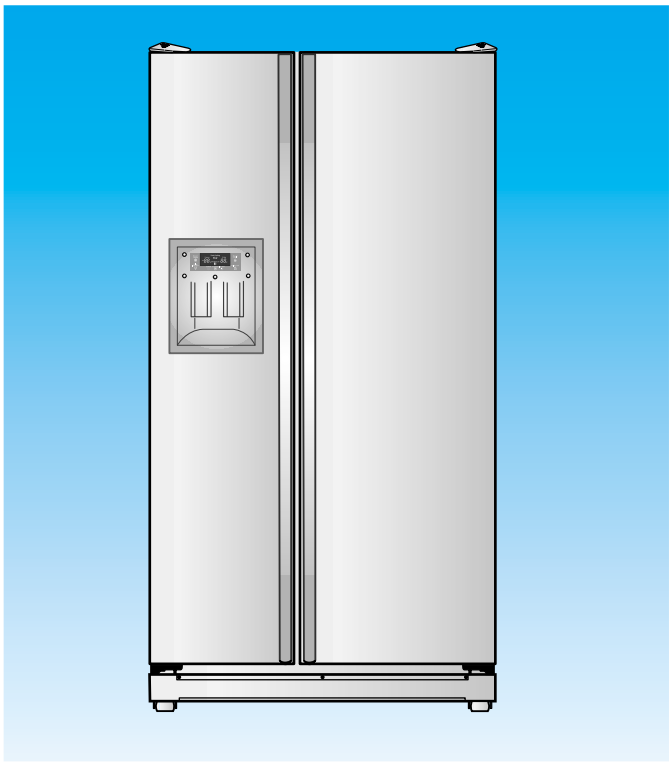
SAMSUNG

REFRIGERATOR

SIDE BY SIDE
RS265 LAWP
RS265 LABP
RS267 LABP
RS267 LASH
RS269 LARS

SERVICE GUIDE

REFRIGERATOR



PRODUCT FEATURE

- LED DISPLAY
- LONG HANDLE DESIGN
- FASTER COOLING TIMES
- IMPROVED EVEN COOLING

For the latest information, Please access to our service web site (http://itself.sec.samsung.co.kr)

WARNING

IMPORTANT SAFETY NOTICE

The service guide is for service men with 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 dealer cannot be responsible for the interpretation of this information.

SAMSUNG ELECTRONICS AMERICA, INC.

Technical Service Guide

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Contents

1. PRECAUTIONS(SAFETY WARNINGS)

● Pull the power plug out before for the change or repair of electric parts.
→ Be careful the electric shock.

● When exchanging the parts, use the correct parts.
→ Check the model name, rating voltage, rating current, running temperature symbols.

● When troubleshooting, connect firmly the types of harness.
→ Make not to be separated when some power is imposed.

● Check the traces of water infiltration at the electric parts.
→ If there is a trace of water infiltration, exchange or tape the parts.

● Check the assemble status of parts after troubleshooting.
→ It should be done indiscriminately as before the repair.

● Check the use circumstance of refrigerator.
→ If the refrigerator is installed at the place that is damp or wet, or status of installation is unstable, change the installation place.

● Do earth in case of need.
→ Particularly, Be sure to earth when there is a risk of an electric leakage by humidity or wetness.

● Do not use multi plugs in a plug socket at the same time.
Check if the power cord and socket is damaged, pressed, squeezed, or fired.
→ If the plug or plug socket is damaged, repair or exchange that immediately.

● Do not repair the refrigerator by user himself.

● Do not store other materials except the foods.
→ Drugs or scientific materials : difficult to keep precise temperature.
→ The inflammables(alcohol, benzene, ether, LP gas, butane gas etc.): have risk of explosion.

1. PRECAUTIONS(SAFETY WARNINGS)

Read all instructions before repairing the product and follow the instructions in order to prevent danger or property damage.

CAUTION/WARNING SYMBOLS DISPLAYED

Warning	*Indicates that a danger of death or serious injury exists.*
Caution	*Indicates that a risk of personal injury or material damage exists.*

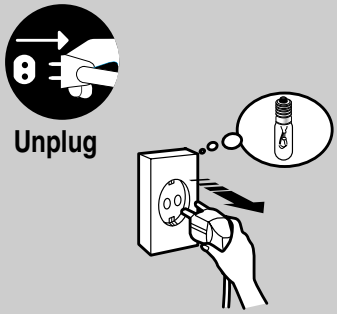
SYMBOLS

means "Prohibition".
means "Do not disassemble".
means "No contact".
means "The things to be followed".
means "Power cord should be unplugged from the consent"
means "Earth to prevent Electric shock".

Warning & Caution

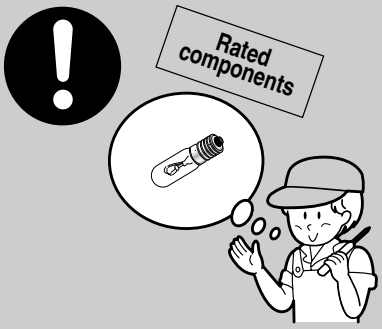
Pull the power plug out to exchange the interior lamp of the refrigerator.

- *It may cause electric shock.*



Use the rated components on the replacement.

- *Check the correct model, rated voltage, rated current, operating temperature and so on.*



On repair, make sure that the wires such as harness are bundled tightly.

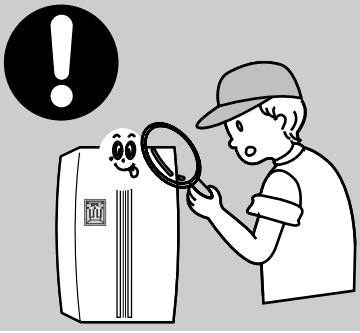
- *Bundle tightly wires in order not to be detached by the external force and then not to be wetted.*

On repair, remove completely dust or other things of housing parts, harness parts, and check parts.

- *Cleaning may prevent the possible fire by tracking or short.*

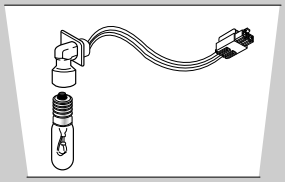
After repair, check the assembled state of components.

- *It must be in the same assembled state when compared with the state before disassembly.*



Check if there is any trace indicating the permeation of water.

- *If there is that kind of trace, change the related components or do the necessary treatment such as taping using the insulating tape.*



1. PRECAUTIONS(SAFETY WARNINGS)

※ Please let users know following warnings & cautions in detail.

Warning & Caution

Do not allow users to put bottles or kinds of glass in the freezer.

- *Freezing of the contents may inflict a wound.*

Do not allow users to store narrow and lengthy bottles or foods in a small multi-purpose room.

- *It may hurt you when refrigerator door is opened and closed resulting in falling stuff down.*

Do not allow users to store pharmaceutical products, scientific materials, etc., in the refrigerator.

- *The products which temperature control should not be stored in the refrigerator.*

Do not allow users to insert the power plugs for many products at the same time.

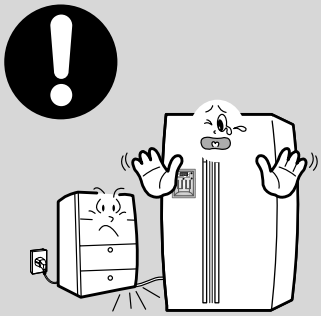
- *May cause abnormal generation of heat or fire.*

Do not allow users to disassemble, repair or alter.

- *It may cause fire or abnormal operation which leads to injury.*

Do not allow users to bend the power cord with excessive force or do not have the power cord pressed by heavy article.

- *May cause fire.*

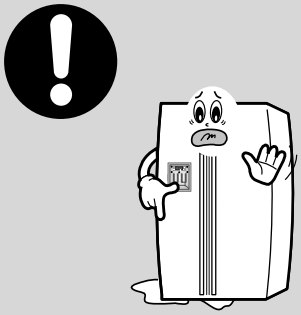


Do not allow users to store articles on the product.

- *Opening or closing the door may cause things to fall down, with may inflict a wound.*

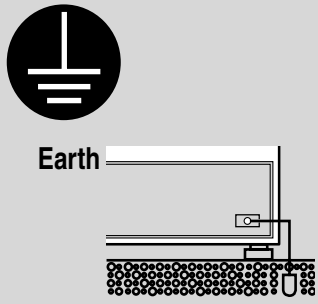
Do not allow users to install the refrigerator in the wet place or the place where water splashes.

- *Deterioration of insulation of electric parts may cause electric shock or fire.*



Make sure of the earth.

- *If earthing is not done, it will cause breakdown and electric shock.*

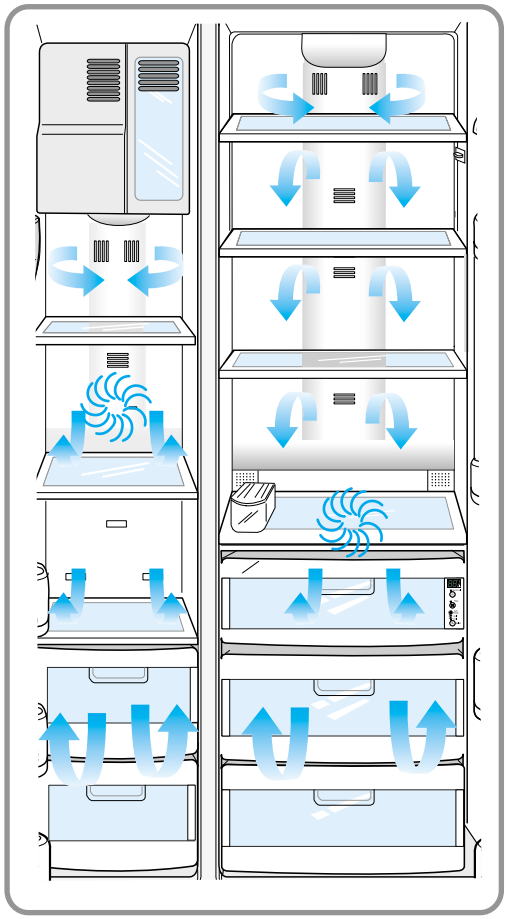


2. PRODUCT SPECIFICATIONS

2. PRODUCT SPECIFICATIONS

2-1) Introduction of main function

● **A newly developed SAMSUNG side by side refrigerator in 2005 has the following characteristics.**



1) Twin Cooling System

- The refrigerator and the freezer have two evaporators. Given this independent system, the freezer and the refrigerator are cooled individually as required and are, therefore, more efficient. Food odor from the refrigerator does not affect food in the freezer due to separate air flow circulation.

2) Multi-Flow System

- Cool air circulates through multiple vents on every shelf level. This provides even distribution of cooling inside cabinets to keep your food fresh longer.

3) Xtra Space™

- Vertical room next to the ice maker in the freezer provides space for pizza etc.

4) Door Alarm

- Beep sound reminds you the door is open.

5) Xtra Fresh™

- Optimized humidity control keeps vegetables & fruits fresh.

6) Deodorizer

- Reusable twin deodorizers keep the refrigerator air fresh and odor free.

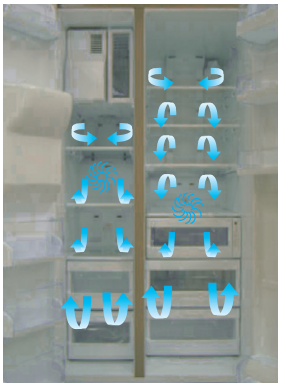
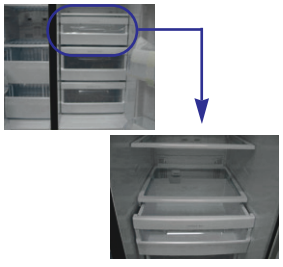
7) CoolSelect Zone™ Drawer(RS267, RS269)

- User can select Quick Cool, Thaw, for quickly chill items, thaw items. Select Soft freeze, Chill or Cool to control the temperature of the drawer.

2. PRODUCT SPECIFICATIONS

2-1) Introduction of main function

● **A newly developed SAMSUNG side by side refrigerator in 2006 has the following characteristics.**

	**Twin Cooling System** • The refrigerator and the freezer have two evaporators. Given this independent system, the freezer and the refrigerator are cooled individually as required and are, therefore, more efficient. Food odor from the refrigerator does not affect food in the freezer due to separate air flow circulation. **Multi-Flow System** • Cool air circulates through multiple vents on every shelf level. This provides even distribution of cooling inside cabinets to keep your food fresh longer.
	**Xtra Space™** • Vertical room next to the ice maker in the freezer provides space for pizza etc.
	**Door Alarm** • Beep sound reminds you the door is open.
	**Xtra Fresh™** • Optimized humidity control keeps vegetables & fruits fresh. (RS263B/RS265L)
	**Deodorizer** • Reusable twin deodorizers keep the refrigerator air fresh and odor free.
	**CoolSelect Zone™ Drawer(RS265B,RS267B,RS267L,RS269L)** • User can select Quick Cool, Thaw, for quickly chill items, thaw items. Select Soft freeze, Chill or Cool to control the temperature of the drawer.

2. PRODUCT SPECIFICATIONS

2-2) Specifications

ELECTRICAL SPECIFICATIONS

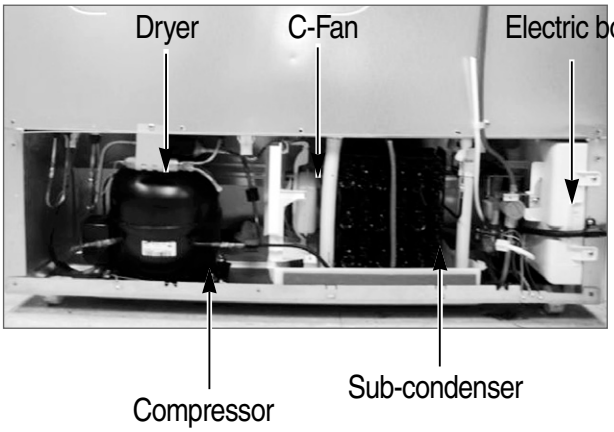
Defrost Control ..... From 24 to 32 hrs
Defrost Thermistor(502AT) ..... 50°F(off)
Electrical Rating.....AC115V 60Hz 11.6 Amps
Maximum Current Leakage ..... 0.25 mA
Maximum Ground Path Resistance 0.1 Ohm
Energy Consumption ..... KWH/mo.

NO LOAD PERFORMANCE

Ambient Temperature	70°F	90°F
Refrigerator,°F	34~46	34~46
Freezer,°F.....	-14~8	-14~8
Run Time,%	<40	<60

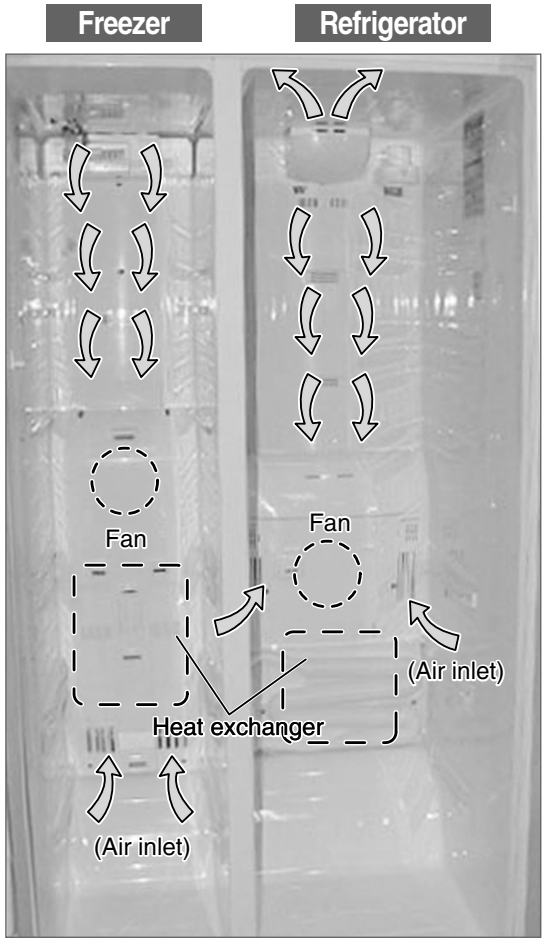
REFRIGERATION SYSTEM

Refrigerant Charge (R134a)..... 7.76 oz
Compressor(MK183C-L2U)..... 532.3 Btu/hr
Compressor oil.....Freol α -10
Capillary tube(Dia, Length) .....0.033 " ,130 "
Dryer ..... Molecular Sieve XH-9



INSTALLATION

Clearance must be provided for air circulation
AT TOP ..... 2 "
AT SIDES..... 0.1 "
AT REAR..... 2 "



MODELS

RS265(Good), RS267(Better), RS269(Best)

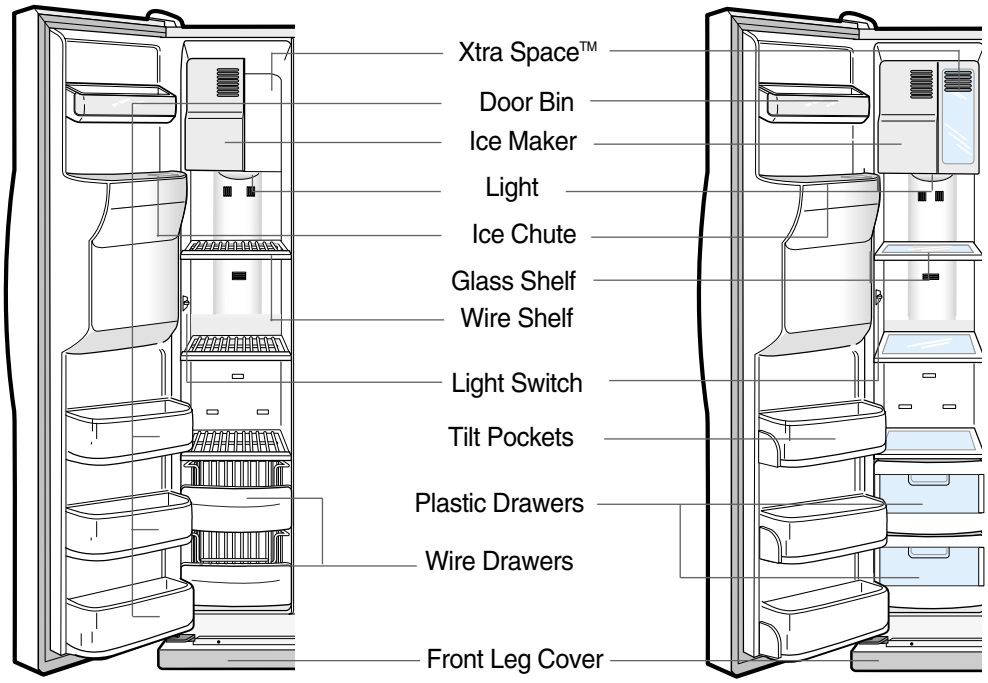
REPLACEMENT PARTS

Main PCB ASS'Y(Dispenser with CoolSlelect Zone™) ····· DA41-00104R
Main PCB ASS'Y((Dispenser) ····· DA41-00104S
Thermistor(Freezer)····· DA32-10109W
Thermistor(Freezer Evaporator) ····· DA32-00006A
Thermistor(Refrigerator)····· DA32-10105U
Thermistor(Refrigerator Evaporator) DA32-00006B
Thermistor(Ambient)····· DA32-10109V
Thermistor(CoolSelect Zone™)····· DA32-10109X
Thermistor(Ice-Maker) ····· DA32-10108B
Relay ····· DA35-10013Q
Overload Relay ····· DA34-10003D
Run Capacitor (12㎌) ····· 2501-001045
Fan-Motor(FRE) ····· DA31-00020E
Fan-Motor(REF) ····· DA31-00002S(RS2534)
Fan-Motor(REF) ····· DA31-00020E(RS2556/2578)
Fan-Motor(Condenser) ····· DA31-00020H
Thermal Fuse ····· DA47-00095C
Senser-Flow ····· DA32-10110B

2. PRODUCT SPECIFICATIONS

2-3) Interior Views

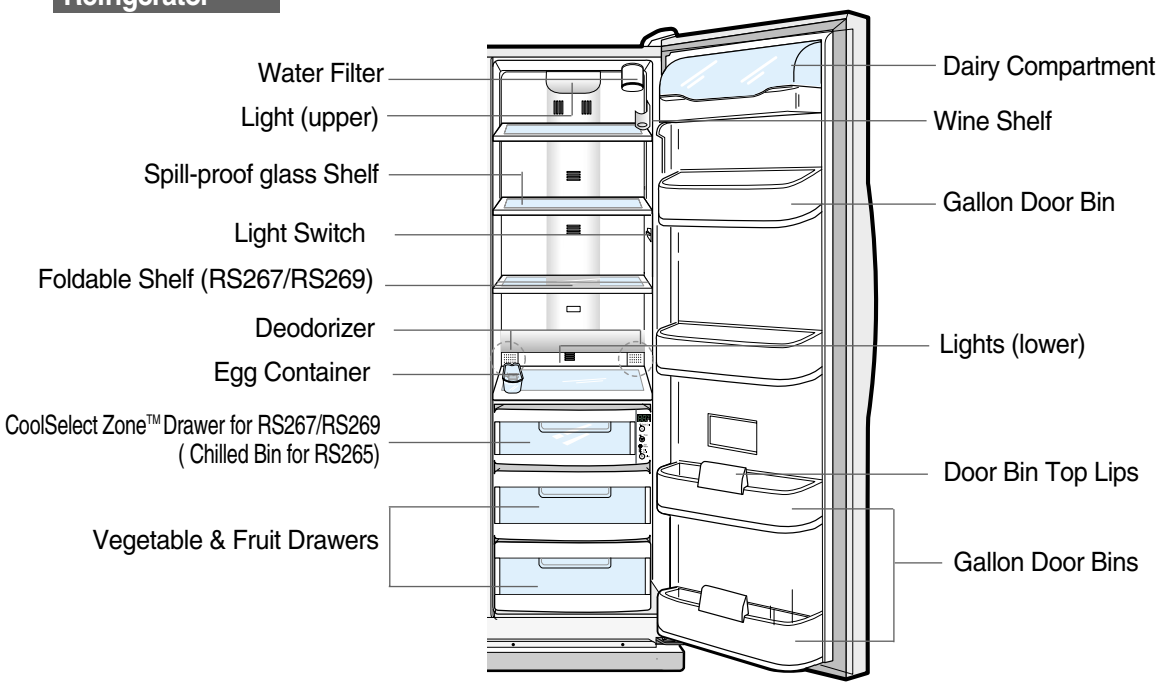
Freezer



RS265 Model

RS267/RS269 Model

Refrigerator



2-4) Model Specification &Comparison Chart

Item		Specification	
Models		BBY	LOWES
		RS255BAWW	RS267LABB
		DISPENSER/COOL SELECT ZONE	DISPENSER/COOL SELECT ZONE
Net Capacity	Total	713L	702L
	Refrigerator	270L	264L
	Freezer	443L	438L
Product Weight		135	140
MOTOR		DC12,DREP3030LA(고내) DC12,DRCP3030LA(기계)	DC12V,DREP302 ϕCA
POWER CODE AC 125V		AC 125V 15A DA39-10165E	AC115V,0.5A
DOOR SWITCH		AC 250V 0.5A DA34-10110E(REF) DA34-10120E(FRE)	AC115V,12A

PRODUCT SPECIFICATIONS

2-4) Model Specification &Comparison Chart

ITEM			Spec	SAMSUNG A-TOP05	WHIRLPOOL GS6SHAXLS	GE GSS25JFP
Appearance						
Product Zone			Cooling Tech	Twin Cooling	Mono Cooling	Mono Cooling
			Door Shape	Flat	Contour	Contour
			Special Room	Cool select Zone	Convertible Bin	Convertible Bin
Performance	Cooling Speed(Min)	F-Room	200 ↓	167.2	111.6	199.0
		R-Room	150 ↓	108.5	386.4	202.0
	32℃	F-Room	-26 ↓	-29.9	-29.8	-27.2
		R-Room	0±1.5	0.1	-4.6	-1.1
	43℃	F-Room	-18 ↓	-24.0	-24.7	-20.4
		R-Room	5 ↓	1.3	3.4	1.1
	Temperature Distribution (Fridge)	F-Room	2.0 ↓	1.3	1.7	1.0
		R-Room	2.0 ↓	1.5	2.1	3.3
	Operation rate	N-N	65% ↓	53.2	48.8	55.3
Noise	Sound power level		45dB ↓	44.4	45.0	46.7
	Sound pressure level		43dB ↓	41.3	40.0	45.0

PRODUCT SPECIFICATIONS

2-5) Model Specification & Specification Chart

Item		Specification		
Models		RS265LA	RS267LA	RS269LA
		Dispenser	Dispenser with Coolselect Zone™	Dispenser with Coolselect Zone™
Net Capacity	Total	26.1 cu.ft		
	Refrigerator	10.0 cu.ft		
	Freezer	16.1 cu.ft		
Net Dimension(W × D × H)		35.9 inch × 34.6 inch × 70.0 inch		
Rated Frequency and Frequency		AC 115V/60Hz		
Motor Rated Consumption Power		160W		
Electric Heater Rated Consumption Power		413W	414W	
Kind of Refrigerator		Indirect Cooling Method Refrigerator		
Refrigerant		R134a		
Refrigerant Input Amount		7.76oz		
Product Weight		309 Pounds		

PRODUCT SPECIFICATIONS

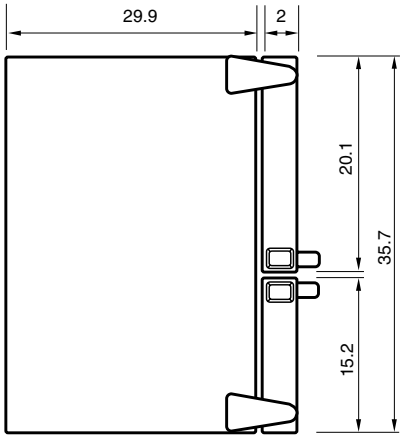
Items				Specification		
Models				RS265LA	RS267LA	RS269LA
Components for Freezer	Compressor		Model	MK183C-L2U		
			Starting type	R.S.C.R		
			Oil Charge	FREOL α-10		
	Evaporator		Freezer	SPLIT FIN TYPE		
			Refrigerator	SPLIT FIN TYPE		
	Condenser			Forced and natural convection type		
	Dryer			Molecular sieve XH-9		
	Capillary tube(Dia × Length)			0.033 " × 130 "		
	Refrigerant			R134a		
Room Temperature Sensor Components	Freezer	Model	Temperature Selection	ON(˚F)	OFF(˚F)	
		THERMISTOR (F-SENSOR) 502AT	-14˚F	-11˚F	-17˚F	
			-4˚F	-1˚F	-7˚F	
			8˚F	11˚F	5˚F	
	Refrigerator	Model	Temperature Selection	ON(˚F)	OFF(˚F)	
		THERMISTOR (R-SENSOR) 502AT	34˚F	36˚F	32˚F	
			38˚F	40˚F	36˚F	
			44˚F	46˚F	42˚F	
Defrost Related Components	Defrost Cycle	First Defrost Cycle (Concurrent defrost of F and R)		4 hr ± 10 min		
		Defrost Cycle(FRE)		12~24hr(vary according to the conditions used)		
		Defrost Cycle(REF)		6~12hr(vary according to the conditions used)		
		Pause time		10 ± 2 min		
	Defrost Sensor	F Defrost-Sensor	Model	THERMISTOR (502AT)		
			SPEC	5.0㏀ at 50˚F		
		R Defrost-Sensor	Model	THERMISTOR (502AT)		
			SPEC	5.0㏀ at 50˚F		
	Thermal-Fuse	F Bimetal-thermo	Rated	AC 125V 10A		
			Operating temperature	Off:140 ˚F/On:104 ˚F		
		R Thermal Fuse	Rated	AC 250V 10A		
			Operating temperature	170.6 ˚F(+0 ˚F/-10 ˚F)		

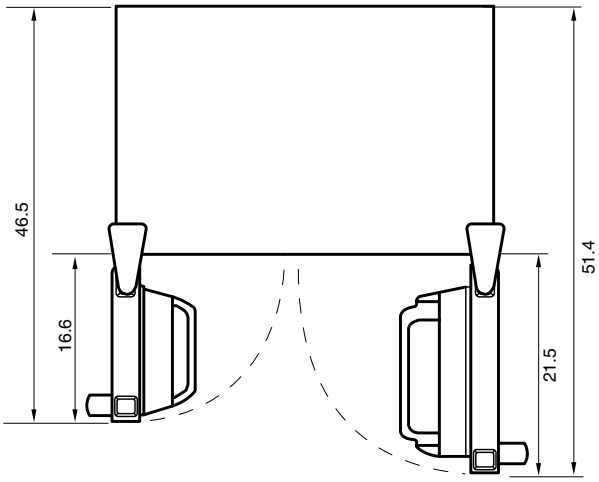
PRODUCT SPECIFICATIONS

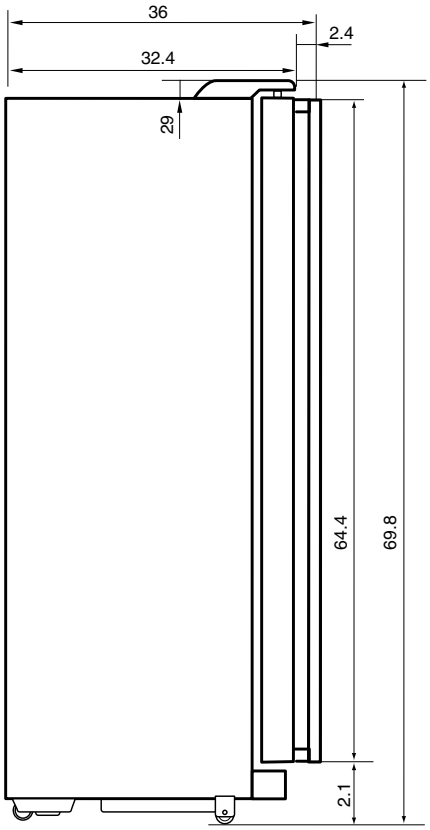
Items			Specification		
Model			RS265LA	RS267LA	RS269LA
Electric Components	Defrost Heater(FRE)	Conducting at F Defrosting	AC 115V,215W		
	Defrost Heater(REF)	Conducting at R Defrosting	AC 115V,140W		
	Drain Heater(FRE)	Conducting at F Defrosting	AC 115V,45W		
	Drain Heater(REF)	Conducting at R Defrosting	Single Body with Defrost Heater(REF)		
	DISPENSER Heater	Interlock with F-FAN	AC 115V,5W		
	WATER PIPE Heater	-	AC 115V,5W		
	WATER TANK- Heater	-	AC 115V,3W		
	Bimetal-thermo for preventing Overheating of Freezer Defrost-Heater		AC 125V 10A Off:-76 ˚F/On:104 ˚F		
	Thermal Fuse for preventing Overheating of Refrigerator Defrost-Heater		AC 250V 10A 170.6 ˚F(+0 ˚F/-10 ˚F)		
	Condenser for COMP (Package type)	Running	12μF,250V		
		Starting	-		
	Starting-Relay	Model	J531Q32E4R7M180-2		
		Operation	4.7Ω ±20%		
	Over load Relay	Model	4TM265RFBZZ53		
		Temp. ON	257 ˚F±10˚F		
		Temp. OFF	156.2˚F ±18˚F		
	Rated Voltage		AC 115V/60Hz		
	MOTOR-BLDC(FRE)		DC12V/DREP3030 LA		
	MOTOR-BLDC(REF)		DC12V/DREP3020 LA		
	MOTOR-BLDC (Circuit)		DC12V/DRCP3030 LA		
	Lamp(FRE)		AC 115V/ 30W(1EA)		
	Lamp(REF)		AC 115V/40W(1EA)_Upper AC 115V/30W(2EA)_Lower		
	Door Switch		AC 250V 0.5A×2		
	Power cord		AC250V 12A		
	Earth Screw		BSBN (BRASS SCREW)		

2. PRODUCT SPECIFICATIONS

2-6)Dimensions of Refrigerator (Inches)







2. PRODUCT SPECIFICATIONS

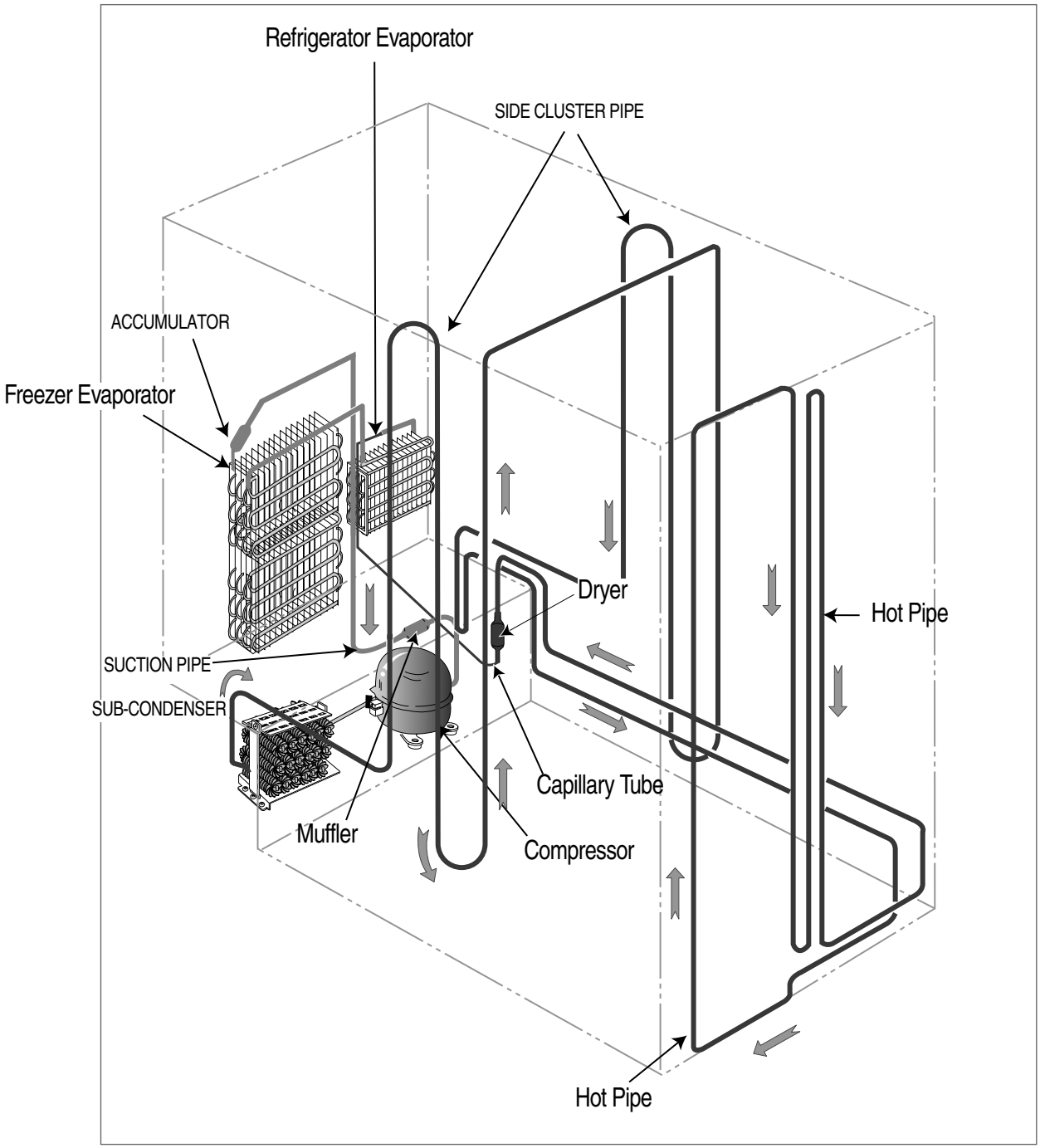
2-7) Optional Material Specification

Photographe	Part Name	Part Code
	FILTER WATER-ASSY	DA29-00003B
	ASSY-PACKING SUB	DA99-00240A
	LAMP INCANDENT	4713-001206
	LAMP INCANDENT	4713-001197

2. PRODUCT SPECIFICATIONS

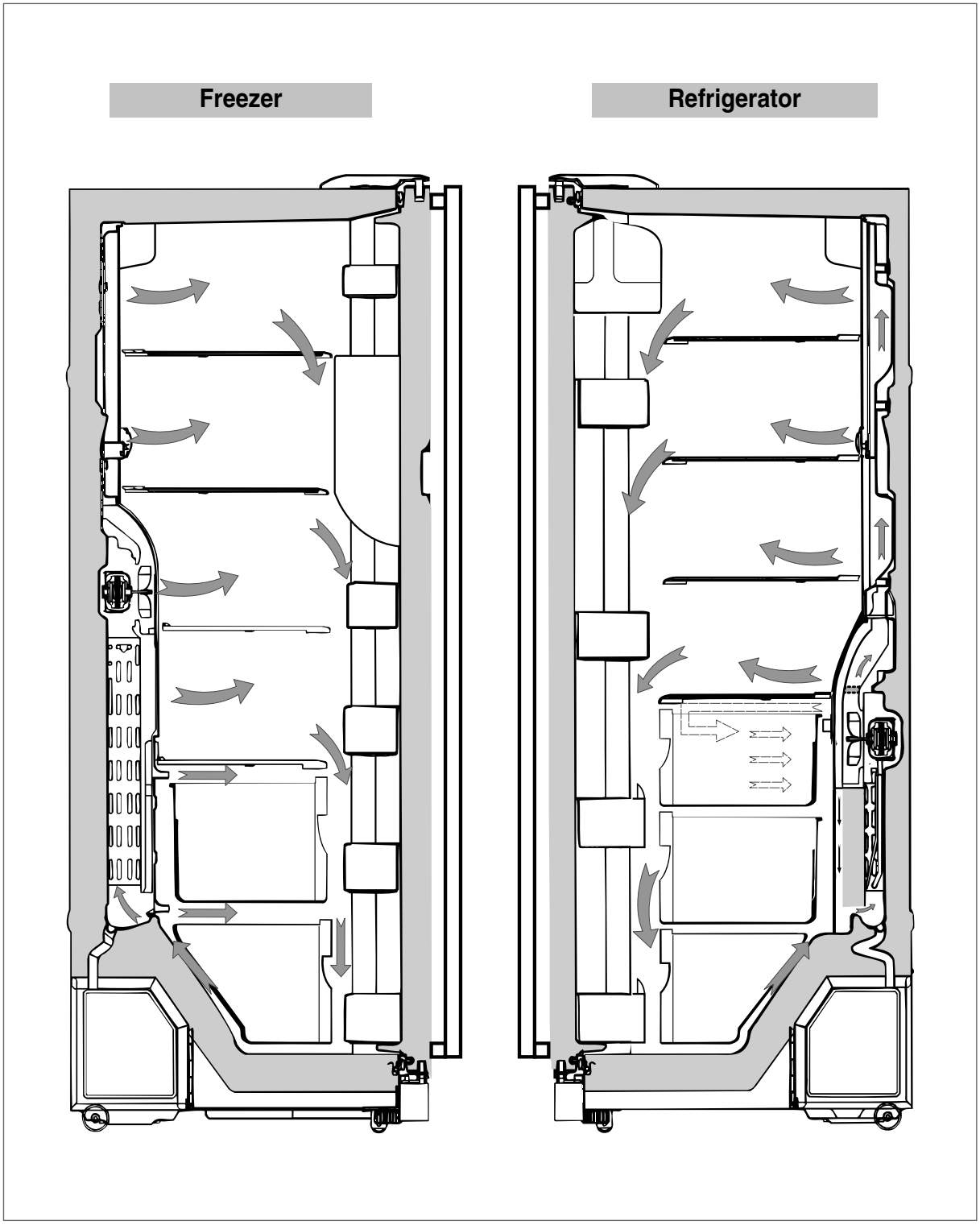
2-8) Refrigerant Route in Refrigeration cycle

Compressor → Sub-condenser → Side Cluster Pipe(FRE) → Side Cluster Pipe(REF) → Hot Pipe
→ Dryer → Capillary Tube → Refrigerator Evaporator → Freezer Evaporator→ Suction Pipe → Compressor



2. PRODUCT SPECIFICATIONS

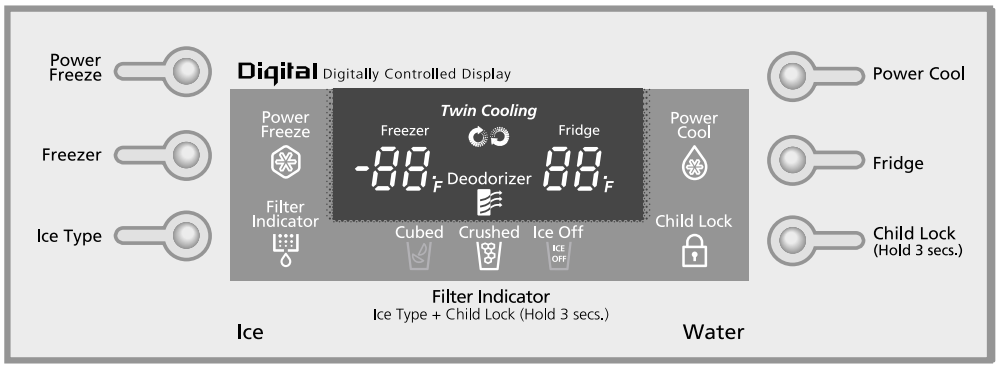
2-9) Cooling Air Circulation



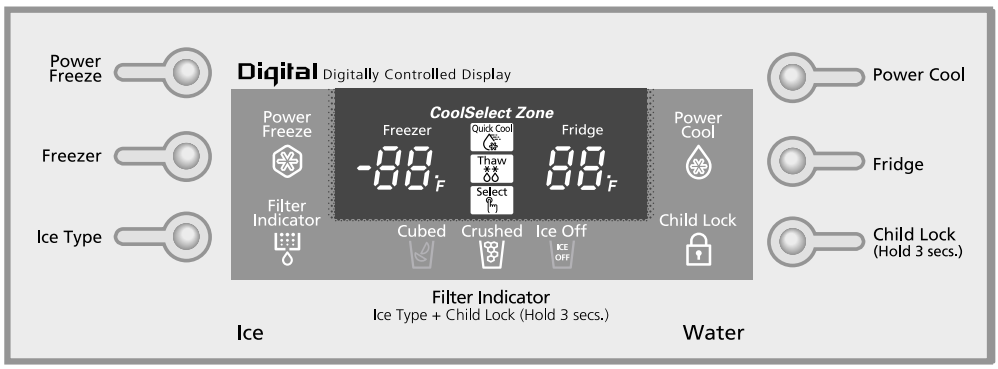
3. OPERATING INSTRUCTIONS & INSTALLATION

3. OPERATING INSTRUCTIONS & INSTALLATION

3-1) Digital Panel



for **RS265LA**



for **RS267LA**
RS269LA

3-2) Temperature Control Function

When the system power is initally engaged, the default set temperature are -4˚F for the freezer and 38˚F for the set refrigerator, respectively. The numbers shown on the digital display panel stand for the actual compartments temperatures. When the compartment temperatures go down, so do the numbers on the display panel, and finally they reach the set temperatures. Once the system is stabilized, the display temperatures are the set temperature.

1) Freezer Temperature Control.
To select a set temperature, press the Freezer Temp. button. The display shows the set temperature from -14˚F to 8 ˚F in sequence.

2) Quick Ice Freezer Temperature Control
Interior Temperature of the freezer will be controlled with -14 degrees Fahrenheit until the ice bucket is filled up with ice cubes. When the ice bucket is filled up with ice cubes, the freezer will run with original set temperature. Also, whenever the ice bucket is released from being filled with ice cube, the freezer will repeat to be controlled with -14 degrees Fahrenheit. But if you select "Ice Off, the freezer always will be controlled with original set temperature.

3) Refrigerator Temperature Control.
To select a set temperature, press the Fridge Temp. button. The display shown the set temperature from 34˚F to 46˚F in sequence.

note) Because of the temperature sensor sensivity, the refrigerator can be under and/or over cooled when the air flow is blocked by stored foods. (Temperature range of the sensor : 15˚F～80˚F)
In the event of a power failure, if the freezer temperature is maintained lower than 41˚F, the last selected set temperature and functions memorized in EEPROM will be restored when the power is on.

3. OPERATING INSTRUCTIONS & INSTALLATION

3-3) Power Freeze and Power Cool Functions

- Select the Power Freeze or Power Cool buttons separately.
- These buttons are toggled ON and OFF and the indicators as well.
- Although you select Power Freeze or Power Cool, the set temperatures in the freezer and refrigerator are not changed.
- The set temperatures for the compartments can be changed while these functions are in use.

1) Power Freeze function
   1-1) When you press the Power Freeze button, the LED indicator lights right away, but there is 10 seconds lag time to an actual operation. When this button is pressed again, the Power Freeze function stops and the indicator is off immediately .
   1-2) If you select Power Freeze, both the compressor and the freezer fan run for 2.5 hours continuously.
   1-3) During Power Freeze, the freezer retains the current settings.
   1-4) When Power Freeze expires, the indicator goes off and the freezer set temperature will be restored.

2) Power Cool function
   2-1) Power Cool operation and the indicator work exactly same as the Power Freeze function.
   2-2) When Power Cool is selected, COMP and Refrigerator Fan operate continuously until the refrigerator reaches 25°F. This function will be terminated after 2 ½ hr running.

3) When you select Power Freeze and Power Cool together
   Each function works at the same time. The COMP and Freezer Fan run continuously and the Refrigerator Fan runs until 25°F in the refrigerator.

4) Initial Power-On
   4-1) When the freezer and the refrigerator temperatures are higher than 14°F and 50°F, respectively, if Power Freeze is selected, then the Refrigerator Fan will be off. If Power Cool is selected, then the Freezer Fan will be off.
   4-2) When both functions are selected, there is no benefit of fast cooling for each compartment.

3-4) Child Lock Function

- When the child lock button is pressed for 3 seconds, the child lock indicator is on with an audible tone.

  -When it is locked, no function commands except the Ice type button.

  -This function will prevent accidental setting that may be caused by children or pets.

  -To unlock the setting functions, press this button for 3 seconds again.

3. OPERATING INSTRUCTIONS & INSTALLATION

3-5) Ice & Water Dispenser Function

- Among several ice-maker functions, the ice extraction function is performed by mechanical system. Only the relay control for a cubed-ice dispensing and the SSR control for the ice chute door are performed electronically.

1) Select Cubed/Crushed/Ice-off function
1-1) The Ice Type button selects Cubed/Crushed/Ice-off options in sequence.
1-2) A default setting is Cubed option.
1-3) If Cubed ice is selected, the Crushed ice bypass solenoid and the geared motor will allow Cubed ice to by pass the ice Crusher.
1-4) If Ice-off is selected, the ice maker will stop working. This option will be terminated when Cubed and Crushed options are selected.

Note) When the Ice-off indicator is on, only Cubed ice will be dispensed from the ice bucket.

1-5) The ice chute door must remain open for 5 seconds after dispensing ceases. After this 5 seconds delay, SSR will be controlled to shut the ice chute door.

Caution) Do not force to close the ice chute door. Try to dispense some more ice again to work it automatically.

2) Water Dispenser function
2-1) To dispense water, depress the water dispenser lever located in the dispenser recess.
2-2) When the lever is depressed, the water solenoid valve located in the machine compartment is open to flow water.
2-3) There is no electronic control function for this option.

3-6) C-Fan Motor Delay Function of the Machine Compartment

- According to the ambient temperature, the condenser fan located in the machine compartment is operated with different modes.

	Ranges of ambient temp.	Operation
Condenser Fan Delay function	Above 66˚F	Condenser-Fan is ON as soon as the compressor is on.
	61˚F ~ 65˚F	Condenser-Fan is ON with 5 minutes delay from the compressor on.
	Below 60˚F	Condenser-Fan is OFF regardless of the compressor operation.

3-7) CoolSelect Zone™ Function (RS267LA,RS269LA)

- To select this function, open the refrigerator door and press the button on the control panel of CoolSelect Zone ™ drawer.
- When the CoolSelect Zone™ function is selected, the damper inside fan ductwork is open. So the refrigerator cooling is performed first, then the damper is closed to control the CoolSelect Zone™ temperature.

3. OPERATING INSTRUCTIONS & INSTALLATION

1) Select function

1-1) Using Select button, Cool, Chill(30˚F), and Soft Freeze(23˚F) options can be selected in sequence. Cool option maintains a set temperature of the refrigerator.

2) Quick Cool function

2-1) If the Quick Cool is selected, LEDs will flash 60 and Min. The count will be decreased in every minute.

2-2) To cancel this function, press Quick Cool button again or Thaw button or Select button. Otherwise, it will be terminated 60 minutes later automatically.

2-3) After this function ends, this drawer will come back to Cool option.

2-4) A defrost cycle will be postponed until Quick Cool option is finished.

3) Thaw function

3-1)When the thaw button is pressed, LEDs will flash 4, 6, 10, and 12 in sequence and Hr.

3-2) The count will be decreased in every hour.

3-3) A cancellation of this function is the same as Quick Cool function.

3-4) After this function ends, this drawer will be maintained with 30˚F.

3-5) While the compressor is on, this drawer retains a certain temperature and while the compressor is off, the defrost heater is activated and Refrigerator Fan is on with a closed position of the damper.

3-8) Water Filter Indicator Function

1) Filter Indicator

1-1)This indicator initially lights in green. The light color will be changed to orange after 5 month operation then to red at the 6th month. The EEPROM in the control board counts a period of time regardless of a power failure.

1-2)To reset the counter and the light color, press Ice Type button and Child lock button for 3 seconds simultaneously.

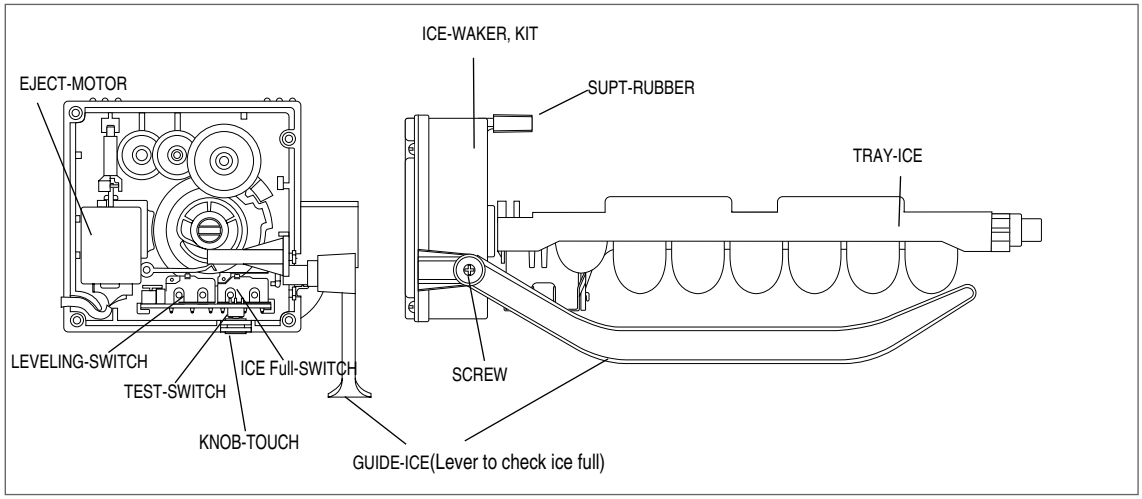
1-3)If these two buttons are pressed simultaneously for 5 seconds, this function will cease.

1-4)To restore this function, press these buttons again for 3 seconds.

3-9) Ice-Maker Function

- The Ice-maker is referred to the device with an automatic ice production, storage in the ice bucket and dispensing through the ice chute.

1) Ice-maker parts

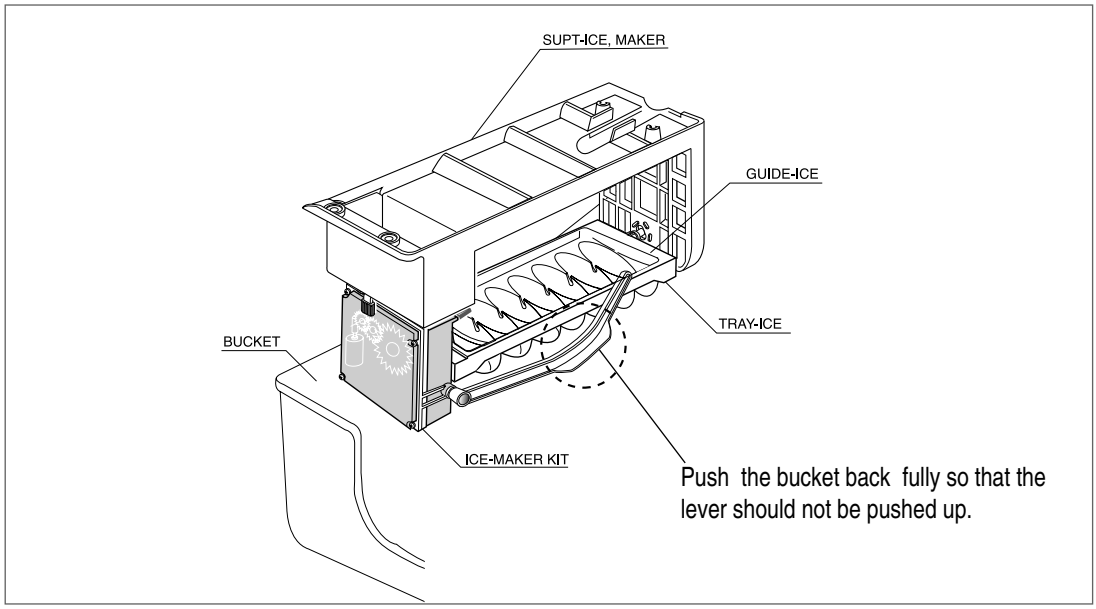


2) Preparation of Ice-maker

2-1) Connect the water line to the water supply valve of refrigerator to supply water. (See how to connect a water supply line in the owner's manual.)

2-2) Push the bucket back fully so that the guide-ice of ice maker should not touch the back of bucket. (If the back of bucket is touched the guide-ice of ice maker, the ice maker will not make ice any more because of a ice full signal.)

2-3) It takes 6 hours to harvest a first ice, and throw away 2-3 times of these ice to make sure the supplied water clean.



1) Initial Operation function

1-1) Whenever the power is on, the control board checks the ice tray leveling with the leveling switch within 2 seconds.

1-2) If the leveling switch is not off position, the geared motor will turn to the initial position to make the ice tray leveled.

1-3) When the ice tray is leveled, it will remain this position for 2 hours (1 cycle time for ice production).

1-4) After 2 hours, the sensor located under the ice tray will measure the tray temperature. If the temperature is maintained lower than 1˚F for 5 minutes, and the ice full switch is off position, the ice tray twisting process will begin.

<Reference table>

Leveling S/W	Ice full S/W	Judgement	Remark
ON("LOW")	ON("LOW")	Not ready	· MICOM Port PIN #51: Leveling PIN #51: Ice full · Port level OFF : 4.5V ↑ ON : 0.5V ↓
ON("LOW")	OFF("HIGH")	Not ready	
OFF("HIGH")	ON("LOW")	Not ready(Ice bucket with full of ice)	
OFF("HIGH")	OFF("HIGH")	Ready	

2) Water Supply function
2-1) When the ice tray is levelled again after ejecting ice, the water solenoid value will be controlled to supply water by time check basis. (See the "Time to supply water" Table)

3) Ice production
3-1) After 60 minutes pass from the water supply, the control board will check the temperature.
3-2) If the sensor reads the temperature lower than 1℉ for more than 5 minutes, than the ice production process is completed.

4) Test function
- In order to operate a test function, press the knob (Test Switch) for 1.5 second.
- This function can be used to check a proper working, to clean the ice tray, and to adjust the water level in the ice tray.

4-1) This function only works when the ice tray is leveled and the ice full signal is cleared.
4-2) When the water line is connected, each process such as a water supply, ejection, and leveling, can be investigated by this button.

5) Ice off function
5-1) When the Ice off option is selected by Ice Type button, the ice making process will cease.
5-2) When the ice making process ceases, the final state will be the ice tray with supplied water.
5-3) When Cubed or Crushed option is selected again, the control board will check an accumulated time period. After making it 60 minutes and when the ice tray temperature is acceptable, ice ejection process will begin.

6) Functions when the freezer door is open
- When the freeze door is open, all ice maker related processes will cease in order to minimize noise and to prevent ice from dispensing.

6-1) The ice tray stops moving regardless of the position.
6-2) The water supply process remains working as usual.
6-3) If the ice tray is in the middle of ice ejecting process, close the freezer for 30 seconds and check if the tray is leveled. If it is not leveled, it must be out of order.

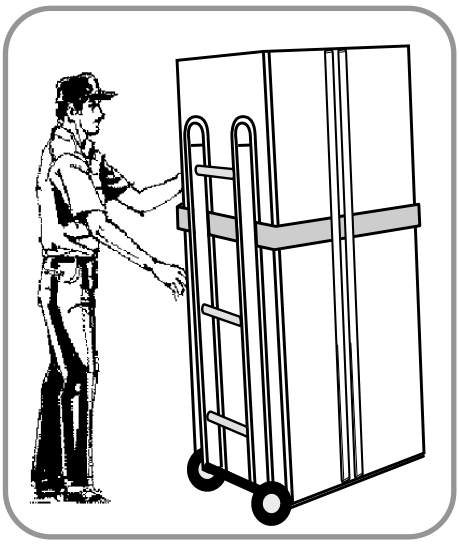
3-10) Defrost Function

1) A defrost is determined based on the accumulated compressor on-time.
2) When the power is engaged for the first time, the defrost cycle for the freezer and the refrigerator will begin after 4 hours of the accumulated compressor on-time.
3) A defrost interval depends on the ambient temperature, the number of door openings, and the door open time.
4) A minimum interval is 6 hours and a maximum is 8 hours for the refrigerator, and 12 hours and 16 hours for the freezer, respectively.
5) The defrost heater on-time is determined by the defrost sensors as follow :

	Refrigerator	Freezer
Heater ON	Below 50℉	-
Heater OFF	63℉	50℉

3. OPERATING INSTRUCTIONS & INSTALLATION

3-11) Installation



1) To protect refrigerator in movement
Use padded hand truck as shown. If entrance width is less than 39 ″, remove doors prior to installation and reattach doors according to procedure below.

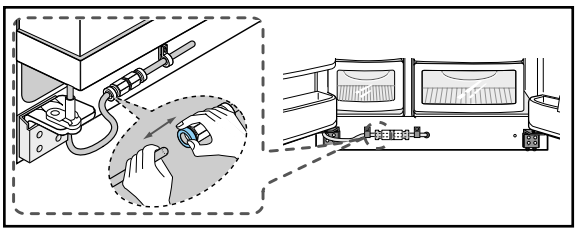
2) Remove all protective tape and pad in refrigerators.
Connect water lines and power cord. Adjust the clearance between the doors.

3) Set the temperature control to the temperature and wait for an hour.
The refrigerator should get slightly chilled and the motor runs smoothly.

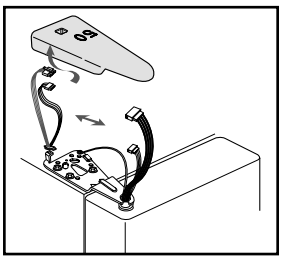
4) Once the refrigerator temperature is sufficiently low
You can store food in the refrigerator. After starting the refrigerator, it takes a few hours to reach the appropriate temperature.

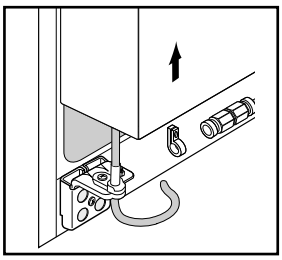
● Removing Doors

Open the freezer and refrigerator doors, and then take off the front leg cover assembly by turning the three screws counter-clockwise. Remove the screw from clamp, disconnect the water tube by pressing the coupler, and pulling the water tube away.



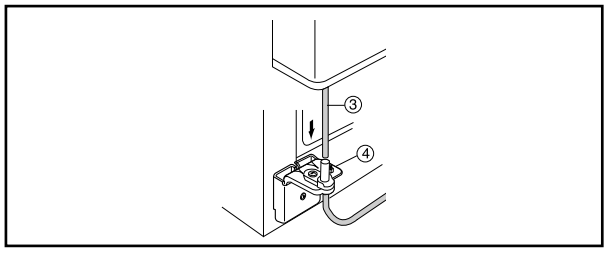
With the door closed, remove the upper hinge cover using a screwdriver, and then disconnect the wires. Remove hinge screws and ground screw counter-clockwise, and take off the upper hinge. Take care removing the door to ensure that it does not fall on you. Remove the door from the lower hinge by carefully lifting the door so as not to damage the water tube. Remove the lower hinge from the lower hinge bracket by lifting the lower hinge.



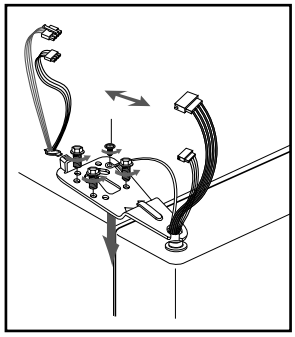


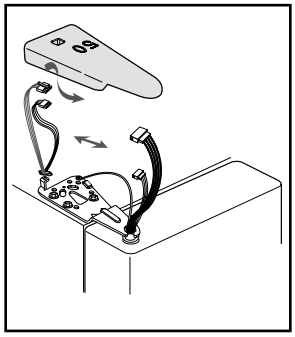
● Attaching Doors

Insert the lower hinge in the bracket lower hinge. Attach the freezer door by inserting the hose in the lower side of the door into the hole in the lower hinge and pulling the hose down.



Insert the upper hinge shaft into the hole. After leveling between the upper hinge hole and the hole of the cabinet. Reattach hinge screws and ground screw in the clockwise direction. Connect the wires. (Put the front part of the upper hinge cover on the front part of the upper hinge and reattach from the front part of the upper hinge cover first.)





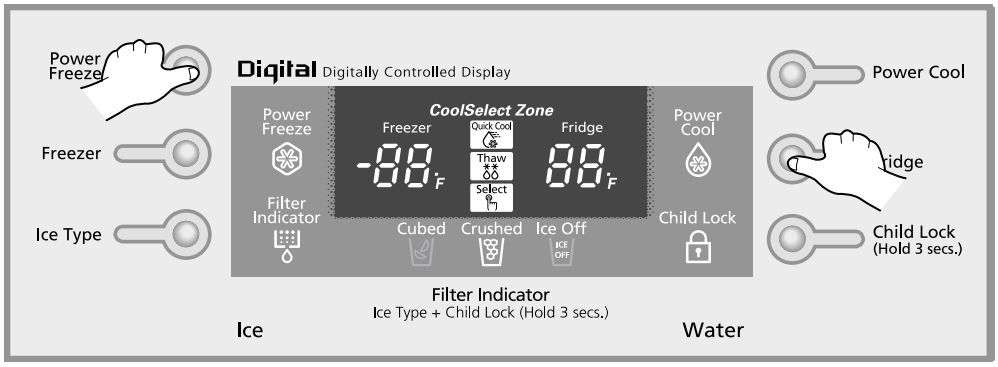
4. ALIGNMENT AND ADJUSTMENTS

4. ALIGNMENT AND ADJUSTMENTS

4-1) Forced Operation Function (Pull-down / Refrigerator Defrost / Refrigerator . Freezer-Defrost / Cancellation)

- This function enables a pull-down mode, a defrost mode for the refrigerator only, a defrost mode for the freezer and the refrigerator at the same time, and a cancellation of this function.
- Press Power Freeze and Fridge Temp. buttons for 8 seconds simultaneously to get in the ready mode for a forced operation.
- The display panel will return to normal after 20 seconds in the ready mode.
- At the ready mode, press any button(except Ice Type and Child Lock) once to start a pull-down operation, twice for a defrost cycle for the refrigerator, three times for a defrost cycle for the freezer and the refrigerator, and finally four times for cancellation of this function.
- Another way to cancel this function is to simply plug out and in the power cord.

Press both button for 8seconds at the same time



1) Pull-down

1-1) At the ready mode, press any button once then the buzzer will beep (ON for 1/2 second and OFF for 1/2 second) until this mode is cancelled.

1-2) At this pull-down mode, the compressor will start immediately (No 5 minute delay) and if the system is in the defrost cycle, it will be cancelled right away.

note) If this pull-down mode begins right after the compressor was off, the compressor may not start to run due to an overload condition.

1-3) At this mode, the compressor and freezer fan will operate continuously for 24 hours and the refrigerator fan will be on and off according to the set temperature(34°F)

1-4) After 24 hour operation, the system will be cycled at -14°F for the freezer and 34°F for the refrigerator.

1-5) In order to cancel this mode at any time, select the next mode on the ready mode or power off the system.

2) Refrigerator Defrost / Refrigerator . Freezer-Defrost operation

2-1) At the pull-down mode, press any button again on the ready mode to begin the defrost cycle for the refrigerator.

2-2) The beep sound continues for 3 second at the beginning, then ON for 3/4 seconds and OFF for 1/4 second until this mode cease.

2-3) After this operation, the system will come back to normal operation.

2-4) At this mode, press any button again on the ready mode to operate the defrost cycles for both compartments.

2-5) The beep sound continues for 3 seconds at that time, then ON for 1/4 second and OFF for 3/4 seconds until the defrost operation cease.

3) Cancellation

3-1) At the R,F-Defrost mode, press ant button again on the ready mode to return to a normal operation.

3-2) Simply unplug the power cord, then plug it again to return to a normal operation.

4. ALIGNMENT AND ADJUSTMENTS

4-2) Sound function

1) Sound function
1-1) To make sure a command input, whenever a button is pressed, a "ding-dong" sounds.
1-2) When two or more buttons are pressed simultaneously or if a wrong button is pressed, there is no sound.

2) Door Open Alarm
2-1) When the doors remain open for 2 minutes, there are 10 times beeps.
2-2) If the doors continue to remain open more than 2 minutes, the additional 10 beeps interval will change to 1 minute.
2-3) The beeps will cease immediately when the doors are closed.

4-3) Exhibition Function

● This function is for a display purpose on the floor of show room or store.

1) Mode ON/OFF
1-1) For the exhibition mode, press Power Freeze and Freezer Temp, buttons simultaneously for 8 seconds until a "ding-dong" sounds.
1-2) Press the same time buttons again for 8 seconds to cancel this mode put with a "ding-dong" sound.

2) Operation
2-1) Most of the system function except the compressor operation are working properly.
2-2) There is no defrost cycle in this mode.

4-4) Self-Diagnostics Function

1) Self-Diagnostics in the initial Power ON
1-1)The control board performs a self diagnostics test within 1 second and check out the temperature sensors abilities.
1-2) If a sensor failure occurs, a corresponding LED segment will blink with a beep.
1-3) When a LED segment blinks, only the cancellation function (Press Power Freeze and Power Cool buttons simultaneously for 8 seconds) is acceptable.
1-4) After a replacement of bad sensor or a cancellation of this function, this self diagnostics will end.

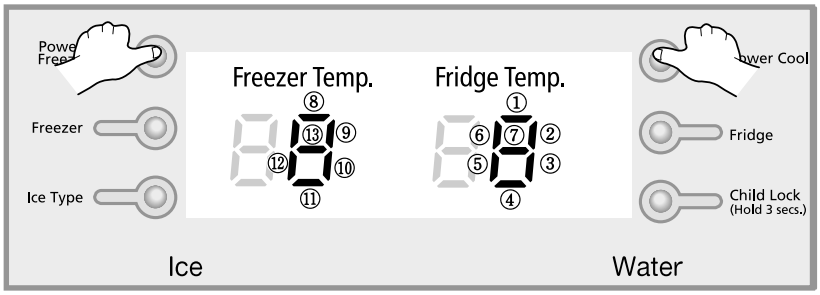
2) Self-Diagnostics in the normal operation
2-1) To select this function, press Power Freeze and Power Cool buttons simultaneously for 8 seconds with an audible tone.
2-2) In the self diagnostic mode, only corresponding LED segments will be illuminated (see the check list on the next page)
2-3) After a 30 second illumination of error signal, the system will return to the normal operation.

4. ALIGNMENT AND ADJUSTMENTS

∗ Self-diagnostics check list

NO	Error
①	ICE MAKER SENSOR
②	REFRIGERATOR SENSOR
③	REFRIGERATOR DEFROST SENSOR
④	REFRIGERATOR FAN ERROR
⑤	ICE MAKER function error
⑥	CoolSelect Zone™ SENSOR
⑦	REFRIGERATOR DEFROST ERROR
⑧	EXIT-SENSOR
⑨	FREEZER SENSOR
⑩	FREEZER DEFROST ERROR
⑪	FREEZER FAN ERROR
⑫	CONDENSER FAN ERROR
⑬	FREEZER DEFROST ERROR

Press both buttons simultaneously for 8 seconds



If any LEDs blink, the corresponding sensors and components must be checked for an error.

∗ Error items of self-diagnostics

NO	Error items	LED Display	Details	Remarks
01	ICE MAKER SENSOR	REF. SEGMENT	Ice Maker sensor connector missing; contact failure, electric wire cut, short-circuit; Ice Maker sensor failure; and so on	Indicate Error when the temperature sensed by Ice Maker sensor is higher than 150℉ or lower than –58℉.
02	REFRIGERATOR SENSOR	REF. SEGMENT	Refrigerator sensor connector missing; contact failure, electric wire cut, short- circuit; Refrigerator sensor itself failure; and so on	Indicate Error when the temperature sensed by Refrigerator sensor is higher than 150℉ or lower than –58℉.
03	REFRIGERATOR DEFROST SENSOR	REF. SEGMENT	Refrigerator evaporator internal defrosting sensor connector missing; contact failure, electric wire cut, short-circuit; sensor itself failure; and so on	Indicate Error when the temperature sensed by Refrigerator defrosting sensor is higher than 150℉ or lower than –58℉.
04	REFRIGERATOR FAN ERROR	REF. SEGMENT	Refrigerator Fan motor operation failure; feedback signal line contact failed, electric wire cut, short- circuit; and so on	Indicate Error if the F and G signals generated by the FAN-motor operation are not input.
05	ICE MAKER function ERROR	REF. SEGMENT	Ice-ejector and level failed three times or more	
06	CoolSelect Zone™ sensor	REF. SEGMENT	CoolSelect Zone™ sensor connector missing; contact failed, electric wire cut, short-circuit; CoolSelect Zone™ sensor itself failed; and so on.	Indicate Error when the temperature sensed by CoolSelect Zone™ sensor is higher than 150℉ or lower than –58℉.
07	REFRIGERATOR DEFROST ERROR	REF. SEGMENT	In the refrigerator room, if frost removal mode is finished due to limited time of 80 minutes. Error is displayed.	-
08	Ambient Air SENSOR	FREEZER SEGMENT	Air sensor connector missing; contact failure, electric wire cut, short-circuit; open air sensor itself failure; and so on	Indicate Error when the temperature sensed by the open air sensor is higher than 150℉ or lower than –58℉.
09	FREEZER SENSOR	FREEZER SEGMENT	Freezer sensor connector missing; contact failed, electric wire cut, short-circuit;Freezer Room sensor itself failure.	Indicate Error when the temperature sensed by Freezer sensor is higher than 150℉ or lower than –58℉.
10	FREEZER DEFROST SENSOR	FREEZER SEGMENT	Freezer evaporator defrosting sensor connector missing; contact failed, electric wire cut, short-circuit; sensor itself failure; and so on	Indicate Error when the temperature sensed by Freezer defrosting sensor is higher than 150℉ or lower than –58℉.
11	FREEZER FAN ERROR	FREEZER SEGMENT	Freezer Fan motor operation failure; feedback signal line contact failure, motor's electric wire missing; and so on.	Indicate Error if the F and G signals generated by the FAN-motor operation are not input.
12	CONDENSER FAN ERROR (COMP-FAN)	FREEZER SEGMENT	Condenser Fan motor operation failure; feedback signal line contact failure, motor's electric wire missing; and so on.	Indicate Error if the F and G signals generated by the FAN-motor operation are not input
13	FREEZER DEFROST ERROR	FREEZER SEGMENT	In the freezer room, if frost removal mode is finished due to limited time of 70 minutes. Error is displayed	-

4. ALIGNMENT AND ADJUSTMENTS

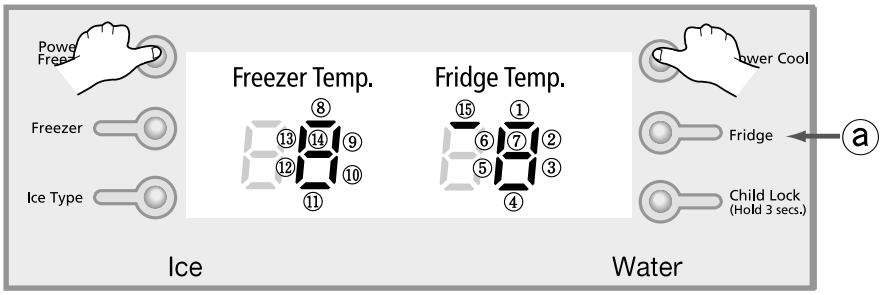
4-5) Load Operation Check Function

1) In the normal operation, press Power Freeze and Power Cool buttons simultaneously for 6 seconds, then the display panel will blink for 2 seconds.
2) Press Fridge Temp. button ⓐ to get into this check mode with an audible tone.
3) Each illuminating LED segment stands for the component which has an ouput signal from the control board.
4) This mode will terminate automatically after 30 seconds.

∗ Table of Load Mode Check List

NO	Contents
①	REFRIGERATOR FAN High or AC motor operation
②	REFRIGERATOR FAN Low
③	REFRIGERATOR DEFROST heater
④	Start mode
⑤	Overload mode
⑥	Low-temperature mode
⑦	Exhibition mode
⑧	COMPRESSOR
⑨	FREEZER FAN High
⑩	FREEZER FAN Low
⑪	FREEZER DEFROST Heater
⑫	CONDENSER FAN High
⑬	CONDENSER FAN Low
⑭	Dispenser-Heater
⑮	Damper
-	Normal condition

Press both buttons simultaneously for 6 seconds, all LED lights will be turned off. At this time press button ⓐ



※ For the REFRIGERATOR FAN, only one rpm is applied for the current models, so that ① and ② show REFRIGERATOR FAN operation only.
※ The FREEZER FAN and CONDENSER FAN are operated to High/Low rpm automatically according to the operational condition.
※ ④⑤ and ⑥ only explain the system operation state according to the ambient condition

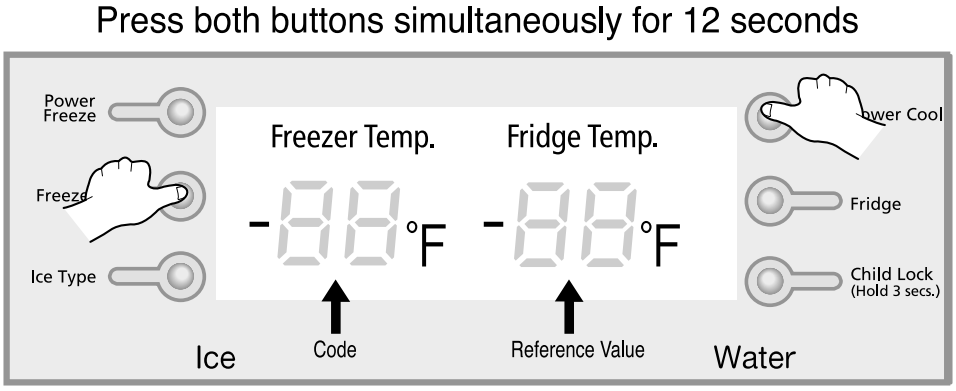
4-6) Restoration Function for Power Outage

1) When the freezer temperature is lower than 41˚F, all functions on the display panel will be restored.
2) When the freezer temperature is higher than 41˚F, all functions will be initialized.
(-4˚F for the freezer, 38˚F for the refrigerator, and Cubed for the Ice Type)

4-7) Set Point Shift Function

- Press Freezer Temp. and Power Cool buttons simultaneously for 12 seconds to get into this mode.
- In this mode, only the display LEDs for temperature will be ON.

4. ALIGNMENT AND ADJUSTMENTS



1) Initially, all products set the code, “0”

2) After 20 seconds from adjustment, a new setting will be stored in EEPROM and return to the normal display.

3) Freezer Temp, Fridge Temp., Ice maker water supply, Ice tray temperature, and CoolSelect Zone™ temperature can be adjusted with this function.

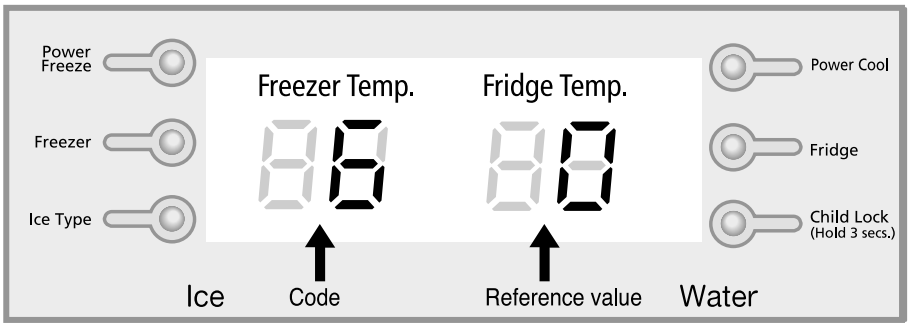
4-8) Table of Set Point Shift Function

1) Shift the freezer temperature sensor

Reference Value	0

Code	Temp. shift	Code	Temp. shift
0	0	8	1.0˚F
1	−1.0˚F	9	2.0˚F
2	−2.0˚F	10	3.0˚F
3	−3.0˚F	11	4.0˚F
4	−4.0˚F	12	5.0˚F
5	−5.0˚F	13	6.0˚F
6	−6.0˚F	14	7.0˚F
7	−7.0˚F	15	8.0˚F

Example) If you are lowering the current temperature of the freezer by −6.0˚F

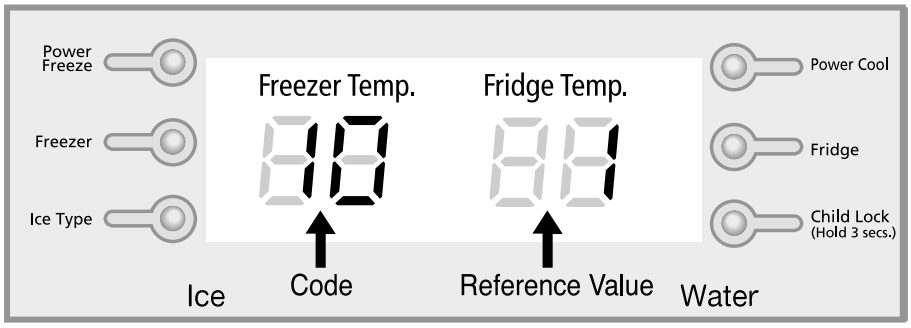


2) Shift the refrigerator temperature sensor

Reference Value	1

Code	Temp. shift	Code	Temp. shift
0	0	8	1.0˚F
1	−1.0˚F	9	2.0˚F
2	−2.0˚F	10	3.0˚F
3	−3.0˚F	11	4.0˚F
4	−4.0˚F	12	5.0˚F
5	−5.0˚F	13	6.0˚F
6	−6.0˚F	14	7.0˚F
7	−7.0˚F	15	8.0˚F

Example) If you are raising the current temperature of the refrigerator by +3.0˚F



■ The following options are limited to a model with the Ice Maker.

3) Adjust the time to supply water for the ice maker

Reference Value	2

Code	Volume to supply water
0	85 cc
1	95 cc

4) Shift the Ice maker temperature sensor

Reference Value	4

Code	Ice maker temperature sensor
0	1˚F
1	-0.5˚F
2	-4˚F
3	-7.5˚F
4	5˚F
5	10.5˚F
6	14˚F
7	17.5˚F

5) Shift the CoolSelect Zone™ temperature sensor.

Reference Value	20

Code	CoolSelect Zone™ temperature sensor
0	0˚F
1	-1.0˚F
2	-2.0˚F
3	-3.0˚F
4	1.0˚F
5	2.0˚F
6	3.0˚F
7	4.0˚F

5. DISASSEMBLY AND REASSEMBLY

5-1) Assy Door

5-2) Refrigerator Disassembly

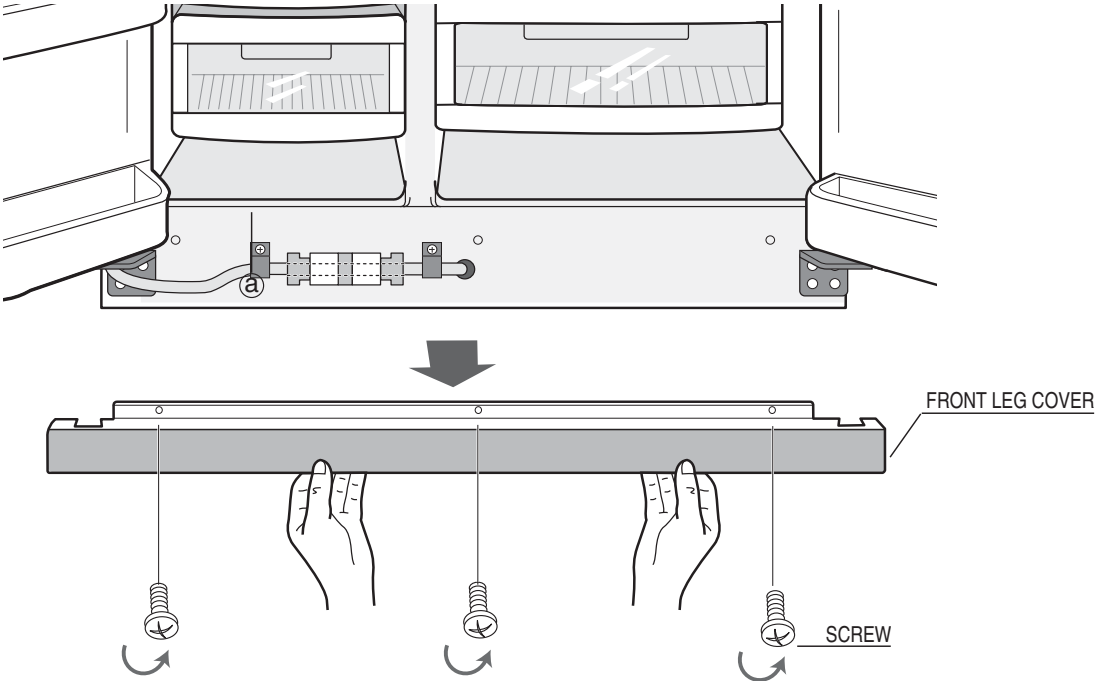
5-3) Freezer Disassembly

5. DISASSEMBLY AND REASSEMBLY

5-1) Assy Door

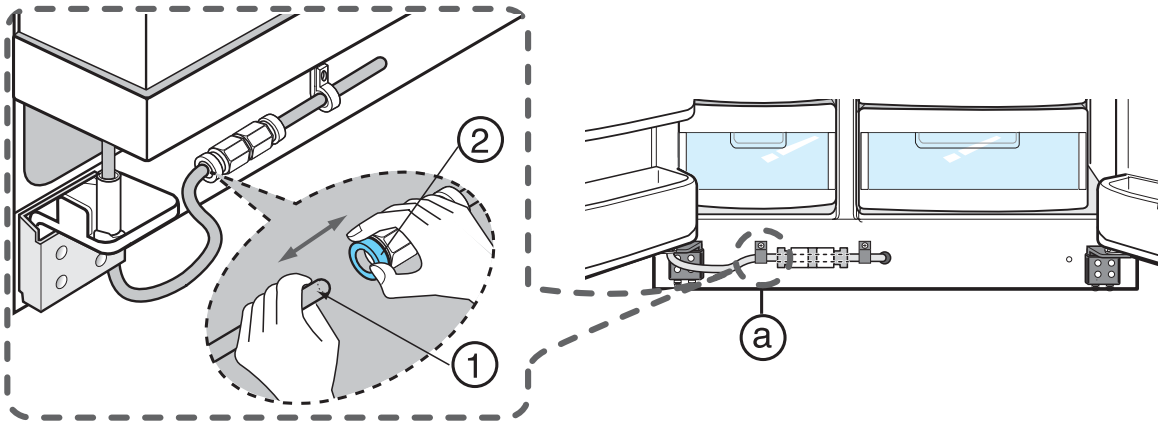
Removing the Front Leg Cover

Open the freezer and refrigerator doors, and then take off the front leg cover by turning the three screws counter-clockwise.



Separating the Water Supply Line from the Refrigerator

1) Remove the screw from clamp (ⓐ).
2) Remove the water tube by pressing the coupler (②) and pulling the water tube (①) away.



WARNING Do not cut the water tube but separate it from the coupler.

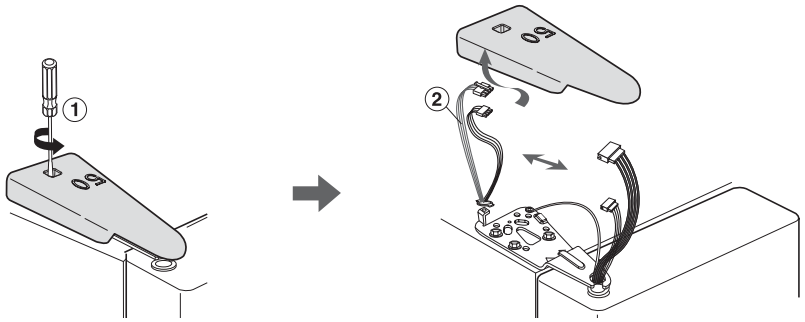
5. DISASSEMBLY AND REASSEMBLY

NOTE

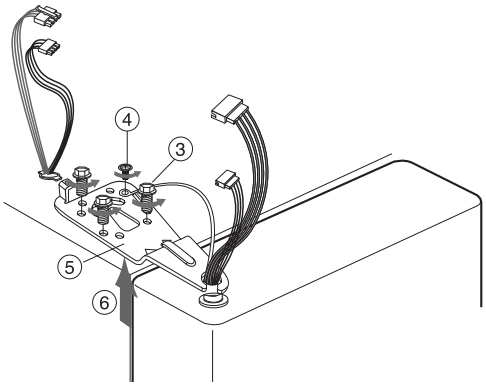
- Lift the door straight up.
- Be careful not to pinch the water tubing and wire harness on the door.
- Place doors on a protected surface.

Removing the Freezer Door

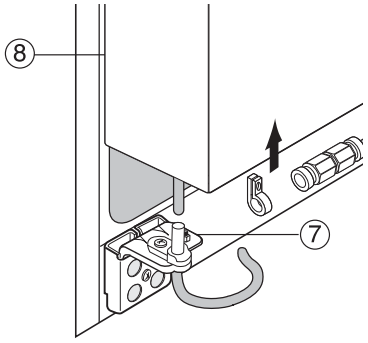
1) With the door closed, remove the upper hinge cover (①) using a screwdriver, and then disconnect the wires (②).



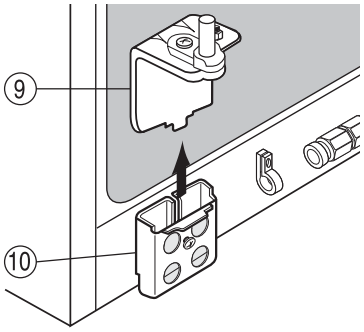
2) Remove hinge screws (③) and ground screw (④) counter-clockwise, and take off the upper hinge (⑤) along the arrow (⑥). Take care when removing the door to ensure that it does not fall on you.



3) Remove the door from the lower hinge (⑦) by carefully lifting the door (⑧).



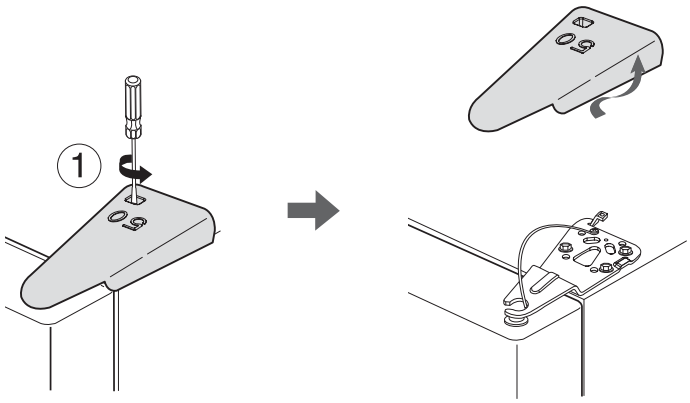
4) Remove the lower hinge (⑨) from the bracket lower hinge (⑩) by lifting the lower hinge (⑨) in the direction of the arrow.



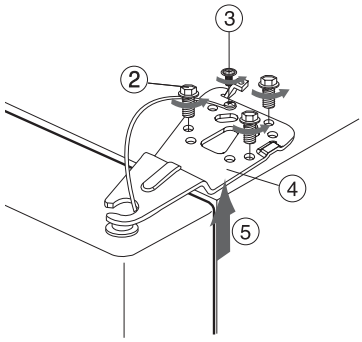
5. DISASSEMBLY AND REASSEMBLY

Removing the Refrigerator Door

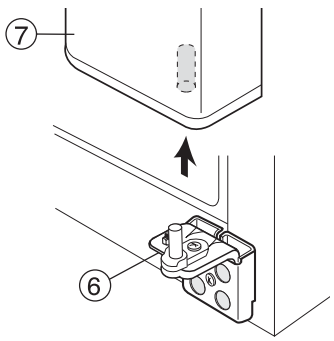
1) With the door closed, remove the upper hinge cover (①) using a screwdriver



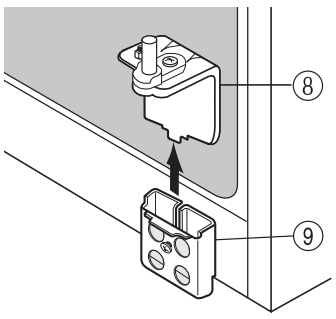
2) Remove hinge screws (②) and ground screw (③) counter-clockwise, and take off the upper hinge (④) in the direction of the arrow (⑤). Be careful when removing the door to ensure that it does not fall on you.



3) Remove the door from the lower hinge (⑥) by lifting the door (⑦).



4) Remove the lower hinge (⑧) from the bracket (⑨) by lifting the lower hinge (⑧)

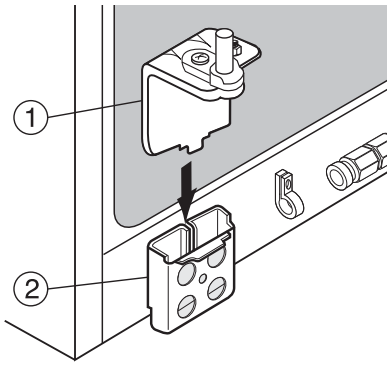


NOTE

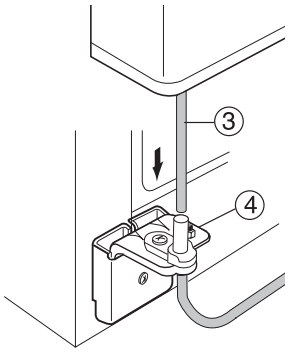
• After disassembling the freezer / refrigerator door, move it to the appropriate location. you must reassemble it.

Reattaching the Freezer Door

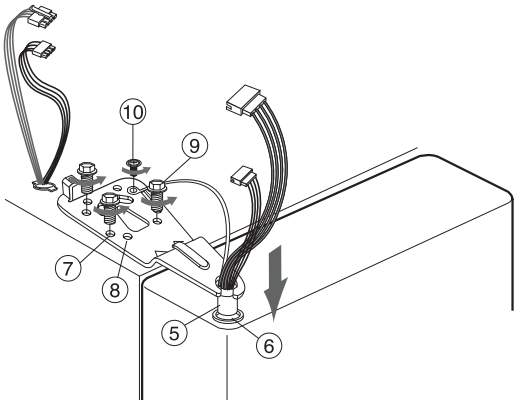
1) Insert the lower hinge (①) in the bracket lower hinge (②).



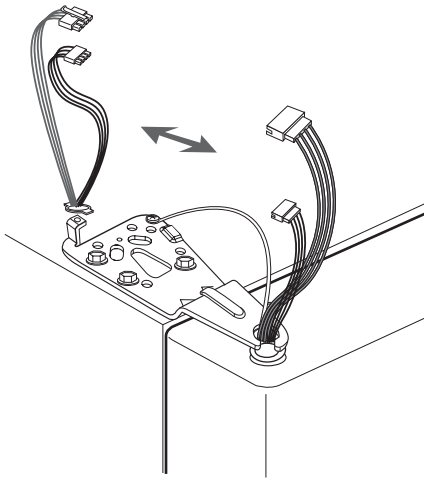
2) Reattach the freezer door by inserting the hose (③) in the lower side of the door into the hole in the lower hinge (④) and pulling the hose down.



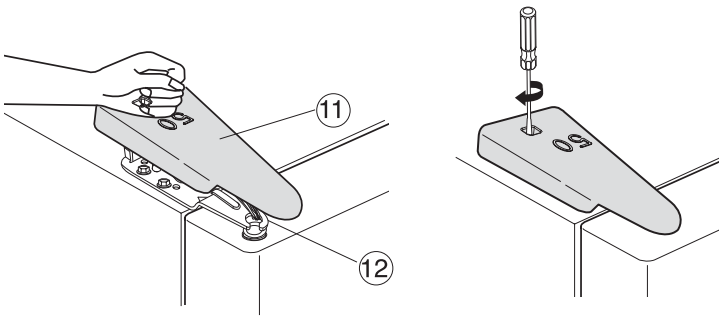
3) Insert the upper hinge shaft (⑤) into the hole (⑥). After levelling between the upper hinge hole (⑦) and the hole of the cabinet (⑧). Reattach hinge screws (⑨) and gound screw (⑩) in a clockwise direction.



4) Connect the wires.

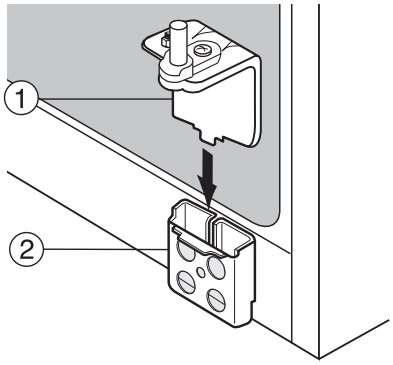


5) Put the front part of the upper hinge cover (⑪) on the front part of the upper hinge (⑫) and reattach from the front part of the upper hinge cover first.

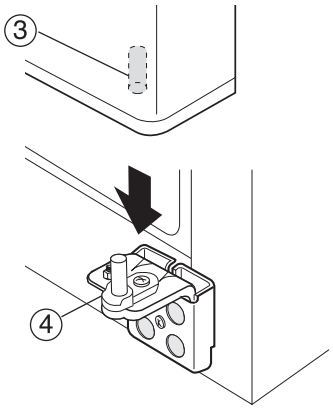


Reattaching the Refrigerator Door

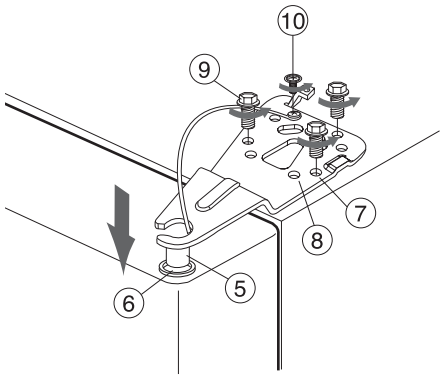
1) Insert the lower hinge (①) in the bracket lower hinge (②).



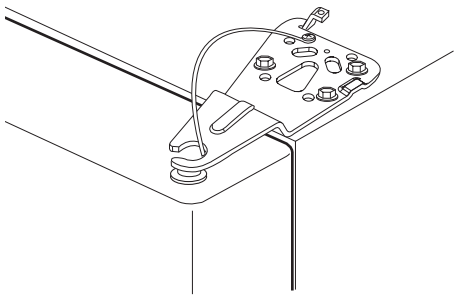
2) Place the hole in the refrigerator door (③) over the lower hinge (④).



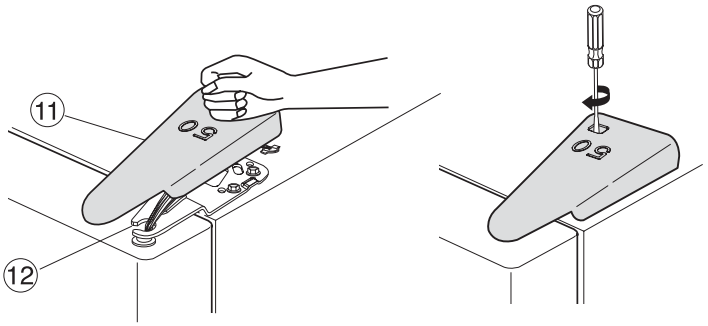
3) Insert the upper hinge shaft (⑤) into the hole (⑥). After levelling between the upper hinge hole (⑦) and the hole of the cabinet (⑧). Reattach hinge screws (⑨) and gound screw (⑩) in the clockwise direction.



4) Connect the wires.

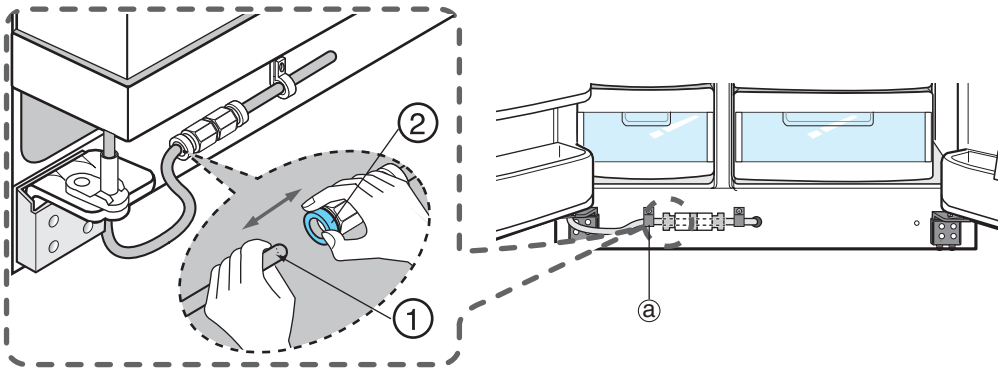


5) Put the front part of the upper hinge cover (⑪) on the front part of the upper hinge (⑫) and reattach it from the front part of the upper hinge cover first.



Reattaching the Water Supply Line

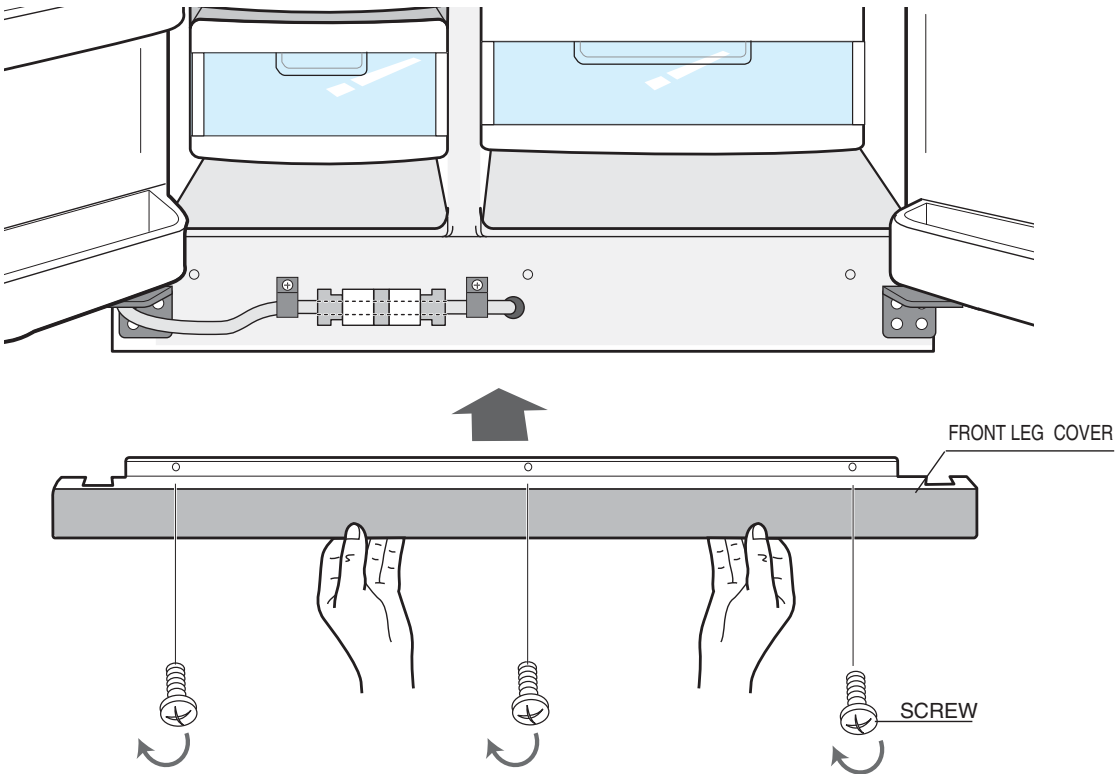
1) While pressing the front face of coupler (②), insert the water line (①) in the coupler.
2) Tighten the screw on the clamp (ⓐ).



Reattaching the Front Leg Cover

Put on the front leg cover by turning the three screws clockwise, as shown in the figure.

NOTE Before attaching check water connector and 6 glasses to check for leakage.

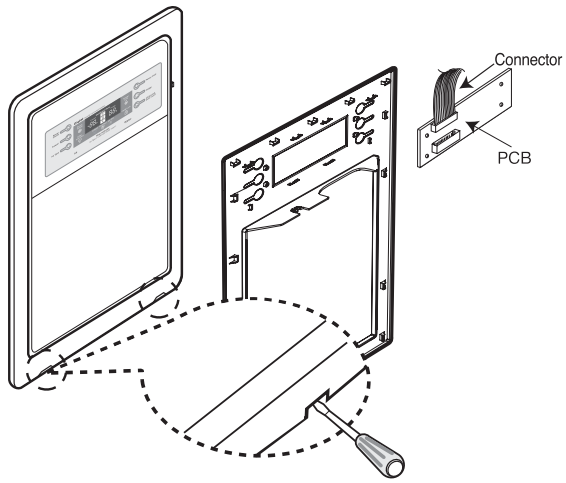


5. DISASSEMBLY AND REASSEMBLY

5-2) Refrigerator Disassembly

Control Panel

1. Insert a flat-blade screwdriver on the slot as shown, and unlock the tabs.
2. Disconnect the wire connector.



Door Handle

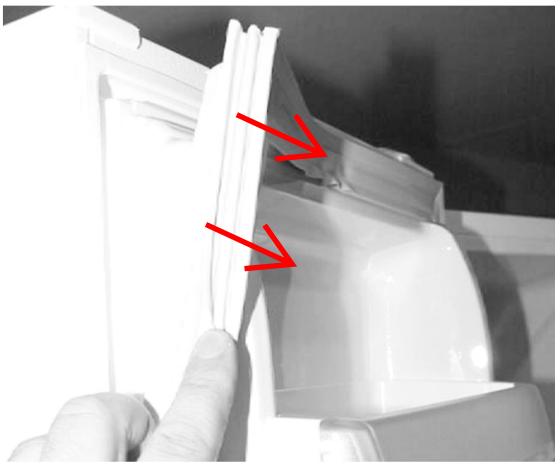
The door handles allow access into the refrigerator and freezer. They are front mounted with screws.

1. Lift the handle upward motion with on.

Door Gasket

The door gasket is a molded gasket set into a channel located in the door liner.

1. Open the door.
2. Grasp the gasket and pull in an outward motion until the molded gasket separates from the door liner.

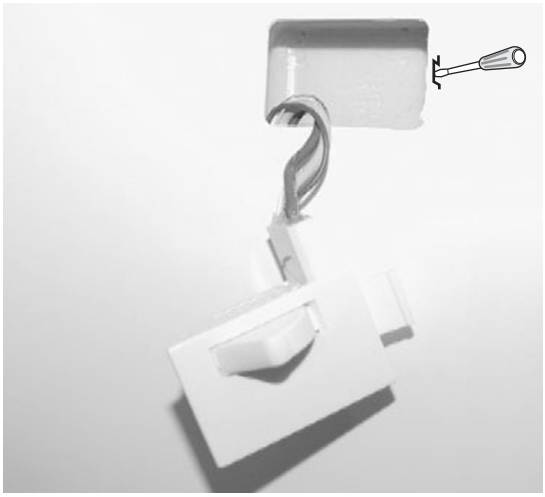


5. DISASSEMBLY AND REASSEMBLY

Refrigerator Door Light Switch

The refrigerator has a door light switch located in the upper right corner for the refrigerator.

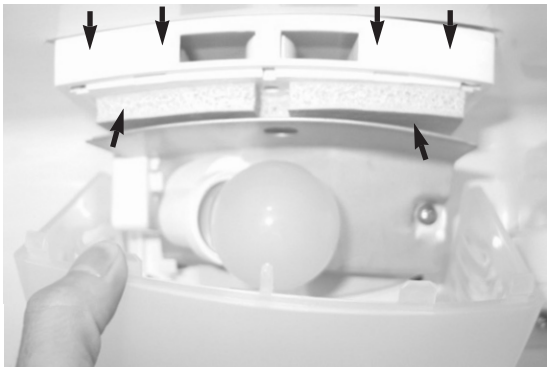
1. Use a small flat-blade screwdriver to unlock the locking tab and pull the switch out until the wire connector is visible.



Refrigerator Light

The refrigerator lights are located in the upper and lower portion of refrigerator.

1. Pull out the screw cap and remove the screw.
2. To access the lower lights, pull out the screw cap and remove the screw.
3. Remove the lamp cover by unlocking the tabs and pulling the cover down.

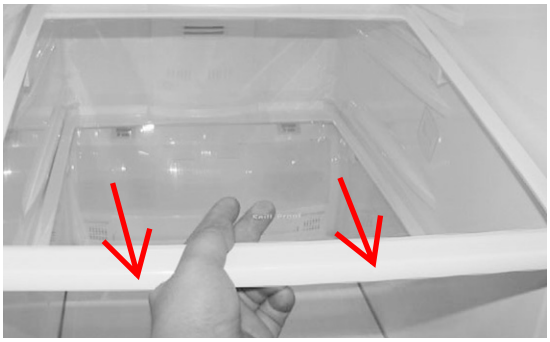


Tempered Glass Shelf

These shelves allow the storage of larger items and pull out for easy access.

1. Pull the shelf out as far as it goes.
2. Lift it up and remove it.

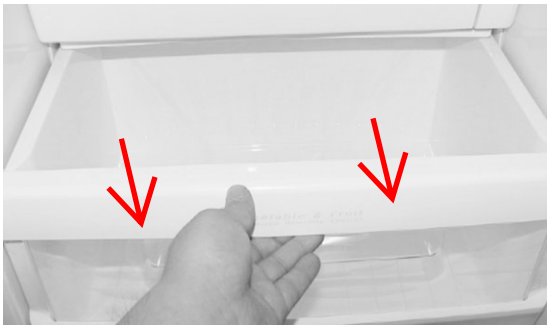
※ WARNING. Plug off before disassembling



Plastic Drawers in Refrigerator

Drawers are designed for storage of fruits, vegetables, and deli items. The drawers are located in the lower portion of the refrigerator.

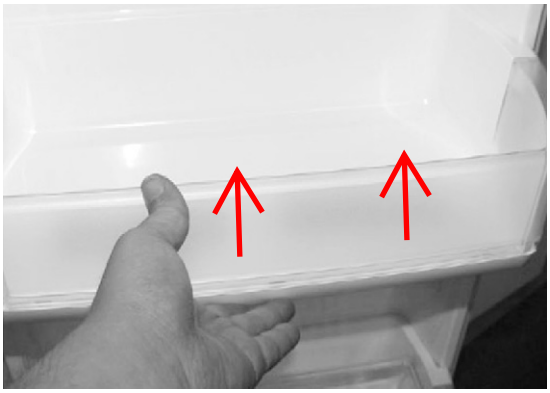
1. Pull out the drawer as far as it goes.
2. Tilt the drawer up and pull it out until it is removed.



Gallon Door Bin

The door bins allow storage of perishable items.

1. Push the bin up and slide it out.



5. DISASSEMBLY AND REASSEMBLY

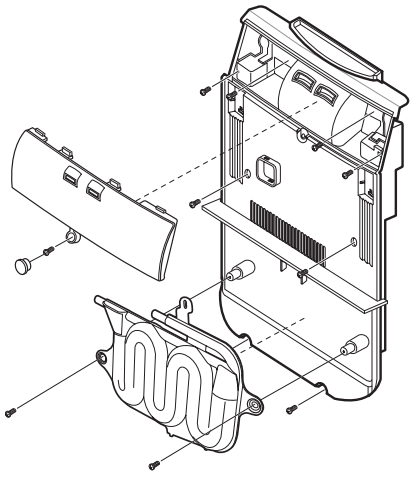
Water Filter

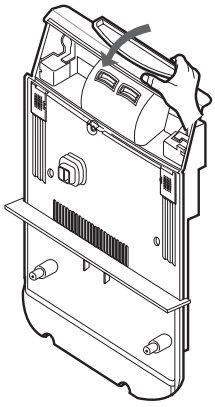
The water filter is located in the upper right- hand corner of the refrigerator. The water filter filters water for the ice maker and the water dispenser.

1. Turn the water filter 1/ 2 turn counterclockwise and pull it down.
2. To install the filter, align the ndication mark (unlock position) and push it up while turning1/2 turn clockwise until the lock position is aligned. Do not over tighten.

Evaporator Cover in the Refrigerator

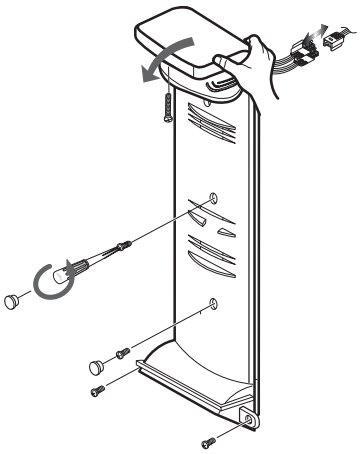
1. Pull out the screw cap and remove the screw.
2. Remove the lamp cover by unlocking the tabs and pulling the cover down.
3. Remove the water tank from the evaporator cover by unscrewing the screws (2).
4. Remove the screws (6) at the evaporator cover and the two fixed screws of the wire connector cover.
5. Take off motor and lamp wire connector located on the upper liner.
6. Remove the duckwork of the evaporator fan in the direction of the arrow as shown.





Upper Ductwork

1. Remove the screw caps (2) and screws (5).
2. Slide the upper fan ductwork out while disconnecting the wire connector(lamp and thermistor).



Evaporator Fan Motor

The evaporator fan is located in the middle rear of the freezer. This fan circulates cold air in the freezer.

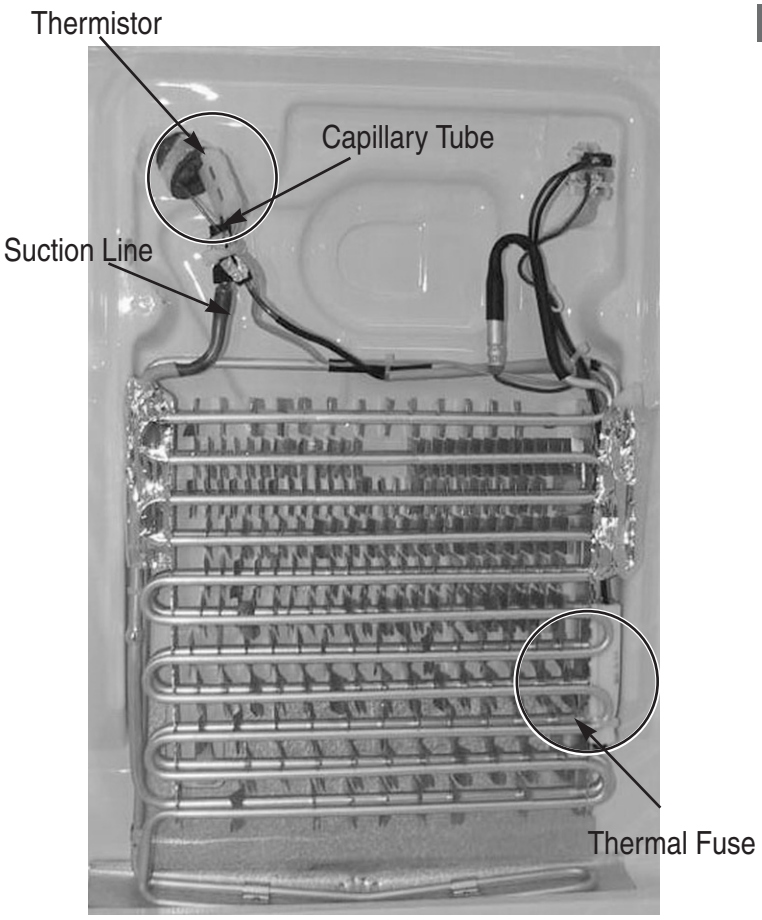
1. Remove screws (4) located at the four corners of the fan bracket.
2. Take the fan motor assembly off.

5. DISASSEMBLY AND REASSEMBLY

Evaporator in Refrigerator

Evaporator is located in the bottom of refrigerator.

1. Take off the ductwork in refrigerator.
2. Disconnect the wire connector.(Heater and Thermistor)
3. Desolder the capillary tube and the suction line from the evaporator.
4. Remove the evaporator.
5. With a file, score the capillary tube just upstream of the soldered point. Break off the soldered section to help prevent solder from plugging the tube during soldering.
6. Place a new evaporator and braze the suction and capillary tube to evaporator using silver solder.
7. Install a replacement dryer.
8. Evacuate and recharge the system using reasonable procedures.

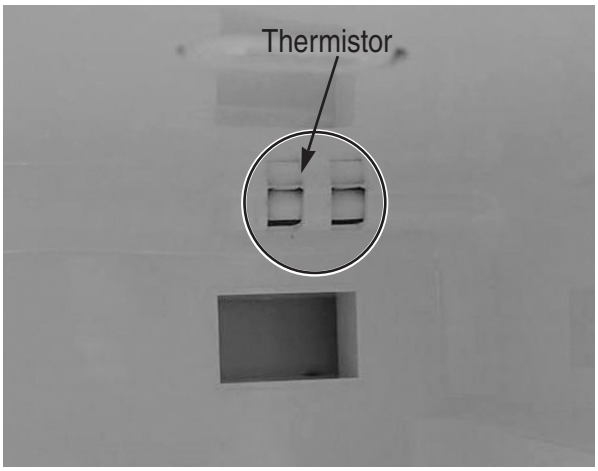


Refrigerator Thermistor

The refrigerator thermistor is located inside of the upper light cover of the refrigerator.

CoolSelect Zone™ Thermistor

The CoolSelect Zone™ thermistor is located outside the back of CoolSelect Zone™ drawer.
The temperature signal sends the micro-processor.

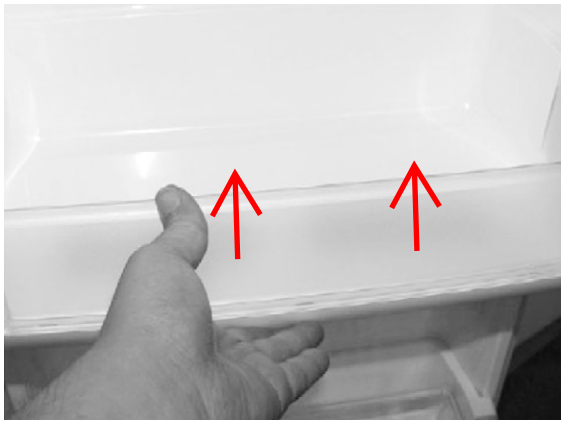


5. DISASSEMBLY AND REASSEMBLY

5-3) Freezer Disassembly

Door Bin in Freezer

The door bins allow storage of perishable items.
1. Push the bin up and slide it out.

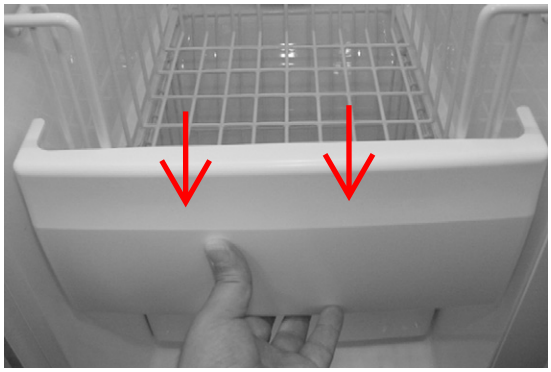


Freezer Door Light Switch

This switch is located in the left-hand portion of the freezer and sends a signal to the processor.
1. With a small flat-blade screwdriver, unlock the locking tabs and pull the switch out until the wire connector is visible.
2. Disconnect the wire connector and remove the switch.

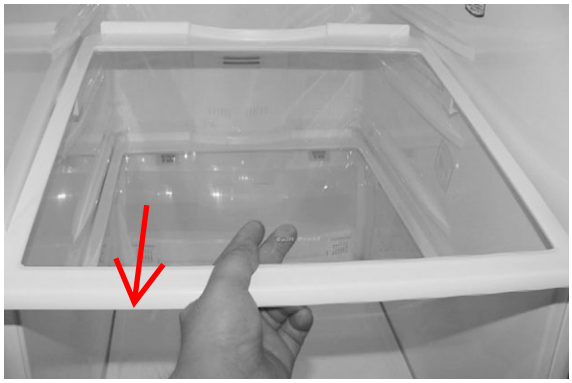
Plastic (Wire) Drawer in Freezer

Drawers are designed for storage of meat and dry foods. The drawers are located in the lower portion of the freezer.
1. Pull out the drawer as far as it goes.
2. Tilt the drawer up and pull it out until it is removed.



Freezer Shelf

The shelves slide out for easy access for frozen items.
1. Slide the shelf out until it reaches its stop.
2. Tilt down and slide it out of the compartment.



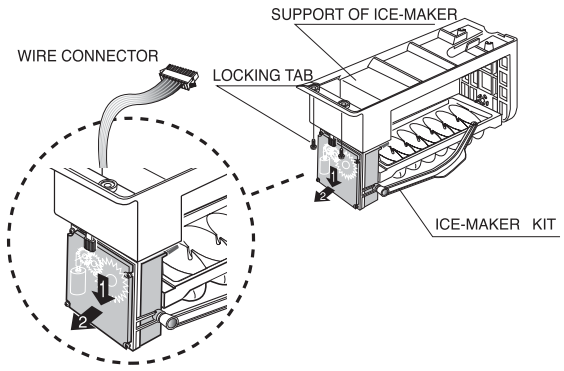
Ice Dispenser & Ice Maker

The ice dispenser is located in the upper portion of the freezer. This assembly stores ice made by the icemaker and dispenses ice.
1. Lift the ice bucket up ① and slide out the ice dispenser assembly ②.

5. DISASSEMBLY AND REASSEMBLY

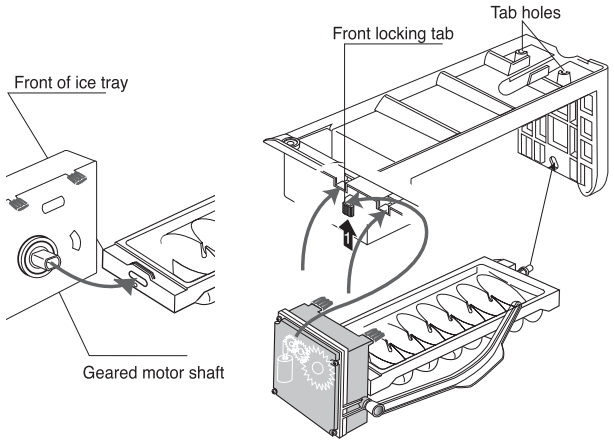
The ice maker is located inside of the ice dispenser assembly.

1. Remove ice maker support screws (2), and slide out.
2. Disconnect the ice maker wire connector.
3. Unlock the locking tabs to separate the ice maker kit.



In order to assemble the icemaker kit.

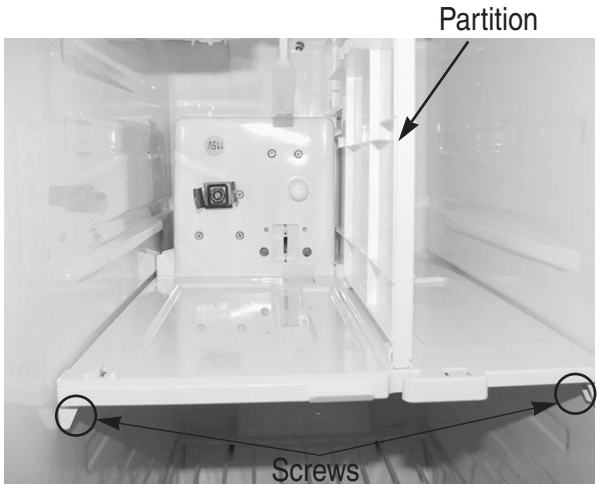
1. Assemble the geared motor shaft and the front of ice tray.
2. Lift the front locking tab and assemble the ice maker kit.
3. Connect the ice maker wire connector.
4. Match the tab holes and tabs(2) located on the top of the liner, and slide the ice maker in.
5. Tighten the screws (2) of the ice maker support.



Auger Motor Case

This shelf is designed to support the ice maker & ice dispensed and Xtra Space™.

1. Remove the Xtra Space™ cover to push it down and pull front.
2. Slide the partition out.
3. Remove the screws (2) on the bottom front of the case.
4. Slide out the case while disconnecting the wire connect.



5. DISASSEMBLY AND REASSEMBLY

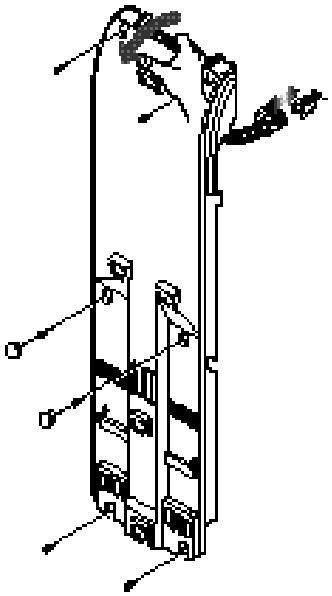
Freezer Light

The freezer light is located in the bottom of the auger motor case. The light is covered by an opaque cover.

1. Remove the screw and the light cover.

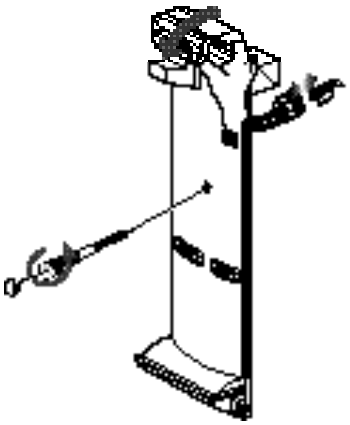
Evaporator Cover in Freezer

1. Pull out the screw caps and remove screws (6).
2. Remove the ductwork of the evaporator fan in the direction of the arrow as shown.
3. Disconnect the wire connector.



Upper Ductwork

1. Remove the screw cap and screw.
2. Slide the upper fan ductwork out while disconnecting the wire connector (Lamp and Thermistor).



Evaporator Fan Motor

The evaporator fan is located in the lower rear of refrigerator. This fan circulates cold air in the refrigerator.

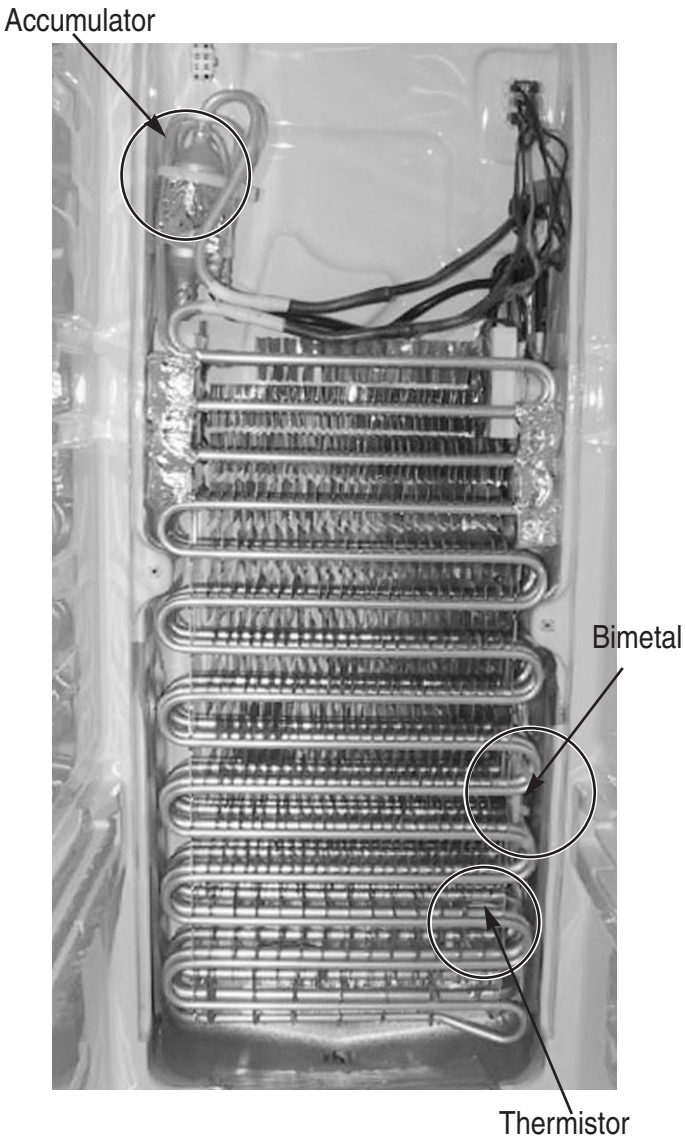
1. Remove screw(4) located at the four corners of the fan bracket.
2. Take the fan motor assembly off.

5. DISASSEMBLY AND REASSEMBLY

Evaporator in Freezer

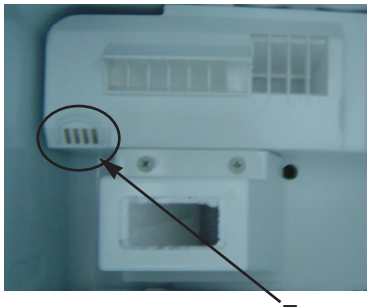
Evaporator is located in the bottom of freezer to produce cold air driven across the evaporator coils.

1. Take off the ductwork in Freezer.
2. Disconnect the wire connector (Heater, Bimental, and Thermistor).
3. Desolder the inlet and outlet tubes.
4. Remove the evaporator.
5. Take the same steps to seal the system as mentioned earlier.



Freezer Thermistor

The freezer thermistor is located at the top left of freezer vent. It sends temperature signals to the micro-processor.

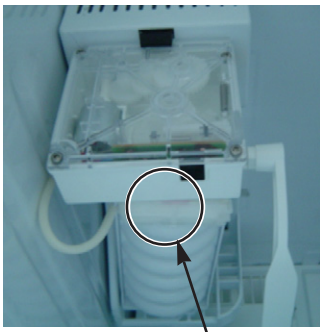


Ambient Thermistor

The ambient thermistor is located inside the upper hinge cover. Fre It sends temperature signals to the micro-processor.

Ice-Maker Thermistor

The Ice-Maker thermistor is located in its bottom. The temperature signal sends the micro-processor.

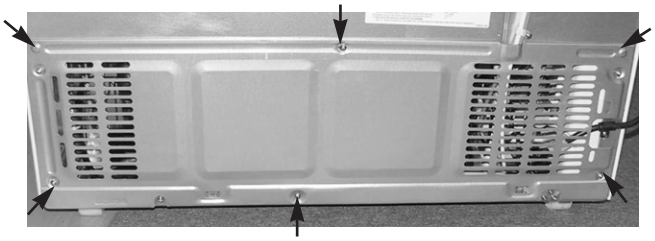


5. DISASSEMBLY AND REASSEMBLY

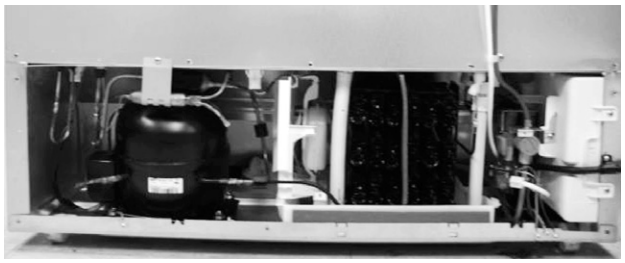
5-4) Machine Compartment Disassembly

Machine Compartment & Electric Box

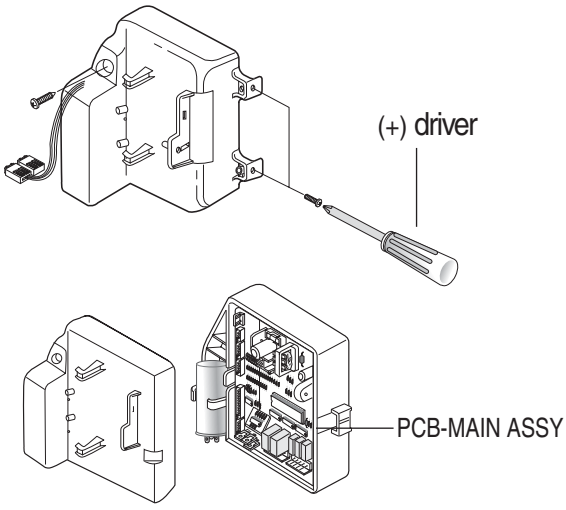
1. Disconnect the power cord of the refrigerator.
2. Remove the fixed screws (6) of compressor cover.



3. Slide up and take off the compressor cover to see the machine compartment.



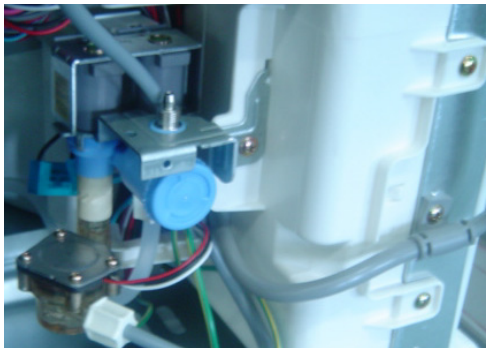
4. Press the tab in electric box cover to take out by using a driver.



Water Solenoids

When the solenoids receive a signal from the micro-processor, they supply water to the water dispenser or the ice maker.

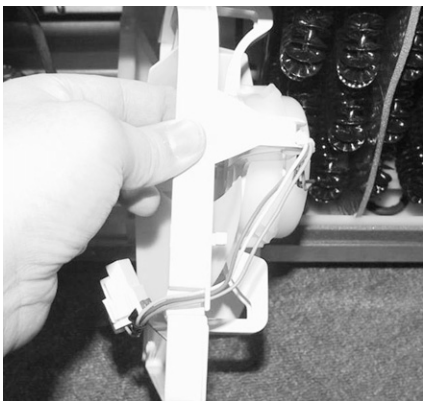
1. Remove bracket screw (1) from electric box.
2. Take the solenoids assembly out.
3. Disconnect water tubes (3).



Condenser Fan

The condenser Fan is located in the middle of machine compartment. It cools down the sub-condenser and the compressor.

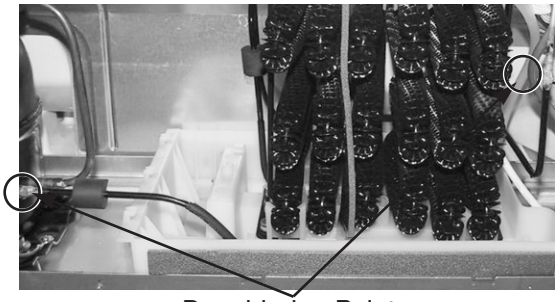
1. Disconnect the condenser fan wire.
2. Remove screw (1) from the drain water tray.
3. Take the condenser fan assembly off.



Sub-condenser

The sub-condenser is located in the machine compartment. The heat is extracted by condenser fan.

1. Desolder the compressor discharge & the sub-condenser outlet.
2. Take out the sub-condenser.



Desoldering Point

6. TROUBLESHOOTING

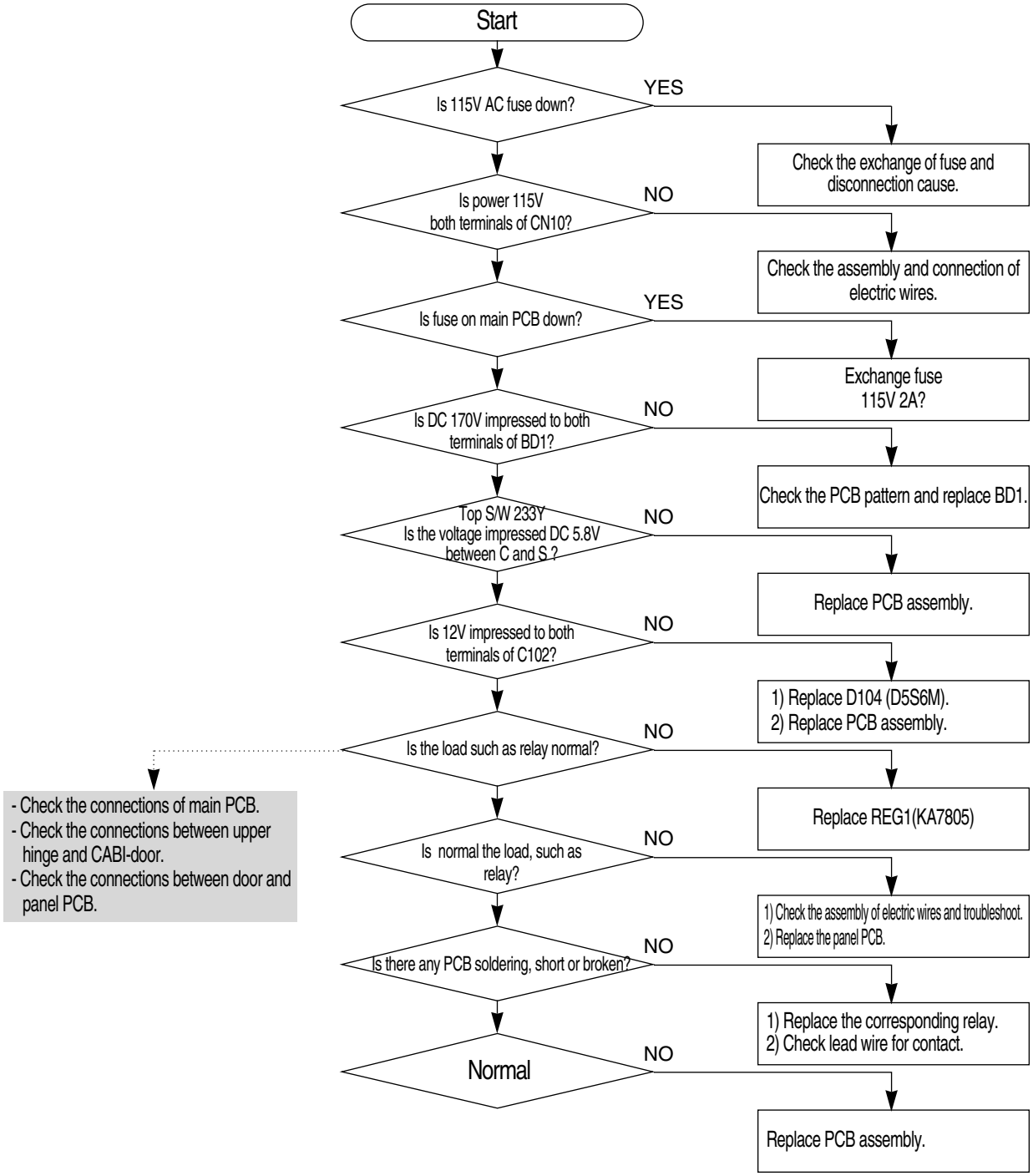
6. TROUBLESHOOTING

6-1) If power is not ON

Caution!

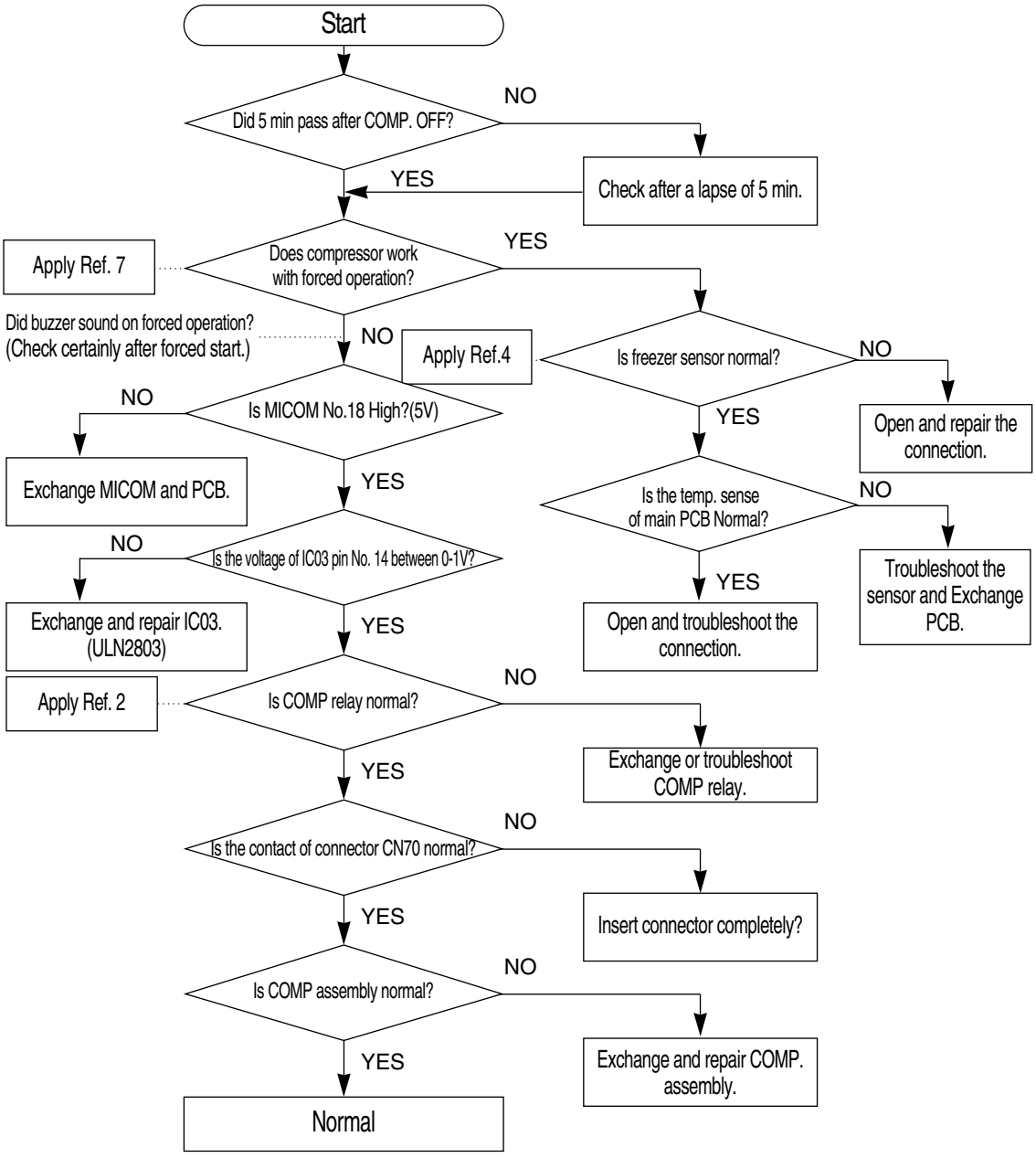
At the power of main PCB, the 115V power and a high-voltage over DC 170V occur. Please take care of yourself on repair and measurement.

To check the main PCB, please apply descriptions of operation and references in the manual.



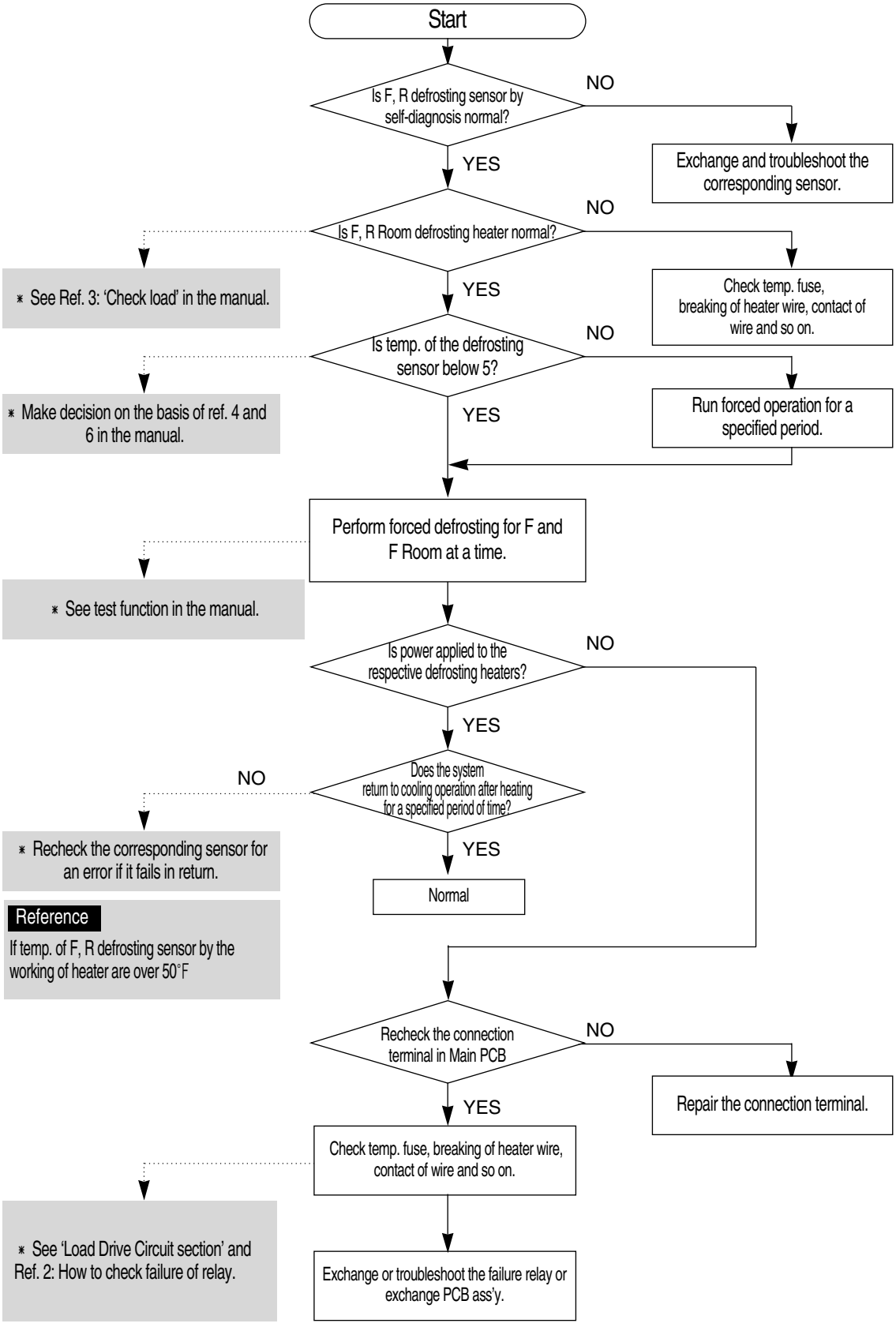
6. TROUBLESHOOTING

6-2) If the compressor and cooling fan motor don't work normally



6. TROUBLESHOOTING

6-3) If defrost function

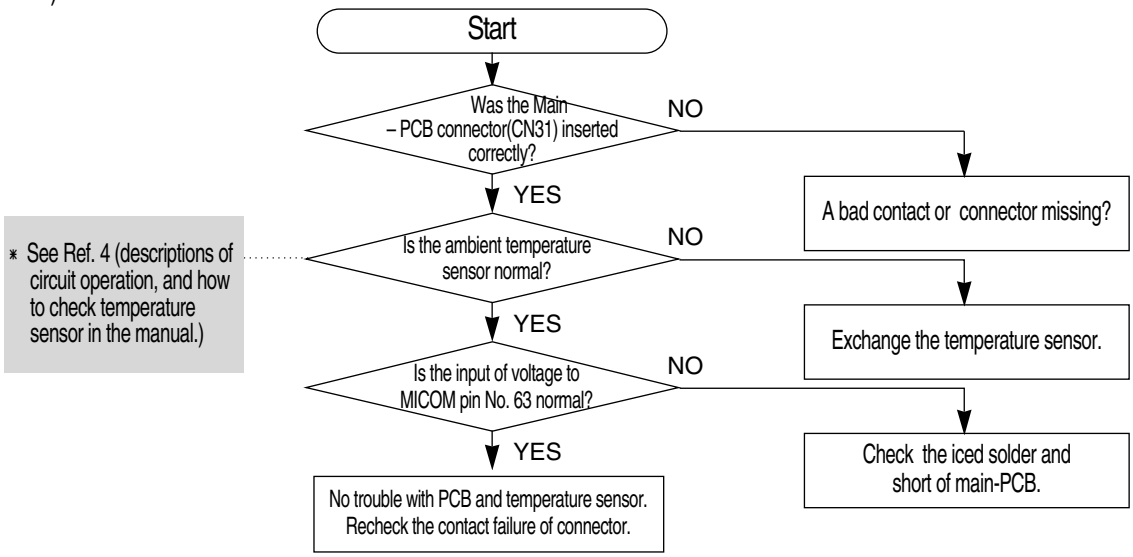


6. TROUBLESHOOTING

6-4) If there is a trouble with self-diagnosis

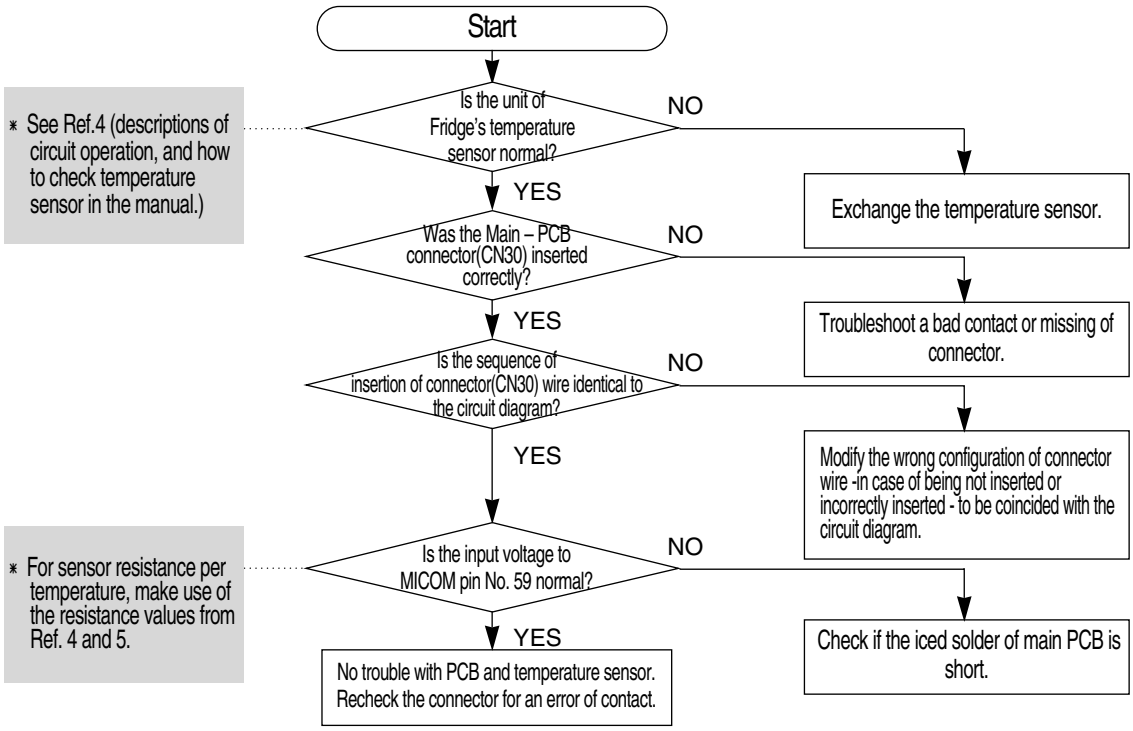
- Error of sensor can be seen on the front display of refrigerator. If power is impressed to refrigerator first, an failure of sensor is found. The refrigerator will stop working and display(blink) the region of trouble-occurred sensor repetitively.
- Even if sensor has failure during the operation, the refrigerator will not stop working but can run the normal cooling operation because of being operated in the Emergency Operation mode. Therefore you' re requested to use how to check self-diagnosis(at page 26) in the manual.

1) If the ambient sensor has trouble



2) If the temperature sensor of R room has trouble

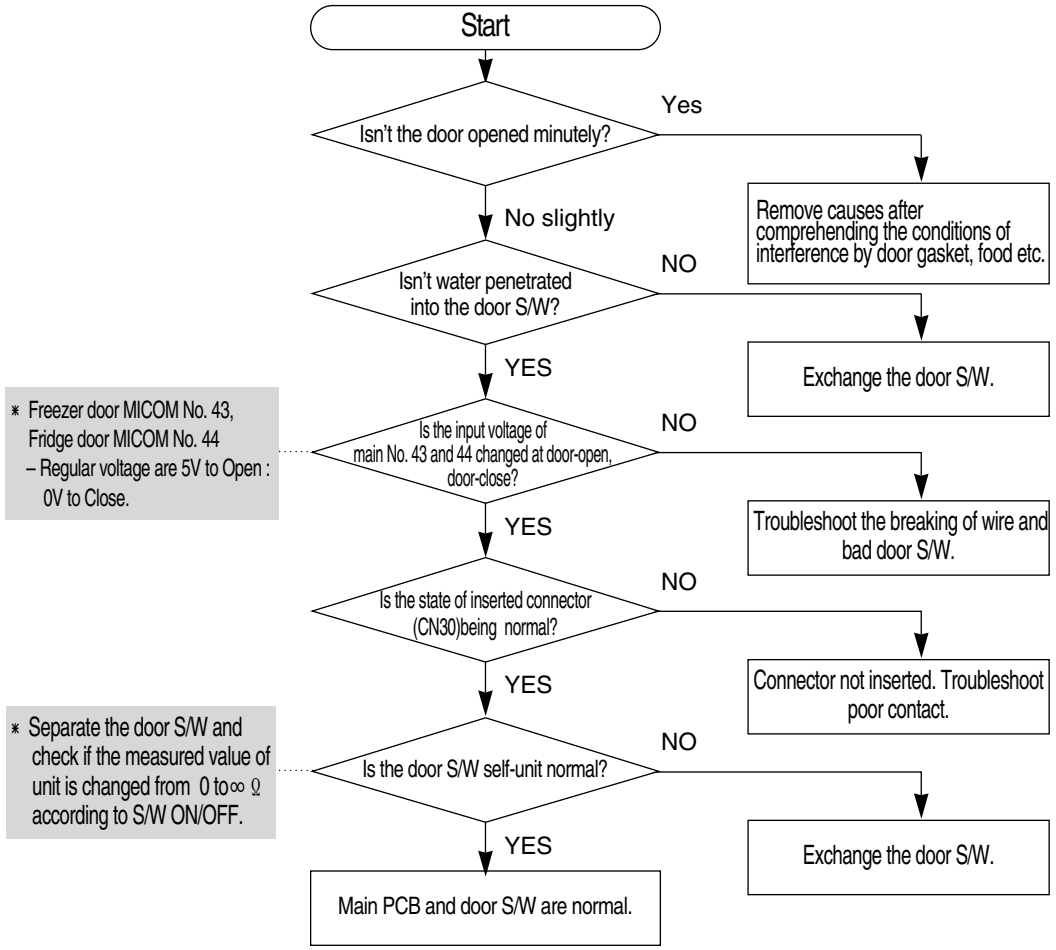
- The sensor of freezer is connected in parallel with Bimetal. See the contents of Temperature Sensing Circuit section in the description of circuit operation.



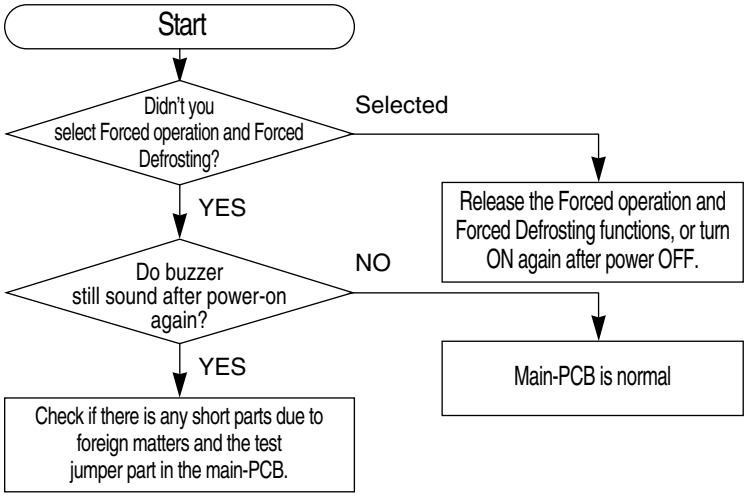
6. TROUBLESHOOTING

6-5) If alarm sound

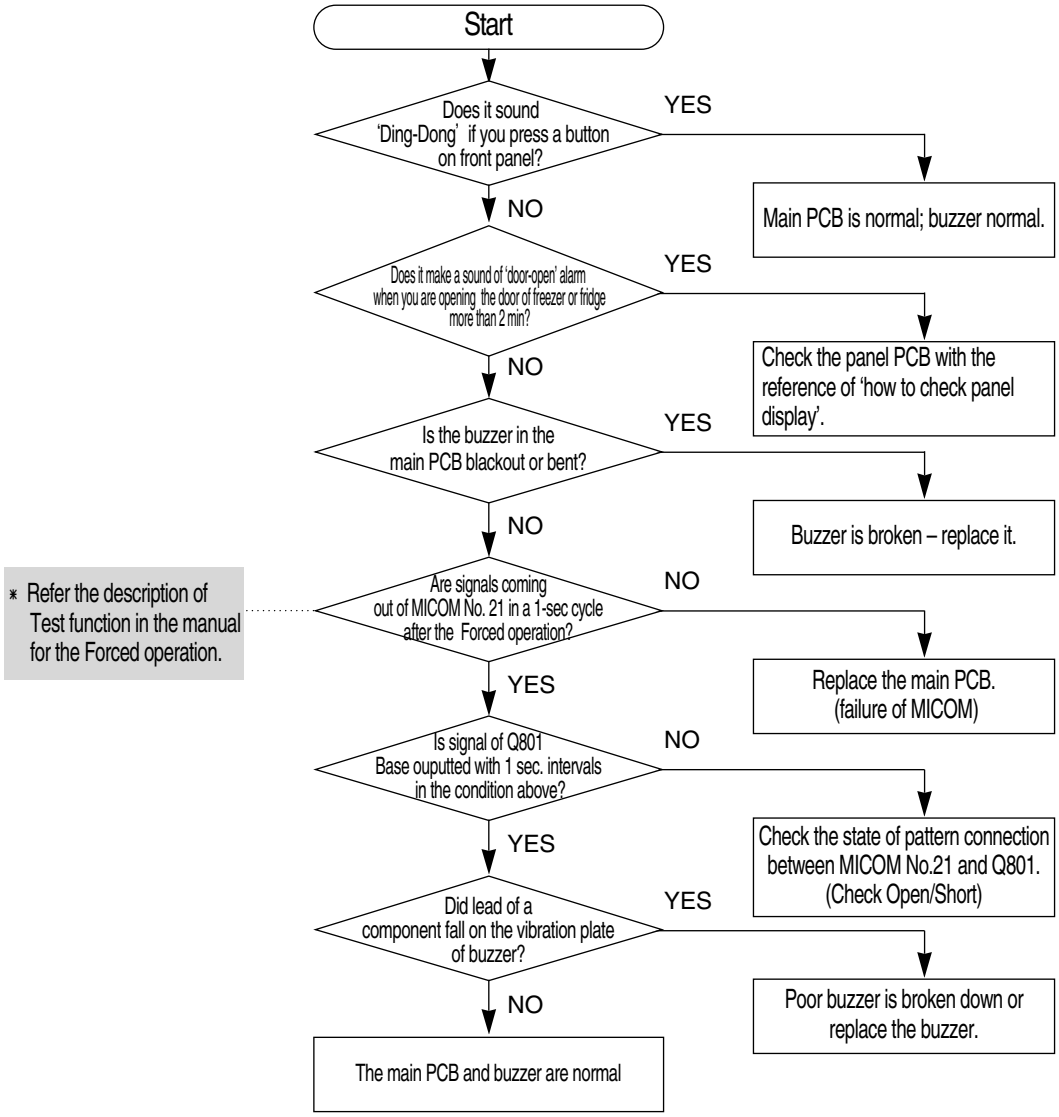
1) If "Ding-Dong" sounds continuously



2) If "Ding-Dong" sounds continuously



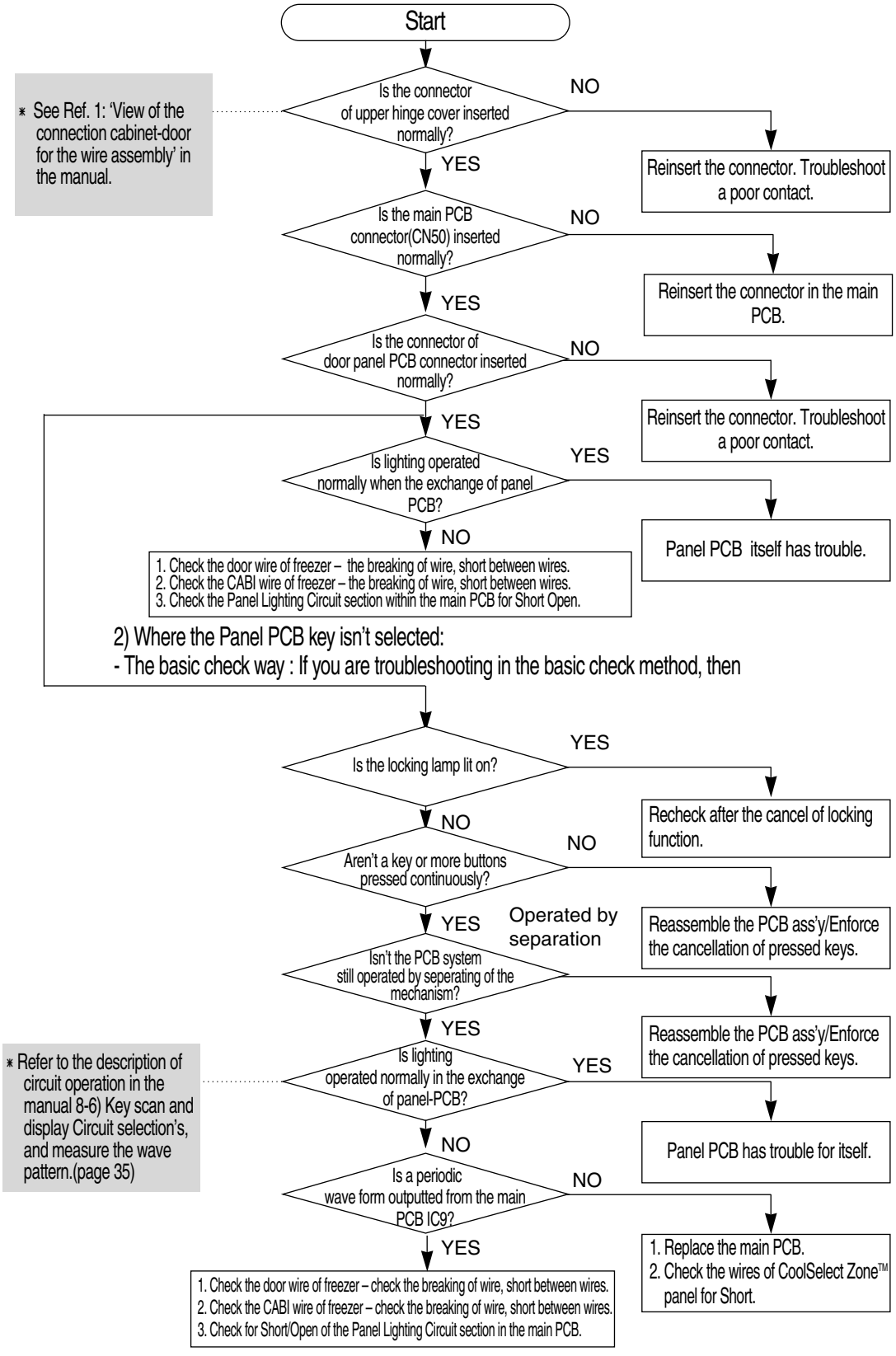
3) Without sound of buzzer operation



6. TROUBLESHOOTING

6-6) If the panel PCB is not working normally

1) Where lighting of the panel PCB is disabled, or only some lamps are disabled.

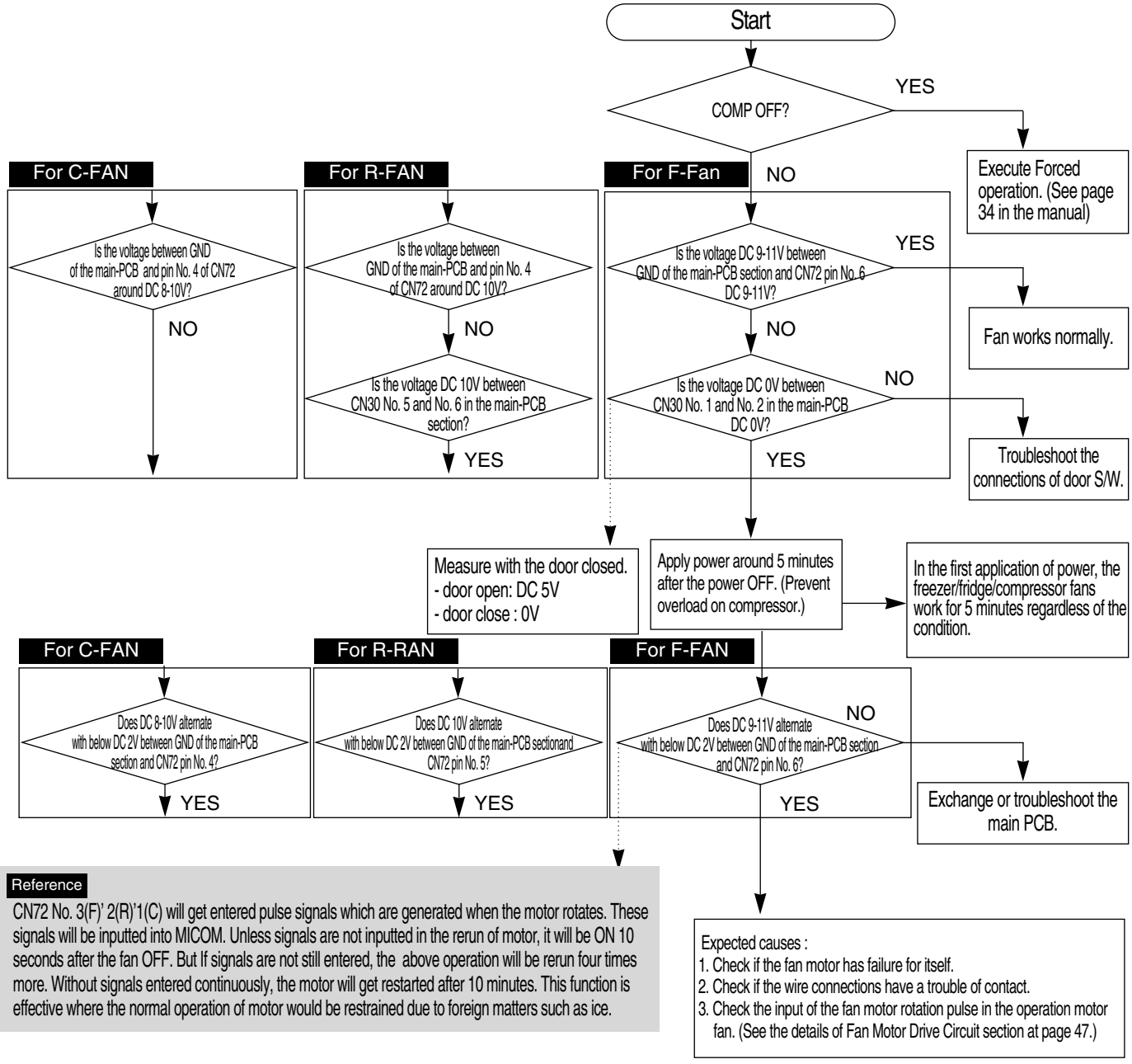


6. TROUBLESHOOTING

6-7) If fan doesn't work

Reference

- The refrigerator has been applied with the BLDC fan motor for RS2534, R room Fan is AC motor used. The BLDC motor is driven by DC 8-12V.
- Under the normal condition of COMP ON, it is operated together with F-FAN motor. With operation of the CoolSelect Zone™ function, the F-Fan motor will not work. If the door is opened and closed once at a high ambient temperature, the BLDC motor would be operated after a minute or longer delay. Therefore, you' re advised not to take it for an error.
- When the Fridge is open, the freezer fan motor will also stop working simultaneously with the fan motor. (for the purpose of performance improvement).



Reference

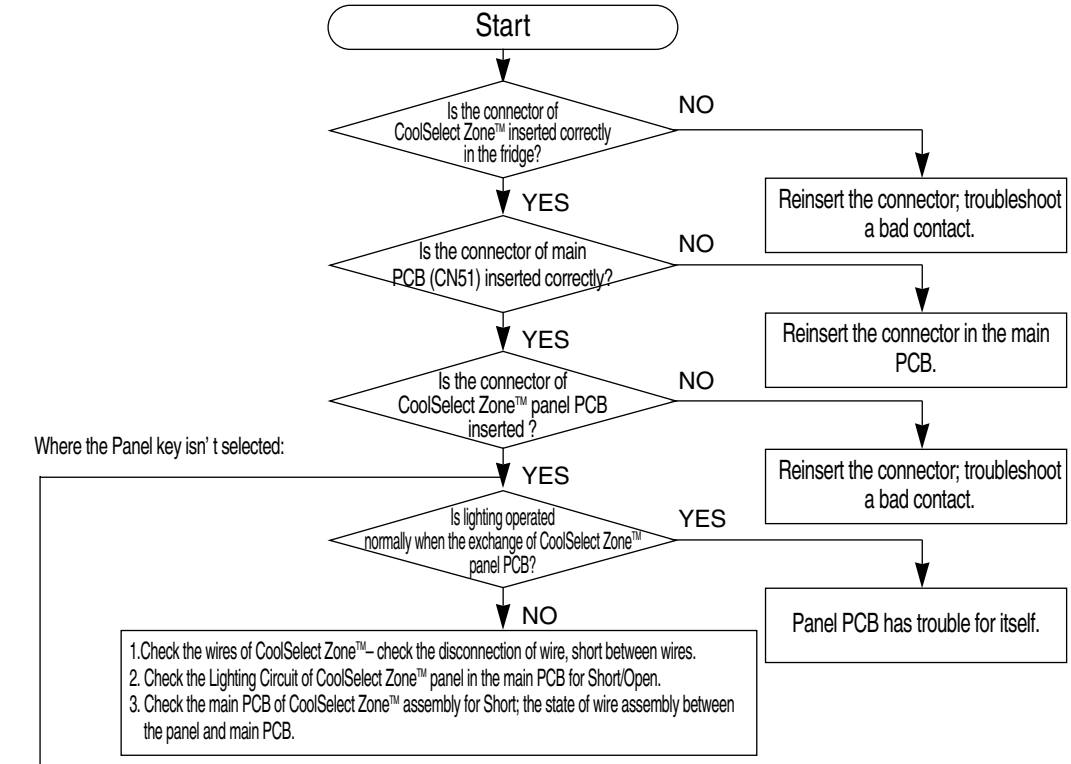
CN72 No. 3(F)' 2(R)'1(C) will get entered pulse signals which are generated when the motor rotates. These signals will be inputted into MICOM. Unless signals are not inputted in the rerun of motor, it will be ON 10 seconds after the fan OFF. But If signals are not still entered, the above operation will be rerun four times more. Without signals entered continuously, the motor will get restarted after 10 minutes. This function is effective where the normal operation of motor would be restrained due to foreign matters such as ice.

Expected causes :
1. Check if the fan motor has failure for itself.
2. Check if the wire connections have a trouble of contact.
3. Check the input of the fan motor rotation pulse in the operation motor fan. (See the details of Fan Motor Drive Circuit section at page 47.)

6. TROUBLESHOOTING

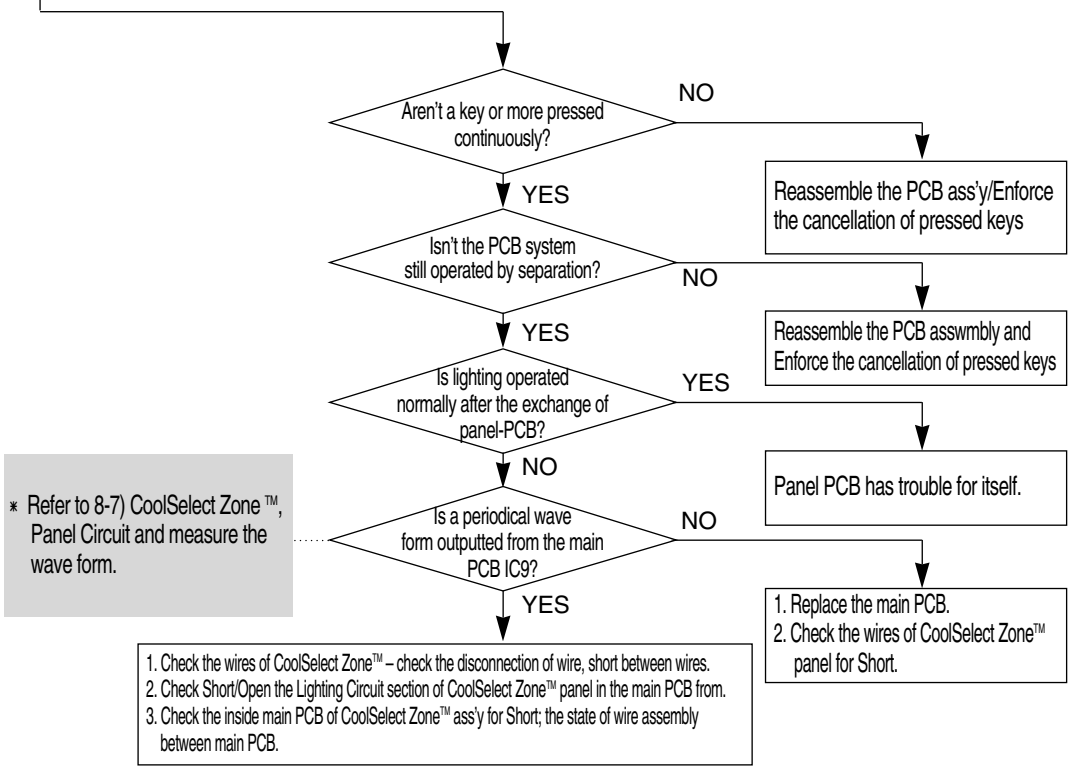
6-8) If CoolSelect Zone™ isn't operated normally (RS267LA, RS269LA)

1) If the lamp of CoolSelect Zone™ is not lit.



2) Where the Panel PCB key isn't selected:

- The basic method is applied to check – if you fail in troubleshooting after above the execution, then

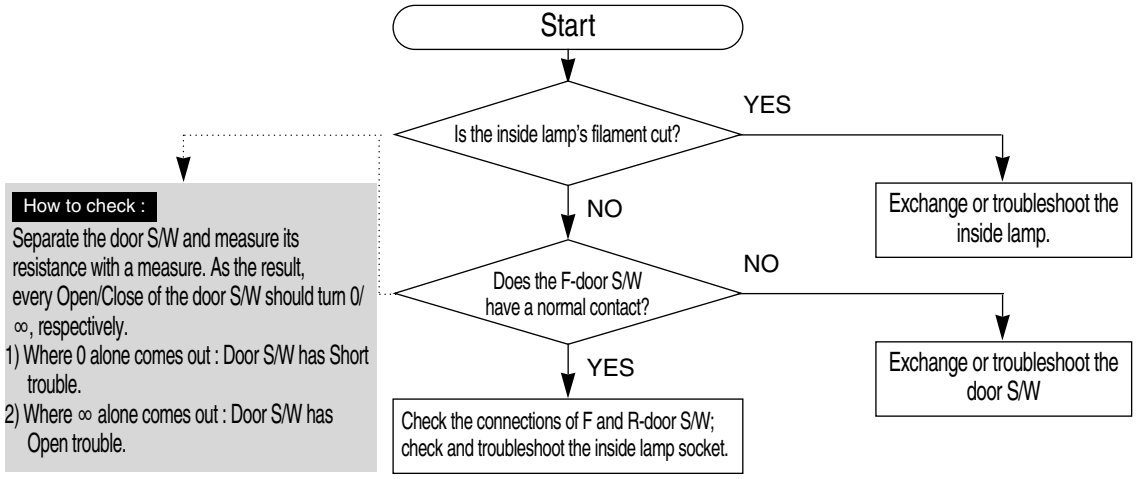


6. TROUBLESHOOTING

6-9) If the lamps of freezer / refrigerator fail in lighting

⚠ Caution!

1. When you are exchanging the lamp of freezer, please exchange or troubleshoot it with the power OFF to avoid an electric shock.
2. Please keep in mind you do not get burnt by the excessive heating of an incandescent light bulb.



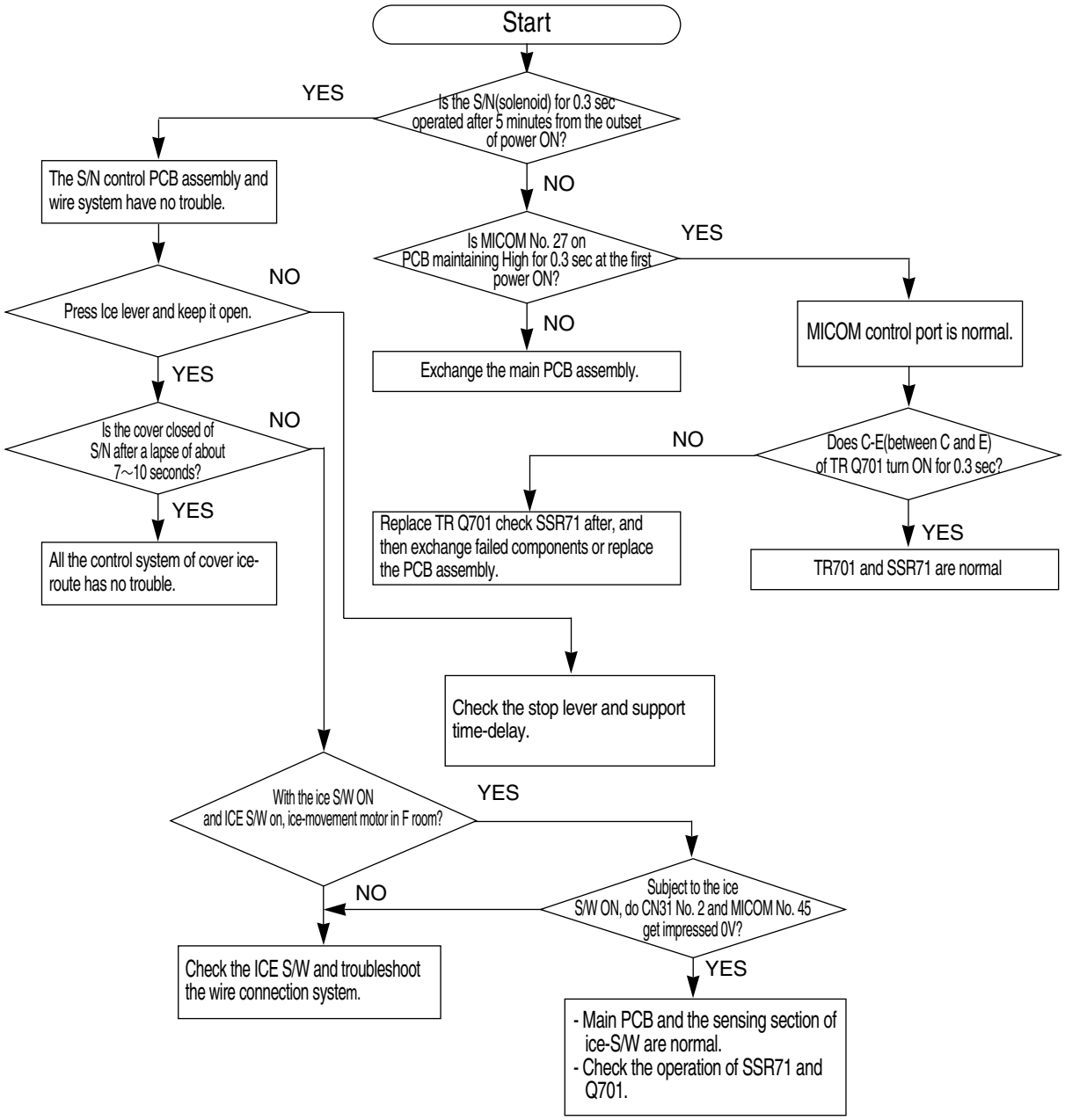
Reference

If the door is opened, then the contact of door S/W is opened and MICOM gets applied 5V to finally sense Open. If 5V has been sensed over two minutes afterwards, then an Door-Open alarm will sound 'Ding-Dong' for 10 seconds in a minute cycle. For that reason, if the door S/W has failure, the refrigerator can make a "Ding-Dong" sound per a minute cycle. Please note step for its service!

6-10) If the ice chute cover solenoid doesn't work

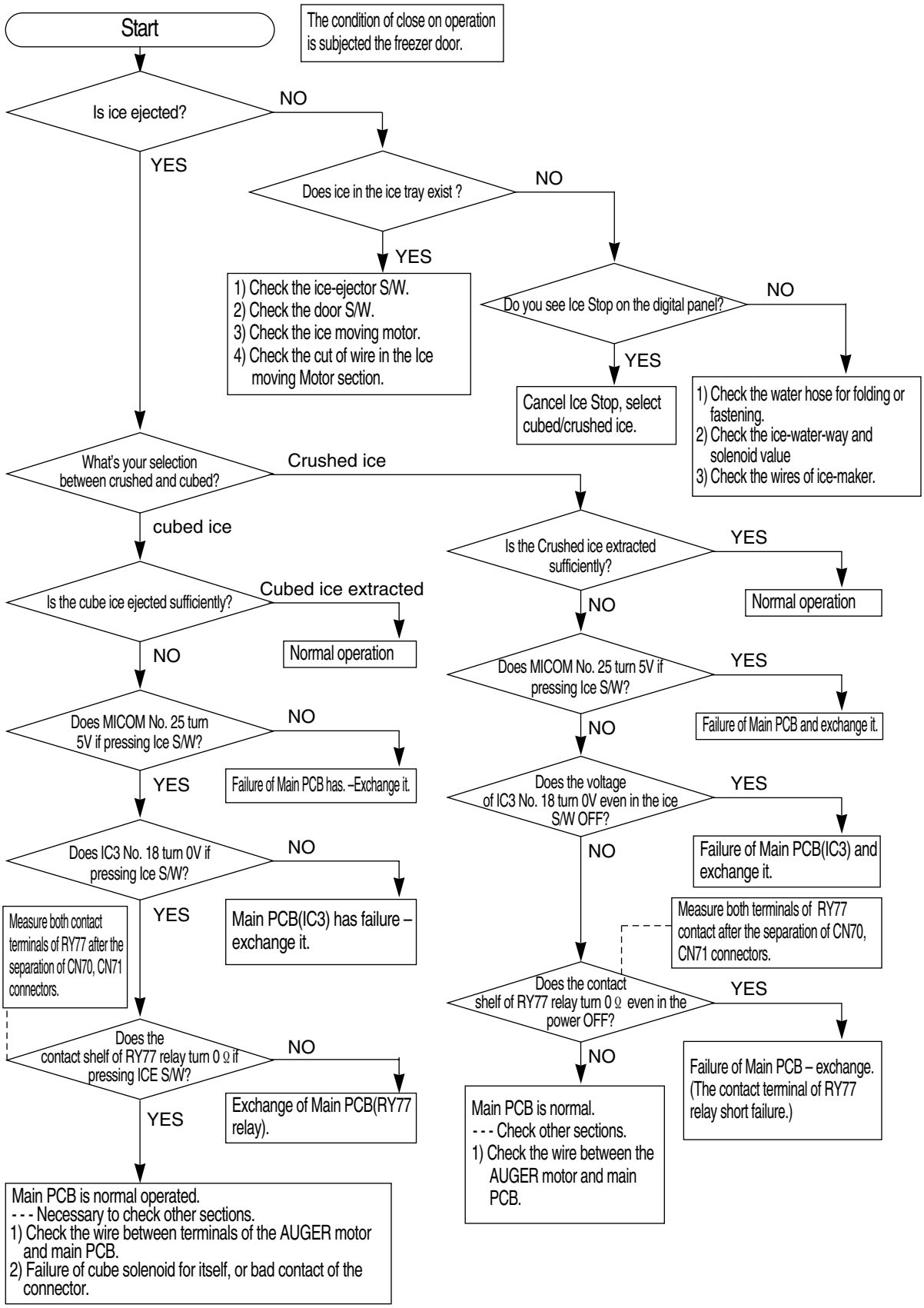
Preliminary check

1) Check if the solenoid is operated unconditionally for 0.3 sec, independent of the Open/Close condition of cover ice-route, after a lapse of about 5 seconds from the outset of power ON. (Before installation, the cancellation of cover ice-route Open is enabled.)
2) Check if the connector of upper hinge section is hook-up correctly.



6. TROUBLESHOOTING

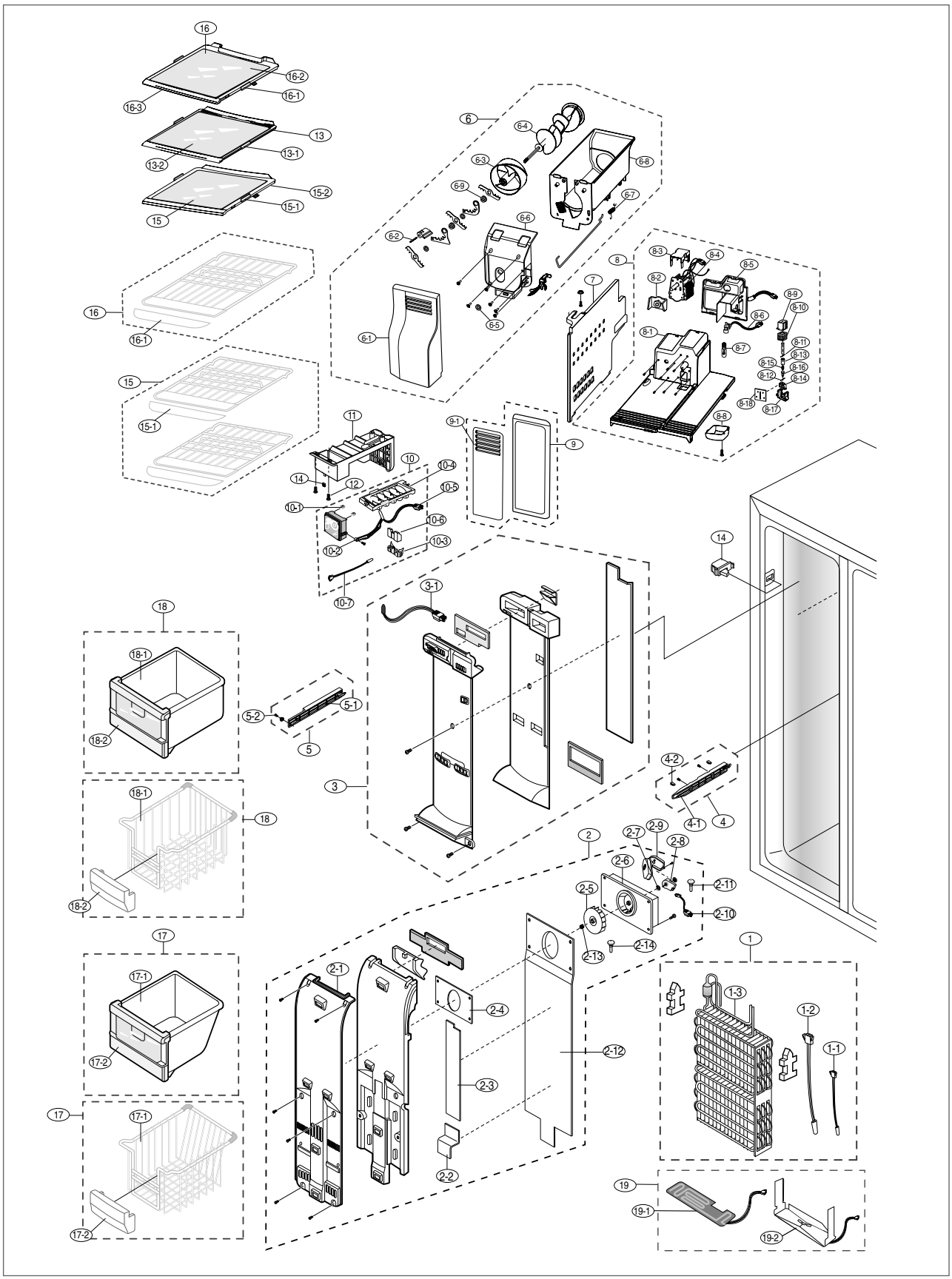
6-11) If Crushed Ice/Cubed Ice doesn't work properly



7 . EXPLODED VIEW& PARTS LIST

7 . EXPLODED VIEW& PARTS LIST

7-1) Freezer



7 . EXPLODED VIEW& PARTS LIST

■ **Parts List of Freezer**

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
1	DA96-00021N	ASSY EVAP-FRE	A-TOP,-,-,-,115V/60Hz,-,-,	1	RF011	
1-1	DA32-10105R	SENSOR ASSY-FRE	502AT,ET-PJT,-50~50,5V,1	1	RF040	
1-2	DA47-10160H	THERMO BIMETAL	AD-PJT,-,250V,10A,40,60,-	1	RI073	
1-3	DA59-00233H	EVAP FRE	-,FIN,AL,-,115V60HZ,-,-,-,A-TO	1	RF011	
2	DA97-00466Z	ASSY COVER-EVAP,FRE	Best-buy,EXP,BLDC,wi	1	RF005	
2-1	DA63-00797D	COVER EVAP-FRE	A-TOP,PP,-,-,-,SC-02740R,	1	RF005	
2-2	DA61-00412A	GUIDE AIR-FRE	A-TOP,PVC,-,-,-,-,COVER-EV	1	RW427	
2-3	DA61-00410B	PLATE-AIR	A-TOP,HIPS,T1.5,-,-,-,-	1	RW576	
2-4	DA61-00411A	PLATE-FAN MOTOR	A-TOP,HIPS,T1.5,W196.5,L	1	RW604	
2-5	DA31-00053A	FAN-BACKWARD	-,A-TOP,ABS,-,FRE	1	RI150	
2-6	DA61-00417A	CASE MOTOR	A-TOP,ABS SCRAP,-,-,-,WHT,SBS	1	RF036	
2-7	DA63-01146A	GROMMET-MOTOR	A-TOP,NBR,-,-,-,ID6.5,OD42	1	RI086	
2-8	DA31-00020E	MOTOR DC-BLDC SENSOR	DREP3020LA,ET,0.245	1	RI089	
2-9	DA63-01809A	COVER MOTOR-BLDC	BLDC-NEW,PP,NTR,-,-,-,-	1	RF083	
2-10	DA39-00060K	WIRE HARNESS-MOTOR	A-TOP,-,-,-,-,-,-,351	1	RF028	
2-11	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,-,-,-,-,	1	RI087	
2-12	DA61-00792B	PLATE-EVAP SUCTION	BEST-BUY,A-TOP,T1.0,P	2	RW603	
2-13	DA61-20128A	SPRING ETC-FAN	-,STS304,PI7.8,-,OD1.0,-,	1	RW716	
2-14	DA63-01808A	GROMMET-MOTOR	BLDC,NBR,BLACK,-,-,-,-,-,H	1	RI086	
2-15	DA63-02646A	COVER-HOUSHING FRE	USP05,GAVA,T0.4,-,-,-	1	RF056	
3	DA97-02006B	ASSY COVER-MULTI FRE DISP	Best-buy 05,Co	1	RF054	
3-1	DA32-10109W	SENSOR ASSY	502AT,A-TOP,-,5V,-,-,F,R-SEN	1	RS099	
4	DA97-00730E	ASSY RAIL-BASKET R(A-TYPE)	A-TYPE,A-TOP,	2	RF020	
4-1	DA61-00291C	RAIL-BASKET R	A-TOP(A-TYPE),HIPS,-,-,-,C	1	RF020	
4-2	DA63-02079A	GROMMET-RAIL	A-TOP,NY-6,WIRE-BOX,A,B-TYP	1	RI088	
5	DA97-00731E	ASSY RAIL-BASKET L(A-TYPE)	A-TOP(A-TYPE)	2	RF019	
5-1	DA61-00290C	RAIL-BASKET L	A-TOP(A-TYPE),HIPS,-,-,-,C	1	RF019	
5-2	DA63-02079A	GROMMET-RAIL	A-TOP,NY-6,WIRE-BOX,A,B-TYP	1	RI088	
6	DA97-02700A	ASSY TRAY-ICE BUCKET	USP,ASSY,-,-,-,-	1	RF004	
6-1	DA63-02452A	COVER-ICE BUCKET	USP 05,HIPS,2,SC-02470R	1	RF012	
6-2	DA60-90136A	PIN-SPIRAL	STS304,OD5.2,L40,SR-S7180,-,-	1	RM016	
6-3	DA61-01658A	BLADE-ICE	AD,ABS,SC-02740R,-,-	1	RD060	
6-4	DA65-00037A	CLAMPER CORE-HELIX	AD,POM,-,-,WHITE,-	1	RW215	
6-5	DA60-40116A	WASHER-PLAIN	-,ID20,OD28,T0.5,-,-,-,STS4	1	RW919	
6-6	DA63-02007A	COVER-CRUSHER	AD,HIPS,T3.3,-,-,-,-,SC-02	1	RF035	
6-7	DA61-20124C	SPRING ETC-DISPENSER	AD,STS304,0.9,5.9,-	1	RW710	
6-8	DA63-02010A	TRAY ICE-BUCKET	AD,ABS,T2.0,-,-,-,SC-027	1	RM012	
6-9	DA60-30108A	NUT-HEX	HEX,-,-,-,POM,-,AURGER	1	RW554	
7	DA67-01192A	PARTITION-COOL	USP 05 (760),HIPS,2,SC-02	1	RM018	
8	DA97-02057L	ASSY CASE MOTOR-AUGER	A-TOP,LOWES05,760L	1	RF034	
8-1	DA61-01655A	CASE-AUGER MOTOR	AD,ABS,-,-,-,SC-02740R,	1	RF034	
8-2	DA61-01659A	PLATE-DRIVE AUGER	AD,STS304,T2.0,-,-,-,-	1	RF047	
8-3	DA63-02012A	COVER-MOTOR AUGER SUB	AD,ABS,-,-,-,-,-,S	1	RF035	
8-4	DA31-00105A	MOTOR GEARD-AUGER	SPG,ISG3240SSI,2.3A,60	1	RF039	
8-5	DA63-02451A	COVER-AUGER MOTOR	USP 05 (760),PP,2,-,-,	1	RF035	
8-6	DA47-00112G	LAMP HOLDER	E17,250V,75W,-,C5210S-EH,PBT	1	RI080	
8-7	4713-001197	LAMP-INCANDESCENT	130V,-,30W,BLUE,-,-,25	1	RI081	
8-8	DA63-00785A	COVER LAMP-FRE DISP	A-TOP,PP,-,-,-,-,-,-	1	RF031	
8-9	DA74-40151G	VALVE-SOLENOID	SR-S6586B,-,-,-,-,CUBE-SN	1	RO088	
8-10	DA72-60348A	SEAL-FOAM PE	SR-S7180,FOAM-PE,BLK,T30,-,	1	RW961	
8-11	DA60-90137A	PIN-SPRING A	STS304,-,L22,SR-S7180,-,-	1	RF044	

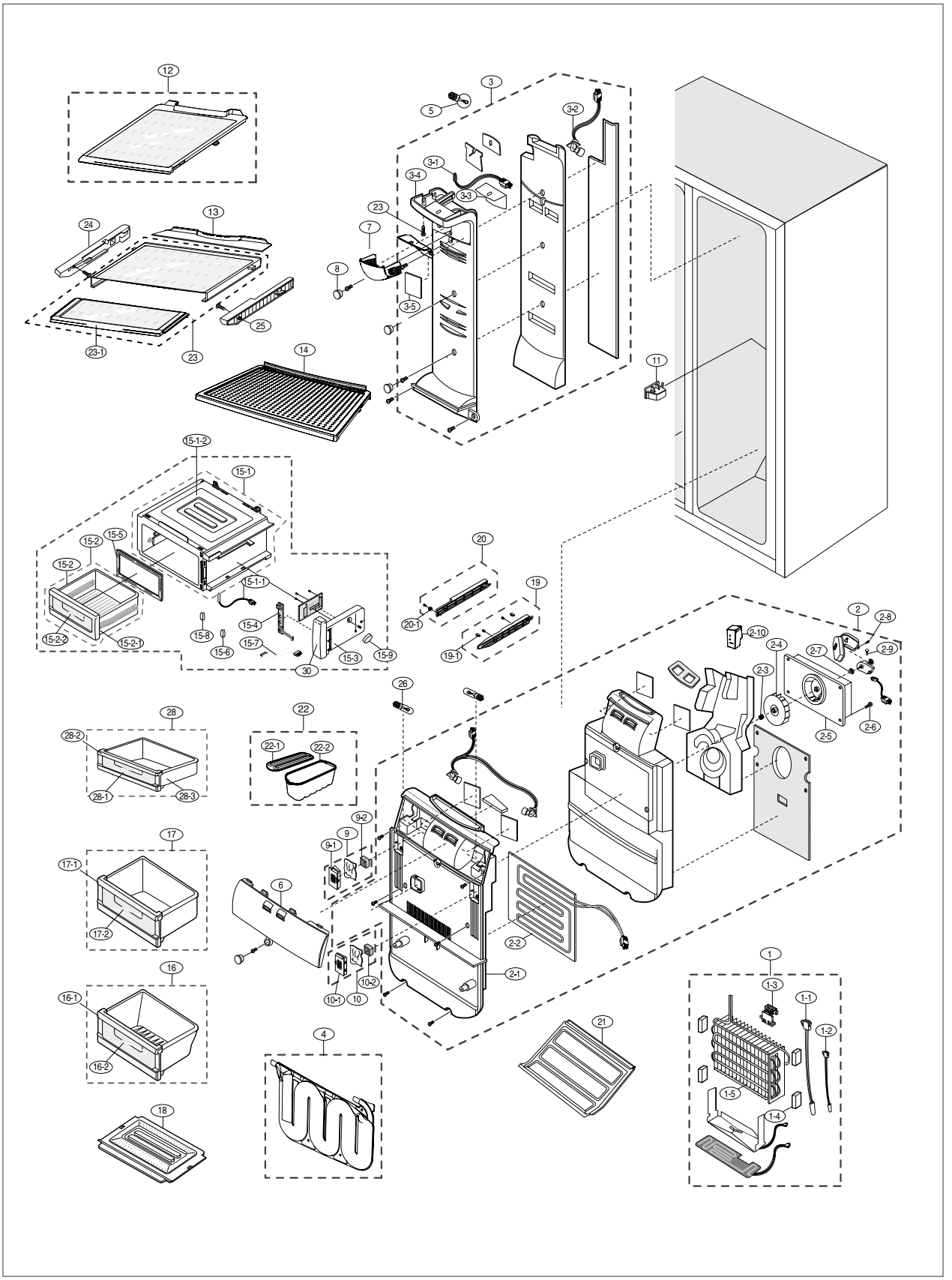
7 . EXPLODED VIEW& PARTS LIST

■ **Parts List of Freezer**

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
8-12	DA60-90137B	PIN-SPRING B	STS304,-,L16,SR-S7180,-,-	1	RF045	
8-13	DA63-90008A	BUSH-SOLENOID	-,POM,-,-,-,SC-93438R,-	1	RW111	
8-14	DA65-20107A	SADDLE-SOLENOID	-,NY-6,-,SR-S7180,-	1	RW661	
8-15	DA61-20140A	SPRING ETC-SOLENOID	SR-S7180,STS304,PI7.	1	RW735	
8-16	DA66-90003A	GEAR-SOLENOID	POM,-,-,-,-,SC-93438R	1	RW358	
8-17	DA61-60001A	SLIDER-SOLENOID DISP	-,POM,-,-,-,-,-	1	RW700	
8-18	DA73-00168A	RUBBER-SOLENOIDE	ZIPEL,SILICON,-,-,-,-,-	1	RW660	
9	DA97-03268A	ASSY COVER-COOL	LOWES05,A-TOP,DISP,-,-,-	1	RI011	
9-1	DA63-02844A	COVER-COOL SUB	LOWES 05,GPPS,-,-,-,-,LOW	1	RI011	
10	DA97-00258C	ASSY ICE MAKER	BEST-BUY,EXP,Half-ellipti	1	RM001	
10-1	DA61-70254A	SUPPORT-GASKET	ICE-MAKER,NBR,T2.0,-,-,-	2	RW759	
10-2	DA61-00524A	GUIDE-ICE FULL	A-TOP,ABS,-,-,-,SC-93437R	1	RW447	
10-3	DA63-02183A	COVER-SENSOR	AD,PP,T1.0,-,-,-,-,WHITE,-	1	RI021	
10-4	DA63-01453B	TRAY ICE	A-TOP,PP,-,SC-02740R,-,-,COOL-	1	RM011	
10-5	DA41-20151B	PBA SUB	ZIPEL,ICE-MAKER,FR-1,54 X 29,S	1	RM008	
10-6	DA64-40144A	KNOB-TOUCH	ICE-MAKER,NBR,-,-,-,-,-,-,NTR	1	RD040	
10-7	DA39-20368B	WIRE HARNESS	G-PJT,PCB,DOM,KS,5V,-,KIT,-	1	RO129	
11	DA61-00244B	SUPPORT-ICE MAKER(A-TOP)	A-TOP,HIPS,COOL	1	RM010	
12	DA61-01797A	FIXER GROMMET-DOOR	T3-PJT,ABS,-,SC-02740	2	RH020	
13	DA97-03231A	ASSY SHELF-FRE LOW	USP 05 (750),COOL-WHI	1		
13-1	DA64-00090B	TRIM-SHELF	A-TOP,LDPE,WHITE,-,-,-,-	2	RI079	
13-2	DA67-01317A	SHELF FRE-LOW	(750)A-TOP,HIPS,-,-,-,Cool	1	RF022	
14	DA34-10120E	SWITCH DOOR-F	-,slide,-,-,250V,-,0.5A,-	1	RF041	
15	DA97-00699E	ASSY SHELF-WIRE FRE,LOW	(750)BEST-BUY,CO	2	RF022	
15-1	DA64-00670B	TRIM-SHELF WIRE	A-TOP,HIPS,Cool-white,SC	1	RI079	
15	DA97-00158M	ASSY SHELF-FRE LOW	USP 05 (750),COOL-WHI	1	RF087	
15-1	DA64-00090B	TRIM-SHELF	A-TOP,LDPE,WHITE,-,-,-,-	2	RI079	
15-2	DA67-00515B	SHELF FRE-LOW	A-TOP,HIPS,-,-,SC-02740R,C	1	RF022	
16	DA97-00698E	ASSY SHELF-WIRE FRE,MID	(750)BEST-BUY,CO	1	RF023	
16-1	DA64-00670B	TRIM-SHELF WIRE	A-TOP,HIPS,Cool-white,SC	1	RI079	
16	DA97-03230A	ASSY SHELF FRE-MID	A-TOP,750LT	1	RE064	
16-1	DA64-00090B	TRIM-SHELF	A-TOP,LDPE,WHITE,-,-,-,-	2	RI079	
16-2	DA67-00541W	SHELF GLASS-FRE,MID	BEST-BUY,GLASS,T3.2,	1	RF023	
16-3	DA67-01313A	SHELF FRE-MID	(750)A-TOP,HIPS,-,-,-,Cool	1	RF023	
17	DA97-00700E	ASSY CASE-BASKET LOW(750)	BEST-BUY,Cool-	1	RF001	
17-1	DA61-01195A	CASE-WIRE BASKET,LOW	MSWR10,BEST-BUY,PE	1	RF001	
17-2	DA63-01290B	COVER-WIRE BASKET	A-TOP,HIPS,Cool-white,	1	RF050	
17	DA97-00143N	ASSY CASE-BASKET,LOW(750)	A-TOP,Normal,E	1	RF081	
17-1	DA61-00281C	CASE-BASKET LOW	A-TOP 750,ABS,-,-,-,COOL	1	RF001	
17-2	DA63-00801A	COVER-BASKET FRE,A	A-TOP,GPPS,-,-,-,-,-	1	RF060	
18	DA97-00701E	ASSY CASE-BASKET UP(750)	BEST-BUY,Cool-w	1	RF002	
18-1	DA61-01197A	CASE-WIRE BASKET,UPP	MSWR10,BEST-BUY,PE	1	RF002	
18-2	DA63-01290B	COVER-WIRE BASKET	A-TOP,HIPS,Cool-white,	1	RF050	
18	DA97-00142N	ASSY CASE-BASKET,UP(750)	A-TOP,EXP,norma	1	RF079	
18-1	DA61-00280C	CASE-BASKET UP	A-TOP 750,ABS,-,-,-,COOL-	1	RF002	
18-2	DA63-00801A	COVER-BASKET FRE,A	A-TOP,GPPS,-,-,-,-,-	1	RF060	
19	DA97-00111C	ASSY-HEATER DRAIN FRE	A-TOP,115V,45W,-	1	RI134	
19-1	DA47-00090C	HEATER DRAIN-FRE	-,A-TOP,-,45W,-,115V,29	1	RF025	
19-2	DA61-00477A	PLATE-DRAIN FRE	A-TOP,GALVANUME,T0.5,-,-	1	RF026	

7 . EXPLODED VIEW& PARTS LIST

7-2) Refrigerator



7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Refrigerator

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
1	DA96-00020G	ASSY EVAP-REF	A-TOP,-,-,-,115V,-,140W,-,	1	RI016	
1-1	DA47-00095B	THERMO FUSE-ASSY	ET-PJT,-,250V,-,-,-,-,-	1	RI074	
1-2	DA32-00006B	SENSOR ASSY-REF	PX-41C,A TOP,-10C~35C,5V	1	RI098	
1-3	DA61-00453A	FIXER-SENSOR	A-TOP,EVAP,PP,-,NTR,ALL	1	RM017	
1-4	DA61-00476A	PLATE-DRAIN REF	A-TOP,GALVANUME,T0.4,-,-	1	RF026	
1-5	DA59-00234H	EVAP REF	A-TOP,-,AL,-,115V,-,-,-,-,-	1	RI016	
2	DA97-02810K	ASSY COVER EVAP-REF	A-TOP,BLDC MOTOR,CHI	1	RI008	
2-1	DA63-00812B	COVER EVAP-REF	A-TOP,PP,-,-,-,SC-02740R,	1	RI024	
2-2	DA47-00200C	HEATER-WATER TANK	-,-,UL1015 1/0.81,3W,-	1	RI045	
2-3	DA61-20128A	SPRING ETC-FAN	-,STS304,PI7.8,-,OD1.0,-,	1	RW716	
2-4	DA31-00016A	FAN-CIRCUIT	-,ET-PJT,-,-,-,12,•'95,•'63.	1	RO139	
2-5	DA61-00417A	CASE MOTOR	A-TOP,ABS SCRAP,-,-,-,WHT,SBS	1	RF036	
2-6	DA63-01146A	GROMMET-MOTOR	A-TOP,NBR,-,-,-,ID6.5,OD42	1	RI086	
2-7	DA31-00020E	MOTOR DC-BLDC SENSOR	DREP3020LA,ET,0.245	1	RI089	
2-8	DA63-01809A	COVER MOTOR-BLDC	BLDC-NEW,PP,NTR,-,-,-,-	1	RF083	
2-9	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,-,-,-,-,	1	RI087	
2-10	DA63-02645A	COVER-HOUSHING REF	USP05,GAVA,T0.4,-,-,-	1	RI110	
3	DA97-03310A	ASSY COVER-MULTI,REF	LOWE'S,-,-,-,-,-,-,	1	RI019	
3-1	DA32-10105U	SENSOR ASSY	502AT,A-TOP,-50~50,5V,-,-,RO	1	RS092	
3-2	DA47-40001C	LAMP HOLDER-ASSY	E26,-,1A,-,-,PBT(5VA),U	1	RI151	
3-3	DA63-02561A	COVER-AIR GUIDE,A	A-TOP M/C,HIPS,T2.0,-,	1	RI083	
3-4	DA63-02553A	COVER-MULTI REF	A-TOP M/C,PP,T2.0,-,-,-,	1	RI107	
3-5	DA61-02538A	PLATE-LAMP	LOWES,GALVANUME,T0.5,-,-,-,-	1	RI120	
4	DA97-02432B	ASSY TANK WATER	ASSY TANK WATER,HDPE, LD	1	RI043	
5	4713-001201	LAMP-INCANDESCENT	230V,0mA,40W,FROST,0Lm	1	RI081	
6	DA63-00814G	COVER LAMP-REF LOW	A-TOP,PP,CLEARNESS,EX	1	RI099	
7	DA63-02819A	COVER LAMP-REF UP	LOWES,PP,T2.5,-,-,-,-,	1	RI078	
8	DA67-30266K	CAP-SCREW	A-TOP,PP,SC-02740R,-,-,COOL-WH	4	RO086	
9	DA97-01484D	ASSY COVER-PURIFIER,L	A-TOP,-,-,-,-,-,-,	1		
9-1	DA02-00111A	CATALYST	A-TOP(SBS),LTC,-,T10,W41,L41,-	1	RI077	
9-2	DA63-00855D	COVER-PURIFIER L	A-TOP,HIPS,Cool-white,S	1	RF014	
10	DA97-01485D	ASSY COVER-PURIFIER,R	A-TOP,-,-,-,-,-,-,	1		
10-1	DA02-00111A	CATALYST	A-TOP(SBS),LTC,-,T10,W41,L41,-	1	RI077	
10-2	DA63-00856C	COVER-PURIFIER R	A-TOP,HIPS,Cool-white,S	1	RI020	
11	DA34-10110E	SWITCH DOOR-R	-,Sliding,-,-,250V,-,0.5A,	1	RI003	
12	DA67-01310B	SHELF GLASS-REF UP	A-TOP,PP+GLASS,EXP,NO	3	RI041	
13	DA67-00906B	SHELF REF-FOLD FENCE	A-TOP,ABS,SC-02740R	1	RI038	
14	DA67-00686B	SHELF REF-LOW	A-TOP(26/27),HIPS,-,-,-,CO	1	RI039	
15	DA97-02087U	ASSY-CASE CONVERTIBLE	A-TOP,05-NEW PRINT	1	RI005	
15-1	DA97-00370C	ASSY CASE-CONVERITIBLE,SUB(750)	A-TOP,Coo	1	RI004	
15-1-1	DA32-10109X	SENSOR ASSY	502AT,A-TOP,-,5V,-,-,CONVERT	1	RS100	
15-1-2	DA61-00274B	CASE-CONVERTIBLE A	A-TOP,HIPS,-,SC-02740	1	RD066	
15-2	DA97-00371J	ASSY TRAY-CONVERTIBLE(750)	A-TOP,750LT,E	1	RI047	
15-2-1	DA63-01286C	COVER-CONVERTIBLE A	A-TOP,HIPS,EXP,Cool-	1	RI005	
15-2-2	DA63-01287A	COVER-CONVERTIBLE,B	BEST-BUY,GPPS,-,-,-,	1	RI026	
15-3	DA63-00800H	COVER-CONTROL CONVERTIBLE	A-TOP,ABS,CHIN	1	RI005	
15-4	DA41-00108A	PBA SUB	A-TOP CONVERTIBLE,R-ROOM,FR-1,	1	RM008	
15-5	DA63-01783C	GASKET-CONVERTIBLE	A-TOP,SF-PVC,W170*L38	1	RI054	
15-6	DA64-00558A	BUTTON-CONVERTIBLE	A-TOP,HIPS,-,-,SC-934	1	RI048	
15-7	DA39-00215A	WIRE HARNESS	A-TOP(CONVERTIBLE),-,-,-,-,	1	RW923	
15-8	DA64-00558B	BUTTON-CONVERTIBLE,BRAIL-SHELF FOLD L	A-TOP,HIPS,-,-,SC-9	2	RI049	

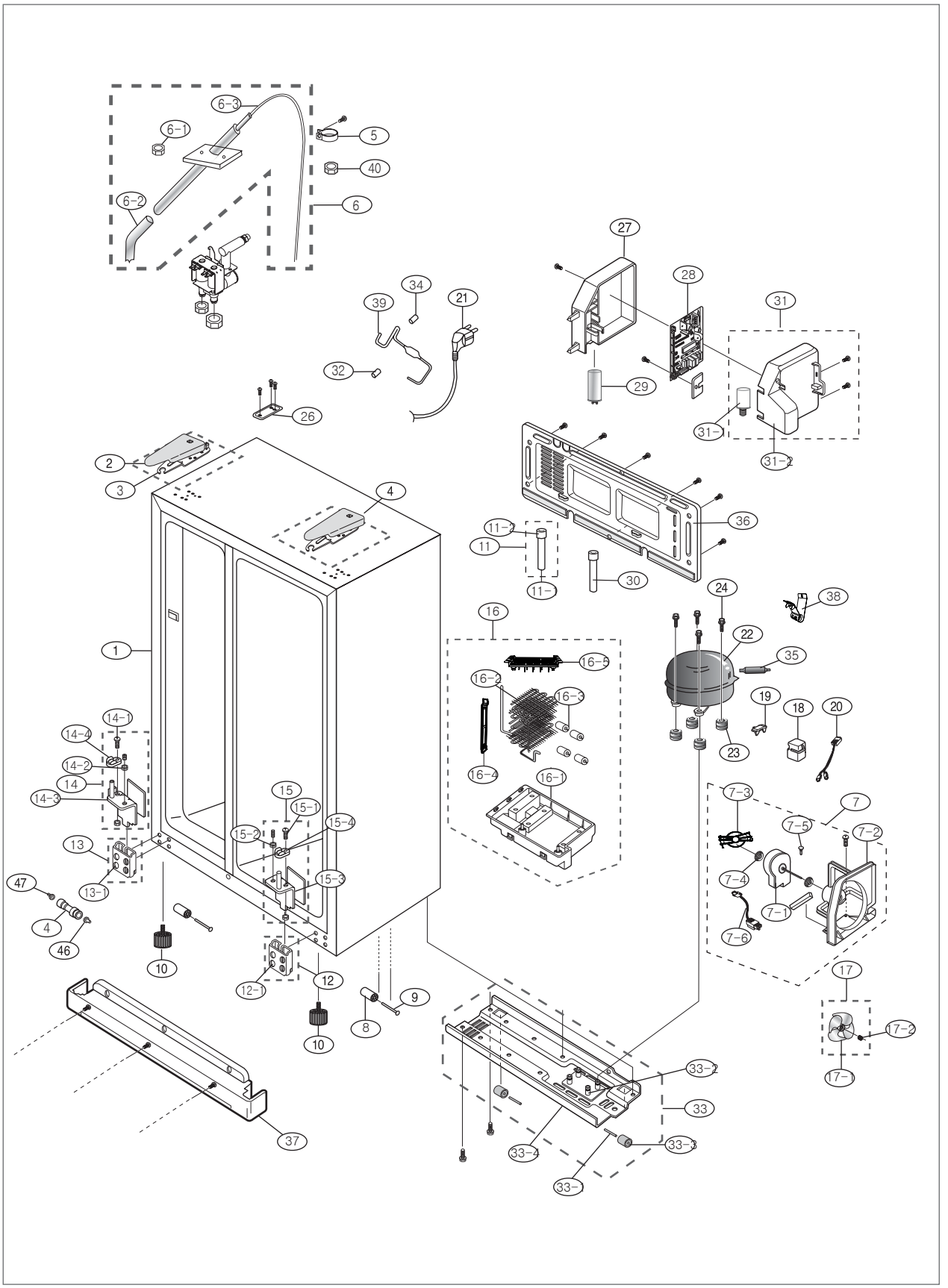
7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Refrigerator

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
15-9	DA66-00151A	ROLLER-FRONT	A-TOP,POM,•'16,-,WHT,-,CONV	2	RW650	
16	DA97-00148N	ASSY CASE-VEG,LOW(750)	A-TOP,EXP,normal,	1	RI001	
16-1	DA63-00805A	COVER-VEG FRONT,A	A-TOP,GPPS,-,-,-,-,-,N	1	RI100	
16-2	DA63-00806D	COVER-VEG FRONT,B	A-TOP,HIPS,Cool-white,	1	RI101	
17	DA97-00144N	ASSY CASE-VEG,UP(750)	A-TOP,EXP,Normal,C	1	RI002	
17-1	DA63-00805A	COVER-VEG FRONT,A	A-TOP,GPPS,-,-,-,-,-,N	1	RI100	
17-2	DA63-00806D	COVER-VEG FRONT,B	A-TOP,HIPS,Cool-white,	1	RI101	
18	DA63-00811C	COVER-VEG LOW(750)	A-TOP,HIPS,Cool-white	1	RI009	
19	DA97-00730F	ASSY RAIL-BASKET R(B-TYPE)	B-TYPE,A-TOP,	1	RF020	
19-1	DA63-02079A	GROMMET-RAIL	A-TOP,NY-6,WIRE-BOX,A,B-TYP	1	RI088	
20	DA97-00731F	ASSY RAIL-BASKET L(B-TYPE)	A-TOP(B-TYPE)	1	RF019	
20-1	DA63-02079A	GROMMET-RAIL	A-TOP,NY-6,WIRE-BOX,A,B-TYP	1	RI088	
21	DA63-00810C	COVER-VEG UP	A-TOP(750),HIPS,COOL-WHITE,	1	RI010	
22	DA97-02806A	ASSY TRAY-EGG	EPEL,T2.5,W324.5,L122.2,H1	1	RI158	
22-1	DA63-02491A	COVER-TRAY EGG	EPEL,GPPS,T2.5,W319.0,L11	1	RE023	
22-2	DA63-02492A	TRAY EGG	EPEL,GPPS,T2.5,W324.5,L122.2,H	1	RE022	
23	DA97-01396Q	ASSY SHELF-REF FOLD	A-TOP(750),NON-PRINT	1	RI038	
23-1	DA67-01349A	SHELF REF-FOLD A	A-TOP 750,PP+GLASS,3,39	1	RI042	
24	DA61-01245B	RAIL-SHELF FOLD L	A-TOP(760),ABS,-,-,-,C	1	RI132	
25	DA61-01248B	RAIL-SHELF FOLD R	A-TOP(760),ABS,-,-,-,C	1	RI133	
26	4713-001197	LAMP-INCANDESCENT	130V,-,30W,BLUE,-,-,25	2	RI081	
27	DA63-00800H	COVER-CONTROL CONVERTIBLE	A-TOP,ABS,CHIN	1	RI005	
28	DA97-00174K	ASSY TRAY-CHILLED(750)	A-TOP,EXP,750LT,C	1	RI018	
28-1	DA63-00808A	COVER-TRAY CHILL,A	A-TOP,GPPS,-,-,-,-,-,	1	RI017	
28-2	DA63-00809D	COVER-TRAY CHILLED,B	BEST-BUY,HIPS,-,-,-	1	RI017	
28-3	DA63-00818D	TRAY-CHILLED ROOM(750)	A-TOP,ABS,Cool-wh	1	RI018	
29	DA61-01220A	SHELF WINE	GPPS	1		

7 . EXPLODED VIEW& PARTS LIST

7-3) Cabinet



7 . EXPLODED VIEW & PARTS LIST

■ Parts List of Cabinet

NO	CODE-NO	PART NAME	Spec	Quantity
1	DA70-00393A	CABINET-ASSY	A-TOP,SECC1,T0.5,-,-,-,-,-	1
2	DA63-02086B	COVER HINGE-UPP	A-TOP,N-ABS,2.5,-,-,-,-,	2
3	DA61-01709A	HINGE-UP	AD,SHP1,T3,-,-,-,-,50MM,BLK	2
4	DA62-20111B	TUBE-FITTING	POM,-,-,-,-,SRS6580Z,OD8.1	1
5	DA65-20110B	CLAMP	-,NY-66,-,-,-,DN-5N,PI8.0	4
6	DA97-00708B	ASSY PIPE WATER	BEST-BUY,115V , 19W	1
6-1	DA60-30104A	NUT-WATER LINE A	-,-,-,-,NY-6,SR-S7180,-	1
6-2	DA63-01291A	GROMMET-PIPE WATER FILL,IN	BEST-BUY,SILI	1
6-3	DA73-00070K	PIPE-WATER LINE	ZIPEL,PB,-,•'6.35,L2000,	1
7	DA97-01283K	ASSY SUPPORT-CIRCUIT MOTOR	A-TOP,ET(DOM)	1
7-1	DA31-00146B	MOTOR BLDC	DRCP5030LA,1560,-,DC12V,230mA,-,-,2.7W,ATOP,-,-,	1
7-2	DA61-00415A	SUPPORT-CIRCUITE MOTOR	A-TOP,ABS SCRAP,-,-,-,WHITE,-	1
7-3	DA61-02355B	BRACKET-CUIRCUIT MOTOR	ABS,NEXT,-,-,-,NTR,-	1
7-4	DA63-01146A	GROMMET-MOTOR,REAR	A-TOP,NBR,-,-,-,ID6.5,OD42,BLK,BLDC	2
7-5	DA63-40167A	GROMMET-COVER CHIL	-,SILICON,T3.0,-,L16,-,-,BLACK,-	1
7-6	DA96-00042A	ASSY-HARNESS MOTOR	A-TOP UL(MOTOR),C-FAN,350MM	1
8	DA61-01871A	CASTER	A-TOP,NY-66,O.D-35MM,-,-,-,-	2
9	DA61-01920A	CASTER-RIVET	(ZPC2),MSWR10,OD8.0,L54,-,-	2
10	DA61-30102A	FOOT-FRONT	SR-F5670,PP,-,YEL,T0.6,-,ZPC2	2
11	DA97-00359A	ASSY TUBE-DRAIN	ET-PJT,-	1
11-1	DA62-20001R	TUBE PVC	V2-PJT,GASKET SCRAP,T1.0,-,L21	1
11-2	DA63-00951C	GROMMET-DRAIN HOSE	V2-PJT,NBR,-,-,-,-,-,	1
12	DA97-02242B	ASSY BRACKET-HINGE LOW R 50	USP/A-TOP,50	1
12-1	DA61-00459D	BRACKET HINGE-LOW	A-TOP,SHP1,T2.6,50MM,M	1
13	DA97-02241B	ASSY BRACKET-HINGE LOW L 50	USP/A-TOP,50	1
13-1	DA61-00459D	BRACKET HINGE-LOW	A-TOP,SHP1,T2.6,50MM,M	1
14	DA97-01760G	ASSY HINGE LOW L	USP,-,A-TOP,NEW-SHAFT,N	1
14-1	6011-001442	BOLT-SOCKET	M8,L15,ZPC(BLK),SCM435	1
14-2	6021-001125	NUT-HEXAGON	3,M8, P1.25,ZPC(BLK),SWRCH10	1
14-3	DA61-01607C	HINGE-LOW L	A-TOP/USP,SHP1,T4.5,-,-,BLKUSP05(	1
14-4	DA66-00343A	CAM-RISER	ATOP,ET),NY-66(2110R),BL	1
15	DA97-01763D	ASSY HINGE LOW R	USP,-,A-TOP,NEW-SHAFT,N	1
15-1	6011-001442	BOLT-SOCKET	M8,L15,ZPC(BLK),SCM435	1
15-2	6021-001125	NUT-HEXAGON	3,M8, P1.25,ZPC(BLK),SWRCH10	1
15-3	DA61-01608B	HINGE-LOW R	A-TOP/USP,SHP1,T4.5,-,-,BLKUSP05(	1
15-4	DA66-00343A	CAM-RISER	ATOP,ET),NY-66(2110R),BL	1
16	DA97-01285C	ASSY TRAY-DRAIN,WATER(SPIRAL)	A-TOP,SPIR	1
16-1	DA66-00034A	TRAY-DRAIN WATER	-,-,-,-,-,-,-,T2.0,-	1
16-2	DA97-00259G	ASSY PIPE-SPIRAL CONDESNSER	A-TOP,SPIRAL	1
16-3	DA63-40171B	GROMMET-SUCT PIPE A	-,NBR,OD20,ID4,L20,-	2
16-4	DA61-00863A	BRACKET-CONDENSER SIDE	A-TOP,SHP1,T1.0,-	2
16-5	DA61-00864A	BRACKET-CONDENSER LOW	A-TOP,SHP1,T1.0,-,	1
17	DA31-00010D	FAN-ASS'Y	-,ET,ZIPEL,ASSY,-,UNIT,°À150	1
17-1	DA31-00015C	FAN-TURBO	-,ET-PJT,ABS+GLASS FIBE,-,GR-4	1
17-2	DA61-20128A	SPRING ETC-FAN	-,STS304,PI7.8,-,OD1.0,-,	1
18	DA63-01866A	COVER RELAY	SBS,NORYL,-,-,-,-,-,-,-	1
19	DA34-10003S	RELAY PROTECTOR O/L	4TM445PHBZZ-53,	1
20	DA39-20389E	WIRE HARNESS-EARTH	-,-,-,-,-,-,UL 1015 A	1
21	DA39-10165E	CBF-POWER CORD	ET-PJT,-,SVT-3,-,-,-,-,-,	1
22	MK183CL2U/E07	COMPRESSOR	8.19cc,115V~60Hz,RSCR	1
23	DA63-02017A	GROMMET-COMP	QUEEN,EPDM,-,-,-,-,-,-,-	4

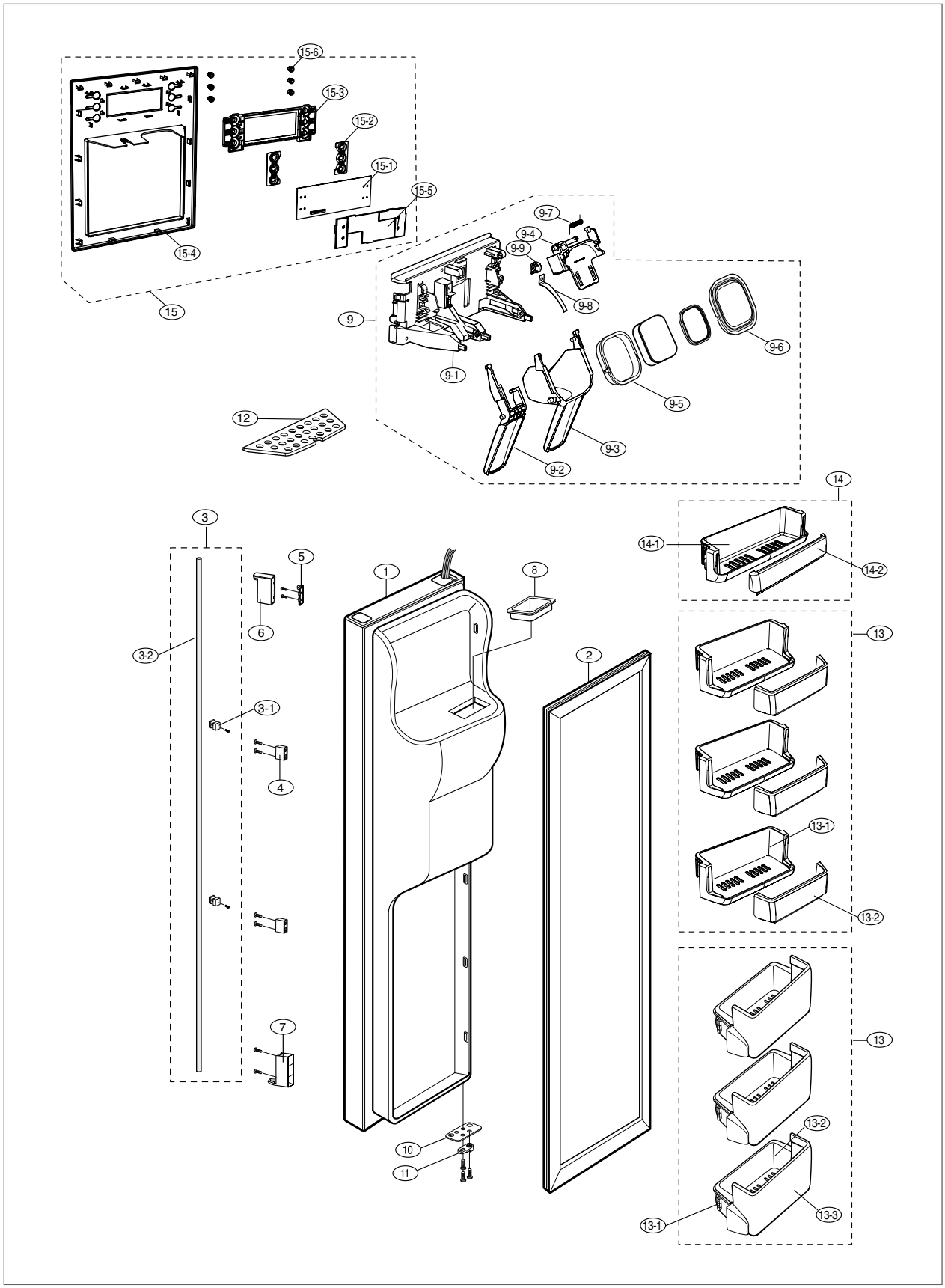
7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Cabinet

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
26	DA63-01275A	COVER-TUBE WATER	BEST-BUY,HIPS,-,-,-,-,-	1	RO009	
27	DA61-00261C	CASE-PCB, PANEL	A-TOP,ABS,-,-,-,BISQUE,-	1	RO048	
28	DA41-00104S	PBA MAIN	A-TOP(LOWE'S),-,FR-1,148*197,G	1	RO007	
28	DA41-00104R	PBA MAIN	A-TOP(LOWE'S),-,FR-1,148*197,B	1	RO007	
29	2501-001045	C-OIL	12uF,250V,BK,40X70,16mm	1	RO004	
30	DA97-00359A	ASSY TUBE-DRAIN	ET-PJT,-	1	RW012	
30-1	DA62-20001R	TUBE PVC	V2-PJT,GASKET SCRAP,T1.0,-,L21	1	RW904	
30-2	DA63-00951C	GROMMET-DRAIN HOSE	V2-PJT,NBR,-,-,-,-,-	1	RW389	
31	DA97-03239K	ASSY CASE-PCB	SPT-3(SJT KDK),CUR,XAA,XAC	1	RO047	
31-1	DA27-00002A	COIL-NOISE FILTER	4,+50%,-30%,38*50,-,-	1	RO004	
31-2	DA63-00783A	COVER PCB-PANEL	A-TOP,N-ABS,-,-,-,-,-,-	1	RO050	
32	DA62-20001P	TUBE PVC	ZIPEL,-,-,-	1	RW902	
33	DA97-00555D	ASSY CHASSIS-COMP	A-TOP,ET,-,-,-,-,-,-	1	RO002	
33-1	DA60-90146A	PIN-CASTER	MSWR10,OD6.0,L40,ZPC2,SR-289-	2	RH019	
33-2	DA61-01867A	BRACKET-COMP	A-TOP,SBHG1,T2.0,-,-,-,-	4	RW083	
33-3	DA61-40126B	CASTER-REAR	REF-ALL,PP,-,PI 44,NTR,W22,-	2	RH011	
33-4	DA71-00058A	CHASSIS-COMP	ET-PJT,SBHG1,T1.4,-,-,-,-	1	RO002	
34	DA63-40171B	GROMMET-SUCT PIPE A	-,NBR,OD20,ID4,L20,-	1	RH033	
35	DA73-30102B	DRYER-ASSY	-,CU,OD18.85,ID2,L102,10.0G,-	1	RH014	
36	DA97-00479C	ASSY COVER COMP	ET-PJT,SBHG1,T0.35,-,-,-,-,-,	1	RH001	
37	DA63-01968G	COVER-LEG FRONT	A-TOP(04),PP,I-BLACK,SC-	1	RO003	
38	DA61-01957A	CLIP-DRYER	AD,SECC1,T0.6,-,-	1	RO141	
39	DA97-00918A	ASSY PIPE CONNECT	A-TOP,SUCTION	1	RO079	
40	DA60-30105A	NUT-WATER LINE B	-,-,-,-,NY-6,SR-S7180,-	1	RF043	
41	DA63-40171D	GROMMET-SUCT PIPE B	RAIL L19.5,NR,-,OD20	2	RH034	

7 . EXPLODED VIEW& PARTS LIST

7-4) Disassembly of Freeze Door



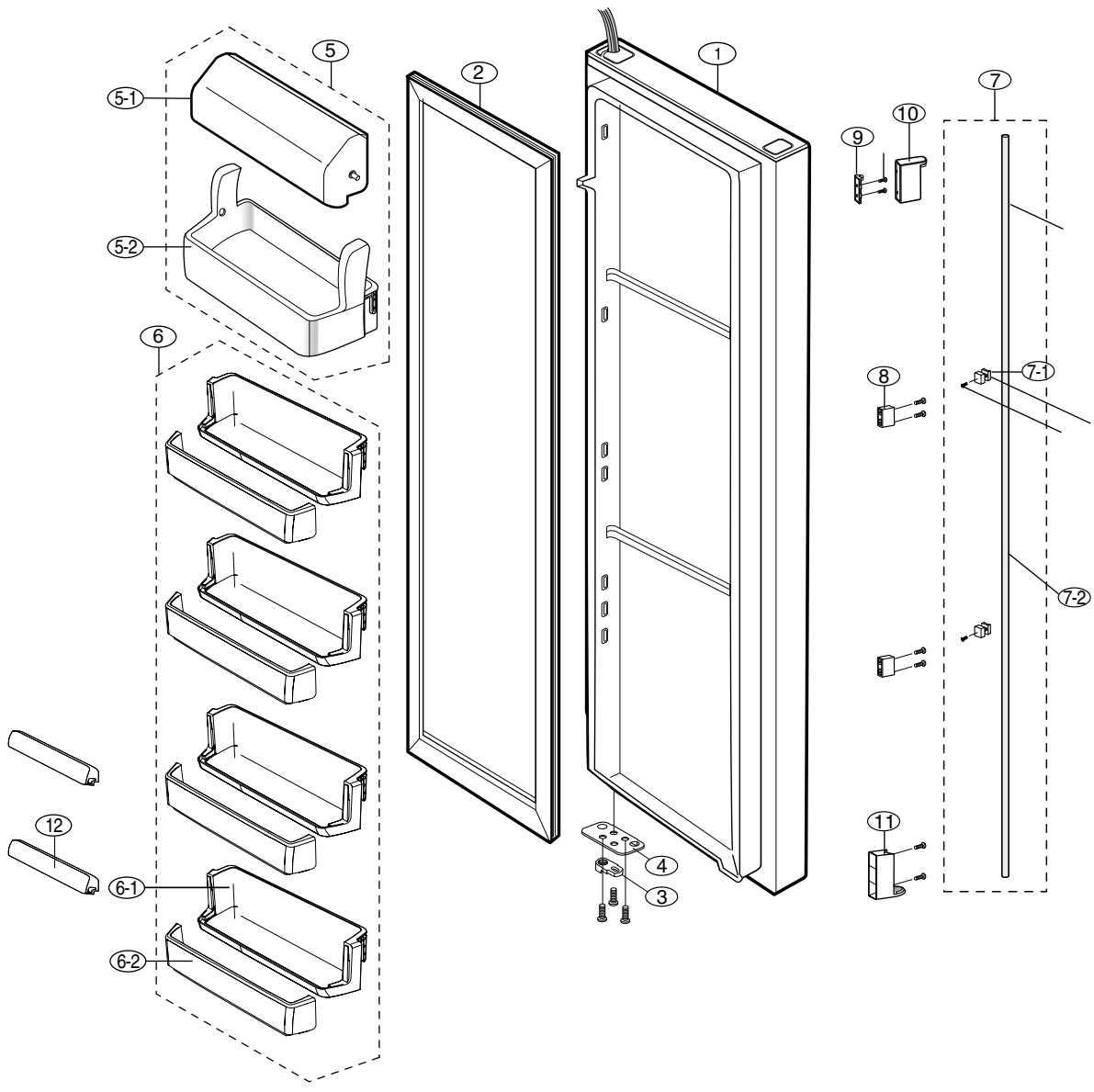
7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Freezer

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
1	DA91-02180A	ASSY DOOR FOAM FRE	A-TOP(24/26),SMOOTH W	1	RD001	
2	DA97-01800C	ASSY-GASKET DOOR FRE	A-TOP,W342,H1586,-,	1	RD012	
3	DA97-00727K	ASSY HANDLE-BAR	LOWE'S,-,-,-,-,-,SNOW WH	1	RO140	
3-1	DA63-00789A	GROMMET-FIXER HANDLE	EXP,PC-ABS,-,-,-,-,	2	RW395	
3-2	DA64-00575U	HANDLE BAR	A-TOP,AL,-,-,-,-,SNOW WH,-	1	RO017	
4	DA61-00264N	SUPPORT-HANDLE MID	LOWES,PCABS,-,-,-,SNO	2	RO060	
5	DA61-00831A	BASE-CAP HANDLE	N-PJT,ABS,-,-,-,N.T.R,-	1	RW057	
6	DA67-00773A	CAP-HANDLE UPP	N-PJT,ABS,-,-,-,-,-	1	RO106	
7	DA67-00796A	CAP-HANDLE LOW	n-PJT,ABS,-,-,-,-,AL-PLAT	1	RO058	
8	DA67-00537B	CAP-CHUTE ICE(50)	A-TOP,ABS,SC-02740R,50	1	RD044	
9	DA97-02050E	ASSY COVER-PCB PANEL REAR	USP-PJT,ABS SC	1	RD067	
9-1	DA63-02460A	COVER PCB-PANEL REAR	USP 05,ABS,SC-97527	1	RO051	
9-2	DA66-00267A	LEVER DISPENSER-WATER	AD,ABS,T2.5,-,-,-,	1	RD023	
9-3	DA66-00294A	LEVER DISPENSER-ICE	AD,ABS,-,-,-,-,CRYST	1	RD022	
9-4	DA63-01970A	COVER-ICE ROUTE A	AD,ABS,T2.5,-,-,-,-,BL	1	RD019	
9-5	DA63-01971A	COVER-ICE ROUTE B	AD,ABS,T1.8,-,-,-,-,BL	1	RD064	
9-6	DA63-01972A	GASKET-COVER ICE ROUTE	AD,SILICON,T1.5,-	1	RD051	
9-7	DA61-01651A	SPRING ETC-COVER ICE ROUTE	AD,STS304,1.0	1	RD050	
9-8	DA61-01616A	SPRING ETC-LEVER DISP WATER	AD,STS304,-,	1	RD049	
9-9	DA61-01869A	OIL DAMPER	AD,POM,-,120g/Cm,-,OD15,-,-	1	RW559	
10	DA61-00564A	STOPPER DOOR	A-TOP,SHP1,3,-,-,BLK,50MM	1	RE043	
11	DA66-00344A	CAM-HINGE RISER LOW	USP05(ATOP,ET),NY-66	1	RO105	
12	DA63-01975A	TRAY DISPENSER	AD,ABS,T2.5,-,-,-,SC-9752	1	RO065	
13	DA97-03270A	ASSY GUARD FRE-LOW	LOWES05,-,50mm,-,-,CO	3	RD016	
13-1	DA63-02867A	GUARD FRE-LOW,A	LOWES 05,HIPS,T2.5,-,-,C	1		
13-2	DA63-02868A	GUARD FRE-LOW,B	LOWES 05,GPPS,-,-,-,NTR,	1		
13	DA97-00163G	ASSY-GUARD FRE LOW,TILT	LOWES,TILT,EXP,5	3	RD016	
13-1	DA63-00840A	GUARD-SUPT	A-TOP,HIPS,-,-,-,WHT,50MM,PRE	1	RW423	
13-2	DA63-00842C	GUARD-FRE LOW,A(50)	A-TOP,HIPS,Cool-whit	1	RD016	
13-3	DA63-02846A	GUARD FRE-LOW,B TILT	LOWES 05,GPPS,-,-,-	1		
14	DA97-03269A	ASSY GUARD FRE-UPP	LOWES05,DISP,50mm,-,-	1	RD017	
14-1	DA63-02845A	GUARD FRE-UPP,B	LOWES 05,GPPS,-,-,-,NTR,	1		
14-2	DA63-02866A	GUARD FRE-UPP,A	LOWES 05,HIPS,-,-,-,COOL	1		
15	DA97-03337E	ASSY COVER-DISPENSER	A-TOP,DISP,EXP,GOOD	1	RD026	
15-1	DA41-00204J	PBA PANEL	Lowe's,AMERICA,FR-4,-,DISPENSE	1	RO052	
15-2	DA61-00877A	SUPPORT-KNOB TOUCH,DISP-TRIM	A-TOP,SILIC	2	RI093	
15-3	DA63-02751A	COVER-CONTROL WINDOW	A-TOP(Lowes),ABS,Sn	1	RD052	
15-4	DA63-02752A	COVER-DISPENSER	A-TOP(Lowes),ABS,Snow-wh	1	RD032	
15-5	DA63-02817A	COVER PCB-PANEL SUB	A-TOP,ABS SCRAP,-,-,	1	RO103	
15-6	DA64-00741A	KNOB-TOUCH(TRIM-KIT)	A-TOP(TRIM-KIT),ABS	6	RD040	

7 . EXPLODED VIEW& PARTS LIST

7-5) Disassembly of Refrigerator Door



7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Refrigerator Door

NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
1	DA91-02181A	ASSY DOOR FOAM REF	A-TOP(24/26),SMOOTH W	1	RE001	
2	DA97-01800D	ASSY-GASKET DOOR REF	A-TOP,W469,H1586,-,	1	RE016	
3	DA66-00344A	CAM-HINGE RISER LOW	USP05(ATOP,ET),NY-66	1	RO105	
4	DA61-00564A	STOPPER DOOR	A-TOP,SHP1,3,-,-,BLK,50MM	1	RE043	
5	DA97-00160E	ASSY-GUARD DAIRY	-,-,-,-	1	RE028	
5-1	DA63-00848B	COVER-GUARD	A-TOP,GPPS,2.5,-,-,-,LOWE'S,	1	RD018	
5-2	DA63-00852D	GUARD-DAIRY	A-TOP(50),HIPS,COOL-WHITE,SC	1	RE025	
6	DA97-03290A	ASSY GUARD REF-LOW	A-TOP,50mm DOOR,-,-,-	4	RE025	
6-1	DA63-02832A	GUARD REF-LOW A	A-TOP,HIPS,T2.5,-,-,COOL	1		
6-2	DA63-02833A	GUARD REF-LOW B	A-TOP,GPPS,T2,-,-,-,-	1		
7	DA97-00727K	ASSY HANDLE-BAR	LOWE'S,-,-,-,-,-,SNOW WH	1	RO140	
7-1	DA63-00789A	GROMMET-FIXER HANDLE	EXP,PC-ABS,-,-,-,-,	2	RW395	
7-2	DA64-00575U	HANDLE BAR	A-TOP,AL,-,-,-,-,SNOW WH,-	1	RO017	
8	DA61-00264N	SUPPORT-HANDLE MID	LOWES,PCABS,-,-,-,SNO	2	RO060	
9	DA61-00831A	BASE-CAP HANDLE	N-PJT,ABS,-,-,-,N.T.R,-	1	RW057	
10	DA67-00773A	CAP-HANDLE UPP	N-PJT,ABS,-,-,-,-,-	1	RO106	
11	DA67-00796A	CAP-HANDLE LOW	n-PJT,ABS,-,-,-,-,AL-PLAT	1	RO058	
12	DA71-00090A	GUIDE-BOTTLE REF	ET-PJT,PP,T2.5,-,-,-,-	2	RE021	

7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Other

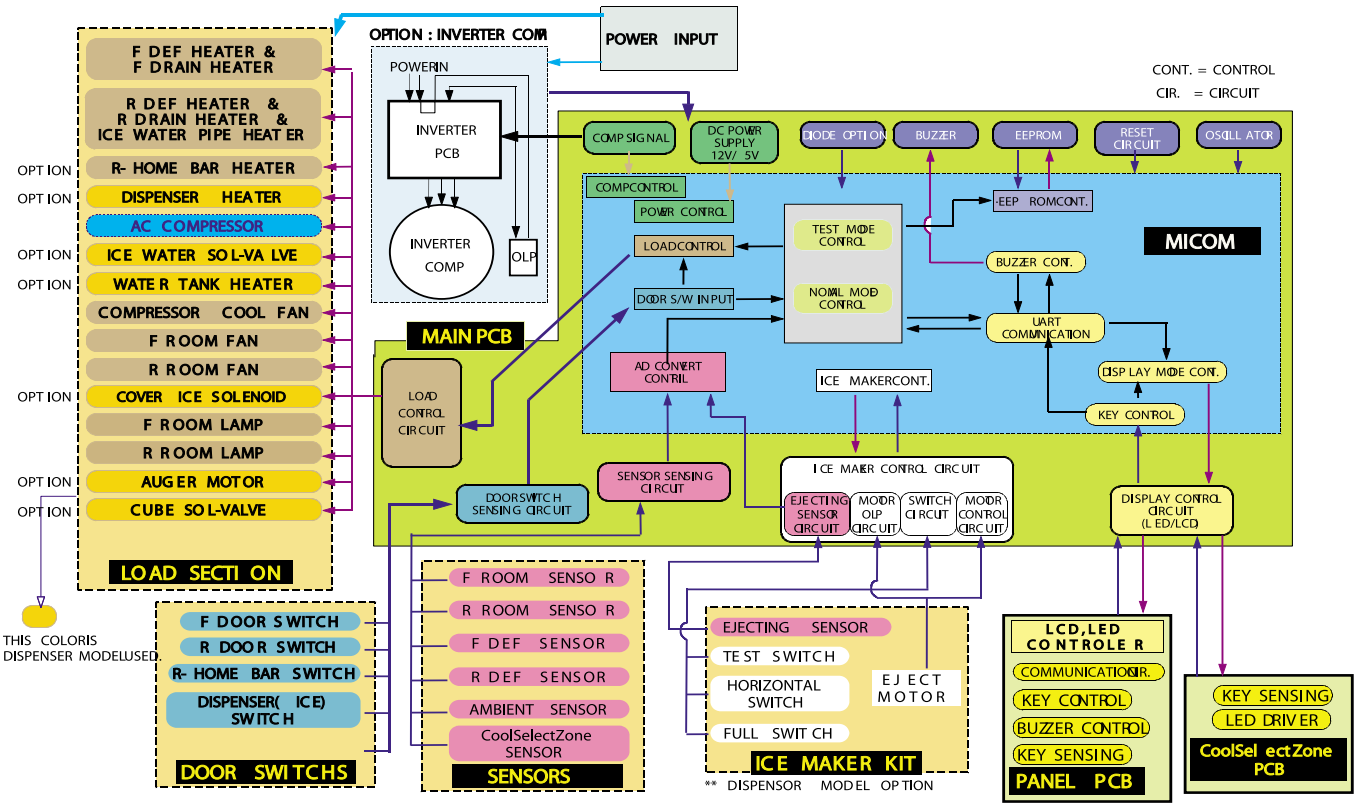
NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
	6501-000122	CABLE TIE	DACT-100,-,W2.5,L101.6,NTR,NYL	10	RO101	
	6501-000124	CABLE TIE	DACT-200,-,W4.8,L190,NTR,NYLON	4	RO101	
	6501-001038	CABLE TIE	DA-275,T1.4,W6.2,L275,NTR,NYLO	1	RW131	
	6002-001335	SCREW-TAPPING	BH,+,1,M4,L12,DAC(WHT),SWR	11	RS069	
	DA72-00410W	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T5,W20,L	1	RW961	
	DA72-00410X	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T3,W10,L	1.45	RW961	
	6002-001341	SCREW-TAPPING	BH,+,-,1,M4,L16,DAC(WHT),S	34	RS080	
	6002-001351	SCREW-TAPPING	BH,+,-,M4,L8,DACRO(WHT),SW	1	RS071	
	6002-001204	SCREW-TAPPING	TH,+,-,1,M4,L16,PASS,STS30	3	RS066	
	6002-000475	SCREW-TAPPING	TH,+,1,M4,L20,-,STS304	5	RS080	
	6002-000473	SCREW-TAPPING	TH,+,1,M4,L14,-,STS304	9	RS080	
	DA60-00001A	SCREW-SPECIAL	HEX,-,-,-,L8.3,-,STS-304,-	2	RQ747	
	DA63-02621A	GROMMET-SOLENOID	EPEL,NBR,T2.6,W43.0,L45	1	RF055	
	DA60-10131A	SCREW-MACHINE	-,STS,M3,L4.6,PH,+,-,-,U	1	RO108	
	DA60-10132A	SCREW-TAPPING	PH,+,-,PI3,L15,-,STS,-,2S	4	RS080	
	6002-000217	SCREW-TAPPING	TH,+,1,M4,L8,ZPC(YEL),MSWR	1	RS080	
	DA72-00410K	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T3,W12,L	1	RW961	
	DA72-00410L	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T5,W7,L3	1	RW961	
	DA72-00410P	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T5,W20,L	1	RW961	
	6002-000213	SCREW-TAPPING	TH,+,-,1,M4,L12,ZPC(YEL),S	51	RS047	
	6501-000123	CABLE TIE	DACT-140,-,W3.6,L146,NTR,NYLON	7	RO101	
	DA62-00649A	PIPE-SLEEVE	OD4.7,NYLON,ID3.0,L90,WATER-	1	RW570	
	DA72-00410R	SEAL CUTT-SPONGE	A-TOP,N SPONGE,-,T5,W40	2	RW961	
	6002-000462	SCREW-TAPPING	PH,+,2,M3.0,L10,ZPC(YEL),M	5	RS080	
	6002-000471	SCREW-TAPPING	TH,+,1,M4,L12,PASS,STS304,	1	RS080	
	6009-001293	SCREW-SPECIAL	PWH,+,-,M4,L15.5(6.5),PASS	2	RQ747	
	6003-001136	SCREW-TAPTITE	BH,+,B,M4,L8,ZPC(YEL),SWRC	9	RS080	
	6002-000520	SCREW-TAPPING	TH,+,2,M4,L12,ZPC(YEL),SWR	1	RS080	
	6003-001435	SCREW-TAPTITE	HWH,+,S,M5,L12.7,ZPC(YEL),	2	RS082	
	6009-001252	SCREW-SPECIAL	PH,+,-,M4.0,L20(12),ZPC(YE	4	RQ747	
	DA62-00440A	SEAL-SUB COND	A-TOP,N FOAM-PE,T5,SUB-CON	1	RH030	
	DA63-40128A	GROMMET-SUB COND	-,NBR,-,-,-,-,-,-,DARK-	2	RH022	
	3301-000016	CORE-FERRITE	AE,17.7X9.5X28MM,1500,2800G	1	RH017	
	6043-000170	PIN-PARALLEL(KEY)	A,-,L18,ZPC(WHT),MSWR1	2	RW563	
	6006-001108	SCREW-TAPPING	TH,+,PW(OD15),-,M4,L16,ZPC	8	RS080	
	6009-001255	SCREW-HEX	SWRCH18A,-,HEX-PLANGE,HEX,M6,L	8	RW664	
	DA60-10004A	SCREW-TAPPING	-,SGDC90/90,-,L16,HH,+,-,-	8	RS080	
	DA72-60106V	SEAL CUTT-SPONGE	-,SPONGE,-,T10,W80,L40,	6	RW961	
	DA63-00252A	GROMMET-TUBE WATER	SRS7580,HDPE,-,-,72.0	2	RF018	
	DA02-40034A	CATALYST	PC-SSC,-,PC-35	70	RI077	
	DA62-01018A	SEAL CUTT-RUBBER	A-TOP M/C,RUBBER,BLACK,	1	RW960	
	DA72-60362C	SEAL CUTT-SPONGE	-,SPONGE,WHT,T10,W40,L4	10	RW961	
	DA60-10122C	SCREW-TAPPING	-,MSWR10,M5,L16,HH,-,-,-,Z	4	RS080	
	DA62-00215B	SEAL CUTT-SPONGE	ALL,SPONGE,-,T20,W20,L1	1	RW961	
	DA64-01232A	HANDLE-REAR	A-TOP(NEW),PP,-,-,-,-,NTR,PP	2	RO013	
	DA72-00274V	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T5,W15,L	2.3	RW961	
	DA72-00274W	SEAL CUTT-SPONGE	A-TOP,SPONGE,-,T10,W15,	1	RW961	
	6002-000215	SCREW-TAPPING	TH,+,-,1,M4.0,L16,ZPC(YEL)	1	RS080	
	6002-000216	SCREW-TAPPING	TH,+,-,1,M4.0,L20,ZPC(YEL)	5	RS080	
	DA35-10013Q	RELAY-PTC	180V,12.0A,#250,J531Q32E4R7M18	1	RH006	

7 . EXPLODED VIEW& PARTS LIST

■ Parts List of Other

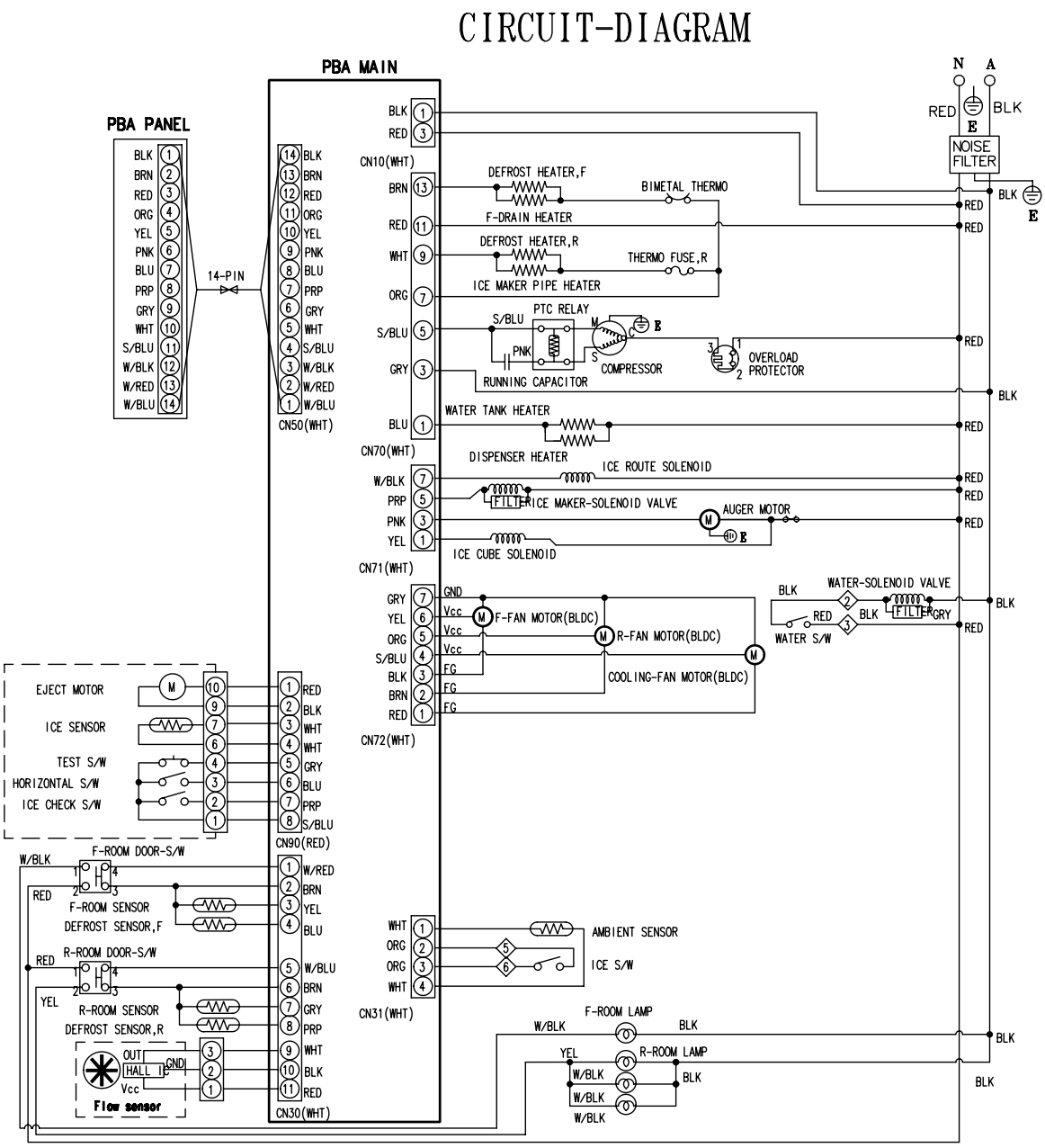
NO	CODE-NO	PART NAME	Spec	Quantity	SEVICE CODE	Remark
	DA39-00084D	WIRE HARNESS-RELAY	ET-PJT,-,UL,-,-,-,AWG	1	RH016	
	DA60-10107A	SCREW MACHINE	-,BSBN,M4,L10,-,+,-,-,-,EA	5	RS016	
	DA60-20008A	BOLT-HEX	SM30C,-,-,L42.6,-,-,-	4	RW074	
	DA73-10190U	PIPE-CONNECT DISC,B	TD-PJT,C1220-T,-,6.3	1	RH026	
	DA73-10190V	PIPE-CONNECT DISC,A	TD-PJT,C1220T 1/2H,-	1	RZ020	
	DA72-60040D	SEAL CUTT-RUBBER	-,POLYBUTILENE,-,-,-,-,	1	RW960	
	6002-000601	SCREW-TAPPING	TH,+,1,M4,L30,ZPC(YEL),SWR	1	RS055	
	6003-000003	SCREW-TAPTITE	BH,+,-,B,M4,L10,CBLACK,SWR	1	RS080	
	DA60-10124A	SCREW-TAPPING	HH,-,-,-,M6,L16,ZPC2-Y,-,-	6	RS045	
	DA97-01666G	ASSY CASE-FILTER	USP,Inside-filter,White	1	RI006	
	6001-001458	SCREW-MACHINE	TH,+,M5,L21.0,PASS,STS304,	4	RS021	
	DA63-00588A	GROMMET-TUBE FILTER	ZIPEL,SILICON,T2.0,-	1	RF025	
	DA67-00466A	CAP-SUPPORT FILTER	ZIPEL,HIPS,-,-,-,-,IN	1	RW170	
	0205-001100	GREASE-SILICON	DOW CORNING 111,SILICON,1	300	RW364	
	DA70-00288A	PLATE-BOTTOM	ET-PJT,SCP1,T3.0,-,-,-,Ni+C	1	RW588	
	DA73-00070Y	PIPE-WATER LINE	A-TOP,LLDPE,-,OD•'6.35,L	0.8	RO090	
	DA73-00070Z	PIPE-WATER LINE	A-TOP,LLDPE,-,OD•'6.35,L	1.8	RO090	
	DA74-00070A	VALVE-FITTING-NUT	ET-PJT,CU,-,-,-,-	3	RW915	
	6502-000112	CABLE CLAMP	DA-8N,ID13.2,T1.0,NYLON6/6,N	2	RW959	
	DA29-00003B	FILTER WATER-ASSY	-,A-TOP,-,-,86*86*167,	1	RI070	
	DA63-00586A	COVER-TUBE FILTER	ZIPEL,PP,T2.0,-,-,-,SC	1	RW303	
	DA73-00211A	RUBBER-CAP HOSE	I4-PJT,SILICON,-,GRAY,-	1	RW653	
	DA74-40150H	VALVE	RIV-12A-5,-,-,-,-,110-127V60Hz	1	RW911	
	DA61-00764A	GUIDE-PIPE WATER,ICE	BEST-BUY,PP,-,-,-,-	1	RW462	
	DA63-01277A	COVER-FIXER TUBE	BEST-BUY,PP,-,-,-,-,-,-	1	RW269	
	DA97-00724E	ASSY COVER-FILTER	A-TOP,Insert-filter,EX	1	RI068	
	DA63-00763B	COVER-FILTER	A-TOP,HIPS,Cool-white,SC-00	1	RI068	
	DA99-00240A	ASSY PACKING-VALVE	BEST-BUY,FILTER-INSTA	1	RI112	
	DA62-00305A	VALVE-FITTING PU	BEST-BUY,(C3604BD-F)+BN	1	RW913	
	DA80-00002A	SPANNER-WRENCH	ZIPEL,ET,-,-,-,-,-,L-WREN	1	RW703	
	6002-000630	SCREW-TAPPING	PH,+,-,2S,M3,L8,ZPC(YEL),S	1	RS080	
	DA61-01868A	BRACKET-OIL DAMPER	AD,ABS,-,-,-,SC-93437	1	RD051	
	DA61-02438A	SPRING ETC-LEVER DISPENSER	AD,STS304,-,-	1		
	6003-000333	SCREW-TAPTITE	RH,+,2S,M3,L10,ZPC(YEL),SW	4	RS080	
	6002-000244	SCREW-TAPPING	TH,+,B,M5,L16,ZPC,SWRCH18A	9	RS048	
	6002-001122	SCREW-TAPPING	FH,+,1,M4,L14,ZPC(WHT),SWR	27	RS059	
	DA62-00476C	SEAL CUTT-SPONGE	V2,N,A-TOP,SPONGE,-,T5,	2	RW961	
	DA62-00476D	SEAL CUTT-SPONGE	V2,N,A-TOP,SPONGE,-,T7,	4	RW961	
	DA72-60424B	SEAL CUTT-SPONGE	-,SPONGE,-,T5,-,-,W350,	5	RW961	
	DA61-01615A	BRACKET-PIPE WATER	AD,ABS,T2.5,-,-,SC-93	1	RO130	
	DA61-01713A	GUIDE ICE-ROUTE	AD,ABS,-,-,-,SC-02740R,5	1	RD062	
	DA62-00633F	PIPE-WATER LINE	AD,PB,I.D4.2,O.D6.35,L15	1	RO090	
	DA62-00779H	SEAL CUTT-SPONGE	AD,SPONGE,-,T3,W50,L20,	1	RW961	
	DA34-00011B	SWITCH MICRO	-,-,-,-,250V,-,15A,-,-,-,-	2	RD063	
	6002-000613	SCREW-TAPPING	TH,+,-,2,M5,L16,ZPC(YEL),S	2	RS056	
	DA73-10469E	PIPE-WATER	SR-S6580/S7080,PVC,-,OD16,L50	1	RF018	
	DA39-20389H	WIRE HARNESS-EARTH	EARTH,UL AWG18,RING-T	1	RW934	
	DA62-20001P	TUBE PVC	ZIPEL,-,-,-		RW902	

8 . BLOCK DIAGRAM



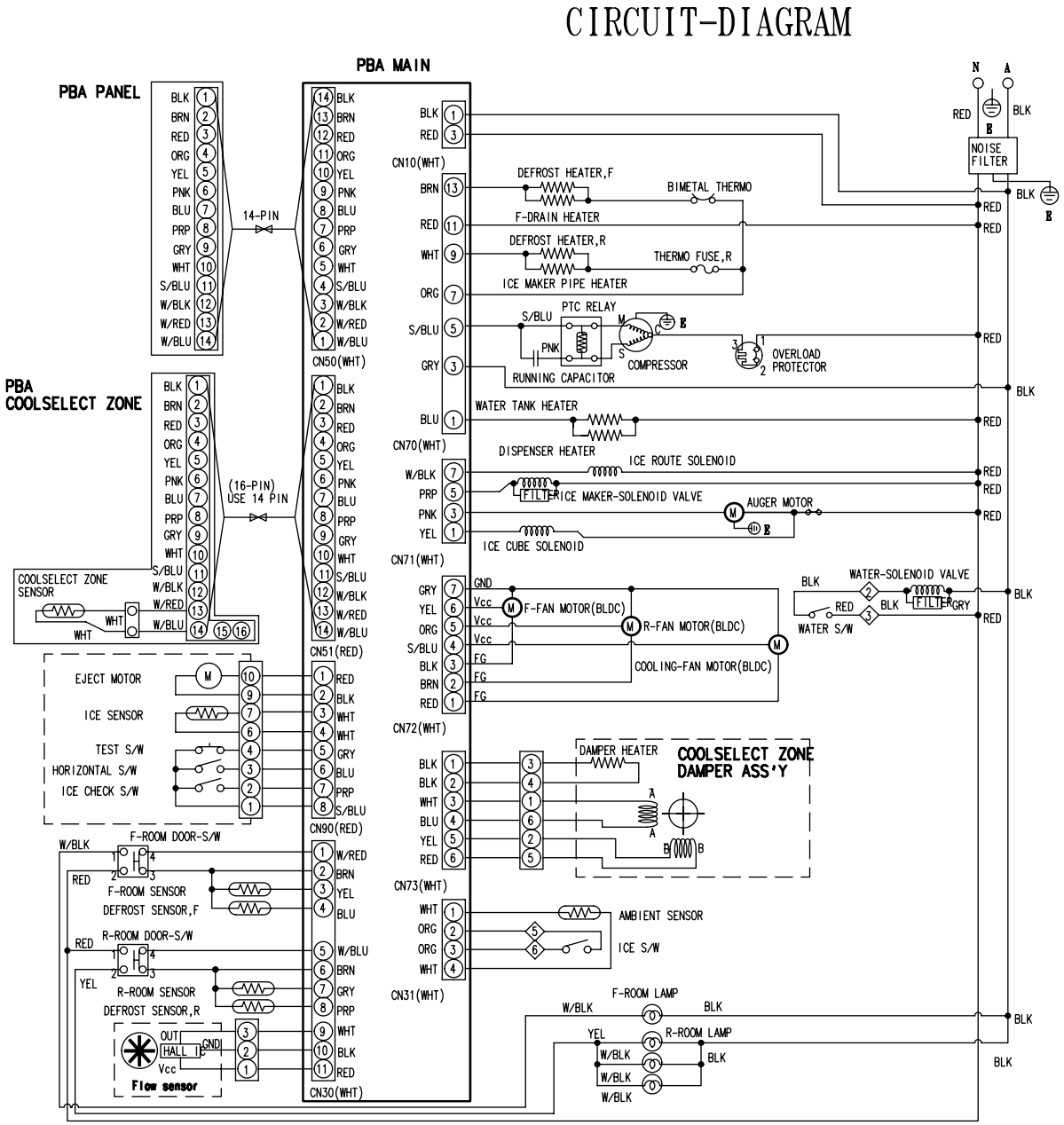
9 . WIRING DIAGRAM

9-1) RS269LA, RS267LA



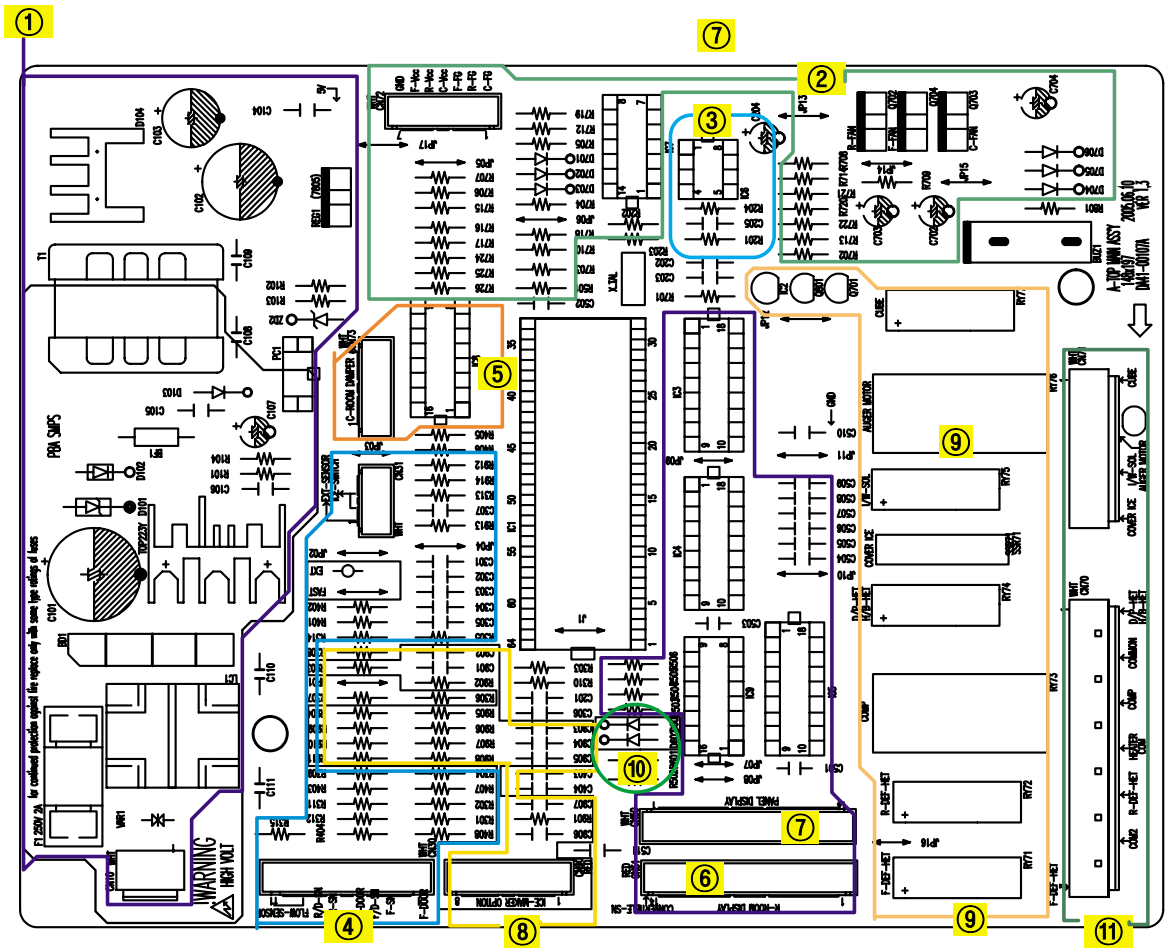
9 . WIRING DIAGRAM

9-2) RS265LA



10. PCB DIAGRAM

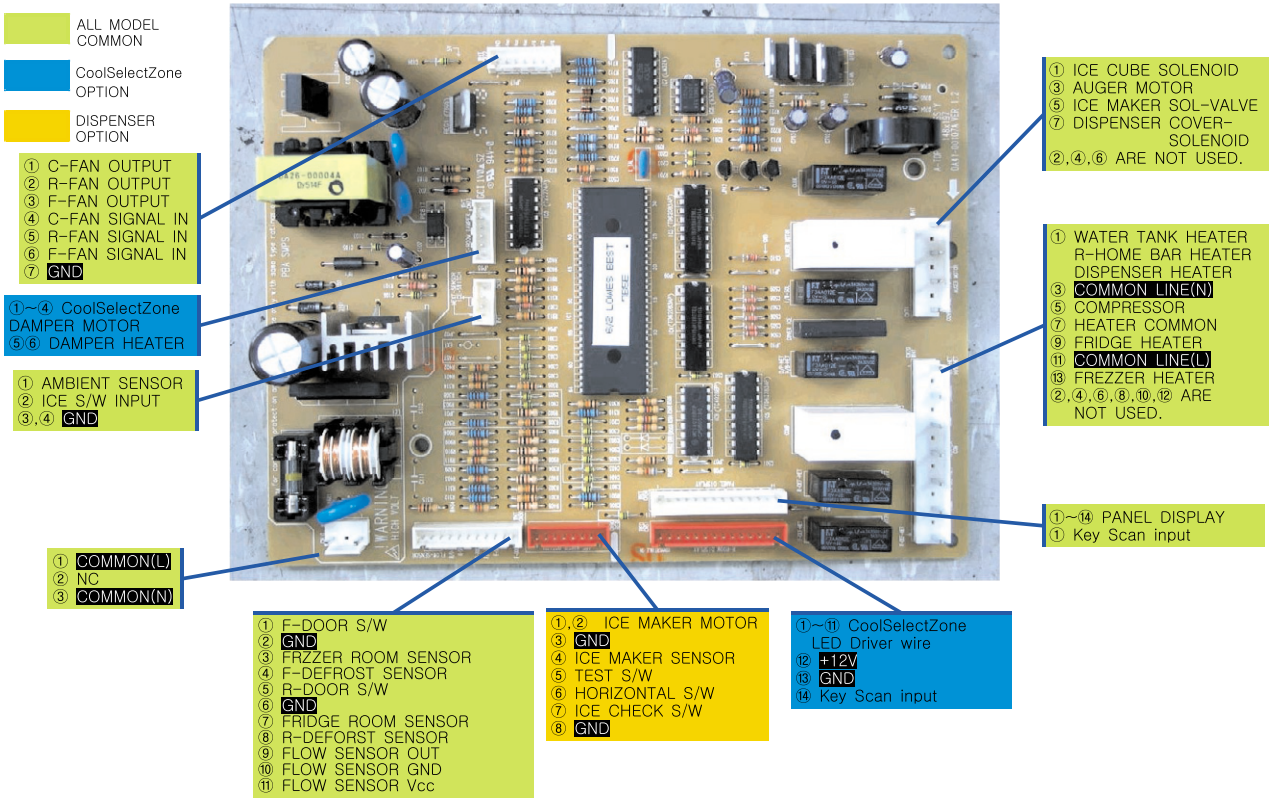
10-1) PART ARRANGEMENT (Main Board)



1. AC power on the PCB power part (SMPS)is supplied and converted to DC12V, 5V and GND through SMPS circuits.
2. Power is supplied to the fan motor driving part up to 8.3V ~10V depending on the type of motor.
3. EEPROM:Saves or records various data.
4. Receives various sensor signals and removes noise with MICOM and transfers them again.
5. Plays role of operating the genuine room taste damper and the damper heater.
6. Displays LED to the genuine room taste display driving part,and processes key signals.
7. Displays LED to the panel display driving part,and processes key signals. (Controlled in the link with genuine room taste circuits)
8. Performs i ce-maker operati on and suppl i es power of the motor and senses change of switches.
9. Relay part to control AC load.
10. Option setting part for model separation.
11. Connector part to connect AC load.

10. PCB DIAGRAM

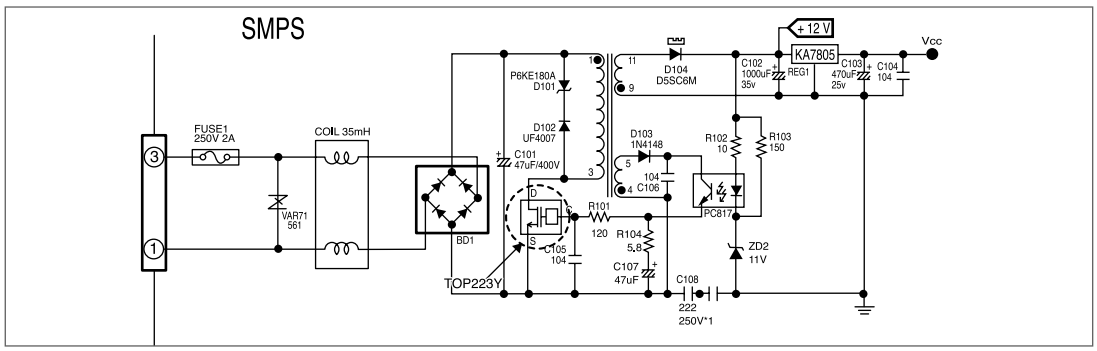
10-2) CONNECTOR ARRANGEMENT (Main Board)



11. CIRCUIT DESCRIPTIONS

11. CIRCUIT DESCRIPTIONS

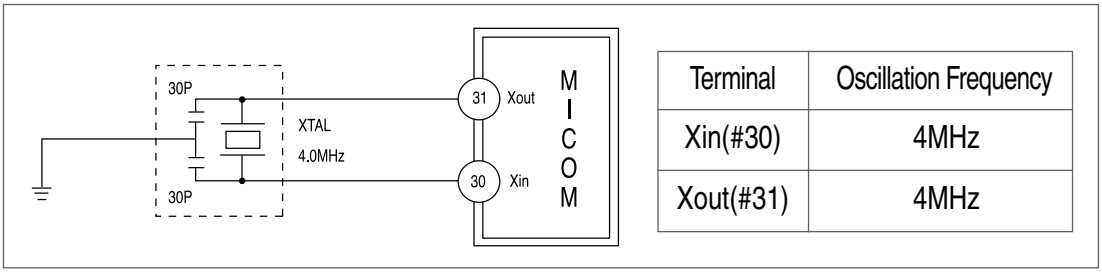
11-1) Source Power Circuit



This circuit shows SMPS(Switch Mode Power Supply) which converts AC input voltage (115V, 60Hz) to a high DC voltage (170V). The input AC source power is converted to DC through a wave rectifier (BD1) and the converted DC power will generate a constant waveform on the switching transformer using a high speed (100KHz) switching motion of TOP223Y. The D104 will rectify the generated voltage and transform into a steady 12V DC source power used for the digital display panel and relays. The regulator (KA7805) finally transforms into 5V DC source power for the control board and sensor's circuits.

Caution) Be careful to handle this circuit due to high voltages (AC115V, DC170V)

11-2) Oscillator Circuit

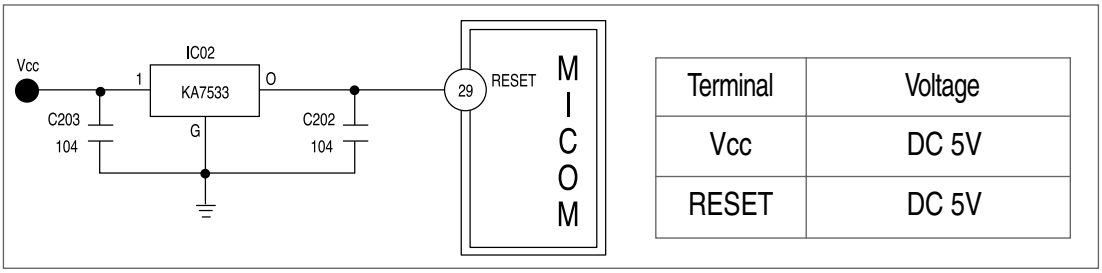


Terminal	Oscillation Frequency
Xin(#30)	4MHz
Xout(#31)	4MHz

This is oscillator circuit to generate synchronous clocks used to calculate the time for the microprocessor operation.

Note) If the specification of resonator changes, micro-processor can not work properly.

11-3) Reset Circuit

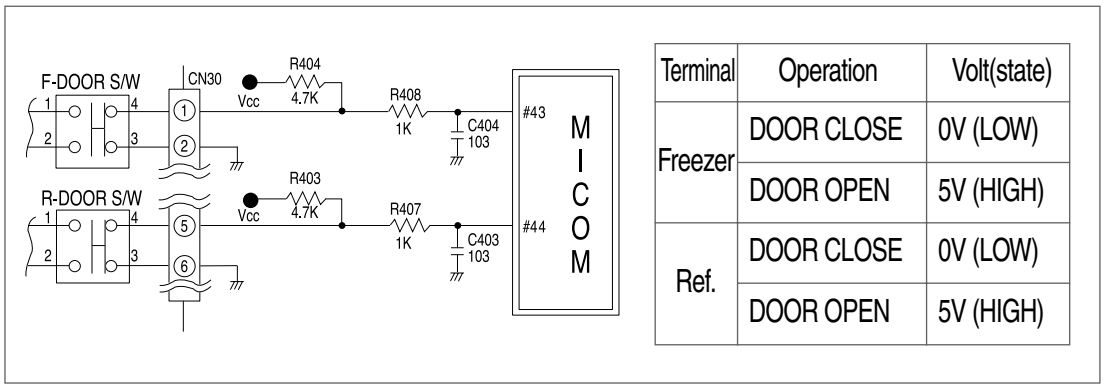


Terminal	Voltage
Vcc	DC 5V
RESET	DC 5V

The reset circuit is to initialize the values RAM & other sectors of micro-processor. When the power is engaged initially, the reset voltage becomes "Low," and it keeps "High" in the normal operation.

11. CIRCUIT DESCRIPTIONS

11-4) Door S/W Sensing Circuit

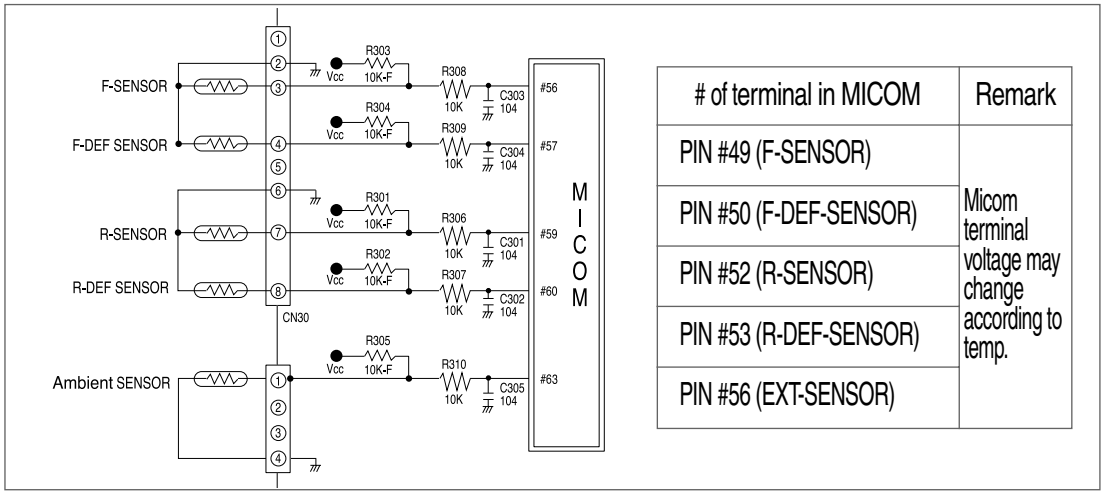


Terminal	Operation	Volt(state)
Freezer	DOOR CLOSE	0V (LOW)
	DOOR OPEN	5V (HIGH)
Ref.	DOOR CLOSE	0V (LOW)
	DOOR OPEN	5V (HIGH)

1) The terminals, ② and ⑥ of the connector (CN30) are grounded, and DC5V (Vcc) is supplied to the terminals, ⑤ and ⑥ through the resistors, R404 and R403 for the freezer and the refrigerator door, respectively.
2) The micro-processor senses the door's open and close based on engaged voltages, "Low(0V)" and "High(5V)," respectively.

Note) The door switch always should be checked when the evaporator fan is not running while the door is closed.

11-5) Temperature Sensing Circuit

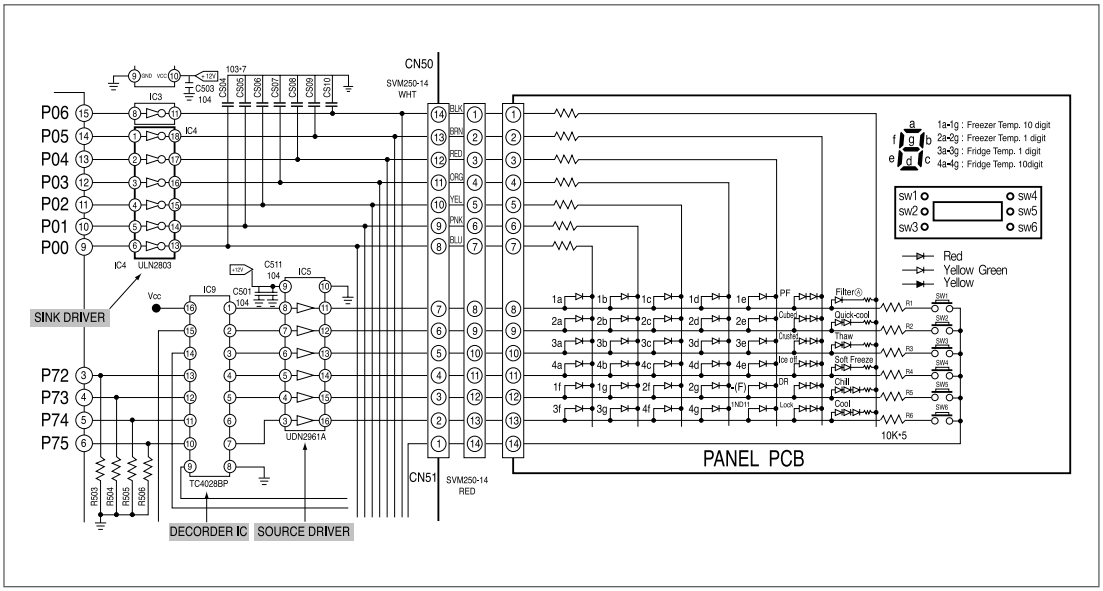


# of terminal in MICOM	Remark
PIN #49 (F-SENSOR)	Micom terminal voltage may change according to temp.
PIN #50 (F-DEF-SENSOR)	
PIN #52 (R-SENSOR)	
PIN #53 (R-DEF-SENSOR)	
PIN #56 (EXT-SENSOR)	

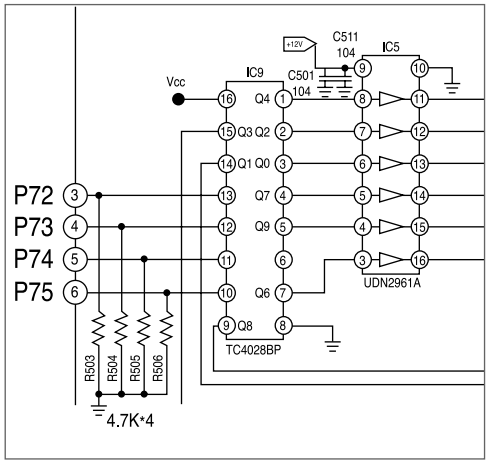
1) A thermistor with a negative temperature coefficient (NTC) is used for a temperature sensor.
2) Resistors, R 306 ~ R310 and capacitors, C 301 ~ C 305 are used for a noise protection purpose.
3) For the F-sensor, the input voltage into the micro processor (MICOM), VF is calculated by (Rth x Vcc)/(R303+ Rth), where Rth is a corresponding resistance to the thermistor's output (See Ref. 6 in Appendix).

11. CIRCUIT DESCRIPTIONS

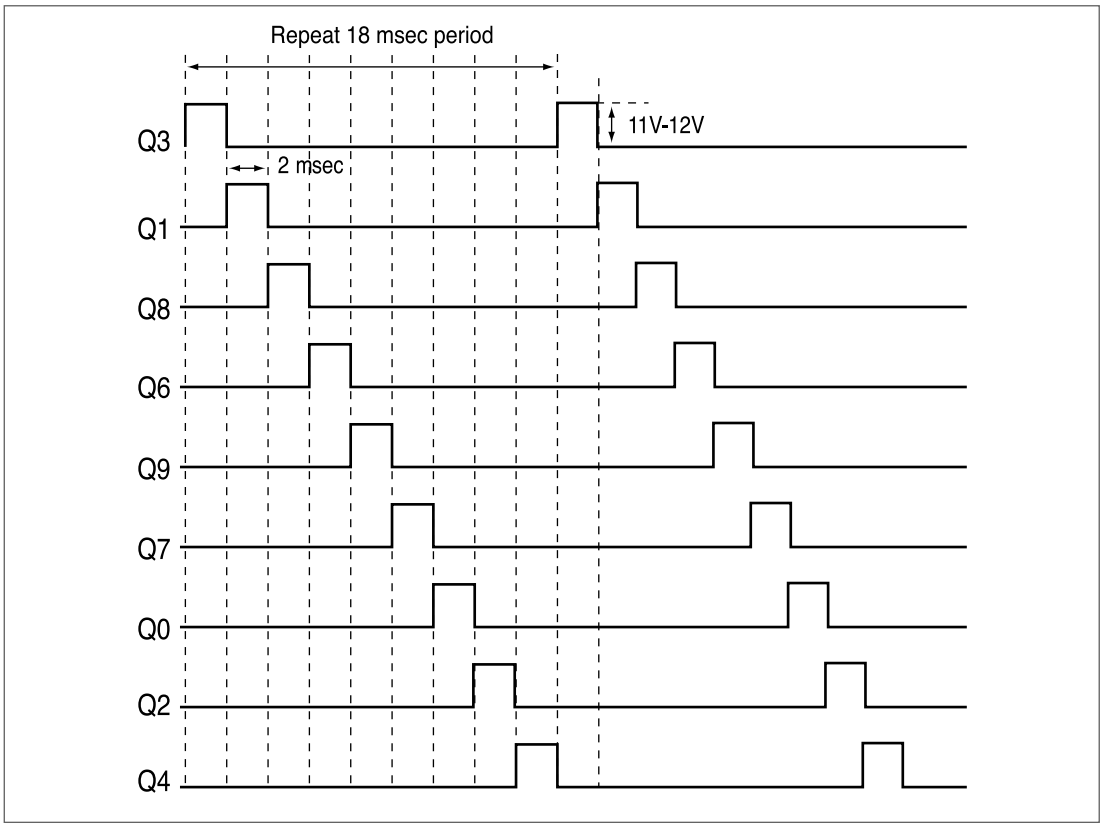
11-6) Key Scan and Display Circuit



1) Key Scan and display operation.



The model uses a decorder IC which 4 inputs and 9 outputs. If the IC 9 decorder (TC4028BP) received signals from MICOM pins (3~6), an output signal per 2 miliseconds comes out from Q3, Q41, Q8, Q6, Q9, Q7, Q0, Q2, and Q4 pin in sequence. This signal enters to a driver IC input terminal of the CoolSelect Zone™ PCB and IC5 (TD 62783AP), then approximate 11V peaks will generate from an output terminal as shown on the next page.



The step signals of DC 11～ 12V will be generated periodically. If a sink signal outputs from IC4, DC 11-12V will be applied to the LED input terminal and sink the LED output terminal to 0V. Therefore, LED will be ON for 2 miliseconds.

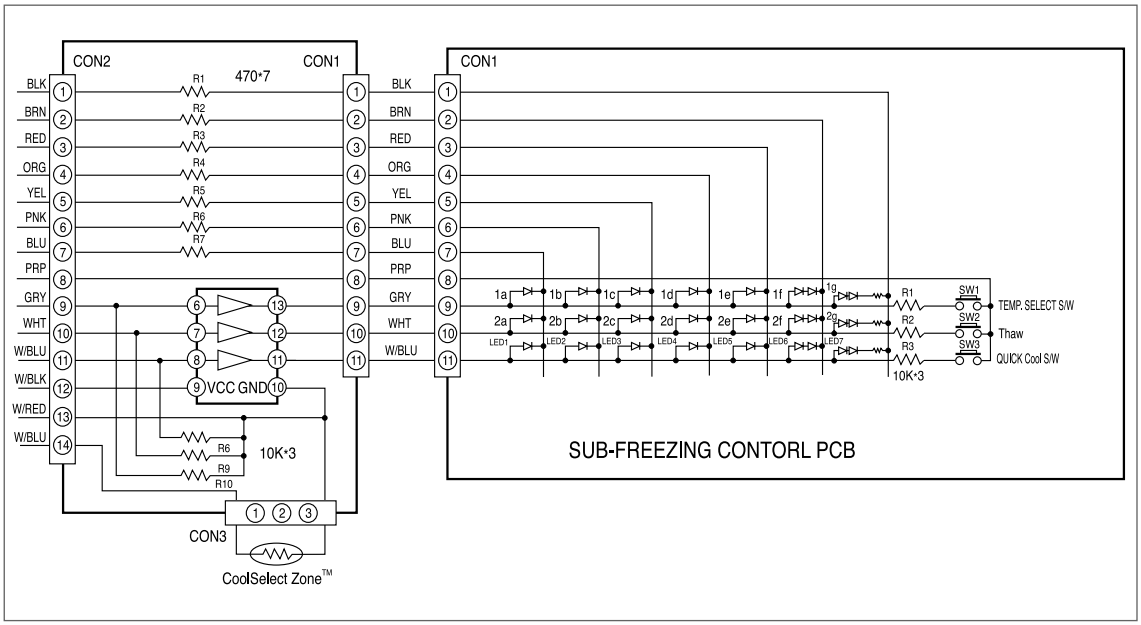
2) Key Scan

The 6 step signals, Q6～Q4 are applied to scan the 6 keys (buttons). When SW6 is pressed, the step signal from Q6 will be reduced to 5V and entered to the MICOM, then MICOM will match a corresponding function for SW6 key.

11. CIRCUIT DESCRIPTIONS

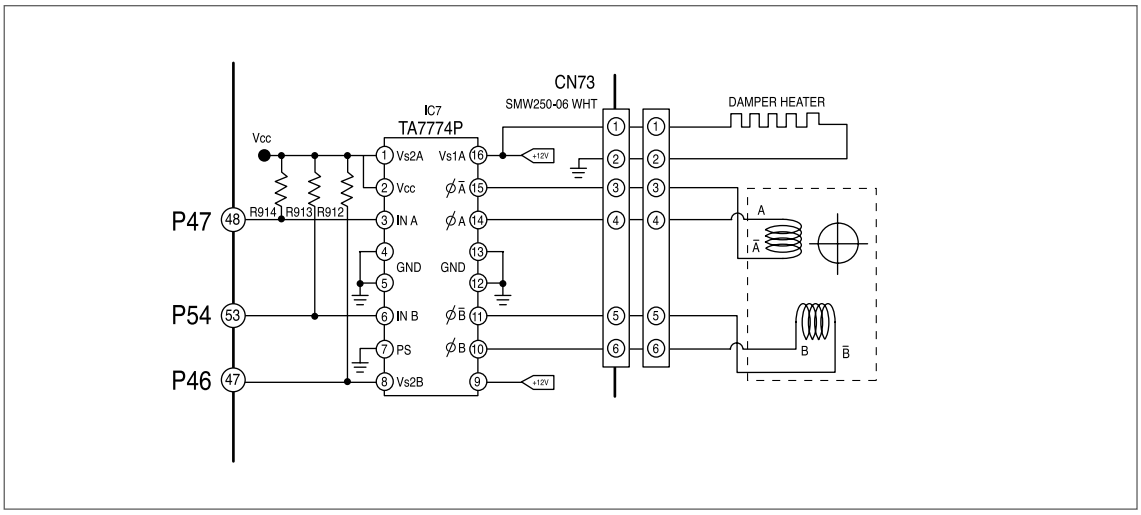
11-7) CoolSelect Zone™ Panel Circuit

1) CoolSelect Zone™ display panel and temperature sensor



1-1) CoolSelect Zone™ is referred to as a storage drawer to implement features of Quick cool, Thaw, and Select (Soft Freeze, Chill, and Cool).
1-2) CoolSelect Zone™ has an additional display panel. Panel LEDs are off while the doors are closed. When a door is open, micro-processor senses its signal and LEDs will be on.
1-3) The basic operational principle is the same as the key scan process.
1-4) The additional sensor can measure the temperature of CoolSelect Zone™. This sensor enables to control the features of CoolSelect Zone™.

2) Damper drive circuit



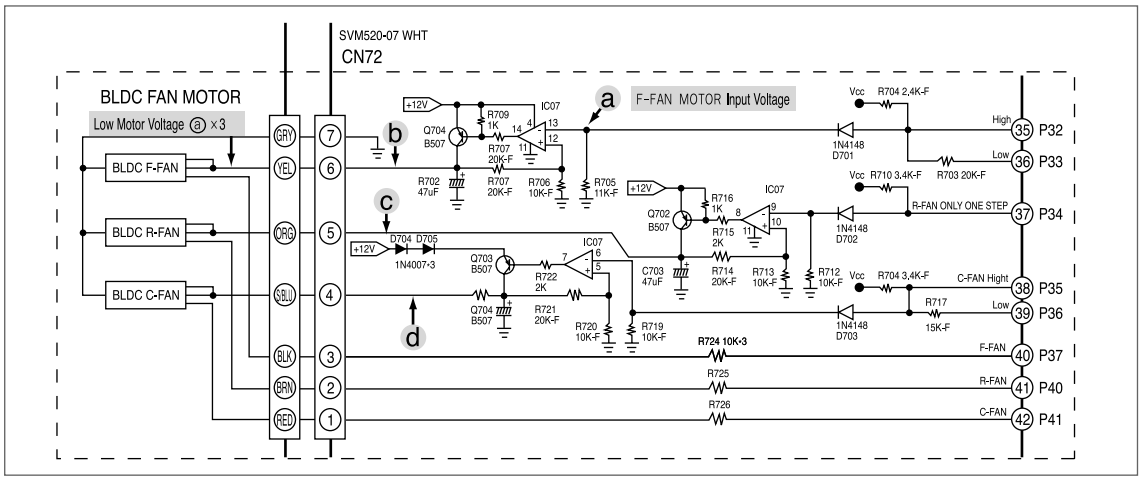
11. CIRCUIT DESCRIPTIONS

2-1) CoolSelect Zone™ Drawer is controlled by a damper to supply or block cold air. For Quick Cool, the damper will be close. So cold air is supplied only to CoolSelect Zone™ Drawer. For Thaw, the evaporator heater of refrigerator is ON and the damper is controlled by the refrigerator temperature.

2-2) The stepping motor controlled by a Driver IC TA7774P(IC7) operates the damper. The stepping motor uses 4 combined signals to open and close the damper.

Note) To prevent the malfunction from a high humidity, a Dc12V, 1 watt heater is mounted and activated continuously.

11-8) Fan Motor (BLDC) Drive Circuit



1) Motor drive circuit

1-1) This refrigerator adopts a BLDC motor produces energy consumption, Motors of the freezer, refrigerator and the machine compartment are composed of the BLDC. For RS2534, R-fan is operated by AC 115V Motor.

1-2) Voltages between high-speed and low-speed

	Voltage of motor			Remark
	Measure b (F-FAN)	Measure C (R-FAN)	Measure d(C-FAN)	In the normal operation, MICOM No. 40, 41 and 42 applies a constant frequency; and MICOM defects the signal to check the failure of motor. (frequency(Hz) × 12 = motor rpm)
High	11.1V	10V	10V	
Low	10V	10V	8.3V	

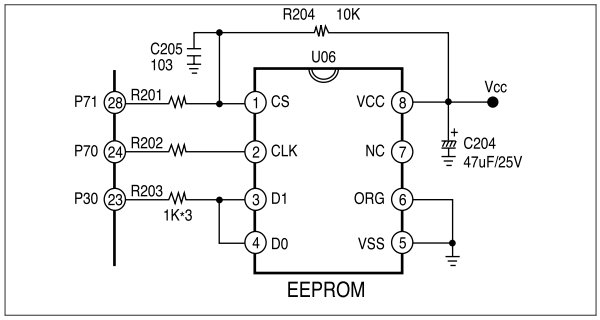
Note) Under the conditions, the fans will be operated in 2 options, such as High and Low mode. Generally, it is operated in the High mode during a day time and in the Low mode at night.

1-3) When the motor rpm is in 600~700, it will stop automatically and it tries to resume after 10 seconds. If the motor is not working properly after 5 time trials, it will rest for 10 minutes, then try to resume again. This process will be done continuously.

Note) If there is an abnormal situation for the motor, the self-diagnostics will show the corresponding LED segment.

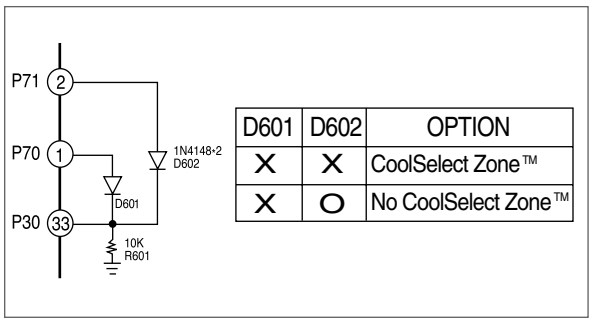
11-9) EEPROM Circuit

EEPROM is semiconductor memory not to be erased. It can be used in the area of unstable electric power.



11-10) Option Circuit

There are a variety of models that have a different function. A different model can set up to use option circuit as shown.



D601	D602	OPTION
X	X	CoolSelect Zone™
X	O	No CoolSelect Zone™

11-11) Load Drive Circuit

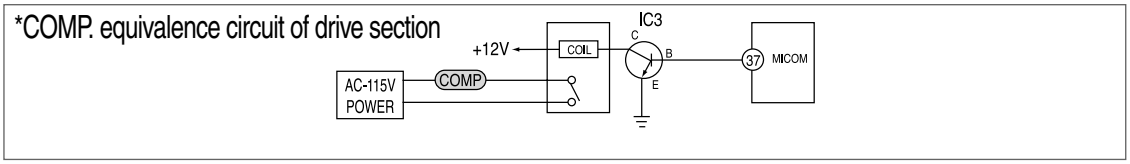
1) The control of load in the system is accomplished by the main PCB.

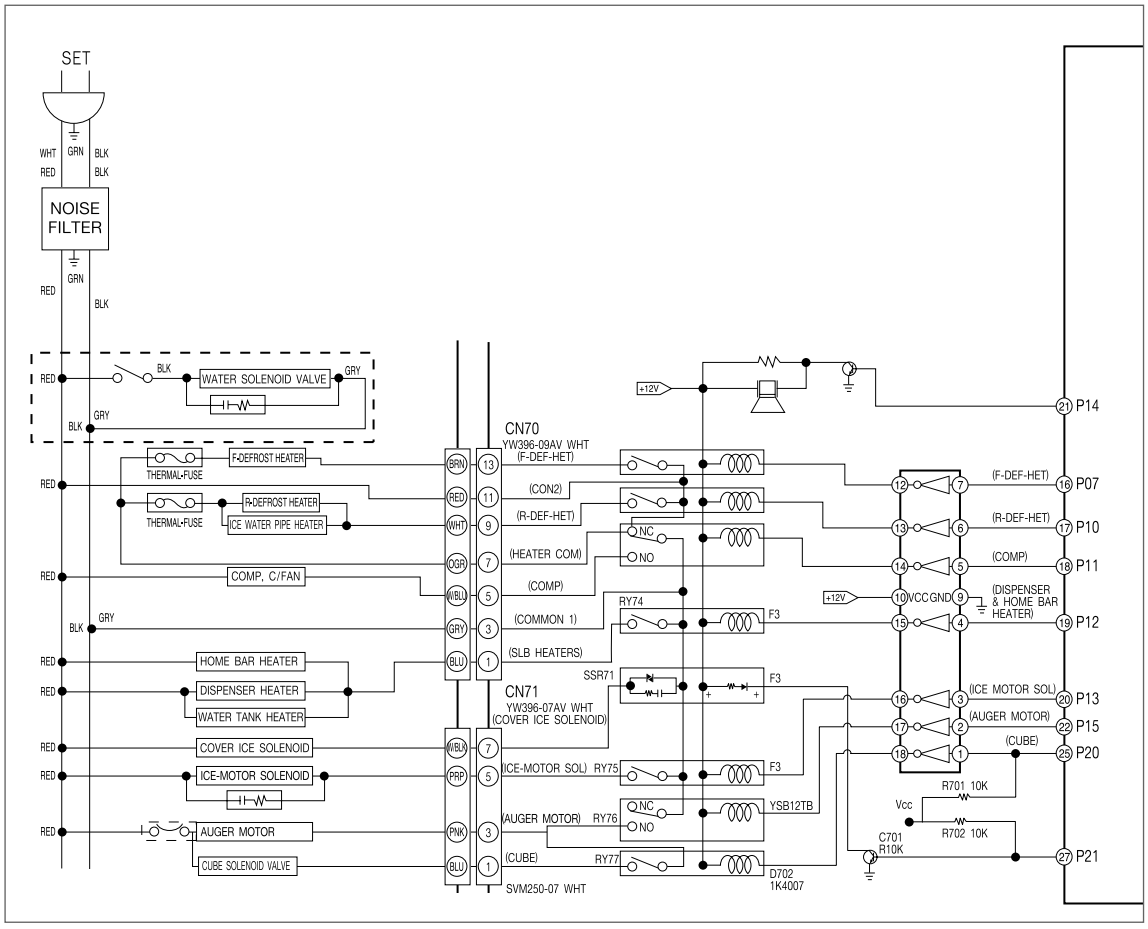
2) Most of relays or SSRs can control compressor, refrigerator/freezer defrost heater, and several option functions.

3) For compressor, #18 pin of micro processor signals High (5V). This signal inputs #5 pin of IC3 and #14 of output terminal which have base and collector functions of IC3 turns on and connects the GND. Relay 73 will be grounded through #14 of IC. Magnetic lines will generate so that the second side of RY73 is activated and 115V is supplied to the compressor. On the other hands, if #18 of micro processor turns Low(0V), #5 of IC3, the current of RY 73 relay, and magnetic line will shut down in sequence. A contact point in secondary side of Relay 73 is off. Finally compressor will stop.

4) The principles of other loads are the same as 3) item described.

Note) SSR(Solid State Relay) is a kind of Relay.





12. Safety Instructions on Service

- Unplug the refrigerator before making any repair or any replacement.
  ⇨ Avoid the electric shock.

- Use the rated components on the replacement.
  ⇨ Check the correct model number, rated voltage, rated current, operating temperature and so on.

- On repair, be sure that the wires such as harness are bundled tightly and are not exposed by water.
  ⇨ Bundle wires tightly in order not to be detached by the external force.

- On repair, remove completely dust, particles or other things on housing parts, harness parts, and connectors.
  ⇨ Cleaning may prevent fire by tracking or short.

- Check if there is any trace indicating the infiltration of water on electrical parts.
  ⇨ If there is kind of trace, change the related components or do the necessary action such as taping using the insulating tape.

- After repair, check the assembled state of parts.
  ⇨ It must be in the same assembled state when compared with the state before disassembly.

- Check the surrounding conditions of the installed refrigerator.
  ⇨ When the refrigerator is located at humid or wet place, or the installed state is unstable, change the location.

- If needed, do the ground.
  ⇨ Especially, if there is a possibility of the electric leakage, this appliance must be properly grounded.

- Do not allow consumers to use one outlet for several plugs.

- Check whether the power cord is placed under other appliance and so, damaged, worm-out squeezed.
  ⇨Repair immediately the defective power plug or outlet.
  ⇨Make sure that the power cord is not placed under other appliance or squeezed.

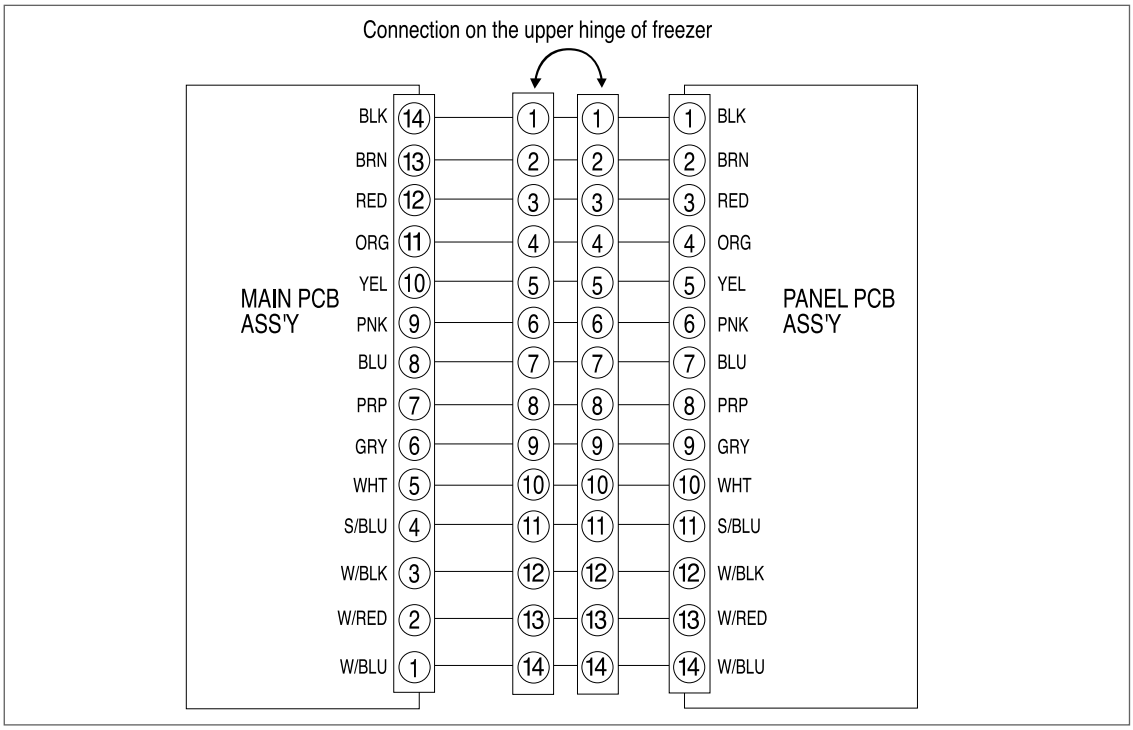
- Do not allow consumers to keep bottles or the likes in the Freezer or to keep foods in unstable position.

- Do not allow consumers to repair the appliance by themselves.

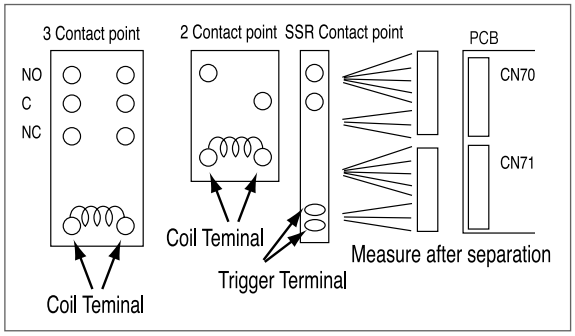
- Do not allow consumers to keep other chemicals except food.
  ⇨Medicines and other materials for research ; This appliance will not maintain the precisely constant temperature for them.
  ⇨Volatile material(Alcohol, Benzene, Ether, LP gas etc.) : possibility of explosion

12. Safety Instructions on Service

12-1) Wire connector on the cabinet door.



12-2) How to check relay failure



Note) NC -> Normally Close (C terminal and ON terminal)
NO -> Normally Open (C terminal and Open terminal)
C -> Common Terminal

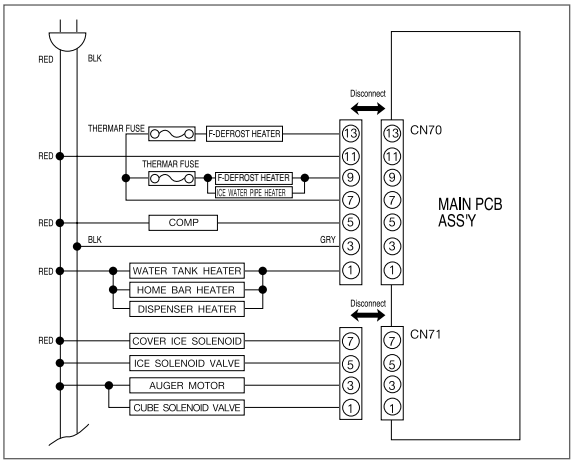
Disconnect the connector of the main PCB CN70 and CN71, then check the follows :

1. Measure the voltage at both terminals of a coil and determine if the relay is working.
2. Measure the voltage at both terminals of a trigger and determine if SSR is working.
3. Measure the resistance at both terminals of a load contact, and determine if there is an error in voltages of coil and trigger.

Div. of contact	Voltage at both terminal of coil and trigger	Both terminals of contact	Resistance value	
3-contact terminal Relay	DC 12V (Working Condition)	Between C and NO	0Ω (Short) -> Normal	
		Between C and NC	∞Ω (Open) -> Normal	
	DC 0V (Stop Condition)	Between C and NO	∞Ω (Open) -> Normal	
		Between C and NC	0Ω (Short) -> Normal	
2-contact terminal Relay	~ DC 12V (load working condition)	Between both terminals of contact	0Ω (Short) -> Normal	
	~DC 0V (load stop condition)	Between both terminals of contact	∞Ω (Open) -> Normal	
SSR	~DC 12V (load working condition)	Between both terminals of contact	About 4-5kΩ (Short) -> Normal	
	~DC 0V (load stop condition)	Between both terminals of contact	∞Ω (Open) -> Normal	

12. Safety Instructions on Service

12-3) Check a load



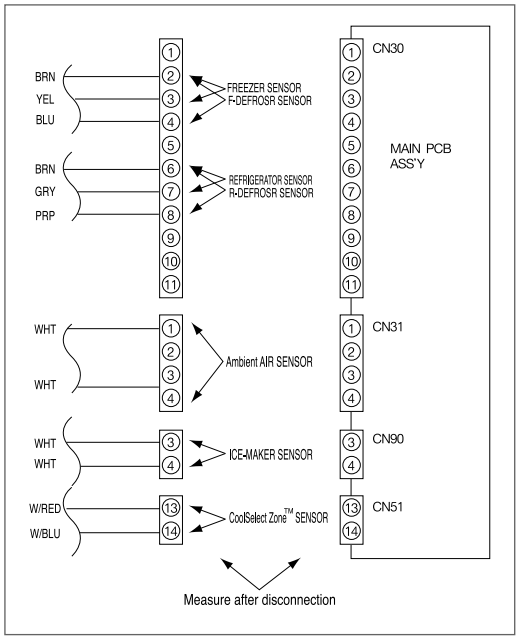
Unplug the powercord and disconnect the main PCB CN70 and CN71, the measure the follows :

1. As shown in table below, measure the resistance between terminals, check load trouble and wire connection error.
2. The diagram of circuit was drawn based on the maximum load. When a repair is needed, see the electric wiring diagram on the back of refrigerator to troubleshoot the corresponding model.
3. For safety, you must turn the power off.

Load	Measuremenr Termina l	Value	Contents
Freezer Def heater	between CN70 13 and CN70 7	0 Ω	Temperature fuse, heater, wires short trouble
		∞ Ω	Temperature fuse, heater, wires disconnection trouble
Ref. Def heater	between CN70 9 and CN70 7	0 Ω	Temperature fuse, heater, wires short trouble
		∞ Ω	Temperature fuse, heater, wires disconnection trouble
1) Beverage Station™ heater 2) Dispenser heater 3) Water tank heater	between CN70 11 and CN70 1	0 Ω	Heater, wires short trouble
		∞ Ω	Heater, wires, and connector disconnection
Cover Over Solenoid	between CN71 7 and CN70 11	0 Ω	Coil, wires short trouble
		∞ Ω	Coil, wires disconnection trouble
Ice Solenoid Valve	between CN71 5 and CN70 11	0 Ω	Coil, wires short trouble
		∞ Ω	Coil, wires disconnection trouble
Auger Motor	between CN71 3 and CN70 11	0 Ω	Coil, wires short trouble
		∞ Ω	Coil, wires disconnection trouble
Cube Solenoid Valve	between CN71 1 and CN70 11	0 Ω	Coil, wires short trouble
		∞ Ω	Coil, wires disconnection trouble

12. Safety Instructions on Service

12-4) Check sensors

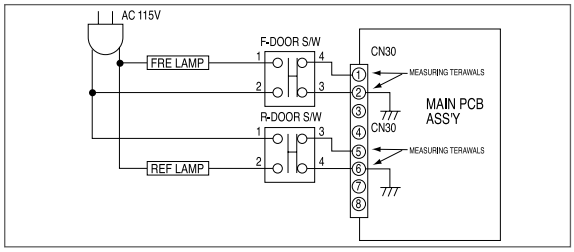


Disconnect the connector from the Main PCB, Then measure the resistance of the following sensors.

1. Check the resistance the Freezer sensor cn30 between the no. 2 and 3.
2. Check the resistance the Fridge Room sensor cn30 between the no. 6 and 7.
3. Check the resistance the F Defrosting sensor cn30 between the no. 2 and 4.
4. Check the resistance the R Defrosting sensor cn30 between the no. 6 and 8.
5. Check the resistance between the no. 1 and 4 the ambient Air sensor cn31.
6. Check the resistance between the no. 3 and 4 of the Ice-Maker sensor cn90.
7. Check the resistance between the no. 13 and 14 of the CoolSelect Zone™ sensor cn51.
8. Decide the sensor by comparing the above resistances to the temperature of each sensor with the conversion table of sensor resistance and voltage from the reference temperature of Ref. 6 on this manual.

※ When the resistance is ∞ Ω or 0 Ω , check the connection of electric wire and sensor connector.

12-5) Check Door S/W



Check the condition in power on. Door S/W have 2 contact points. One contact point perceives the door open/close by DC 5V on the PCB. Another contact point turns on/off the Lamp.

(Lamp on the REF)

1. If the Lamp turns on correctly when the door is open, it is normal. Press the door s/w and check if the lamp turns off. If it doesn't work properly, check the door s/w on the refrigerator.

(Door open on the REF and the sensor part of the Main PCB)

1. Check the voltage between no. 5 "+" terminal and no.6 "-" terminal of CN30.
2. If 5V is checked when the door is open, it is normal.
3. If 0V is checked when the door is closed, it is normal. If it is not, check the door s/w and electric wire connection.

(Lamp on the FRE)

1. If the Lamp turns on correctly when the door is open, it is normal. Press the door s/w and check if the lamp turns off. If it doesn't work properly, check the door s/w on the FRE.

(Door open on the FRE and the sensor part of the Main PCB)

1. Check the voltage between no. 1 "+" terminal and no.2 "-" terminal of CN30.
2. If 5V is checked when the door is open, it is normal.
3. If 0V is checked when the door is closed, it is normal. If it is not, check the door s/w and electric wire connection.

12-6) Table of temperature sensor according to resistance and voltage conversion.

The input voltage to the MICOM PORT could be different by a hardware. This is a table based on the voltage using the 10kohm-F.
MICOM PORT voltage when the sensor is open: about DC 5V(Vcc LEVEL)
MICOM PORT voltage when the sensor is shorted: about DC 0V(Ground LEVEL)

Temp.(°F)	Resistance(㏀)	Voltage(V)
-43.6	98.870	4.541
-41.8	93.700	4.518
-40.0	88.850	4.494
-38.2	84.150	4.469
-36.4	79.800	4.443
-34.6	75.670	4.416
-32.8	71.800	4.389
-31	68.150	4.360
-29.2	64.710	4.331
-27.4	61.480	4.301
-25.6	58.430	4.269
-23.8	55.550	4.237
-22.0	52.840	4.204
-20.2	50.230	4.170
-18.4	47.770	4.134
16.6	45.450	4.098
-14.8	43.260	4.061
-13.0	41.190	4.023
-11.2	39.240	3.985
-9.4	37.390	3.945
-7.6	35.650	3.905
-5.8	33.990	3.863
-4.0	32.430	3.822
-2.2	30.920	3.778
-0.4	29.500	3.734
1.4	28.140	3.689
3.2	26.870	3.644
5.0	25.650	3.597
6.8	24.510	3.551
8.6	23.420	3.504
10.4	22.390	3.456

Temp.(°F)	Resistance(㏀)	Voltage(V)
12.2	21.410	3.408
14.0	20.480	3.360
15.8	19.580	3.310
17.6	18.730	3.260
19.4	17.920	3.209
21.2	17.160	3.159
23.0	16.430	3.108
24.8	15.740	3.057
26.6	15.080	3.006
28.4	14.450	2.955
30.2	13.860	2.904
32.0	13.290	2.853
33.8	12.740	2.801
35.6	12.220	2.750
37.4	11.720	2.698
39.2	11.250	2.647
41.0	10.800	2.596
42.8	10.370	2.545
44.6	9.959	2.495
46.4	9.569	2.445
48.2	9.195	2.395
50.0	8.839	2.346
51.8	8.494	2.296
53.6	8.166	2.248
55.4	7.852	2.199
57.2	7.552	2.151
59.0	7.266	2.104
60.8	6.992	2.057
62.6	6.731	2.012
64.4	6.481	1.966
66.2	6.242	1.922

Temp.(°F)	Resistance(㏀)	Voltage(V)
68.0	6.013	1.878
69.8	5.792	1.834
71.6	5.581	1.791
73.4	5.379	1.749
75.2	5.185	1.707
77.0	5.000	1.667
78.8	4.821	1.626
80.6	4.650	1.587
82.4	4.487	1.549
84.2	4.329	1.511
86.0	4.179	1.474
87.8	4.033	1.437
89.6	3.894	1.401
91.4	3.760	1.366
93.2	3.631	1.332
95.0	3.508	1.298
96.8	3.390	1.266
98.6	3.276	1.234
100.4	3.167	1.203
102.2	3.062	1.172
104.0	2.962	1.143
105.8	2.864	1.113
107.6	2.770	1.085
109.4	2.680	1.057
111.2	2.593	1.030
113.0	2.510	1.003
114.8	2.429	0.977
116.6	2.352	0.952
118.4	2.278	0.928
120.2	2.206	0.904

12. Safety Instructions on Service

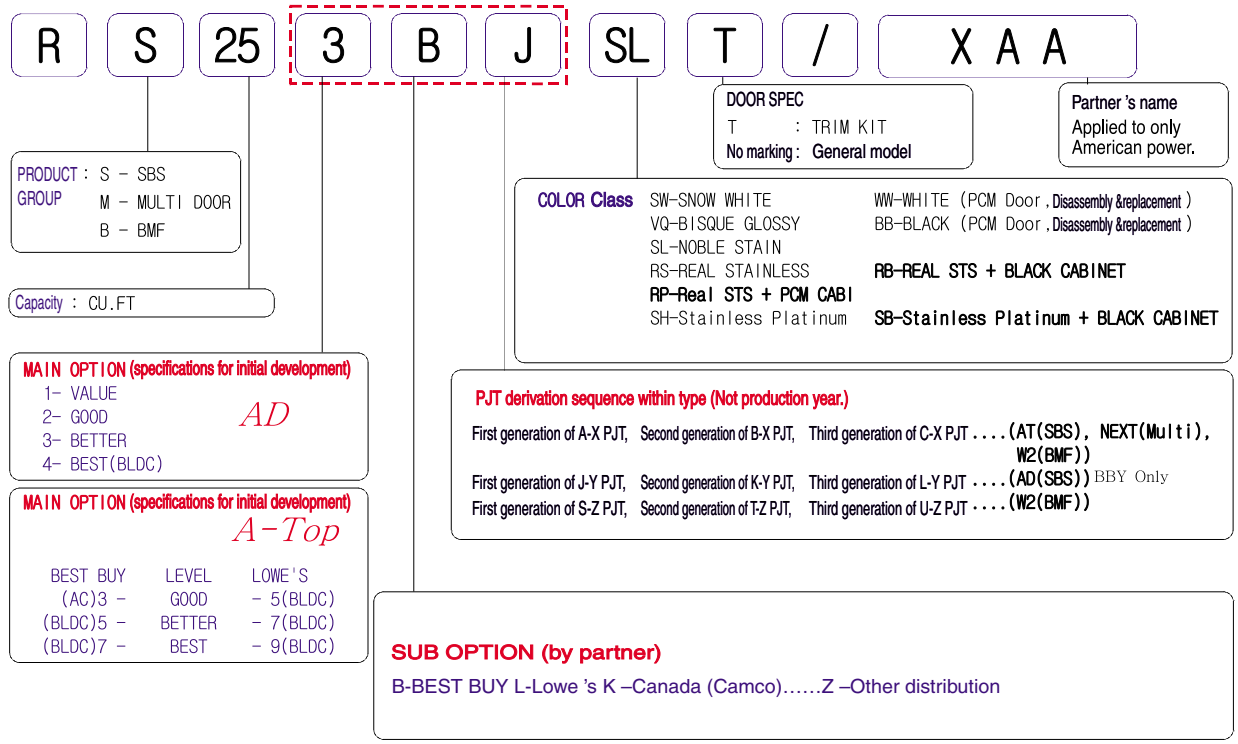
12-7) Service material lists of each circuit board.

NO	CODE-NO	PART NAME	SPECIFCATION	Q'TY
1	DA41-00104R	Main PCB ASS'Y	Dispenser with CoolSelect Zone™	1
2	DA41-00104S	Main PCB ASS'Y	Dispenser	1
3	DA41-00204H	PANEL PCB ASS' Y	Dispenser with CoolSelect Zone™	1
4	DA41-00204J	PANEL PCB ASS' Y	Dispenser	1
5	DA32-00006B	R-DEFROST Sensor	502AT, PX-41C	1
6	DA32-10109V	Ambient Temp. Sensor	502AT, PX-41C	1
7	DA32-10109W	F-Temp.Sensor	502AT, PX-41C	1
8	DA32-00006A	F-DEFROST Sensor	502AT, PX-41C	1
9	DA32-10105U	R-Temp.Sensor	502AT, PX-41C	1
10	DA32-10109X	CoolSelect Zone™ Sensor	502AT, PX-41C	1
11	DA41-00108A	CoolSelect Zone™ PCB ASS' Y	CoolSelect Zone™ MAIN+PANEL	1
12	3301-000016	FERRITE CORE (LOCK TYPE)	-	1
13	DA27-00002A	NOISE FILTER	Commonly used in ET-PJT	1

※ The last no. of the code number such as DA41-xxxxx? for the Main PCB-ASS'Y could be changed by MICOM and option.

13. REFERENCE INFORMATION

13-1) Model Name (Nomenclature)



13. REFERENCE INFORMATION

13-2) Q & A

Problem	Possible Causes	What To Do
The refrigerator does not work sufficiently or at all	• Disconnected power plug	• Check that the power plug is properly connected.
	• Is the temperature control on the display panel set to the correct temperature?	• Try setting it to a lower temperature.
	• Is the refrigerator in direct sunlight or located near a heat source?	• Move the refrigerator to the proper location.
	• Is the back of the refrigerator too close to the wall?	
The food in the refrigerator is frozen	• Is the temperature control on the display panel set to the correct temperature?	• Try setting it to a warmer temperature.
	• Is the temperature in the room too low?	
	• Did you store the food with a high water content in the coldest part of the refrigerator.	
Unusual noises or sounds are heard		• Check that the floor is levelled and stable.
	• Is the back of the refrigerator too near to the wall?	• Move the refrigerator to the proper location.
	• Was anything dropped behind or under the refrigerator?	• Remove the foreign thing.
	• A “ticking” sound may be heard from inside the refrigerator. This is normal and occurs because various accessories contract or expand.	
The front corners and sides of the cabinet are hot; condensation occurs	• HOT-PIPE is installed in the front corners of refrigerator. That makes refrigerator’s temperature low quickly and save the power consumption.	• Normal state
	• Condensation can occur when you leave the door open for a long time.	• Normal state
Ice is not dispensed	• Did you stop the ice making function?	• See the control panel.
	• Is there any ice in the storage unit?	• See the ice container.
	• Is the water pipe connected and the shut-off valve open?	• See the valve.
	• Is the freezer temperature too warm?	• Set the temperature lower.
	• Did you wait for 12 hours after installation of the water supply line before making ice?	
You can hear water bubbling in the refrigerator	• The bubbling comes from the refrigerant circulating in the refrigerator and is normal.	• Normal state
There is a bad smell in the refrigerator	• Wrap strong smelling food so that it is airtight. Throw away any rotten food.	
Frost forms on the wall of the freezer		• Allow sufficient space between stored food for efficient air circulation.
	• Is the air vent blocked?	
	• Is the door closed properly?	
No water is supplied	• Is the water pipe connected and the shut-off valve open?	
	• Is the water supply pipe crushed?	
	• Is the water tank frozen because the refrigerator temperature is too low? Select a warmer setting on the display panel.	

13. REFERENCE INFORMATION

Problem	Possible Causes	What To Do
Small or hollow cubes	Water filter clogged.	• Replace filter cartridge with new cartridge or with plug.
Slow ice cube freezing	Door left open.	• Check to see if package is holding door open.
	Temperature control not set cold enough.	• See about the controls.
Orange glow in the freezer	Defrost heater is on.	• This is normal.
Cube dispenser does not work(on some models)	Icemaker turned off or water supply turned off.	• Turn on icemaker or water supply.
	Ice cubes are frozen to icemaker feeler arm.	• Remove cubes and move the feeler arm to the ON position.
	Irregular ice clumps in storage container.	• Break up with fingertip pressure and discard remaining clumps. • Freezer may be too warm. Adjust the freezer control to a colder setting, one position at a time, until clumps do not form.
	Dispenser is LOCKED.	• Press and hold the CHILD LOCK for 3 seconds.
Water has poor taste/odor (on some models)	Water dispenser has not been used for a long time.	• Dispense water until all water in system is replenished.
Water in first glass is warm (on some models)	Normal when refrigerator is first installed.	• Wait 24 hours for the refrigerator to completely cool down.
	Water dispenser has not been used for a long time.	• Dispense water until all water in system is replenished.
	Water system has been drained.	• Allow several hours for replenished supply to chill.
Water dispenser does not work(on some models)	Water supply line turned off or not connected.	• See Installing the water line.
	Water filter clogged.	• Replace filter cartridge or remove filter and install plug.
	Air may be trapped in the water system.	• Press the dispenser arm for at least two minutes.
	Dispenser is LOCKED.	• Press and hold the CHILD LOCK pad for 3 seconds.
Water spurting from dispenser (on some models)	Newly-installed filter cartridge.	• Run water from the dispenser for 3 minutes (about one and a half gallons).
	Water in reservoir is frozen.	• Call for service.
Water is not dispensed (on some models) but icemaker is working	Refrigerator control setting is too cold.	• Set to a warmer setting.
	Ice cubes stuck in icemaker. (Green power light on icemaker blinking).	• Turn off the icemaker, remove cubes, and turn the icemaker back on.
Water on kitchen floor or on bottom of freezer	Drain in the bottom of the freezer clogged.	• See Care and cleaning. • Check the lock of filter.
	Cubes jammed in chute.	• Poke ice through with a wooden spoon.
No water or ice cube production	Supply line or shutoff valve is clogged.	• Call a plumber.
	Water filter clogged.	• Replace filter cartridge or remove filter and install plug.
	Dispenser is LOCKED.	• Press and hold the CHILD LOCK pad for 3 seconds.

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