



LG

U.S.A. Website: <http://us.lgservice.com>
Canadian Website: <http://lg.ca>

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

DLEX3885*

DLEX3875*

Gas

DLGX3886*

DLGX3876*



JAN. 2010 PRINTED IN KOREA

P/No.: MFL62119907

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.

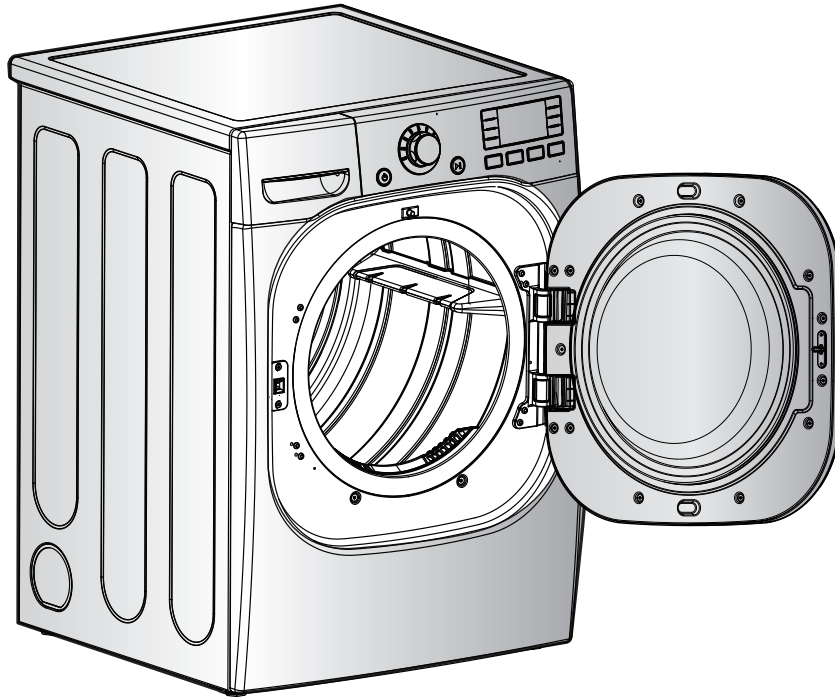
- Before removing the part from its package, touch the anti-static bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly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

CONTENTS

1. SPECIFICATIONS	4
2. FEATURES AND BENEFITS	6
3. INSTALLATION INSTRUCTIONS	6
4. DRYER CYCLE PROCESS	13
5. COMPONENT TESTING INFORMATION	14
6. MOTOR DIAGRAM AND SCHEMATIC	17
7. WIRING DIAGRAM	18
8. STEAM FUNCTION	19
8-1. STEAM CYCLE GUIDE	19
8-2. TROUBLESHOOTING FOR STEAM DRYER	20
8-3. DISPLAY FAULT/ERROR CODES FOR STEAM DRYER	21
9. FLOW SENSOR FUNCTION	22
9-1. FLOW SENSOR	22
9-2. INSTALLATION CHECK	23
9-3. TROUBLESHOOTING FOR FLOW SENSOR DRYER	24
10. DIAGNOSTIC TEST	25
10-1. TEST 1 120V AC ELECTRICAL SUPPLY	26
10-2. TEST 2 THERMISTOR TEST - MEASURE WITH POWER OFF	29
10-3. TEST 3 MOTOR TEST	30
10-4. TEST 4 MOISTURE SENSOR	31
10-5. TEST 5 DOOR SWITCH TEST	32
10-6. TEST 6 HEATER SWITCH TEST - ELECTRIC TYPE	33
10-7. TEST 7 GAS VALVE TEST - GAS TYPE	34
10-8. TEST 8 SEMI-CONDUCTOR	35
10-9. TEST 9 MOTOR ASSEMBLY, DC, PUMP	35
10-10. TEST 10 GENERATOR ASSEMBLY	36
11. CHANGE GAS SETTING (NATURAL GAS, PROPANE GAS)	37
12. DISASSEMBLY INSTRUCTIONS	39
13. EXPLODED VIEW	49
13-1-1. Control Panel and Plate Assembly (Touch LCD type)	49
13-1-2. Control Panel and Plate Assembly	50
13-2. PANEL DRAWER ASSEMBLY and GUIDE ASSEMBLY	51
13-3-1. CABINET and DOOR ASSEMBLY: ELECTRIC TYPE	52
13-3-2. CABINET and DOOR ASSEMBLY: GAS TYPE	53
13-4-1. DRUM and MOTOR ASSEMBLY: ELECTRIC TYPE	54
13-4-2. DRUM and MOTOR ASSEMBLY: GAS TYPE	55

1

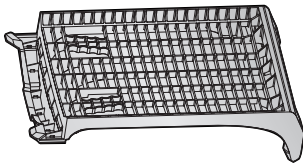
SPECIFICATIONS



- 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



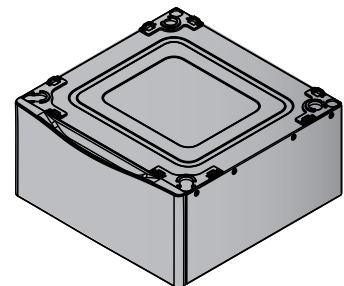
Dryer rack (1 each)

See page 6



Stacking kit (1 each)
Purchased Separately

See page 7



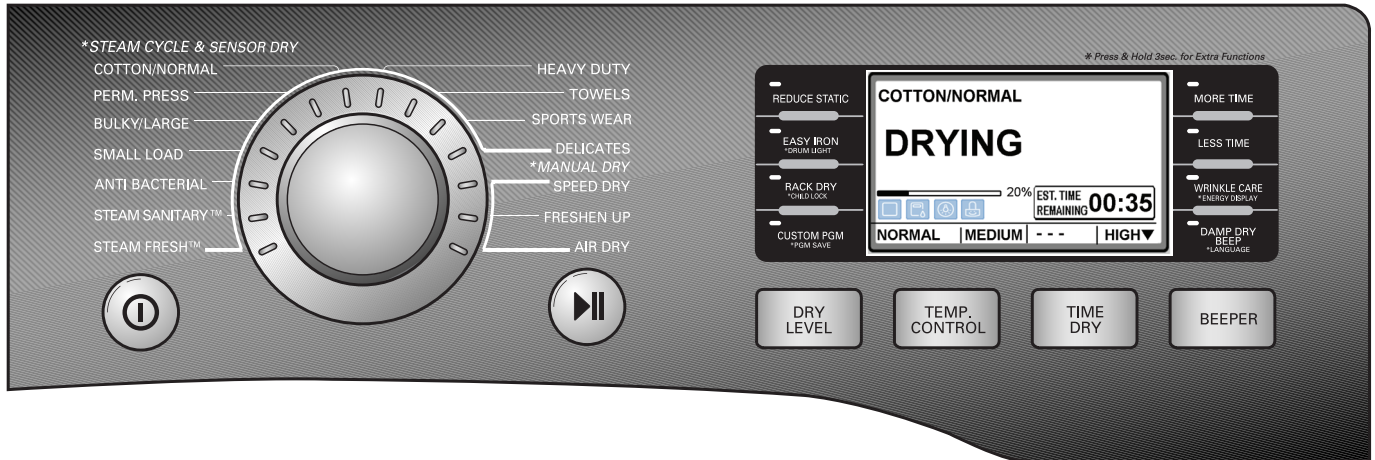
Pedestal (1 each)
Purchased Separately

See page 8

ITEM		DLEX3885* DLEX3875*	DLGX3886* DLGX3876*	REMARK
Material & Finish	Color	Blue White / Stainless Silver / Vintage Gold		
	Top Plate	Porcelain		
	Door Trim	Chromate		
POWER SUPPLY		120V/240V 60Hz (26A)		
ELECTRICITY CONSUMPTION	MOTOR	250W (4.5A)		AC 120V
	HEATER	5400W (22.5A)		AC 240V (ELECTRIC MODEL)
	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)
CONTROL TYPE		Electronic		
DRUM CAPACITY		7.4 cu.ft.		AC 240V (ELECTRIC MODEL)
Weight (lbs) - Net/Gross		136 / 155.7		
No. of Programs		9		
No. of Dry Options		5		
No. of Temperature Controls		5		
No. of Dry Levels		5		
Sound levels		5		
Sensor	Moisture	Available		Electrode sensor, Dual Sensor
	Temperature	Available		Thermistor, Dual Sensor
Reversible Door		Available		
Drum		Stainless Steel		
Dryer Rack		Available		
Child Lock		Available		
Interior Light		Available		
Product (WxHxD)		27" x 42 3/4" x 28 1/3"		
Packing (WxHxD)		29 1/2" x 44 3/4" x 30 3/4"		

2

FEATURES AND BENEFITS



3

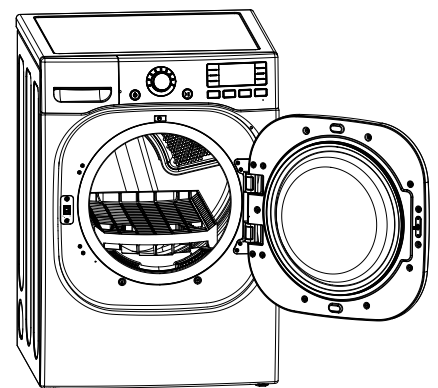
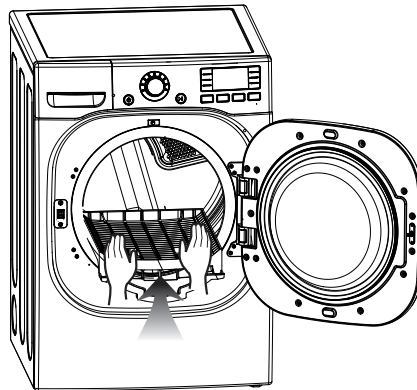
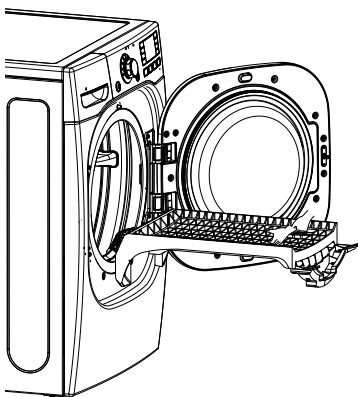
INSTALLATION INSTRUCTIONS

Dryer Rack Installation Instructions

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

2 Put the dryer rack into the drum

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



Stacking Kit Installation Instructions

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

WARNING

Do not attempt this alone!

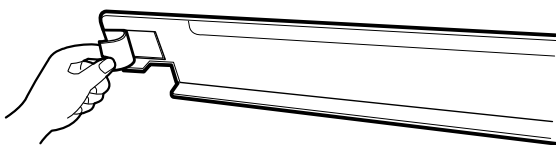
At least two people are required to lift and position the dryer on top of a washing machine!

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

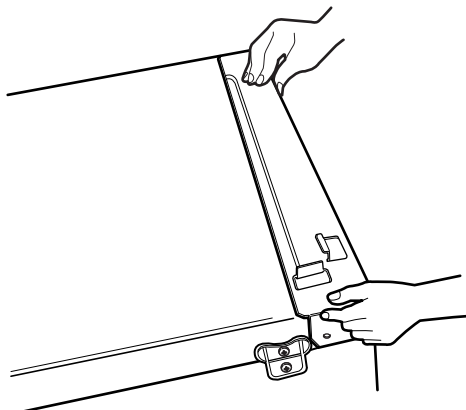


Stacking kit

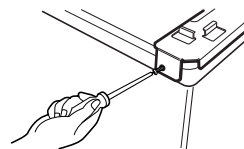
- 1 Place the washer firmly on a stable, even and solid floor as product installation instructions describe in the owner's manual.
- 2 Peel the protective paper from the tape on the side bracket.



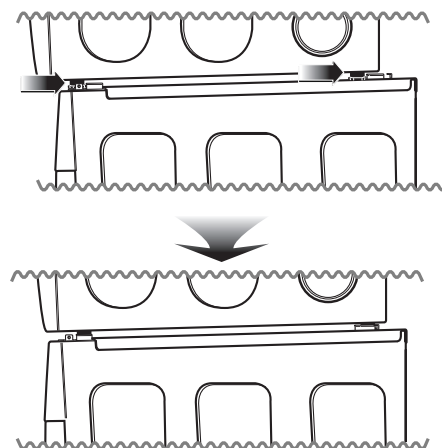
- 3 Fit the side bracket firmly to the side of the top plate by attaching the double-faced tape to the top plate as picture shown.



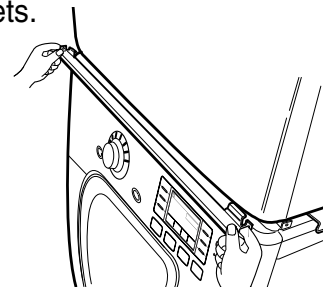
- 4 Secure the side bracket to the washer with a screw on the back of the bracket. Repeat Steps 2, 3, and 4 for the other side.



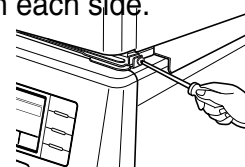
- 5 Place the dryer on top of the washer by placing the legs as shown. Be careful not to pinch fingers between the washer and dryer. Slide the dryer back against the stop on the side rail.



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



- 7 Attach the front bracket to the side rails with a screw on each side.

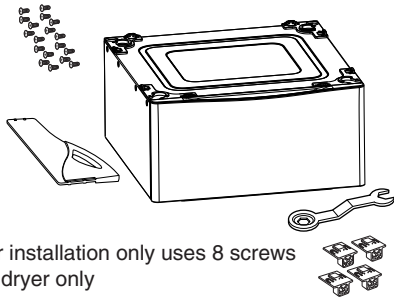


- Do not use a stacking kit with a gas dryer in potentially unstable conditions like a mobile home.

Pedestal Installation Instructions

The pedestal accessory includes:

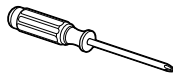
- Drawer divider (1)
- Wrench (1)
- Screws (18) †
- T-clips (4) ††



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

Tools Needed for Installation:

- Phillips-head screwdriver
- Wrench (supplied)

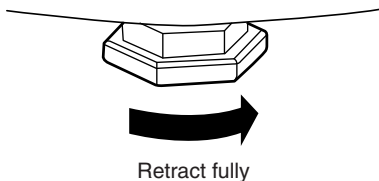


To ensure safe and secure installation, please thoroughly follow the instructions below.

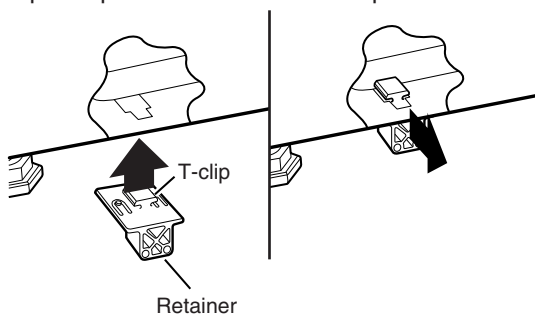
⚠ WARNING

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

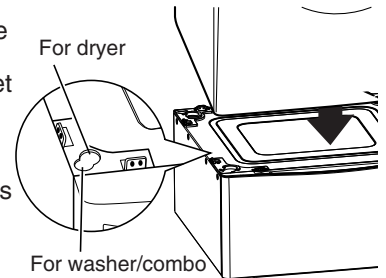
- 1 Make sure the leveling feet of the dryer are fully retracted.
NOTE: The appliance and pedestal assembly must be placed on a solid, sturdy, level floor for proper operation.



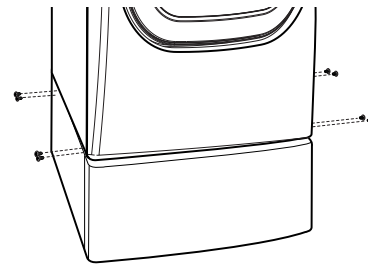
- 2 Insert the T-clip of the 4 retainers into the dryer base as shown. Press up on the back of the clip and pull outward to lock into place.



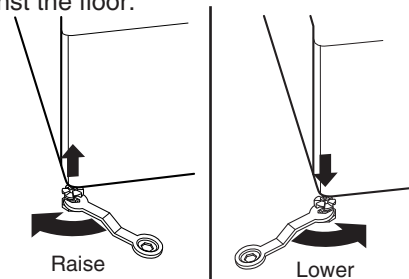
- 3 Place the dryer on the pedestal. Make sure the front and back feet are in the correct positions. The dryer feet will fit into the innermost positions as shown.



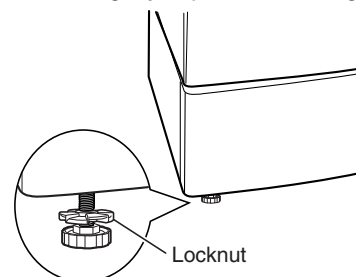
- 4 Make sure the screws on the pedestal align with the holes in the retainers, then install 4 screws on each side to securely attach the appliance to the pedestal.
NOTE: If the screws are not installed properly, noise and vibration may result.
 Move the appliance to the desired location.



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




- 6 Securely tighten all locknuts by hand.
NOTE: Noise and vibration may result if locknuts are not tightened.
 Be sure to connect the appliances to all water, power, or gas lines and draining or venting connections before operation.
 If there is excessive vibration during the first operation after installation, slightly adjust the leveling feet.




Electric Dryer Only

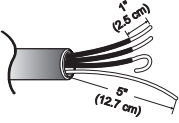
Review the following options to determine the appropriate electrical connection for your home:

	<p>4-wire receptacle (NEMA type 14-30R)</p>
---	--

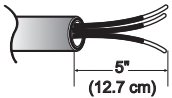
Use the instructions under option 1 if your home has a 4-wire receptacle (NEMA type 14-30R).

	<p>3-wire receptacle (NEMA type 10-30R)</p>
---	--

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.

	<p>4-wire direct</p>
---	-----------------------------

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

	<p>3-wire direct</p>
---	-----------------------------

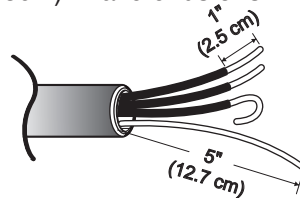
If this type is available at your home, you will be connecting to a fused disconnect or circuit breaker box

4-wire connection : Direct wire

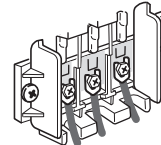
Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

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

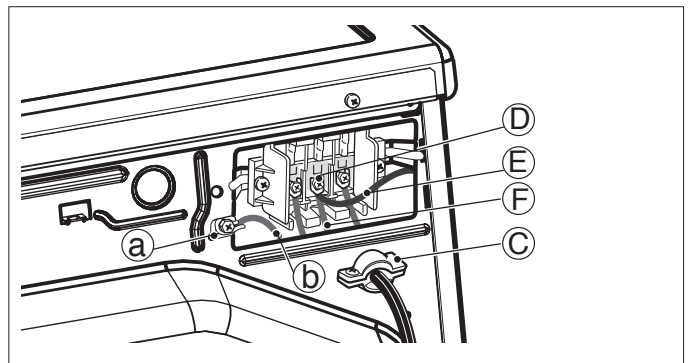
First, peel 5 inch (12.7cm) of covering material from end. Make a 5 inch of ground wire bared. After cutting 1½ inch (3.8cm) from 3 other wires, peel insulation back 1inch (2.5cm). Make ends of 3 wires a hook shape.



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



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

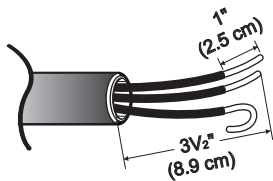


3-wire connection : Direct wire

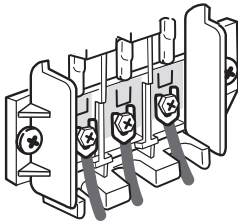
Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, and (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor.

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

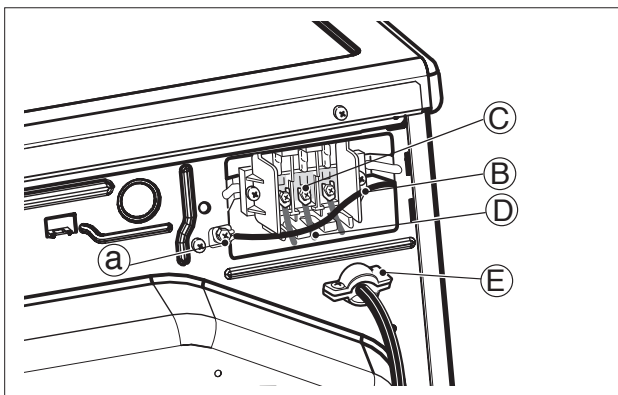
First, peel 3 1/2 inch (8.9cm) of covering material from end and bare 1 inch from the ends.



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

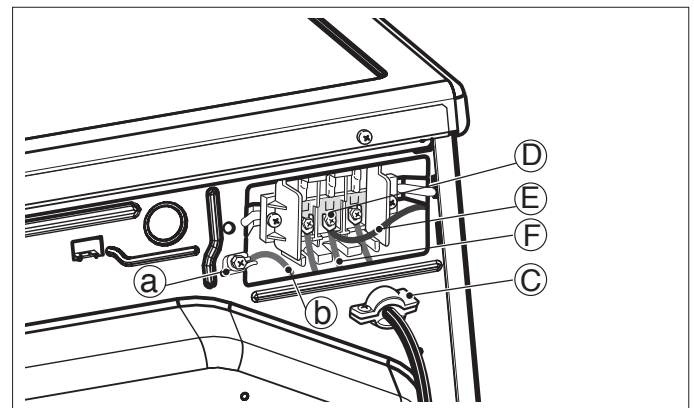
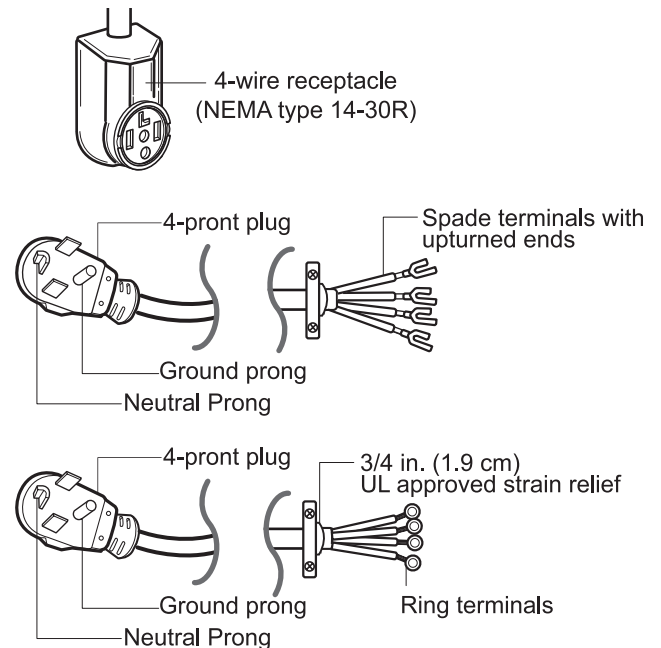


1. Connect neutral wire (white) of power cord to center terminal block screw.
2. Connect red and black wire to the left and right terminal block screws.
3. Make sure that the strain relief screw is tightened and be sure that all terminal block nuts are on tight and power cord is in right position.



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

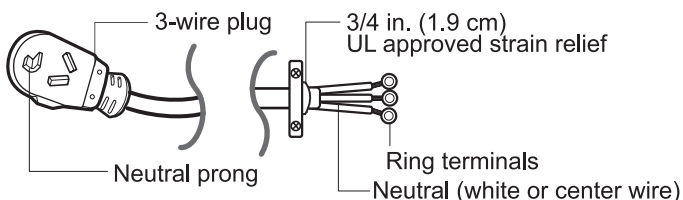
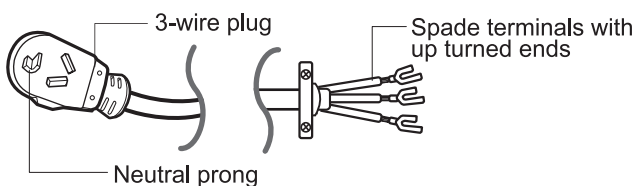
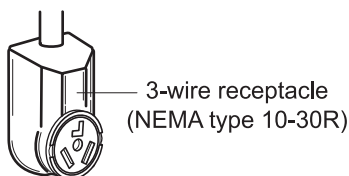
- If your local codes or ordinances do not allow the use of a 3 wire connection, or you are installing your dryer in a mobile home, you must use a 4-wire connection.



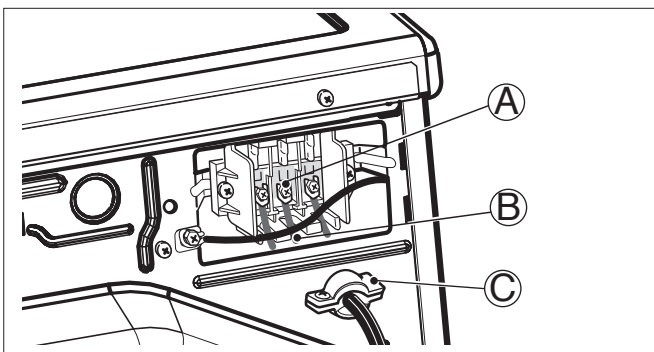
1. Connect the neutral wire (white) of the power cord to the center terminal block screw.
2. Connect the red and black wires to the left and right terminal block screws.
3. Connect the ground wire (green) of the power cord to the external ground screw. Remove the neutral ground wire of appliance and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

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

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

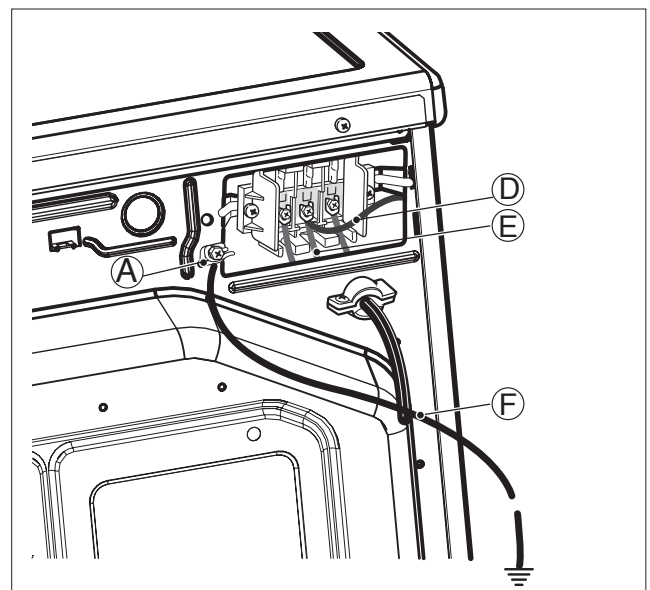
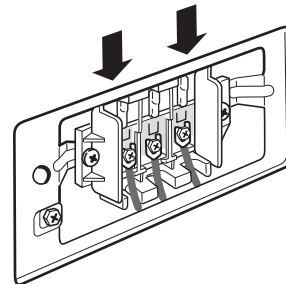


1. Connect the neutral (white or center) wire (B) to the center, silver colored, screw (A) and tighten securely.
2. Connect the other two power cord wires (red and black) to the left and right terminal block screws and tighten securely.
3. Tighten the strain relief screws (C) securely.



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.

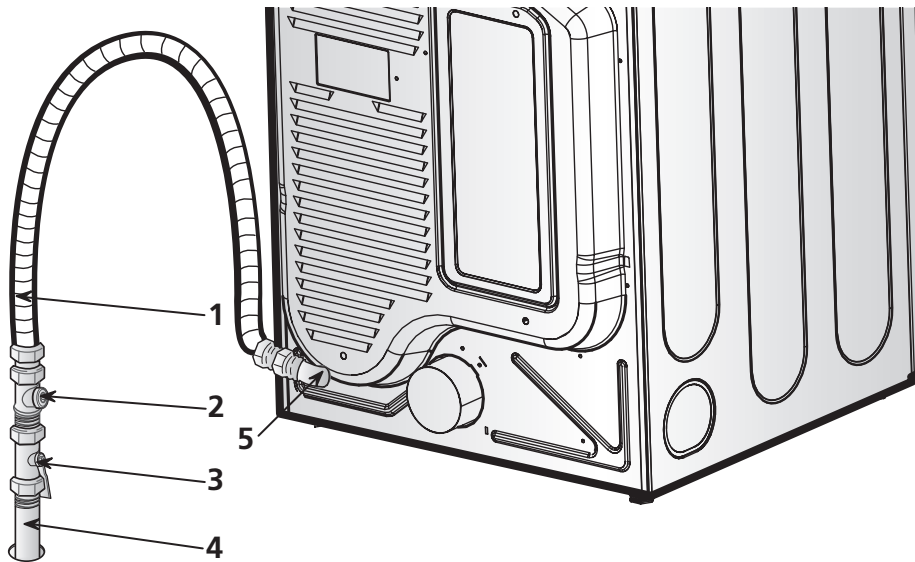


1. Remove the appliance ground wire (D) (green) from the external ground connector screw and reconnect it, together with the center, white, neutral wire (E) to the center, silver colored, terminal block screw.
2. Connect the other two power cord wires (red and black) to the left and right terminal block 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 $\frac{3}{8}$ " NPT 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 and external) for gas leaks with a non-corrosive leak detection fluid.
5. For LP (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 $\frac{1}{8}$ " NPT 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 $\frac{3}{8}$ " pipe
Longer than 20' (6.1 m) - Use $\frac{1}{2}$ " pipe
- 5 $\frac{3}{8}$ " NPT Gas Connection

4

DRYER CYCLE PROCESS

Cycle		Default			Conditions of operation and termination				
		Temp-erature	Dry Level	Display time	Drying		Cooling		Wrinkle care
					Electro-sensor	Temp-Control	Default time	Temp-Control**	Time
Sensor Dry *	STEAM FRESH™	HIGH MEDIUM	Off	20min	Saturation	66±4°C	5min	45 ±5°C	3Hr
	STEAM SAINTARY™	HIGH	Off	39min	Saturation	68±4°C	5min	45 ±5°C	
	ANTIBACTE-RIAL	HIGH	Very Dry	70min	Saturation	68±4°C	5min	45 ±5°C	
	BULKY / LARGE	MEDIUM	Normal Adjustable	55min	Saturation	60±4°C	5min	45 ±5°C	
	HEAVY DUTY	HIGH	Normal Adjustable	54min	Saturation	68±4°C	5min	45 ±5°C	
	PERM PRESS CASUAL	LOW	Normal Adjustable	32min	Saturation	52±3°C	5min	45 ±5°C	
	COTTON / NORMAL	MEDIUM	Normal Adjustable	41min	Saturation	60±4°C	5min	45 ±5°C	
	DELICATES	LOW	Normal Adjustable	28min	Saturation	52±3°C	5min	38 ±5°C	
	TOWELS	MEDIUM HIGH	Normal Adjustable	55min	Saturation	66±4°C	5min	45 ±5°C	
	SMALL LOAD	HIGH	Normal Adjustable	30min	Saturation	68±4°C	5min	45 ±5°C	
	SPORTS WEAR	—	—	27min	Saturation	60±4°C	5min	45 ±5°C	
Manual Dry **	SPEED DRY	HIGH	Off	15min	Saturation	(68±5°C)	5min	(47±5°C)	3Hr
	AIR DRY	NO HEAT	Off	30min	Saturation	(66±5°C)	5min		
	FRESHEN UP	Mid High	Off	25min	Saturation	(66±5°C)	5min	(45 ±5°C)	
Load			Motor						Off Time: 6min
			Heater						On Time: 10sec
					Temperature Control for each cycle				

*Sensor dry : Dry Level is set by users.

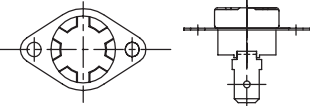
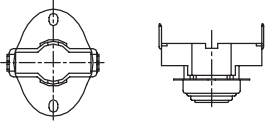
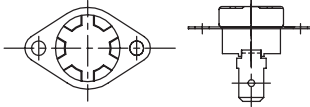
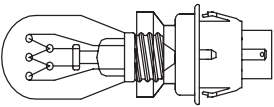
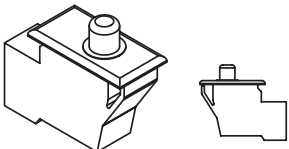
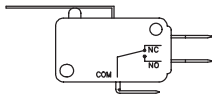
**Manual dry : Temperature control is set by users.

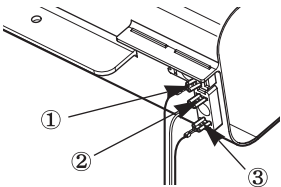

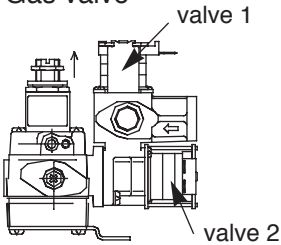
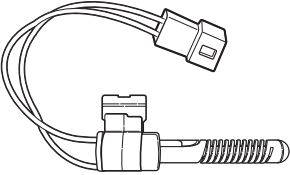
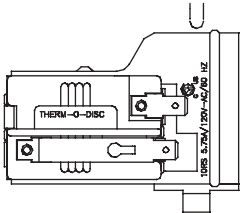
Default settings can be adjusted by users.

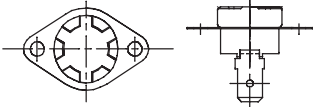
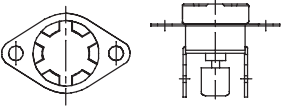
5

COMPONENT TESTING INFORMATION

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

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

Component	Test Procedure	Check result	Remark
7. Heater 	Measure resistance of the following terminal ① Terminal: 1 (COM) - 2 ② Terminal: 1 (COM) - 3 ③ Terminal: 2 - 3	① Resistance value: 10Ω ② Resistance value: 10Ω ③ Resistance value: 20Ω	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Heater case - Hi limit • Electric type
9. Motor			<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Gas type
11. Igniter 	Measure resistance of terminal to terminal	Resistance value: 100~800Ω	<ul style="list-style-type: none"> • Gas type
12. Flame Detect 	Measure resistance of terminal to terminal ① Open at 370°F ((Maximum) ② Close at 320°F	① Resistance value ≒ ∞ ② Resistance value < 1Ω	<ul style="list-style-type: none"> • Gas type

Component	Test Procedure	Check result	Remark
<p>13. Outlet Thermostat (Auto reset)</p>  <p>• Check Top Marking: N95</p>	<p>Measure resistance of terminal to terminal</p> <p>① Open at $203 \pm 7^{\circ}\text{F}$ ($95 \pm 5^{\circ}\text{C}$)</p> <p>② Close at $158 \pm 9^{\circ}\text{F}$ ($70 \pm 5^{\circ}\text{C}$)</p>	<p>① Resistance value $\neq \infty$</p> <p>② Continuity $< 1\Omega$</p>	<ul style="list-style-type: none"> • Gas type • Gas funnel
<p>14. Outlet Thermostat (Manual reset)</p>  <p>• Check Top Marking: N110</p>	<p>Measure resistance of terminal to terminal</p> <p>① Open at $212 \pm 12^{\circ}\text{F}$ ($110 \pm 7^{\circ}\text{C}$)</p> <p>② Manual reset</p>	<p>If thermal fuse is open must be replaced</p> <p>① Resistance value $\neq \infty$</p> <p>② Continuity $< 1\Omega$</p>	<ul style="list-style-type: none"> • Gas type • Gas funnel

6

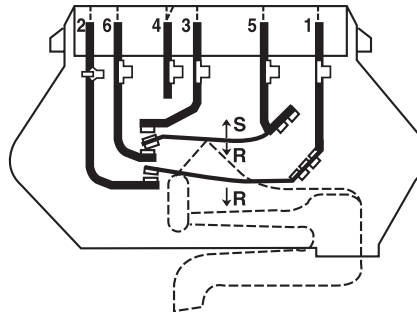
MOTOR DIAGRAM AND SCHEMATIC

NOTE When checking component, be sure to turn power off, then do voltage discharge sufficiently.

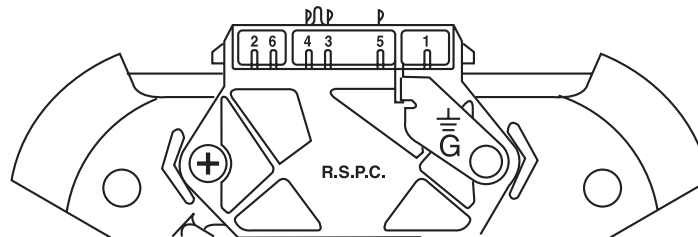
■ Contact On / Off by Centrifugal Switch

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

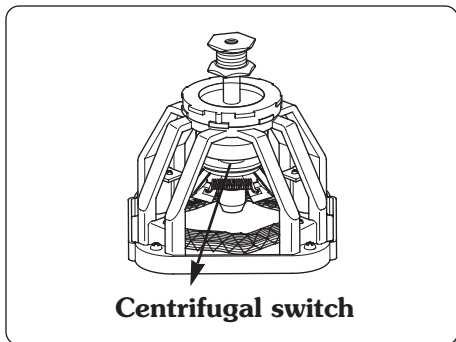
..... Open
 ——— Close



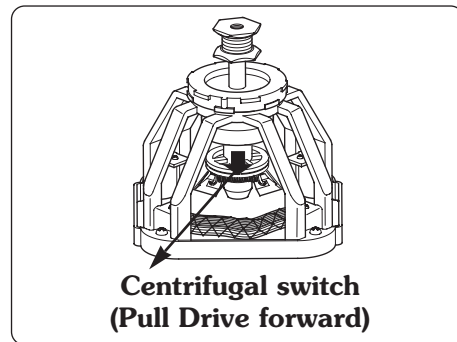
SWITCH SHOWN IN START POSITION



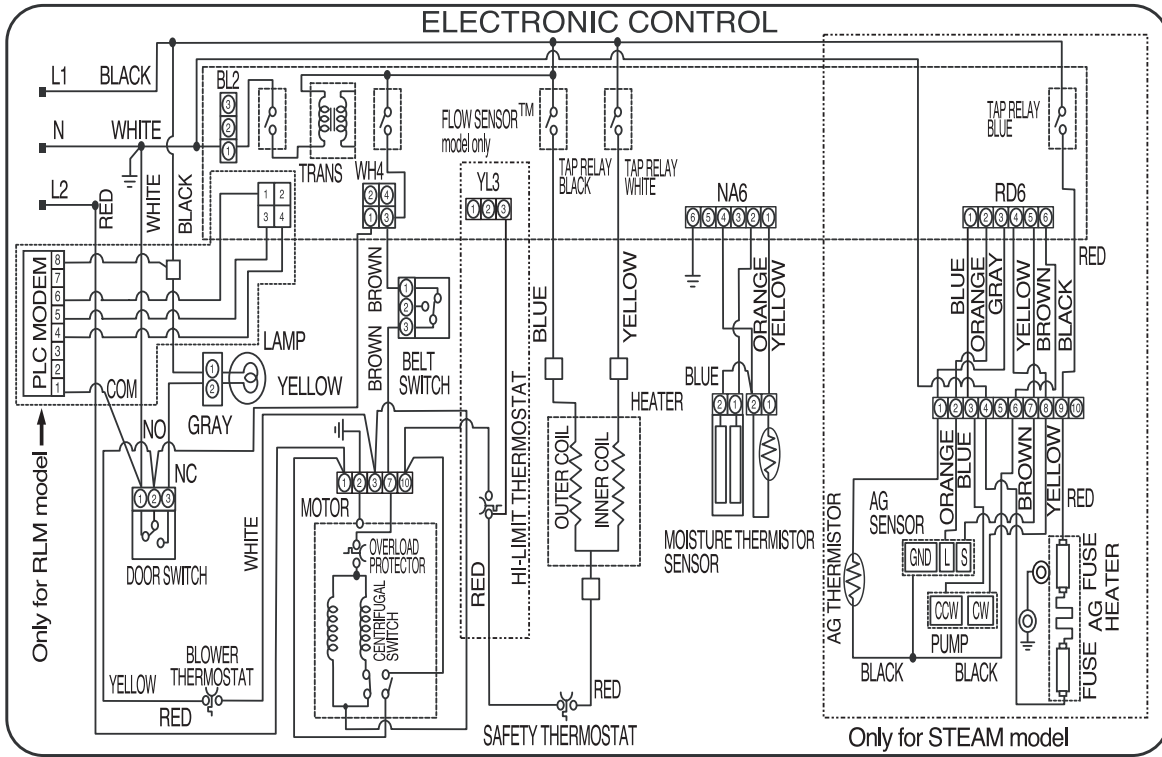
■ STOP MODE
 (When Motor does not operate)



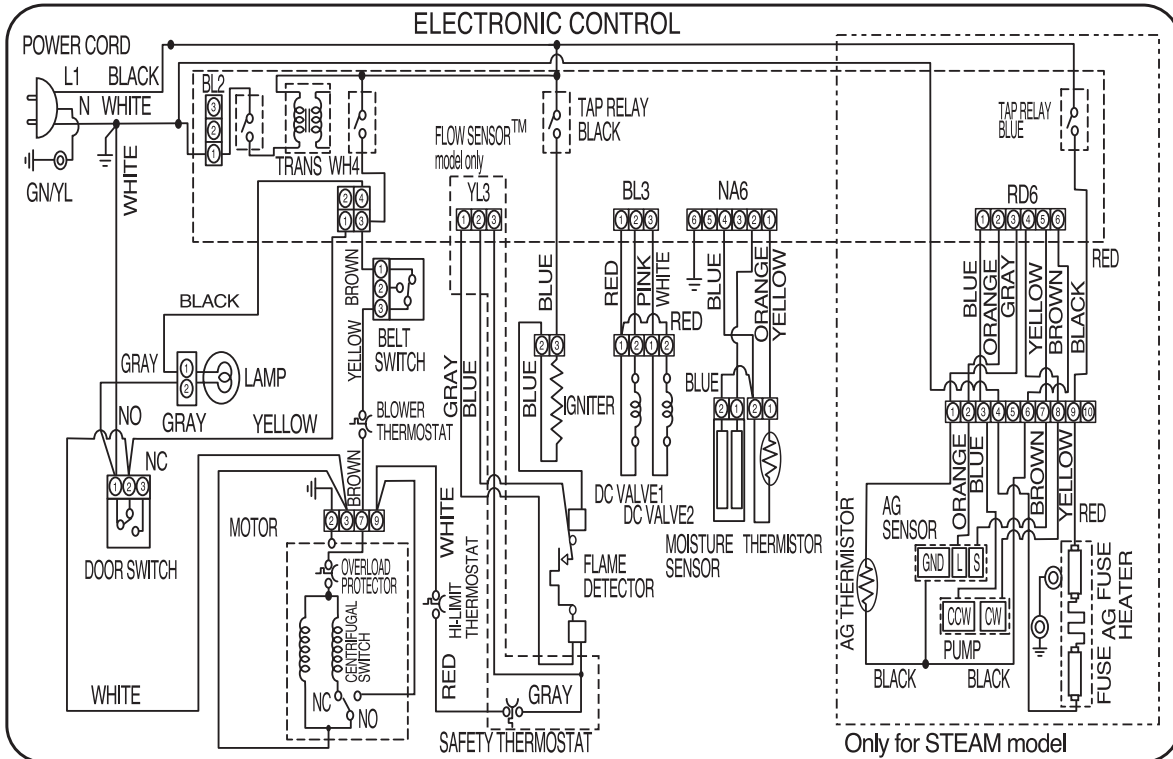
■ RUN MODE
 (Motor operates)



ELECTRIC DRYER WIRING DIAGRAM



GAS DRYER WIRING DIAGRAM



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 Children's clothing	Single (1 each) 3 lbs.
STEAM FRESH™		STEAM FRESH™ (20 minutes)	○		Dry	Comforter Shirts*	Single (1 each) 5 each
	+ REDUCE STATIC	STEAM FRESH™ (10 minutes)			Dry	Shirts*	8 lbs. (18 Items.)
	+ EASY IRON	STEAM FRESH™ (12 minutes)			Dry		Shirts* (5 each)
STEAM OPTION	+ REDUCE STATIC	HEAVY DUTY COTTON/TOWELS NORMAL PERM.PRESS DELICATES		○	Wet	Follow selected cycle	8 lbs. (18 Items.)
	+ EASY IRON			○	Wet	Follow selected cycle	Shirts* (5 each)
TIME DRY	+ REDUCE STATIC	TIME DRY (45 minutes)	○		Wet	Follow selected temp	8 lbs. (18 Items.)
	+ EASY IRON	TIME DRY (47 minutes)	○		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
<p>The display shows:</p>	<ul style="list-style-type: none"> Water supply error. 	<ul style="list-style-type: none"> Check steam feeder drawer: <ol style="list-style-type: none"> Make sure steam feeder is filled with water to MAX line. Make sure steam feeder is seated properly and drawer is fully closed. 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.
<p>Water drips from nozzle when Steam Cycle starts.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> This is steam condensation. The dripping water will stop after a short time.
<p>Steam doesn't generate but no error code is shown.</p>	<ul style="list-style-type: none"> Water level error. 	<ul style="list-style-type: none"> Unplug dryer and call for service.
<p>Garments still wrinkled after STEAM FRESH™.</p>	<ul style="list-style-type: none"> Too many or too different types of garments in dryer. 	<ul style="list-style-type: none"> Small loads of 1 to 5 items work best. Load fewer garments. Load similar-type garments.
<p>There are no creases left on garment after STEAM FRESH™.</p>	<ul style="list-style-type: none"> The function of this cycle is to remove wrinkles from fabric. 	<ul style="list-style-type: none"> Use an iron to make creases.
<p>Garments have static after REDUCE STATIC.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> Depends on individual moisture level in skin.
<p>Garments are too damp or too dry after REDUCE STATIC.</p>	<ul style="list-style-type: none"> Correct drying options not selected. 	<ul style="list-style-type: none"> Select load weight manually before starting REDUCE STATIC option.
<p>Garments are not uniformly damp after EASY IRON.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> Depends on the amount or type of garments.
<p>Water drips from door during Steam Cycle.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> This is steam condensation on door surface.
<p>Steam is not visible during Steam Cycle.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> Steam vapor is difficult to see when the door is closed.
<p>Drum does not turn during Steam Cycle.</p>	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> This is normal. 	<ul style="list-style-type: none"> Steam is released at different stages of the cycle for each option.
The display shows BULKY LOAD.	<ul style="list-style-type: none"> MORE TIME button pressed. 	<ul style="list-style-type: none"> 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™.	<ul style="list-style-type: none"> STEAM FRESH™ did not remove odor completely. 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> If water in the steam feeder is not enough this error may be displayed. Fill the feeder and restart the cycle.

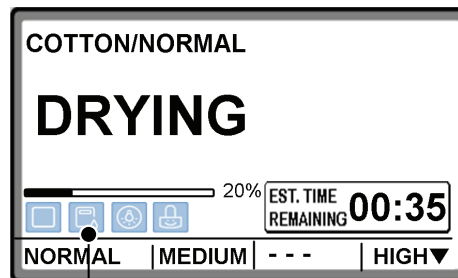
9-1 Flow sensor

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.

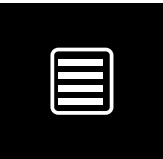
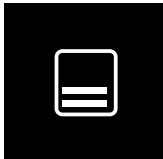
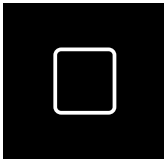
This function alerts you to the need of cleaning the duct.

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 ?

		
4 Bars	2 Bars	NO Bars
CLOGGED Check and Clean Duct.	NORMAL Duct OK. The Dryer can work.	

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):

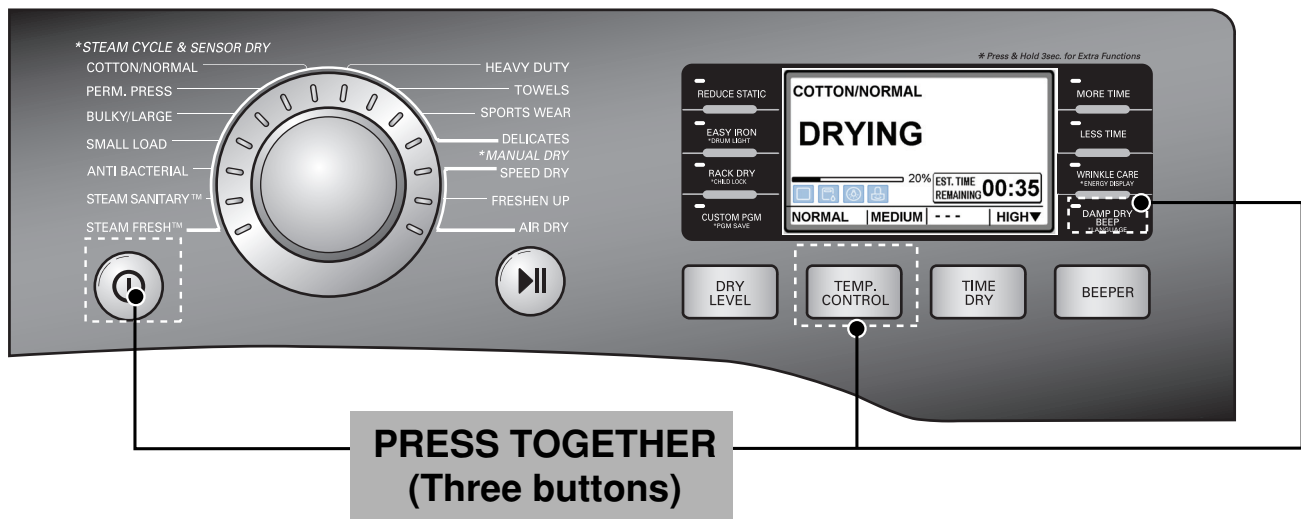
- ① No bars displayed.
- ② 2 bars displayed.
- ③ 4 bars displayed.

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....

OR

COMPLETED FLOW CHECK
 THE DUCTWORK IS FREE FROM BLOCKAGES OR RESTRICTIONS.

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

NEED FLOW CHECK
 THE DUCTWORK HAS A BLOCKAGE THAT NEEDS TO BE REMOVED IMMEDIATELY.

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

Is lint filter full?



Clean lint filter before every load



Is duct clogged?



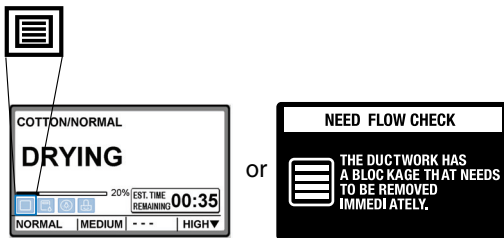
Check & clean duct.

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

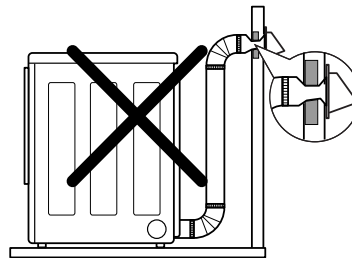
- Flow sensor lights up 2 bars even when vents have been clean and even when the vents are off.
→ **This is Normal.** After flow sensor recheck full next cycle, flow sensor is reset.
(Flow sensor bars will disappear after dryer has operated two cycle)
- Is flow sensor display changed from 4 bars to 2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

■ Bars are displayed and do NOT disappear

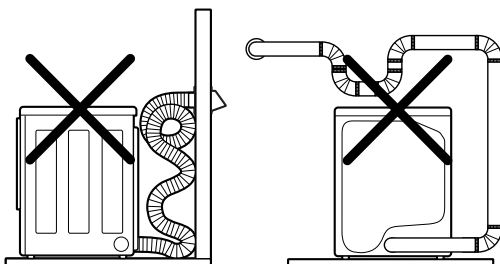
*Control Panel



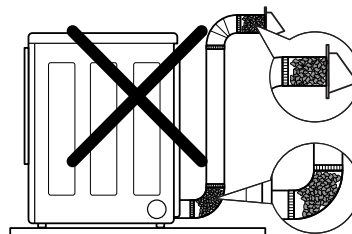
Make sure that the ductwork is not crushed or restricted.



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



Check for blockages and lint build up.



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 & Temperature sensor	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center; margin: 0;">LQC TEST MODE</p> <table style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td style="width: 50%;">VERSION</td> <td style="width: 50%;">GAS or ELECTRIC</td> </tr> <tr> <td>ELECTRODE : XXX</td> <td></td> </tr> <tr> <td>TEMPERATURE1 : XXX</td> <td></td> </tr> <tr> <td>SG TEMP : XXX</td> <td>SG PUMP : XXX</td> </tr> <tr> <td>SG Short : XXX</td> <td>SG LONG : XXX</td> </tr> <tr> <td>TEMPERATURE2 : XXX</td> <td>HUMIDITY : XXX</td> </tr> </table> </div>	VERSION	GAS or ELECTRIC	ELECTRODE : XXX		TEMPERATURE1 : XXX		SG TEMP : XXX	SG PUMP : XXX	SG Short : XXX	SG LONG : XXX	TEMPERATURE2 : XXX	HUMIDITY : XXX	Standard
		VERSION	GAS or ELECTRIC												
		ELECTRODE : XXX													
		TEMPERATURE1 : XXX													
SG TEMP : XXX	SG PUMP : XXX														
SG Short : XXX	SG LONG : XXX														
TEMPERATURE2 : XXX	HUMIDITY : XXX														
tE1	Thermistor open														
tE2	Thermistor shorted														
tE4	AG Thermistor open or shorted														
Once	Motor+Controller	30 = Low moisture 239 = High moisture	Motor runs												
			Displays Moisture Sensor Operation If moisture sensor is contacted with damp cloth. The display number is below 180 in normal condition												
Twice	<ul style="list-style-type: none"> ■ ELECTRIC TYPE Motor+Heater1(2700W) ■ GAS TYPE Motor 	Current Temp. (5~70)	<ul style="list-style-type: none"> ■ ELECTRIC TYPE Heater 1 is energized - 2700 W ■ GAS TYPE is not opened (Temperature in the drum is displayed in degrees C.) 												
3 times	<ul style="list-style-type: none"> ■ ELECTRIC TYPE Motor+Heater1+Heater2 (5400W) ■ GAS TYPE Motor+Gasvalve 	Current Temp. (5~70)	<ul style="list-style-type: none"> ■ 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.) ■ DUAL SENSOR FAILURE CHECK : Values of TEMPERATURE2 and HUMIDITY are '000', the display shows SE ERROR. 												
4 times	Motor+Pump+Heater2(runs for 1sec) (Heater1 off)	Pump AD valve (11~255)	Pump runs												
		E5	Pump Error												
5 times	Motor, Pump, Heater2 off	OO													
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

Caution	When measuring power, be sure to wear insulated gloves to avoid an electric shock.	
Trouble Symptom	No power was applied to Controller. (LED,LCD Display off)	
Measurement Condition	With Dryer Power On; Connector linked to Controller.	
<pre> graph TD Start[Check the outlet, is the voltage 110V ~ 125V AC?] -- NO --> Action1[• Check the fuse or circuit breaker.] Start -- YES --> Step2[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?] Step2 -- NO --> Action2[• Check if Power Cord is properly connected.] Step2 -- YES --> Step3[① Check if the Controller wire is disconnected. ② Check if Terminal Block and Power Cord are connected (Check Plug). - Does Power Cord N neutral line match to center terminal N neutral line?] Step3 -- NO --> Action3[• Reconnect the controller.] Step3 -- YES --> End[Replace controller.] </pre>		

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

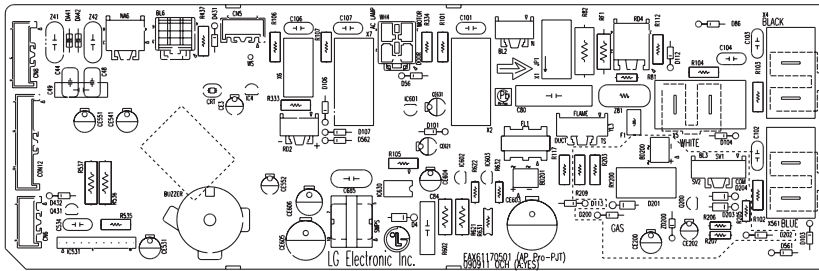
< Table 1 > : Connection of the tap relay with Heater (Electric)

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

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

	Tab Relay 1	Burner	Remark
High Mid High Medium	○	○	Temperature Control below $70 \pm 4^\circ\text{C}$ Turn on Burner
Low Extra Low	○	○	Temperature Control below $47 \pm 4^\circ\text{C}$ Turn on Burner

Tab Relay 1 Tab Relay 2 Trans



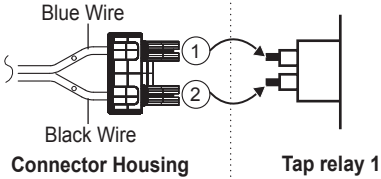
* PCB ASSEMBLY LAYOUT

2. Status Mode Of The Connection

< Table 1 > : Connection of tap relay with the tap relay of the PCB ASSEMBLY Electric

	Color	Connection		Remark
		Harness	PCB	
Connector Housing	Black	<p>Yellow wire Black wire Connector Housing Tap relay 1</p>		Check the Matching color Between Harness wire and tap relay. (Black Housing – Black tap relay)
	White	<p>Blue wire Black wire Connector Housing Tap relay 2</p>		Check the Matching color Between Harness wire and tap relay. (White Housing – White tap relay)

< Table 2 > : Connection of tap relay with PCB ASSEMBLY (Gas)

	Color	Harness	PCB	Remark
Connector Housing	Black			Check the Matching color Between Harness wire and tap relay. (Black Housing – Black tap relay)

3. Status Mode Of wrong Connection

< Table1 > : incorrect Connection of the tap relay and connector housing (Electric)

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 > : incorrect Connection of the tap relay and connector housing (Gas)

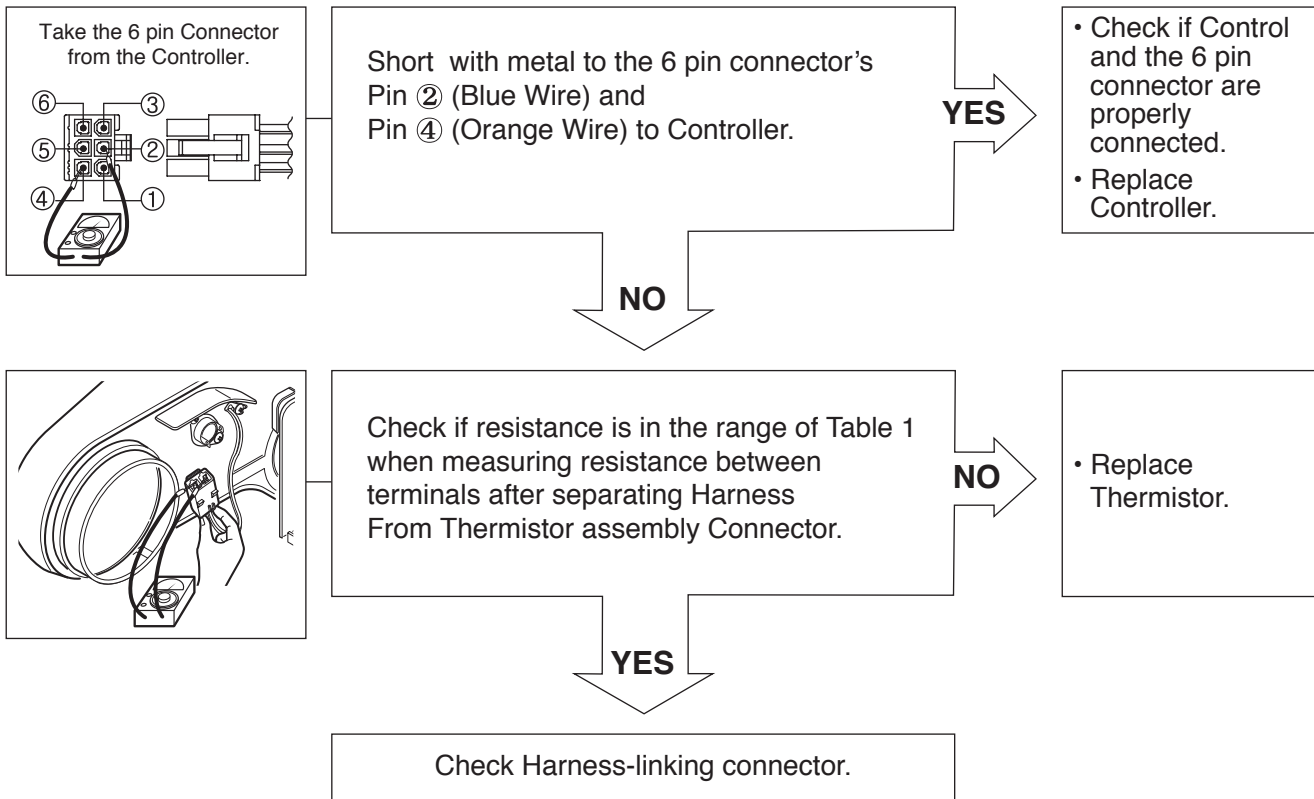
Items	Case	Heater1 Operation (black)	Heater2 operation (White)	PCB condition Of operation
1.Black and White Housing	Wire ①, ② CROSS	Off	Off	Power Off

⚠ CAUTION

CAUTION! Improper connection of the heater can damage the heater or the main board.

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

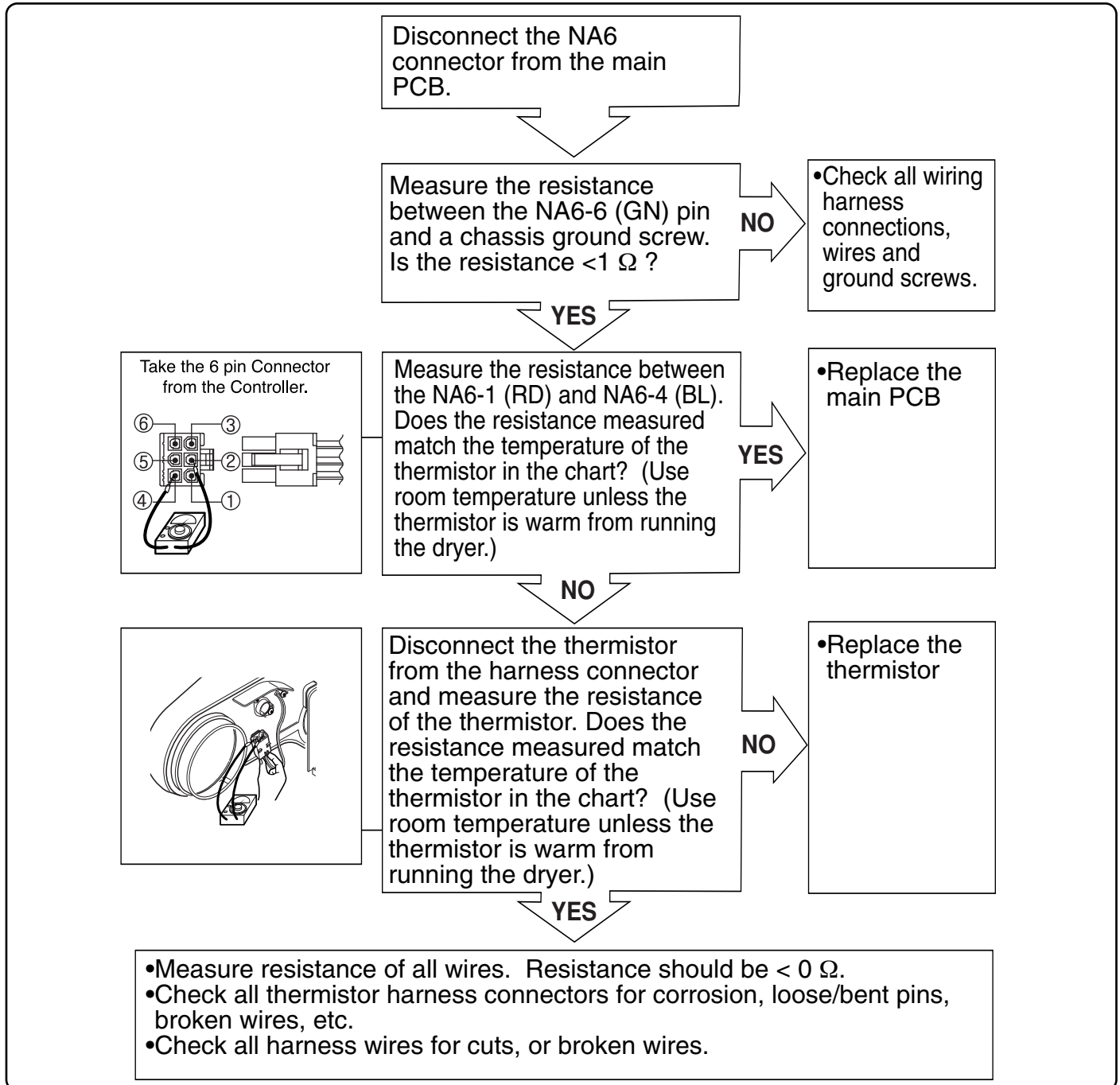
Caution	Before measuring resistance, be sure to turn Power off, and do voltage discharge. (When discharging, contact the metal plug of Power cord with the Ground.)
Trouble Symptom	<ol style="list-style-type: none"> ① During Diagnostic Test, tE1 and tE2 Error occur. ② During operation, Heater would not 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.

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

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

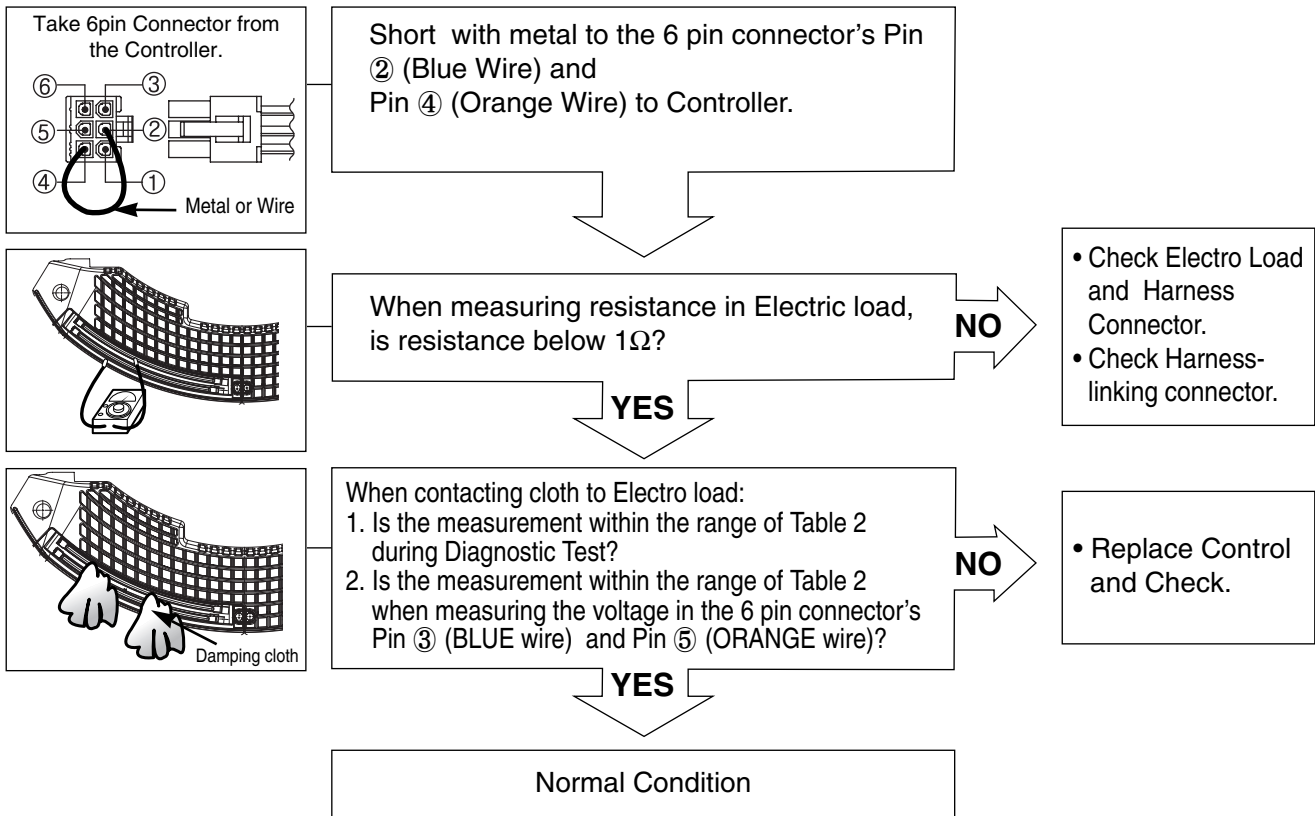


■ Thermistor temperature/resistance chart ($\pm 5\%$)

Air TEMP. °F (°C)	RES. k Ω	Air TEMP. °F (°C)	RES. k Ω	Air TEMP. °F (°C)	RES. k Ω
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 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.



■ 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

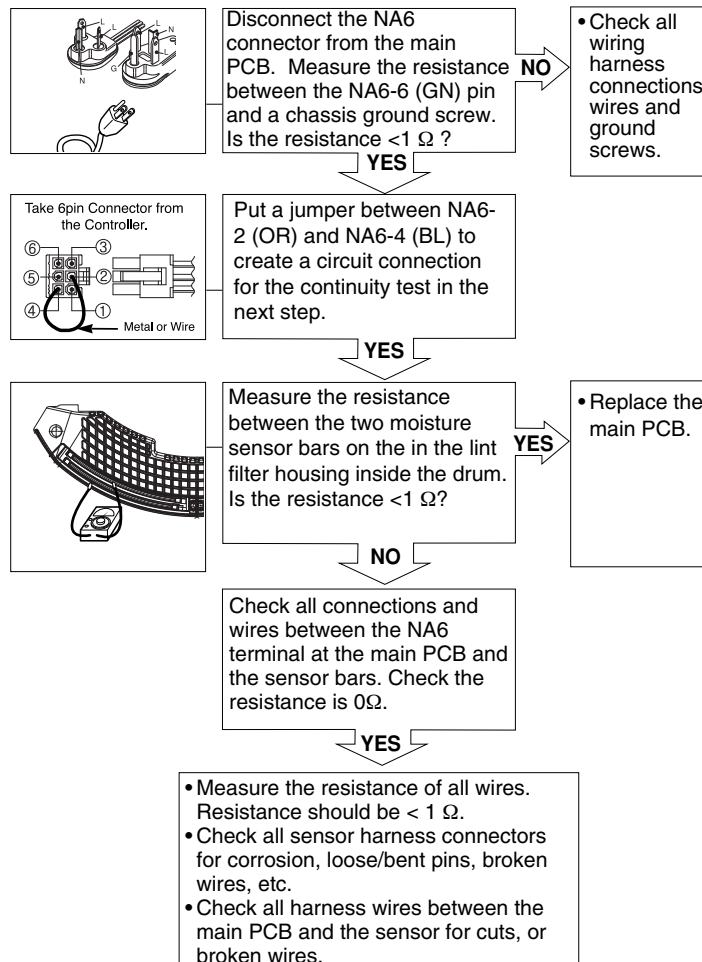
■ Test 4 Moisture sensor

NOTE: This test has two parts. The best test of the moisture sensing system is done in the diagnostic mode. This FUNCTIONAL TEST will test the sensor bars, wiring harness and PCB operation. If the results of this test are normal, the sensor system and PCB response are normal. The problem is somewhere else.

FUNCTIONAL TEST (Control)

1. Enter the diagnostic mode. (See DIAGNOSTIC TEST MODE on page 1.)
2. With the door closed, press the START/PAUSE button once. The dryer will start tumbling without heat.
3. Open the door. The drum will stop tumbling and the "dE" error code will be displayed and the chime will sound several times (if turned on).
4. With one hand, reach into the drum and place your fingers across the moisture sensor bars.
(CAUTION: The dryer drum will turn in this test. Your hand will be close to the rotating drum vanes. Keep your hand close to the filter housing to avoid being hit by the moving vanes.)
5. Use your other hand to press the door switch. The dryer drum will start rotating automatically.
6. Observe the numerical display. Depending on conditions, the number displayed should be between 30 and 239. The numbers should start decreasing as the control senses the moisture in your skin.
7. After you have observed the number decreasing, remove your fingers from the sensor bars. The numbers will continue to decrease for a few seconds (minimum 30) and the begin to increase (maximum 239).
8. If this test fails, proceed with the MECHANICAL TEST below.

MECHANICAL TEST



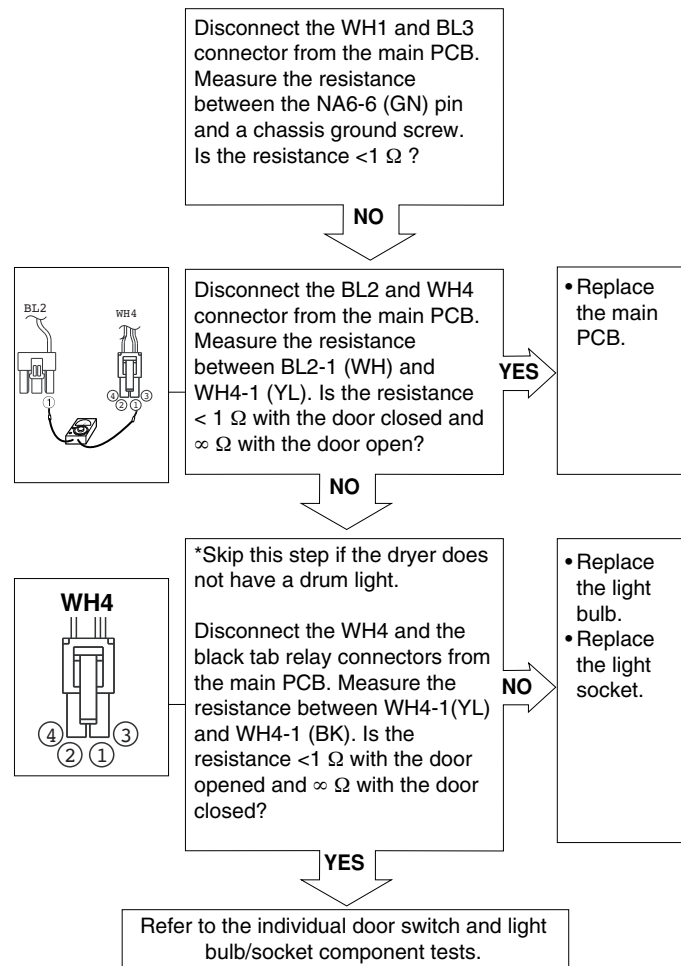
■ Test 5 Door switch test

NOTE: This test has two parts. The best test of the door switch system is done in the diagnostic mode. This **FUNCTIONAL TEST** will test the door switch, wiring harness and PCB operation. If the results of this test are normal, the door switch system and PCB response are normal. The problem is somewhere else.

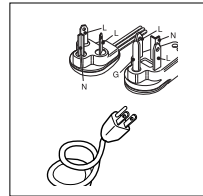
FUNCTIONAL TEST (Control)

1. Enter the diagnostic mode. (See DIAGNOSTIC TEST MODE on page 1.)
2. With the door closed, press the START/PAUSE button once. The dryer will start tumbling without heat.
3. Open the door. The drum will stop tumbling. The "dE" error code should be displayed, the chime should sound seven times (if turned on), and the drum light (if equipped) should come on. If the "dE" error code is not displayed or the light does not come on, proceed with the MECHANICAL TEST below. If the error displays and light comes on, the door switch is working properly.

MECHANICAL TEST



Test 6 Heater switch test - Electric Type

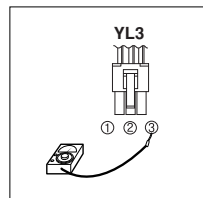


Enter diagnostic mode and press the START/PAUSE button twice. Measure the voltage between YL3- 3 (WH) and the YL wire on the black tab relay. Is the voltage 240 VAC?

NO

- Check power supply.

YES



Disconnect the YL3, black tab relay and white tab relay connectors at the main PCB. Measure the resistance between YL3-3 (WH) and the YL wire on the black tab relay connector. Is the resistance 18-22 Ω ?

NO

- Check wiring and connectors to the element.
- See element component test.

YES

Measure the resistance between YL3-3 (WH) and the BL wire on the white tab relay connector. Is the resistance 18-22 Ω ?

NO

- Check wiring and connectors to the element.
- See element component test.

YES

Measure the resistance between the YL wire on the black tab relay and the BL wire on the white tab relay connectors. Is the resistance 36-44 Ω ?

NO

- Check wiring and connectors to the element.
- See element component test.

YES

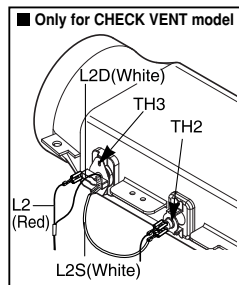
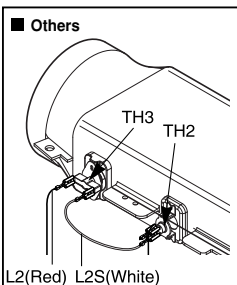
Measure the resistance between terminals 1 (RD) and the heater housing. Is the resistance Ω ?

NO

- Replace the element.

YES

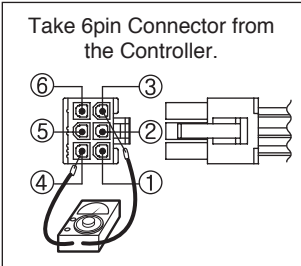
Refer to the hi-limit thermostat and thermal cut off component tests.



※ Wires

- L2(Red)
- L2D(White) : Go to the duct(YL3 in main pcb)
- L2S(White) : Go to the safety.

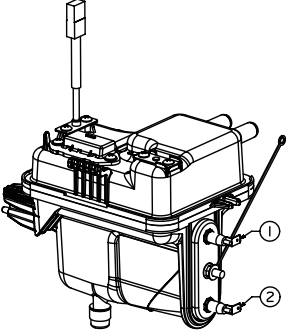
■ Test 8 Semi Conductor

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 $300 \pm 30 \Omega$
Measurement Condition	Turn the Dryer's Power Off, then measure resistance.
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 20px;"> <p>Take 6pin Connector from the Controller.</p>  </div> <div style="border: 1px solid black; padding: 10px; width: 60%;"> <p>When measuring resistance ③-④, ④-⑤ Is resistance $300 \pm 20 \Omega$?</p> <p style="text-align: right;">NO →</p> <p style="text-align: center;">YES ↓</p> </div> <div style="border: 1px solid black; padding: 10px; margin-left: 20px;"> <ul style="list-style-type: none"> • Check Semi-conductor and Harness Connector • Check Harness linking connector </div> </div>	

■ 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 occurs.
Measurement Condition	Turn the Dryer's Power Off, then measure resistance.
<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 10px; margin-right: 20px;"> <p>After activating the *diagnostic test, press START/PAUSE button 4 times. Is AD value displayed higher than 10 ?</p> <p style="text-align: right;">NO →</p> <p style="text-align: center;">YES ↓</p> </div> <div style="border: 1px solid black; padding: 10px; margin-left: 20px;"> <ul style="list-style-type: none"> • Replace the DC Pump </div> </div> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 30%; text-align: center;"> <p>Normal condition</p> </div> <p style="font-size: small; margin-top: 10px;">* diagnostic test : go to page 22</p>	

■ 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	① During Steam cycle, Generator Assembly is not heating. ② During Diagnostic Test, tE4 Error occurs.
Measurement Condition	Turn the Dryer's Power Off, then measure resistance.
	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 10px; margin-right: 20px;"> <p>Is resistance $14.3 \Omega (\pm 5\%)$ between Heater terminal ① and ② ?</p> </div> <div style="font-size: 2em; margin-right: 20px;"> <p>NO</p> </div> <div style="border: 1px solid black; padding: 10px; margin-right: 20px;"> <p>YES</p> </div> <div style="border: 1px solid black; padding: 10px; margin-right: 20px;"> <p>Normal condition</p> </div> <div style="border: 1px solid black; padding: 10px;"> <ul style="list-style-type: none"> • Replace the Generator Assembly • If measured resistance value is ∞, replace the Generator Assembly too. </div> </div>

11

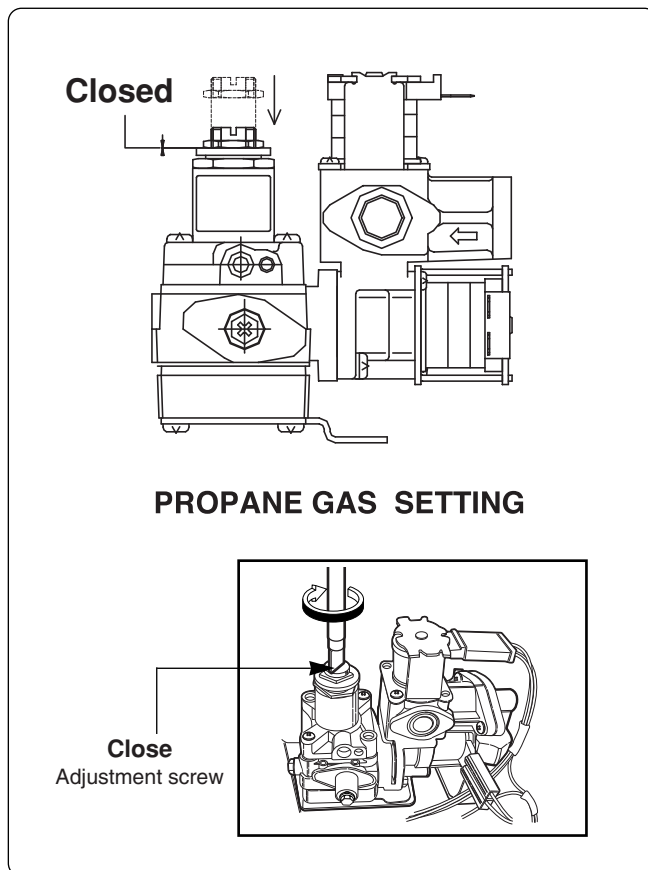
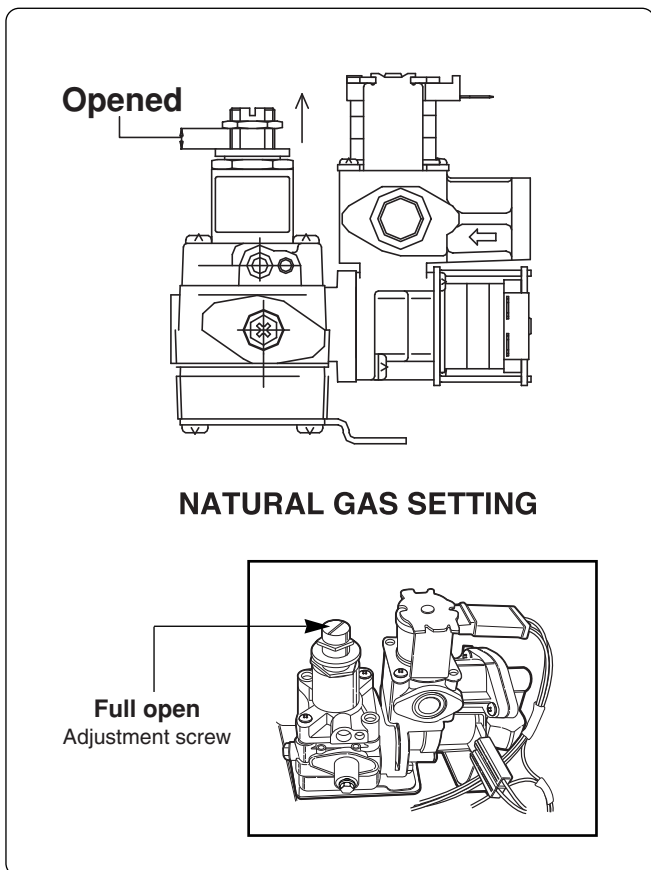
CHANGE GAS SETTING (NATURAL GAS, PROPANE GAS)

⚠ Warning

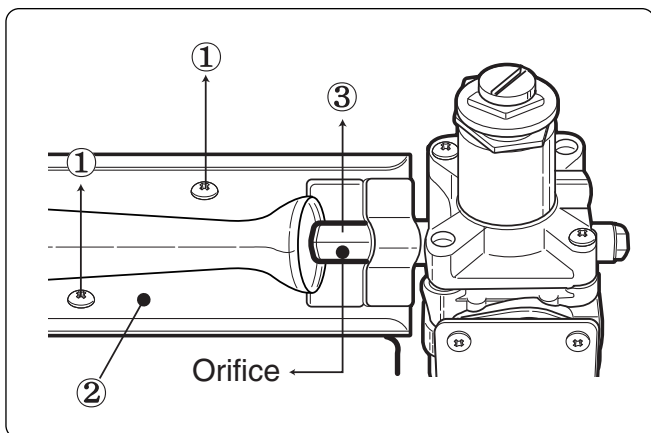
Changing orifices and gas valve adjustments improperly can result in an explosion and/or fire. Conversion must be made by a qualified technician.

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

STEP 1 : VALVE SETTING



STEP 2 : ORIFICE CHANGE

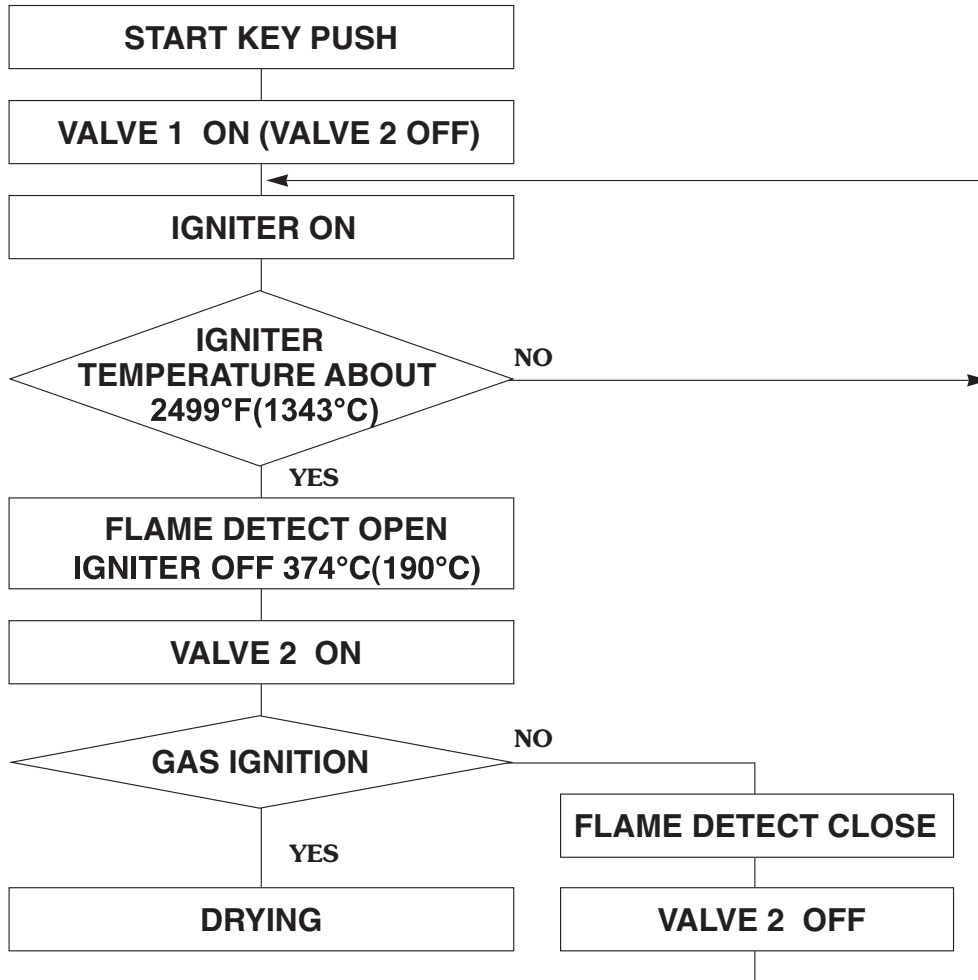


- ① Remove 2 screws.
- ② Disassemble the pipe assembly.
- ③ Replace Natural Gas orifice with Propane Gas orifice.

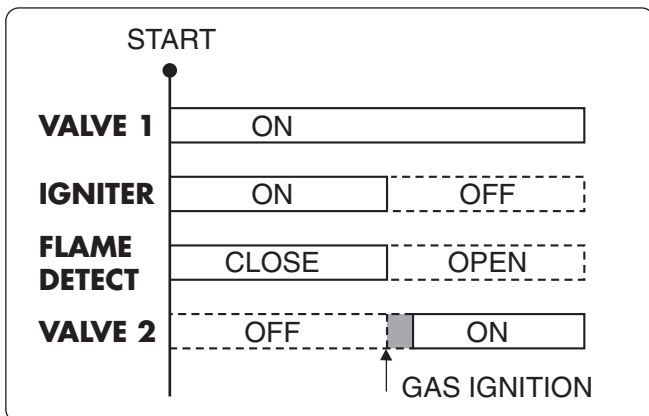
Gas type	Orifice P/No	Marking	Shape
Natural Gas	4948EL4001B	NCU	
Propane Gas	4948EL4002C	PCU	

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

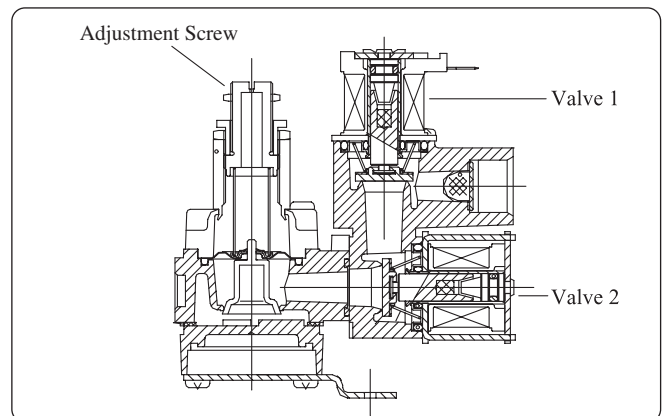
■ GAS VALVE FLOW



GAS IGNITION



GAS VALVE STRUCTURE

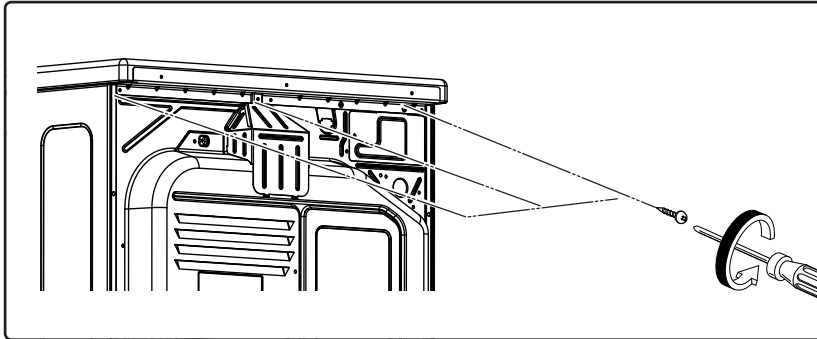


12

DISASSEMBLY INSTRUCTIONS

※ Unplug the dryer before servicing.

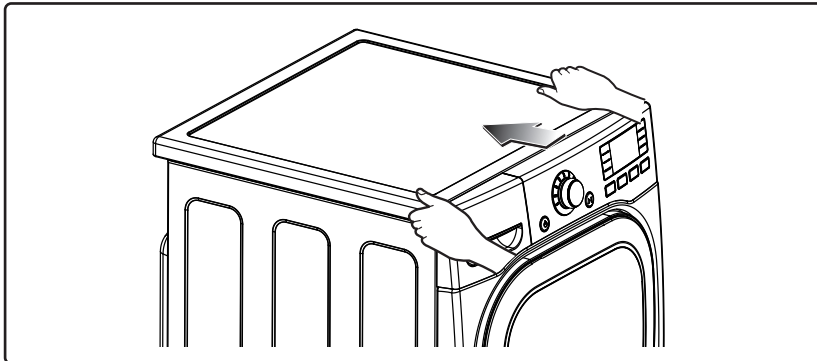
TOP PLATE



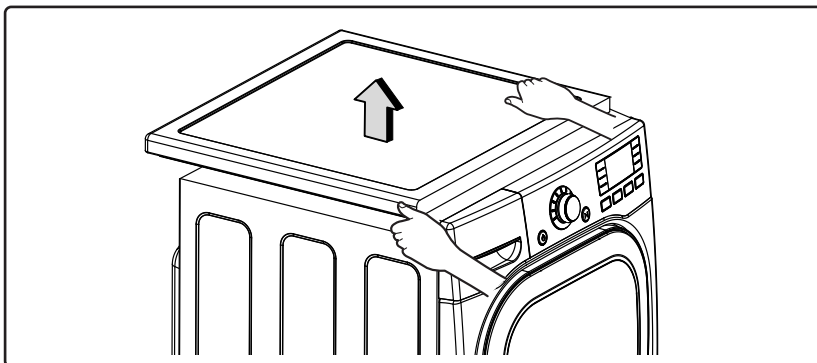
⚠ WARNING !

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

1. Remove 3 screws on the upper plate.



2. Push the top plate backward.

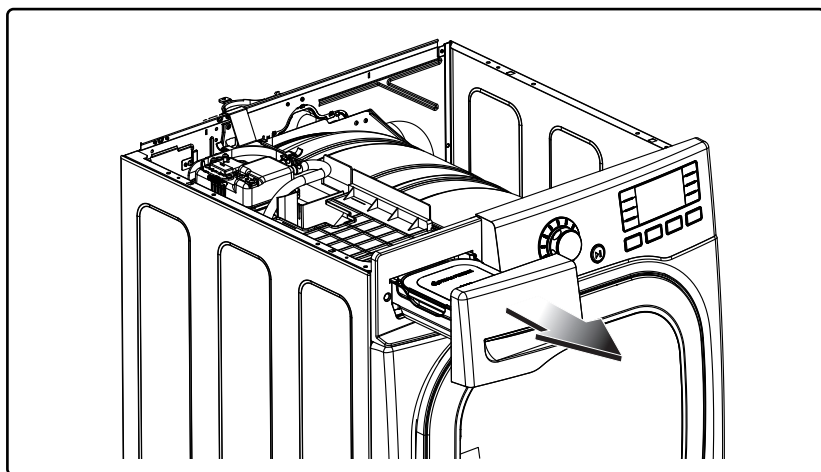


3. Lift the top plate.

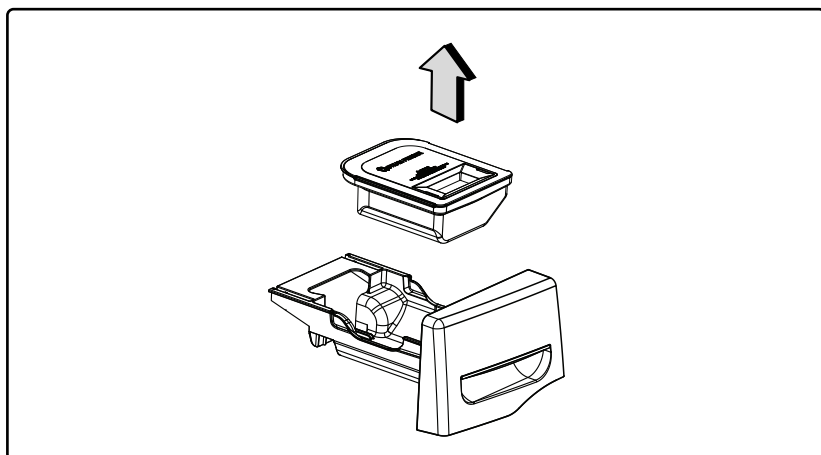
⚠ WARNING !

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

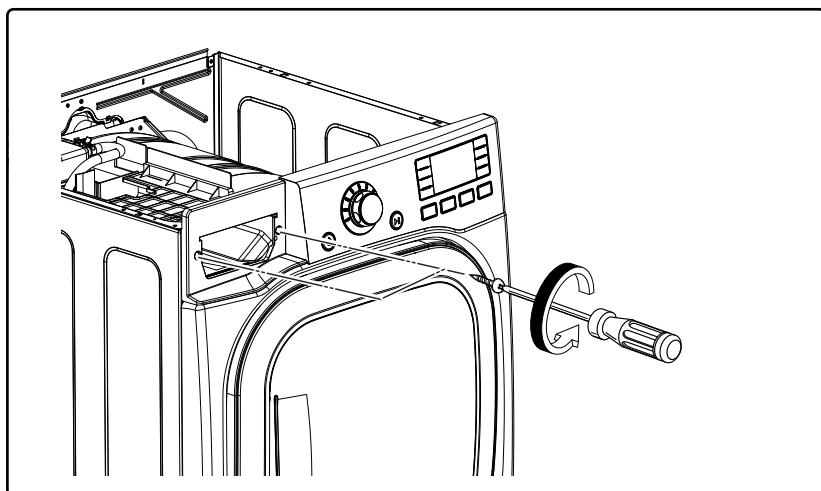
PANEL DRAWER ASSEMBLY



1. Pull out the drawer

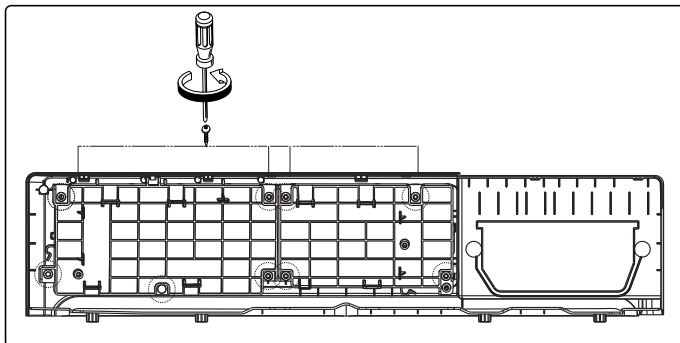
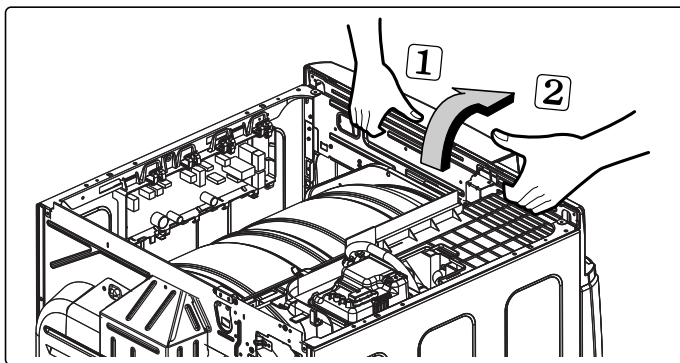
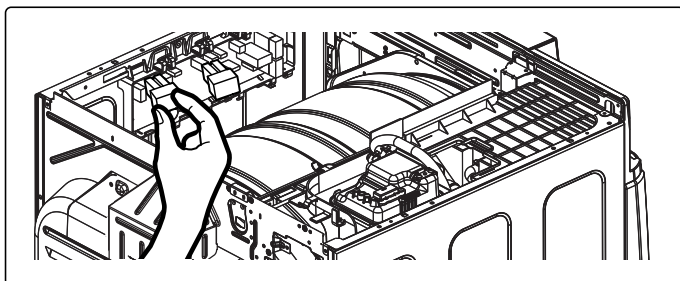
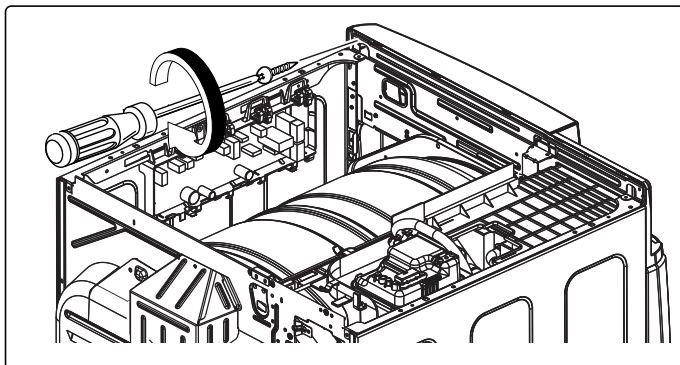


2. Lift out the steam feeder.



3. Remove 2 screws on the control panel.

CONTROL PANEL ASSEMBLY

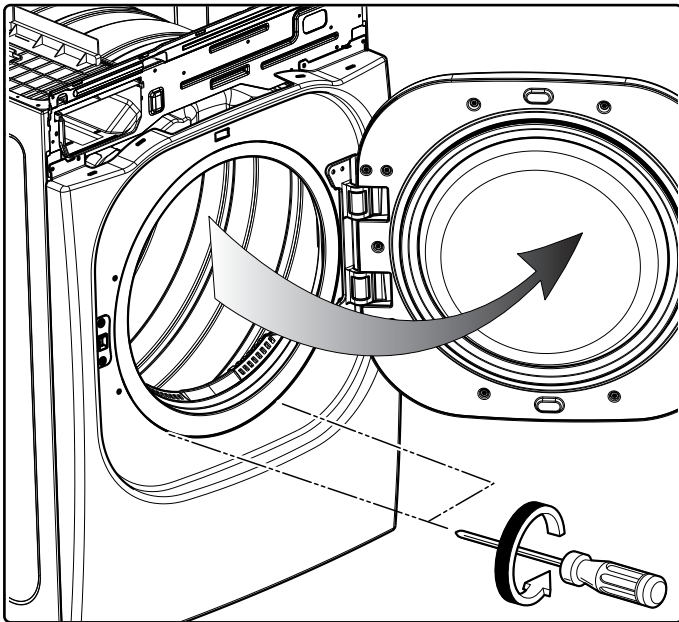


⚠ WARNING !

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

1. Remove 2 screws 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 PCB (PCB) assembly, display.
5. Disassemble the control panel assembly.

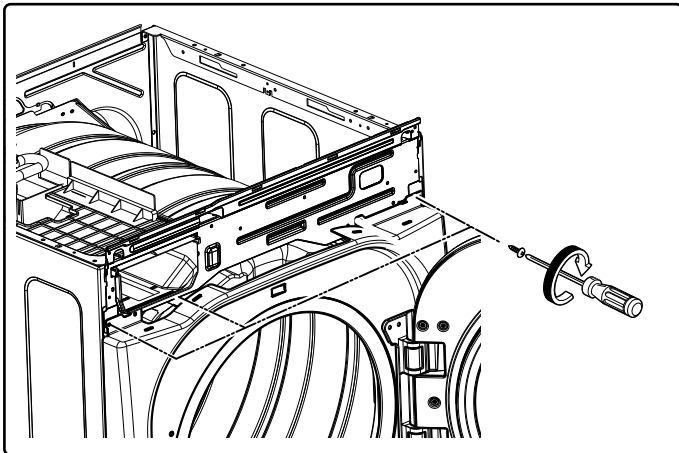
COVER CABINET



⚠ WARNING !

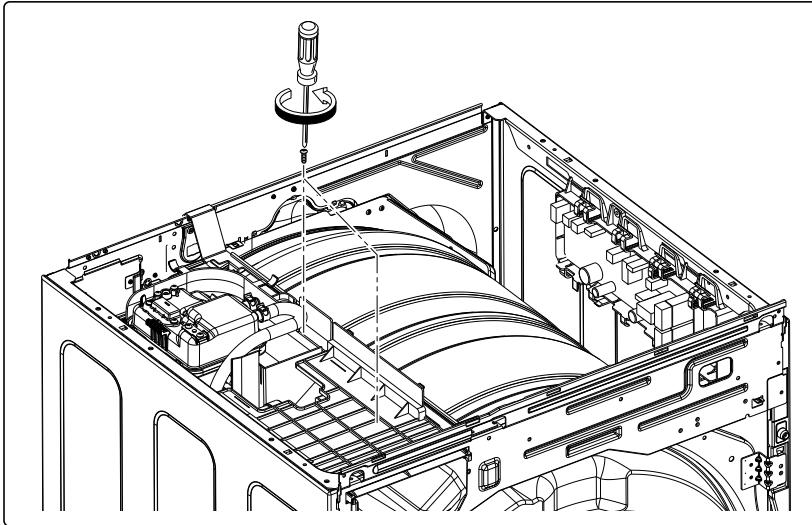
When you disassemble the door switch connector, be sure to take gloves and handle the frame and other parts carefully to avoid cuts. Failure to do this could lead to a serious injury.

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

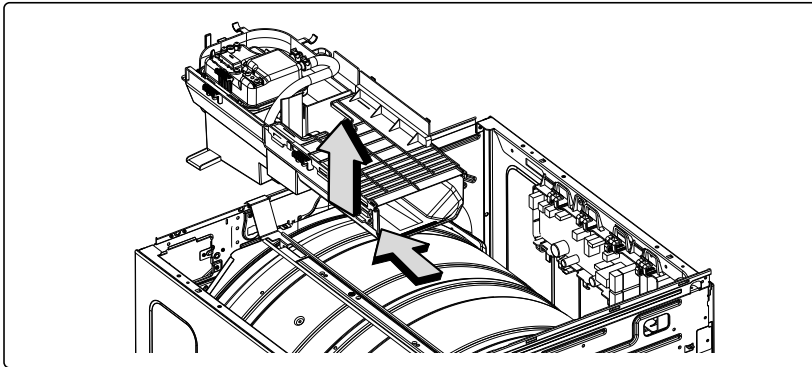


5. Remove 3 screws from the top of cabinet cover.
6. Disconnect the harness of door switch.

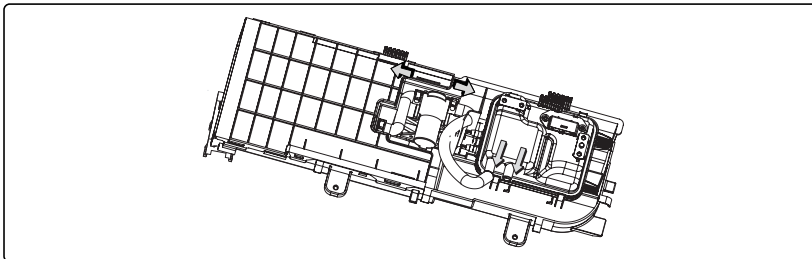
GUIDE ASM



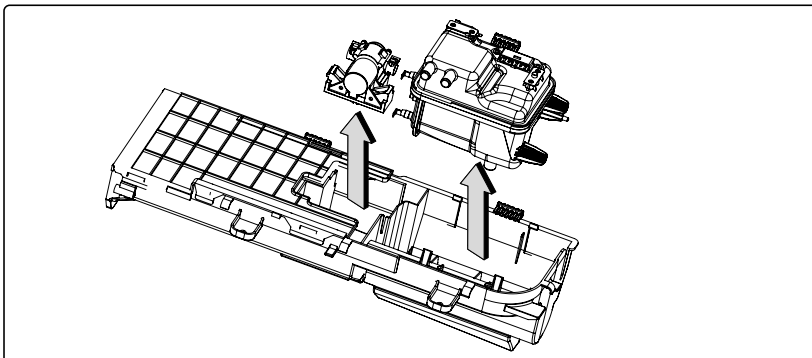
1. Remove 3 screws on the frame body.



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

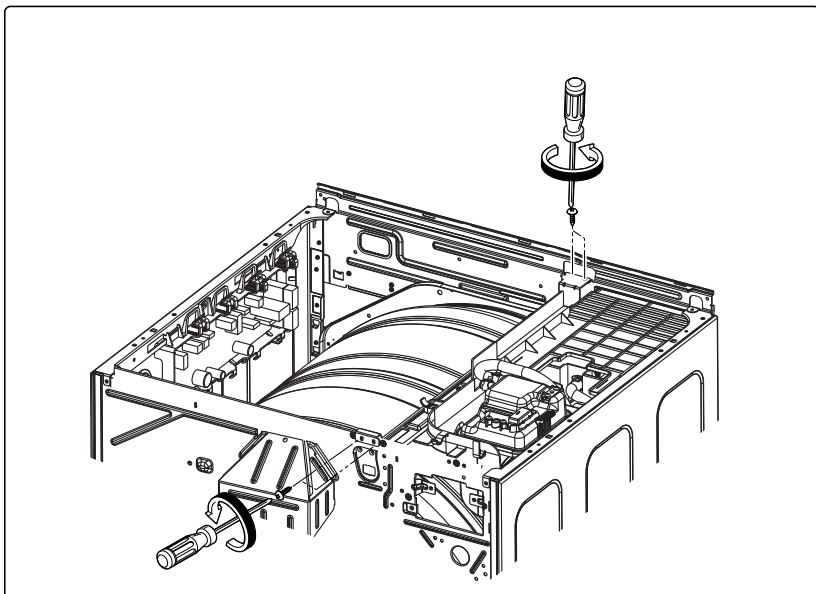


3. Separate 2 hoses from the pump and generator.

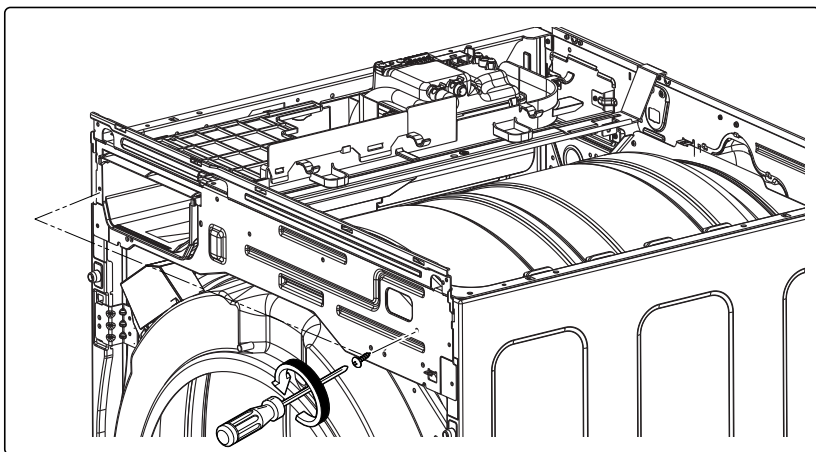


4. Lift a pump and generator up.

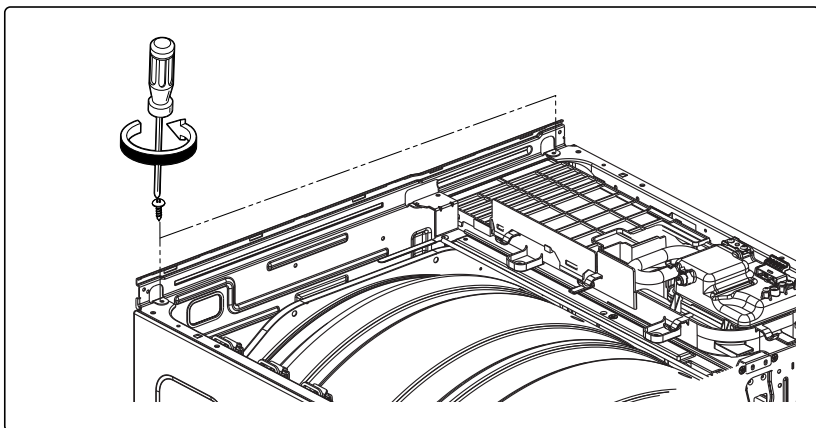
FRAME BODY & PANEL FRAME



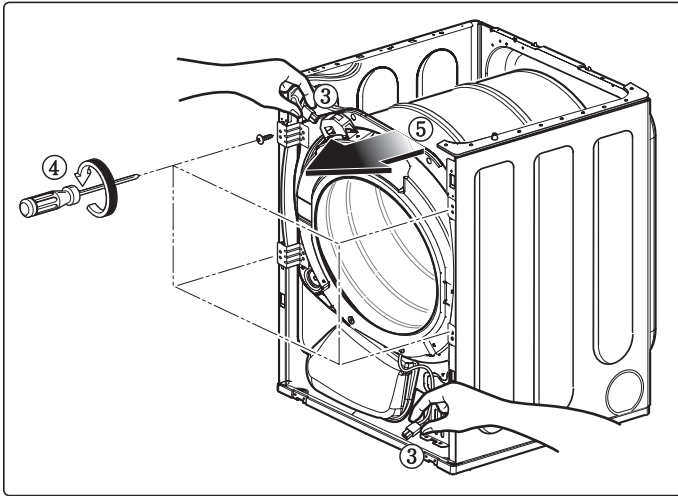
1. Remove 3 screws on the frame body.
and then disassemble the frame body.



2. Remove 4 screws on the panel Frame
and then remove it.



TUB DRUM (FRONT)

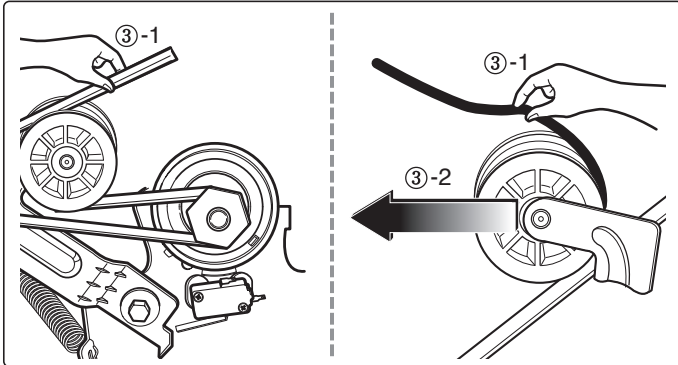


⚠ WARNING !

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

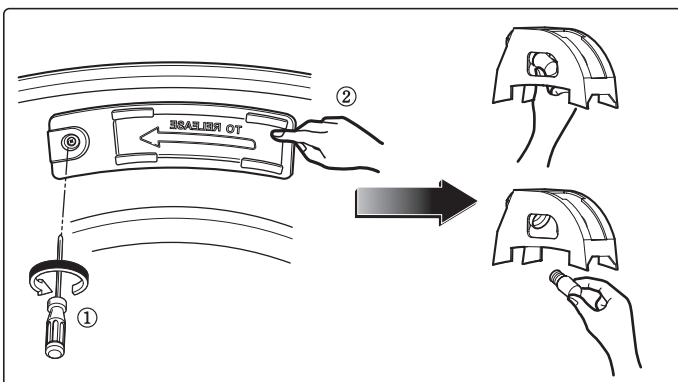
1. Open the top plate.
2. Remove Cover Cabinet.
3. Disconnect the door lamp and electrode sensor connector.
4. Remove 4 screws.
5. Disassemble the Tub Drum (Front) assembly.

DRUM ASSEMBLY



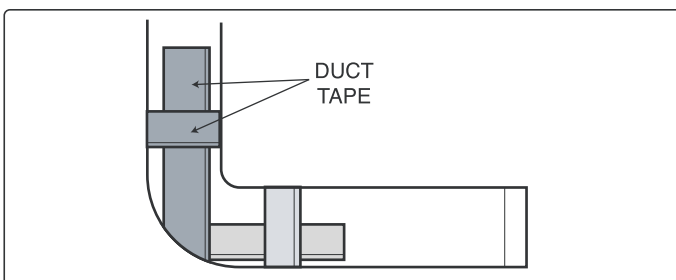
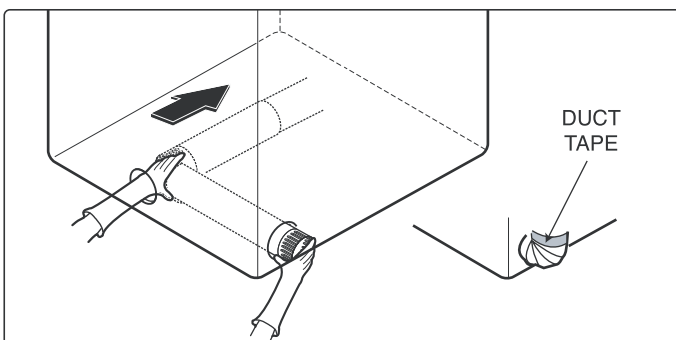
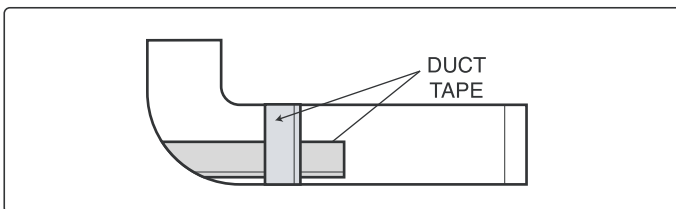
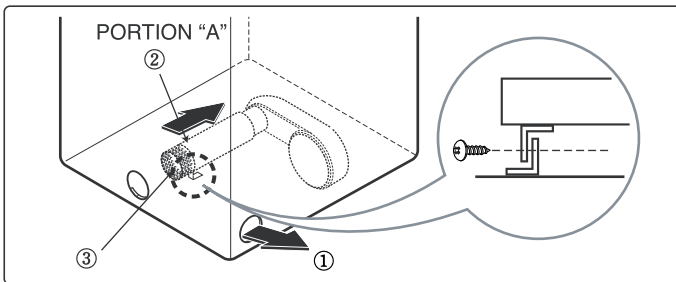
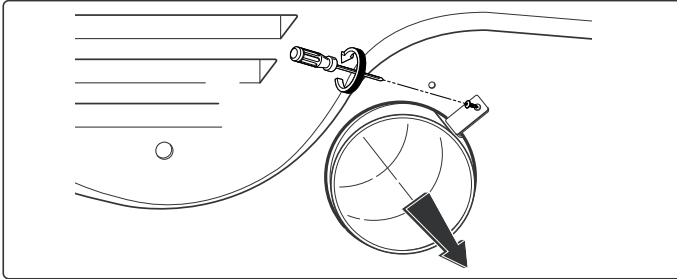
1. Open the top plate.
2. Remove the Cabinet Cover and Tub Drum (Front) assembly.
3. Loosen belt from motor and idler pulleys.
4. Carefully remove the drum.

CHANGING THE DRUM LAMP



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

DRYER EXHAUST CHANGE

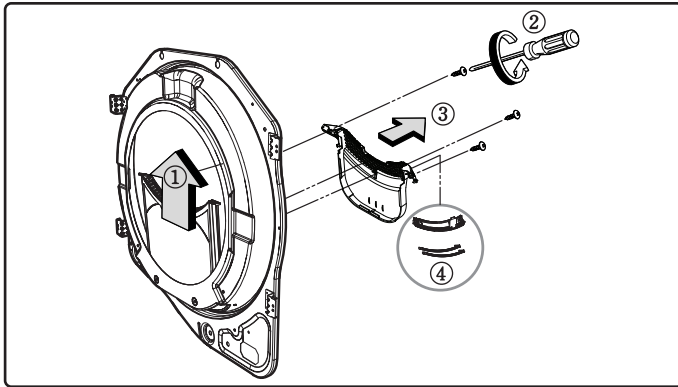


⚠ WARNING !

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

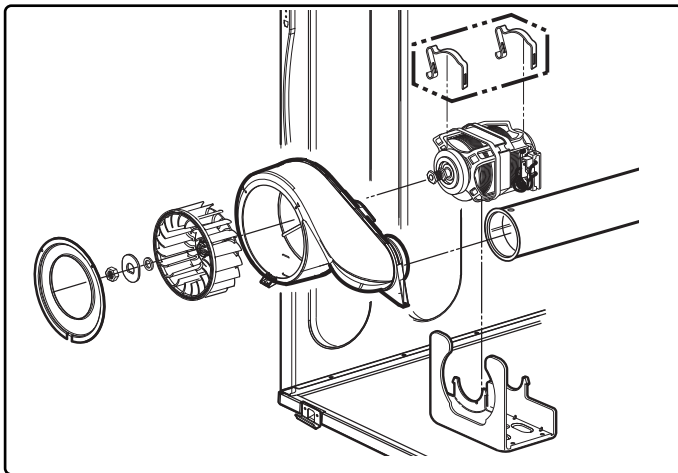
1. Remove screw and exhaust duct.
2. Detach and remove the bottom, left or right side knockout as desired.
3. Reconnect the new duct [11" (28 cm)] to the blower housing, and attach the duct to the base.
4. Pre-assemble a 4" elbow with a 4" duct. Wrap duct tape around the joint
5. Insert duct assembly, elbow first, through the side opening and connect the elbow to the dryer's internal duct.

FILTER ASSEMBLY



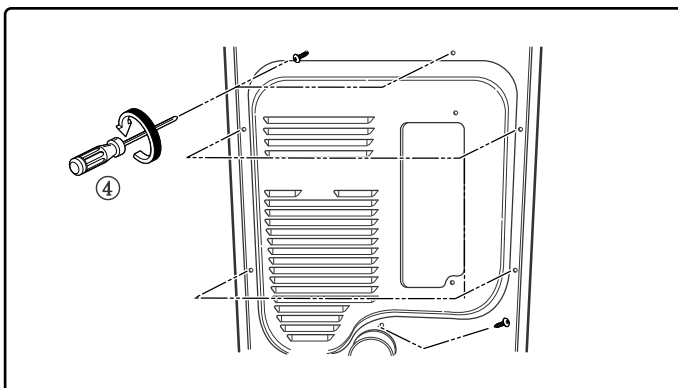
1. Remove the filter.
2. Remove 3 screws.
3. Remove the Cover Grid.
4. Disconnect the electrode sensor.

BLOWER HOUSING



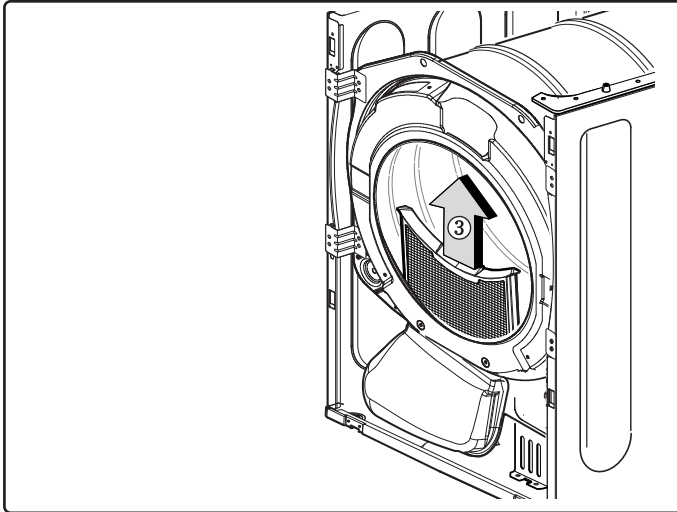
1. Disassemble the top plate.
2. Remove the Cabinet Cover and Tub Drum (Front) assembly.
3. Remove the Drum assembly.
4. Remove 2 screws and cover (Air guide).
5. Remove the bolt and washer.
6. Remove the fan.
7. Disconnect the motor clamp and motor.

BACK COVER

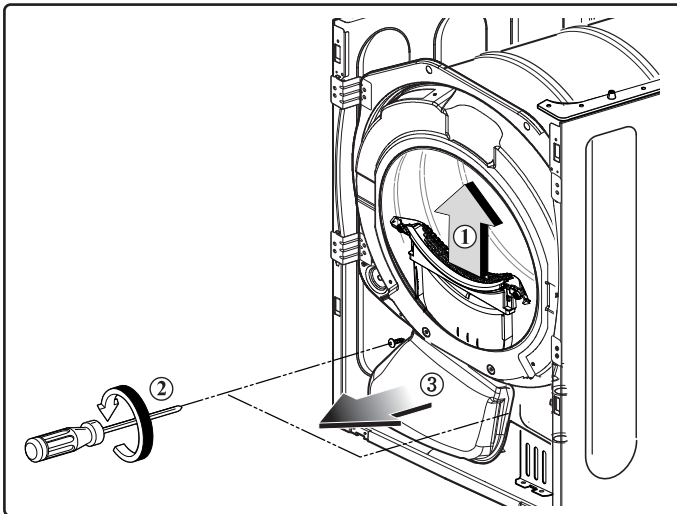


1. Open the top plate.
2. Remove the Cover Cabinet and Tub Drum (Front) assembly.
3. Remove the Drum assembly.
4. Remove 7 screws.
5. Pull the Tub Drum (Rear) assembly. Towards the front.

AIR DUCT

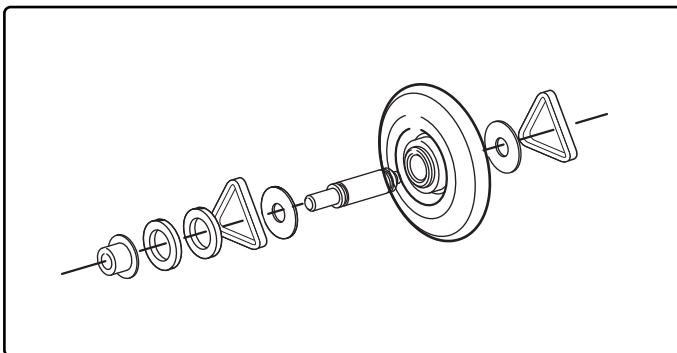


1. Disassemble the top plate.
2. Remove the Cover Cabinet.
3. Remove the filter.



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

ROLLERS

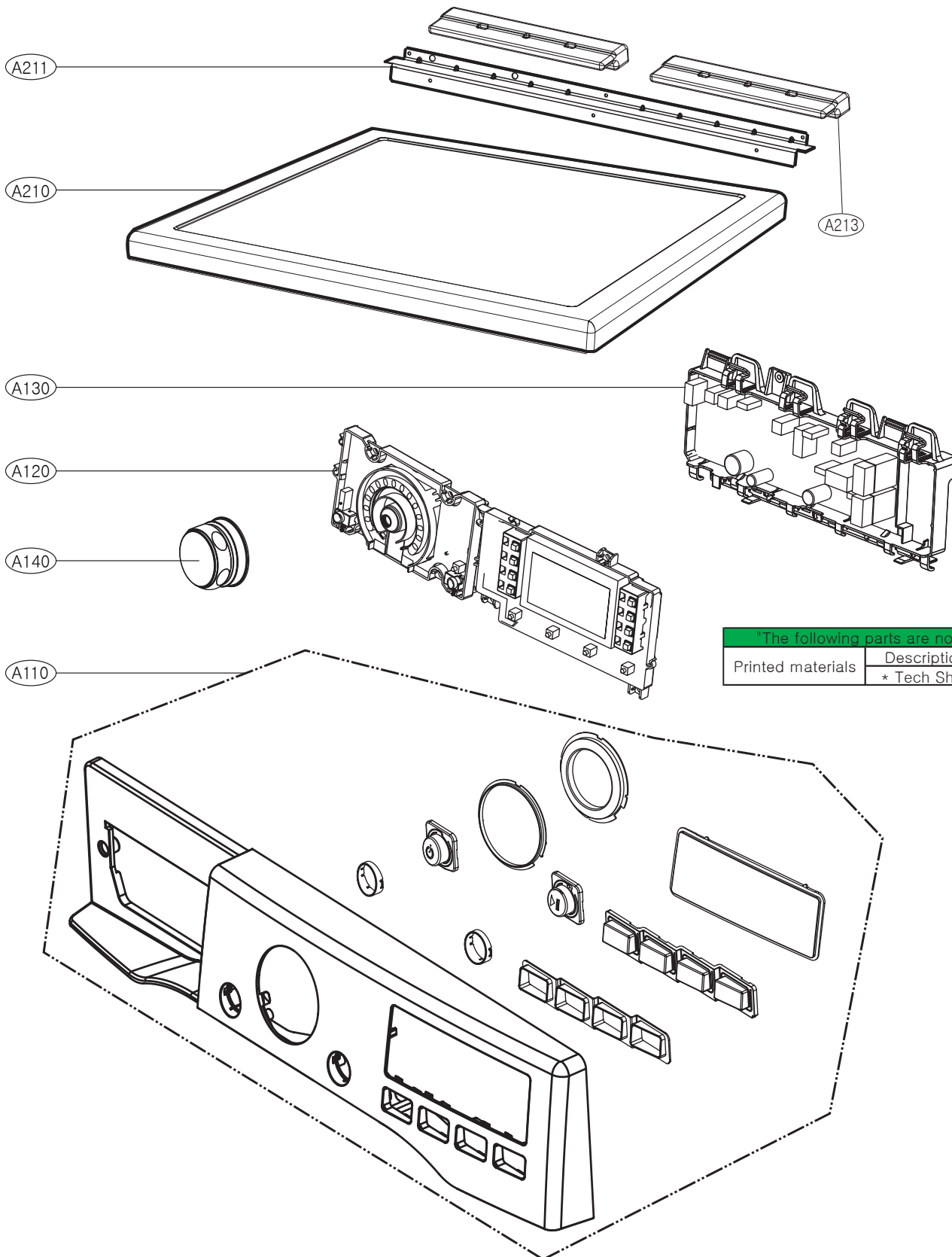


1. Disassemble the top plate.
2. Remove the Cover Cabinet and Tub Drum (Front) assembly.
3. Remove the Drum assembly and Tub Drum (Front) assembly.
4. Disconnect the Air duct from the Tub Drum (Front) assembly.
5. Remove the rollers from the Tub Drum (Front) assembly and Tub Drum (Rear) assembly.

13

EXPLODED VIEW

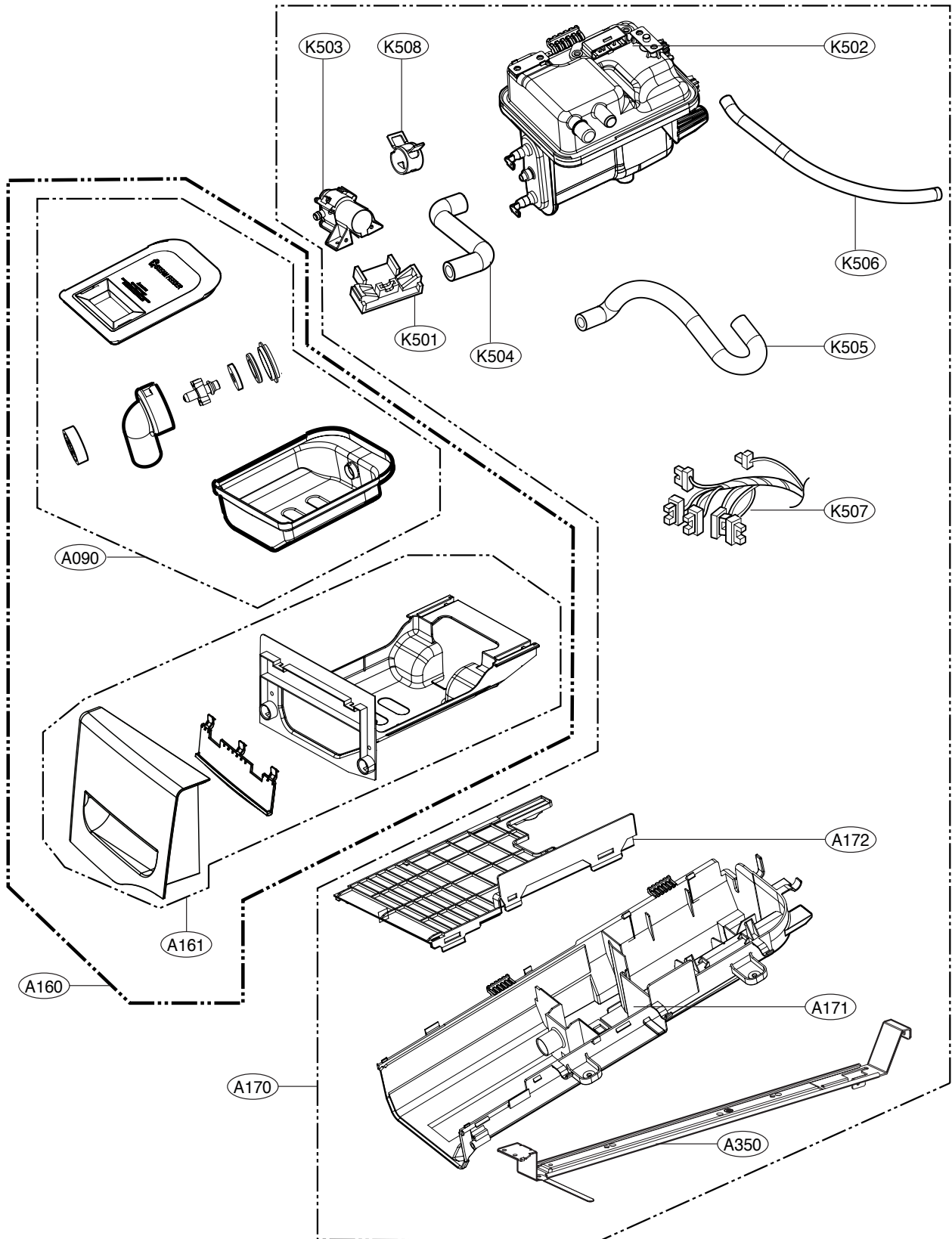
13-1-1. Control Panel & Plate Assembly (Touch LCD type)



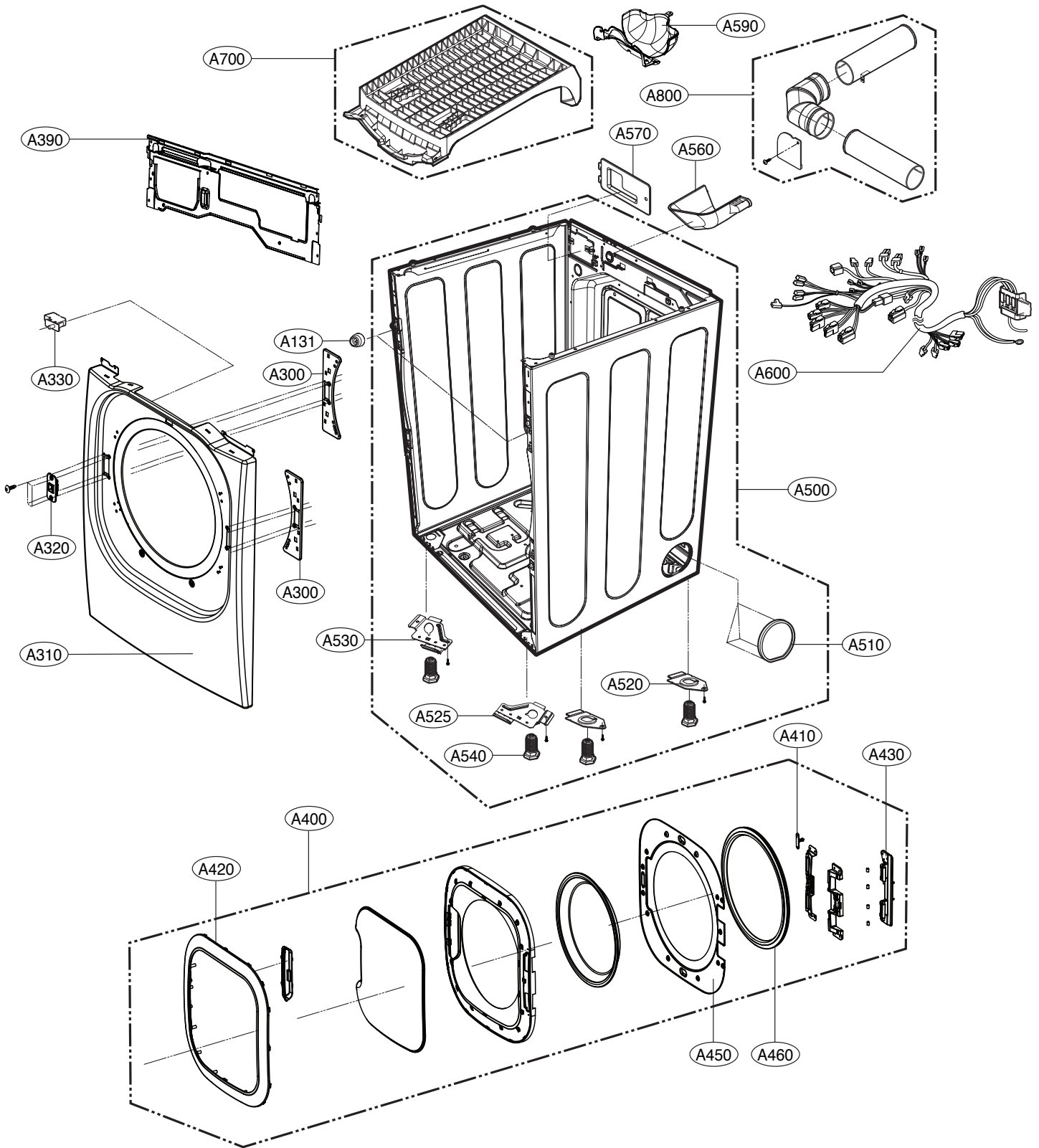
"The following parts are not illustrated"

Description	LOC NO.
Printed materials	
* Tech Sheet	G003

13-2. Panel Drawer Assembly & Guide Assembly



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



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

