



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 Gas

DLEX3001W DLGX3002W DLEX3001R DLGX3002R DLEX3001P DLGX3002P



P/No.: 3828EL3005U

JUL. 2008 PRINTED IN KOREA

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.

A WARNING!

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

RECONNECT ALL GROUNDING DEVICES

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

WHAT TO DO IF YOU SMELL GAS:

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

IMPORTANT

Electrostatic Discharge (ESD)
Sensitive Electronics

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

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

- OR -

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

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

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SPECIFICATIONS



■ Name: Electric and Gas Dryer

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

■ Size: 27 X 30 X 38.7 (inch)

■ Dryer capacity: IEC 7.4 cu.ft.

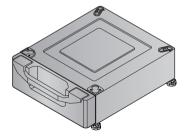
■ Weight: 136(lbs)

Specifications are subject to change by manufacturer.

ACCESSORIES







Dryer rack (1 each)

Stacking kit (1 each)
Purchased Separately

Purchased Separately

See page 6

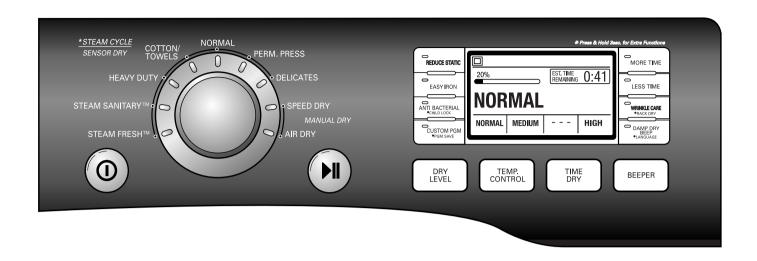
See page 7

See page 8

Pedestal (1 each)

| ITEM | | | DLEX3001W DLGX3002W DLEX3001R DLGX3002R DLEX3001P DLGX3002P | REMARK |
|-------------------|--------|-------------|---|-------------------------|
| | | Color | Blue White / Candy Red / Platinum Silver | |
| Material & Finish | - | Top Plate | Porcelain | |
| 1 | [| Door Trim | Chromate | |
| POWER | RSU | PPLY | 120V/240V 60Hz (26A) | |
| | | MOTOR | 250W (4.5A) | AC 120V |
| ELECTRICI | ΤΥ | HEATER | 5400W (22.5A) | AC 240V(ELECTRIC MODEL) |
| CONSUMPT | ION | LAMP | 15 W (0.2A) | AC 120V |
| | | GAS VALVE | 13 W (0.11A) x 2 | AC 120V(GAS MODEL) |
| | | AG HEATER | 1100W (9.2A) | AC 120V(STEAM MODEL) |
| | | DC, PUMP | 2.4W (0.15A) | DC 9V(STEAM MODEL) |
| CONTR | ROL | TYPE | Electronic | |
| DRUM (| CAP | ACITY | 7.4 cu.ft. | |
| Weight (lbs | s) - N | let/Gross | 136 / 155.7 | |
| No. of | Prog | rams | 9 | |
| No. of D | ry O | ptions | 5 | |
| No. of Tempe | eratu | re Controls | 5 | |
| No. of [| Ory L | .evels | 5 | |
| Soun | ıd lev | rels | 5 | |
| 0 | | Moisture | Available | Electrode sensor |
| Sensor | Te | mperature | Available | Thermistor |
| Reversible Door | | Door | Available | |
| Drum | | | Stainless Steel | |
| Dryer Rack | | ck | Available | |
| Child Lock | | ck | Available | |
| Interior Light | | ght | Available | |
| Produc | • | • | 27" x 42 3/4" x 28 1/3" | |
| Packing | y (W) | (HxD) | 29 1/2" x 44 3/4" x 30 3/4" | |

FEATURES AND BENEFITS

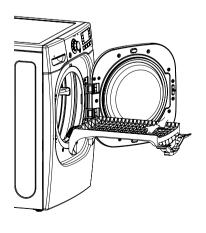


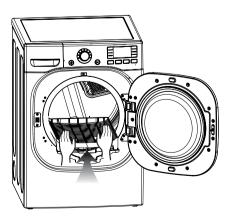
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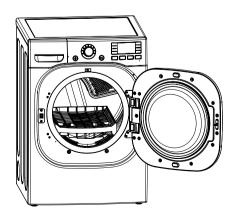
INSTALLATION INSTRUCTIONS

Dryer Rack Installation Instructions

- Open the door.
 Hold the dryer rack
 with both hands.
- Put the dryer rack into the drum
- Check and be sure that the front of the rack is properly seated behind the lint filter.







Stacking Kit Installation Instructions

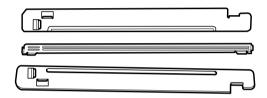
To ensure safe and secure installation, please observe the instructions below.

WARNING

Do not attempt this alone!

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

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

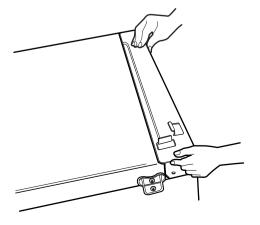


Stacking kit

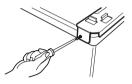
- Place the washer firmly on a stable, even and solid floor as product installation instructions describe in the owner's manual.
- Peel the protective paper from the tape on the side bracket.



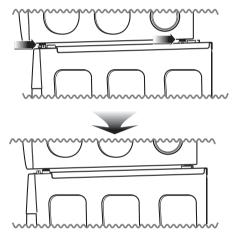
Fit the side bracket firmly to the side of the top plate by attaching the double-faced tape to the top plate as picture shown.



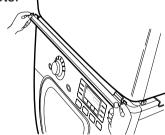
Secure the side bracket to the washer with a screw on the back of the bracket. Repeat Steps 2, 3, & 4 for the other side.



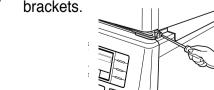
Place the dryer on top of the washer by placing the legs as shown. Be careful not to pinch fingers between the washer and dryer. Slide the dryer back against the stop on the side rail.



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



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



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

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Pedestal Installation Instructions

The pedestal accessory includes:

- Drawer divider (1)
- Wrench (1)
- Screws (18) †
- Retainers (4) ††



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

Tools Needed for Installation:

- · Phillips-head screwdriver
- Wrench (supplied)



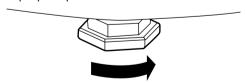
To ensure safe and secure installation, please thoroughly follow the instructions below.

A 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.

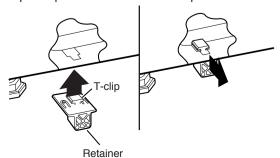
Make sure the leveling feet of the dryer are fully retracted.

NOTE: The appliance and pedestal assembly must be placed on a solid, sturdy, level floor for proper operation.



Retract fully

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.



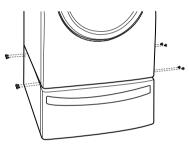
Place the dryer on the pedestal. Make sure the front and back feet are in the correct positions. The dryer feet will fit into the innermost positions as shown.



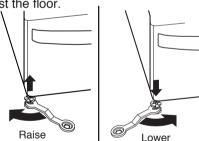
Make sure the screws on the pedestal align with the holes in the retainers, then install 4 screws on each side to securely attach the appliance to the pedestal.

> NOTE: If the screws are not installed properly, noise and vibration may result.

Move the appliance to the desired location.



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.

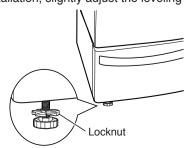


Securely tighten all locknuts by hand.

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:



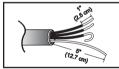
4-wire receptacle (NEMA type14-30R)

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



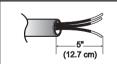
3-wire receptacle (NEMA type10-30R)

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



4-wire direct

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



3-wire direct

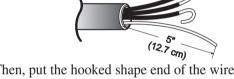
If this type is available at your home, you will be connecting to a fused disconnect or circuit breaker box

4-wire connection: Direct wire

Important: 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.

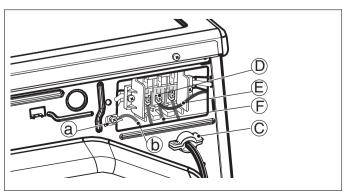
First, peel 5 inch (12.7cm) of covering material from end. Make a 5 inch of ground wire bared. After cutting 1¹/₂ inch (3.8cm) from 3 other wires. peel insulation back 1inch (2.5cm). Make ends of 3 wires a hook shape.



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



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

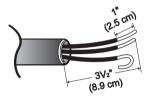


3-wire connection: Direct wire

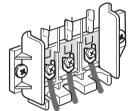
Important: Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

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

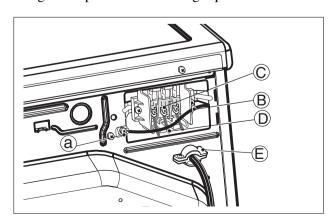
First, peel 3 ½ inch (8.9cm) of covering material from end and bare 1 inch from the ends.



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

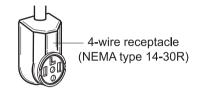


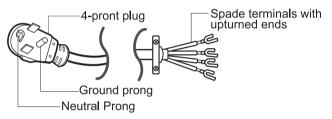
- 1. Connect neutral wire(white) of power cord to center terminal block screw.
- 2. Connect red and black wire to the left and right terminal block screws.
- 3. Make sure that the strain relief screw is tightened and be sure that all terminal block nuts are on tight and power cord is in right position.

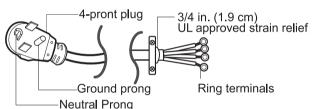


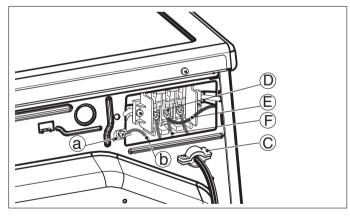
Option 1: 4-wire connection with a Power supply cord.

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





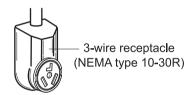


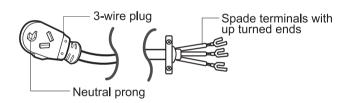


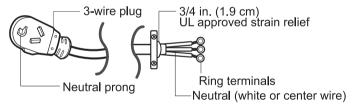
- 1. Connect the neutral wire (white) of the power cord to the center terminal block screw.
- 2. Connect the red and black wires to the left and right terminal block screws.
- 3. Connect the ground wire (green) of the power cord to the external ground screw. Remove the neutral ground wire of appliance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

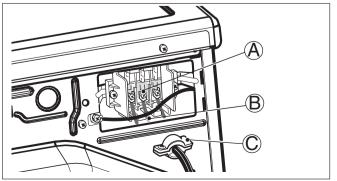
If your local codes or ordinances permit the connection of a frame-grounding conductor to the neutral wire, use these instructions. If your local codes or ordinances do not allow the connection of a frame-grounding conductor to the neutral wire, use the instructions under **Section 3: Optional 3-wire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





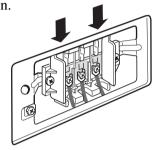


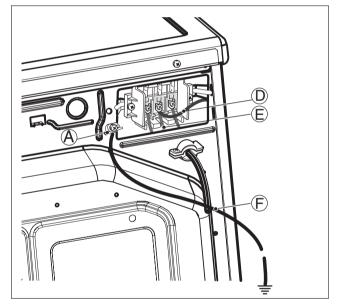
- 1. Connect the neutral (white or center) wire (B) to the center, silver colored, screw (A) and tighten securely.
- 2. Connect the other two power cord wires (red and black) to the left and right terminal block screws and tighten securely.
- 3. Tighten the strain relief screws (C) securely.



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.



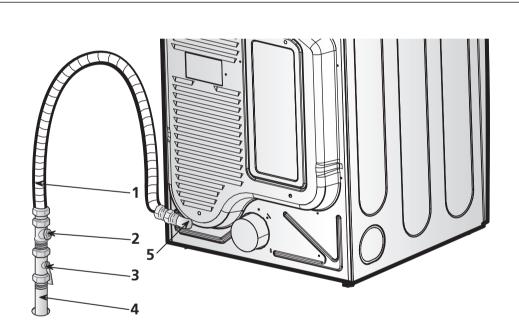


- 1. Remove the appliance ground wire (D) (green) from the external ground connector screw and reconnect it, together with the center, white, neutral wire (E) to the center, silver colored, terminal block screw.
- 2. Connect the other two power cord wires (red and black) to the left and right terminal 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.
- Tighten all connections securely. Turn on gas and check all pipe connections (internal & external) for gas leaks with a non-corrosive leak detection fluid.
- 5. For L.P. (Liquefied Petroleum) gas connection, refer to section on Gas Requirements.



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

DRYER CYCLE PROCESS

| | | | Default | | | Conditions of operation and termination | | | | | |
|-----------------|--------------------|------------------|-----------|------------|--------------------|---|-----------------|--------------------|----------------|--|--|
| | Cycle | | Dwy | Dianlay | Drying | | Cooling | | Wrinkle care | | |
| | | Temp- erature | | | Electro- sensor | Temp- control | Default time | Temp- Control** | Time | | |
| | HEAVY DUTY | HIGH | (Normal) | 54min | Saturation | 68±4°C | (5min) | 47±5℃ | | | |
| | COTTON/ TOWELS | MID HIGH | (Normal) | 55min | Saturation | 66 ±4°C | (5min) | 47 ±5℃ | | | |
| | NORMAL | MEDIUM | (Normal) | 41min | Saturation | 60 ±4°C | (5min) | 47 ±5°C | | | |
| Sensor Dry * | PERM PRESS | LOW | (Normal) | 36min | Saturation | 52±3℃ | (5min) | 47±5°C | 3Hr | | |
| | DELICATES | LOW | (Normal) | 32min | Saturation | 52±3℃ | (5min) | 38±5℃ | | | |
| | STEAM FRESH™ | MID HIGH | - | 20min | Saturation | 66 ±4°C | (1min) | 47±5°C | | | |
| | STEAM SANITARY™ | HIGH | - | 39min | Saturation | 68 ±4°C | (5min) | 47±5°C | | | |
| Manual | SPEED DRY | (HIGH) | - | 25min | Saturation | (70 ±5°C) | (5min) | 47±5℃ | 3Hr | | |
| Dry ** | AIR DRY | - | - | 30min | Saturation | No heater | N/A | N/A | Ol II | | |
| | | | Mo | otor | | | | | Off Time: 6min | | |
| | | | 1710 | | | | | | On Time: 10sec | | |
| Load Heater | | Temperati | ure Contr | ol for ead | ch cycle | | | | | | |

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

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

Default settings can be adjusted by users.

COMPONENT TESTING INFORMATION

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

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

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

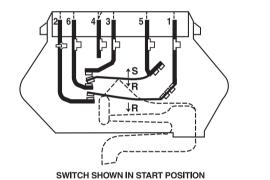
| Component | Test Procedure | Check result | Remark |
|----------------------------|-------------------------------------|---|------------|
| 13. Outlet Thermostat | Measure resistance of terminal | | Gas type |
| (Auto reset) | to terminal | | Gas funnel |
| | ① Open at 203 ± 7°F (95 ± 5°C) | ① Resistance value ≒ ∞② Continuity < 1Ω | |
| | ② Close at 158 ± 9°F (70 ± 5°C) | Continuity < 152 | |
| Check Top Marking: N95 | | | |
| 14. Outlet Thermostat | Measure resistance of terminal | If thermal fuse is open must | Gas type |
| (Manual reset) | to terminal | be replaced | Gas funnel |
| 65 30 | ① Open at 212 ± 12°F (100 ± 7°C) | ① Resistance value ≒ ∞ | |
| | 2 Manual reset | ② Continuity < 1Ω | |
| Check Top Marking: | | | |
| N100 | | | |
| | | | |

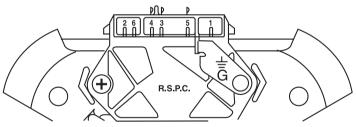
MOTOR DIAGRAM AND SCHEMATIC

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

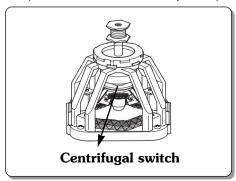
■ Contact On / Off by Centrifugal Switch

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

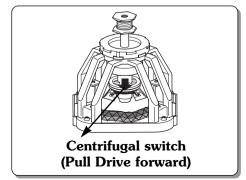




■ STOP MODE (When Motor does not operate)



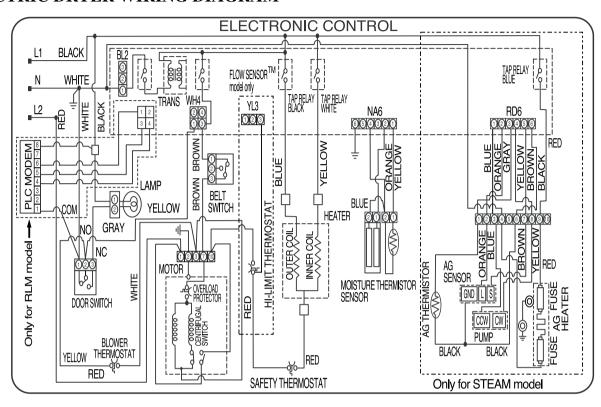
■ RUN MODE (Motor operates)



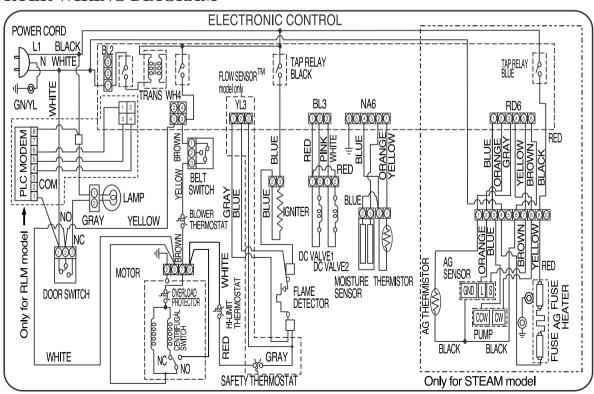
---- Open
--- Close

WIRING DIAGRAM

ELECTRIC DRYER WIRING DIAGRAM



GAS DRYER WIRING DIAGRAM



STEAM FUNCTION

8-1. Steam Cycle Guide

| | STEAM | DEFAULT TIME | TEMP. CONTROL | DRY LEVEL | FABRIC STATE | FABRIC TYPE | MAXIMUM AMOUNT |
|--------------------|-----------------------|-----------------------------------|------------------|--------------|-----------------|-----------------------|---------------------------|
| STEAM SANITARY™ | | STEAM SANITARY™ (39 minutes) | | | Dry | Comforter Bedding | Single (1 each) |
| | | (commutes) | | | | Children's clothing | 3 lbs. |
| | | STEAM FRESH™ (20 minutes) | 0 | | Dry | Comforter Shirts* | Single (1 each) 5 each |
| STEAM FRESH™ | + REDUCE STATIC | STEAM FRESH™ (10 minutes) | | | Dry | Shirts* | 8 lbs. (18 ltems.) |
| | + EASY IRON | STEAM FRESH™ (12 minutes) | | | Dry | Silits | Shirts* (5 each) |
| STEAM | + REDUCE STATIC | HEAVY DUTY COTTON/TOWELS | | 0 | Wet | Follow selected cycle | 8 lbs. (18 ltems.) |
| OPTION | + EASY IRON | NORMAL PERM.PRESS DELICATES | | 0 | Wet | Follow selected cycle | Shirts* (5 each) |
| TIME | + REDUCE STATIC | TIME DRY (45 minutes) | 0 | | Wet | Follow selected temp | 8 lbs. (18 ltems.) |
| DRY | + EASY IRON | TIME DRY (47 minutes) | 0 | | Wet | Follow selected temp | Shirts* (5 each) |

^{*}Shirt: 70% cotton/30% poly blend. Except especially delicate fabrics.

- When the lint filter or exhaust duct is clogged, steam options will not give proper results.
- For best results, load articles of similar size and fabric type. Do not overload.

IMPORTANT NOTES ABOUT STEAM CYCLES:

- The steam feeder must be filled with water up to the MAX line. Otherwise, an error message will be displayed.
- If the lint filter or exhaust duct is clogged, the Steam options will not give proper results.
- For best results, load articles of similar size and fabric type.
 Do not overload.
- Water only Do not add any additives or other materials as these will damage your dryer.
- Before moving the dryer, make sure the steam feeder is empty.
- Best results are obtained with cotton/poly blend fabrics.

8-2. Troubleshooting for Steam Dryer

| PROBLEM | POSSIBLE CAUSES | SOLUTIONS |
|--|---|--|
| The display shows: AEROR WHES SUPPLY ERROR, FIL. STEAM FEBBER FIL | Water supply error. | Check steam feeder drawer: (1) Make sure steam feeder is filled with water to MAX line. (2) Make sure steam feeder is seated properly and drawer is fully cloased. (3) Turn the dryer off then restart the Steam cycle. Do not use distilled water; the water level sensor in steam generator will not work. Pump not working. Unplug dryer and call for service. |
| Water drips from nozzle when Steam Cycle starts. | This is normal. | This is steam condensation. The dripping water will stop after a short time. |
| Steam doesn't generate but no error code is shown. | Water level error. | Unplug dryer and call for service. |
| Garments still wrinkled after STEAM FRESH™. | Too many or to different types of garments in dryer. | Small loads of 1 to 5 items work best. Load fewer garments. Load similar-type garments. |
| There are no creases left on garment after STEAM FRESH™. | The function of this cycle is to remove wrinkles from fabric. | Use an iron to make creases. |
| Garments have static after REDUCE STATIC. | This is normal. | Depends on individual moisture level in skin. |
| Garments are too damp or too dry after REDUCE STATIC. | Correct drying options not selected. | Select load weight manually before starting REDUCE STATIC option. |
| Garments are not uniformly damp after EASY IRON. | This is normal. | Depends on the amount or type of garments. |
| Water drips from door during Steam Cycle. | This is normal. | This is steam condensation on door surface. |
| Steam is not visible during Steam Cycle. | This is normal. | Steam vapor is difficult to see when the door is closed. |
| Drum does not turn during Steam Cycle. | This is normal. | The drum is turned off so that the steam vapor remains in the drum. |

| PROBLEM | POSSIBLE CAUSES | SOLUTIONS |
|---|--|---|
| Cannot see steam vapor at the beginning of cycle. | This is normal. | Steam is released at different stages of the cycle for each option. |
| The display shows BULKY LOAD. | MORE TIME button pressed. | Pressing the MORE TIME button several times will set the cycle for a large load such as a comforter. |
| Odors remain in clothing after STEAM FRESH™. | STEAM FRESH™ did not remove odor completely. | Fabrics containing strong odors should be washed in a normal cycle. |

8-3. Display Fault/Error Codes for Steam Dryer

The error codes below will be displayed when attempting to start a drying cycle, or after activating the Diagnostic Test mode.

| DISPLAY | CHECKING PART | CAUSE | REMARK |
|-----------|-------------------------------|---|---|
| tE1 | Thermistor of blower housing | Outlet thermistor open or shorted. | tE1 error is displayed in the drying cycle or test mode. Replace the steam generator. |
| tE2 | Thermistor of blower housing | Outlet thermistor open or shorted. | tE2 error is displayed in the drying cycle or test mode. Replace the steam generator. |
| tE4 | Thermistor of steam generator | Steam generator thermistor open or shorted. | tE4 error is only displayed in the test mode.Replace the steam generator. |
| E5 | Water supply pump | When the pump valve is less than 10 in the test mode | tE5 error is only displayed in the test mode. Check the connection between harness wire and connector. Replace the water supply pump. |
| Add water | Steam generator | Sensors do not detect that steam generator is full within 60 seconds. | If water in the steam feeder is not enough this error may be displayed. Fill the feeder and restart the cycle. |

FLOW SENSOR FUNCTION

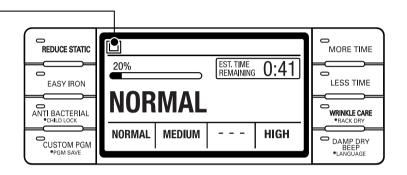
9-1 Flow sensor

This FlowSense[™] function detects the clogging or blocking of ducts.

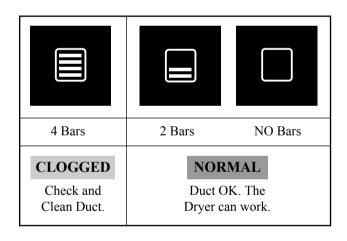
"Clogged" duct vents or hoses decrease efficiency in drying cloths. Clogged vents can also cause fire. This function alarms you, when to clean the ducts.

When the alarm about Duct clogging is on display of the panel, your duct vents should be cleaned by yourself or serviceman.

Flow Sensor Function



■ How does the Flow sense function display the clogging of duct ?



The FlowSense[™] display consists of four bars inside a box. The display has only three possible displays as only three possible displays as shown here (Also see the figure shown below):

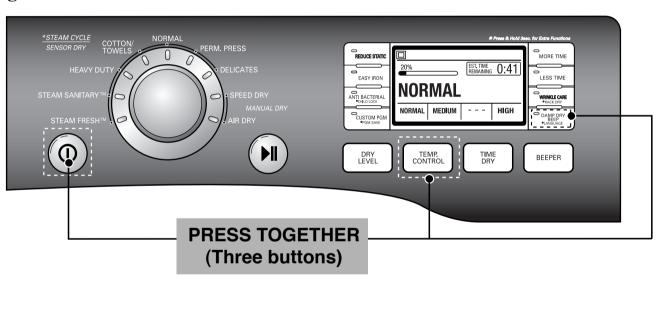
- 1 No bars displayed.
- 2 2 bars displayed.
- 3 4 bars displayed.

9-2 Installation check

This feature allows you to quickly verify that the exhaust system is adequate for the normal function of the dryer. The check takes only two minutes. The results of the check are displayed in the FlowSense display window as shown below

(Fig. 1). The dryer must be at room temperature for this test to be reliable. To perform this test, start the machine in standby mode (power off). Press and hold both the **DAMP DRY BEEP** and the **TEMP CONTROL** buttons together while turning on the dryer with the POWER button i.e. Press together the three buttons **DAMP DRY BEEP + TEMP CONTROL + POWER.** The dryer will start and run for 2 minutes while it checks temperatures. At the end of this short cycle, it will display the results as follows.

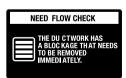
Fig.1



After Installation Check, If duct shows....



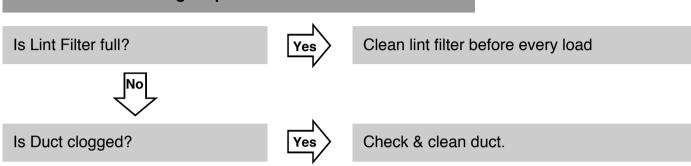
If NO Bars are shown in the display, ductwork is free from any blocking or restrictions.



If 4 Bars are shown in the display, ductwork is blocked and need to be cleaned immediately.

9-3 Troubleshooting for flow sensor dryer

1. Flow sensor bars light up

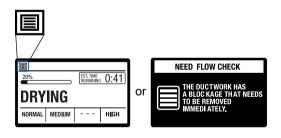


2. Flow sensor bars light up and does not disappear.

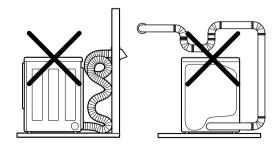
- 1. Flow sensor lights up 2 bars even when vents have been clean and even when the vents are off.
 - → **This is Normal.** After Flow sensor Recheck Full Next Cycle, Flow sensor is Reset. (Flow sensor bars will disappear after Dryer has operated two cycle)
- 2. Is Flow sensor display changed from 4 bars to 2 bar after cleaning the duct.
 - → Ductwork is slightly too long or has too many elbows.
 - → Dryer can be used in this condition.

■ Displayed and Don't disappear Bars

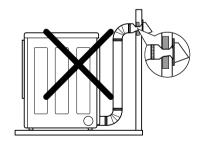
*Control Panel



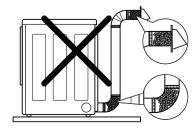
Avoid long runs of ducts or runs with multiple elbows or bends.



Make sure that the ductwork is not crushed or restricted.



Check for blockages and lint build up.



10

DIAGNOSTIC TEST

- 1. This TEST should be used for Factory test /Service test. Do not use this DIAGNOSTIC TEST other than specified.
- 2. Activating the Heater manually with the Door open may trip the Thermostat attached to the Heater, therefore do not activate it manually. (Do not press the door switch to operate the heater while the door is open)

■ ACTIVATING THE DIAGNOSTIC TEST MODE

- 1. UNIT must be in standby (unit plugged in, display off)
- 2. Press POWER while pressing MORE TIME and LESS TIME simultaneously.
- 3. Press START/PAUSE button to advance through diagnostics.

| Pressing the START/PAUSE | CHECKING ACTION | DISPLAY | CHECKPOINT |
|--------------------------|---|--|---|
| None | Electric control | LQC TEST VERSION ELECTRODE XXX TEMPERATUER XXX SG TEMP XXX SG SHORT XXX SG LONG XXX | Standard |
| | Temperature sensor | tE1 | Thermistor open |
| | | tE2 | Thermistor shorted |
| | | tE4 | AG Thermistor open or shorted |
| | | 30 = Low | Motor runs |
| Once | Motor+Controller | moisture 239 = High moisture | Displays Moisture Sensor Operation: If moisture sensor is contacted with damp cloth. The display number is below180innormalcondition |
| Twice | ■ELECTRIC TYPE Motor+Heater1(2700W) ■GAS TYPE Motor+Gasvalve | Current Temp. (5~70) | ■ ELECTRIC TYPE Heater 1 is energized - 2700 W ■ GAS TYPE Valve runs (Temperature in the drum is displayed in degrees C.) |
| 3 times | ■ELECTRIC TYPE Motor+Heater1+Heater2 (5400W) ■GAS TYPE Motor+Gasvalve | Current Temp. (5~70) | ■ ELECTRIC TYPE: Heater 1 and heater 2 are energized - 5400 W ■ GAS TYPE: Gas valve is energized (Temperature in the drum is displayed in degrees C.) |
| 4 times | Motor+Pump+ Heater2(runs for 1sec) | Pump AD valve (11~255) | Pump runs |
| | (Heater1 off) | E5 | Pump Error |
| 5 times | Motor,Pump,Heater2 off | 00 | |
| 6 times | Loads, Controller off | | Power off |

* To check pump operation:

When pressed 4 times in the test mode, If the AD value of the pump is higher than 10 on the display, the pump is normal. If it is lower than 10, E5 error will be displayed.

■ **Test 1** 120V AC Electrical supply

| When measuring power, be sure to wear insulated g electric shock. | loves, to | and avoid an |
|--|---|--|
| No power was applied to Controller. (LED,LCD Disp | lay off) | |
| With Dryer Power On; Connector linked to Controlle | r. | |
| | _ | |
| Check the outlet, is the voltage 110V ~ 125V AC? | NO | Check the fuse or circuit breaker. |
| YES | | |
| 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. | | |
| | No power was applied to Controller. (LED,LCD Disp With Dryer Power On; Connector linked to Controlle Check the outlet, is the voltage 110V ~ 125V AC? YES 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? 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 power was applied to Controller. (LED,LCD Display off) With Dryer Power On; Connector linked to Controller. Check the outlet, is the voltage 110V ~ 125V AC? YES 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? 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? |

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

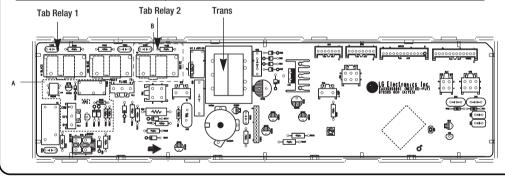
1.Power Connection

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

| | Tab Relay 1 | Tab Relay 2 | Heater 1 | Heater 2 | Remark |
|----------------------------|-------------|-------------|----------|----------|--|
| High Mid High Medium | on | on | on | on | Temperature Control below 68±4°C. Turn on Heater1 and Heater2. |
| Low Extra Low | on | off | on | off | Temperature Control below $52\pm4^{\circ}\text{C}$. Only Turn on Heater1. |

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

| | Tab Relay 1 | Burner | Remark |
|----------------------------|-------------|--------|---|
| High Mid High Medium | 0 | 0 | Temperature Control below 70±4°C. Turn on Burner |
| Low Extra Low | 0 | 0 | Temperature Control below 47±4°C. Turn on Burner |



₩ PCB ASSEMBLY LAYOUT

2. Status Mode Of The Connection

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

| | 0-1 | Connection | | Domayle | |
|-------------------|-------|--|-------------|--|--|
| | Color | Harness | PCB | Remark | |
| Connector Housing | Black | Yellow Wire Black Wire Connector Housing | Tap relay 1 | Check the Matching color Between Harness wire and Tab Relay. (Black Housing – Black Tab Relay) | |
| | White | Blue Wire Black Wire Connector Housing | Tap relay 2 | Check the Matching color Between Harness wire and Tab Relay. (White Housing – White Tab Relay) | |

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

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

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 |

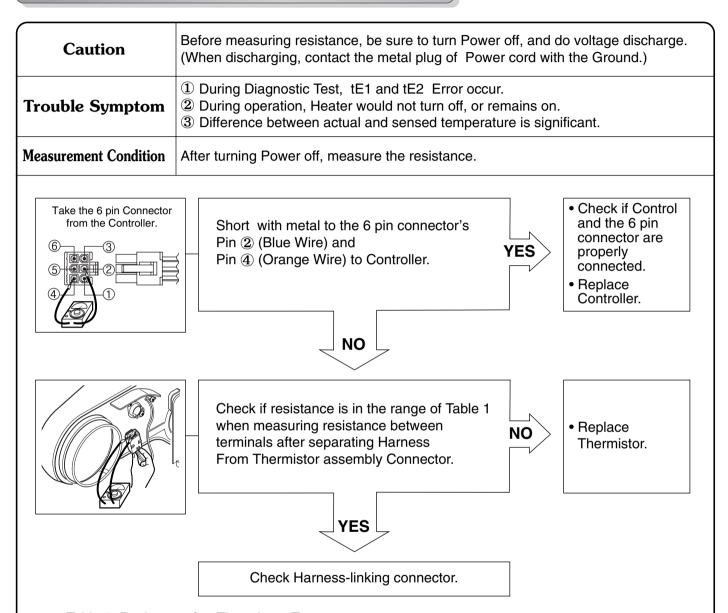
< Table2 > : Wrong Connection of the Tab Relay and Connector Housing (Gas)

| 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 |

A CAUTION

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

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



■ Table 1. Resistance for Thermistor Temperature.

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

■ Test 3 Motor test

| Caution | Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with earth line.) | | | | | | |
|---------------------------------|---|--|--|--|--|--|--|
| Trouble Symptom | Drum will not rotate; No fan will function; No Heater will work. | | | | | | |
| Measurement Condition | Turn the Dryer's Power Off, then measure resistance. | | | | | | |
| WH 1 BL2 1 2 BL2 1 2 | Is resistance below 3Ω between Connector WH① (White wire) and BL2-② (Brown wire)? ** Measure while door is closed. Is resistance below 3Ω between Connector WH① (White wire) and BL2-① (Yellow wire)? ** Measure while door is closed. YES Is resistance below 3Ω between Connector YES Is resistance below 3Ω between Connector YES Is resistance below 3Ω between Connector YES | Replace Control. (Relay check) Check Controller connector. Check if Door flame presses door switch knob. Check Door Switch. Check Harness connection. Replace Control. (Relay check) | | | | | |
| | BL2-① (Yellow wire) and BL2-② (Brown wire)? NO Is resistance below 1Ω between terminals of Outlet Thermostat attached to blower housing? YES | Check Controller connector. Replace Outlet Thermostat. (Refer to 'Component') | | | | | |
| Idler Switch Lever Idler Switch | Does Idle Switch attached to Motor Bracket operate Level by drum belt? (Not operating Lever is normal.) Is resistance below 1Ω between Idler Switch | Check Idler Assembly. Drum Belt cuts off Trum Belt takes off from Motor Pulley. Replace Idler | | | | | |
| | • Check Motor. (Refer to 'Motor Diagram & Check') • Check if Control Connector is contacted. | Switch. | | | | | |

■ 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 | Э. | | | | | |
| Take 6pin Connector from the Controller. 6 3 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 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 | Check Electro Load and Harness Connector. Check Harness-linking connector. | | | | |
| Damping clot | 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)? YES | NO | Replace Control and Check. | | | | |
| | Normal Condition | | | | | | |

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

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

■ Test 5 Door switch test

| Caution | Before measuring resistance, be sure to turn Power (When discharging, contact the metal plug of Powe | | |
|-----------------------|--|-----|---|
| Trouble Symptom | Door Opening is not sensed.(During operation, when Heater run continuously) Door Close is not sensed. (Drum motor will not operate. Display will flash at 0.5 | | |
| Measurement Condition | After turning Dryer Power Off, measure resistance. | | |
| BK2 WH1 | Measure while Door is closed. Check it resistance is below 2500 Ω between WH1-①(White wire) and BK2-② Connector WH1,BL2 after taking WH1,BL2 out from Controller. | YES | Door switch Check (Refer to Component testing.) |
| | 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. | NO | Check Lamp. (When opening Lamp, replace then measure again.) Door switch Check(Refer to Component testing.) |
| WH 1 BL2 | 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 | Door switch Check (Refer to Component testing.) |
| 1 2 | NO | | |
| | Measure while Door is closed. Check it resistance is below 1 Ω between BL2- $\mathbb{Q}(Yellow wire)$ and WH1- $\mathbb{Q}(White wire)$ after taking Connector WH1,BL2 out from Controller. | NO | Door switch Check (Refer to Component testing.) |
| | YES | | |
| | Check Controller. Check Harness-linking connector. | | |

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

| Caution | Before measuring resistance, be sure to turn Power of (When discharging, contact the metal plug of Power of Pow | | |
|-----------------------|--|----|---|
| 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? | NO | • Replace Heater. |
| YES | | | |
| TH3 TH2 | Check if the value of measured resistance is below 1Ω between terminal TH2 (Safety Thermostat). | NO | Replace TH2 (Safety Thermostat) and TH3 (Hi-Limit thermostat) |
| | Check if the value of measured resistance is below 1Ω between terminal TH3 (HI-Limit Thermostat). | NO | Replace TH2 (Safety Thermostat) and TH3 (Hi-Limit thermostat) |
| | Check Motor. Check if the value of measured resistance is below 1Ω between terminal 1 and 10 at RUN condition. | NO | Check Motor and replace it. |
| | YES | l | |
| | Check Controller. Check Harness-linking Connector. | | |

■ Test 7 GAS Valve test - Gas Type

| Caution | When measuring power, be sure to wear insulated g | loves, to | avoid electric shock. |
|-----------------------|---|-----------|--|
| Trouble Symptom | While operating, Heating will not work. Drying time takes longer. | | |
| Measurement Condition | With dryer power on | | |
| | Power On & Start (Normal Cycle) | | |
| Valve 1 | When measuring Valve 1 voltage, More than DC 90V? | NO | Check thermostat Hi limit Safety |
| | YES | | |
| | Igniter operates? (after 1 min, Igniter becomes reddish) | NO | Check Igniter & Frame detect |
| Igniter | YES | | |
| Valve 2 | When measuring Valve 2 voltage, Value is more than DC 90V? (10 sec after Igniter off) | YES | Check Gas connection or Gas supply |
| | NO | | |
| | When measuring terminal resistance on Valve 1 and Valve 2, Valves are more than 1.5 ~ 2.5 k Ω ? (Measure after Off) | YES | Change Valve |
| | NO | | |
| | If "Valve 1 " and "Valve 2" are under DC 10V, Valves are Off? | NO | Change Valve |
| | YES | | |
| | Harness check Controller change | | |
| | Controller change we operates after disassembling, ignition will be off several see see there is no circulation of air. | conds. | |

■ Test 8 Semi Conductor

| 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 Resistance is not in 300°æ30 Ω | |
| Measurement Condition Turn the Dryer's Power Off, then measure resistance. | | |
| Take 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 |

■ Test 9 Motor Assembly, DC, Pump

| 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 | During Diagnostic Test, E5 Error occur. | |
| Measurement Condition | Turn the Dryer's Power Off, then measure resistance. | |
| | After activating the *diagnostic test, press START/PAUSE button 4 times. Is AD value displayed higher than 10 ? YES • Replace the DC Pump | |
| | Normal condition | |
| * diagnostic test : go to page | e 22 | |

■ Test 10 Generator Assembly

| 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 | During Steam cycle, Generator Assembly is not heating. During Diagnostic Test, tE4 Error occur. | | | | |
| Measurement Condition | Turn the Dryer's Power Off, then measure resistance. | | | | |
| | Is resistance 14.3 Ω ($\pm 5\%$) between Heater terminal ① and ② ? • Replace the Generator Assembly • If measured resistance value is ∞ , replace the Generator Assembly too. | | | | |

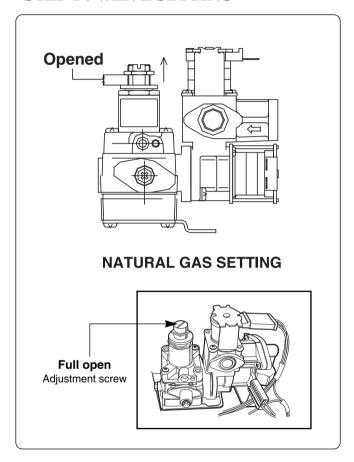
CHANGE GAS SETTING (NATURAL GAS, PROPANE GAS)

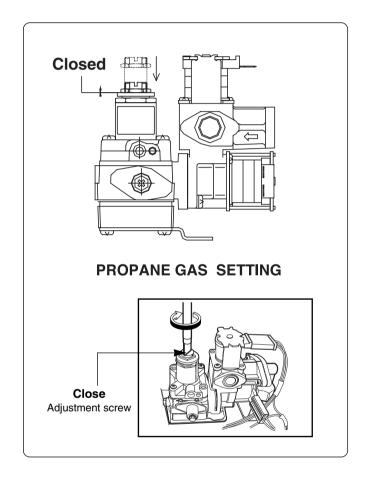
A Warning

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

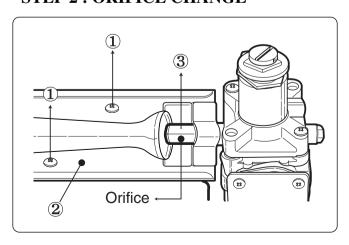
Initially, Natural Gas mode is set. Propane Gas Orifice is on sale as a Service Part to authorized servicers only.

STEP 1: VALVE SETTING





STEP 2: ORIFICE CHANGE

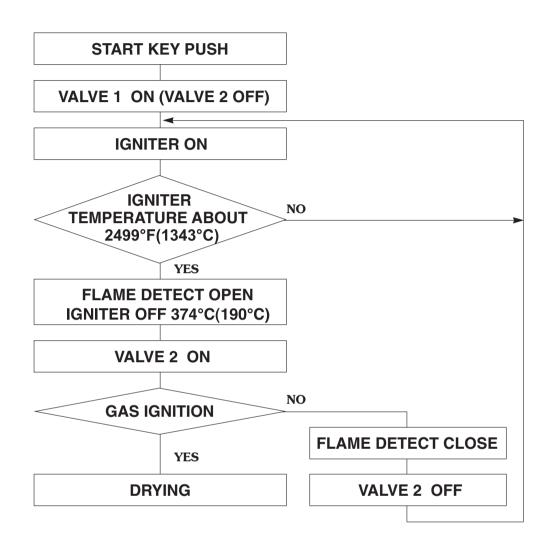


- 1 Remove 2 screws.
- 2 Disassemble the pipe assembly.
- (3) Replace Natural Gas orifice with Propane Gas orifice.

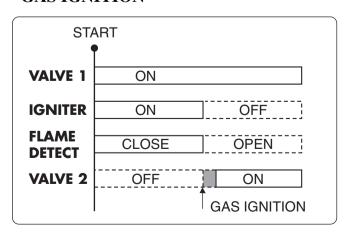
| Gas type | Orifice P/No | Marking | Shape |
|-------------|--------------|---------|-------|
| Natural Gas | 4948EL4001B | NCU | |
| Propane Gas | 4948EL4002B | PCU | |

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

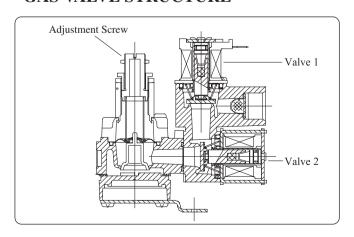
■ GAS VALVE FLOW



GAS IGNITION



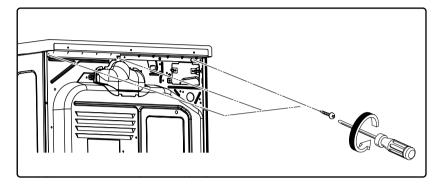
GAS VALVE STRUCTURE



DISASSEMBLY INSTRUCTIONS

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

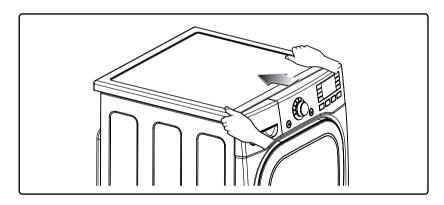
TOP PLATE



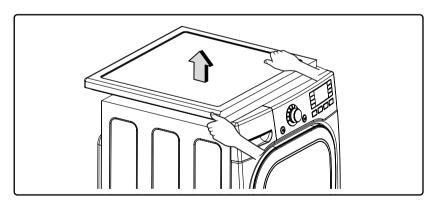
A WARNING!

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

1. Remove 3 screws on the upper plate.

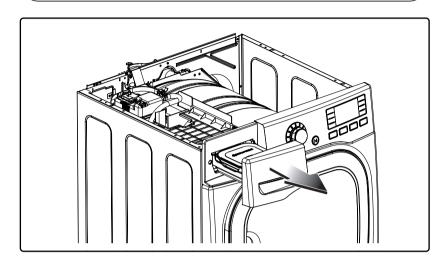


2. Push the top plate backward.

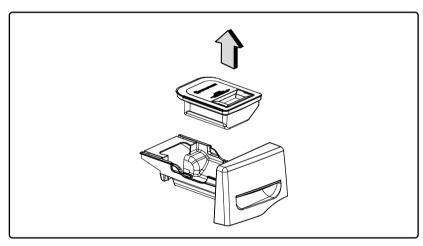


3. Lift the top plate

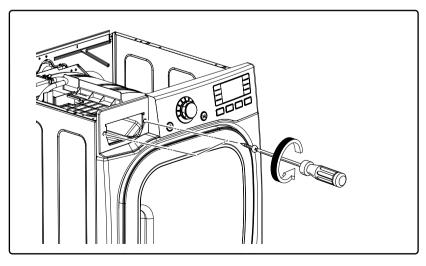
PANEL DRAWER ASSEMBLY



1. Pull out the drawer

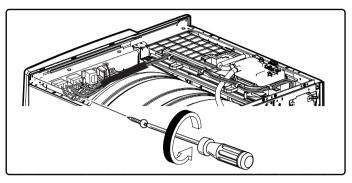


2. Lift out the Steam feeder.



3. Remove 2 screws on the control panel.

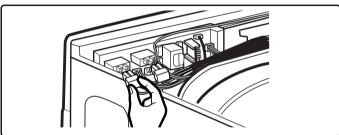
CONTROL PANEL ASSEMBLY



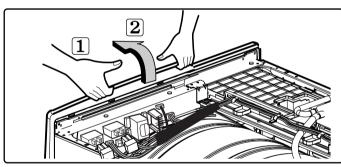
A WARNING!

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

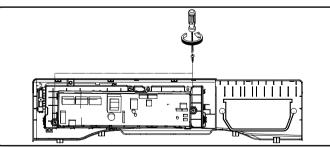
1. Remove 1 screw on the control panel frame.



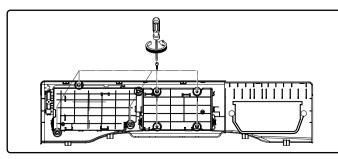
2. Disconnect the connectors.



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

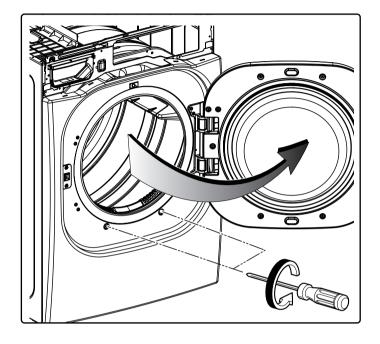


- **4.** Remove 2 screws on the PWB(PCB) assembly, main.
- **5.** Disassemble the main PWB



- **6.** Remove 8 screws on the PWB(PCB) assembly, display.
- 7. Disassemble the display PWB

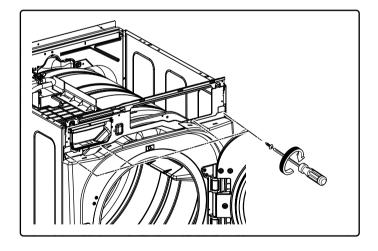
COVER CABINET



A WARNING!

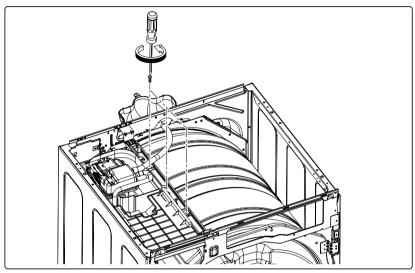
When you disassemble the door switch connector, be sure to take gloves and careful cabinet edge. Failure to do so can cause serious injury.

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

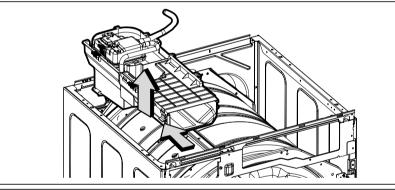


- **5.** Remove 3 screws from the top of cabinet cover.
- **6.** Disconnect the harness of door switch.

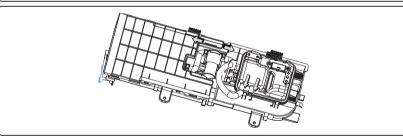
GUIDE ASM



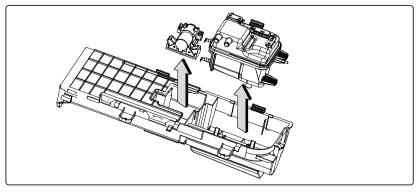
1. Remove 3 screws on the frame body.



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

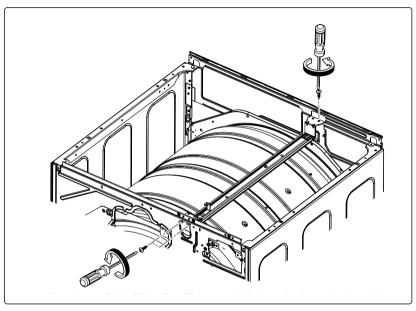


3. Separate 2 hoses from the pump and generator.

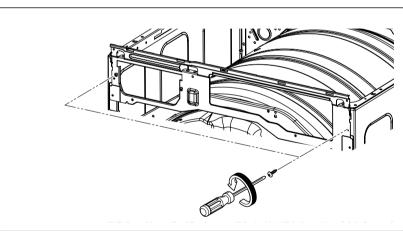


4. Lift a pump and a generator up.

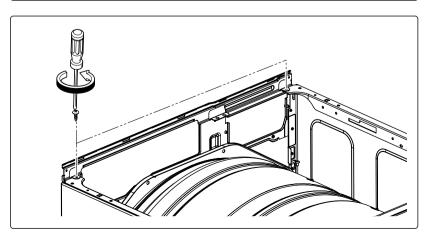
FRAME BODY & PANEL FRAME



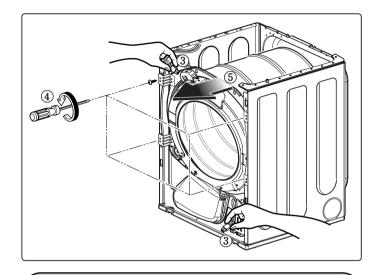
1. Remove 3 screws on the frame body and then disassemble the frame body.



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



TUB DRUM [FRONT]

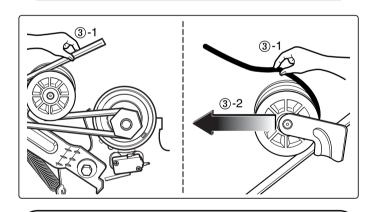


A WARNING!

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

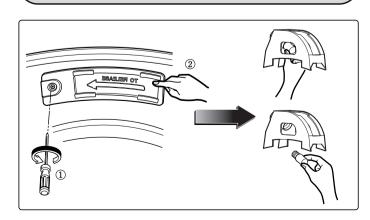
- 1. Disassemble the top plate.
- 2. Remove Cover Cabinet.
- **3.** Disconnect the door lamp and electrode sensor connector.
- 4. Remove 4 screws.
- **5.** Disassemble the Tub Drum [Front].

DRUM ASSEMBLY



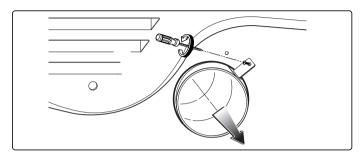
- 1. Disassemble the top plate.
- **2.** Remove the Cabinet Cover and Tub drum [front].
- 3. Loosen belt from motor and idler pulleys.
- **4.** Carefully remove the drum.

CHANGING THE DRUM LAMP

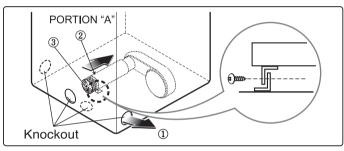


- 1. Disassemble the door.
- 2. Hold the lamp shield in place while removing the screw.
- **3.** Slide the shield up and remove.
- **4.** Remove the bulb and replace with a 15 watt, 120 volt candelabra-base bulb.
- 5. Replace the lamp shield and screw.

DRYER EXHAUST CHANGE

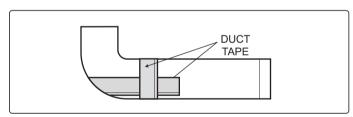


1. Remove a screw and the exhaust duct.

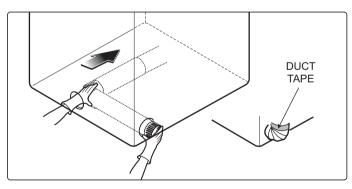


2-1. Detach and remove a knockout at the botton, left or right side as desired. (Right Side Vent not available on Gas dryer)

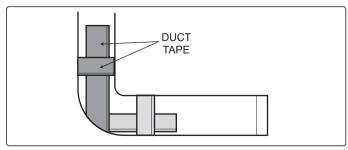
①, ②, ③ the order of work.



2-2. Reconnect the another duct [11 in (28cm)] to the blower housing, and attach the duct to the base. (Duct is a SVC part)

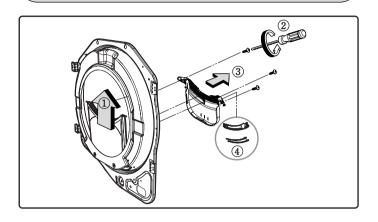


3-1. Pre-assemble 4" elbow with 4" duct. Wrap duct tape around joint.



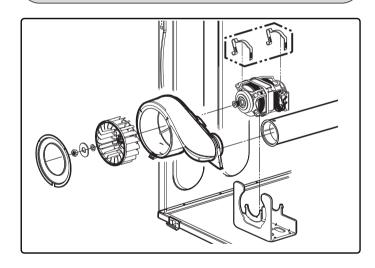
3-2. Insert the elbow duct assembly through the side opening and connect the elbow to the internal duct.

FILTER ASSEMBLY



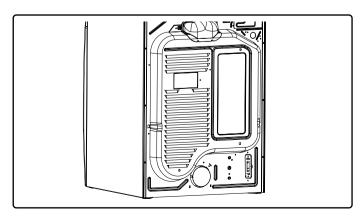
- **1.** Remove the filter.
- 2. Remove 3 screws.
- 3. Remove the Cover Grid.
- **4.** Disconnect the electrode sensor.

BLOWER HOUSING



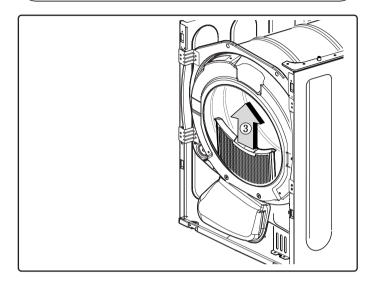
- **1.** Disassemble the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- **3.** Remove the Drum assembly.
- 4. Remove 2 screws and cover (Air guide).
- **5.** Remove the bolt and washer.
- **6.** Remove the fan.
- **7.** Disconnect the motor clamp and motor.

BACK COVER

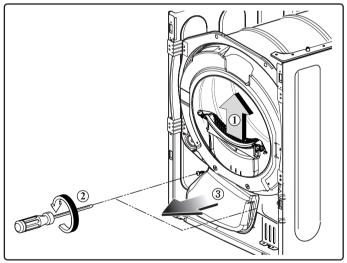


- **1.** Disassemble the top plate.
- 2. Remove the Cabinet Cover and Tub Drum [Front].
- **3.** Remove the Drum assembly.
- 4. Remove 7 screws.
- **5.** Remove the Back Cover.

AIR DUCT

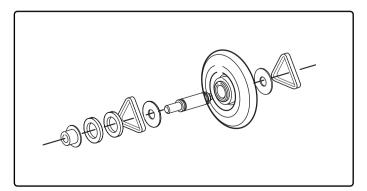


- **1.** Disassemble the top plate.
- **2.** Remove the Cover Cabinet.
- **3.** Remove the filter.



- **1.** Remove the Cover guide.
- 2. Remove 2 screws.
- **3.** Remove the air duct.

ROLLERS

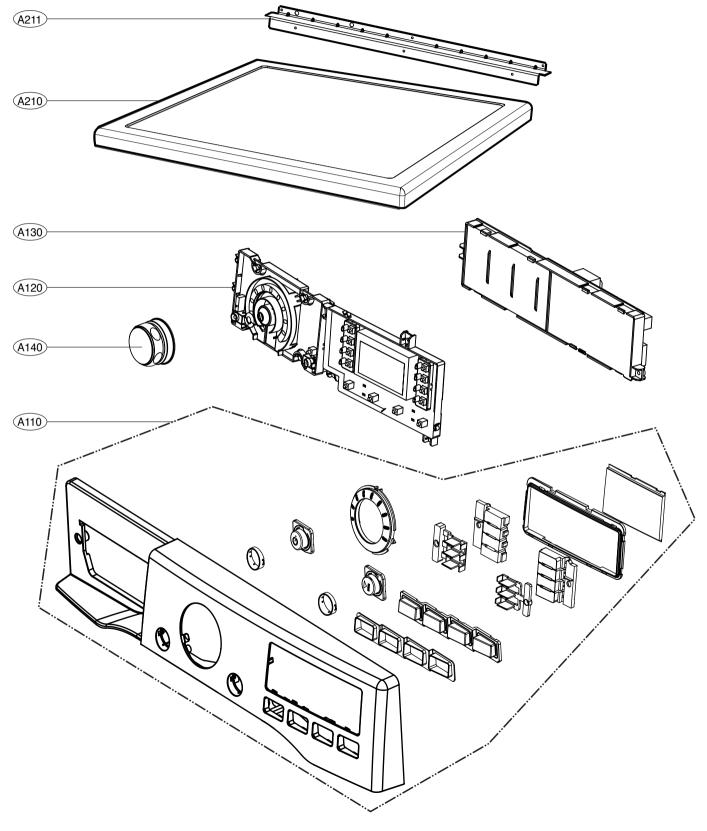


- **1.** Disassemble the top plate.
- 2. Remove the Cover Cabinet and Tub Drum [Front].
- **3.** Remove the Drum assembly and Tub Drum [Rear].
- **4.** Disconnect the Air duct from the Tub Drum [Front].
- **5.** Remove the roller from the Tub Drum [Front] and Tub Drum [Rear].

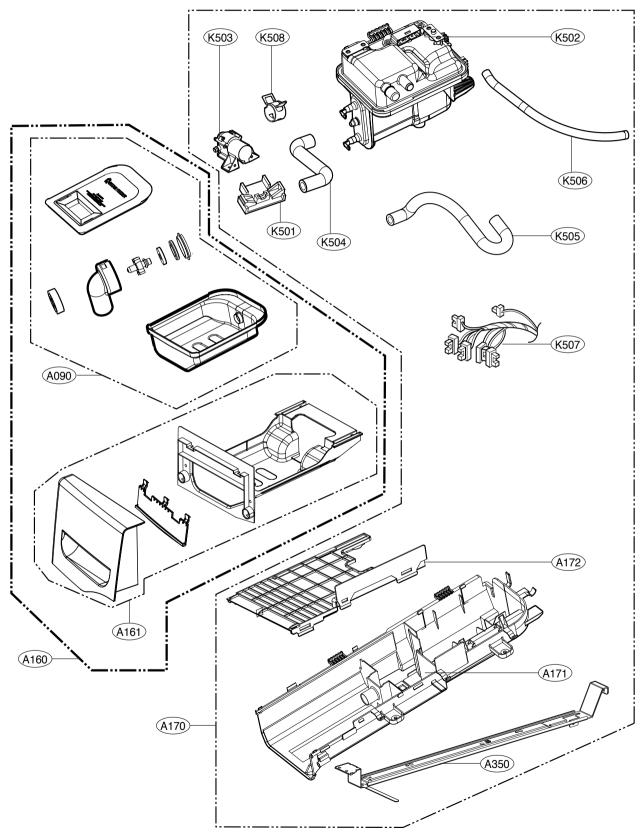
13

EXPLODED VIEW

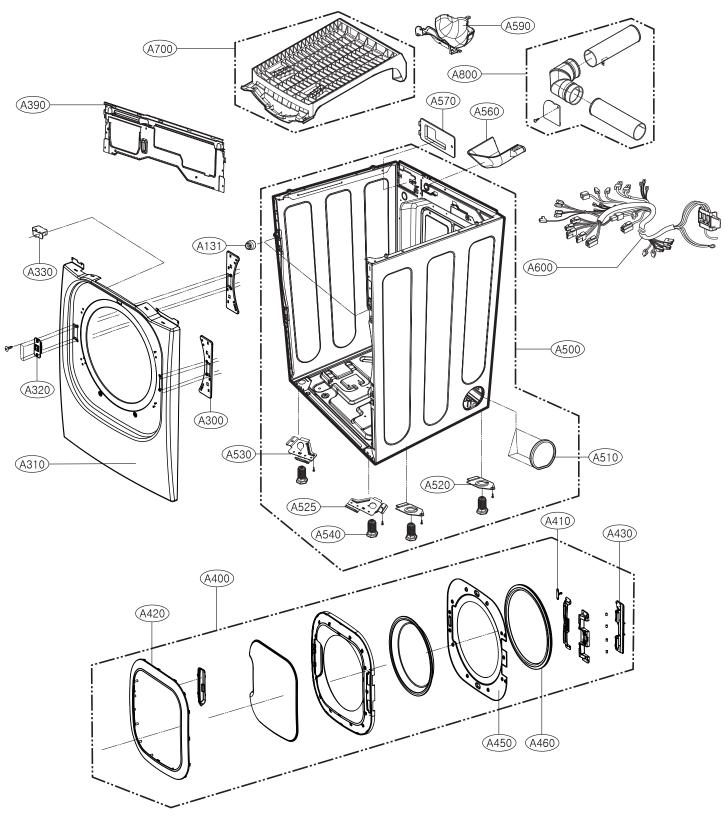
13-1. Control Panel & Plate Assembly



13-2. Panel Drawer Assembly & Guide Assembly



13-3-1. Cabinet & Door Assembly: Electric Type



13-4-1. Drum & Motor Assembly: Electric Type

