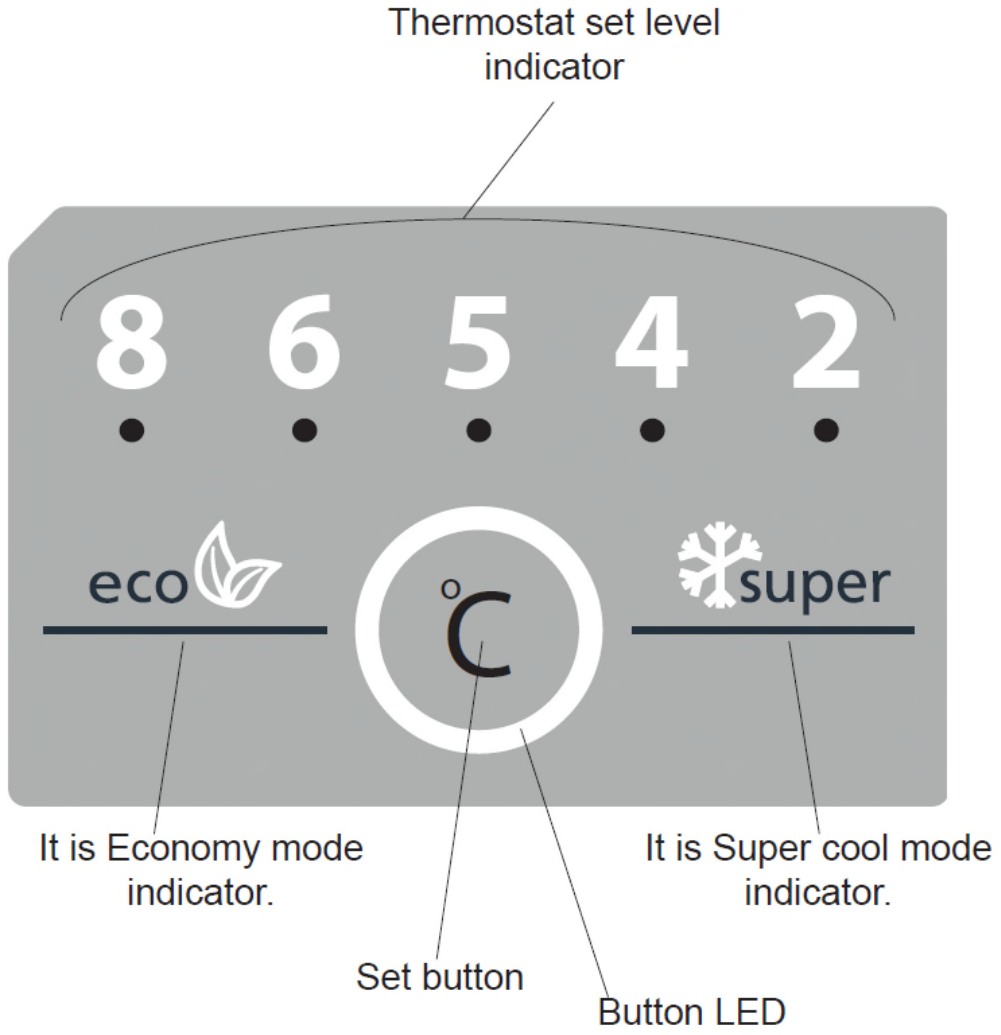
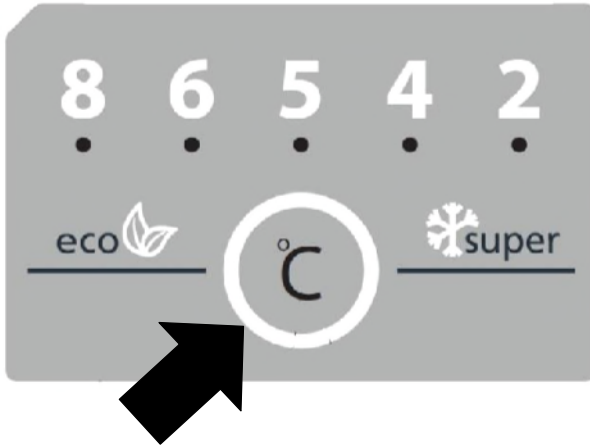


## Display and control panel



### Super Cooling Mode



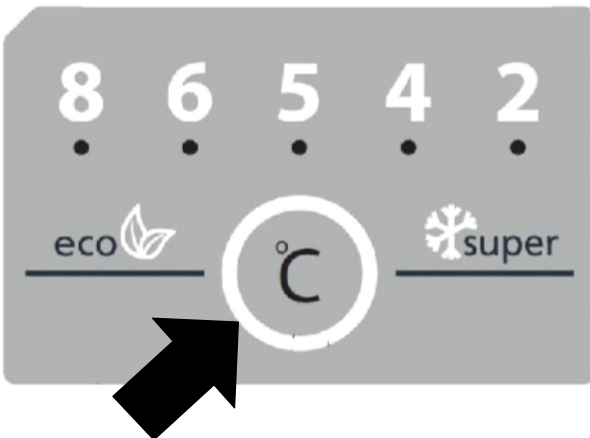
#### When to use;

- Press the set button until the 'Super' icon blinks
- It will blink 3 times and sound beep beep, then 'Super Cooling' is set.
- During this mode, previously set value will be seen on set screen.

#### During this mode;

- Set value cannot be changed
- 'Super Cooling' mode is deactivated by setting a different value.

### Eco Mode



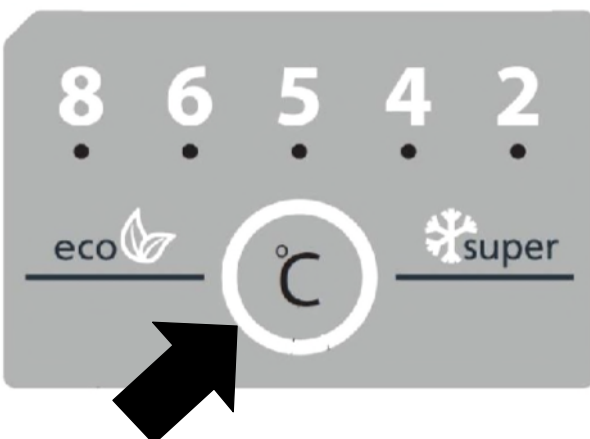
#### How to use?

- Press the set button until the 'Eco' icon blinks
- It will blink 3 times and sound beep beep, then 'Eco' mode is set

#### During this mode;

- Set value cannot be changed
- 'Eco' mode is deactivated by setting a different value.

### Temperature Setting



#### How to use?

- Pressing the set button changes in between the set values , 1,2,3,4,5 , eco & super
- Press the set button until the desired set value's icon blinks
- It will blink 3 times and sound beep beep, then it is set
- After the auto end or user's cancellation of 'Super Cooling' and 'Eco' modes, the refrigerator will continue with the last temperature set.

	<b>289 INNER DISPLAY</b>	
<b>Control Panel</b>		

## Demo Mode

### Entering Demo mode:

- Firstly the power is on , within 1 minute (\*see note-1) push mode button for 10 seconds, the appliance will go on “demo mode”.
- All functions can be used to show how they can be changed to the customer.
- During the demo mode ‘super’ LED blinks constantly.

### Canceling Demo mode:

For cancelling; Same operation will be used. Pushing mode button for 10 seconds will cancel the demo mode.

When appliance is in Demo mode; if plug is removed or there is an electricity breakdown; demo mode will continue with current settings after user plug into or electricity breakdown finish.

### Note:

- 1\* A warm refrigerator makes an auto-test in the first 25 secs after the plug-in. Demo mode can be activated after this check.
- If the refrigerator cannot be set to Demo mode within this interval, the appliance must be plugged out and plugged in again to retry.

### How to understand if it is in DEMO Mode?

Super LED blinks constantly.

### Does DEMO Mode continue after an electricity breakdown, or plug out ?

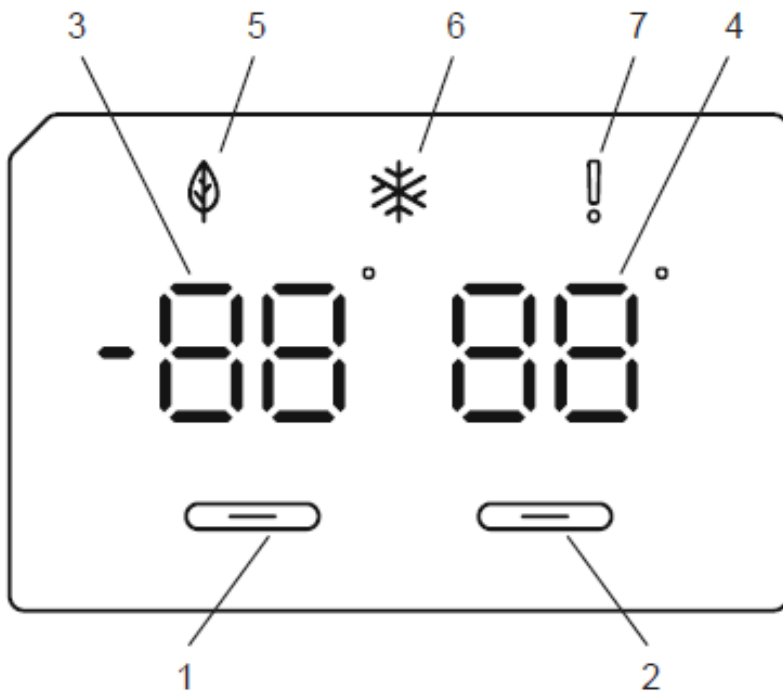
Yes. Interruption in electricity will not terminate the DEMO Mode. You can only cancel DEMO Mode by pushing Mode button for 10 secs.

### Other info:

Refrigerator will not give any service alarm in DEMO Mode.

### Will there be a low cooling alarm?

No. In this mode by definition it is not possible to give any alarm.



#### Using the Control Panel

1. Enables the setting of the freezer.
2. Enables the setting of the cooler.
3. Freezer set value screen.
4. Cooler set value screen.
5. Economy mode symbol.
6. Super freeze symbol.
7. Alarm symbol.

#### Operating your Fridge Freezer

Once you have plugged in the product, all symbols will be displayed for 2 seconds and the initial values will be shown as  $-18^{\circ}\text{C}$  on the freezer adjustment indicator, and  $+4^{\circ}\text{C}$  on the fridge adjustment indicator.

#### Freezer Temperature Settings

- The initial temperature value for the freezer setting indicator is  $-18^{\circ}\text{C}$ .
- Press the freezer set button once.

When you first press the button, the previous value will blink on the screen.

- Whenever you press the same button, a lower temperature will be set ( $-16^{\circ}\text{C}$ ,  $-18^{\circ}\text{C}$ ,  $-20^{\circ}\text{C}$ ,  $-22^{\circ}\text{C}$  or  $-24^{\circ}\text{C}$ ).
- If you continue to press the button, it will restart from  $-16^{\circ}\text{C}$ .

**NOTE:** Eco mode gets activated automatically when the temperature of the freezer compartment is set to  $-18^{\circ}\text{C}$ .

#### Cooler Temperature Settings

- The initial temperature value for the cooler setting indicator is  $+4^{\circ}\text{C}$ .
- Press the cooler button once.
- Whenever you press the button, a lower temperature will be set ( $+8^{\circ}\text{C}$ ,  $+6^{\circ}\text{C}$ ,  $+5^{\circ}\text{C}$ ,  $+4^{\circ}\text{C}$ , or  $+2^{\circ}\text{C}$ ).
- If you continue to press the button, it will restart from  $+8^{\circ}\text{C}$ .

	<b>289 INNER DISPLAY</b>	
	<b>Control Panel</b>	

## Super Freeze Mode

### Purpose

- To freeze a large quantity of food that cannot fit on the fast freeze shelf.
- To freeze prepared foods.
- To freeze fresh food quickly to retain freshness.



### How to use

To enable the super freeze mode, press and hold the freezer temperature setting button for 3 seconds. Once the super freeze mode has been set, the super freeze symbol on the indicator will be lit and the machine will beep to confirm the mode has been switched on.

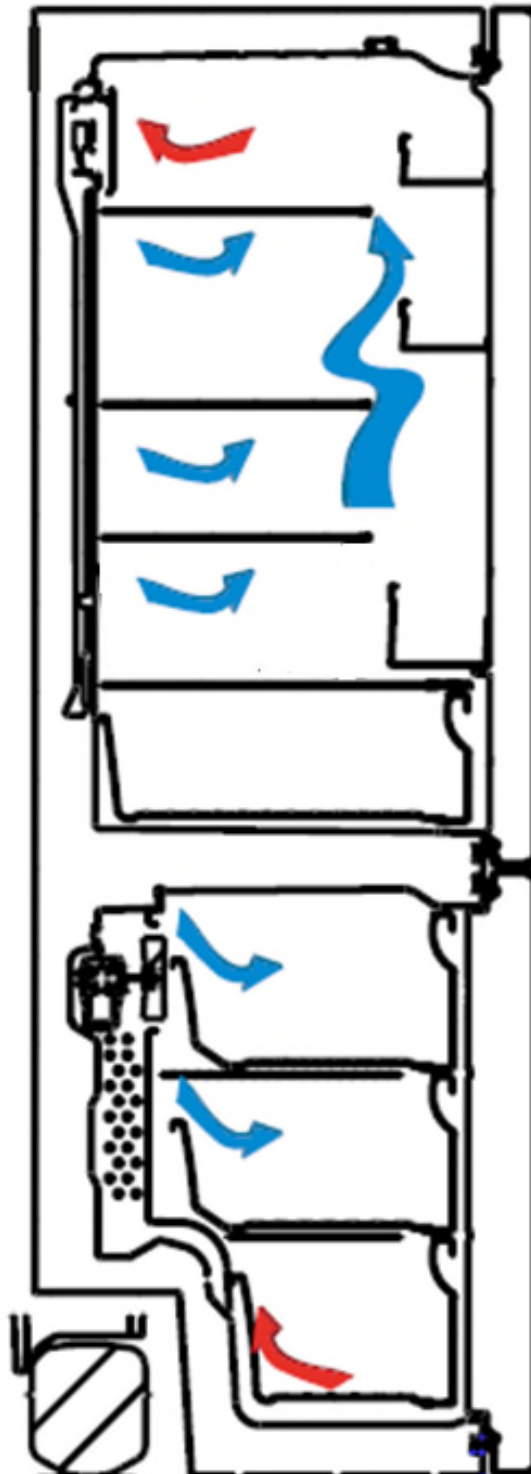
### During Super Freeze Mode:

- The temperature of the Cooler may be adjusted. In this case, Super Freeze mode will continue.
- Economy mode cannot be selected.
- Super Freeze mode can be cancelled in the same way it is selected.

### Notes:

- The maximum amount of fresh food (in kilograms) that can be frozen within 24 hours is shown on the appliance label.
  - For optimal appliance performance in maximum freezer capacity, activate super freeze mode 3 hours before you put fresh food into the freezer.
- Super freeze mode will automatically cancel after 24 hours, depending on the environmental temperature or when the freezer sensor reaches a sufficiently low temperature.

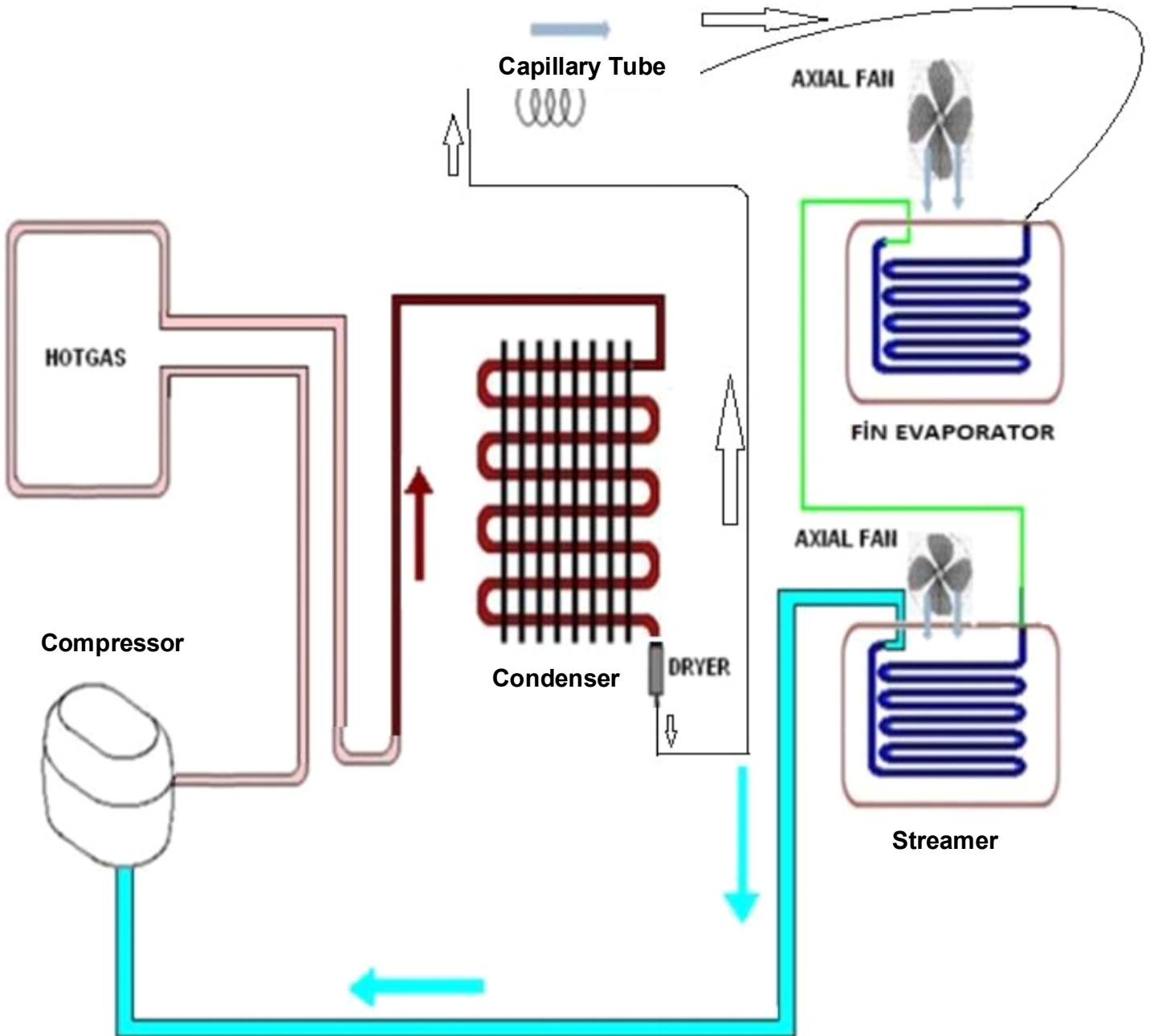
**Air Flow Diagram**



**Cutaway view: Air Flow Direction**

-  **Blown : Cold Air**
-  **Returned: Hot Air**

## Air Flow Diagram



**This model is double controlled product without any valve. When both cooler & freezer set by user :**  
**Mainboard controls both the cooler sensor & freezer sensor. When cooler part reach requested value, if the freezer part haven't reach the requested level; compressor continues to run.**  
**While freezer continue to cool down, with the help of the RDH (Ref. Defrost Heater ), cooler will stay at constant value. When the freezer reach the requested value both compressor & RDH will be stop.**

	<b>289 INNER DISPLAY</b>	
	<b>Used Component</b>	

**Resistance Values According To The Temperature Sensor (°C/Ohm Rates)**

( For The Freezer Defrost and The Cooler Ambient Sensor)

45 °C/1kΩ	-1 °C/6.2kΩ
35 °C/1.5kΩ	-3 °C/6.8kΩ
30 °C/1.8kΩ	-5 °C/7.5kΩ
25 °C/2.2kΩ	-7 °C/8.2kΩ
19 °C/2.7kΩ	-12 °C/10kΩ
14 °C/3.3kΩ	-15 °C/12kΩ
10 °C/3.9kΩ	-20 °C/15kΩ
5.5 °C/4.7kΩ	-24 °C/18kΩ
1.5 °C/5.6kΩ	-31.5 °C/27kΩ
0 °C/6kΩ	-35.5 °C/33kΩ

**Sensor Resistance Values According To The Temperature (°C/Ohm Rates)**

(For The Cooler Defrost Sensor)

45 °C/2.15kΩ	-1 °C/17.1kΩ
35 °C/3.26kΩ	-3 °C/19kΩ
30 °C/4.02kΩ	-5 °C/21.1kΩ
25 °C/5kΩ	-7 °C/23.5kΩ
19 °C/6.53kΩ	-12 °C/30.8kΩ
14 °C/8.23kΩ	-15 °C/36.5kΩ
10 °C/9.95kΩ	-20 °C/48.6kΩ
5.5 °C/12.3kΩ	-24 °C/61.5kΩ
1.5 °C/15kΩ	-31.5 °C/98kΩ
0 °C/16.3kΩ	-35.5 °C/12.6kΩ

	<b>289 INNER DISPLAY</b>	
<b>Special Programs</b>		

### **NTC Sensor**

There are three types of sensors. They are cooler, freezer defrost, cooler defrost sensors. Cooler and freezer defrost sensors have the same features but their cable length is different. The resistance values of all sensors decrease when the temperature values of the sensors increase. For example, the resistance value that is 33 kΩ in the -35.5 °C goes down to 1kΩ in the 45 °C and therefore the ambient temperature should be considered while the sensor is being checked. If the ambient temperature is 25 °C, the measuring device shows about 2.2kΩ (if ntc sensor is steady).

### **When the refrigerator works on first time;**

If the cooler compartment defrost sensor and the freezer compartment defrost sensor are hotter than -5°C, the test system works automatically. These below components are tested automatically every 5 seconds.

- ❖ The compressor and freezer fan motor starts and stops after 5 seconds.
- ❖ The defrost resistance starts and stops after 5 seconds.
- ❖ The cooler defrost resistance starts and stops after 5 seconds.
- ❖ The DC Radial Fan starts and stops after 5 seconds.

After these steps, the system waits 5 minutes and then it will switch normal mod.

### **Freezer Defrost Program**

- According to the conditions of usage, the defrost might be activated after the min compressor running time; 8 hours or max total time; 55 hours. Below matters are also effected;
- Consisted ice amount,
- Door open-close,
- Sudden usage variance,
- Cooler sudden temperature rise,

### **Cooler Defrost Program**

The cooler defrost and the freezer defrost are operated parallel except those below. If the cooler defrost sensor does not feel 5°C three times during a particular period of time.

- Defrost will be activated after the refrigerator works max 9 hours. According to the conditions of usage, the defrost might be activated (due to mentioned those below) after the compressor works min 5 hours.
- Consisted ice amount,
- Door open-close,
- Sudden usage variance,
- Cooler sudden temperature rise,

	<b>289 INNER DISPLAY</b>	
	<b>Special Programs</b>	

### **Freezer Defrosting Time**

The Defrost is disabled when the defrost sensor temperature feels 8°C. If defrost time passes 37 minutes, defrost completing temperature will be rise to 15°C.

### **Cooler Defrosting Time**

The cooler defrost and the freezer defrost are operated parallel except those below. The cooler defrost will not work if the freezer defrost stops.

The defrost process stops when the defrost sensor temperature feels 7°C.

Compressor delay: First, the defrost process ends, the system waits 5 minutes, just after that the compressor is active.

### **In Case of Power Cut**

- All regulated parameters and functions are kept in memory when the power cut.
- When the electricity comes, if the defrost sensor temperature is lower than -5 °C the compressor works 5 minutes later. If it is higher than -5 °C.

### **Other Features**

Warnings : The door open warning is active 2 minutes later and it alarms.

Door Direction : It is possible to reverse the door.

Gasket : It is possible to change the gasket.

<b>Unsufficient cooling</b>	Is the appliance too close to wall or heat sources (stove, central heating, oven, cooker etc.)?	It should be placed min 50cm distance from heat sources and min 5 cm from electrical ovens.
	Is the ambient temperature high?	Raise the thermostat value.
	Check whether putting the hot foods in the refrigerator?	Put the foods after get cold.
	Is there any gas leakage in refrigerant system?	Check all welding points in the system.
<b>The foods in the cooler compartment are freezing.</b>	Were the foods placed close to cooling air outlet?	Please do not block air outlets
	Is the cooler thermostat value high ? Is there any hot foods close to the cooler sensor?	Decrease the cooler thermostat value and do not put hot things close to the sensor.
<b>Are there any sweating or icing?</b>	Were the liquid foods in the closed containers?	Put the liquid foods into the closed containers.
	Were the hot foods put into the refrigerator?	Put it into after getting cold.
	Was the refrigerator door opened?	Do not leave the refrigerator door open and do not often open or close.
<b>Abnormal Noise</b>	Is the appliance on the flat surface?	The floor should be straight and balance the refrigerator with the help of the adjustable feet.
	Is the compressor feet loose	Fix it.
	Is the condenser or fan stationary normal?	Fix it.
	Do the capillary tube or all other tubes touch any where?	Fix it.

	<b>289 INNER DISPLAY</b>	
	<b>Service Mode</b>	

### Entering service mode :

The appliance will enter service mod, if push set button continuously in 10 seconds when it was in ECO mode.

- If there is a faulty situation, error code will be observed on screen. Otherwise nothing will be on the screen.
- Buzzer will sound beep for 0.1 sec. each 5 sec. during the service mode.
- Ring and eko led will blink at the same time during the service mode
- Service function could be activated by pushing «Set» button continuously in 5 seconds

<b>SERVICE FUNCTIONO</b>	
	While display is on service mode, it could be changed among service functions by touching set icon
<b>TOUCHING M (SET) BUTTON ONE TIME.</b>	<b>STARTING MODE</b>
	Buzzer will sound beep
	The number of components which is control, the led is shown at segments of display will blink
<b>TOUCHING M (SET) BUTTON TWO TIMES.</b>	<b>MANUAL DEFROST</b>
	"2" led blink continuously and defrost will start after 3 second s
	Defrost might be finished manually or automatically.
	Defrost might be finished manually by pushing the set button. "2" led goes off and display returns to initial service mode.
	When defrost sensor access 10 degrees defrost finish automaticly



## 289 INNER DISPLAY



### User and Service Mode Error Message (Single Control)

SENSOR	TEMPERATURE	USER MODE REACTION	SERVICE MODE REACTION
(1)Refrigerator	> +50 °C or <-50 °C (sensor is short or open)	<b>Display Ring Leds Blink &amp; Eco Led Blink Buzzer 'beep'</b>	1 Led ON
(2)Defrost			2 Led ON
(3)Serpentine sensor			3 Led ON
Breakdown of (1) and (2)			1 and 2 Led ON
Breakdown of (1) and (3)			1 and 3 Led ON
Breakdown of (2) and (3)			2 and 3 Led ON
Breakdown of (1) and (2) and (3)			1, 2 and 3 Led ON

### Component defect on display

DEFECT TYPE	DETAILS	USER MODE REACTION	SERVICE MODE REACTION
Compressor Defect	Defrost sensor temp > -10°C (D sensor temp.unchanges for 10 min.continuous compressor run)	<b>Display Ring Leds Blink &amp; Eco Led Blink Buzzer 'beep'</b>	4 Led ON
Defrost Heater Defect	Defrost sensor < 0°C		5 Led ON



## 289 INNER DISPLAY



### User and Service Mode Error Message (DoubleControl)

SENSOR	FREEZER SET VALUE	COOLER SET VALUE
(1) Freezer (Short-Open)	E	01
(2) Refrigerator (Short-Open)	E	02
(3) Defrost (Short-Open)	E	03
(4) AT sensor	E	04
(5) RDH Sensor	E	05

### Component defect on display

DEFECT TYPE	FREEZER SET VALUE	COOLER SET VALUE
Compressor Defect	E	06
Defrost Heater Defect	E	07

### Low voltage error on display

DEFECT TYPE	FREEZER SET VALUE	COOLER SET VALUE
Low voltage	E	08

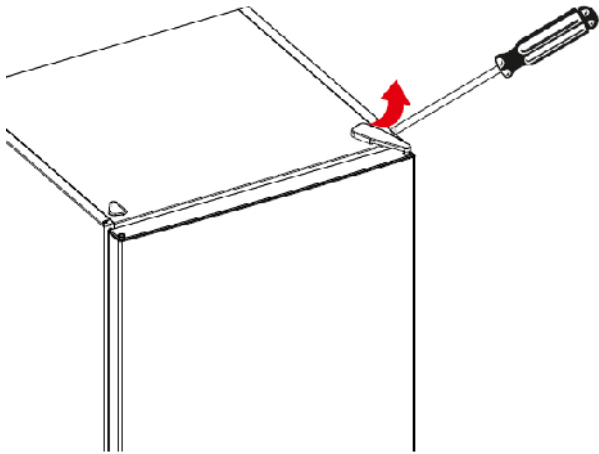
### Cooling error on display

DEFECT TYPE	FREEZER SET VALUE	COOLER SET VALUE
LF	E	09
LC	E	10
HC	E	11

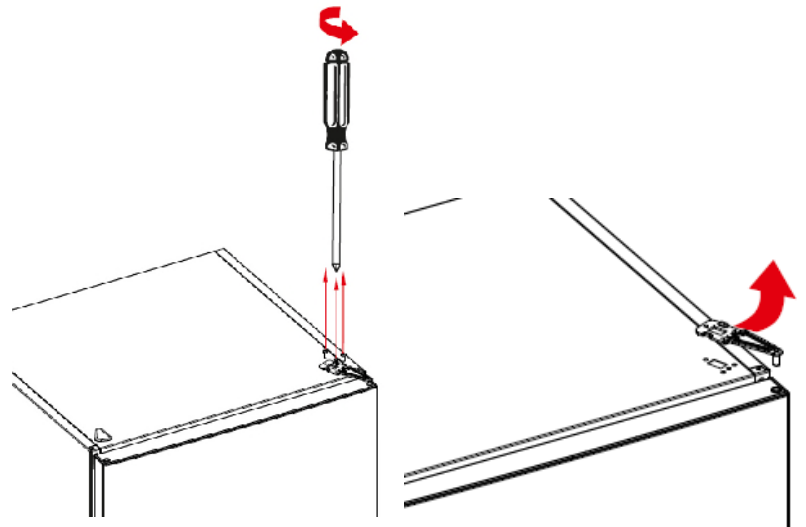
## Reversing the door

1. Hold the top hinge cover and remove it toward that direction (Pic-1)

2. Unscrew the screws fixing the top hinge and remove it. (Pic-2)



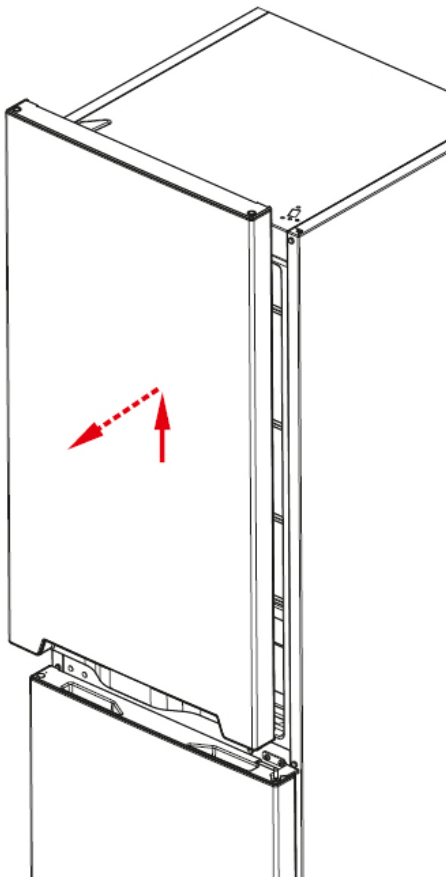
Picture-1



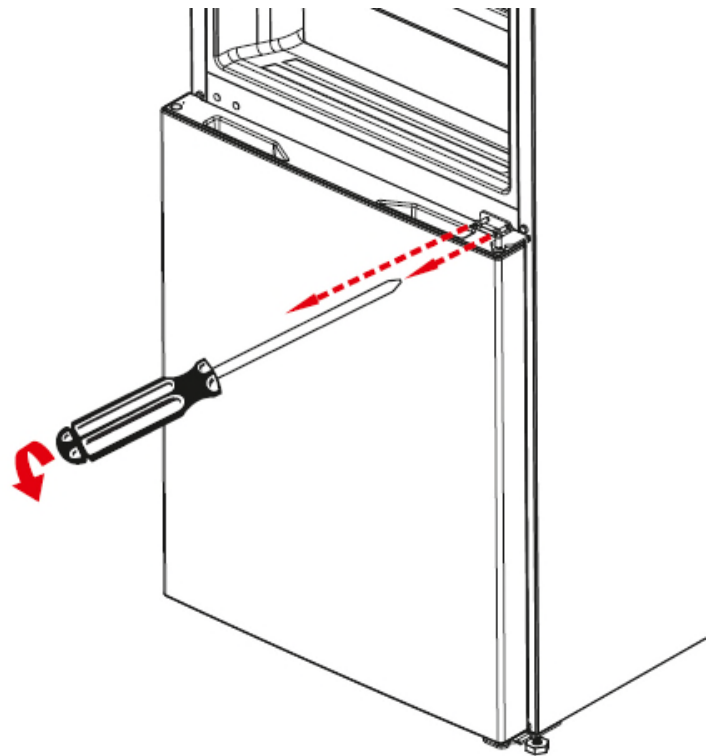
Picture-2

3. Displace the top door (Pic-3)

4. Unscrew the two screws fixing the middle hinge and remove it. (Pic-4)

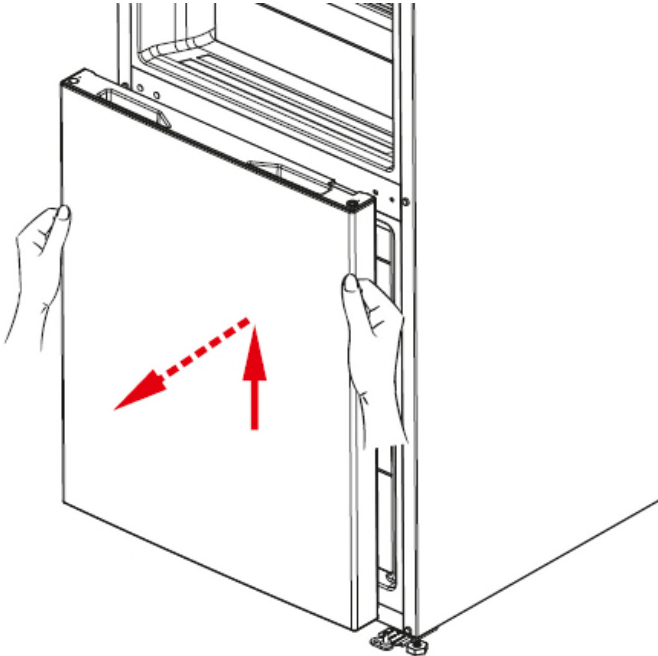


Picture-3



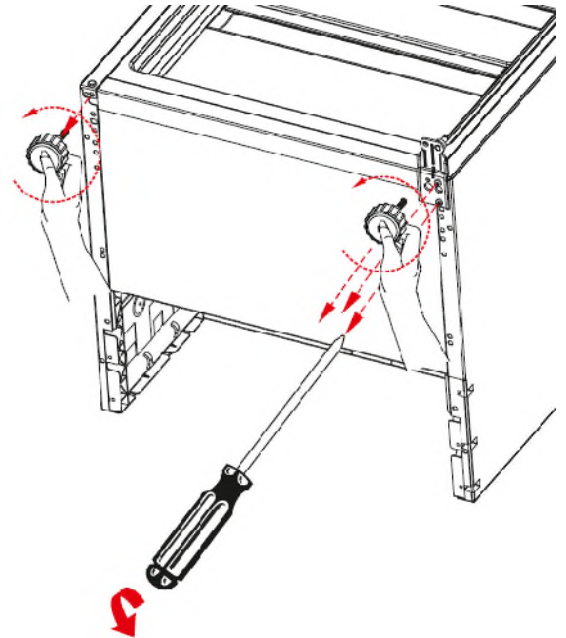
Picture-4

5. Displace the bottom door. (Pic-5)



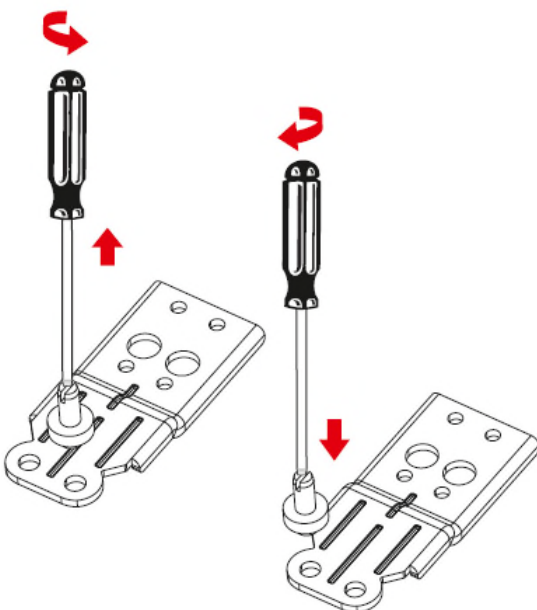
Picture-5

6. Unscrew the adjustable foot and bottom hinge screws (Pic-6)



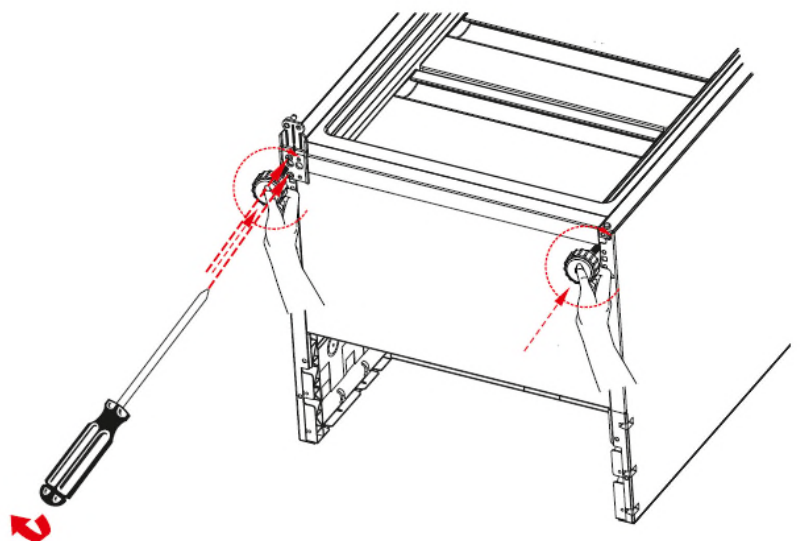
Picture-6

7. Unscrew the bottom hinge pin and screw it to other hole. (Pic-7)



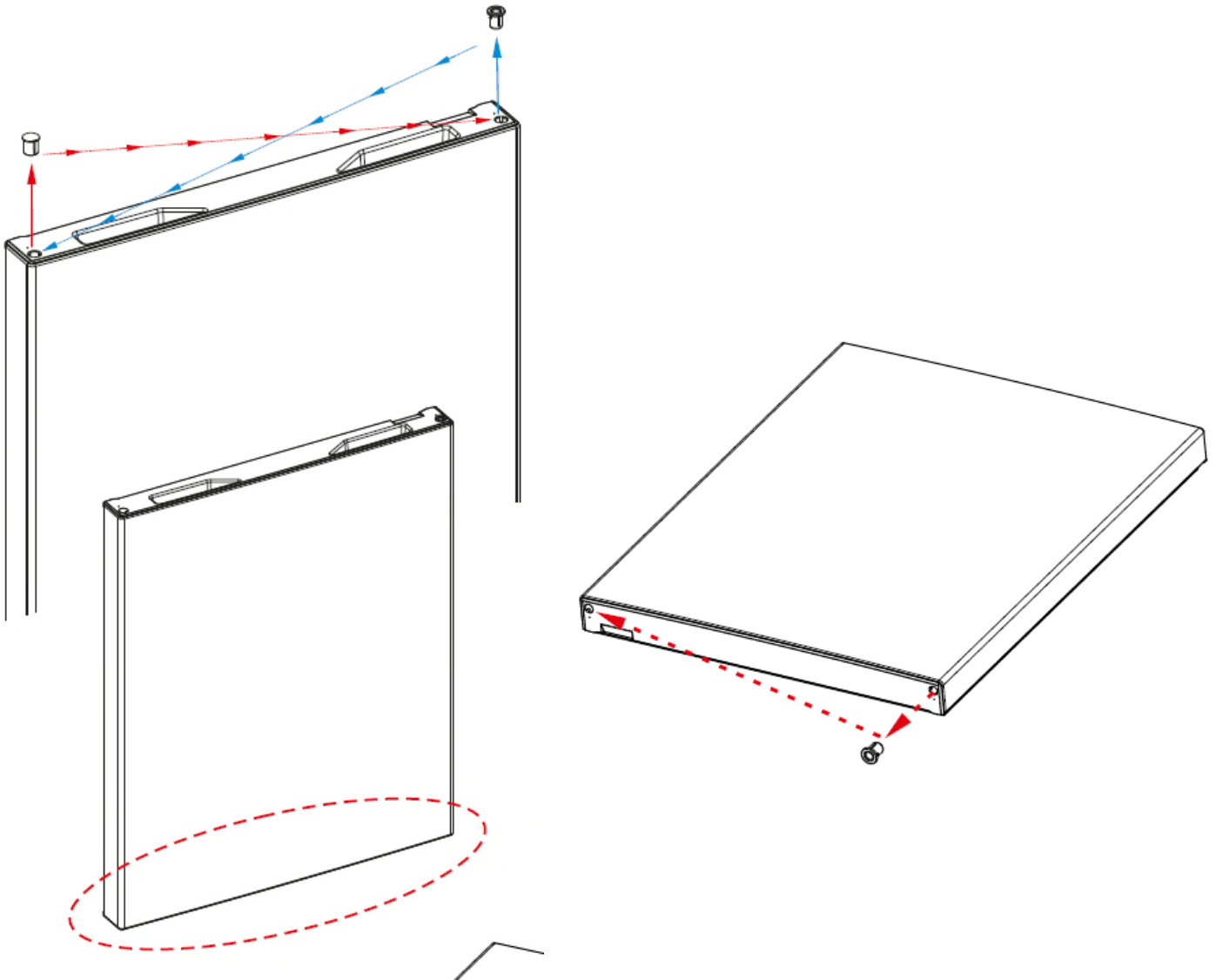
Picture-7

8. Screw the bottom hinge to the left bottom side of refrigerator. Screw the adjustable foot there. (Pic-8)



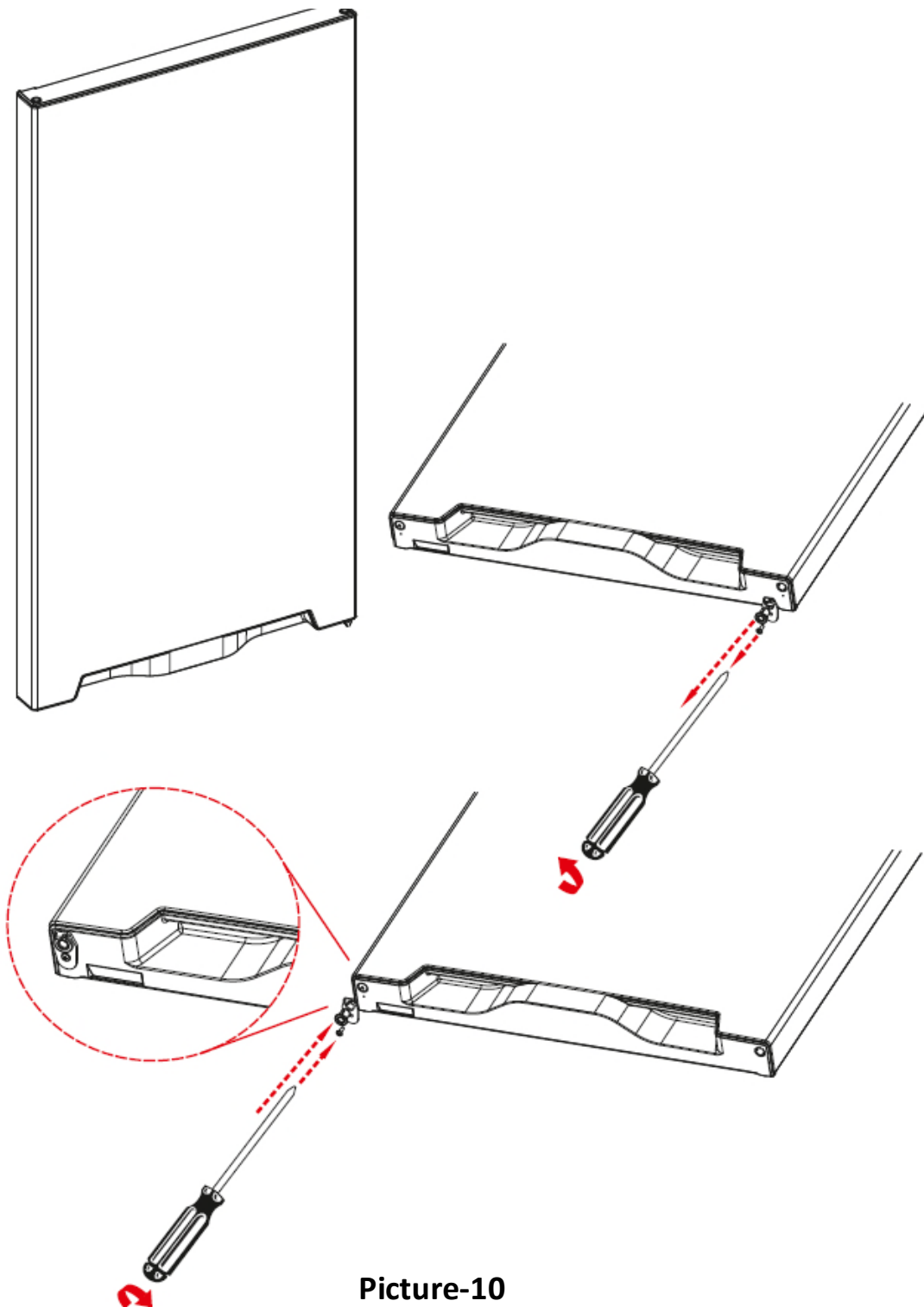
Picture-8

9. Replace the top bushing and the top bushing cap at the bottom door. (Pic-9)



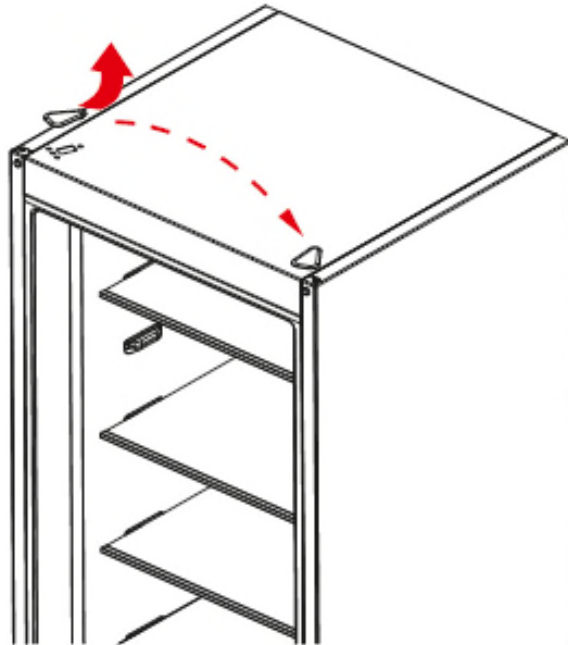
Picture-9

**10.** Remove the support plastic and then metal stopper placed under the upper door. (Picture-10) Then re screw these parts to the other side symmetrically. (remember the screw for the metal part must be screwed to the hole which is closer to the bushing). Do not use cordless screwdriver for these screws.



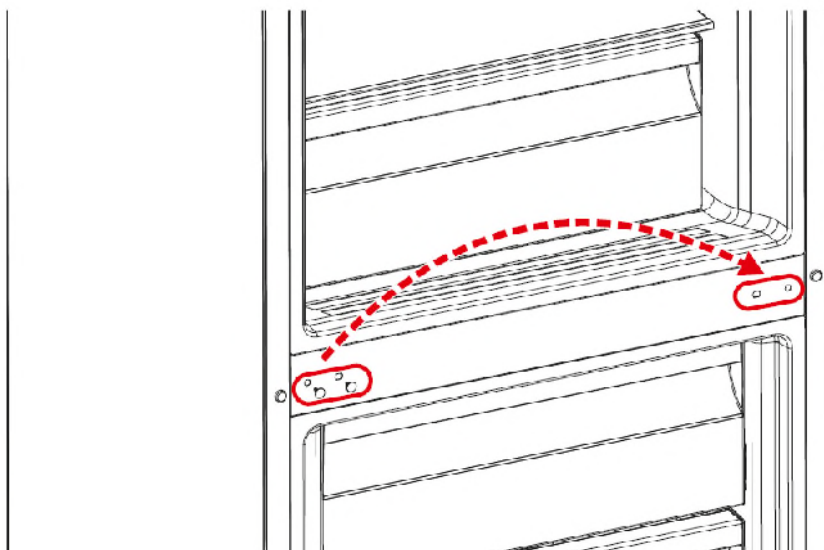
**Picture-10**

**11.** Remove the hinge cover on the top panel and replace to other side.(Pic-11)



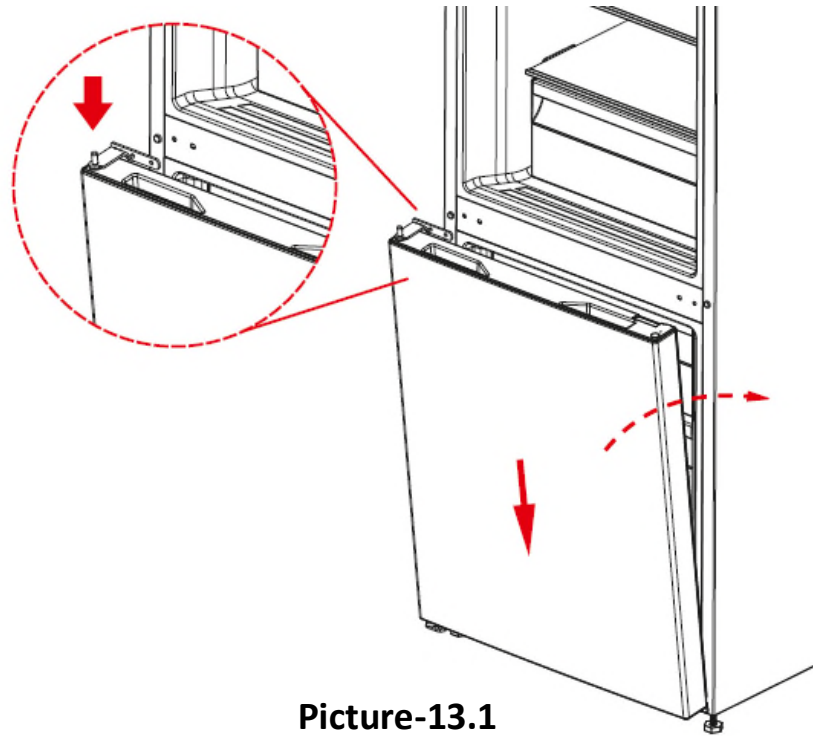
**Picture-11**

**12.** Remove the middle screw hole cover and assemble to the right side panel (Pic-12)

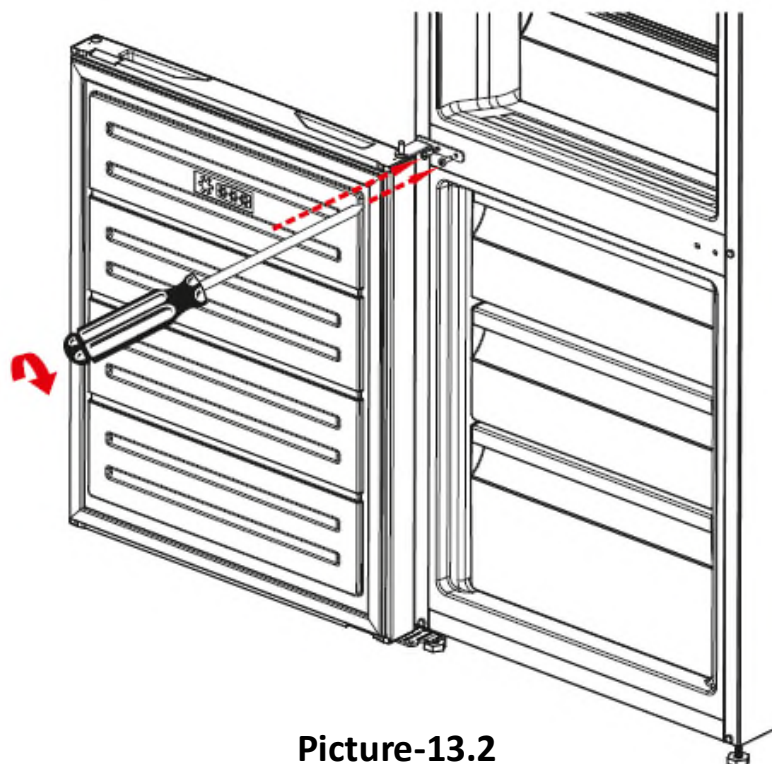


**Picture-12**

**13.** Place the bottom door (Pic-13.1) and rotate the middle hinge by 180°. After that, Screw to the right side on the middle sheet. (Pic-13.2)

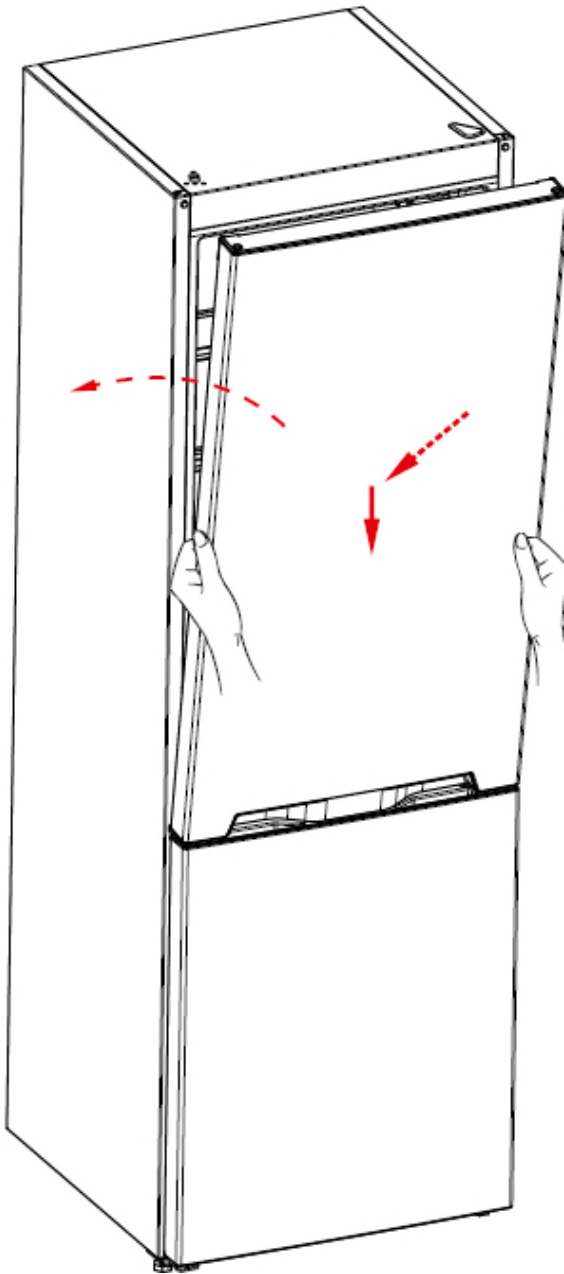


Picture-13.1

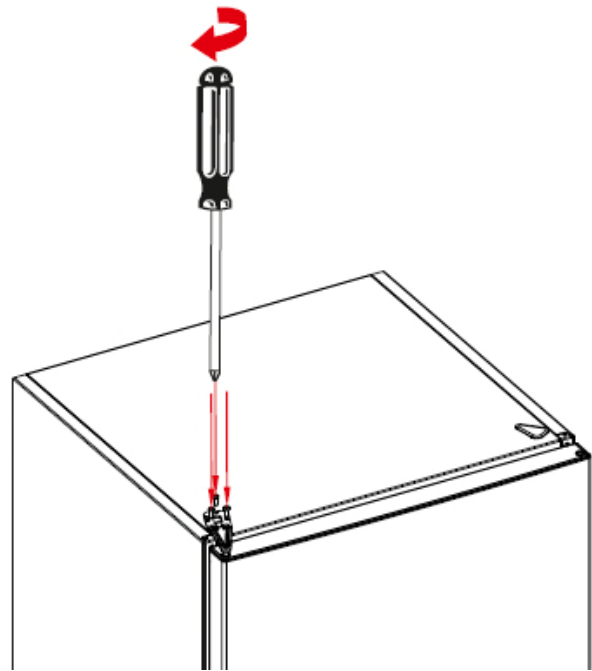


Picture-13.2

**14.** Place the top door to the middle hinge (Pic-14.1) and screw the top hinge to the top panel (Pic-14.2).

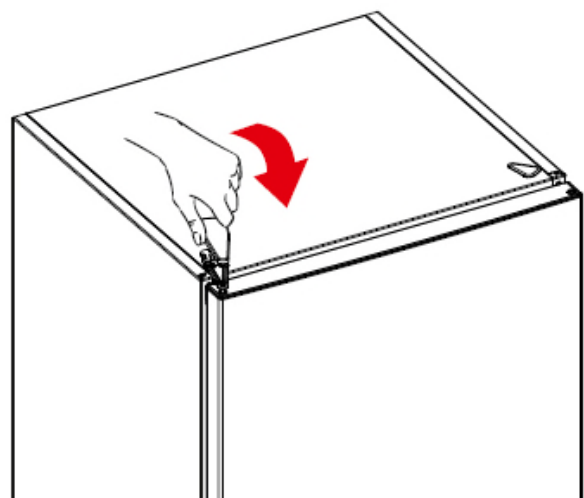


**Picture-14.1**



**Picture-14.2**

**15.** Place the top hinge cover. (Pic-15)



**Picture-15**

***CAUTION: The plug must be pulled out before the mainboard group is removed.***

1. Unscrew the screws which are fixing the main board cover. (Pic-1)



**Picture-1**

2. Pull the mainboard slightly forward and disconnect all the connectors and then replace it. Finally, place the mainboard cover and screw it. (Pic-2)



**Picture-2**

1. Stick a tape to protect plastic.  
Insert a flat screwdriver into the gap and remove the cover. (Pic-1)



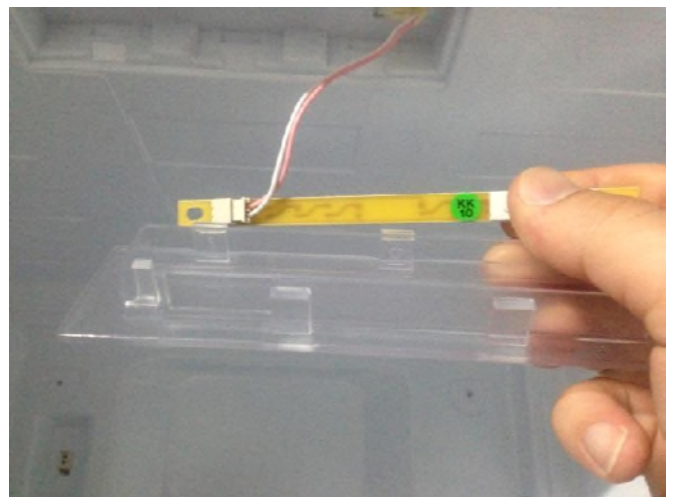
**Picture-1**

2. Remove the led strip light from its housing. (Pic-2)

3. Disconnect the connector and change the led light strip. (Pic-3)



**Picture-2**



**Picture-3**

4. First, place the left point of the led light strip and then place towards other side.(Pic-4)



**Picture-4**

5. Reassemble the led cover. (Pic-5)



**Picture-5**

### Removing The Cooler Multi Flow

1. Remove the cooler glass shelves. (Pic-1)



**Picture-1**

2. Stick one tape to each air duct to avoid scratching. (Pic-2) Remove the screw caps by using a flat screwdriver and screw the screws. (Pic-3)

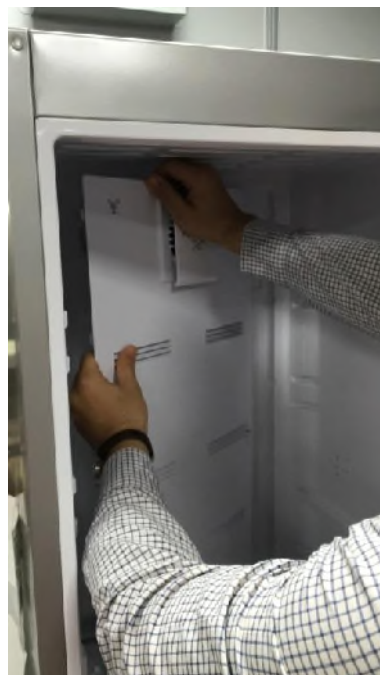
3. Flex the multi flow by holding the fan cover and remove it. (Pic-4) Disconnect the connector after removing the multi flow. (Pic-5)



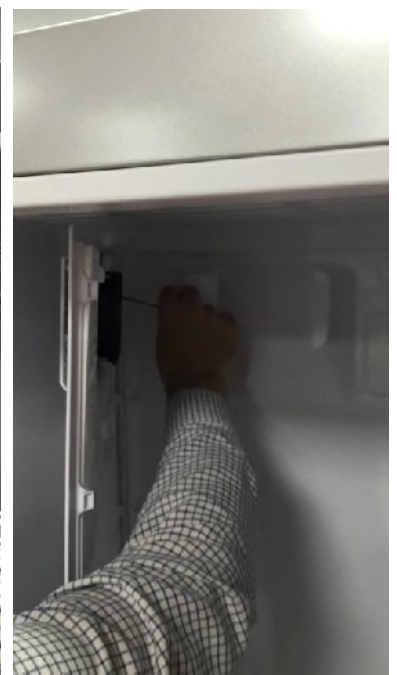
**Picture-2**



**Picture-3**



**Picture-4**

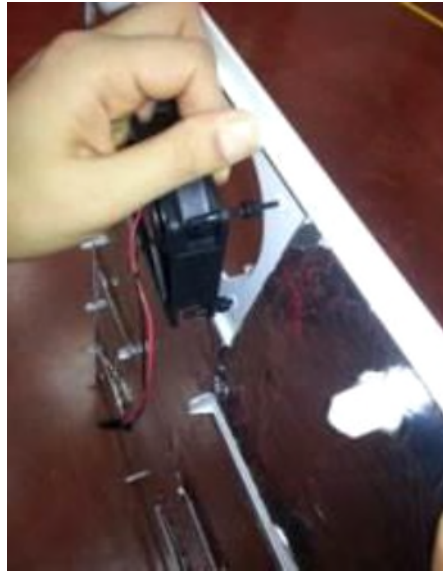


**Picture-5**

1. Remove the fan cover by flexing the fan cover detail and then remove the fan motor by flexing the fan motor rubbers. (Pic-1/ Pic-2/Pic-3)



Picture-1



Picture-2



Picture-3

2. Place the rubbers to the fan motor. After that, first place the bottom two details of the fan motor and place the top two details by pressing-flexing it. (Pic-4/ Pic-5/Pic-6)

**Note :** *The fan motor cable outlet should be at the top-left corner of it.*

3. After the connector is connected, place it by flexing it and then reassemble the multi flow by screwing.



Picture-4



Picture-5



Picture-6

### Changing The Sensor

1. Remove the sensor cover with the help of a screwdriver and then disconnect the sensor connector. (Pic-1)

#### Refrigerator Sensor



2. Place the bottom-front details of the cover to its housing and then place the top cover detail to the housing by flexing it with a screwdriver. (Pic-2)



#### Removing Freezer Sensor (Double Control)

Remove the sensor cover with the help of a screwdriver and then disconnect the sensor connector.



### Removing The Freezer Multi Flow Group

1. Displace the glass shelves and baskets if there is. (Pic-1/Pic-2)
2. Unscrew the screw fixing the multiflow group. (Pic-3)
3. Removing the freezer bottom cover by flexing back side of it. (Pic-4)



Picture-1



Picture-2



Picture-3

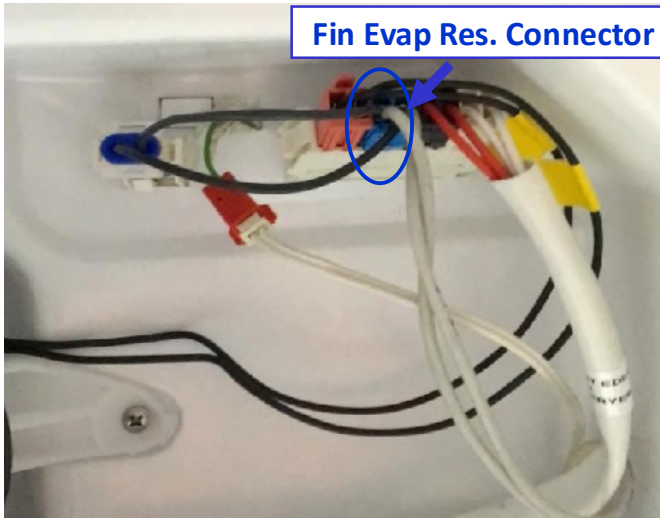


Picture-4

### Removing Fin Evaporator Group

1. Remove the fin evaporator resistance connectors from the sockets. (Pic-1)  
(blue connector)

2. Displace the fin evaporator balanced by holding on both sides. (Pic-2)



Picture-1



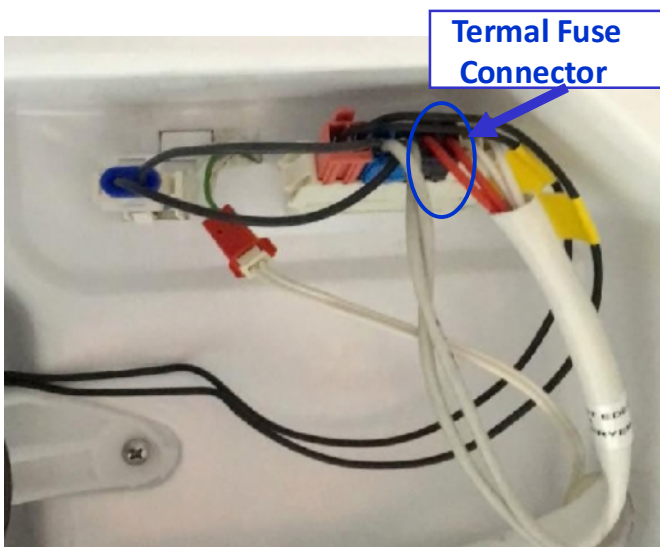
Picture-2

**CAUTION: The fin evaporator should not be pulled upward-downward. Otherwise, the fin evaporator fixing plastics might be broken.**

### Removing The Thermal Fuse

1. Remove the thermal fuse connector. (Pic-1) (black-white connector)

2. Thermal fuse has two details. These details hold on to the pipe. It could be removed easily. (Pic-2)



Picture-1



Picture-2

## Removing The Freezer Fan Motor

1. Remove the fan motor connector. (Pic-1)
2. Unscrew the fan motor fixing screws and displace the fan motor. (Pic-2)
3. Remove the propeller. (Pic-3)



Picture-1



Picture-2



Picture-3

4. Displace the details on the fan motor box. (Pic-4)



Picture-4



Fan Motor Components

***CAUTION: The plug must be pulled out before the display is removed.***

**1.** The display can be removed with the help of a horizontal brace or a spatula. Avoid screwdriver etc. in display disassembly which will apply pressure to the liner plastic on single point. This will damage the liner. By placing the spatula near the door side of the refrigerator between the display and the housing in the body. Remove it from its slot. (Picture-1) (Picture-2)



Picture-1



Picture-2

**2.** The display tabs are fixed (B) at the bottom and flexible (A) near the door side of the refrigerator. (Picture-3)



Picture-3

B

A

**3.** Unplug the cable connector on the display board and remove the display assembly. (Picture-4)



Picture-4