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 : DLEX7177WM / DLEX8377WM
        DLEX7177RM / DLEX8377NM
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.

**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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**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 7.3 cu.ft.
- **Weight:** 126(lbs)

* Specifications are subject to change by manufacturer.

**ACCESSORIES**

- **Dryer rack (1 each)**  
  See page 6
- **Stacking kit (1 each)**  
  Purchased Separately  
  See page 7
- **Pedestal (1 each)**  
  Purchased Separately  
  See page 8
- **Remote Laundry Monitor**  
  Purchased Separately  
  See page 8
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DLEX7177WM DLGX7188WM</th>
<th>DLEX7177RM DLGX7188RM</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material &amp; Finish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Blue White</td>
<td>Candy Apple Red</td>
<td></td>
</tr>
<tr>
<td>Top Plate</td>
<td>Porcelain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Door Trim</td>
<td>Chromate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POWER SUPPLY</td>
<td></td>
<td></td>
<td>120V/240V 60Hz (26A)</td>
</tr>
<tr>
<td>ELECTRICITY CONSUMPTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOTOR</td>
<td>250W (4.5A)</td>
<td></td>
<td>AC 120V</td>
</tr>
<tr>
<td>HEATER</td>
<td>5400W (22.5A)</td>
<td></td>
<td>AC 240V (ELECTRIC MODEL)</td>
</tr>
<tr>
<td>LAMP</td>
<td>15 W (125mA)</td>
<td></td>
<td>AC 120V</td>
</tr>
<tr>
<td>GAS VALVE</td>
<td>13 W (110mA) x 2</td>
<td></td>
<td>AC 120V (GAS MODEL)</td>
</tr>
<tr>
<td>CONTROL TYPE</td>
<td>Electronic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRUM CAPACITY</td>
<td>7.3 cu.ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (lbs) - Net/Gross</td>
<td>124/144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Programs</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Dry Options</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Temperature Controls</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Dry Levels</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound levels</td>
<td>On/Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensor</td>
<td>Moisture</td>
<td>Available</td>
<td>Electrode sensor</td>
</tr>
<tr>
<td></td>
<td>Temperature</td>
<td>Available</td>
<td>Thermistor</td>
</tr>
<tr>
<td>Reversible Door</td>
<td>Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum</td>
<td>Stainless Steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dryer Rack</td>
<td>Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Lock</td>
<td>Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Light</td>
<td>Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product (WxHxD)</td>
<td>27&quot; x 42 3/4&quot; x 28 1/3&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing (WxHxD)</td>
<td>29 1/2&quot; x 44 3/4&quot; x 30 3/4&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**FEATURES AND BENEFITS**

**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.

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

✿ For washer, dryer, and combo LG 27"

1. Remove pedestal, installation hardware, and instructions from the shipping carton.

2. Position the dryer on top of the pedestal.

3. Remove the paper from the bracket.

   **NOTE:** That the Pedestal hardware packet may include 2 sets of side brackets. Be sure to use the brackets marked for the dryer.

4. After removing the protective covering from the adhesive surface, align the screw holes in the brackets with the matching holes in the pedestal base and press and press the brackets against the base and the dryer.

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

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

7. 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 unit toward the pedestal while holding the pedestal leg using a wrench.
**Electric Dryer Only**

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

<table>
<thead>
<tr>
<th>4-wire receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NEMA type 14-30R)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>3-wire receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NEMA type 10-30R)</td>
</tr>
</tbody>
</table>

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.

**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.

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**4-wire direct**

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

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**3-wire direct**

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

![4-wire receptacle](NEMA_type_14-30R)

![Spade terminals with upturned ends](Ground_prong_Neutral_Prong)

![3/4 in. (1.9 cm) UL approved strain relief](Ground_prong_Neutral_Prong)

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
## DRYER CYCLE PROCESS

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Default</th>
<th>Conditions of operation and termination</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Drying</td>
<td>Cooling</td>
</tr>
<tr>
<td></td>
<td>Temperature</td>
<td>Dry Level</td>
<td>Display time</td>
</tr>
<tr>
<td>HEAVY DUTY</td>
<td>HIGH</td>
<td>(Normal)</td>
<td>54min</td>
</tr>
<tr>
<td>COTTON/ TOWELS</td>
<td>MID</td>
<td>HIGH</td>
<td>(Normal)</td>
</tr>
<tr>
<td>NORMAL</td>
<td>MEDIUM</td>
<td>(Normal)</td>
<td>41min</td>
</tr>
<tr>
<td>PERM PRESS</td>
<td>LOW</td>
<td>(Normal)</td>
<td>36min</td>
</tr>
<tr>
<td>DELICATES</td>
<td>LOW</td>
<td>(Normal)</td>
<td>32min</td>
</tr>
<tr>
<td>ULTRA DELICATE</td>
<td>ULTRA LOW</td>
<td>(Normal)</td>
<td>34min</td>
</tr>
<tr>
<td>STEAM FRESH</td>
<td>MEDIUM</td>
<td>(Normal)</td>
<td>12min</td>
</tr>
<tr>
<td>SPEED DRY</td>
<td>(HIGH)</td>
<td>–</td>
<td>25min</td>
</tr>
<tr>
<td>AIR DRY</td>
<td>–</td>
<td>–</td>
<td>30min</td>
</tr>
</tbody>
</table>

**Sensor Dry**

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

**Manual Dry**

** Manual dry: “Temperature control” is set by users. Default settings can be adjusted by users.**
When checking the Component, be sure to turn the power off, and do voltage discharge sufficiently.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Procedure</th>
<th>Check result</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thermal cut off</td>
<td>Measure resistance of terminal to terminal</td>
<td>If thermal fuse is open must be replaced</td>
<td>• Heater case-Safety • Electric type</td>
</tr>
<tr>
<td>1. Thermal cut off</td>
<td>1. Open at 266 ± 12°F (130 ± 7°C)</td>
<td>Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Auto reset 31°F (35°C)</td>
<td>2. Continuity (250°F ↓) &lt; 1Ω</td>
<td></td>
</tr>
<tr>
<td>• Check Top Marking: N130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Hi limit Thermostat (Auto reset)</td>
<td>Measure resistance of terminal to terminal</td>
<td></td>
<td>• Heater case - Hi limit • Electric type</td>
</tr>
<tr>
<td>2. Hi limit Thermostat (Auto reset)</td>
<td>1. Open at 257 ± 9°F (125 ± 5°C)</td>
<td>Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Close at 221 ± 9°F (105 ± 5°C)</td>
<td>2. Resistance value &lt; 5Ω</td>
<td></td>
</tr>
<tr>
<td>3. Outlet Thermostat (Auto reset)</td>
<td>Measure resistance of terminal to terminal</td>
<td></td>
<td>• Blow housing - Safety • Electric type</td>
</tr>
<tr>
<td>3. Outlet Thermostat (Auto reset)</td>
<td>1. Open at 185 ± 9°F (85 ± 5°C)</td>
<td>Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Close at 149 ± 9°F (65 ± 5°C)</td>
<td>2. Resistance value &lt; 5Ω</td>
<td></td>
</tr>
<tr>
<td>• Check Top Marking: N85</td>
<td>Same shape as Thermal cut off.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 4. Lamp holder                   | Measure resistance of terminal to terminal | Resistance value: 80Ω ~ 100Ω | |}

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Procedure</th>
<th>Check result</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Door switch</td>
<td>Measure resistance of the following terminal</td>
<td>The state that Knob is pressed is opposite to Open condition.</td>
<td></td>
</tr>
<tr>
<td>5. Door switch</td>
<td>1) Door switch knob: open</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>① Terminal: “COM” - “NC” (1-3)</td>
<td>① Resistance value &lt; 1Ω</td>
<td></td>
</tr>
<tr>
<td></td>
<td>② Terminal: “COM” - “NO” (1-2)</td>
<td>② Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Door switch push: push</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>① Terminal: “COM” - “NC” (1-3)</td>
<td>① Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>② Terminal: “COM” - “NO” (1-2)</td>
<td>② Resistance value &lt; 1Ω</td>
<td></td>
</tr>
<tr>
<td>6. Idler switch</td>
<td>Measure resistance of the following terminal: “COM - NC”</td>
<td>1. lever open</td>
<td></td>
</tr>
<tr>
<td>6. Idler switch</td>
<td>1. Resistance value &lt; 1Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Lever push (close)</td>
<td>② Resistance value $\cong \infty$</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Test Procedure</td>
<td>Check result</td>
<td>Remark</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| 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 | Measure resistance of the following terminal  
1. Valve 1 terminal  
2. Valve 2 terminal | 1. Resistance value: > 1.5 kΩ  
2. Resistance value: > 1.5~2.5 kΩ | • Gas type |
| 11. Igniter | Measure resistance of terminal to terminal | Resistance value: 100~800Ω | • Gas type |
| 12. Frame Detect | Measure resistance of terminal to terminal  
1. Open at 370°F ((Maximum)  
2. Close at 320°F | 1. Resistance value $\rightarrow \infty$  
2. Resistance value < 1Ω | • Gas type |
<table>
<thead>
<tr>
<th>Component</th>
<th>Test Procedure</th>
<th>Check result</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Outlet Thermostat</td>
<td>Measure resistance of terminal to terminal</td>
<td></td>
<td>• Gas type</td>
</tr>
<tr>
<td>(Auto reset)</td>
<td>• Check Top Marking: N95</td>
<td></td>
<td>• Gas funnel</td>
</tr>
<tr>
<td></td>
<td>① Open at 203 ± 7°F (95 ± 5°C)</td>
<td>① Resistance value $\neq \infty$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>② Close at 158 ± 9°F (70 ± 5°C)</td>
<td>② Continuity $&lt; 1\Omega$</td>
<td></td>
</tr>
<tr>
<td>14. Outlet Thermostat</td>
<td>Measure resistance of terminal to terminal</td>
<td>If thermal fuse is open must be replaced</td>
<td>• Gas type</td>
</tr>
<tr>
<td>(Manual reset)</td>
<td>• Check Top Marking: N100</td>
<td>① Resistance value $\neq \infty$</td>
<td>• Gas funnel</td>
</tr>
<tr>
<td></td>
<td>① Open at 212 ± 12°F (100 ± 7°C)</td>
<td>② Manual reset</td>
<td></td>
</tr>
<tr>
<td></td>
<td>② Continuity $&lt; 1\Omega$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**NOTE** When checking Component, be sure to turn Power off, then do voltage discharge sufficiently.

- Contact On / Off by Centrifugal Switch

<table>
<thead>
<tr>
<th>Terminal No</th>
<th>Resistance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor STOP</strong></td>
<td>2 ~ 3Ω</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Motor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heater (Electric Models)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gas Valve (Gas Models)</td>
</tr>
<tr>
<td><strong>Motor RUN</strong></td>
<td>3 ~ 5Ω</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Motor</td>
</tr>
<tr>
<td></td>
<td>&lt; 1Ω</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heater (Electric Models)</td>
</tr>
<tr>
<td></td>
<td>&lt; 1Ω</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gas Valve (Gas Models)</td>
</tr>
</tbody>
</table>

- **STOP MODE**
  (When Motor does not operate)

- **RUN MODE**
  (Motor operates)

Centrifugal switch

Centrifugal switch (Pull Drive forward)
PWB ASSEMBLY DISPLAY LAYOUT

※ 7-SEG Display in QC-Test MODE

<table>
<thead>
<tr>
<th>DISPLAY P/NO</th>
<th>MAIN P/NO</th>
<th>7-SEG DISPLAY</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBR36858901</td>
<td>EBR36858801</td>
<td>18:88</td>
<td>Electric, Discovery Steam(D) LED, North America</td>
</tr>
<tr>
<td>EBR36858902</td>
<td>EBR36858802</td>
<td>18:88</td>
<td>Gas, Discovery Steam(D) LED, North America</td>
</tr>
</tbody>
</table>

PWB ASSEMBLY LAYOUT

Main PWB Asm (Discovery Steam(D))

※ MODEL AS DIAGNOSTIC TEST

<table>
<thead>
<tr>
<th>P/N</th>
<th>GAS</th>
<th>Elec</th>
<th>STEAM D</th>
<th>STEAM X</th>
<th>(110V/220V)</th>
<th>DUCT SENSING</th>
<th>MICOM</th>
<th>Bare PCB</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>6170EC1006F</td>
<td>100K, 1/2W</td>
<td>BOM</td>
<td>Elec Discovery Steam(D) LED North America</td>
</tr>
<tr>
<td>02</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>6170EC1006F</td>
<td>100K, 1/2W</td>
<td>BOM</td>
<td>Gas Discovery Steam(D) LED North America</td>
</tr>
</tbody>
</table>
ELECTRIC DRYER WIRING DIAGRAM

GAS DRYER WIRING DIAGRAM
## 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.

<table>
<thead>
<tr>
<th>Pressing the START/PAUSE button</th>
<th>CHECKING ACTION</th>
<th>DISPLAY</th>
<th>CHECKING POINT</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Electric control &amp; Temperature sensor</td>
<td>LQC TEST</td>
<td>Won't power up Detective LED or LCD</td>
<td>See test 1 Display: See page</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tE1</td>
<td>Thermistor open</td>
<td>See test 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tE2</td>
<td>Thermistor close</td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td>Motor</td>
<td>70 ~ 239 Measured Moisture Value.</td>
<td>Motor runs</td>
<td>See test 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Displays Moisture Sensor Operation: If moisture sensor is contacted with damp cloth. The display number is below 180, in normal condition.</td>
<td></td>
</tr>
<tr>
<td>Twice</td>
<td>ELECTRIC TYPE: Motor + Heater 1 (2700W)</td>
<td>Current Temp.</td>
<td>ELECTRIC TYPE: Heater runs</td>
<td>Gas valve See test 7</td>
</tr>
<tr>
<td></td>
<td>GAS TYPE: Motor + Valve</td>
<td></td>
<td>GAS TYPE: GAS Valve runs (Display the Temperature of Inside drum.)</td>
<td></td>
</tr>
<tr>
<td>3 times</td>
<td>ELECTRIC TYPE: Motor + Heater 1 +Heater 2 (5400W)</td>
<td>Current Temp. (5 ~ 70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 times</td>
<td>Motor, Heater</td>
<td>50~230 Measured</td>
<td>Motor, Heater Off</td>
<td></td>
</tr>
<tr>
<td>5 times</td>
<td>Control Off</td>
<td></td>
<td>Auto Off</td>
<td></td>
</tr>
<tr>
<td>During check, If the door is open.</td>
<td>Motor &amp; Heater Off + Lamp On + Buzzer beeps seven times</td>
<td>“de” or “Error” (THE DOOR IS OPEN PLEASE CLOSE THE DOOR COMPLETELY)</td>
<td>Door switch</td>
<td>See test 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lamp</td>
<td></td>
</tr>
<tr>
<td>During check, If the door is closed.</td>
<td>Motor on &amp; Heater Off + Lamp Off</td>
<td>70 ~ 239</td>
<td></td>
<td>• Press Start button 1 time and then open the door. Proceed again with the step 1 (by pressing start 1 time), step 2 (by pressing start 2 times), step 3 (by pressing start 3 times) and step 4 (by pressing start 4 times) in sequence. • Press Start 2 times and then open the door. Proceed again from the step 1 all the way to the step 4. • Press Start 3 times and then open the door Proceed with the step 1 and skip the step 2 and press step 3 twice and finish with step 4 by making sure all the electric devices shut off in the end.</td>
</tr>
</tbody>
</table>
# Test 1 120V AC Electrical supply

<table>
<thead>
<tr>
<th>Caution</th>
<th>When measuring power, be sure to wear insulated gloves, to and avoid an electric shock.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trouble Symptom</td>
<td>No power was applied to Controller. (LED, LCD Display off)</td>
</tr>
<tr>
<td>Measurement Condition</td>
<td>With Dryer Power On; Connector linked to Controller.</td>
</tr>
</tbody>
</table>

Check the outlet, is the voltage 110V ~ 125V AC?

- **NO** • Check the fuse or circuit breaker.

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?

- **NO** • Check if Power Cord is properly connected.

- **YES**

① Check if the Controller wire is disconnected.
② Check if Terminal Block and Power Cord are connected (Check Plug).
  - Does Power Cord N (Natural) line match to Terminal Center N (Natural) line?

- **NO** • Reconnect the controller.

- **YES** Replace controller.
Caution: When measuring power, be sure to wear insulated gloves, to avoid an electric shock.

Trouble Symptom: Check the Tab Relays Connection properly.

Measurement Condition: With Dryer Power On; Connector linked to Controller.

1. Power Connection

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

<table>
<thead>
<tr>
<th>Tab Relay</th>
<th>Tab Relay</th>
<th>Heater 1</th>
<th>Heater 2</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Mid</td>
<td>High Mid</td>
<td>on</td>
<td>on</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>Medium</td>
<td>on</td>
<td>on</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Extra Low</td>
<td>on</td>
<td>on</td>
<td>Temperature Control below 68±4°C. Turn on Heater1 and Heater2.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tab Relay</th>
<th>Burner</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Mid</td>
<td>O</td>
<td>Temperature Control below 70±4°C. Turn on Burner</td>
</tr>
<tr>
<td>Medium</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>O</td>
<td>Temperature Control below 47±4°C. Turn on Burner</td>
</tr>
<tr>
<td>Extra Low</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Status Mode Of The Connection

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

<table>
<thead>
<tr>
<th>Color</th>
<th>Connection</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td><img src="image" alt="Yellow Wire" /> <img src="image" alt="Black Wire" /> <img src="image" alt="Connector Housing" /> <img src="image" alt="Tap relay 1" /></td>
<td>Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay)</td>
</tr>
<tr>
<td>White</td>
<td><img src="image" alt="Blue Wire" /> <img src="image" alt="Black Wire" /> <img src="image" alt="Connector Housing" /> <img src="image" alt="Tap relay 2" /></td>
<td>Check the Matching color Between Harness wire and Tab Relay. (White Housing – White Tab Relay)</td>
</tr>
</tbody>
</table>
3. Status Mode Of wrong Connection

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

<table>
<thead>
<tr>
<th>Items</th>
<th>Case</th>
<th>Heater1 Operation(black)</th>
<th>Heater2 operation(White)</th>
<th>PCB condition Of operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black and White Housing</td>
<td>Wire ①, ② CROSS</td>
<td>Off</td>
<td>Off</td>
<td>Power Off</td>
</tr>
<tr>
<td>2. Black Housing</td>
<td>Wire ①, ② CROSS</td>
<td>Off</td>
<td>Off</td>
<td>Power Off</td>
</tr>
<tr>
<td>3. White Housing</td>
<td>Wire ①, ② CROSS</td>
<td>Normal</td>
<td>Normal</td>
<td>Power On</td>
</tr>
<tr>
<td>* 4. Black and White Housing</td>
<td>Housing CROSS</td>
<td>Heater2</td>
<td>Heater1</td>
<td>Power On</td>
</tr>
<tr>
<td>5. Black and White Housing</td>
<td>Housing and Wire ①, ② CROSS</td>
<td>Off</td>
<td>Off</td>
<td>Power Off</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Items</th>
<th>Case</th>
<th>Heater1 Operation(black)</th>
<th>Heater2 operation(White)</th>
<th>PCB condition Of operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black and White Housing</td>
<td>Wire ①, ② CROSS</td>
<td>Off</td>
<td>Off</td>
<td>Power Off</td>
</tr>
</tbody>
</table>

⚠️ CAUTION

- In case of power failure(<Table1>-1,2,5,<Table2>-1), Please check the Connection of “2. Status Table of Connection”. In case of power failure(<Table1>-4), please check the Connection of “2. Status Table of Connection”. Because improper Connection of the equipment-dryer can be damaged of changing heater.

< Table2 > : Connection of Tab Relay with PCB ASSEMBLY (Gas)

<table>
<thead>
<tr>
<th>Color</th>
<th>Harness</th>
<th>PCB</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td><img src="Image" alt="Diagram" /></td>
<td></td>
<td>Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay)</td>
</tr>
</tbody>
</table>
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
1. During Diagnostic Test, tE1 and tE2 Error occur.
2. During operation, Heater would not turn off, or remains on.
3. Difference between actual and sensed temperature is significant.

Measurement Condition
After turning Power off, measure the resistance.

Table 1. Resistance for Thermistor Temperature.

<table>
<thead>
<tr>
<th>Air TEMP. [°F (°C)]</th>
<th>RES. [kΩ]</th>
<th>Air TEMP. [°F (°C)]</th>
<th>RES. [kΩ]</th>
<th>Air TEMP. [°F (°C)]</th>
<th>RES. [kΩ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F (10°C)</td>
<td>18.0</td>
<td>90°F (32°C)</td>
<td>7.7</td>
<td>130°F (54°C)</td>
<td>2.9</td>
</tr>
<tr>
<td>60°F (16°C)</td>
<td>14.2</td>
<td>100°F (38°C)</td>
<td>6.2</td>
<td>140°F (60°C)</td>
<td>3.0</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>11.7</td>
<td>110°F (43°C)</td>
<td>5.2</td>
<td>150°F (66°C)</td>
<td>2.5</td>
</tr>
<tr>
<td>80°F (27°C)</td>
<td>9.3</td>
<td>120°F (49°C)</td>
<td>4.3</td>
<td>160°F (71°C)</td>
<td>2.2</td>
</tr>
</tbody>
</table>
## Test 3  Motor test

<table>
<thead>
<tr>
<th>Caution</th>
<th>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.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trouble Symptom</td>
<td>Drum will not rotate; No fan will function; No Heater will work.</td>
</tr>
<tr>
<td>Measurement Condition</td>
<td>Turn the Dryer’s Power Off, then measure resistance.</td>
</tr>
</tbody>
</table>

### Measurement Condition Examples

1. **Is resistance below 3Ω between Connector WH-1 (White wire) and BL2-2 (Brown wire)?**
   - YES: Check Controller connector.
   - NO: Check if Door flame presses door switch knob. Check Door Switch. Check Harness connection.

2. **Is resistance below 3Ω between Connector BL2-1 (Yellow wire) and BL2-2 (Brown wire)?**
   - YES: Replace Outlet Thermostat. (Refer to ‘Component’)

3. **Does Idle Switch attached to Motor Bracket operate Level by drum belt?**
   - (Not operating Lever is normal.)
   - YES: Replace Idler Switch.
   - NO: Check Motor. (Refer to ‘Motor Diagram & Check’)

4. **Is resistance below 1Ω between terminals of Outlet Thermostat attached to blower housing?**
   - YES: Replace Outlet Thermostat. (Refer to ‘Component’)

5. **Is resistance below 3Ω between Connector WH-1 (White wire) and BL2-2 (Brown wire)?**
   - YES: Check Controller connector.
   - NO: Check if Door flame presses door switch knob. Check Door Switch. Check Harness connection.

6. **Is resistance below 1Ω between Idler Switch terminals?**
   - YES: Check Motor. (Refer to ‘Motor Diagram & Check’)
   - NO: Check if Control Connector is contacted.
Test 4  Moisture sensor

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

Take 6pin Connector from the Controller.

Short with metal to the 6 pin connector’s Pin ② (Blue Wire) and Pin ④ (Orange Wire) to Controller.

When measuring resistance in Electric load, is resistance below 1Ω?  

- NO
- YES

When contacting cloth to Electro load:  
1. Is the measurement within the range of Table 2 during Diagnostic Test?  
2. Is the measurement within the range of Table 2 when measuring the voltage in the 6 pin connector’s Pin ③ (BLUE wire) and Pin ⑤ (ORANGE wire)?  

- NO
- YES

Normal Condition

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

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

• Check Electro Load and Harness Connector.  
• Check Harness-linking connector.  
• Replace Control and Check.
## Test 5 Door switch test

<table>
<thead>
<tr>
<th>Caution</th>
<th>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.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trouble Symptom</td>
<td>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.)</td>
</tr>
<tr>
<td>Measurement Condition</td>
<td>After turning Dryer Power Off, measure resistance.</td>
</tr>
</tbody>
</table>

### Check Controller.

Check Harness-linking connector.

### Door switch test

1. **Measure while Door is closed.** Check it resistance is below 2500 Ω between WH1-①(White wire) and BK2-②(Black wire). Connector WH1,BL2 after taking WH1,BL2 out from Controller.

   - **YES**
   - **NO**

2. **Measure while Door is open.** Check it resistance is 300–60 Ω between WH1-①(White wire) and BK2-②(Black wire). Connector WH1,BL2 after taking WH1,BL2 out from Controller.

   - **YES**
   - **NO**

3. **Measure while Door is open.** Check it resistance is below 1 Ω between BL2-①(Yellow wire) and WH1-①(White wire) after taking Connector WH1,BL2 out from Controller.

   - **YES**
   - **NO**

4. **Measure while Door is closed.** Check it resistance is below 1 Ω between BL2-①(Yellow wire) and WH1-①(White wire) after taking Connector WH1,BL2 out from Controller.

   - **YES**
   - **NO**

- **Check Lamp.** (When opening Lamp, replace then measure again.)
- **Door switch Check (Refer to Component testing.)**
### Test 6  Heater switch test - Electric Type

**Caution**
Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with earth line.)

**Trouble Symptom**
While operating, Heating will not work. Drying time takes longer.

**Measurement Condition**
After turning Power off, measure the resistance.

---

1. Is resistance between Heater terminal ① and ② below 18 ~ 22Ω?
2. Is resistance between Heater terminal ① and ③ below 18 ~ 22Ω?
3. Is resistance between Heater terminal ② and ③ below 9 ~ 11Ω?

![Resistance Check Diagram]

- **YES**
  - Check Motor. Check if the value of measured resistance is below 1Ω between terminal ① and ⑥ at RUN condition.
  - **YES**
    - Check Controller.
    - Check Harness-linking Connector.
  - **NO**
    - Replace Heater.

- **NO**
  - Check if the value of measured resistance is below 1Ω between terminal TH2 (Safety Thermostat) and TH3 (Hi-Limit Thermostat).
  - **YES**
    - Replace TH2 (Safety Thermostat) and TH3 (Hi-Limit Thermostat)
  - **NO**
    - Replace TH2 (Safety Thermostat) and TH3 (Hi-Limit Thermostat)

- **NO**
  - Replace TH2 (Safety Thermostat) and TH3 (Hi-Limit Thermostat)

- **NO**
  - Replace Heater.

---

*TH3  TH2  ①  ②  ③*
### Test 7 GAS Valve test - Gas Type

<table>
<thead>
<tr>
<th>Caution</th>
<th>When measuring power, be sure to wear insulated gloves, to avoid electric shock.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trouble Symptom</td>
<td>While operating, Heating will not work. Drying time takes longer.</td>
</tr>
<tr>
<td>Measurement Condition</td>
<td>With dryer power on</td>
</tr>
</tbody>
</table>

#### Power On & Start (Normal Cycle)

- **NO**
  - When measuring Valve 1 voltage, More than DC 90V? **NO**
  - Igniter operates? (after 1 min, Igniter becomes reddish) **NO**
  - When measuring Valve 2 voltage, Value is more than DC 90V? (10 sec after Igniter off) **NO**
  - When measuring terminal resistance on Valve 1 and Valve 2, Valves are more than 1.5 ~ 2.5kΩ? (Measure after Off) **NO**
  - If “Valve 1” and “Valve 2” are under DC 10V, Valves are Off? **NO**

- **YES**
  - • Check thermostat Hi limit Safety
  - • Check Igniter & Frame detect
  - • Check Gas connection or Gas supply
  - • Change Valve

- **NOTE:** When the gas valve operates after disassembling, ignition will be off several seconds. It is normal because there is no circulation of air.
**Test 8  Semi Conductor**

<table>
<thead>
<tr>
<th>Caution</th>
<th>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.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trouble Symptom</strong></td>
<td>Degree of Resistance is not in 300°±30 Ω</td>
</tr>
<tr>
<td><strong>Measurement Condition</strong></td>
<td>Turn the Dryer's Power Off, then measure resistance.</td>
</tr>
</tbody>
</table>

![Diagram of 6pin Connector from the Controller]

When measuring resistance 3–4, 4–5
Is resistance 300 ± 20 Ω?

- **YES**
  - Check Semi-conductor and Harness Connector
  - Check Harness linking connector
- **NO**

Take 6pin Connector from the Controller.
Changing orifices and gas valve adjustments improperly can result in an explosion and/or fire. Conversion must be made by a qualified technician.

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

**STEP 1: VALVE SETTING**

**NATURAL GAS SETTING**

- Full open
- Adjustment screw

** PROPANE GAS SETTING**

- Close
- Adjustment screw

**STEP 2: ORIFICE CHANGE**

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

<table>
<thead>
<tr>
<th>Gas type</th>
<th>Orifice P/No</th>
<th>Marking</th>
<th>Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>4948EL4001B</td>
<td>NCU</td>
<td></td>
</tr>
<tr>
<td>Propane Gas</td>
<td>4948EL4002B</td>
<td>PCU</td>
<td></td>
</tr>
</tbody>
</table>

※ Kit contents: Orifice (Dia. = 1.613mm, for Propane Gas)
Replace Label
Instruction Sheet
# GAS VALVE FLOW

1. **START KEY PUSH**
2. **VALVE 1 ON (VALVE 2 OFF)**
   - **IGNITER ON**
   - **IGNITER TEMPERATURE ABOUT 2499°F (1343°C)**
     - **YES**
     - **FLAME DETECT OPEN**
       - **IGNITER OFF 374°C (190°C)**
         - **VALVE 2 ON**
           - **GAS IGNITION**
             - **NO**
             - **FLAME DETECT CLOSE**
               - **DRYING**
               - **VALVE 2 OFF**
             - **YES**
2. **NO**

## GAS VALVE STRUCTURE

![Diagram of Gas Valve Structure]

- **Adjustment Screw**
- **Valve 1**
- **Valve 2**

## GAS IGNITION

<table>
<thead>
<tr>
<th>Action</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>START</td>
<td></td>
</tr>
<tr>
<td>VALVE 1</td>
<td>ON</td>
</tr>
<tr>
<td>IGNITER</td>
<td>ON</td>
</tr>
<tr>
<td>FLAME DETECT</td>
<td>CLOSE</td>
</tr>
<tr>
<td>VALVE 2</td>
<td>OFF</td>
</tr>
</tbody>
</table>
**DISASSEMBLY INSTRUCTIONS**

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

**TOP PLATE**

1. Remove 1 screw on the safety guard.

2. Remove 3 screws on the upper plate.

3. Push the top plate backward.

4. Lift the top plate

**WARNING!**

When you disassemble the top plate, be sure to take gloves and careful plate’s edge. Failure to do so can cause serious injury.
1. After pulling out the drawer, lift out the water tank.

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

2. Disconnect the connectors.

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

4. Remove 8 screws on the PWB(PCB) assembly, display.

5. Disassemble the 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. 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.

**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. Remove 2 screws on the frame body.

2. Push the Guide ASM to the back side and then lift it.

3. Separate hoses from the pump and generator.

4. Lift a pump and a generator up.
1. Remove 4 screws on the frame body and then disassemble the frame body.

2. Remove 4 screws on the panel frame and then disassemble the panel frame.
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].

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

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

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

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

FILTER ASSEMBLY

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.

BLOWER HOUSING

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.

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

**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].
12-1. Control Panel & Plate Assembly
12–2. Panel Drawer Assembly & Guide Assembly
12-3. Cabinet & Door Assembly
12-4-1. Drum & Motor Assembly: Electric Type