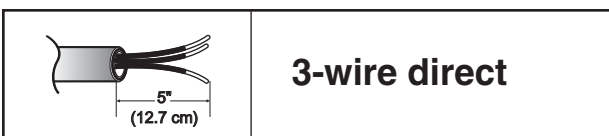
Use the instructions under option 1 if your home has a 4-wire receptacle (NEMA type 14-30R).



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



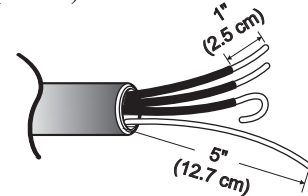
If this type is available at your home, you will be connecting to a fused disconnect or circuit breaker box

### 4-wire connection : Direct wire

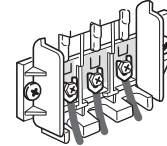
**Important :** Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

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

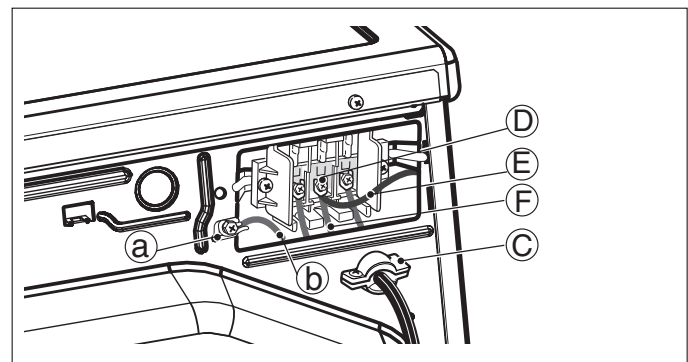
First, peel 5 inch (12.7cm) of covering material from end. Make a 5 inch of ground wire bared. After cutting 1½ inch (3.8cm) from 3 other wires, peel insulation back 1inch (2.5cm). Make ends of 3 wires a hook shape.



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.

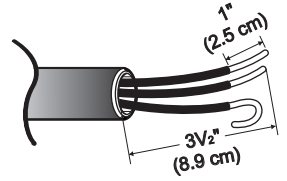


## 3-wire connection : Direct wire

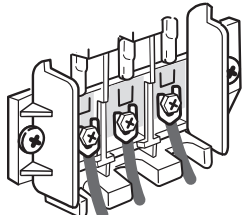
**Important :** Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

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

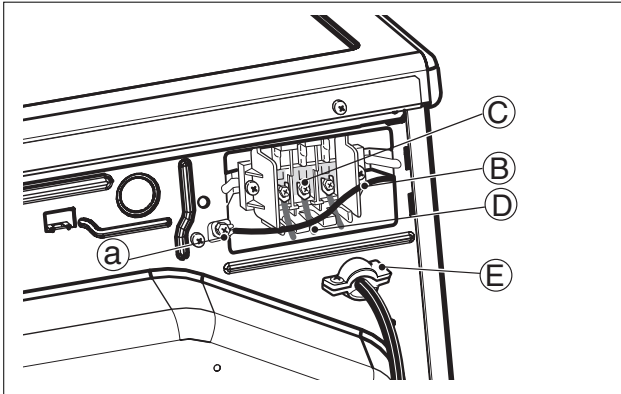
First, peel 3 1/2 inch (8.9cm) of covering material from end and bare 1 inch from the ends.



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.

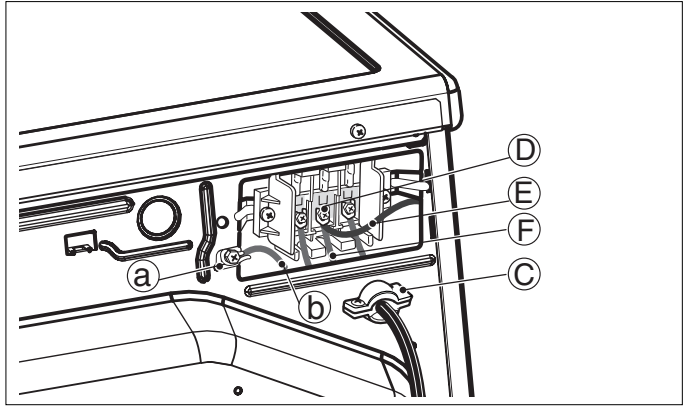
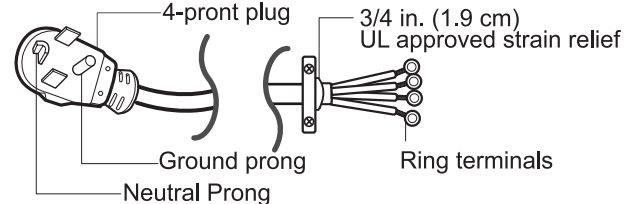
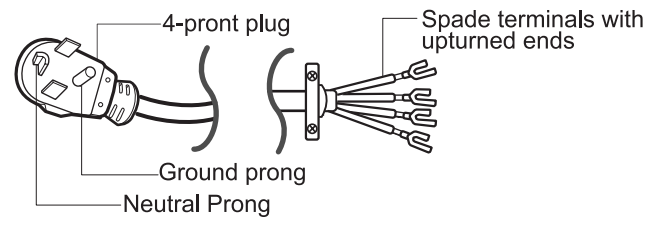
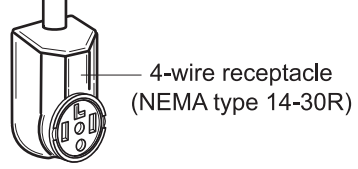


1. Connect neutral wire(white) of power cord to center terminal block screw.
2. Connect red and black wire to the left and right terminal block screws.
3. Make sure that the strain relief screw is tightened and be sure that all terminal block nuts are on tight and power cord is in right position.



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

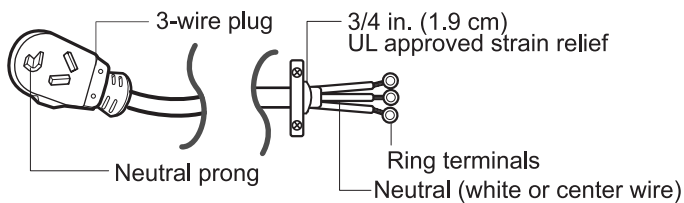
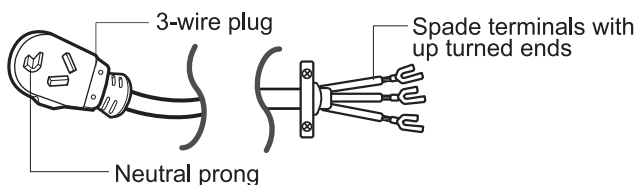
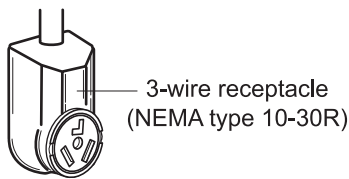
- If your local codes or ordinances do not allow the use of a 3 wire connection, or you are installing your dryer in a mobile home, you must use a 4-wire connection.



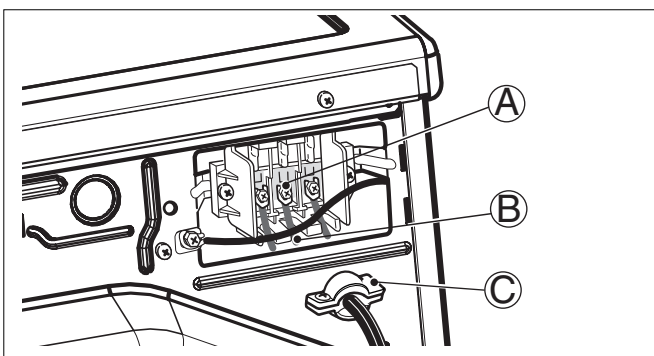
1. Connect the neutral wire (white) of the power cord to the center terminal block screw.
2. Connect the red and black wires to the left and right terminal block screws.
3. Connect the ground wire (green) of the power cord to the external ground screw. Remove the neutral ground wire of appliance and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

## 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.**

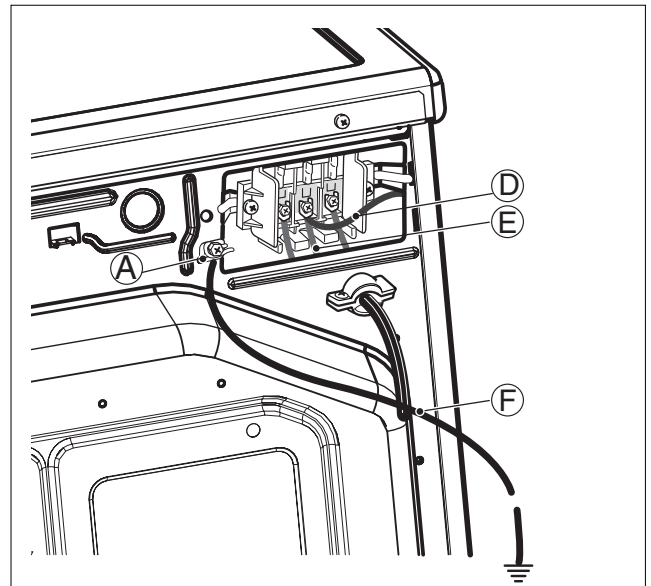
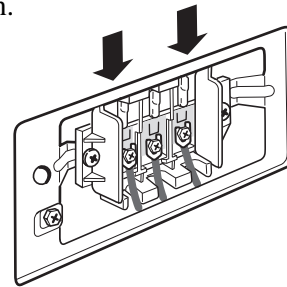


1. Connect the neutral (white or center) wire (B) to the center, silver colored, screw (A) and tighten securely.
2. Connect the other two power cord wires (red and black) to the left and right terminal block screws and tighten securely.
3. Tighten the strain relief screws (C) securely.



## 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.

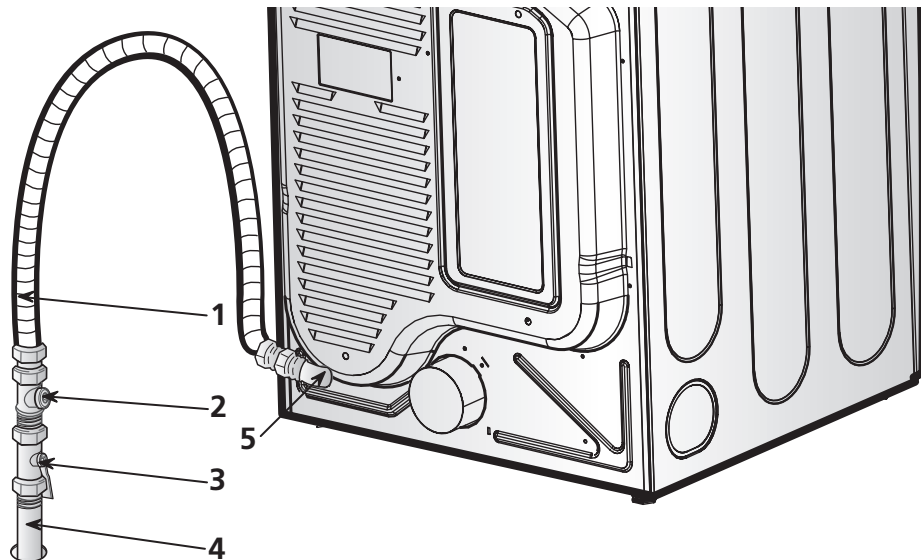


1. Remove the appliance ground wire (D) (green) from the external ground connector screw and reconnect it, together with the center, white, neutral wire (E) to the center, silver colored, terminal block screw.
2. Connect the other two power cord wires (red and black) to the left and right terminal block 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.



- 1 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

# 4

## DRYER CYCLE PROCESS

| Cycle                |                 | Default      |                   |              | Conditions of operation and termination |  |              |                |                                  |
|----------------------|-----------------|--------------|-------------------|--------------|---|--|--------------|----------------|----------------------------------|
|                      |                 | Temp-erature | Dry Level         | Display time | Drying                                  |  | Cooling      |                | Wrinkle care                     |
|                      |                 |              |                   |              | Electro-sensor                          | Temp-Control                           | Default time | Temp-Control** | Time                             |
| <b>Sensor Dry *</b>  | TOWELS          | MID HIGH     | (Normal)          | 55min        | Saturation                              | 66±4°C                                 | (5min)       | 47±5°C         | 3Hr                              |
|                      | DELICATES       | LOW          | (Normal)          | 28min        | Saturation                              | 52±3°C                                 | (5min)       | 38±5°C         |                                  |
|                      | PERM PRESS      | LOW          | Normal Adjustable | 32min        | Saturation                              | 52±3°C                                 | (5min)       | 45±5°C         |                                  |
|                      | COTTON / NORMAL | MEDIUM       | (Normal)          | 41min        | Saturation                              | 60±4°C                                 | (5min)       | 47±5°C         |                                  |
| <b>Manual Dry **</b> | SPEED DRY       | (HIGH)       | -                 | 25min        | Saturation                              | (70±5°C)                               | (5min)       | (47±5°C)       | 3Hr                              |
|                      | FRESHEN UP      | MID HIGH     | off               | 20min        | Saturation                              | (66±5°C)                               | (5min)       | (45±5°C)       |                                  |
|                      | AIR DRY         | -            | -                 | 30min        | Saturation                              | No heater                              | N/A          | N/A            |                                  |
| <b>Load</b>          |                 |              |                   |              | <b>Motor</b>                            |  |              |                | Off Time: 6min<br>On Time: 10sec |
|                      |                 |              |                   |              | <b>Heater</b>                           | Temperature Control for each cycle<br> |              |                |                                  |

\* Sensor dry : “Dry Level” is set by users.

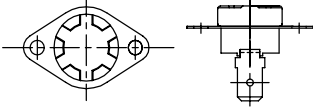
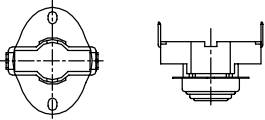
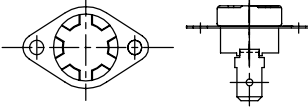
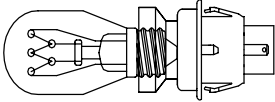
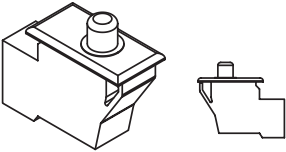
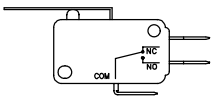
\*\* Manual dry : “Temperature control” is set by users.

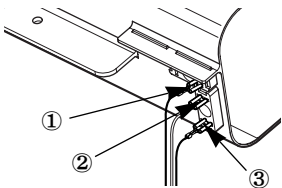
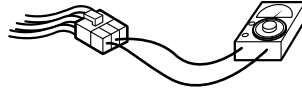
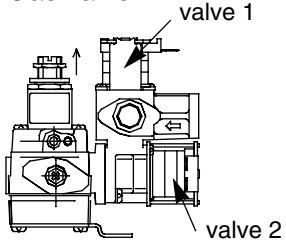
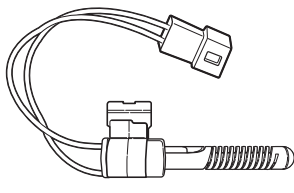
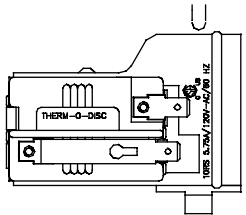
Default settings can be adjusted by users.

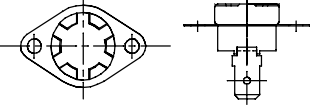
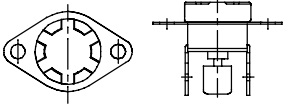
# 5

# COMPONENT TESTING INFORMATION

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

| Component  | Test Procedure  | Check result  | Remark  |
|--|---|---|---|
| <p>1. Thermal cut off</p>  <p>• Check Top Marking:<br/>N130</p>                 | <p>Measure resistance of terminal to terminal</p> <p>① Open at 266 ± 12°F (130 ± 7°C)</p> <p>② Auto reset 31°F (35°C)</p> <p>Same shape as Outlet Thermostat.</p>   | <p>If thermal fuse is open must be replaced</p> <p>① Resistance value ≒ ∞</p> <p>② Continuity (250°F ↓) &lt; 1Ω</p>             | <ul style="list-style-type: none"> <li>• Heater case-Safety</li> <li>• Electric type</li> </ul>     |
| <p>2. Hi limit Thermostat (Auto reset)</p>                                      | <p>Measure resistance of terminal to terminal</p> <p>① Open at 257 ± 9°F (125 ± 5°C)</p> <p>② Close at 221 ± 9°F (105 ± 5°C)</p>  | <p>① Resistance value ≒ ∞</p> <p>② Resistance value &lt; 5Ω</p>   | <ul style="list-style-type: none"> <li>• Heater case - Hi limit</li> <li>• Electric type</li> </ul> |
| <p>3. Outlet Thermostat (Auto reset)</p>  <p>• Check Top Marking:<br/>N85</p> | <p>Measure resistance of terminal to terminal</p> <p>① Open at 185 ± 9°F (85 ± 5°C)</p> <p>② Close at 149 ± 9°F (65 ± 5°C)</p> <p>Same shape as Thermal cut off.</p>  | <p>① Resistance value ≒ ∞</p> <p>② Resistance value &lt; 5Ω</p>   | <ul style="list-style-type: none"> <li>• Blow housing - Safety</li> <li>• Electric type</li> </ul>  |
| <p>4. Lamp holder</p>   | <p>Measure resistance of terminal to terminal</p>   | <p>Resistance value:<br/>80Ω ~ 100Ω</p>   |   |
| <p>5. Door switch</p>   | <p>Measure resistance of the following terminal</p> <p>1) Door switch knob: open</p> <p>① Terminal: "COM" - "NC" (1-3)</p> <p>② Terminal: "COM" - "NO" (1-2)</p> <p>2) Door switch push: push</p> <p>① Terminal: "COM" - "NC" (1-3)</p> <p>② Terminal: "COM" - "NO" (1-2)</p> | <p>① Resistance value &lt; 1Ω</p> <p>② Resistance value ≒ ∞</p> <p>① Resistance value ≒ ∞</p> <p>② Resistance value &lt; 1Ω</p> | <p>The state that Knob is pressed is opposite to Open condition.</p>                                |
| <p>6. Idler switch</p>    | <p>Measure resistance of the following terminal:<br/>"COM - NC"</p>   | <p>1. lever open</p> <p>① Resistance value &lt; 1Ω</p> <p>2. Lever push (close)</p> <p>② Resistance value ≒ ∞</p>               |   |

| Component   | Test Procedure  | Check result  | Remark  |
|---|---|---|---|
| 7. Heater<br>          | Measure resistance of the following terminal<br>① Terminal: 1 (COM) - 2<br>② Terminal: 1 (COM) - 3<br>③ Terminal: 2 - 3 | ① Resistance value: 10Ω<br>② Resistance value: 10Ω<br>③ Resistance value: 20Ω | <ul style="list-style-type: none"> <li>• Electric type</li> </ul>                                   |
| 8. Thermistor<br>      | Measure resistance of terminal to terminal<br>Temperature condition:<br>58°F ~ (10~40°C)<br>58°F ~ 104F (10~40°C)       | Resistance value: 10Ω   | <ul style="list-style-type: none"> <li>• Heater case - Hi limit</li> <li>• Electric type</li> </ul> |
| 9. Motor  |   |   | <ul style="list-style-type: none"> <li>• See Page 13</li> </ul>                                     |
| 10. Gas valve<br>    | Measure resistance of the following terminal<br>① Valve 1 terminal<br>② Valve 2 terminal                                | ① Resistance value: > 1.5 kΩ<br>② Resistance value: > 1.5~2.5 kΩ              | <ul style="list-style-type: none"> <li>• Gas type</li> </ul>  |
| 11. Igniter<br>      | Measure resistance of terminal to terminal  | Resistance value: 100~800Ω  | <ul style="list-style-type: none"> <li>• Gas type</li> </ul>  |
| 12. Frame Detect<br> | Measure resistance of terminal to terminal<br>① Open at 370°F ((Maximum)<br>② Close at 320°F                            | ① Resistance value ≒ ∞<br>② Resistance value < 1Ω                             | <ul style="list-style-type: none"> <li>• Gas type</li> </ul>  |

| Component  | Test Procedure   | Check result   | Remark   |
|--|--|--|--|
| <p>13. Outlet Thermostat<br/>(Auto reset)</p>  <p>• Check Top Marking:<br/>N95</p>    | <p>Measure resistance of terminal to terminal</p> <p>① Open at <math>203 \pm 7^{\circ}\text{F}</math> (<math>95 \pm 5^{\circ}\text{C}</math>)</p> <p>② Close at <math>158 \pm 9^{\circ}\text{F}</math> (<math>70 \pm 5^{\circ}\text{C}</math>)</p> | <p>① Resistance value <math>\neq \infty</math></p> <p>② Continuity <math>&lt; 1\Omega</math></p>   | <ul style="list-style-type: none"> <li>• Gas type</li> <li>• Gas funnel</li> </ul> |
| <p>14. Outlet Thermostat<br/>(Manual reset)</p>  <p>• Check Top Marking:<br/>N100</p> | <p>Measure resistance of terminal to terminal</p> <p>① Open at <math>212 \pm 12^{\circ}\text{F}</math> (<math>100 \pm 7^{\circ}\text{C}</math>)</p> <p>② Manual reset</p>  | <p>If thermal fuse is open must be replaced</p> <p>① Resistance value <math>\neq \infty</math></p> <p>② Continuity <math>&lt; 1\Omega</math></p> | <ul style="list-style-type: none"> <li>• Gas type</li> <li>• Gas funnel</li> </ul> |

# 6

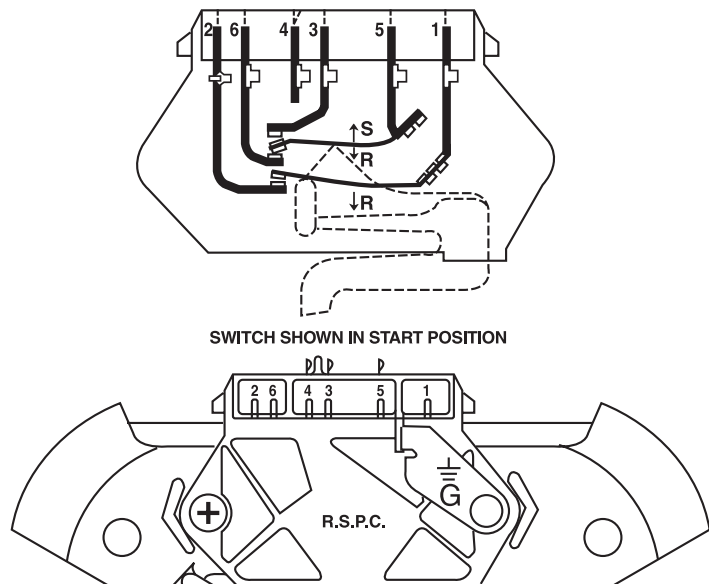
# MOTOR DIAGRAM AND SCHEMATIC

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

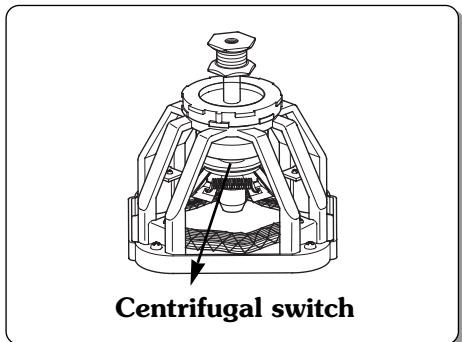
■ Contact On / Off by Centrifugal Switch

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

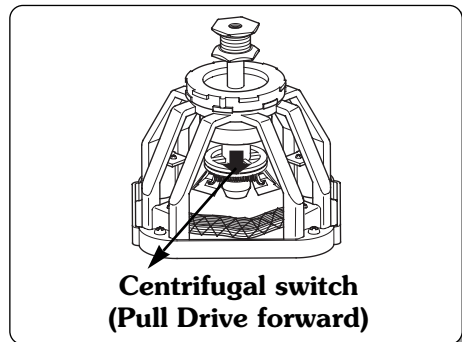
..... Open  
 ——— Close



■ STOP MODE  
 (When Motor does not operate)



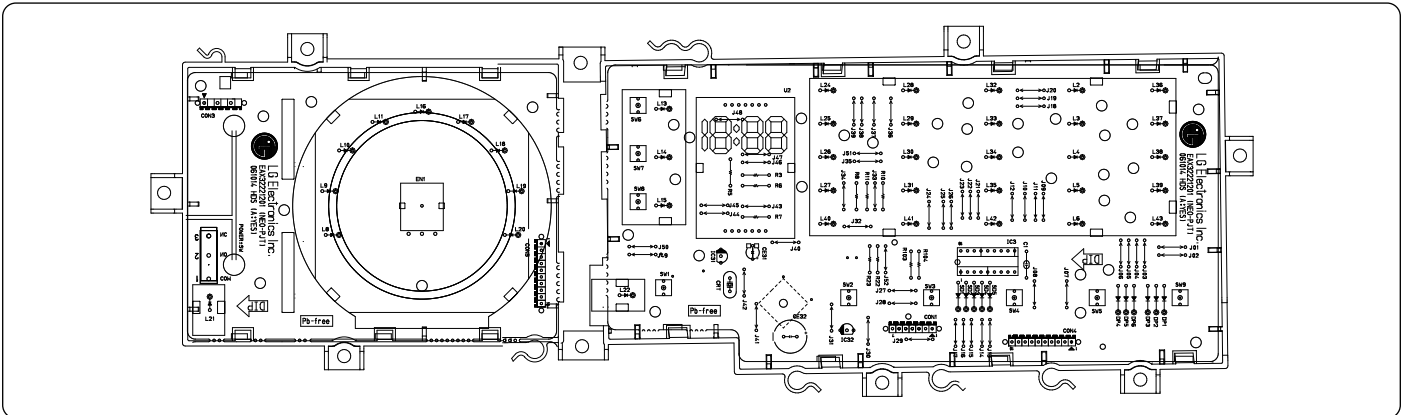
■ RUN MODE  
 (Motor operates)



# 7

# CONTROL LAY - OUT

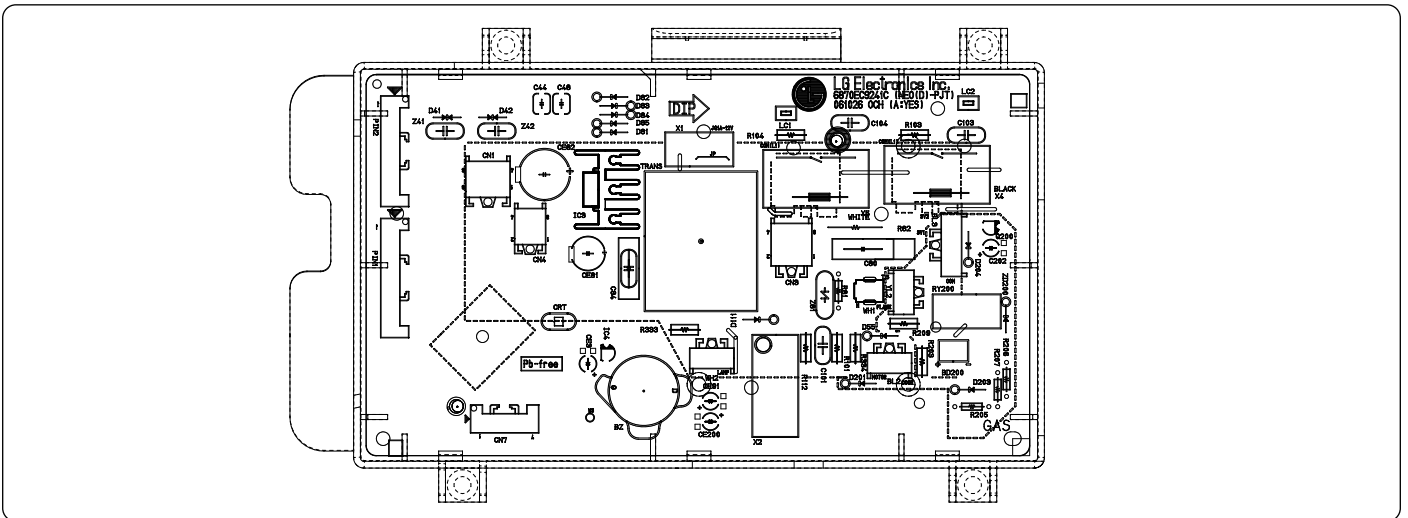
## PWB ASSEMBLY DISPLAY LAYOUT



※ MODEL DISPLAY AS DIAGNOSTIC TEST

| DISPLAY Part Number | MAIN Part Number | 7-SEG Display | NOTE     |
|---------------------|------------------|---------------|----------|
| EBR71527101         | EBR33640917      |               | Electric |
|                     | EBR33640918      |               | Gas      |

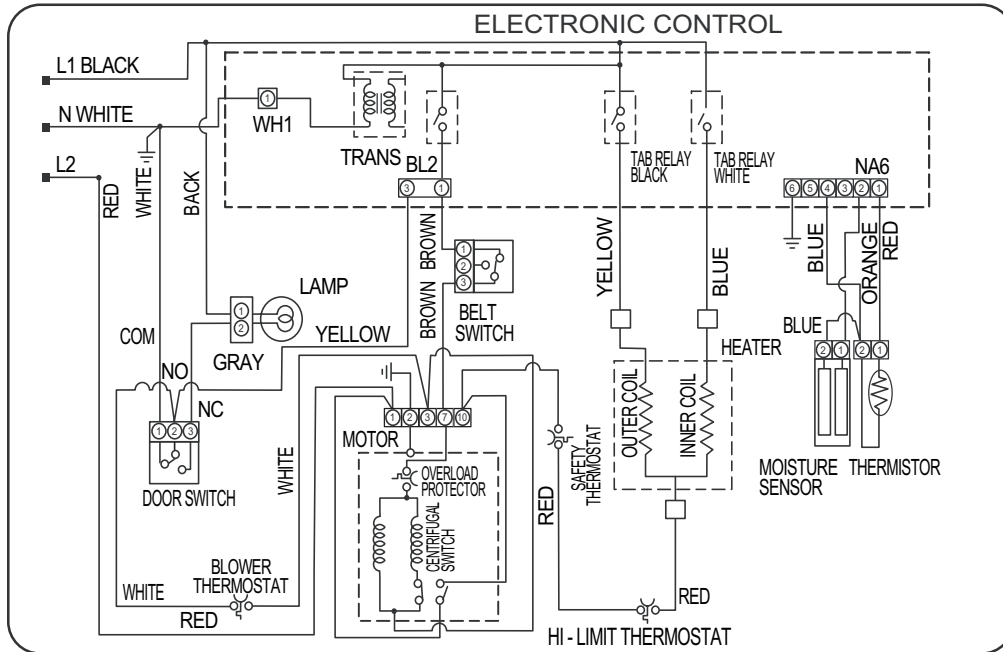
## PWB ASSEMBLY LAYOUT



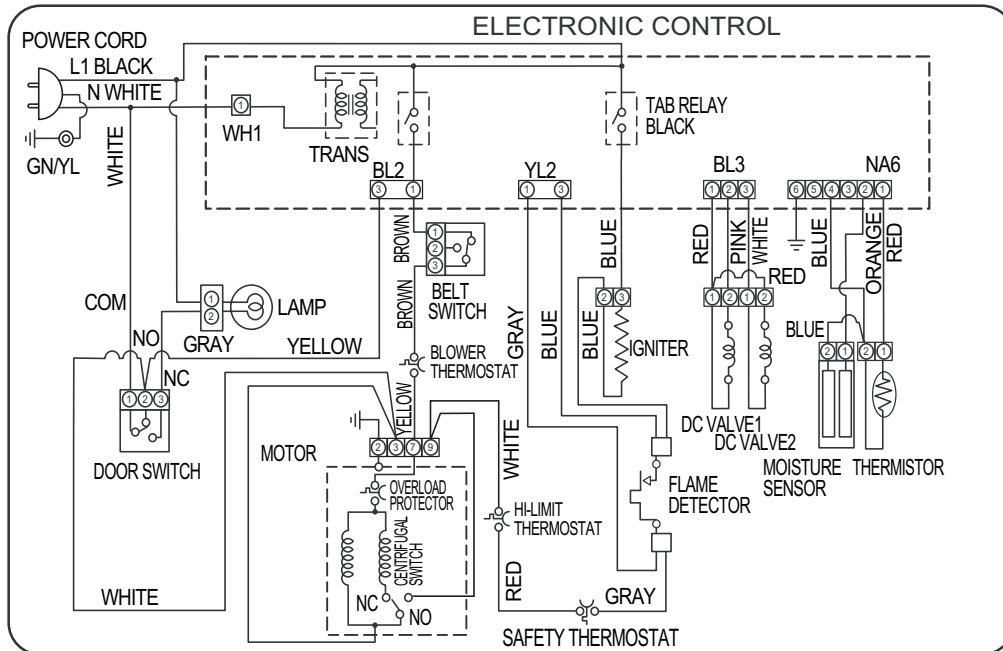
※ MODEL AS DIAGNOSTIC TEST

| DISPLAY Part Number | MAIN Part Number | 7-SEG Display | NOTE     |
|---------------------|------------------|---------------|----------|
| EBR71527101         | EBR33640917      |               | Electric |
|                     | EBR33640918      |               | Gas      |

**ELECTRIC DRYER WIRING DIAGRAM**



**GAS DRYER WIRING DIAGRAM**



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.
3. Press START/PAUSE button to advance through diagnostics.

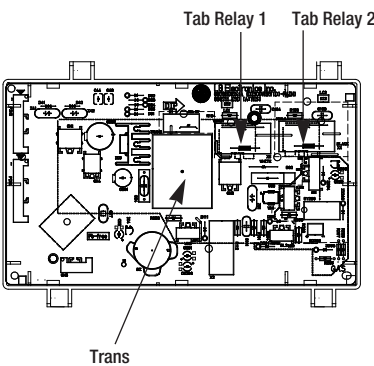
| Pressing the START/PAUSE button         | CHECKING ACTION  | DISPLAY  | CHECKING POINT  | REMARK                          |
|---|--|--|---|---------------------------------|
| None                                    | Electric control & Temperature sensor  | LQC TEST   | Won't power up<br>Detective LED or LCD  | See test 1<br>Display: See page |
|   |  | tE1  | Thermistor open   | See test 2                      |
|   |  | tE2  | Thermistor close  |                                 |
| Once                                    | Motor  | 70 ~ 255<br>Measured<br>Moisture Value.                                      | Motor runs  | See test 3                      |
|   |  |  | Displays Moisture Sensor Operation:<br>If moisture sensor is contacted with damp cloth. The display number is below 180, in normal condition.   | See test 4                      |
| Twice                                   | <ul style="list-style-type: none"> <li>■ ELECTRIC TYPE<br/>Motor + Heater 1 (2700W)</li> <li>■ GAS TYPE<br/>Motor + Valve</li> </ul>             | Current Temp.  | <ul style="list-style-type: none"> <li>■ ELECTRIC TYPE: Heater runs</li> <li>■ GAS TYPE: GAS Valve runs<br/>(Display the Temperature of Inside drum.)</li> </ul>  | Gas valve<br>See test 7         |
| 3 times                                 | <ul style="list-style-type: none"> <li>■ ELECTRIC TYPE<br/>Motor + Heater 1<br/>+Heater 2 (5400W)</li> <li>■ GAS TYPE<br/>Motor+Valve</li> </ul> | Current Temp.<br>(5 ~ 70)  |   |                                 |
| 4 times                                 | End signal with Display PCB buzzer   | 50~230 Measured  | Motor, Heater Off   | See test 8                      |
| 5 times                                 | Control Off  |  |   |                                 |
| During check,<br>If the door is open.   | Motor & Heater Off + Lamp On +<br>Buzzer beeps seven times   | "dE" or "Error"<br>(THE DOOR IS<br>OPEN.PLEASE CLOSE THE<br>DOOR COMPLETELY) | Door switch   | See test 6                      |
|   |  |  | Lamp  |                                 |
| During check,<br>If the door is closed. | Motor on & Heater<br>Off + Lamp Off  | 70 ~ 239   | <ul style="list-style-type: none"> <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 120V AC Electrical supply

|                              |  |   |
|------------------------------|--|---|
| <b>Caution</b>               | When measuring power, be sure to wear insulated gloves, to and avoid an electric shock.  |   |
| <b>Trouble Symptom</b>       | No power was applied to Controller. (LED,LCD Display off)  |   |
| <b>Measurement Condition</b> | With Dryer Power On; Connector linked to Controller.   |   |
|                              |  |   |
|                              | <p>Check the outlet, is the voltage 110V ~ 125V AC?</p>  | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Check the fuse or circuit breaker.</li> </ul>         |
|                              | <p><b>YES</b></p>  |   |
|                              | <p>Check if the voltage measured between Connector BK2 or WH2-② (Black Wire) Linked to the Controller and WH1-① (White Wire) Is 110~125V?</p>  | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Check if Power Cord is properly connected.</li> </ul> |
|                              | <p><b>YES</b></p>  |   |
|                              | <p>① Check if the Controller wire is disconnected.<br/>② Check if Terminal Block and Power Cord are connected (Check Plug ).<br/>- Does Power Cord N (Natural) line match to Terminal Center N (Natural) line?</p> | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Reconnect the controller.</li> </ul>                  |
|                              | <p><b>YES</b></p>  |   |
|                              | <p>Replace controller.</p>   |   |

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

## 1. Power Connection



\* PCB ASSEMBLY LAYOUT

**< Table 1 > : Connection of the Tab Relay with Heater (Elec)**

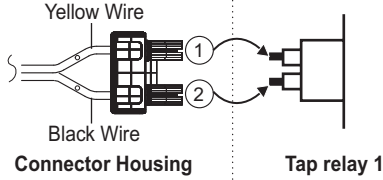
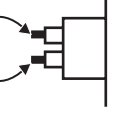
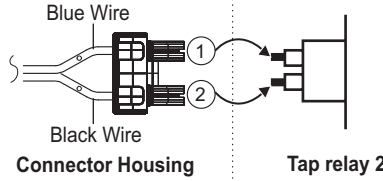
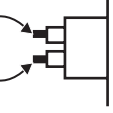
|                            | T a | T a |    |     | R  |
|----------------------------|-----|-----|----|-----|--|
| High<br>Mid High<br>Medium | on  | on  | on | on  | Temperature Control below $68 \pm 4^\circ\text{C}$ .<br>Turn on Heater1 and Heater2. |
| Low<br>Extra Low           | on  | off | on | off | Temperature Control below $52 \pm 4^\circ\text{C}$ .<br>Only Turn on Heater1.        |

**< Table 2 > : Connection of the Tab Relay with Burner (Gas)**

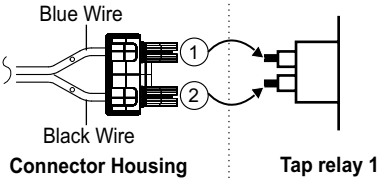
|                            | T a | B | R  |
|----------------------------|-----|---|--|
| High<br>Mid High<br>Medium | ○   | ○ | Temperature Control below $70 \pm 4^\circ\text{C}$ .<br>Turn on Burner |
| Low<br>Extra Low           | ○   | ○ | Temperature Control below $47 \pm 4^\circ\text{C}$ .<br>Turn on Burner |

## 2. Status Mode Of The Connection

**< Table 1 > : Connection of Tab Relay with the Tab Relay of the PCB ASSEMBLY (Elec)**

|                   | Color | Connection  |   | Remark  |
|-------------------|-------|---|---|---|
|                   |       | Harness   | PCB   |   |
| Connector Housing | Black |  |  | Check the Matching color Between Harness wire and Tab Relay.<br>(Black Housing – Black Tab Relay) |
|                   | White |  |  | Check the Matching color Between Harness wire and Tab Relay.<br>(White Housing – White Tab Relay) |

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

|                   | Color | Harness   | PCB | Remark   |
|-------------------|-------|---|-----|--|
| Connector Housing | Black |  <p>Blue Wire<br/>Black Wire<br/>Connector Housing<br/>Tap relay 1</p> |     | Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay) |

### 3. Status Mode Of wrong Connection

< Table1 > : Wrong Connection of the Tab Relay and Connector Housing (Elec)

| 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)

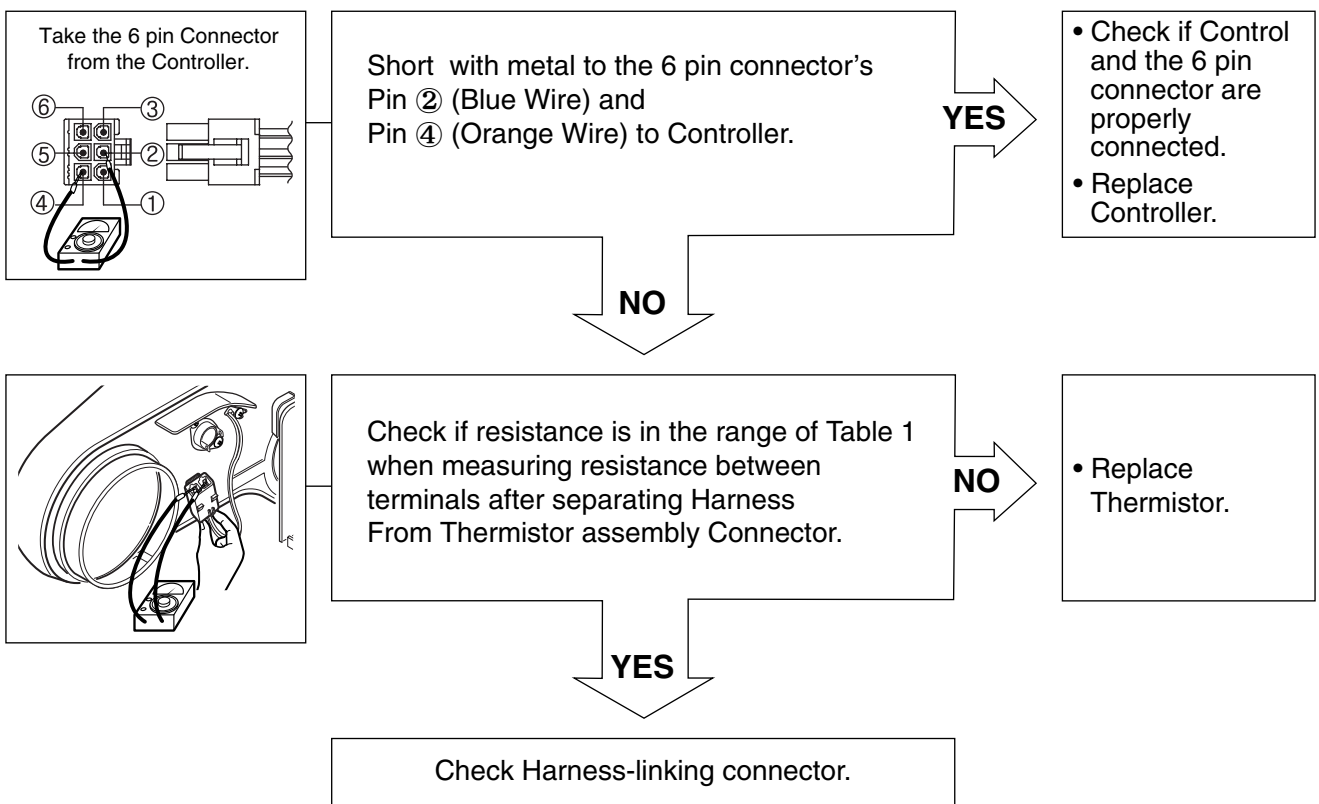
| Items                     | Case            | Heater1 Operation(black) | Heater2 operation(White) | PCB condition Of operation |
|---------------------------|-----------------|--------------------------|--------------------------|----------------------------|
| 1.Black and White Housing | Wire ①, ②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

## ⚠ CAUTION

- Improper connection of the heater can damage the heater or the main board.

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

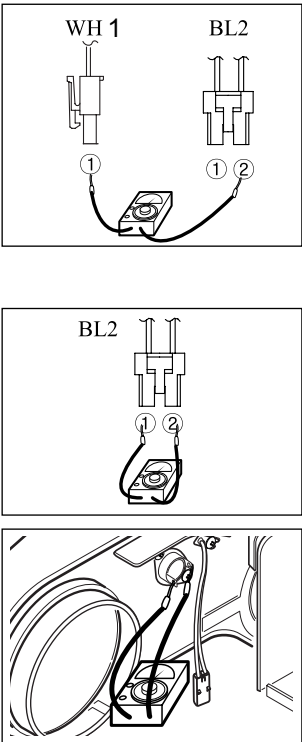
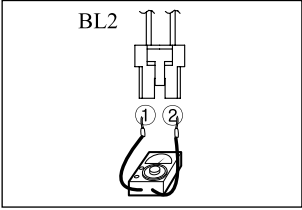
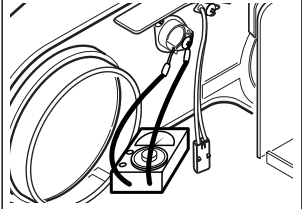
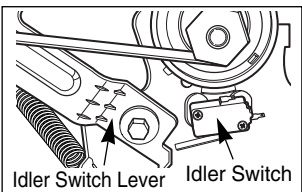
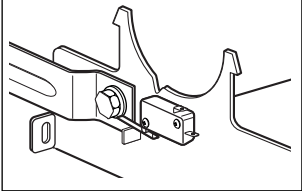


|                              |   |
|------------------------------|---|
| <b>Caution</b>               | Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with the Ground.)   |
| <b>Trouble Symptom</b>       | <ol style="list-style-type: none"> <li>① During Diagnostic Test, tE1 and tE2 Error occur.</li> <li>② During operation, Heater would not turn off, or remains on.</li> <li>③ Difference between actual and sensed temperature is significant.</li> </ol> |
| <b>Measurement Condition</b> | After turning Power off, measure the resistance.  |



■ Table 1. Resistance for Thermistor Temperature.

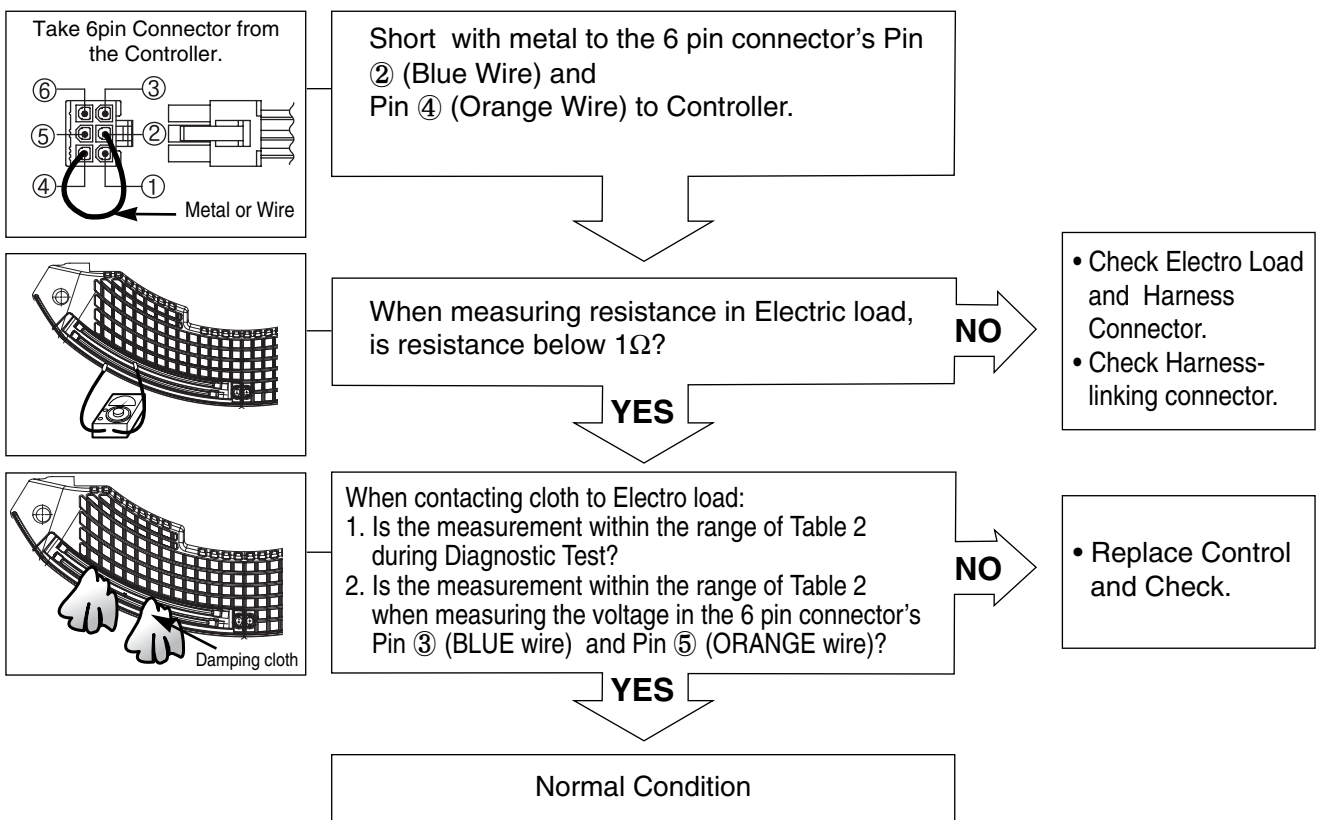
| Air TEMP.[°F (°C)] | RES. [kΩ] | Air TEMP.[°F (°C)] | RES. [kΩ] | Air TEMP.[°F (°C)] | RES. [kΩ] |
|--------------------|-----------|--------------------|-----------|--------------------|-----------|
| 50°F (10°C)        | 18.0      | 90°F (32°C)        | 7.7       | 130°F (54°C)       | 2.9       |
| 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

|   |  |  |
|---|--|--|
| <p><b>Caution</b></p>   | <p>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.)</p>                 |  |
| <p><b>Trouble Symptom</b></p>   | <p>Drum will not rotate; No fan will function; No Heater will work.</p>  |  |
| <p><b>Measurement Condition</b></p>   | <p>Turn the Dryer's Power Off, then measure resistance.</p>  |  |
|    | <p>Is resistance below <math>3\Omega</math> between Connector WH① (White wire) and BL2-② (Brown wire)?<br/>※ Measure while door is closed.</p> <p><b>YES</b></p> <p><b>NO</b></p>  | <ul style="list-style-type: none"> <li>• Replace Control. (Relay check)</li> <li>• Check Controller connector.</li> </ul>  |
|  | <p>Is resistance below <math>3\Omega</math> between Connector WH① (White wire) and BL2-① (Yellow wire)?<br/>※ Measure while door is closed.</p> <p><b>NO</b></p> <p><b>YES</b></p> | <ul style="list-style-type: none"> <li>• Check if Door flame presses door switch knob.</li> <li>• Check Door Switch.</li> <li>• Check Harness connection.</li> </ul> |
|  | <p>Is resistance below <math>3\Omega</math> between Connector BL2-① (Yellow wire) and BL2-② (Brown wire)?</p> <p><b>YES</b></p> <p><b>NO</b></p>                                   | <ul style="list-style-type: none"> <li>• Replace Control. (Relay check)</li> <li>• Check Controller connector.</li> </ul>  |
|  | <p>Is resistance below <math>1\Omega</math> between terminals of Outlet Thermostat attached to blower housing?</p> <p><b>NO</b></p> <p><b>YES</b></p>                              | <ul style="list-style-type: none"> <li>• Replace Outlet</li> <li>• Thermostat. (Refer to 'Component')</li> </ul>   |
|  | <p>Does Idle Switch attached to Motor Bracket operate Level by drum belt? (Not operating Lever is normal.)</p> <p><b>YES</b></p> <p><b>NO</b></p>                                  | <ul style="list-style-type: none"> <li>• Check Idler Assembly.</li> <li>• Drum Belt cuts off</li> <li>• Drum Belt takes off from Motor Pulley.</li> </ul>            |
|  | <p>Is resistance below <math>1\Omega</math> between Idler Switch terminals?</p> <p><b>YES</b></p>  | <ul style="list-style-type: none"> <li>• Replace Idler Switch.</li> </ul>  |
|  | <p>• Check Motor. (Refer to 'Motor Diagram &amp; Check')</p> <p>• Check if Control Connector is contacted.</p>   |  |

## ■ Test 4 Moisture sensor

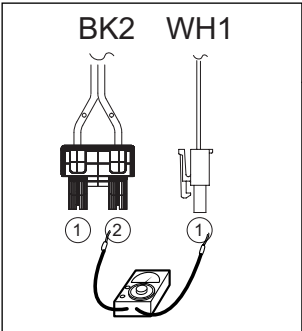
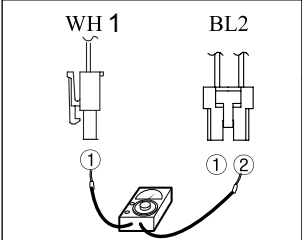
|                              |   |
|------------------------------|---|
| <b>Caution</b>               | Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with earth line.) |
| <b>Trouble Symptom</b>       | Degree of dryness does not match with Dry Level.  |
| <b>Measurement Condition</b> | Turn the Dryer's Power Off, then measure resistance.  |



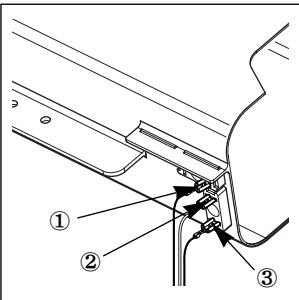
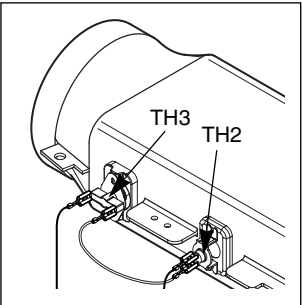
■ Table 2. IMC Ratio and Display Value / Voltage (IMC: Initial Moisture Content)

| 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                   |

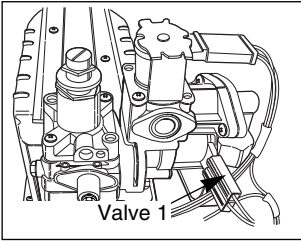
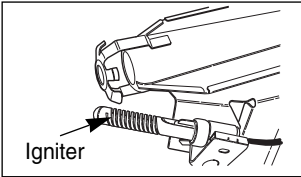
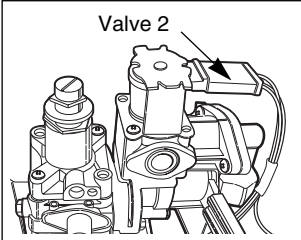
## ■ Test 5 Door switch test

|   |   |   |
|---|---|---|
| <b>Caution</b>  | 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.)   |   |
| <b>Trouble Symptom</b>  | Door Opening is not sensed.(During operation, when opening Door, Drum motor and Heater run continuously) Door Close is not sensed. (Drum motor will not operate. Display will flash at 0.5 second intervals.)   |   |
| <b>Measurement Condition</b>  | After turning Dryer Power Off, measure resistance.  |   |
|   | <p>Measure while Door is closed. Check it resistance is below 2500 <math>\Omega</math> between WH1-①(White wire) and BK2-② Connector<br/>WH1,BL2 after taking WH1,BL2 out from Controller.</p> <p style="text-align: right;"><b>YES</b></p> <p style="text-align: center;"><b>NO</b></p> <p>Measure while Door is open. Check it resistance is 300~60 <math>\Omega</math> between WH1-①(White wire) and BK2-② (Black wire). Connector WH1,BL2 after taking WH1,BL2 out from Controller.</p> <p style="text-align: right;"><b>NO</b></p> <p style="text-align: center;"><b>YES</b></p> | <ul style="list-style-type: none"> <li>• Door switch Check (Refer to Component testing.)</li> </ul><br><ul style="list-style-type: none"> <li>• Check Lamp. (When opening Lamp, replace then measure again.)</li> <li>• Door switch Check(Refer to Component testing.)</li> </ul> |
|  | <p>Measure while Door is open. Check it resistance is below 1 <math>\Omega</math> between BL2- ①(Yellow wire) and WH1-①(White wire) after taking Connector WH1,BL2 out from Controller.</p> <p style="text-align: right;"><b>YES</b></p> <p style="text-align: center;"><b>NO</b></p> <p>Measure while Door is closed. Check it resistance is below 1 <math>\Omega</math> between BL2- ①(Yellow wire) and WH1-①(White wire) after taking Connector WH1,BL2 out from Controller.</p> <p style="text-align: right;"><b>NO</b></p> <p style="text-align: center;"><b>YES</b></p>         | <ul style="list-style-type: none"> <li>• Door switch Check (Refer to Component testing.)</li> </ul><br><ul style="list-style-type: none"> <li>• Door switch Check (Refer to Component testing.)</li> </ul>  |
| <p>Check Controller.<br/>Check Harness-linking connector.</p>                       |   |   |

## ■ Test 6 Heater switch test - Electric Type

|  |  |   |   |
|--|--|---|---|
| <b>Caution</b>   | 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.)  |   |   |
| <b>Trouble Symptom</b>   | While operating, Heating will not work. Drying time takes longer.  |   |   |
| <b>Measurement Condition</b>   | After turning Power off, measure the resistance.   |   |   |
|                                    | <p>1. Is resistance between Heater terminal ① and ② below 18 ~ 22Ω?</p> <p>2. Is resistance between Heater terminal ① and ③ below 18 ~ 22Ω?</p> <p>3. Is resistance between Heater terminal ② and ③ below 9 ~ 11Ω?</p> | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Replace Heater.</li> </ul>                  |   |
| <b>YES</b>   |  |   |   |
|                                   | <p>Check if the value of measured resistance is below 1Ω between terminal TH2 (Safety Thermostat).</p>   | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Replace TH2 (Safety Thermostat).</li> </ul> |   |
| <b>YES</b>   |  |   |   |
| <p>Check if the value of measured resistance is below 1Ω between terminal TH3 (HI-Limit Thermostat).</p>             |  |   | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Replace TH3 (HI-Limit Thermostat).</li> </ul> |
| <b>YES</b>   |  |   |   |
| <p>Check Motor. Check if the value of measured resistance is below 1Ω between terminal ① and ⑩ at RUN condition.</p> |  |   | <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• Check Motor and replace it.</li> </ul>        |
| <b>YES</b>   |  |   |   |
| <p>Check Controller.<br/>Check Harness-linking Connector.</p>  |  |   |   |

## ■ Test 7 GAS Valve test - Gas Type

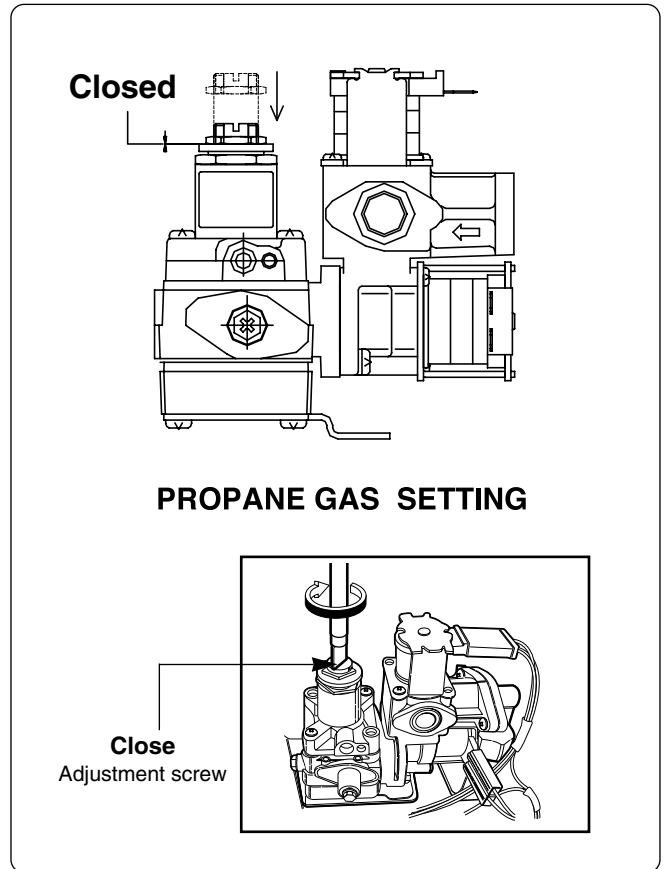
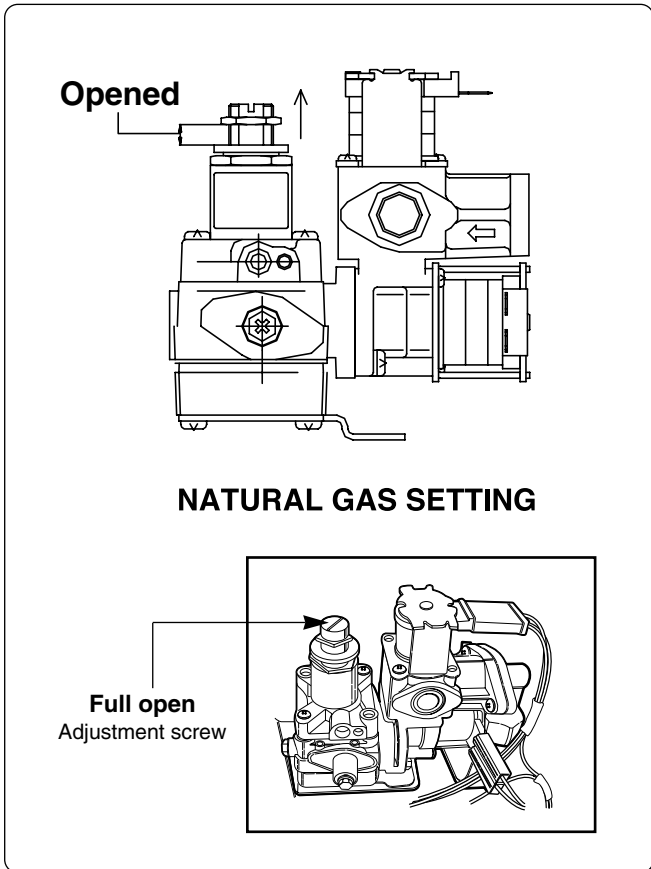
|   |  |  |
|---|--|--|
| <b>Caution</b>  | When measuring power, be sure to wear insulated gloves, to avoid electric shock.   |  |
| <b>Trouble Symptom</b>  | While operating, Heating will not work.<br>Drying time takes longer.   |  |
| <b>Measurement Condition</b>  | With dryer power on  |  |
|    | <p>Power On &amp; Start (Normal Cycle)</p> <p style="text-align: center;"><b>NO</b></p>  |  |
|   | <p>When measuring Valve 1 voltage, More than DC 90V?</p> <p style="text-align: right;"><b>NO</b></p>   | <ul style="list-style-type: none"> <li>• Check thermostat Hi limit Safety</li> </ul>   |
|  | <p>Igniter operates?<br/>(after 1 min, Igniter becomes reddish)</p> <p style="text-align: right;"><b>NO</b></p>  | <ul style="list-style-type: none"> <li>• Check Igniter &amp; Frame detect</li> </ul>   |
|  | <p>When measuring Valve 2 voltage, Value is more than DC 90V? (10 sec after Igniter off)</p> <p style="text-align: right;"><b>YES</b></p>                            | <ul style="list-style-type: none"> <li>• Check Gas connection or Gas supply</li> </ul> |
|   | <p style="text-align: center;"><b>NO</b></p>   |  |
|   | <p>When measuring terminal resistance on Valve 1 and Valve 2, Valves are more than 1.5 ~ 2.5kΩ? (Measure after Off)</p> <p style="text-align: right;"><b>YES</b></p> | <ul style="list-style-type: none"> <li>• Change Valve</li> </ul>                       |
|   | <p style="text-align: center;"><b>NO</b></p>   |  |
|   | <p>If "Valve 1 " and "Valve 2" are under DC 10V, Valves are Off?</p> <p style="text-align: right;"><b>NO</b></p>   | <ul style="list-style-type: none"> <li>• Change Valve</li> </ul>                       |
|   | <p style="text-align: center;"><b>YES</b></p>  |  |
|   | <ul style="list-style-type: none"> <li>• Harness check</li> <li>• Controller change</li> </ul>   |  |

**Warning**

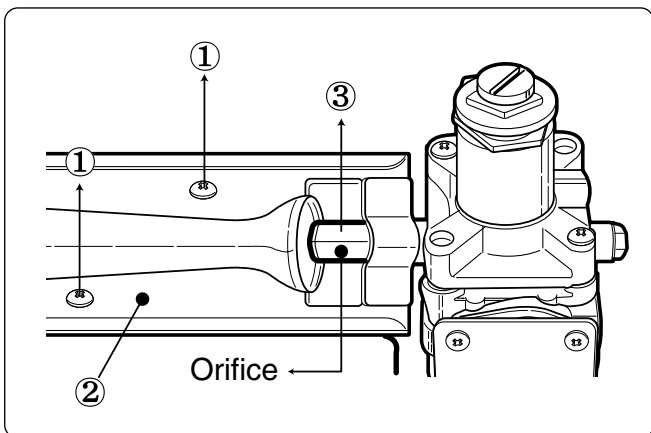
Changing orifices and gas valve adjustments improperly can result in an explosion and/or fire. Conversion must be made by a qualified technician.

**Initially**, The burner is set for natural gas at the factory. The propane orifice conversion kit is sold as a service part to authorized servicers only. Part numbers are shown below.

**STEP 1 : VALVE SETTING**



**STEP 2 : ORIFICE CHANGE**

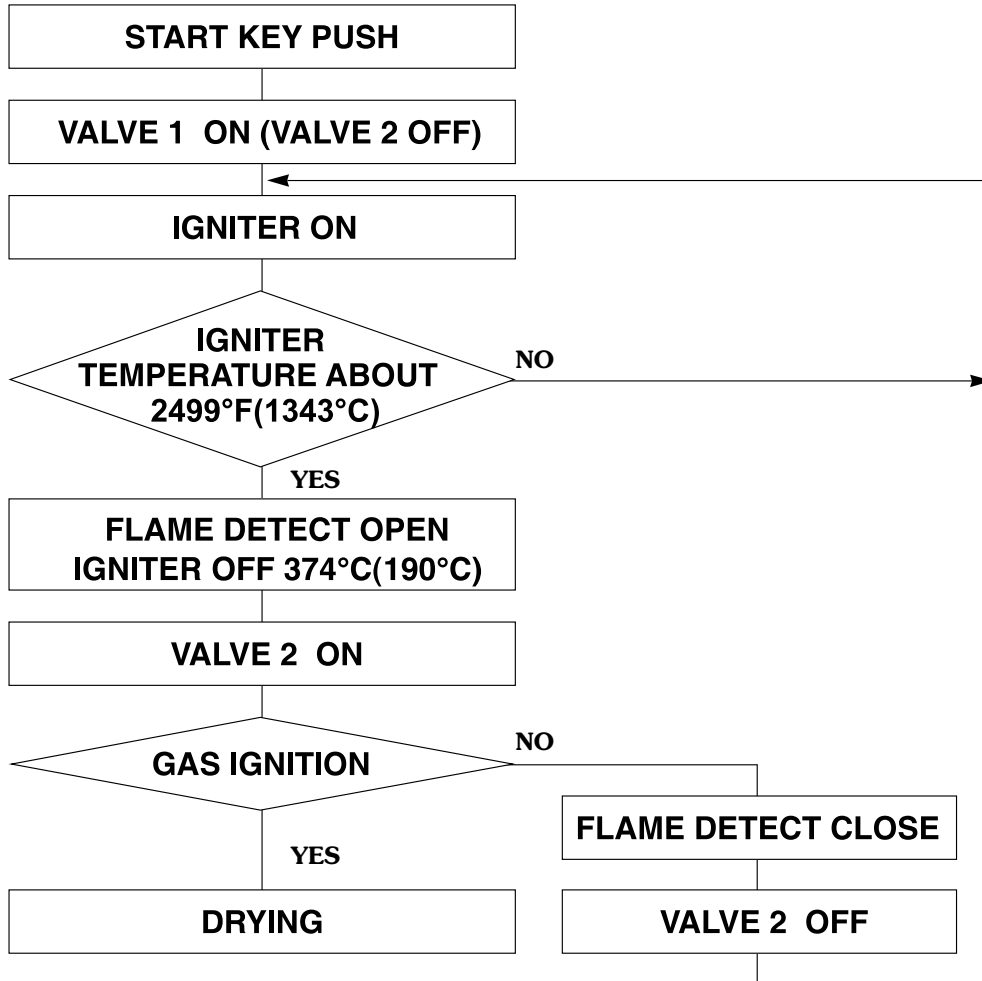


- ① Remove 2 screws.
- ② Disassemble the pipe assembly.
- ③ Replace Natural Gas orifice with Propane Gas orifice.

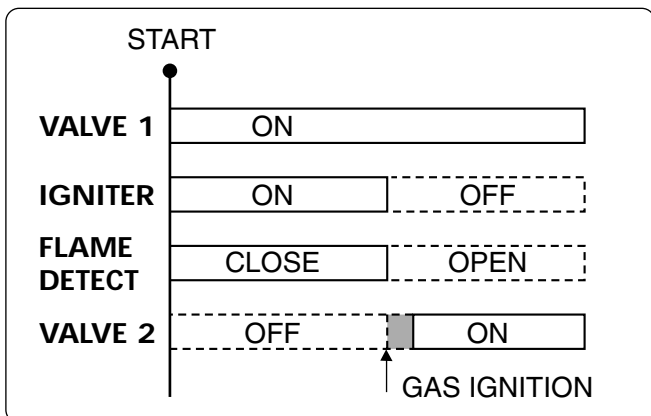
| Gas type    | Orifice P/No | Marking | Shape |
|-------------|--------------|---------|-------|
| Natural Gas | 4948EL4001B  | NCU     |       |
| Propane Gas | 4948EL4002C  | PCU     |       |

※ **Kit contents:** Orifice (Dia. = 1.47mm, for Propane Gas)  
Conversion Label  
Instruction Sheet

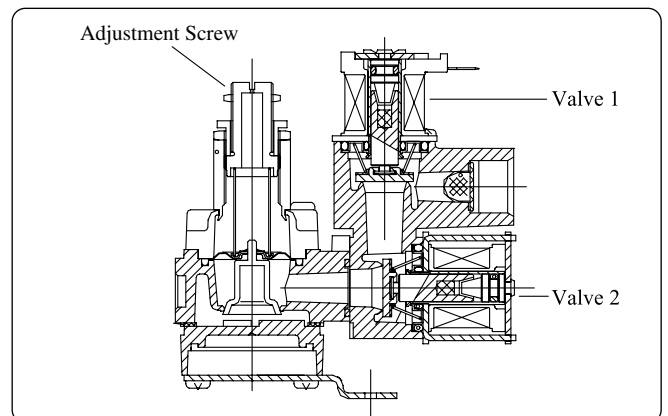
## ■ GAS VALVE FLOW



### GAS IGNITION



### GAS VALVE STRUCTURE



# 11

## DISASSEMBLY INSTRUCTIONS

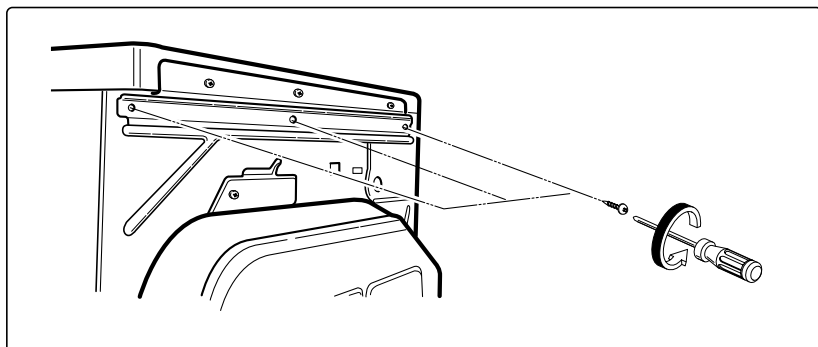
\* Disassemble and repair the unit only after pulling out power plug from the outlet.

### TOP PLATE

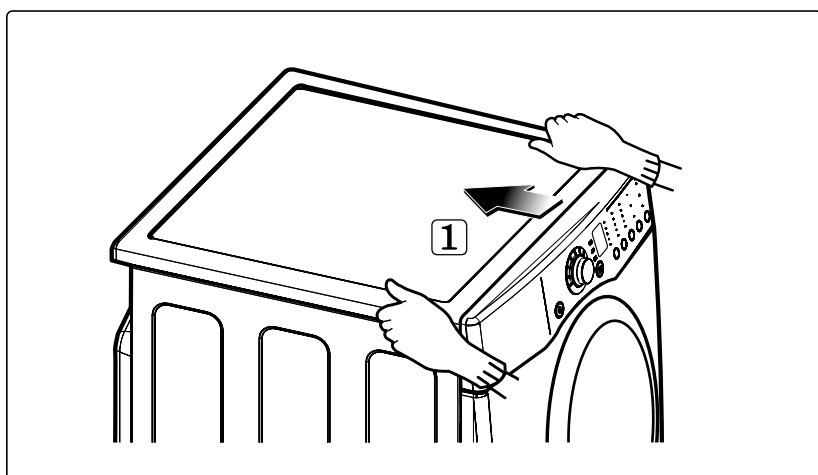
#### **! WARNING !**

When you disassemble the top plate, be sure to take gloves and handle the top plate carefully to avoid cuts. Failure to do this could lead to a serious injury.

1. Remove 3 screws on the upper plate.



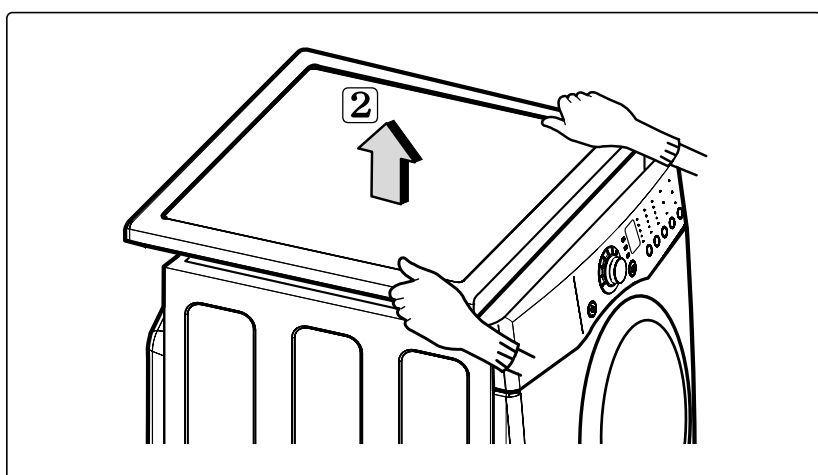
2. Push the top plate back ward.



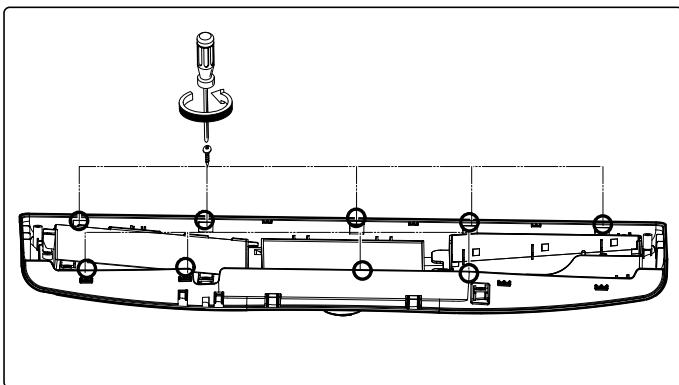
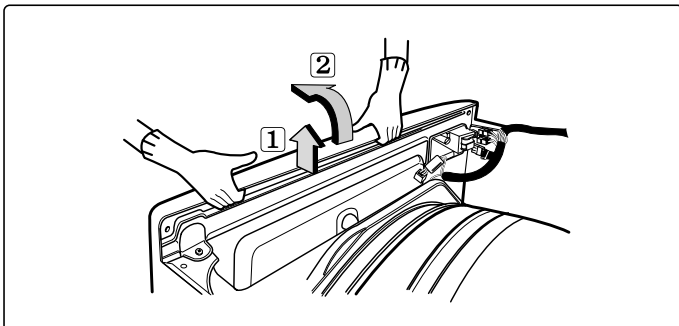
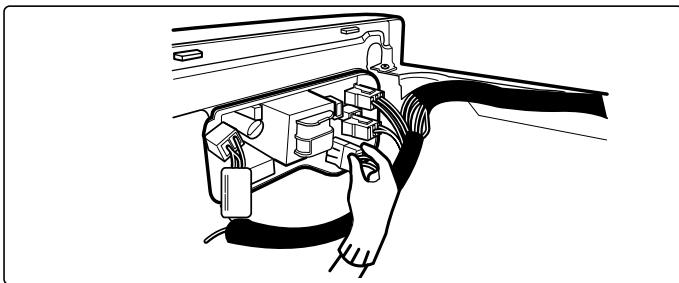
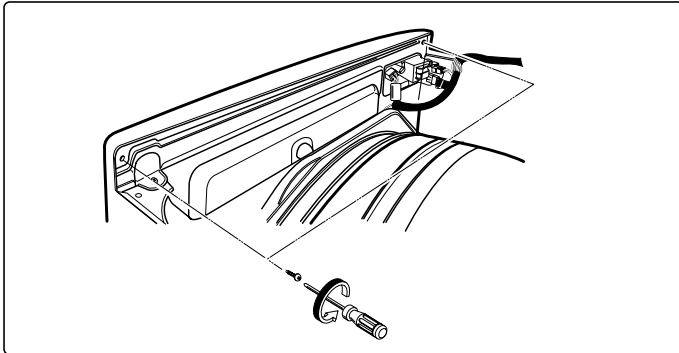
3. Lift the top plate

#### **! WARNING !**

THE DRYER TOP PLATE IS VERY LARGE AND HEAVY. Failure to follow instructions can result in damage to the dryer, property damage or personal injury.



## CONTROL PANEL ASSEMBLY

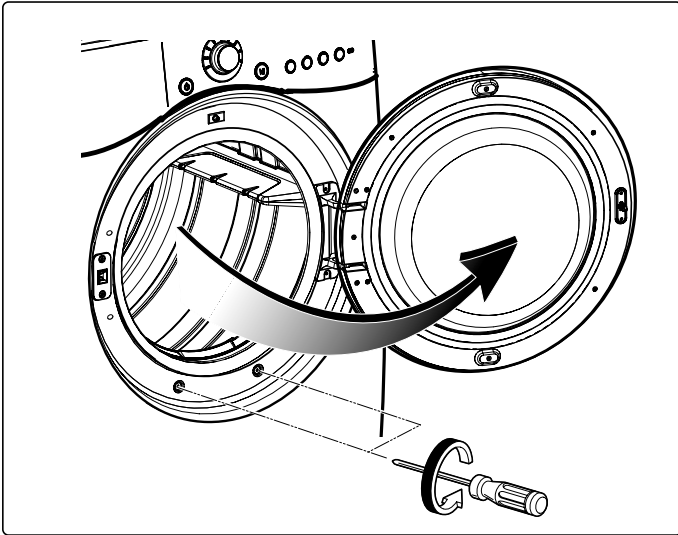


### **⚠ WARNING !**

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.

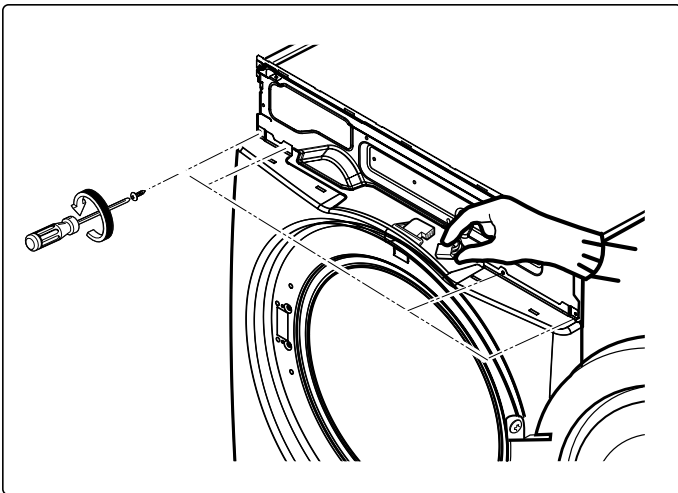
## COVER CABINET



### **⚠ WARNING !**

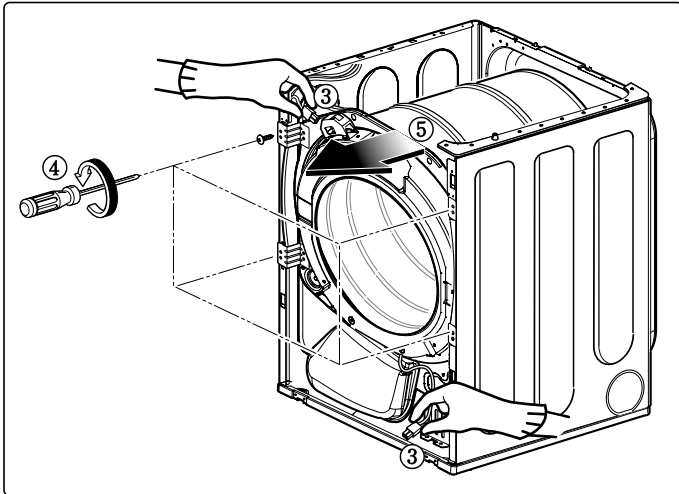
When you disassemble the door switch connector, be sure to take gloves and careful cabinet edge. Failure to do so can cause serious injury.

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]

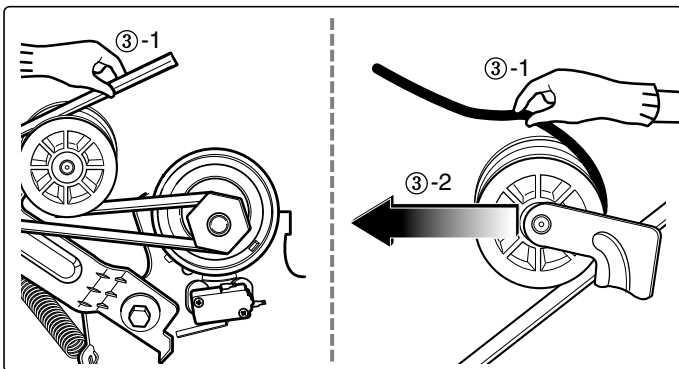


## ⚠ WARNING !

When you disassemble the lamp connector, be sure to take gloves and handle the frame and other parts carefully to avoid cuts. Failure to do this could lead to a serious injury.

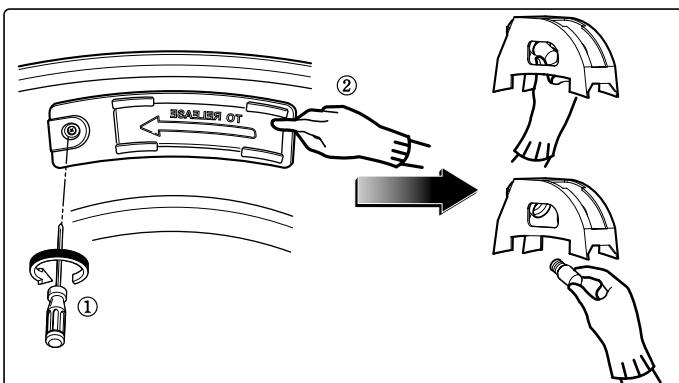
1. Disassemble the top plate.
2. Remove Cover Cabinet.
3. Disconnect the door lamp and electrode sensor connector.
4. Remove 4 screws.
5. Disassemble the Tub Drum [Front].

## DRUM ASSEMBLY



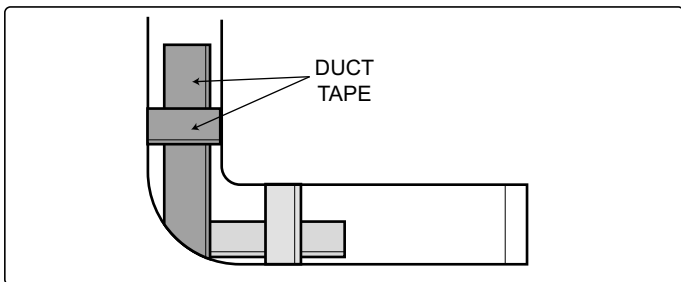
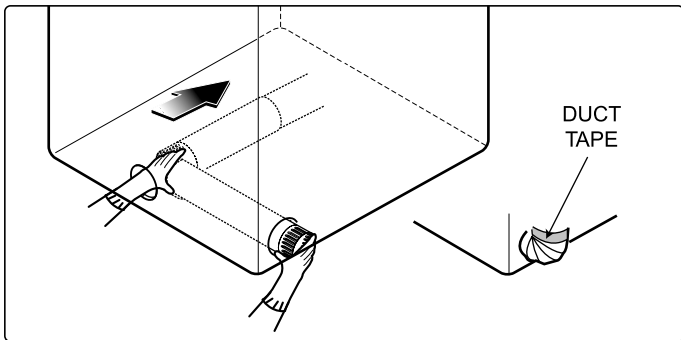
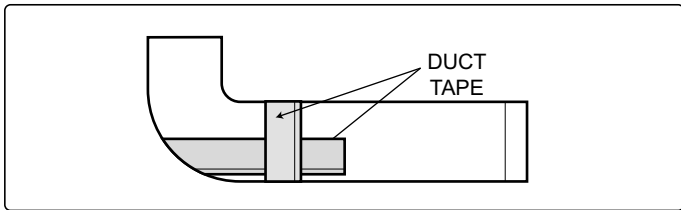
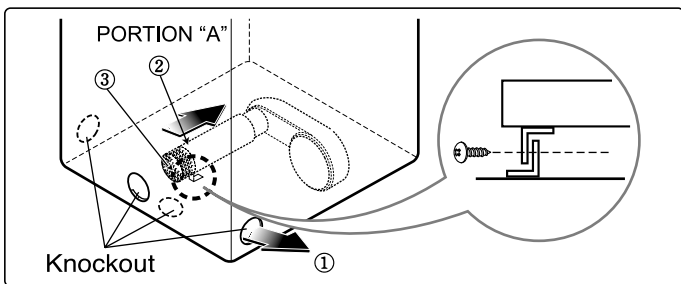
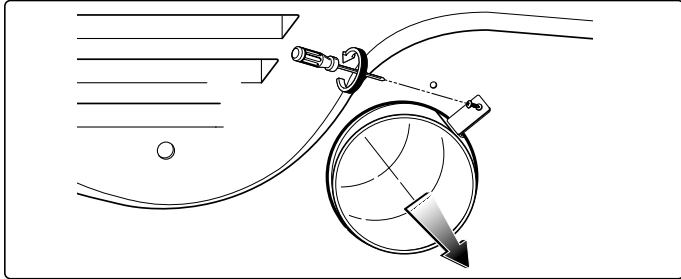
1. Disassemble the top plate.
2. Remove the Cabinet Cover and Tub drum [front].
3. Loosen belt from motor and idler pulleys.
4. Carefully remove the drum.

## CHANGING THE DRUM LAMP



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

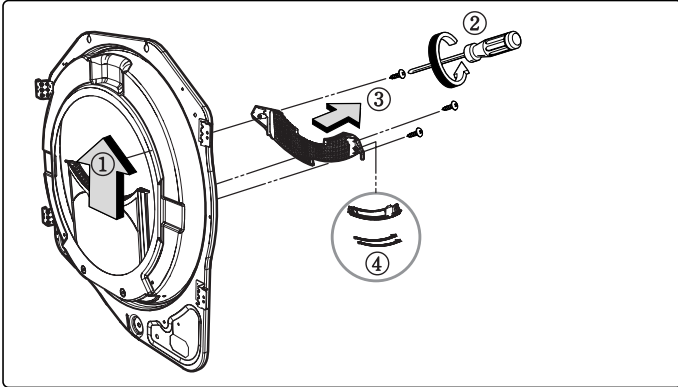


## ⚠ WARNING !

Before performing this exhaust installation, be sure to disconnect the dryer from its electrical supply. Protect your hands and arms from sharp edges when working inside the cabinet. To reduce the risk of personal injury, adhere to all industry recommended safety procedures including the use of long sleeved gloves and safety glasses.

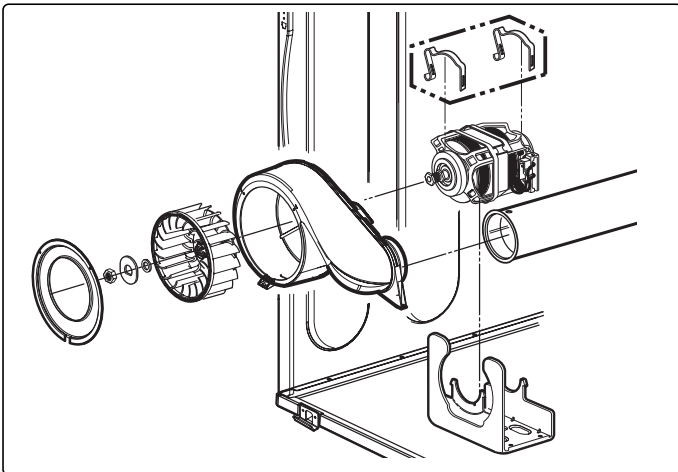
1. Remove a screw and the exhaust duct.
- 2-1. Detach and remove a knockout at the bottom, left or right side as desired. (Right Side Vent not available on Gas dryer)  
①, ②, ③ the order of work.
- 2-2. Reconnect the another duct [11 in (28cm)] to the blower housing, and attach the duct to the base. (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



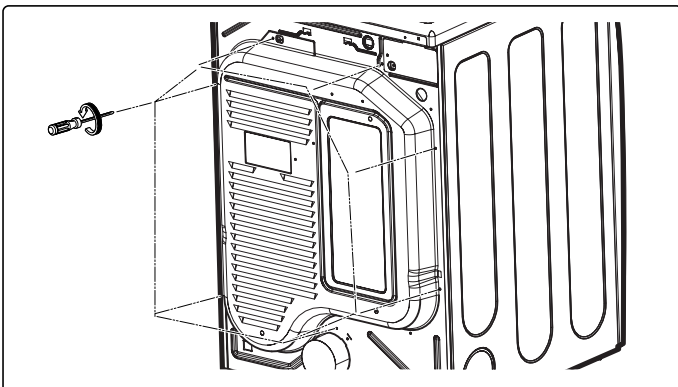
1. Remove the filter.
2. Remove 3 screws.
3. Remove the Cover Grid.
4. Disconnect the electrode sensor.

## BLOWER HOUSING



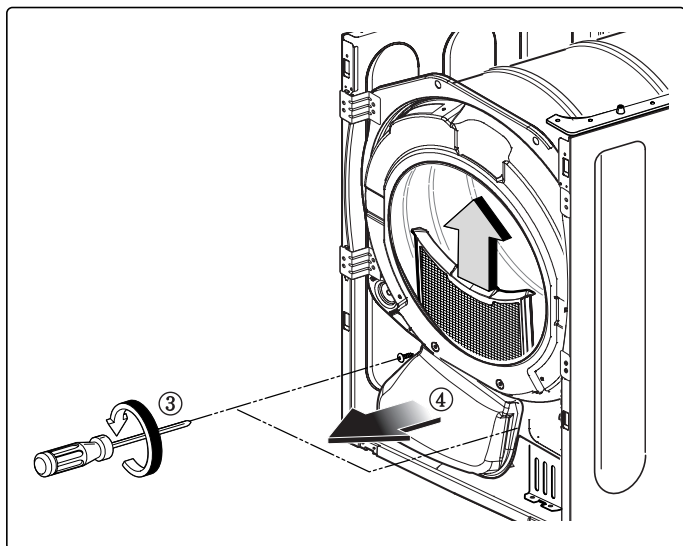
1. Disassemble the top plate.
2. Remove the Cabinet Cover and Tub Drum [Front].
3. Remove the Drum assembly.
4. Remove 2 screws and cover (Air guide).
5. Remove the bolt and washer.
6. Remove the fan.
7. Disconnect the motor clamp and motor.

## BACK COVER



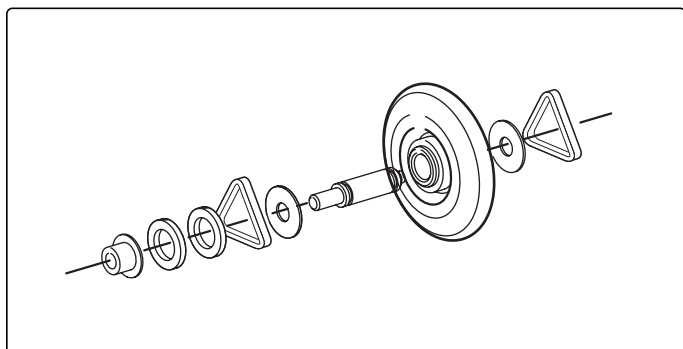
1. Disassemble the top plate.
2. Remove the Cabinet Cover and Tub Drum [Front].
3. Remove the Drum assembly.
4. Remove 7 screws.
5. Remove the Back Cover.

## AIR DUCT



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

## ROLLERS

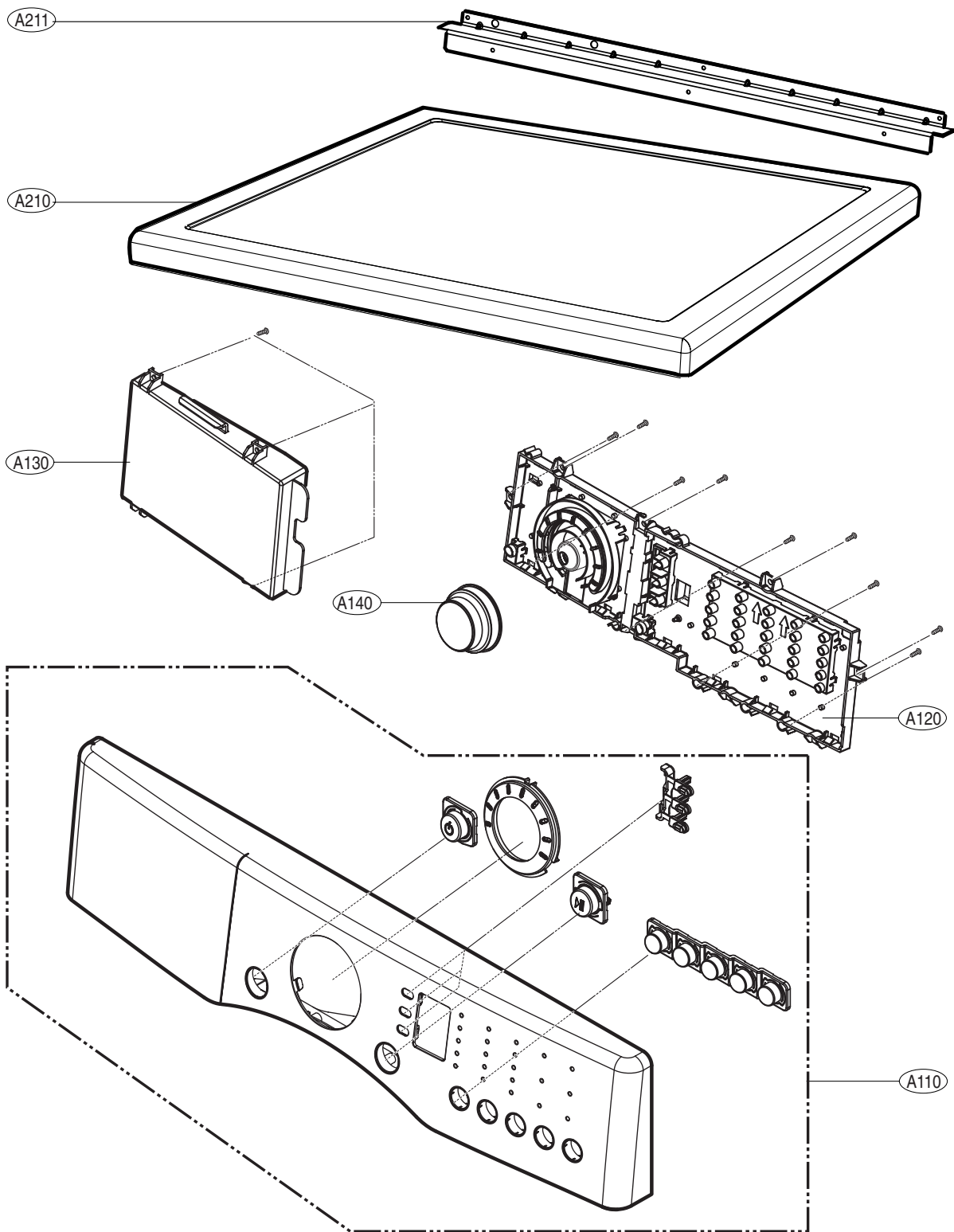


1. Disassemble the top plate.
2. Remove the Cover Cabinet and Tub Drum [Front].
3. Remove the Drum assembly and Tub Drum [Rear].
4. Disconnect the Air duct from the Tub Drum [Front].
5. Remove the roller from the Tub Drum [Front] and Tub Drum [Rear].

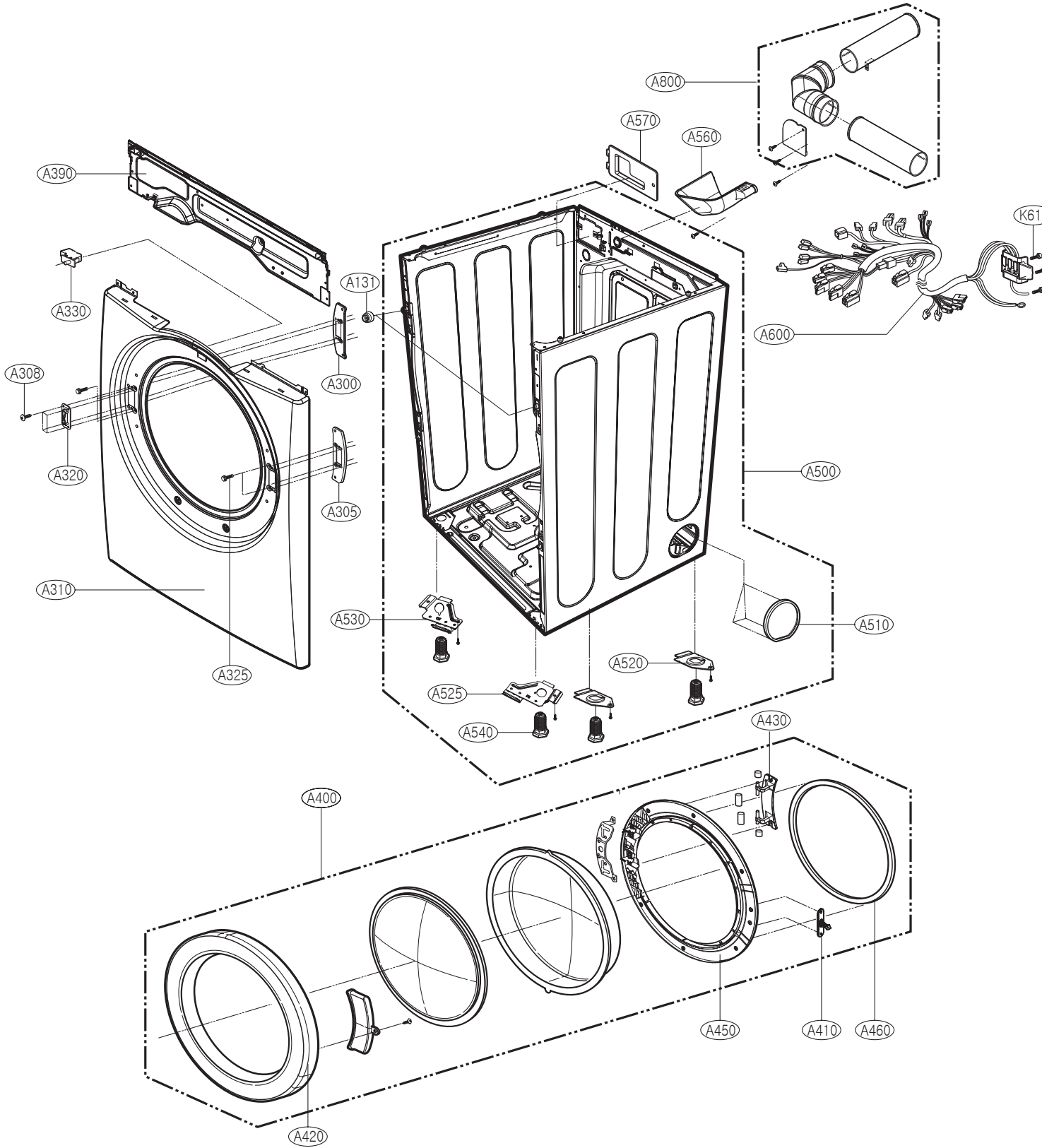
# 12

# EXPLODED VIEW

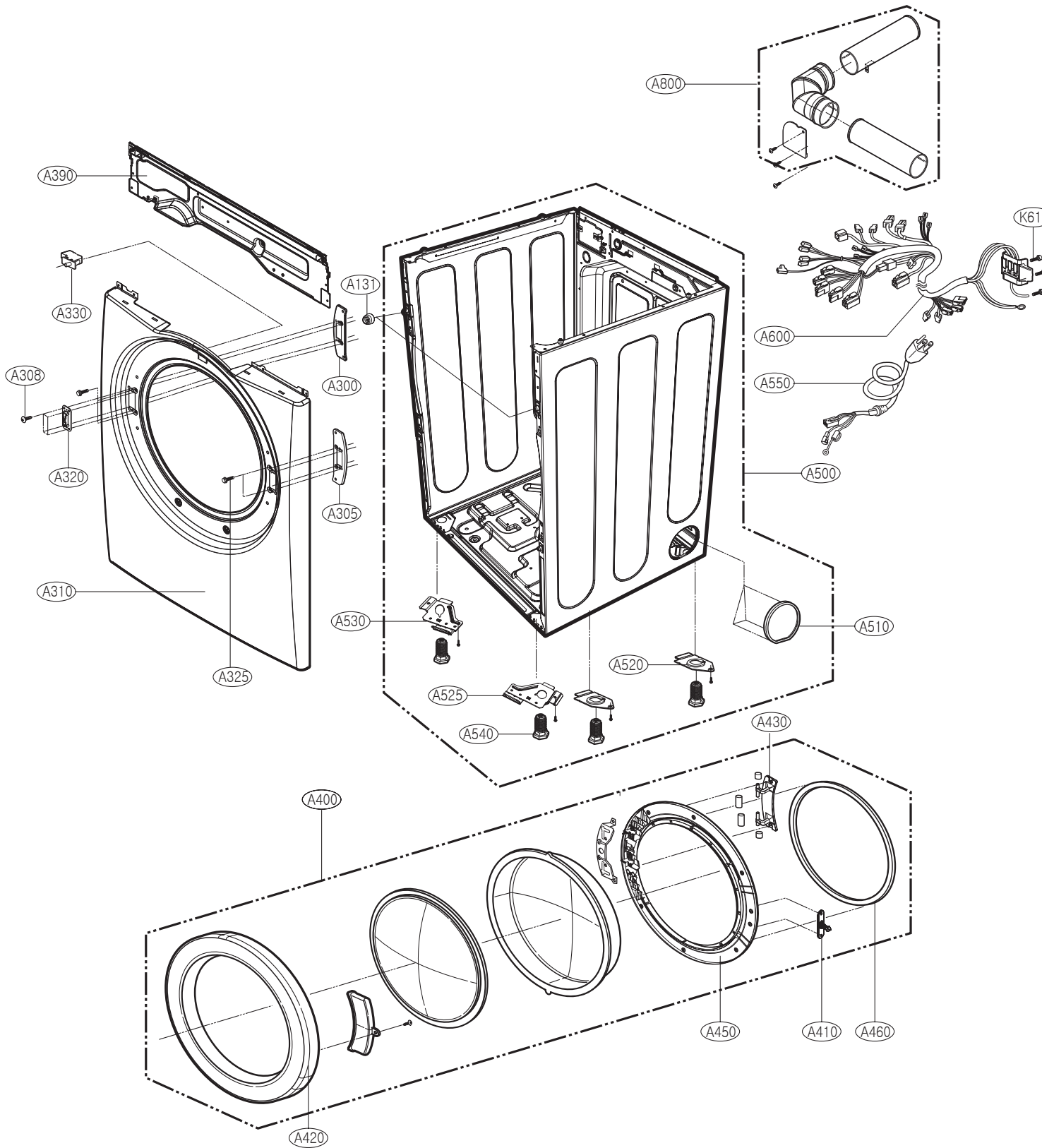
## 12-1. Control Panel & Plate Assembly



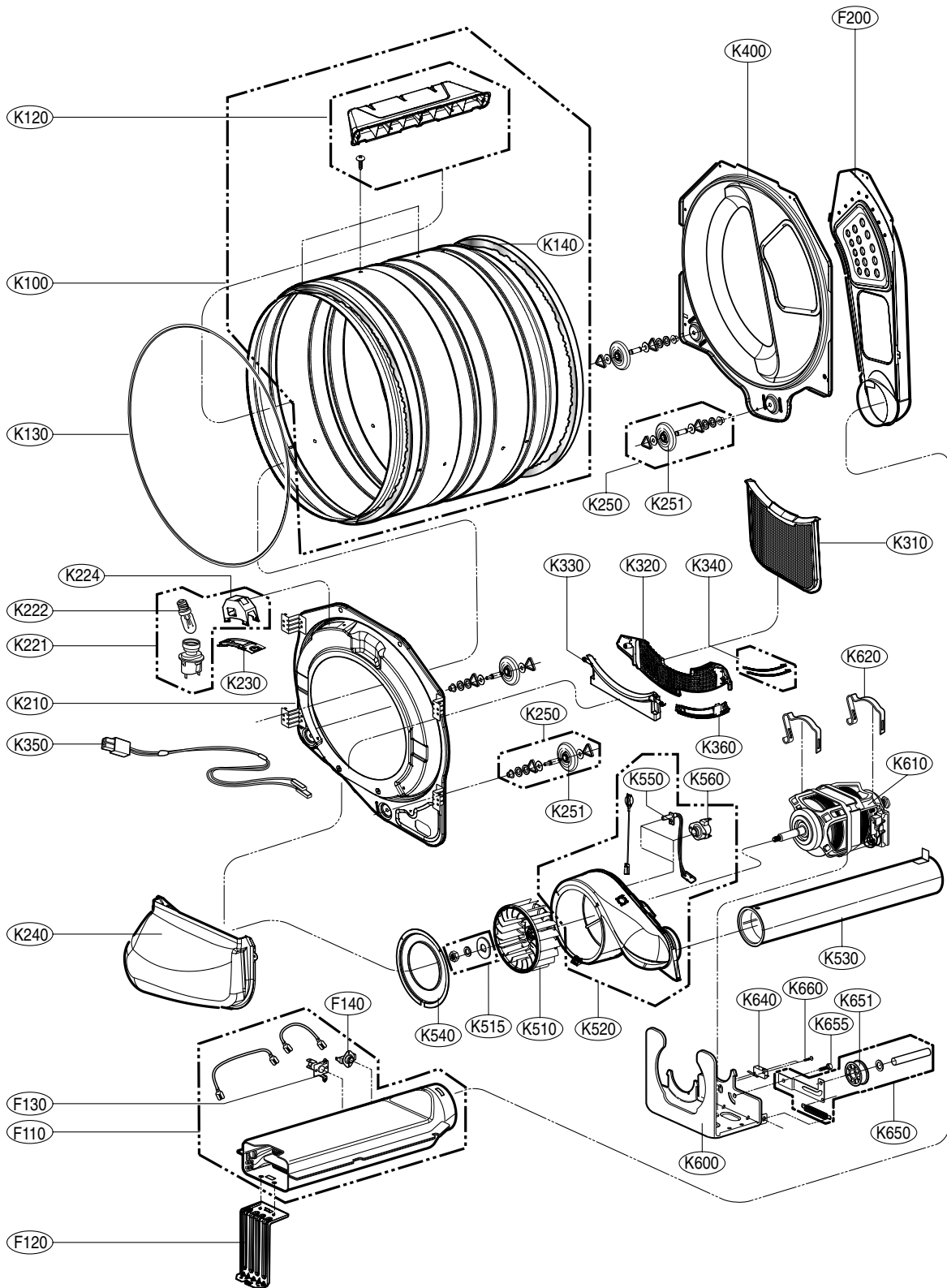
## 12-2. Cabinet & Door Assembly



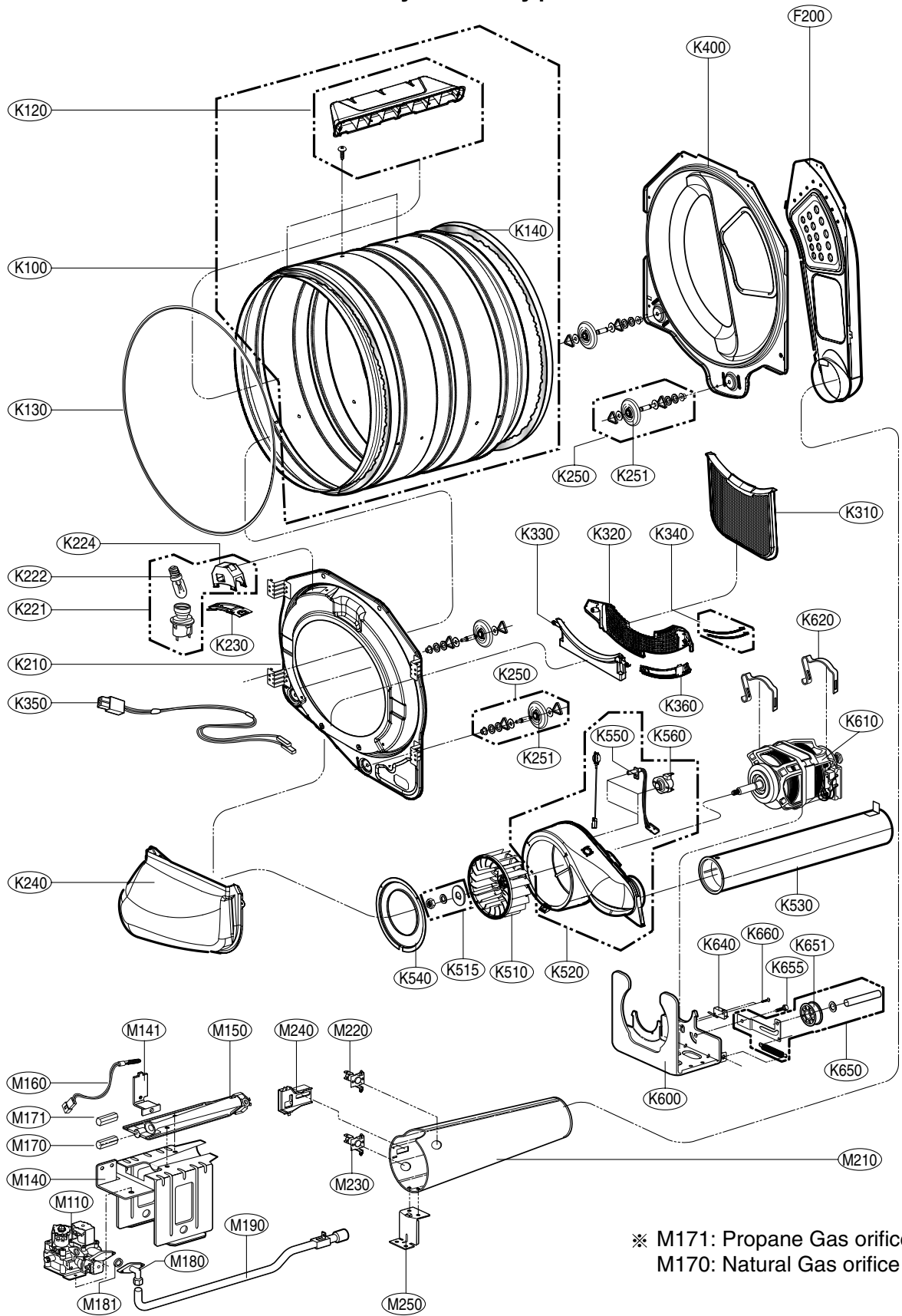
## 12-2. Cabinet & Door Assembly



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



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



※ M171: Propane Gas orifice  
M170: Natural Gas orifice