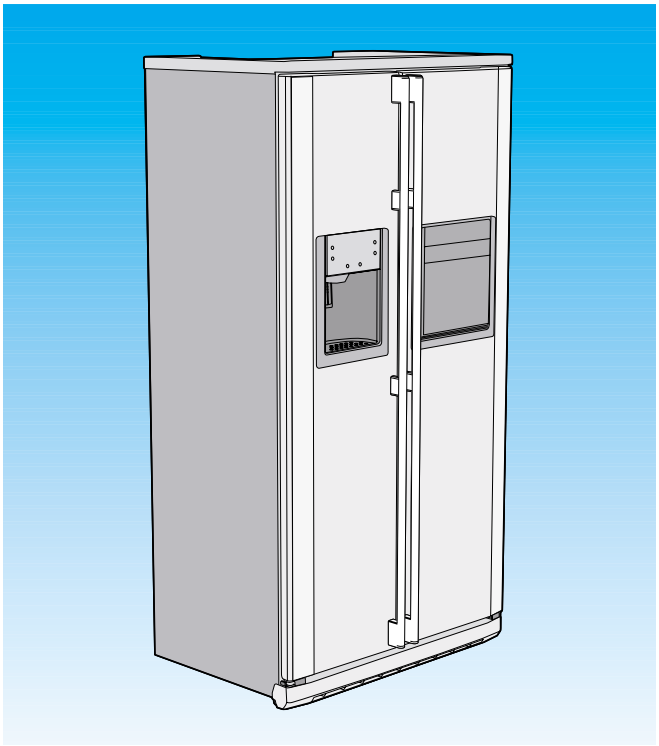
SAMSUNG

REFRIGERATOR

SIDE BY SIDE
RSE8KPAS
RSE8KPAS1/ XEU

SERVICE Manual

REFRIGERATOR



PRODUCT FEATURE

- Twin Cooling System
- Cool Select Zone & Chilled Compartment
- Spill-proof Shelf & Safety Glass Shelf
- Automatic Wator And Ice Dispenser

For more 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

Contents

1. Precautions(Safety Warnings)

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

Precautions(Safety Warnings)

Read all instructions before repairing the product and keep to 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.*

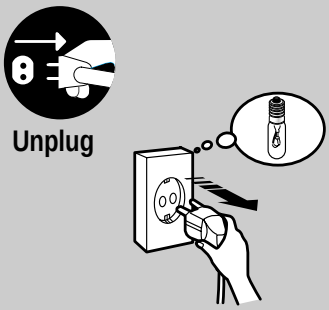
SYMBOLS

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

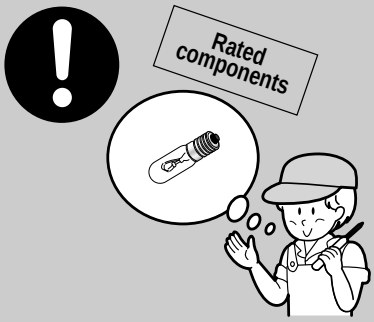
Pull the power plug out to exchange the interior lamp of the refrigerator.

- *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.

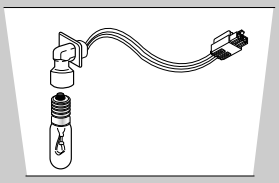
- *Cleaning may prevent the possible fire by tracking or short.*

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.*



Precautions(Safety Warnings)

❋ *Please ler 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.*

Prohibition

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

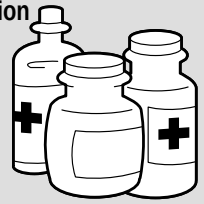
- *It may hurt you when refrigerator door is opened and closed resulting in falling stuff down.*

Prohibition

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.*

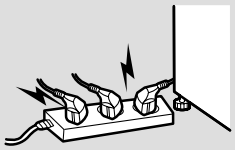
Prohibition



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

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

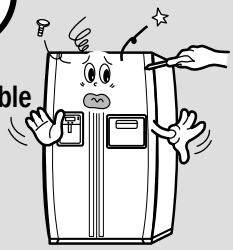
Prohibition



Do not allow users to disassemble, repair or alter.

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

Do not disassemble



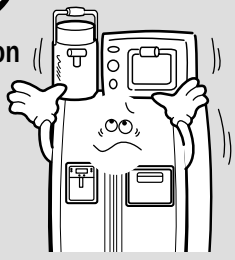
Do not allow users to bend the power cord with excessive force or do not have the power cord pressed by heavy article.

- *May cause fire.*

Do not allow users to store articles on the product.

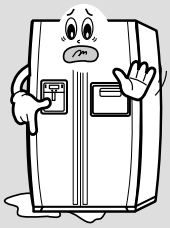
- *Opening or closing the door may cause things to fall down, with may inflict a wound.*

Prohibition



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

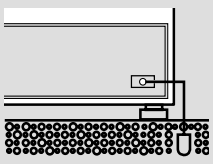
- *Deterioration of insulation of electric parts may cause electric shock or fire.*



Make sure of the earth.

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

Earth



2. Product Specifications

2-1) Introduction of main function

- **SAMSUNG side by side refrigerator has the following characteristics.**

Twin Cooling System
• The refrigerator and the freezer have two evapora tors. 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 of 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.

Door Alarm
• A beeper reminds you if the door is left open.

High humidity for fresher food
• You can keep food, fruit and vegetables fresh for longer because your refrigerator supplies highly humidified cold air. This can be up to four or five times more effective than a normal refrigerator.

Energy-saving fridge/freezer
• Power consumption is kept to a minimum by distributing cool air separately to the refrigerator and freezer.

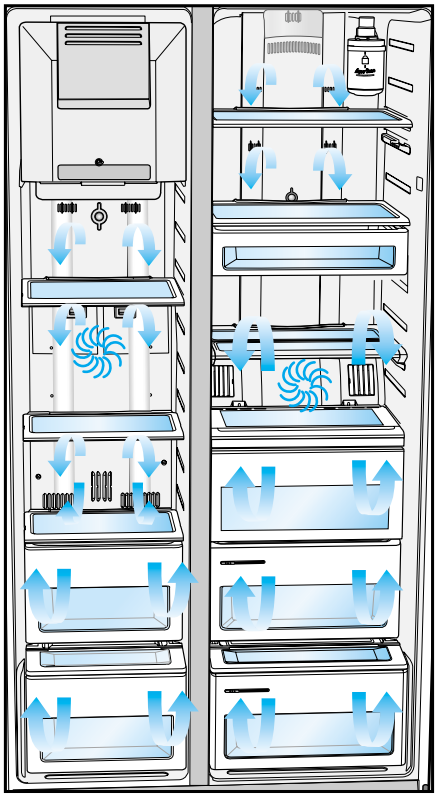
Faster cooling times
• The power freeze function allow you to freeze food more quickly.

Abundant supply of ice and cold water
• The ice and water dispenser provides ice and cold water at any time.

Beverage Station (optional)
• You do not have to open the main door to access frequently used food in the extra refrigerating compartment. This saves time and money.

Deodorizer
• Reusable deodorizer keeps the refrigerator air fresh and odor free.

CoolSelect Zone™Drawer (optional)
• User can select Soft Freeze, 0 zone, Quick cool, cool, Thaw buttons.



NOTE

This operation instruction covers various models.
The characteristics of your appliance may differ slightly from those described in this manual.

Product Specifications

2-2) Model Specification

Item		Specification	
Model(RSE8)		RSE8J*, D*	RSE8K*, F*, V*, T*
		Dispenser without home-bar	Dispenser with home-bar
Net Capacity	Total	510ℓ	495ℓ
	Refrigerator	311ℓ	296ℓ
	Freezer	199ℓ	199ℓ
Net dimension(W×D×H)		940mm x 625mm x 1874mm	
Rated Frequency and Frequency		230 ~ 240V/50Hz	
Motor Rated Consumption Power		140W	
Electric Heater Rated Consumption Power		442W	452W
Kind of Refrigerator		Indirect Cooling Method Refrigerator	
Refrigerant		R600a	
Refrigerant Input Amount		96g	
Freezer Performance		**** (4-STAR)	
Product Weight		K, J, V (139Kg), D (135Kg), T (141Kg)	

2-3) Comparison Chart

Item		Specification		
Model		ET-PJT		EPEL-PJT
		RS21K	RS23K	RSE8K
		Dispenser/Home-bar/ Cool select Zone	Dispenser/Home-bar/ Cool select Zone	Dispenser/Home-bar/ Cool select Zone
Net Capacity	Total	520ℓ	553ℓ	495ℓ
	Refrigerator	334ℓ	357ℓ	296ℓ
	Freezer	186ℓ	196ℓ	199ℓ
Net dimension(W×D×H)		908mm x 719mm x 1760mm	908mm x 754mm x 1760mm	940mm x 625mm x 1874mm
Motor Rated Consumption Power		160W	160W	140W
Electric Heater Rated Consumption Power		423W	423W	452W
Refrigerant Input Amount		88g	88g	96g
Product Weight		120Kg	130Kg	139Kg

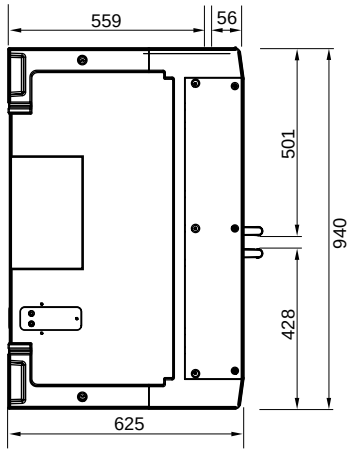
2-4) Electric Parts Specification

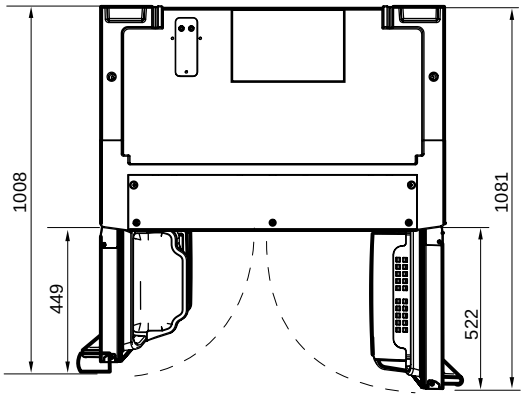
Items				Specification	
Models					
Freezing Capacity				***** ******* (4 STAR)	
Components for Freezer	Compressor		Model	MK4A5Q-R1U	
			Starting type	R.S.C.R	
			Oil Charge	FREOL α - 15 (ESTER)	
	Evaporator		Freezer	SPLIT FIN TYPE	
			Refrigerator	SPLIT FIN TYPE	
	Condenser			Forced and natural convection type	
	Dryer			Molecular sieve XH-9	
	Capillary tube			0.82 × 3400, 5.5 Kg/cm^2	
	Refrigerant			R600a	
Room Temperature Sensor Components	Freezer	Model	Temperature Selection	ON(℃)	OFF(℃)
		THERMISTOR (F-SENSOR) 502AT	-25℃	-24.0	-26.0
			-20℃	-19.0	-21.0
			-14℃	-13.0	-15.0
	Refrigerator	Model	Temperature Selection	ON(℃)	OFF(℃)
		THERMISTOR (R-SENSOR) 502AT	1℃	2.0	0
			3℃	4.0	2.0
			7℃	8.0	6.0
Defrost Related Components	Defrost Cycle	First Defrost Cycle (Concurrent defrost of F and R)		4 hr ± 10 min	
		Defrost Cycle(FRE)		12 ~ 24 hr (vary according to the conditions used)	
		Defrost Cycle(REF)		6 ~ 12 hr (vary according to the conditions used)	
		Pause time		10 ± 1 min	
	Defrost Sensor	F Defrost-Sensor	Model	THERMISTOR (502AT)	
			SPEC	5.0㏀ at 25℃	
		R Defrost-Sensor	Model	THERMISTOR (502AT)	
			SPEC	5.0㏀ at 25℃	
	Thermal-Fuse		Rated	AC 250V 10A	
			Operating temperature	77 (+0℃/-5℃)	

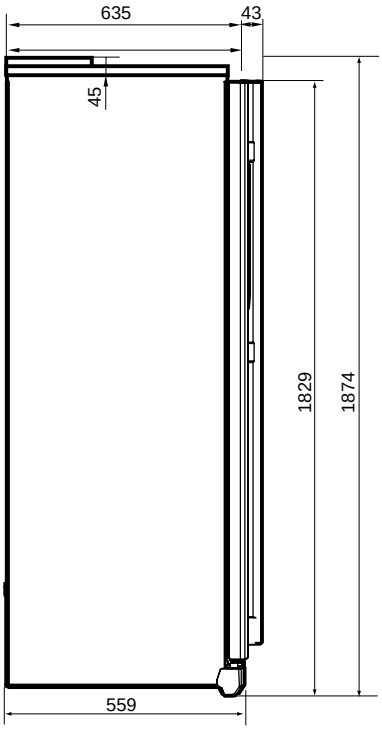
Product Specifications

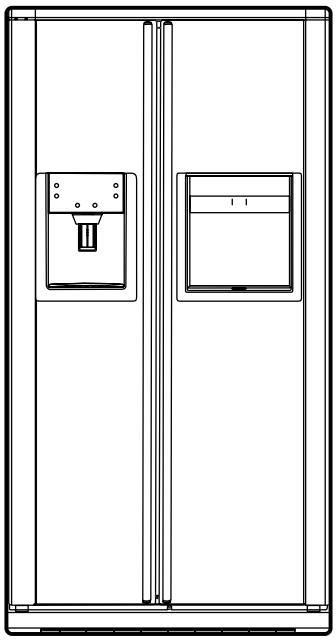
Items			Specifications	
Model			Dispenser	Home Bar
Electric Components	Defrost-Heater(FRE)	Conducting at F Defrosting	245W	
	Defrost-Heater(REF)	Conducting at R Defrosting	110 W	
	DRAIN Heater(FRE)	Conducting at F Defrosting	45 W	
	DRAIN Heater(REF)	Conducting at R Defrosting	25 W	
	DISPENSER Heater	Interlock with F-FAN	7W	
	HOME-BAR Heater	Interlock with COMP	-	10W
	WATER PIPE Heater	-	7W	-
	WATER TANK Heater	-	3W	
	Thermal-Fuse for preventing overheating of Freezer Defrost-Heater		AC 250V 10A 77 (+0℃/-5℃)	
	Thermal-Fuse for preventing overheating of Refrigerator Defrost-Heater			
	Condenser for COMP (Package type)	Running	350VAC-5㎌	
		Starting	-	
	Starting-Relay	Model	12SP 18A 265RH	
		Operation	33Ω ±20%	
	Over-load Relay	Model	4TM265RFBYY-53	
		Temp. ON	130 ±5℃	
		Temp. OFF	61 ±9℃	
	Rated Voltage		230V/50,60Hz	
	MOTOR-BLDC(FRE)		DC12V/DL-5905 SSEA	
	MOTOR-BLDC(REF)		DC12V/DL-5905 SSEA	
	MOTOR-BLDC (Circuit)		DC12V/DL-5905 SSCA	
	Lamp(FRE)		AC240V/40W×2	
	Lamp(REF)		AC240V/30W×5	
	Door Switch		AC250V 0.5A×2	
	Door Switch (HOME-BAR)		AC250V 0.5A	
	Power cord		AC250V 12A	
	Earth Screw		BSBN (BRASS SCREW)	

2-5) Dimensions (mm)

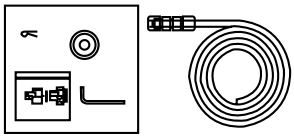






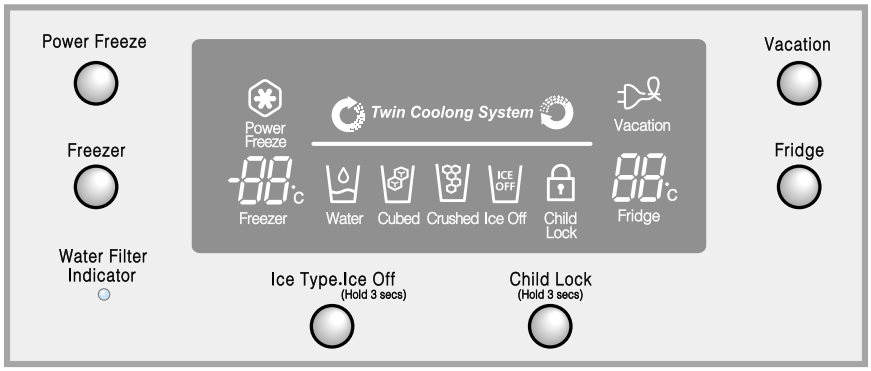


2-6) Optional Material Specification

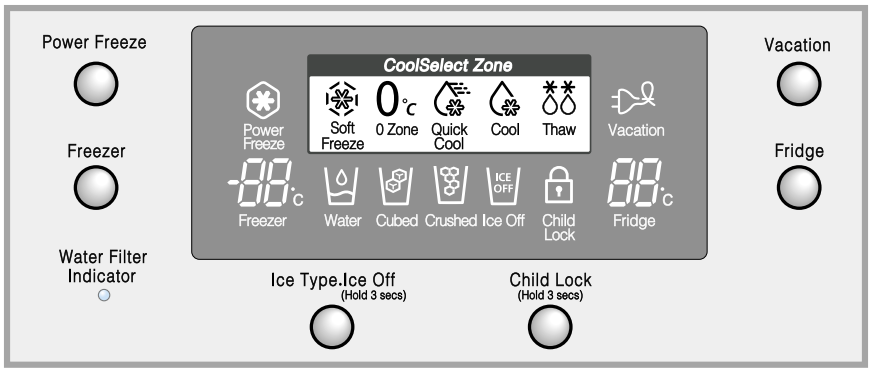
Photographe	Part Name	Part Code	Remark
	FILTER WATER-ASSY	DA29-00003B	
	ASSY-INSTALL FILTER	DA97-01469D	
	LAMP INCANDENT	4713-001201	Freezer : 2pcs 230V, 40W
	LAMP INCANDENT	4713-001147	Refrigerator : 5pcs 240V, 25W

3. Operating Instructions & Installation

3-1) Digital Panel



for **RSE8F,D,N*****



for **RSE8K,J,V,T*****

3-2) Temperature Control Function

When the system power is initally engaged, the default set temperature are -20℃ for the freezer and 3℃ for the 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℃ to -25 ℃ in sequence.
2) Refrigerator Temperature Control.
To select a set temperature, press the “Fridge” Temp. button. The display shown the set temperature from 7℃ to 1℃ 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 : -9℃~30℃)
In the event of a power failure, if the freezer temperature is maintained lower than 5℃, the last selected set temperature and functions memorized in EEPROM will be restored when the power is on.

note) Interior Temperature of the freezer will be controlled with -25℃ 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 -25 ℃. But if you select "Ice Off, the freezer always will be controlled with original set temperature.

3-3) Power Freeze and Vacation Function

- Select the "Power Freeze" button.
- Although you select Power Freezer, the set temperatures in the freezer is not changed.
- The set temperatures for the compartments can be changed while this function is 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.
- 1-5) During power Freeze, the defrost will be delayed until power freeze expiration. If you select power freeze during defrost, Power Freeze will be started when defrost finished.

2) Vacation function
- 2-1) It is selected or cancelled by presseing the Vacation button.
- 2-2) When the Vacation function is selected, the Vacation LED will be on, the R-Room 7-SEG will be off and R-FAN will be turned off.
- 2-3) It does not automatically set to ICE OFF.
- 2-4) When the Vacation function is cancelled by pressing the Vacation button, the Vacation LED will be off, the R-Room 7-SEG will be on and R-FAN will be on or off according to the R-Room set temperature.
- 2-5) If the R-Room temperature control button is pressed during the operation of the Vacation function, the Vacation function will be cancelled, the Vacation LED will be off, the R-Room 7-SEG will be on and R-FAN will be on or off according to the R-Room set temperature.
- 2-6) When the Vacation button is pressed, the LED will be changed immediately.But,it will operate according to the new setting 10 seconds later.
- 2-7) With the Vacation function operating, Defrost by R-FAN will be carried out.
- 2-8) With the Vacation function operating, Damper will be closed.
  But, during natural defrost or when R-Fan is on,Damper will be opened.
- 2-9) Defrost with the Vacation function is carried out according to 4-hour accumulated Comp-On time.
- 2-10) When the Vacation function is carried out with an ambient temperature over 18 ℃, the R-Fan Off temperature for natural defrost will be changed (normally it is turned off when the Defrost Sensor temperature becomes -2℃) and it operates until the next Comp On. With an ambient temperature lower than 17℃, when R-Heater is on, R-Fan is turned off and when R-Heater is off, R-Fan is turned on.
- 2-11) When the Vacation function is selected,Convertible LED will be off and the Convertible button won 't work.

3) When you select "Power Freeze" and "Vacation" together
Each function works at the same time. The COMP and Freezer Fan run continuously for power freeze function and the Refrigerator Fan stop and damper for coolselect zone close for vacation.

3-4) Child Lock Function

- When the child lock button is pressed for 3 seconds, the child lock indicator is on.
  -When it is locked, no function commands like temperature control / power freeze / vacation / Ice type / dispenser operation.
  -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.
  -Temperature LED for Freezer, Fridge is off. But LED for Ice type, Ice Off, Chilk Lock, Vacation, Power Freeze remam on.

3-5) Function with Ice Dispenser &Water Dispenser Installed

● This function only applies to the model with Ice Maker and Ice/Water Dispenser.

1) Water / Cubed Ice / Crushed Ice / Ice Off Select Function

1-1) By pressing each specific button on the display panel, Water, Cubed Ice, Crushed Ice, Ice Off will be selected. But, the Ice Off button needs to be pressed for more than 3 seconds to select.
1-2) With the initial power on, it will be selected to Water automatically.
1-3) When taking out water after Water is selected,the Water Solenoid Valve operates.
1-4) When taking out ice after Cubed Ice is selected, the auger motor and the cubed ice solenoid are used to push out the ice in the ice bin.
1-5) When taking out ice after Crushed Ice is selected, only the auger motor operates to push out the ice in the ice bin.
1-6) When Ice Off is selected,the Ice Maker stops operating.When Water is selected, it supplies water and when Cubed Ice or Crushed Ice is selected, the ice made before the Ice Off is selected will be supplied.
1-7) Ice comes out when the Ice Cover opens completely after the Dispenser S/W is pressed.
1-8) The Ice Cover is closed in 5 seconds after the Dispenser S/W is turned off.
1-9) The Dispenser Lamp lights up with the Dispenser Switch on and it goes off in10seconds after the Dispenser Switch is turned off.

※ Caution : If the Ice Cover is closed forcefully, it could get broken.So, make the Ice Cover operate again by extracting ice once again if it is not closed.

※ Note) When extracting ice after selecting Ice Off, only the ice in the Ice Bin is extracted.Also, with Ice Off selected,the Water/Cubed Ice/Crushed Ice buttons can be used.
But, it is limited to the use of only the ice remaining in the Ice Bin.

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 18˚C	Condenser-Fan is ON as soon as the compressor is on.
	13˚C ~ 17˚C	Condenser-Fan is ON with 5 minutes delay from the compressor on.
	Below 12˚C	Condenser-Fan is OFF regardless of the compressor operation.

3-7) CoolSelect Zone™ Function (optional)

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

1) Select function
1-1) Using Select button, Soft Freeze (-5℃), 0 Zone(0℃), Quick Cool, Cool, Thaw options can be selected in sequence. Cool option maintains a set temperature of the refrigerator.
1-2) Temperature control for fresh food compartment is ahead of cool select Zone.

2) Quick Cool function
2-1) If the Quick Cool is selected, LEDs will flash 60 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 other 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 finish.
2-5) When the function is input, the R-Room Damper will be closed for the initial 40 minutes, only the Convertible Room will be controlled and the freezer compartment will be controlled according to the Notch setting. During the last 20 minutes, the Freezer, Fridge Fan will operate according to the Freezer, Fridge Notch temperatures. And, when the temperatures of the Freezer, Fridge Rooms are satisfied, cold air will be discharged to the Convertible Room.

3) Thaw function
3-1) When the thaw button is pressed in sequence, LEDs will flash 4, 6, 10, 12 and return to 4Hrs, default value is 4Hrs.
3-2) The count will be decreased in every hour.
3-3) A cancellation of this function is same as Quick Cool function.
3-4) After this function ends, cool select Zone display return to Zero Zone.
3-5) It remains on for Ref. evaporator heater and Ref. fan motor and close for damper until the Ref. evaporator sensor reach to the certain temperature. When the Ref. evaporator sensor reach to certain temperature, damper will be closed, Ref. heater will be off, Ref. fan motor will be on until the compressor is on to control the freezer, refrigerator compartments.

3-8) Water Filter Indicator Function

1) Filter Indicator
1-1) The color of filter indicator tarns to orange when the total amount of supply water for Ice making or water dispenser are more than 250 Gallon, red for 300 Gallon.
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 6 seconds, this function will cease.
1-4) To restore this function, press these buttons again for 3 seconds.

3-9) Ice-Maker Function

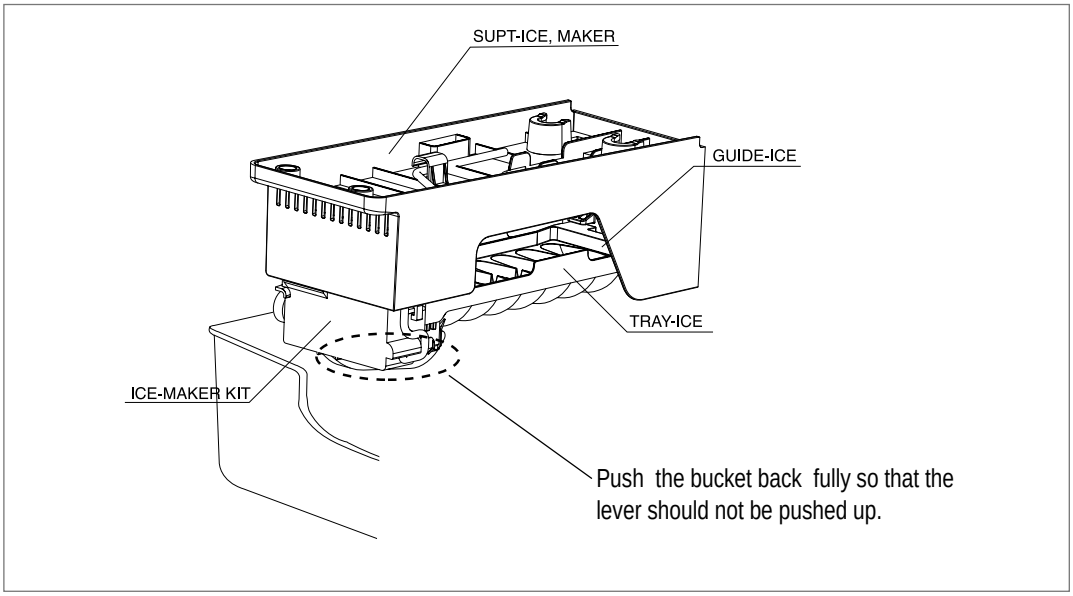
- The Ice-maker is referred to the device with an automatic ice production, storage in the ice bucket and dispensing through the ice chute.

1) Preparation of Ice-maker

1-1) 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.)

1-2) 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 touches the guide-ice of ice maker, the ice maker will not make ice any more because of a ice full signal.)

1-3) 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.



2) Initial Operation function

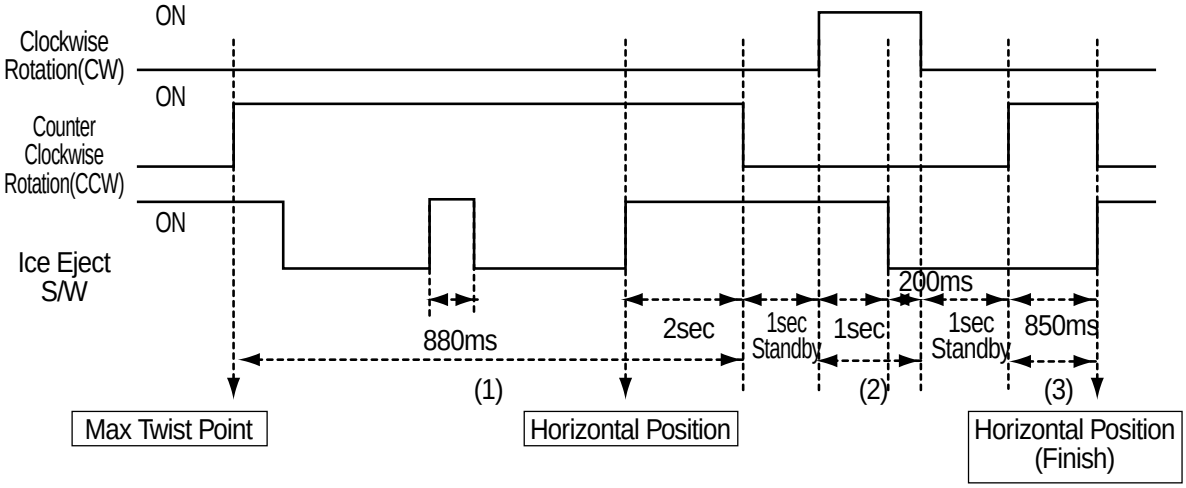
2-1) Whenever the power is on, the control board checks the ice tray leveling with the leveling switch with in 2 seconds.

2-2) If the levelling switch is not in the off position, the geared motor will turn to the initial position to level the ice tray.

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

2-4) After 2 hours, the sensor located under the ice tray will measure the tray temperature. If the temperature is maintained lower than -17℃ for 5 minutes, and the ice full switch is off position, the ice tray twisting process will begin.

- Horizontal Leveling upon Initial Power On



3) Water Supply function

3-1) When the ice tray is levelled again after ejecting ice, the water solenoid valve will be controlled to supply water.

- The ice eject standby time is as follows.(With ice full,it stands by for an hour)

No.of Water Supply	Detection of Water Supply		Detection of No Water Supply	
	Low Temp (lower than 17˚C)	High Temp (over 18˚C)	Low Temp (lower than 17˚C)	High Temp (over 18˚C)
Once	65min(58+7)	58min	110min	95min
2~4 times	58min	58min	70min	70min

4) Ice production

4-1) After eject waiting time from the water supply, the control board will check the temperature.

4-2) If the sensor reads the temperature lower than -17˚C for more than 5 minutes, than the ice production process is completed.

5) 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.

5-1) This function only works when the ice tray is leveled and the ice full signal is cleared.

5-2) When the water line is connected, each process such as a water supply, ejection, and leveling, can be investigated by this button.

6) Water Dispenser Function

6-1) This function is directly connected to tap water. When the Water Lever is pressed, the water solenoid valve will be open and water will come out. If the water extracting function is faulty, check out the solenoid, the connection pipe and the status of water supply and repair it

7) Ice off function

7-1) When the ice select button is pressed for more than 3 seconds, ICE OFF will be selected and when it is pressed for more than 3 seconds again, ICE OFF will be cancelled.

7-2) Ice production is on with the power on. So, WATER is automatically selected and it lights up.

7-3) When ICE OFF is selected, the ice maker does not operate.

7-4) As ICE OFF is selected, the ICE OFF LED goes on immediately. And, during ice ejection, water supply or restoration of the horizontal state, it will stop producing ice after the completion of the final water supply.

8) 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.

8-1) The ice tray stops moving.

8-2) The water supply process remains working as usual.

8-3) If the Ice-Tray is tilted over slightly or deviated from its horizontal position when checking the door inside, it indicates that the F-Door got opened during the ice ejection. If the tray does not return to its horizontal position more than 30 seconds after the door is closed, it can be considered to be faulty. If the F-Room stops working due to its door open, its Test function doesn 't work because it is under actual operation.

8-4) When it goes into the Test function with the Test button pressed, it carries out Ice Ejection regardless of the F-Door Open.

9) Ice Eject Function

- After the completion of the ice making, the operation of ice separation from the ice tray will be carried out as follows. According to the state of the Ice Eject S/W, it is classified as Full Ice Bin and Not Full Ice Bin.

Ice Bin Full : 1st Step → 2nd Step → 3rd Step → 4th Step → 5th Step → 6th Step

Ice Bin Not Full : 1st Step → 2nd Step → 6th Step

9-1) 1st Step : It is an ice temperature checking step for ice ejection. It checks whether the ice temperature is lower than -17.0 ˚C and it has passed 58 mins (58~110 mins : refere to table 3-1) after water supply.
- When F-Defrost goes into operation during the ice eject standby, it will be counted from the start after the completion of Defrost and it will be checked if it has passed 58 minutes after the completion of F-Defrost. When the Ice Maker Sensor temperature becomes lower than -17.0 ˚C and maintains it for 5 minutes , it will proceed to the next stage.

9-2) 2nd Step: To separate ice from the ice tray, it will turn over the ice tray by rotating the Eject Motor clockwise.
- Ice Bin Full: When the Ice Eject S/W becomes on again within 3.6 seconds from the point that it is turned off after the clockwise rotation of the Ice Eject Motor, it indicates Ice Bin Full. So, it will stop the clockwise rotation and start counterclockwise rotation after one second. The sixth step will be carried out.
- Ice Eject S/W does not become on again within 3.6 seconds, it will be evaluated as Ice Bin Not Full. In this case, normal ice eject operation will be carried out and it will perform the next 3rd step.

9-3) 3rd Step : When the Ice Eject S/W does not become on again within 3.6 seconds from the point that it is turned off after the clockwise rotation of the Ice Eject Motor, it is regarded as normal ice eject operation. When the F-Door is opened during the ice ejecting operation ever since, it will hold the operation and operate again with the door closed.

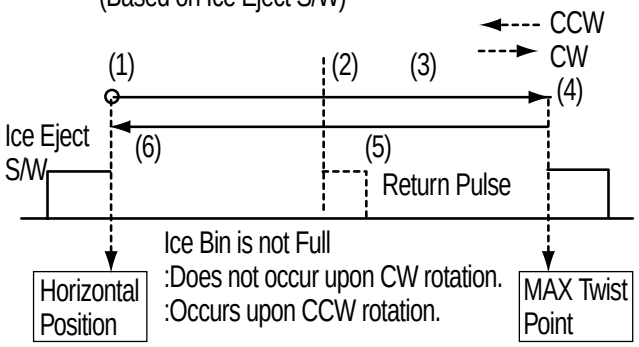
9-4) 4th Step : When the Ice Eject S/W is turned on after 3.6 seconds, it will stop rotating. And, it will be regarded as the maximum twist point and it will standby for a second at this maximum twist point.

9-5) 5th Step : It is a step that the ice tray restores to its horizontal position by rotating the Ice Eject Motor counter clockwise. After the 4 th Step, the Ice Eject Motor will rotate counter clockwise. At this time, the Ice Eject S/W will check signals called " Return Pulse" from the Feeler Arm whether there is ice in the ice bin or not.

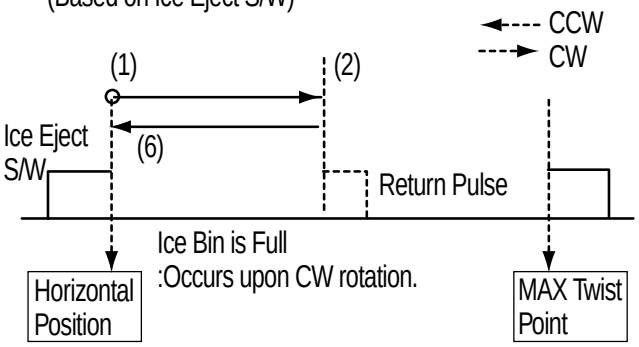
9-6) 6th Step : When the Ice Eject S/W becomes on after the detection of " Return Pulse" , it will stop the counter clockwise rotation of the Ice Eject Motor and consider it to be leveled horizontally. At this time, if it is restored to its horizontal position after the detection of Ice Bin Full, it will not supply water and try to eject ice every hour until the Ice Bin Full is cancelled. Also, it will supply water when normal ice ejection is carried out.

9-7) The figure indicates operation specs for normal ice ejection (Ice Bin Not Full / Ice Bin Full.)

- Fig.Normal Ice Ejection &Horizontal Leveling (Based on Ice Eject S/W)



- Fig.Ice Ejection &Horizontal Leveling Operation (Based on Ice Eject S/W)



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 12 hours for the refrigerator, and 12 hours and 24 hours for the freezer, respectively.
5) The defrost heater on-time is determined by the defrost sensors as follow :

	Refrigerator	Freezer
Heater OFF	17˚C	12˚C

3-11) Sound Function

1) Button Touch Tone (Refer to Sound Table)

1-1) When selecting each button on the Control Panel, Button Touch Tone goes off as follows.

Description	Sound Group	Sound Pattern
Selection of POWER FREEZE, VACATION,LOCK,ICE OFF or FILTR RESET	SUB ON (Function Selection)	
Cancellation of POWER FREEZE,VACATION,LOCK or ICE OFF. Selection of FILTER OFF	SUB OFF (Function Cancellation)	
Selection of WATER,CUBED or CRUSHED	MODE (Function Change "Ding ")	
Selection of FREEZER or FRIDGE button	VERTICAL (Temp Setting)	
Completion of Water Supply for Ice Maker Test Mode	"Ding-Dong "	Previous Ding-Dong Sound
Door Open Alarm	ALERT (Alarm Sound)	

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.

3-12) 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 and C-Fan are working properly.

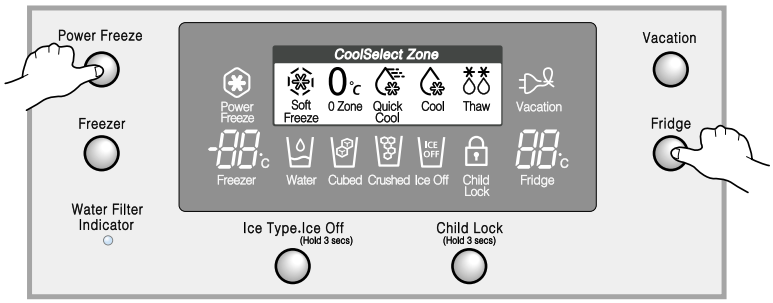
2-2) There is no defrost cycle in this mode.

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 fridge and Power Freeze. buttons for 8 seconds simultameously 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 8 seconds at the same time.



1) Pull-down Operation

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.

1-4) After pull down operation, the system will be cycled at -25˚C for the freezer and 1˚C 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.

notch) After pull down operation, defrost will be followed for freeezer and refrigerator

2) 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.

4-2) 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 without a beep.

1-3) When a LED segment blinks, only the cancellation function (Press Power Freeze and Vacation 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

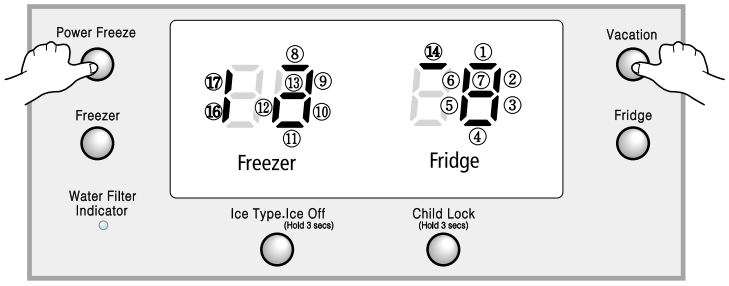
2-1) To select this function, press Power Freeze and Vacation buttons simultaneously for 8 seconds with an audible tone.

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.

∗ Self-diagnostics check list

Press both buttons simultaneously for 8 seconds



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

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
⑭	DAMPER HEATER ERROR
⑯	UART COMMUNICATION ERROR-COMMUNICATION WIRE ERROR
⑰	LOAD-MICOM COMMUNICATION ERROR-LOAD-MAIN MICOM COMMUNICATION 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 +65℃ or lower than –50℃.
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 +65℃ or lower than –50℃.
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 +65℃ or lower than –50℃.
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/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	Ice Maker change.
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 +65℃ or lower than –50℃.
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 +65℃ or lower than –50℃.
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 +65℃ or lower than –50℃.
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 +65℃ or lower than –50℃.
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/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/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	-
14	DAMPER HEATER ERROR	REF. SEGMENT	Damper Heater connector missing contack fuilure, wire cut.	
15	Uart Communication Error (PLC)	FREEZER SEGMENT	Communication error with PLC modem	When it is not connected with PLC modem
			Note) PLC Communication modem will be applied optionally. So even if the appliance which does not apply PLC displays this error digit, It is not defect.	
16	L↔M Communication Error	FREEZER SEGMENT	When there is no communication between MICOM MAIN and LOAD for more than 10 seconds,the entire LCD will keep blinking with buzzer alarm sound.	It needs an oscilloscope to check the error.So,it is advisable to check after replacing MAIN or PANEL PCB.

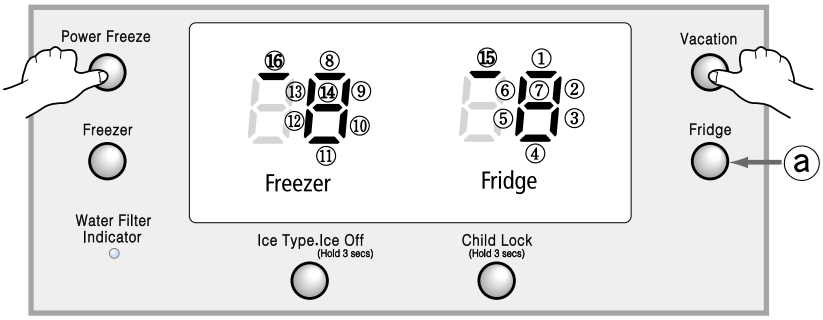
4-3) Load Operation Check Function

1) In the normal operation, press Power Freeze and Vacation buttons simultaneously for 6 second, 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
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	Water Tank Heater
⑯	Damper
⑰	Normal condition

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



※ The FREEZER FAN and CONDENSER FAN are operated to High/Low rpm automatically according to the operational condition.
※ ⑤⑥ and ⑰ only explain the system operation state according to the ambient condition

4-4) Restoration Function for Power Outage

1) When the freezer temperature is lower than 5℃, all functions on the display panel will be restored.
2) When the freezer temperature is higher than 5℃, all functions will be initialized.
(-20℃ for the freezer, 3℃ for the refrigerator, and Water for the Ice Type)

4-5) Set Point Shift Function

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

Press both buttons simultaneously for 12 seconds

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.

KEY	Reference Value
Vacation key	ITEM DONM ↓
Fridge key	ITEM UP ↑
Power Freeze	OPTION VALUE DOWN ↓
Freeze key	OPTION VALUE UP ↑

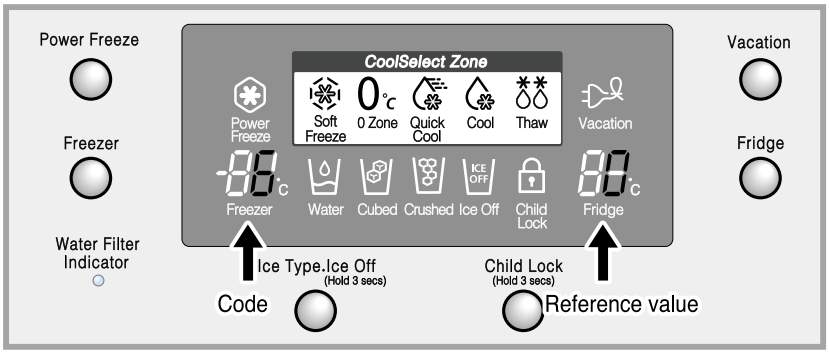
4-6) Table of Set Point Shift Function

1) Shift the freezer temperature sensor

Reference Value	0

Code	Temp. shift	Code	Temp. shift
0	0	8	0.5℃
1	−0.5℃	9	1.0℃
2	−1.0℃	10	1.5℃
3	−1.5℃	11	2.0℃
4	−2.0℃	12	2.5℃
5	−2.5℃	13	3.0℃
6	−3.0℃	14	3.5℃
7	−3.5℃	15	4.0℃

Example) If you are lowering the current temperature of the freezer by －3℃

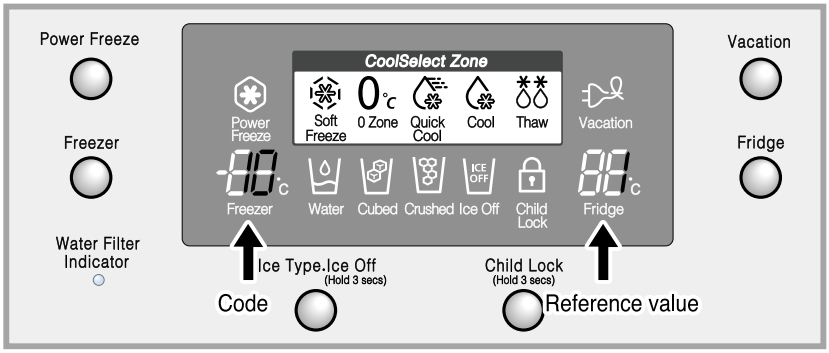


2) Shift the refrigerator temperature sensor

Reference Value	1

Code	Temp. shift	Code	Temp. shift
0	0	8	0.5℃
1	－0.5℃	9	1.0℃
2	－1.0℃	10	1.5℃
3	－1.5℃	11	2.0℃
4	－2.0℃	12	2.5℃
5	－2.5℃	13	3.0℃
6	－3.0℃	14	3.5℃
7	－3.5℃	15	4.0℃

Example) If you are raising the current temperature of the refrigerator by 1.5℃



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

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

Reference Value	2

Code	Volume to supply water
0	95 cc
1	85 cc

4) Shift the Ice maker temperature sensor

Reference Value	4

Code	Ice maker temperature sensor
0	-17℃
1	-16℃
2	-15℃
3	-14℃
4	-13℃
5	-12℃
6	-18℃
7	-19℃

5) Shift the CoolSelect Zone™ temperature sensor.

Reference Value	20

Code	CoolSelect Zone™ temperature sensor
0	0℃
1	-0.5℃
2	-1.0℃
3	-1.5℃
4	0.5℃
5	1.0℃
6	1.5℃
7	2.0℃

5. Disassembly and Reassembly

5-1) Assy Door

5-2) Door Sub Parts

5-3) Refrigerator Compartments

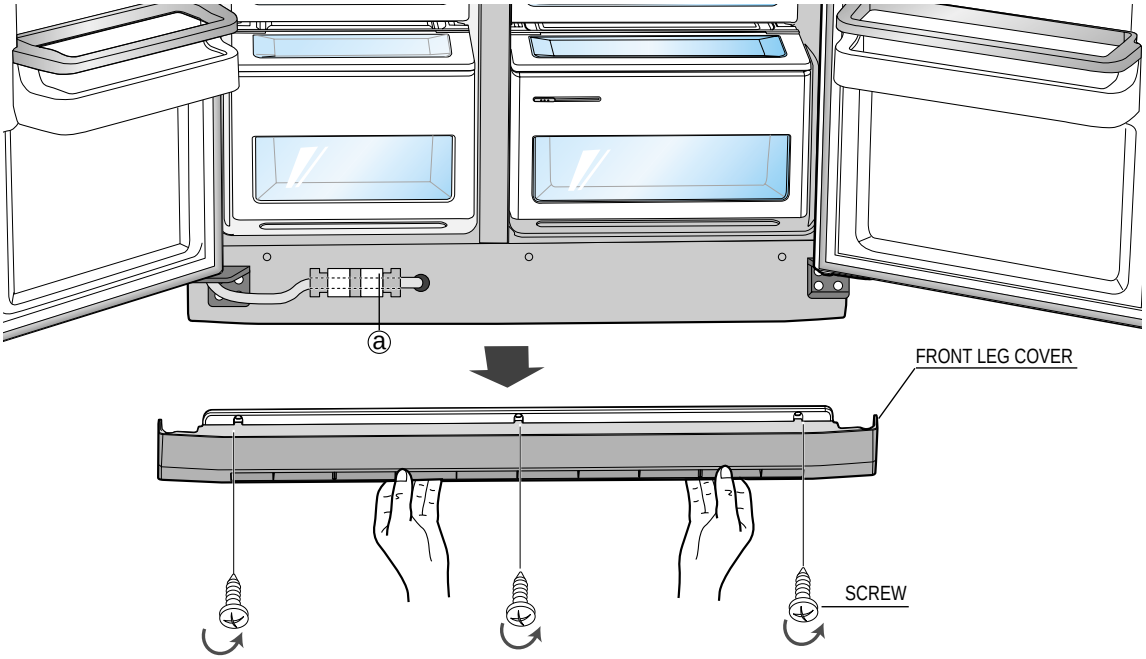
5-4) Freezer Disassembly

5-5) Machine Compartments

5-1) Assy Door

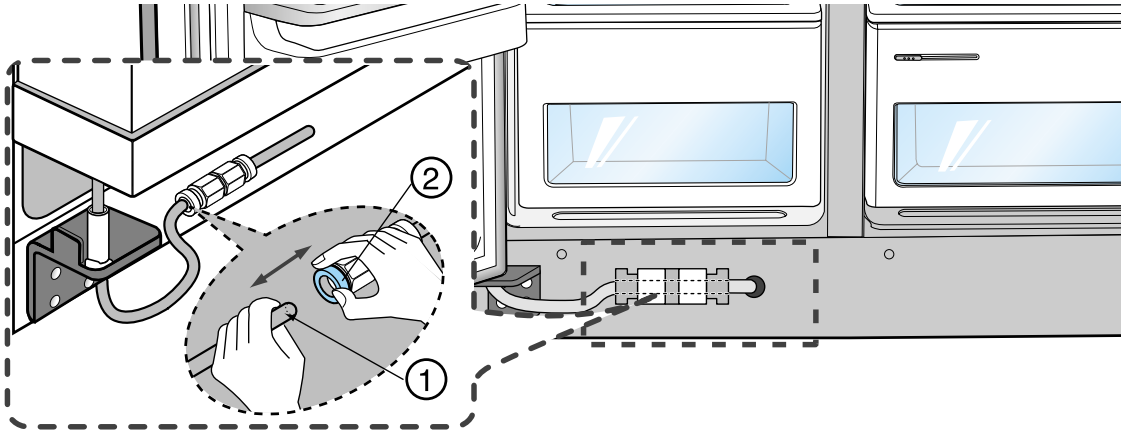
Removing the Front Leg Cover

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



Separating the water supply line from the refrigerator

1) Remove the water tube by pressing the coupler (②) and pulling the water tube (①) away.



WARNING

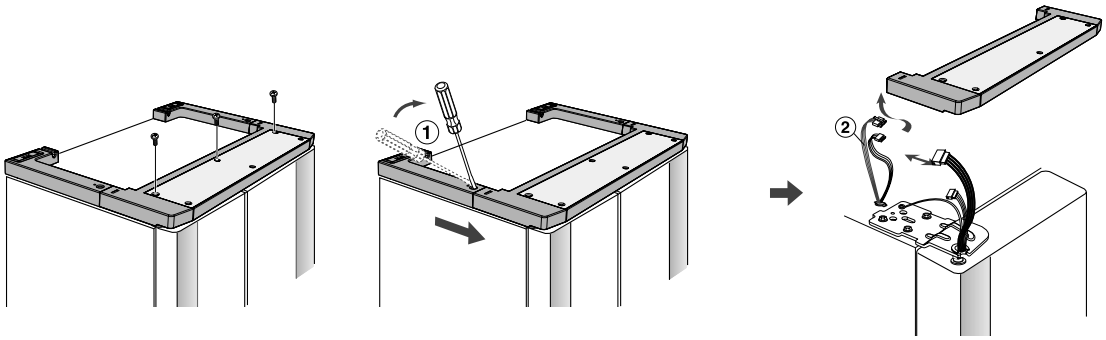
Do not cut the water tube but separate it from the coupler.

NOTE

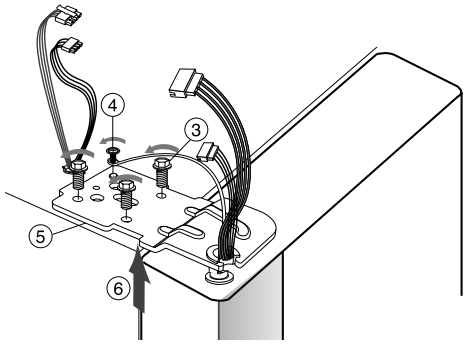
- Lift the door straight up.
- Be careful not to pinch the water tubing and wire harness on the door.
- Place doors on a protected surface.

Removing the Freezer Door

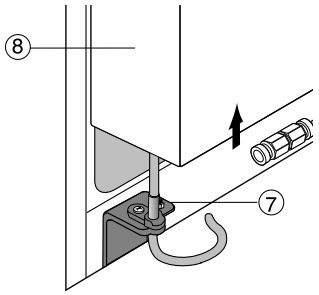
1) With the door closed, remove the Top table (①) using a screwdriver, and then disconnect the wires (②).



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.

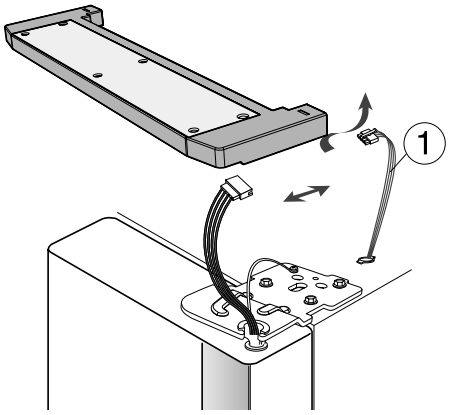


3) Remove the door from the lower hinge (⑦) by carefully lifting the door (⑧).

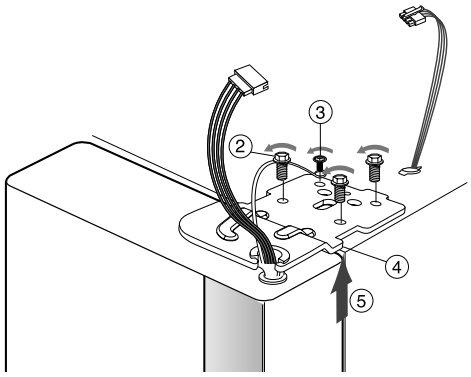


Removing the Refrigerator Door

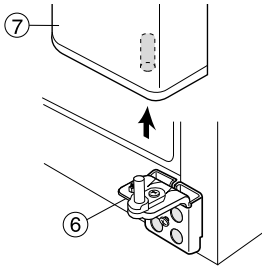
1) Disconnect the wires (①).



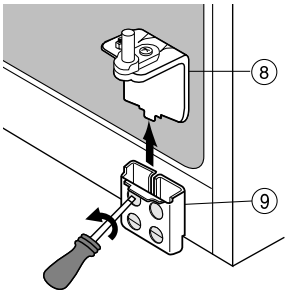
2) Remove hinge screws (②) and ground screw (③) counter-clockwise, and take off the upper hinge (④) in the direction of the arrow (⑤). Take care when removing the door to ensure that it does not fall on you.



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



4) Remove the lower hinge (⑧) from the bracket lower hinge (⑨) by lifting the lower hinge (⑧) in the direction of the arrow.

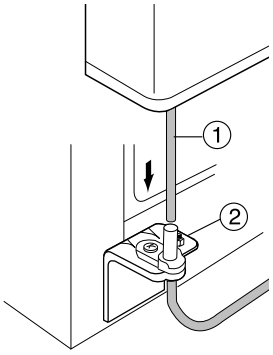


NOTE

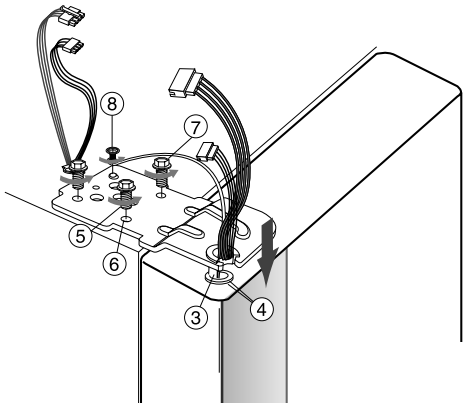
• After disassembling the freezer / refrigerator door, move it to the appropriate location. you must reassemble it.

Reattaching the Freezer Door

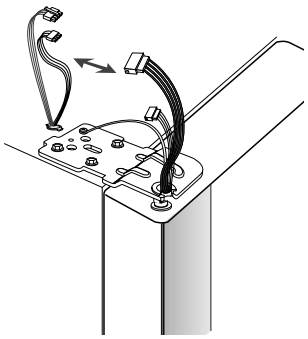
1) Reattach the freezer door by inserting the hose (①) in the lower side of the door into the hole in the lower hinge (②) and pull the hose down.



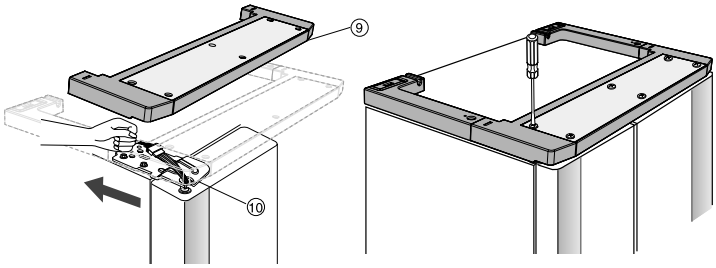
2) Insert the upper hinge shaft (③) into the hole (④). After levelling the upper hinge hole (⑤) with the hole of the cabinet (⑥). Fasten bolts (⑦) and screw (⑧) in a clockwise direction.



3) Connect the wires.

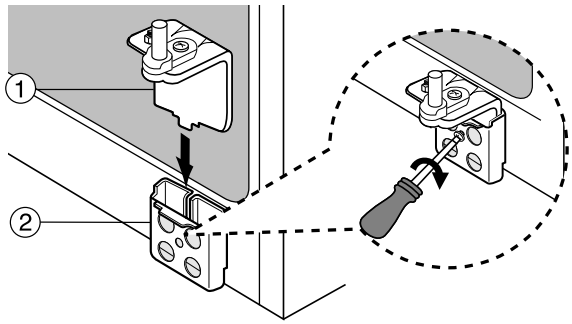


4) Put the front part of the Top table (⑨) on the front part of the upper hinge (⑩) and reattach from the front part of the Top table first.

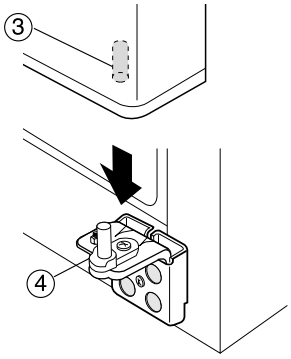


Reattaching the Refrigerator Door

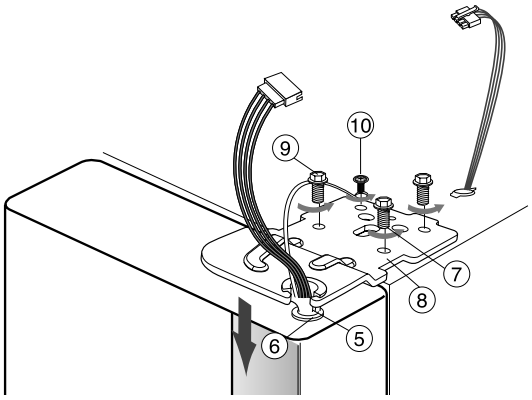
1) Insert the lower hinge (①) in the bracket lower hinge (②).



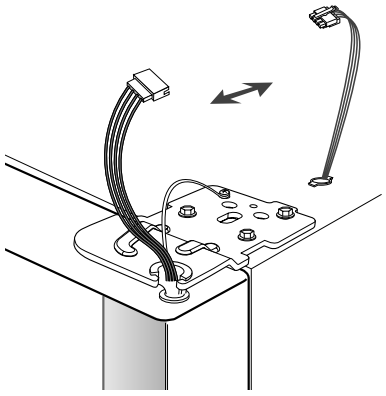
2) Place the hole in the refrigerator door (③) over the lower hinge (④).



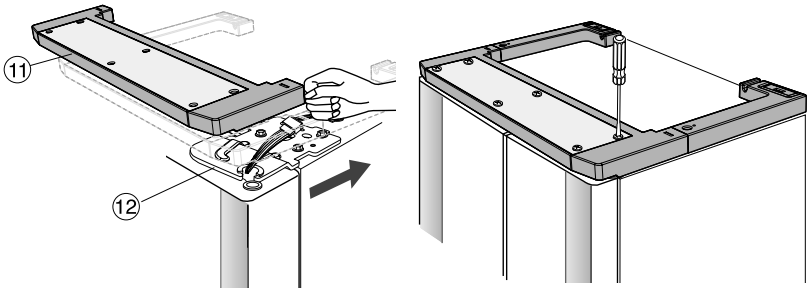
3) Insert the upper hinge shaft (⑤) into the hole (⑥). After levelling the upper hinge hole (⑦) with the hole of the cabinet (⑧). Fasten hinge screws (⑨) and screw (⑩) in the clockwise direction.



4) Connect the wires.



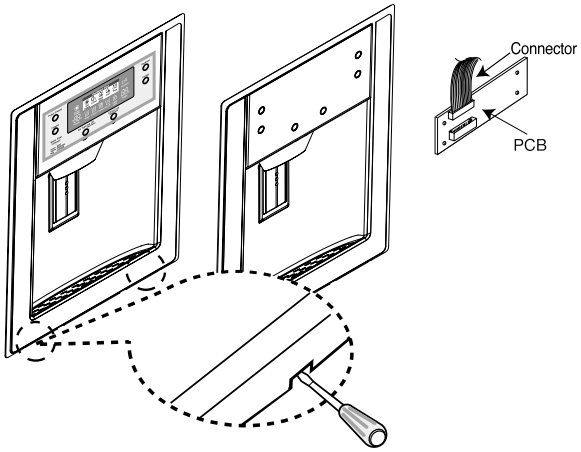
5) Put the front part of the Top table (⑪) on the front part of the upper hinge (⑫) and reattach it from the front part of the Top table first.



5-2) Door Sub Parts

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.

Beverage Station™

The beverage station™ allows access to the refrigerator without opening the refrigerator door.

1. Open the door beverage station™
2. With a small flat-blade screwdriver,take out the rubber cap, then put it into the small hole and push the button inside.
3. Take off its door.

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.

5-3) Refrigerator Compartments

Refrigerator Door Light Switch

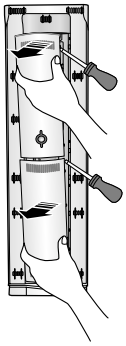
The refrigerator has a door light switch located in the upper right corner for the refrigerator.

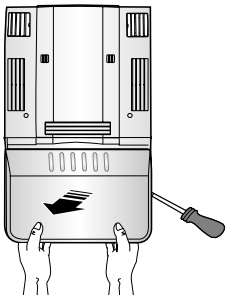
1. Use a small flat-blade screwdriver to unlock the locking tab and pull the switch out until the wire connector is visible.

Refrigerator Light

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

1. Place a flat screwdriver under the light cover hooks and push in the direction of the arrow.
2. Pull the cover in the direction of the arrow.
3. After changing the bulb, replace the light cover.





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.

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.

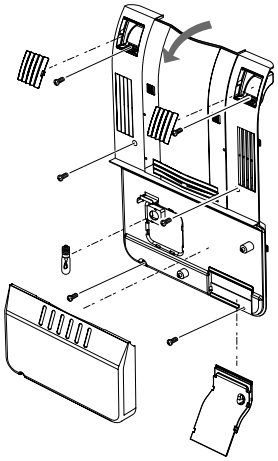
Water Filter

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 indication mark (unlock position) and push it up while turning 1/2 turn clockwise until the lock position is aligned. Do not over tighten.

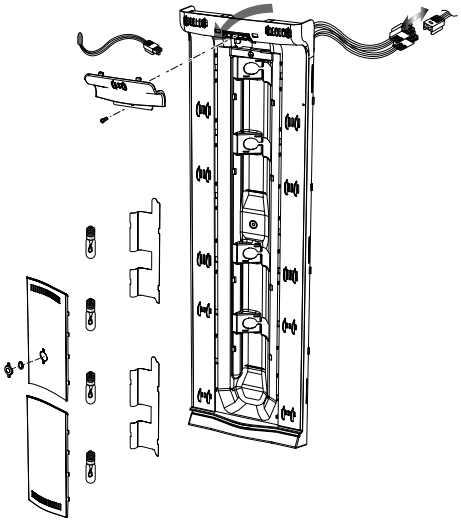
Evaporator Cover in the Refrigerator

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 connecto 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

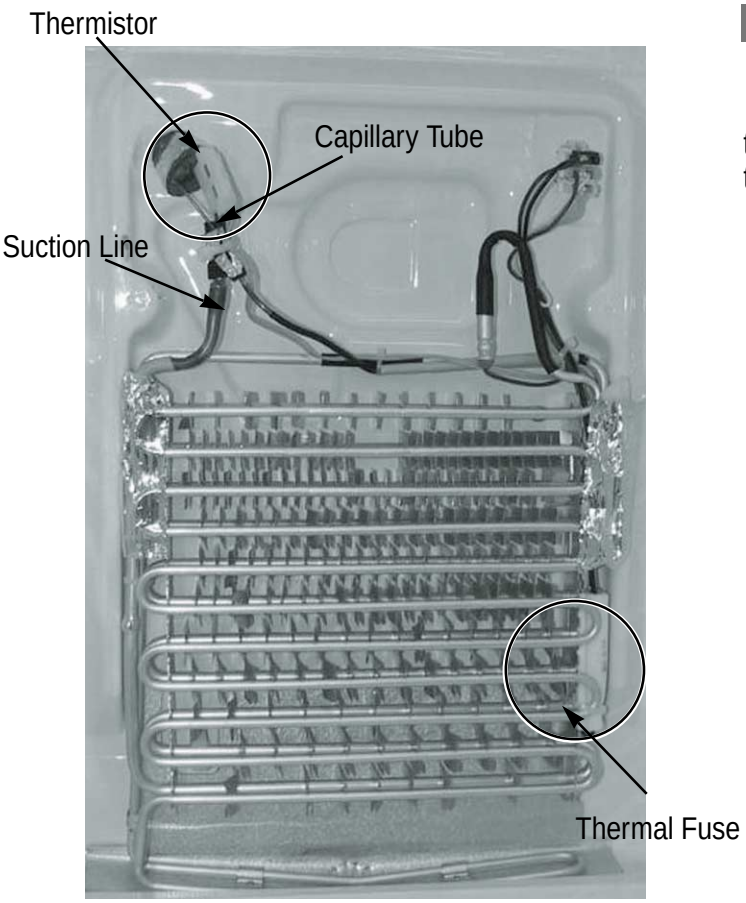
The evaporator fan is located in the middle rear of the freezer. This fan circulates cold air in the freezer.

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

Evaporator in Refrigerator

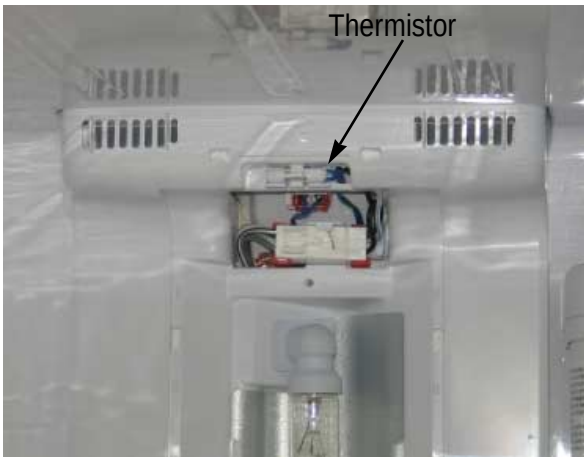
Evaporator is located in the bottom of refrigerator.

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.



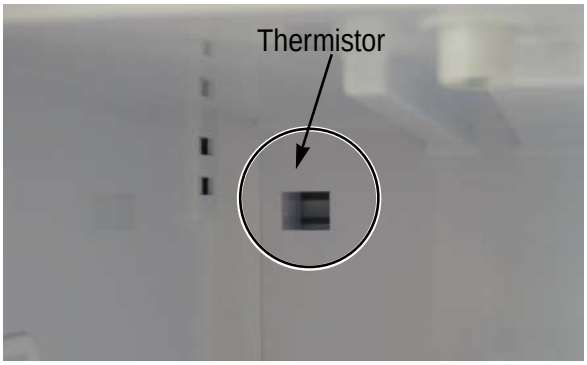
Refrigerator Thermistor

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.



5-4) Freezer Compartments

Door Bin in Freezer

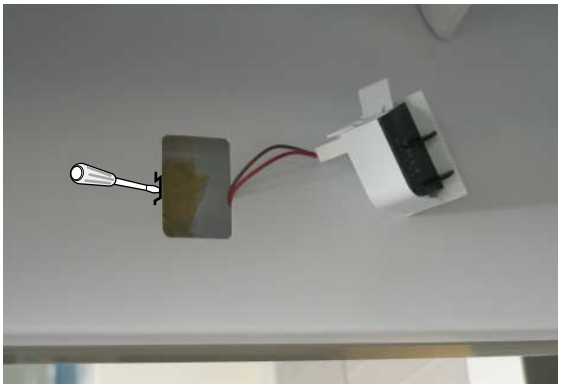
The door bins allow storage of perishable items.

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 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.

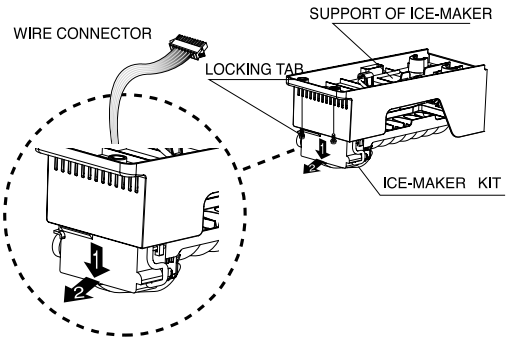
Ice Dispenser & Ice Maker

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.

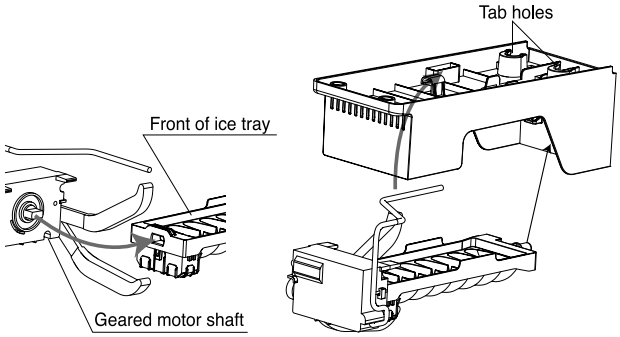
The ice maker is located inside of the ice dispenser assembly.

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.

Screws

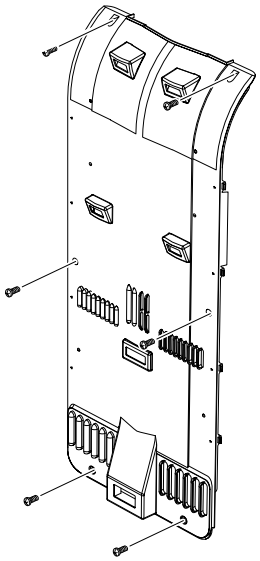
Freezer Light

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

1. Remove the light cover by pressing the cover.

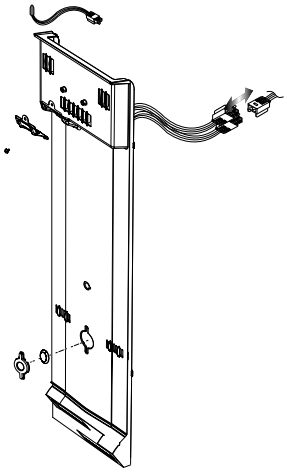
Evaporator Cover in Freezer

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

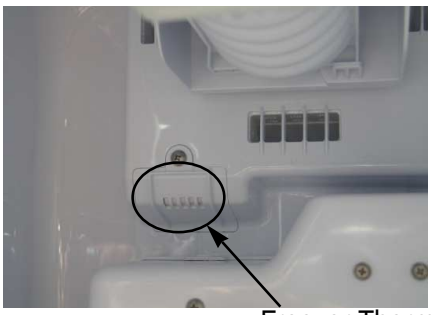
The evaporator fan is located in the lower rear of refrigerator. This fan circulates cold air in the refrigerator.

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

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.

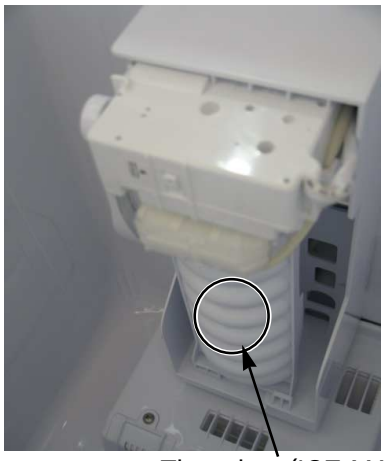


Ambient Thermistor

The ambient thermistor is located inside the case PBC assembly. It sends temperature signals to the micro-processor.

Ice-MakerThermistor

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



Freezer Bimetal

Thermal fuse has been replaced with Bimetal since 2004, May 3rd

Freezer Thermistor

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

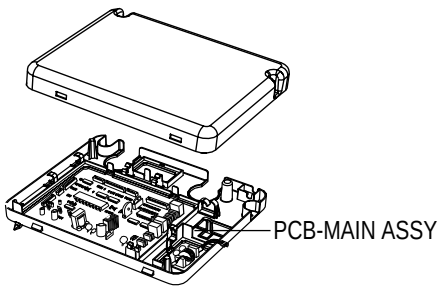
5-5) Machine Compartments

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 flat-blade screw driver.



Water Solenoids

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

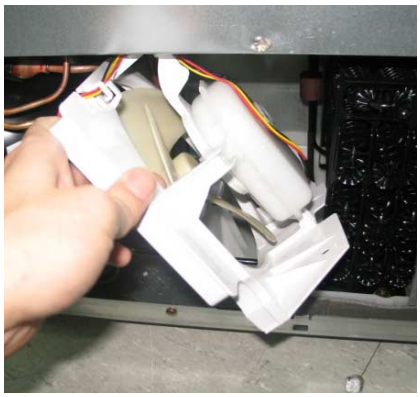
1. Remove bracket screw (1) on cabinet bottom right siole.
2. Take the solenoids assembly out.

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.

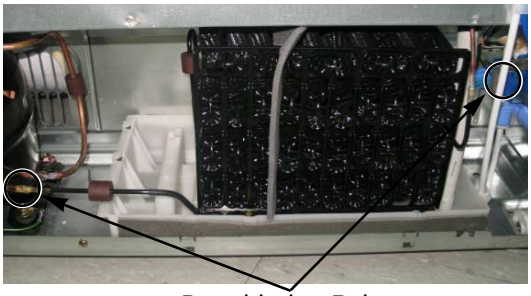
1. Disconnect the condenser fan wire.
2. Remove screw (1) on the drain water tray.
3. Take the condenser fan assembly off.



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

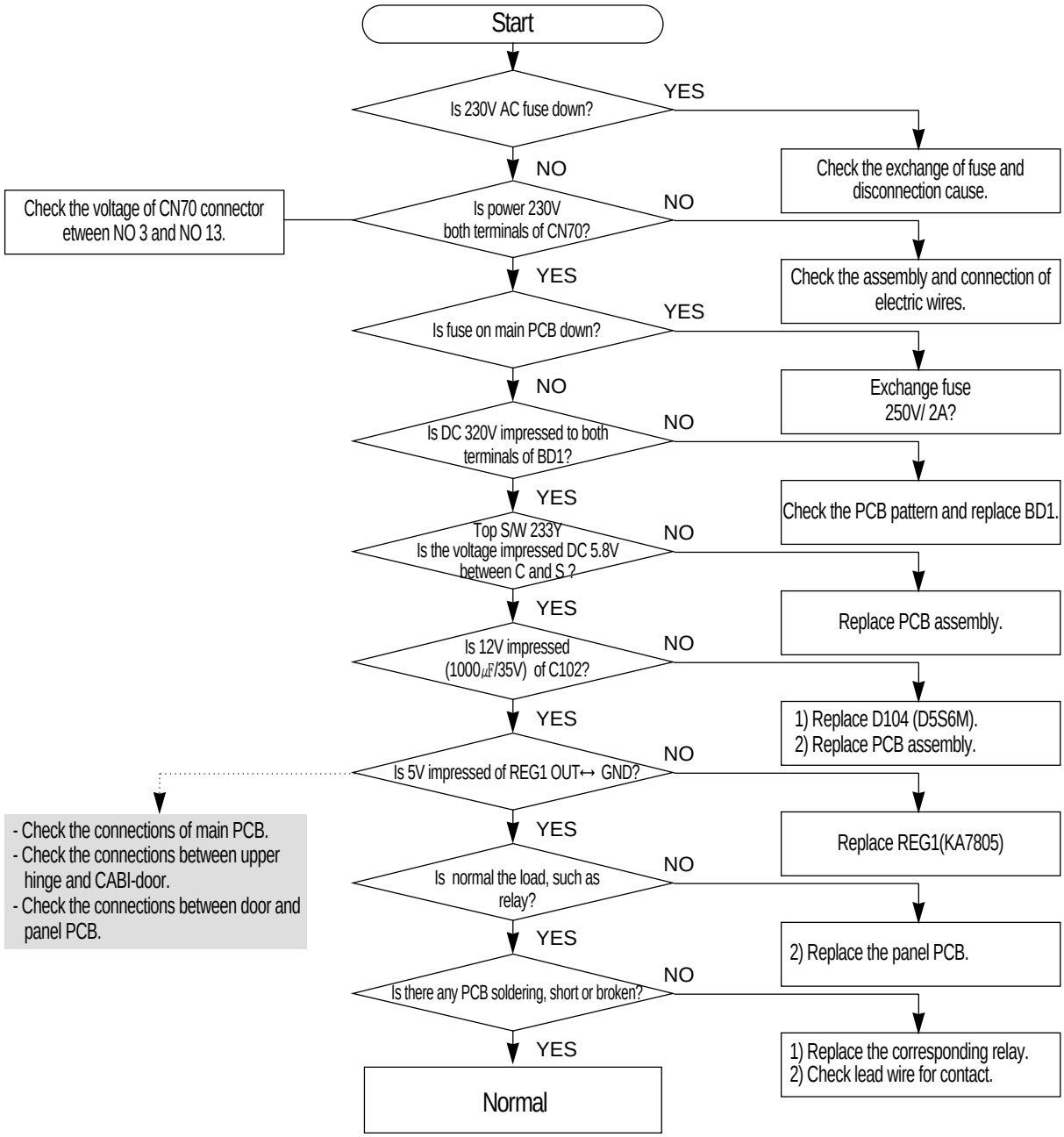
6. Troubleshooting

6-1) If power is not ON

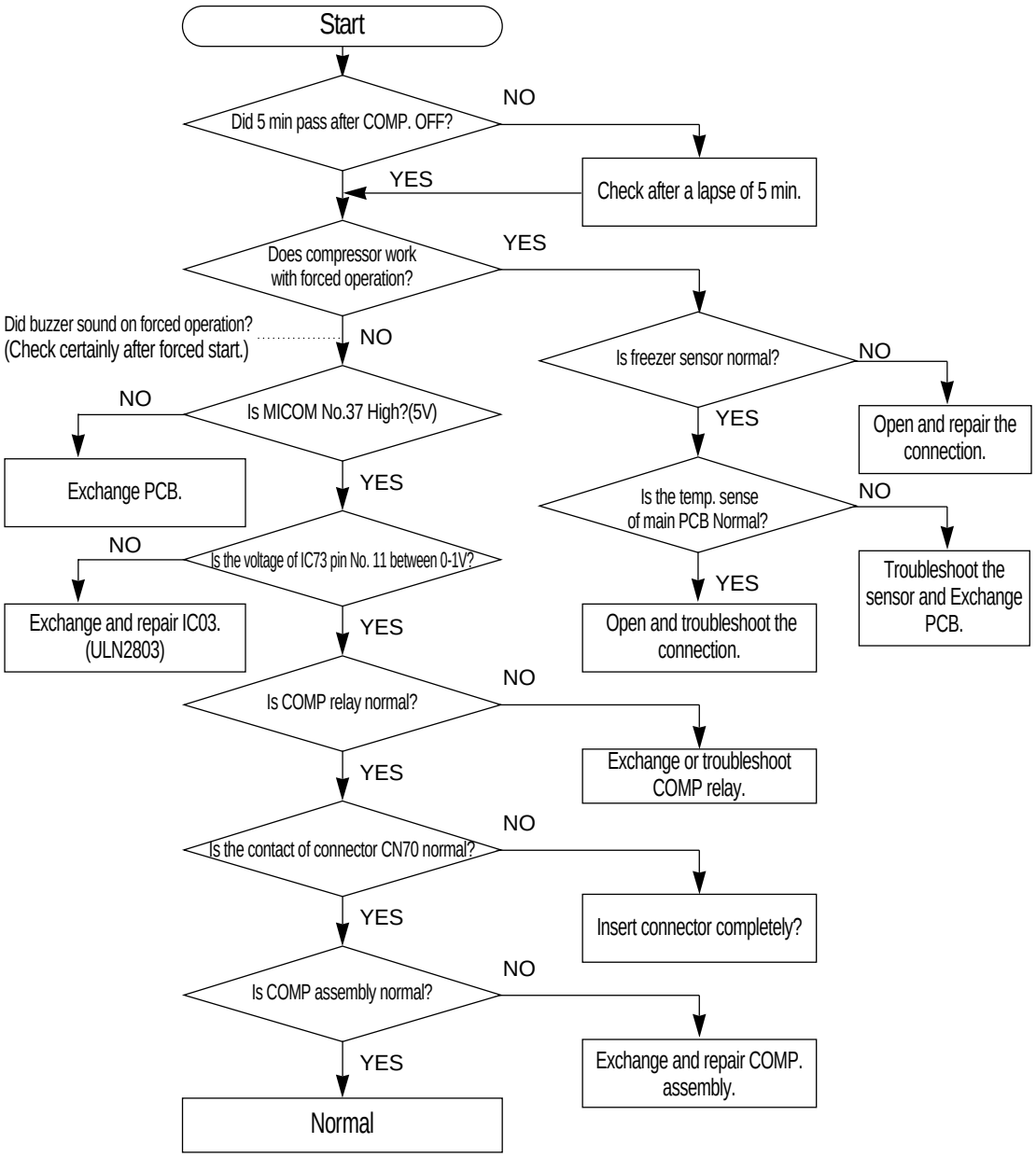
Caution!

At the power of main PCB, the 230V power and a high-voltage over about DC 320V occur. Please take care of yourself on repair and measurement.

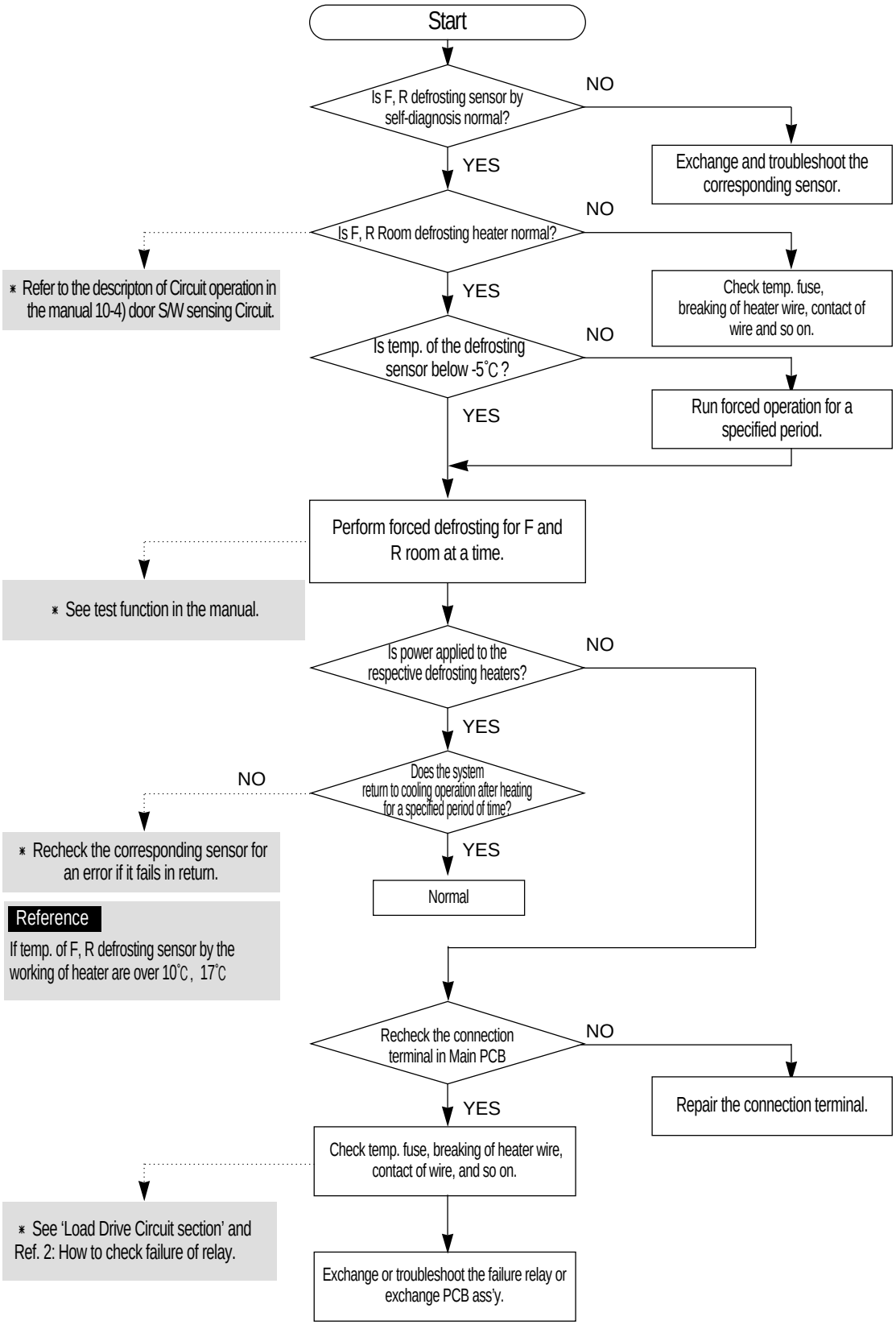
To check the main PCB, please apply descriptions of operation and references in the manual.



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



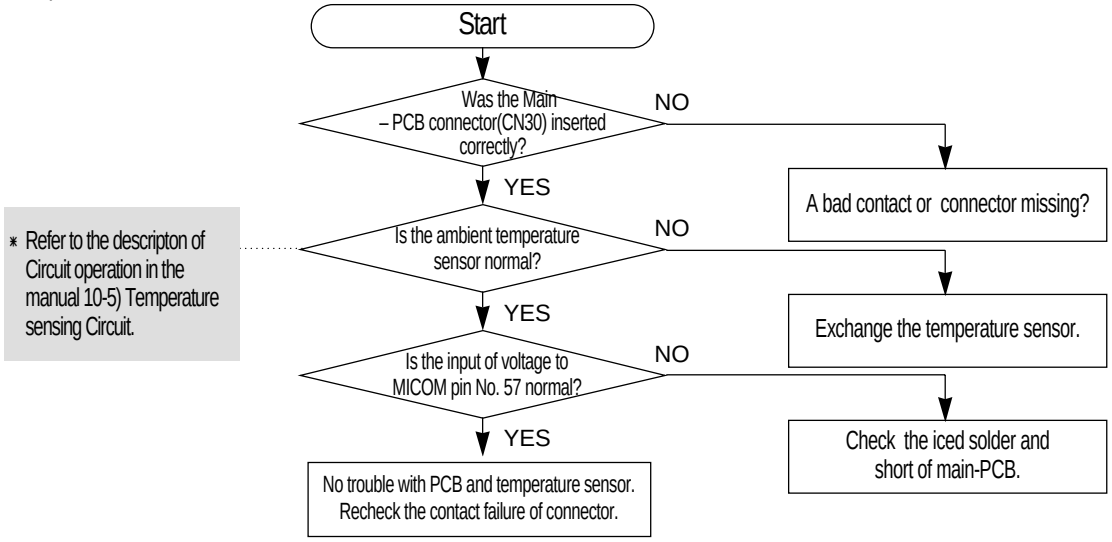
6-3) If defrost function



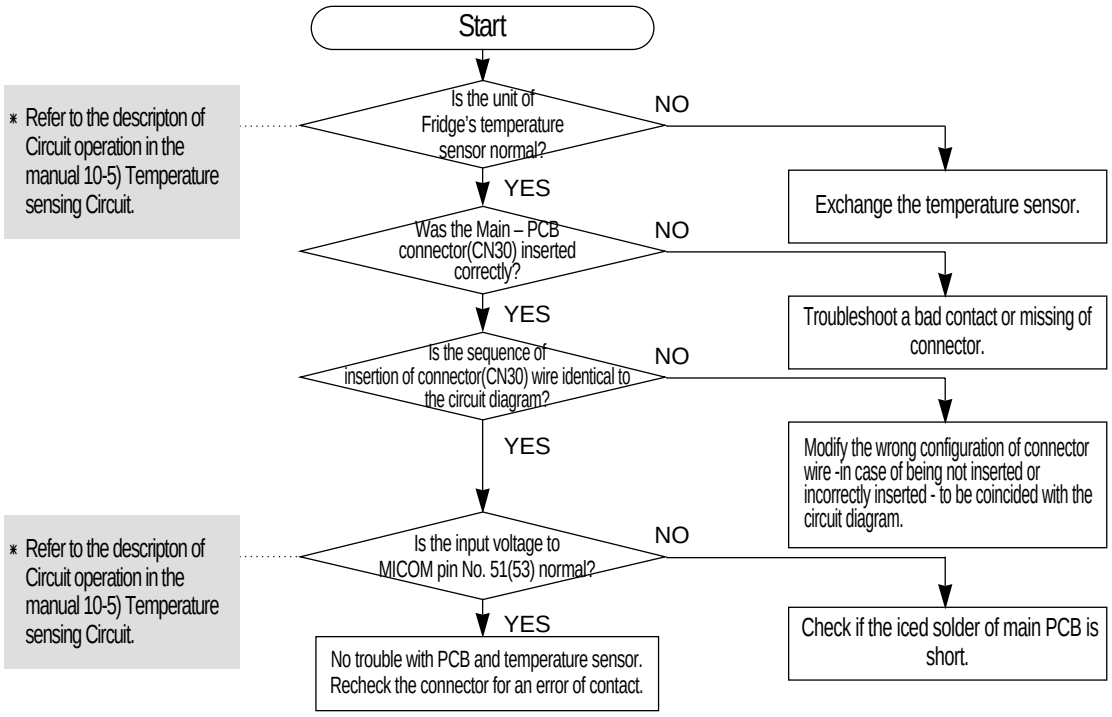
6-4) If there is a trouble with self-diagnosis

- 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 in the manual.

1) If the ambient sensor has trouble

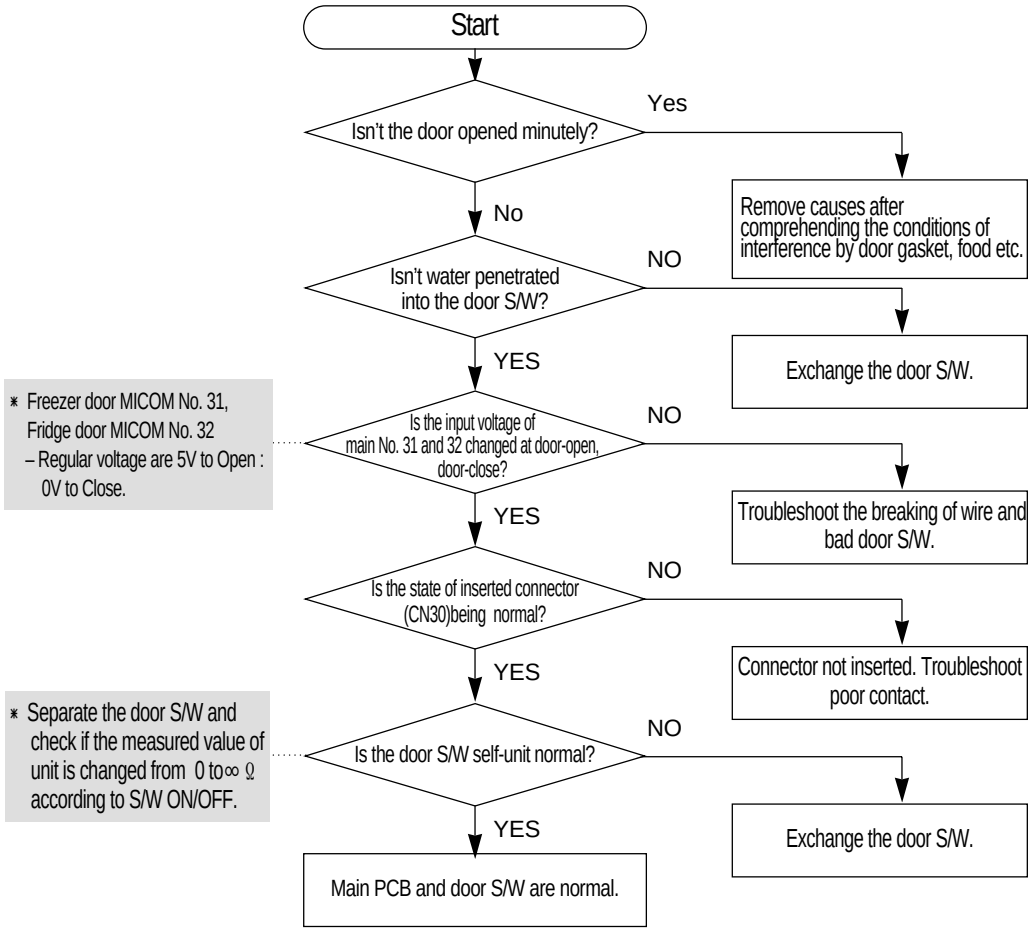


2) If the temperature sensor of F and R room has trouble

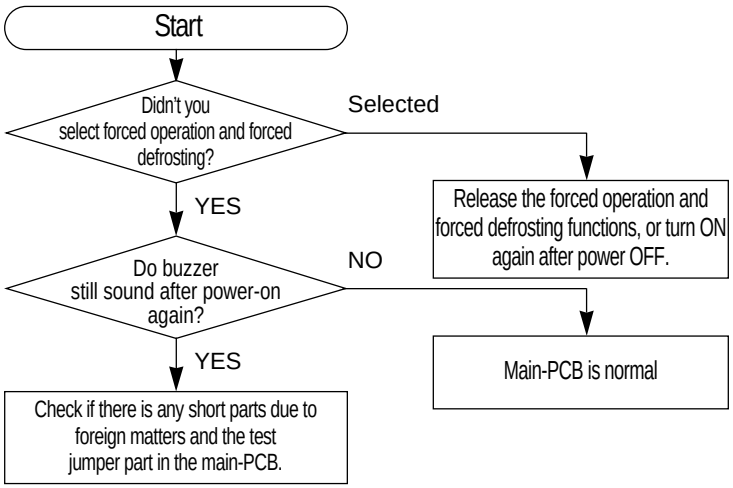


6-5) If alarm sound

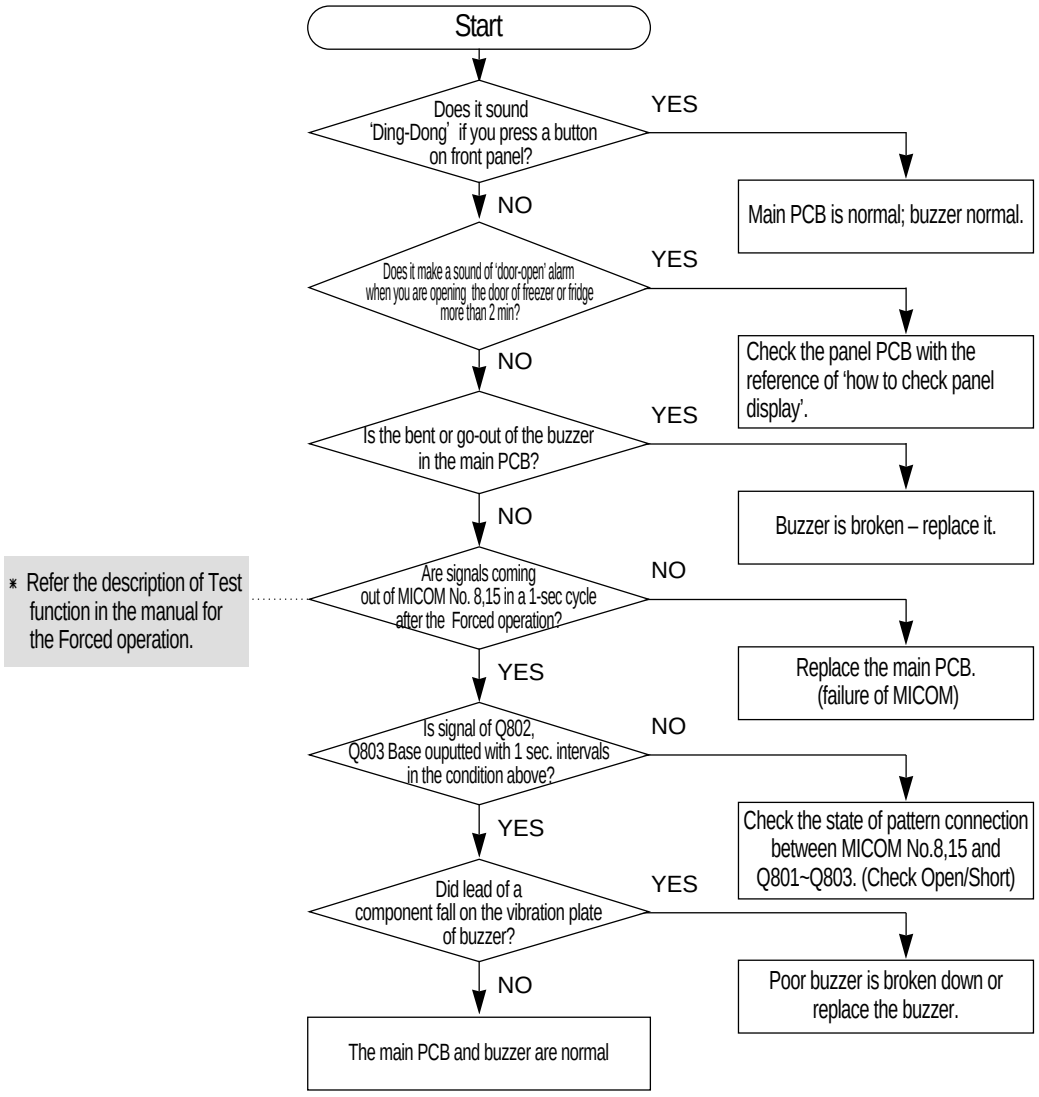
1) If “Ding-Dong” sounds continuously



2) If “Beep” sounds continuously

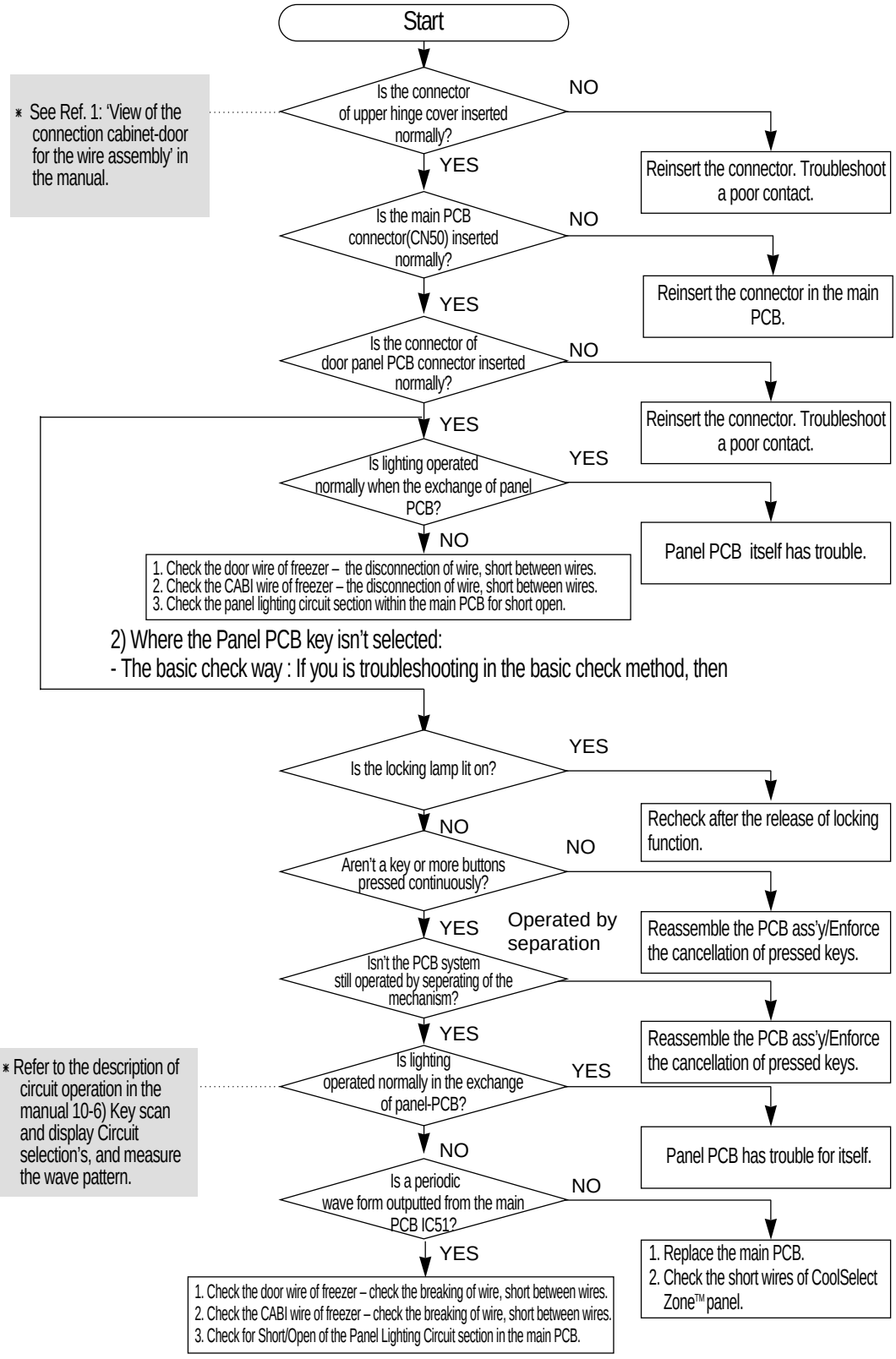


3) Without sound of buzzer operation



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

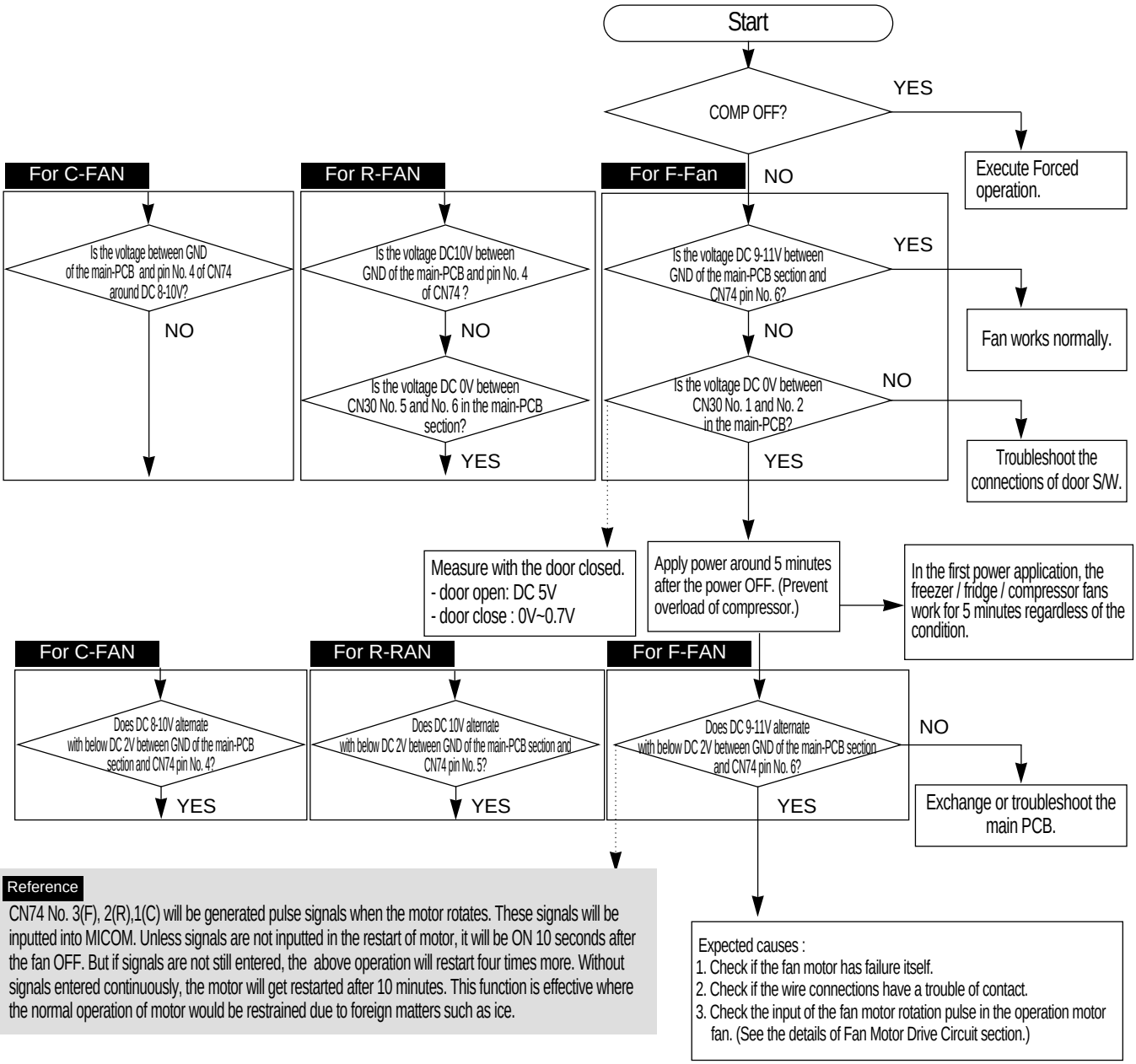
1) Where lighting of the panel PCB is disabled, or only some lamps are disabled.



6-7) If fan doesn't work:

Reference

- 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 may do not work. If the door is opened and closed once at a high ambient temperature, the BLDC motor would be operated after a 1-minute or longer delay. Therefore, you' re advised not to take it for an error.
- When the refrigerator is open, the freezer fan motor will also stop working simultaneously with the fan motor. (for the purpose of performance improvement).



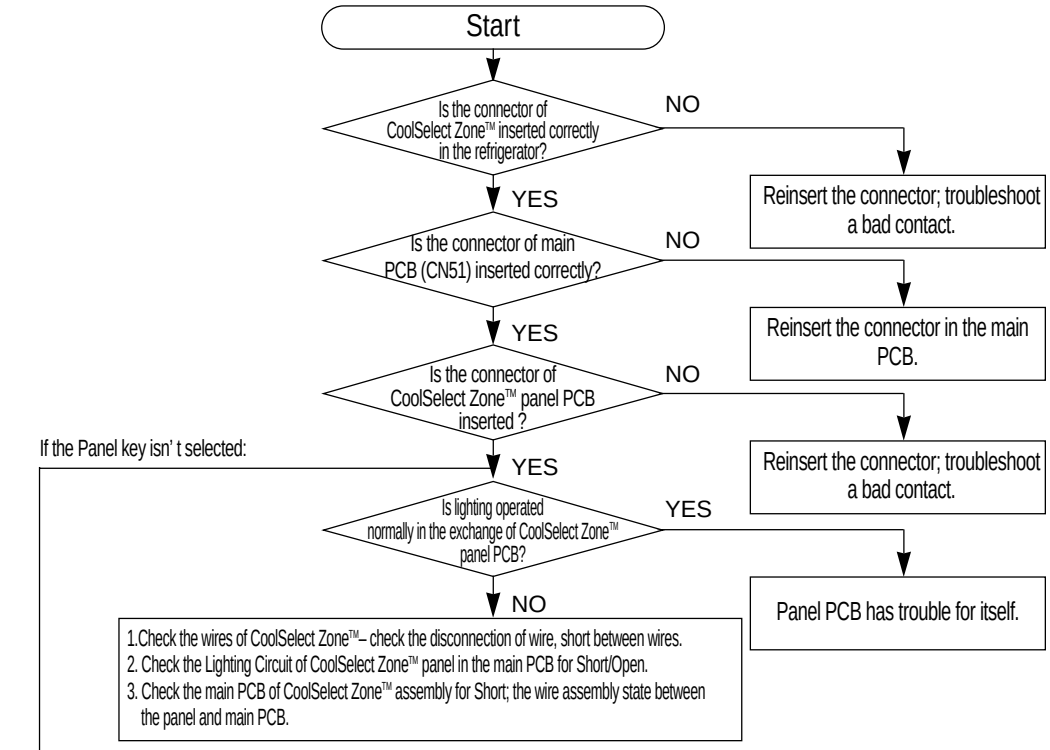
Reference

CN74 No. 3(F), 2(R),1(C) will be generated pulse signals when the motor rotates. These signals will be inputted into MICOM. Unless signals are not inputted in the restart of motor, it will be ON 10 seconds after the fan OFF. But if signals are not still entered, the above operation will restart 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 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.)

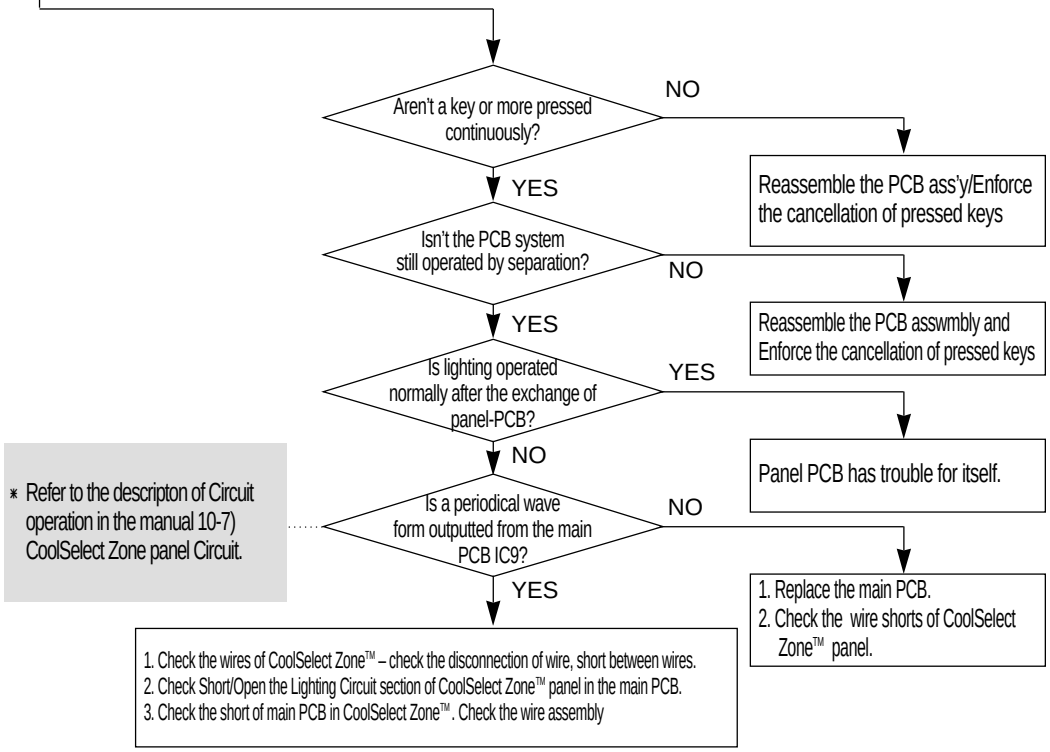
6-8) If CoolSelect Zone™ isn't operated normally

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



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

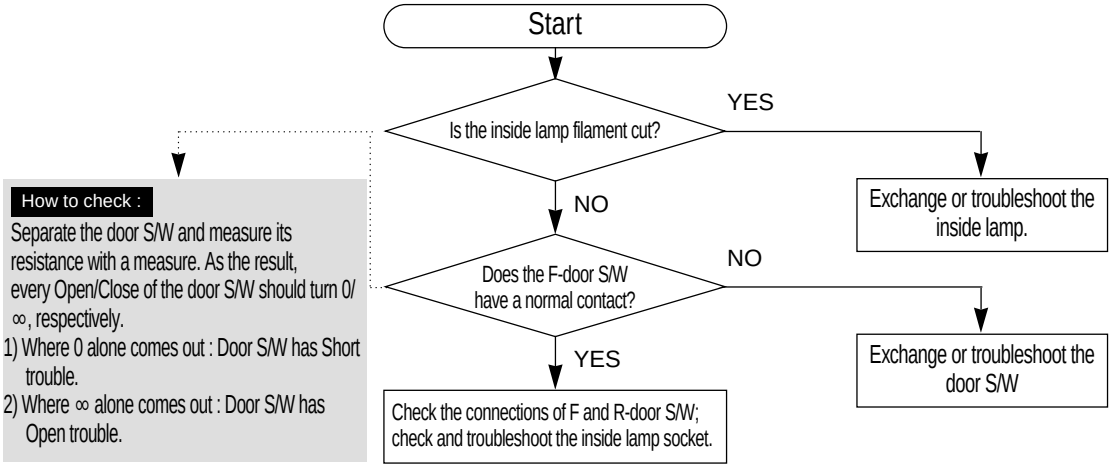
- The basic method is applied to check – if you fail in troubleshooting after above the execution, then



6-9) If the lamps of freezer / refrigerator does not light.

⚠ 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.



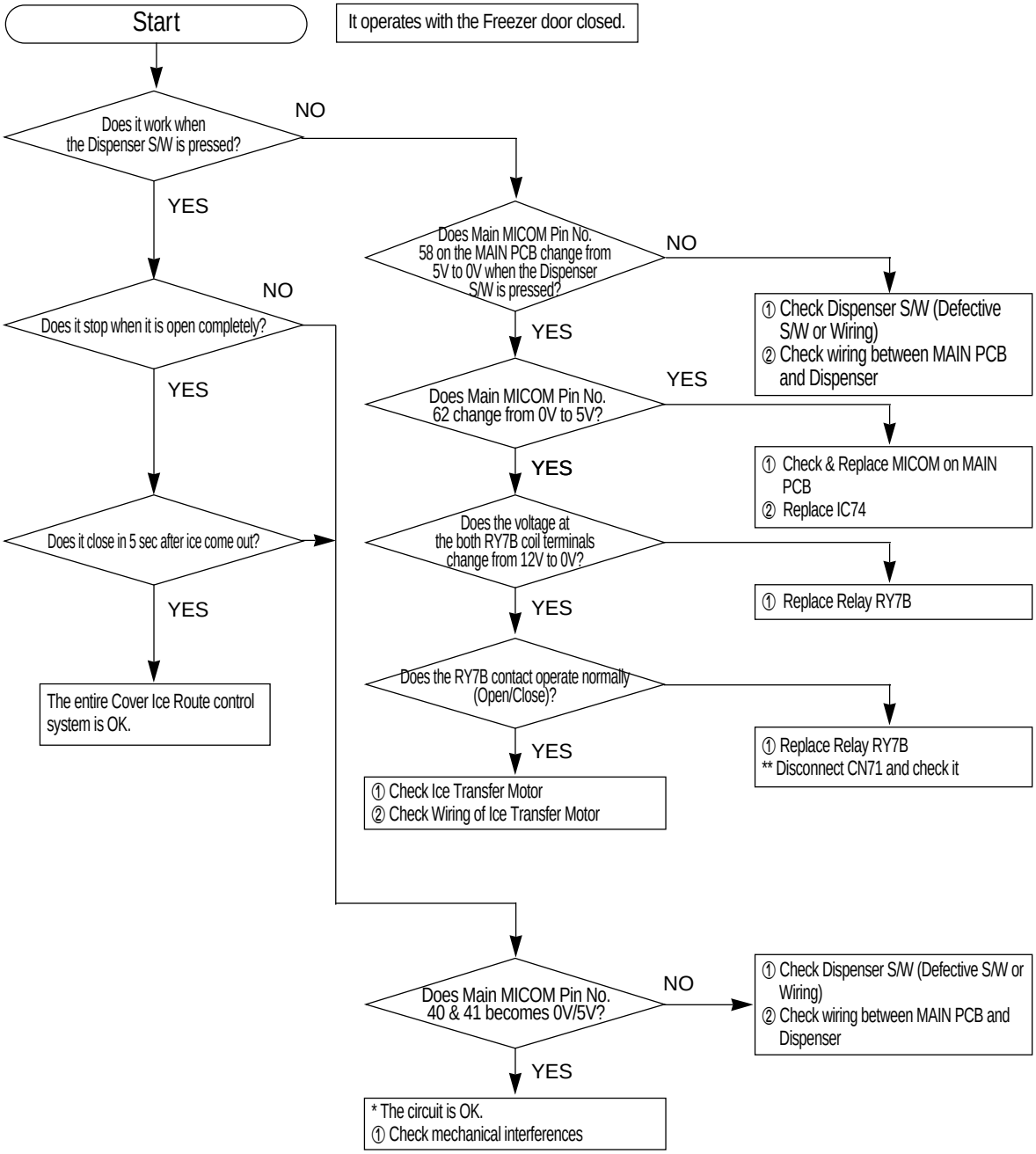
Reference

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 one-minute cycle. For that reason, if the door S/W has failure, the refrigerator can make a "Ding-Dong" sound per a one-minute cycle. Please note step for its service!

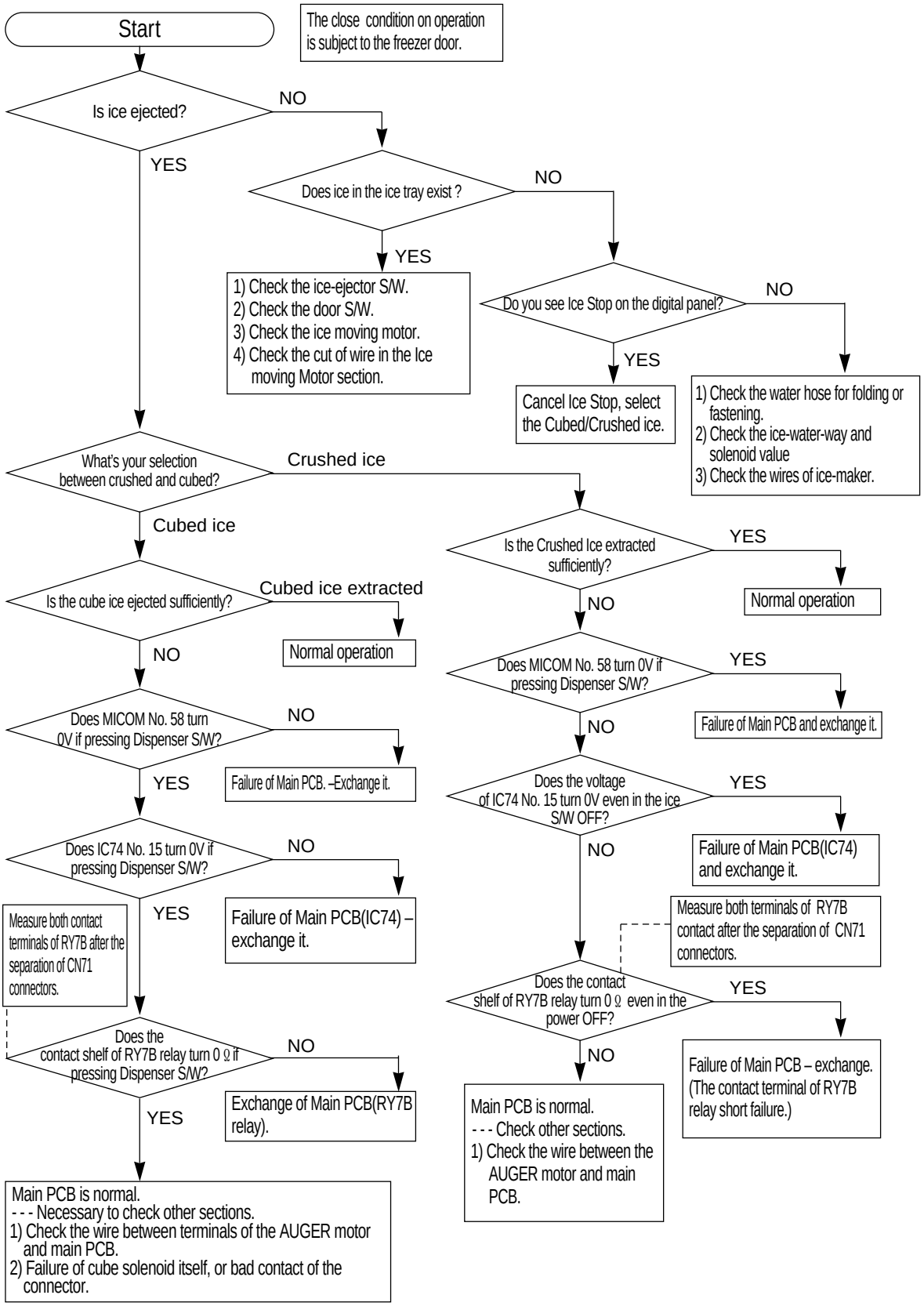
6-10) When the Dispenser Cover does not close

Note

1) When the Dispenser S/W is pressed after selecting the type of ice (CUBED or CRUSHED), the Geared Motor will operate and the Dispenser Cover will be opened. When the button keeps on being pressed, ice comes out. If the Geared Motor does not operate, check the Dispenser S/W first. Also, take out the Geared Motor and check its resistance at the both terminals. When it is 0 ohm, it is shorted and must be replaced.

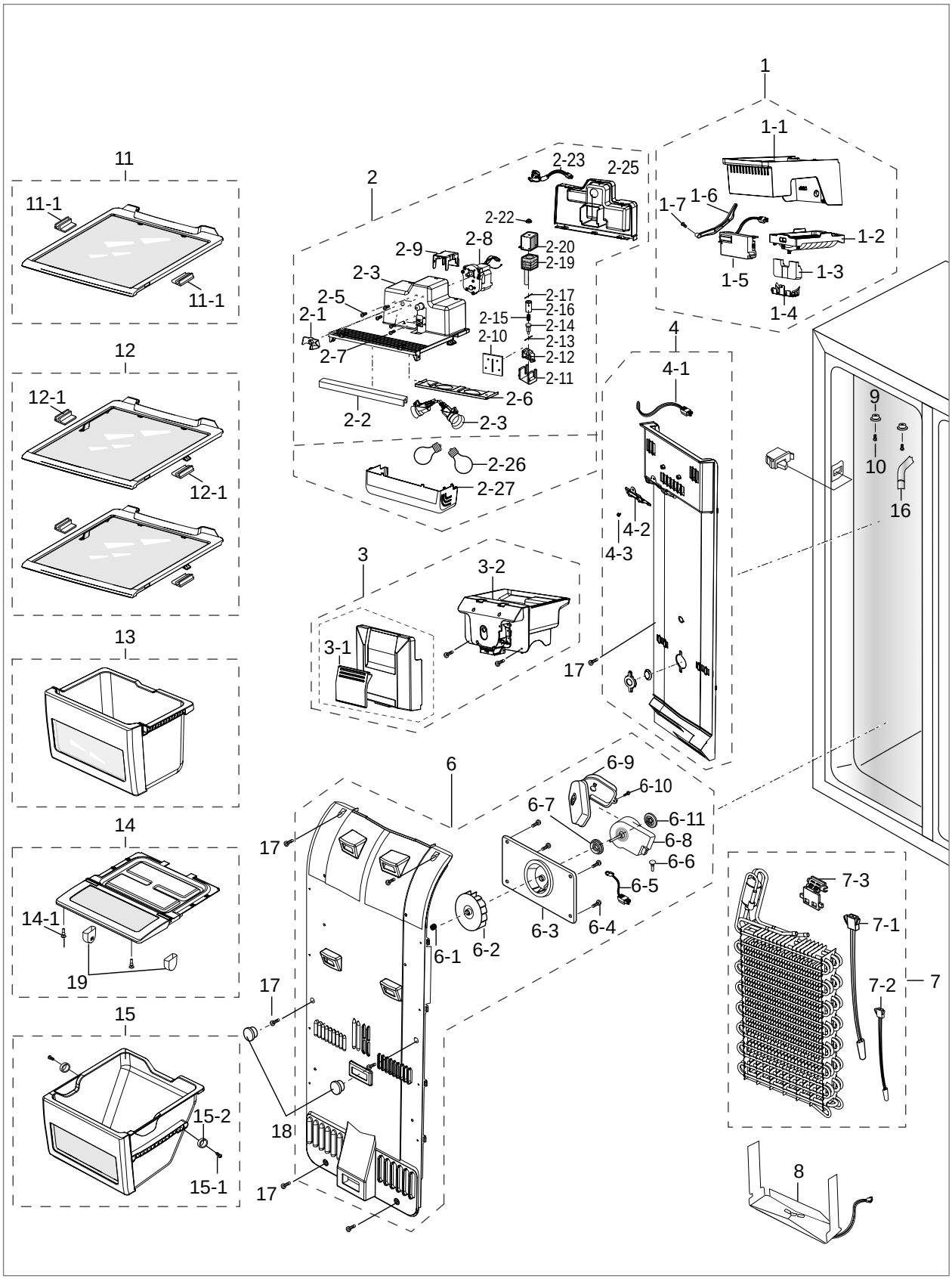


6-11) If Crushed Ice/Cubed Ice doesn't work properly:



7 . Exploded View & Parts List

7-1) Freezer



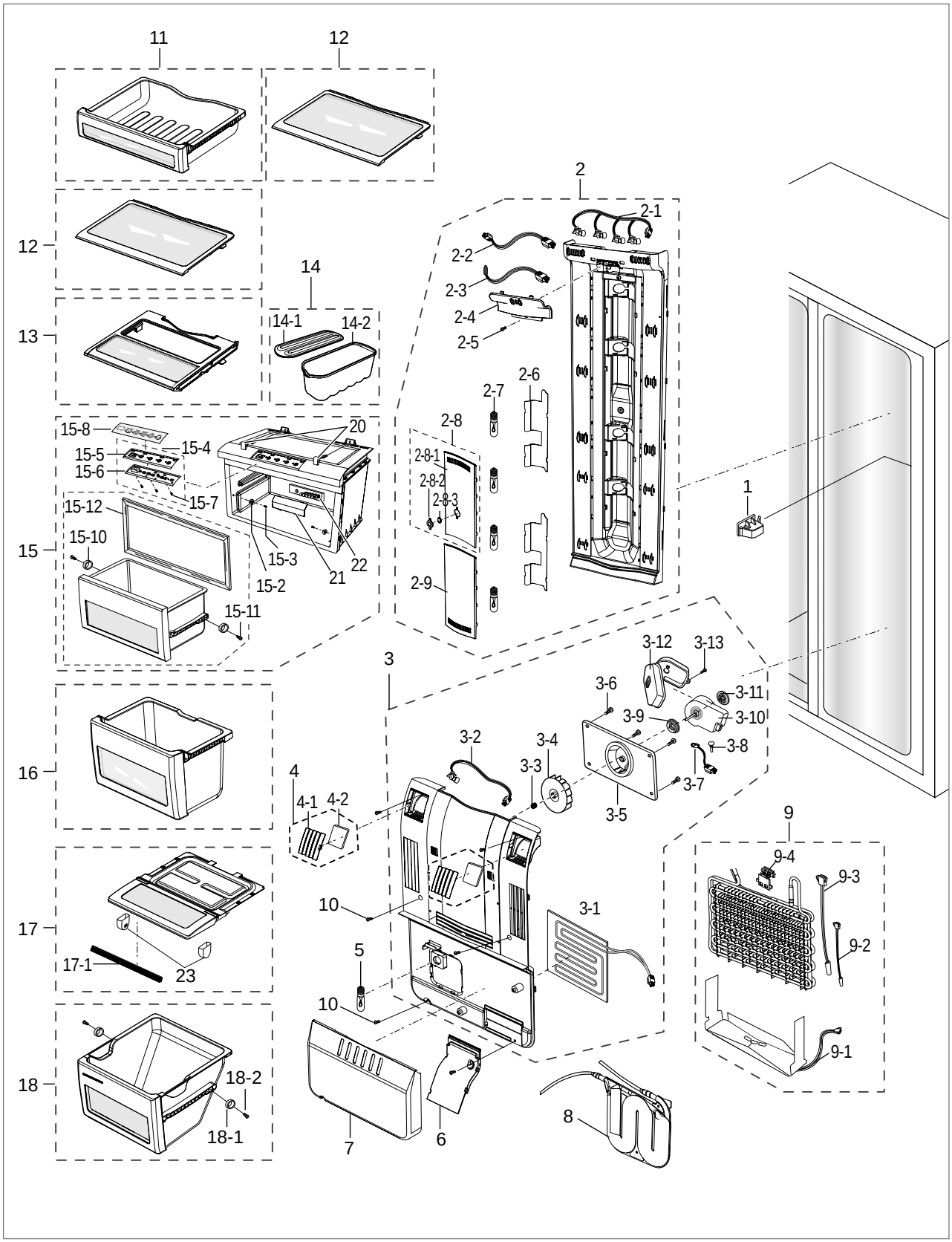
■ Parts List of Freezer

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	DA97-02641A	ASSY-SUPPORT ICE MAKER	230V/50Hz	1	
1-1	DA61-02057A	SUPPORT-ICE MAKER	RS18RK,HIPS,WHT	1	
1-2	DA63-02284A	TRAY ICE	AD,PP,SC-93437R,BJ73SL	1	
1-3	DA61-01800A	FIXER-SENSOR(ICE MAKER)	AD,URETHANE	1	
1-4	DA63-02183A	COVER-SENSOR	AD,PP,T1.0,WHITE	1	
1-5	DA59-00294A	ICE MAKER-ASSY	NTGN,DC12V	1	
1-6	DA61-00954A	GUIDE-ICE FULL	QUEEN,ABS	1	
1-7	DA60-10132A	SCREW-TAPPING	STS,PI3,L15,PH, + ,2S,2S	1	
2	DA97-02859A	ASSY-CASE AUGER MOTOR SUB	EPEL,W350.5,L3	1	
2-1	DA61-01659A	PLATE-DRIVE AUGER	AD,STS304,T2.0	1	
2-2	DA61-02271A	PLATE-CASE AUGER	EPEL,STS304,T1.5,W343.4,L14.0,H28.0	1	
2-3	DA61-02055A	CASE-AUGER MOTOR	EPEL,ABS,W349.5,L354.0,WHT,H209.0	2	
2-3	DA47-40001C	LAMP HOLDER-ASSY	E26,1A,PBT(5VA),UL SPEC	1	
2-5	DA60-00001A	SCREW-SPECIAL	SR-S6580/7080,STS-304,L8.3,	1	
2-6	DA61-02058A	PLATE-LAMP,FRE	EPEL,Ga,T0.4,W257.0,L91.7,WHT,PCM	7	
2-7	6002-000473	SCREW-TAPPING	TH, + ,1,M4,L14,STS304	1	
2-8	DA31-00105C	MOTOR GEARD-AUGER	ISG-3240SSH,1.0A,50Hz,82W,Max 143V,15rpm,220-240V,40T	1	
2-9	DA63-02012A	COVER-MOTOR AUGER,SUB	AD,N/F ABS,SC-02740R	1	
2-10	DA73-00168A	RUBBER-SOLENOIDE	ZIPEL,SILICON,SOLENOIDE	1	
2-11	DA61-60001A	SLIDER-SOLENOID DISP	POM	1	
2-12	DA65-20107A	SADDLE-SOLENOID	NY-6,SR-S7180	1	
2-13	DA60-90137B	PIN-SPRING B	STS304,L16,SR-S7180	1	
2-14	DA66-90003A	GEAR-SOLENOID	POM,SC-93438R	1	
2-15	DA61-20140A	SPRING ETC-SOLENOID	SR-S7180,STS304,PI7.5,L30.1,L30.1,ID0.7	1	
2-16	DA63-90008A	BUSH-SOLENOID	POM,SC-93438R	1	
2-17	DA60-90137A	PIN-SPRING A	STS304,L22,SR-S7180	1	
2-19	DA72-60348A	SEAL-FOAM PE	SR-S7180,FOAM-PE,BLK,T30	1	
2-20	DA74-40151F	VALVE-SOLENOID	SR-S6586B,CUBE-SN2,220-240[V] 145Ω	1	
2-22	DA63-02621A	GROMMET-SOLENOID	EPEL,NBR,T3.0,W43.0,L45.0	1	
2-23	DA96-00036E	ASSY-HARNESS-EJECT MOTOR	E-PEL,WIRE-HARNESS MAIN,A	1	
2-25	DA63-02419A	COVER-AUGER MOTOR	EPEL,PP,W280.5,L176.7,WHT	1	
2-26	4713-001201	LAMP-INCANDESCENT	230V,0mA,40W,FROST,0Lm,0Cd/m^2,47x84mm	2	
2-27	DA63-02422A	COVER-LAMP,FRE(DISP)	EPEL,PP,W287.0,L134.0	1	
3	DA97-02642A	ASSY TRAY-ICE__BURCKET	RS18RK	1	
3-1	DA97-02860A	ASSY-COVER ICE__BURCKET	EPEL,W341.3,L325.	1	
3-1-1	DA64-01440A	WINDOW-ICE BUCKET	EPEL,HIPS,W196.8,L15	1	
3-2	DA97-02872A	ASSY-COVER ICE__BURCKET,SUB	EPEL,W341.3,L325.0	1	
3-3	6002-000473	SCREW-TAPPING	TH, + ,1,M4,L14,STS304	2	
4	DA97-02651A	ASSY COVER-MULTI FRE(DISP)	RS18RK,PP	1	
4-1	DA32-00006C	SENSOR ASSY	PX-41C,W2 PJT10℃ ~35℃	1	
4-2	DA67-01178A	CAP-SENSOR FRE	EPEL,PP,W54.6,L59.7,W	1	
4-3	6002-001335	SCREW-TAPPING	BH, + ,1,M4,L12,DAC(WHT),SWR	1	
4-4	DA63-02426A	COVER-SENSOR,A	EPEL,ABS,W38.5,L64.0,H8	1	
4-5	DA63-02427A	COVER-SENSOR,B	EPEL,GPPS,W25.0,H3.0,	1	
5	DA34-10120E	SWITCH DOOR-F	slide,250V,0.5A,	1	
6	DA97-02652A	ASSY COVER-EVAP FRONT,FRE	EPEL,PP,	1	
6-1	DA61-20128A	SPRING ETC-FAN	STS304,PI7.8,OD1.0,	1	
6-2	DA31-00053A	FAN-BACKWARD	A-TOP,ABS,FRE	1	
6-3	DA61-00417A	CASE MOTOR	A-TOP,ABS SCRAP,WHT,SBS	1	
6-4	6002-001335	SCREW-TAPPING	BH, + ,1,M4,L12,DAC(WHT),SWR	4	
6-5	DA96-00042E	ASSY-HARNESS MOTOR BL-DC	E-PEL,WIRE-HARNESS MA	1	
6-6	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,	1	
6-7	DA63-01808A	GROMMET-MOTOR(BLDC)	BLDC,NBR,BLACK	1	

■ Parts List of Freezer

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
6-8	DA31-00118A	MOTOR DC-BLDC	DL-5905SSEA,EPEL,3.0W,	1	
6-9	DA63-01809A	COVER MOTOR-BLDC	BLDC-NEW,PP(BJ-730),NTR	1	
6-10	6002-001341	SCREW-TAPPING	BH, + ,1,M4,L16,DAC(WHT),S	2	
6-11	DA63-01146A	GROMMET-MOTOR	A-TOP,NBR,ID6.5,OD42	1	
7	DA97-02647A	ASSY EVAP-FRE	RS18RK,230/50	1	
7-1	DA32-10105R	SENSOR ASSY-FRE	502AT,ET-PJT50～50,5V,1	1	
7-2	DA47-10148K	THERMO FUSE-ASSY,B	ATOP,SW-102T,250V,10A	1	
8	DA97-02649A	ASSY-HEATER DRAIN,FRE	EPEL,230V/45W	1	
9	DA61-01797A	FIXER GROMMET-DOOR	T3-PJT,ABS,SC-02740	2	
10	6003-001144	SCREW-TAPTITE	BH, + ,B,M4,L12,ZPC(WHT),SWRCH18A	2	
11	DA97-02619A	ASSY SHELF-FRE,UPP	EPEL,ABS	1	
11-1	DA64-00090B	TRIM-SHELF	A-TOP,LDPE,WHITE	2	
12	DA97-02618A	ASSY SHELF-FRE,LOW	EPEL,ABS	2	
12-1	DA64-00090B	TRIM-SHELF	A-TOP,LDPE,WHITE	2	
13	DA97-02627A	ASSY CASE-BASKET,UPP	EPEL,W346,L234,	1	
14	DA97-02622B	ASSY COVER-SLIDE,BASKET	EPEL,W346,	1	
14-1	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,	2	
14-2	DA67-01290A	CAP-SLIDE	EPEL,NY-66,-,W9.0XL18.0,H24.0,COOL WHT	2	
15	DA97-02626A	ASSY CASE-BASKET,LOW	EPEL,W346,L352,	1	
15-1	DA66-00148A	ROLLER	A-TOP,POM,Ø16,SC-93437R,P	2	
15-2	6009-001278	SCREW-SPECIAL	TWH, + ,M4,L9(6),PASS,STS3	2	
16	DA63-02418A	GROMMET-WATER PIPE FILL,IN	RS18RK,SILICO	1	
17	6002-001341	SCREW-TAPPING	BH, + ,1,M4,L16,DAC(WHT),SWRCH18A	7	
18	DA67-30266K	CAP-SCREW	A-TOP,PP,SC-02740R,COOL-WHITE	2	
19	DA67-01290A	CAP-SLIDE	EPEL,NY-66,-,W9.0XL18.0,H24.0,COOL WHT	2	

7-2) Refrigerator



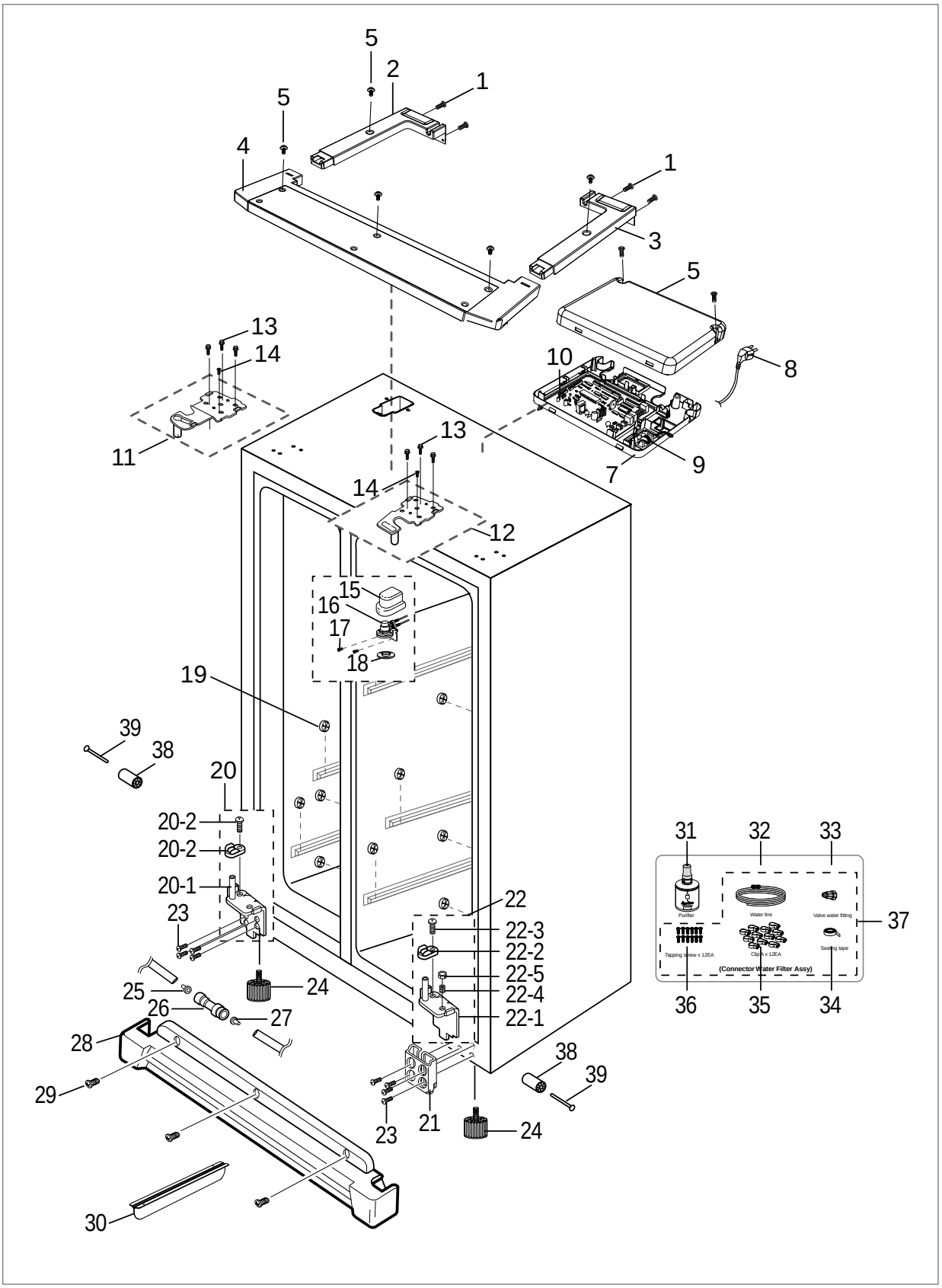
■ Parts List of Refrigerator

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	DA34-10110E	SWITCH DOOR-R	Sliding,250V,0.5A	1	
2	DA97-02653A	ASSY COVER-MULTI,REF	EPEL,PP,W	1	
2-1	DA47-00069H	LAMP HOLDER-MULTI REF	250V,75W,Cu,PBT,HOLDER 4EA	1	
2-2	DA96-00173A	ASSY-HARNESS LAMP	E-PEL,WIRE-HARNESS MAIN,A	1	
2-3	DA32-10109Y	SENSOR ASSY	502AT,A-TOP,5V,R-SENSO	1	
2-4	DA67-01168A	CAP-SENSOR,REF	EPEL,PP,T2.0,W130.5,WHT	1	
2-5	6003-001144	SCREW-TAPTITE	BH, + ,B,M4,L12,ZPC(WHT),SWRCH18A	1	
2-6	DA61-02033A	PLATE-LAMP-MULTI,UP	EPEL,Ga,T0.4,W81.0,L	2	
2-7	4713-001147	LAMP-INCANDESCENT	240V,25W,TRP,25x	4	
2-8	DA97-02678A	ASSY COVER-LAMP REF,UPP	EPEL,PP	1	
2-8-1	DA63-02395A	COVER LAMP-REF,UP	EPEL,PP,T2.0,W133.6,L3	1	
2-8-2	DA63-02426A	COVER-SENSOR,A	EPEL,ABS,W38.5,L64.0,H8	1	
2-8-3	DA63-02427A	COVER-SENSOR,B	EPEL,GPPS,W25.0,H3.0,	1	
2-9	DA63-02397A	COVER LAMP-REF,LOW	EPEL,PP,T2.0,W133.96,	1	
3	DA97-02671B	ASSY COVER-EVAP ,REF	RS18RK,PP	1	
3-1	DA47-00183B	HEATER-WATER TANK	RS18RK,230V,3W	1	
3-2	DA47-00069G	LAMP HOLDER-REF,LOW	250V,75W,Cu,PBT,HOLDER 1EA	1	
3-3	DA61-20128A	SPRING ETC-FAN	STS304,PI7.8,OD1.0	1	
3-4	DA31-00016A	FAN-CIRCUIT	ET-PJT,12,Ø95,Ø63	1	
3-5	DA61-00417A	CASE MOTOR	A-TOP,ABS SCRAP,WHT,SBS	1	
3-6	6002-001341	SCREW-TAPPING	BH, + ,1,M4,L16,DAC(WHT),S	4	
3-7	DA96-00042E	ASSY-HARNESS MOTOR	E-PEL,WIRE-HARNESS MA	1	
3-8	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,	1	
3-9	DA63-01808A	GROMMET-MOTOR(BLDC)	BLDC,NBR,BLACK	1	
3-10	DA31-00118A	MOTOR DC-BLDC	DL-5905SSEA,EPEL,3.0W,	1	
3-11	DA63-01146A	GROMMET-MOTOR	A-TOP,NBR,ID6.5,OD42	1	
3-12	DA63-01809A	COVER MOTOR-BLDC	BLDC-NEW,PP(BJ-730),NTR	1	
3-13	6002-001335	SCREW-TAPPING	BH, + ,1,M4,L12,DAC(WHT),SWR	3	
4	DA97-02646A	ASSY COVER-PURIFIER	EPEL,T10,W40,L40	2	
4-1	DA63-02403A	COVER-PURIFIER	EPEL,PP,L74.0,COOL WHT	1	
4-2	DA02-90106K	CATALYST-LTC	EXPORT,LTC,4,T10,W40,L40,SS-400-10-3	1	
5	4713-001147	LAMP-INCANDESCENT	240V,25W,TRP,25x	1	
6	DA63-02404A	COVER-LAMP REF,TANK	EPEL,PP,W405.0,L27	1	
7	DA97-02645A	ASSY COVER-AIR REF	EPEL,PP,W183.0,	1	
8	DA97-02650A	ASSY TANK WATER	RS18RK,HD-PE,T3.0,	1	
9	DA97-02648A	ASSY EVAP-REF	RS18RK,230/50	1	
9-1	DA97-02838A	ASSY-HEATER DRAIN,REF	EPEL,230V/25W	1	
9-2	DA32-00006C	SENSOR ASSY	PX-41C,W2 PJT10℃ ~35℃,	1	
9-3	DA47-10148J	THERMO FUSE-ASSY,A	ATOP,SW-102T,250V,10A,77℃(+05):FUSE	1	
9-4	DA61-00453A	FIXER-SENSOR(EVAP)	A-TOP,PP,NTR,ALL	1	
10	6002-001341	SCREW-TAPPING	BH, + ,1,M4,L16,DAC(WHT),SWRCH18A	6	
11	DA97-02621A	ASSY TRAY-CHILLED	RS18RK,NTR	1	
12	DA67-01173A	SHELF-REF,UPP	EPEL,HIPP,T2.5,W434.0,L369	2	
13	DA97-02620A	ASSY SHELF-REF,FOLD	EPEL,ABS	1	
14	DA97-02806A	ASSY TRAY-EGG	EPEL,T2.5,W324.5,L122.2,H1	1	
14-1	DA63-02491A	COVER-TRAY EGG	EPEL,GPPS,T2.5,W319.0,L11	1	
14-2	DA63-02492A	TRAY EGG	EPEL,GPPS,T2.5,W324.5,L122.2,H	1	
15	DA97-02629A	ASSY-CONVERTIBLE	EPEL	1	
15-1	DA97-02849A	ASSY CASE-CONVERTIBLE	EPEL,WHT	1	
15-2	DA66-00151A	ROLLER-FRONT	A-TOP,POM,Ø16,WHT,CONV	2	
15-3	6009-001293	SCREW-SPECIAL	STS304,PWH, + ,M4,L15.5(6.	2	
15-4	DA97-02852A	ASSY-PBA CONVERTIBLE	EPEL	1	
15-5	DA63-02402A	COVER-CONVERTIBLE,PBA	EPEL,ABS,T2.0,W198.5,WHT	1	

■ Parts List of Refrigerator

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
15-6	DA41-00270A	PBA DISPLAY-(C-ROOM)	E-PEL,PBA_C-ROOM,FR-1,1.6*28*212.5	1	
15-7	6002-000630	SCREW-TAPPING	PH, + ,2S,M3,L8,ZPC(YEL),SWRCH18A	2	
15-8	DA64-01494A	INLAY-CONVERTIBLE	EPEL,PC,T0.25,W42.5,L1	1	
15-9	DA97-02628A	ASSY TRAY-CONVERTIBLE	RS18RK	1	
15-10	DA66-00148A	ROLLER	A-TOP,POM,Ø16,SC-93437R,P	2	
15-11	6009-001278	SCREW-SPECIAL	TWH, + ,M4,L9(6),PASS,STS3	2	
15-12	DA63-01783B	GASKET-CONVERTIBLE	RS18RK,SF-PVC,W415,	1	
16	DA97-02625A	ASSY CASE VEG-UPP	RS18RK	1	
17	DA97-02623B	ASSY COVER-SLIDE,VEG	RS18RK,W430,L36	1	
17-1	DA63-02067B	GASKET-BIG BOX	USP-PJT,SF-PVC,L420	1	
18	DA97-02624A	ASSY CASE VEG-LOW	RS18RK	1	
18-1	DA66-00148A	ROLLER	A-TOP,POM,Ø16,SC-93437R,P	1	
18-2	6009-001278	SCREW-SPECIAL	TWH, + ,M4,L9(6),PASS,STS3	1	
19	DA63-02408A	COVER-VEG UP	EPEL,HIPS,T2.0,W419.7,L240.7,-,-,WHT	1	
20	DA67-01252A	CAP-SCREW CONVERTIBLE	EPEL,ABS,T2.0	2	
21	DA63-02251B	COVER-CONVERTIBLE LAMP	EPEL,ABS,-,W105.6	1	
22	DA41-00241A	PBA-ROOM LAMP	H-PJT,-,FR-1,85*15,-,14V	1	
23	DA67-01290A	CAP-SLIDE	EPEL,NY-66,-,W9.0XL18.0,H24.0,COOL WHT	2	

7-3) Cabinet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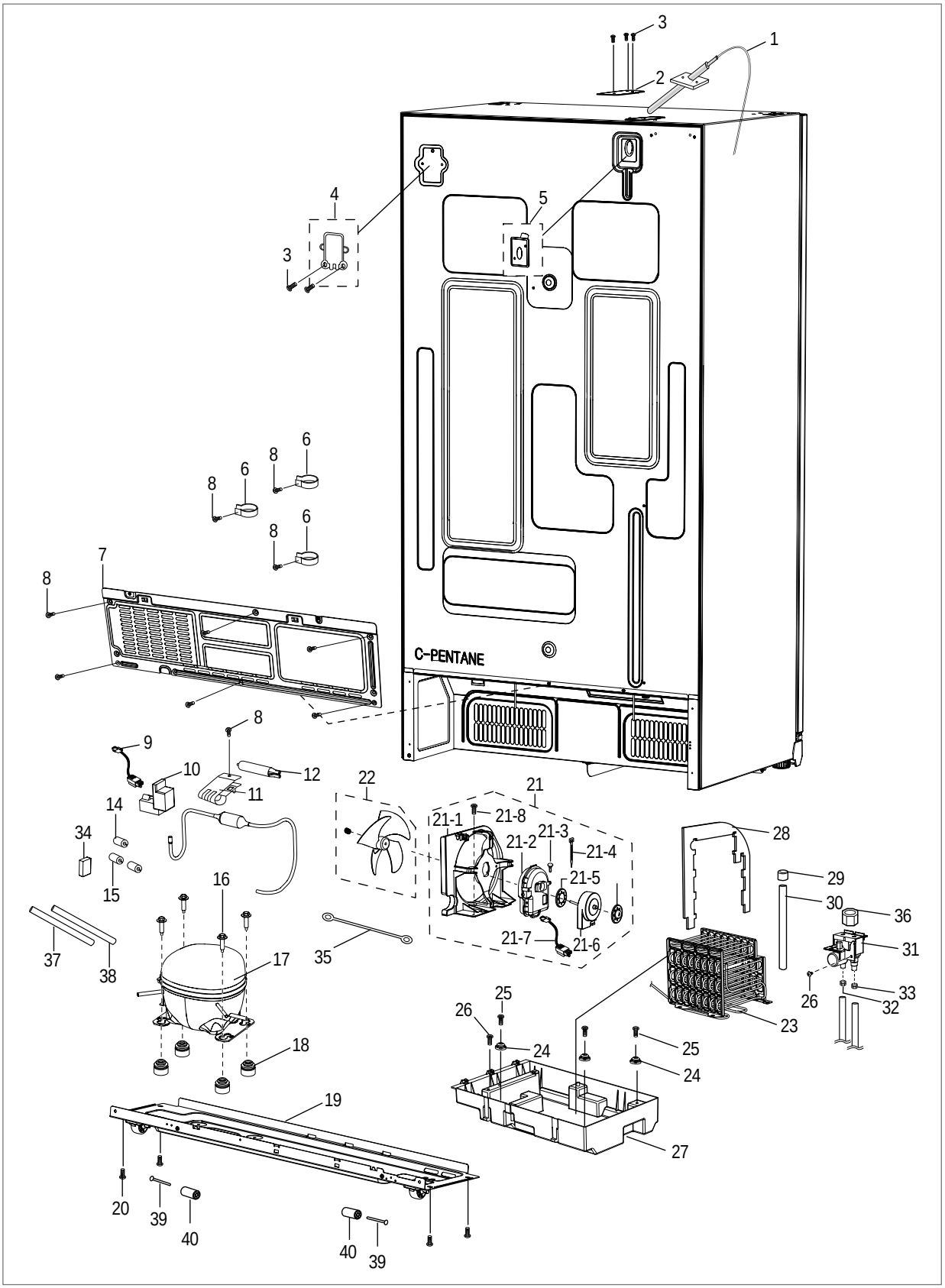
33
Purifier
Water line
Valve water fitting
37
Tapping screw x 12EA
Clip x 12EA
Sealing tape
(Connector Water Filter Assy)
36
35
34

■ Parts List of Cabinet

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	6006-001108	SCREW-TAPPING	PW(OD15),TH,+,M4,L16,ZPC(Y	4	
2	DA64-01449A	TOP TABLE-SIDE,L	EPEL,ABS,W408.0,L171.5,AL SILVER,SC-01014S	1	
	DA64-01449B		RS18RK,ABS,SC-05010S(P/S		
	DA64-01449C		RS18RK,ABS,SC-05013S,CORAL-WHT		
3	DA64-01450A	TOP TABLE-SIDE,R	EPEL,ABS,W408.0,L171.5,AL SILVER,SC-01014S	1	
	DA64-01450B		RS18RK,ABS,SC-05010S(P/S		
	DA64-01450C		RS18RK,ABS,SC-05013S,CORAL-WHT		
4	DA97-02630A	ASSY TOP TABLE	EPEL,ABS,W943.0,L253.0,AL SILVER,SC-01014S	1	
	DA97-02630B		ABS,SC-05010S,PLATINUM SILVER		
	DA97-02630C		ABS,SC-05013S,WHT CORAL		
5	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),S	6	
6	DA97-02848A	ASSY COVER-PCB PANEL	EPEL,ABS,W368,L29	1	
7	DA61-02069A	CASE-PCB PANEL	EPEL,ABS(VH-0815),T2.5,W3	1	
8	DA39-10164E	CBF-POWER CORD	BF-3,250V,13A,3500,BF-3	1	
9	DA27-00014A	COIL FILTER-EMI FILTER	USP 05,82*6	1	
10	DA41-00287A	PBA MAIN	EPEL,TOP OF REF,FR-1,1.6T*197*	1	
11	DA97-02637A	ASSY HINGE UPP-FRE	RS18RK,T3.0,BLK	1	
12	DA97-02638A	ASSY HINGE UPP-REF	RS18RK,T3.0,BLK	1	
13	DA60-10124A	SCREW-TAP TITE	M6,L16,HH,ZPC2-Y	6	
14	DA60-10107A	SCREW-EARTH	BSBN,M4,L10,+,EARTH	4	
15	DA97-00724E	ASSY COVER-FILTER	A-TOP,Cool-white,EXP	1	
16	DA97-01666C	ASSY CASE-FILTER	A-TOP,NTR	1	
17	6002-001197	SCREW-TAPPING	TH,+,1,M4,L16,SNC2(SIL),MSWR10	2	
18	DA63-00586A	COVER-TUBE FILTER	ZIPEL,PP,T2.0,SC	1	
19	DA66-10104A	ROLLER FRE	POM,SRS6580Z,OD8.1	14	
20	DA97-02639B	ASSY HINGE LOW-FRE	RS18RK,T4.5,BLK	1	
20-1	DA61-02087A	HINGE-LOW,FRE	EPEL,SHP1,T4.5,BLK	1	
20-2	DA66-00343A	CAM-RISER	USP-PJT,NY-66,10.5 GASKET,BL	1	
20-3	6003-001435	SCREW-TAPTITE	HWH,+,S,M5,L12.7,ZPC(YEL)	1	
21	DA61-02073A	BRACKET-HINGE LOW,R	RS18RK,SCP1,T2.6	1	
22	DA97-02640B	ASSY HINGE LOW-REF	RS18RK,T4.5,BLK	1	
22-1	DA61-02088A	HINGE-LOW,REF	RS18RK,SHP1,T4.5,B	1	
22-2	DA66-00343A	CAM-RISER	ZIPEL,NY-66,BLAC	1	
22-3	6003-001435	SCREW-TAPTITE	HWH,+,S,M5,L12.7,ZPC(YEL)	1	
22-4	6011-001442	BOLT-SOCKET	M8,L15,ZPC(BLK),SCM435	1	
22-5	6021-001125	NUT-HEXAGON	3,M8, P1.25,ZPC(BLK),SWRCH10	1	
23	6009-001255	SCREW-HEX	SWRCH18A,HEX-PLANGE,HEX,M6,L	8	
24	DA61-30102A	FOOT-FRONT	SR-F5670,PP,YEL,T0.6,ZPC2	2	
25	DA71-20208A	FIXER-VALVE WATER,B	SR-S7180,NY-6,OD6.1	1	
26	DA62-20111B	TUBE-FITTING	POM,SRS6580Z,OD8.1	1	
27	DA71-20207A	FIXER-VALVE WATER,A	SR-S7180,NY-6,OD7.8	1	
28	DA63-02466A	COVER-LEG FRONT	EPEL,ABS,T2.0,W946.7,L79,AL SILVER,SC-01014S	1	
	DA63-02466B		ABS,T2.0,SC-05010S,PLATINUM SILVER		
	DA63-02466C		ABS,T2.0,SC-05013S,WHT CORAL		
29	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),S	3	
30	DA64-01497A	TRIM-BLADE	RS18RK,PVC,L341.5,WHITE	1	
31	DA29-00003B	FILTER WATER-ASSY	A-TOP,86*86*167,NSF53	1	
32	DA97-00753A	ASSY PIPE-WATER	A-TOP,INVERTER	1	
33	DA73-00180A	PIPE-CONNECT	ET-PJT,BRASS,EUROPE	1	
34	0203-000399	TAPE-TEFLON	T0.05,W13,ROLL,WHT	1	
35	DA65-20110B	CLAMP	NY-66,DN-5N,PI8.0	12	
36	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),SWRCH18	12	
37	DA97-01469F	ASSY-INSTALL FILTER	EXP,FILTER IN	1	
38	DA61-40115A	CASTER-FRONT	SR-62EA,NY-66,ID6 OD30 W38	2	
39	DA60-90124A	RIVET	ZPC3,OD6.0,L56,	2	

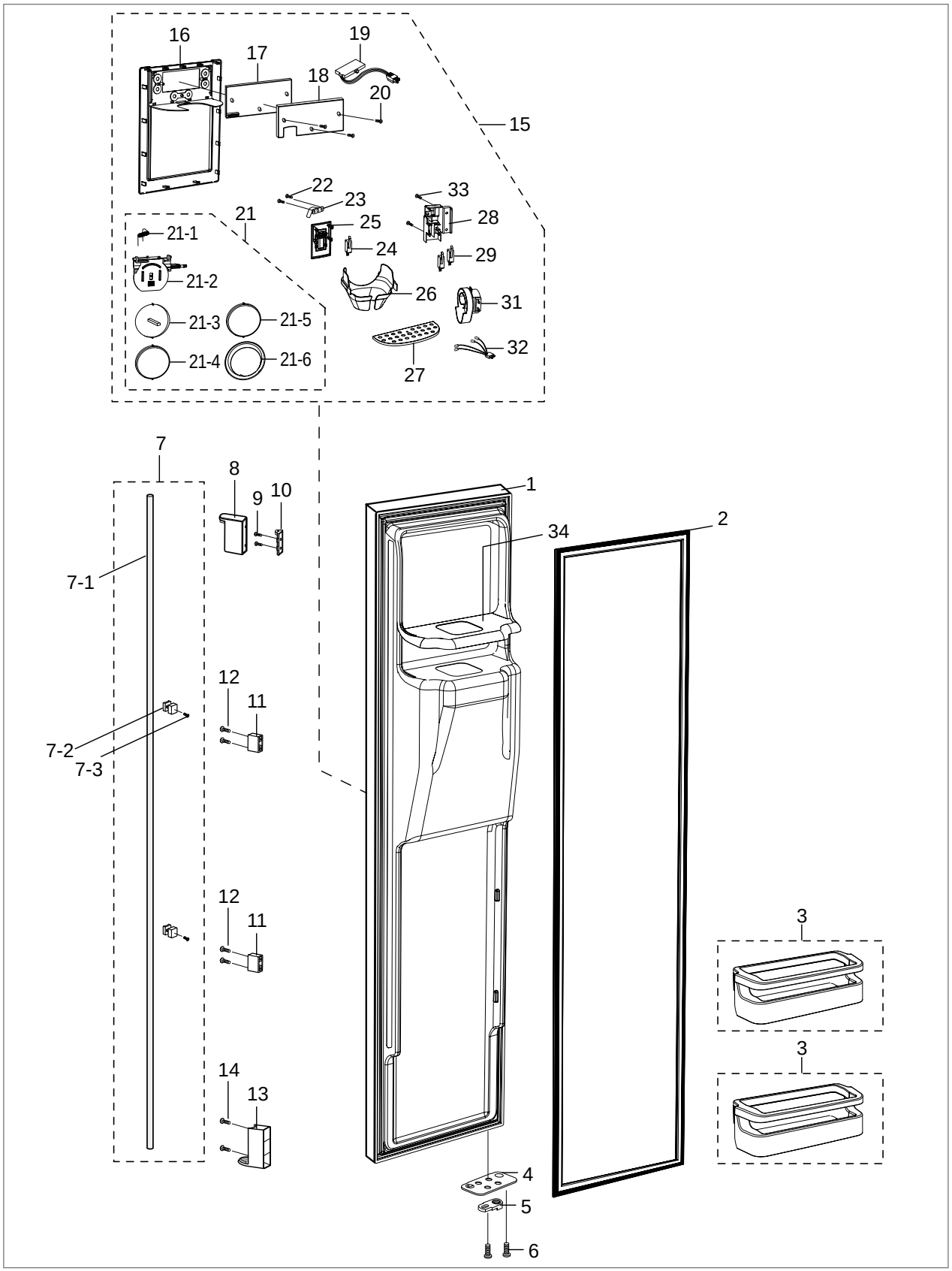
7-4) Cabinet



■ Parts List of Cycle

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	DA97-00708F	ASSY PIPE-WATER ICE	EPEL,230V/5W	1	
2	DA97-02858A	ASSY COVER-TUBE WATER	EPEL,W161.5,L66.0	1	
3	6006-001108	SCREW-TAPPING	PW(OD15),TH,+,M4,L16,ZPC(Y	5	
4	DA63-00586A	COVER-TUBE FILTER	ZIPEL,PP,T2.0,SC	1	
5	DA97-02644A	ASSY COVER-FIXER WATER LINE	RS18RK,W43,L58	1	
6	6502-000112	CABLE CLAMP	DA-8N,ID13.2,T1.0,NYLON6/6,N	2	
7	DA97-02681A	ASSY COVER-COMP	RS18RK,SBHG1,T0.4,	1	
8	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),S	9	
9	DA96-00174A	ASSY-HARNESS COMP	EPEL,WIRE-HARNESS MAIN	1	
10	DA97-02895A	ASSY-COMP SUB	12SP18A265RF,33&	1	
11	DA61-01957A	CLIP-DRYER	AD,SECC1,T0.6	1	
12	DA73-30102B	DRYER-ASSY	CU,OD18.85,ID2,L102,10.0G	1	
13	DA97-00918A	ASSY PIPE CONNECT	A-TOP,SUCTION	1	
14	DA63-40171B	GROMMET-SUCT PIPE,A	NBR,OD20,ID4,L20	1	
15	DA63-40171D	GROMMET-SUCT PIPE,B	RAIL L19.5,NR,OD20	2	
16	DA60-20008A	BOLT-HEX	SM30C,L42.6	4	
17	MK4A5QR1U/E10	COMPRESSOR	220-240V?50Hz,RSCR,Static	1	
18	DA63-02617A	GROMMET COMP	USP05,EPDM,BLACK	4	
19	DA97-02680A	ASSY CHASSIS-COMP	RS18RK,SBHG1,T1.4	1	
20	DA60-10004A	SCREW-TAP TITE	SGDC90/90,L16,HH	4	
21	DA97-01283F	ASSY SUPPORT-CIRCUIT MOTOR	EPEL,DC12V	1	
21-1	DA61-00415A	SUPPORT-CIRCUITE MOTOR	A-TOP,ABS SCRAP,WHITE	1	
21-2	DA63-00713A	COVER-MOTOR	OMEGA,PP,BLDC	1	
21-3	DA63-40167A	GROMMET-COVER CHIL	T3.0,SILICON,NTR	1	
21-4	6501-000122	CABLE TIE	DACT-100,W2.5,L101.6,NTR,NYL	1	
21-5	DA63-01146A	GROMMET-MOTOR	A-TOP,NBR,ID6.5,OD42,BLK,BLDC	2	
21-6	DA31-00118B	MOTOR DC-BLDC(CYCLE)	DL-5905SSCA,EPEL,2.82W,1600RPM,DC12V,29dB,SUNGSHIN	1	
21-7	DA96-00042A	ASSY-HARNESS COMP(MOTOR)	A-TOP UL,C-FAN,350MM	1	
21-8	6003-000003	SCREW-TAPTITE	BH,+,B,M4,L10,CBLACK,SWRCH18A	2	
22	DA31-00010D	FAN-ASS'Y	ET,ZIPEL,ASSY,UNIT,Ø150	1	
23	DA97-02687A	ASSY PIPE-SPIRAL CONDENSER	EPEL,BLK	1	
24	DA63-02205A	GROMMET-SUB CONDENSER	AD,NBR	4	
25	6009-001252	SCREW-SPECIAL	PH,+,M4.0,L20(12),ZPC(YE	3	
26	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),S	1	
27	DA63-02434A	TRAY-DRAIN WATER	RS18RK,PP,T2.0,NT	1	
28	DA62-00983A	SEAL-SUB COND	EPEL,N-FOAM PE,T5.0,W209.0,L211.0	1	
29	DA63-00951C	GROMMET-DRAIN HOSE	V2-PJT,NBR,GRAY	1	
30	DA62-20001R	TUBE PVC	V2-PJT,GASKET SCRAP,T1.0,L218	1	
31	DA97-02682A	ASSY VALVE WATER	EPEL	1	
32	DA71-20208A	FIXER-VALVE WATER,B	SR-S7180,NY-6,OD6.1	1	
33	DA71-20207A	FIXER-VALVE WATER,A	SR-S7180,NY-6,OD7.8	1	
34	DA72-60040D	SEAL CUTT-RUBBER	POLYBUTILENE	1	
35	DA39-20389E	WIRE HARNESS-EARTH	UL 1015 AWG18	1	
36	DA74-00070A	VALVE-FITTING-NUT	CU	1	
37	DA73-10190L	PIPE-CONNECT-DISC,A	SR-L35,32,C1220T-0,-,OD4.76,L120	1	
38	DA73-10190M	PIPE-CONNECT DISC,B	SR-L35,32,C1220T-0,-,OD6.35,L120	1	
39	DA60-90146A	PIN-CASTER	MSWR10,OD6.0,L40,ZPC2,SR-289-4	2	
40	DA61-40126B	CASTER-REAR	REF-ALL,PP,-,PI 44,NTR,W22	2	

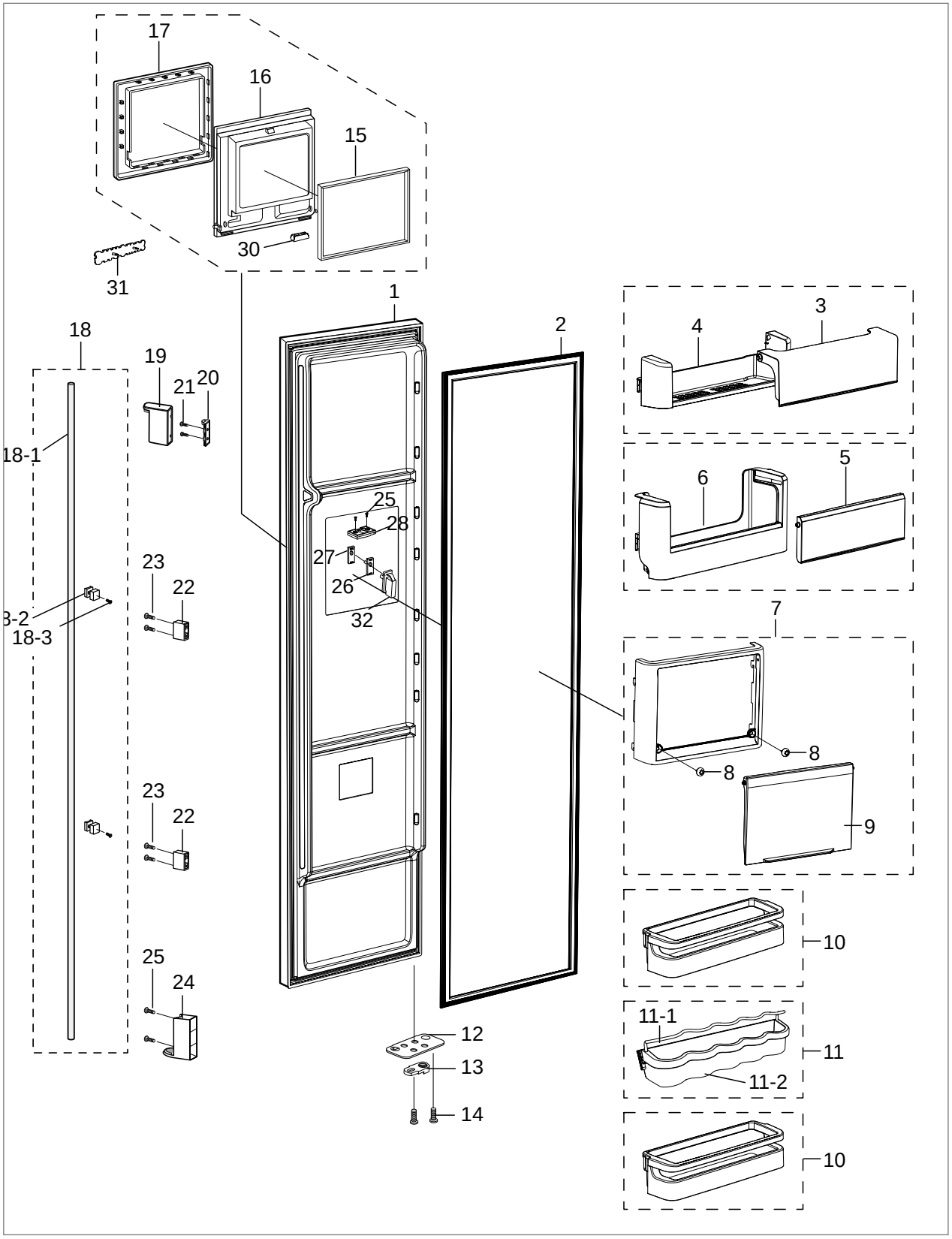
7-5) Disassembly of Freeze Door



■ Parts List of Freezer Door

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	DA91-02003A	ASSY DOOR FOAM FRE	SC-05014TP,AL SILVER,-,-,DISP TYPE	1	
	DA91-02003B		SC-05010TE,N,-,-,PLATINUM SILVER		
	DA91-02003C		EPEL,SC-05013TV,N,-,-,WHT CORAL		
2	DA97-01800S	ASSY-GASKET DOOR,FRE	EPEL,W384,L1670.0	1	
3	DA97-02635A	ASSY GUARD-FRE LOW	RS18RK,ABS,WHT	2	
4	DA61-02085A	STOPPER-DOOR	RS18RK,SHP1,T3.0,W35.0,L77	1	
5	DA66-00344A	CAM HINGE-RISER,LOW	ZIPEL,NY-66,BLAC	1	
6	6001-000715	SCREW-MACHINE	TH,+,M5,L16,ZPC(YEL),SWR	2	
7	DA97-02605A	ASSY HANDLE-BAR	AL,OD24,L1670.5	1	
	DA97-02605B		Platinum silver,-,OD24,L1670.5		
	DA97-02605C		EPEL,AL,T1.5,-,L1670.5,-,CORAL WHT		
7-1	DA64-00575M	HANDLE BAR	EPEL,AL,T1.5,L1670.5,EMPIRE SILVER,SC-04072S	1	
	DA64-00575S		RSE18RK,PLATINUM SILVER,T1.5,-,L1670.5		
	DA64-00575T		EPEL,AL,T1.5,-,L1670.5,-,CORAL WHT		
7-2	DA63-00789A	GROMMET-FIXER HANDLE	EXP,PC-ABS,SILVER-GRAY	2	
7-3	6002-000216	SCREW-TAPPING	TH,1,M4.0,L20,ZPC(YEL),MSWR10	2	
8	DA67-01251A	CAP-HANDLE UPP	EPEL,ABS,-,76.0,L52.4,AL SILVER,SC-01014S	1	
	DA67-01251B		EPEL,ABS,-,W22.4,L76.0,PLATINUM SILVER,SC-05010S		
	DA67-01251C		EPEL,ABS,-,W22.4,L76.0,AL PLATING		
9	DA61-02218A	BASE-CAP HANDLE	EPEL,ABS,NTR	1	
10	6002-001341	SCREW-TAPPING	BH,+,1,M4,L16,DAC(WHT),SWRCH18A	2	
11	DA61-00264H	SUPPORT-HANDLE MID	EPEL,ABS,-,W16.0,L54.5,AL SILVER,SC-01014S	2	
	DA61-00264J		EPEL,ABS,-,W16.0,L54.5,PLATINUM SILVER,SC-05010S		
	DA61-00264A		EPEL,ABS,-,W22.4,L76.0,AL PLATING		
12	6002-000468	SCREW-TAPPING	PH,+,2S,M5.0,L18,ZPC(YEL),MAWR10	4	
13	DA67-00796F	CAP-HANDLE LOW	EPEL,ABS,-,W22.4,L76.0,AL SILVER,SC-01014S	1	
	DA67-00796G		EPEL,ABS,-,W22.4,L76.0,PLATINUM SILVER,SC-05010S		
	DA67-00796A		n-PJT,ABS,-,-,-,-,AL-PLATING		
14	6002-001122	SCREW-TAPPING	FH,+,1,M4,L14,ZPC(WHT),SWRCH18A	2	
15	DA97-02673A	ASSY COVER-DISPENSER	EPEL,ABS,-,W290.0,L371.5,-,SC-01014S	1	
	DA97-02673B		EPEL,ABS,PLATINUM SILVER,SC-05010S		
	DA97-02673C		EPEL,ABS,WHT CORAL,SC-05013S		
16	DA97-02846A	ASSY COVER-DISPENSER SUB	EPEL,W290.0,L371.5,AL SILVER,SC-01014S	1	
	DA97-02846B		EPEL,W290.0,L371.5,PLATINUM SILVER,SC-05010S		
	DA97-02846C		EPEL,W290.0,L371.5,WHT CORAL,SC-05013S		
17	DA41-00261A	PBA PANEL	EPEL,FR-4,CEM-1,190*84.5,Dis	1	
18	DA63-02448A	COVER-PANEL-PCB	EPEL,HIPS,W203.4,L91.3	1	
19	DA97-02847A	ASSY-LAMP DOOR	EPEL,LED TYPE	1	
20	6002-000470	SCREW-TAPPING	TH,+,1,M4,L10,ZPC,SCRCH18A	3	
21	DA97-02674A	ASSY COVER-ICE ROUTE	EPEL,BLK	1	
21-1	DA61-01914A	SPRING ETC-COVER ICE ROUTE	QUEEN,STS304,	1	
21-2	DA63-00194A	COVER-ICE ROUTE-B	ET-PJT,ABS,T2.5	1	
21-3	DA63-02445A	COVER-ICE-ROUTE,A	EPEL,PC-ABS	1	
21-4	DA72-00260A	SEAL-FOAM LEX,A	ET-PJT,FOAM-LEX,T12.0	1	
21-5	DA72-00260H	SEAL-COVER ICE,ROUTE	QUEEN,FOAM-LEX,WHIT	1	
21-6	DA63-02305A	GASKET-CVOER ICE ROUTE	TBI-PJT,SILICON	1	
22	6002-000213	SCREW-TAPPING	TH,+,1,M4,L12,ZPC(YEL),SWRCH18	4	
23	DA67-01131A	CAP-TUBE WATER LINE	TBI-PJT,ABS,VI	1	
24	DA34-00011A	SWITCH-MICRO	VP533A-OF-5,MICRO,250V,15A	1	
25	DA97-02675A	ASSY COVER-SWITCH	EPEL,W51.0,L90.0	1	
26	DA61-02343A	GUIDE-ICE ROUTE	ABS(HG-0760)	1	
27	DA63-02450B	TRAY DISPENSER	RS18RK,ABS,SPRAY	1	
28	DA97-02676A	ASSY SUPPORT-MICRO SWITCH	EPEL	1	
29	DA34-00011A	SWITCH-MICRO	VP533A-OF-5,MICRO,250V,15A,	2	
30	DA61-02098A	SUPPORT-MICRO SWITCH	EPEL,ABS,W62.0,L9	1	
31	DA97-02677A	ASSY-GEARD MOTOR	RS18RK	1	
32	DA96-00192A	ASSY-HARNESS MOTOR,DISP	EPEL,L150.0/WIRE HARN	1	
33	6002-001341	SCREW-TAPPING	BH,+,1,M4,L16,DAC(WHT),SWRCH18A	5	
34	DA63-02437A	GUARD-FRE,UPP	RS18RK,ABS,WHT	1	

7-6) Disassembly of Refrigerator Door



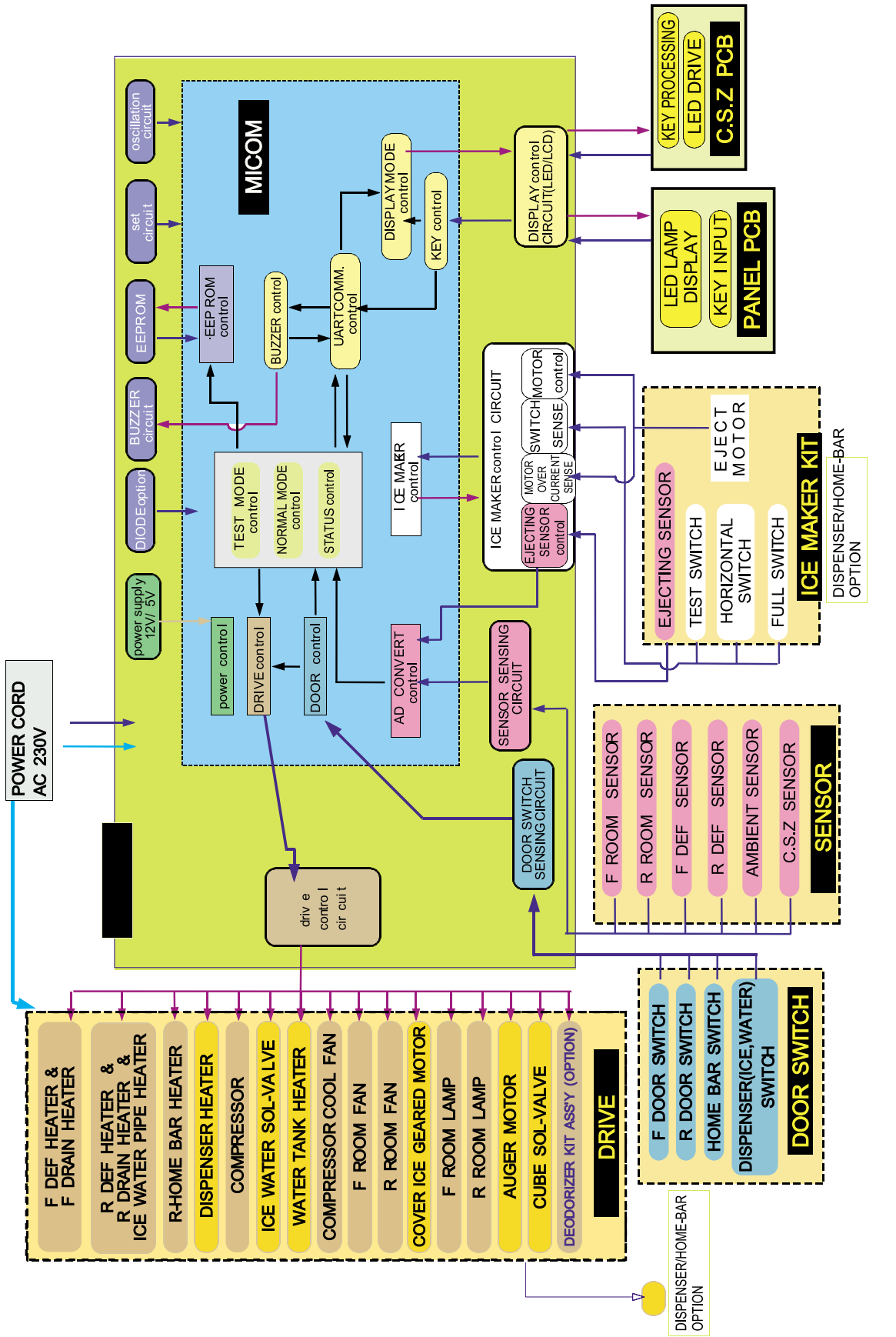
■ Parts List of Refrigerator Door

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	DA91-02004A	ASSY DOOR FOAM REF	SC-05014TP,AL SILVER,-,-,DISP TYPE	1	
	DA91-02004B		EPEL,SC-05010TE,PLATINUM SILVER		
	DA91-02004C		EPEL,SC-05013TV,WHT CORAL		
2	DA97-01800T	ASSY-GASKET DOOR,REF	EPEL,W457 x L1670,S	1	
3	DA63-02442A	COVER-DAIRY	EPEL,GPPS,W359.5,L87.0,H124	1	
4	DA63-02440A	GUARD-DAIRY	EPEL,ABS,W413.5,L129.5,H120	1	
5	DA63-02441A	COVER-SPECIAL	EPEL,GPPS,W345.0,L22.0,H11	1	
6	DA63-02439A	GUARD-SPECIAL	EPEL,ABS,W414.0,L129.5,H19	1	
7	DA97-02636A	ASSY CASE-DOOR RECESS	RS18RK,WHT,H	1	
8	DA63-00991A	GROMMET-DOOR RECESS	A-TOP,SILICON	2	
9	DA63-02443A	COVER-DOOR RECESS	RS18RK,GPPS	1	
10	DA97-02634A	ASSY GUARD-REF LOW	RS18RK,ABS,WHT	2	
11	DA97-02633A	ASSY GUARD-REF MID	RS18RK,ABS,WHT	1	
11-1	DA61-02122A	GUIDE-GUARD REF,MID	RS18RK,MSWR10,OD5.0,-,-,-,SNC1	1	
11-2	DA63-02484A	GUARD-REF,MID	EPEL,ABS,-,W392.5,L110.0,WHT	1	
12	DA61-02085A	STOPPER-DOOR	RS18RK,SHP1,T3.0,W35.0,L77	1	
13	DA66-00344A	CAM HINGE-RISER,LOW	ZIPEL,NY-66,BLAC	1	
14	6001-000715	SCREW-MACHINE	TH,+,M5,L16,ZPC(YEL),SWR	2	
15	DA63-00850K	GASKET HOME BAR-OUT	RS18RK,SF-PVC,W265	1	
	DA63-00850N		EPEL,SF-PVC,-,W265.8,L260.5,CREAM WHITE		
16	DA97-02606A	ASSY HOME BAR	EPEL,W300.5,L328.5,SPRAY,AL SILVER,SC-01014S	1	
	DA97-02606B		PLATINUM SILVER		
	DA97-02605C		CORAL WHITE		
17	DA63-02430A	COVER-BRACKET FRAME	RS18RK,ABS,AL SILVER,SC-01014S	1	
	DA63-02430B		EPEL,ABS,SC-05010S,PLATINUM SILVER		
	DA63-02430C		EPEL,ABS,SC-05013S,WHT CORAL		
18	DA97-02605A	ASSY HANDLE-BAR	AL,OD24,L1670.5,AL SILVER	1	
	DA97-02605B		Platinum silver,-,OD24,L1670.5		
	DA97-02605C		EPEL,AL,T1.5,-,L1670.5,-,CORAL WHT		
18-1	DA64-00575M	HANDLE BAR	EPEL,AL,T1.5,L1670.5,AL SILVER	1	
	DA64-00575S		RSE18RK,PLATINUM SILVER,T1.5,-,L1670.5		
	DA64-00575T		EPEL,AL,T1.5,-,L1670.5,-,CORAL WHT		
18-2	DA63-00789A	GROMMET-FIXER HANDLE	EXP,PC-ABS,SILVER-GRAY	2	
18-3	6002-000216	SCREW-TAPPING	TH,1,M4.0,L20,ZPC(YEL),MSWR10	2	
19	DA67-01251A	CAP-HANDLE UPP	EPEL,ABS,-,76.0,L52.4,AL SILVER,SC-01014S	1	
	DA67-01251B		EPEL,ABS,-,W22.4,L76.0,PLATINUM SILVER,SC-05010S		
	DA67-01251C		EPEL,ABS,-,W22.4,L76.0,AL PLATING		
20	DA61-02218A	BASE-CAP HANDLE	EPEL,ABS,NTR	1	
21	6002-001341	SCREW-TAPPING	BH,+,1,M4,L16,DAC(WHT),SWRCH18A	2	
22	DA61-00264H	SUPPORT-HANDLE MID	EPEL,ABS,-,W16.0,L54.5,AL SILVER,SC-01014S	2	
	DA61-00264J		EPEL,ABS,-,W16.0,L54.5,PLATINUM SILVER,SC-05010S		
	DA61-00264A		EPEL,ABS,-,W22.4,L76.0,AL PLATING		
23	6002-000468	SCREW-TAPPING	PH,+,2S,M5.0,L18,ZPC(YEL),MAWR10	4	
24	DA67-00796F	CAP-HANDLE LOW	EPEL,ABS,-,W22.4,L76.0,AL SILVER,SC-01014S	1	
	DA67-00796G		EPEL,ABS,-,W22.4,L76.0,PLATINUM SILVER,SC-05010S		
	DA67-00796A		n-PJT,ABS,-,-,-,-,AL-PLATING		
25	6002-001122	SCREW-TAPPING	FH,+,1,M4,L14,ZPC(WHT),SWRCH18A	2	
26	DA63-01100B	GASKET HOME BAR-SWITCH	ET-PJT,SILICON,	1	
	DA63-01100A		CREAM WHITE		
27	DA63-00219J	COVER SWITCH-HOME BAR	A-TOP,ABS,	1	
	DA63-00219E		CREAM WHITE		
28	DA61-01198B	STOPPER-HOME BAR	CREAM-WHITE,A-TOP 03,AB	1	
29	6002-001122	SCREW-TAPPING	FH,+,1,M4,L14,ZPC(WHT),SWR	2	
30	DA67-00638C	CAP-HOME BAR DOOR IN	SILICON,VICTORY-GRAY,SC-01645R	1	
	DA67-00638A		CREAM WHITE,SILICON		
31	DA64-00990A	MASCOT	AL,-,-,80MM	1	
32	DA34-10121A	SWITCH DOOR-HOME BAR	PA6,-,250V/125V,-,1.5A/0.5A	1	

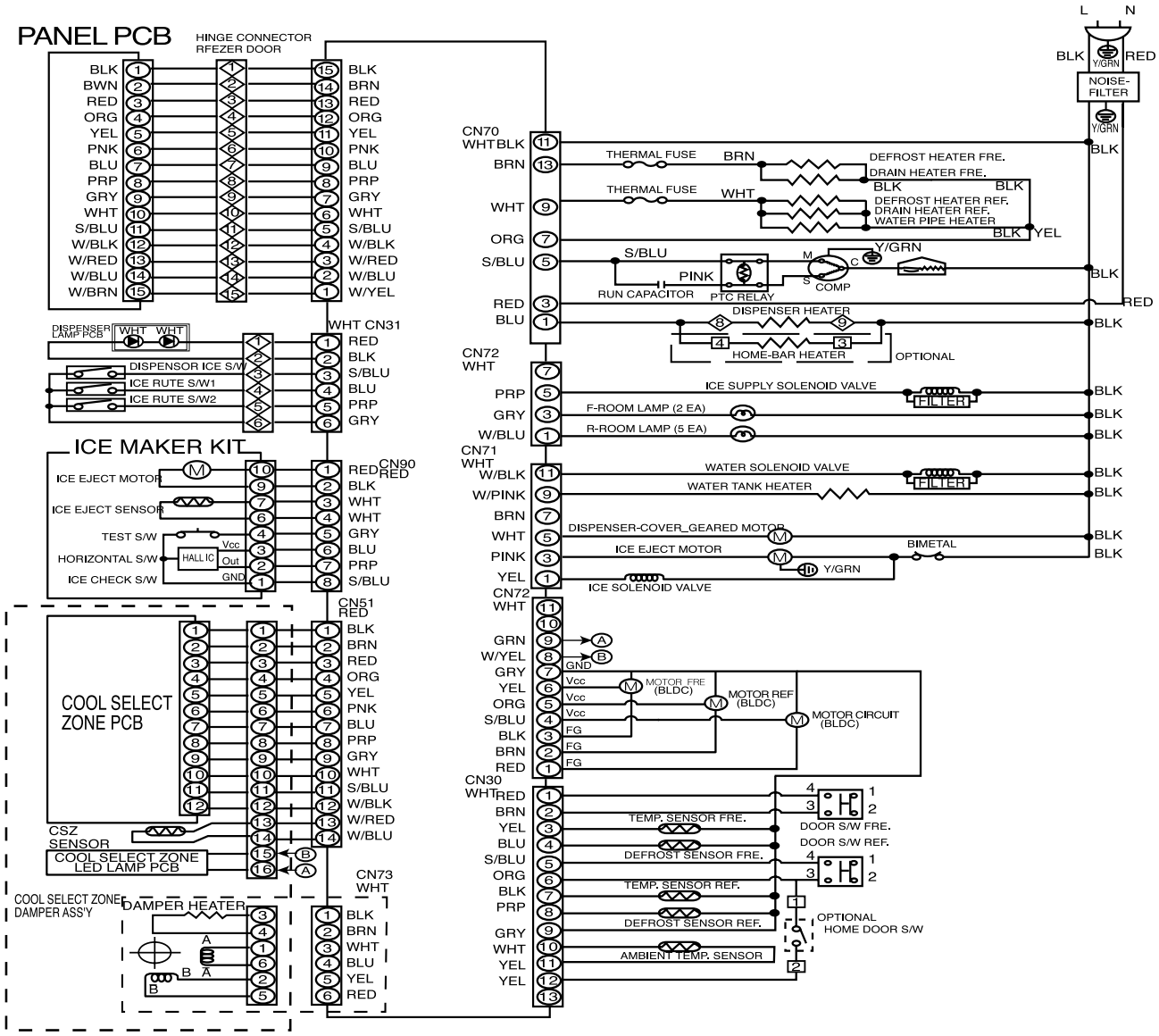
■ Parts List of Others

NO	CODE-NO	PART NAME	Spec	Quantity	Remark
1	0203-001678	TAPE-POLY	204C,T0.07,W50,L50000,BLUE	1	
2	6001-001458	SCREW MACHINE	TH,M5XL21,STS304	1	
3	6002-000216	SCREW-TAPPING	TH,+,-,1,M4.0,L20,ZPC(YEL),MSWR10,	1	
4	6002-000480	SCREW-TAPPING	BH,+,-,2S,M4,L10,ZPC(YEL),SWRCH18A	1	
5	6002-000521	SCREW-TAPPING	TH,+,2,M4,L14,ZPC(YEL),SWRCH18	1	
6	6002-001351	SCREW-TAPPING	BH,+,-,M4,L8,DACRO(WHT),SWRCH18A	1	
7	6501-000123	CABLE TIE	DACT-140,-,W3.6,L146,NTR,NYLON66	1	
8	6501-001038	CABLE TIE	DA-275,T1.4,W6.2,L275,NTR,NYLON6/6	1	
9	DA60-10122C	SCREW-TAPPING	MSWR10,M5,L16,HH,ZPC2	1	
10	DA60-30104A	NUT-WATER LINE A	NY-6	1	
11	DA60-30108A	NUT-HEX	HEX,-,-,-,POM,-,AURGER	1	
12	DA60-40116A	WASHER-PLAIN	ID20,OD28,T0.5,STS430	1	
13	DA60-90125A	RING	-	1	
14	DA60-90136A	PIN-SPIRAL	STS304,OD5.2,L40,SR-S7180	1	
16	DA61-20124C	SPRING ETC-DISPENSER	AD,STS304,0.9,5.9	1	

8 . Block Diagram

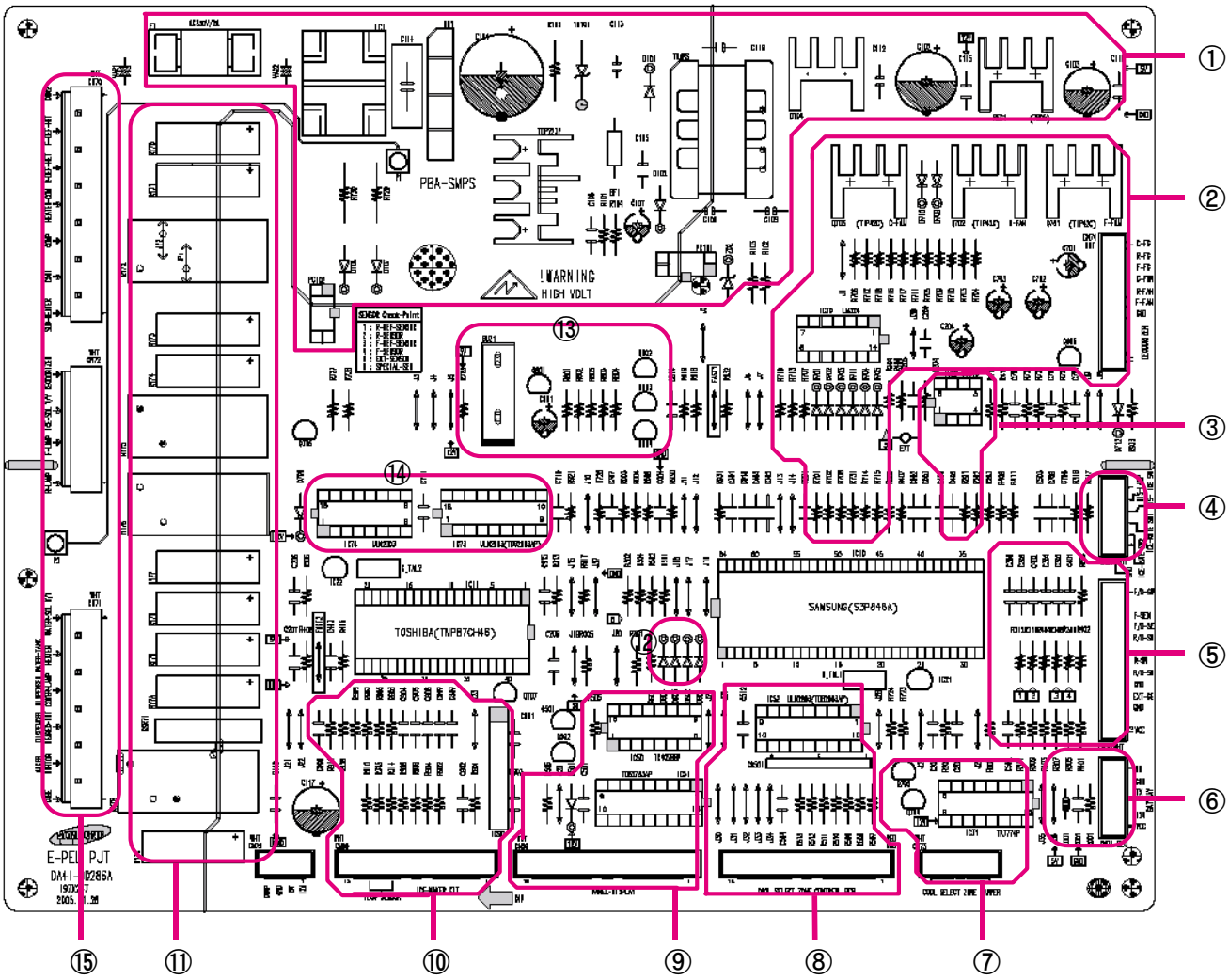


9 . Wiring Diagram



10. PCB Diagram

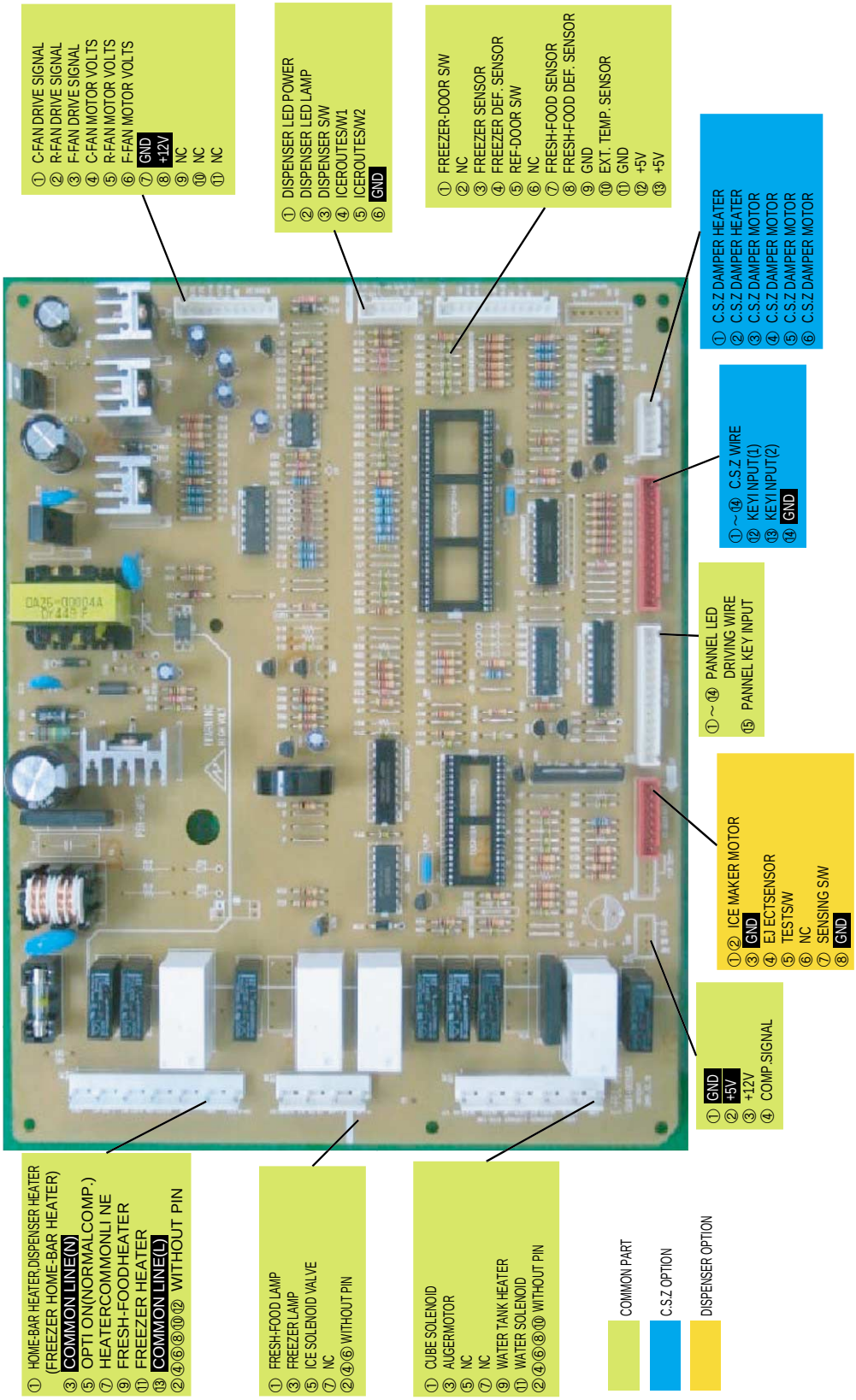
10-1) PART ARRANGEMENT (Main Board)



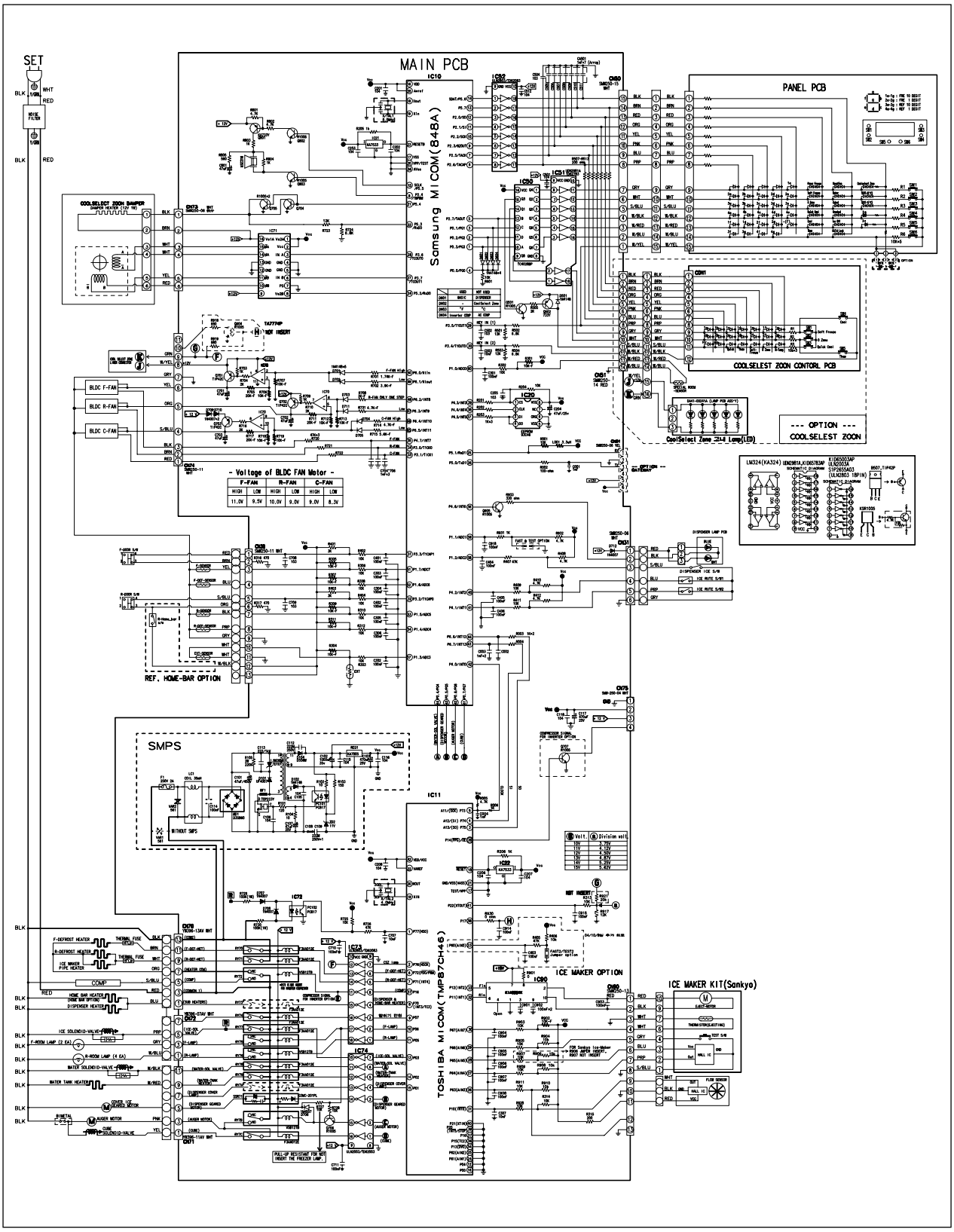
1. Available FOR NORMAL COMPRESSOR DC12V,5V,GNDSUPPLY THROUGH CN75 FOR Inverter, COMPRESSOR.
2. FAN MOTOR DRIVING PART POWER SUPPLIED FROM 8. 3V TO10V ACCORDI NGTOMOTORVOLTS.
3. EEPROM : Memorandum ALL DATA.
4. CHECK THE STATUS OF ICE/WATER SWITCH.CHECK THE STATUS OF SWITCH FOR DISPENSER GEAR MOTOR .
5. Transfer THE ALL SENSOR SIGNAL TO MICOM AFTER REMOVE THE NOISE.
6. WIRE COMMUNICATION CIRCUIT
7. OPERATE C. S. Z DAMPER AND DAMPER HEATER
8. C. S. Z DISPLAY DRIVING PART-LEDDISPLAY, PROCESS THE KEY SIGNAL.
9. PROCESSING THE COMMUNICATION SIGNAL BETWEEN PANEL↔ MAIN PCB.
10. OPERATING ICE-MAKER, POWER SUPPLY FOR MOTOR, SENSING THE STATUS OF SWITCH.
11. RELAY FOR CONTROL AC LOAD AND IT OPERATE BY DRIVING SIGNAL FROM NO⑭ IC.
12. OPTION SETTING PART FOR MODEL Classification.
13. BUZZER CIRCUIT
14. DRIVER IC PART FOR RELAY DRIVE
15. CONNECTOR PART FOR CONNECTING AC LOAD.

PCB Diagram

10-2) CONNECTOR ARRANGEMENT (Main Board)



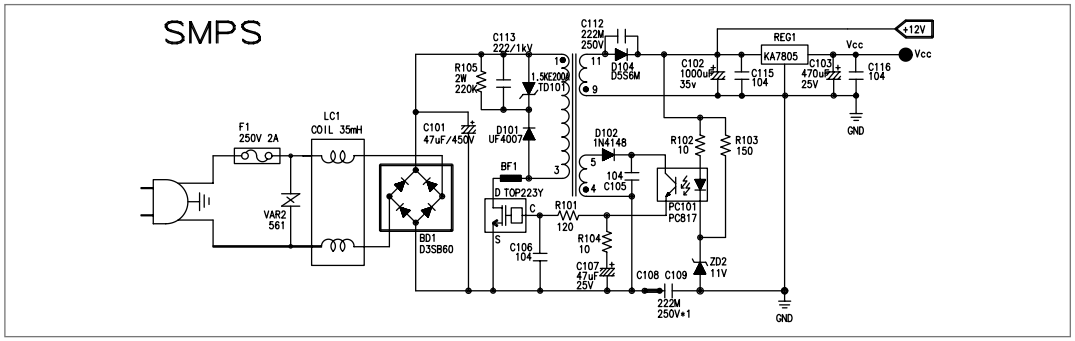
11. Circuit (Schematic) Diagram



12. Circuit Descriptions

Circuit Descriptions

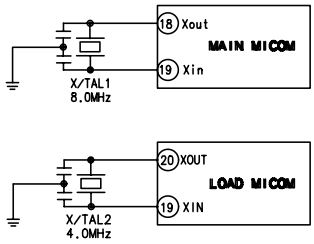
12-1) Source Power Circuit



This circuit shows SMPS(Switch Mode Power Supply) which converts AC input voltage (230V, 50Hz) to a high DC voltage (340V). 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 voltage (AC230V, DC320V)

12-2) Oscillator Circuit

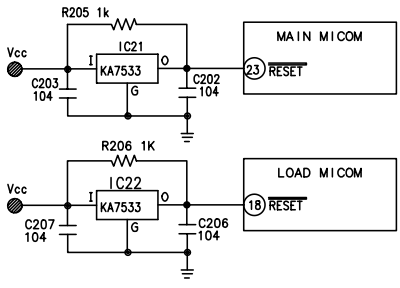


Terminal	Oscillation Frequency
MAIN MICOM	8.0MHz
LOAD MICOM	4.0MHz

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

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

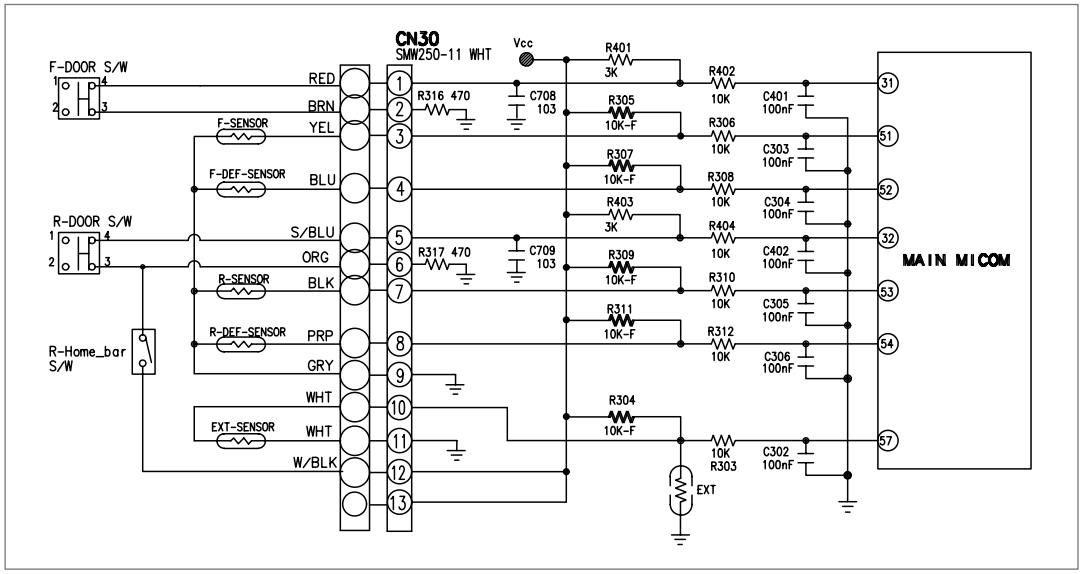
12-3) Reset Circuit



	MAIN MICOM	LOAD MICOM
Terminal	Pin NO. 23	Pin NO. 18
Normal Operation	5V	5V
Reset Operation	0V	0V

The reset circuit is to initialize the values of 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.

12-4) Door S/W Sensing Circuit



- DOOR PARTS FUNTION

Terminal	Operation	Volt(state)
Freezer (No.31)	DOOR OPEN	5V (HIGH)
	DOOR CLOSE	0.7V (LOW)
Fridge (No.32)	DOOR OPEN	5V (HIGH)
	DOOR CLOSE	0.7V (LOW)

- SENSOR PARTS FUNTION

Terminal No	Remark
F-SENSOR (51)	Micom terminal voltage may change according temp.
F-DEF-SENSOR (52)	
R-SENSOR (53)	
R-DEF-SENSOR (54)	
EXT-SENSOR (57)	

→ Door Parts Funtion

1) F-Room door open is picked up based on the state (5V/0V)of the MICOM No.31 Port.
When the F-Room door opens, it becomes short between the Door S/W 1&2.And Door S/W 3&4 open.
Vcc → R401 → Door S/W (3&4)open → R402(10K) → MICOM 31 PORT.
When the state of MICOM 31 PORT is 0.7V, the door is picked up as closed. When it is 5V, the door is considered to be open.

2) R-Room door open is picked up based on the state (5V/0V)of the MICOM No.32 Port.
When the R-Room door opens, it becomes short between the Door S/W 1 &2.And Door S/W 3&4 open.
Vcc →R403 → Door S/W (3&4)open → R404(10K) → MICOM 32 PORT.
When the state of MICOM 44 PORT is 0V,the door is picked up as closed. When it is 5V, the door is considered to be open.

3) When door open is detected, the MICOM have the relevant Fan Motor stop and the relevant Room Lamp light up.
Depending on the state of Door Open/Close,there are following operations; Lamp On/Off, Fan Motor On/Off and Door open alarm.
So, check relevant items upon A/S.

12-5) Temperature Sensing Circuit

1) A thermistor with a negative temperature coefficient (NTC) is used for a temperature sensor.
2) Resistors, R 303 ~ R312 and capacitors, C 302 ~ C 306 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)/(R301+ Rth), where Rth is a corresponding resistance to the thermistor's output (below table Table).

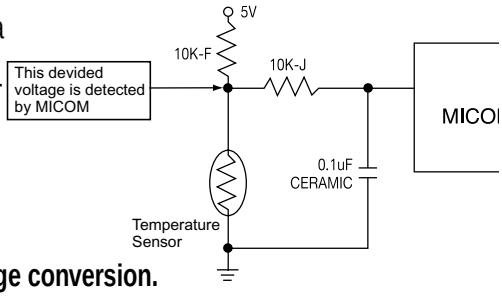


Table of temperature sensor according to resistance and voltage conversion.

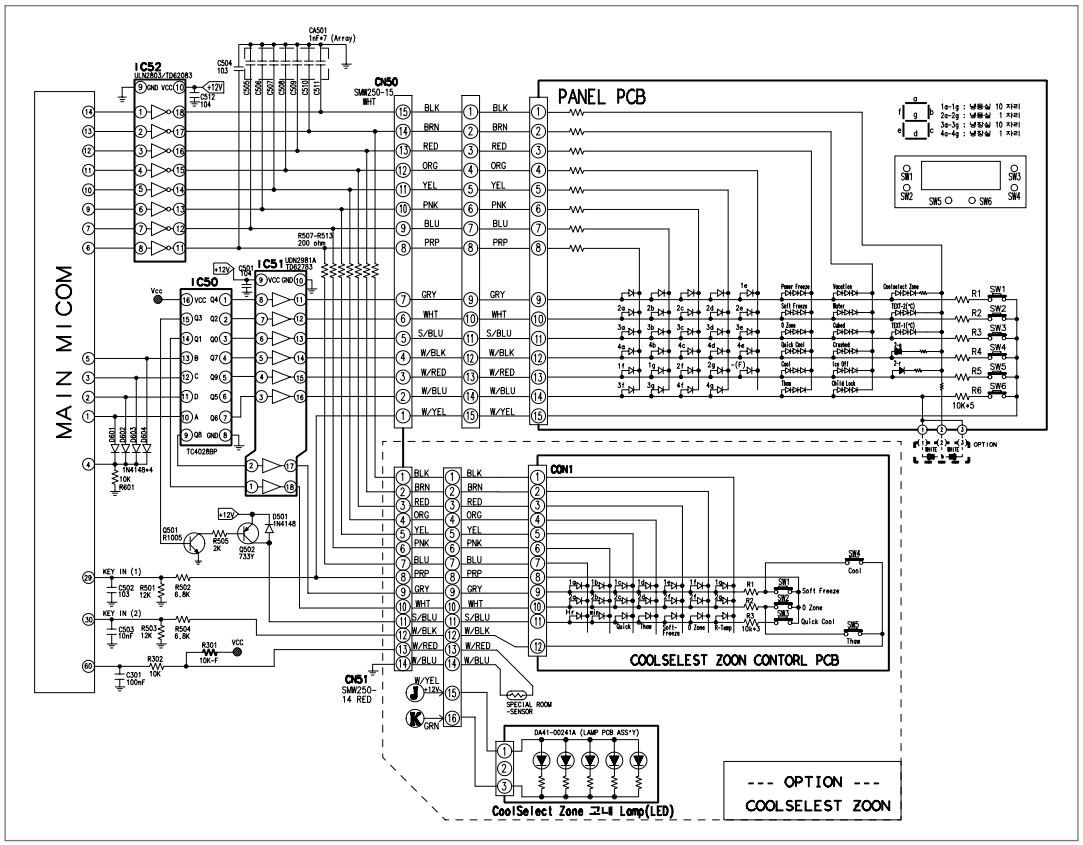
- The input voltage to the MICOM PORT could be different by a hardware.
  This is a table based on the voltage using the 10kohm-F.
  MICOM PORT voltage when the sensor is open: about DC 5V(Vcc LEVEL)
  MICOM PORT voltage when the sensor is shorted: about DC 0V(Ground LEVEL)

Temp.(˚F)	Temp.(˚C)	Resistance(㏀)	Voltage(V)
-43.6	-42	98.9	4.54
-41.8	-41	93.7	4.52
-40.0	-40	88.9	4.49
-38.2	-39	84.2	4.47
-36.4	-38	79.8	4.44
-34.6	-37	75.7	4.42
-32.8	-36	71.8	4.39
-31.0	-35	68.2	4.36
-29.2	-34	64.7	4.33
-27.4	-33	61.5	4.30
-25.6	-32	58.4	4.27
-23.8	-31	55.6	4.24
-22.0	-30	52.8	4.20
-20.2	-29	50.2	4.17
-18.4	-28	47.8	4.13
16.6	-27	45.5	4.10
-14.8	-26	43.3	4.06
-13.0	-25	41.2	4.02
-11.2	-24	39.2	3.99
-9.4	-23	37.4	3.95
-7.6	-22	35.7	3.91
-5.8	-21	34.0	3.86
-4.0	-20	32.4	3.82
-2.2	-19	30.9	3.78
-0.4	-18	29.5	3.73
1.4	-17	28.1	3.69
3.2	-16	26.9	3.64
5.0	-15	25.7	3.60
6.8	-14	24.5	3.55
8.6	-13	23.4	3.50
10.4	-12	22.4	3.46

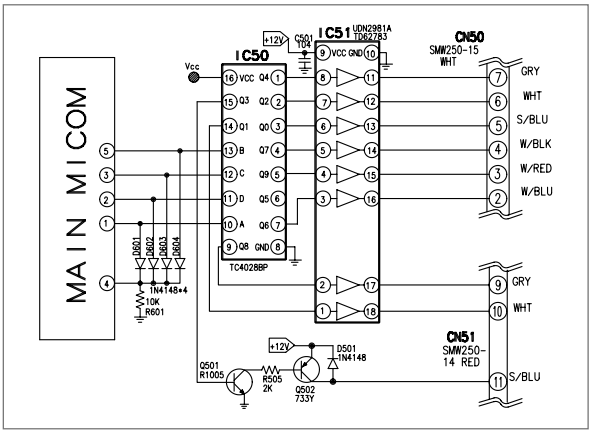
Temp.(˚F)	Temp.(˚C)	Resistance(㏀)	Voltage(V)
12.2	-11	21.4	3.41
14.0	-10	20.5	3.36
15.8	-9	19.6	3.31
17.6	-8	18.7	3.26
19.4	-7	17.9	3.21
21.2	-6	17.2	3.16
23.0	-5	16.	3.11
24.8	-4	15.7	3.06
26.6	-3	15.1	3.01
28.4	-2	14.5	2.96
30.2	-1	13.9	2.90
32.0	0	13.3	2.85
33.8	1	12.7	2.80
35.6	2	12.2	2.75
37.4	3	11.7	2.70
39.2	4	11.3	2.65
41.0	5	10.8	2.60
42.8	6	10.4	2.55
44.6	7	10.0	2.50
46.4	8	9.6	2.45
48.2	9	9.2	2.40
50.0	10	8.8	2.35
51.8	11	8.5	2.30
53.6	12	8.2	2.25
55.4	13	7.9	2.20
57.2	14	7.6	2.15
59.0	15	7.3	2.10
60.8	16	7.0	2.06
62.6	17	6.7	2.01
64.4	18	6.5	1.97
66.2	19	6.2	1.92

Temp.(˚F)	Temp.(˚C)	Resistance(㏀)	Voltage(V)
68.0	20	6.01	1.88
69.8	21	5.79	1.83
71.6	22	6.58	1.79
73.4	23	5.38	1.75
75.2	24	5.19	1.71
77.0	25	5.00	1.67
78.8	26	4.82	1.63
80.6	27	4.65	1.59
82.4	28	4.49	1.55
84.2	29	4.33	1.51
86.0	30	4.18	1.47
87.8	31	4.03	1.44
89.6	32	3.89	1.40
91.4	33	3.76	1.37
93.2	34	3.63	1.33
95.0	35	3.51	1.30
96.8	36	3.39	1.27
98.6	37	3.28	1.23
100.4	38	3.17	1.20
102.2	39	3.06	1.17
104.0	40	2.96	1.14
105.8	41	2.86	1.11
107.6	42	2.77	1.09
109.4	43	2.68	1.06
111.2	44	2.59	1.03
113.0	45	2.51	1.00
114.8	46	2.43	0.98
116.6	47	2.35	0.95
118.4	48	2.28	0.93
120.2	49	2.21	0.90

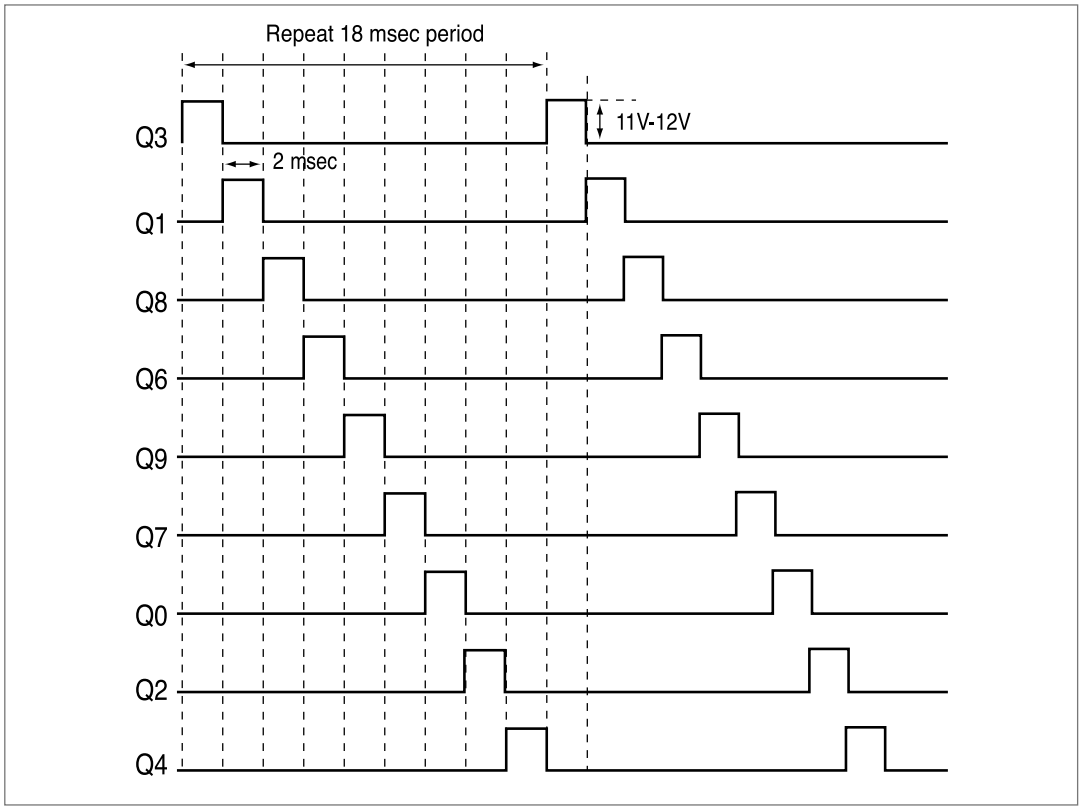
12-6) Key Scan and Display Circuit



1) Key Scan and display operation.



The model uses a decorder IC which 4 inputs and 9 outputs. If the IC 9 decorder (TC4028BP) receivesd 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 11~2V 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.

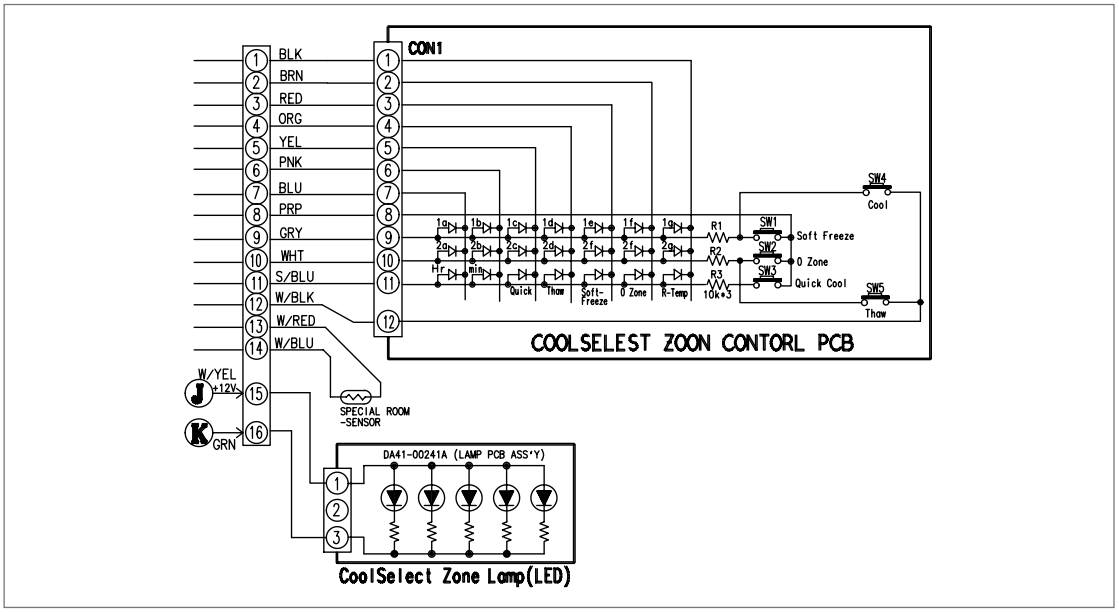
2) Key Scan

The 6 step signals, Q6~Q4 are applied to scan the 6 keys (buttons). When SW6 is pressed, the step signal 5V from IC50 Q60 will be amplified to 12V and entered to the panel PCB.
This signal will reach to SW6 throogh CN50 pin2, and 12V signal enlered to CN50 lst pin during SW6 being pressed.
The signal (DC 12V) will be reduced to 5V by R502 and R501, and ented to the MICOM 29 at the same time of output signal of Q6, then MICOM will match a corresponding function for SN6 is pressed.

2-1) IC50 Q6(5V) → IC51 NO3(5V) → IC51 NO16 (12V) → VN50 NO2(12V) → Panel PCB Connector NO2(12V) → SW6 → Panel PCB Connector NO1(12V) → CN50 NO2(12V) → R502/R5.1 → Voltage Down(5V) → Input MICOM NO29(5V)

12-7) CoolSelect Zone™ Panel Circuit

1) CoolSelect Zone™ display panel and temperature sensor, Lamp PCB



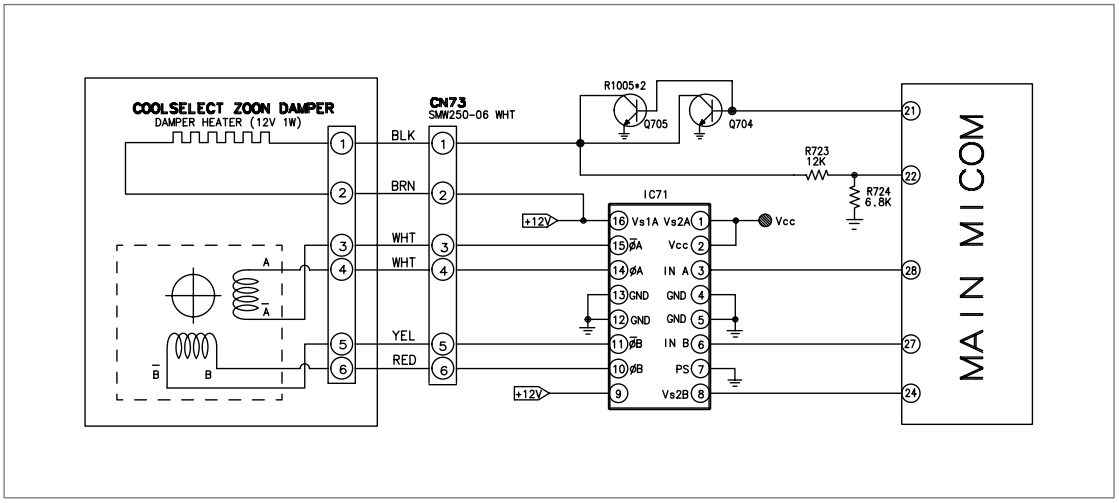
1-1) CoolSelect Zone™ is referred to as a storage drawer to implement features of Soft Freeze, 0 Zone, Quick cool, Cool and Thaw

1-2) CoolSelect Zone™ has an additional display panel.Panel LED are off while the doors are closed.When a door is opened,micro-processor senses its signal and LEDs will be on.

1-3) The basic operational principle is the same as the Panel pcb 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

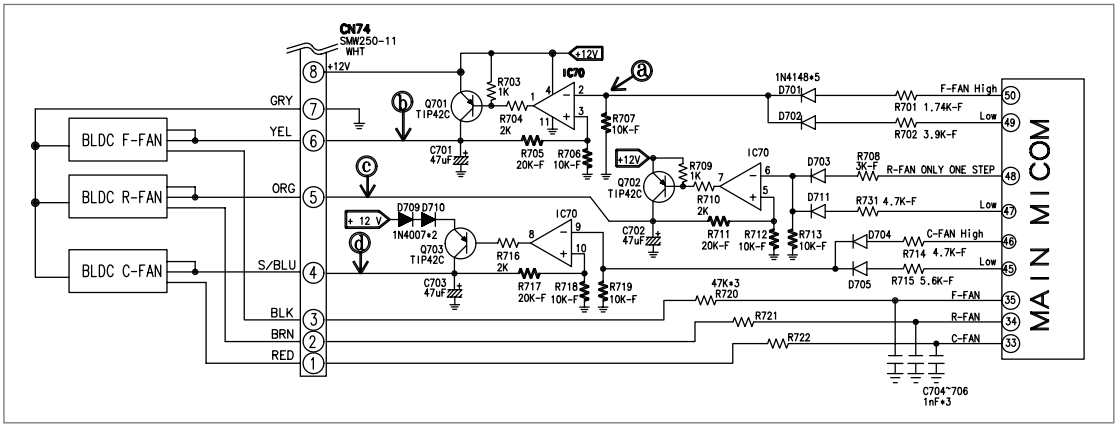


2-1) CoolSelect ZoneTM Drawer is controlled by a damper to supply or block cold air. For Quick Cool, the damper will be closed. So cold air is supplied only to CoolSelect ZoneTM Drawer.For Thaw, the evaporator heater of refrigerator is ON and the damper is controlled by the refrigerator temperature.

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 DC 12V, 1 watt heater is mounted and activated continuously.

12-8) Fan Motor (BLDC) Drive Circuit



1) Motor drive circuit

1-1) This refrigerator adopts a BLDC motor for reduce energy consumption, Motors of the freezer, refrigerator and the machine compartment are composed of the BLDC. (This circuit is used to other models in common.)

1-2) Operating Principle

In the above circuit, there are similarities between motors in the composition of their circuits. Here comes the F-Fan motor for example. According to conditions, the F-Fan motor runs High or Low in RPM. To opernte the F-Fan motor, a specific voltage should be applied to OP-AMP No.2 as shown in the figure. When MICOM No.50 is 0V, OP-AMP No.2 also becomes 0V. So, the motor does not operate. When MICOM No.50 becomes High (5V), the forward voltage drop of R701 and D701 (IN4148) will be subtracted from the High voltage and then voltage will decided through the division with R707 10K. The devided voltage then flows to OP-AMP No.2 amplifying treble voltage. It applies to the motor. If the voltage at OP-AMP No.2 is 3V, 3V x 3 = 9V applies to the motor. (When the F-Fan is High, 5V will be output from MICOM No.2 and when it is running in Low RPM, MICOM No.2 becomes 0V and 5V will be output from MICOM No.49. So, when the F-Fan is turned off, both of MICOM 50 & 49 becomes 0V.)
** Other fan motors run with the same principle.

1-3) Oper

	Voltage of motor			Remark
	Measure b (F-FAN)	Measure c (R-FAN)	Measure d(C-FAN)	
High	11.0V	10V	10V	In the normal operation, MICOM No. 33, 34, 35 and 42 receive a constant frequency; and MICOM defects the signal to check the failure of motor. (frequency(Hz)×12 = motor rpm)
Conditionally	9.5V	9.0V	8.3V	

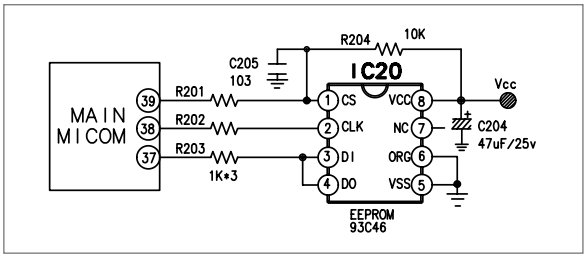
Note) According to conditions, the F-Fan and the C-Fan motors are controlled to High and Low RPM. Generally, the refrigerator operates in High RPM during the peak using time and it runs in Low RPM when the use of the refrigerator is slow. (For the purpose of performance improvements, the motor RPM, Voltage and Frequency can be changed without a notice in advance.)

1-4) When there is error in the motor (if the motor is sensed under 600 ~ 700 RPM), the relevant motor stops immediately and it tries to start up in 10 seconds. At this time, when the RPM is sensed as normal, the motor will be judged as normal and it starts operating. But, when a normal RPM is not input, it tries to start up again in 10 seconds. If it refuses to start up for 5 times, it will pause for 10 minutes, and repeat a 5-times trial with an interval of 10 seconds continually. At this time, when the Self-Diagnosis function is selected on the display panel, the LED relevant to the operation error will light up indicating that there is a problem with the motor. When the power is off, the error data will be erased. So, do not turn off the power before it is checked by service personel.

Note) When the fan motor error is expected during a service check, do not turn off the power but to carry out the Self-Diagnosis function and check the current status of the refrigerator.

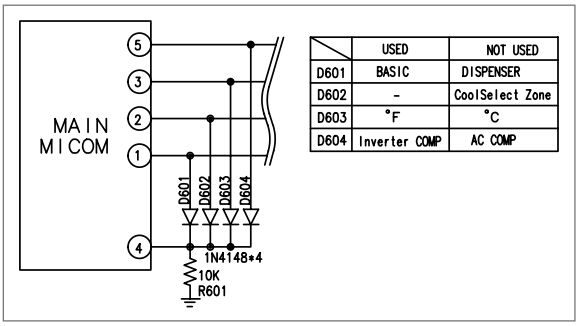
12-9) EEPROM Circuit

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



12-10) 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.



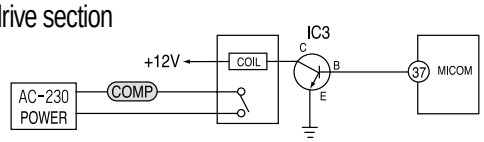
	USED	NOT USED
D601	BASIC	DISPENSER
D602	-	CoolSelect Zone
D603	°F	°C
D604	Inverter COMP	AC COMP

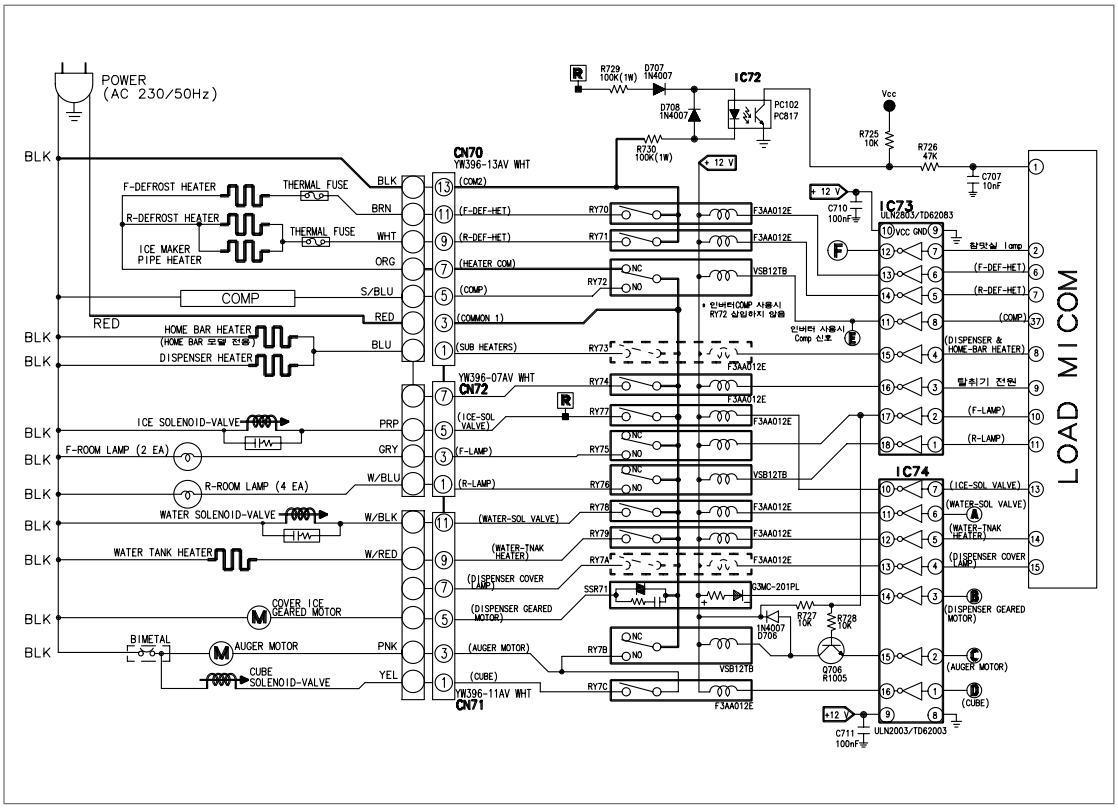
12-11) Load Drive Circuit

1) The control of load in the system is accomplished by the main PCB.
2) Most of relays or SSRs can control the compressor, refrigerator/freezer defrost heater, and several option functions.
3) For the compressor, #37 pin of micro processor signals High (5V). This signal enters #8 pin of IC73 and #11 of output terminal which have base and collector functions of IC73 turns on and connects the GND. Relay 72 will be grounded through #11 of IC73.Magnetic field will generate so that the second side of RY72 is activated and 230V is supplied to the compressor. On the other hands, if #37 of micro processor turns Low(0V), #8 of IC73, the current of RY 72 relay, and magnetic field will shut down in sequence. A contact point in secondary side of Relay 72 is off. Finally compressor will stop.
4) The principles of other loads is the same as 3) item described.

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

*COMP. equivalence circuit of drive section





13. Reference Information

13-1) Model Name(Nomenclature)

R S E8 K P MS

DOOR PLATE COLOR ;
SW-SNOW WHITE (EMBO) SV-SNOW WHITE (PET)
MS-SILBER MIST (THAI) RS-REAL STAINLESS
AS-ALUMINUM SILVER

HANDLE TYPE (DESIGN)
G : LONG BAR (Glossy)
P : LONG BAR (Without Glossy)

Function
N : Without any option
D : With Dispenser only
J : With Dispenser and Convertible
B : With Home-bar only
F : With Dispenser and Home-bar
K : With Dispenser,Home-bar and Convertible
V : With Dispenser and Convertible (Inverter Compresor)
T : K-option + Transparent Home-bar

CATEGORY
S : SBS

VOLUME CAPACITY : E8 (18 cu.ft)

BRAND : R-SAMSUNG REFRIGERATOR B-OEM REFRIGERATOR

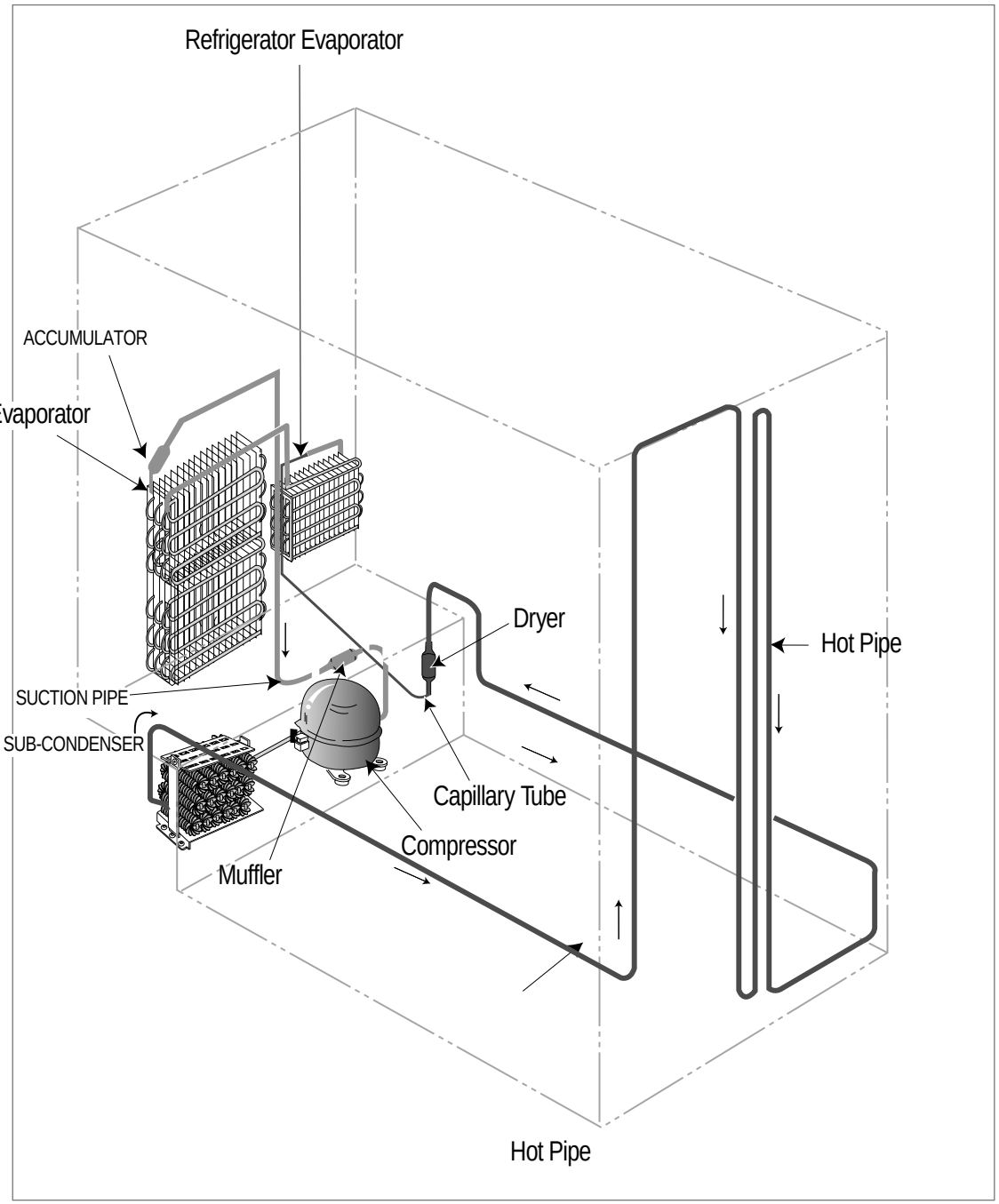
13-2) Q & A

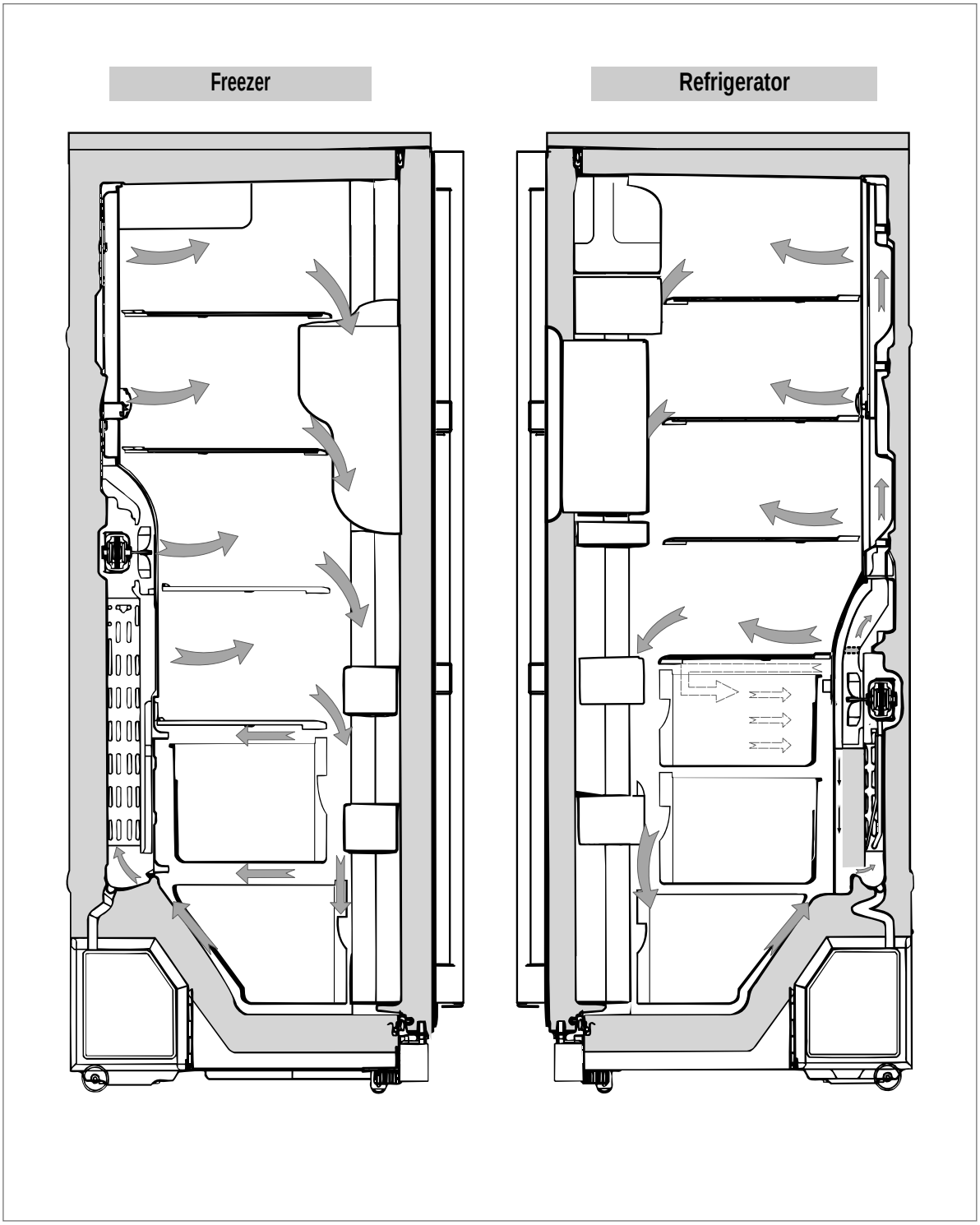
Problem	Possible Causes	What To Do
The refrigerator does not work sufficiently or at all	• Disconnected power plug	• Check that the power plug is properly connected.
	• Is the temperature control on the display panel set to the correct temperature?	• Try setting it to a lower temperature.
	• Is the refrigerator 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.	

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 is not dispensed (on some models) but icemaker is working	Water in reservoir is frozen.	• Call for service.
	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.

13-3) Additional Information

Compressor → Sub-condenser → Hot Pipe → Dryer → Capillary Tube → Refrigerator Evaporator → Freezer Evaporator→ Suction Pipe → Compressor




Freezer
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