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1. Safety Warning & Cautions

For your safety, please certainly keep followings








◆ Please read [Caution for Safety] before using refrigerator and operates it correctly.			
 <b>Warning</b>	It contains contents of possibility of severe damage to human body such as dead or heavy injury etc when does not follow instructions.	 <b>Caution</b>	It contains contents of possibility of light or light-heavy damage to human body or damage to material when does not follow instructions.
◆ Example of marking			
	It means prohibition of disassembly.		This marks means [Prohibition] or [Do not attempt to try].
	It means certainly disconnect electric source plug from socket.		This mark means [Mandatory] or [Certainly keep Instructions]











 <b>Warning</b>			
	<p>Do not install refrigerator at wet area or humid environment.</p> <p>◇ It cause of electric shock or fire accident by weakening electrical insulation.</p>		<p>When throw away refrigerator, certainly remove packing of door.</p> <p>◇ Children may be trapped and suffocated. It is dangerous thought if you consider as for "some days"</p>
	<p>Insert plug so that electrical cord face downward.</p> <p>◇ It cause of electrical shock or fire accident by short circuit or over heating due to irregular condition when cord is inserted as face up.</p>		<p>Make sure there is no shaking after inserting plug in to socket.</p> <p>◇ It cause of electric shock or fire accident by weakening electrical Insulation.</p>
	<p>Make a call for service if electric cord is damaged.</p> <p>◇ It cause of fire or electric shock or short circuit.</p>		<p>If you feel there is leakage of flammable gas, make ventilation so that refrigerator does not exposed to gas.</p> <p>◇ It cause of explosion, fire or burning accident by flame at electrical connection.</p>



Warning

	<p>Do not touch electric source plug with wet hand.</p>		<p>Do not use distribution socket.</p>
	<p>◇ It cause of electric shock.</p>		<p>◇ It cause of fire by abnormal heat When connect with multiple line. ◇ Only use single socket with rated capacity over 220V.</p>
	<p>Do not connect to other electric source except 220V.</p>		<p>Do not use damaged cord or electric source plug, loosened socket.</p>
	<p>◇ It cause of fire, electric shock and out of order.</p>		<p>◇ It cause of electric shock or fire by short circuit or over heating.</p>
	<p>Do not let electric source plug or wire to be pressed by refrigerator or other object.</p>		<p>Do not pull plug only with gripping cord.</p>
	<p>◇ It cause of fire by damage of electric source plug or wire.</p>		<p>◇ It cause of electric shock or fire by broken wire and short circuit. ◇ Always pull plug from socket by gripping body of plug.</p>
	<p>Do not let electric source cord exposed at electric heating source.</p>		<p>Do not put container with water on the top of refrigerator.</p>
	<p>◇ It cause of fire or electric shock by damaging of cord. ◇ When cord is damaged, stop using it and call service center to replace part.</p>		<p>◇ It cause of short circuit, electric shock or fire by weakening of electrical insulation of parts when water is spilt from container.</p>
	<p>Do not spray water at main body or Inside of refrigerator.</p>		<p>Do not move rack with food stuffs on the rack.</p>
	<p>◇ It cause of electric shock or fire By weakening of electrical insulation.</p>		<p>◇ It may cause of hurt by dropping down of a food stuffs.</p>
	<p>Do not pull down door with gripping it.</p>		<p>Do not climb over refrigerator.</p>
	<p>◇ It may cause of falling down or hurt such as finger constriction accident.</p>		<p>◇ It may cause of hurt by falling Down of a refrigerator.</p>
	<p>Never try to Disassemble or repair or remodeling.</p>		<p>Do not let sheath of electric cord to be peeled off by pressing of heavy obstacle or pull or bend electric cord forcefully.</p>
	<p>◇ It may cause of hurt by fire or abnormal operation.</p>		<p>◇ It may cause of fire or electric shock when sheath is damaged.</p>
	<p>Do not use flammable spray nearby refrigerator.</p>		<p>Do not put flammables inside of refrigerator.</p>
	<p>◇ It may danger of fire at electrical Connection.</p>		<p>◇ It may exist danger of ignition, explosion by thinner, benzene, LP gas or adhesive.</p>

 Warning	
 Do not keep medicine or materials for lecture. ◇ Do not keep materials at home refrigerator which need strict temperature control.	 Use same capacity of fuse when changing fuse. ◇ It is danger of fire when use inadequate capacity of fuse.
 Certainly disconnect plug when access to the bottom rear side of machining chamber by hand. ◇ It cause electric shock or fire.	 Do not install earth to water line, gas line, telephone line and lightning rod. ◇ It cause of fire or electric shock. ◇ Certainly ask sales agent for earthing.
 Change light inside of refrigerator after disconnecting plug. ◇ It may cause electric shock.	 Make sure of earthing. ◇ It is danger of electric shock by a short circuit due to out of ordered part. ◇ Certainly ask sales agent for earthing.

 Caution	
 Wear glove when change light inside of a refrigerator because light may be broken or burning accident by hot light bulb.	 Do not eat food stuffs with odor or discolored. ◇ Food stuffs may be spoiled if It is stored for a long time even if It is stored at freezer or refrigerator
 Raise adjusting legs when moving refrigerator. ◇ It damage floor when moving refrigerator forcefully. ◇ Lay protective plate to protect floor with easily get damaged.	 When moving refrigerator, grip adjustable legs and upper part of rear side. ◇ Be careful so that hand is not slipped when gripping upper part of rear side. ◇ It may hurt hand by slippage.
 Do not insert hand under of Refrigerator. ◇ It may hurt hand by sharp plate when inserting hand for cleaning.	 Do not touch food or container at freezer or refrigerator with wet hand. ◇ It is danger of frostbite.
 Do not touch compressor or piping at rear bottom side of refrigerator. ◇ It may cause of burning accident by hot compressor or piping during operation or short time after stopping.	 Disconnect electric source plug when do not use refrigerator for a long time. ◇ It cause of fire.
 Do not store bottle at freezer. ◇ It is danger of hurt by broken Bottle due to freeze.	

## 2. Product Specifications

### 2-1. Product specification

Item Description		Specifications			
Model Name		RSZ622B**	RSZ(A)612D**	RSZ(A)612F**	RSZ(A)612G**
Effective Internal Volume	Total Internal Volume	622 (577)ℓ	604 (538)ℓ	604 (538)ℓ	604 (526)ℓ
	Freezer	242 (198/6)ℓ	224 (164/6)ℓ	224 (164/6)ℓ	224 (164/6)ℓ
	Refrigerator	380 (373)ℓ	380 (368)ℓ	380 (368)ℓ	380 (356)ℓ
Outside Dimensions _ mm (WX D X H) _Include Handle		906X742X1770			
Rated Voltage / Frequency		230 V / 50Hz			
Rated Wattage		144W	177W(Comp Max RPM <sup>㉔</sup> )		
Rated Wattage for Heat Transfer Equipment		290~330W			
Kinds of Refrigerator		Intermittent Refrigerator			
Refrigerant / Quantity		R600a / 0.075 Kg			
Class of Climate		T			
Weight		100 kg	106 kg	108 kg	110 kg

### 2-2. Specification of electrical parts

Item Description		Specifications				
Model Name		RSZ622B**	RSZ(A)612D**	RSZ(A)612F**	RSZ(A)612G**	
Performance of Freezer		4-Star/2-Star				
Freeze Parts	compressor	Type Name	LQ140NAEM	VNW120LI2BB		
		Operating method	RSCR	INVERTER		
		Seal ed Oil	Mineral Oil(MO) 310 ±10cc	Freol-S8T , 270 cc		
	Evaporator		FIN TYPE			
	Condenser		Compulsory Convection Type			
	Dryer		MOLECULAR SIEVE XH-9			
	Capillary tube		IDΦ0.7 X 0.55t X L2,188			
	Refrigerant		R600a			
	O L P	Type Name	4TM205RFB		4MPS57F3	
		Open Temp	130℃ +10/-5		110℃	
Close Temp		61℃ ± 9		60℃		
Defrost related parts	Defrost Heater		230V / 197W			
	AL Heater		230V / 100W			
	D-Sensor (Type/Temperature return)		PBN-43 / 13℃			
	Temperature Fuse		250V / 10A / 77 (+0,-4)℃			

Item Description		Specifications			
Model Name		RSZ622B**	RSZ(A)612D**	RSZ(A)612F**	RSZ(A)612G**
Other electric al part specifi cations	Main Fuse	AC250V /15A			
	Home Bar Heater			230V / 5W (Control per RT & Time)	
	Dispenser Heater		230V / 3W		
	Freezer(F) Fan Motor	DC12V / $\phi$ 140			
	Condenser(C) Fan Motor	DC12V / $\phi$ 150			
	Refrigeration(R) Damper	DC12V			
	Switching Room Damper	-	-	-	DC12V
	Lamp of Freezer	LED ( DC12V)			
	Lamp of Refrigerator	LED ( DC12V)			
	Vita Led of Refrigerator	LED ( DC12V)			
	Freezer/Refrigerator Door Switch	SP101B (AC 250 V, 0,5A)			
	Home Bar Door Switch	-		DC 12V / RS-D4(REED S/W + MAGNET)	
	electric source cord	AC250V 13A			
	F/R – Sensor	PT-38 / PBN-43B			

2-3. Temperature controlling of freezer & refrigerator

1) RSZ(A)622B\*\*(Basic Type)

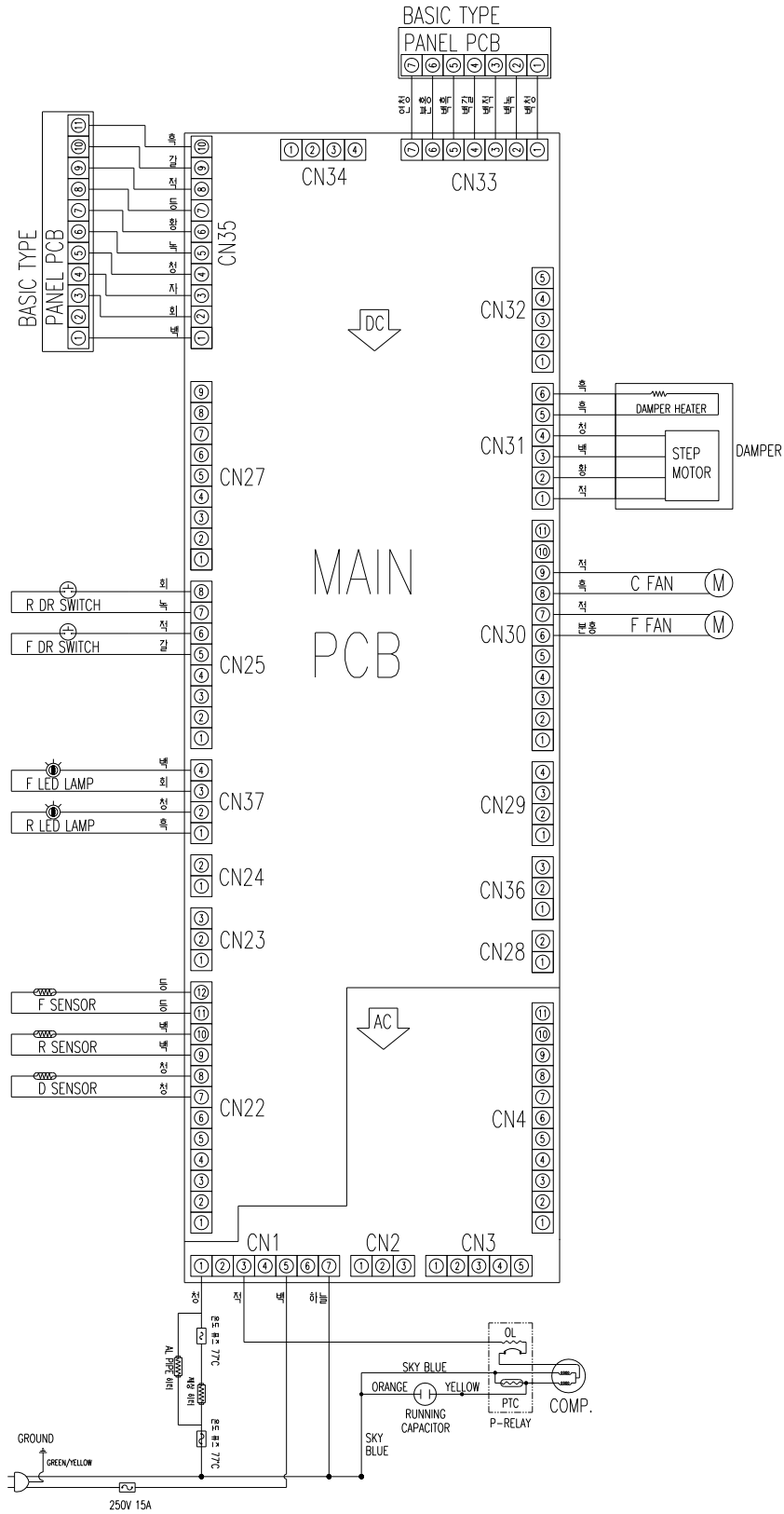
Freezer			Refrigerator		
Step	Display	ON / OFF	Step	Display	ON / OFF
Light	-15	-9.4 / -12.7	Light	8	11.0 / 10.5
Light medium1	-16	-10.5 / -13.8	Light medium1	7	10.0 / 9.5
Light medium2	-17	-11.4 / -14.8	Light medium2	6	8.9 / 8.5
Medium	-18	-12.6 / -15.7	Light medium3	5	8.1 / 7.6
Medium strong1	-19	-13.7 / -16.7	Light medium4	4	7.0 / 6.5
Medium strong2	-20	-14.6 / -17.7	Medium	3	6.0 / 5.5
Medium strong3	-21	-15.6 / -18.6	Medium strong	2	5.0 / 4.5
Strong	-22	-18.5 / -21.4	Strong	1	3.9 / 3.5
High Speed	-22	-18.5 / -21.4	High Speed	1	3.9 / 3.5

2) RSZ(A)612D/F/G\*\*(Luxury Type)

Freezer			Refrigerator		
Step	Display	ON / OFF	Step	Display	ON / OFF
Light	-15	-11.8 / -14.1	Light	8	11.0 / 10.5
Light medium1	-16	-12.8 / -15.1	Light medium1	7	10.0 / 9.5
Light medium2	-17	-14.9 / -17.0	Light medium2	6	9.0 / 8.5
Medium	-18	-15.9 / -18.0	Light medium3	5	8.1 / 7.6
Medium strong1	-19	-16.9 / -18.9	Light medium4	4	7.0 / 6.6
Medium strong2	-20	-17.9 / -19.8	Medium	3	6.0 / 5.5
Medium strong3	-21	-20.7 / -22.6	Medium strong	2	5.0 / 4.5
Strong	-22	-22.6 / -24.4	Strong	1	4.0 / 3.5
High Speed	-22	-22.6 / -24.4	High Speed	1	4.0 / 3.5

### 3. Wiring Diagram

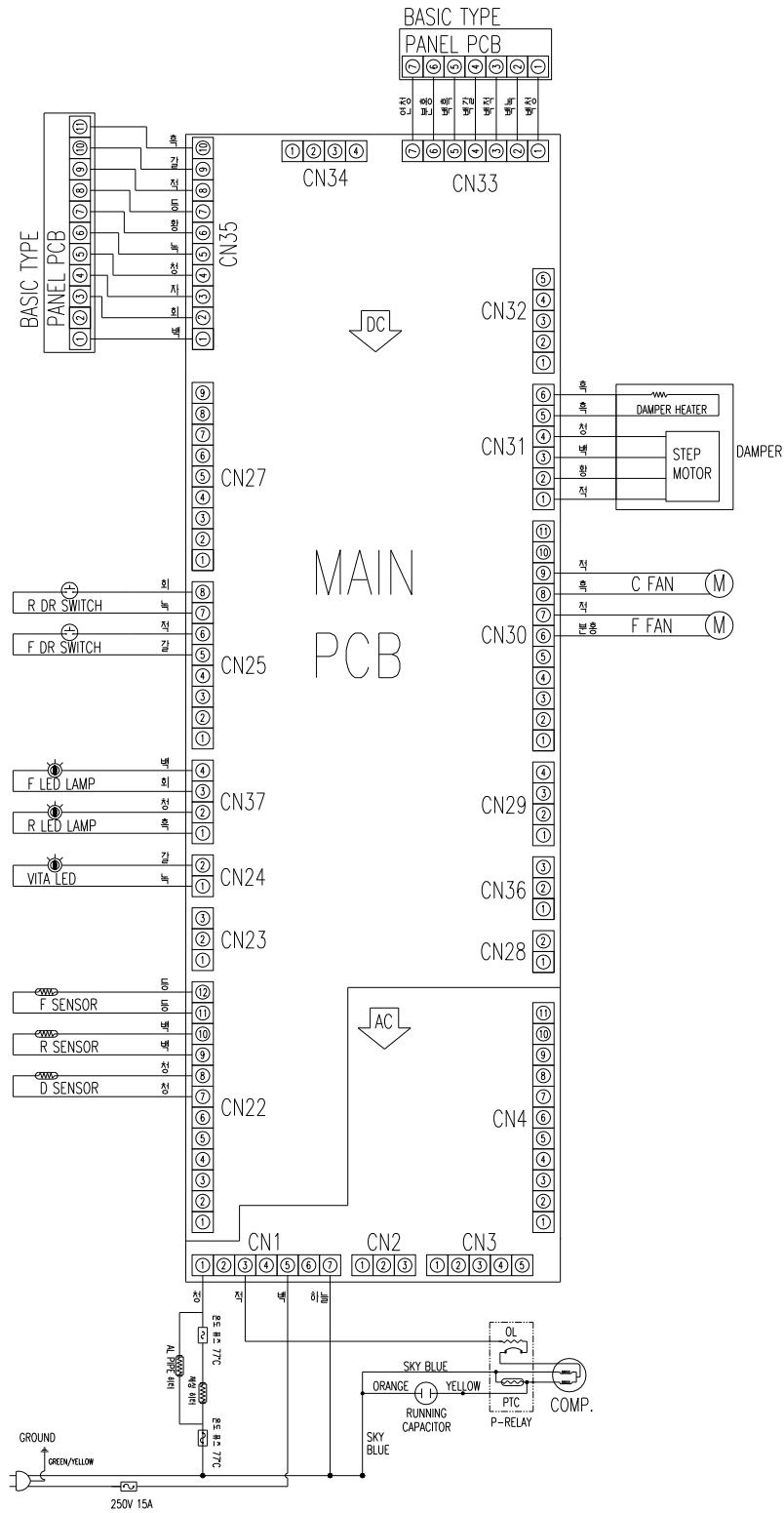
#### 3-1. Applicable model (BASIC MODEL)





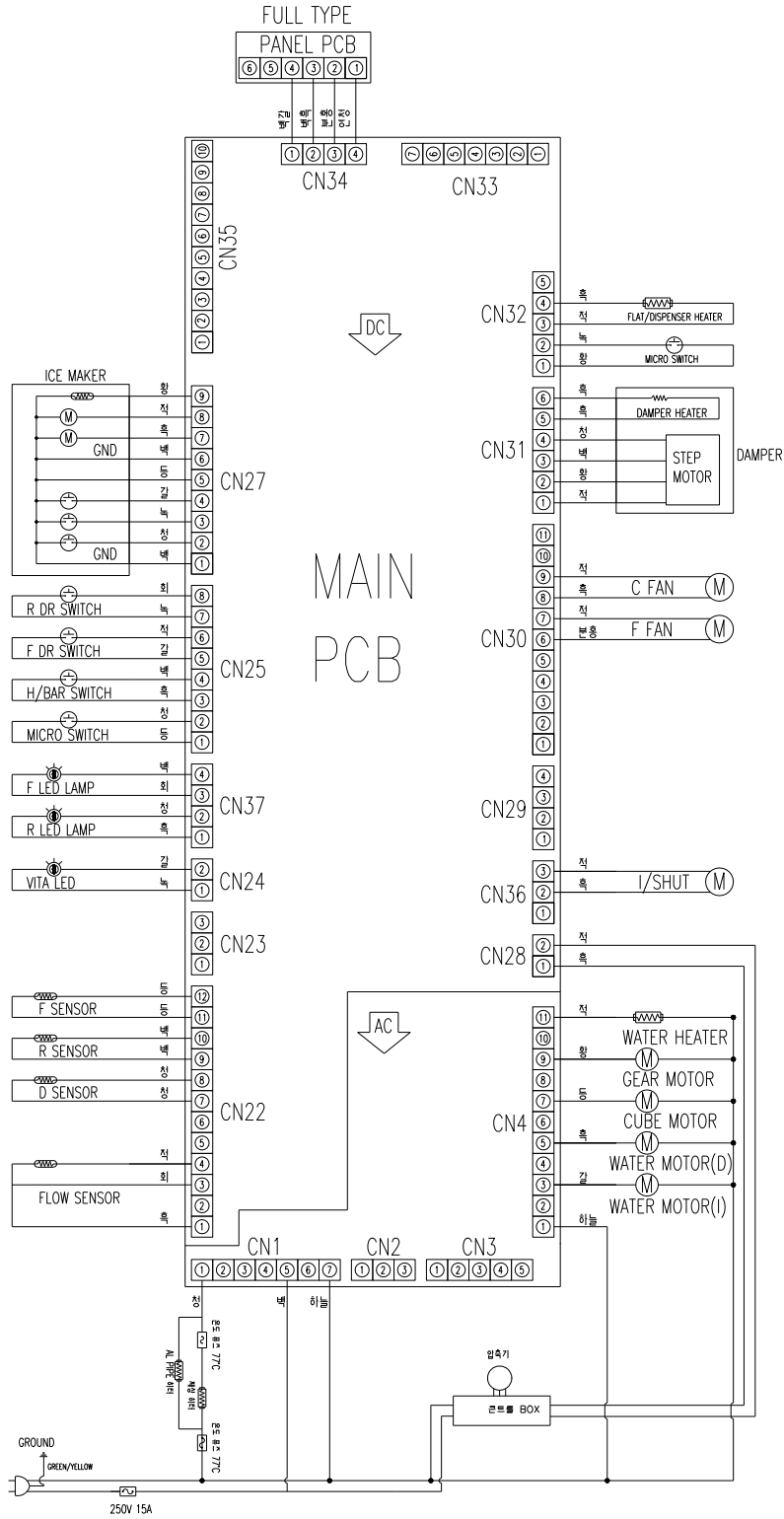
### 3. Wiring Diagram

#### 3-2. Applicable model (BASIC MODEL/VITA LED)



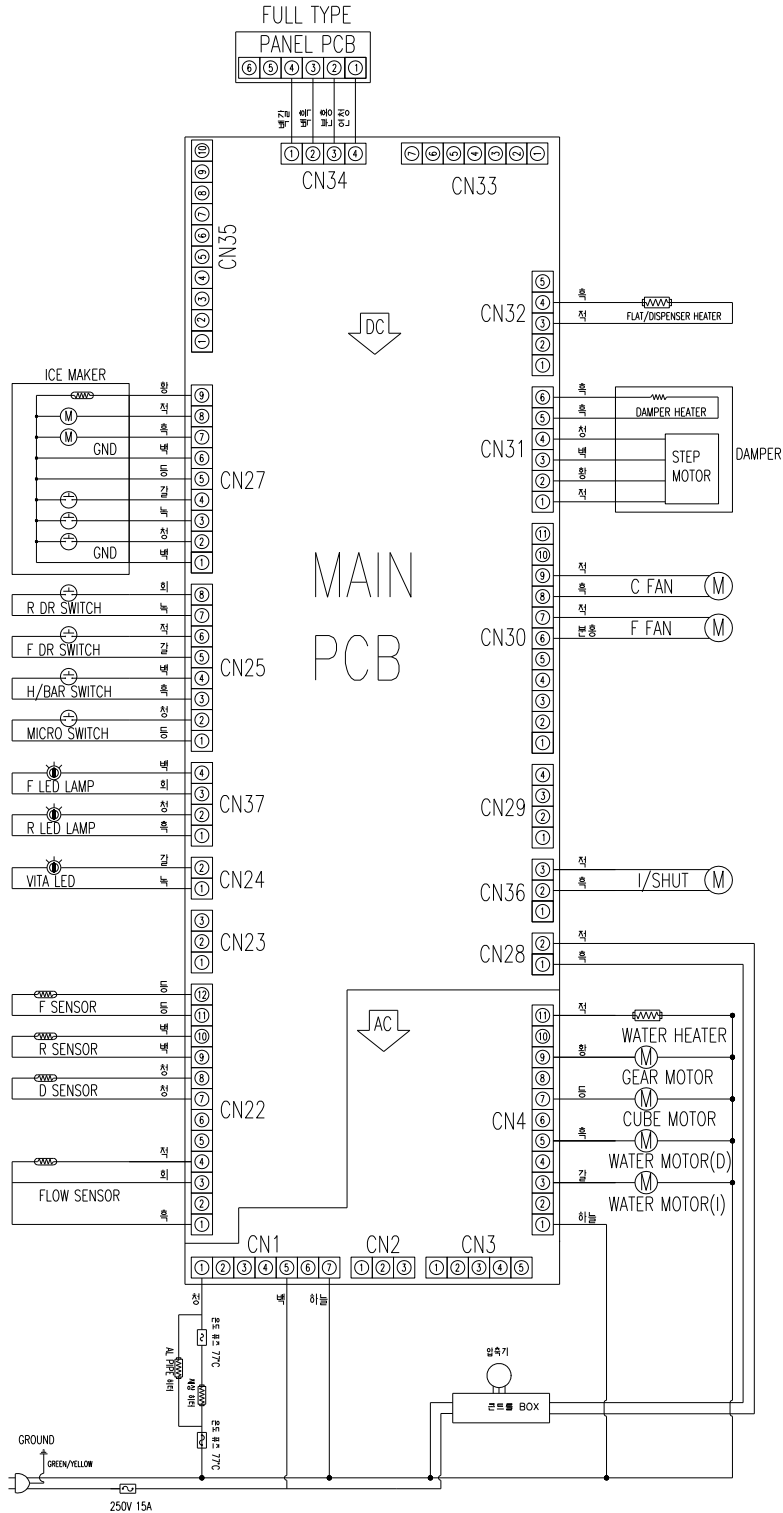
### 3. Wiring Diagram

#### 3-3. Applicable model (DISP MODEL/2LEVER)



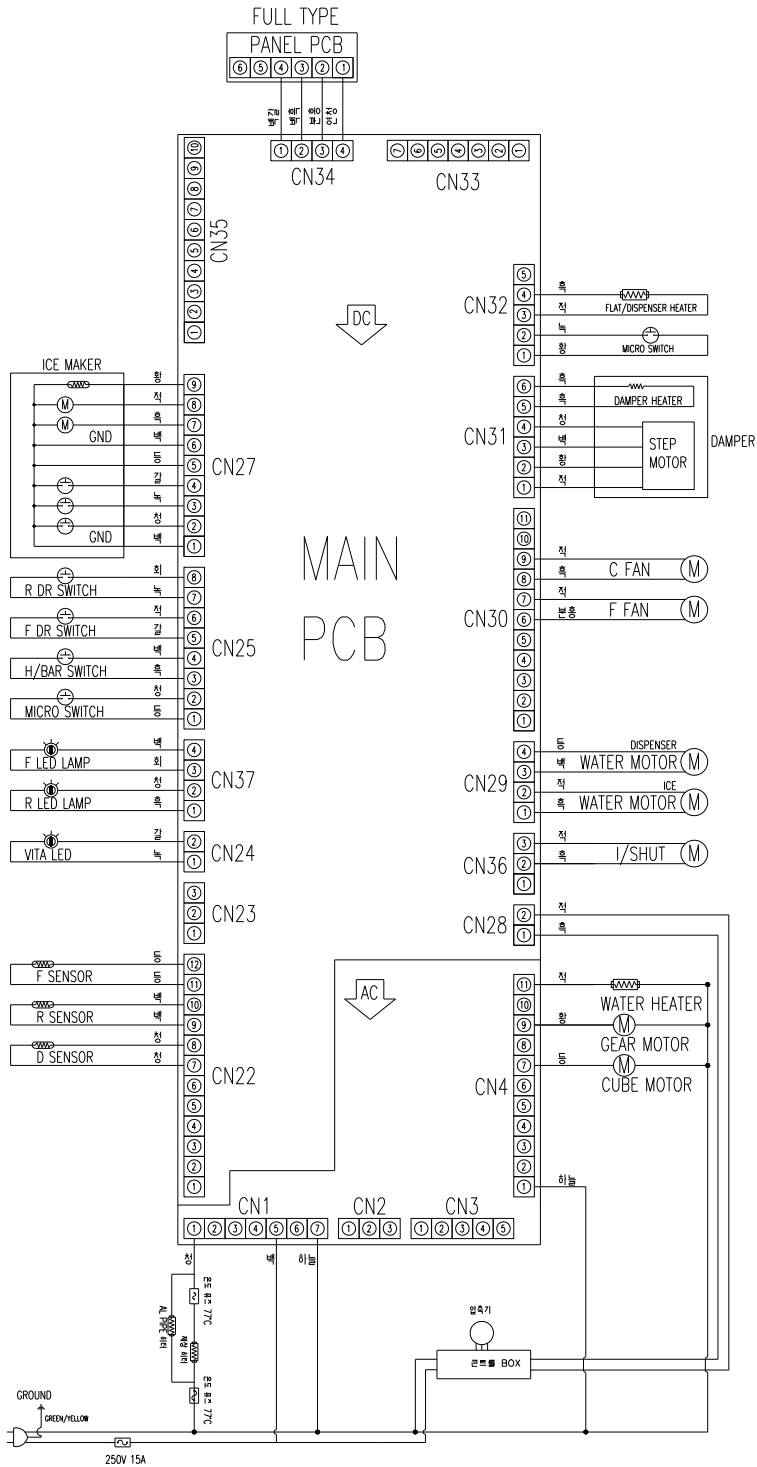
### 3. Wiring Diagram

3-4. Applicable model (DISP MODEL/1LEVER)



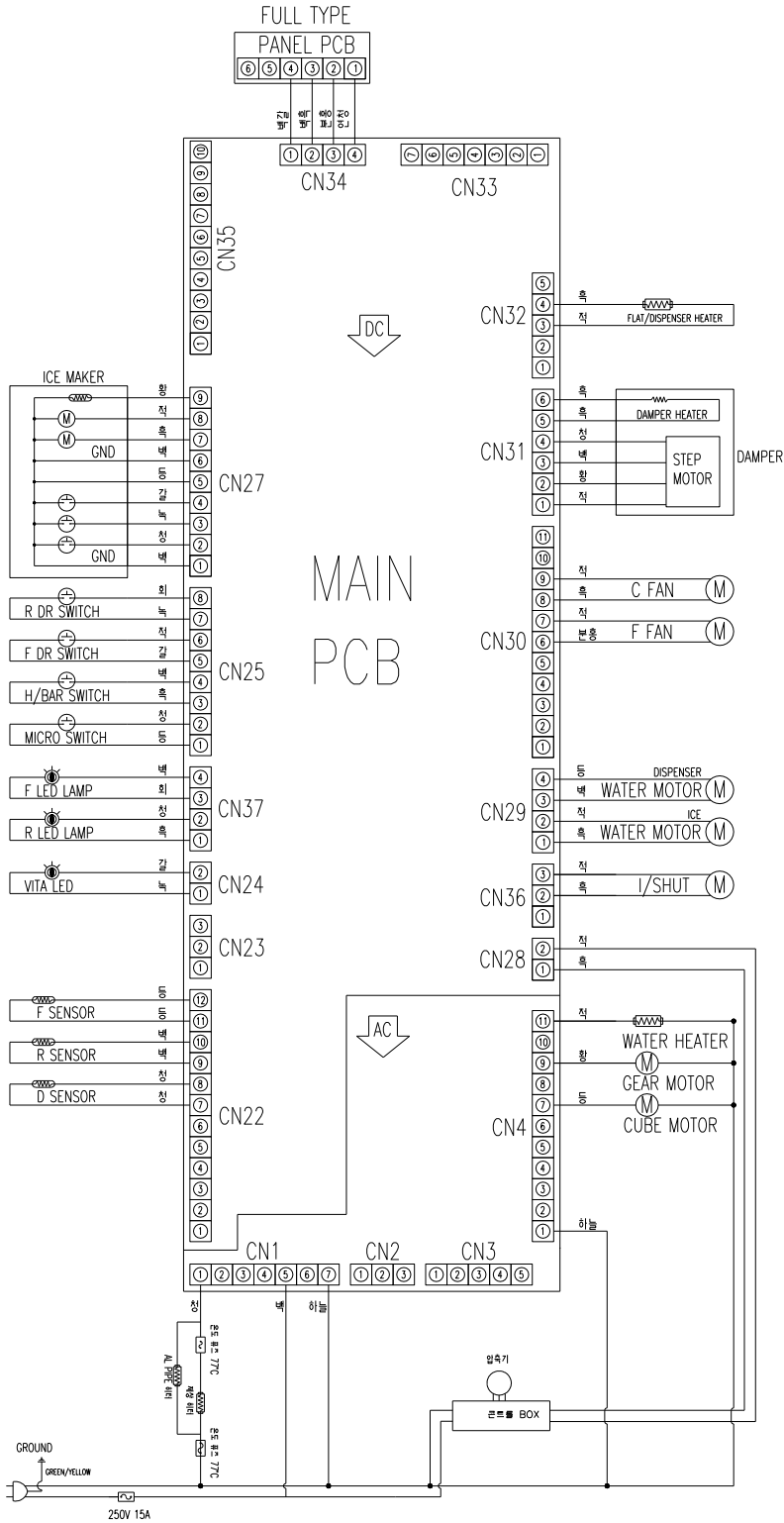
### 3. Wiring Diagram

3-5. Applicable model (DISP+P/FREE MODEL / 2LEVER)



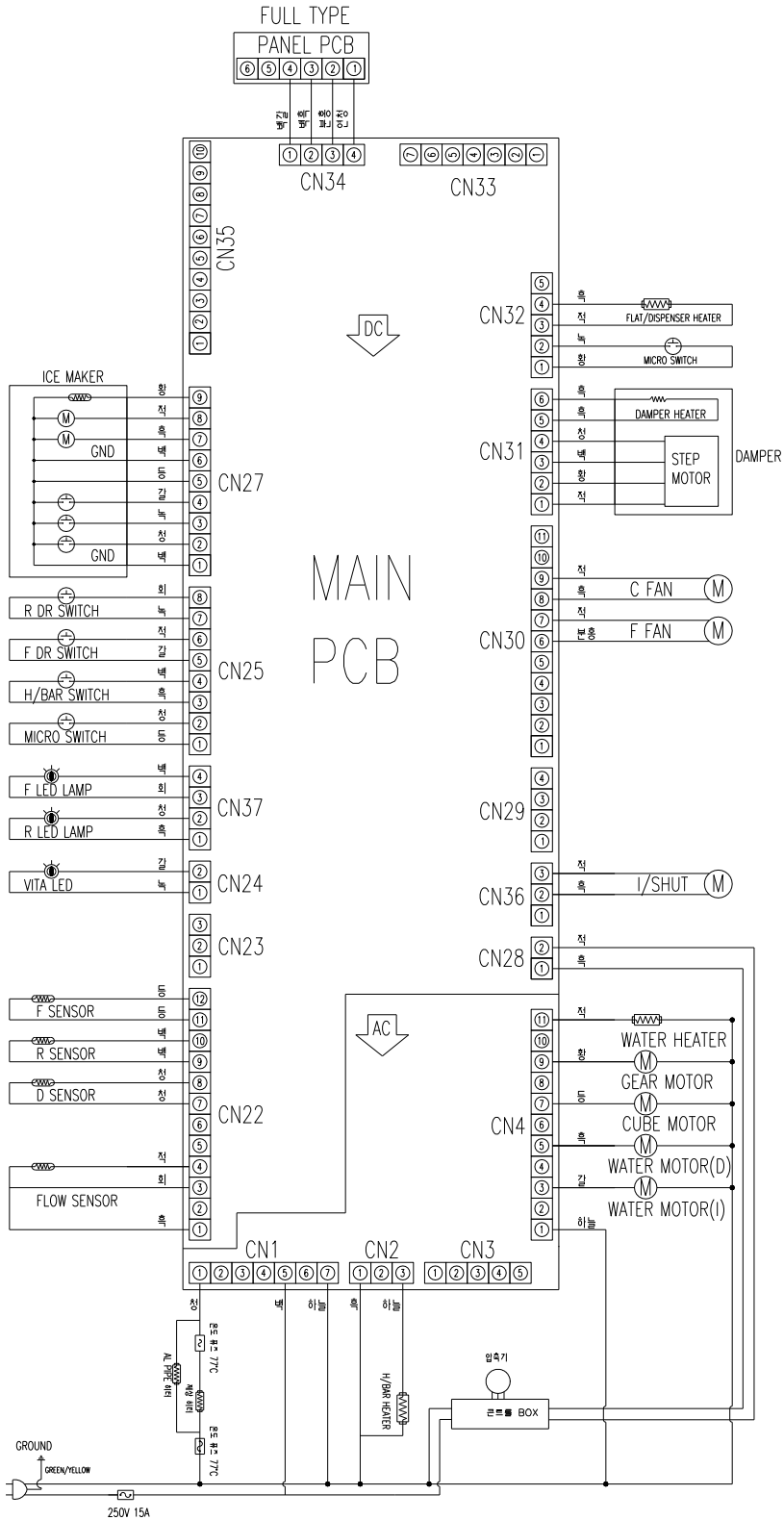
### 3. Wiring Diagram

3-6. Applicable model (DISP+P/FREE MODEL / 1LEVER)



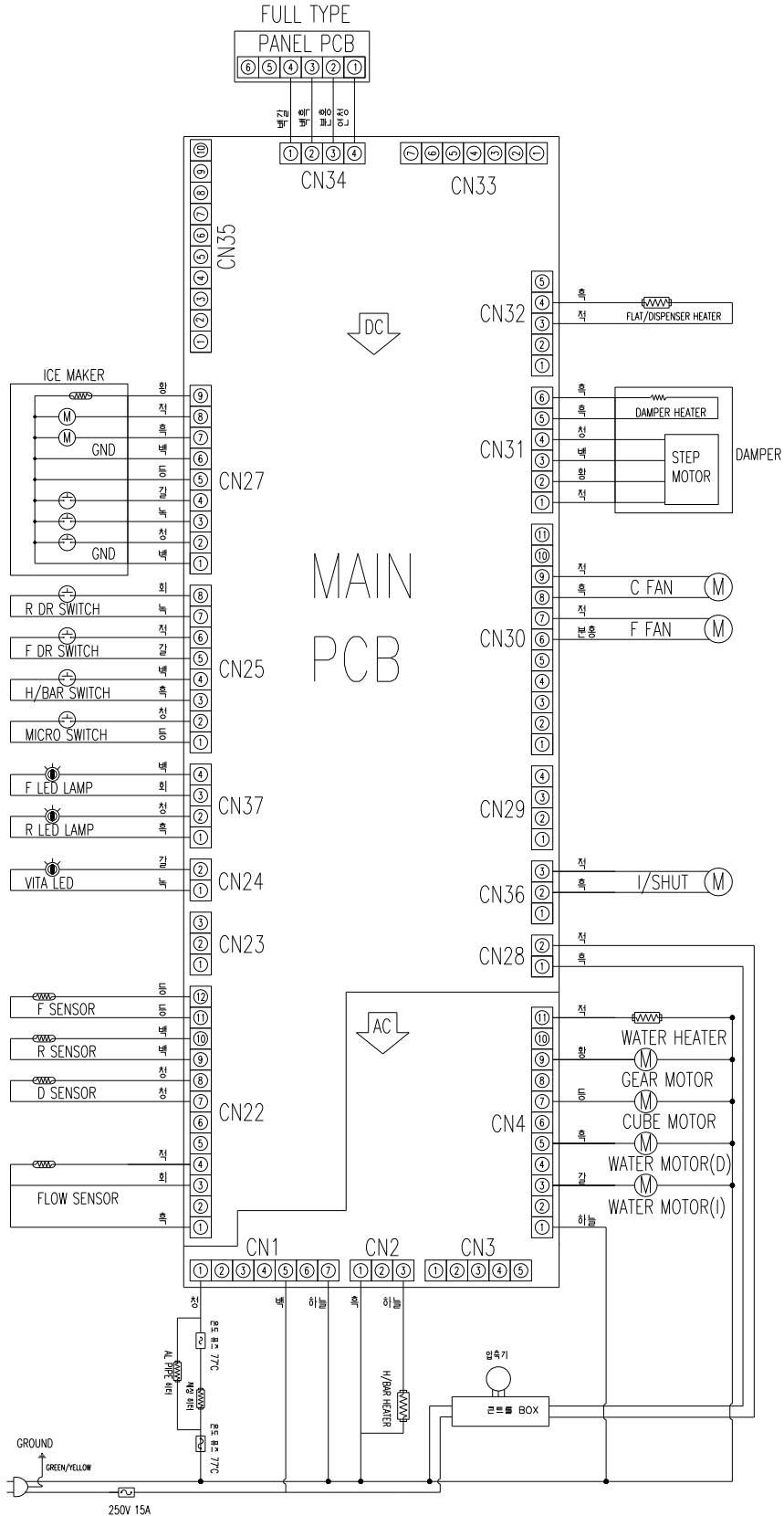
### 3. Wiring Diagram

#### 3-7. Applicable model (F TYPE MODEL / 2LEVER)



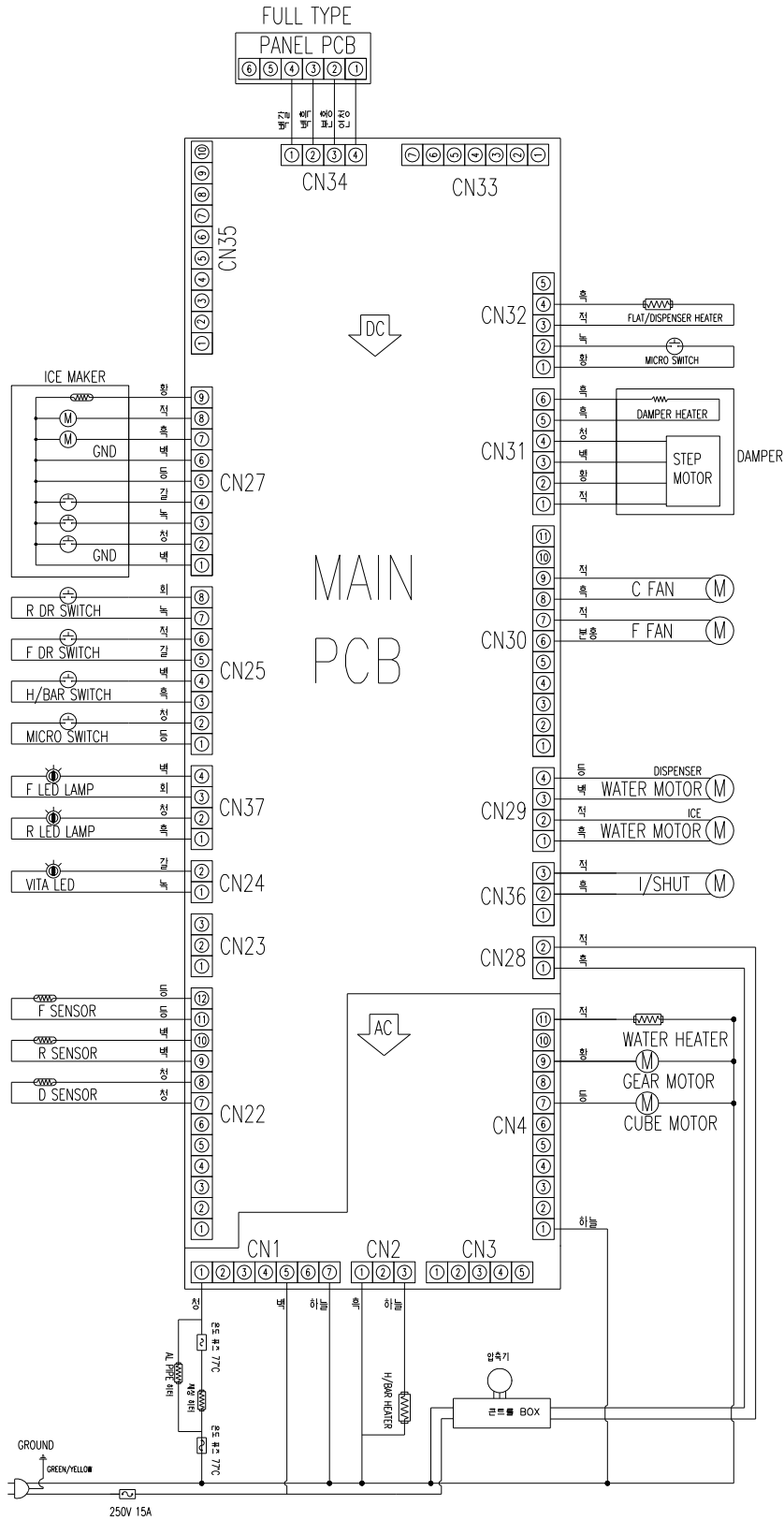
### 3. Wiring Diagram

3-8. Applicable model (F TYPE MODEL / 1LEVER)



### 3. Wiring Diagram

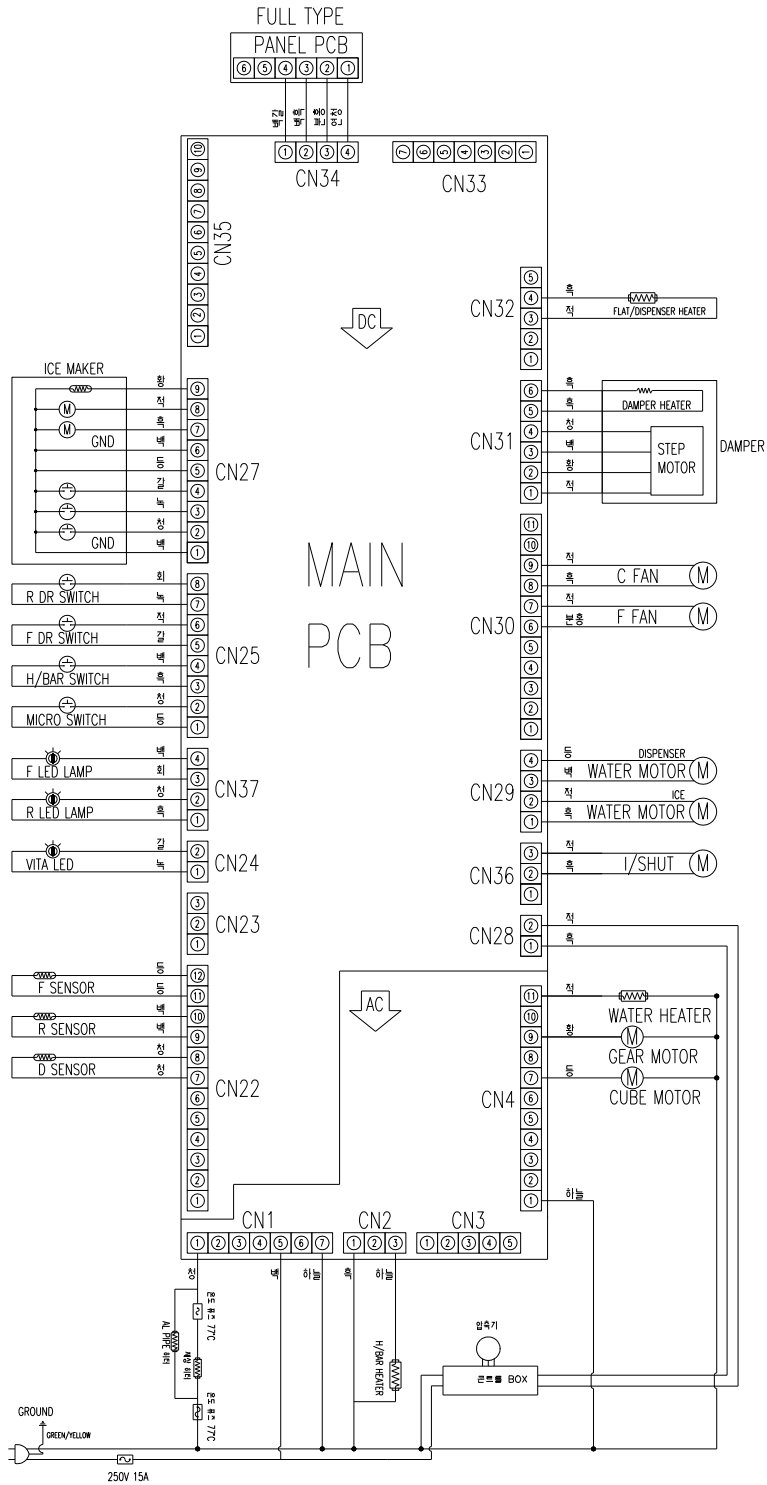
3-9. Applicable model (F TYPE+P/FREE MODEL / 2LEVER)





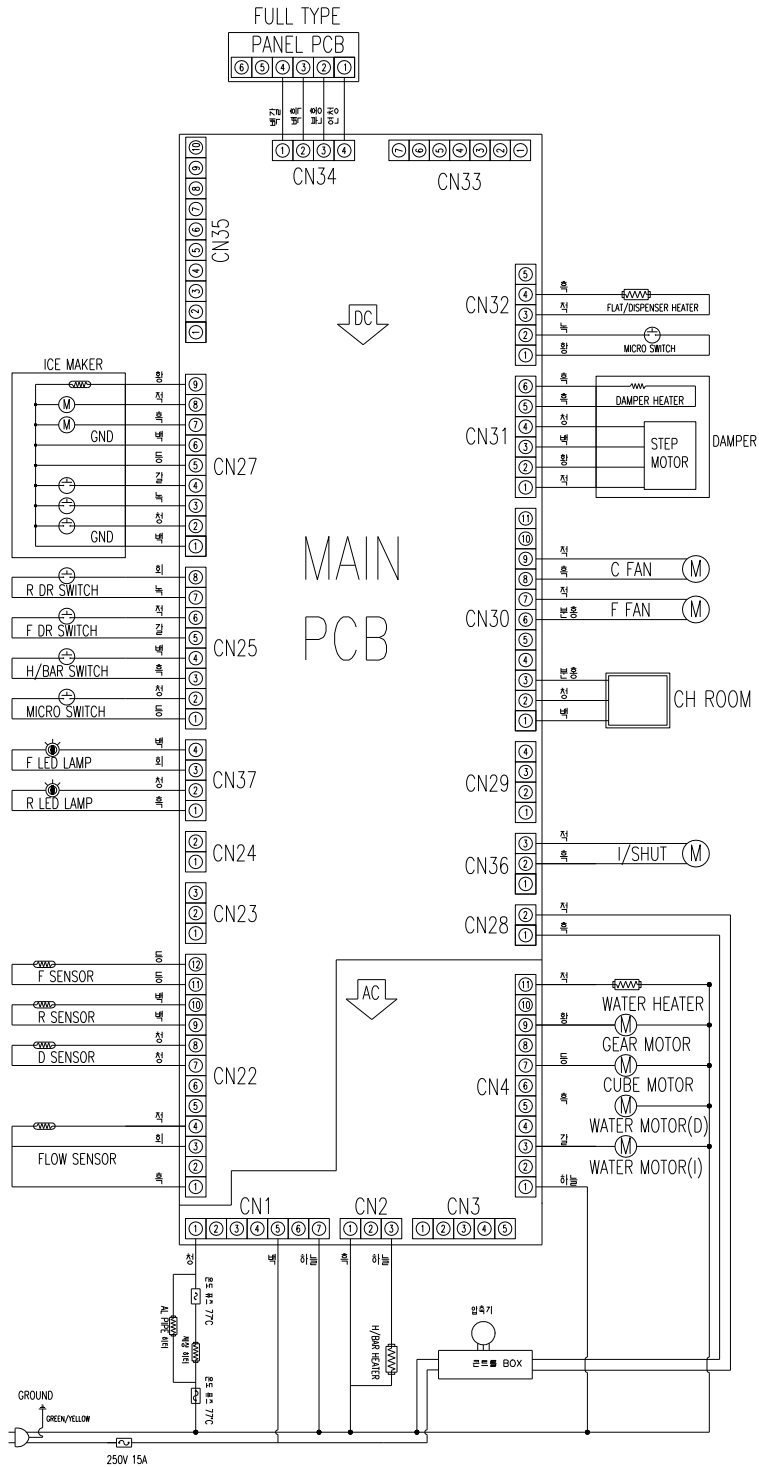
### 3. Wiring Diagram

3-10. Applicable model (F TYPE+P/FREE MODEL / 1LEVER)



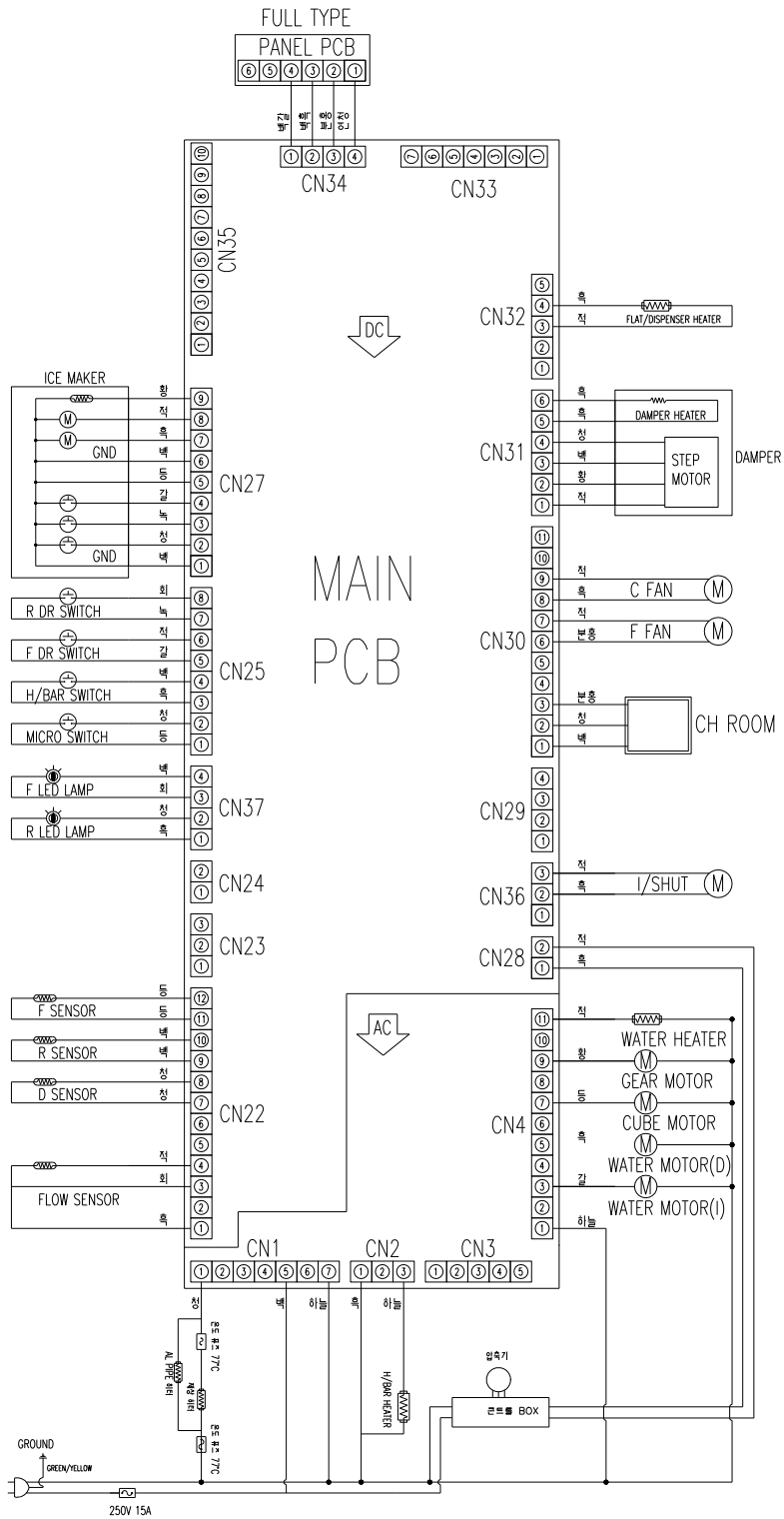
### 3. Wiring Diagram

3-11. Applicable model (G TYPE MODEL / 2LEVER)



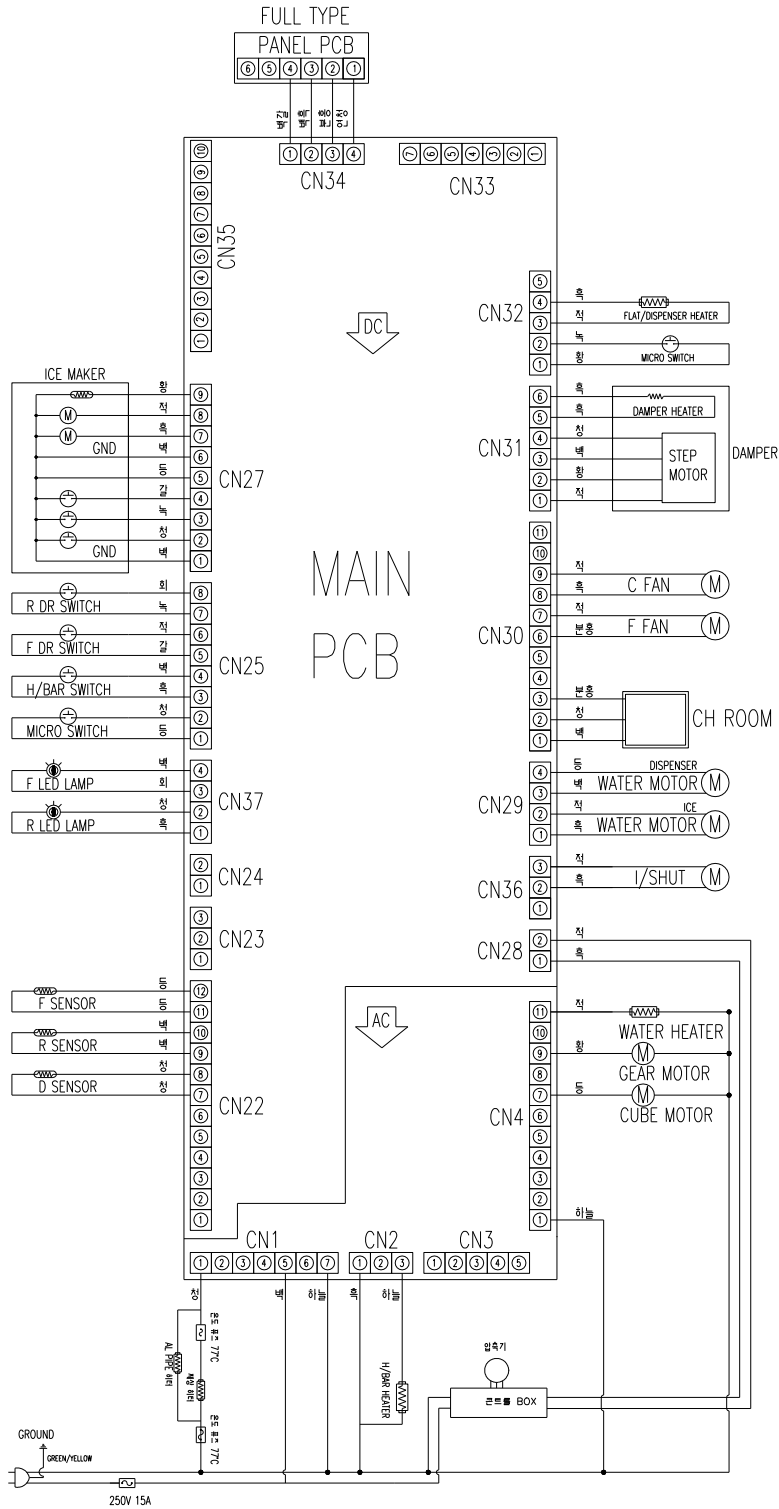
### 3. Wiring Diagram

3-12. Applicable model (G TYPE MODEL / 1LEVER)



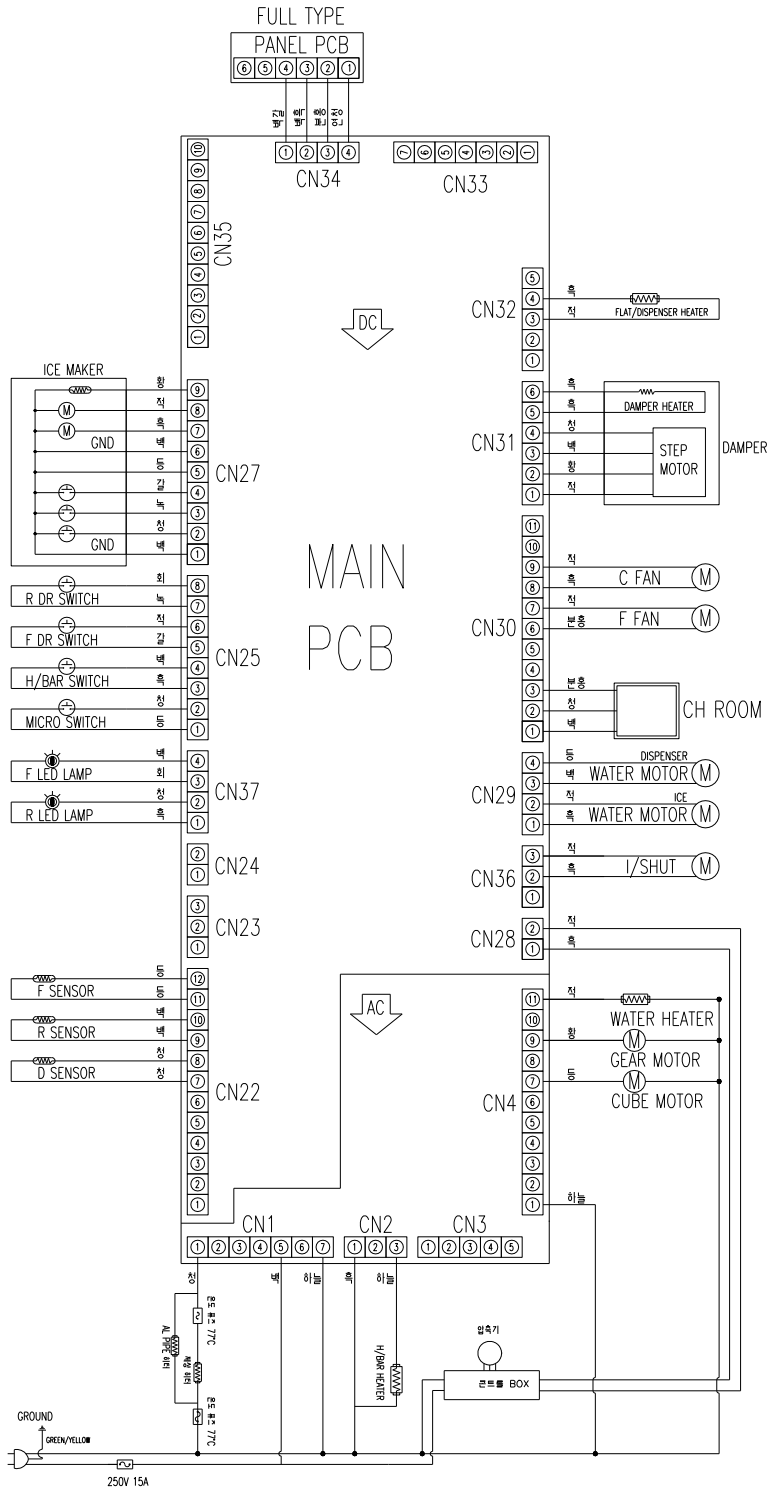
### 3. Wiring Diagram

3-13. Applicable model (G TYPE+P/FREE MODEL / 2LEVER)



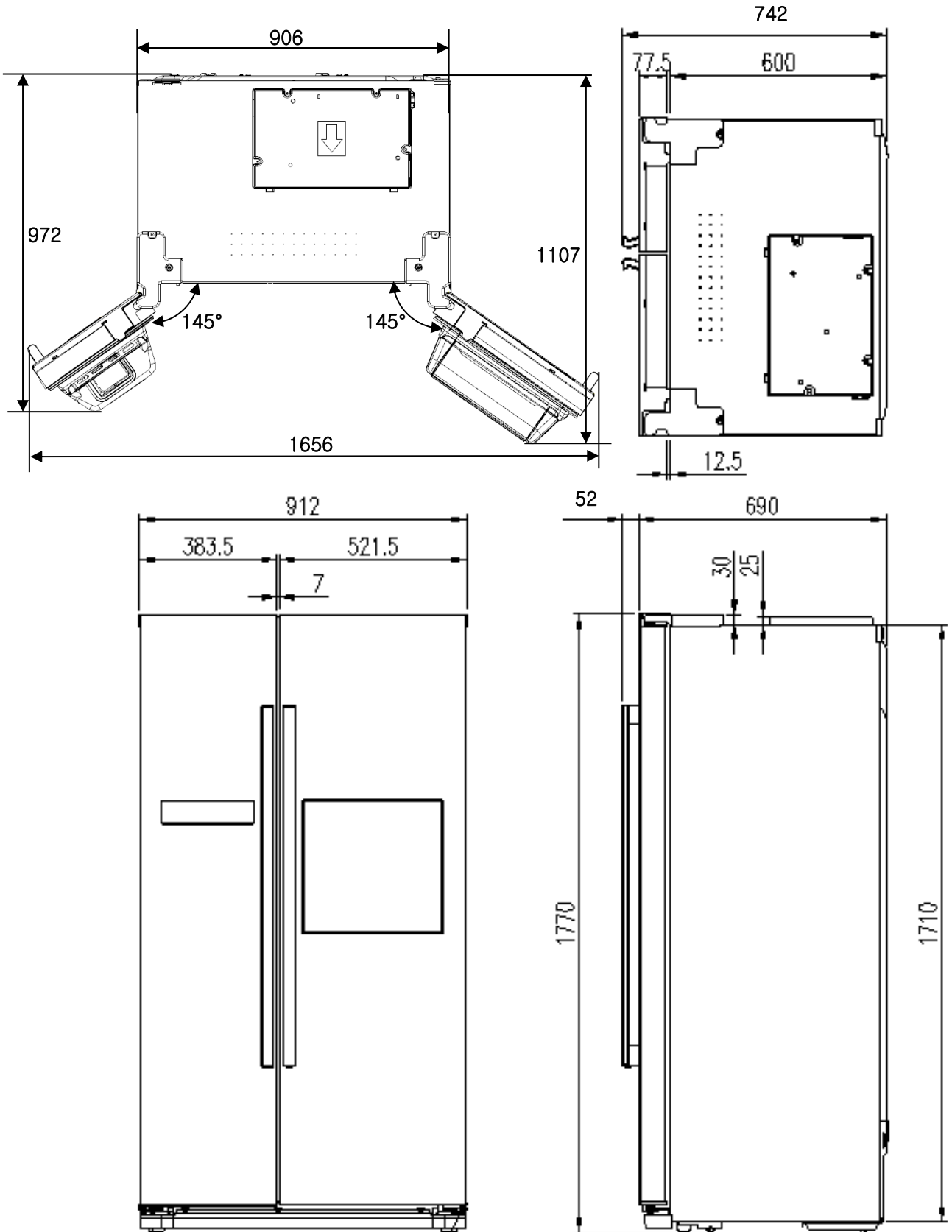
### 3. Wiring Diagram

3-14. Applicable model (G TYPE+P/FREE MODEL / 1LEVER)

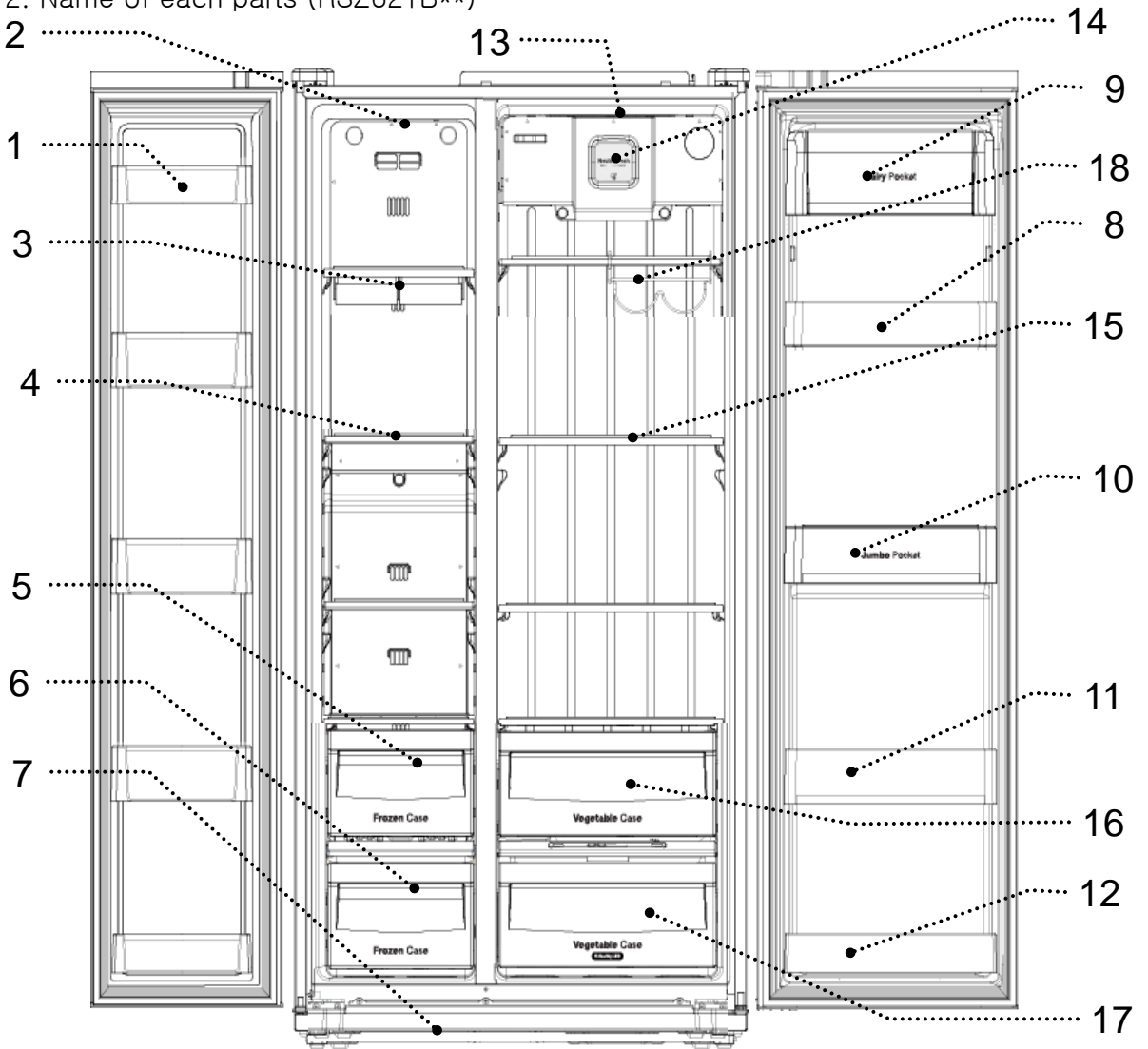


4. Outside Dimensions and Names of Refrigerator

4-1. Overall dimensions (All Models)

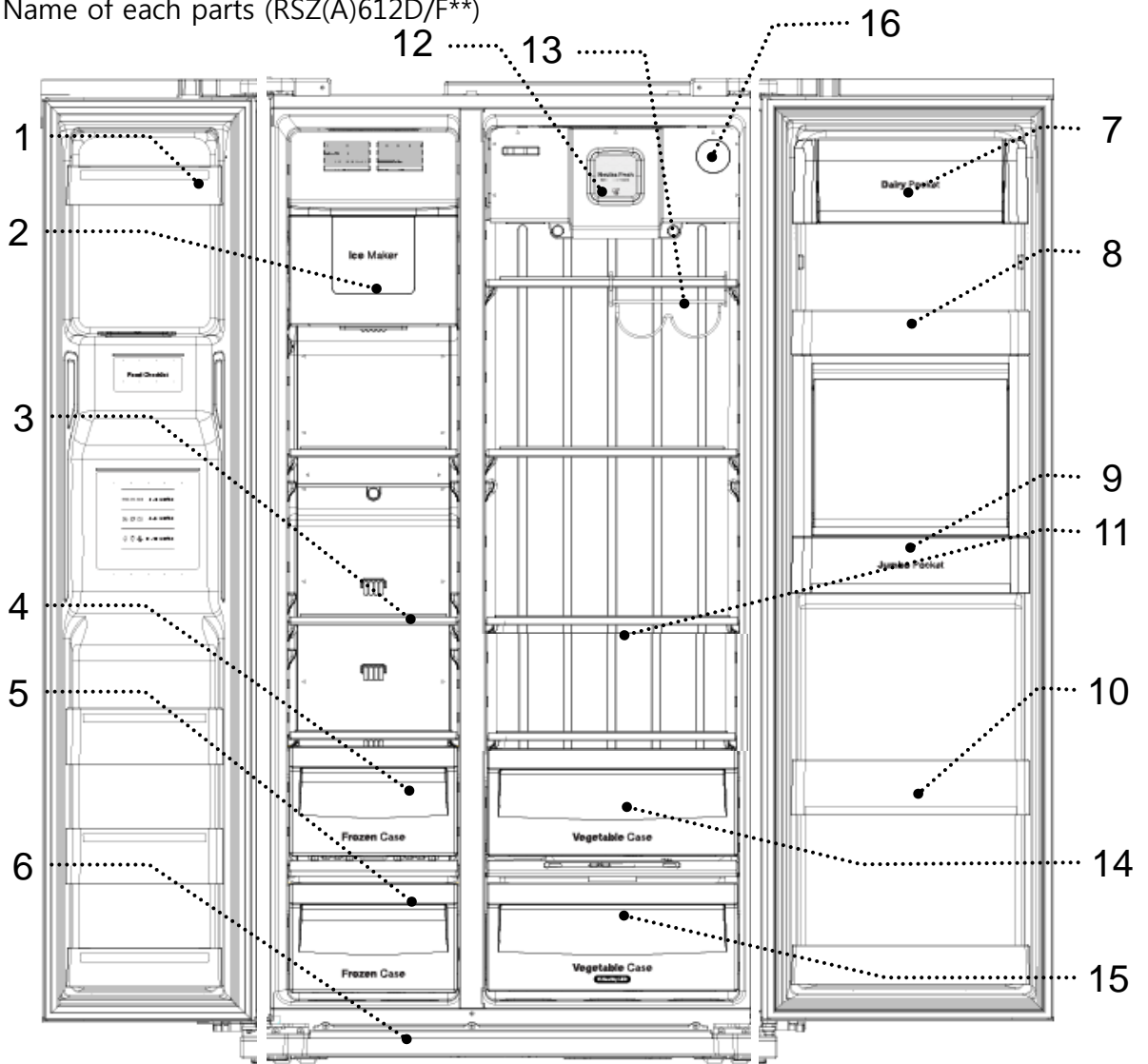


4-2. Name of each parts (RSZ621B\*\*)



Freezer	Refrigerator
1. Freezer Pocket	8. Refrigerator Pocket Upper
2. Freezer Inner Lamp	9. Dairy Pocket
3. Twist Ice Maker	10. Jumbo Pocket
4. Freezer Rack	11. Refrigerator Pocket
5. Dried Stuffs Storing Chamber	12. Refrigerator Pocket 호
6. Meat/Fishery Storing Chamber	13. Refrigerator Inner Lamp
7. Front Plate Cover	14. Antibacterial air feshener
	15. Refrigerator Rack
	16. Vegetable Chamber
	17. Vegetable Chamber
	18. Wine Shelf(Optional)

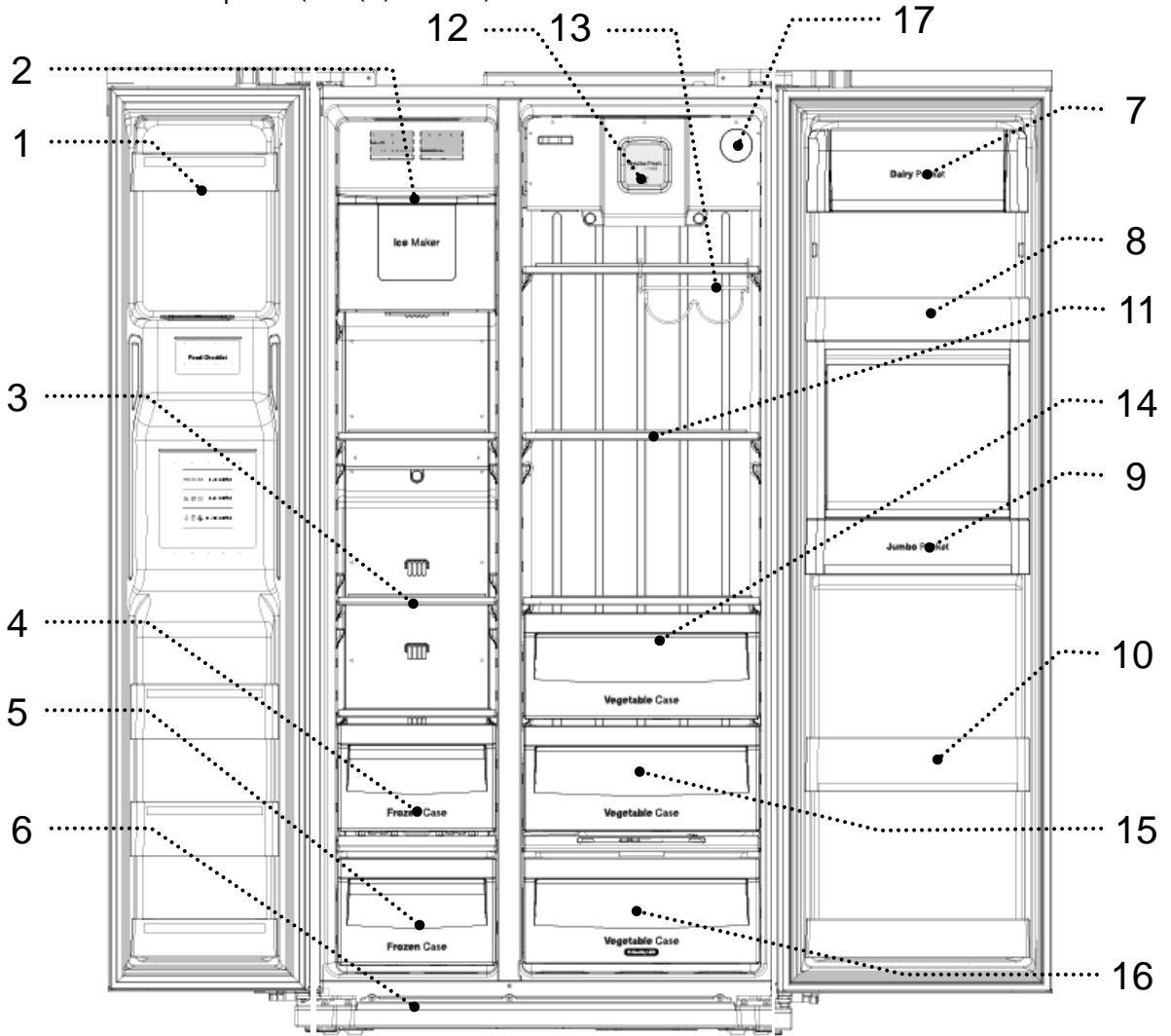
4-3. Name of each parts (RSZ(A)612D/F\*\*)



Freezer	Refrigerator
1. Freezer Pocket	7. Dairy Pocket
2. Automatic Ice Maker	8. Refrigerator Pocket Upper
3. Freezer Rack	9. Jumbo Pocket
4. Dried Stuffs Storing Chamber	10. Refrigerator Pocket
5. Meat/Fishery Storing Chamber	11. Refrigerator Rack
6. Front Plate Cover	12. Antibacterial air feshener
	13. Wine Shelf(Optional)
	14. Vegetable Chamber
	15. Vegetable Chamber
	16. Internal Type Water Filter (RSA612D/F**Model)

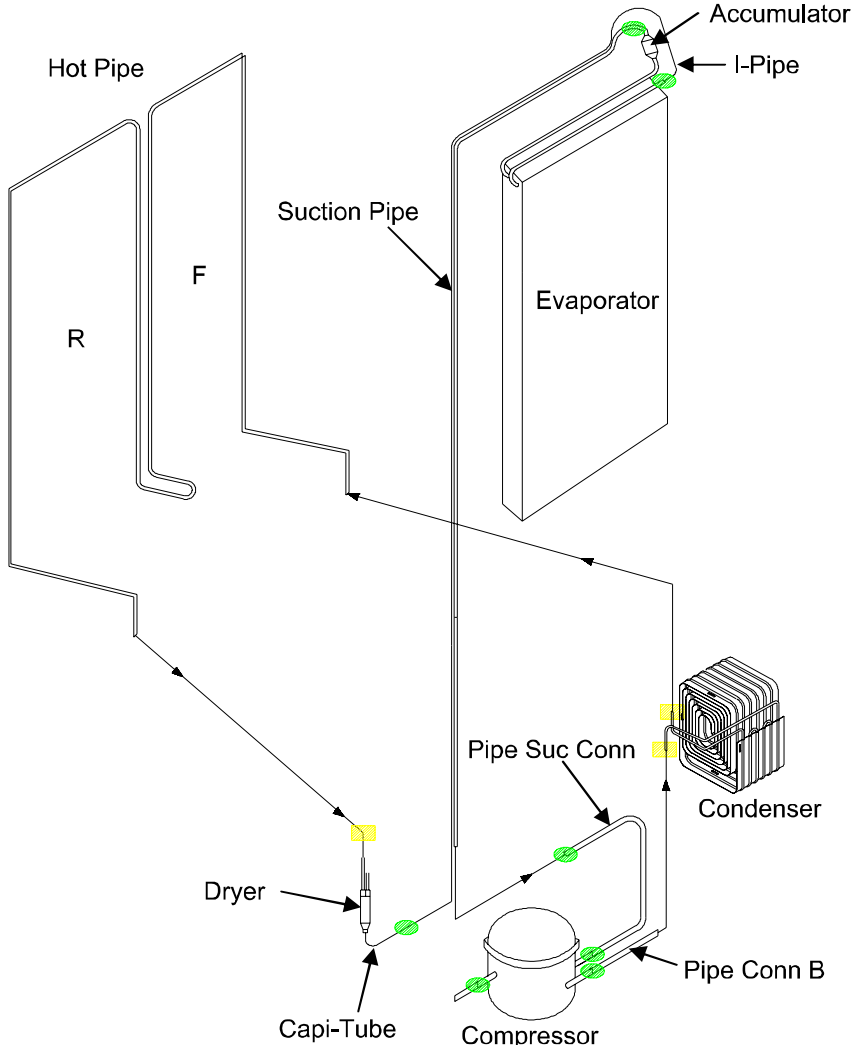


4-4. Name of each parts (RSZ(A)612G\*\*)



Freezer	Refrigerator
1. Freezer Pocket	7. Dairy Pocket
2. Automatic Ice Maker	8. Refrigerator Pocket Upper
3. Freezer Rack	9. Jumbo Pocket
4. Dried Stuffs Storing Chamber	10. Refrigerator Pocket
5. Meat/Fishery Storing Chamber	11. Refrigerator Rack
6. Front Plate Cover	12. Antibacterial air feshener
	13. Wine Shelf (Option)
	14. Vegetable Chamber
	15. Vegetable Chamber
	16. Magic cool Zone
	17. Internal Type Water Filter (RSA612G**Model)

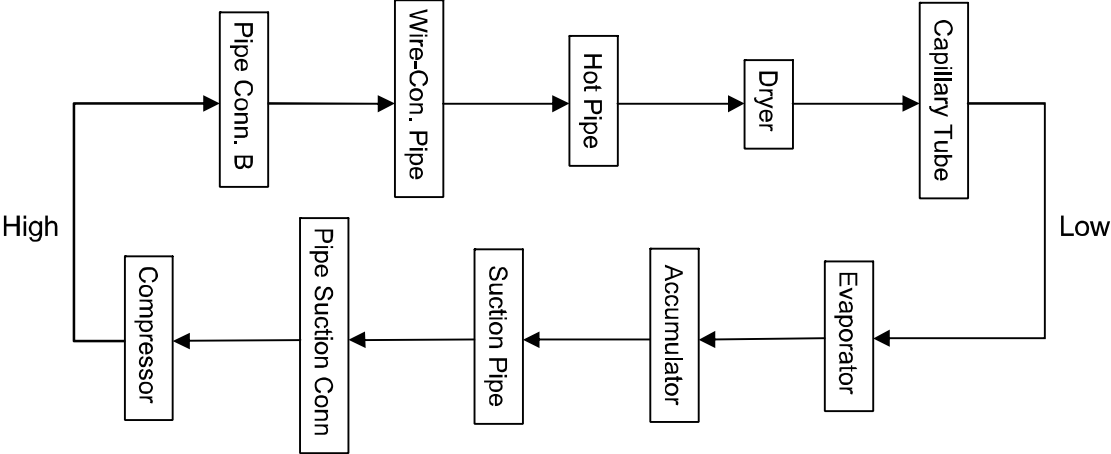
5. Refrigeration Cycle



► Welding Point

●	Copper Welding (Ag 5%)	7 Points
■	LOKRING	3 Points

► Flow of Refrigeration Cycle



## 6. Functions & Operating Method of Refrigerator

– Sequence –

■ RSZ622B(General Type Model RSZ(A)612D/F/G(Dispenser Type Model)

- 6-1. Display
- 6-2. Freezer Temperature Adjust
- 6-3. Refrigerator Temperature Adjust
- 6-4. Fan Control for Each Models
- 6-5. Nomal Defrost
- 6-6. A/S Compulsory Defrost
- 6-7. Comp RPM Control
- 6-8. Initial Defrosting
- 6-9. Intermittent Operation
- 6-10. Prohibition of compressor re-operation
- 6-11. Time Saving Function
- 6-12. Buzzer Function
- 6-13. Delay Time of Electrical Goods
- 6-14. Control Function for Lamp inside of Refrigerator
- 6-15. DEMO funtion
- 6-16. light Refrigeration Option
- 6-17. Automatic Ice Maker
- 6-18. Error Display & Control Methods
- 6-19. Magic-cool zone Control Function
- 6-20. Summary of Function Button

## 6-1. Display

### ■ Dispenser Type Model

Input Screen	Control For								
<p>&lt;F-PCB Button&gt; Freezing control, Refrigeration Control, Eco Mode, FCP Lock, Ice Type, Water Cont.(2 Lever), Water(1 Lever)</p>	<p>Display</p>								
<p>Contents</p>									
<table border="0" style="width: 100%; text-align: center;"> <tr> <td data-bbox="115 507 408 623"></td> <td data-bbox="415 507 708 623"></td> <td data-bbox="715 507 1008 623"></td> <td data-bbox="1015 507 1308 623"></td> </tr> <tr> <td data-bbox="197 644 304 700">Plumbing 2 Lever</td> <td data-bbox="496 644 604 700">Plumbing 1 Lever</td> <td data-bbox="768 644 929 700">Plumbing Free 2 Lever</td> <td data-bbox="1082 644 1243 700">Plumbing Free 1 Lever</td> </tr> </table>						Plumbing 2 Lever	Plumbing 1 Lever	Plumbing Free 2 Lever	Plumbing Free 1 Lever
Plumbing 2 Lever	Plumbing 1 Lever	Plumbing Free 2 Lever	Plumbing Free 1 Lever						

### ■ Method of Front Panel Key Manipulation

#### 1) Freezing control / Recommended Temp.

- ① Default : "-18°C" / When pressed for 3 seconds, Recommended Temp. of "-18°C" is selected
- ② Key manipulation method: When ever freezing control button is clicked once, the temperature setting for the freezer room(F room) is changed.
- ③ Temperature Setting Sequence  
: -18°C → -19°C → -20°C → -21°C → -22°C → Super → -15°C → -16°C → -17°C (repetition)

#### 2) Refrigeration Control / Recommended Temp.

- ① Default : "3°C" / When pressed for 3 seconds, Recommended Temp. of "3°C" is selected
- ② Key manipulation method: Whenever refrigeration control button is clicked once, the temperature setting for the refrigeration room (R room) is changed
- ③ Temperature Setting Sequence :  
: 3°C → 2°C → 1°C → Super → 8°C → 7°C → 6°C → 5°C → 4°C (repetition)

#### 3-1) Eco Mode

- ① Default : Mode OFF
- ② Key manipulation method : When there is a need to enter the Eco Mode, the mode will be entered/released alternative whenever it is clicked

#### 3-2) Filter (\*Plumbing Free Model does not correspond)

- ① Default : Mode OFF
- ② Key manipulation method : At the time of the occurrence of the Filter Change Alarm Event, press for 3 seconds under Front Panel Lock state
- ③ Mode setting Sequence : Alarm OFF at the time of the occurrence of Filter Change Alarm Event

## Contents

## 4) FCP Lock

- ① Default : Mode OFF
- ② Key manipulation method :
  - a. Lock setting : When "Lock" button is clicked, Lock Mode will be set
  - b. Unlock : Lock Mode will be released when the "Lock" button is pressed for about 3 seconds
- ③ Mode setting Sequence : Lock → Unlock → Lock (repetition)

## 5-1) Easy Fill.(2 Lever Type Model) : water softening function

- ① Default : Mode OFF
  - ② Key manipulation method : When needed to enter the water softening function mode, enter/release the mode alternatively whenever it is clicked every time
- \* Water supply will be stopped when clicked during the execution of water softening function

## 5-2) Water (1 Lever Type Model)

- ① Default : Water
- ② Key manipulation method : Water is selected when clicked while in Ice Mode

## 6-1) Ice

- ① Default : Cube
- ② Key manipulation method : Mode changes alternatively whenever the "Ice Type" button is clicked every time
- ③ Mode setting Sequence : Crushed → Cube → Crushed (repetition)

## 6-2) Ice Lock

- ① Default : Mode OFF
- ② Key manipulation method
  - a. Lock setting : Lock Mode will be set if "Ice Type" button is 을 pressed for 3 seconds
  - b. Unlock : Lock Mode will be released if the "Ice Type" button is pressed for 3 seconds
- ③ Mode setting Sequence : Lock → Unlock → Lock (repetition)

## Contents

**■ Front Panel Display**

## 1) Access

- When button is pressed, at the time of Door Open

## 2) Operation and cancellation

- ① LED ON with 100% brightness as the basic Display status
- ② If there is no additional access condition (button, door) for 20 seconds, LED will be turned OFF. (PCB power saving function)
- ③ If there is manipulation of button or door while the LED is turned OFF, LED will be displayed in normal state.

**■ Eco Mode**

## 1) Access method and indication of the status of operation

- When Eco Mode button is clicked in the usual mode, corresponding Icon will be lighted
- Icon will remain ON while the Eco Mode is in progress

## 2) Operation

- When entering the Eco mode, control by increasing only the ON point by +2°C at the ON/OFF point of the R room for each of the Dial  
(However, in the case of "weak" Dial, controlled with the reference ON/OFF point)
- If the door is opened within 30 minutes of having entered the Eco mode, it will be released automatically.

## 3) Release conditions

- ① Eco Mode has not limit time  
(However, if the door is opened within 30 minutes of having entered the Eco mode, it will be released automatically.)
- ② Can cancel the setting only with the Eco Mode button

**■ Vacation Mode**

## 1) Purpose: To stop the refrigerator function without pulling out the plug during holiday seasons

## 2) Accessing method: Under the 'Unlock' state, access the 'freezing control' and 'refrigeration control' buttons for 5 seconds simultaneous

## 3) At the time of setting of Vacation Mode, it is indicated as 'OFF' in the refrigeration/freezing temperature display, and other LED and electrical devices are turned OFF

- The mode status is saved even of the power is turned OFF at the time of Vacation Mode to continuously maintain the mode status when power is turned On.  
(However, it is not saved for 5 days at the time of shipping out.)

## 4) Change room display is turned OFF in Vacation Mode (controlling of HTR, etc. stops)

## 5) Maintain in Damp Open state during the Vacation Mode (ventilation effect)

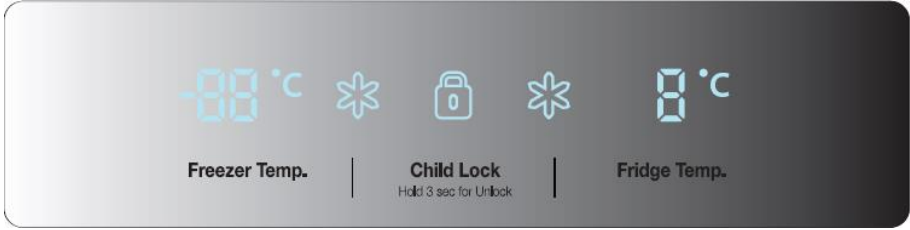
## 6) At the time of setting Vacation Mode

- ① When the automatic ice maker is making ice: Terminate without water supply after completion of ice making
- ② When water is being supplied to the automatic ice maker: Terminate after having stopped water supply

## 7) Method of release: Press both 'freezing control' and 'refrigeration control' buttons for 5 seconds simultaneously.

## 8) At the time of releasing of access, commence reoperation of refrigerator

## ■ General Type Model

Input For	Control For
<F-PCB Button> Adjust Freezer, Adjust Refrigerator, Locking	Display
Contents	
	

### ■ Method of Front Panel Key Manipulation

#### 1) Freezing control

- ① Default : "-18°C"
- ② Key manipulation method: When ever freezing control button is clicked once, the temperature setting for the freezer room(F room) is changed.
- ③ Temperature Setting Sequence  
: -18°C → -19°C → -20°C → -21°C → -22°C → Super → -15°C → -16°C → -17°C (repetition)

#### 2) Refrigeration Control

- ① Default : "3°C"
- ② Key manipulation method: Whenever refrigeration control button is clicked once, the temperature setting for the refrigeration room (R room) is changed
- ③ Temperature Setting Sequence :  
: 3°C → 2°C → 1°C → Super → 8°C → 7°C → 6°C → 5°C → 4°C (repetition)

#### 3) FCP Lock

- ① Default : Mode OFF
- ② Key manipulation method :
  - a. Lock setting : When "Lock" button is clicked, Lock Mode will be set
  - b. Unlock : Lock Mode will be released when the "Lock" button is pressed for about 3 seconds
- ③ Mode setting Sequence : Lock → Unlock → Lock (repetition)

## Contents

**■ Front Panel Display**

## 1) Access

- When button is pressed, at the time of Door Open

## 2) Operation and cancellation

- ① LED ON with 100% brightness as the basic Display status
- ② If there is no additional access condition (button, door) for 20 seconds, LED will be turned OFF. (PCB power saving function)
- ③ If there is manipulation of button or door while the LED is turned OFF, LED will be displayed in normal state.

**■ Vacation Mode**

- 1) Purpose: To stop the refrigerator function without pulling out the plug during holiday seasons
- 2) Accessing method: Under the 'Unlock' state, access the 'freezing control' and 'refrigeration control' buttons for 5 seconds simultaneous
- 3) At the time of setting of Vacation Mode, it is indicated as 'OFF' in the refrigeration/freezing temperature display, and other LED and electrical devices are turned OFF
  - The mode status is saved even of the power is turned OFF at the time of Vacation Mode to continuously maintain the mode status when power is turned On.  
(However, it is not saved for 5 days at the time of shipping out.)
- 4) Maintain in Damper Open state during the Vacation Mode (ventilation effect)
- 5) Method of release: Press both 'freezing control' and 'refrigeration control' buttons for 5 seconds simultaneously.
- 6) At the time of releasing of access, commence reoperation of refrigerator



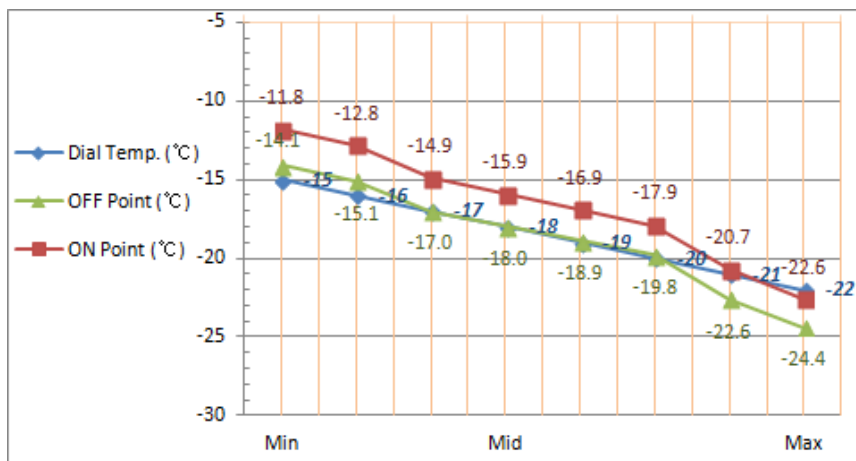
6-2. Freezer Temperature Adjust

■ RSZ61, RSZ62

Input For	Control For
1. Freezer Temperature Adjust Button 2. F-Sensor	1. Comp 2. F-Fan
Contents	

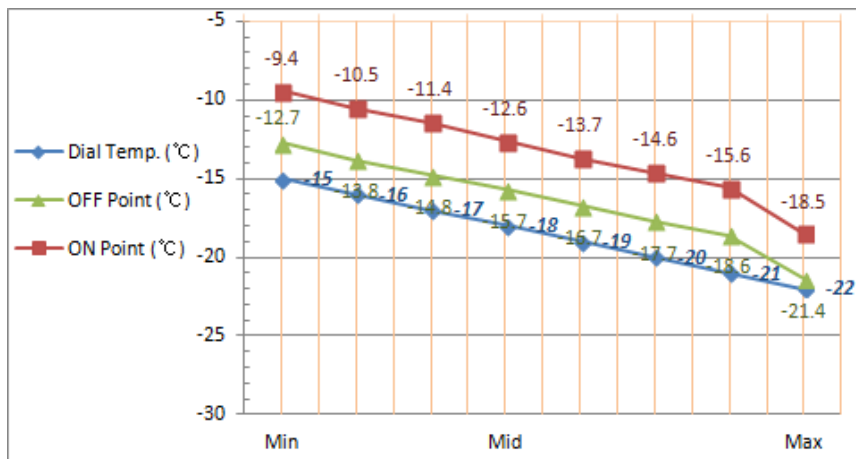
■ Freezing Temp. Setting

Temp. Control	Min			Mid				Max
Setting of Temp. (°C)	-15	-16	-17	-18	-19	-20	-21	-22
ON Point (°C)	-11.8	-12.8	-14.9	-15.9	-16.9	-17.9	-20.7	-22.6
OFF Point (°C)	-14.1	-15.1	-17.0	-18.0	-18.9	-19.8	-22.6	-24.4



Dispenser Type

Temp. Control	Min			Mid				Max
Setting of Temp. (°C)	-15	-16	-17	-18	-19	-20	-21	-22
ON Point (°C)	-9.4	-10.5	-11.4	-12.6	-13.7	-14.6	-15.6	-18.5
OFF Point (°C)	-12.7	-13.8	-14.8	-15.7	-16.7	-17.7	-18.6	-21.4



Basic

6-2. Freezer Temperature Adjust

■ RSZ61, RSZ62

Input For	Control For
1. Freezer Temperature Adjust Button 2. F-Sensor	1. Comp 2. F-Fan

Contents

■ **Super Mode Function**

1) Method of accessing and displaying of operational state

① Quick freezing

- a. When the 'freezing control' button is clicked in the setting of temperature at 'Strong cold (-22°C)', 'Quick Icon (Super)' will be turned ON after 6 flickerings, and the temperature setting will display "Strong" on the dial.
- b. When the 'freezing control' button is clicked during quick freezing, quick freezing will be released and the Dial will be displayed as 'Weak'.

② Quick refrigeration

- a. When the 'refrigeration control' button is clicked at the temperature setting of 'Strong (1°C)', 'Quick Icon (Super)' will be turned ON after 6 flickerings and the temperature setting will be displayed as "Strong" in the Dial.
- b. When 'refrigeration control' button is clicked during quick refrigeration, quick refrigeration will be released and the Dial will display 'Weak'.

2) Operation

① Quick freezing

Electrical Devices	24 hours
Comp, F-Fan	Continuous operation / Operation with Dial at 'strong'

- a. Quick freezing will be operated according to the 'strong' setting value for the freezer room Dial over a period of 24 hours.
- b. At the time of commencement of function during defrosting, quick freezing Icon LED will be turned ON and function will begin after the completion of defrosting.
- c. When the quick function is completed, refrigeration room will be operated at the Dial setting value of -18°C.
- d. It is possible to enter defrosting through continuous operation and the duration of quick function will be extended by the duration of defrosting.

## Contents

## ② Quick refrigeration

Electrical Devices	40 minutes
Comp, F-Fan, R-Damper	Continuous operation / Operation with Dial at 'strong'

- a. Quick refrigeration will be operated according to the 'strong' setting value for the refrigeration room Dial over a period of 40 minutes.
- b. R-Damper Open and F-Fan, Comp will be turned On until the R-Sensor reaches the excessive cooling OFF point (-7°C).  
(Once the excessive cooling OFF point is reached, operate at the Dial setting at 'strong' ON/OFF Point until quick refrigeration is completed.)
- c. At the time of commencement of function during defrosting, quick refrigeration Icon LED will be turned ON and function will begin after the completion of defrosting.
- d. Once the quick function is completed, operation will be at the 3°C setting value on the refrigeration room Dial.

## 3) Conditions for release

- ① Automatic release after the passage of the quick setting time  
(automatic release after 24 hours of freezing and 40 minutes of refrigeration)
- ② Contact with 'freezing control' button or 'refrigeration control' button once
- ③ Reconnection of power source

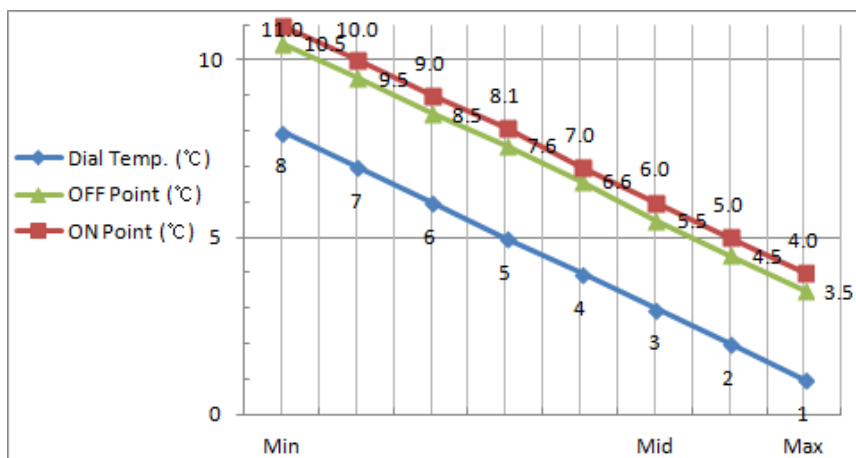
6-3. Refrigerator Temperature Adjust

■ Common to all Models

Input For	Control For
1. Refrigerator Temperature Adjust Button 2. R-sensor	1. Comp 2. R-Fan
Contents	

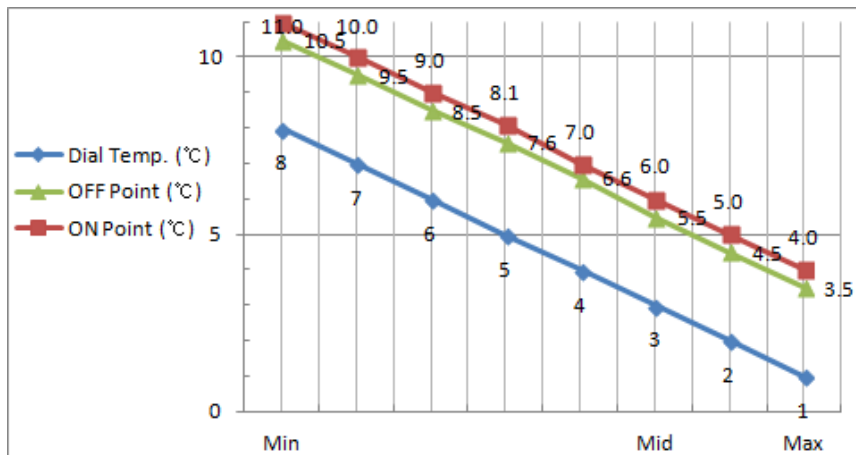
■ Freezing Temp. Setting

Temp. Control	Min					Mid		Max
Setting of Temp. (°C)	8	7	6	5	4	3	2	1
ON Point (°C)	11.0	10.0	9.0	8.1	7.0	6.0	5.0	4.0
OFF Point (°C)	10.5	9.5	8.5	7.6	6.6	5.5	4.5	3.5



Dispenser Type

Temp. Control	Min					Mid		Max
Setting of Temp. (°C)	8	7	6	5	4	3	2	1
ON Point (°C)	11.0	10.0	9.0	8.1	7.0	6.0	5.0	4.0
OFF Point (°C)	10.5	9.5	8.5	7.6	6.6	5.5	4.5	3.5



Basic

6-4. Fan Control for each Models

■ Common for all Models

Input For	Control For
1. R-Sensor 2. F-Sensor	1. F-Fan 2. C-Fan 3. R Damper

Contents

1. Fan voltage per control mode

(1) Exerted fan motor voltage

Mode	F-Fan	C-Fan
Normal Control	11 V	13V
Quick freezing	13 V	
Load Response		
After defrosting (4 hours)		
RT-S $\geq$ 38°C		

- Normal control ⇨ Slow operation mode with relatively low noise level.
- Load response ⇨ Operation mode which need to be operated by temperature rise at inner side of refrigerator according to operating condition.

■ **Overload Mode Function (mode to cope with load)**

1) Purpose: To restore the increase in the temperature in the unit due to overload or frequent Open/Close of the Door during the use of refrigerator as quickly as possible.

2) Display method: No Display

3) Mode to cope with load

① Entry

a. Single Door Open time of more than 30 seconds for each of F/R → Each of F/R enter into measures to cope with the load

b. At the time of sensing of more than F-Sensor ON Point + 5 deg. → Cope with load in F

c. At the time of sensing of more than R-Sensor ON Point + 5 deg. → cope with load in R

\* Commence coping with load without sensing of Door Open at the time of connection of power source

② Operation

a. Operate with RPM that is a step higher than the Comp RPM in accordance with the corresponding RT-S conditions

(However, operate at 4,500 RPM if the RT-S is higher than 40°C)

b. Apply 13V to the F-Fan (only the coping with the freezing load will be corresponded)

6-4. Fan Control for each Models

■ Common for all Models

Input For	Control For
1. R-Sensor 2. F-Sensor	1. F-Fan 2. C-Fan 3. R Damper

Contents

- ③ Release: Terminate if the termination conditions are fulfilled, and immediately re-enter if the entry conditions are met after termination
  - a. Mode for coping with freezer room load
    - Maintain the mode to cope with the load continuously until the Comp OFF point at the RT-S temperature of less than 35°C
    - If the RT-S temperature is more than 35°C, terminate the mode to cope with load after 20 minutes (However, re-enter if the conditions for entry is maintained after 20 minutes after the entry)
    - Terminate the mode for coping with load in the freezer room if the OFF point of F-Sensor is reached
  - b. Mode for coping with load in the refrigeration room
    - Terminate the mode for coping with load after 20 minutes of having entered the mode for coping with load (However, re-enter if the conditions for entry is maintained after 20 minutes after the entry)
    - Terminate the mode for coping with load of the refrigeration room once the OFF point of R-Sensor is reached
- 4) Conditions for avoidance of the entry into mode for coping with load
  - ① Mode for coping with load in the freezer room
    - a. Avoid entry into the mode for coping with load if there is no Door Open signal
    - b. However, at the RT-S temperature of less than 35°C, detection of 'Door Open signal' will be releases at the time of the reaching of the Comp OFF point of freezer room
    - c. At the RT-S temperature of more than 35°C, 'Door Open signal' detection will be released at the time of defrosting
  - ② Mode for coping with load in the refrigeration room
    - a. If there is no signal for opening/closing of Door, entry into mode for coping with load will be avoided
    - b. 'Door open/close signal' detection will be released at the time of the termination of defrosting
- 5) Mode for coping with load 2 (does not correspond to Basic Model)
  - ① Entry: In the event of operating the Comp continuously for more than 4 hours at the RT-S temperature of more than 30°C, the freezer room mode for coping with load is 1
  - ② Operation: ON/OFF operation of Comp at 4,500RPM until the entry into the next defrosting
  - ③ Release: Automatic release at the time of the entry into the next defrosting

6-5. Normal Defrost

■ Common for all Models

Input For	Control For
1. Accumulated Comp operating time 2. Operation ratio of Comp 3. Outside Temperature 4. Accumulated Door opening time	1. Comp 2. F-Fan 3. R-Damper 4. Defrost Heater
Contents	

■ Conditions for entry into defrosting

1) Defrosting will be entered if the following conditions are met after the accumulation hours of Comp operation passed 6, 8, 10, ~, 40 hours.

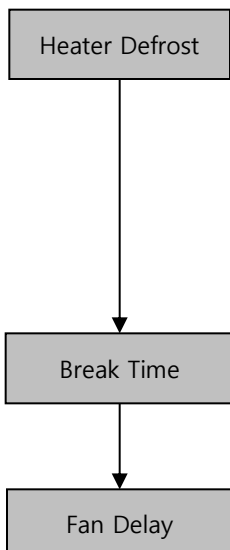
Conditions for the entry into defrosting
1 minute of accumulated Door Open time (apply each of F/R, accumulate after the termination of defrosting)
More than 3 times of Door Open (total of F Door and R Door Open)
Occurrence of various Errors (R1, F1, D1, F3, RT/S, C1, Door Error, etc.)

2) Entry into defrosting due to continuous operation of Comp

Conditions for the entry into defrosting	
RT_S < 38°C	6 continuous operation of Comp.
RT-S > 38°C (Check after 6 continuous hours of Comp operation)	6 continuous hours of operation of R-Damper (Open)
	During the 6 hours of continuous operation of Comp, measures to cope with freezer room load is entered more than 4 times during the 2nd ~6th hours
	More than 24 hours of accumulated operation of Comp

3) Entry into defrosting in other situations

Conditions for the entry into defrosting
Comp ON+OFF Time has passed 24 hours at the time of low room temperature (RT-S ≤ 15°C)
50 hours of Comp ON+OFF Time has passed



- ① HTR defrosting
  - a. Subjects of control: Comp OFF, Fan OFF, Disp.-HTR OFF, D-HTR ON
  - b. Limit time for progress
    - 30 minutes : D1 Error (disconnection and short-circuit in D-Sensor)
    - 60 minutes : When the control status is normal (control with the limit time of HTR defrosting)
  - c. F3 Error : Occurrence of error at the time of restoration of HTR due to limit time of 60 minutes
- ② Resting period
  - a. Subjects of control : Comp OFF, F-Fan OFF, D-HTR OFF
  - b. Duration of progress : 10 minutes
- ③ Fan delay
  - a. Subjects of control : Comp ON, Disp.-HTR ON, C-Fan ON, F-Fan & D-HTR OFF
  - b. Duration of progress : 5 minutes

(\* More than 3 times for Door Open or more than 1 minute of Door Open → duration of progress of 1 minute)

## Contents

- ④ Conditions for termination of HTR defrosting : Converted into resting period following termination if the D-S temperature meets the following conditions

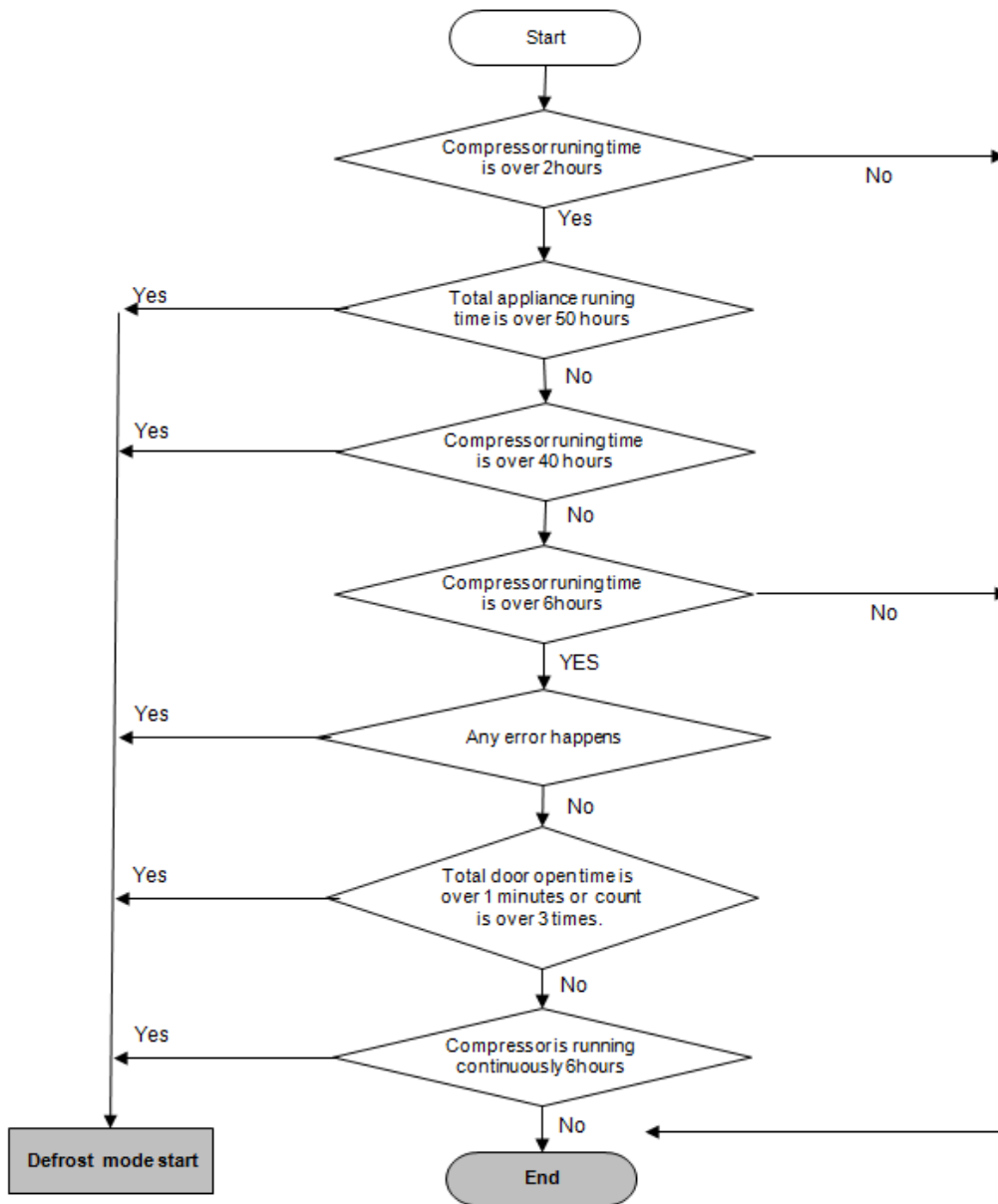
Termination conditions	Temperature
More than 3 times of Door Open prior to defrosting (F/R)	D-S>15°C
More than 1 minute of accumulated time of Door Open prior to defrosting	
Overall average operation ratio of less than 80% over a period of 16 hours prior to defrosting without various Door Open/Close and various Errors (R1, F1, D1, RT/S, C1, Door Error, etc.) during 16 hours prior to defrosting.	D-S>7°C
At the time of detection of weak cooling for more than once prior to defrosting	D-S>18°C
In situations other than above	D-S>13°C

- ⑤ Defrosting Time Chart

	HTR defrosting	Rest period	Fan delay	R-Damper
<b>Comp, C-Fan</b>	Off	Off	On	Control
<b>F-Fan</b>	Off	Off	Off	Control
<b>R-Damper</b>	Close	Close	Close	Close
<b>D-HTR</b>	On	Off	Off	Off
<b>Limit time</b>	- 60 minutes - 30 minutes at the time of D-S Error	10 minutes	5 minutes	12 minutes



5. Decision of defrost flow



6-6. A/S compulsory defrost

■ Common to all models

Input for	Control for
1. Adjust Freezer Button 2. Adjust Refrigerator Button	Defrost Mode
Contents	
1. Entering method : At "Locking" condition, press "Adjust Freezer" button and press "Adjust Refrigerator" 5 times. 2. Processing method (1) Same as normal defrost mode except omitting Pre-Cool Mode. (2) For 30 seconds at initial stage, defrost heater operates compulsory regardless of temperature of D-sensor. ( Defrost current inspection function)	

6-7. Comp RPM Control

■ Common to all models

Input For	Control For
N/A	Compressor
Contents	

1. Comp RPM may be changed according to operating condition of RT-S & Set.  
(Comp RPM is adjusted by control frequency of set at Main Micom. )

구분	RT-S ≤ 30°C	30°C < RT-S ≤ 35°C	36°C < RT-S ≤ 40°C	40°C < RT-S
통상운전	1770 RPM	3440 RPM	4500 RPM	4500 RPM
부하대응	3440 RPM	4500 RPM	4500 RPM	4500 RPM
쾌속운전	3990 RPM	3990 RPM	3990 RPM	4500 RPM
단락운전	4500 RPM	4500 RPM	4500 RPM	4500 RPM

RPM	1770 RPM	3400 RPM	3990 RPM	4500 RPM
주파수 신호	59 Hz	115 Hz	130 Hz	150 Hz

2. Detailed condition according to RT-S at normal operation.

- (1) When RT-S exceeds over 30°C at 1,800 RPM operation, it operates with 2,550 RPM.
- (2) When RT-S becomes under 29°C at 2,550 RPM operation, it operates with 1,880 RPM and becomes over 35°C, it operates with 3,650 RPM.
- (3) When RT-S becomes under 34°C at 3,600 RPM operation, it operates with 2,550 RPM and becomes over 40°C, it operates with 3,650 RPM.
- (4) When RT-S becomes under 39°C at 4,000 RPM operation, it operates with 3,660 RPM.

3. For the initial 5 minutes from connecting electric source to refrigerator, it operates with 1830RPM (Lowest speed)

- (1) (Improving method for noise claim) In case for RT condition, load response condition etc. operates with 1,830RPM (Lowest speed) for the initial 5 minutes from connecting electric source to refrigerator and return to relevant RPM.

## 6-8. Initial Defrosting

## ■ Common to all Models

Input For	Control For
D-Sensor Initial electric source	Defrost Mode
Contents	
<ol style="list-style-type: none"> <li>1. When connecting initial electric source, if D-sensor <math>\leq 3.5</math> °C , it operates into defrost mode.</li> <li>2. Compressor delay operation for 6 minutes at initial defrost operating condition.</li> </ol>	

## 6-9. Intermittent operation

## ■ Common to all models

Input Screen	Control For
Front-PCB	Electrical Goods
Contents	
<ol style="list-style-type: none"> <li>1. Operation method <ul style="list-style-type: none"> <li>■ Dispenser : Adjust refrigerator + Adjust freezer + press Ice selection button 5 times.</li> <li>■ Basic : Adjust refrigerator + press Locking button 10 times.</li> </ul> </li> <li>2. Control method : Continuous operation of comp, F/C-fan.</li> <li>3. Display operation : At error display mode, display "Co" ( Refer error display)</li> <li>4. Release method : Automatic release 30 hours after start of operation.</li> </ol>	

6-10. Prohibition of compressor re-operation

■ Common to all models

Input For	Control For
N/A	Comp
Contents	
<p>1. Compressor does not operates 6 minutes after off condition regardless of F-Sensor reach to on point..</p>	

6-11. Time saving function

■ Common to all models

Input Screen	Control For
Main PCB	Electrical Goods
Contents	
<p>1. Save 1 minute : Click 1 time of "fast key" at main-PCB.                  2. Save 30 minutes : When press and hold "fast key", then buzzer noises shortly and save 30 minutes.                  3. Example for usage : Use when you want to reduce unnecessary time.                  (6 minutes stop function, fan delay function...)</p>	

6-12. Buzzer function

■ Common to all models

Input for	Control for
<p>1. F-PCB Button                  2. Door Switch                  3. Connecting initial electric source</p>	Buzzer
Contents	
<p>1. Buzzer noises when operating front-PCB button.                  2. When connecting initial electric source, buzzer noise 3 seconds after connection.                  3. During intermittent operation, A/S compulsory defrost, buzzer noises.                  4. When perform fine adjustment of freezer/refrigerator, buzzer noise when press button.                  5. Buzzer noise for every 1 minute after door is opened. (noise for 5 minutes).</p>	

6-13. Delay Time of Electrical Goods

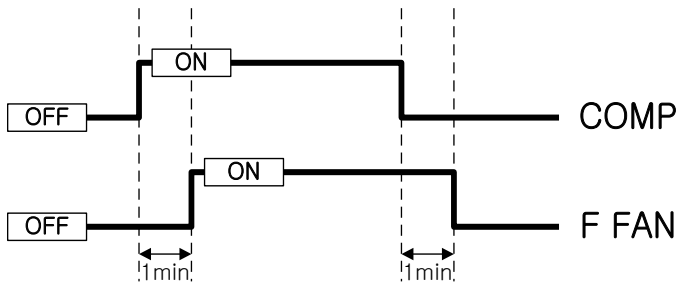
■ Common to all Models

Input For	Control For
Comp On / Off	1. Comp 2. F/C-Fan
Contents	

1. Comp / C-Fan / F-Fan

(1) F-Fan time delay function when compressor on/off condition.

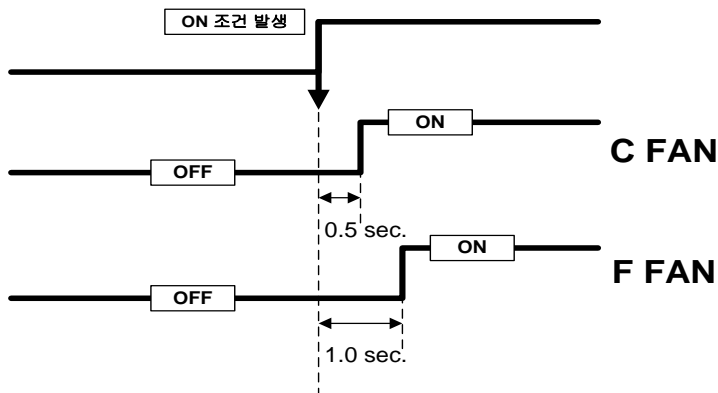
⇒ F-Fan on/off 1 minutes after compressor on/off.



(2) Fan delay and priority

C-Fan ⇒ On 0.5 seconds after on condition happens.

F-Fan ⇒ On 1.0 second after on condition happens.



## 6-14. Control Function for Lamp inside of Refrigerator

## ■ Common to all Models

Input For	Control For
1. F-Door 2. R-Door 3. Home bar Door	1. F/R-LED Lamp
Contents	
<p>1. R-room LED lamp control</p> <p>(1) R-lamp becomes on/off immediate after receiving open &amp; close signal from R-door switch.</p> <p>(2) But, R-lamp becomes off 10 minutes later when open condition continues even if it does not receive close signal after receiving open signal from R-door switch.</p> <p>(3) When receive signal more than 1 hour of continuous open, "dR" error displays and function relating to door switch sensing is deleted.</p> <p>2. F- Room LED lamp control</p> <p>(1) F-lamp becomes on/off immediate after receiving open &amp; close signal from F- door switch.</p> <p>(2) But, F-lamp becomes off 10 minutes later when open condition continues even if it does not receive close signal after receiving open signal from F-door switch.</p> <p>(3) When receive signal more than 1 hour of continuous open, "dR" error displays and function relating to door switch sensing is deleted.</p> <p>3. R-room LED lamp control by home bar</p> <p>(1) R-lamp becomes on/off immediate after receiving open &amp; close signal from home bar door switch.</p> <p>(2) But, R-lamp becomes off 10 minutes later when open condition continues even if it does not receive close signal after receiving open signal from home bar door switch.</p> <p>(3) When receive signal more than 1 hour of continuous open, "dH" error displays and function relating to door switch sensing is deleted.</p>	

6-15. DEMO function

■ Common to all models

Input for	Control for
1. Adjust Refrigerator Button 2. Adjust Freezer Button	1. Comp 2. F-Fan

Contents

1. Operating method

- FRY-601 Adjust refrigerator + press ice selection button for 5 times.
- FRX-622B Adjust refrigerator + press adjust freezer button for 10 times.

2. Control method

- (1) All electrical goods become off.
- (2) But, F-Fan becomes on when Freezer & Refrigerator door is opened.  
 Door open -> Fan on / Door close -> Fan off

(3) Display

① Dispenser

- 냉동, 냉장실 단계별 온도 88 Segment Display
- Eco Icon ON → Filter Icon ON (Plumbing 모델에 限) → Water Icon ON →  
 Cube Ice Icon ON → Crushed Ice Icon ON → Ice Lock Icon ON → FCP Lock Icon ON
- F & R Recommended 및 F & R Super Icon 교대로 ON/OFF

② Basic

- 냉동, 냉장실 단계별 온도 88 Segment Display → 쾌속 Icon ON

3. Release method

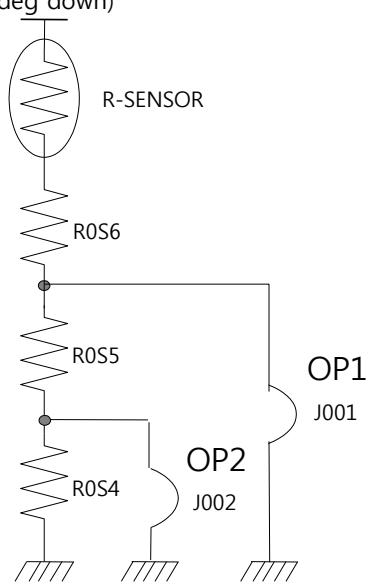
- (1) 각 모델별 진입 방법과 동일
- (2) Connect electric source again.

6-16. light Refrigeration Option

■ Common to all Models

Input For	Control For
J001,J002 (OP1,OP2) of Main PCB	Basic Resistor for R-Sensor "medium" Off point
Contents	

1. Adjust R-sensor off point (Max. 3deg down)
2. To make easy of A/S when light refrigeration happens, adjust as follows:
  - (1) Resistor(R0S6) : Basic resistor of R-sensor at normal operation.(31.4K or 32.8K)
  - (2) Resistor(R0S5) : 2K up for basic resistor by cutting J001 when light refrigeration happens. (1.5 deg down)
  - (3) Resistor(R0S4) : 4K up for basic resistor by cutting J002 when light refrigeration happens. (3.0 deg down)



R0S6 = medium off point  
 R0S6 + R0S5 = medium off point - 1.5 deg  
 R0S6 + R0S5 + R0S4 = medium off point - 3.0 deg

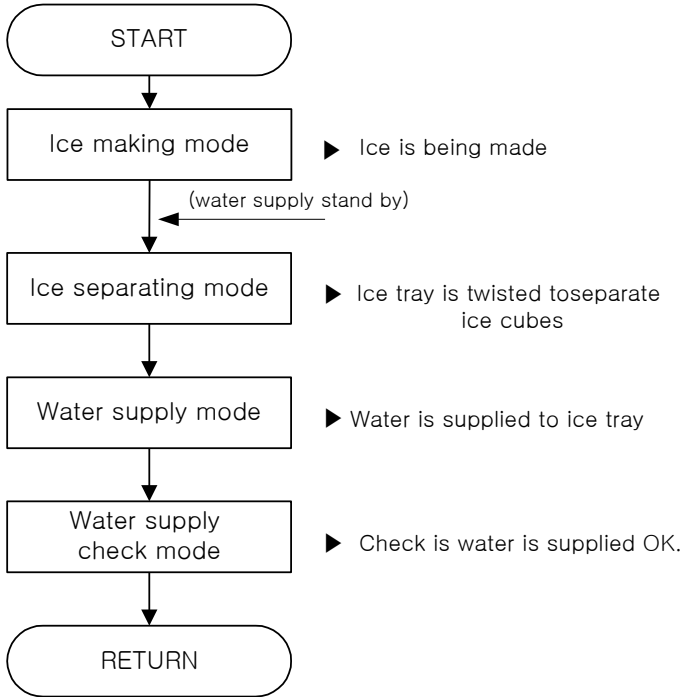


6-17. Automatic Ice Maker

■ RSZ61 (Dispenser Type Model)

Input For	Control For
N/A	Automatic Ice Maker
Contents	

1. Ice making flow



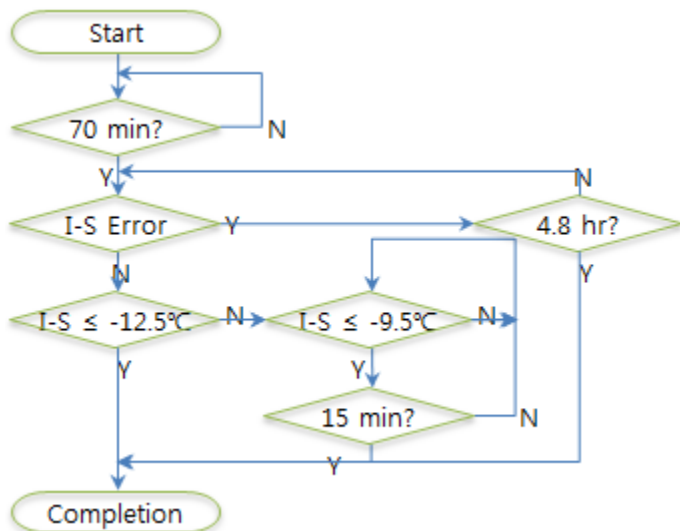
- 1) Test mode starts when pressing test S/W more than 1 second at ice making ass'y.  
 (But 1. Ice separation mode starts first when starting test mode.  
 2. Only 1 time of test proceeds when test S/W has disconnection error.)
- 2) When initial electric source is connected, first level ice shaping plate and then proceed to ice making mode.
- 3) When released from ice making procedure during ice making flow ice making mode proceeds first.
- 4) Water supply HTR control

Control time [minutes]	
At the time of full freezing & stoppage of ice making & error in water supply	At the time of ice making
Always ON	Always ON
Link with defrosting HTR	20 minutes prior to water supply & 10 minutes after water supply
25 / 35 (ON/OFF)	25 / 35 (ON/OFF)
40 / 20 (ON/OFF)	40 / 20 (ON/OFF)

- 5) Water supply waiting condition
  - ① Condition : When sensing full ice making.
  - ② Operation : Proceed to ice making mode among ice making flow.(Stop for ice separation, water supply mode)
  - ③ Release : Automatic release when operates at normal condition.

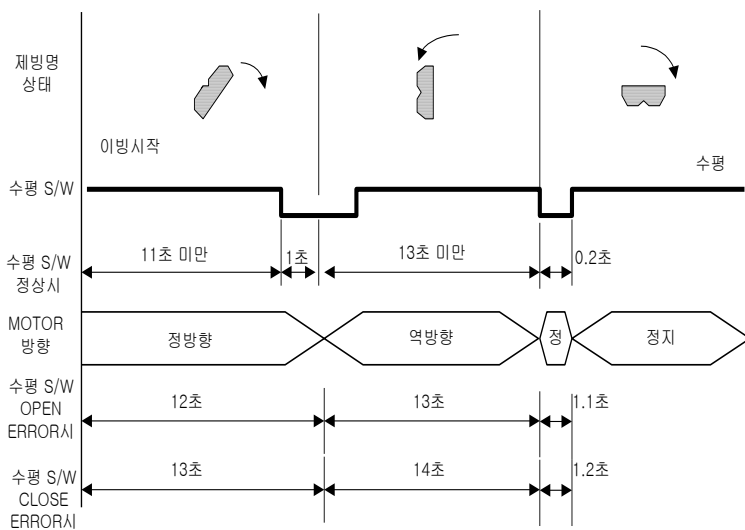
Contents

2. Ice making mode



- 1) When I-S becomes under -12.5 °C 70 minute passes by, ice making flow is finished.
- 2) When I-S does not reach under -12.5 °C 70 minutes passed by, but I-S becomes continuously keep under -9.5 °C for 15 minutes, ice making flow is finished.
- 3) When there is I-sensor error, ice making flow is finished 4.8 hr from ice making flow.

3. Ice separation mode

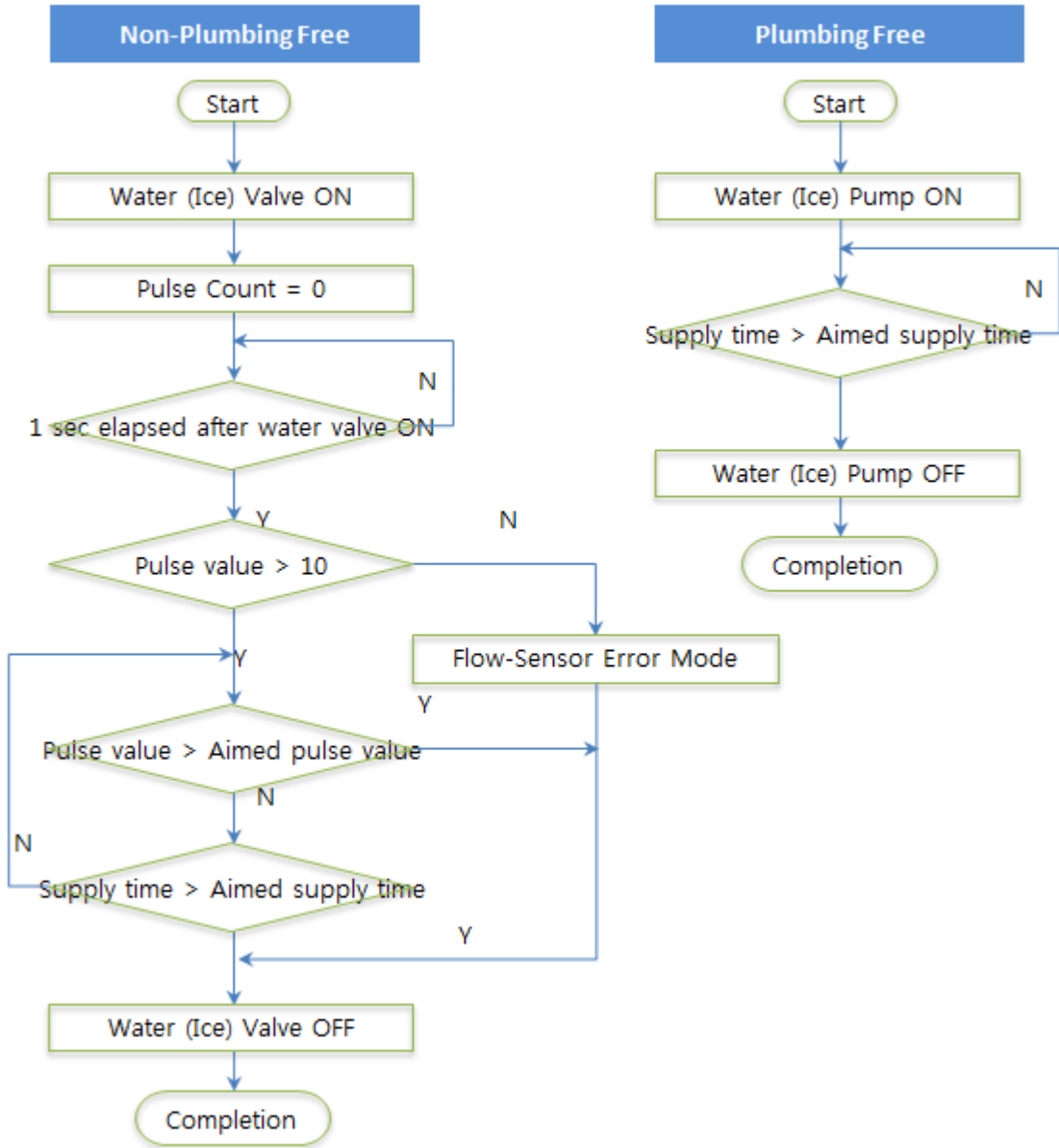


- \* Time for each of the sectors is used for the detection of horizontal S/W Error (Example, horizontal detection error of the horizontal Low is not detected for more than 11 seconds after the commencement of freezing)
- \* At the time of the detection of the horizontal S/W Error, the freezing mode continues to progress (progress freezing in the time unit)
- \* Freezing motor stops at the time of ICE Maker System Error

Contents

4. Water Supply Mode

< Water Supply Flow Chart >



## Contents

## 4. Water Supply Mode

■ **Water supply mode (Plumbing)**

- 1) When the water supply mode is entered after freezing, Water (Ice) Valve is turned ON.
- 2) At the time of Flow Sensor Error, supply water with time
  - Variable Factor value (scheduled to be used at the time of A/S processing)
    - ① When the Flow Sensor is normal, flux Pulse value is set at 228  
(At the time of water supply with time : Max. limit water supply time of 15 seconds)
    - ② At the time of Flow Sensor Error, water supply time of 5.5 seconds
- 3) Turn the Water (Ice) Valve OFF.

■ **Water supply mode (Plumbing Free)**

- 1) Water (Ice) Pump is turned ON if the water supply mode is entered after freezing.
- 2) Water supply with time
  - Limit water supply time : Max of 9 seconds
  - Normal water supply time : 6.3 seconds
- 3) Water (Ice) Pump is turned Off.
- 4) In the event of having entered the ice maker water supply condition during the Disp. Operation, water is not supplied until the Disp. Operation stops.  
(However, at the time of Dispenser operation after the ice maker water supply has commenced first, ice maker water supply will be operated normally.)
  - \* To minimize the changes in the quantity of ice maker water supply due to the operation of the Dispenser Pump  
(There is a possibility in the drop in flux if both Pumps are to be operated together.)

## Contents

## 5. Dispenser function

**■ Button for the selection of Water or Ice Type**

## 1) 2 Lever

## ① Water Cont. button (water softening function button)

- When Water Dispenser S/W is clicked after the selection of the function, water will be supplied until the S/W is clicked again once.

\* Water supply will be stopped when the Water Cont. button is clicked even during the execution of water softening function.

\* Limit time for continuous water supply : 60 seconds (when the limit time is reached, water supply is stopped automatically)

## ② Ice Type button (Ice Type selection button)

- When Ice Dispenser S/W is clicked, selected Ice (Cube/Crush) will be discharged

## 2) 1 Lever

- The usual Default mode is Water

- Corresponding Icon LED is turned ON with the remaining Icons turned OFF in accordance with the clicking of the Water or Ice Type button

- When the Dispenser S/W is clicked, the selected water supply or Ice(Cube/Crush) is discharged

**■ Ice Lock function**

## 1) 2 Lever

- When Ice Type button is touched for 3 seconds, Ice Lock is selected and the corresponding Icon LED is turned ON

- When Ice Button is touched for 3 seconds under Ice Lock state, it will be released

## 2) 1 Lever

- When Ice Type button is touched for 3 seconds, Ice Lock is selected and the corresponding Icon LED is turned ON

(At the time of the selection of the Ice Lock, Water Icon LED is turned ON.)

- When the Ice Button is touched for 3 seconds under Ice Lock state, it will be released.

**■ Display**

## 1) 2 Lever

- Water : The usual Default mode is turning OFF of the water softening function, and at the time of the selection of the function, Icon LED is turned ON

- Ice : The usual Default mode is Ice Cube, and, at the time of the selection of the Ice Type, corresponding Icon LED is turned ON.

## 2) 1 Lever

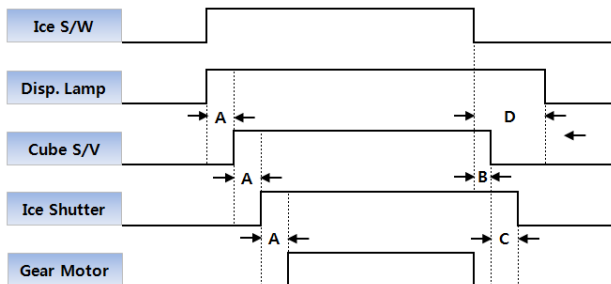
- Usual Default mode : Water

- At the time of selection of Water or Ice (Cube/Crushed), corresponding Icon LED is turned ON

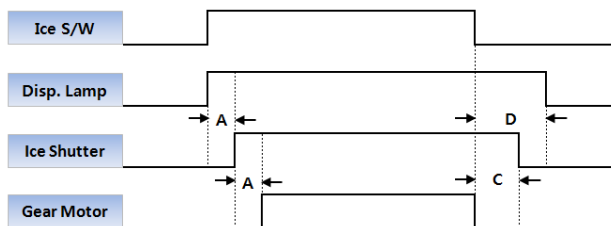
Contents

4) Control flow & timing chart

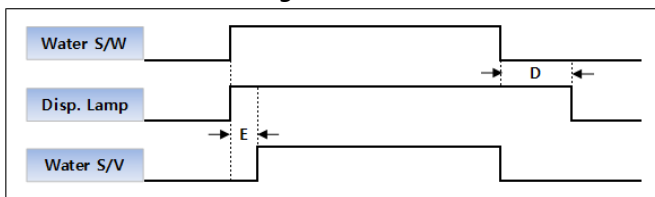
■ Ice (Cube) select



■ Ice (Crush) select



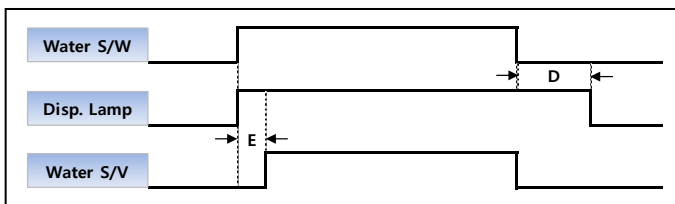
■ Water select (Plumbing)



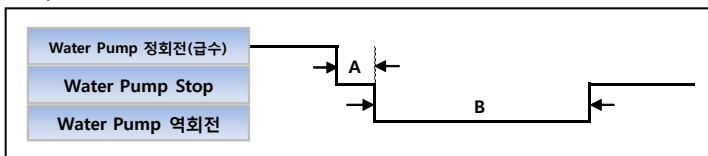
\* Delay Time : A = 0.5s, B = 0.5s, C = 2.0s, D = 10.0s, E = 0.3s

■ Water select (Plumbing Free)

① Dispenser S/W ON



② Dispenser S/W OFF



- Time : A = 0.02s

(Delay Time until the reverse rotation of PUMP after the Dispenser S/W is turned OFF)

- Time : B = 0.2s

(Reverse rotation time until the complete stop of Pump after the Delay Time)

\* Reverse rotation of the Pump to suppress the phenomenon of the leakage of water due to the momentum of Pump motor at the time of Pump Stop (0.2s), Provide Delay Time for the protection of Pump prior to the reverse rotation of the Pump (0.02s)

## 6-18. Error Display &amp; Control methods

## ■ Common to all Models

Input For	Control For
Freezer Temperature Adjusting Button	88 Display

## Contents

## 1. Entering method

■ High Model : (FCP Lock) Adjust freezer + press water selection button for 5 times.

■ Basic Model : (FCP Lock) Adjust freezer + press Lock selection button for 5 times.

## 2. Display method: Displays error code using 88 Seg.

When press adjust freezer at error display condition, display repeats.

## 3. Release method: Automatic release after pressing 1 time of Locking button and 4 minutes passed by.

## 4. Automatic reset becomes when all error codes return to normal condition.

(But for C1,F3,EF, Et,Eg,EA, Eu etc become reset after reoperation point of relevant electrical goods and after finish cycle)

-Error content and code display method(■ There is no error codes for ice maker and dispenser for Basic model)

ERROR CODE	CONTENTS
<b>F1</b>	F-sensor : disconnection("Lo"), short("Hi")
<b>r1</b>	R-sensor : disconnection("Lo"), short("Hi")
<b>rt</b>	RT-sensor : disconnection("Lo"), short("Hi")
<b>d1</b>	D-sensor : disconnection("Lo"), short("Hi")
<b>dr</b>	R-Door Switch : defective
<b>dF</b>	F-Door Switch : defective
<b>dH</b>	Homebar Door Switch : defective
<b>E1</b>	l-sensor : disconnection("Lo"), short("Hi")
<b>EF</b>	Flow sensor : defective
<b>Et</b>	Horizontal switch : error
<b>Eg</b>	Water supply : error
<b>ES</b>	Micro switch : error
<b>EA</b>	Drop the ice while Et
<b>Eu</b>	Full ice switch : error
<b>C1</b>	Cycle : abnormal or defective
<b>F3</b>	Return after defrosting : abnormal or defective
<b>G0</b>	Display Full Down mode
<b>D2</b>	Display forced defrost mode for A/S

Contents

5. Control method

1) "F1" Error

- ① Generating condition : In case for disconnection, short circuit of F Sensor.
- ② Control method : Operate as follows according to RT-S.  
(But, when there is error at same time with RT-S, operates on/off for 25/25 minutes.)
- ③ Release condition : Automatic release when F sensor is at normal condition.

RT Basis	Under 8°C	~14°C	~23°C	~30°C	~41°C	Over 41°C
RT-S Basis	Under 10°C	~16°C	~25°C	~32°C	~43°C	Over 43°C
On/Off (Min.)	14 / 50	16 / 41	27 / 45	26 / 22	35 / 20	35 / 20

2) "r1" Error

- ① Generating condition : In case of disconnection, short circuit of R sensor.
- ② Control method : Operates as follows according to RT-S.  
(But, when there is error at same time with RT-S, operates on/off for 3/7 minutes.)
- ③ Release condition : Automatic release when R sensor is at normal condition.

RT Basis	Under 8°C	~14°C	~23°C	~30°C	~41°C	Over 41°C
RT-S Basis	Under 10°C	~16°C	~25°C	~32°C	~43°C	Over 43°C
On/Off (Min.)	Off	3 / 50	2 / 10	3 / 7	4 / 6	6 / 4

3) "rt" Error

- ① Generating condition : In case of disconnection, short circuit of RT sensor.
- ② Control method : Operate with normal condition and delete control condition by RT sensor.
- ③ Release condition : Automatic release when RT sensor is at normal condition.

4) "d1" Error

- ① Generating condition : In case of disconnection, short circuit of D sensor.
- ② Control method : According to 30 minutes of defrost return limit time.
- ③ Release condition : Automatic release when D sensor is at normal condition.

5) Door Error

- ("dF", "dR", "dH" display) sense door error for F / R / home bar door.

- ① Generating condition : When sense continuous door open more than 1 hour.
- ② Control method : Delete function relating to door S/W sensing.
- ③ Release condition : Automatic release when sensing close from door S/W.

6) "C1" Error

- ① Generating condition: When compressor operate continuously more than 3 hours with D sensor temperature is more than -5°C.
- ② Control method : Normal operation.
- ③ Release condition : Release when D sensor temperature is under -5°C with compressor off.

7) "F3" Error

- ① Generating condition : When defrost return by 60 minutes limit time.
- ② Control method : Delete pre-cool mode at defrost mode.
- ③ Release condition : Release when defrost is completed by D sensor.



## Contents

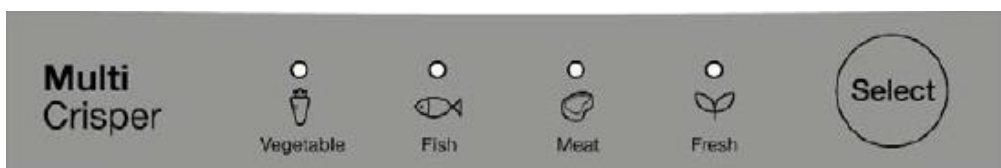
- 9) "d2" Mode : A/S compulsory defrost mode
- ① Entering condition - Adjust freezer + press adjust refrigerator button for 5 times.
  - ② Control method : Same as normal defrost mode. (But, start with HTR defrost)
  - ③ Release condition – Automatic release when D sensor temperature is over 13°C.
- 10) "d3" Mode : Precool compulsory defrost mode
- ① Entering condition : - Adjust freezer + press water selection/ice selection button for 5 times.
  - ② Control method : Same as normal defrost mode. (Start with precool)
  - ③ Release condition : Connect electric source.
- 11) "EI" Error
- ① Generating condition : In case for disconnection, short circuit of I-sensor.(But, ice separation stops when sensing full ice making.)
  - ② Control method : Ice separation with 4.8 hour intervals after water selection.
  - ③ Release condition : Automatic release when I-sensor is at normal condition.
- 12) "Et" Error
- ① Generating condition : When level switch is error.(When does not sense for a certain time)
  - ② Control method : Control by time. (Skip water selection mode)
  - ③ Release condition : Automatic release when at normal condition.
- 13) "EF" Error
- ① Generating condition : When flow-sensor is error.  
(When pulse is not sensed for a certain time)  
When pulse enter under 10 frequency per a second during water supply on.
  - ② Control method : Control by time.  
(Control by Pector time stored at EEPROM.)  
(Normally supply water for 5.5 seconds.)
  - ③ Release condition : Release when sense as normal condition after water supply mode operates again.
- 14) "Eg" Error
- ① Generating condition : Check I-sensor temperature.(5 minutes after water supply), when certain temperature rise is not possible.
  - ② Control method : Normal control
  - ③ Release condition : Automatic release when operates at normal condition.
- 15) "ES" Error
- ① Generating condition : When Micro S/W sense more than 1 minute.
  - ② Control method : Stop function of dispenser & crusher.
  - ③ Display method : Blink relevant mode LED.(Water icon)
- 16) Malfunction of ice separating motor (No relevant display)
- ① Generating condition : Malfunction of ice separation motor(Ice separation motor does not work) Check by pressing ice maker test S/W.
  - ② Release condition : Change ice separation motor.
- 17) "Eu" Error
- ① Generating condition : When full ice making S/W error (When there is no sensing of high/low )
  - ② Control method : Ice separation motor rotates only 90 deg. when separating ice.
  - ③ Release condition : When full ice making S/W is at normal condition.
- 18) "EA" Error
- ① Generating condition : When sensing ice separation 3 times with level switch at error condition.
  - ② Control method : Automatic stop of ice maker.
  - ③ Release condition : When connect electric source or press automatic ice maker test SW with level switch is at normal condition.

6-19. Magic-cool zone Control Function

■ RSZ(A)612G\*\*(Magic-cool zone Applicable Model)

Input For	Control For
1. R-Fan 2. Magic-cool zone sensor 3. Magic-cool zone 선택Key	1. Magic-cool zone Damper (Heater)

CONTENTS



1. When press "select key" of display for each steps and open/close control (Initial value is "Fresh"), it changes "Vegetable"→"Fish"→"Meat" →" Fresh"

When set for each step, relevant LED at left side becomes on.

2. Stepping motor control method

- (1) Damper always close when R-damper is opened.
- (2) Open/close control is possible according to set step only when R-damper is closed.
- (3) Damper is always closed at fresh step.

3. Damper HTR control

- (1) When damper is opened, damper HTR becomes off and when damper is closed, damper HTR becomes on.
- (2) Damper HTR always off at fresh step.

Step	DAMPER ON/OFF POINT	
	ON	OFF
	Temp (°C)	Temp (°C)
Vegetable	8	7
Fish	4.5	3.5
Meat	3	2
Fresh	-	-

4. Checking method for sensor error and damper open/close condition.

- (1) Entering method : Press and hold function key for 3~6 second and then release.  
(Entering is not possible when pressing time is below 3 seconds or over 6 seconds.)
  - ① Fresh, meat LED on when sensor is at normal condition and all LED on when sensor is at error condition.
  - ② When press function key 1 time after entering into checking mode, damper is opened compulsory (Fresh, Fish LED ON)
  - ③ When press function key 2 times after entering into checking mode, damper is closed compulsory (Fresh, Vegetable LED ON)
  - ④ When press function key, it repeat as "Sensor error display"→" Open"→" Close" sequence.
- (2) Release method : Automatic release 20 seconds after enter into checking mode.

5. When set system off function

- 1) ALL LED off, damper open, damper HTR off.
- 2) When it is released, starts operation again.

## 6-20. Summary of function buttons

## ■ Common for all models

## CONTENTS

## ■ High Model : Mode entering method per functions.(All Functions enter form "Locking" condition)

MODE	SBS ZB600 Inverter Specification
A/S Compulsory Defrost	Press Adjust Freezer + Adjust Refrigerator for 5 times
Intermittent Function	Press Adjust Refrigerator + Adjust Freezer + Ice Selection for 5 times.
Freezer Fine Adjustment	Press Ice Selection + Adjust Freezer for 5 times.
Refrigerator Fine Adjustment	Press water selection + Adjust Refrigerator for 5 times.
Demo Function	Adjust Refrigerator + Ice selection for 5 times.
Error Display Function	Adjust Freezer + water selection for 5 times.
EEPROM Clear	Press Refrigerator + water selection for 5 times
Filter Reset Function	(At Locking Release condition) Press and hold Eco for 3 seconds.

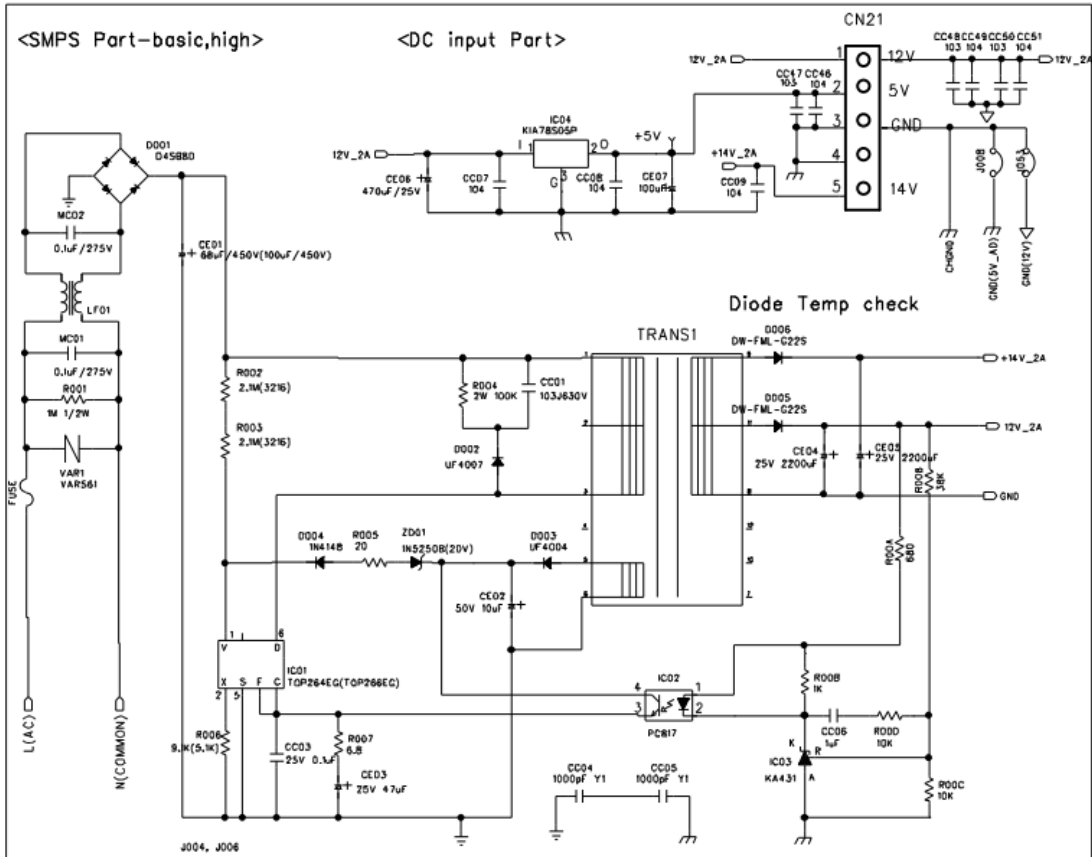
## ■ Basic Model : Mode operating method per functions (All Functions enter from "Locking" condition)

Mode	Operating method
Compulsory Defrost	Press Adjust Freezer + Adjust Refrigerator for 5 times.
Precool Compulsory Defrost	Press and hold Adjust Freezer + Adjust Refrigerator 10 seconds at same time.
Intermittent Function	Press Adjust Refrigerator + Locking for 10 times.
Freezer Fine Adjustment	Press and hold Adjust Freezer for 10 seconds.
Refrigerator Fine Adjustment	Press and hold Adjust Refrigerator for 10 seconds.
Demo Function	Press Adjust Refrigerator + Adjust Freezer for 10 times.
Error Display Function	Press Adjust Freezer + Locking for 5 times.
EEPROM Clear	Press Refrigerator + Freezer + Locking for 5 times.

## 7. MICOM Circuit Explanation

### 7-1. electric source part (SMPS) circuit

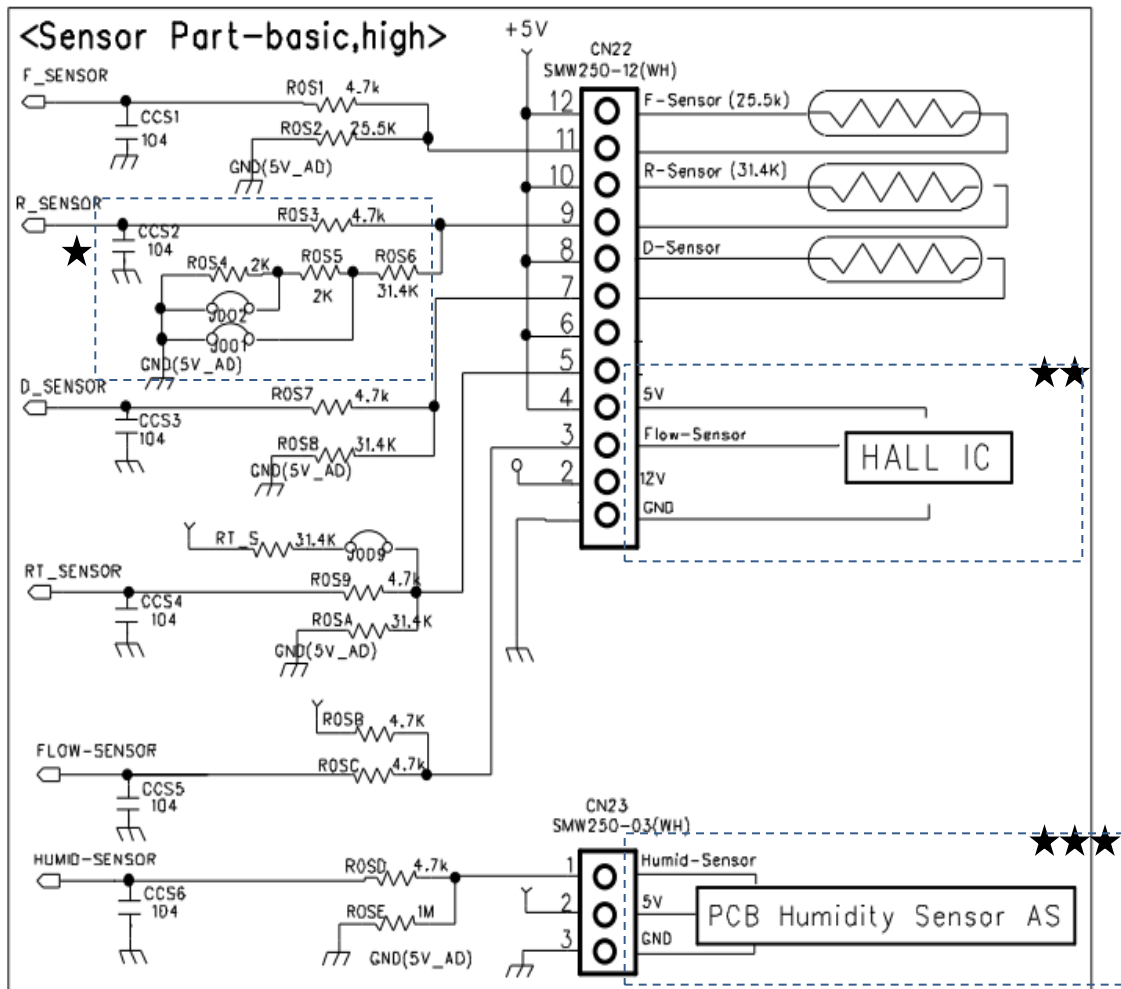
■ Common for all models



## 7. MICOM Circuit Explanation

### 7-2. Sensor part circuit

■ Common for all models



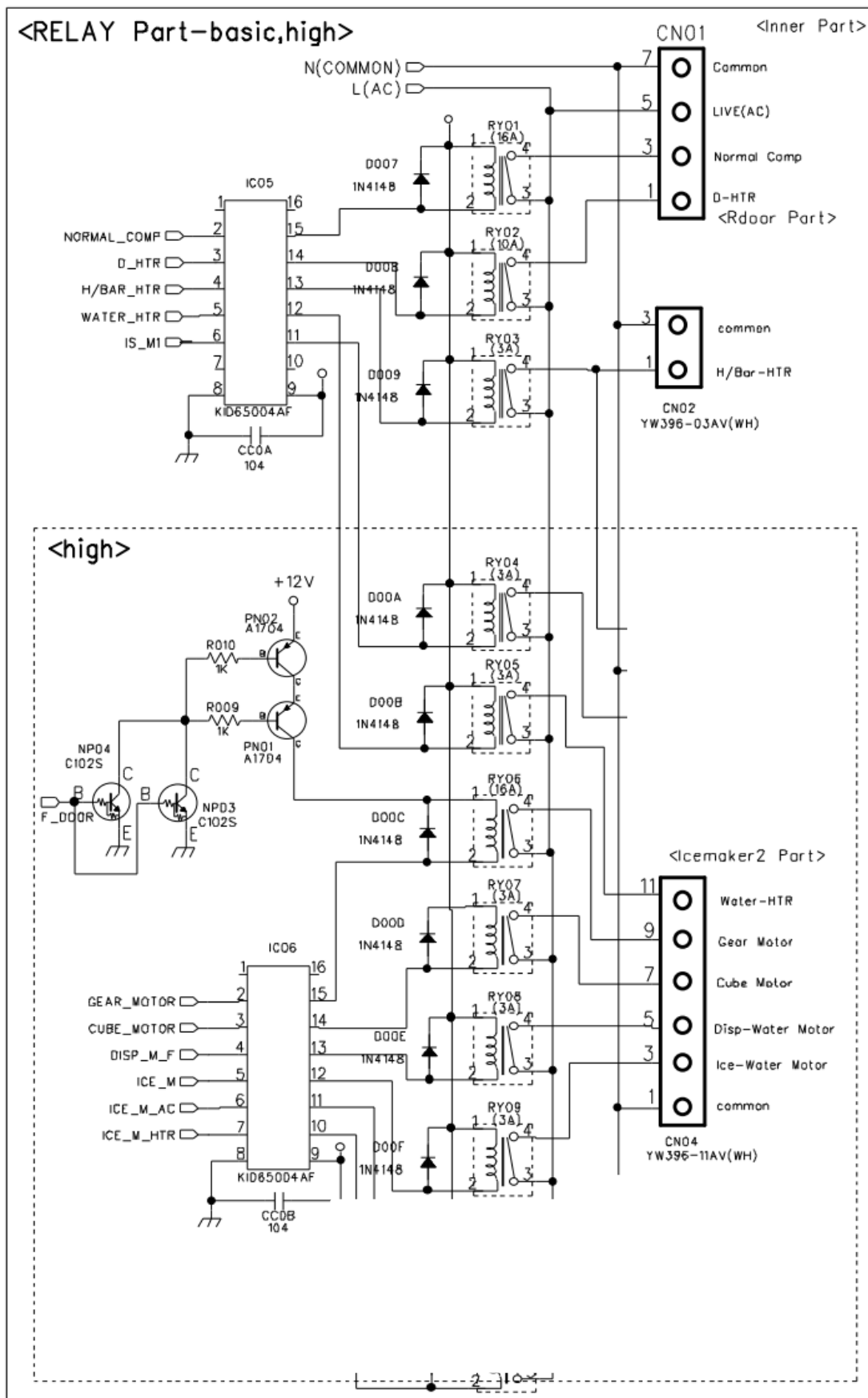
★ OP1,OP2 : Cut J001,J002 when light refrigeration occur at refrigerator to lower control temperature of Refrigerator.  
 1) When cut J001, Refrigerator control temperature down to 1.5°C.  
 2) When cut J001 and J002, Refrigerator control temperature down to 3°C.

★★ FLOW SENSOR : ZB600 DISPENSOR, FULL TYPE MODEL

★★★ HUMIDITY SENSOR : ZB600 A++ MODEL

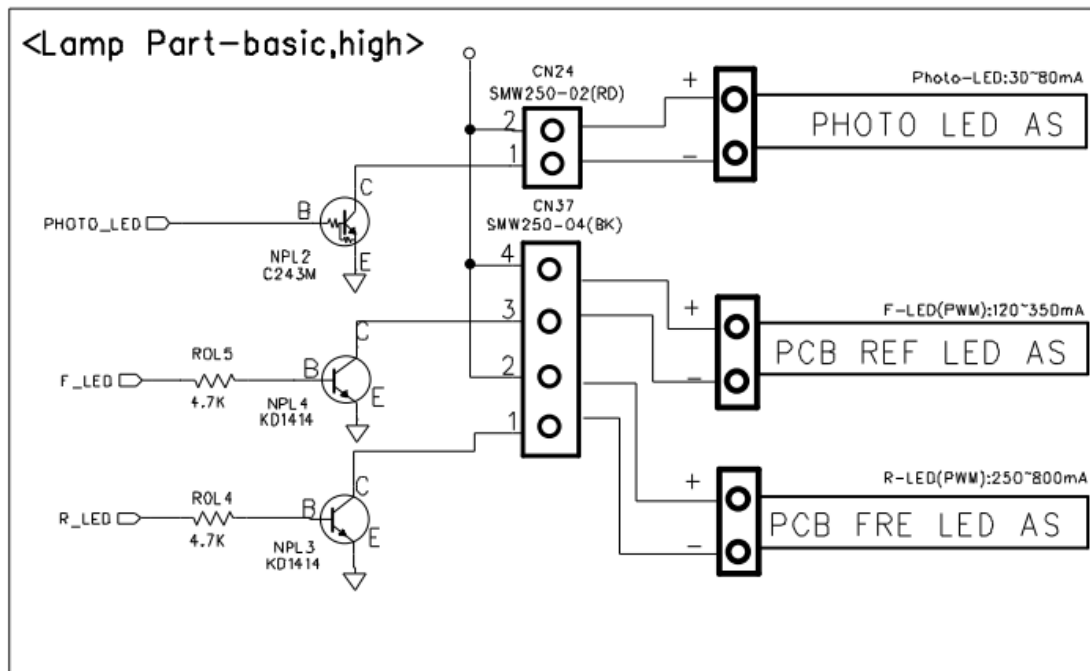
7-3. Relay Operating Circuit & LED Inner lamp Operating Circuit

7-3-1. ZB600 BASIC/HIGH circuit



7-3. Relay Operating Circuit & LED Inner lamp Operating Circuit

7-3-1. ZB600 BASIC/HIGH circuit



7-3-2. Explanation of ZB600 BASIC/ HIGH operation

Control	Control method	Operation (ON) condition		Operation (OFF) condition	
		MICOM PORT	Output PIN	MICOM PORT	IC2 Output PIN
D HTR	RELAY	3 Of IC05 ≒ 3.7V	14 Of IC05 ≒ 0.7V	3 Of IC05 ≒ 0V	14 Of IC05 ≒ 12V
H/Bar HTR	RELAY	4 Of IC05 ≒ 3.7V	13 Of IC05 ≒ 0.7V	4 Of IC05 ≒ 0V	13 Of IC05 ≒ 12V
★ WATER HTR	RELAY	5 Of IC05 ≒ 3.7V	12 Of IC05 ≒ 0.7V	5 Of IC05 ≒ 0V	12 Of IC05 ≒ 12V
★ GEAR M	RELAY	2 Of IC06 ≒ 3.7V	15 Of IC06 ≒ 0.7V	2 Of IC06 ≒ 0V	15 Of IC06 ≒ 12V
★ CUBE M(S/V)	RELAY	3 Of IC06 ≒ 3.7V	14 Of IC06 ≒ 0.7V	3 Of IC06 ≒ 0V	14 Of IC06 ≒ 12V
★ WATER M(DISP)	RELAY	4 Of IC06 ≒ 3.7V	13 Of IC06 ≒ 0.7V	4 Of IC06 ≒ 0V	13 Of IC06 ≒ 12V
★ WATER M(ICE)	RELAY	5 Of IC06 ≒ 3.7V	12 Of IC06 ≒ 0.7V	5 Of IC06 ≒ 0V	12 Of IC06 ≒ 12V

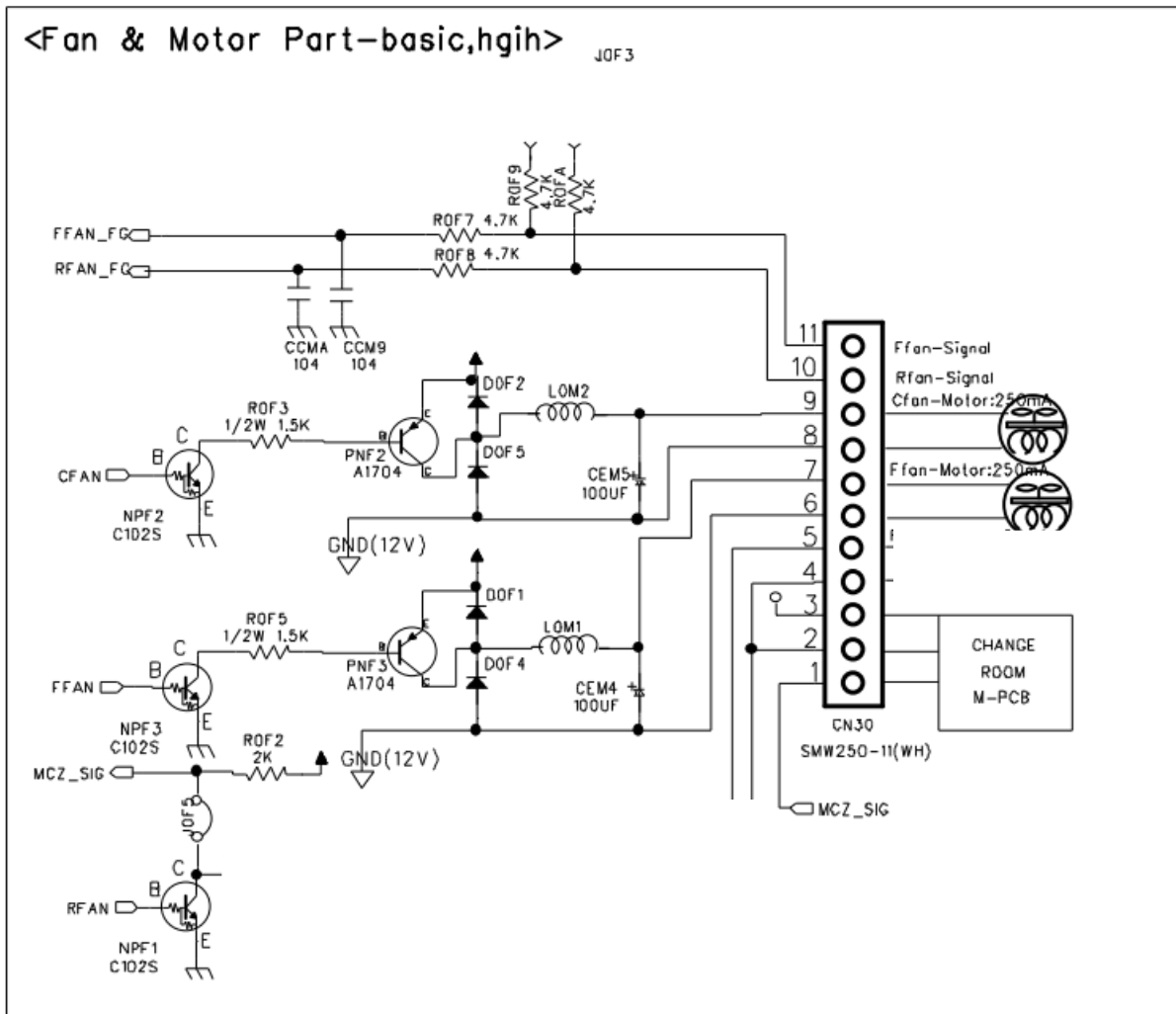
R-LED	TR	1 Of NPL3 ≒ 1.3V	1 Of CN37 ≒ 0.7V	1 Of NPL3 ≒ 0V	1 Of CN37 ≒ 6V
F-LED	TR	1 Of NPL4 ≒ 1.3V	3 Of CN37 ≒ 0.7V	1 Of NPL4 ≒ 0V	3 Of CN37 ≒ 6V
VITA-LED(Photo)	TR	1 Of NPL5 ≒ 3.7V	1 Of CN24 ≒ 0.7V	1 Of NPL5 ≒ 0V	1 Of CN24 ≒ 6V

★ ZB600 HIGH MODEL

7-4. Fan Driving

7-4-1. Circuit

■ Common for all models



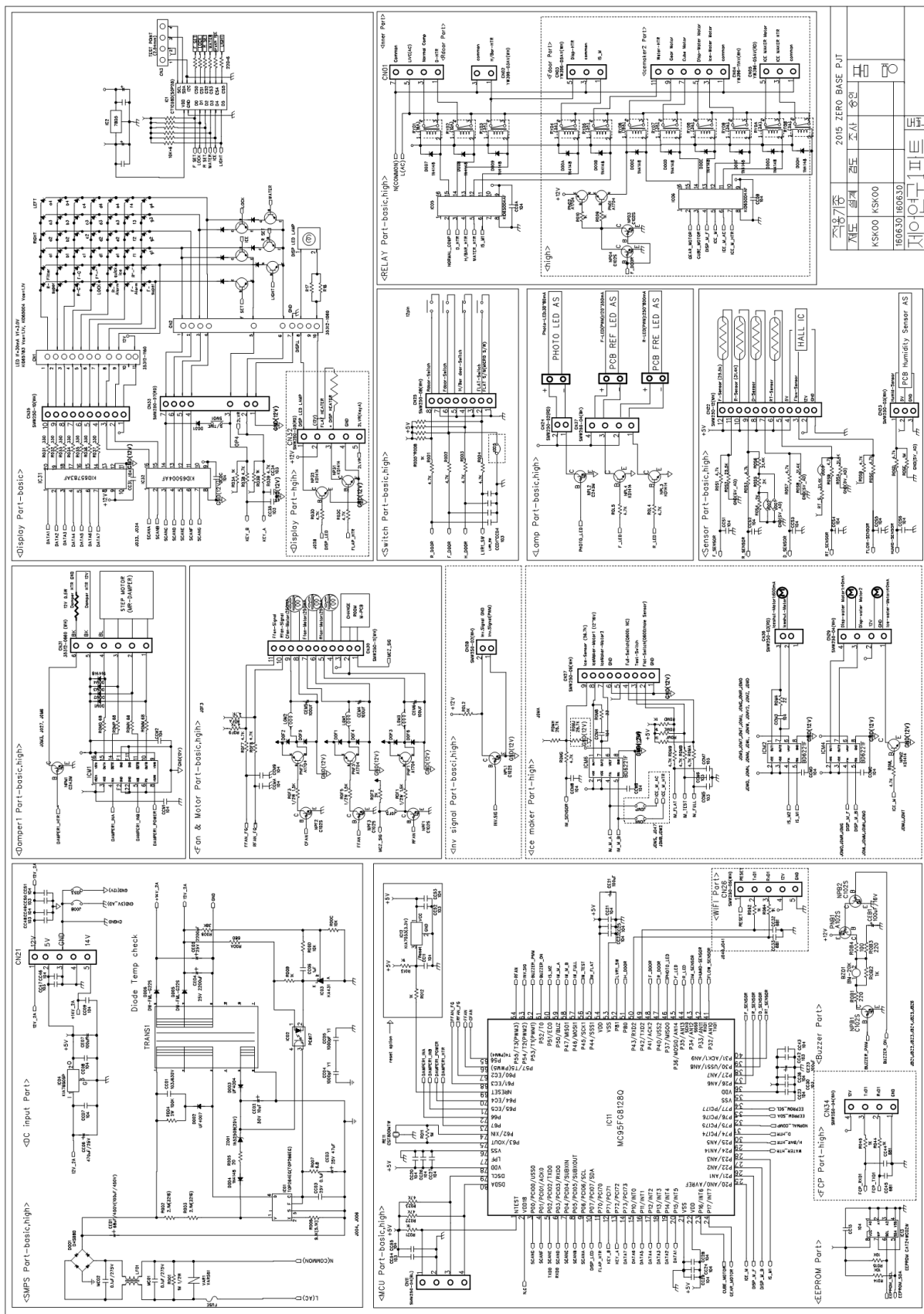
7-4-2. Explanation of operation

Control	Control method	Operation (ON) condition		Operation (OFF) condition	
		MICOM PORT	Output PIN	MICOM PORT	IC2 Output PIN
F-FAN	TR	1 Of NPF3 ≈ 3.5V	7 Of CN30 ≈ 12.6V	1 Of NPF3 ≈ 0.7V	7 Of CN30 ≈ 0V
C-FAN	TR	1 Of NPF2 ≈ 3.0V	9 Of CN30 ≈ 12.6V	1 Of NPF2 ≈ 0.7V	9 Of CN30 ≈ 0V



## 7-5. Main PCB circuit

### ■ ZB600 BASIC/HIGH Model



제어기종	2015 ZERO BASE PJT
제호	김도 외사 운영
모델명	KSX00 KSX00
제어기종	180630 180630
제어기종	제어기종

7-6. Temperature Display Value for R/F Sensor

■ FRY-601 , FRX-622B

(RBasis:31.4K, FBasis:25.5K)

R / D -Sensor				F-Sensor			
Temp.	Basis(kΩ)	Temp.	Basis(kΩ)	Temp.	Basis(kΩ)	Temp.	Basis(kΩ)
-30.0	129.30	0.5	29.34	-30.0	39.652	0.5	7.692
-29.5	125.90	1.0	28.71	-29.5	38.495	1.0	7.508
-29.0	122.50	1.5	28.08	-29.0	37.375	1.5	7.328
-28.5	119.30	2.0	27.47	-28.5	36.291	2.0	7.153
-28.0	116.20	2.5	26.88	-28.0	35.242	2.5	6.983
-27.5	113.20	3.0	26.30	-27.5	34.227	3.0	6.818
-27.0	110.20	3.5	25.74	-27.0	33.240	3.5	6.656
-26.5	107.40	4.0	25.19	-26.5	31.372	4.0	6.500
-26.0	101.60	4.5	24.65	-26.0	30.926	4.5	6.347
-25.5	101.90	5.0	24.13	-25.5	30.480	5.0	6.198
-25.0	99.30	5.5	23.62	-25.0	29.616	5.5	6.054
-24.5	96.70	6.0	23.12	-24.5	28.780	6.0	5.913
-24.0	94.30	6.5	22.63	-24.0	27.970	6.5	5.776
-23.5	91.90	7.0	22.15	-23.5	27.185	7.0	5.642
-23.0	89.60	7.5	21.69	-23.0	26.425	7.5	5.512
-22.5	87.30	8.0	21.24	-22.5	25.686	8.0	5.386
-22.0	85.10	8.5	20.80	-22.0	24.974	8.5	5.262
-21.5	83.00	9.0	20.36	-21.5	24.283	9.0	5.142
-21.0	80.90	9.5	19.94	-21.0	23.612	9.5	5.025
-20.5	78.90	10.0	19.53	-20.5	22.963	10.0	4.911
-20.0	76.90	10.5	19.13	-20.0	22.333	10.5	4.800
-19.5	75.00	11.0	18.74	-19.5	21.722	11.0	4.691
-19.0	78.20	11.5	18.35	-19.0	21.130	11.5	4.586
-18.5	71.40	12.0	17.98	-18.5	20.557	12.0	4.483
-18.0	69.60	12.5	17.61	-18.0	20.000	12.5	4.383
-17.5	67.90	13.0	17.26	-17.5	19.460	13.0	4.285
-17.0	66.30	13.5	16.91	-17.0	18.937	13.5	4.190
-16.5	64.70	14.0	16.37	-16.5	18.429	14.0	4.097
-16.0	63.10	14.5	16.26	-16.0	17.937	14.5	4.007
-15.5	61.60	15.0	15.91	-15.5	17.459	15.0	3.918
-15.0	60.10	15.5	15.59	-15.0	16.995	15.5	3.832
-14.5	58.60	16.0	15.28	-14.5	16.545	16.0	3.749
-14.0	57.20	16.5	14.98	-14.0	16.109	16.5	3.668
-13.5	55.90	17.0	14.66	-13.5	15.635	17.0	3.587
-13.0	54.60	17.5	14.39	-13.0	15.274	17.5	3.509
-12.5	53.30	18.0	14.10	-12.5	14.875	18.0	3.433
-12.0	52.00	18.5	13.83	-12.0	14.487	18.5	3.350
-11.5	50.80	19.0	13.56	-11.5	14.111	19.0	3.287
-11.0	49.60	19.5	13.29	-11.0	13.746	19.5	3.217
-10.5	48.70	20.0	13.03	-10.5	13.391	20.0	3.148
-10.0	47.30	20.5	12.78	-10.0	13.047	20.5	3.081
-9.5	46.20	21.0	12.53	-9.5	14.712	21.0	3.015

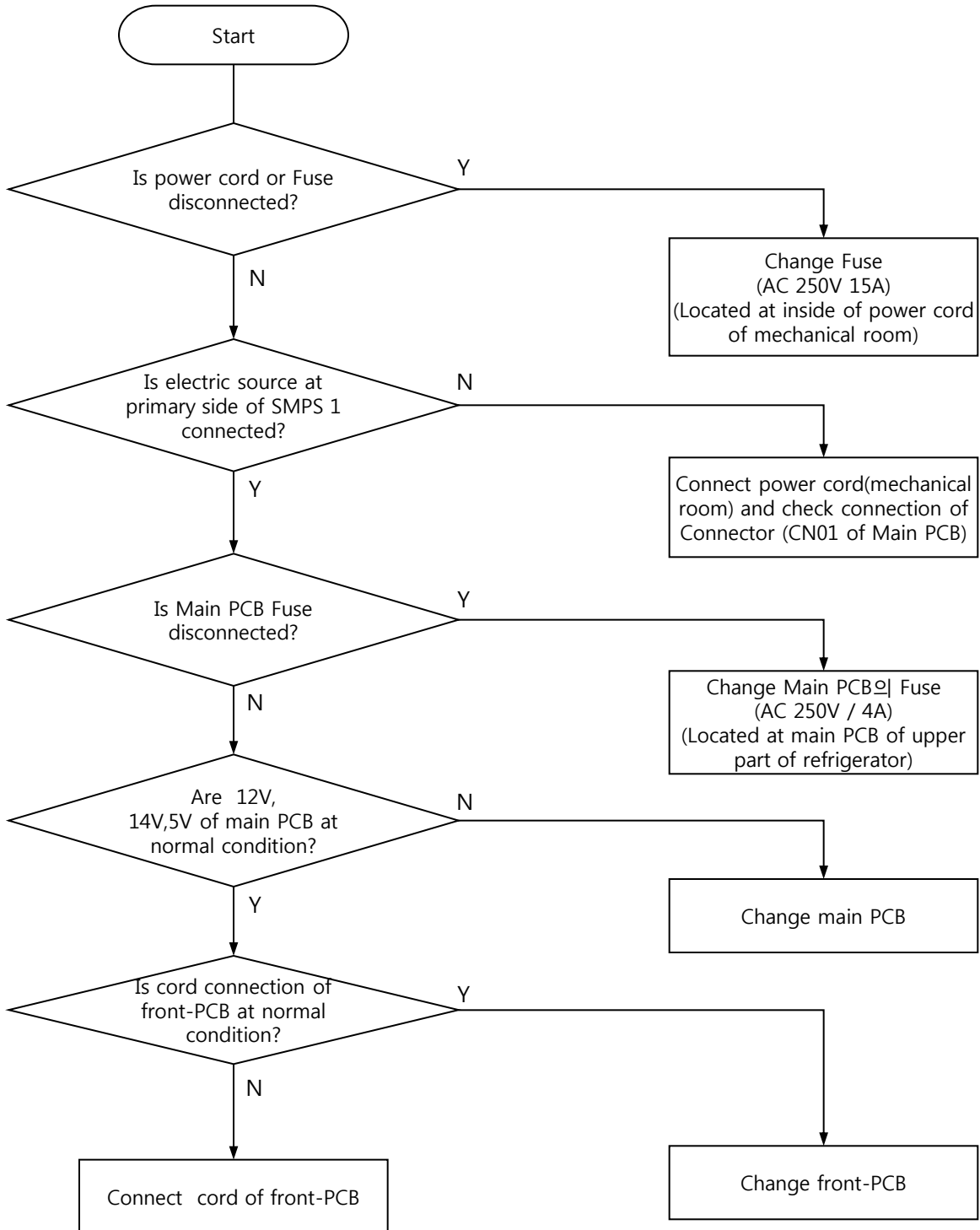
R / D-Sensor				F-Sensor			
Temp.	Basis(kΩ)	Temp.	Basis(kΩ)	Temp.	Basis(kΩ)	Temp.	Basis(kΩ)
-9.0	45.10	21.5	12.29	-9.0	12.387	21.5	2.927
-8.5	44.10	22.0	12.05	-8.5	12.072	22.0	2.839
-8.0	43.10	22.5	11.82	-8.0	11.765	22.5	2.829
-7.5	42.10	23.0	11.60	-7.5	11.467	23.0	2.769
-7.0	41.10	23.5	11.37	-7.0	11.176	23.5	2.711
-6.5	40.30	24.0	11.16	-6.5	10.897	24.0	2.655
-6.0	39.30	24.5	10.95	-6.0	10.624	24.5	2.600
-5.5	37.90	25.0	10.74	-5.5	10.358	25.0	2.546
-5.0	37.50	25.5	10.54	-5.0	10.109	25.5	2.493
-4.5	36.70	26.0	10.34	-4.5	9.849	26.0	2.442
-4.0	35.80	26.5	10.14	-4.0	9.605	26.5	2.392
-3.5	35.00	27.0	9.945	-3.5	9.368	27.0	2.343
-3.0	34.30	27.5	9.768	-3.0	9.138	27.5	2.295
-2.5	33.50	28.0	9.586	-2.5	8.913	28.0	2.246
-2.0	32.70	28.5	9.408	-2.0	8.696	28.5	2.202
-1.5	32.00	29.0	9.234	-1.5	8.484	29.0	2.158
-1.0	31.30	29.5	9.063	-1.0	8.277	29.5	2.114
-0.5	30.60	30.0	8.896	-0.5	8.077	30.0	2.072
0.0	30.00			0.0	7.882		

## 8. Troubleshooting & Repairing Methods

### - Sequence -

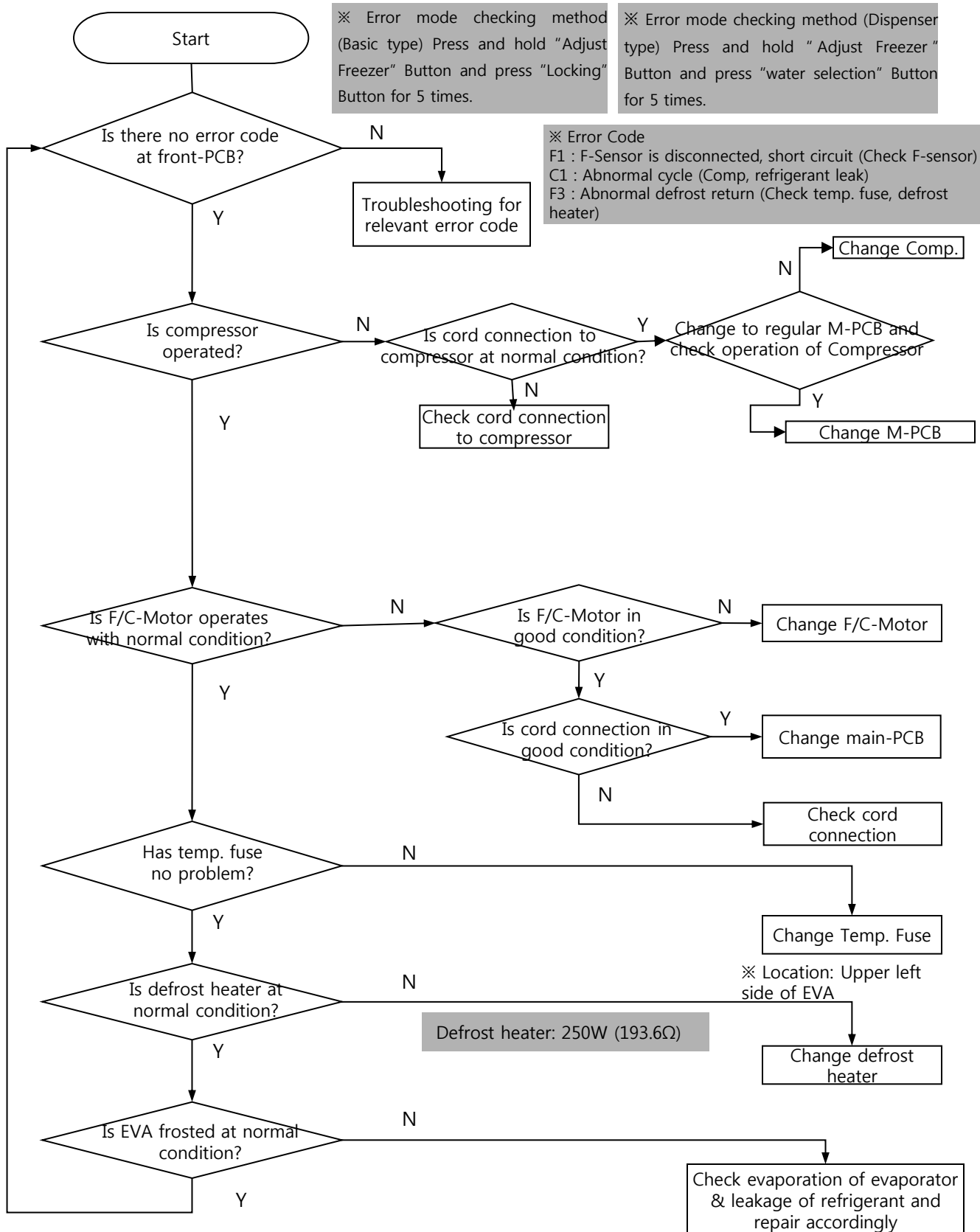
- 8-1. In case electric source is not connected. ( Disconnection of freezer, refrigerator inner lamp & F-PCB electric source is dead)
- 8-2. Freezer/refrigerator is weak in performance.
  - 8-2-1. Freezer does not operate / Freezer is weak in performance. (Food stuff become melting / food stuff does not freeze quickly)
  - 8-2-2. Refrigerator does not operate / Refrigerator is weak in performance. (Food stuff is not cool / food stuff does not cool quickly)
- 8-3. Freezer louver becomes freezing.
- 8-4. Inner lamp is disconnected.
  - 8-4-1. Freezer/Refrigerator Inner lamp is disconnected. (LED LAMP)
- 8-5. In case defrost does not operate.
- 8-6. Dewdrops inside of refrigerator.
- 8-7. Vegetable chamber is overcooled.
- 8-8. Noise
  - 8-8-1. Compressor noise.
  - 8-8-2. Refrigerant flow noise.
  - 8-8-3. Fan noise.
  - 8-8-4. Pipe chattering / interference noise.
- 8-9. Door part
  - 8-9-1. Alarm noises continuously when door is closed.
- 8-10. Adjusting freezer/refrigerator door mismatch.
- 8-11. Repairing method of refrigerator cycle.
  - 8-11-1. Checking method of trouble. (Freezer/refrigerator does not operate)
  - 8-11-2. Repairing method per symptom and cautions.
  - 8-11-3. Introduction of CYCLE(R-600a) repairing tool set.
  - 8-11-4. Parts for repairing CYCLE(R-600a)

8-1. There is no electric source connected ( freezer, refrigerator inner lamp disconnection or F-PCB electric source is dead)

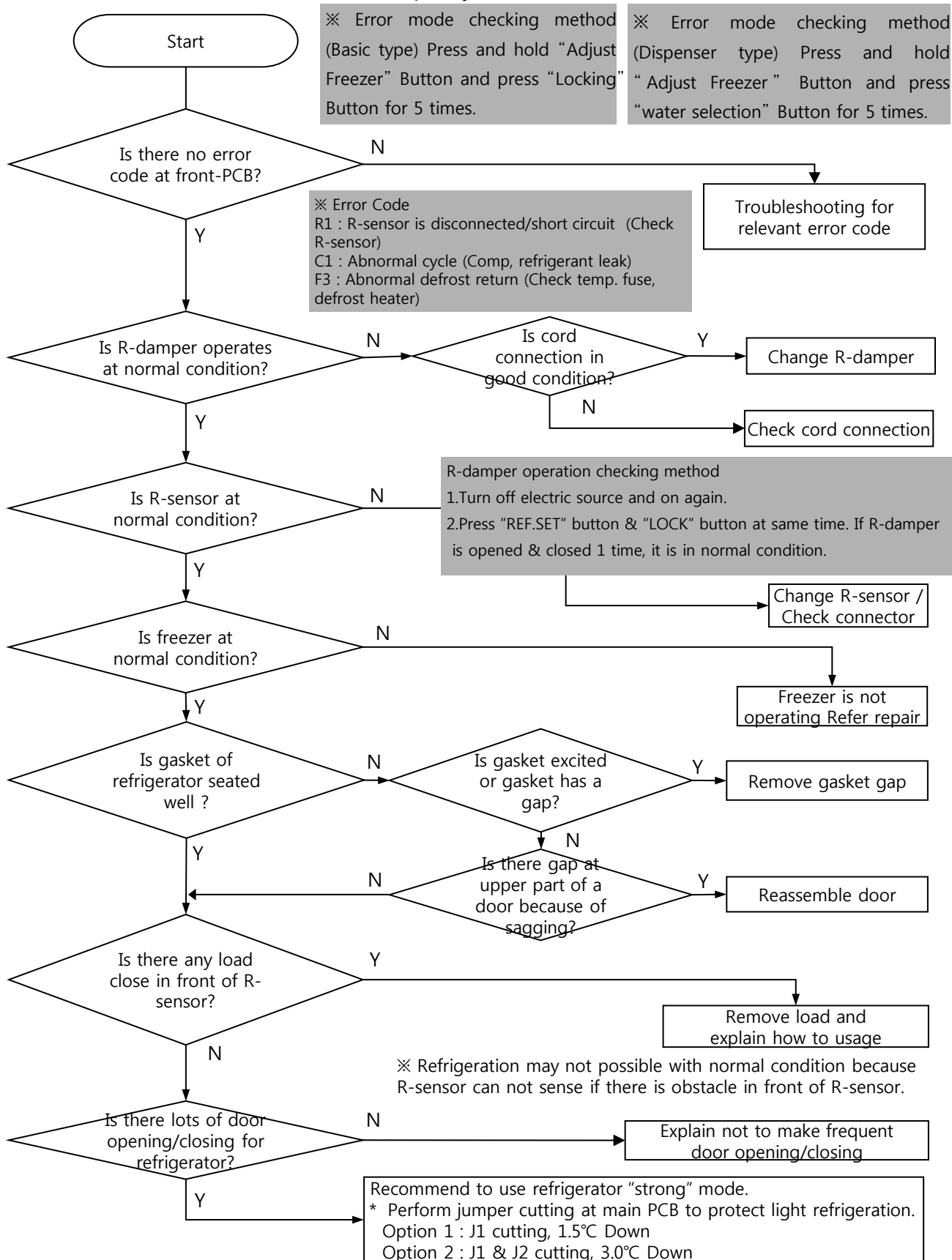


8-2. Freezer/refrigerator is weak in performance.

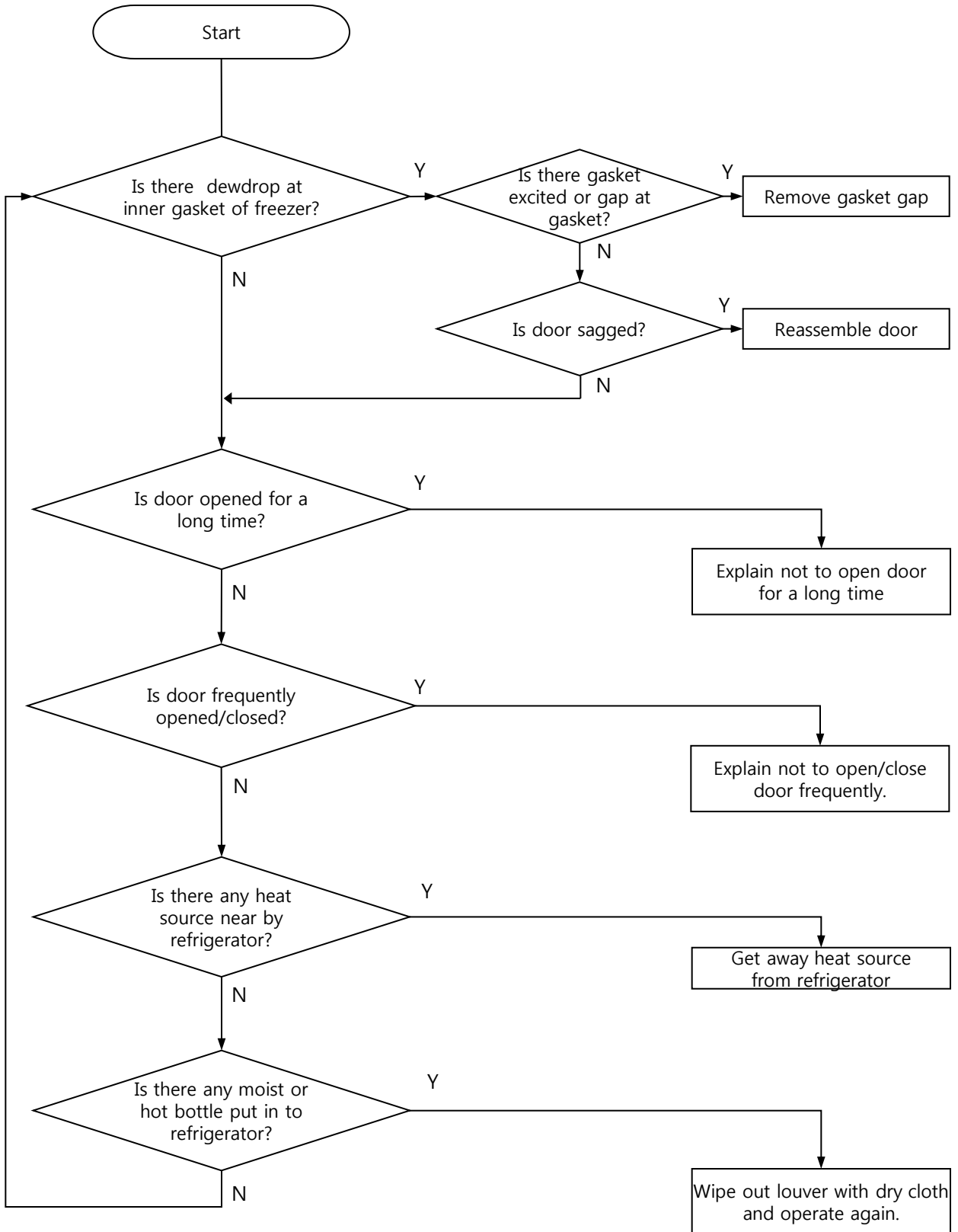
8-2-1. Freezer does not operate / Freezer is weak in performance. (Food stuff become melting / food stuff does not freeze quickly)



8-2-2. Refrigerator does not operate / Refrigerator is weak in performance. (Food stuff is not cool / food stuff does not cool quickly)



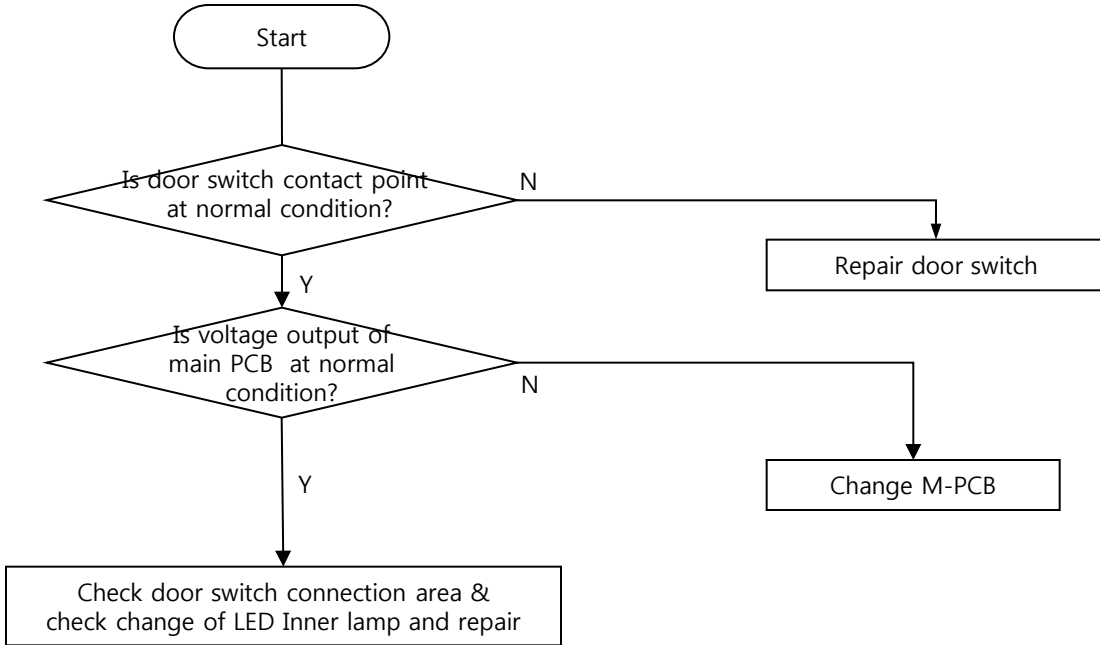
8-3. Freezer louver becomes freezing.





8-4. Inner lamp is disconnected.

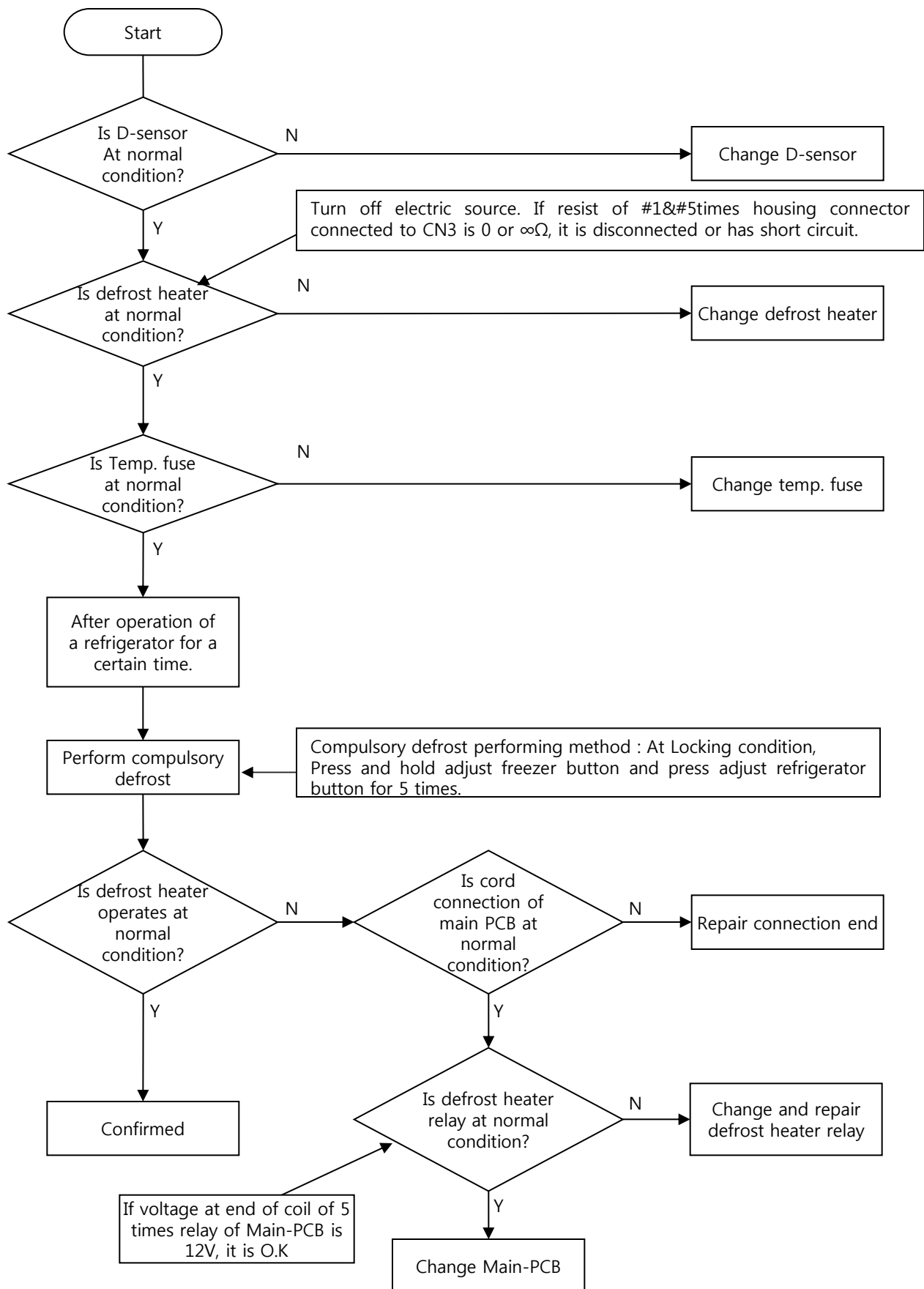
8-4-1. Freezer/Refrigerator Inner lamp is disconnected. (LED LAMP)



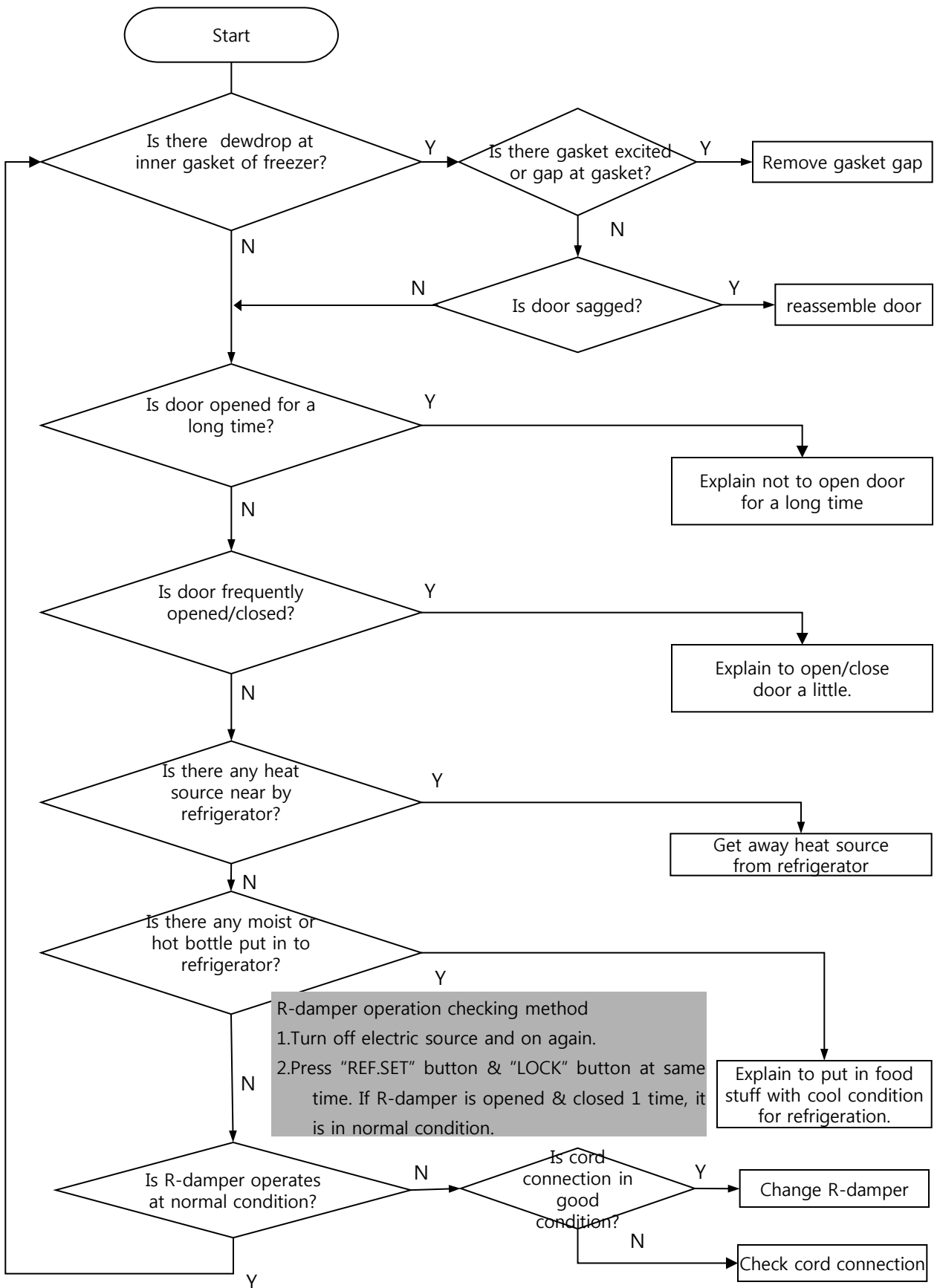
Reference

- Refer inner lamp (LED) & door switch disassembly method

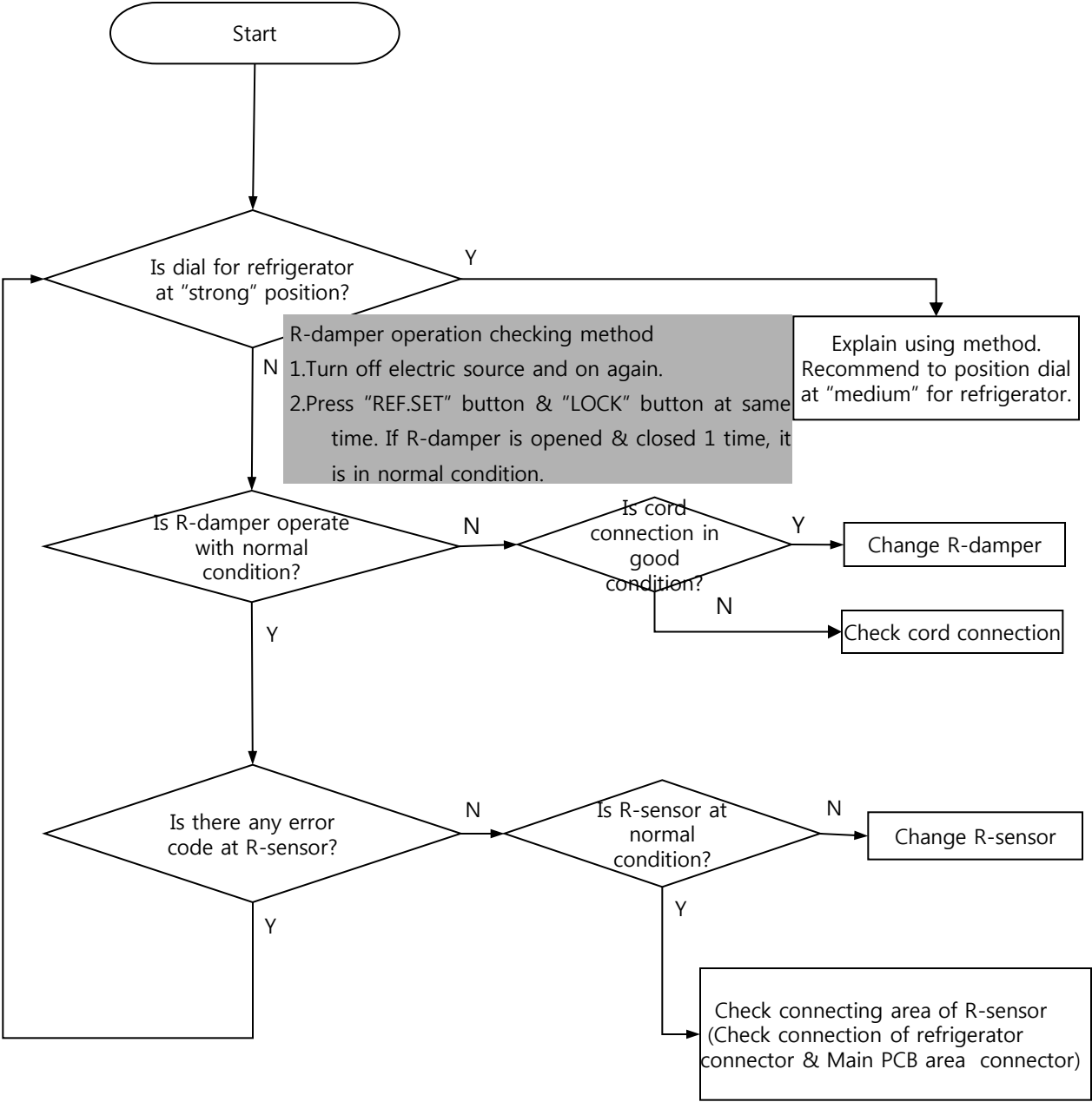
8-5. In case defrost does not operate.



8-6. Dewdrops inside of refrigerator.

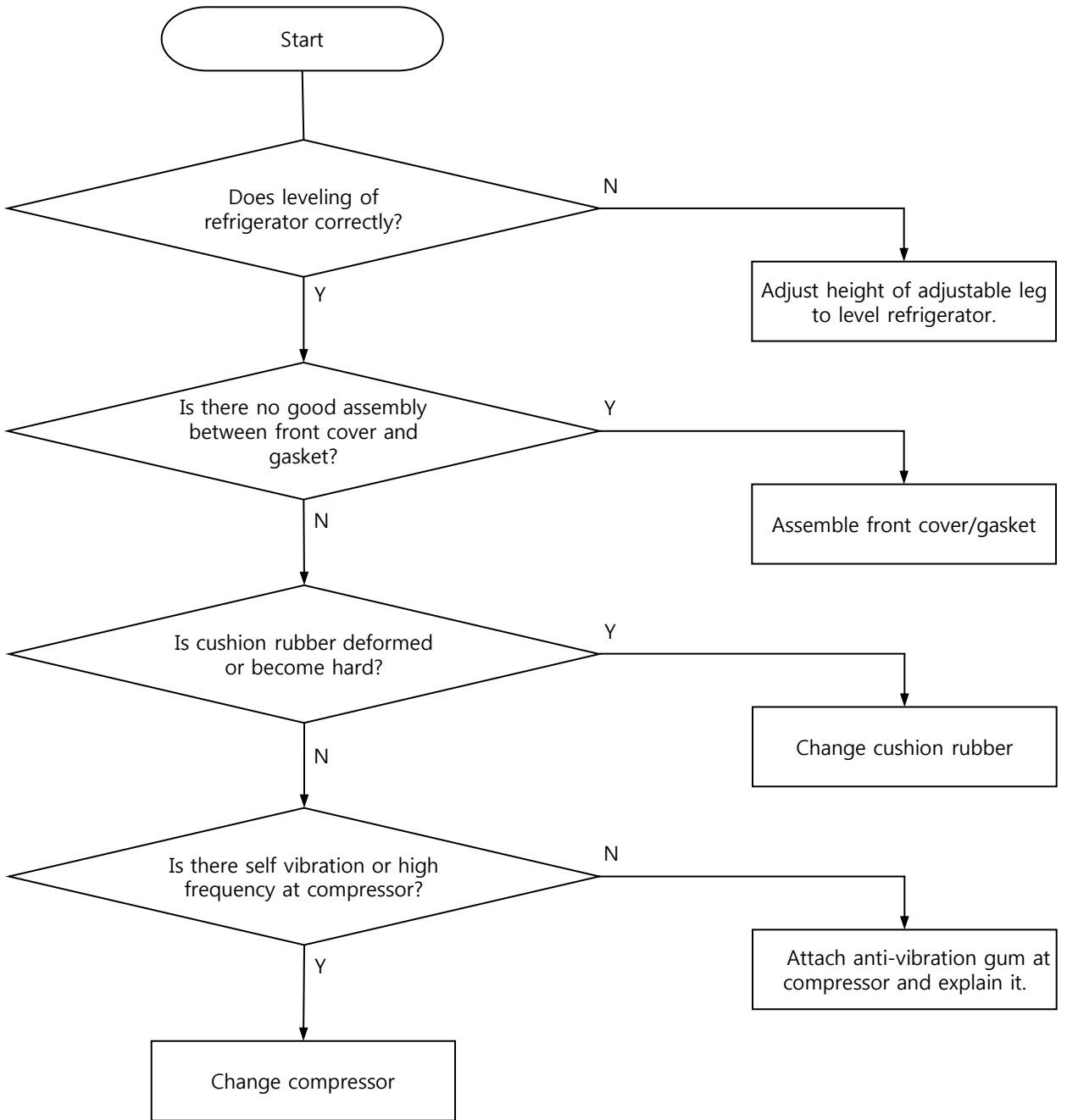


8-7. Vegetable chamber is overcooled.



8-8. Noise

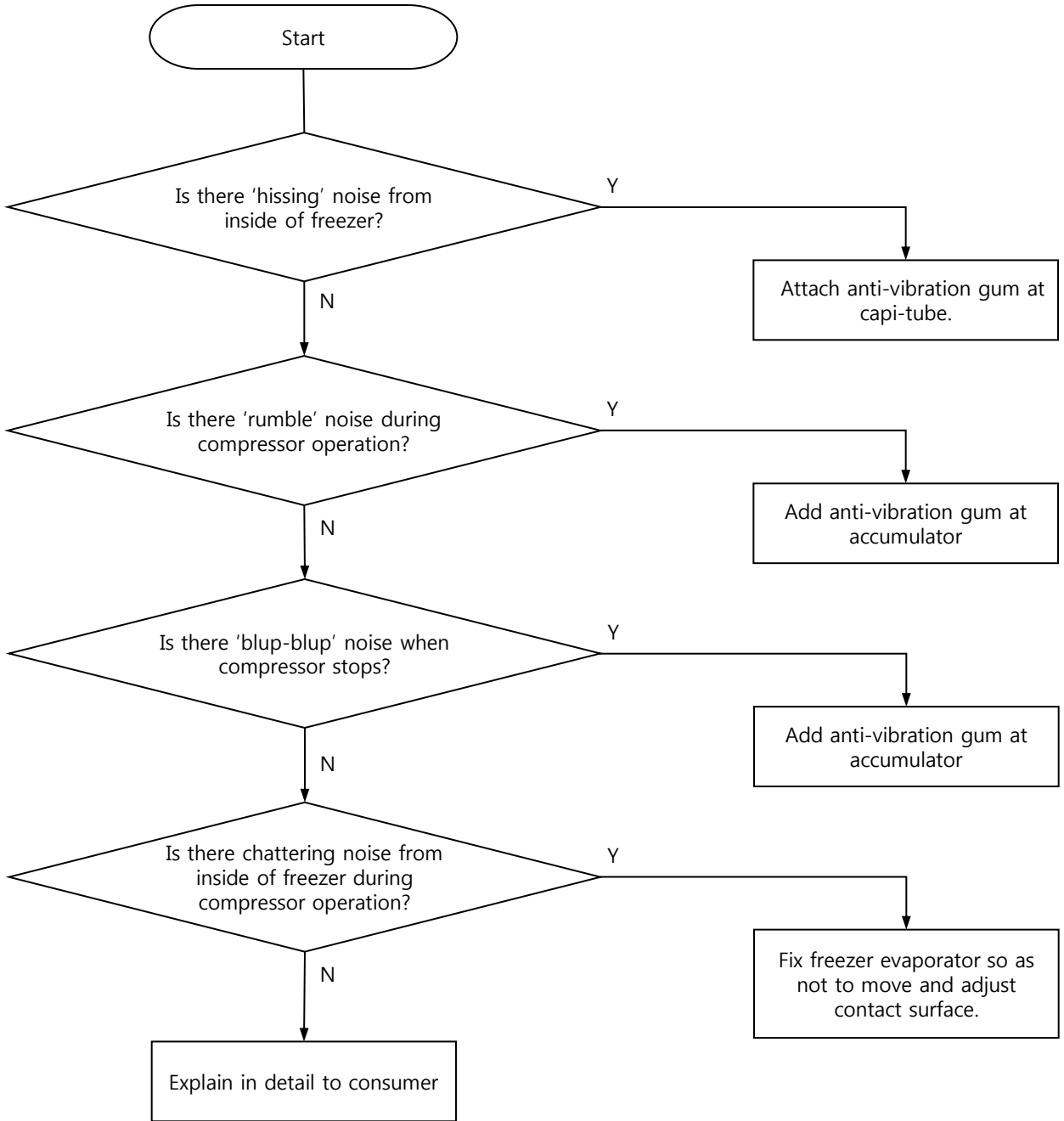
8-8-1. Compressor noise.



Reference

- There is noise from compressor during operation because compressor operates with high RPM to circulate refrigerant.
- There may thud noise by vibration of motor or piston when compressor starts or finishes operation.

8-8-2. Refrigerant flow noise.

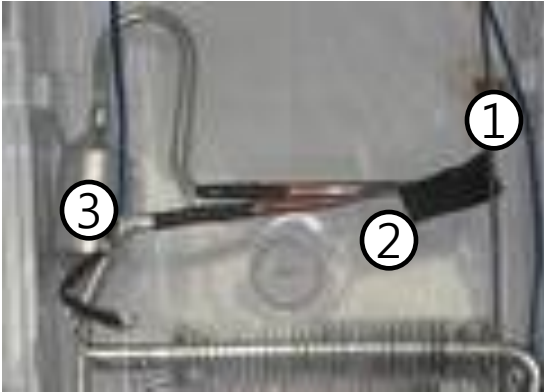


Reference

- It is at normal operation condition when there is flow noise of refrigerant during compressor operation or "blup-blup" noise when compressor stops because it is refrigerator cycle to change refrigerant from fluid to gas.

## Repairing method when there is noise from evaporator.

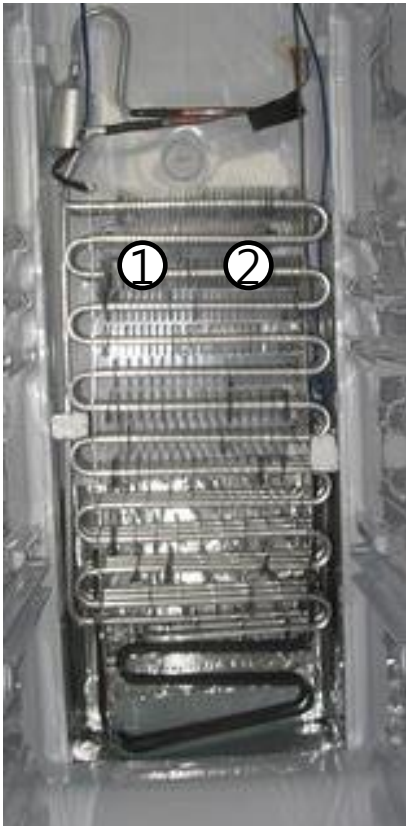
1. When there is 'hissing' noise from capi-tube:



- 1)'I' tube is used to connect capi-tube and evaporator and there is 2 welding point at ① & ② to connect capi-tube & evaporator.
- 2) When there is injection noise, attach anti-vibration gum longitudinally so that ①, ② can be wrapped completely.

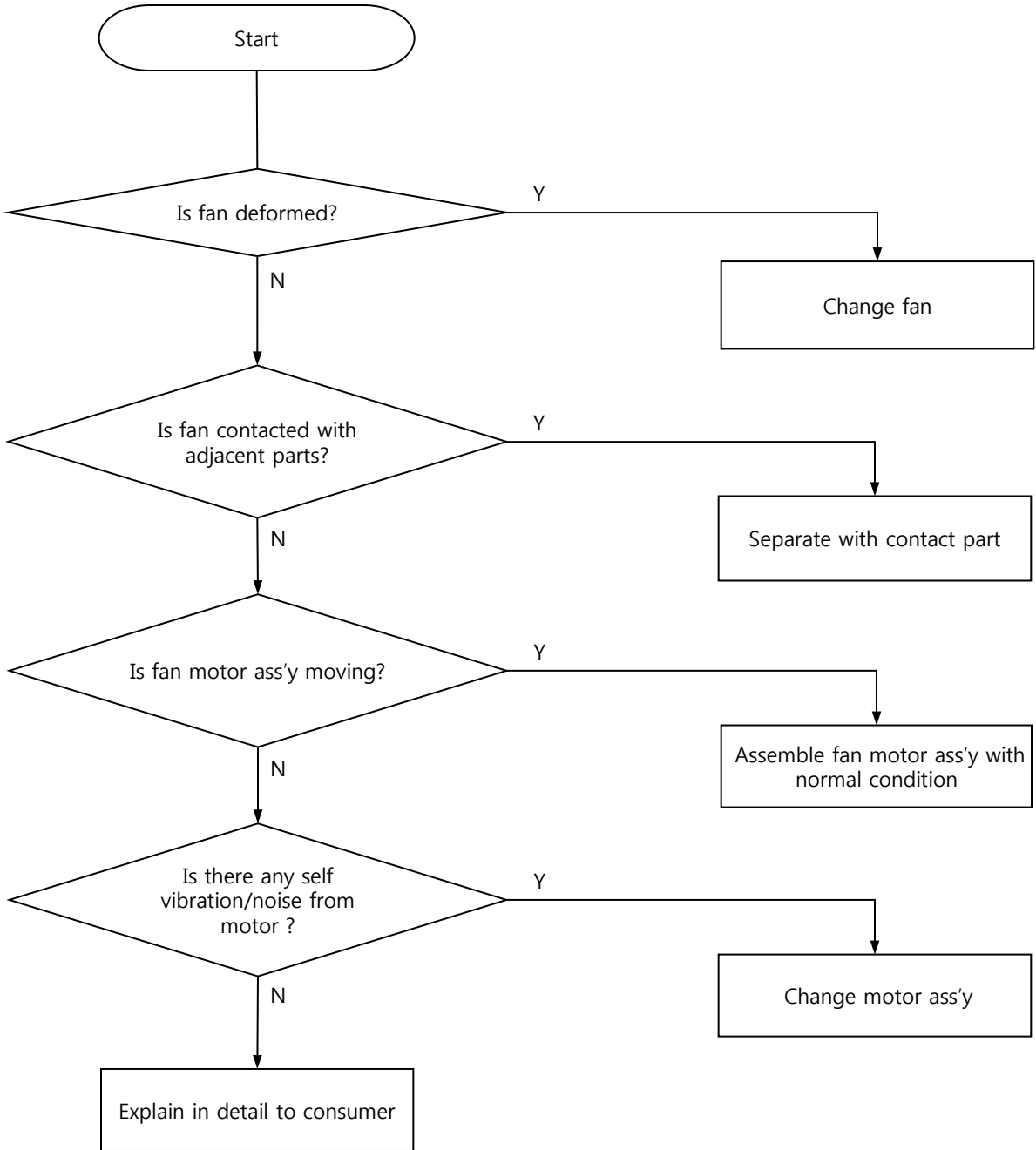
2. When there is 'rumble' or 'blup-blup' noise from accumulator:  
Add anti-vibration gum at ③ area of above picture.

3. When there is chattering noise from evaporator:



- 1) There is fixture at ①, ② to fix evaporator. It shall be assembled so as to be closed normally.
- 2) Fix using styrofoam etc between right/left side of evaporator and inner part so that there is no shaking.

8-8-3. Fan Noise.



Reference

- Noise from louver or wall is in normal condition because wind coming out from fan to make smooth circulation of cooling air inside of refrigerator.



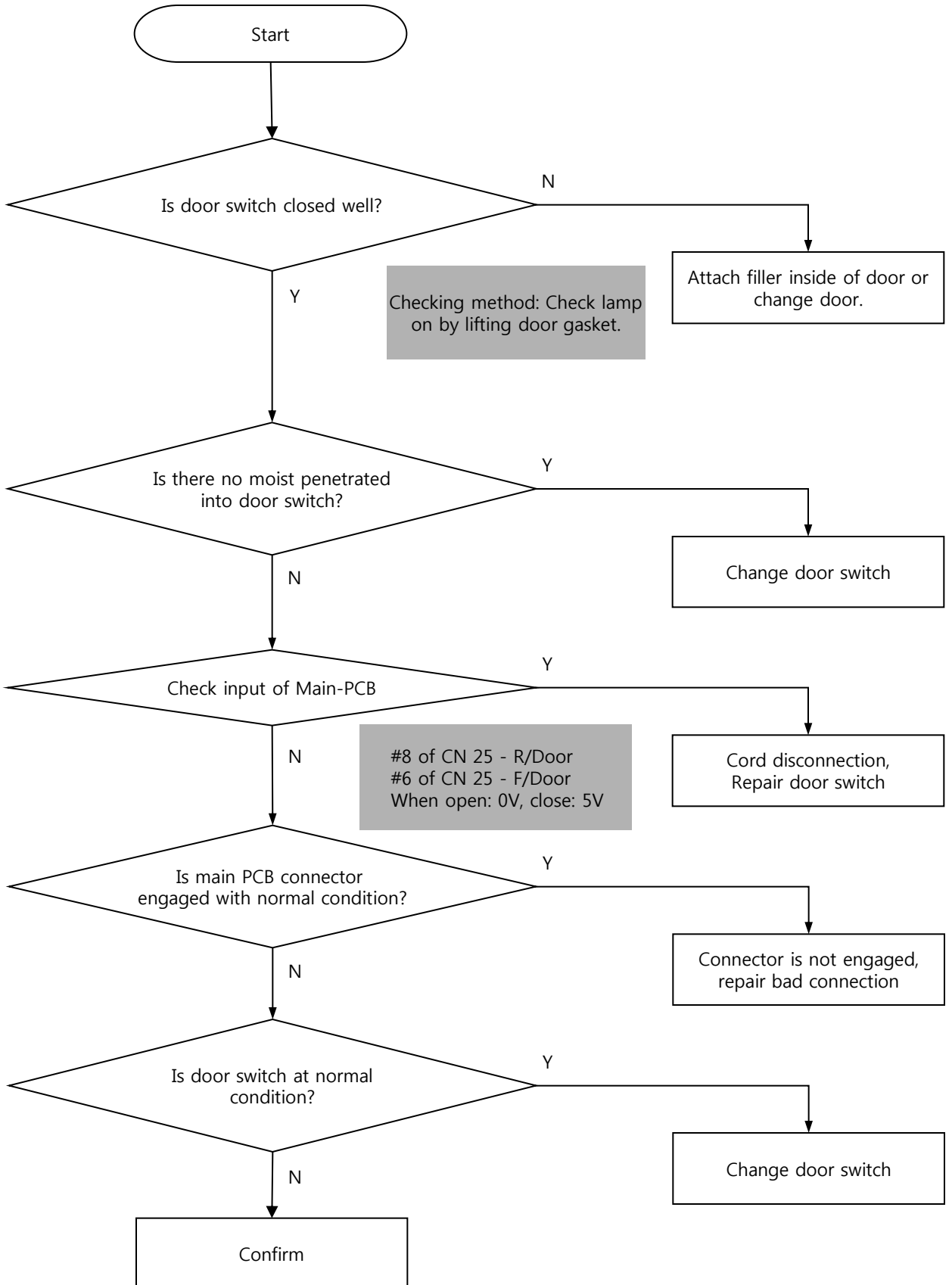
8-8-4. Pipe chattering noise / interference noise.



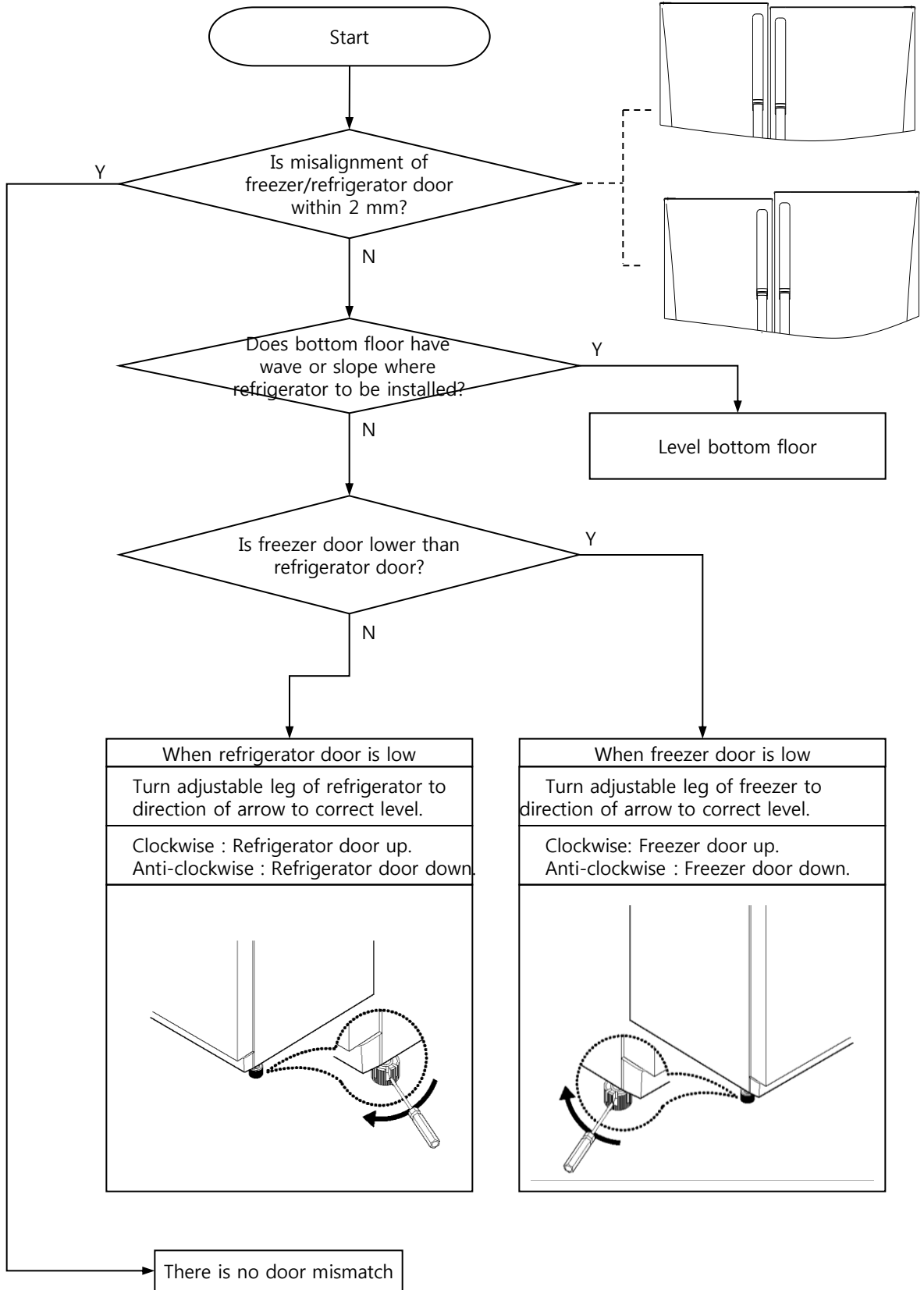
- Reference
- There may be vibration from pipes because of discharging of circulating refrigerant by high pressure.
  - It is better to attach anti-vibration mass at severe pipe bending area or welding area between pipe and compressor when vibration is transmitted to pipe from compressor.

8-9. Door part

8-9-1. Alarm noises continuously when door is closed. (Alarm noise with 1 minute interval for 5 minutes)



8-10. Adjusting freezer/refrigerator door mismatch.



## 8-11. Repairing method of refrigerator cycle.

## 8-11-1. Checking method of trouble. (Freezer/refrigerator does not operate)

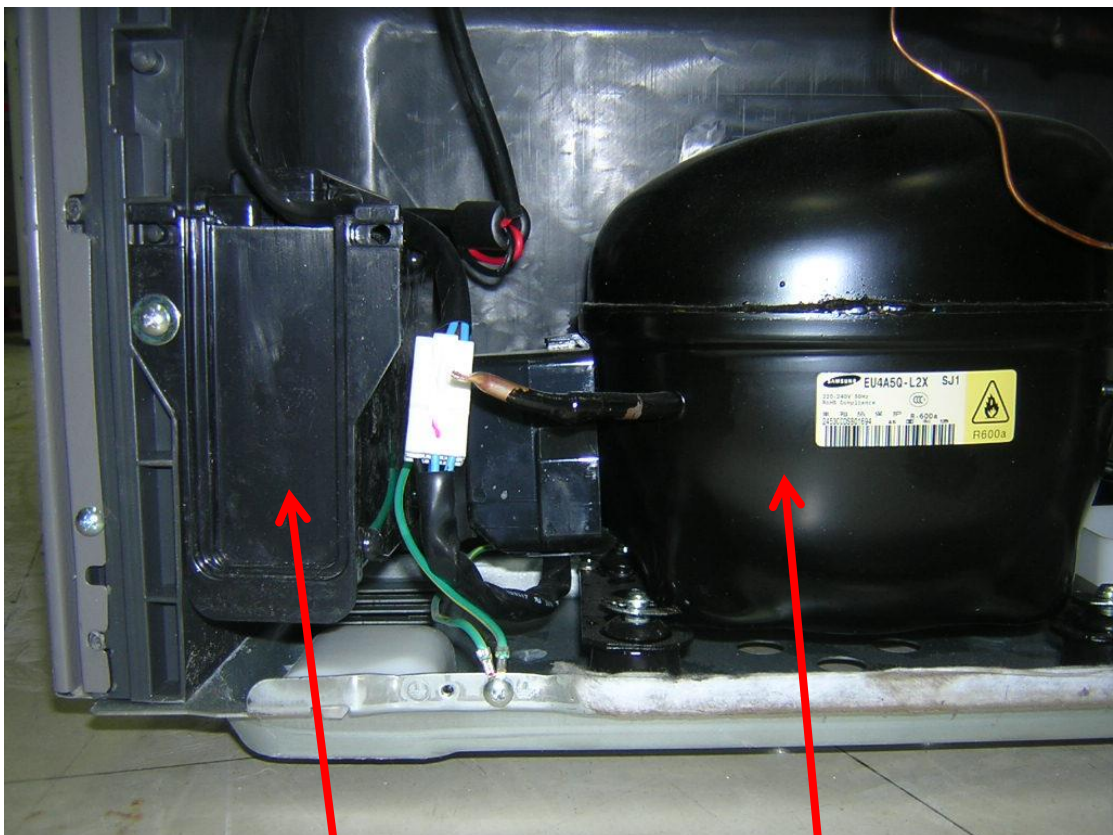
- 1) Check heat radiation from compressor discharge area (aux. comp) during compressor operation. It depends on condition but shall be higher than surrounding temperature. It is easy to stop operation of compressor and check heat radiation after operating compressor.

When there is no heat radiation, it does not mean only for gas problem, but one of followings:

- a) GAS leakage.
  - b) CYCLE clogged.
  - c) Malfunction of compressor itself.
- 2) For the more accurate diagnosis, check temperature of inlet/outlet of radiator during compressor is in operation.
    - Normally, inlet temp. of radiator:  $-25^{\circ}\text{C} \downarrow$ , outlet temp. of radiator:  $-20^{\circ}\text{C} \downarrow$ . (Different according to condition)
    - When, inlet temp. becomes down but outlet temp. is not down, it means lack of refrigerant due to gas leakage. But, it needs to check whether temp. does not become down even if freezer, refrigerator is operated with "strong", "strong" position fully.
  - 3) When it is decided that there is malfunction according to above checking method, review according to following sequence to make correct repair.
    - a) Operates compressor for 2~3 minutes and stop operation.
    - b) Cut outlet capillary tube of a dryer.
      - When, there is no refrigerant gas injection: CYCLE clogging or gas leakage.
      - there is refrigerant gas injection : Lack of gas or malfunction of compressor itself.  
(Discharge malfunction)
    - c) Perform nitrogen blowing to check clogging.
      - (Blowing pressure to be more than  $6 \text{ kgf/cm}^2$ )
      - Direction of blowing is to blow nitrogen from low pressure side of compressor and check discharge to capillary tube or outlet of hot-pipe.
    - d) To check malfunction of compressor (Discharge malfunction) itself, operate compressor and check discharge pressure from discharge pipe.
      - In this case, there shall be over  $20 \text{ kgf/cm}^2$  (Different in condition) for normal condition.
      - When there is no pressure gauge available, discharge pressure shall be such as it can not be blocked by hand.
    - e) To make decision of gas leakage, cut capillary tube at outlet of dryer and when there is no injection of refrigerant, check clogging and if there is no clogging, it is gas leakage.
      - To find out leakage area, basically it is used leakage inspector before braking cycle (With refrigerant sealed inside) or find out visually by checking oil from pipes or welding area.
      - After braking cycle, checking is done by using high pressure nitrogen injected inside of cycle to make  $0.001 \text{ kgf/cm}^2$  pressure and soap bubble.

## 8-11-2. Repairing method per symptom and cautions.

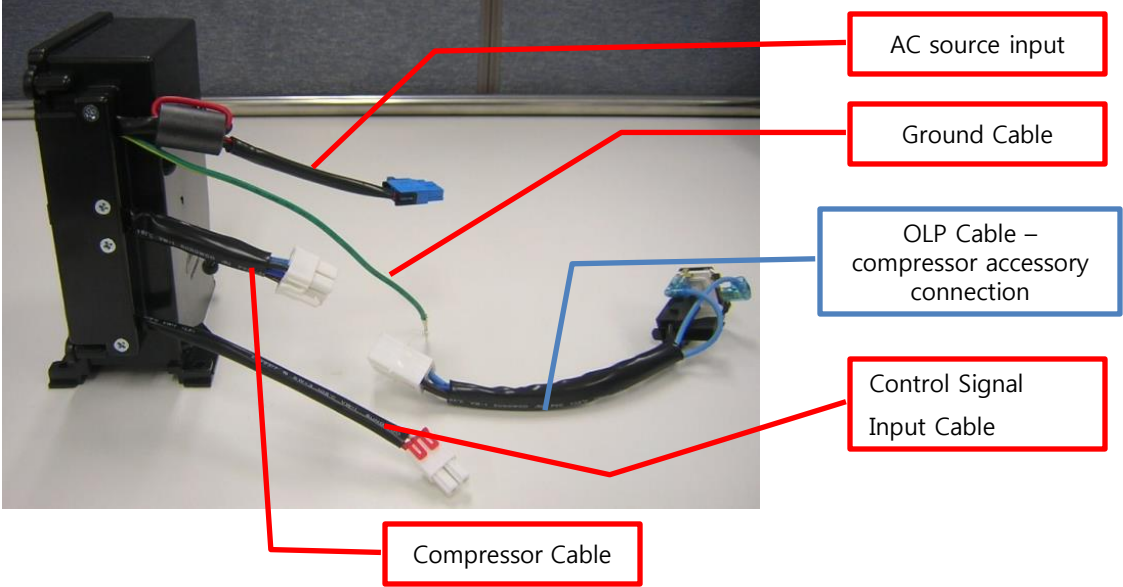
- 1) When there is no problem at temperature control area and freezer & refrigerator does not feel cool at all, it can be considered as gas leakage or malfunction of compressor.
  - When compressor operating continuously more than 2 hours or freezer/refrigerator is out of order for cooling, check gas leakage for pipes and when there is no leakage, it is considered as malfunction of compressor and change compressor.
  - But) If high pressure pipe becomes hot so that it can not touch by hand when compressor operates more than 3 minutes, compressor is in good condition.
    - When it does not have above symptom ( compression malfunction), find out gas leakage area (Welding area) and perform welding, vacuum and charge gas.
- 2) Out of ordered compressor.
  - Operates compressor for under 3 minutes and stop. (Freezer cycle is clogged)
    - Trace clogged area and Disassemble, vacuum, charge gas.
  - Check connection of electric source (Electronic PCB connection area) and connect it again or fix it completely.
  - Check connection of electrical parts. (Compressor relay, condenser of PCB side)
  - When checking compressor motor, check resistor of compressor terminal.
- 3) Checking method of malfunction of compressor.
  - 3-1) Connect inverter and compressor.



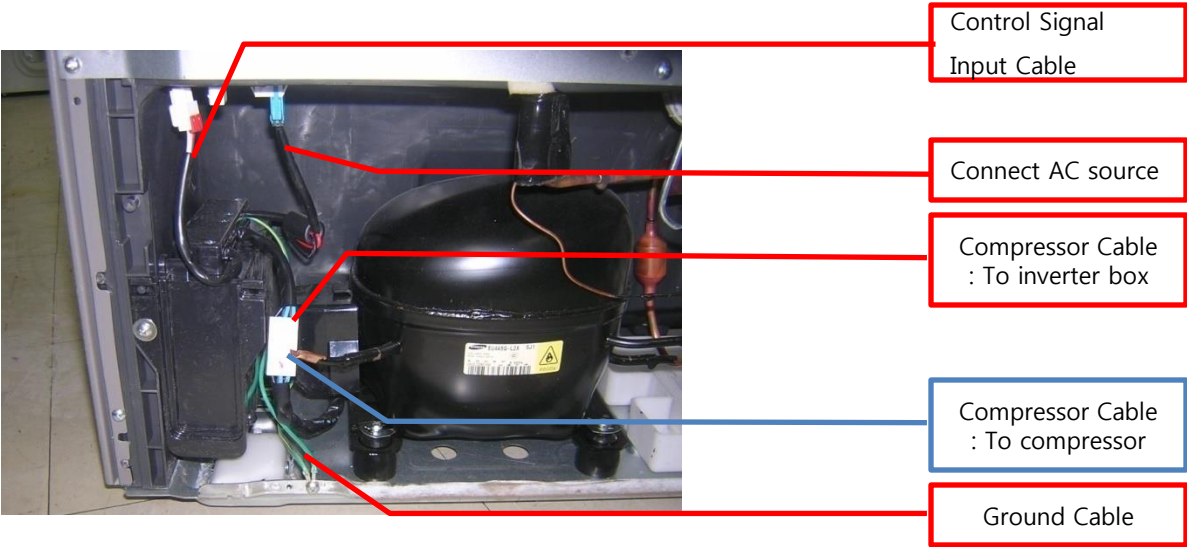
INVERTER BOX

COMPRESSOR

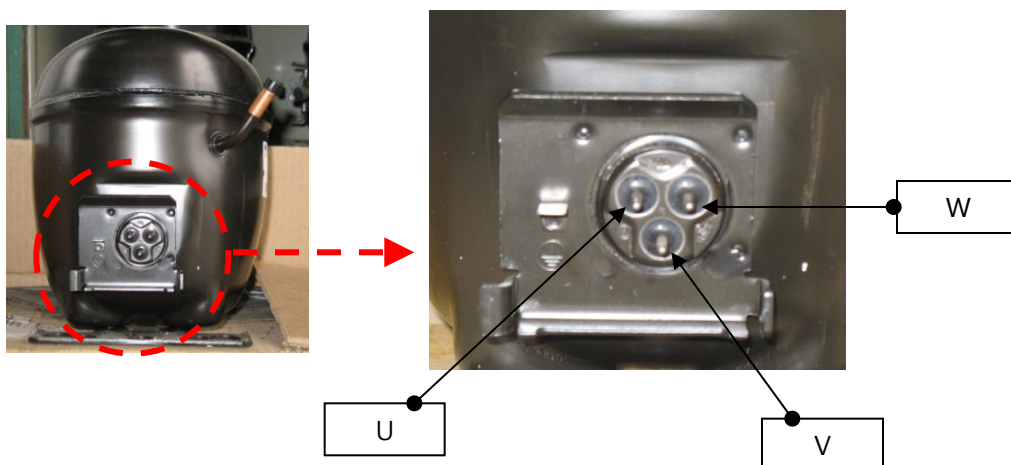
● Inverter box wire connection



● Connect inverter box and compressor



## 3-2) Check method for compressor terminal of compressor malfunction.



### ● Check method for COMP or Resistor value

- > V phase Resistor value = W phase + U phase
- > W phase Resistor value = V phase + U phase
- > U phase Resistor value = W phase + V phase

- => Normal phase : W, V, U phase Resistor value is coincided.
- => Abnormal phase : W, V, U phase Resistor value is not coincided.

Average resistor value ( Measured at room temp.)		
V phase (Ω)	W phase (Ω)	U phase (Ω)
8.5 ±0.1	8.5 ±0.1	8.5 ±0.1

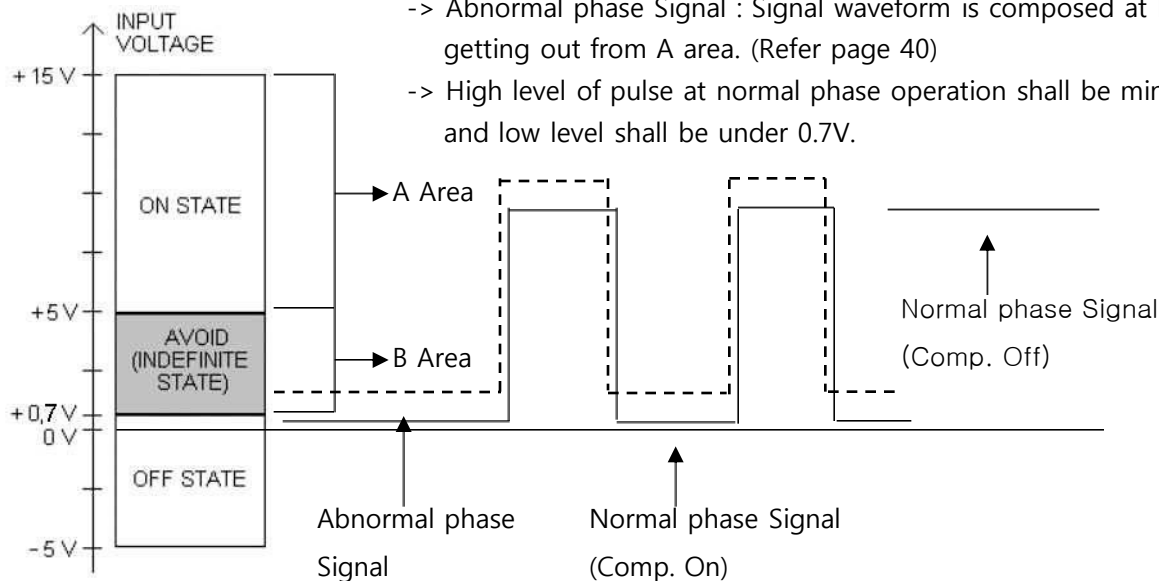
### ● Caution

But, when motor has high temp. (Product) at a coil, higher resistor value shows.  
(When power is connected, there is no problem)











## 3-3) Checking method of inverter input signal

### ● Check waveform of inverter input signal.


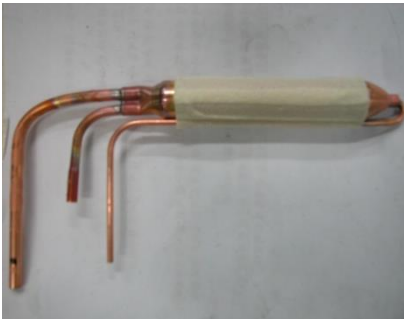
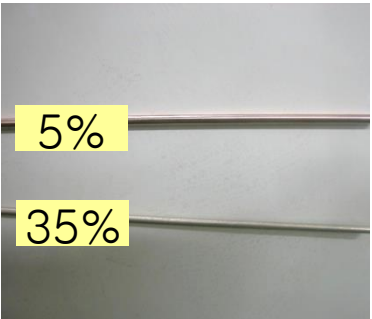
- > Normal phase signal : Signal waveform is composed at A area.
- > Abnormal phase Signal : Signal waveform is composed at B area getting out from A area. (Refer page 40)
- > High level of pulse at normal phase operation shall be min. 5V and low level shall be under 0.7V.



## 8-11-3. Introduction of CYCLE(R-600a) repairing tool set

No.	Equip. Name	Image	No.	Equip. Name	Image
1	Tap Plier		6	Can Adapter	
2	Pinch Plier		7	Vacuum Pump	
3	Electronic Scale		8	Refrigerant Discharge Hose	
4	Gas Leakage Inspector		9	Charging Nipple (For gas injection)	
5	R-600a Refrigerant Can		10	Welding M/C	

## 8-11-4. Parts for repairing CYCLE(R-600a)

1. COMPRESSOR	2. DRYER	3. WELDING ELECTRODE
		



## 8-11-5. Repairing work procedure for CYCLE(R-600a) (Change compressor)

### 1Step. Remove R-600a refrigerant

- Connect refrigerant discharge hose and install it at outside of a window.
- Discharge time: 7 minutes.

### 2Step. Remove residual refrigerant

- Remove residual refrigerant by connecting vacuum pump at end of discharge hose .
- Discharge time: 10 minutes.

### 3Step. Change comp. dryer, weld pipe

- Change Comp, Dryer
- Weld Pipes
- Cu-Cu : 5% weld
- Cu-St : 35% weld

### 4Step. Weld charging nipple

- Weld charging nipple
- ※Certainly separate nipple cap and gas charge cap and perform welding. (Refer detail content)





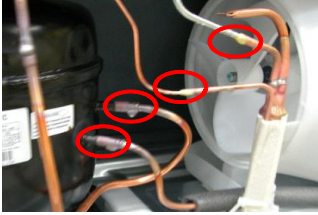

### 5Step. Vacuum

- Connect manifold gauge and check vacuum.
- Vacuum time : 60~80 minutes.

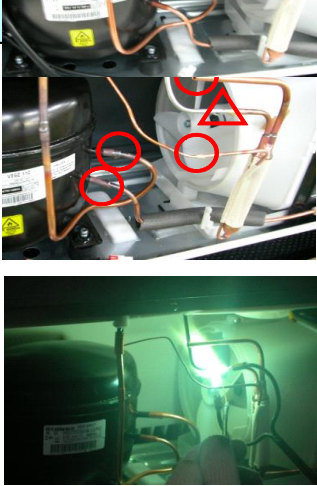



### 6Step. Charge R-600a refrigerant

- Charge refrigerant with refrigerator operating condition
- Charging time : 10 minutes.

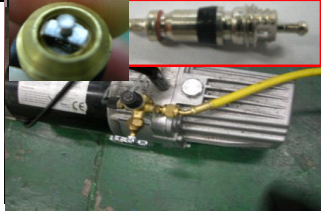



\* Detail description of CYCLE(R-600a) repair

NO.	WORK NAME	WORK FIGURE	WORK DESCRIPTION
1	Pinch plier and connect discharge hose		<ol style="list-style-type: none"> <li>1. Connect refrigerant discharge hose to pinch plier.</li> <li>2. Install the other end of discharge hose to the outside of door.</li> </ol>
2	Pinch plier and fix charging pipe		<ol style="list-style-type: none"> <li>1. Fix pinch plier to compressor charging pipe</li> <li>2. Fix tool so that there is no moving.</li> </ol> <p>※ When there is moving, it may cause fire by inlet of refrigerant in to a room.</p>
3	Discharge R-600a refrigerant		<ol style="list-style-type: none"> <li>1. Discharge R-600a refrigerant to outside of a room. [Before connect to vacuum pump]</li> </ol> <p>※ Perform more than 7 minutes for discharge of refrigerant</p>
4	Discharge residual refrigerant		<ol style="list-style-type: none"> <li>1. When it pass more than 7 minutes, connect vacuum pump at end of discharge</li> </ol> <p>※ Certainly operate vacuum pump at well ventilated outside area</p> <ol style="list-style-type: none"> <li>2. Operate vacuum pump more than 10 minutes to discharge residual refrigerant at pipe</li> </ol>
5	Remove pinch plier and separate pipe		<ol style="list-style-type: none"> <li>1. Separate welding area of del. pipe, suction pipe, capillary tube, dryer &amp; hot pipe</li> </ol> <p>※ Be careful there is no damage to parts by welding flame.</p>
6	Change compressor and dryer		<ol style="list-style-type: none"> <li>1. Change compressor, dryer</li> </ol> <p>※ Necessarily check compressor spec. per model and use same compressor</p>

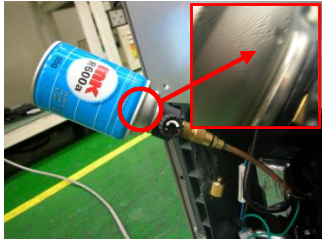


\* CYCLE(R-600a) phase세 수리 Step

NO.	WORK NAME		WORK DESCRIPTION
7	Welding		<p>1. Weld connection area of del. Pipe, suction pipe, capillary tube, dryer &amp; hot pipe</p> <p>※ ○ Cu. &amp; Cu. Weld - 5% Weld            ▲ Cu. &amp; St. Weld - 35% Weld</p>
8	Disassemble charging nipple		<p>1. Separate charging nipple cap and separate inside valve ass'y</p> <p>※ Inner rubber melt if perform welding without separating inside valve.</p>
9	Weld charging nipple		<p>1. Insert charging nipple to compressor and perform welding</p> <p>※ When perform welding, wrap parts inside of machine room with wet clothes :</p>
10	Assemble charging nipple & connect manifold gauge		<p>1. Insert charging nipple valve ass'y and assemble it by rotating clockwise.</p> <p>2. Fix blue hose of manifold gauge at charging nipple and connect yellow hose to vacuum pump.</p> <p>3. Open lever of blue gauge and operate vacuum pump.</p>

\* CYCLE(R-600a) phase세 수리 Step

NO.	WORK NAME	WORK FIGURE	WORK DESCRIPTION
11	Vacuum		<p>1. Make inside of cycle vacuum by operating vacuum pump.</p> <p>※ Surely perform vacuum for 60~80 minutes =&gt; When perform vacuum within 60 minutes performance to be weak and cause of light</p>
12	Check vacuum		<p>1. Check whether gauge scale reach to -76cmHg.</p> <p>※ If it is not possible to make vacuum it has a leakage problem.</p>
13	Adjust R-600a can refrigerant quantity		<p>1. Measure weight of R-600a can refrigerant at electronic scale and discharge all</p> <p>※ Perform discharge of residual refrigerant at well ventilated out side.</p> <p>※ Adjusting method of refrigerant quantity</p> <ul style="list-style-type: none"> <li>- Can weight: 160g(Bottle75g+Refrigerant85g)</li> <li>- Adapter weight : 145g</li> </ul> <p>=&gt; Total weight : 305g</p> <ul style="list-style-type: none"> <li>- Refrigerant charging quantity: 79g(6g discharge)</li> </ul> <p>=&gt; Total can weight shall meet 299g</p>
14	Connect charging nipple & connect adapter		<p>1. Connect can adapter to charging nipple</p> <p>2. Open adapter lever slowly and charge refrigerant</p> <p>※ Careful for connection so that there is no leakage</p>

\* CYCLE(R-600a) phase세 수리 Step

NO.	WORK NAME	WORK FIGURE	WORK DESCRIPTION
15	Charge refrigerant		<p>1. Connect electrical source to refrigerant and charge refrigerant approx. 10 minutes</p> <p>※ Charge refrigerant so that there is no dew around can charging area</p>
16	Check leakage of welding area		<p>1. Check leakage around welding area using gas leakage inspector</p> <p>※ When there is gas leakage, work again start from No.1</p>
17	Finish work		<p>1. When repair work finished, remove foreing matter arounc machine room and finish work.</p> <p>2. Assemble machine room cover</p>

## 8-11-6. Caution when repairing CYCLE(R-600a)

Item	Caution
refrigerant R-600a characteristic	1) R-600a refrigerant is natural gas of refrigerant(C4H10) with no harmful. 2) R-600a refrigerant is a kind of butane gas and when discharged to atmosphere with adequate concentration, there is danger such as fire or explosion. 3) It need very careful caution during repairing CYCLE.
CYCLE repairing area & environment	1) Check working area whether it has good ventilation and air flow 2) Necessarily use refrigerant collection bag when work at room. 3) Check and remove fire or heat source around work area. 4) Never discharge refrigerant at room because it is flammable. 5) Surely follow instruction procedure of SVC during repair.
Using tools	1) Use special tools and parts for R-600a refrigerant for refrigerator.
Removing residual refrigerant	1) When discharge residual refrigerant, necessarily disconnect electric source of refrigerator and remove refrigerant 5 minutes after disconnecting electric source . 2) When discharge refrigerant, first cur high pressure side and then cut low pressure side. 3) When dryer is clogged, cut capillary tube to discharge refrigerant.
Change dryer	1) When charging refrigerant or repair piping, necessarily change using dryer for R-600a.
Nitrogen blowing welding	1) When welding, perform nitrogen blowing with constant 2) Pressure to protect oxidized scale. 3) (Nitrogen pressure:0.1~0.2 kgf/cm <sup>2</sup> )
Others	1) Use nitrogen gas to clean inside of cycle piping. 2) Check leakage using electronic leakage tester. 3) Necessarily use pipe cutter when cutting pipe. 4) Be careful there is no moist penetrate in to cycle. 5) When discharge refrigerant, never use welding machine or fire. 6) Never perform repair by the person without finishing training course for R-600a. 7) Make sure correct ventilation during repair. 8) Check leakage test surely after repair. 9) Never apply welding or flame after charging refrigerant.

## 9. How to take action against Unsatisfied Quality of Sensitivity

### 9-1. Temperature

Consumer Unsatisfied Content	Explanation and Action
Refrigeration is not possible.	Normally a refrigerator is delivered with 'medium' position and inner temperature of a refrigerator can be changed according to the condition and environment of consumers. Some consumers complain even for the change of dial position. In this case, we can not meet taste of all consumers and explain that refrigerator is set to typical temperature and designed so as to change temperature by dialing according to taste of a consumer.
Fish stored at meat storage room becomes melt.	Meat storage room is a storage room for fish and meat to consume it within 1~2 days and sustains temperature range which is not suitable for a long time storage of fish or meat. In this case, explain to store fish or meat at freezer.
Refrigerator is weak in performance compare with previous one and does not feel cool than neighbor's one.	It is because of feeling difference of a consumer according to large size refrigerator if previous one is a small size or mechanical type. Especially when storing period of food stuff is not becomes short, it is because of difference of feeling. Recommend to change dial to 'strong' position.
Water stored at refrigerator does not feel cool.	Normally water is stored at a door pocket and when cooling air flow is blocked, cooling air flow to the door pocket may not smooth. In this case recommend to move food stuff stored at nearby of cooling air discharge port.
Ice cream becomes melt.	The freezing point of high grade ice cream to be down and normally ice cream becomes freeze under $-13^{\circ}\text{C}$ . So, when open/close door of freezer frequently, ice cream may be melt. Recommend to change ice cream storage area at inside of freezer or change dial to 'strong' position.
Kimchi becomes freeze.	Kimchi is easy to be frozen when temperature is low because it contains lots of water. When storing Kimchi, store Kimchi at a place away from cooling air discharge port. Especially when large size box such as Kimchi box blocks cooling air discharge port, temperature such as pocket may be raised.
Vegetable becomes freeze.	Vegetable is easy to be frozen even for a small quantity of cooling air flow because it contains lots of water. So, it is easy to be frozen when vegetable is not stored at vegetable storage room.
Refrigeration is strong.	When water or food stuff stored at refrigerator becomes freeze recommend to change dial to 'light' position and when only food stuff stored in front of cooling air discharge port becomes freeze, recommend to move it to the other places away from cooling air discharge port .

9-2. Noise

Consumer Unsatisfied Content	Explanation and Action
'Whiz' noise	<p>There is noise generating source at refrigerator such as compressor, cooling fan and fan at machine room.</p> <ul style="list-style-type: none"> <li>- Cooling fan</li> </ul> <p>In case for a freezer, there is a freezer fan and the function of this fan is to circulate cooling air inside of freezer. When cooling air flows through a narrow path, there may be wind blow noise or vibration noise. Also, when open/close door of a freezer or put in food stuff inside of a freezer, a fan operates at high speed to drop down inside temperature and noise level may be goes up.</p> <ul style="list-style-type: none"> <li>- Machine room fan</li> </ul> <p>There is a fan at machine room to cool down machine room which is located at back side of a refrigerator. When move a refrigerator in close to a wall surface, restriction of air flow generates and 'whiz' noise becomes high.</p> <ul style="list-style-type: none"> <li>- Compressor</li> </ul> <p>The largest noise source at a refrigerator is a compressor and it operates with high revolution at 3,600RPM to circulate refrigerant.</p>
'tuk-tuk' noise from refrigerator.	<p>It is a noise because of shrinkage, expansion of parts according to change of inner temperature of internal evaporator and pipes when a refrigerator operates.</p>
Water flow noise from refrigerator.	<p>It is a noise because high pressurized refrigerant at condenser flow into evaporator when a refrigerator stops operation.</p>
Rumbling noise from refrigerator.	<p>It is a noise because vaporized refrigerant which comes from oil collection hole pass through liquid refrigerant which is accumulated at evaporator accumulator when a refrigerator stops operation.</p>
Rattle, thud noise from refrigerator.	<p>There is a compressor at a refrigerator and when this compressor starts/stops operation, there is thud noise because of vibration of motor and piston.</p>
'zing' noise from refrigerator.	<p>Normally 'zing' noise comes when pipes contact each other. Separate pipes or insert anti-vibration rubber to get rid of vibration.</p> <p>When noise comes because of evaporator plate is not fixed or part of evaporator plate contacts with compressor base, protect vibration by applying sealing material etc.</p>
	<p>When level is not done adequately during installation of a refrigerator, noise may be expanded even though for a small noise, adjust level adjusting thread so that refrigerator shall not move.</p> <p>There may noise become grow by vibration when install a refrigerator at wooden floor or wooden wall surface.</p>



9-3. Odor, freezer

Consumer Unsatisfied Content	Explanation and Action
Lots of odor from a refrigerator	There are several smell for food stuff. Especially for fermented food stuffs which are famous for Korean, it have unique smell and can not remove smell even though by deodorant. When odor becomes strong, set inner temperature of a refrigerator to 'strong' position and wipe inner surface of a refrigerator thoroughly using detergent such as 'Pong-Pong'. Especially when cap of bottle of pickled food stuff or Kimchi is opened or spilt over rack etc, odor may be generated terribly. Explain to consumer that it need to be cleaned periodically for a refrigerator.
Frost exist at a freezer	In case there are lots of frost generating suddenly, -Door is opened -Gap of a gasket becomes large and external air flow in to freezer -Door of a freezer is opened/closed frequently or -Put hot water in to freezer without cooling down it. And, when open door especially at summer season with lots of humid and high temperature, high temperature and lots of humid air flow into freezer every time when open door of a freezer and stick to food stuffs. But this is a temporary phenomenon and can be solved when reduce using of a freezer.
Frost happen in front of a ice maker.	When pour water at ice maker and put it into a freezer, there arise water vaporization phenomenon at a surface of water and when cooling air flow into here from back side of a cooling air discharge port, frost is generated momentarily.

9-4. Others

Consumer Unsatisfied Content	Explanation and Action
Side of a refrigerator is hot	There is anti-heat radiation pipes to protect dewdrops in front and surrounding of a refrigerator and freezer. Especially for the summer season where room temperature rise up or when refrigerator is installed close to wall surface, side of a refrigerator becomes hot because of bad heat radiation. Make good ventilation around a refrigerator.
There is a small hole at inside of a door of a refrigerator	The reason for a small hole inside of a door of a refrigerator is a air hole to disperse insulation material well inside of a door during insulation process for a door. It is normal case and use a refrigerator without concern.
Door of a refrigerator does not opened easily	When open door of a refrigerator, cooling air from inside of a refrigerator and hot air from outer side meet and in this case volume of inner air of a refrigerator becomes small and create negative pressure momentarily. This is a same principle when hot water PET bottle is stored at a refrigerator, PET bottle becomes crushed and this phenomenon is normal case for a refrigerator.
Door of a refrigerator is jiggled.	Doors of a freezer and refrigerator of a refrigerator is opened each other and when close a door of a refrigerator, air flow in to a refrigerator move to the other chamber through connecting passage and air volume over the volume of a refrigerator flow out from a refrigerator.

## 10. Disassemble/assemble method for each parts

※Assemble method is a vice versa of disassembling sequence

### 10-1. Inner lamp changing method

#### Freezer LED changing



Separate back side of a LED cover using (-) driver.



Separate LED cover and loosen 2 fixing screws for LED plate.



Disconnect harness of LED plate and change LED.

#### Refrigerator LED changing



Same as disassemble of a freezer.



Same as disassemble of a freezer.



Same as disassemble of a freezer.

#### Dispenser Type Freezer LED changing

◆ Separate Geared-Motor Box. (Refer 'Geared-Motor separation' part)



Separate back side of a LED cover located at bottom of Geared-Motor Box using (-) driver.



Separate cover and loosen 2 fixing screws for LED plate.



Disconnect harness from LED plate and change LED.

10-2. Ice maker/ Geared-Motor changing method

Ice maker changing



Pull bottom of a ice box and separate ice box from a freezer.



Grip bottom of a ice maker cover and pull it to separate from a freezer.



Loosen 2 fixing screws at roof of a freezer and pull a ice maker toward forward direction to separate it.



Disconnect harness connected to a ice maker and separate ice maker from a freezer.

Geared-Motor changing

◆ Separate ice maker.



Disconnect 2 kinds of harness which is connected with a Geared-Motor box at upper part of a freezer.



Loosen 4 fixing screws for a Geared-Motor box.

10-3. Freezer cooler area changing method

- ◆ Pull out food stuffs and rack inside of a freezer

Separate cooler fan cover – Dispenser Model

- ◆ Separate ice maker & Geared-Motor box.



Separate heater housing for water supply pipes.



Loosen fixing screw for a fan cover of a cooler.



Separate cover & water supply port (silicon rubber) by loosening screw at cover of a water supply pipe at back side of a refrigerator.



Grip cooling air discharge port at fan cover of a cooler by hand and separate it from lock.



Push back a water supply pipe located at back side of a freezer and go to back side of a refrigerator and pull out a water supply pipe.



Lift up right side of a cooler fan cover to forward direction and tilt it to disconnect and pull out fan harness located at left side of a cooler fan cover.



Remove screw cap of a fan cover located at upper rear side of a freezer.



Separate fan cover of a cooler.



Cooler fan cover separation – Basic Model



Remove screw cap of a cooler fan located at rear upper side of a freezer.



Lift up right side of a cooler fan cover to forward direction and tilt it to disconnect and pull out fan harness located at left side of a cooler fan cover.



Separate fixing screw of a cooler fan cover.



Separate cooler fan cover.



Grip cooling air discharge port of a cooler fan cover and pull it forward direction to separate it from lock.

Cooler fan / Fan motor separation

◆ Separate cooler fan cover.



Loosen 8 fixing screws for a fixture f motor located at rear side of a cooler fan cover.

Separate 11 hooks to separate a fixture f motor.



Pull out fan assembled at inner side of a fixture fan motor to vertical direction. [ Fan separation]

Fan fixing rings are fixed with lock tight. (Kinds of bond)



Loosen 3 fixing screws for fixture f motor B from back side of a fixture fan motor.

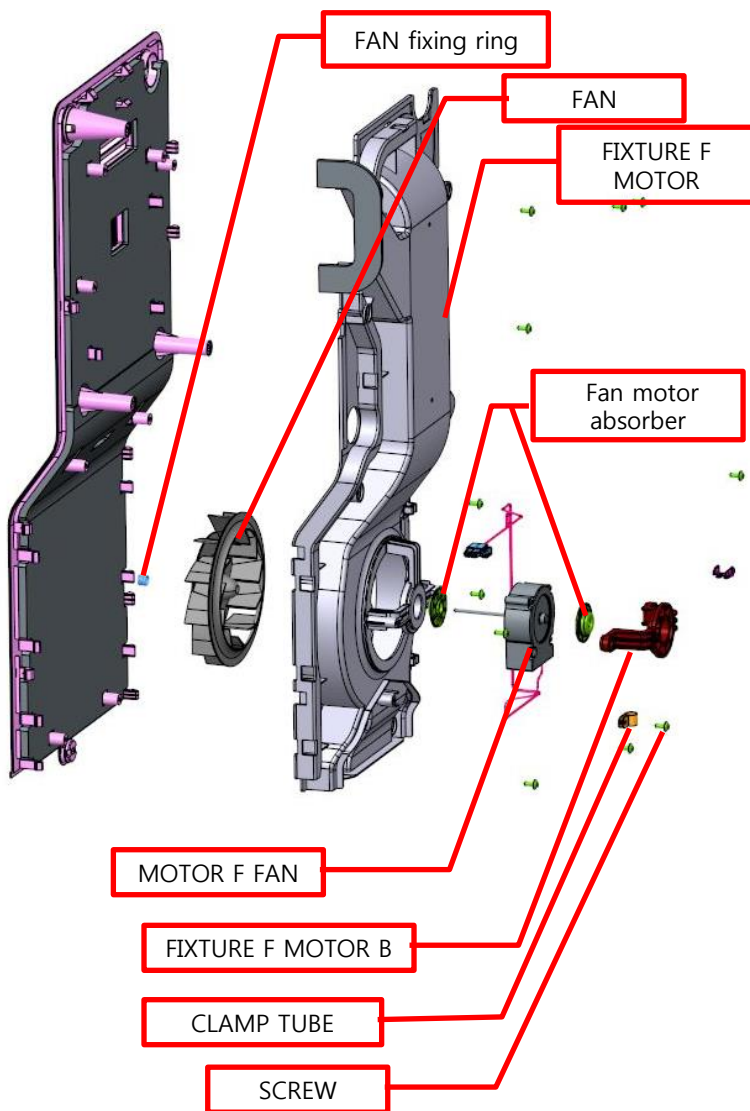


Motor can be separated by separation of a fixture f motor B.

Caution when disassemble/assemble fan & fan motor.

- Assemble motor so that there is no tilt or loosening. ( To prohibit noise generating problem)
- When fixing a fan, fix it using fan fixing rings to protect moving or separation and apply lock tight. (Kinds of bond)
- After fixing a fan, rotates fan by hand to check interference with surrounding parts. When there is interference with surrounding parts, fix fan or motor again.

Disassemble drawing for fan & fan motor



## Cooler front cover separation - Common



Grip upper part of a cooler front cover by hand and pull it forward direction to separate it.



Figure of a freezer room after cooler front cover is removed.

Detail of a cooler(EVA)

cooler(EVA)

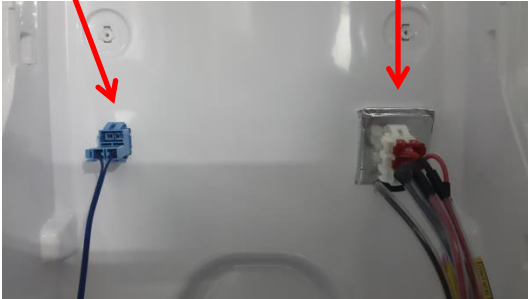


cooler housing connection



D-sensor housing

Defrost heater + temp. fuse housing+ AL pipe heater



D-sensor

Temp. fuse



EVA upper area

Defrost heater



EVA bottom area



10-4. Refrigerator Damper changing method

◆ Pull out food stuffs and rack from refrigerator .

Damper cover disassemble  
(Exterior filter type)



Separate Screw caps(2EA)  
Using (-) driver.



Loosen 2 fixing  
screws for  
Damper cover.



Grip lower side  
of a damper  
cover and pull it  
forward to  
separate it.

Damper cover disassemble  
(Interior filter type)



Remove interior  
filter at right  
side of a damper  
cover.



Separate Screw caps(2EA)  
Using (-) driver.



Loosen 2 fixing  
screws for  
Damper cover.



Grip lower side  
of a damper  
cover and pull it  
forward to  
separate it.

Refrigerator Damper changing

◆ Disassemble damper cover.



Damper is assembled at left side wall of a refrigerator where damper cover is disassembled.



Disconnect harness connected with a damper and pull out a damper.



10-5. Refrigerator switching room changing method

Switching room disassemble



Loosen right, left side screws of a switching room.



Lift up a changing room lightly and pull it forward a little bit and separates a housing and then separate a changing room.

Switching room damper disassemble

◆ Disassemble switching room



Loosen a screw of a damper cover assembled at left side of a refrigerator.



Remove a damper cover.



Disconnect harness connected with a damper and pull out a damper.

## Changing room PCB Disassemble

## ◆ Disassemble changing room.



Lift up a hook at back side of a changing room a little bit using (1) driver and pull out a changing room cover to separate it from a changing room.



Loosen screws at bottom of a changing room cover.

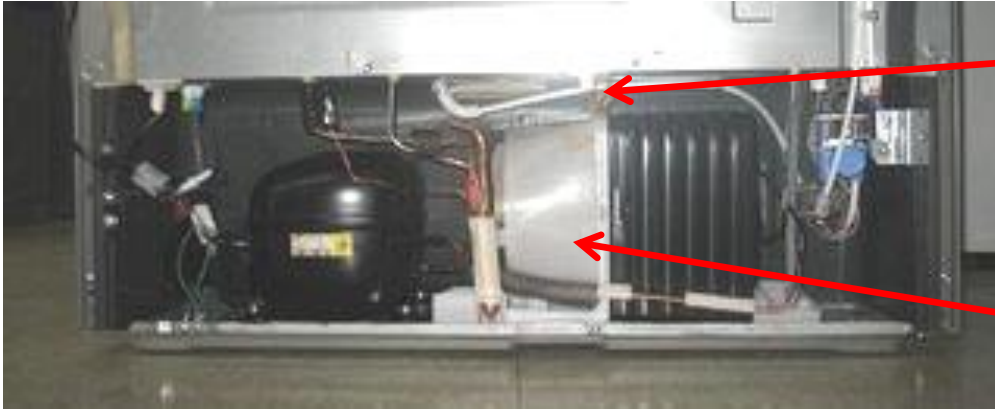


Separate PCB box from changing room cover and disconnect harness between main PCB and front PCB.



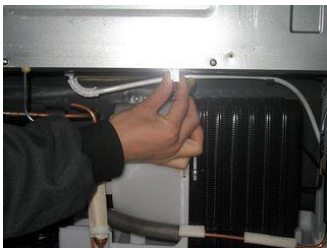
Separate PCB by loosening fixing screw of a Main PCB & Front PCB.

10-6. C-Fan Motor changing method



C-Fan motor housing

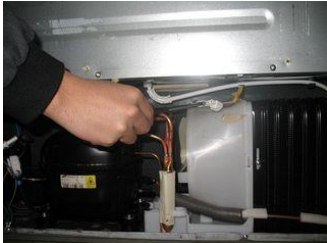
Bell mouth



Separate C-fan motor housing at upper right part of a machine room.



Push and pull forward lock of a bell mouth and separate bell mouth ass'y. (Be careful blade of a fan not to be deformed during disassemble)



Loosen screws at upper, lower part of a bell mouth.



Separate a blade of a fan from a C-Fan motor shaft.



Loosen screws of a motor cover and separate cover and pull out C-fan motor.



Make a space to pull out bell mouth by pushing dryer lightly which is located in front of a bell mouth to a compressor side.



## 10-7. Front PCB changing method

- ◆ Necessarily disconnect power cord before working.

### Basic Type



Separate film by inserting (-) driver at right side of a PCB groove at a freezer door.



Separate a FBC from a refrigerator at a hole on the film removed area.



Disconnect 2 harnesses connected with FBC and separate FBC completely.

### Dispenser Type



Loosen screws at bottom side of a FCB of a freezer dispenser.



Grip bottom side of a FCB with two hands and lift and pull it forward side to separate FCB.



Disconnect 2 harnesses connected with FCB

## 10-8. Dispenser area LED changing method

- ◆ LED lights at dispenser area are built-in at front PCB.
- ◆ To change LED light at dispenser area, front PCB shall be changed.

10-9. Dispenser area flap lever/dispenser lever/DC Motor changing method

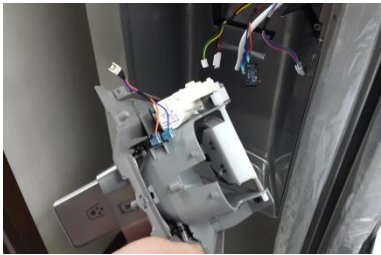
◆ Necessarily disconnect power cord before work.

Dispenser guide separation(1Lever)

◆ Disassemble front PCB.



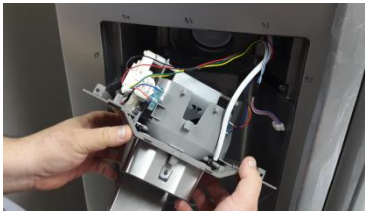
Separate a Water Hose which is assembled at dispenser guide



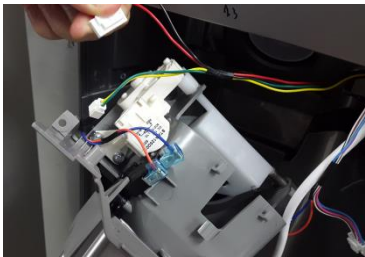
Disassemble a dispenser guide.



Loosen 4 screws for fixing a dispenser guide.



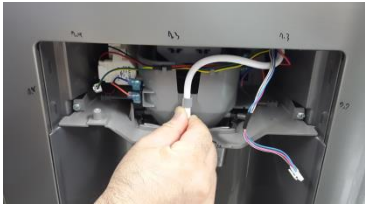
Grip front side of a dispenser guide and separate by pulling it forward.



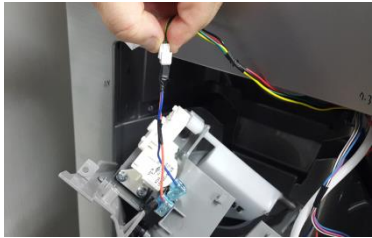
Separate a dispenser motor housing

Dispenser guide separation(2Lever)

◆ Disassemble front PCB.



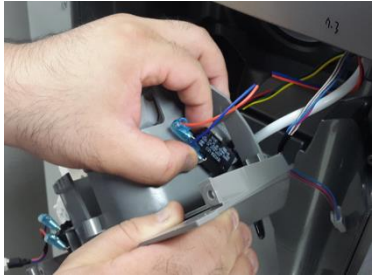
Lift up a water hose which is assembled at dispenser guide and disassemble it.



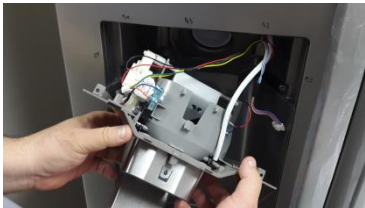
Separate a micro switch housing



Loosen 4 screws for fixing a dispenser guide.



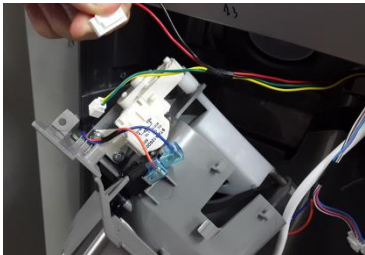
Open up fixing hook and pull out micro switch which is assemble at right side of a dispenser guide .



Grip front side of a dispenser guide and separate by pulling it forward.



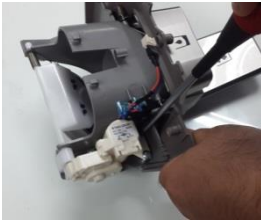
Disassemble a dispenser guide.



Separate a dispenser motor housing

## DC Motor changing

- ◆ Disassemble dispenser guide.



Loosen DC motor fixing screws.

## Dispenser changing(1Lever)

- ◆ Disassemble dispenser guide.



Loosen 2 fixing screws for Dispenser lever .

## Dispenser flap lever changing

- ◆ Disassemble DC Motor.



Separate a flap lever completely by pulling it along shaft direction where flap lever spring is assembled.



Lift up a dispenser lever and disassemble it



Separate a dispenser lever by pulling it along shaft direction where dispenser lever spring is assembled.



## Dispenser changing(2Lever) (Water Lever/Ice Lever)

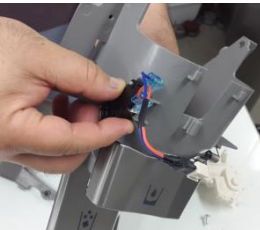
### ◆ Disassemble dispenser guide.



Loosen 2 fixing screws for Dispenser lever .



Lift up a dispenser lever and disassemble it



Separate micro switch which is assembled on the side of a dispenser guide.



Separate dispenser water lever and disassemble



Separate a dispenser Ice lever by pulling it along shaft direction where dispenser Ice lever spring is assembled.

10-10. Home bar door area changing method

Home bar door disassemble



Open home bar door and separate cover at bottom side using (-) driver.



Insert (-) driver at shaft head and grip and pull home bar door with the other hand.



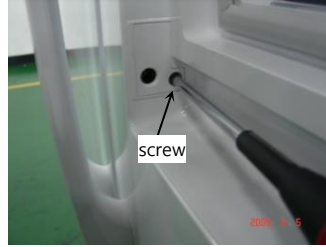
Door can be separated when move shaft to a certain distance.



Separate home bar door from a refrigerator by twisting it from left side in sequence.

Home bar door damper disassemble

◆ Disassemble home bar door.



Loosen cover damper fixing screw.



After loosen screw, pull and separate damper cover to arrow direction using a tool.



Separate damper fixing screw.



Separate damper support using blade as left side figure.



Separate damper.

※ Separate right side damper as above..

Home bar frame latch disassemble



Separate latch cover.



Remove latch fixing screw.



Separate latch from home bar frame.

Home bar door switch disassemble

- ◆ Disassemble latch cover.
  - Refer home bar frame latch disassemble method



Pull out home bar door switch from fixing home.



Grip lead switch end connector by hand.



Disconnect harness.

## 10-11. Door switch area changing method

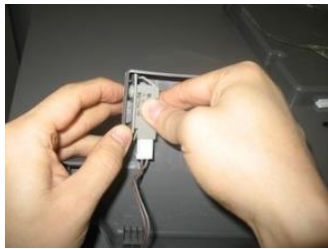
## Door switch disassemble



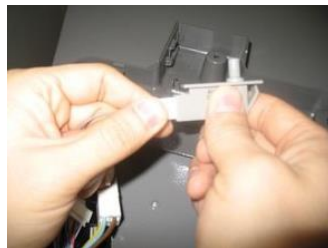
Loosen 2 hinge cover fixing screws.



Open door and lift up rear side of a hinge cover and disassemble it.



Separate door switch by pressing round shape projected area of a door switch.



Disconnect harness connected to a door switch.

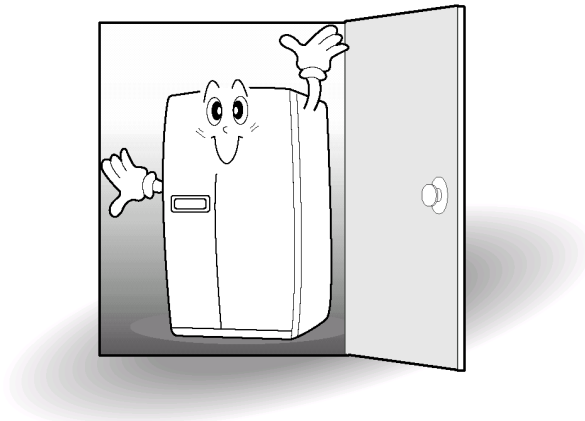
※ Door switch disassemble method of a refrigerator & freezer is same.

# 11. refrigerator product installation method

## 11-1. Prepare for installation

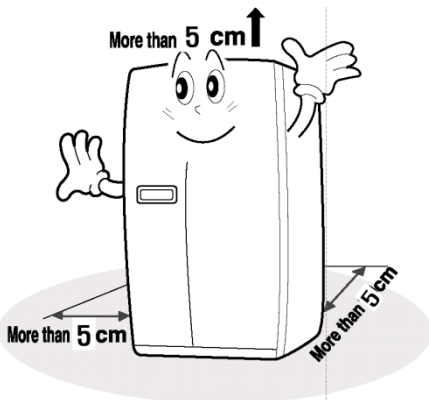
Check followings whether refrigerator may be entered through a door

MODEL	Product dimensions (Include handle)
RSZ(A)622B** RSZ(A)612D/F/G**	906mm X 742mm X 1770mm (W X D X H)

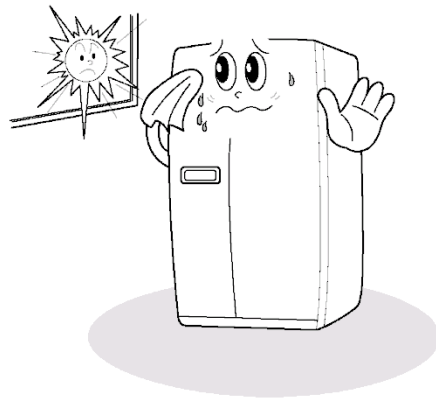


Select adequate area for installation

※ Keep an adequate distance from a wall so that good ventilation can be done.



※ Prohibit from direct sun ray

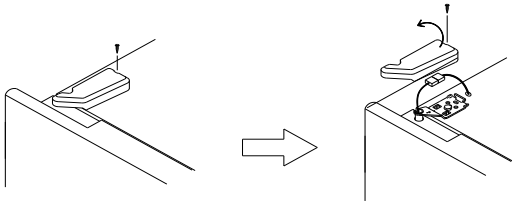
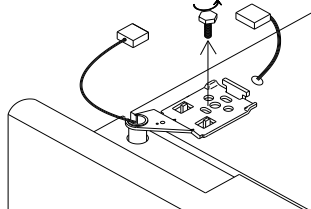
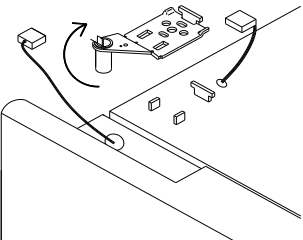
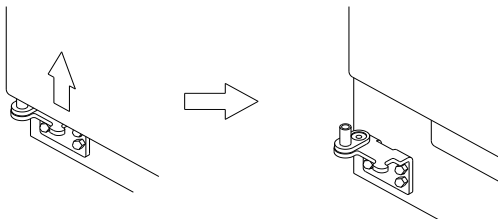


If installation area is prepared, install according to procedure of the following chapter.  
If ambient temperature of a refrigerator is too low(Under 5℃), food stuffs may be frozen or a refrigerator may not be operated with normal condition.

11-2. When refrigerator can not enter through a door




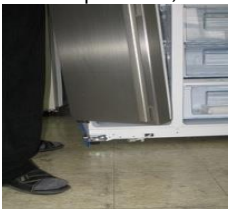
Freezer door disassemble  
(General Type Model)

◆ First, separate front cover.

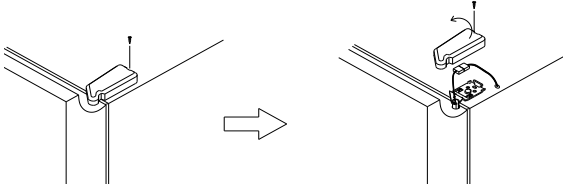
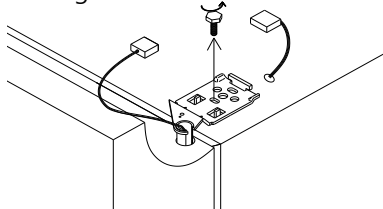
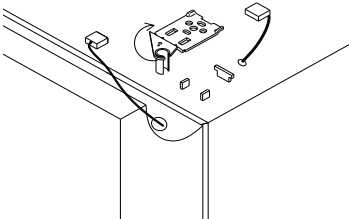
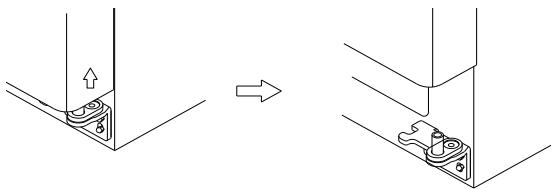
<p><b>1</b> Using driver, loosen 2 hinge cover fixing screws at upper part and separate cover by leaning it to side of a hinge cover.</p> 	<p><b>2</b> Loosen upper part of a hinge fixing bolt by rotating it to anti-clock wise and pull out housing for wire connection.</p> 
<p><b>3</b> Separate upper hinge by lifting it. (Be careful door may be fall down forward.)</p> 	<p><b>4</b> Lift up a freezer door lightly and separate it from a bottom hinge.</p> 

Freezer door disassemble  
(Dispenser type model)

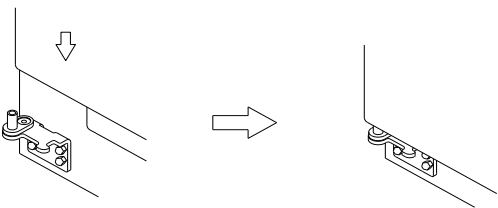
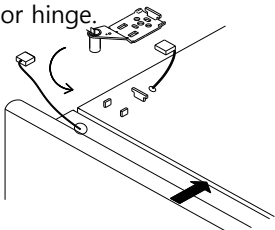
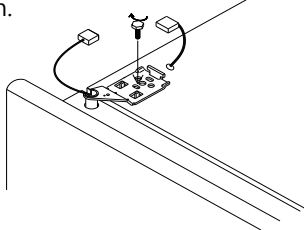
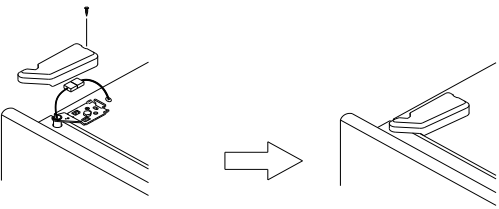
◆ First, separate front cover.

<p><b>1</b> Separate front plate cover and open door and loosen water supply hose fixing screws which are connected with door.</p> 	<p><b>2</b> Pull out connection fitting between hoses. Pull out end of a fitting to fitting direction and pull out connected hoses.</p> 
<p><b>3</b> Separate bending fixture for water supply hose bending which is assembled water supply hose at door side.</p> 	<p><b>4</b> Disassemble method for Basic type model Door: Proceed disassemble same for step 1~4. (Separate door by lifting it until water supply hose of a freezer door is separated.)</p> 

Refrigerator door disassemble

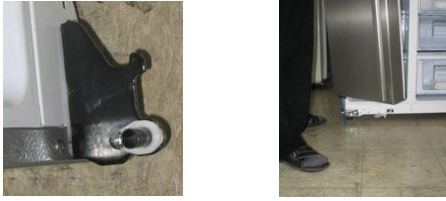
<p><b>1</b> Using driver, loosen 2 hinge cover fixing screws at upper part and separate cover by leaning it to side of a hinge cover.</p> 	<p><b>2</b> Loosen upper part of a hinge fixing bolt by rotating it to anti-clock wise and pull out housing for wire connection.</p> 
<p><b>3</b> Separate upper hinge by lifting it. (Be careful door may be fall down forward.)</p> 	<p><b>4</b> Lift up a freezer door lightly and separate it from a bottom hinge.</p> 

Freezer door assemble  
(Basic type model)

<p><b>1</b> Assemble a freezer door to bottom hinge.</p> 	<p><b>2</b> Make a freezer door close to arrow direction and assemble door by inserting upper hinge to a hole of a door hinge.</p> 
<p><b>3</b> Rotate upper hinge fixing screw to clock wise To fix door and connect housing for wire Connection.</p> 	<p><b>4</b> Assemble upper hinge cover so that snap sounds and fix it using fixing screw.</p> 

Freezer door assemble  
(Dispenser type model)

- 1** Insert a freezer door water supply hose at a bottom hinge and assemble a door at bottom hinge.



- 2** Door assemble method for basic type model is same as for step 2~4.

- 3** Assemble bending fixture for water supply hose bending and connect water supply hose using fitting for connection. Connection can be done by inserting hose into a fitting. In this case insert hose by pushing it strongly to make maximum connection.

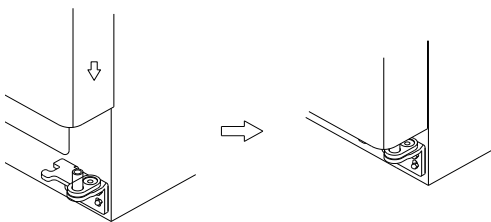


- 4** Fix connecting area between water supply hoses (fitting connection area) using screws.

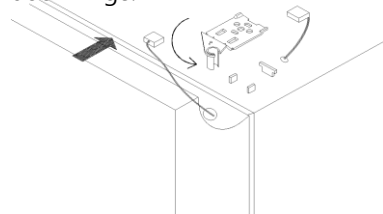


Refrigerator door assemble

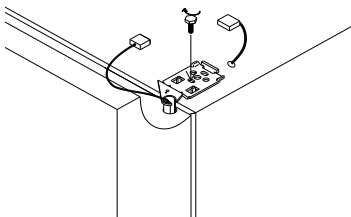
- 1** Assemble a refrigerator door to bottom hinge.



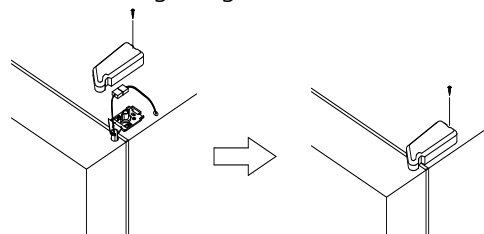
- 2** Make a refrigerator door close to arrow direction and assemble door by inserting upper hinge to a hole of a door hinge.



- 3** Rotate upper hinge fixing screw to clock wise To fix door and connect housing for wire Connection.



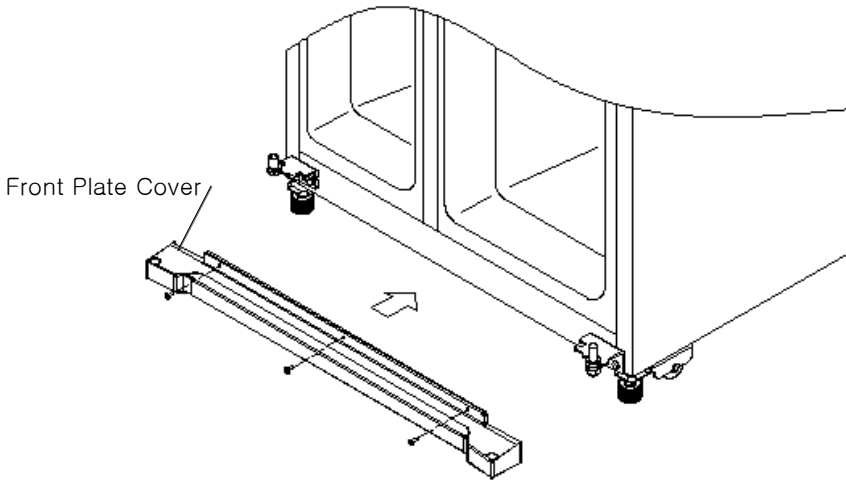
- 4** Assemble upper hinge cover so that snap sounds and fix it using fixing screw.





Front Plate Cover assemble

※ Fix Front Plate Cover using 3 screws as shown in direction of the following figure.



11-3. Height and level adjustment of a refrigerator

※ For the good out looking and performance of a refrigerator, height of a refrigerator shall be well adjusted. (When bottom floor has a irregular shape, a refrigerator & freezer door looks unbalanced.)

<p>When freezer door is low than a refrigerator door</p>	<p>When refrigerator door is low than a freezer door</p>
<p>Insert (-) driver to an adjustable leg at a freezer side and rotates to clockwise to level. (When rotates clock wise, freezer door becomes raised and rotates reverse side, door becomes fall down.)</p>	<p>Insert (-) driver to an adjustable leg at a refrigerator side and rotates to clockwise to level. (When rotates clock wise, refrigerator door becomes raised and rotates reverse side, door becomes fall down.)</p>

**Caution**

To make door can be closed easily, front side of a refrigerator need to be slightly higher than a rear side. But, when raise adjusting leg too high to level, and if front side of a refrigerator become too high compare with a rear side, it will be hard to open door.

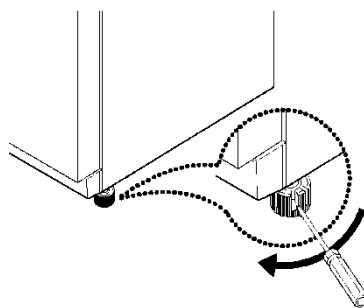
Bottom hinge height adjust : When there is lots of mismatch between freezer/refrigerator door

※ When it is not easy to adjust freezer/refrigerator mismatch by adjusting leg, adjust bottom hinge as followings.

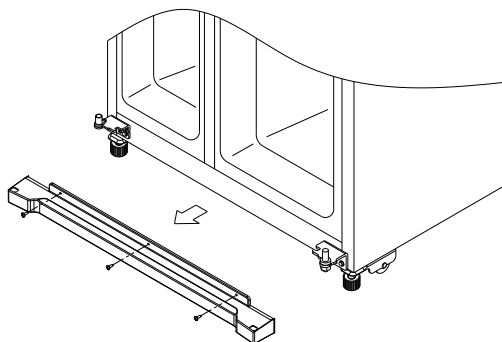
● When refrigerator door is low compare with a freezer door.

1. Insert (-) driver to an adjustable leg at a refrigerator side and rotates to level.

\* When level is not possible even though rotating adjustable leg, level according to following procedure.

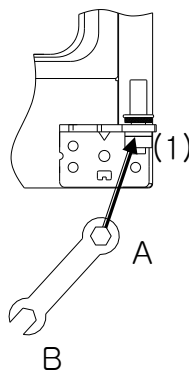


2. Open refrigerator door and separate front plate cover with a refrigerator. (When moving refrigerator after installation)

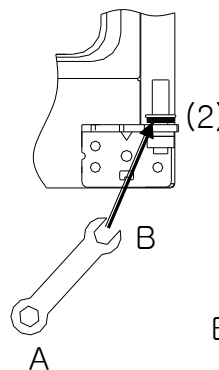


3. Insert 'A' part of a wrench in to a refrigerator door hinge nut(1) and loosen nut by rotating clock wise.

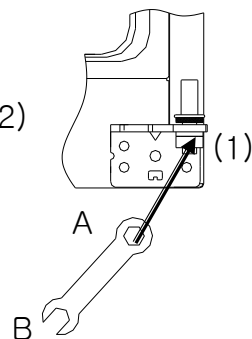
3



4



5



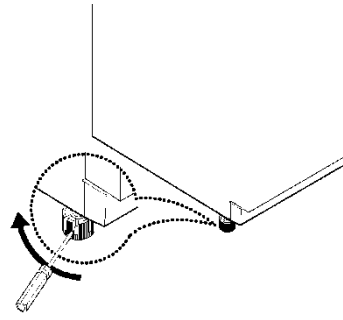
4. When inserting 'B' part of a wrench in to a refrigerator door bottom hinge shaft(2) and rotate it anti-clock wise, a refrigerator door can be raised.

5. Insert 'A' part of a wrench to a hinge nut(1) and rotate it to anti-clock wise to fix nut firmly.

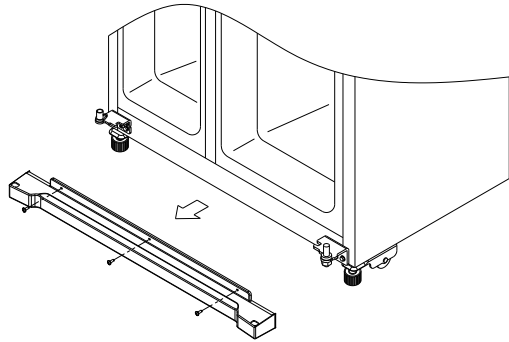
- When freezer door is low compare with a refrigerator door.

1. Insert (-) driver to an adjustable leg at a freezer side and rotates to level.

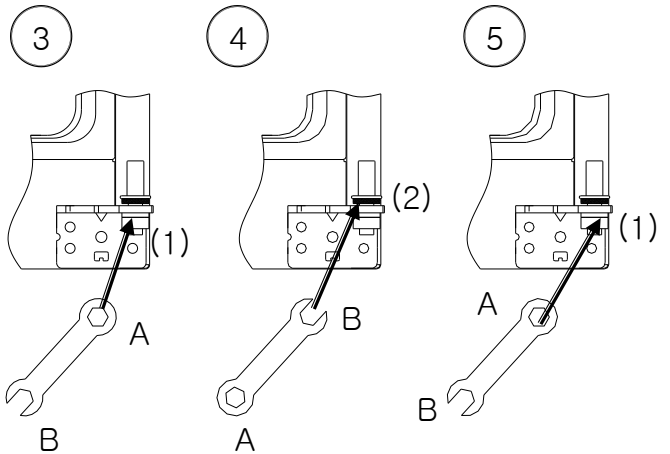
\* When level is not possible even though rotating adjustable leg, level according to following procedure.



2. Open refrigerator door and separate front plate cover with a refrigerator.  
(When moving refrigerator after installation)



3. Insert 'A' part of a wrench in to a refrigerator door hinge nut(1) and loosen nut by rotating clock wise.



4. When inserting 'B' part of a wrench in to a refrigerator door bottom hinge shaft(2) and rotate it anti-clock wise, a refrigerator door can be raised.

5. . Insert 'A' part of a wrench to a hinge nut(1) and rotate it to anti-clock wise to fix nut firmly.

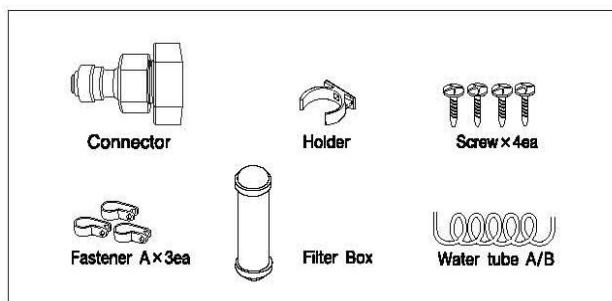
## 11-4. How to install Water Line (Dispenser Models only)

1. The water pressure should be 2.0~12.5 kgf/cm<sup>2</sup> or more to run the automatic icemaker.  
Checkup your tap water pressure ; if a cup of 180cc is full within 10 seconds, the pressure is OK.
2. When installing the water tubes, ensure they are not close to any hot surfaces.
3. The water filter only filters water ; it does not eliminate any bacteria or microbes.
4. If the water pressure is not so high to run the icemaker, call the local plumber to get an additional water pressure pump.
5. The filter life depends on the amount of use. We recommend you replace the filter at least once every 6months.  
※When attaching the filter, place it for easy access (removing & replacing)
6. After installation of refrigerator and water line system, select [WATER] on your control panel and press it for 2~3 minutes to supply water into the water tank and dispense water.
7. Use sealing tape to every connection of pipes/tubes to ensure there is no water leak.
8. The water tube should be connected to the cold water line.

### External filter type

#### WATER SUPPLY KIT

- ※Check the parts below for installing water supply.  
Some other necessary parts are available at your local service agents.



### Installation Procedure (Dispenser Models Only)

#### 1. Join Connector to the tap water line

Figure A

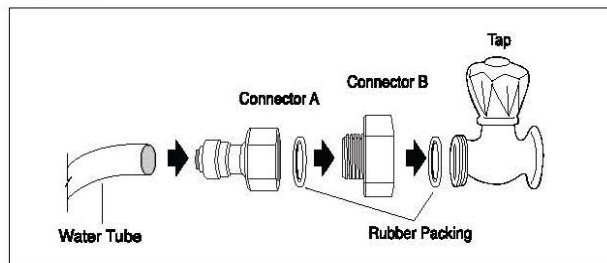
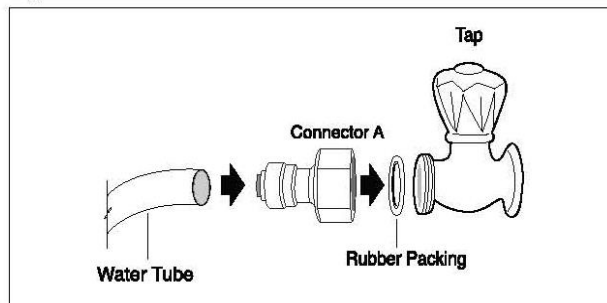


Figure B

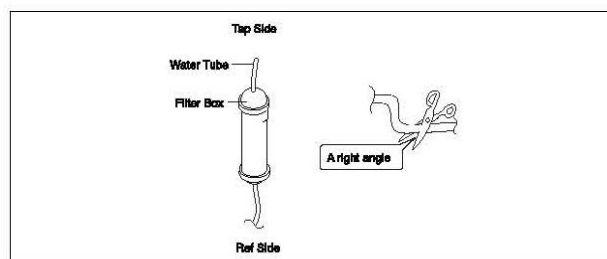


- NB** Place the rubber washer inside the tap connector and screw onto the water tap.

#### 2. Get ready to install the Water Filter

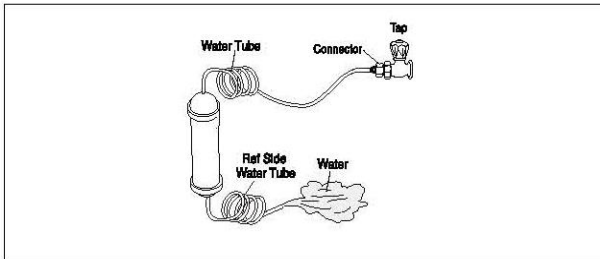
- 1) Measure an approximate distance between the filter and the Water Tube and cut the tube off filter vertically.
- 2) Connect the tubes to the filter as the figure shows.

- NB** Leave a sufficient distance when cutting the tubes.



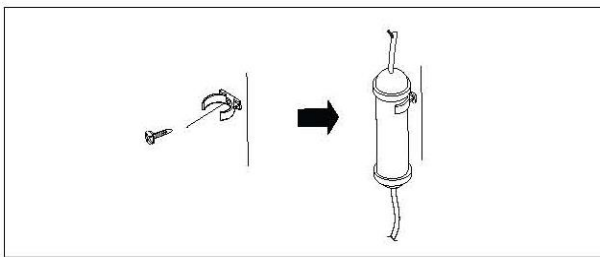
### 3. Remove any substances in the filter.

- 1) Open the main tap water valve and check if water comes out of the Water Tube.
- 2) Check if the Water Valve is open in case water does not come out.
- 3) Leave the valve open until clean water is coming out.  
 ※Initial water may contain some substances out of filter (manufacturing process).



### 4. Attach the Filter Box

- 1) Screw and fasten the filter holder to the left/right side of the back of refrigerator.  
 ※In case the holder is not fastened well, remove the back paper of the tape on the filter holder and attach it."
- 2) Insert the filter box into the holder.

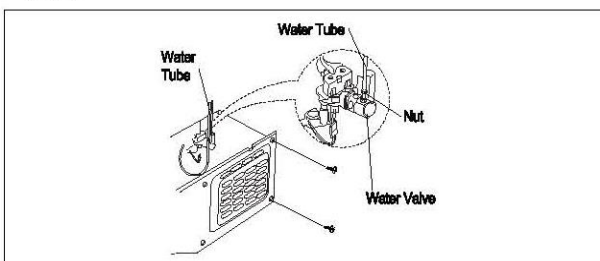


### 5. Connect the Water Tube to the refrigerator.

- 1) Remove the rear cover at the bottom back of the refrigerator.
- 2) Insert the fastening ring into the Water tube.  
 (Be careful to follow the direction of the nut.)
- 3) Insert the Water Tube into the top of the Water Valve, turn the nut clockwise to fasten it. (The Water valve is to the right of the motors.)
- 4) Check for any bent tubes or water leaks; if so, re-check installation procedure.
- 5) Replace the rear cover. (The Water Tube should be placed between the groove of the refrigerator back and motor cover.)

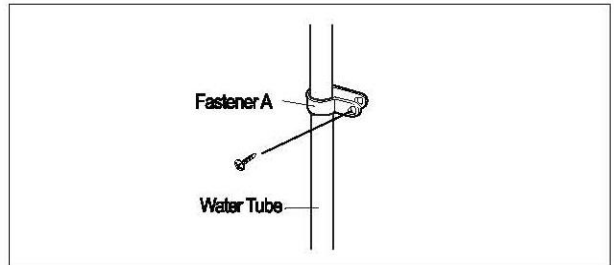


Set the tube upright as the figure shows.



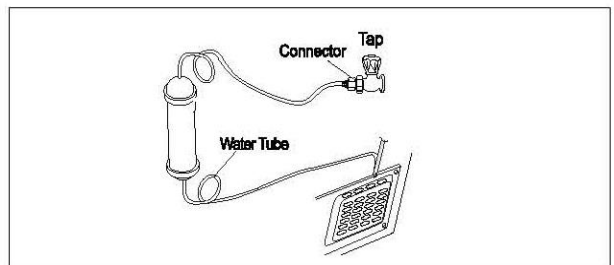
### 6. Fasten the Water Tube.

- 1) Fasten the Water Tube with the [Fastener A].
- 2) Check if the tube is bent or squeezed. If so, set it right to prevent any water leak.



### 7. After installation of Water Supply System

- 1) Plug in the refrigerator, press the [WATER] button on the control panel for 2~3 minutes to remove any air (bubble) in the pipes and drain out the initial water.
- 2) Check for the water leaks again through the water supply system (tubes, connectors and pipes) Rearrange the tubes again and do not move the refrigerator.



## Internal filter type

### WATER SUPPLY KIT

※Check the parts below for installing water supply.  
Some other necessary parts are available at your local service agents.



2. Connect check valve
  - 1) Cut water tube adequately which is connected with tap water.
  - 2) Insert end of cut water tube into a tube fixture of a refrigerator.



- 3) Using check valve, connect water tube.  
Caution! Check valve is used to protect back flow and connection between tube and assemble so that water supply direction can not be assembled by reverse direction.

### Installation Procedure (Dispenser Models Only)

#### 1. Join Connector to the tap water line

Figure A

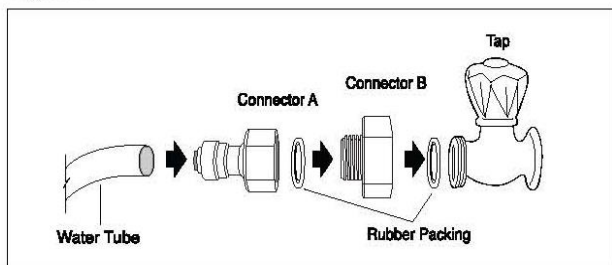
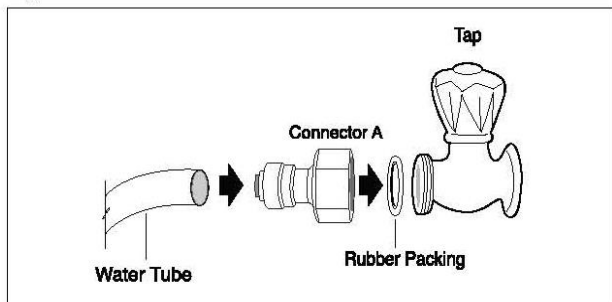


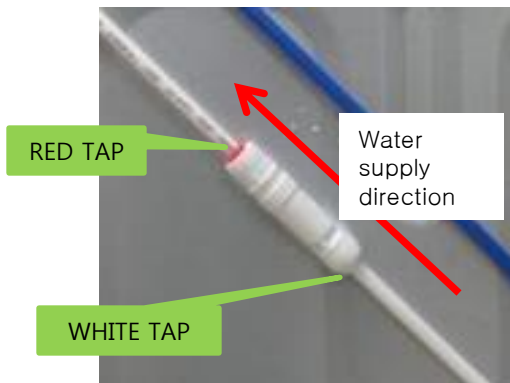
Figure B



**NB** Place the rubber washer inside the tap connector and screw onto the water tap.

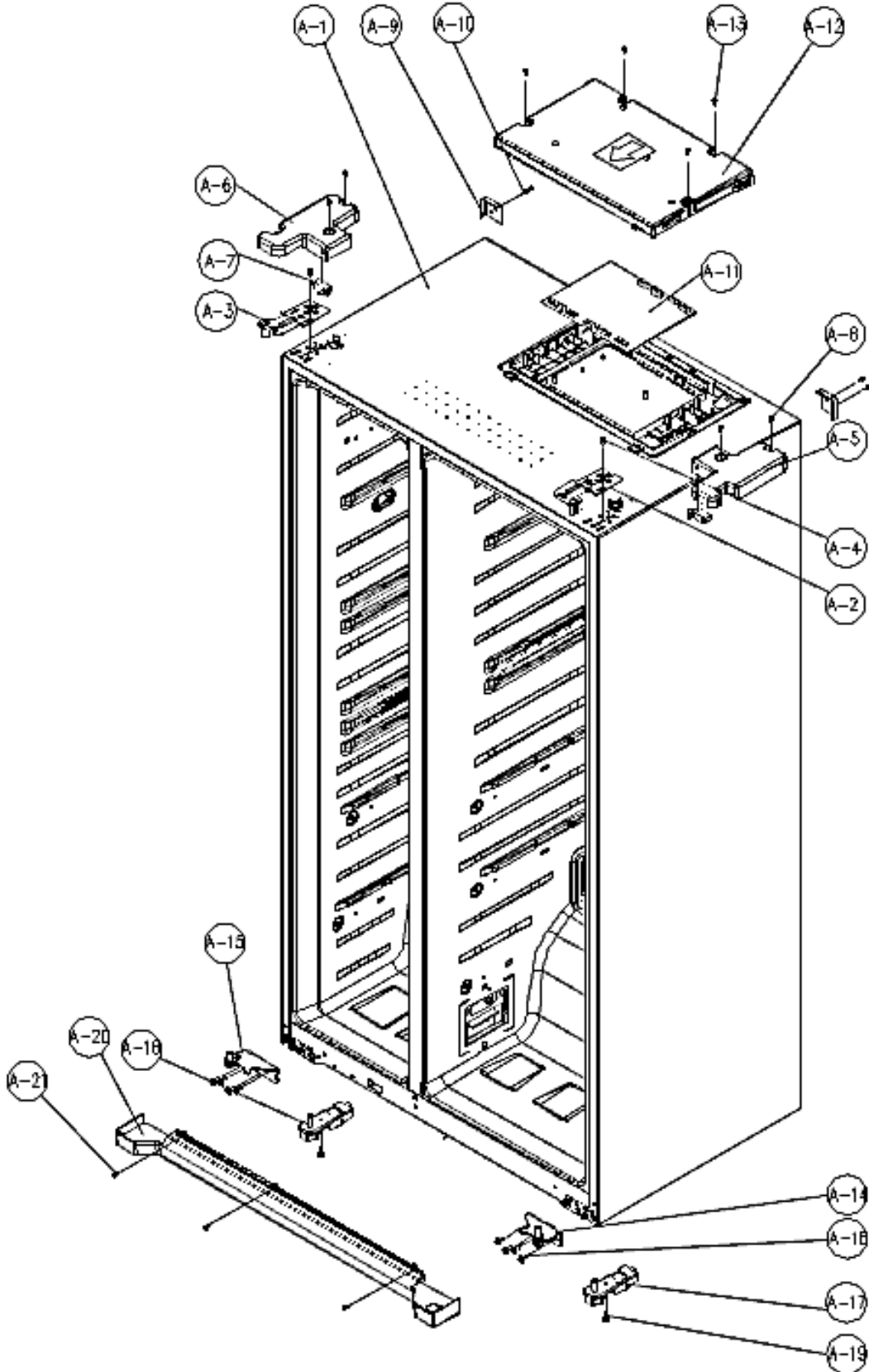


Figure shows water tube is correctly connected



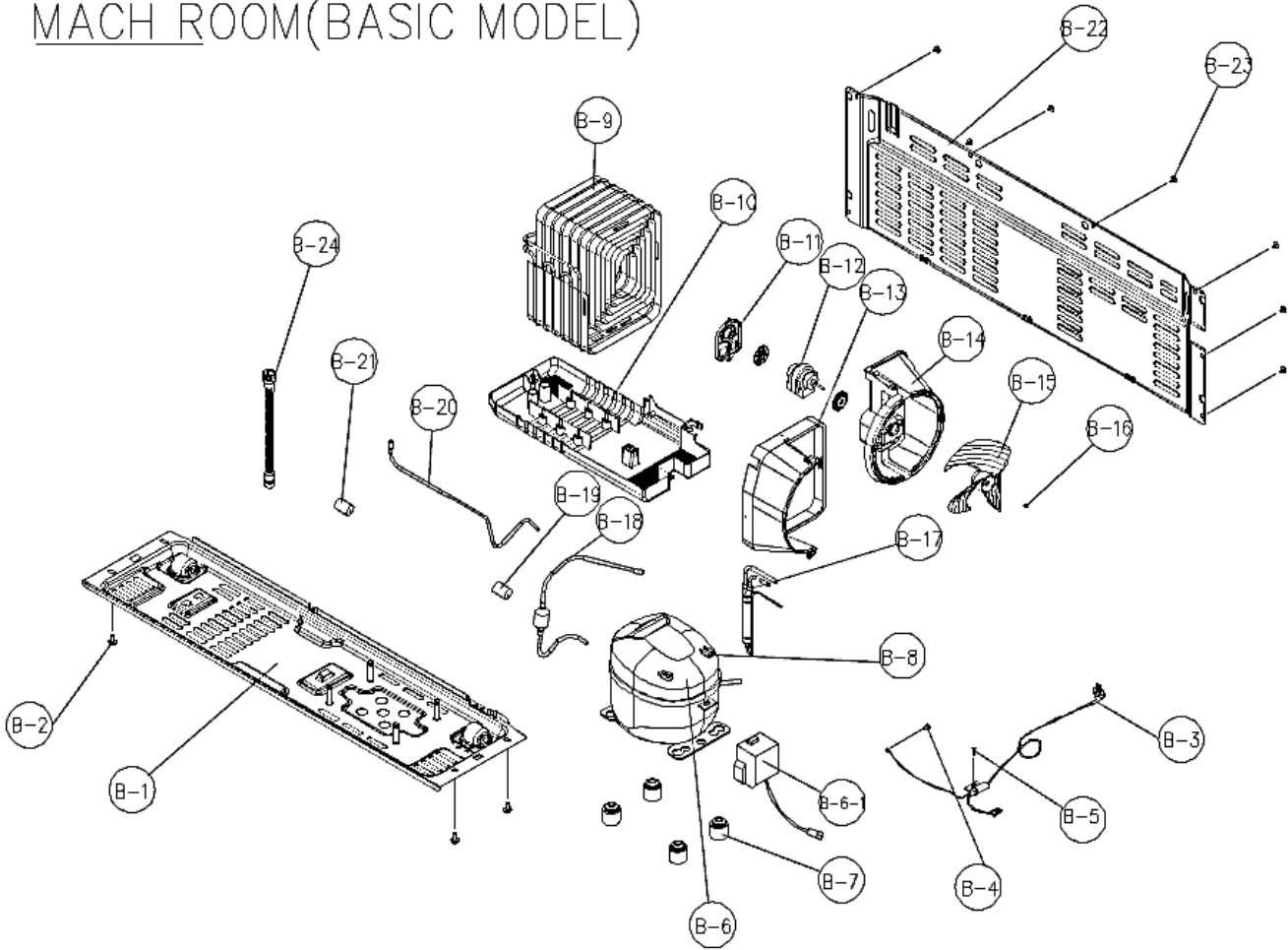
## 12.-1 Pop-Up Drawings (RSZ622B\*\*)

## CABINET(BASIC MODEL)



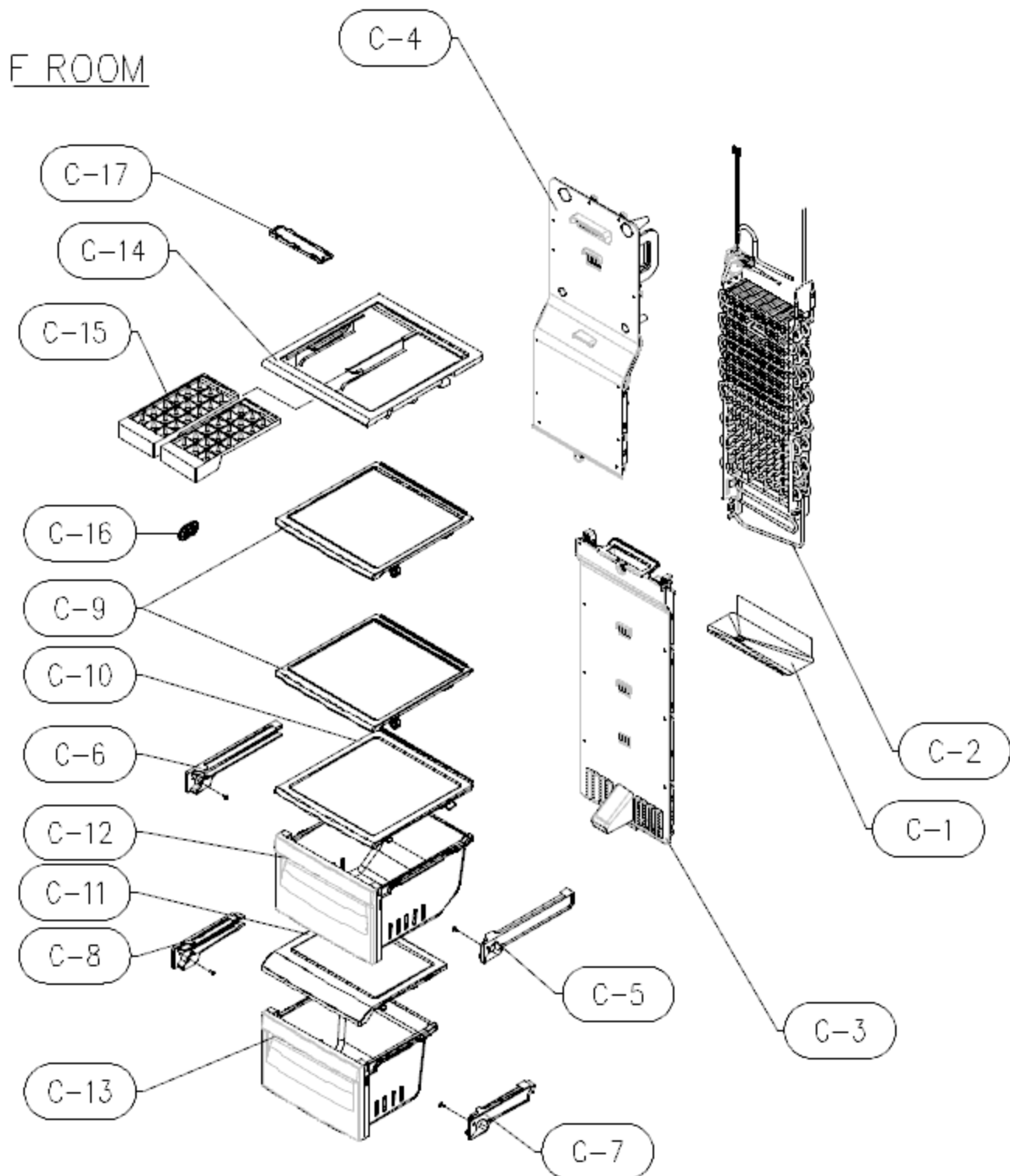
12.-1 Pop-Up Drawings (RSZ622B\*\*)

MACH ROOM(BASIC MODEL)

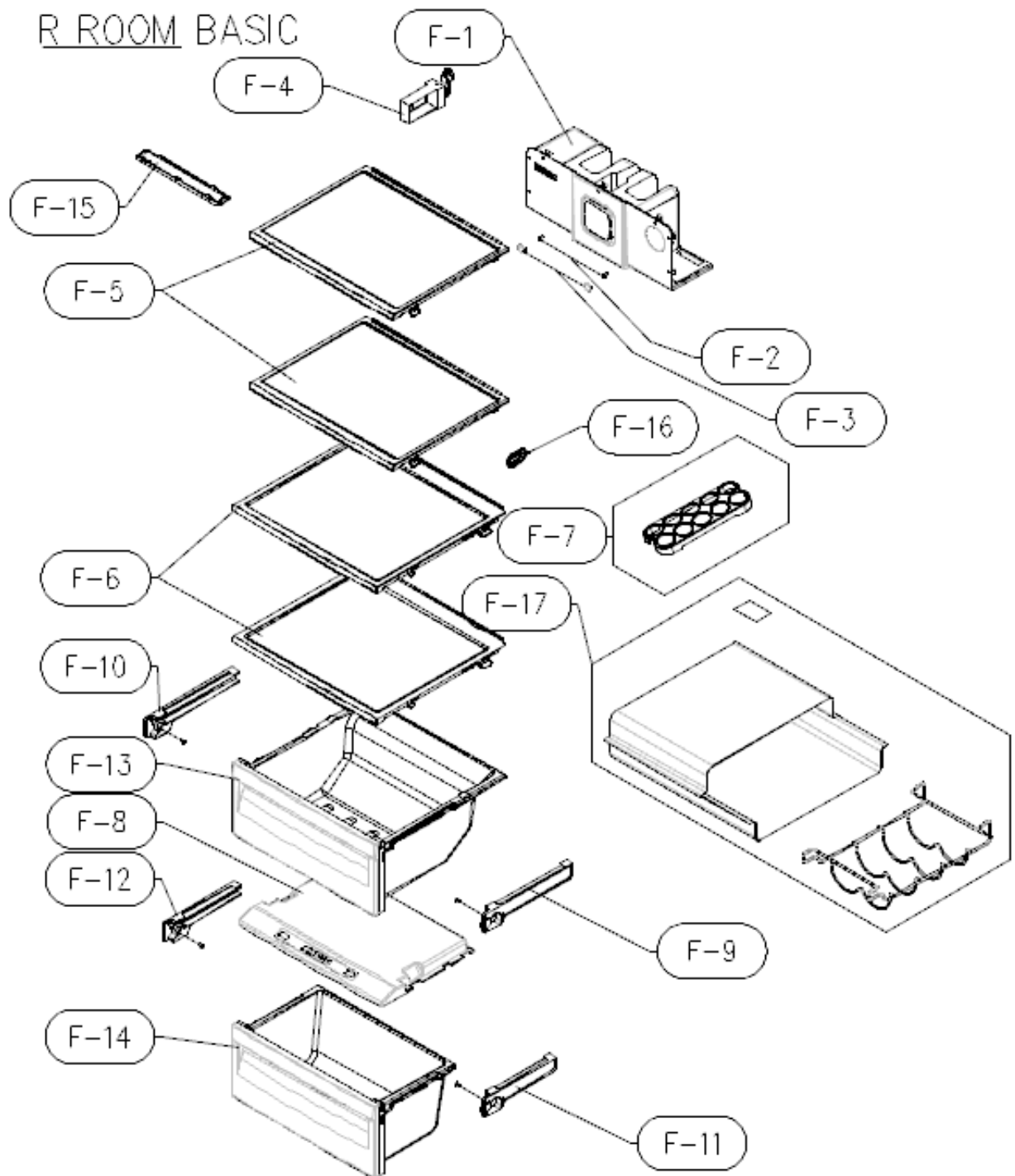




12.-1 Pop-Up Drawings (RSZ622B\*\*)

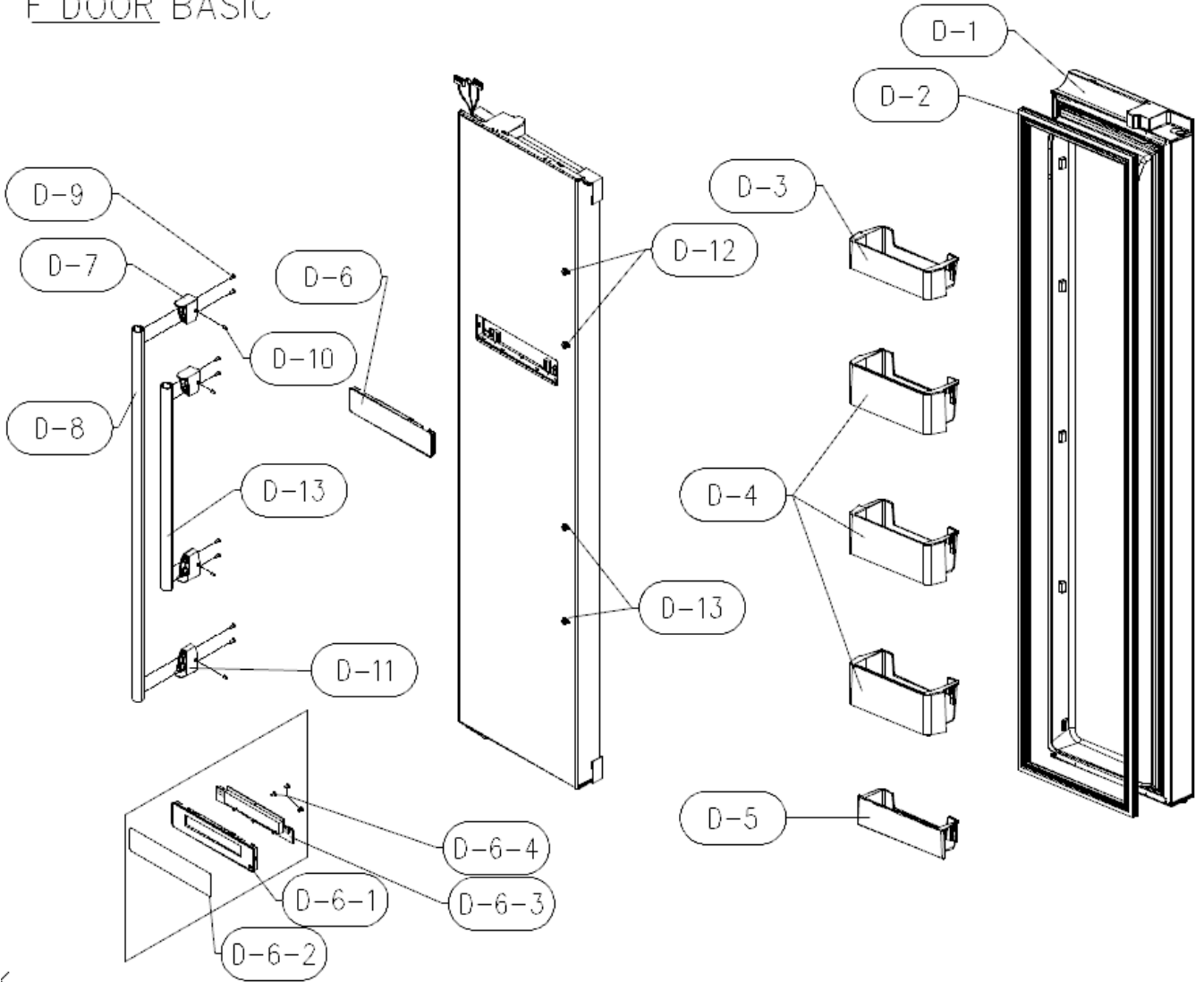


## 12.-1 Pop-Up Drawings (RSZ622B\*\*)



12.-1 Pop-Up Drawings (RSZ622B\*\*)

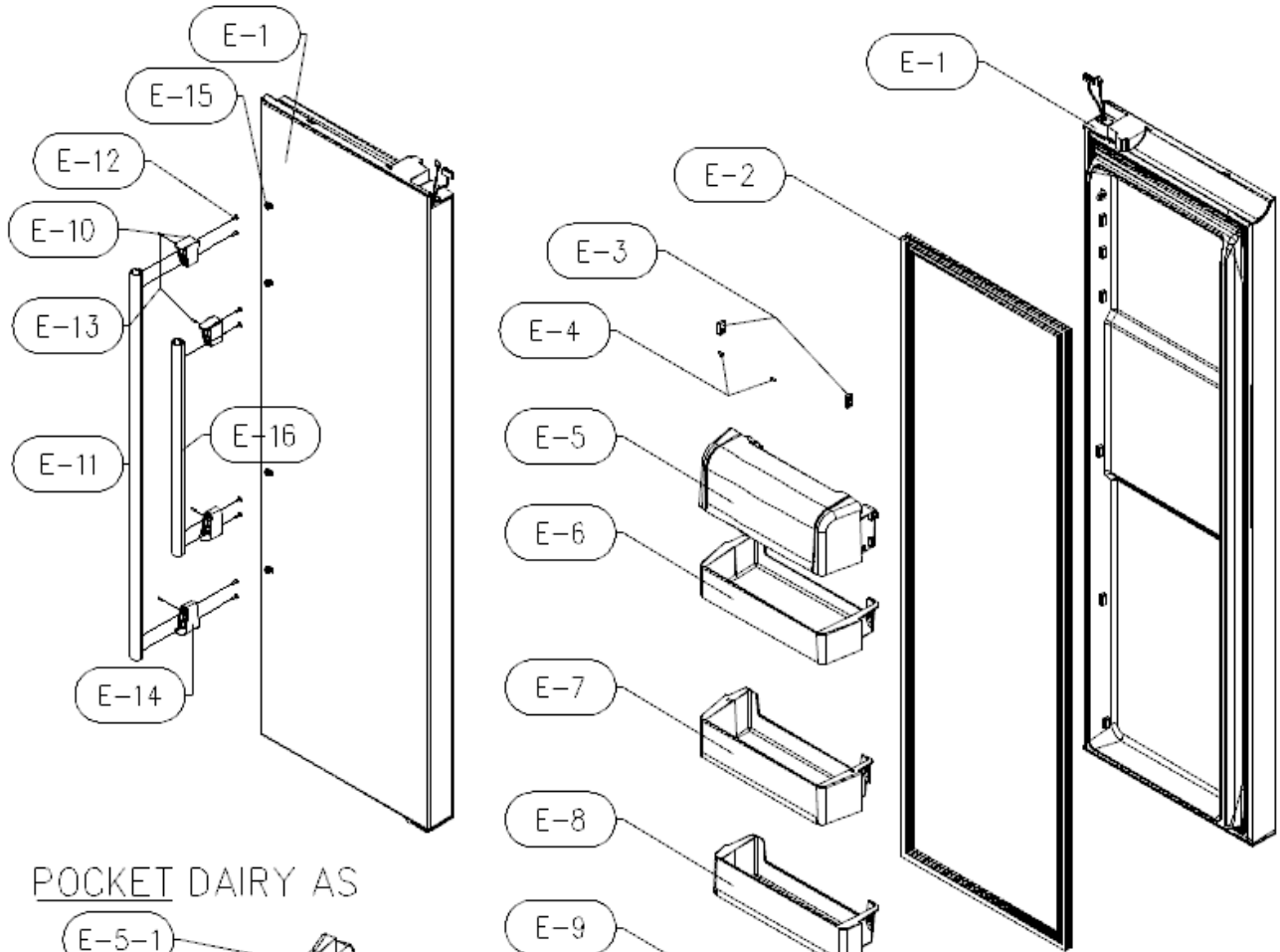
F DOOR BASIC



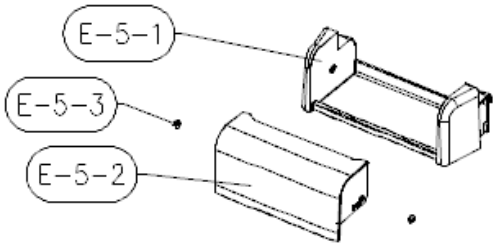
<

12.-1 Pop-Up Drawings (RSZ622B\*\*)

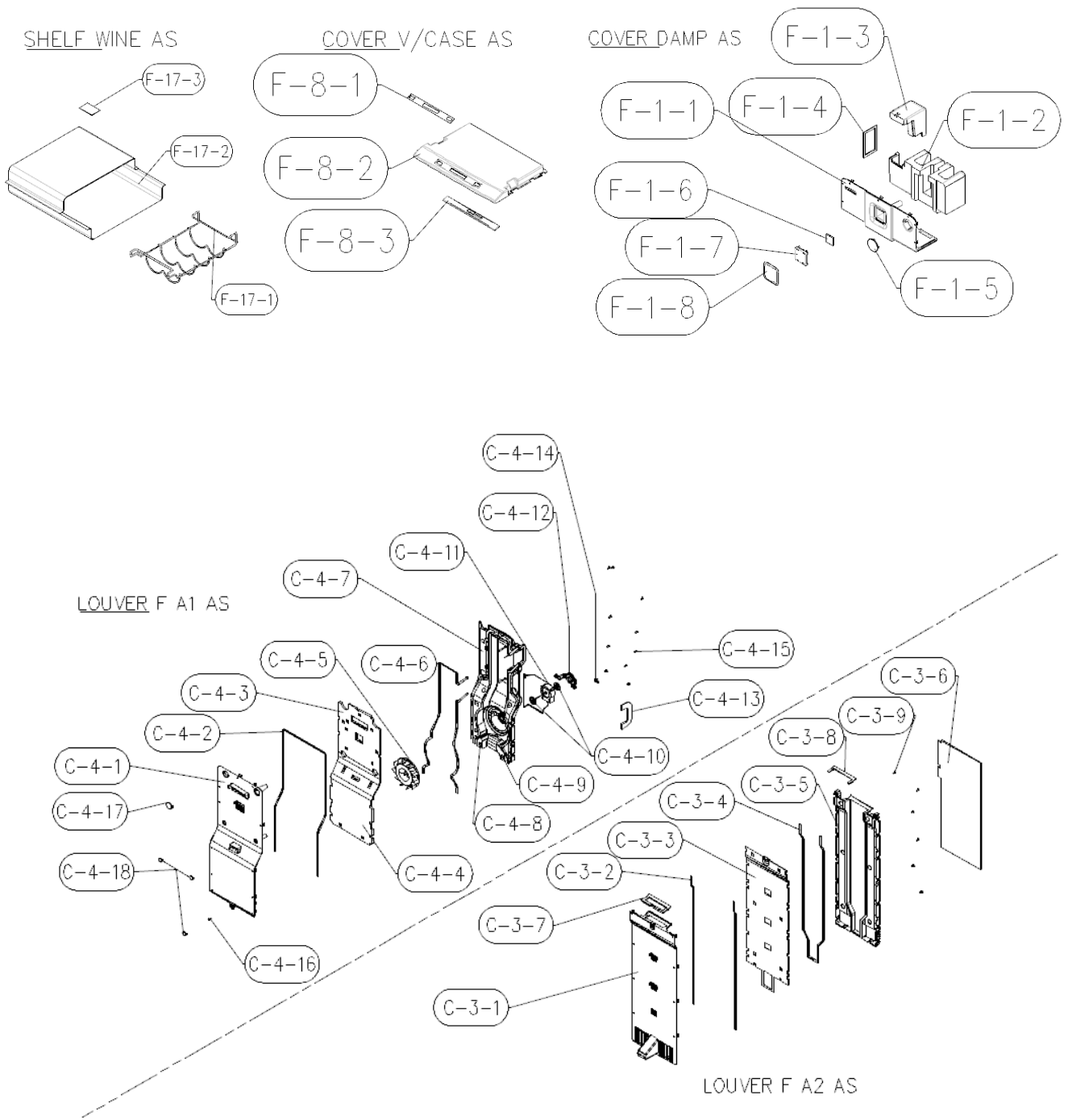
R DOOR BASIC TYPE



POCKET DAIRY AS



12.-1 Pop-Up Drawings (RSZ622B\*\*)



NO	PART NAME	PART CODE NO	QTY	REMARKS
A-1	ASSY CAB URT	300009AB00	1	FRX-621B
A-2	HINGE *T *R AS	3012933300	1	PO T3.0 + PAINT
A-3	HINGE *T *L AS	3012933200	1	PO T3.0 + PAINT
A-4	SPECIAL *T HI BOLT	3016042300	2	SWCH18A
A-5	COVER HI *T *R	3001434900	1	PP
A-6	COVER HI *T *L	3001434800	1	PP
A-7	SWITCH H/BAR DR AS	3018125601	2	SP101B-2DI(G), GRAY
A-8	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-9	CAP CAB COVER	3010968400	2	PP
A-10	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-11	REF PCB MAIN ASSY	40301-0102500	1	ZB600 BASIC COMP
A-12	COVER M/PCB BOX	3011446001	1	PP(FB-72)
A-13	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-14	HINGE *U *R AS	3012933510	1	FRX-621B
A-15	HINGE *U *L AS	3012933411	1	FRX-621B
A-16	SPECIAL BOLT *T	3016001240	8	6*22 SWCH22A(YL)
A-17	BRACKET ADJ FT *R AS	3010684300	1	FRQ-503D
A-18	BRACKET ADJ FT *L AS	3010684200	1	FRQ-503D
A-19	SPECIAL BOLT	3016001270	2	6*18 SWCH22A(WH)
A-20	COVER CAB BRKT	3001433900	1	PP
A-21	SCREW TAPPING	7112401611	3	T1 TRS 4*16 MFZN
B-1	BASE COMP AS	3010359600	1	FRX-621B
B-2	SPECIAL BOLT	3016003300	4	T2 M6.5*20
B-3	CORD POWER AS	3011346701	1	AC 250V 16A(VDE)
B-4	SPECIAL SCREW	7S422X4081	3	TT3 TRS 4*8 SE MFZN
B-5	SPECIAL SCREW	3016008900	1	T1 PAN 4*12 PW MFZN
B-6	COMPRESSOR	3956114M80	1	LQ140NAEM 220~240V 50Hz
B-6-1	COVER RELAY AS	-	1	
B-7	ABSORBER COMP	3010101600	4	NBR
B-8	COMP WASHER	3016002500	3	SK-5 T0.8

NO	PART NAME	PART CODE NO	QT'Y	REMARKS
B-9	PIPE WICON AS	3014486700	1	6ROW CON FRX-608F
B-10	CASE VAPORI AS	30111-0044400	1	PP FRX-608F
B-11	FIXTURE MOTR	3012021700	1	PP
B-12	MOTOR C FAN	3015920900	1	D4612AAA31
B-13	M/BELL B	3018500310	1	PP
B-14	M/BELL A	3018500210	1	PP
B-15	FAN	3011836300	1	PP OD3.17*D150
B-16	CLAMP FAN	3011200500	1	SUS 304
B-17	DRYER AS	60168-0000814	1	SBS 10G(X600 LOKRING)
B-18	PIPE SUC CONN	3014474610	1	FRX-621B
B-19	ABSORBER SUC PIPE A	3010101340	1	NBR 32G
B-20	PIPE CONN A2 AS	60144-0027201	1	Ø4.76xT0.5, FRX-608F
B-21	ABSORBER PIPE B	3010101330	1	NBR 15G
B-22	COVER MACH RM AS	3001436520	1	GI T0.35
B-23	SPECIAL SCREW	3016008910	7	TH1/W #8x1/2 MFZN
B-24	HOSE DRN	30132-0004800	1	PE ZB6T00 T=0.6
C-1	GUIDE DRN	3012538400	1	EGI SCRAP T0.4
C-2	EVA AS	60170-0011800	1	ZB600
C-3	LOUVER F A2 AS	30189-0014600	1	RSZ621B
C-4	LOUVER F A1 AS	30189-0015000	1	SILK PRINT ZB600(BASIC)
C-5	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)
C-6	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
C-7	GUIDE CASE C *R AS	3012529812	1	FRU-571I(PP)
C-8	GUIDE CASE C *L AS	3012529712	1	FRU-571I(PP)
C-9	SHELF F AS	3017851200	2	FRX-621B
C-10	COVER F CASE *T AS	3001438000	1	FRX-621B
C-11	COVER F CASE *U	3001434500	1	HIPS
C-12	CASE F *T AS	30111-0050300	1	RSZ621B
C-13	CASE F *U AS	30111-0050400	1	RSZ621B
C-14	SHELF F ICE AS	3017851700	1	FRX-621B

NO	PART NAME	PART CODE NO	QT'Y	REMARKS
C-15	CASE ICE	3011186340	2	FRU-577I, PP(NO PRINT)
C-16	COVER F SENSOR	300149D800	1	ABS
C-17	WINDOW F LED *T	3015517200	1	ABS(TRANSPARENT)
C-3-1	LOUVER F A2	30189-0014500	1	RSZ612B
C-3-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-3-3	SEAL F LUVR A3	30177-0066500	1	F-PE(G)
C-3-4	SEAL INSU B	301779EF00	3	EPDM
C-3-5	DUCT F A2	30169-0007700	1	RSZ621B
C-3-6	SEAL F LUVR A2	60177-0066400	1	F-PE+AL
C-3-7	SEAL F LUVR A4	60177-0066600	1	EPDM T5.0
C-3-8	SEAL DUCT	60177-0066700	1	EPDM T3.0
C-3-9	SCREW TAPPING	7122401211	6	T2S TRS 4*12 MFZN
C-4-1	LOUVER F A1 SAS	30189-0014900	1	RSZ621B
C-4-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-4-3	INSU F A1	30133-0022200	1	F-PS
C-4-4	INSU F A2	30133-0022100	1	F-PS
C-4-5	FAN F	3011836400	1	ABS
C-4-6	SEAL INSU B	301779EF00	3	EPDM
C-4-7	FIXTURE F MOTR A	30120-0027700	1	PP
C-4-8	SEAL FIXR MOTR A1	60177-0066800	1	EPDM T3.0
C-4-9	SEAL FIXR MOTR A2	60177-0066900	1	EPDM T3.0
C-4-10	ABSORBER F MOTR	3010108800	2	NBR
C-4-11	MOTOR F FAN AS	60159-0007001	1	DC12V ZB600
C-4-12	FIXTURE F MOTR B	3012034700	1	PP
C-4-13	SEAL F LUVR A3	3007708400	1	EPDM, T5.0
C-4-14	CLAMP TUBE A	3011202000	1	PA-66, 5N
C-4-15	SCREW TAPPING	7122401211	8	T2S TRS 4*10 MFZN
C-4-16	SCREW TAPPING	7122401211	1	T2S TRS 4*10 MFZN
C-4-17	CAP F LOUVER	3010924600	2	HIPS 2.3T
C-4-18	CAP F LOUVER B	3010968600	3	HIPS

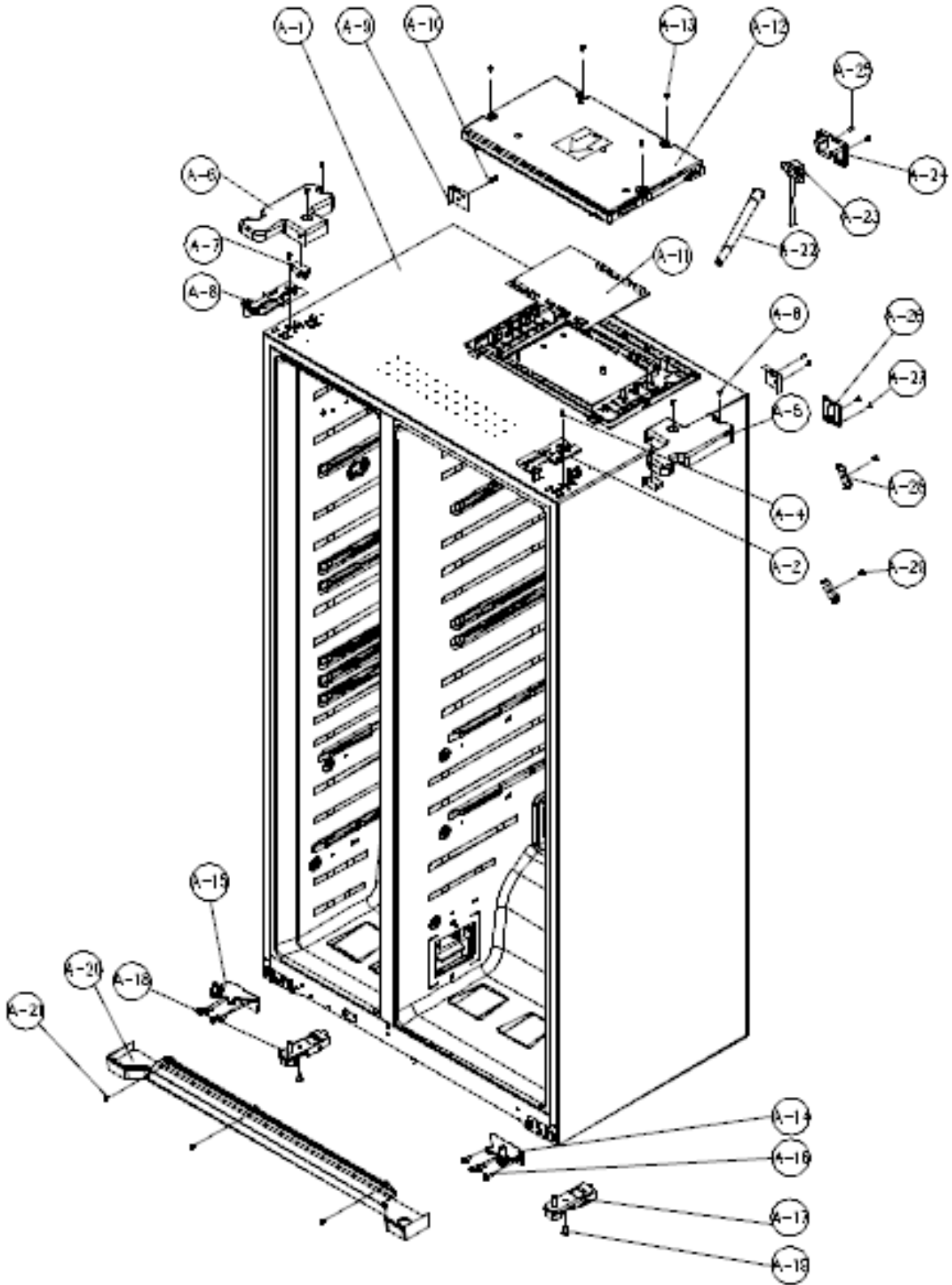


NO	PART NAME	PART CODE NO	QT'Y	REMARKS
F-1	COVER DAMPER AS	30114-0097000	1	ZB600 BASIC
F-2	SCREW TAPPING	7112401211	2	T1 TRS 4*12 MFZN
F-3	CAP F LOUVER	3010924600	2	HIPS 2.3T
F-4	DAMPER AS	3016767100	1	DU24-013
F-5	SHELF R AS	30178-0033500	2	ZB600 HIPS+GLASS
F-6	COVER V/CASE AS	30114-0101200	1	ZB600 HIPS+GLASS
F-7	CASE EGG TRAY	3011190800	1	GPPS
F-8	COVER V/CASE *U AS	30114-0097900	1	RSZ621B
F-9	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
F-10	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)
F-11	GUIDE V/CASE *U *R AS	3012540400	1	FRX-621B
F-12	GUIDE V/CASE *U *L AS	3012540300	1	FRX-621B
F-13	CASE VEGETB *M AS	30111-0050200	1	RSZ621B
F-14	CASE VEGETB *U AS	30111-0050500	1	RSZ621B
F-15	WINDOW R LED *T	3015517100	1	ABS(TRANSPARENT)
F-16	COVER R SENSOR	300149D800	1	ABS
F-17	SHELF WINE AS	30178-0033900	1	AS
D-1	ASSY F DR URT	300009AD00	1	FRX-621B
D-2	GASKET F DR AS	30123-0017300	1	PVC-S 336X1613
D-3	POCKET F *T	30190-0011401	1	CRYSTAL
D-4	POCKET F *M	3019057930	3	CRYSTAL
D-5	POCKET F *U	3019058120	1	CRYSTAL
D-6	COVER FCP AS	30114-0098000	1	TOUCH SILVER RSZ621B
D-7	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
D-8	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL,TITAN Ano
D-9	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
D-10	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
D-11	SUPPORTER HNDL *U	30153-0023100	1	ASB+Zn INSERT+SPRAY
D-12	SPECIAL BOTL HNDL	3016046400	2	M6,SWCH10A
D-13	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano

NO	PART NAME	PART CODE NO	QT'Y	REMARKS
E-1	ASSY R DR URT	300009AF00	1	FRX-621B
E-2	GASKET R DR AS	30123-0017400	1	PVC-S, 474X1613
E-3	FIXTURE POKT	30120-0027900	2	HIPS
E-4	SCREW TAPPING	7112401420	1	T1 TRS 4X14(WHITE COLOR)
E-5	POCKET DAIRY AS	30190-0029200	1	CRYSTAL ZB600
E-6	POCKET R *T	3019058410	1	CRYSTAL
E-7	POCKET H/BAR AS	30190-0029300	1	SILK PRINT ZB600 CRYTAL
E-8	POCKET R *M	3019058310	1	FRX-60R, CRYSTAL
E-9	POCKET R *U	3019058510	1	CRYSTAL
E-10	SUPPORTER HNDL *U	30153-0023100	1	ABS+Zn INSERT+SPRAY
E-11	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL,TITAN Ano
E-12	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
E-13	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
E-14	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
E-15	SPECIAL BOTL HNDL	3016046400	2	M6,SWCH10A
E-16	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano
E-5-1	POCKET DAIRY	30190-0029000	1	HIPS
E-5-2	COVER DAIRY	30114-0095100	1	GPPS
E-5-3	BUSHING DAIRY POKT	30107-0004800	2	POM
F-1-1	COVER DAMP	30114-0096700	1	RSZ621B
F-1-2	INSU DAMP COVR *A1	3013378300	1	F-PS
F-1-3	INSU DAMP COVR *A2	30133-0022000	1	F-PS
F-1-4	SEAL INSU DAMP COVR	301779GB00	1	F-OJC, T5.0
F-1-5	CAP DAMP COVER	3010989900	1	HIPS
F-1-6	DEODORANT	60119-0000300	1	W40XL40
F-1-7	FRAME DEO	30122-0039200	1	HIPS
F-1-8	COVER DEO	30114-0096500	1	ABS+SILK
F-8-1	WINDOW HUMID CONTL	30155-0025000	1	PC SHEET T0.5
F-8-2	COVER V/CASE *U	30114-0095500	1	HIPS
F-8-3	KNOB HUMID CONTL	30134-0005900	1	HIPS

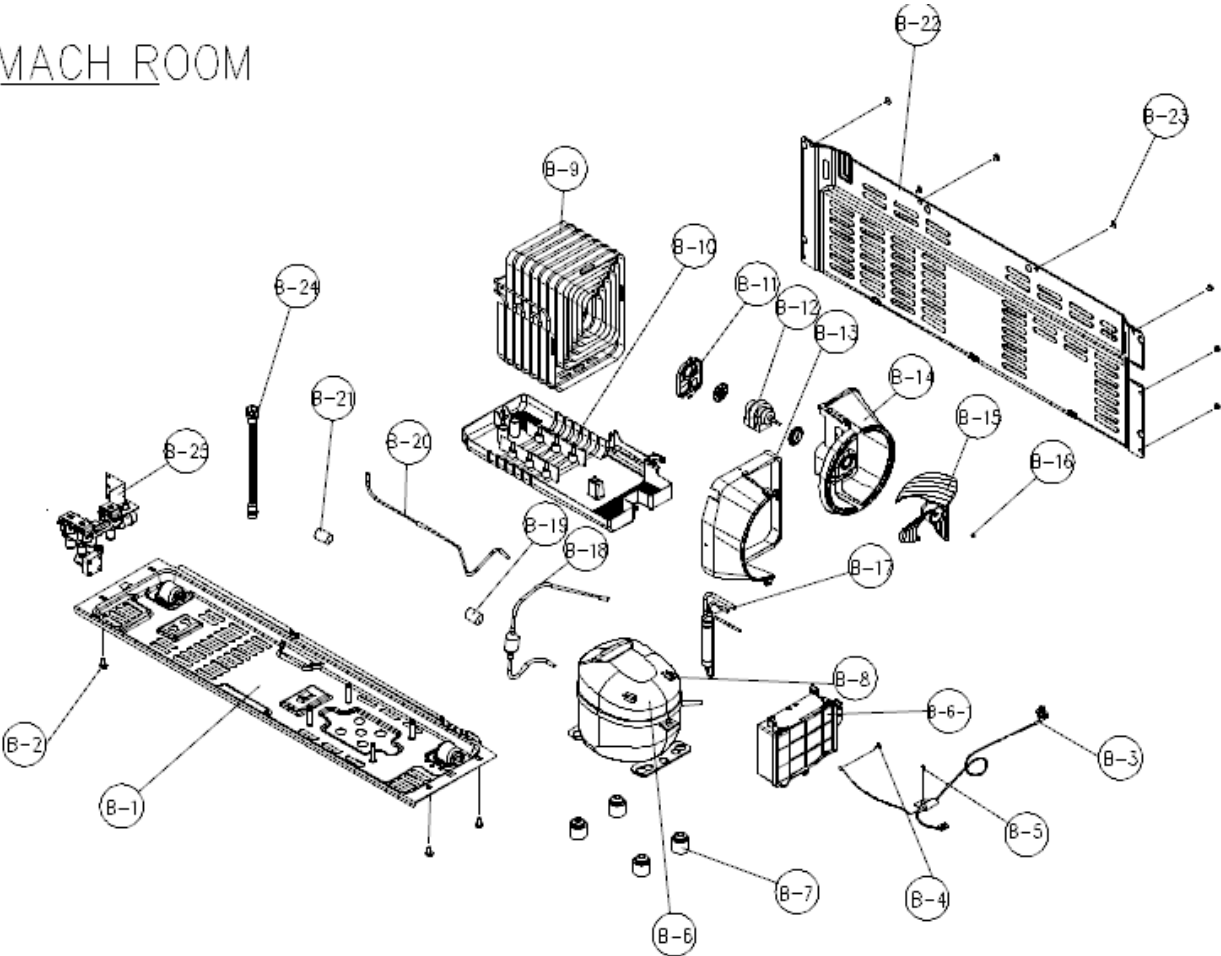


## 12.-1 Pop-Up Drawings (RSZ612D\*\*)

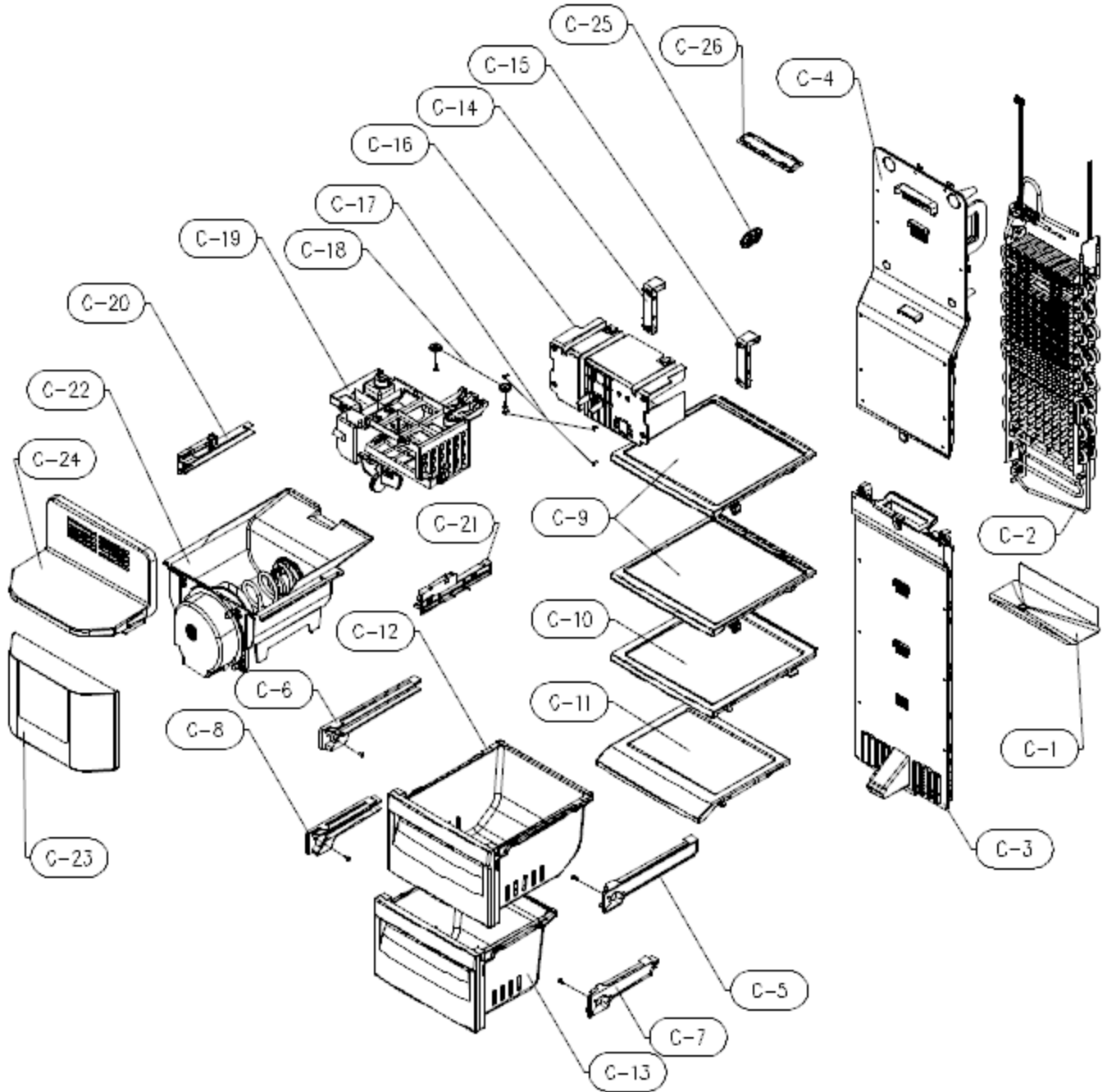
CABINET(DISPENSER MODEL)

12.-1 Pop-Up Drawings (RSZ612D\*\*)

MACH ROOM

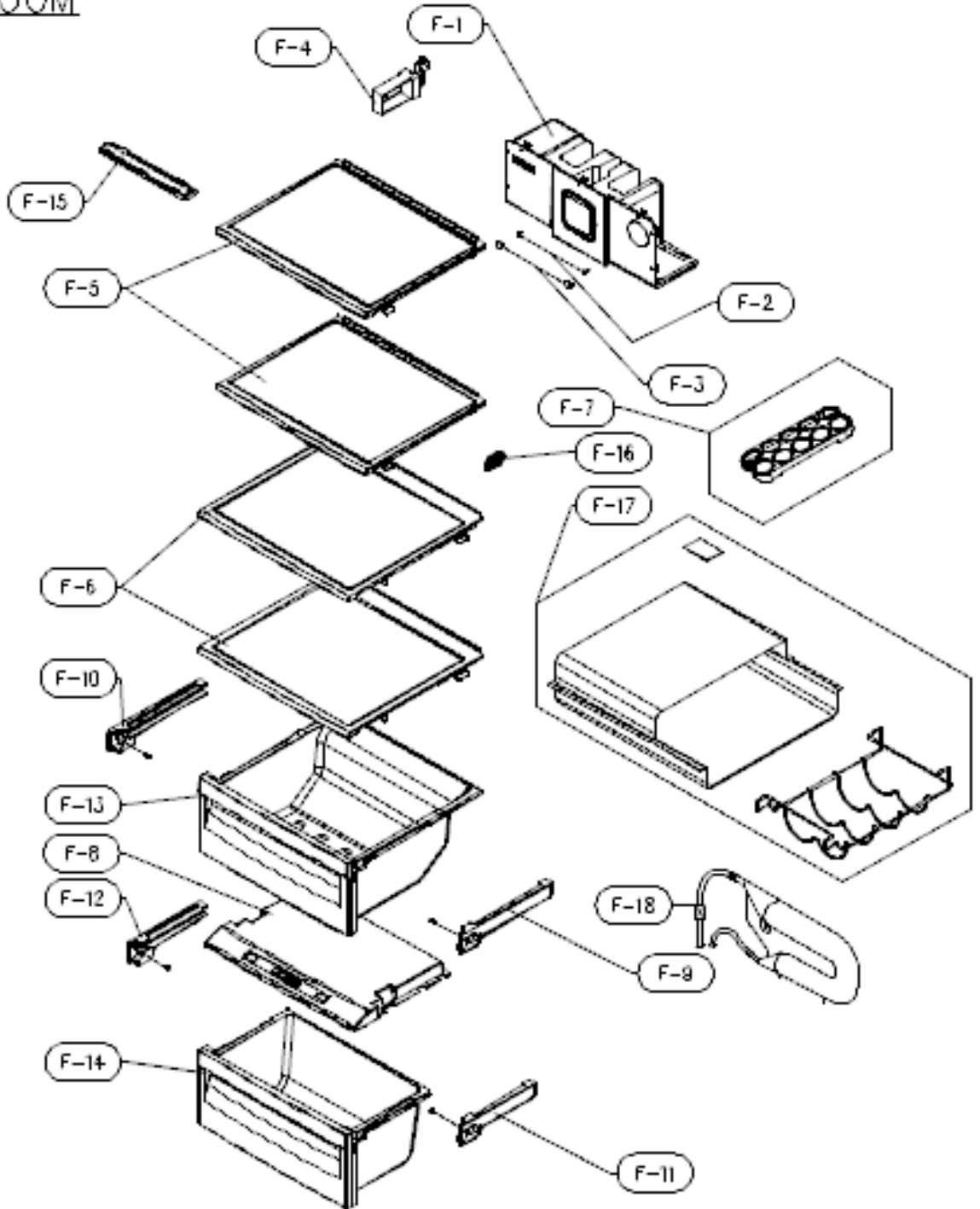


## 12.-1 Pop-Up Drawings (RSZ612D\*\*)

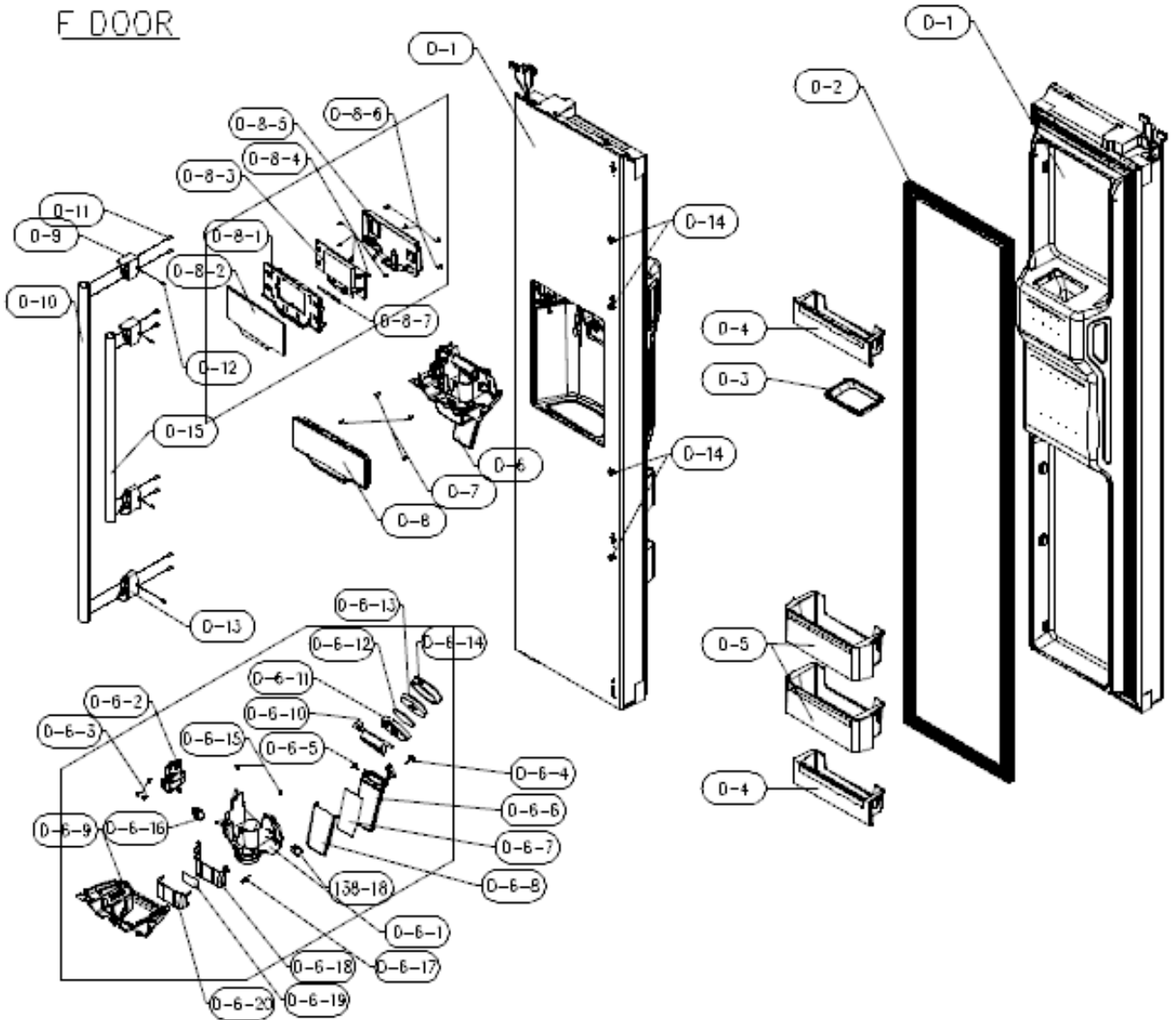
F ROOM

12.-1 Pop-Up Drawings (RSZ612D\*\*)

R ROOM



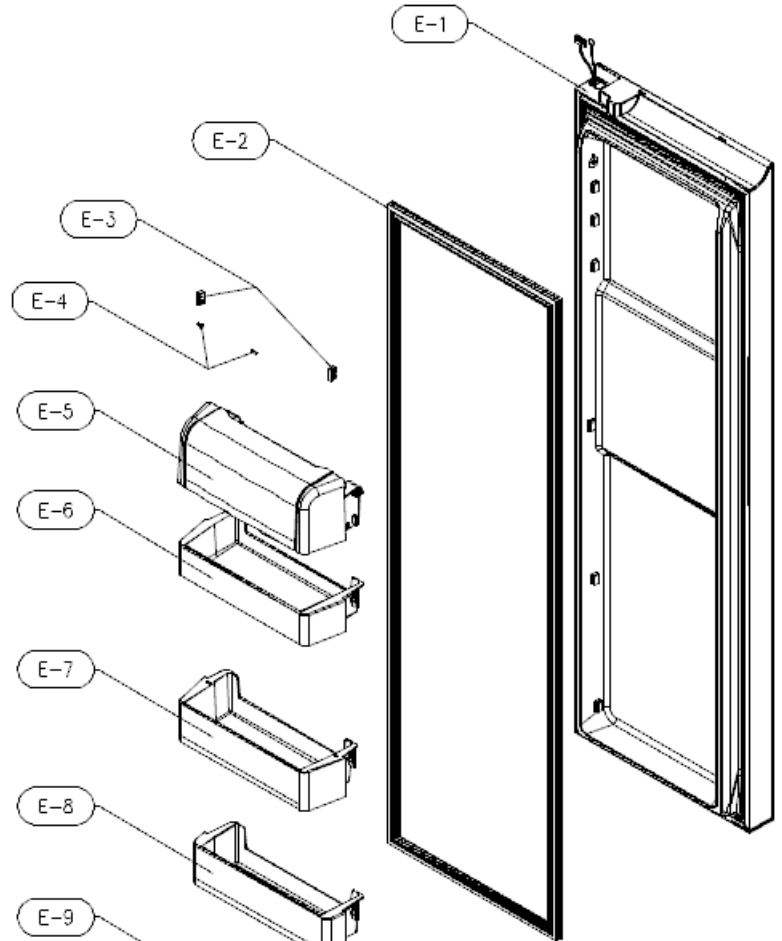
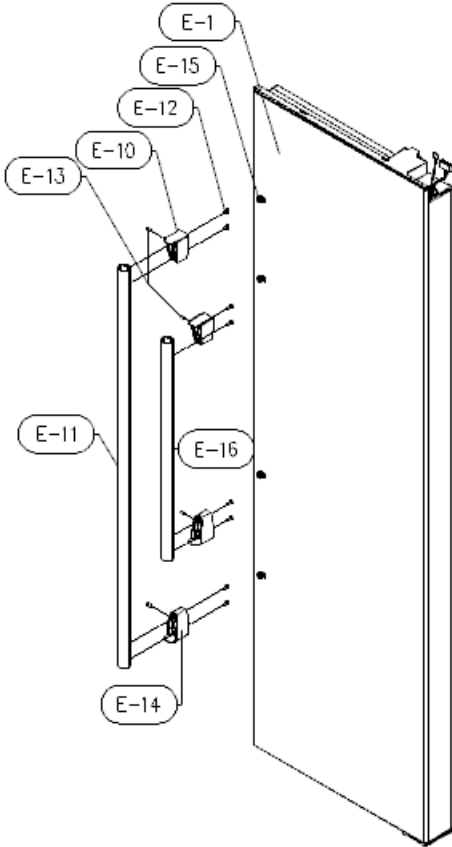
12.-1 Pop-Up Drawings (RSZ612D\*\*)



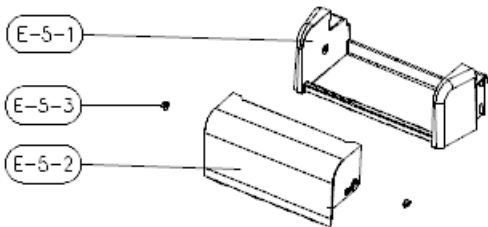


12.-1 Pop-Up Drawings (RSZ612D\*\*)

R DOOR

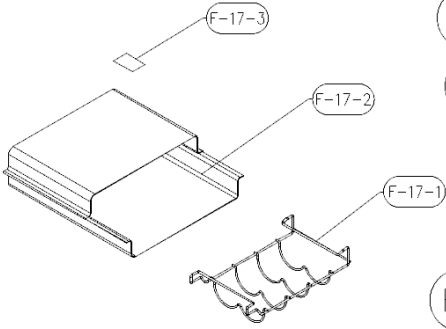


POCKET DAIRY AS

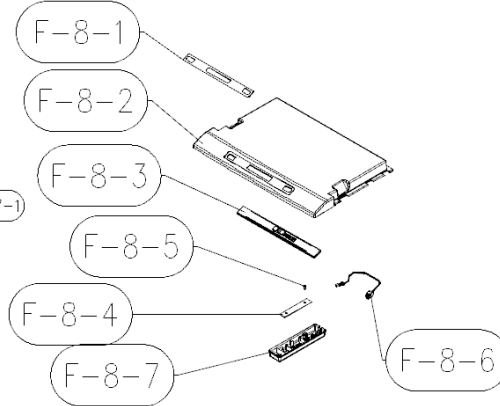


12.-1 Pop-Up Drawings (RSZ612D\*\*)

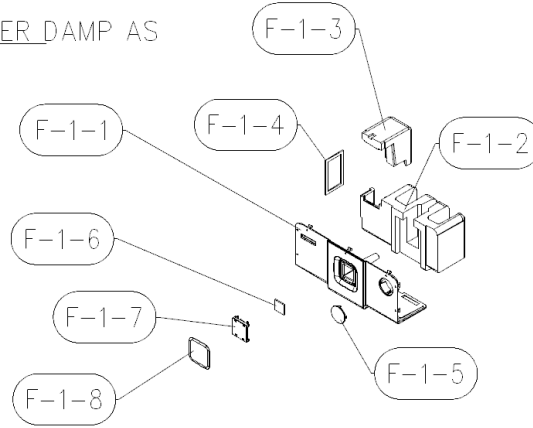
SHELF\_WINE AS



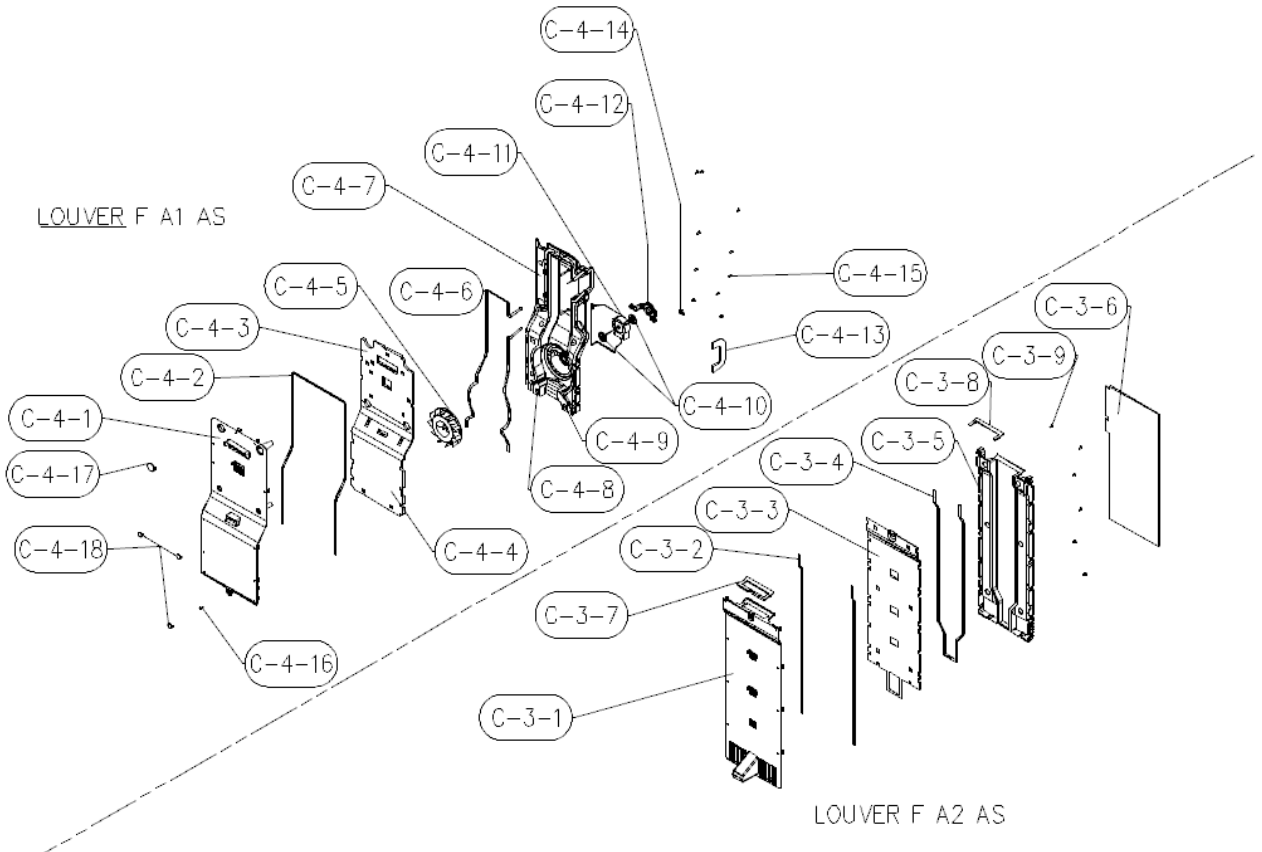
COVER\_V/CASE AS



COVER\_DAMP AS



LOUVER F A1 AS



LOUVER F A2 AS

NO	PART NAME	PART CODE NO	QTY	REMARKS
A-1	ASSY CAB URT	300009AC00	1	FRX-601D
A-2	HINGE *T *R AS	3012933300	1	PO T3.0 + PAINT
A-3	HINGE *T *L AS	3012933200	1	PO T3.0 + PAINT
A-4	SPECIAL *T HI BOLT	3016042300	2	SWCH18A
A-5	COVER HI *T *R	3001434900	1	PP
A-6	COVER HI *T *L	3001434800	1	PP
A-7	SWITCH H/BAR DR AS	3018125601	2	SP101B-2DI(G), GRAY
A-8	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-9	CAP CAB COVER	3010968400	2	PP
A-10	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-11	REF PCB MAIN ASSY	40301-0102202	1	ZB600 HIGH
A-12	COVER M/PCB BOX	3011446001	1	PP(FB-72)
A-13	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-14	HINGE *U *R AS	3012933510	1	FRX-621B
A-15	HINGE *U *L AS	3012933411	1	FRX-621B
A-16	SPECIAL BOLT *T	3016001240	8	6*22 SWCH22A(YL)
A-17	BRACKET ADJ FT *R AS	3010684300	1	FRQ-503D
A-18	BRACKET ADJ FT *L AS	3010684200	1	FRQ-503D
A-19	SPECIAL BOLT	3016001270	2	6*18 SWCH22A(WH)
A-20	COVER CAB BRKT	3001433900	1	PP
A-21	SCREW TAPPING	7112401611	3	T1 TRS 4*16 MFZN
A-22	HOSE I/MAKER TUBE AS	301322800	1	FRY-61ADTE8NI
A-23	GUIDE CAB W/TUBE A1 AS	30125-0038001	1	L1535, RSX60/61, RPX60/61
A-24	COVER GUIDE CAB W/TUBE A1	301149CP00	2	FRX-601G
A-25	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-26	COVER GUIDE CAP W/FILT	3001424100	1	PP
A-27	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-28	CLAMP W/TUBE C	3011202010	2	HIPS
A-29	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
B-1	BASE COMP AS	3010359600	1	FRX-621B

NO	PART NAME	PART CODE NO	QTY	REMARKS
B-2	SPECIAL BOLT	3016003300	4	T2 M6.5*20
B-3	CORD POWER AS	3011346701	1	AC 250V 16A(VDE)
B-4	SPECIAL SCREW	7S422X4081	2	TT3 TRS 4*8 SE MFZN
B-5	SPECIAL SCREW	3016008900	1	T1 PAN 4*12 PW MFZN
B-6	COMPRESSOR	60110-0020400	1	VNW120LIBB DAEWOO COMP
B-6-1	BOX INVERTER AS	30105-0035702	1	VNW120LIBB(230V) INVERTER
B-7	ABSORBER COMP	3010101600	4	NBR
B-8	COMP WASHER	3016002500	3	SK-5 T0.8
B-9	PIPE WICON AS	3014486700	1	6ROW CON FRX-608F
B-10	CASE VAPORI AS	30111-0044400	1	PP FRX-608F
B-11	FIXTURE MOTR	3012021700	1	PP
B-12	MOTOR C FAN	3015920900	1	D4612AAA31
B-13	M/BELL B	3018500310	1	PP
B-14	M/BELL A	3018500210	1	PP
B-15	FAN	3011836300	1	PP OD3.17*D150
B-16	CLAMP FAN	3011200500	1	SUS 304
B-17	DRYER AS	60168-0000814	1	SBS 10G(X600 LOKRING)
B-18	PIPE SUC CONN	3014474610	1	FRX-621B
B-19	ABSORBER SUC PIPE A	3010101340	1	NBR 32G
B-20	PIPE CONN A2 AS	60144-0027201	1	Ø4.76xT0.5, FRX-608F
B-21	ABSORBER PIPE B	3010101330	1	NBR 15G
B-22	COVER MACH RM AS	3001436520	1	GI T0.35
B-23	SPECIAL SCREW	3016008910	7	TH1/W #8x1/2 MFZN
B-24	HOSE DRN	30132-0004800	1	PE ZB6T00 T=0.6
B-25	VALVE WATER AS	3015402300	1	FR-S660CW
C-1	GUIDE DRN	3012538400	1	EGI SCRAP T0.4
C-2	EVA AS	60170-0011800	1	ZB600
C-3	LOUVER F A2 AS	30189-0014600	1	RSZ621B
C-4	LOUVER F A1 AS	30189-0014700	1	RSZ612D
C-5	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)

NO	PART NAME	PART CODE NO	QTY	REMARKS
C-6	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
C-7	GUIDE CASE C *R AS	3012529812	1	FRU-571I(PP)
C-8	GUIDE CASE C *L AS	3012529712	1	FRU-571I(PP)
C-9	SHELF F AS	3017851200	2	FRX-621B
C-10	COVER F CASE *T AS	3001438000	1	FRX-621B
C-11	COVER F CASE *U	3001434500	1	HIPS
C-12	CASE F *T AS	30111-0050300	1	RSZ621B
C-13	CASE F *U AS	30111-0050400	1	RSZ621B
C-14	GUIDE G MOTOR BRKT *L	3012517800	1	ABS
C-15	GUIDE G MOTOR BRKT *R	3012517900	1	ABS
C-16	BRACKET G/MOTR AS	3010673651	1	FRX-612D
C-17	SCREW TAPPING	7112401415	4	T1 TRS 4*14 ZNNI
C-18	FIXTURE C	3012013200	2	PP
C-19	FRAME I/MAKER AS	3012231400	1	FRX-601D
C-20	GUIDE I/CRUSHER *L	3012538200	1	ABS
C-21	GUIDE I/CRUSHER *R	3012538100	1	ABS
C-22	CASE I/CRUSHER AS	30111-0050600	1	AS
C-23	COVER I/CRUSHER *U	30114-0096900	1	HIPS
C-24	COVER I/CRUSHER *T	30114-0096800	1	HIPS
C-25	COVER F SENSOR	300149D800	1	ABS
C-26	WINDOW F LED *T	3015517200	1	ABS(TRANPARENCY)
C-3-1	LOUVER F A2	30189-0014500	1	RSZ-621B
C-3-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-3-3	SEAL F LUVR A3	30177-0066500	1	F-PE(G)
C-3-4	SEAL INSU B	301779EF00	3	EPDM
C-3-5	DUCT F A2	30169-0007700	1	RSZ621B
C-3-6	SEAL F LUVR A2	60177-0066400	1	F-PE+AL
C-3-7	SEAL F LUVR A4	60177-0066600	1	EPDM T5.0
C-3-8	SEAL DUCT	60177-0066700	1	EPDM T3.0
C-3-9	SCREW TAPPING	7122401211	6	T2S TRS 4*12 MFZN

NO	PART NAME	PART CODE NO	QTY	REMARKS
C-4-1	LOUVER F A1	30189-0014400	1	RSZ612D
C-4-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-4-3	INSU F A1	30133-0022200	1	F-PS
C-4-4	INSU F A2	30133-0022100	1	F-PS
C-4-5	FAN F	3011836400	1	ABS
C-4-6	SEAL INSU B	301779EF00	3	EPDM
C-4-7	FIXTURE F MOTR A	30120-0027700	1	PP
C-4-8	SEAL FIXR MOTR A1	60177-0066800	1	EPDM T3.0
C-4-9	SEAL FIXR MOTR A2	60177-0066900	1	EPDM T3.0
C-4-10	ABSORBER F MOTR	3010108800	2	NBR
C-4-11	MOTOR F FAN AS	60159-0007001	1	DC12V ZB600
C-4-12	FIXTURE F MOTR B	3012034700	1	PP
C-4-13	SEAL F LUVR A3	3007708400	1	EPDM, T5.0
C-4-14	CLAMP TUBE A	3011202000	1	PA-66, 5N
C-4-15	SCREW TAPPING	7122401211	8	T2S TRS 4*10 MFZN
C-4-16	SCREW TAPPING	7122401211	1	T2S TRS 4*10 MFZN
C-4-17	CAP F LOUVER	3010924600	2	HIPS 2.3T
C-4-18	CAP F LOUVER B	3010968600	3	HIPS
F-1	COVER DAMP AS	30114-0097800	1	ZB600 HIGH
F-2	SCREW TAPPING	7112401211	2	T1 TRS 4*14 MFZN
F-3	CAP F LOUVER	3010924600	2	HIPS 2.3T
F-4	DAMPER AS	3016767100	1	DU24-013
F-5	SHELF R AS	30178-0033500	2	ZB600 HIPS+GLASS
F-6	COVER V/CASE AS	30114-0101200	2	ZB600 HIPS+GLASS
F-7	CASE EGG TRAY	3011190800	1	GPPS
F-8	COVER V/CASE *U AS	30114-0097900	1	RSZ621B
F-9	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
F-10	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)
F-11	GUIDE V/CASE *U *R AS	3012540400	1	FRX-621B
F-12	GUIDE V/CASE *U *L AS	3012540300	1	FRX-621B

NO	PART NAME	PART CODE NO	QTY	REMARKS
F-13	CASE VEGETB *M AS	30111-0050200	1	RSZ621B
F-14	CASE VEGETB *U AS	30111-0051000	1	SILK PRINT(VITA LED)
F-15	WINDOW R LED *T	3015517100	1	ABS(TRANSPARENT)
F-16	COVER R SENSOR	300149D800	1	ABS
F-17	SHELF WINE AS	30178-0033900	1	AS
F-18	TANK WATER AS	3018201000	1	FRU-541D
D-1	ASSY F DR URT	30100-0215100	1	FRX-601D
D-2	GASKET F DR AS	30123-0017300	1	PVC-S, 336X1613
D-3	CAP I/PATH FRAME	3010989400	1	PP
D-4	POCKET F *U	3019058110	2	CRYSTAL
D-5	POCKET F *M	3019057930	2	CRYSTAL
D-6	DOX DISPNE I/SHUT AS	30105-0037800	1	2LEVER, CURVED
D-7	SCREW TAPTITE	7173401211	4	TT2 BIN 4*14 MFZN
D-8	PANEL CONTL *F AS	60142-0027000	1	2LEVER, CURVED
D-9	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
D-10	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL TITAN AnO
D-11	SCREW TAPPING	7112401211	4	T1 TRS 4*14 MFZN
D-12	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
D-13	SUPPORTER HNDL *U	30153-0023100	1	ABS+Zn INSERT+SPRAY
D-14	SPECIAL BOLT HNDL	300009AF00	2	M6, SWCH10A
D-15	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL TITAN AnO
E-1	ASSY R DR URT	300009AF00	1	FRX-621B
E-2	GASKET R DR AS	30123-0017400	1	PVC-S, 474X1613
E-3	FIXTURE POKT	30120-0027900	2	HIPS
E-4	SCREW TAPPING	7112401420	1	T1 TRS 4X14(WHITE COLOR)
E-5	POCKET DAIRY AS	30190-0029200	1	CRYSTAL ZB600
E-6	POCKET R *T	3019058410	1	CRYSTAL
E-7	POCKET H/BAR AS	30190-0029300	1	SILK PRINT ZB600 CRYTAL
E-8	POCKET R *M	3019058310	1	FRX-60R, CRYSTAL
E-9	POCKET R *U	3019058510	1	CRYSTAL

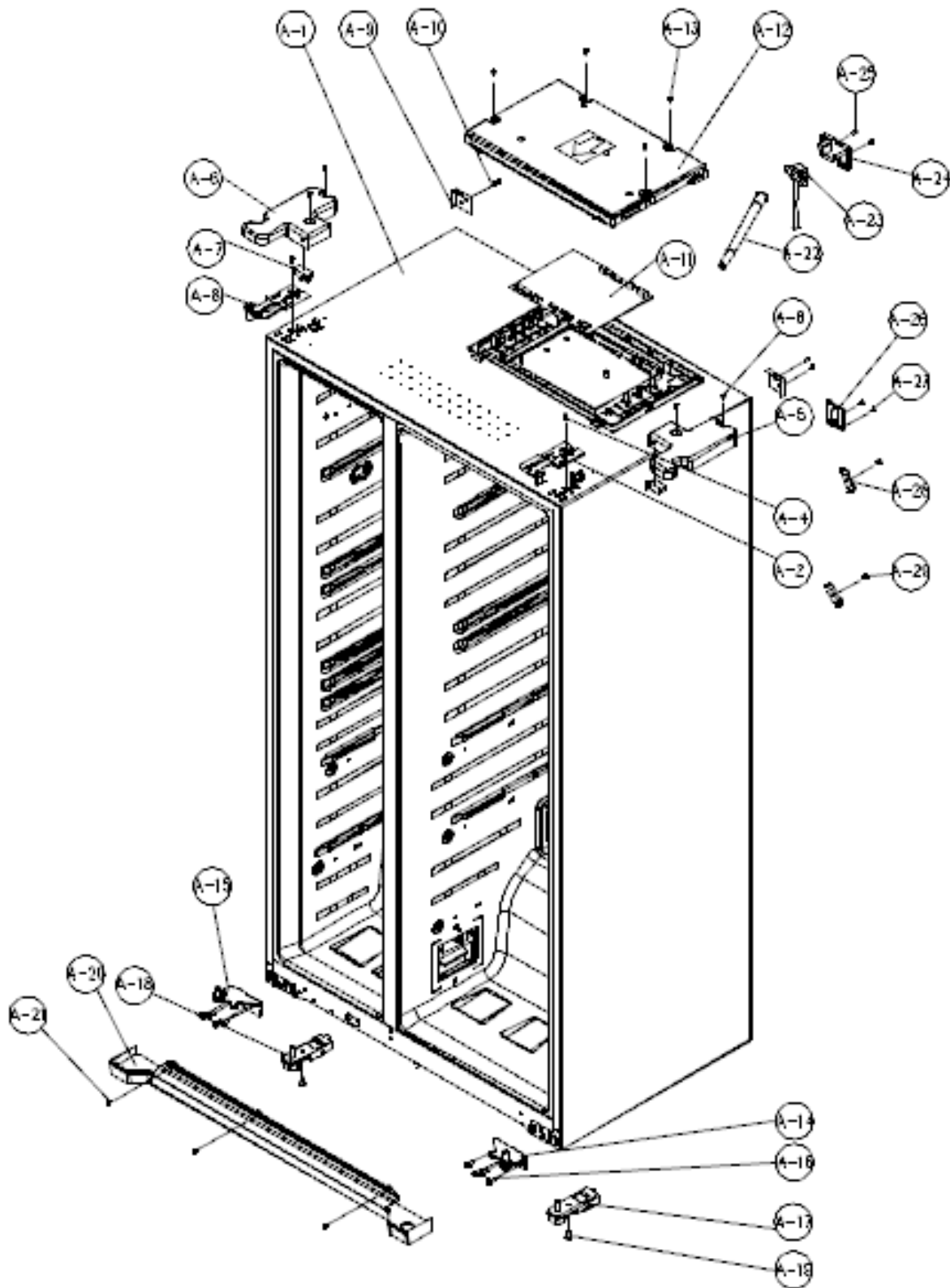
NO	PART NAME	PART CODE NO	QTY	REMARKS
E-10	SUPPORTER HNDL *U	30153-0023100	1	ABS+Zn INSERT+SPRAY
E-11	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL,TITAN Ano
E-12	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
E-13	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
E-14	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
E-15	SPECIAL BOTL HNDL	3016046400	2	M6,SWCH10A
E-16	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano
E-5-1	POCKET DAIRY	30190-0029000	1	HIPS
E-5-2	COVER DAIRY	30114-0095100	1	GPPS
E-5-3	BUSHING DAIRY POKT	30107-0004800	2	POM
F-1-1	COVER DAMP	30114-0096700	1	RSZ621B
F-1-2	INSU DAMP COVR *A1	3013378300	1	F-PS
F-1-3	INSU DAMP COVR *A2	30133-0022000	1	F-PS
F-1-4	SEAL INSU DAMP COVR	301779GB00	1	F-OJC, T5.0
F-1-5	CAP DAMP COVER	3010989900	1	HIPS
F-1-6	DEODORANT	60187-0001100	1	W45XL45
F-1-7	FRAME DEO	30122-0039200	1	HIPS
F-1-8	COVER DEO	30114-0085401	1	PC+FILM
F-8-1	WINDOW HUMID CONTL	30155-0025000	1	PC SHEET T0.5
F-8-2	COVER V/CASE *U	30114-0095500	1	HIPS
F-8-3	KNOB HUMID CONTL	30134-0005900	1	HIPS
F-8-4	PCB LED AS	30143F1410	1	FR-T690FG
F-8-5	SCREW MACHINE	7001300811	1	T2S PAN 3*8 MFZN
F-8-6	HARNESS LED PCB AS	60127-0041000	1	TITANA COMMON
F-8-7	WINDOW VITA LED	30155-0024900	1	MIPS
F-17-1	SHELF WINE	30178-0032500	1	SUS204
F-17-2	BAG AIR	60102-0004500	1	BAG VINYL AIR CAP W480XL530
F-17-3	TAPE PE	1TAJXXX-0017	0.07	T0.04XW50 WHITE



NO	PART NAME	PART CODE NO	QTY	REMARKS
D-6-1	BOX DISPNS I/SHUT	30105-0037600	1	ABS
D-6-2	MOTOR I/SHUT AS	3015922800	1	DC12V(SCD)
D-6-3	SCREW TAPTITE	7173401211	3	TTS BIN 4X12 MFZN
D-6-4	SPRING LEVER I/SHUT	30151-0003100	1	SUS304
D-6-5	SPRING LEVR DISPNS BOX	30151-0002700	1	SUS304
D-6-6	LEVER DISPNS	30137-0005300	1	PC
D-6-7	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45, ACRYL(WHITE)
D-6-8	DECO DISPNS LEVR	30116-0039000	1	SUS304, AFP, HAIR LINE
D-6-9	COVER DISPNS I/SHUT	30114-0095200	1	CURVED 2-LEVER
D-6-10	LEVER I/SHUT	30137-0005500	1	POM
D-6-11	FLAP ICE A2	30171-0000900	1	ABS
D-6-12	SEAL I/FLAP	3017763200	1	F-US(G), T3*OD69
D-6-13	INSU I/FLAP	30133-0022300	1	F-PS
D-6-14	COVER I/FLAP	30114-0094800	1	SILICON
D-6-15	SCREW TAPTITE	7173401211	2	TTS BIN 4X12 MFZN
D-6-16	SWITCH MICRO	3018133600	1	GSM-V603**
D-6-17	SPRING LEVR W/DISPNS	30151-0003200	1	SUS304
D-6-18	LEVER W/DISPNS	30137-0005400	1	PC
D-6-19	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45 ACRYL(WHITE)
D-6-20	DECO W/DISPNS	30116-0038500	1	SUS304 AFP, HAIR LINE
D-8-1	PANEL CONTL *F	60142-0026700	1	ABS
D-8-2	WINDOW FCP AS	30155-0025700	1	ABS+FILM INSERT
D-8-3	REF PCB FRONT AS	40301-0102700	1	2 LEVER, CURVED
D-8-4	SCREW TAPPING	7121300811	6	T2S PAN 3X8 MFZN
D-8-5	COVER FCP	30114-0095000	1	PP
D-8-6	SCREW TAPPING	7122400811	4	T2S TRS 4X8 MFZN
D-8-7	PLATE FCP AS	30145-0031000	1	PET T0.1, BLACK

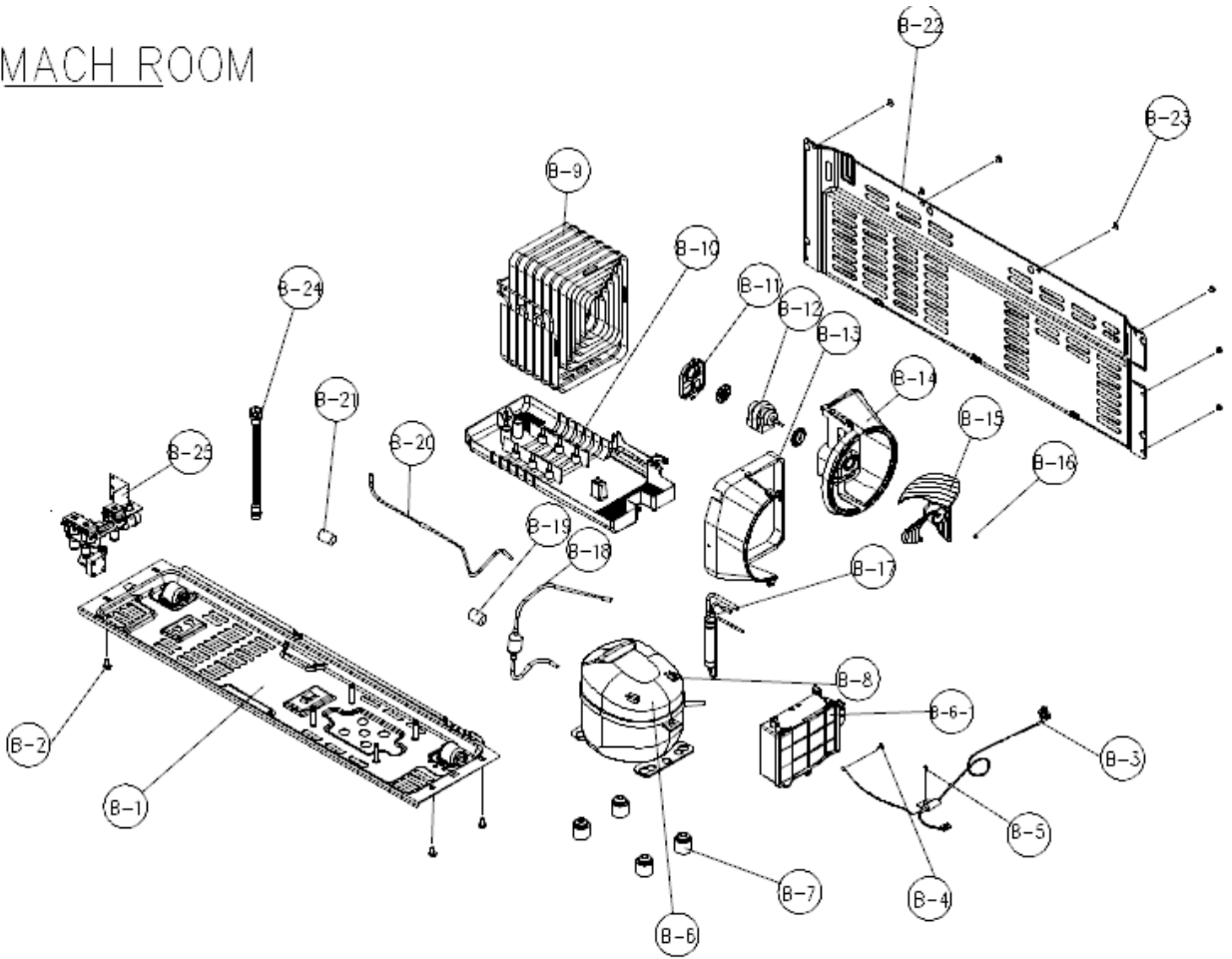
12.-1 Pop-Up Drawings (RSZ612F\*\*)

CABINET(DISPENSER MODEL)

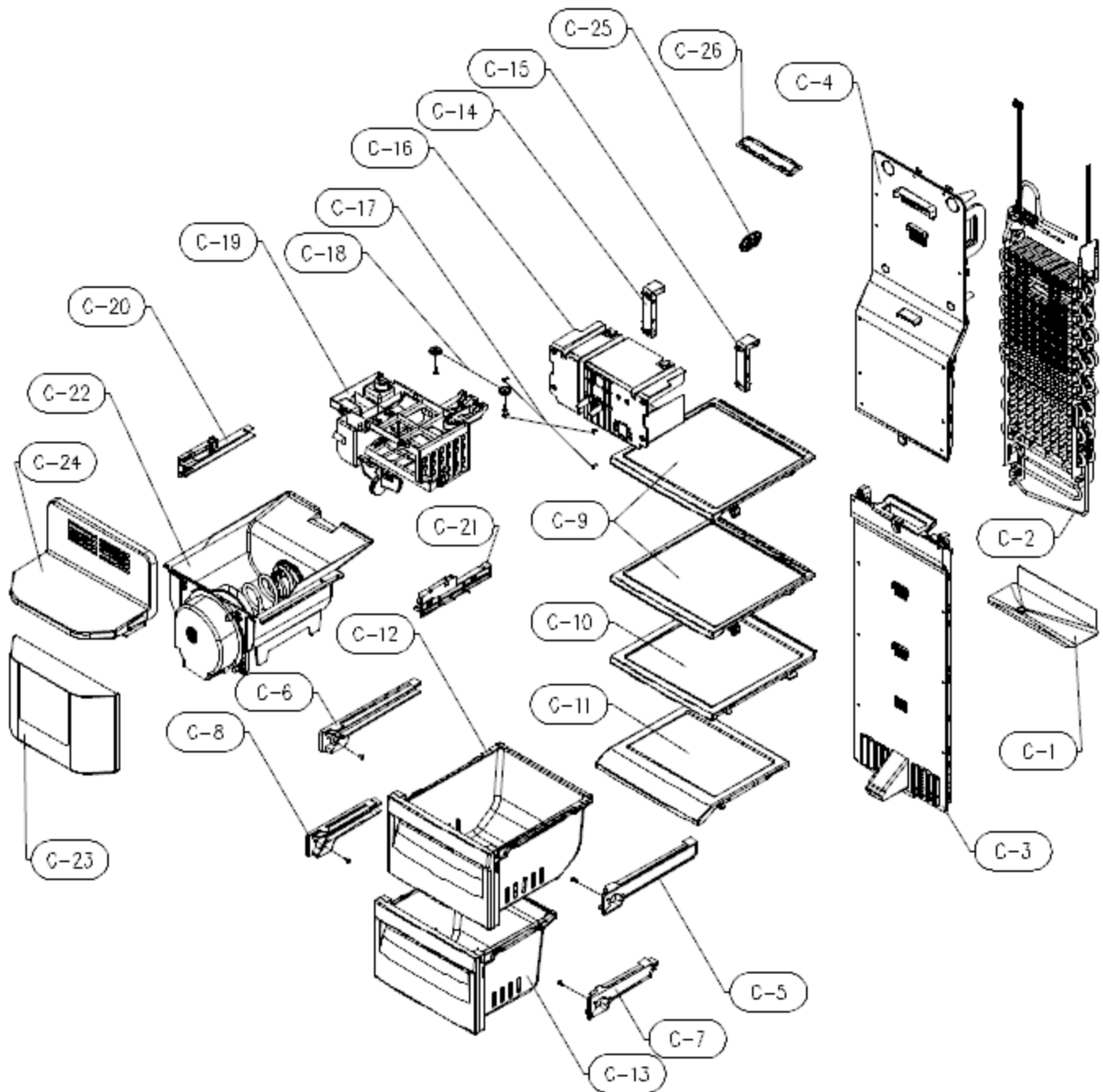


12.-1 Pop-Up Drawings (RSZ612F\*\*)

MACH ROOM

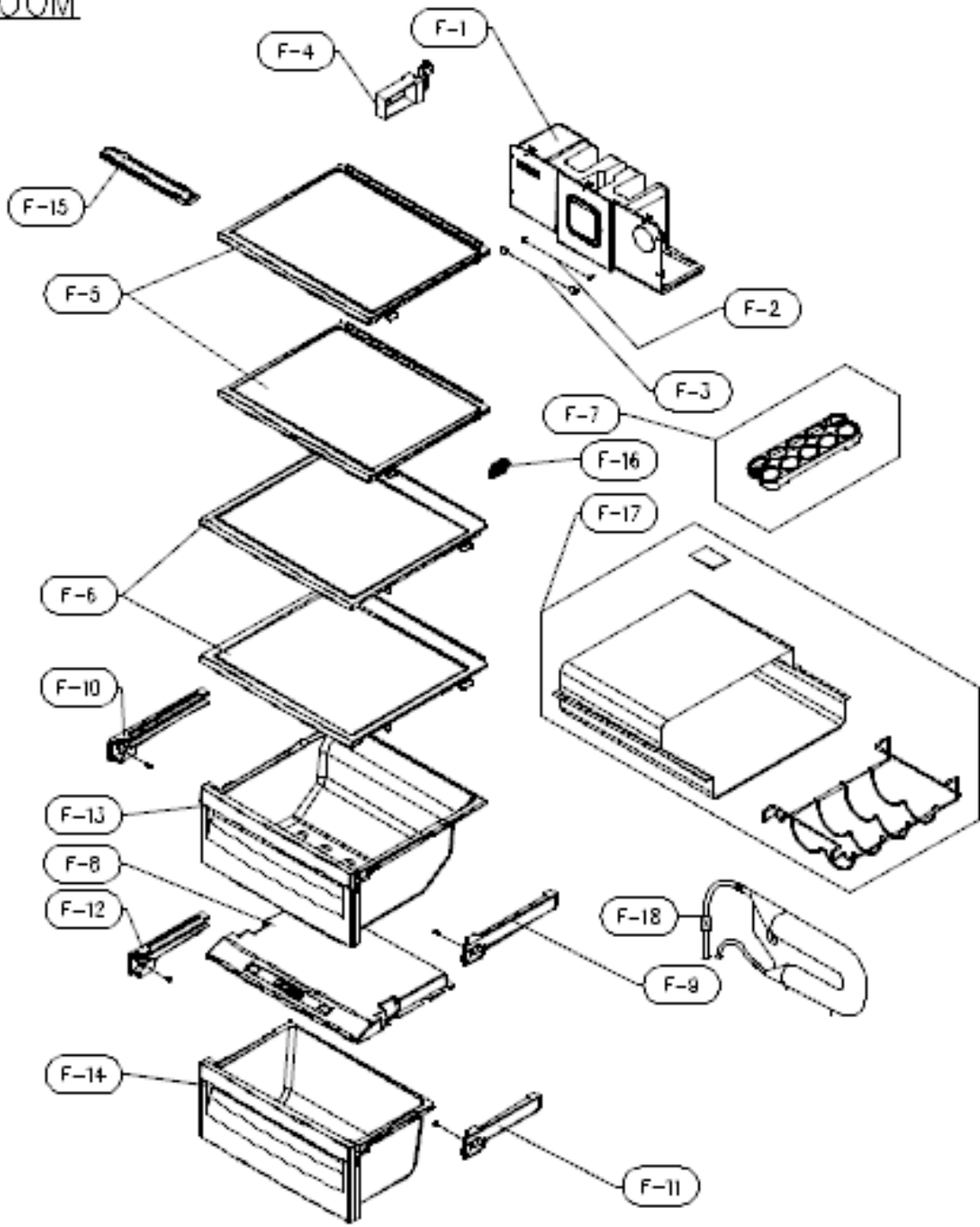


## 12.-1 Pop-Up Drawings (RSZ612F\*\*)

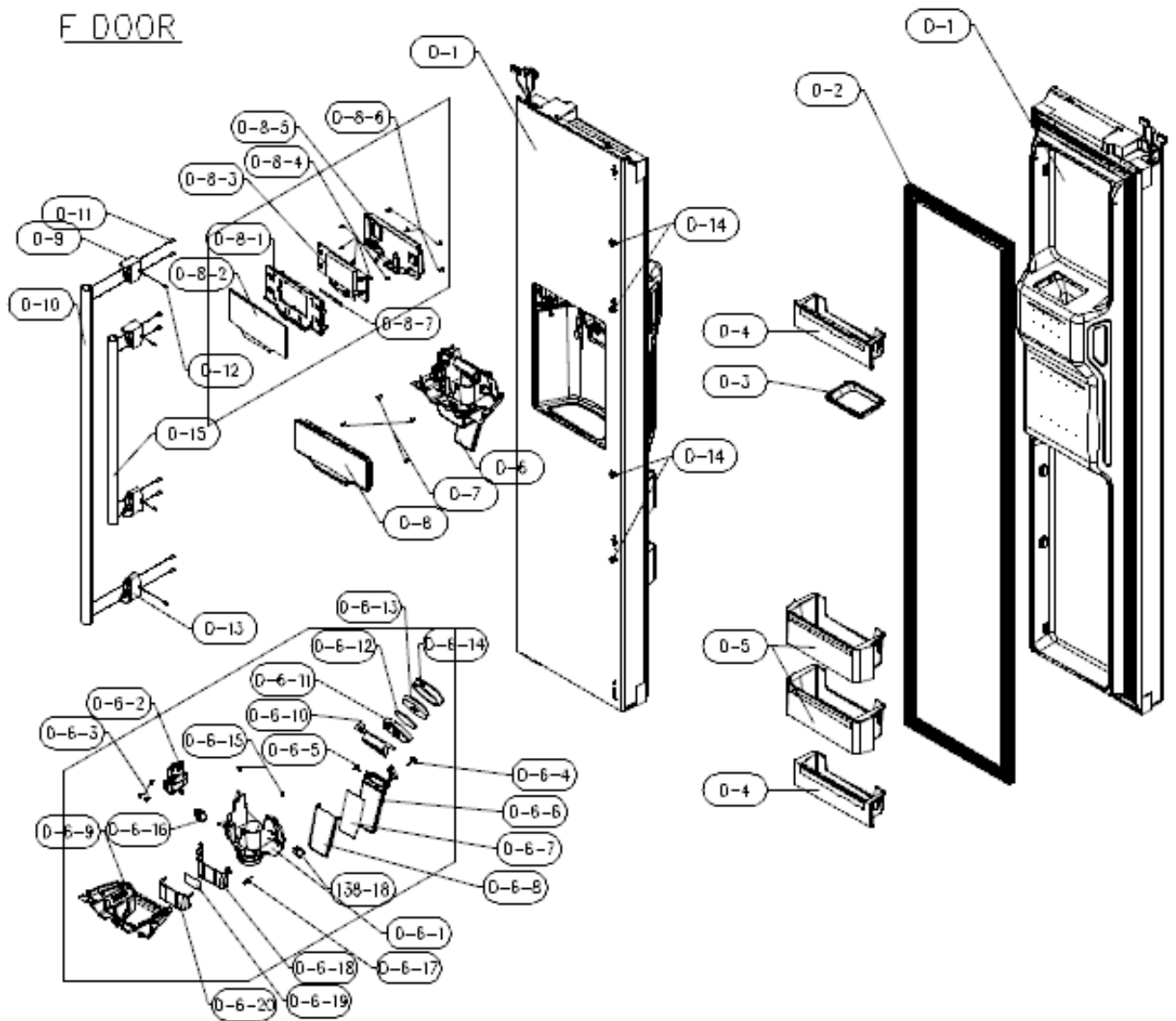
F ROOM

12.-1 Pop-Up Drawings (RSZ612F\*\*)

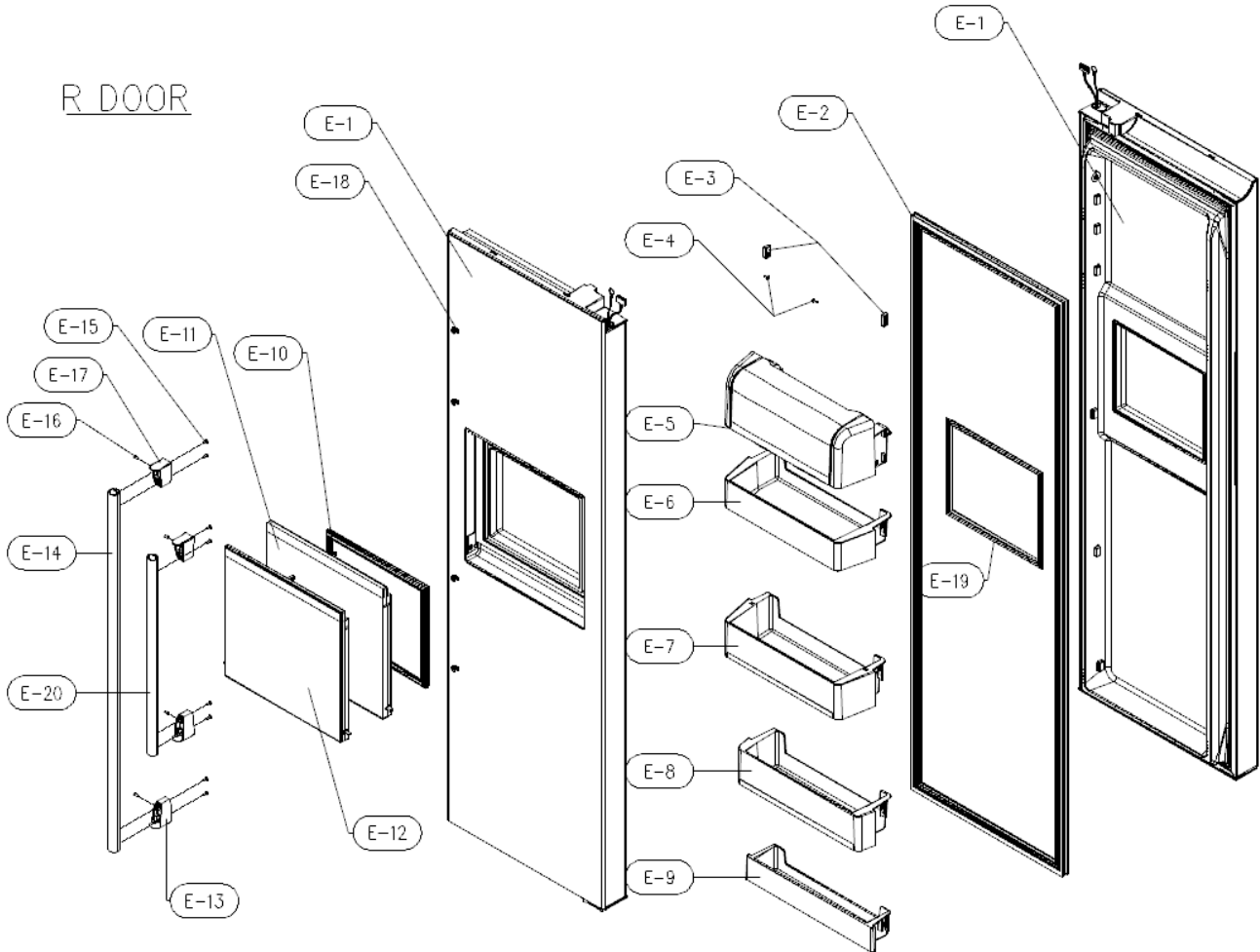
R ROOM



## 12.-1 Pop-Up Drawings (RSZ612F\*\*)

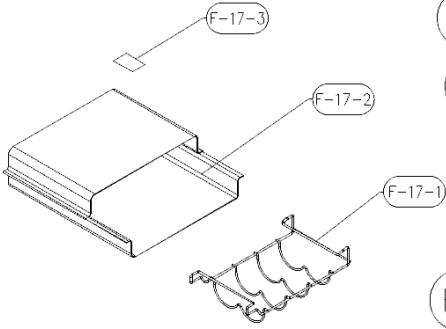


12.-1 Pop-Up Drawings (RSZ612F\*\*)

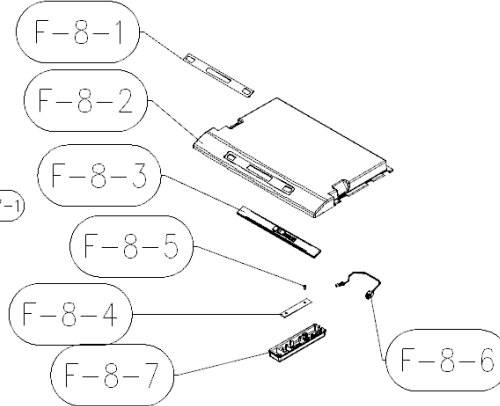


12.-1 Pop-Up Drawings (RSZ612F\*\*)

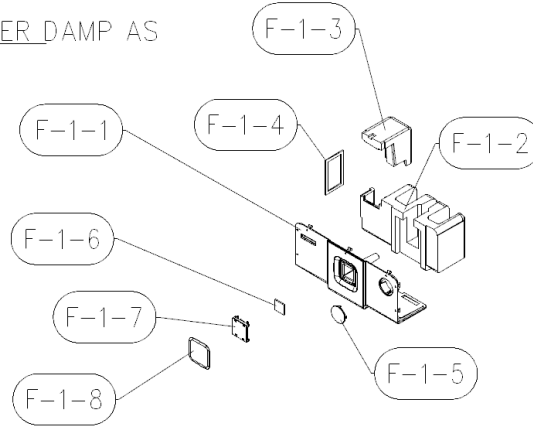
SHELF\_WINE AS



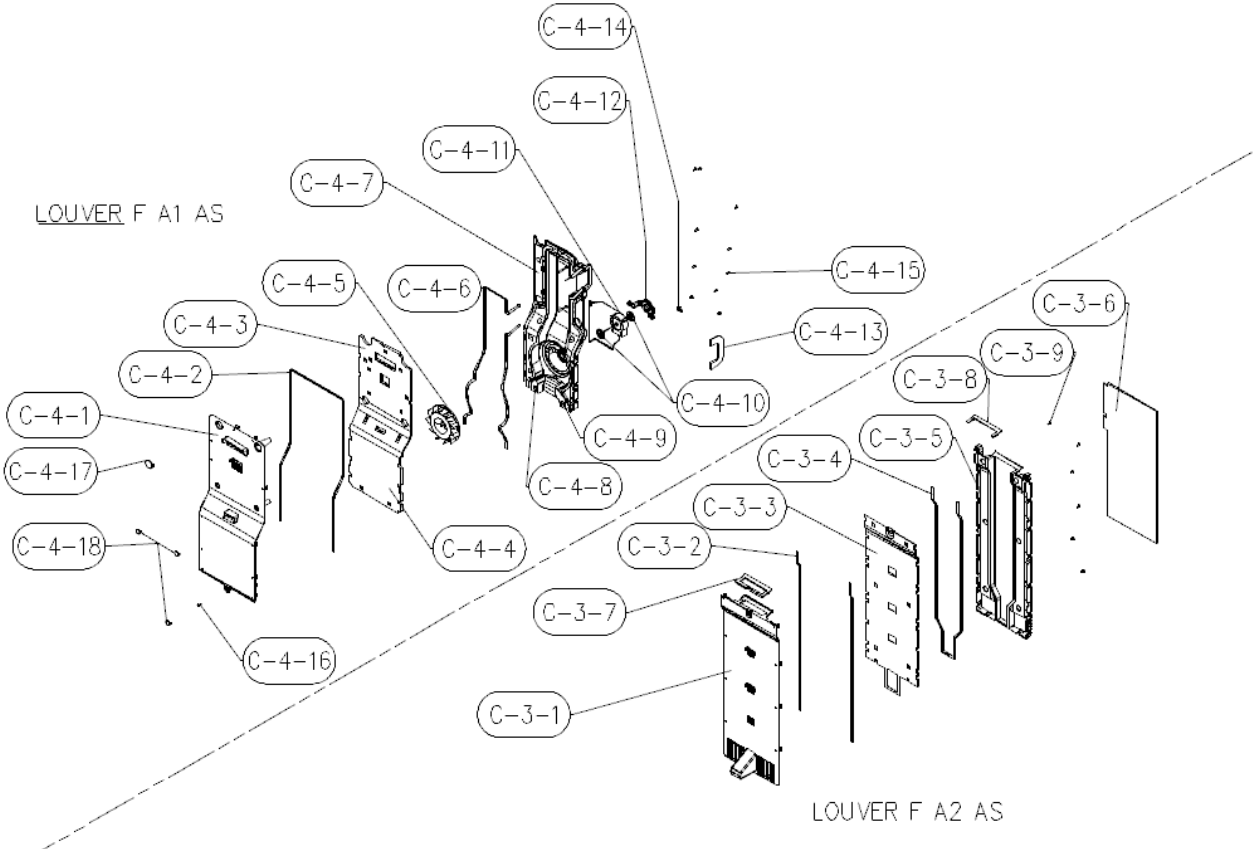
COVER\_V/CASE AS



COVER\_DAMP AS



LOUVER F A1 AS



LOUVER F A2 AS



NO	PART NAME	PART CODE NO	QTY	REMARKS
A-1	ASSY CAB URT	300009AC00	1	FRX-6201D
A-2	HINGE *T *R AS	3012933300	1	PO T3.0 + PAINT
A-3	HINGE *T *L AS	3012933200	1	PO T3.0 + PAINT
A-4	SPECIAL *T HI BOLT	3016042300	2	SWCH18A
A-5	COVER HI *T *R	3001434900	1	PP
A-6	COVER HI *T *L	3001434800	1	PP
A-7	SWITCH H/BAR DR AS	3018125601	2	SP101B-2DI(G), GRAY
A-8	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-9	CAP CAB COVER	3010968400	2	PP
A-10	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-11	REF PCB MAIN ASSY	40301-0102201	1	ZB600 HIGH
A-12	COVER M/PCB BOX	3011446001	1	PP(FB-72)
A-13	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-14	HINGE *U *R AS	3012933510	1	FRX-621B
A-15	HINGE *U *L AS	3012933411	1	FRX-621B
A-16	SPECIAL BOLT *T	3016001240	8	6*22 SWCH22A(YL)
A-17	BRACKET ADJ FT *R AS	3010684300	1	FRQ-503D
A-18	BRACKET ADJ FT *L AS	3010684200	1	FRQ-503D
A-19	SPECIAL BOLT	3016001270	2	6*18 SWCH22A(WH)
A-20	COVER CAB BRKT	3001433900	1	PP
A-21	SCREW TAPPING	7112401611	3	T1 TRS 4*16 MFZN
A-22	HOSE I/MAKER TUBE AS	301322800	1	FRY-61ADTE8NI
A-23	GUIDE CAB W/TUBE A1 AS	30125-0038001	1	L1535, RSX60/61, RPX60/61
A-24	COVER GUIDE CAB W/TUBE A1	301149CP00	2	FRX-601G
A-25	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-26	COVER GUIDE CAP W/FILT	3001424100	1	PP
A-27	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-28	CLAMP W/TUBE C	3011202010	2	HIPS
A-29	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
B-1	BASE COMP AS	3010359600	1	FRX-621B

NO	PART NAME	PART CODE NO	QTY	REMARKS
B-2	SPECIAL BOLT	3016003300	4	T2 M6.5*20
B-3	CORD POWER AS	3011346701	1	AC 250V 16A(VDE)
B-4	SPECIAL SCREW	7S422X4081	2	TT3 TRS 4*8 SE MFZN
B-5	SPECIAL SCREW	3016008900	1	T1 PAN 4*12 PW MFZN
B-6	COMPRESSOR	60110-0020400	1	VNW120LIBB DAEWOO COMP
B-6-1	BOX INVERTER AS	30105-0035702	1	VNW120LIBB(230V) INVERTER
B-7	ABSORBER COMP	3010101600	4	NBR
B-8	COMP WASHER	3016002500	3	SK-5 T0.8
B-9	PIPE WICON AS	3014486700	1	6ROW CON FRX-608F
B-10	CASE VAPORI AS	30111-0044400	1	PP FRX-608F
B-11	FIXTURE MOTR	3012021700	1	PP
B-12	MOTOR C FAN	3015920900	1	D4612AAA31
B-13	M/BELL B	3018500310	1	PP
B-14	M/BELL A	3018500210	1	PP
B-15	FAN	3011836300	1	PP OD3.17*D150
B-16	CLAMP FAN	3011200500	1	SUS 304
B-17	DRYER AS	60168-0000814	1	SBS 10G(X600 LOKRING)
B-18	PIPE SUC CONN	3014474610	1	FRX-621B
B-19	ABSORBER SUC PIPE A	3010101340	1	NBR 32G
B-20	PIPE CONN A2 AS	60144-0027201	1	Ø4.76xT0.5, FRX-608F
B-21	ABSORBER PIPE B	3010101330	1	NBR 15G
B-22	COVER MACH RM AS	3001436520	1	GI T0.35
B-23	SPECIAL SCREW	3016008910	7	TH1/W #8x1/2 MFZN
B-24	HOSE DRN	30132-0004800	1	PE ZB6T00 T=0.6
B-25	VALVE WATER AS	3015402300	1	FR-S660CW
C-1	GUIDE DRN	3012538400	1	EGI SCRAP T0.4
C-2	EVA AS	60170-0011800	1	ZB600
C-3	LOUVER F A2 AS	30189-0014600	1	RSZ621B
C-4	LOUVER F A1 AS	30189-0014700	1	RSZ612D
C-5	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)

NO	PART NAME	PART CODE NO	QTY	REMARKS
C-6	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
C-7	GUIDE CASE C *R AS	3012529812	1	FRU-571I(PP)
C-8	GUIDE CASE C *L AS	3012529712	1	FRU-571I(PP)
C-9	SHELF F AS	3017851200	2	FRX-621B
C-10	COVER F CASE *T AS	3001438000	1	FRX-621B
C-11	COVER F CASE *U	3001434500	1	HIPS
C-12	CASE F *T AS	30111-0050300	1	RSZ621B
C-13	CASE F *U AS	30111-0050400	1	RSZ621B
C-14	GUIDE G MOTOR BRKT *L	3012517800	1	ABS
C-15	GUIDE G MOTOR BRKT *R	3012517900	1	ABS
C-16	BRACKET G/MOTR AS	3010673651	1	FRX-612D
C-17	SCREW TAPPING	7112401415	4	T1 TRS 4*14 ZNNI
C-18	FIXTURE C	3012013200	2	PP
C-19	FRAME I/MAKER AS	3012231400	1	FRX-601D
C-20	GUIDE I/CRUSHER *L	3012538200	1	ABS
C-21	GUIDE I/CRUSHER *R	3012538100	1	ABS
C-22	CASE I/CRUSHER AS	30111-0050600	1	AS
C-23	COVER I/CRUSHER *U	30114-0096900	1	HIPS
C-24	COVER I/CRUSHER *T	30114-0096800	1	HIPS
C-25	COVER F SENSOR	300149D800	1	ABS
C-26	WINDOW F LED *T	3015517200	1	ABS(TRANPARENCY)
C-3-1	LOUVER F A2	30189-0014500	1	RSZ-621B
C-3-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-3-3	SEAL F LUVR A3	30177-0066500	1	F-PE(G)
C-3-4	SEAL INSU B	301779EF00	3	EPDM
C-3-5	DUCT F A2	30169-0007700	1	RSZ621B
C-3-6	SEAL F LUVR A2	60177-0066400	1	F-PE+AL
C-3-7	SEAL F LUVR A4	60177-0066600	1	EPDM T5.0
C-3-8	SEAL DUCT	60177-0066700	1	EPDM T3.0
C-3-9	SCREW TAPPING	7122401211	6	T2S TRS 4*12 MFZN

NO	PART NAME	PART CODE NO	QTY	REMARKS
C-4-1	LOUVER F A1	30189-0014400	1	RSZ612D
C-4-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-4-3	INSU F A1	30133-0022200	1	F-PS
C-4-4	INSU F A2	30133-0022100	1	F-PS
C-4-5	FAN F	3011836400	1	ABS
C-4-6	SEAL INSU B	301779EF00	3	EPDM
C-4-7	FIXTURE F MOTR A	30120-0027700	1	PP
C-4-8	SEAL FIXR MOTR A1	60177-0066800	1	EPDM T3.0
C-4-9	SEAL FIXR MOTR A2	60177-0066900	1	EPDM T3.0
C-4-10	ABSORBER F MOTR	3010108800	2	NBR
C-4-11	MOTOR F FAN AS	60159-0007001	1	DC12V ZB600
C-4-12	FIXTURE F MOTR B	3012034700	1	PP
C-4-13	SEAL F LUVR A3	3007708400	1	EPDM, T5.0
C-4-14	CLAMP TUBE A	3011202000	1	PA-66, 5N
C-4-15	SCREW TAPPING	7122401211	8	T2S TRS 4*10 MFZN
C-4-16	SCREW TAPPING	7122401211	1	T2S TRS 4*10 MFZN
C-4-17	CAP F LOUVER	3010924600	2	HIPS 2.3T
C-4-18	CAP F LOUVER B	3010968600	3	HIPS
F-1	COVER DAMP AS	30114-0097800	1	ZB600 HIGH
F-2	SCREW TAPPING	7112401211	2	T1 TRS 4*14 MFZN
F-3	CAP F LOUVER	3010924600	2	HIPS 2.3T
F-4	DAMPER AS	3016767100	1	DU24-013
F-5	SHELF R AS	30178-0033500	2	ZB600 HIPS+GLASS
F-6	COVER V/CASE AS	30114-0101200	2	ZB600 HIPS+GLASS
F-7	CASE EGG TRAY	3011190800	1	GPPS
F-8	COVER V/CASE *U AS	30114-0097900	1	RSZ621B
F-9	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
F-10	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)
F-11	GUIDE V/CASE *U *R AS	3012540400	1	FRX-621B
F-12	GUIDE V/CASE *U *L AS	3012540300	1	FRX-621B

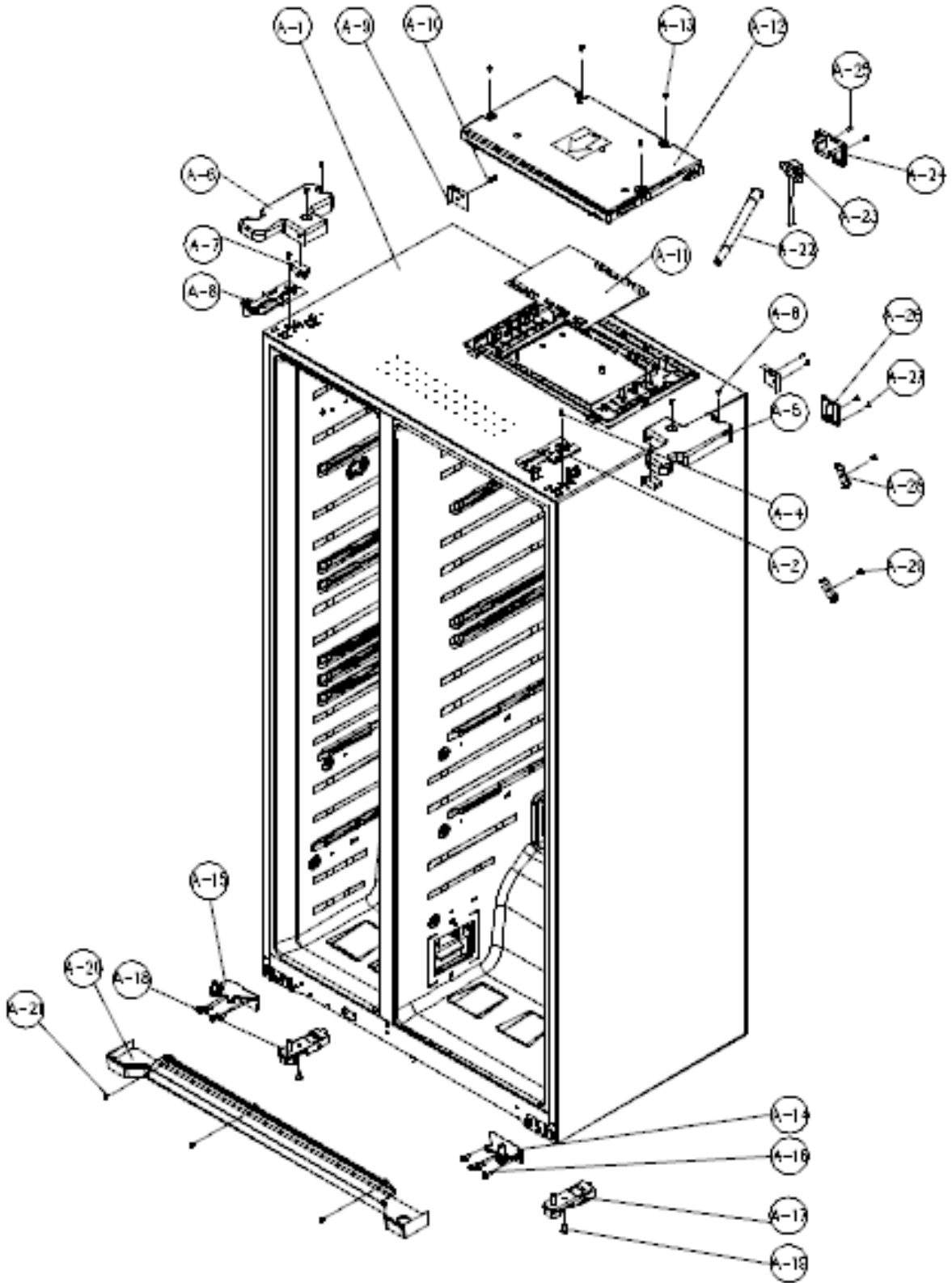
NO	PART NAME	PART CODE NO	QTY	REMARKS
F-13	CASE VEGETB *M AS	30111-0050200	1	RSZ621B
F-14	CASE VEGETB *U AS	30111-0051000	1	SILK PRINT(VITA LED)
F-15	WINDOW R LED *T	3015517100	1	ABS(TRANSPARENT)
F-16	COVER R SENSOR	300149D800	1	ABS
F-17	SHELF WINE AS	30178-0033900	1	AS
F-18	TANK WATER AS	3018201000	1	FRU-541D
D-1	ASSY F DR URT	30100-0215100	1	FRX-601D
D-2	GASKET F DR AS	30123-0017300	1	PVC-S, 336X1613
D-3	CAP I/PATH FRAME	3010989400	1	PP
D-4	POCKET F *U	3019058110	2	CRYSTAL
D-5	POCKET F *M	3019057930	2	CRYSTAL
D-6	BOX DISPNS I/SHUT AS	30105-0037800	1	2LEVER, CURVED
D-7	SCREW TAPTITE	7173401211	4	TT2 BIN 4*14 MFZN
D-8	PANEL CONTL *F AS	60142-0027000	1	2LEVER, CURVED
D-9	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
D-10	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL TITAN Ano
D-11	SCREW TAPPING	7112401211	4	T1 TRS 4*14 MFZN
D-12	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
D-13	SUPPORTER HNDL *U	30153-0023100	1	ABS+Zn INSERT+SPRAY
D-14	SPECIAL BOLT HNDL	300009AF00	2	M6, SWCH10A
D-15	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL TITAN Ano
E-1	ASSY R DR URT	30100-0222600	1	ZB600 H/BAR
E-2	GASKET R DR AS	30123-0017400	1	PVC-S, 474X1613
E-3	FIXTURE POKT	30120-0027900	2	HIPS
E-4	SCREW TAPPING	7112401420	1	T1 TRS 4X14(WHITE COLOR)
E-5	POCKET DAIRY AS	30190-0029200	1	CRYSTAL ZB600
E-6	POCKET R *T	30190-0011801	1	CRYSTAL
E-7	POCKET H/BAR AS	30190-0029300	1	SILK PRINT ZB600 CRYTAL
E-8	POCKET R *M	3019058310	1	FRX-60R, CRYSTAL
E-9	POCKET R *U	3019058510	1	CRYSTAL

NO	PART NAME	PART CODE NO	QTY	REMARKS
E-10	GASKET H/BAR A1 AS	30123-0008803	1	319.4X278.3 ZB600
E-11	DOOR H/BAR AS	30117-0093202	1	M/D, SV5305BM SPRAY
E-12	DOOR H/BAR AS	30117-0093301	1	METAL
E-13	SUPPORTER HNDL *U	30153-0023100	1	ABS+Zn INSERT+SPRAY
E-14	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL,TITAN Ano
E-15	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
E-16	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
E-17	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
E-18	SPECIAL BOTL HNDL	3016046400	2	M6,SWCH10A
E-19	GASKET H/BAR A2 AS	3012326200	1	FR-A75IR
E-20	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano
E-5-1	POCKET DAIRY	30190-0029000	1	HIPS
E-5-2	COVER DAIRY	30114-0095100	1	GPPS
E-5-3	BUSHING DAIRY POKT	30107-0004800	2	POM
F-1-1	COVER DAMP	30114-0096700	1	RSZ621B
F-1-2	INSU DAMP COVR *A1	3013378300	1	F-PS
F-1-3	INSU DAMP COVR *A2	30133-0022000	1	F-PS
F-1-4	SEAL INSU DAMP COVR	301779GB00	1	F-OJC, T5.0
F-1-5	CAP DAMP COVER	3010989900	1	HIPS
F-1-6	DEODORANT	60187-0001100	1	W45XL45
F-1-7	FRAME DEO	30122-0039200	1	HIPS
F-1-8	COVER DEO	30114-0085401	1	PC+FILM
F-8-1	WINDOW HUMID CONTL	30155-0025000	1	PC SHEET T0.5
F-8-2	COVER V/CASE *U	30114-0095500	1	HIPS
F-8-3	KNOB HUMID CONTL	30134-0005900	1	HIPS
F-8-4	PCB LED AS	30143F1410	1	FR-T690FG
F-8-5	SCREW MACHINE	7001300811	1	T2S PAN 3*8 MFZN
F-8-6	HARNESS LED PCB AS	60127-0041000	1	TITANA COMMON
F-8-7	WINDOW VITA LED	30155-0024900	1	MIPS
F-17-1	SHELF WINE	30178-0032500	1	SUS204

NO	PART NAME	PART CODE NO	QTY	REMARKS
F-17-2	BAG AIR	60102-0004500	1	BAG VINYL AIR CAP W480XL530
F-17-3	TAPE PE	1TAJXXX-0017	0.07	T0.04XW50 WHITE
D-6-1	BOX DISPNS I/SHUT	30105-0037600	1	ABS
D-6-2	MOTOR I/SHUT AS	3015922800	1	DC12V(SCD)
D-6-3	SCREW TAPTITE	7173401211	3	TTS BIN 4X12 MFZN
D-6-4	SPRING LEVER I/SHUT	30151-0003100	1	SUS304
D-6-5	SPRING LEVR DISPNS BOX	30151-0002700	1	SUS304
D-6-6	LEVER DISPNS	30137-0005300	1	PC
D-6-7	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45, ACRYL(WHITE)
D-6-8	DECO DISPNS LEVR	30116-0039000	1	SUS304, AFP, HAIR LINE
D-6-9	COVER DISPNS I/SHUT	30114-0095200	1	CURVED 2-LEVER
D-6-10	LEVER I/SHUT	30137-0005500	1	POM
D-6-11	FLAP ICE A2	30171-0000900	1	ABS
D-6-12	SEAL I/FLAP	3017763200	1	F-US(G), T3*OD69
D-6-13	INSU I/FLAP	30133-0022300	1	F-PS
D-6-14	COVER I/FLAP	30114-0094800	1	SILICON
D-6-15	SCREW TAPTITE	7173401211	2	TTS BIN 4X12 MFZN
D-6-16	SWITCH MICRO	3018133600	1	GSM-V603**
D-6-17	SPRING LEVR W/DISPNS	30151-0003200	1	SUS304
D-6-18	LEVER W/DISPNS	30137-0005400	1	PC
D-6-19	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45 ACRYL(WHITE)
D-6-20	DECO W/DISPNS	30116-0038500	1	SUS304 AFP, HAIR LINE
D-8-1	PANEL CONTL *F	60142-0026700	1	ABS
D-8-2	WINDOW FCP AS	30155-0025700	1	ABS+FILM INSERT
D-8-3	REF PCB FRONT AS	40301-0102700	1	2 LEVER, CURVED
D-8-4	SCREW TAPPING	7121300811	6	T2S PAN 3X8 MFZN
D-8-5	COVER FCP	30114-0095000	1	PP
D-8-6	SCREW TAPPING	7122400811	4	T2S TRS 4X8 MFZN
D-8-7	PLATE FCP AS	30145-0031000	1	PET T0.1, BLACK

12.-1 Pop-Up Drawings (RSZ612G\*\*)

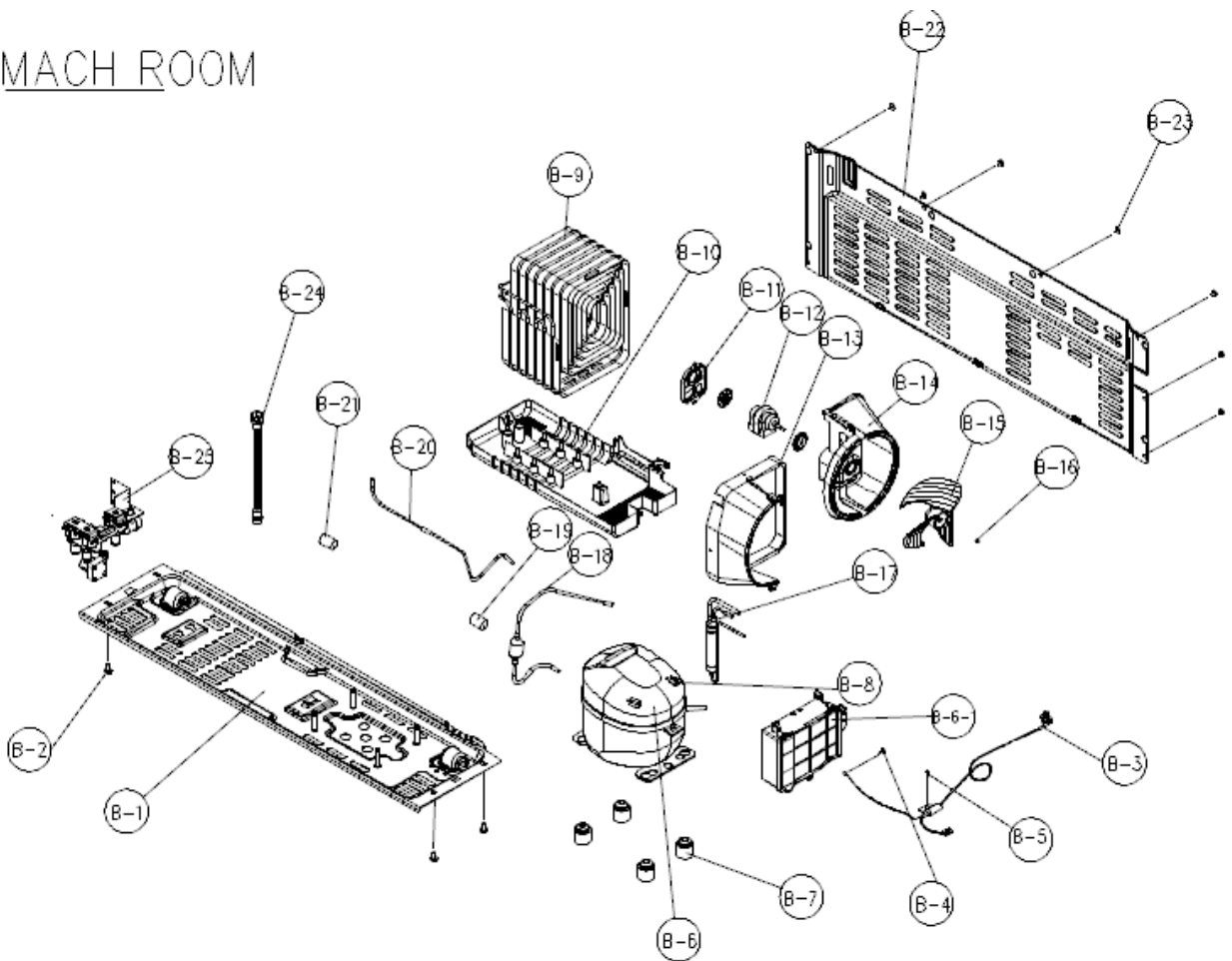
CABINET(DISPENSER MODEL)



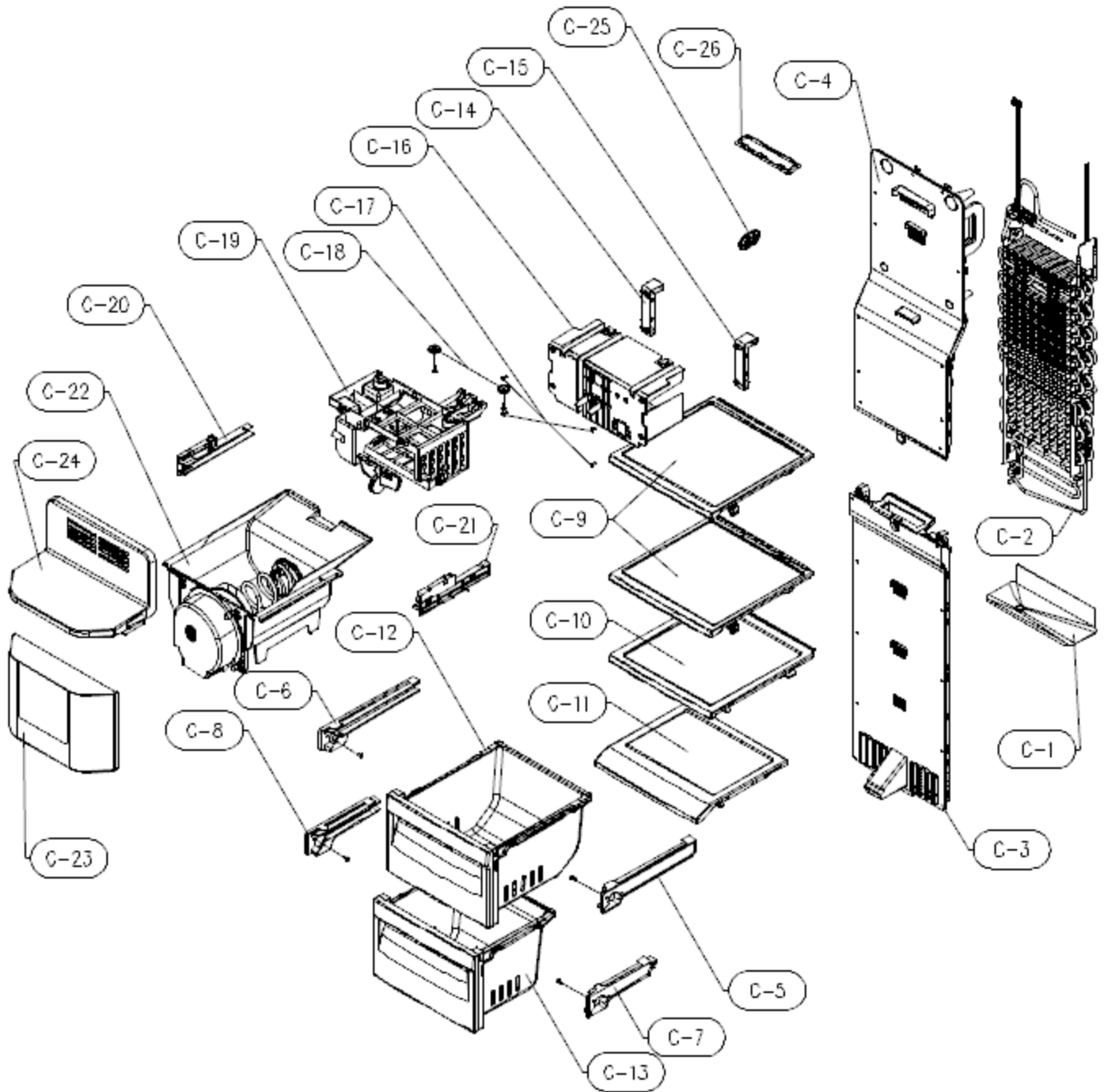


12.-1 Pop-Up Drawings (RSZ612G\*\*)

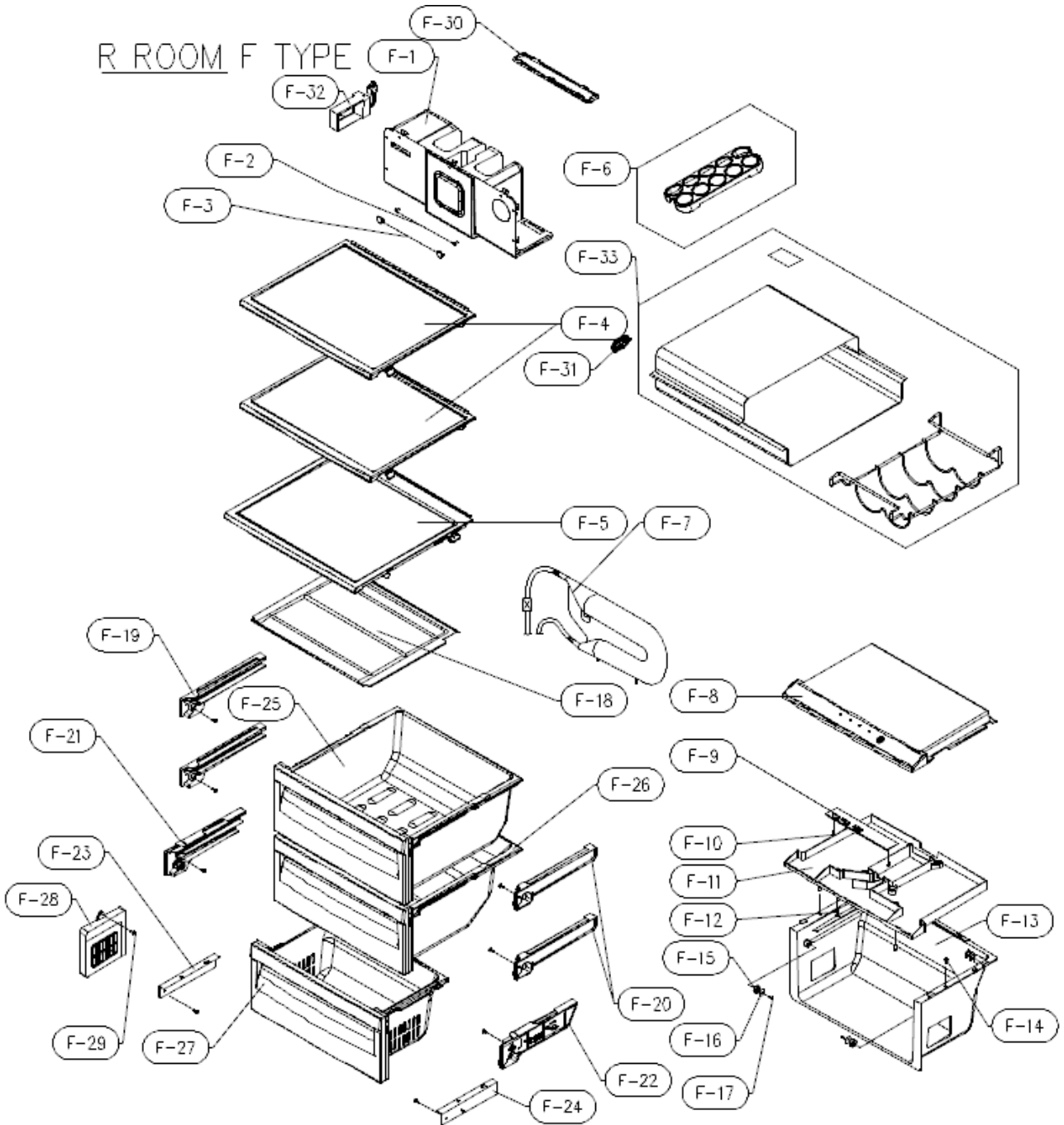
MACH ROOM



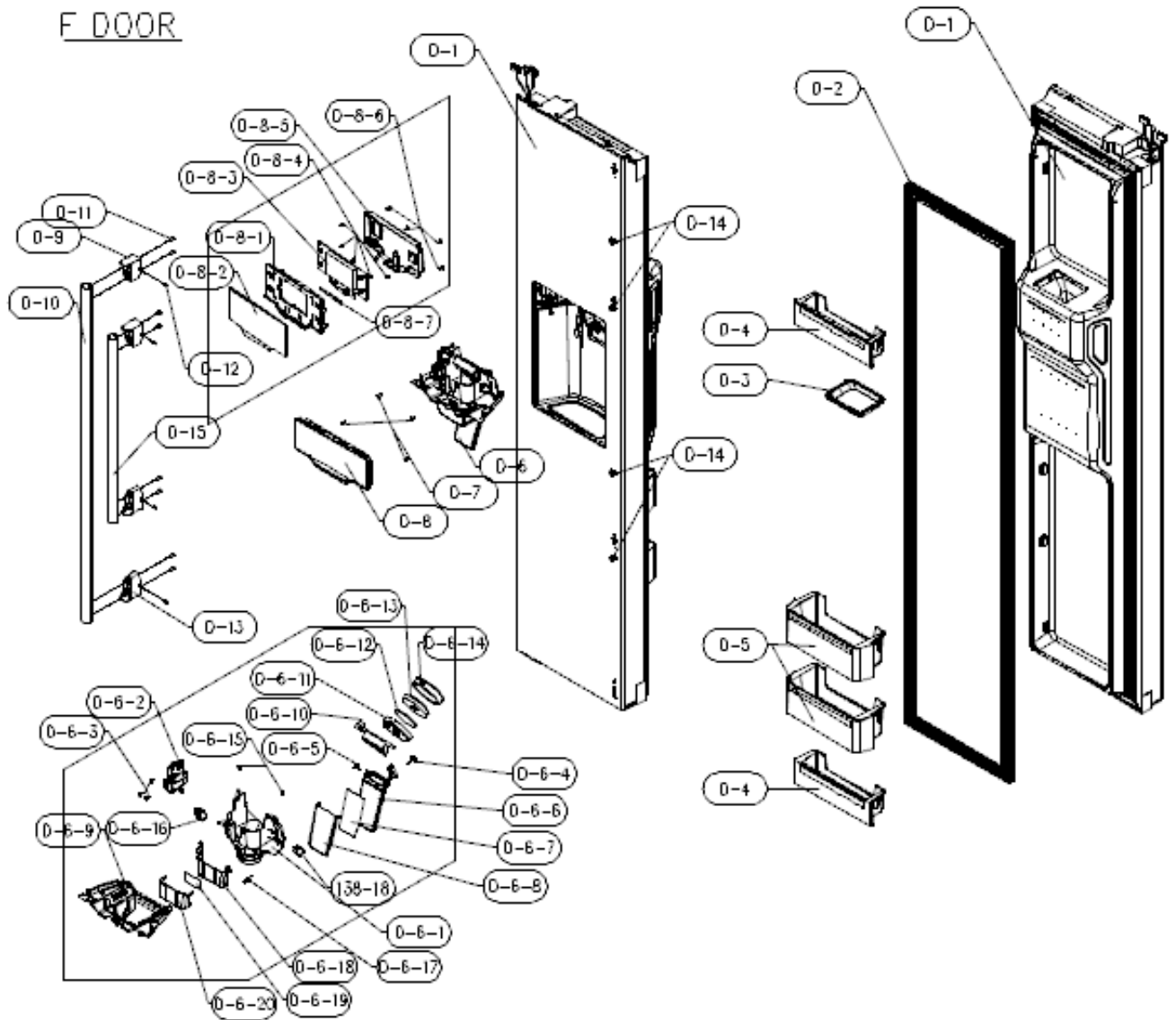
## 12.-1 Pop-Up Drawings (RSZ612G\*\*)

F ROOM

12.-1 Pop-Up Drawings (RSZ612G\*\*)

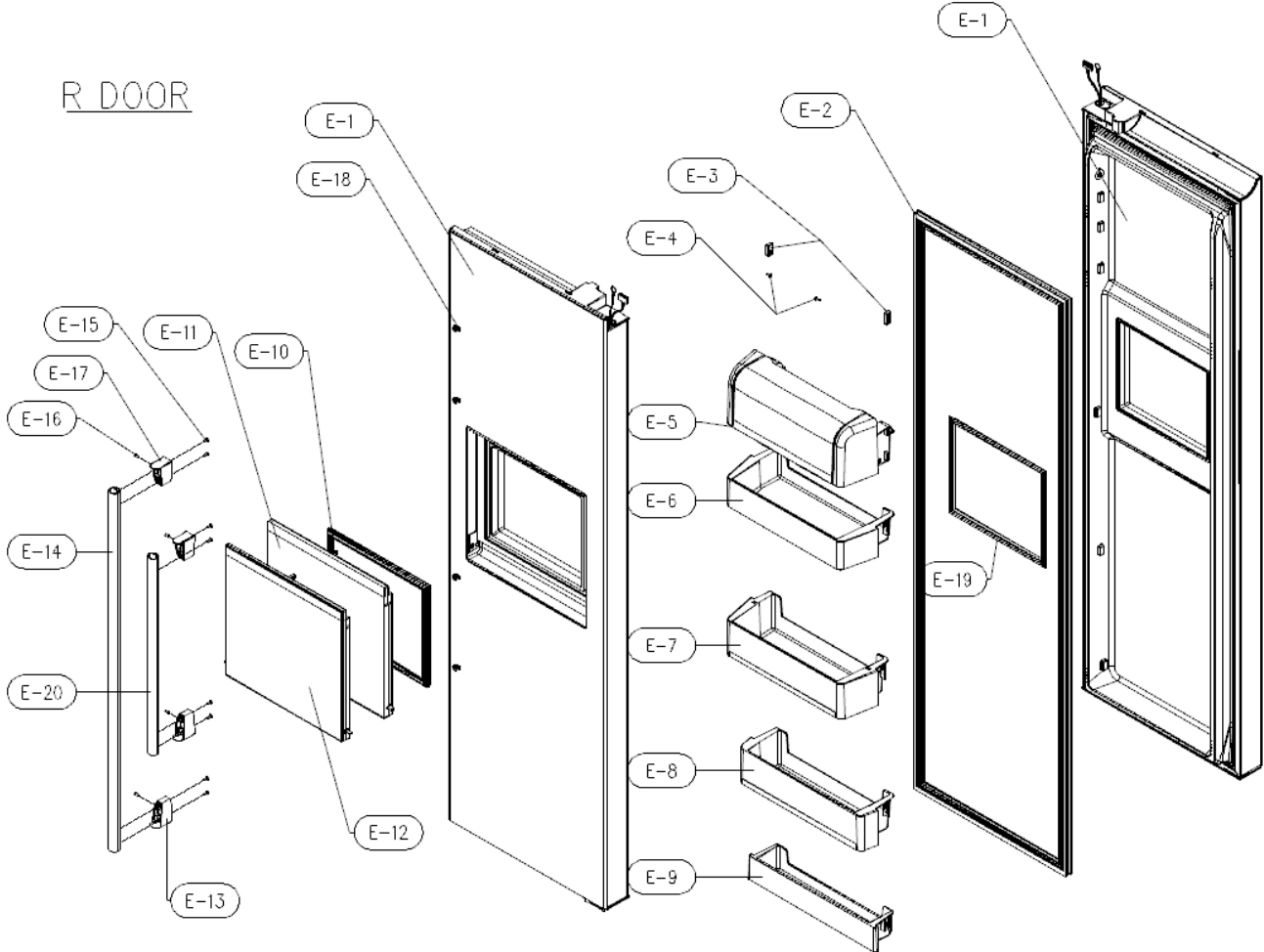


## 12.-1 Pop-Up Drawings (RSZ612G\*\*)



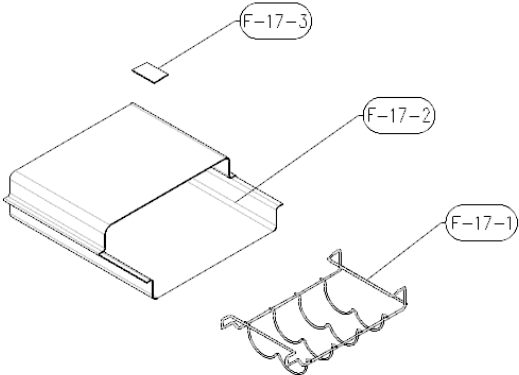
12.-1 Pop-Up Drawings (RSZ612G\*\*)

R DOOR

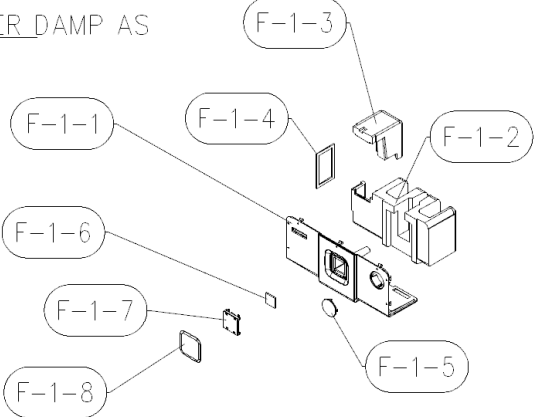


12.-1 Pop-Up Drawings (RSZ612G\*\*)

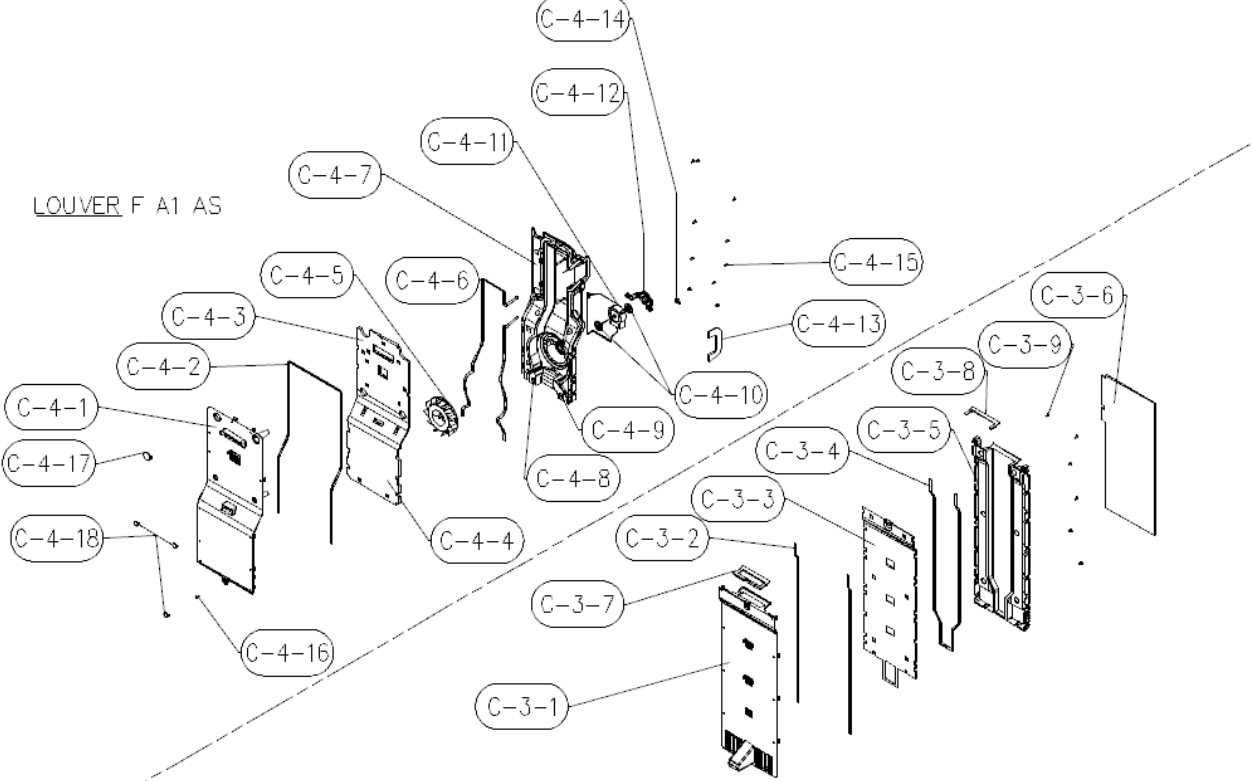
SHELF WINE AS



COVER DAMP AS



LOUVER F A1 AS



LOUVER F A2 AS

NO	PART NAME	PART CODE NO	QTY	REMARKS
A-1	ASSY CAB URT	300009AC00	1	FRX-6201D
A-2	HINGE *T *R AS	3012933300	1	PO T3.0 + PAINT
A-3	HINGE *T *L AS	3012933200	1	PO T3.0 + PAINT
A-4	SPECIAL *T HI BOLT	3016042300	2	SWCH18A
A-5	COVER HI *T *R	3001434900	1	PP
A-6	COVER HI *T *L	3001434800	1	PP
A-7	SWITCH H/BAR DR AS	3018125601	2	SP101B-2DI(G), GRAY
A-8	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-9	CAP CAB COVER	3010968400	2	PP
A-10	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-11	REF PCB MAIN ASSY	40301-0102201	1	ZB600 HIGH 2LVR INVERTER
A-12	COVER M/PCB BOX	3011446001	1	PP(FB-72)
A-13	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
A-14	HINGE *U *R AS	3012933510	1	FRX-621B
A-15	HINGE *U *L AS	3012933411	1	FRX-621B
A-16	SPECIAL BOLT *T	3016001240	8	6*22 SWCH22A(YL)
A-17	BRACKET ADJ FT *R AS	3010684300	1	FRQ-503D
A-18	BRACKET ADJ FT *L AS	3010684200	1	FRQ-503D
A-19	SPECIAL BOLT	3016001270	2	6*18 SWCH22A(WH)
A-20	COVER CAB BRKT	3001433900	1	PP
A-21	SCREW TAPPING	7112401611	3	T1 TRS 4*16 MFZN
A-22	HOSE I/MAKER TUBE AS	301322800	1	FRY-61ADTE8NI
A-23	GUIDE CAB W/TUBE A1 AS	30125-0038001	1	L1535, RSX60/61, RPX60/61
A-24	COVER GUIDE CAB W/TUBE A1	301149CP00	2	FRX-601G
A-25	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-26	COVER GUIDE CAP W/FILT	3001424100	1	PP
A-27	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
A-28	CLAMP W/TUBE C	3011202010	2	HIPS
A-29	SCREW TAPPING	7112401611	2	T1 TRS 4*16 MFZN
B-1	BASE COMP AS	3010359600	1	FRX-621B

NO	PART NAME	PART CODE NO	QTY	REMARKS
B-2	SPECIAL BOLT	3016003300	4	T2 M6.5*20
B-3	CORD POWER AS	3011346701	1	AC 250V 16A(VDE)
B-4	SPECIAL SCREW	7S422X4081	2	TT3 TRS 4*8 SE MFZN
B-5	SPECIAL SCREW	3016008900	1	T1 PAN 4*12 PW MFZN
B-6	COMPRESSOR	60110-0020400	1	VNW120LIBB DAEWOO COMP
B-6-1	BOX INVERTER AS	30105-0035702	1	VNW120LIBB(230V) INVERTER
B-7	ABSORBER COMP	3010101600	4	NBR
B-8	COMP WASHER	3016002500	3	SK-5 T0.8
B-9	PIPE WICON AS	3014486700	1	6ROW CON FRX-608F
B-10	CASE VAPORI AS	30111-0044400	1	PP FRX-608F
B-11	FIXTURE MOTR	3012021700	1	PP
B-12	MOTOR C FAN	3015920900	1	D4612AAA31
B-13	M/BELL B	3018500310	1	PP
B-14	M/BELL A	3018500210	1	PP
B-15	FAN	3011836300	1	PP OD3.17*D150
B-16	CLAMP FAN	3011200500	1	SUS 304
B-17	DRYER AS	60168-0000814	1	SBS 10G(X600 LOKRING)
B-18	PIPE SUC CONN	3014474610	1	FRX-621B
B-19	ABSORBER SUC PIPE A	3010101340	1	NBR 32G
B-20	PIPE CONN A2 AS	60144-0027201	1	Ø4.76xT0.5, FRX-608F
B-21	ABSORBER PIPE B	3010101330	1	NBR 15G
B-22	COVER MACH RM AS	3001436520	1	GI T0.35
B-23	SPECIAL SCREW	3016008910	7	TH1/W #8x1/2 MFZN
B-24	HOSE DRN	30132-0004800	1	PE ZB6T00 T=0.6
B-25	VALVE WATER AS	3015402300	1	FR-S660CW
C-1	GUIDE DRN	3012538400	1	EGI SCRAP T0.4
C-2	EVA AS	60170-0011800	1	ZB600
C-3	LOUVER F A2 AS	30189-0014600	1	RSZ621B
C-4	LOUVER F A1 AS	30189-0014700	1	RSZ612D
C-5	GUIDE CASE A *R AS	3012514612	1	FR-S580EG(PP)



NO	PART NAME	PART CODE NO	QTY	REMARKS
C-6	GUIDE CASE A *L AS	3012514512	1	FR-S580EG(PP)
C-7	GUIDE CASE C *R AS	3012529812	1	FRU-571I(PP)
C-8	GUIDE CASE C *L AS	3012529712	1	FRU-571I(PP)
C-9	SHELF F AS	3017851200	2	FRX-621B
C-10	COVER F CASE *T AS	3001438000	1	FRX-621B
C-11	COVER F CASE *U	3001434500	1	HIPS
C-12	CASE F *T AS	30111-0050300	1	RSZ621B
C-13	CASE F *U AS	30111-0050400	1	RSZ621B
C-14	GUIDE G MOTOR BRKT *L	3012517800	1	ABS
C-15	GUIDE G MOTOR BRKT *R	3012517900	1	ABS
C-16	BRACKET G/MOTR AS	3010673651	1	FRX-612D
C-17	SCREW TAPPING	7112401415	4	T1 TRS 4*14 ZNNI
C-18	FIXTURE C	3012013200	2	PP
C-19	FRAME I/MAKER AS	3012231400	1	FRX-601D
C-20	GUIDE I/CRUSHER *L	3012538200	1	ABS
C-21	GUIDE I/CRUSHER *R	3012538100	1	ABS
C-22	CASE I/CRUSHER AS	30111-0050600	1	AS
C-23	COVER I/CRUSHER *U	30114-0096900	1	HIPS
C-24	COVER I/CRUSHER *T	30114-0096800	1	HIPS
C-25	COVER F SENSOR	300149D800	1	ABS
C-26	WINDOW F LED *T	3015517200	1	ABS(TRANPARENCY)
C-3-1	LOUVER F A2	30189-0014500	1	RSZ-621B
C-3-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-3-3	SEAL F LUVR A3	30177-0066500	1	F-PE(G)
C-3-4	SEAL INSU B	301779EF00	3	EPDM
C-3-5	DUCT F A2	30169-0007700	1	RSZ621B
C-3-6	SEAL F LUVR A2	60177-0066400	1	F-PE+AL
C-3-7	SEAL F LUVR A4	60177-0066600	1	EPDM T5.0
C-3-8	SEAL DUCT	60177-0066700	1	EPDM T3.0
C-3-9	SCREW TAPPING	7122401211	6	T2S TRS 4*12 MFZN

NO	PART NAME	PART CODE NO	QTY	REMARKS
C-4-1	LOUVER F A1	30189-0014400	1	RSZ612D
C-4-2	SEAL PLT DV	3007707100	2	F-PE(G)
C-4-3	INSU F A1	30133-0022200	1	F-PS
C-4-4	INSU F A2	30133-0022100	1	F-PS
C-4-5	FAN F	3011836400	1	ABS
C-4-6	SEAL INSU B	301779EF00	3	EPDM
C-4-7	FIXTURE F MOTR A	30120-0027700	1	PP
C-4-8	SEAL FIXR MOTR A1	60177-0066800	1	EPDM T3.0
C-4-9	SEAL FIXR MOTR A2	60177-0066900	1	EPDM T3.0
C-4-10	ABSORBER F MOTR	3010108800	2	NBR
C-4-11	MOTOR F FAN AS	60159-0007001	1	DC12V ZB600
C-4-12	FIXTURE F MOTR B	3012034700	1	PP
C-4-13	SEAL F LUVR A3	3007708400	1	EPDM, T5.0
C-4-14	CLAMP TUBE A	3011202000	1	PA-66, 5N
C-4-15	SCREW TAPPING	7122401211	8	T2S TRS 4*10 MFZN
C-4-16	SCREW TAPPING	7122401211	1	T2S TRS 4*10 MFZN
C-4-17	CAP F LOUVER	3010924600	2	HIPS 2.3T
C-4-18	CAP F LOUVER B	3010968600	3	HIPS
F-1	COVER DAMP AS	30114-0097800	1	ZB600 HIGH
F-2	SCREW TAPPING	7112401211	2	T1 TRS 4*14 MFZN
F-3	CAP F LOUVER	3010924600	2	HIPS 2.3T
F-4	SHELF R AS	30178-0033500	2	ZB600 HIPS+GLASS
F-5	COVER V/CASE AS	30114-0101200	1	ZB600 HIPS+GLASS
F-6	CASE EGG TRAY	3011190800	1	GPPS
F-7	TANK WATER AS	3018201000	1	FRU-541D
F-8	COVER CHANGE RM	3001434100	1	HIPS
F-9	PCB SUB FRONT AS	30143HJ360	1	FRX-601G
F-10	SCREW TAPTITE	7173300811	2	TT2 BIN 3*8 MFZN
F-11	COVER CONTL CHANGE RM	3001434200	1	HIPS
F-12	SCREW TAPPING	7122401211	6	T2S TRS 4*10 MFZN

NO	PART NAME	PART CODE NO	QTY	REMARKS
F-13	BOX CHANGE RM	3010573100	1	HIPS
F-14	SCREW TAPPING	7122401011	2	T2S TRS 4*10 MFZN
F-15	ROLLER A	3014700301	2	PP(NATURAL)
F-16	SPECIAL WASHER	3016003700	2	T1.0, OD20
F-17	SPECIAL SCREW D	3016040000	2	4*8
F-18	COVER V/CASE A1	3011446600	1	GPPS
F-19	GUIDE CASE A *L AS	3012514512	2	FR-S580EG(PP)
F-20	GUIDE CASE A *R AS	3012514612	2	FR-S580EG(PP)
F-21	GUIDE CASE C *R AS	3012529812	1	PP
F-22	GUIDE CASE C *L AS	3012529712	1	PP
F-23	GUIDE CHANGE RM *L	3012529500	1	ABS SCRAP
F-24	GUIDE CHANGE RM *R	3012529600	1	ABS SCRAP
F-25	CASE VEGETB *T AS	30111-0050900	1	ZB600 G TYPE
F-26	CASE VEGETB *M AS	30111-0050200	1	RSZ621B*
F-27	CASE CH/RM AS	30111-0051100	1	ZB600 G TYPE
F-28	COVER DUCT CH/RM AS	3011450901	1	FRU-541E
F-29	SCREW TAPPING	7122401211	1	T2S TRS 4*12 MFZN
F-30	WINDOW R LED *T	3015517100	1	ABS(TRANSPARENT)
F-31	COVER R SENSOR	300149D800	1	ABS
F-32	DAMPER AS	3016767100	1	DU24-013
F-33	SHELF WINE AS	30178-0033900	1	AS
D-1	ASSY F DR URT	30100-0215100	1	FRX-601D
D-2	GASKET F DR AS	30123-0017300	1	PVC-S, 336X1613
D-3	CAP I/PATH FRAME	3010989400	1	PP
D-4	POCKET F *U	3019058110	2	CRYSTAL
D-5	POCKET F *M	3019057930	2	CRYSTAL
D-6	BOX DISPNS I/SHUT AS	30105-0037800	1	2LEVER, CURVED
D-7	SCREW TAPTITE	7173401211	4	TT2 BIN 4*12 MFZN
D-8	PANEL CONTL *F AS	60142-0027000	1	2LEVER, CURVED
D-9	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY

NO	PART NAME	PART CODE NO	QTY	REMARKS
D-10	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL, TITAN Ano
D-11	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
D-12	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
D-13	SUPPORTER HNDL *U	30153-0023100	1	AL T1.3 L1025.4 V-HL, TITAN Ano
D-14	SPECIAL BOLT HNDL	300009AF00	2	M6, SWCH10A
D-15	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano
E-1	ASSY R DR URT	30100-0222600	1	ZB600 H/BAR
E-2	GASKET R DR AS	30123-0017400	1	PVC-S 474X1613
E-3	FIXTURE POKT	30120-0027900	2	HIPS
E-4	SCREW TAPPING	7112401420	1	T2S TRS 4X14(WHITE COLOR)
E-5	POCKET DAIRY AS	30190-0029200	1	CRYSTAL ZB600
E-6	POCKET R *T	30190-0011801	1	CRYSTAL
E-7	POCKET H/BAR AS	30190-0029300	1	SILK PRINT ZB600 CRYSTAL
E-8	POCKET R *M	3019058310	1	FRX-60R, CRYSTAL
E-9	POCKET R *U	3019058510	1	CRYSTAL
E-10	GASKET H/BAR A1 AS	30123-0008803	1	319.4X278.3 ZB600
E-11	DOOR H/BAR AS	30117-0093202	1	M/D SV5305BM SPRAY
E-12	DOOR H/BAR AS	30117-0093301	1	METAL
E-13	SUPPORTER HNDL *T	30153-0023000	1	ABS+Zn INSERT+SPRAY
E-14	HANDLE	30126-0025700	1	AL T1.3 L1025.4 V-HL, TITAN Ano
E-15	SCREW TAPPING	7112401211	4	T1 TRS 4*12 MFZN
E-16	SPECIAL SET SCREW	30160-0012700	2	M5X8 SUS304
E-17	SUPPORTER HNDL *U	30153-0023100	1	AL T1.3 L1025.4 V-HL, TITAN Ano
E-18	SPECIAL BOLT HNDL	300009AF00	2	M6, SWCH10A
E-19	GASKET H/BAR A2 AS	3012326200	1	FR-A75IR
E-20	HANDLE	30126-0025500	1	AL T1.3 L561.4 V-HL, TITAN Ano
E-5-1	POCKET DAIRY	30190-0029000	1	HIPS
E-5-2	COVER DAIRY	30114-0095100	1	GPPS
E-5-3	BUSHING DAIRY POKT	30107-0004800	2	POM
F-1-1	COVER DAMP	30114-0096700	1	RSZ621B*

NO	PART NAME	PART CODE NO	QTY	REMARKS
F-1-2	INSU DAMP COVR *A1	3013378300	1	F-PS
F-1-3	INSU DAMP COVR *A2	30133-0022000	1	F-PS
F-1-4	SEAL INSU DAMP COVR	301779GB00	1	F-OJC, T5.0
F-1-5	CAP DAMP COVER	3010989900	1	HIPS
F-1-6	DEODORANT	60187-0001100	1	W45XL45
F-1-7	FRAME DEO	30122-0039200	1	HIPS
F-1-8	COVER DEO	30114-0085401	1	PC+FILM
F-17-1	SHELF WINE	30178-0032500	1	SUS204
F-17-2	BAG AIR	60102-0004500	1	BAG VINYL AIR CAP W480XL530
F-17-3	TAPE PE	1TAJXXX-0017	0.07	T0.04XW50 WHITE
D-6-1	BOX DISPNS I/SHUT	30105-0037600	1	ABS
D-6-2	MOTOR I/SHUT AS	3015922800	1	DC12V(SCD)
D-6-3	SCREW TAPTITE	7173401211	3	TTS BIN 4X12 MFZN
D-6-4	SPRING LEVER I/SHUT	30151-0003100	1	SUS304
D-6-5	SPRING LEVR DISPNS BOX	30151-0002700	1	SUS304
D-6-6	LEVER DISPNS	30137-0005300	1	PC
D-6-7	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45, ACRYL(WHITE)
D-6-8	DECO DISPNS LEVR	30116-0039000	1	SUS304, AFP, HAIR LINE
D-6-9	COVER DISPNS I/SHUT	30114-0095200	1	CURVED 2-LEVER
D-6-10	LEVER I/SHUT	30137-0005500	1	POM
D-6-11	FLAP ICE A2	30171-0000900	1	ABS
D-6-12	SEAL I/FLAP	3017763200	1	F-US(G), T3*OD69
D-6-13	INSU I/FLAP	30133-0022300	1	F-PS
D-6-14	COVER I/FLAP	30114-0094800	1	SILICON
D-6-15	SCREW TAPTITE	7173401211	2	TTS BIN 4X12 MFZN
D-6-16	SWITCH MICRO	3018133600	1	GSM-V603**
D-6-17	SPRING LEVR W/DISPNS	30151-0003200	1	SUS304
D-6-18	LEVER W/DISPNS	30137-0005400	1	PC
D-6-19	TAPE DOUBLE	1TACXXX-0046	0.08	T0.4XW45 ACRYL(WHITE)
D-6-20	DECO W/DISPNS	30116-0038500	1	SUS304 AFP, HAIR LINE

