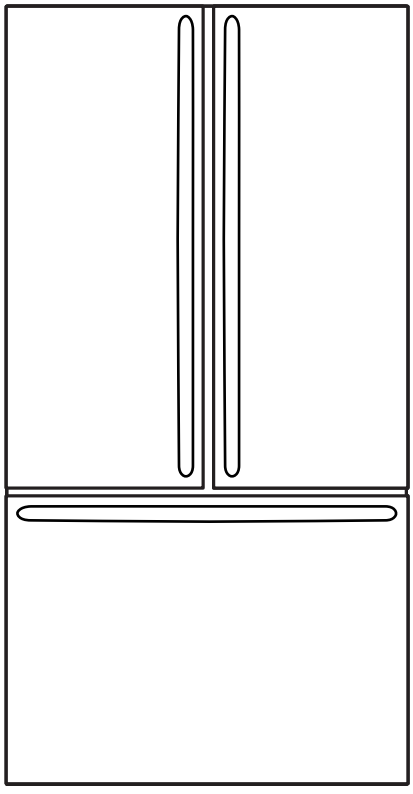
Kenmore ELITE™

REFRIGERATOR SERVICE MANUAL

CAUTION
BEFORE SERVICING THE UNIT,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



Model #s:

795.71042.01*
795.71043.01*
795.71049.01*

P/No. MFL62188032

CONTENTS

SAFETY PRECAUTIONS

Please read the following instructions before servicing your refrigerator.

1. Unplug the power before handling any elctrical componets.
2. Check the rated current, voltage, and capacity.
3. Take caution not to get water near any electrical components.
4. Use exact replacement parts.
5. Remove any objects from the top prior to tilting the product.

1. SPECIFICATIONS

1-1 DISCONNECT POWER CORD BEFORE SERVICING
IMPORTANT - RECONNECT ALL GROUNDING DEVICES

All parts of this appliance capable of conducting electrical current are grounded. 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.

1-2 IMPORTANT NOTICE

This information is intended for use by individuals possessing adequate backgrounds of electrical, electronic and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

1-3 ELECTRICAL SPECIFICATIONS

Temperature Control (Freezer Compartment) . -6°F to +8°F
Defrost Control .....Total Comp Running Time: 7 hrs~50 hrs
Defrost Thermostat ..... 46°F
Electrical Rating : 115VAC, 60Hz ..... 4.2 A
Maximum Current Leakage ..... 0.5 mA
Maximum Ground Path Resistance ..... 0.14 Ohms
Energy Consumption ..... 28cu,ft. 489 (E/STAR)

1-4 NO LOAD PERFORMANCE CONTROL POSITION: MID/MID

And Ambient of : ..... 70°F ..... 90°F
Fresh Food, °F ..... 33°F to 41°F ..... 33°F to 41°F
Frozen Food, °F ..... -4°F to +4°F ..... -4°F to +4°F
Percent Running Time ..... 35%-45% ..... 50°F-70°F

1-5 REFRIGERATION SYSTEM

Minimum Compressor Capacity Vacuum ..... 21 MIN.
Minimum Equalized Pressure
@ 70°F ..... 49 PSIG
@ 90°F ..... 56 PSIG
Refrigerant R134a ..... 4.59 oz.
Compressor ..... 956 BTU/hr

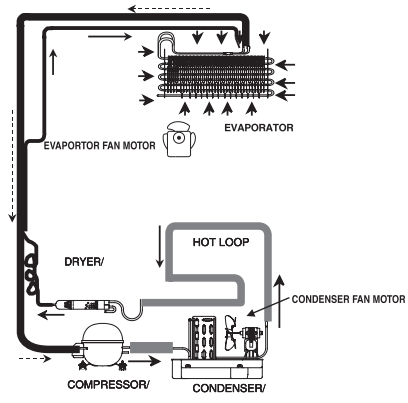
1-6 INSTALLATION

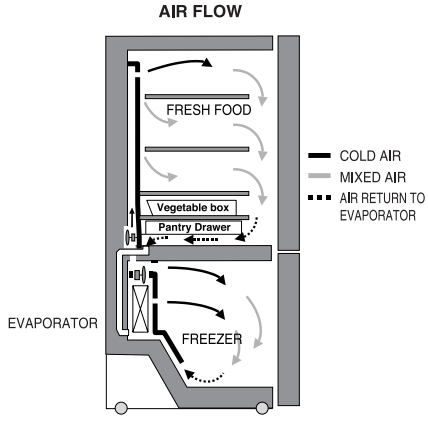
Clearance must be provided at rear of the refrigerator for air circulation.
AT REAR ..... 2 in

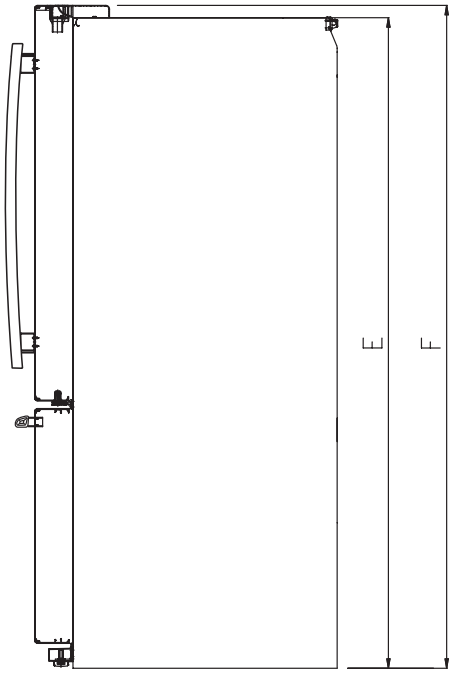
1-7 REPLACEMENT PARTS

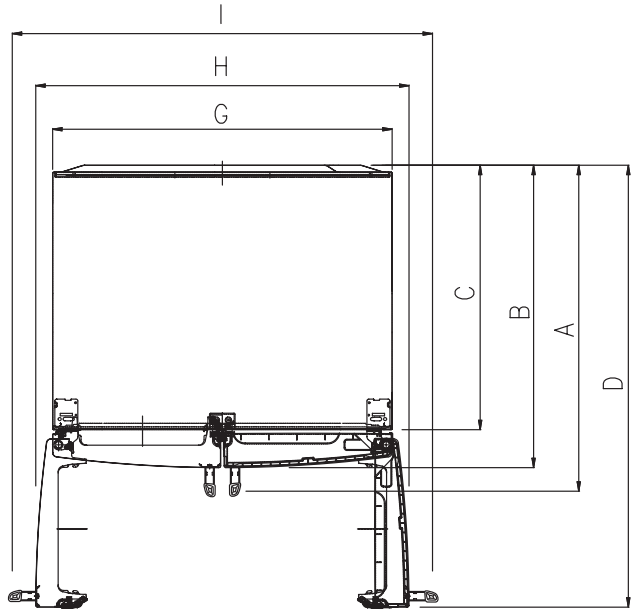
	28cu,ft 795.71042.01* 795.71043.01* 795.71049.01*
Defrost Thermostat	6615JB2005H
Defrost Heater	5300JK1005D
Evaporator Fan Motor	4681JB1027C
Capacitor (Running)	EAE58905701
Compressor (Hi-Side)	TCA34649901
Evaporator (Lo-Side)	5421JJ1003L
Condenser	ACG72915205
Dryer	5851JA2007E
Condenser Fan Motor	.4681JB1029D
Temperature Control	ABQ56655314(STS) ABQ56655316(WB) ABQ56655315(SW)
Main Control	EBR67348004
Refrigerator Fan Motor	.4681JB1027J

1-8 AIR FLOW / CIRCULATION D'AIR



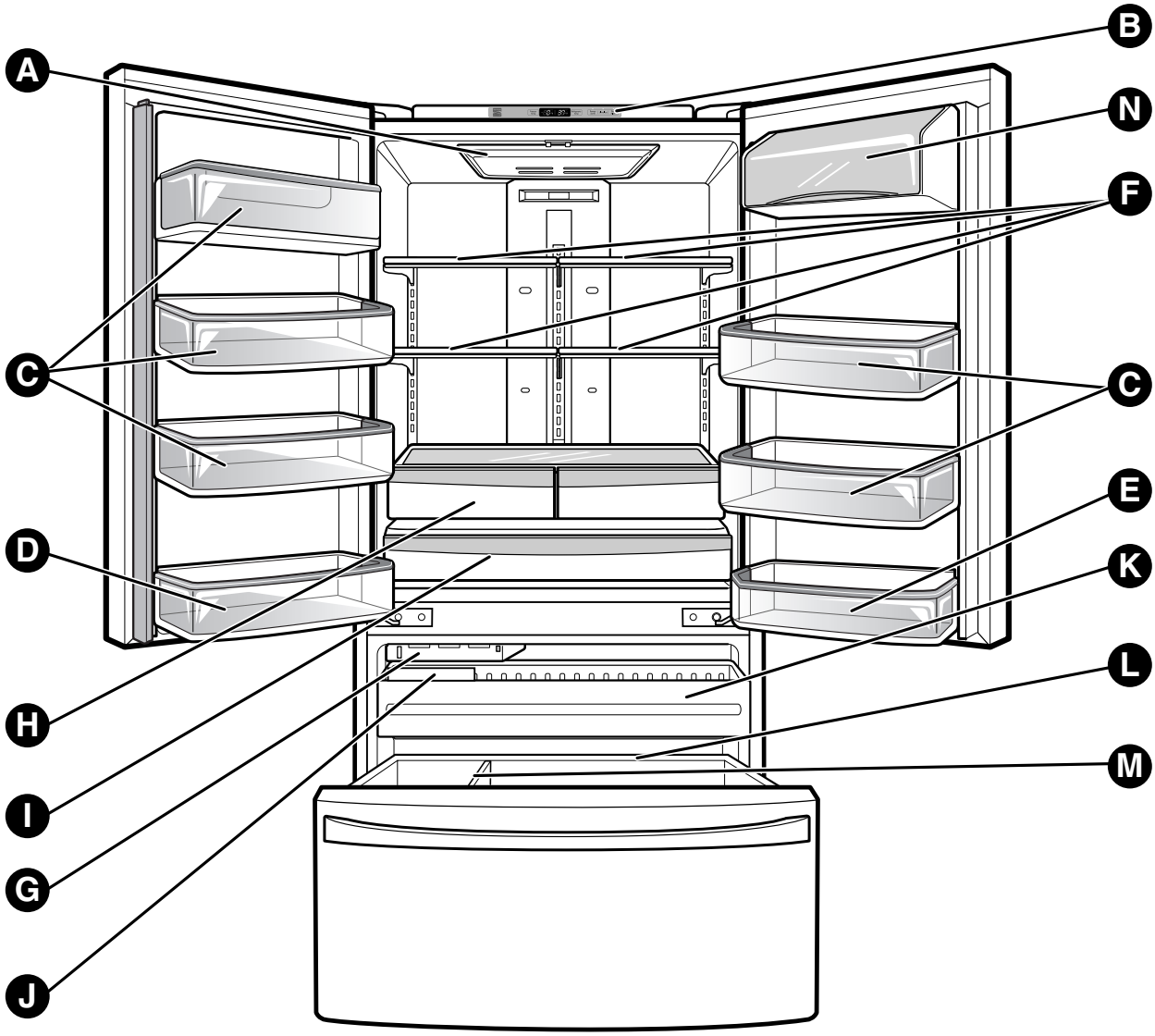






Description		795.7104*
Depth w/ Handles	A	35 3/8 in
Depth w/ Handles	B	32 7/8 in
Depth w/ o Door	C	29 in
Depth (Total with Door Open)	D	47 5/8 in
Height to Top of Case	E	68 3/8 in
Height to Top of Door Hinge	F	69 3/4 in
Width	G	35 3/4 in
Width (door open 90 deg. w/o handle)	H	39 1/4 in
Width (door open 90 deg. w/ handle)	I	44 1/4 in

2. PARTS IDENTIFICATION



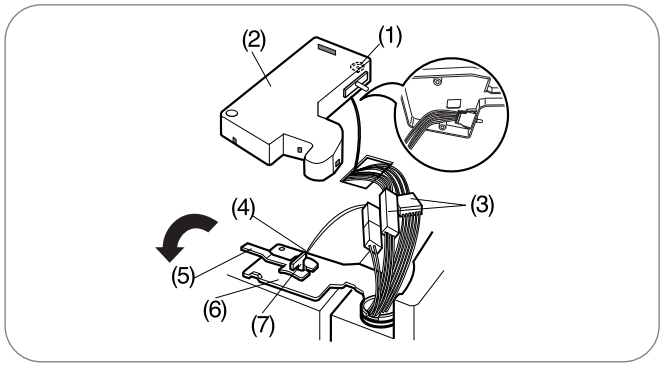
- **A** Refrigerator Light
- **B** Cover Assembly, Display
- **C** Modular Door Bins
- **D** Fixed Door Bin
- **E** Fixed Door Bin
- **F** Refrigerator Shelves
- **G** Automatic Icemaker
- **H** Humidity Controlled Crisper
- **I** Pantry Drawer
- **J** Ice Bin
- **K** Pullout Drawer
- **L** Durabase
- **M** Divider
- **N** Dairy Bin

3. DISASSEMBLY

3-1 REMOVING AND REPLACING REFRIGERATOR DOORS

To remove the left refrigerator door:

⚠ **CAUTION:** Before you begin, remove food and bins from the doors.

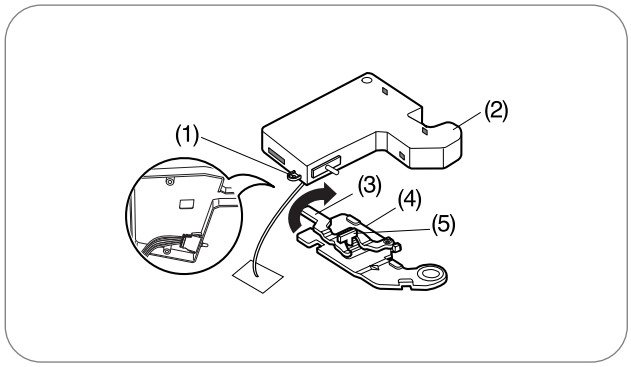


- Open the door. Remove the top hinge cover screw (1).
- Use a flat-head screwdriver to pry back the hooks (not shown) on the front underside of the cover (2). Lift up the cover.
- Remove the cover.
- Disconnect all the wire harnesses (3).
- Remove the grounding screw(4).
- Rotate hinge lever (5) counterclockwise. Lift the top hinge (6) free of the hinge lever latch (7).

IMPORTANT: When lifting the hinge free of the latch, be careful that the door does not fall forward.

- Lift the door from the middle hinge pin and remove the door.
- Place the door, inside facing up, on a nonscratching surface.

To remove the Right refrigerator door:



- Open the door. Remove the top hinge cover screw (1). Lift up the cover (2).
- Remove the cover.
- Rotate the hinge lever (3) clockwise. Lift the top hinge (4) free of the hinge lever latch (5). **IMPORTANT:** When lifting the hinge free of the latch, be careful that the door does not fall forward.

⚠ WARNING

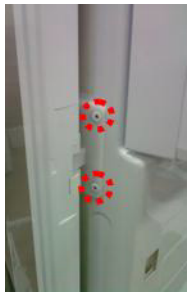
Explosion Hazard

- Disconnect electrical supply to the refrigerator before installing. Failure to do so could result in death or serious injury.
- Do not put hands or feet or other objects into the air vents, base grille, or bottom of the refrigerator. You may be injured or receive an electrical shock.
- Be careful when you work with the hinge, base grille, and stopper. You may be injured.

3-2 DOOR

● **Mullion Removal**

1. **Remove 2 screws.**

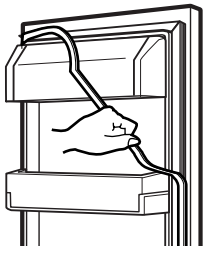


2. **Lift mullion up carefully.**

3. **Disconnect wire harness.**

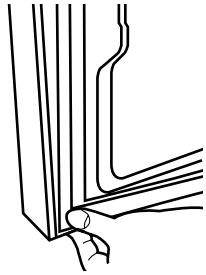
● **Door Gasket Removal**

1. **Remove gasket**
   Pull gasket free from gasket channel on the four remaining sides of door.



● **Door Gasket Replacement**

1. **Insert gasket into channel**
   Press gasket into channels on the four remaining sides of door.

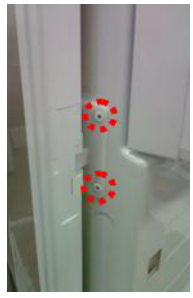


● **Mullion Replacement**

1. **Connect wire harness.**

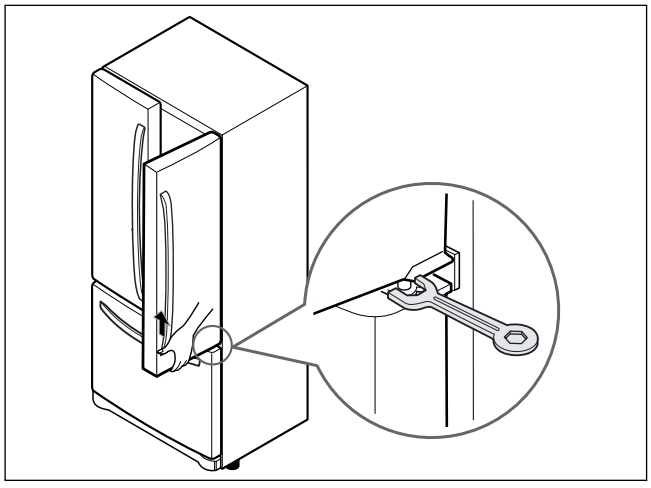
2. **Insert mullion into channel.**
   Inserting mullion assy' into bracket, door

3. **Assemble 2 screws.**



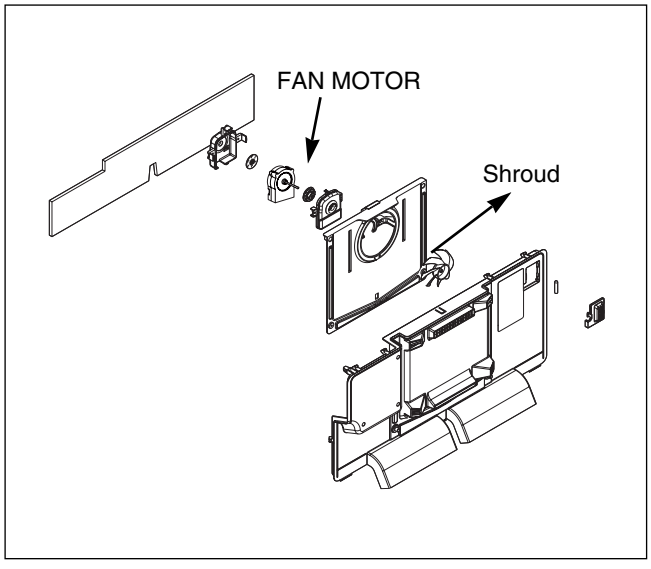
3-3 Door Alignment

If the space between your doors is uneven, follow the instructions below to align the doors:
Remove the Base Grillie. Turn the leveling legs (CCW) to raise or (CW) to lower the height of the front of the refrigerator by using flat blade screw driver or 11/32" wrench. Use the wrench (Included with the User Manual) to adjust the bolt in the door hinge to adjust the height. (CCW to raise or CW to lower the height.)



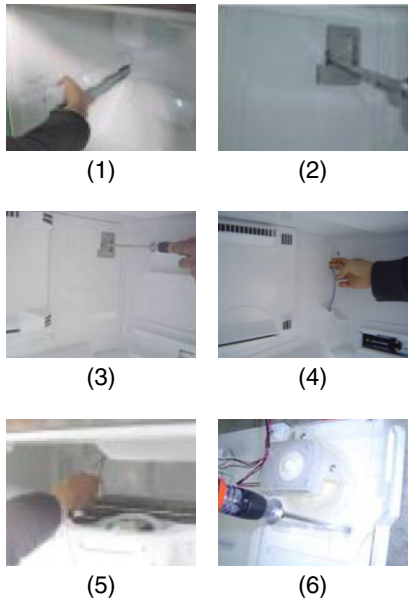
3-4 FAN AND FAN MOTOR(EVAPORATOR)

1. Remove the freezer drawer. (If your refrigerator has an icemaker, remove the icemaker first)
2. Remove the plastic guide for slides on left side by unscrewing phillips head screws.
3. Remove the grille by removing four screws and pulling the grille forward.
4. Remove the Fan Motor assembly by loosening 3 screws and disassembling the shroud.
5. Pull out the fan and separate the Fan Motor and Bracket.



* Grille Fan Scroll Assembly Replacement

1) Remove the plastic guide for slides on left side by unscrewing phillips head screws.
2) Pull out the cover sensor to disassemble using tools shown in the figure.
3) Pull out the cover grille to disassemble using tools shown in the figure.
4) Put your hand into the inside of grille to disassemble shown in the figure.
5) Disconnect wire harness of the grille
6) Remove the scroll assembly by loosening all screws



3-5 DEFROST CONTROL ASSEMBLY

Defrost Control assembly consists of Defrost Sensor and FUSE-M.
The Defrost Sensor works to defrost automatically. It is attached to the metal side of the Evaporator and senses its temperature. At 46F(8°C), it turns the Defrost Heater off. Fuse-M is a safety device for preventing over-heating of the Heater when defrosting.

1. Pull out the grille assembly. (Figure 1)
2. Separate the connector with the Defrost Control assembly and replace the Defrost Control assembly after cutting the Tie Wrap. (Figure 2)

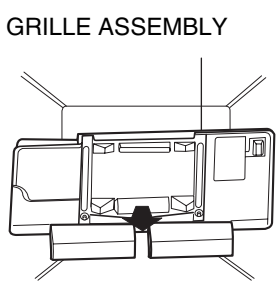


Figure 1

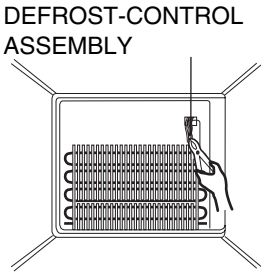


Figure 2

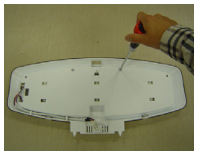
3-6 LAMP

Unplug Refrigerator, or disconnect power at the circuit breaker.
If necessary, remove top shelf or shelves.

3-6-1 Refrigerator Compartment Lamp

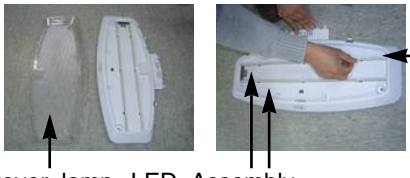
1) Release 2 screws.
2) Hold both ends with your both hands and pull it downward to remove it.


3) To remove the case lamp and cover lamp, release another 2 screws as following picture.



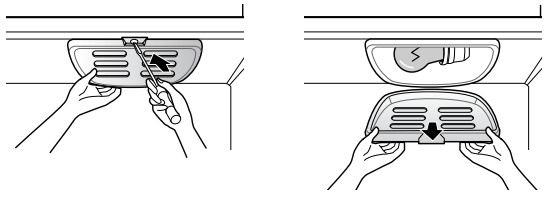
3) Use a flat blade screwdriver as shown below to remove the cover lamp.


4) To remove the LED Assembly, open the Hook part to pull it out as shown in the following picture.



3-6-2 Freezer Compartment Lamp

1. Unplug refrigerator power cord form outlet.
2. Remove screw with driver.
3. Grasp the cover Lamp,pull the cover downward.



3-7 MULTI DUCT

1. Remove the upper and lower Caps by using a flat screwdriver, and remove 2 screws. (Figure 3)
2. Disconnect the lead wire on the bottom position.

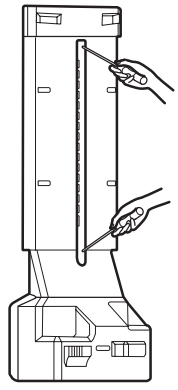


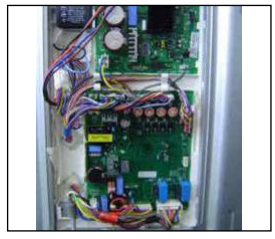
Figure 3

3-8 MAIN PWB

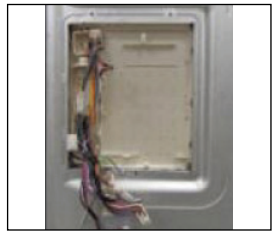
⚠ **WARNING :** Unplug the refrigerator before removing the control board.

1) Loosen the 3 screws on the PWB cover.

2) Remove the PWB cover



3) Disconnect wire harness and replace the main PWB in the reverse order of removal.



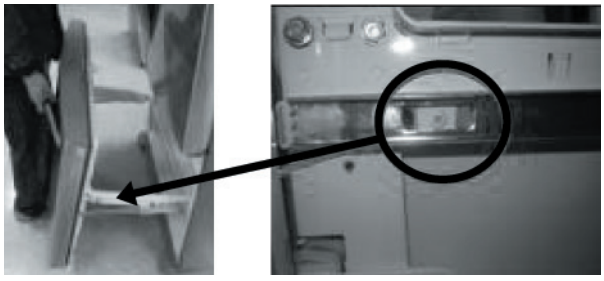
3-9 HOW TO REMOVE AND REINSTALL THE PULLOUT DRAWER

3-9-1 Follow Steps to Remove

Step 1) Open the freezer door.

Step 2) Remove the lower basket.

Step 3) Remove the two screws from the guide rails (one from each side).



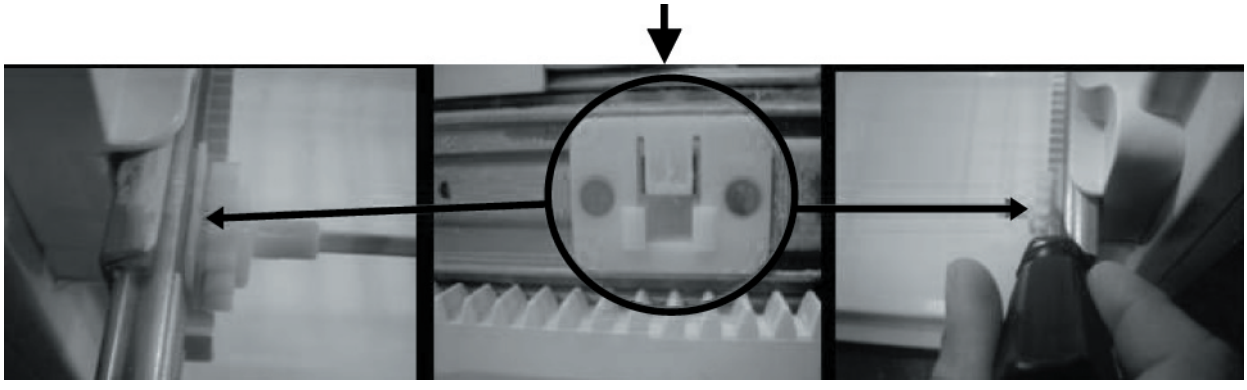
Step 4) Lift the freezer door up to unhook it from the rail support and remove.
Pull both rails to full extension.

Step 5) First: Remove the gear from the left side first by releasing the tab behind the gear, place a screwdriver between the gear and the tab and pull up on the gear.

Second: Remove the center rail.

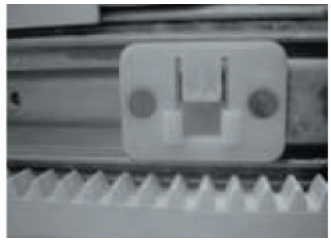
Third: Remove the gear from the right side by following the same steps for the left side.

NOTE: THIS TAB MUST BE PUSHED IN TO RELEASE THE GEAR.



3-9-2 Follow Steps to Reinstall

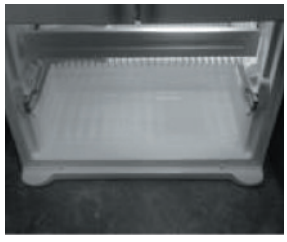
Step 1) Reinstall the right side gear into the clip.


Step 2) Insert the rail into the right side gear. Gears do not need to be perpendicular to each other.

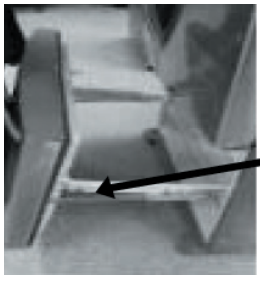
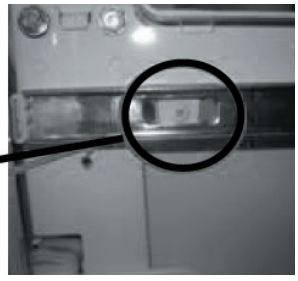
Step 3) Insert the rail into the left side gear, and insert the gear into the clip.

Step 4) The rail system will align itself by pushing the rails all the way into the freezer section.
Pull the rails back out to full extension.

Step 5) Reinstall the freezer door by inserting the rail tabs into the guide rail.

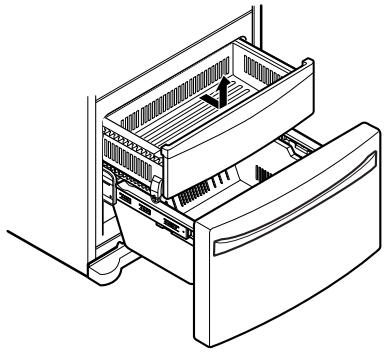
Step 6) Reinstall the two screws into the guide rails (one from each side).

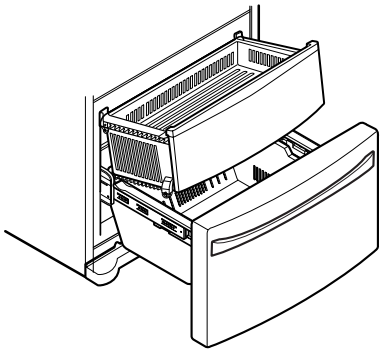
Step 7) Reinstall the lower basket, and close the freezer door.

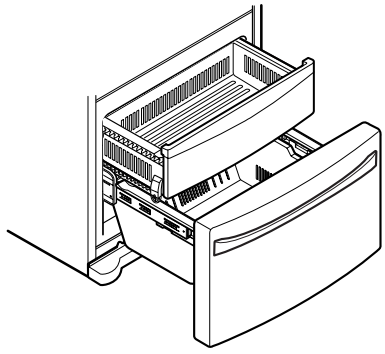
3-10 PULL OUT DRAWER

To remove, pull the drawer out to full extension.
Lift the front of the drawer up, then pull it straight out.



To install, slightly tilt up the front and insert the drawer into the frame and push it back into place.





4. ADJUSTMENT

4-1 COMPRESSOR

4-1-1 Role

The compressor intakes low temperature and low pressure gas from the evaporator of the refrigerator and compresses this gas to high-temperature and high-pressure gas. It then delivers the gas to the condenser.

4-1-2 Note for Usage

(1) Be careful not to allow over-voltage and over-current.
(2) Do not drop or handle carelessly.
(3) Keep away from any liquid.
If liquid such as oil or water enters the Cover PTC Compressor may fail due to breakdown of their insulating capabilities.
(4) Always use the Parts designed for the compressor and make sure it is properly attached to the compressor. Parts may appear physically identical but could have different electrical ratings. Replace parts by part number and model number. Use only approved substitute parts.

4-1-3 REMOVE THE COVER PTC

(1) Remove the Cover Back M/C

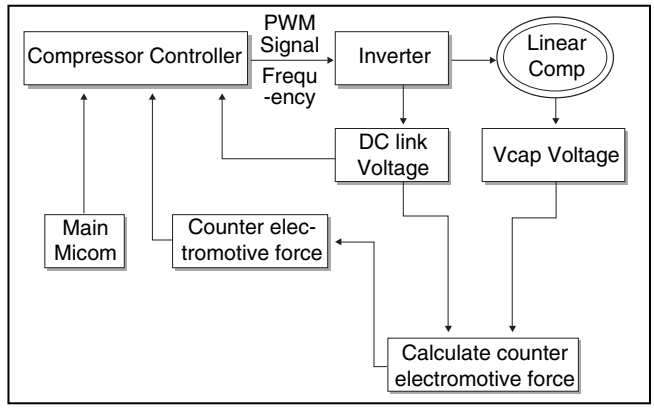
(2) Loosen two screws on comp base

(3) Use a L-shaped flap tooll to pry off the cover
(4) Assembly in reverse order of disassembly

4-2 Introduction of E-Linear Compressor

- E-Linear compressor is run by mechanical part design through automatically varying the cooling power. The main parts consist of compressor and Sub PCB which controls the compressor. PCB authorizes constant voltage and constant frequency to the compressor and protects it.

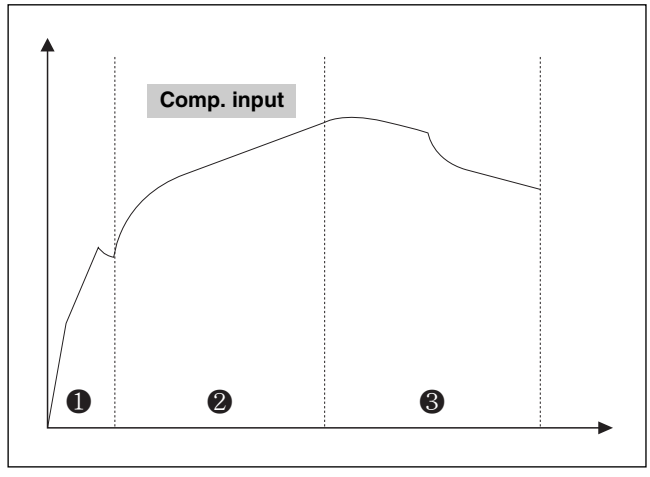
4-2-1 Control of Compressor Block Diagram



Control Block Diagram of Compressor

4-2-2 Compressor operating pattern

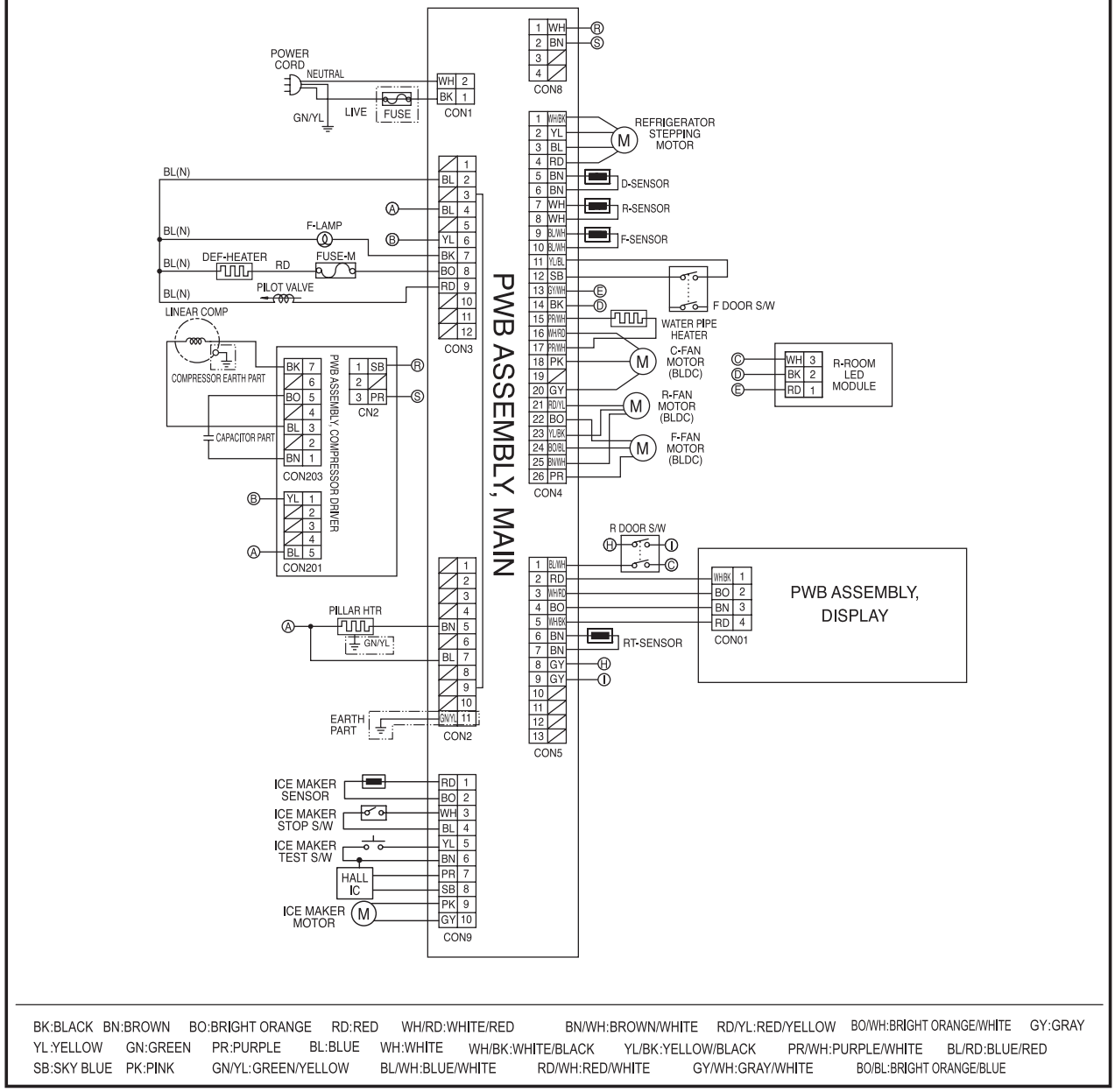
- Drive half stroke after turning on initial power for 30 seconds. Then, slowly increase stroke and reach target input. Once reaching the target input, input naturally changes according to refrigerator load without any special control.



Interval 1) Half stroke interval - after initial running, stay at the initial value for 30 seconds
Interval 2) Running interval - Increase at every 0.8 till it reaches the target input; it takes about 3' 45"
Interval 3) CVCF interval - Run by target voltage and main operating frequency and the input naturally changes according to refrigerator load

5. CIRCUIT DIAGRAM

*EARTH PART, PLUG TYPE AND COMP' EARTH PART,
FUSE ON CIRCUIT DIAGRAM ARE SUBJECT TO
CHANGE IN DIFFERENT LOCALITIES AND MODEL TYPE.



BK:BLACK BN:BROWN BO:BRIGHT ORANGE RD:RED WH/RD:WHITE/RED BN/WH:BROWN/WHITE RD/YL:RED/YELLOW BO/WH:BRIGHT ORANGE/WHITE GY:GRAY
YL:YELLOW GN:GREEN PR:PURPLE BL:BLUE WH:WHITE WH/BK:WHITE/BLACK YL/BK:YELLOW/BLACK PR/WH:PURPLE/WHITE BL/RD:BLUE/RED
SB:SKY BLUE PK:PINK GN/YL:GREEN/YELLOW BL/WH:BLUE/WHITE RD/WH:RED/WHITE GY/WH:GRAY/WHITE BO/BL:BRIGHT ORANGE/BLUE

6. PCB Picture

6-1 Main PCB

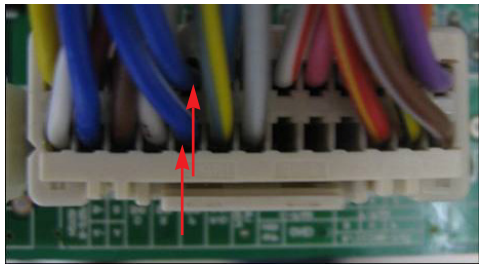
P/No & MFG	Picture
EBR67348002 (2010.03 ~)	

6-2 Display PCB & Sub PCB

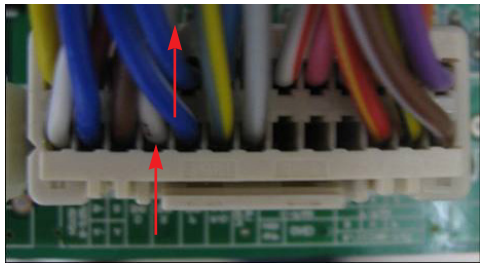
P/No	Picture
Display PCB EBR42479303 (2010.03~)	 CON01

7. Troubleshooting With Error Display

7-1 Freezer Sensor Error (Er FS)

No	Checking flow	Result & SVC Action
1	**Check for a loose connection.**	
2	**Check the Blue/White to Blue/White.**  **<CON4>**	<table><tr><th colspan="2">Result</th><th>SVC Action</th></tr><tr><td>0 Ω</td><td>Short</td><td>Change the sensor</td></tr><tr><td>OFF</td><td>Open</td><td>Replace the refrigerator</td></tr><tr><td>Other</td><td>Normal</td><td>Check the Temp and resistance (Table-1)</td></tr></table> **<Temperature table-1>** <table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>-22°F / -30°C</td><td>40.5 ~ 38.5 kΩ</td></tr><tr><td>-13°F / -25°C</td><td>30.5 ~ 28.5 kΩ</td></tr><tr><td>-4°F / -20°C</td><td>23 ~ 21.5 kΩ</td></tr><tr><td>5°F / -15°C</td><td>17.5 ~ 16.5 kΩ</td></tr><tr><td>14°F / -10°C</td><td>13.5 ~ 12.5 kΩ</td></tr><tr><td>23°F / -5°C</td><td>10.5 ~ 9.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>8 ~7.5 kΩ</td></tr></table> **※ The sensor is determined by the temperature.** **For example, 23kΩ indicates -4°F.**

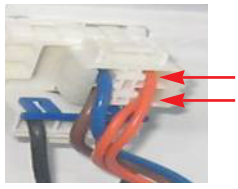
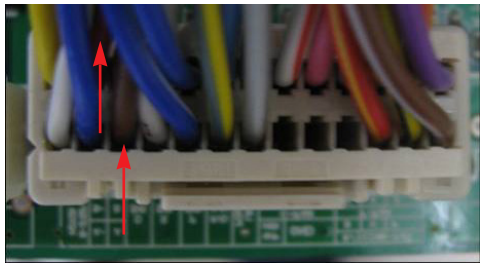
7-2 Refrigerator Sensor Error (Er rS)

No	Checking flow	Result & SVC Action
1	**Check for a loose connection.**	
2	**Check the White to White.**  **<CON4>**	<table><tr><th colspan="2">Result</th><th>SVC Action</th></tr><tr><td>0 Ω</td><td>Short</td><td>Change the sensor</td></tr><tr><td>OFF</td><td>Open</td><td>Replace the refrigerator</td></tr><tr><td>Other</td><td>Normal</td><td>Check the Temp and resistance (Table-2)</td></tr></table> **<Temperature table-2>** <table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>23°F / -5°C</td><td>38.5 ~ 36.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>30.5 ~ 29.5 kΩ</td></tr><tr><td>41°F / 5°C</td><td>24.5 ~ 23.5 kΩ</td></tr><tr><td>50°F / 10°C</td><td>20 ~ 19 kΩ</td></tr><tr><td>59°F / 15°C</td><td>16 ~15.5 kΩ</td></tr></table> **※ The sensor is determined by the temperature.** **For example, 30kΩ indicates 32°F.**

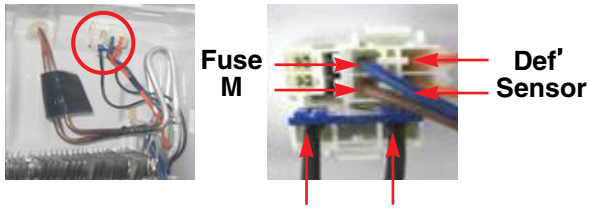
7-3 Icing Sensor Error (Er IS)

No	Checking flow	Result & SVC Action
1	**Check for a loose connection.**	
2	**Check the <u>Red to Bright Orange.</u>**  **<CON9>**	<table><tr><th colspan="2">Result</th><th>SVC Action</th></tr><tr><td>0 Ω</td><td>Short</td><td>Change the sensor</td></tr><tr><td>OFF</td><td>Open</td><td>Replace the refrigerator</td></tr><tr><td>Other</td><td>Normal</td><td>Check the Temp and resistance (Table-1)</td></tr></table> **<Temperature table-1>** <table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>-22°F / -30°C</td><td>40.5 ~ 38.5 kΩ</td></tr><tr><td>-13°F / -25°C</td><td>30.5 ~ 28.5 kΩ</td></tr><tr><td>-4°F / -20°C</td><td>23 ~ 21.5 kΩ</td></tr><tr><td>5°F / -15°C</td><td>17.5 ~ 16.5 kΩ</td></tr><tr><td>14°F / -10°C</td><td>13.5 ~ 12.5 kΩ</td></tr><tr><td>23°F / -5°C</td><td>10.5 ~ 9.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>8 ~7.5 kΩ</td></tr></table> **※ The sensor is determined by the temperature.** **For example, 23kΩ indicates -4°F.**

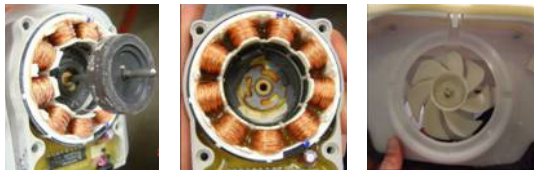
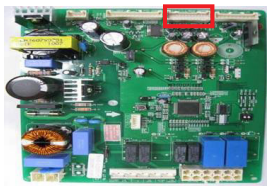
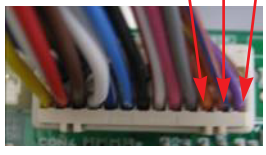
7-4 Defrost Sensor Error (F dS)

No	Checking flow	Result & SVC Action
1	**Check for a loose connection.**  	
2	**Check the <u>Orange to Orange.</u>**  **Check the <u>Brown to Brown.</u>**  **<CON4>**	**<Temperature table-3>** **Result** / **SVC Action** 0 Ω — Short — Change the sensor OFF — Open — Replace the refrigerator Other — Normal — Check the Temp and resistance (Table-3) **<Temperature table-3>** **(1) To (2)** / **Result** 23°F / -5°C — 38.5 ~ 36.5 kΩ 32°F / 0°C — 30.5 ~ 29.5 kΩ 41°F / 5°C — 24.5 ~ 23.5 kΩ 50°F / 10°C — 20 ~ 19 kΩ 59°F / 15°C — 16 ~15.5 kΩ **※ The sensor is determined by the temperature. For example, 23kΩ indicates -4°F.**

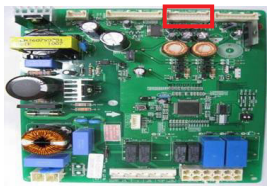
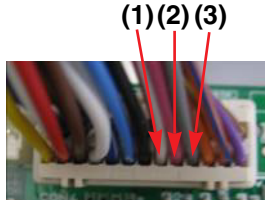
7-5 Defrost Heater Error (Er dH)

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the <u>Door gasket.</u></td><td rowspan="2"><table>
<tr><th>Part</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Fuse-M</td><td>0 Ω</td><td>Go to the 3</td></tr>
<tr><td>Other</td><td>Change Fuse-M</td></tr>
<tr><td rowspan="2">Def' Heater</td><td>34 ~ 42 Ω</td><td>Go to the 3</td></tr>
<tr><td>Other</td><td>Change Fuse-M</td></tr>
<tr><td rowspan="2">Def' Sensor</td><td>21 Ω↓</td><td>Go to the 3</td></tr>
<tr><td>Other</td><td>Go to the 5</td></tr>
</table></td></tr>
<tr><td>2</td><td>Check the <u>Defrost control part.</u>
 
</td></tr>
<tr><td>3</td><td>Input Test 3 Mode.
(Push the button 3 times)</td><td>   </td></tr>
<tr><td>4</td><td>Check the <u>Blue to Orange.</u>
 
<CON3></td><td><table>
<tr><th>Result</th><th>SVC Action</th></tr>
<tr><td>112 ~ 116 V</td><td>Go to the 5</td></tr>
<tr><td>0 V</td><td>Replace Main PCB</td></tr>
</table></td></tr>
<tr><td>5</td><td>Release the test mode.
Push the button 1 times. (Normal)</td><td>  </td></tr>
<tr><td>6</td><td>Check the <u>Blue to Orange.</u>
 
<CON3></td><td><table>
<tr><th>Result</th><th>SVC Action</th></tr>
<tr><td>0 V</td><td>Explain to customer</td></tr>
<tr><td>112 ~ 116 V</td><td>Replace Main PCB</td></tr>
</table></td></tr>
</table>

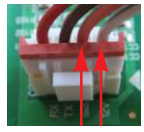
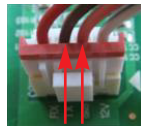
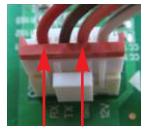
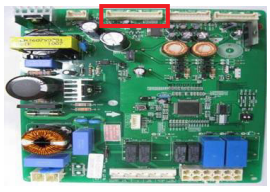
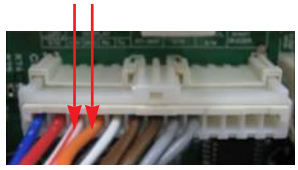
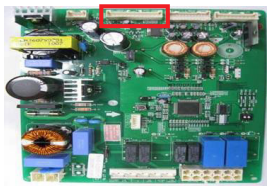
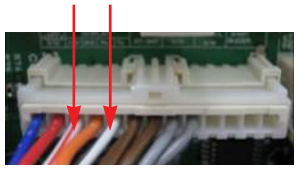
7-6 Freezer Fan Error (Er FF)

No	Checking flow	Result & SVC Action
1	**Reset the unit and Input Test 1 Mode. (Push the button 1 time)**	 
2	**Open the freezer door and Check the air flow. ※ While an error code is displayed, the fan is not working.**	 **Status / SVC Action** No windy – Go to 3 Windy – Go to 4
3	**Check the <u>Fan motor.</u>** 	**Rotate fan using your hand. It feel sticky, change the motor. (Cause of ice or rust inside of motor)**
4	**Check the <u>Fan motor voltage.</u>**   **(1) (2) (3)** **<CON4>**	**Point / Result / SVC Action** (1) ~ (2) – Below 9 V – Change the PCB (2) ~ (3) – 0 or 5 V – Change the motor

7-7 Condenser Fan Error (Er CF)

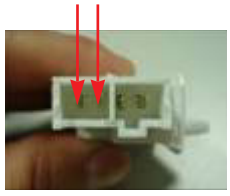
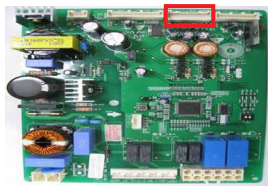
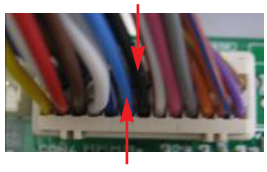
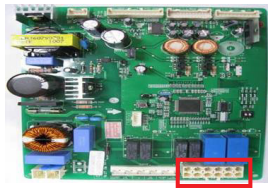
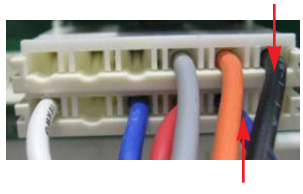
<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Reset the unit and
Input Test 1 Mode.
(Push the button 1 time)</td><td>   </td></tr>
<tr><td>2</td><td>Check the fan rotating.
※ While an error code is displayed,
the fan is not working.</td><td> 
<table>
<tr><th>Status</th><th>SVC Action</th></tr>
<tr><td>No windy</td><td>Check motor</td></tr>
<tr><td>Windy</td><td>Go to the 4</td></tr>
</table></td></tr>
<tr><td>3</td><td>Check the Fan motor and surrounding.
  </td><td>Rotate fan using your hand.
It feel sticky, change the motor.</td></tr>
<tr><td>4</td><td>Check the Fan motor voltage.
  
<CON4></td><td><table>
<tr><th></th><th>Result</th><th>SVC Action</th></tr>
<tr><td>(1) ~ (2)</td><td>Below 9 V</td><td>Change the PCB</td></tr>
<tr><td>(2) ~ (3)</td><td>0 or 5 V</td><td>Change the motor</td></tr>
</table></td></tr>
</table>

7-8 Communication Error (Er CO)

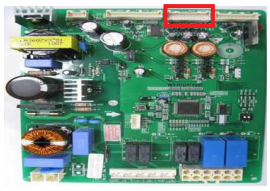
No	Checking flow	Result & SVC Action
1	**Check the loose connection.**	
2	**Check the <u>Orange to White/Black.</u>**  **CON101** **<Display>**  **<CON101>**	**Result** / **SVC Action** 12 V — Go to the 3 Other — Check the Hinge (loose connection) Change the Main PCB
3	**Check the <u>Orange to Brown.</u>**  **CON101** **<Display>**  **<CON101>**	**Result** / **SVC Action** 0 V or 5 V — Change the Display PCB Other — Go to the 4
4	**Check the <u>Orange to Red.</u>**  **CON101** **<Display>**  **<CON101>**	**Result** / **SVC Action** 0 V or 5 V — Change the Main PCB Other — Go to the 5
5	**Check the <u>White/Red to Orange.</u>**   **<CON5>**	**Result** / **SVC Action** 0 V or 5 V — Change the Display PCB Other — Go to the 6
6	**Check the <u>White/Red to White/Black.</u>**   **<CON5>**	**Result** / **SVC Action** 0 V or 5 V — Change the Main PCB Other — Explain to customer

8. Troubleshooting Without Error Display

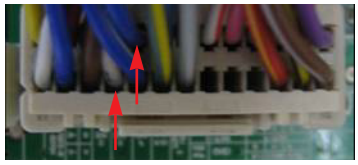
8-1 Freezer room AC Bulb Lamp doesn't work

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the Freezer door switch.
  </td><td>If feel sticky, Change the door s/w.</td></tr>
<tr><td>2</td><td>Check the door S/W resistance.
  </td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Normal</td><td>0Ω</td><td>Go to the 3</td></tr>
<tr><td>Infinity</td><td>Change door S/W</td></tr>
<tr><td rowspan="2">Push S/W</td><td>Infinity</td><td>Go to the 3</td></tr>
<tr><td>0Ω</td><td>Change door S/W</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Check the Yellow Blue to Sky blue.
  
<CON4></td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Closed</td><td>5 V</td><td>Go to the 4</td></tr>
<tr><td>Other</td><td>Change the Door S/W</td></tr>
<tr><td rowspan="2">Open</td><td>0 V</td><td>Go to the 4</td></tr>
<tr><td>Other</td><td>Change the Door S/W</td></tr>
</table>
</td></tr>
<tr><td>4</td><td>Check the Blue to Black.
  
<CON3></td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Closed</td><td>0 ~ 2 V</td><td>Explain to customer</td></tr>
<tr><td>Other</td><td>Change the Main PCB</td></tr>
<tr><td rowspan="2">Open</td><td>115 V</td><td>Change the F Lampe</td></tr>
<tr><td>Other</td><td>Change the PCB</td></tr>
</table>
</td></tr>
</table>

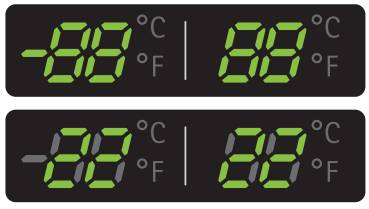
8-2 Refrigerator room lamp doesn't work

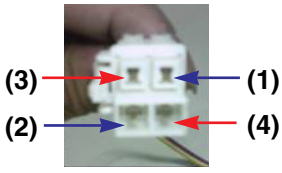
<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the Refrigerator door switch.
  </td><td>If feel sticky, Change the door s/w.</td></tr>
<tr><td>2</td><td>Check the door S/W resistance.
  </td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Normal</td><td>0Ω</td><td>Go to the 3</td></tr>
<tr><td>Infinity</td><td>Change door S/W</td></tr>
<tr><td rowspan="2">Push S/W</td><td>Infinity</td><td>Go to the 3</td></tr>
<tr><td>0Ω</td><td>Change door S/W</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Check the Black to Gray White.
 
 
<CON4></td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Normal</td><td>12 V</td><td>Go to the 4</td></tr>
<tr><td>Other</td><td>Change the PCB</td></tr>
</table>
</td></tr>
<tr><td>4</td><td>Check the Red to Black.
  </td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Normal</td><td>12 V</td><td>Go to the 5</td></tr>
<tr><td>Other</td><td>Change the LED Lamp</td></tr>
</table>
</td></tr>
<tr><td>5</td><td>Check the Black to White.
  </td><td>
<table>
<tr><th>Status</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">Closed</td><td>0 ~ 2 V</td><td>Explain to customer</td></tr>
<tr><td>Other</td><td>Change the Door S/W</td></tr>
<tr><td rowspan="2">Open</td><td>12 V</td><td>Explain to customer</td></tr>
<tr><td>Other</td><td>Change the LED Lamp</td></tr>
</table>
</td></tr>
</table>

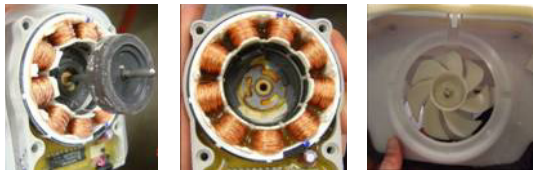
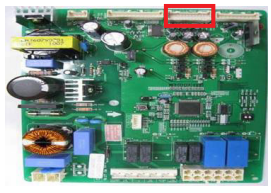
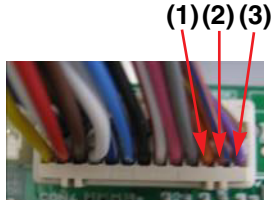
8-3 Poor cooling in Fresh food section

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the sensor resistance.
 
<CON4>
※ The sensor is determined by the temperature.
For example, 30kΩ indicates 32°F.</td><td><table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>23°F / -5°C</td><td>38.5 ~ 36.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>30.5 ~ 29.5 kΩ</td></tr><tr><td>41°F / 5°C</td><td>24.5 ~ 23.5 kΩ</td></tr><tr><td>50°F / 10°C</td><td>20 ~ 19 kΩ</td></tr><tr><td>59°F / 15°C</td><td>16 ~15.5 kΩ</td></tr></table></td></tr>
<tr><td>2</td><td>Reset the unit and
Input Test 1 Mode.
(Push the button 1 time)</td><td>   </td></tr>
<tr><td>3</td><td>Open the fresh food door and
Check the air flow.
  </td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Windy</td><td>Go to the 4</td></tr><tr><td>No windy</td><td>Check the R Fan motor
Check the damper
(Go to the 6)</td></tr></table></td></tr>
<tr><td>4</td><td>Check the air temperature.
Cold or not?</td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Cold</td><td>Explain to customer</td></tr><tr><td>Not cold</td><td>Check the Compressor
And sealed system</td></tr></table></td></tr>
</table>

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr>
<td>5</td>
<td>
Damper checking method.
Inputting TEST Mode,
Check the damper and PCB.

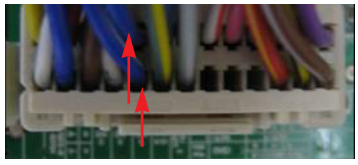




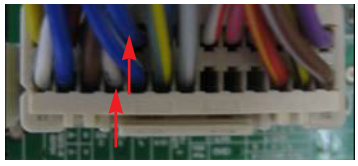
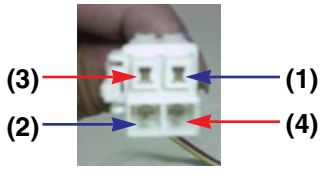
</td>
<td>
<table>
<tr><th>Test Mode</th><th>Damper State</th><th>SVC Action</th></tr>
<tr><td>1 Mode</td><td>Open</td><td rowspan="2">Damper is normal.
(Explain to customer)</td></tr>
<tr><td>2 Mode</td><td>Closed</td></tr>
<tr><td>1,2 mode</td><td>Not working</td><td>Change the damper</td></tr>
</table>
<table>
<tr><th>Test Point</th><th>Result</th><th>SVC Action</th></tr>
<tr><td rowspan="2">(1) to (2)</td><td>270 ~ 330Ω</td><td>It's normal</td></tr>
<tr><td>Other</td><td>Change damper</td></tr>
<tr><td rowspan="2">(3) to (4)</td><td>270 ~ 330Ω</td><td>It's normal</td></tr>
<tr><td>Other</td><td>Change damper</td></tr>
</table>
</td>
</tr>
<tr>
<td>6</td>
<td>
Check the <u>Fan motor.</u>
Rotate fan using your hand.
It feel sticky, change the motor.
(Cause of ice or rust inside of motor)

</td>
<td>
<table>
<tr><th>Point</th><th>Result</th><th>SVC Action</th></tr>
<tr><td>Motor</td><td>Sticky</td><td>Change the motor</td></tr>
</table>
</td>
</tr>
<tr>
<td>7</td>
<td>
Check the F <u>Fan motor voltage.</u>



<CON4>
</td>
<td>
<table>
<tr><th>Point</th><th>Result</th><th>SVC Action</th></tr>
<tr><td>(1) ~ (2)</td><td>Below 12 V</td><td>Change the PCB</td></tr>
<tr><td>(2) ~ (3)</td><td>0 or 5 V</td><td>Change the motor</td></tr>
</table>
</td>
</tr>
</table>

8-4 Poor cooling in Freezer compratment

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the sensor resistance.
 
<CON4>
※ The sensor is determined by the temperature.
For example, 23kΩ indicates -4°F.</td><td><table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>-22°F / -30°C</td><td>40.5 ~ 38.5 kΩ</td></tr><tr><td>-13°F / -25°C</td><td>30.5 ~ 28.5 kΩ</td></tr><tr><td>-4°F / -20°C</td><td>23 ~ 21.5 kΩ</td></tr><tr><td>5°F / -15°C</td><td>17.5 ~ 16.5 kΩ</td></tr><tr><td>14°F / -10°C</td><td>13.5 ~ 12.5 kΩ</td></tr><tr><td>23°F / -5°C</td><td>10.5 ~ 9.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>8 ~7.5 kΩ</td></tr></table></td></tr>
<tr><td>2</td><td>Reset the unit and
Input Test 1 Mode.
(Push the button 1 time)</td><td> 
  </td></tr>
<tr><td>3</td><td>Open the freezer door and
Check the air flow.
  </td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Windy</td><td>Go to the 4</td></tr><tr><td>No windy</td><td>Check the F Fan motor</td></tr></table></td></tr>
<tr><td>4</td><td>Check the air temperature.
Cold or not ?</td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Cold</td><td>Explain to customer</td></tr><tr><td>Not cold</td><td>Check the Compressor
And sealed system</td></tr></table></td></tr>
</table>

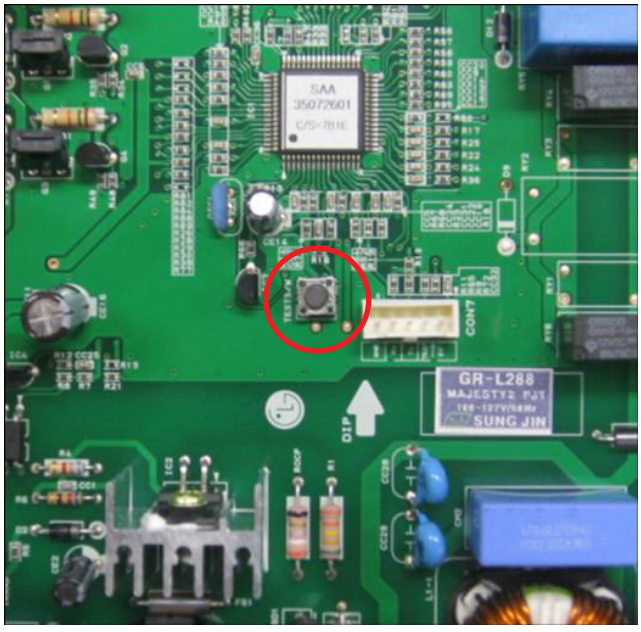
8-5 Over cooling in Fresh food compartment

<table>
<tr><th>No</th><th>Checking flow</th><th>Result & SVC Action</th></tr>
<tr><td>1</td><td>Check the sensor resistance.
 
<CON4>
※ The sensor is determined by the temperature.
For example, 30kΩ indicates 32°F.</td><td><table><tr><th>(1) To (2)</th><th>Result</th></tr><tr><td>23°F / -5°C</td><td>38.5 ~ 36.5 kΩ</td></tr><tr><td>32°F / 0°C</td><td>30.5 ~ 29.5 kΩ</td></tr><tr><td>41°F / 5°C</td><td>24.5 ~ 23.5 kΩ</td></tr><tr><td>50°F / 10°C</td><td>20 ~ 19 kΩ</td></tr><tr><td>59°F / 15°C</td><td>16 ~15.5 kΩ</td></tr></table></td></tr>
<tr><td>2</td><td>Reset the unit and
Input Test 1 Mode.
(Push the button 1 time)</td><td> 
  </td></tr>
<tr><td>3</td><td>Open the refrigerator door and
Check the air flow.
  </td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Windy</td><td>Go to the 4</td></tr><tr><td>No windy</td><td>Check the R Fan
Check the damper
(Go to the 5)</td></tr></table></td></tr>
<tr><td>4</td><td>Input Test 2 Mode and
Check the air flow.
(Push the button 1 time)
 
  </td><td><table><tr><th>Status</th><th>SVC Action</th></tr><tr><td>Windy</td><td>Go to the 5</td></tr><tr><td>No windy</td><td>It's normal</td></tr></table></td></tr>
<tr><td>5</td><td>Check the damper resistance.
 
</td><td><table><tr><th>Test Point</th><th>Result</th><th>SVC Action</th></tr><tr><td rowspan="2">(1) to (2)</td><td>270 ~330Ω</td><td>It's normal</td></tr><tr><td>Other</td><td>Change damper</td></tr><tr><td rowspan="2">(3) to (4)</td><td>270 ~330Ω</td><td>It's normal</td></tr><tr><td>Other</td><td>Change damper</td></tr></table></td></tr>
</table>

9. Reference

9-1 TEST MODE and Removing TPA

1. How to make TEST MODE
If you push the test button on the Main PCB, the refrigerator will be enter the TEST MODE.



Main PWB

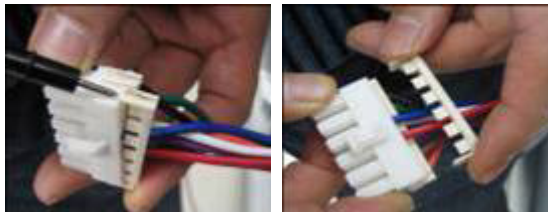
*** 1 time : Comp / Damper / All FAN on**
(All things displayed)

*** 2 times : Damper closed**
(22 22 displayed)

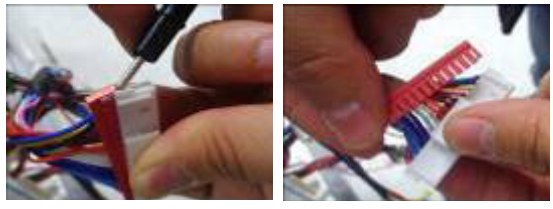
*** 3 times : Forced defrost mode**
(33 33 displayed)

2. How to remove Terminal Position Assurance (TPA)

<AC TPA>



<DC TPA>



※ After measure the values, you should put in the TPA again.

9-2 TEMPERATRUE CHART - FRZ AND ICING SENSOR

TEMP	RESISTANCE	VOLTAGE
-39°F (-40°C)	73.29 kΩ	4.09 V
-30°F (-35°C)	53.63 kΩ	3.84 V
-21°F (-30°C)	39.66 kΩ	3.55 V
-13°F (-25°C)	29.62 kΩ	3.23 V
-4°F (-20°C)	22.33 kΩ	2.89 V
5°F (-15°C)	16.99 kΩ	2.56 V
14°F (-10°C)	13.05 kΩ	2.23 V
23°F (-5°C)	10.10 kΩ	1.92 V
32°F (0°C)	7.88 kΩ	1.63 V
41°F (5°C)	6.19 kΩ	1.38 V
50°F (10°C)	4.91 kΩ	1.16 V
59°F (15°C)	3.91 kΩ	0.97 V
68°F (20°C)	3.14 kΩ	0.81 V
77°F (25°C)	2.54 kΩ	0.67 V
86°F (30°C)	2.07 kΩ	0.56 V
95°F (35°C)	1.69 kΩ	0.47 V
104°F (40°C)	1.39 kΩ	0.39 V

9-3 TEMPERATRUE CHART - REF AND DEF SENSOR

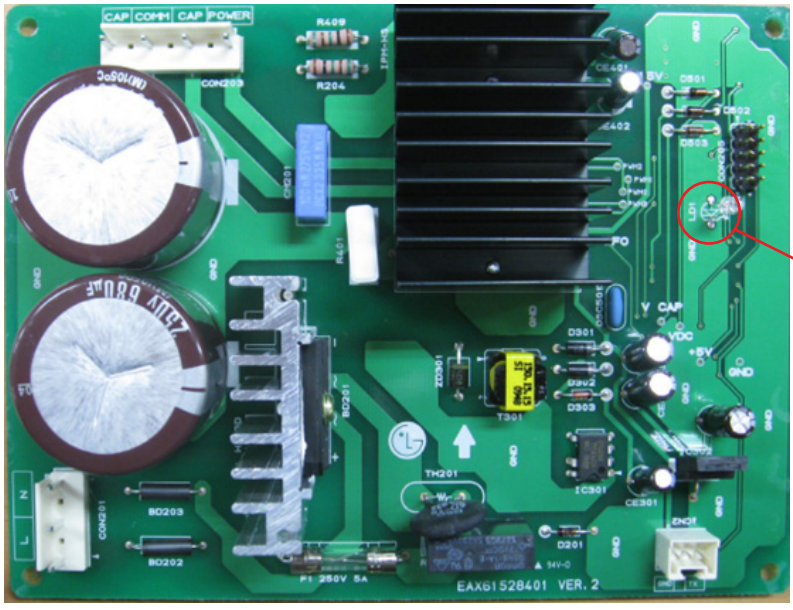
TEMP	RESISTANCE	VOLTAGE
-39°F (-40°C)	225.1 kΩ	4.48 V
-30°F (-35°C)	169.8 kΩ	4.33 V
-21°F (-30°C)	129.3 kΩ	4.16 V
-13°F (-25°C)	99.30 kΩ	3.95 V
-4°F (-20°C)	76.96 kΩ	3.734 V
5°F (-15°C)	60.13 kΩ	3.487 V
14°F (-10°C)	47.34 kΩ	3.22 V
23°F (-5°C)	37.55 kΩ	2.95 V
32°F (0°C)	30 kΩ	2.67 V
41°F (5°C)	24.13 kΩ	2.40 V
50°F (10°C)	19.53 kΩ	2.14 V
59°F (15°C)	15.91 kΩ	1.89 V
68°F (20°C)	13.03 kΩ	1.64 V
77°F (25°C)	10.74 kΩ	1.45 V
86°F (30°C)	8.89 kΩ	1.27 V
95°F (35°C)	7.40 kΩ	1.10 V
104°F (40°C)	6.20 kΩ	0.96 V

Compressor Troubleshooting

⚠ WARNING HIGH VOLTAGE

Step 1) Open PWB cover

Step 2) Check for blinking frequency of LED, PWB



If compressor is normal, it does not blink
: Refer to the next page to find out what actions to take according to how many times LED blink

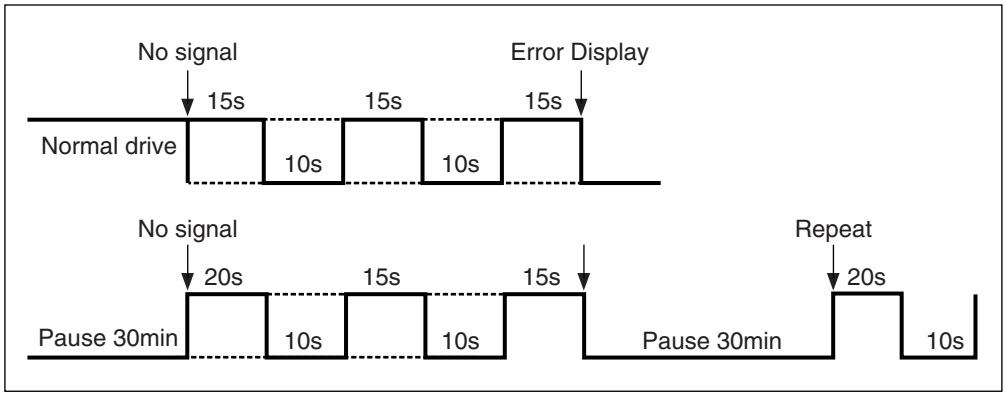
Actions to take according to Led blinking frequency

No	LED operating condition	Cause	Service guideline
1	**LED two - time repetiton**  ··on - on - off - on - on - off - on - on - off ··repeating	PCB part defect (piston overrun)	1.After resetting power, check if it is running normal 2.If the same symptom arises after the first action, replace PCB
2	**LED four - time repetiton**  ··on - on - on - on - off - on - on - on - on - off ··repeating	outlet clogging	1.After resetting power, check if it is running normal 2.If the same symptom arises after the first action, replace PCB 3.If the same symptom arises after the second action, replace compressor
3	**LED five - time repetiton**  ··on - on - on - on - on - off - on - on - on - on - on - off ··repeating	piston constraint	1. After resetting power, check if it is running normal 2. If the same symptom arises after the first action, replace PCB 3. If the same symptom arises after the second action, replace compressor
4	**LED six - time repetiton**  ··on - on - on - on - on - on - off - on - on - on - on - on - on - off ··repeating	circuit overcurrent error	1. After resetting power, check if it is running normal If the same symptom arises after the first action, replace PCB If the same symptom arises after the second action, replace compressor
5	**LED seven- time repetiton**  ··on - on - on - on - on - on - on - off - on - on -on - on - on - on- on - off ··repeating	PCB part defect (IPM)	1.After resetting power, check if it is running normal 2. If the same symptom arises after the first action, replace PCB

9-4 How to check the Fan-Error

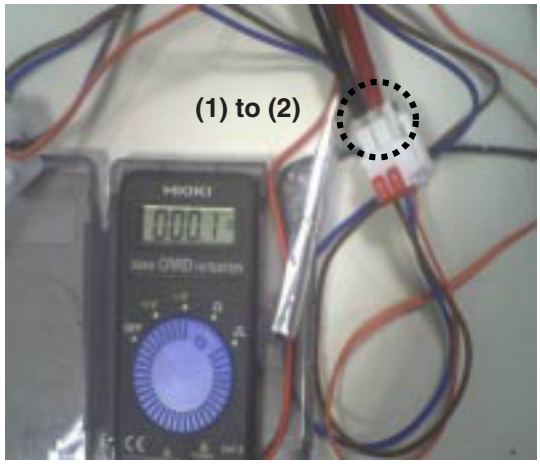
(1) EBR650027

After sending a signal to the fan, the MICOM checks the BLDC fan motor s lock status. If there is no feedback signal from the BLDC fan, the fan motor stops for 10 seconds and then is powered again for 15 seconds. To determine that there is a fan motor malfunction, this process is repeated 3 times. If the fan motor is determined to be defective, the error code will be shown in the display for 30 minutes. At this point, the process will be repeated until the fan motor operates normally. If normal operation is achieved, the error display is erased and the MICOM is reset automatically.



10. COMPONENT TESTING INFORMATION

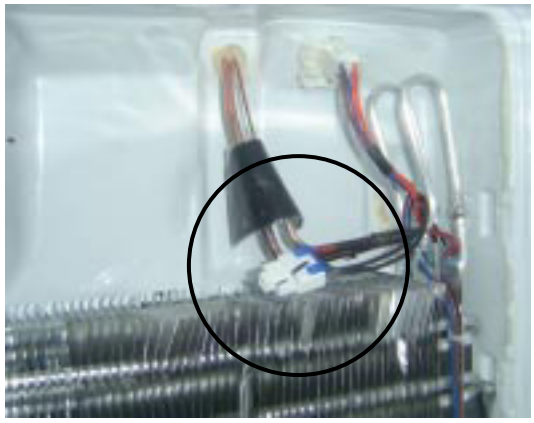
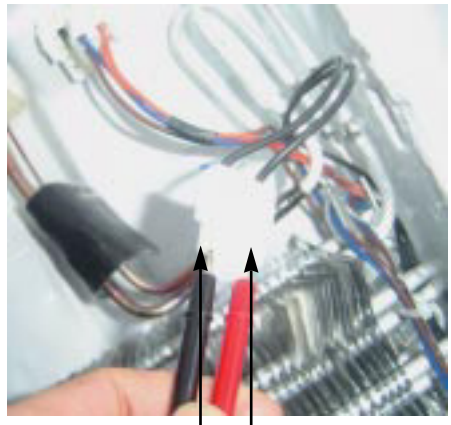
10-1 Defrost Controller Assembly

<table>
<tr><td>Function</td><td>- Controller assembly is consist of 2 kinds of part those are fuse-m and sensor. we can decide part is defect or not when we check the resistance.
- Fuse-m can cut off the source when defrost heater operate the unusual high temperature.
- Sensor give temperature information to Micom</td></tr>
<tr><td>How to Measure (Fuse-M)</td><td> 

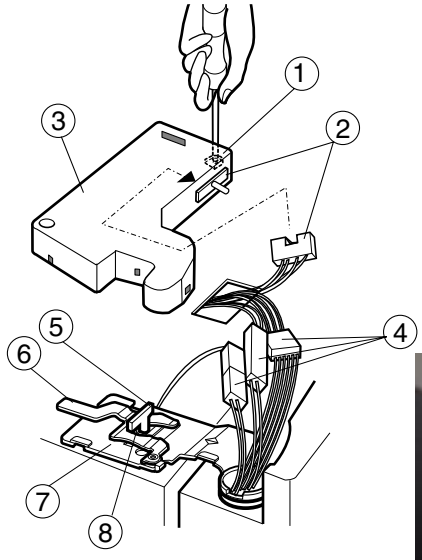
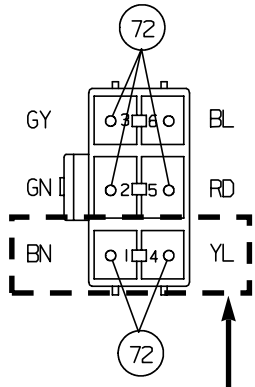
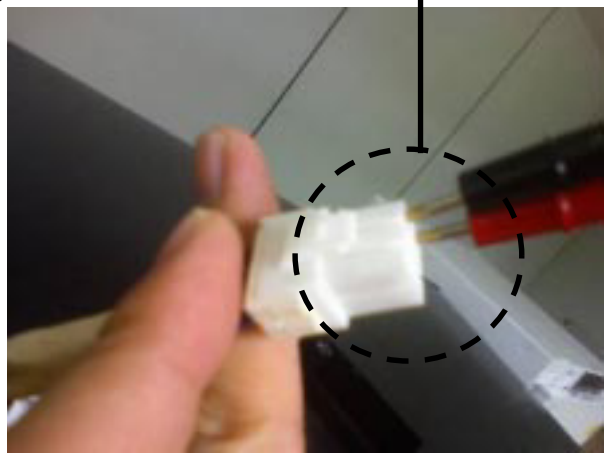
Set a ohmmeter to the 2 housing pin.
Measure the 2 pin connected to Fuse-M.
If the ohmmeter indicate below 0.1ohm fuse-m is a good condition, But infinitely great ohm Fuse-M is disconnection</td></tr>
<tr><td>How to Measure (Sensor)</td><td> 

Set a ohmmeter to The 2housing pin.
Measure the 2 pin connected to Sensor.
If the ohmmeter indicate 11㏀ (at room temperature) Sensor is not a defect.
When check the ohm at other temperature Check the sensor manual.</td></tr>
<tr><td>Standard</td><td>Fuse-M (at all temperature)
<table><tr><td>Test Point</td><td>Ressult</td></tr><tr><td>(1) to (2)</td><td>0 ~ 0.1Ω</td></tr></table>
Sensor (at room temperature)
<table><tr><td>Test Point</td><td>Ressult</td></tr><tr><td>(1) to (2)</td><td>11Ω</td></tr></table></td></tr>
</table>

10-2 Sheath Heater

Function	Sheath heater is a part for defrost. All heating wire is connected to only one line. So we can decide part is defect or not when we check the resistance.
How to Measure	  Set a ohmmeter connect to The 2 housing pin. Measure the 2 pin connected to Sheath Heater. If the ohmmeter indicate (V°øV)/Watt=R is good condition, ex) when watt=350w, voltage=115v R=(115°ø115)/350=38Ω But the ohmmeter indicate infinitely great Sheath heater is disconnection
Standard	**Sheath heater (at all temperature)** Test Point: (1) to (2) — Ressult: 34 ~ 42Ω

10-3 Door Heater Assembly

Function	The heater is designed to prevent the raising dew from door.
How to Measure	  
Standard	Test Point: (1) to (2) — Ressult: 2.3 ~ 2.9Ω

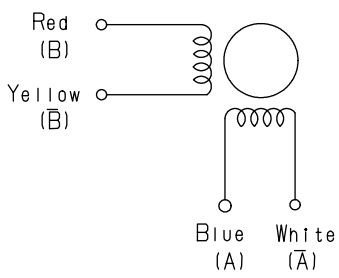
10-4 Damper

Function

The damper supplies the cold air at freezer room to chillroom by using the damper's plate. Chillroom is colder than before when damper's plate is open. When damper's plate is close, chillroom's temperature will rise.

How to Measure

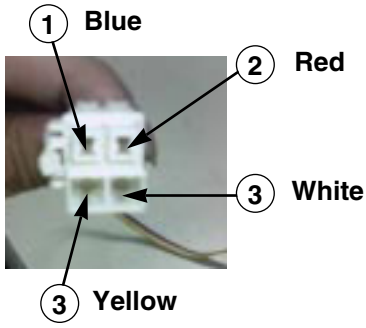
Table(1): 결선도(Wirering)

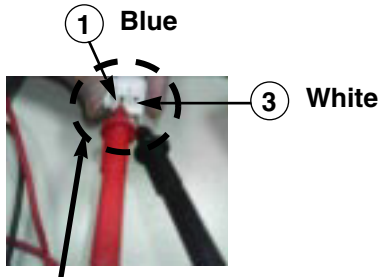


Table(2): 2-2상 여자순서(CW Rotation)

Housing No. & L/Wire Color	Step 1	2	3	4
1- Blue (A)	+	-	-	+
2- Red (B)	+	+	-	-
3- White(Ā)	-	+	+	-
4- Yellow(B̄)	-	-	+	+

< Damper Circuit >

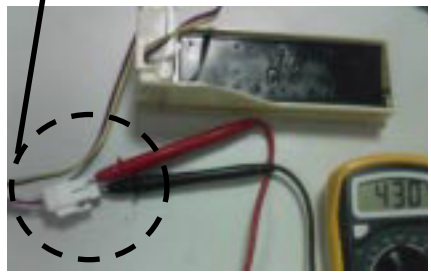




Check the (1), (3)

< extension >

Check the (2), (4)



Check the (1), (3)

Check the resistance between connectors 1,3 and 2,4 .It means check whether or not applying an electric current. If there is resistance, it means the damper not inferiority

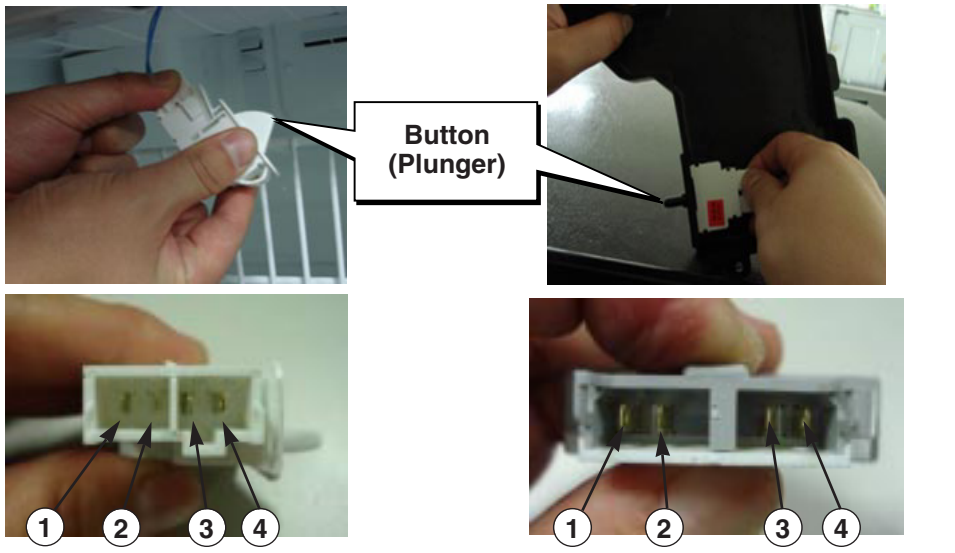
Standard

Damper

Test Points	Result
Red and Yellow	373 ~ 456Ω

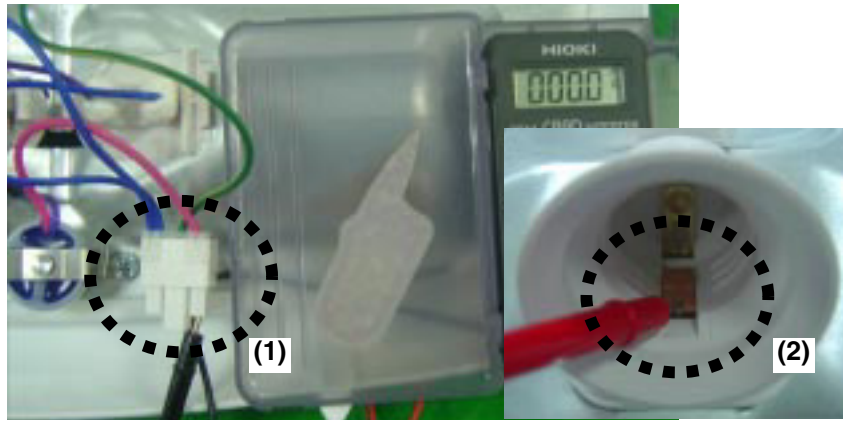
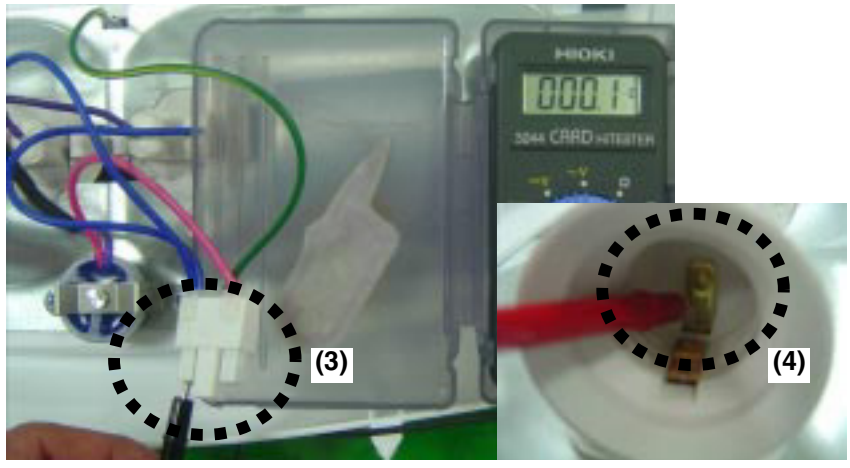
Test Points	Result
Blue and White	373 ~ 456Ω

10-5 Door Switch

<table>
<tr><td>Function</td><td>The switch sense if the door open or close.
- When the door open, lamp on.
- When the door open, the switch give information to Micom.
When the door open, internal contact operate on and off moving plunger of door switch up and down.</td></tr>
<tr><td>How to Measure</td><td>
<Switch, Freezer> <Switch, Refrigerator>


Beep Beep
Check the resistance between connectors 1, 2 and 3, 4 .It means check whether or not applying an electric current. If there is resistance, it means the switch not inferiority
</td></tr>
<tr><td>Standard</td><td>
Multimeter beep – Switch F,R
<table>
<tr><td>Nomal</td><td>Push the button(Plunger)</td></tr>
<tr><td>Beep or 0Ω</td><td>None (∞Ω)</td></tr>
</table>
</td></tr>
</table>

10-6 Lamp Socket

Function	The lamp socket connect cover lamp assembly to lamp. The lamp socket fix lamp and unite lamp and cover lamp assembly. The lamp socket supply electric source to lamp also.
How to Measure	  Check the resistance between connector of housing and connector of lamp socket. It means check whether or not applying an electric current. If there is resistance it means the lamp socket is not inferiority.
Standard	<table><tr><th>Test Points</th><th>Result</th></tr><tr><td>(1) to (2) and (3) to (4)</td><td>0 Ω</td></tr></table>

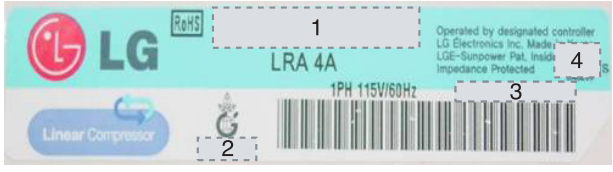
11. TROUBLESHOOTING

11-1 INFORMATION OF LINEAR COMPRESSOR

• The information tag provides compressor model, refrigerant, serial number and safety approval

Name Plate

Size : 90mm X 20mm



Compressor Label

1. Compressor Model

F C 7 5 L A N E

- Series name: DLF/FA/FB
- Displacement: ex)90=9.0cm³/stroke
- Application Category
  - L : LBP with R134a
  - H : HBP with R134a
  - N : LBP with R600a
- Operating Type: A : A-Inverter, E : E-Inverter
- Rated Voltage & Frequency: - M : 220V 50/60Hz, - N : 115V 50/60Hz
- Efficiency version: A : 1st generation, B : 2nd generation

2. Refrigerant

3. Serial Number

00 00 9 2003 5 13 0012

Buyer Code
Model Code
Line
Year
Month
Date
Serial No.

Month		
1 : January	~	O : October
9 : September		N : November
		D : December

4. Safety Approval

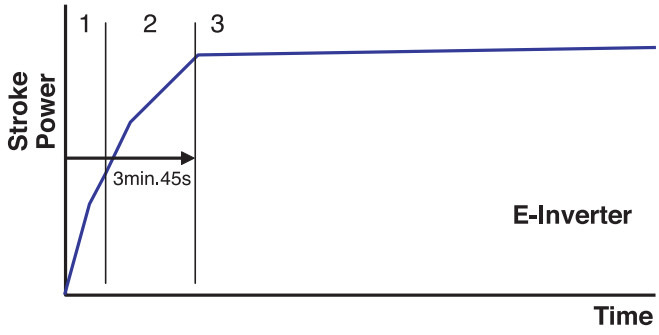
Ex)

• There are two types of controllers used in the linear compressor system.
  - The “E”-inverter system is used with the FC75LANE compressor.
  - The “A”-inverter system is used with the FC90LANA compressor.

	Refrigerator		Comp Drive		Compressor
FC75LANE E-Inverter System	Comp On/Off	→	**Inverter CVCF**	→	**Self Modulation**
FC90LANA A-Inverter System	Controls the algorithm according to various conditions	→	**Inverter VVVF**	→	**Stroke Modulation**

*VVVF : Variable Voltage Variable Frequency
**CVCF : Constant Voltage Constant Frequency

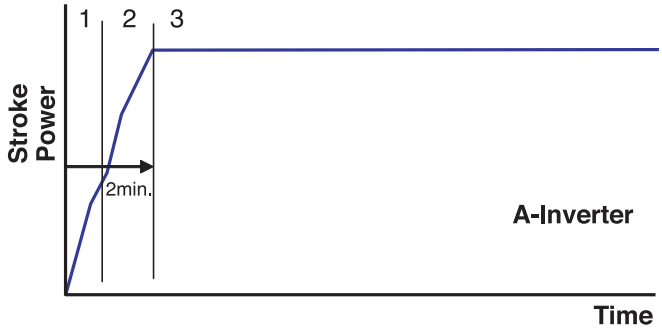
- To reduce noise level, the piston stroke is slowly increased to full power during start up.



Step 1) Start up - Half stroke interval for first 30 seconds.

Step 2) Ramp up - Stroke increases every 0.8sec until maximum stroke length is reached (about 3 min, 15 sec)

Step 3) CVCF interval - 180V / 60Hz



Step 1) Start up - Half stroke interval for first 20 seconds.

Step 2) Ramp up - Stroke increases until maximum stroke length is reached (about 1 min, 40 sec)

Step 3) VVVF interval - target voltage and frequency controlled by Control Board signals

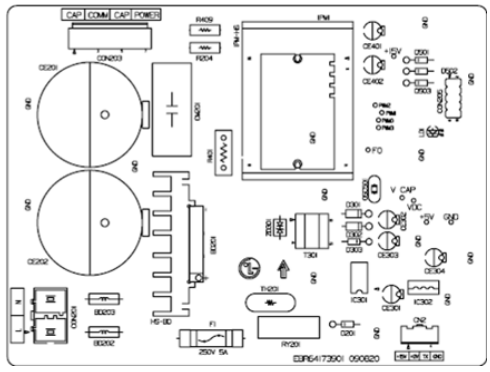
- There are 6 protection logics designed to protect the linear compressor system. When a failure is detected, the compressor will shut and will try to restart after a set period of time for each type of failure. The LED located on the inverter drive PCB will flash the appropriate code to indicate the detected failure. This code will continue to flash until the unit is disconnected from the power source.

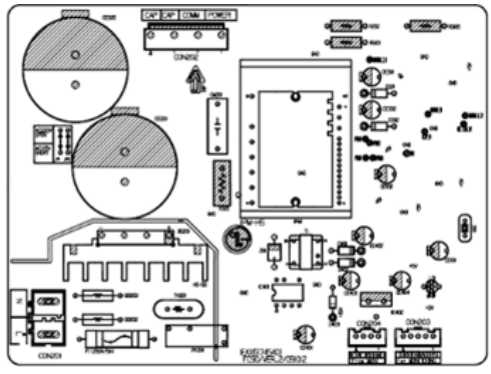
Inverter Error Codes

	App.	Requirement	Waiting Time	The number of LED flashes
FCT0	A-Inv.	Compressor current and voltage error.	20 sec.	1
Stroke Trip	E-Inv. A-Inv.	Piston stroke overrun detected.	1 min.	2
Locked Piston Trip	E-Inv. A-Inv.	Piston is locked.	2 min. 30 sec.	5
Current Trip	E-Inv. A-Inv.	Current overload detected.	2 min. 30 sec.	6
IPM Fault	E-Inv. A-Inv.	High current detected due to IPM failure.	2 min. 30 sec.	7
Communication Error	A-Inv.	Miscommunication with Refrigerator	0	8

- Bridge Diodes converts 115V AC (Alternating current) to 115V DC (Direct current)
  The Voltage Multiplying circuit then increases the 115V DC to 230V DC.
  Then the IPM (Intelligent Power Module) converts the 230V DC to 230V AC.
  The converted AC power can be regulated to any required voltage and frequency.

E-Inverter
FC75LANE

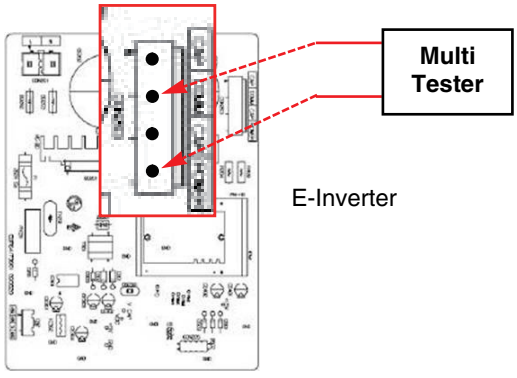




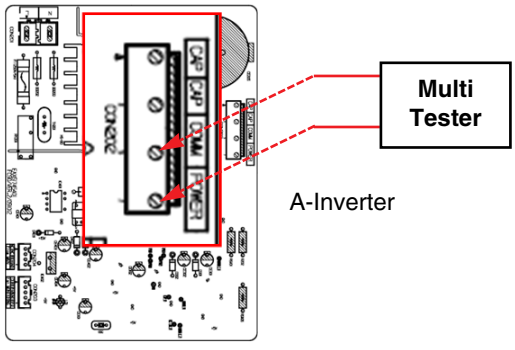
A-Inverter
FC90LANA

- There are two PCB located behind the PCB cover.
  One is the main PCB, and the other is the driver PCB
  the linear compressor.

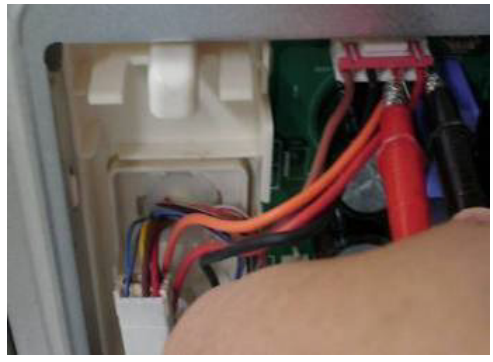
- Measure the voltage at locations on the connector (as shown picture) with a multi-tester.



E-Inverter



A-Inverter



IPM Voltage Check

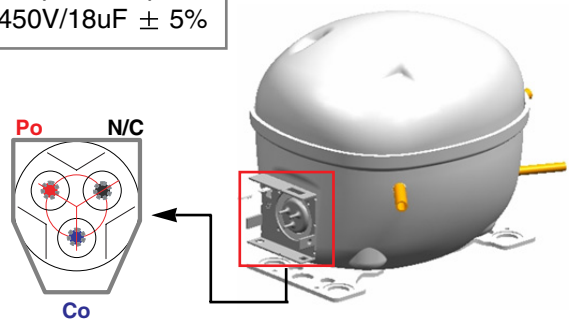
- To ensure proper diagnosis, make sure that the unit has been plugged in for at least 10 min.
- To determine if the compressor is receiving the proper voltage, check the PCB output voltage during operation.
- Normal operating voltage will be between 80V AC and 180V AC.

  Note : Higher voltage readings may occur under "heavy" load conditions.

• Insulation check : Check for infinite Ohms between all compressor terminal and ground.

FC90LANA

Capacitor Spec.
450V/18uF ± 5%

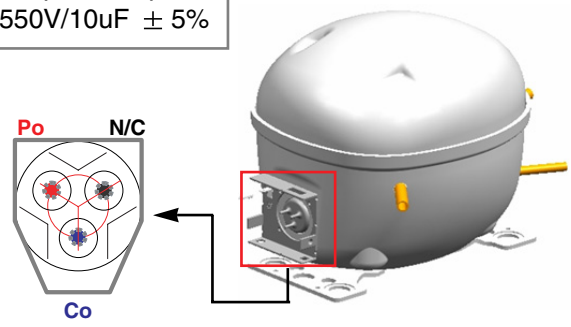


Po : Power
Co : Common
N/C : No Connecting

Compressor Winding Resistance Check
6 ~ 8 Ω Between Po and Co

FC75LANE

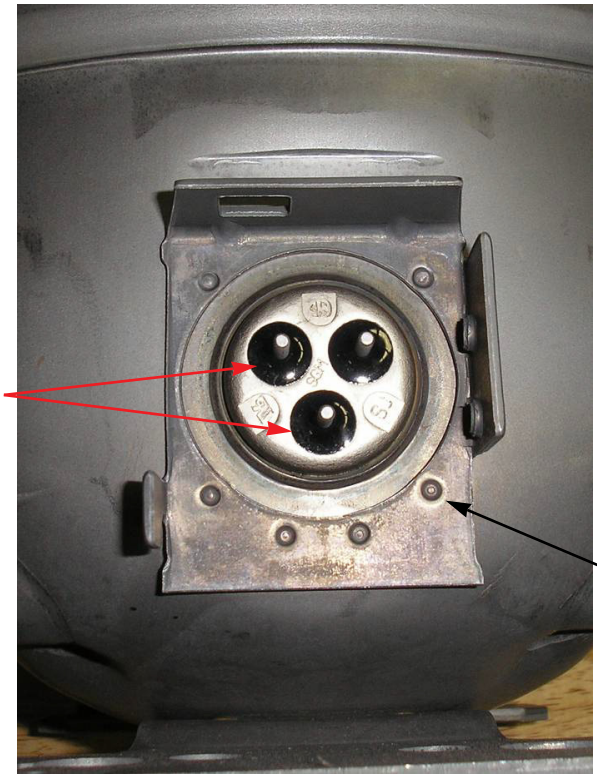
Capacitor Spec.
550V/10uF ± 5%



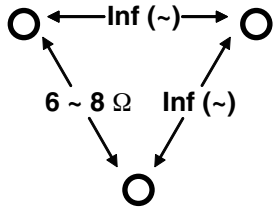
Po : Power
Co : Common
N/C : No Connecting

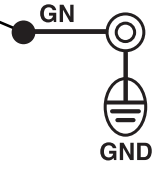
Compressor Winding Resistance Check
6 ~ 8 Ω Between Po and Co

LG Linear Compressor



NOTE : Any Terminal to Ground should read Inf (~)

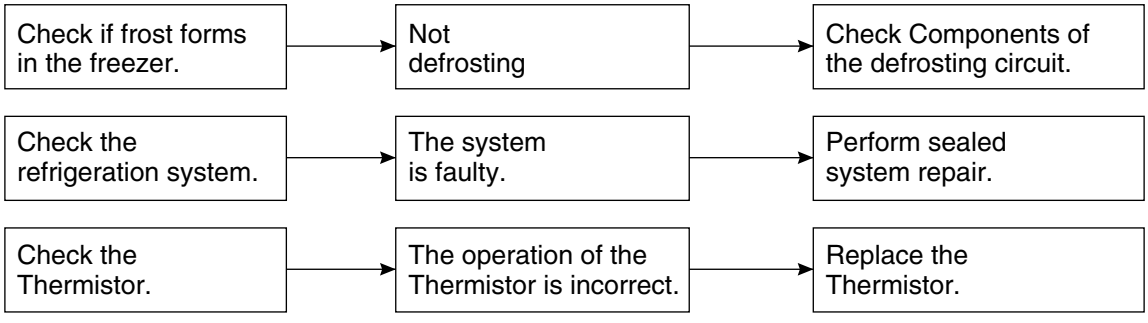




11-2 SERVICE DIAGNOSIS CHART

COMPLAINT	POINTS TO BE CHECKED	REMEDY
No Cooling.	• Is the power cord unplugged from the outlet? • Check if the power switch is set to OFF. • Check if the fuse of the power switch is shorted. • Measure the voltage of the power outlet.	• Plug into the outlet. • Set the switch to ON. • Replace the fuse. • If the voltage is low, correct the wiring.
Cools poorly.	• Check if the unit is placed too close to the wall. • Check if the unit is placed too close to the stove, gas cooker, or in direct sunlight. • Is the ambient temperature too high or the room door closed? • Check if food put in the refrigerator is hot. • Did you open the door of the unit too often or check if the door is sealed properly? • Check if the Control is set to **Warm position**.	• Place the unit about 4 inches (10 cm) from the wall. • Place the unit away from these heat sources. • Lower the ambient temperature. • Put in foods after they have cooled down. • Don't open the door too often and close it firmly. • Set the control to **Recommended position**.
Food in the Refrigerator is frozen.	• Is food placed in the cooling air outlet? • Check if the control is set to **colder position**. • Is the ambient temperature below 41°F(5°C)?	• Place foods in the high-temperature section. (front part) • Set the control to **Recommended position**. • Set the control to **Warm position**.
Condensation or ice forms inside the unit.	• Is liquid food sealed? • Check if food put in the refrigerator is hot. • Did you open the door of the unit too often or check if the door is sealed properly?	• Seal liquid foods with wrap. • Put in foods after they have cooled down. • Don't open the door too often and close it firmly.
Condensation forms in the Exterior Case.	• Check if the ambient temperature and humidity of the surrounding air are high. • Is there a gap in the door gasket?	• Wipe moisture with a dry cloth. It will disappear in low temperature and humidity. • Fill up the gap.
There is abnormal noise.	• Is the unit positioned in a firm and even place? • Are any unnecessary objects placed in the back side of the unit? • Check if the Drip Tray is not firmly fixed. • Check if the cover of the compressor enclosure in the lower front side is taken out.	• Adjust the Leveling Screw, and position the refrigerator in a firm place. • Remove the objects. • Fix the Drip Tray firmly in the original position. • Place the cover in its original position.
Door does not close well.	• Check if the door gasket is dirty with an item like juice. • Is the refrigerator level? • Is there too much food in the refrigerator?	• Clean the door gasket. • Position in a firm place and level the Leveling Screw. • Make sure food stored in shelves does not prevent the door from closing.
Ice and foods smell unpleasant.	• Check if the inside of the unit is dirty. • Are foods with a strong odor unwrapped? • The unit smells of plastic.	• Clean the inside of the unit. • Wrap foods that have a strong odor. • New products smell of plastic, but this will go away after 1-2 weeks.

● Other possible problems:



11-3 REFRIGERATION CYCLE

▼ Troubleshooting Chart

CAUSE		STATE OF THE UNIT	STATE OF THE EVAPORATOR	TEMPERATURE OF THE COMPRESSOR	REMARKS
LEAKAGE	PARTIAL LEAKAGE	Freezer compartment and Refrigerator don't cool normally.	Low flowing sound of Refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Refrigerant level is low due to a leak. • Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
	COMPLETE LEAKAGE	Freezer compartment and Refrigerator don't cool normally.	Flowing sound of refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	• No discharging of Refrigerant. • Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
CLOGGED BY DUST	PARTIAL CLOG	Freezer compartment and Refrigerator don't cool normally.	Flowing sound of refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Normal discharging of the refrigerant. • The capillary tube is faulty.
	WHOLE CLOG	Freezer compartment and Refrigerator don't cool.	Flowing sound of refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	• Normal discharging of the Refrigerant.
MOISTURE CLOG		Cooling operation stops periodically.	Flowing sound of refrigerant is not heard and frost melts.	Lower than ambient temperature.	• Cooling operation restarts when heating the inlet of the capillary tube.
DEFECTIVE COMPRESSION	COMP-RESSION	Freezer and Refrigerator don't cool.	Low flowing sound of refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	• Low pressure at high side of compressor due to low refrigerant level.
	NO COMP-RESSION	No compressing operation.	Flowing sound of refrigerant is not heard and there is no frost.	Equal to ambient temperature.	• No pressure in the high pressure part of the compressor.

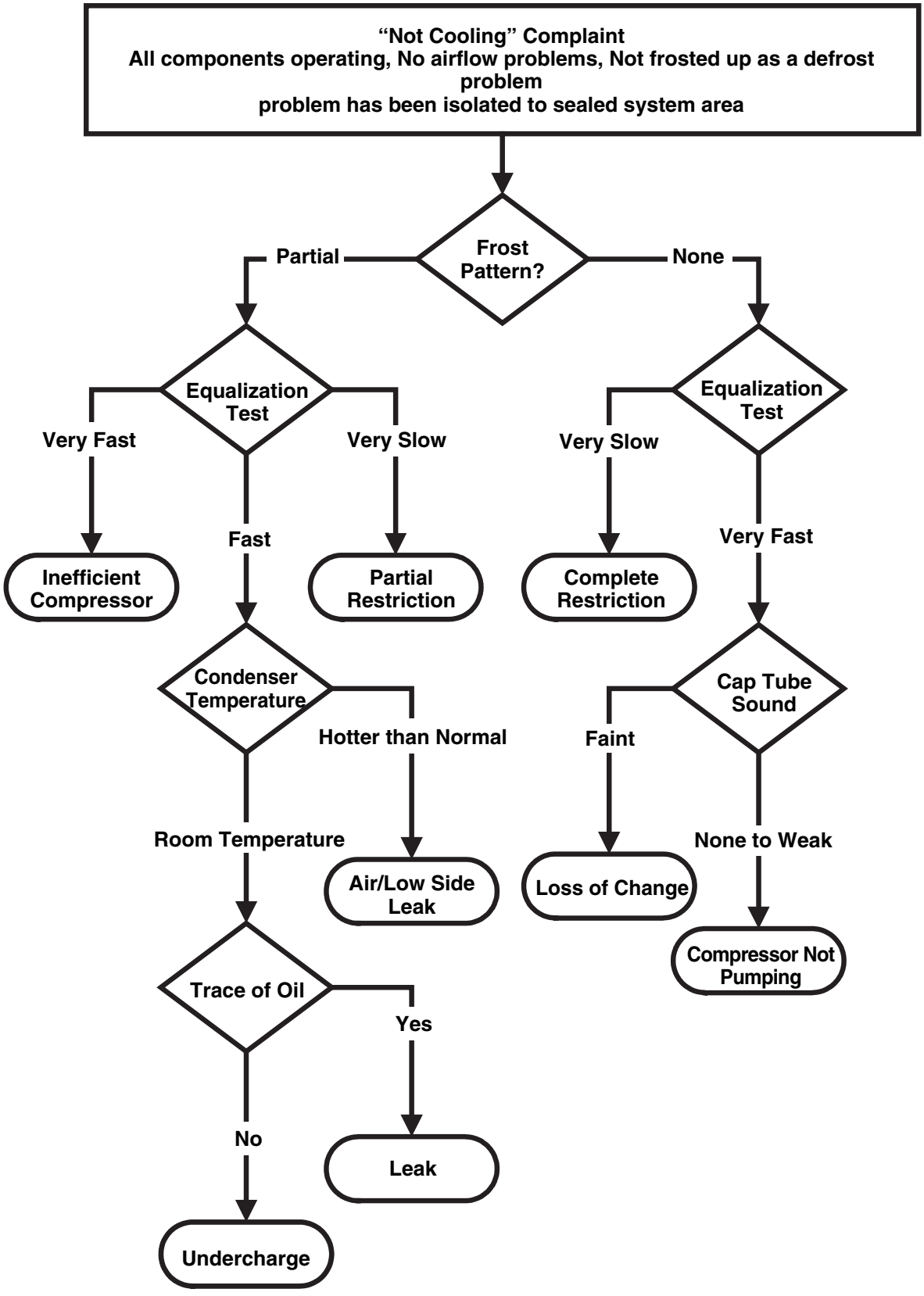
11-3-1 Cleaning

There is no need for routine condenser cleaning in normal Home operating environments. If the environment is particularly greasy or dusty, or there is significant pet traffic in the home, the condenser should be cleaned every 2 to 3 months to ensure maximum efficiency.

If you need to clean the condenser:

- Remove the mechanical cover.
- Use a vacuum cleaner with a soft brush to clean the grille, the open areas behind the grille and the front surface area of the condenser.
- Replace the mechanical cover.

11-3-2 SEALED SYSTEM DIAGNOSIS

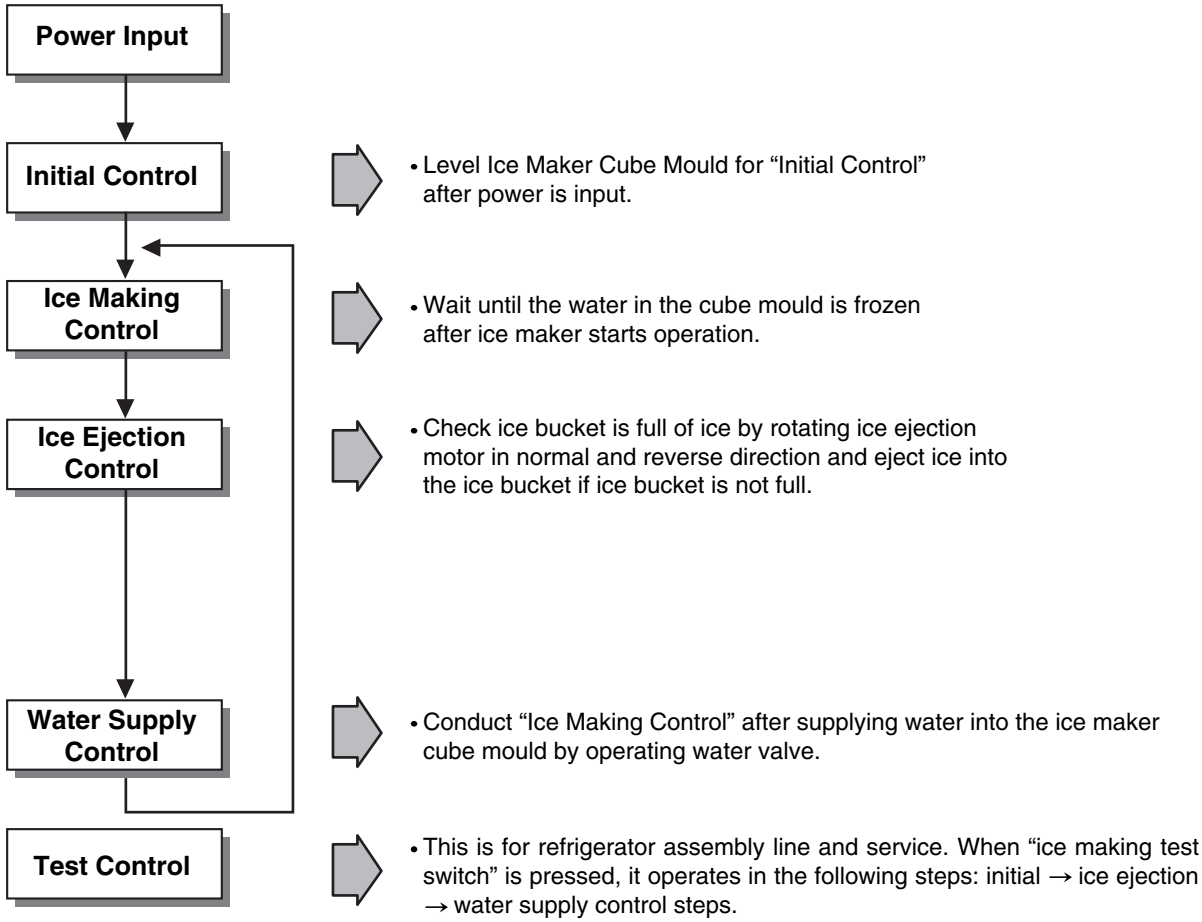


(The equalization test is trying to restart a compressor using a start kit after it has been operating.)

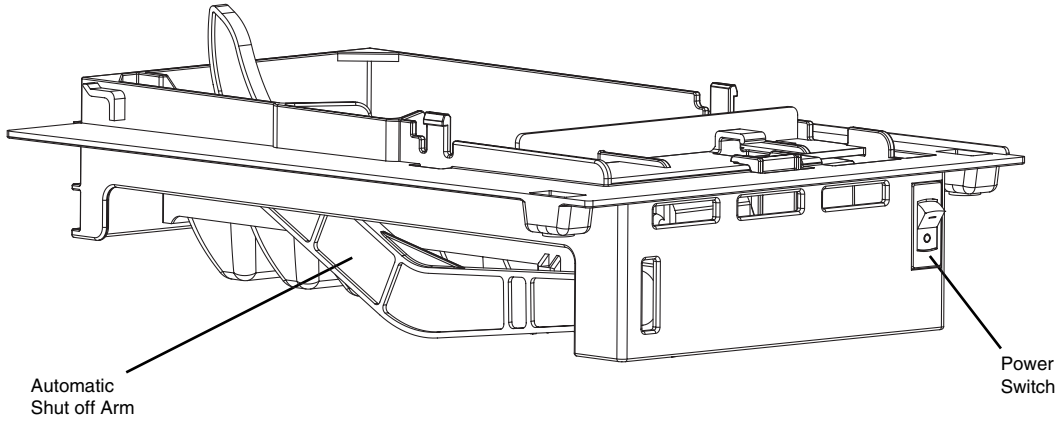
12. ICE MAKER AND DISPENSER WORKING PRINCIPLES AND REPAIR

12-1 Working Principles

12-1-1 Ice Maker Working Principles



1. Turning the Icemaker stop switch off (O) stops the Icemaking function.
2. Setting the Icemaker switch to OFF and then turning it back on will reset the Icemaker control.



12-2 Function of Ice Maker

12-2-1 Initial Control Function

1. When power is initially applied or reapplied after power cut, it detects level of ice maker cube mould after completion of MICOM initialization. The detecting lever moves up and down.
2. The level of ice maker cube mould is judged by output signal, high and low signal, of Hall IC. Make the cube mould to be horizontal by rotating ice ejection motor in normal or reverse direction.
3. If there is no change in signals one minute after the geared motor starts to operate, it stops icemaker operation and check the signal every hour. It resets initialization of icemaker when it becomes normal.
4. It judges that the initial control is completed when it judges the ice maker cube mould is horizontal.
5. Ice ejection conducts for 1 cycle irrespect of ice in the ice bucket when power is initially applied.

12-2-2 Water Supply Control Function

1. This is to supply water into the ice maker cube mould by operating water valve in the machine room when ice ejection control is completed and ice maker mould is even.
2. The quantity of water supplied is determined by DIP switch and time.

<Water Supply Quantity Table>

No	DIP SWITCH SETTING		WATER SUPPLY TIME	REMARKS
	S1	S2		
1	OFF	OFF	9 SEC	* The quantity of water supplied depends on DIP switch setting conditions and water pressure as it is a direct tap water connection type. (the water supplied is generally 60 cc to 100 cc)
2	ON	OFF	8 SEC	
3	OFF	ON	10 SEC	
4	ON	ON	11 SEC	* DIP switch is on the main PCB.

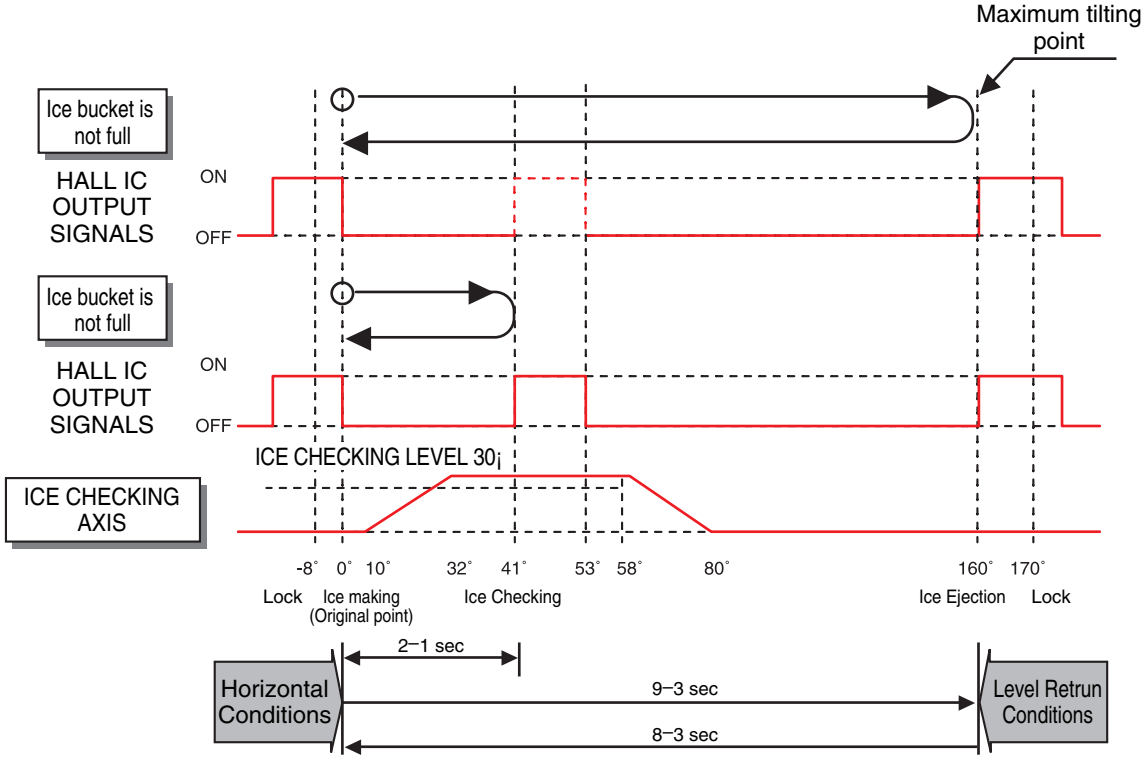
3. If water supply quantity setting is changed while power is on, water supplies for the amended time. If DIP switch is changed during water supply, water shall be supplied for the previous setting time. But it will supply for the amended time from the next supply.
4. When water supply signal is applied to water and ice valves at the same time during water supply, water shall be supplied to water valve. If water supply signal is applied to ice valve during water supply, water shall be supplied to both water and ice valves.

12-2-3 Ice Making Control Function

1. Ice making control is carried out from the completion of water supply to the completion of ice making in the cube mould. Ice making sensor detects the temperature of cube mould and completes ice making. (ice making sensor is fixed below ice maker cube mould)
2. Ice making control starts after completion of water supply control or initial control.
3. At first, It is judged that ice making is completed when ice making sensor temperature reaches at -8°C after 70 minutes when water is supplied to ice maker cube mould.
4. Finally, It is judged that ice making is completed when ice maker sensor temperature reaches below -8 °C after 10 minutes in condition 3.

12-2-4 Ice Ejection Control Function

1. This is to eject ice from ice maker cube mould after ice making is completed.
2. If Hall IC signal is on within 3.6 seconds after ice ejection motor rotates in normal direction, it does not proceed ice ejection but waits. If the ice bucket is full, ice ejection motor rotates in normal direction in every hour to check the condition of ice bucket. If the ice bucket is not full, the water supply control starts after completion of ice ejection control. If the ice bucket is full, ice ejection motor rotates in reverse direction and sops under ice making or waiting conditions.
3. If ice bucket is not full, ice ejection starts. The cube mould tilts to the maximum and ice is separated from the mould and ice checking lever raises.
4. Ice ejection motor stops for 1 second if Hall IC signal changes from OFF (low) to ON (high) after 3.6 seconds when ice ejection motor rotates in normal direction. If there is no change in Hall IC signals within 1 minute after ice ejection motor operates, ice ejection motor stops as ice ejection motor or hall IC is out of order.
5. If ice ejection motor or Hall IC is abnormal, ice ejection motor rotates in normal direction to exercise initial operation. It resets the ice maker if ice ejection motor or Hall IC is normal.
6. The mould stops for 1 second at maximum tilted conditions.
7. The mould returns to horizontal conditions as ice ejection motor rotates in reverse direction.
8. When the mould becomes horizontal, the cycle starts to repeat:
   Water Supply → Ice Making → Ice Ejection → Mould Returns to Horizontal
9. When freezer door is open, ice ejection don't operating, and after 1minute of Freezer door closing, ejection control function is operated.



<Timing Chart During Ice Ejection>

12-2-5 Test Function

1. It is to force the operation during operation test, service, and cleaning. The test switch is mounted under the automatic ice maker. The test function starts when the test switch is pressed for more than 0.5 second.
2. Test button does not work during ice ejection and water supply. It works when it is in the horizontal conditions. If mould is full of ice during test function operation, ice ejection control and water supply control do not work.
3. When test switch is pressed for more than 0.5 second in the horizontal conditions, ice ejection starts irrespect of the mould conditions. Water shall be splashed if test switch is pressed before the water in the mould freezes. Water shall be supplied while the mould returns to the horizontal conditions after ice ejection. Therefore the problems of ice ejection, returning to the horizontal conditions, and water supply can be checked by test switch. When test function performs normally, buzzer sounds and water supply shall carry out. Check it for repair if buzzer does not sound.
4. When water supply is completed, the cycle operates normally as follows: Ice making → Ice ejection → Returning to horizontal conditions → Water supply
5. Remove ice from the ice maker cube mould and press test switch when ice maker cube mould is full of ice as ice ejection and water supply control do not work when cube mould is full of ice.

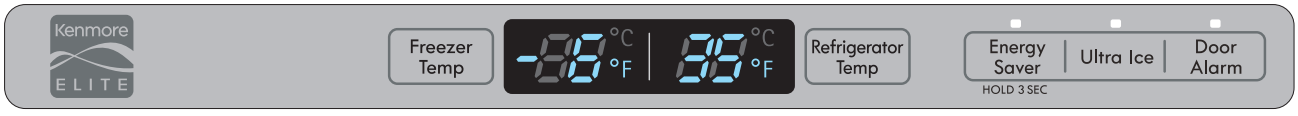
13. DESCRIPTION OF FUNCTION & CIRCUIT OF MICOM

13-1 FUNCTION

13-1-1 Function

1. When the appliance is plugged in, it defaults to 37°F for the refrigerator and 0°F for the freezer.
   You can adjust the refrigerator and the freezer control temperature by pressing the ADJUST button.
2. When the power is initially applied or restored after a power failure, it is automatically set to 3 & -18.

Basic Model



Control range : 33°F ~ 46°F
1°C ~ 8°C

Control range : -6°F ~ 8°F
-21°C ~ -13°C

13-1-2 How to Change the Temperature Mode to °F/°C

1. The display temperature mode can be changed from °F to °C or °C to °F by pressing and holding the FRZ TEMP and the REF TEMP keys at the same time for over five seconds.

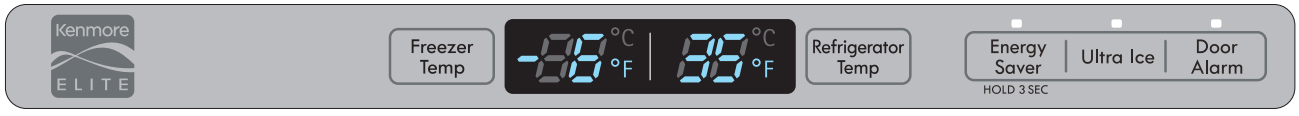
13-1-3 EXPRESS FREEZING

1. The purpose of this function is to intensify the cooling speed of freezer and to increase the amount of ice.
2. Whenever selection switch is pressed, selection/release, the icon will turn ON or OFF.
3. If there is a power outage and the refrigerator is powered on again, EXPRESS FREEZING will be canceled.
4. To activate this function you need to press the EXPRESS FREEZING key and the icon will turn ON. This function will remain activated for 24 hours.

13-1-4 How to s et the dis play mode and cancel it

1. Keep pressing FRZ Temp button and the Ref Temp button for 5 seconds at the same time with opening the refrigerator door.
2. It goes to display mode with special indication as below figure
3. All freezing unit will be turned off at display mode(Exceptions : Lamp, Display)
4. To cancel display mode, keep pressing refrigerator or freezer temperature adjust button to higher more then 5 seconds

Display Mode

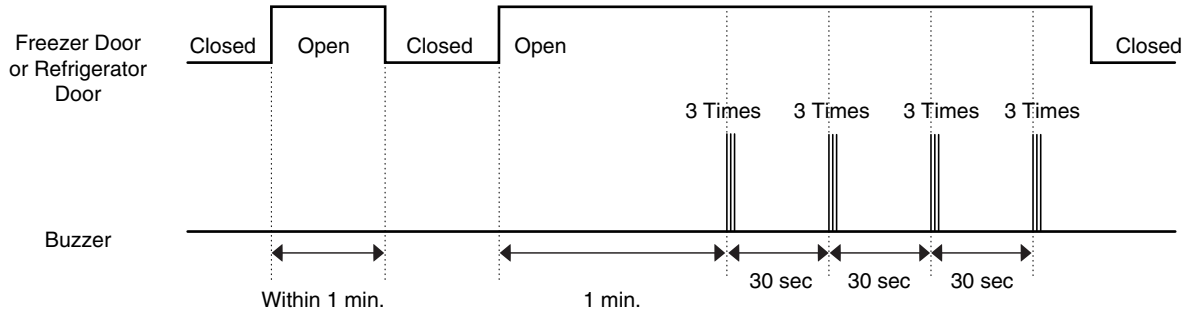


13-1-5 REFRIGERATOR LAMP AUTO OFF

1. To protect the risk of lamp heat, when the refrigerator door is opened for 7 minutes, the refrigerator lamp will be turned off automatically.

13-1-6 Alarm for Open Door

1. This feature sounds a buzzer when the freezer or refrigerator door is not closed within 1 minute after it is opened.
2. One minute after the door is opened, the buzzer sounds three times each for 1/2 second. These tones repeat every 30 seconds.
3. The alarm is cancelled when the freezer or the refrigerator is closed while the buzzer sounds.



13-1-7 Buzzer Sound

When the button on the front display is pushed, a Ding~ Dong~ sound is produced.

13-1-8 Defrosting (removing frost)

1. Defrosting starts each time the compressor running time reaches between 7~50 hours and 50 hours according to door open time.
2. For initial power on or for restoring power, defrosting starts when the compressor running time reaches 4 hours.
3. Defrosting stops if the sensor temperature reaches 8°C or more. If the sensor doesn't reach 8°C in 1 hours, the defrost mode is malfunctioning.
4. Defrosting won't function if its sensor is defective (wires are cut or short circuited)

13-1-9 Electrical Parts Are Turned On Sequentially

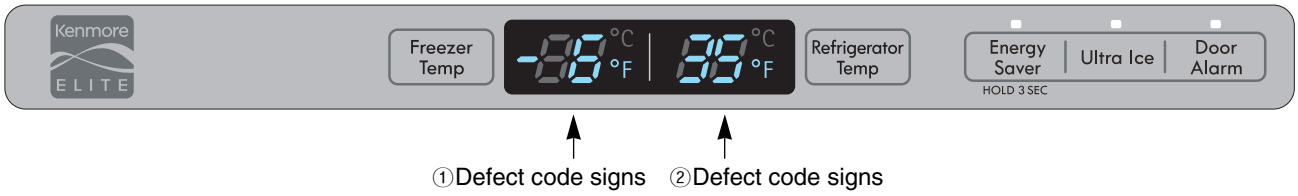
Electrical parts such as compressor, defrosting heater, freezer fan, etc. are turned on in the following order to prevent noise and parts damage. Several parts are started at the same time at initial power on and are turned off together when test is completed.

<table>
<tr><th colspan="2">OPERATING</th><th>ORDERS</th></tr>
<tr><td rowspan="2">Initial power on</td><td>Temperature of defrosting sensor is 45°C or more (when unit is newly purchased or when moved)</td><td>Power ON → (in 0.5 sec.) Compressor ON → (in 0.5 sec.) Freezer fan ON</td></tr>
<tr><td>Temperature of defrosting sensor is lower than 45°C (during power outages or for service)</td><td>Power ON → (in 0.5 sec.) Defrosting heater ON → (in 10 sec.) Defrosting heater OFF
→ (in 0.5 sec.) Pillar heater ON → (in 5 sec.) Pillar heater OFF → (in 5.5 sec.) →
Compressor ON → (in 0.5 sec.) Freezer fan ON</td></tr>
<tr><td colspan="2">Reset to normal operation from test mode</td><td>Total load ON → (In 7 min.) Compressor ON → (In 10 min.) Freezer fan ON</td></tr>
</table>

13-1-10 Defect Diagnosis Function

1. Automatic diagnosis makes servicing the refrigerator easy.
2. When a defect occurs, the buttons will not operate.
3. When the defect CODE removes the sign, it returns to normal operation (RESET).
4. The defect CODE shows on the refrigerator and freezer display.

Basic Model



ERROR CODE on display panel

NO	ITEM	ERROR CODE ①	ERROR CODE ②	CONTENTS	REMARKS
1	Failure of freezer sensor	Er	FS	Cut or short circuit wire	Inspect Connecting wires on each sensor
2	Failure of Refrigerator sensor	Er	rS	Cut or short circuit wire	
3	Failure of defrost sensor	Er	dS	Cut or short circuit wire	
4	Ice maker senor error	NOTE1) Er	IS	Ice maker disconnection or short circuit	
5	Failure of Room Temperature sensor	NOTE1) Er	rt	Cut or short circuit wire	
6	Ice maker kit defect	NOTE1) Er	It	Other electric system error such as moter, gear, hall IC, operating circuit within I/M kit	When the ice does not drop even when the I/M Test S/W is pressed
7	Failure of defrost mode	Er	dH	When defrost sensor doesn't reach 46˚F (8˚C) within 1 hour after starting defrost	Snapping of defrost heater or Temperature fuse, pull-out of connector (indicated minimum 1 hour after failure occurs)
8	Failure of BLDC Fan Motor at Freezing Compartment	Er	FF	If there is no fan motor signal for more than 65 sec in operation fan motor	Poor motor, hooking to wires of fan, contact of structures to fan, snapping or short circuit of Lead wires
9	Failure of BLDC Fan Motor a Mechanical Room	Er	CF	If there is no fan motor signal for more than 65 sec in operation fan motor	Poor motor, hooking to wires of fan, contact of structures to fan, snapping or short circuit of Lead wires
10	Failure of communication	Er	CO	If ther is no signal for Communication between Main PCB and display PCB	Short or open of lead wire Connecting between main PCB And display PCB, transmission TR and receiving part

NOTE1) "Er IS", "Er rt", "Er It" is not indicated on the failure indicating part but indicated in checking display. (When pressing for more than the warmer key of refrigerator temp and the warmer kye of freezer temp for more than 1 second).

NOTE2) 3 hours before occurring the error : Press the Ice Plus (Ultra Ice) button and Freezer button simultaneously.
3 hours after occurring the error : All errors, except "Er rt", "Er IS", "Er It" error, are displayed.

13-1-11 TEST Mode

1. The test mode allows checking the PCB and the function of the product as well as finding out the defective part in case of an error.
2. The test mode is operated by pressing test button at main PCB conttroller.
3. While in the test mode, the function control button is not recognized, but the recognition tone (beep~) sounds.
4. After exiting the test mode, be sure to reset by unplugging and then plugging in the appliance.
5. If an error, such as a sensor failure, is detected while in the test mode, the test mode is cleared and the error code is displayed.
6. While an error code is displayed, the test mode will not be activated.

MODE	MANIPULATION	CONTENTS	REMARKS
TEST1	Push Express Freezing Key and COLDER KEY of Freezer Temp at the same time over 3seconds OR Push TEST S/W (in the main Board)once.	1) Continuous operation of the COMPRESSOR and the Freezer/ Refrigerator fan 2) Stepping DAMPER OPEN 3) Defrosting HEATER OFF 4) DISPLAY LED all ON	
TEST2	Push Express Freezing Key and COLDER KEY of Freezer Temp at the same time over 3 seconds in TEST MODE 1 OR Push TEST S/W once in TEST MODE 1	1) Continuous operation of the COMPRESSOR and the Freezer/ Refrigerator fan 2) Stepping DAMPER CLOSE 3) Defrosting HEATER OFF 4) DISPLAY LED shows no. 2	
TEST3	Push Express Freezing Key and COLDER KEY of Freezer Temp at the same time over 3 seconds in TEST MODE 2 OR Push TEST S/W once in TEST MODE 2	1) COMPRESSOR and the Freezer/ Refrigerator fan OFF 2) Stepping DAMPER CLOSE 3) Defrosting HEATER ON 4) DISPLAY LED shows no. 3	Reset if the Temperature of the Defrosting Sensor is 46˚F(8˚C)or more.
RESET	Push Express Freezing Key and COLDER KEY of Freezer Temp at the same time over 3 seconds in TEST MODE 3 OR Push TEST S/W once in TEST MODE 3	Reset to the previously setting Before TEST MODE.	The compressor will Start after a 7-minute Delay.

* Freezer Fan Variable RPM Check:
  To check the variable rpm, press and hold the WARMER keys of both the REF TEMP and FRE TEMP. The fan speed will change (low to high or high to low) for 30 seconds before reverting to its original setting.

* Demonstration (Display) MODE:
  1. To enter this mode, raise either the Refrigerator or Freezer temperature to its highest setting. Then, press and hold WARMER Key for 5 seconds.
  2. The LED panels will display OFF, to indicate that the compressor, circulating fan, damper, and defrost heater are not operating.
  3. The open door alarm and the lamp auto-off feature will work normally and can be demonstrated.
  4. To reset to normal operation, press and hold either WARMER key for about 5 seconds.

REPAIR
PARTS
LIST

MODELS No.

795.71042.01*
795.71043.01*
795.71049.01*

The model number of your refrigerator is found on the serial plate inside.

All repair parts listed are available for immediate purchase or special order when you visit your nearest Sears Service Center, or the Service Department at most Sears stores. To order parts by phone, call the toll free parts number listed to the left.

When requesting service or ordering parts, always provide the following information:

- Product Type
- Part Number
- Model Number
- Part Description

To call
Toll Free
For Parts:

1-800-366-PART
(1-800-366-7278)

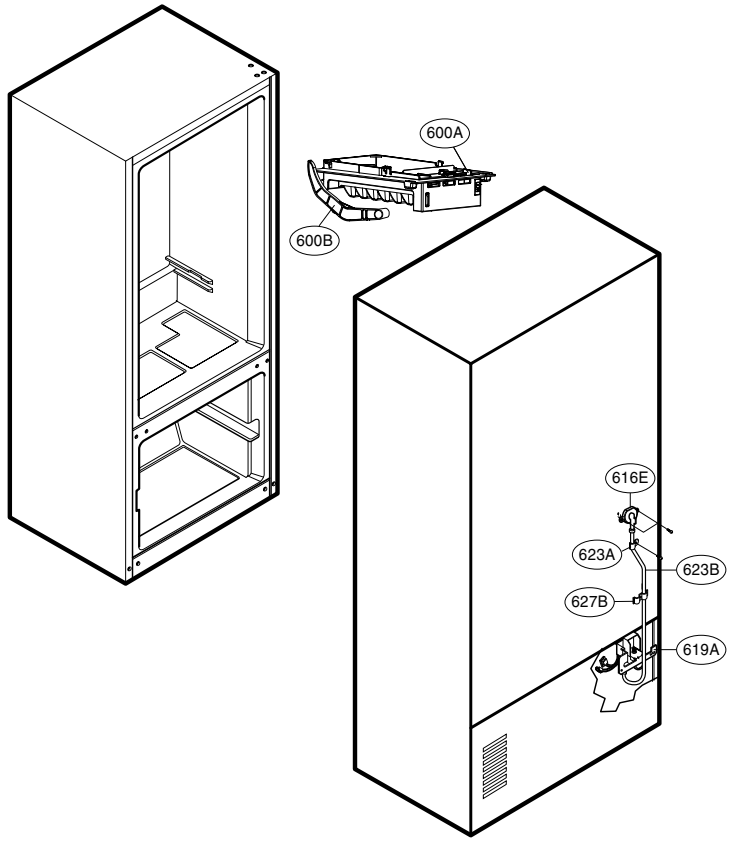
For Service:

1-800-4-MY-HOME
(1-800-469-4663)

Last Revision: MAR. 30. 2010

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

ICEMAKER PARTS



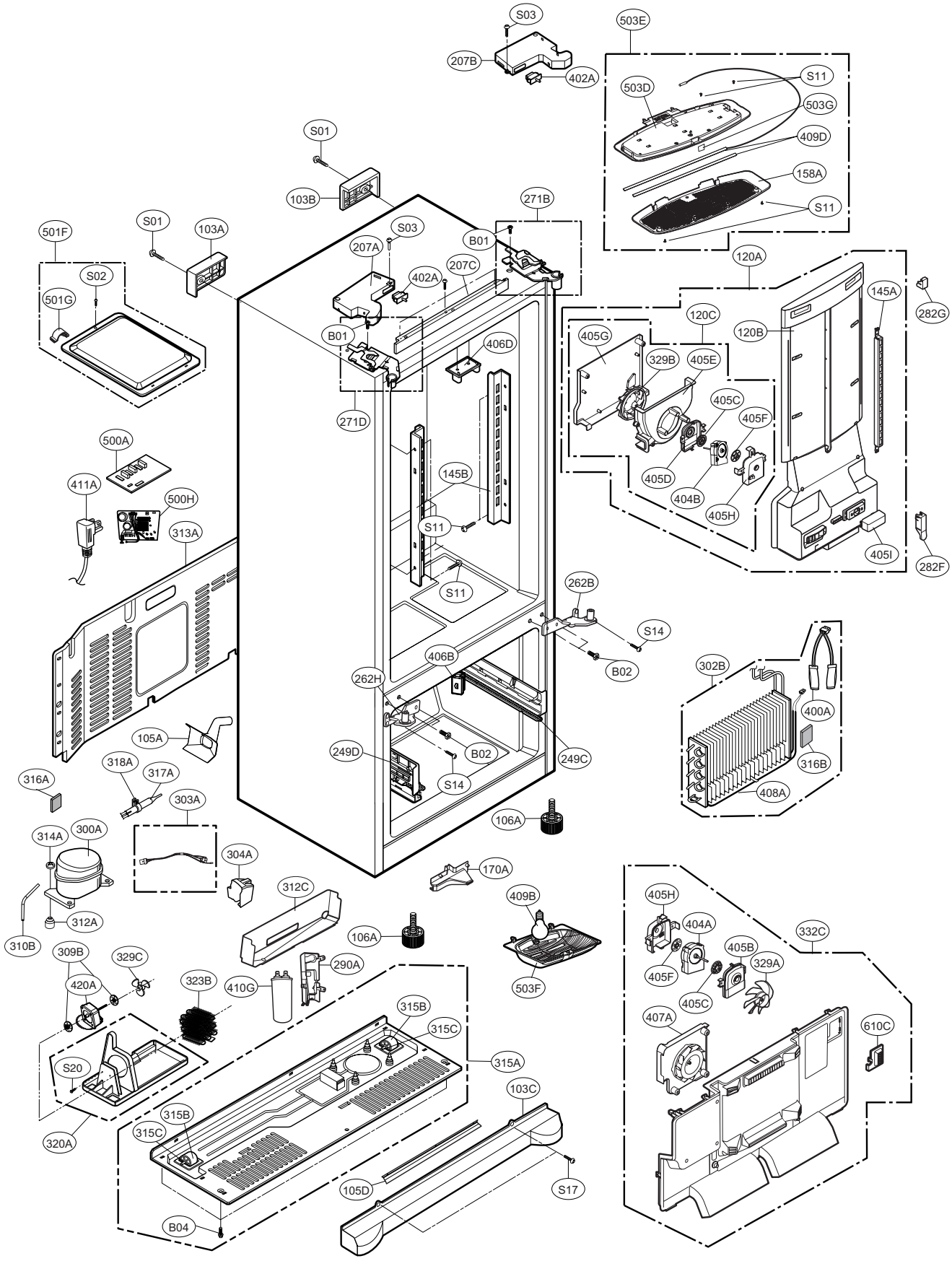
LOC No.	160*	Description
600A	AEQ72909602	Ice Maker Assembly,Kit
600B	4510JA3003D	Lever,Ice Maker
616E	MEG61879201	Holder, Pipe
619A	5220JB2010A	Valve Water
623A	4770JA3001A	Band
623B	MJU39256404	Tube Plastic
627B	4930JA3054A	Holder,Pipe

CAUTION: Use the part number to order part, not the location number.

Part No. MFL62188032

CASE PARTS

CAUTION: Use the part number to order part, not the position number.



CASE PARTS

Loc NO.	71043 (ST)	71049 (WB)	71042 (SW)	Desc
103A	3650JA2061X	3650JA2113N	3650JA2061B	Handle,Rear
103B	3650JA2061W	3650JA2113P	3650JA2061A	Handle,Rear
103C	ACQ55957509	ACQ55957510	ACQ55957511	Cover Assembly,Lower
105A	5251JA3003E	5251JA3003E	5251JA3003E	Tube Assembly,Drain
105D	5070JA3002X	5070JA3002X	5070JA3002X	Skirt,Lower
106A	AFC72909201	AFC72909201	AFC72909201	Leg Assembly,Adjust
120A	ADJ72909810	ADJ72909810	ADJ72909810	Duct Assembly,Multi
120B	MCZ61845003	MCZ61845003	MCZ61845003	Duct,Multi
120C	ABA72913501	ABA72913501	ABA72913501	Bracket Assembly,Motor
145A	4930JA2080C	4930JA2080C	4930JA2080C	Holder,Shelf
145B	4930JA2081C	4930JA2081C	4930JA2081C	Holder,Shelf
158A	MCK61881301	MCK61881301	MCK61881301	Cover,Lamp
170A	MEA62170501	MEA62170501	MEA62170501	Guide,Air
207A	3550JJ1097Q	3550JJ1097E	3550JJ1097A	Cover,Hinge
207B	3550JJ1097R	3550JJ1097B	3550JJ1097F	Cover,Hinge
207C	ABQ56655314	ABQ56655316	ABQ56655315	Case Assembly,Display
249C	MEG61844801	MEG61844801	MEG61844801	Holder,Rail
249D	MEG61844802	MEG61844802	MEG61844802	Holder,Rail
262B	AEH71135338	AEH71135342	AEH71135338	Hinge Assembly,Center
262H	AEH71135340	AEH71135344	AEH71135340	Hinge Assembly,Center
271B	AEH60614102	AEH60614102	AEH60614102	Hinge Assembly,Upper
271D	AEH60614101	AEH60614101	AEH60614101	Hinge Assembly,Upper
282F	MBL61865401	MBL61865401	MBL61865401	Cap,Duct
282G	MBL61865301	MBL61865301	MBL61865301	Cap,Duct
290A	ACQ75168204	ACQ75168204	ACQ75168204	Cover Assembly,PCB
300A	TCA34649901	TCA34649901	TCA34649901	Compressor,Set Assembly
302B	5421JJ1003L	5421JJ1003L	5421JJ1003L	Evaporator Assembly
303A	EAD61050801	EAD61050801	EAD61050801	Harness Assembly
304A	3550JA2284A	3550JA2284A	3550JA2284A	Cover,PTC
309B	5040JJ2001A	5040JJ2001A	5040JJ2001A	Damper,Motor Support
310B	4J00977P	4J00977P	4J00977P	Pipe,Compressor Sealing
312A	5041JA3001B	5041JA3001B	5041JA3001B	Damper Assembly,Seat
312C	3391JJ2013C	3391JJ2013C	3391JJ2013C	Tray Assembly,Drain
313A	3551JJ2018A	3551JJ2018A	3551JJ2018A	Cover Assembly,Machinery(Rear)
314A	4620JA3015A	4620JA3015A	4620JA3015A	Stopper,Compressor
315A	3103JJ1001Q	3103JJ1001Q	3103JJ1001Q	Base Assembly,Compressor
315B	4580JJ3001A	4580JJ3001A	4580JJ3001A	Roller
315C	1PZZJA3013B	1PZZJA3013B	1PZZJA3013B	Pin,Common
316A	5072JA3003F	5072JA3003F	5072JA3003F	Damper,Noise
316B	5072JA3003G	5072JA3003G	5072JA3003G	Damper,Noise
317A	5851JA2007E	5851JA2007E	5851JA2007E	Drier Assembly
318A	4930JA3034A	4930JA3034A	4930JA3034A	Holder,Drier
319A	MJS61845701	MJS61845701	MJS61845701	Tray,Drip
319C	MEA42257901	MEA42257901	MEA42257901	Guide,Fan
323B	ACG72915205	ACG72915205	ACG72915205	Condenser Assembly,Wire
329A	5901JA1016B	5901JA1016B	5901JA1016B	Fan Assembly
329B	5901JA1020A	5901JA1020A	5901JA1020A	Fan Assembly
329C	ADP36665701	ADP36665701	ADP36665701	Fan Assembly
332C	AEB72913910	AEB72913910	AEB72913910	Grille Assembly,Fan
400A	6615JB2005H	6615JB2005H	6615JB2005H	Controller Assembly

CAUTION: Use the part number to order part, not the position number.

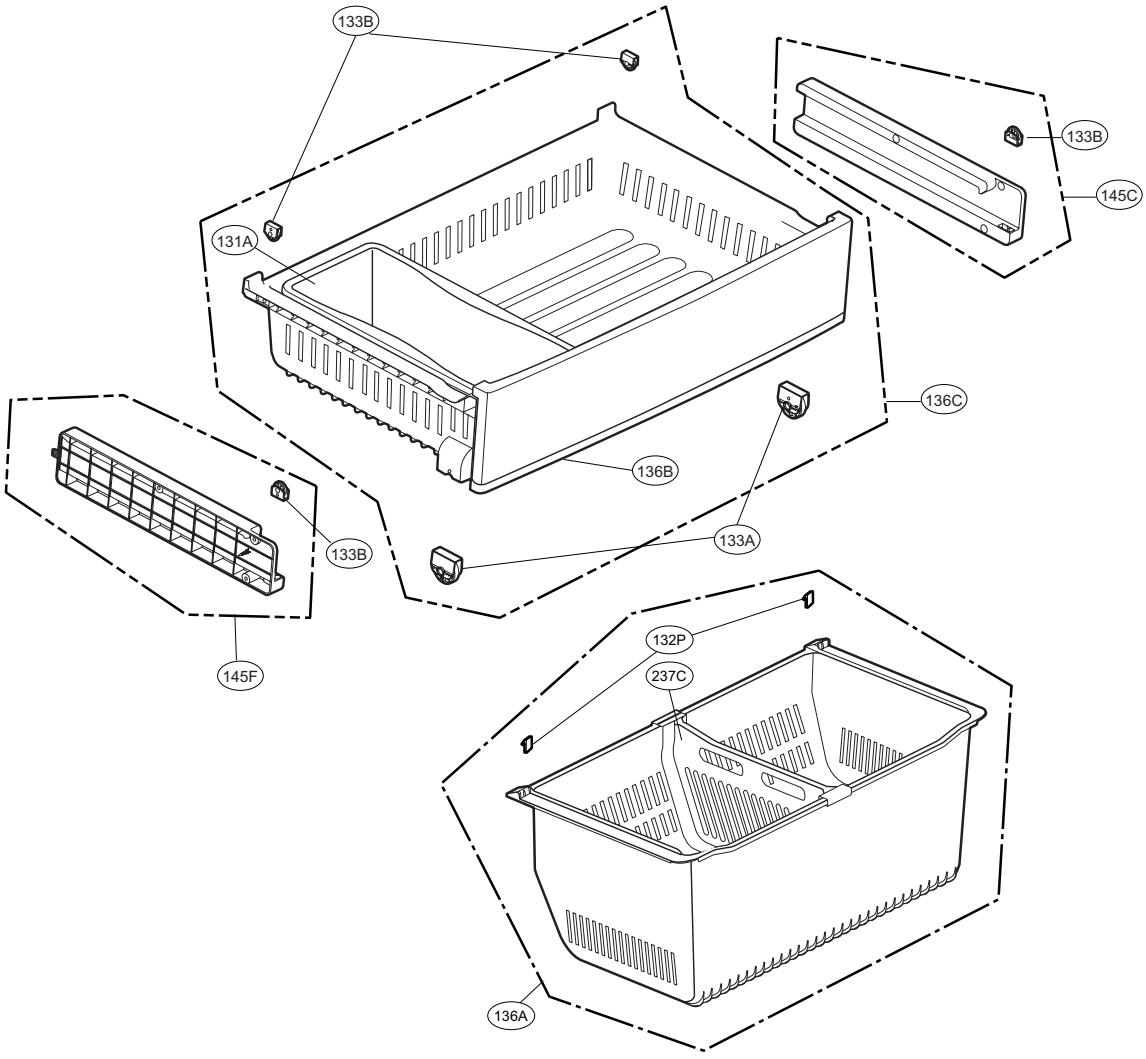
CASE PARTS

Loc NO.	71043 (ST)	71049 (WB)	71042 (SW)	Desc
402A	EBF60755004	6600JB3007J	EBF60705505	Switch,Push Button
404A	4681JB1027C	4681JB1027C	4681JB1027C	Motor,DC
404B	4681JB1027J	4681JB1027J	4681JB1027J	Motor,DC
405B	4810JA2055A	4810JA2055A	4810JA2055A	Bracket,Motor
405C	5040JA2009B	5040JA2009B	5040JA2009B	Damper,Motor Support
405D	4810JA2055A	4810JA2055A	4810JA2055A	Bracket,Motor
405E	MHN61841101	MHN61841101	MHN61841101	Shroud,Refrigerator
405F	5040JA2004B	5040JA2004B	5040JA2004B	Harness,Single
405G	MAZ61845501	MAZ61845501	MAZ61845501	Bracket,Motor
405H	3550JA2273A	3550JA2273A	3550JA2273A	Cover,Motor
405I	MCK61881401	MCK61881401	MCK61881401	Cover,Lamp
406B	6600JB1010K	6600JB1010K	6600JB1010K	Switch,Push Button
406D	MEG61899901	MEG61899901	MEG61899901	Holder,Door
407A	ABA72913302	ABA72913302	ABA72913302	Bracket Assembly,Motor
408A	5300JK1005D	5300JK1005D	5300JK1005D	Heater,Sheath
409B	6912JB2004K	6912JB2004K	6912JB2004K	Lamp, Incandescent
409D	EAV48995107	EAV48995107	EAV48995107	LED Assembly
410G	EAE58905701	EAE58905701	EAE58905701	Capacitor,Electric Appliance Film,Radial
411A	6411JB1042W	6411JB1042W	6411JB1042W	Power Cord Assembly
420A	4681JB1029D	4681JB1029D	4681JB1029D	Motor Assembly,DC,Cooling
500A	EBR67348004	EBR67348004	EBR67348004	PCB Assembly,Main
500H	EBR64173902	EBR64173902	EBR64173902	PCB Assembly,Sub
501F	3551JA2144H	3551JA2144H	3551JA2144H	Cover Assembly,PCB
501G	MCQ62106201	MCQ62106201	MCQ62106201	Damper,Rubber
503D	MBN61844901	MBN61844901	MBN61844901	Case,Lamp
503E	ACQ33676509	ACQ33676509	ACQ33676509	Cover Assembly,Lamp
503F	MCK62375001	MCK62375001	MCK62375001	Cover,Lamp
503G	MCR61954803	MCR61954803	MCR61954803	Decor,Control
610C	ACQ73244001	ACQ73244001	ACQ73244001	Cover Assembly,Sensor
B01	4000W4A003A	4000W4A003A	4000W4A003A	Screw,Customized
B02	1STZJA3004F	1STZJA3004Q	1STZJA3004F	Screw,Customized
B04	1BZZJA2002A	1BZZJA2002A	1BZZJA2002A	Bolt,Common
S01	1SZZJA3005K	1SZZJA3005K	1SZZJA3005K	Screw,Customized
S02	4J00415D	4J00415D	4J00415D	Screw,Customized
S03	4J01424B	4J01424B	4J01424B	Screw,Customized
S11	3J05696W	3J05696W	3J05696W	Screw,Customized
S14	1SZZJJ3010F	1SZZJJ3010F	1SZZJJ3010J	Screw,Customized
S20	1SZZJA3016A	1SZZJA3016A	1SZZJA3016A	Screw,Customized

CAUTION: Use the part number to order part, not the position number.

FREEZER PARTS

CAUTION: Use the part number to order part, not the position number.

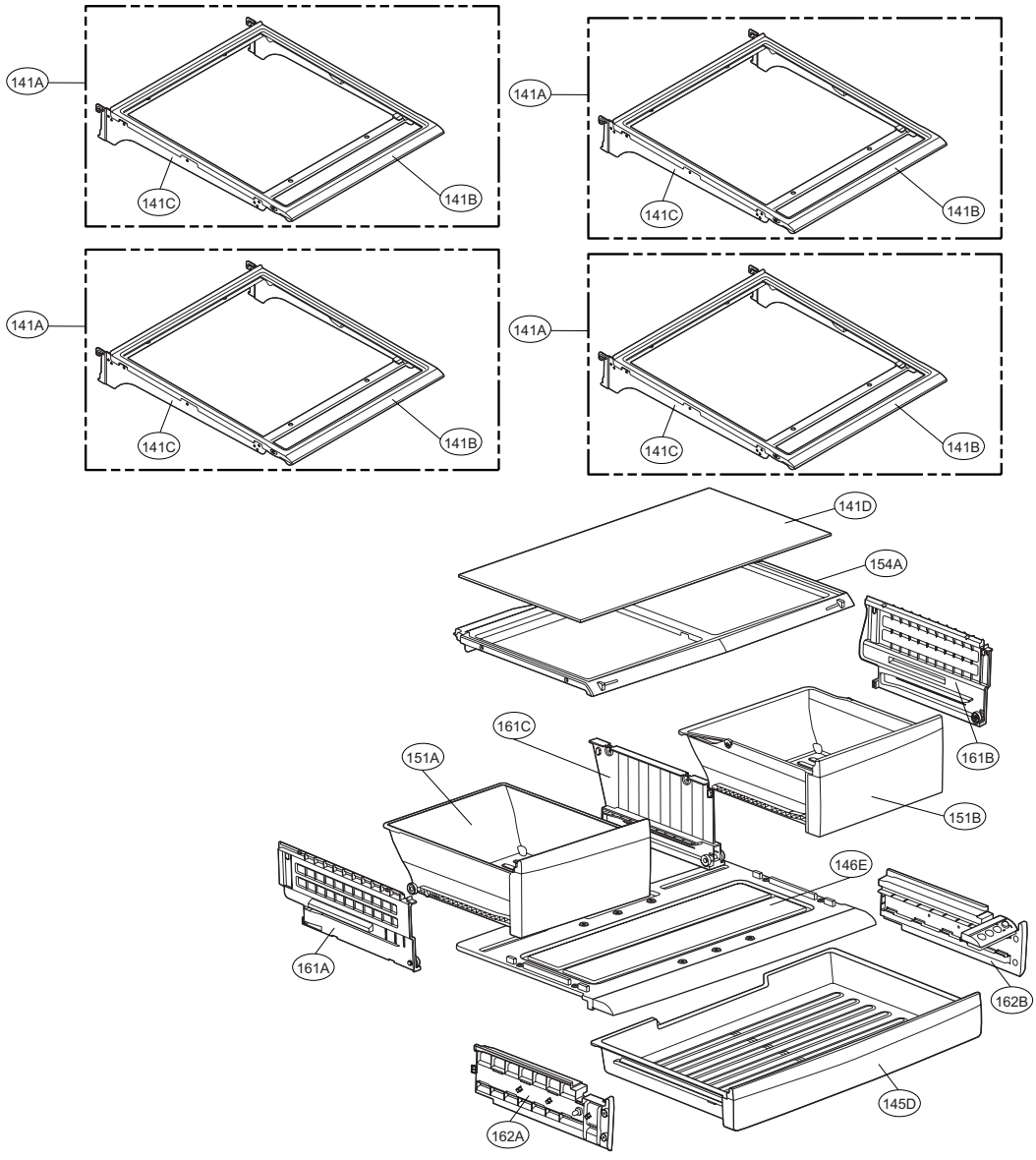


	Loc NO.	71043 (ST)	71049 (WB)	71042 (SW)	Desc
Freezer Parts	131A	MJS62031801	MJS62031801	MJS62031801	Tray,Freezer
	132P	MBL62065801	MBL62065801	MBL62065801	Cap,Rubber
	133A	AHJ72909001	AHJ72909001	AHJ72909001	Roller Assembly
	133B	AHJ72909101	AHJ72909101	AHJ72909101	Roller Assembly
	136A	AJP72909901	AJP72909901	AJP72909901	Tray Assembly,Drawer
	136B	AJP72909703	AJP72909703	AJP72909703	Tray Assembly,Drawer
	136C	AJP72909803	AJP72909803	AJP72909803	Tray Assembly,Drawer
	145C	AEC72912202	AEC72912202	AEC72912202	Guide Assembly,Rail
	145F	AEC72912201	AEC72912201	AEC72912201	Guide Assembly,Rail
	237C	MEA61842101	MEA61842101	MEA61842101	Guide,Drawer

CAUTION: Use the part number to order part, not the position number.

REFRIGERATOR PARTS

CAUTION: Use the part number to order part, not the position number.

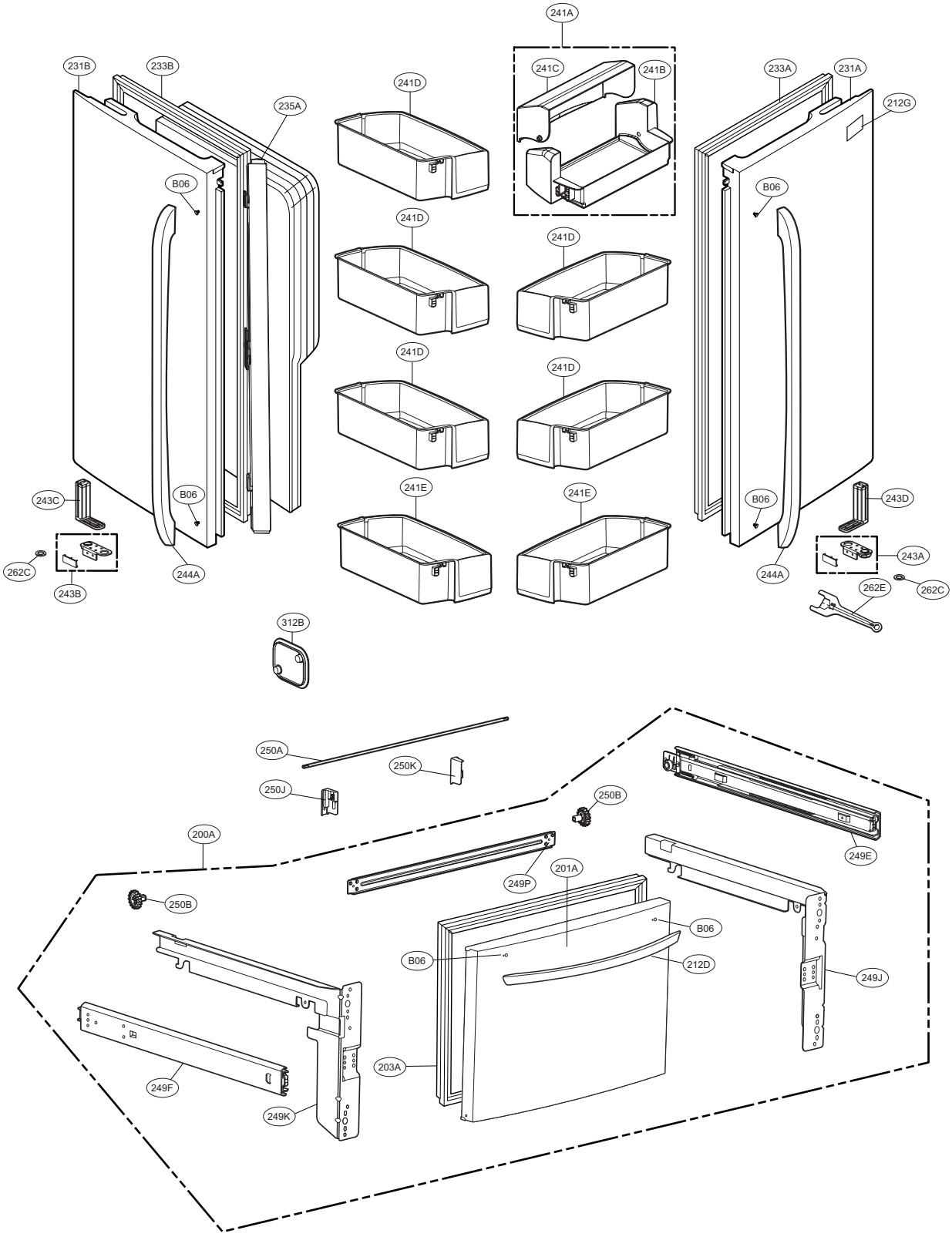


Loc NO.	71043 (ST)	71049 (WB)	71042 (SW)	Desc
141A	AHT72910303	AHT72910303	AHT72910303	Shelf Assembly,Refrigerator
141B	AHT72910203	AHT72910203	AHT72910203	Shelf Assembly,Refrigerator
141C	5027JJ2012R	5027JJ2012R	5027JJ2012R	Shelf Assembly,Net
141D	MHL42613212	MHL42613212	MHL42613212	Shelf,Glass
145D	AJP72909608	AJP72909608	AJP72909608	Tray Assembly,Fresh Room
146E	ACQ73152602	ACQ73152602	ACQ73152602	Cover Assembly,Tray
151A	AJP72910210	AJP72910210	AJP72910210	Tray Assembly,Vegetable
151B	AJP72910206	AJP72910206	AJP72910206	Tray Assembly,Vegetable
154A	ACQ73152504	ACQ73152504	ACQ73152504	Cover Assembly,TV
161A	AEC72910001	AEC72910001	AEC72910001	Guide Assembly,TV
161B	AEC72910002	AEC72910002	AEC72910002	Guide Assembly,TV
161C	AEC72910301	AEC72910301	AEC72910301	Guide Assembly,Rail
162A	AEC72910104	AEC72910104	AEC72910104	Guide Assembly,Rail
162B	AEC72910107	AEC72910107	AEC72910107	Guide Assembly,Rail

CAUTION: Use the part number to order part, not the position number.

DOOR PARTS

CAUTION: Use the part number to order part, not the position number.



DOOR PARTS

Loc NO.	71043 (ST)	71049 (WB)	71042 (SW)	Desc
200A	ADC71974618	ADC71974619	ADC71974620	DOOR Assembly,Freezer
201A	ADD71917419	ADD71917420	ADD71917421	Door Foam Assembly,Freezer
203A	MDS38201406	MDS38201402	MDS38201401	Gasket,Door
212D	AED72952701	AED72952702	AED72952703	Handle Assembly,Freezer
212G	MFT61866202	MFT61866201	MFT61866205	Name Plate
231A	ADD72936107	ADD72936109	ADD72936108	Door Foam Assembly,Refrigerator
231B	ADD72935912	ADD72935913	ADD72935914	Door Foam Assembly,Refrigerator
233A	ADX72930405	ADX72930407	ADX72930406	Gasket Assembly,Door
233B	ADX72930401	ADX72930403	ADX72930404	Gasket Assembly,Door
235A	AGU72969102	AGU72969103	AGU72969101	Plate Assembly,Front
241A	AAP33686302	AAP33686302	AAP33686302	Basket Assembly,Door
241B	MAN38142901	MAN38142901	MAN38142901	Basket,Door
241C	MAN38143001	MAN38143001	MAN38143001	Basket,Window
241D	AAP72909206	AAP72909206	AAP72909206	Basket Assembly,Door
241E	AAP72909214	AAP72909214	AAP72909214	Basket Assembly,Door
243A	AJC68689616	AJC68689616	AJC68689616	Stopper Assembly,Door
243B	AJC68689615	AJC68689615	AJC68689615	Stopper Assembly,Door
243C	AEH36821905	AEH36821905	AEH36821905	Hinge Assembly,Center
243D	AEH36821903	AEH36821903	AEH36821903	Hinge Assembly,Center
244A	AED72952801	AED72952802	AED72952803	Handle Assembly,Refrigerator
249E	MGT61844001	MGT61844001	MGT61844001	Rail,Slide
249F	MGT61844002	MGT61844002	MGT61844002	Rail,Slide
249J	MCD61841103	MCD61841103	MCD61841103	Connector,Rail
249K	MCD61841104	MCD61841104	MCD61841104	Connector,Rail
249P	MCD61841301	MCD61841301	MCD61841301	Connector
250A	MAK39123904	MAK39123904	MAK39123904	Bar
250B	4403JA3005A	4403JA3005A	4403JA3005A	Connector Assembly
250K	ACQ73657701	ACQ73657701	ACQ73657701	Cover Assembly
250J	ACQ73657702	ACQ73657702	ACQ73657702	Cover Assembly
262C	MGZ42997101	MGZ42997101	MGZ42997101	Ring
262E	MHU38218902	MHU38218902	MHU38218902	Spanner
312B	MBL63137001	MBL63137001	MBL63137001	Cap,Cover
B06	4620JJ2010C	4620JJ2010C	4620JJ2010C	Stopper,Handle

CAUTION: Use the part number to order part, not the position number.