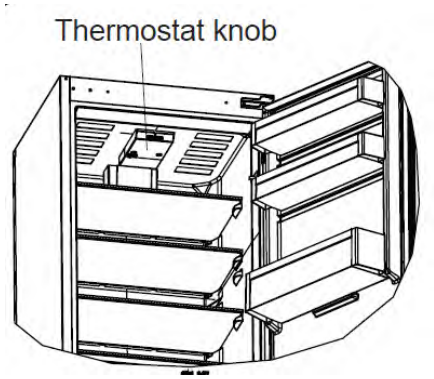
SOGEDIS ELECTROMENAGER	**289 MECHANIC (HIDDEN CAP)**	
	Control Panel	

Thermostat Setting

It ensures that the temperature settings in the cooling and freezing compartments of your refrigerator are performed automatically. It may be set to any value ranging from 1 to 5. As you turn the thermostat setting knob from 1 to 5, the temperature decreases. To save energy in winter months, operate your refrigerator in a lower position.

Fridge compartment thermostat knob;
4 - 5 : For further cooling.
2 - 3 : For normal use.
1 : For less cooling.

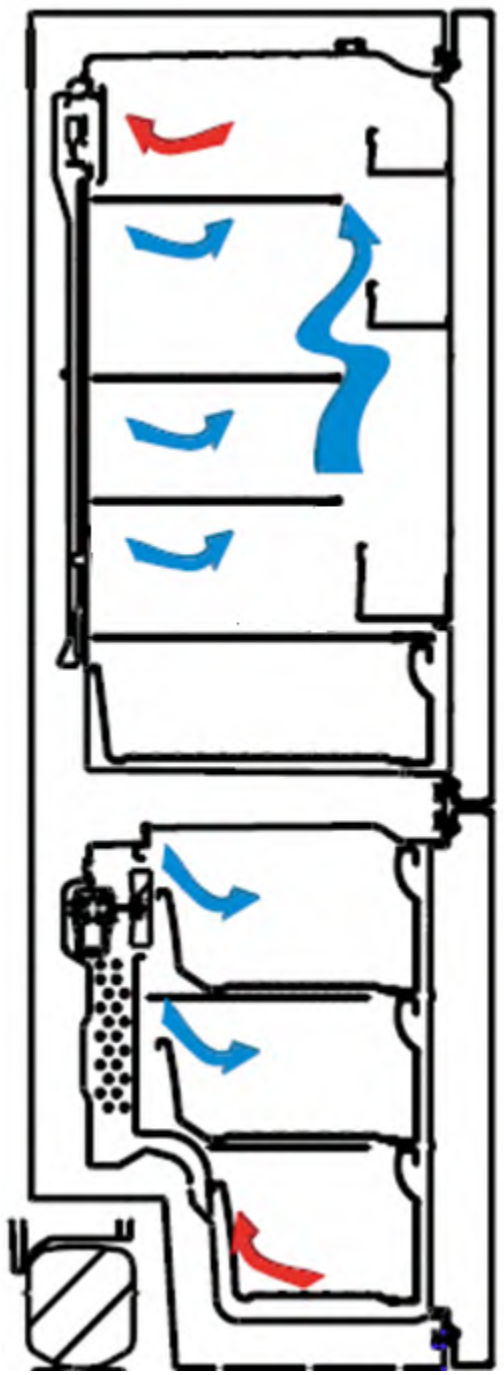


Warnings about Temperature Adjustments

• It is not recommended that you operate your fridge in environments colder than 16°C in terms of its efficiency.
• Temperature adjustments should be made according to the frequency of doors openings and the quantity of food kept inside the fridge-freezer.
• Your fridge-freezer should be operated up to 24 hours according to the ambient temperature without interruption after being plugged in to be completely cooled. Do not open doors of your fridge-freezer frequently and do not place much food inside it in this period.
• During power cut, to prevent any compressor problem you should unplug the fridge-freezer. You should delay pluging in 5 – 10 minutes after your power supply returns. 0f you plug out the fridge-freezer for a reason you should wait at least 5 min to replug. It is important for avoiding damage to fridge-freezer's components.
• Your fridge-freezer is designed to operate in the ambient temperature intervals according to the climate class stated on the information label. In terms of cooling effectiveness, we do not recommend operating your fridge-freezer outside of the stated temperature values.
• This equipment is designed for use at an ambient temperature within the 16°C - 38°C range.

Climate class	Ambient temperature °C
T	Between 16 - 43 °C
ST	Between 16 - 38 °C
N	Between 16 - 32 °C
SN	Between 10 - 32 °C

SOGEDIS ELECTROMENAGER	289 MECHANIC (HIDDEN CAP)	
	Air Flow Diagram	

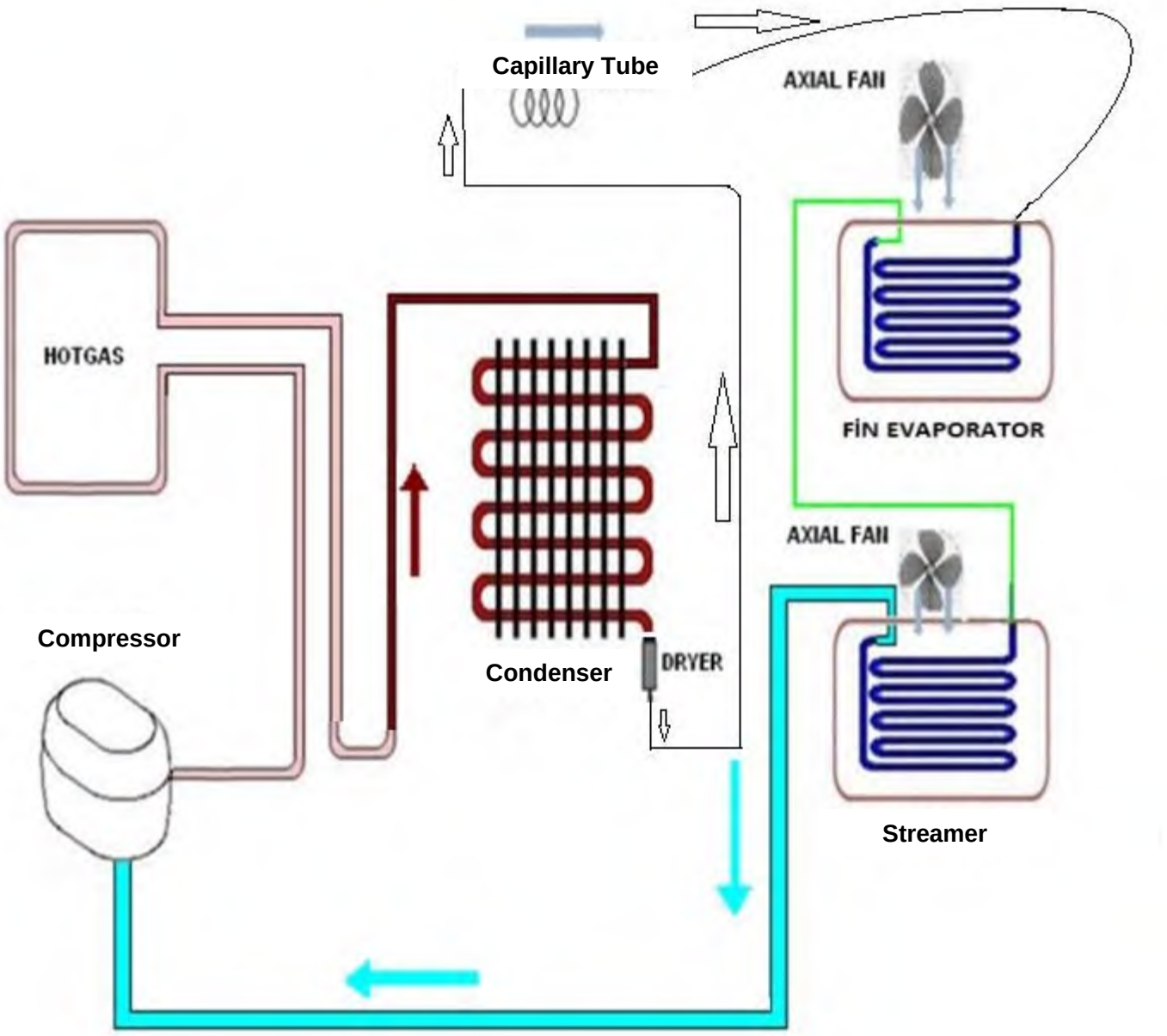


Cutaway view: Air Flow Direction

Blown : Cold Air

Returned: Hot Air

SOGEDIS ELECTROMENAGER	289 MECHANIC (HIDDEN CAP)	
	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.

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/4.02k4Ω	-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

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 ºC goes down to 1kΩ in the 45 ºC and therefore the ambient temperature should be considered while the sensor is being checked. If the ambient temperature is 25 ºC, 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 stars 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,

Freezer Defrosting Time

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

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 7ºC.

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 ºC the compressor works 5 minutes later. If it is higher than -5 ºC.

Other Features

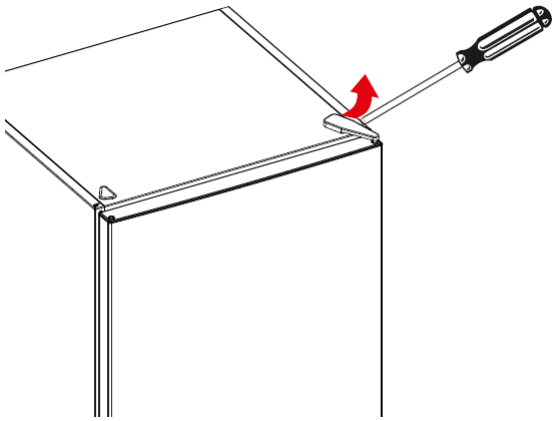
Warnings : The door open warning is active 2 minutes later and it alarms.

Door Direction : It is possible to reverse the door.

Gasket : It is possible to change the gasket.

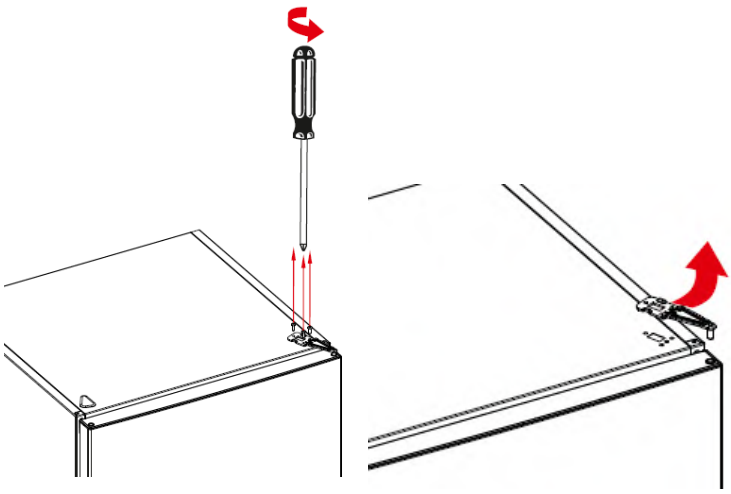
Unsufficient cooling	Is the appliance too close to wall or heat sources (stove, central heating, oven, cooker etc.)?	It should be placed min 50cm distance from heat sources and min 5 cm from electrical ovens.
	Is the ambient temperature high?	Raise the thermostat value.
	Check whether putting the hot 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.
The foods in the cooler compartment are freezing.	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.
Are there any sweating or icing?	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.
Abnormal Noise	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.

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



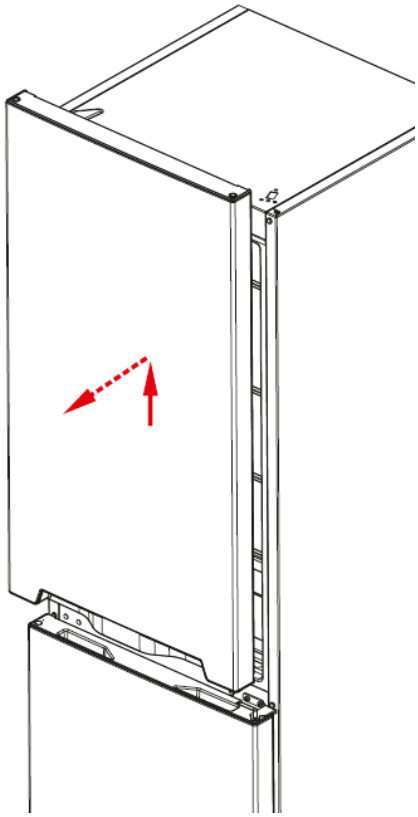
Picture-1

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



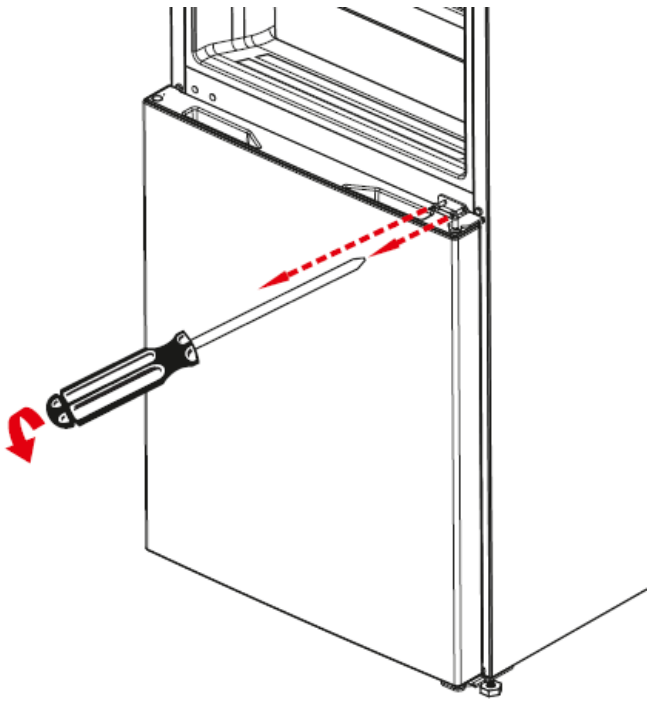
Picture-2

3. Displace the top door (Pic-3)



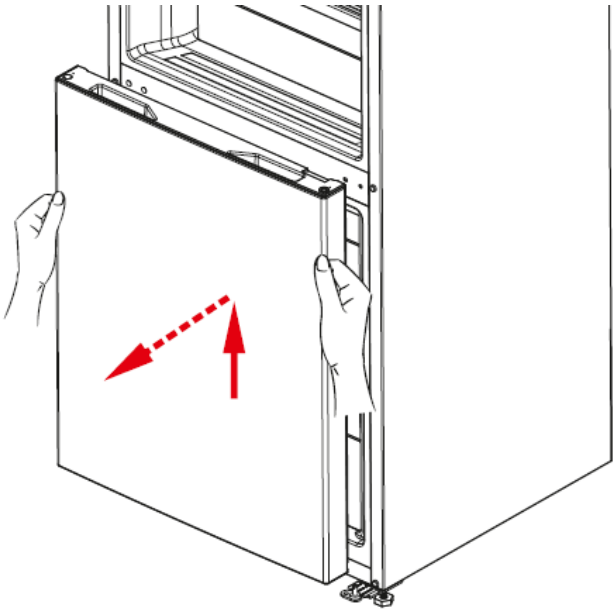
Picture-3

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



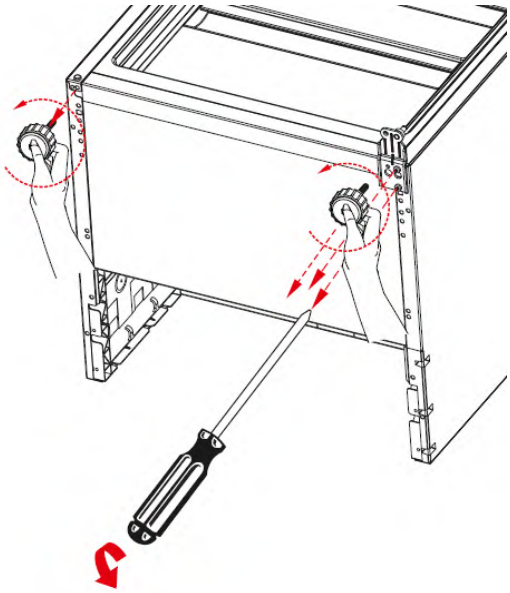
Picture-4

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



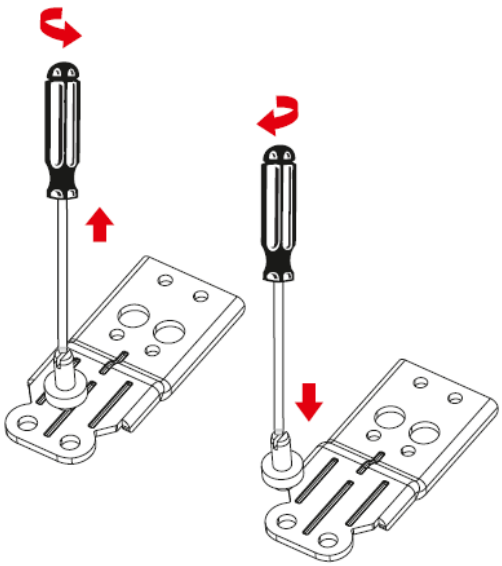
Picture-5

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



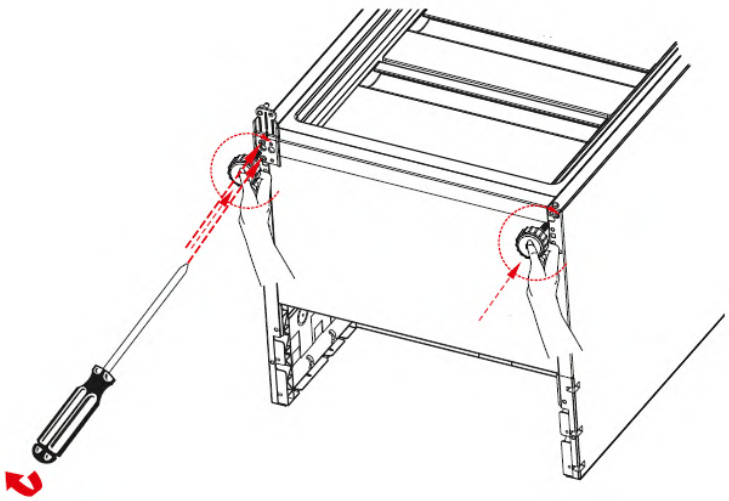
Picture-6

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



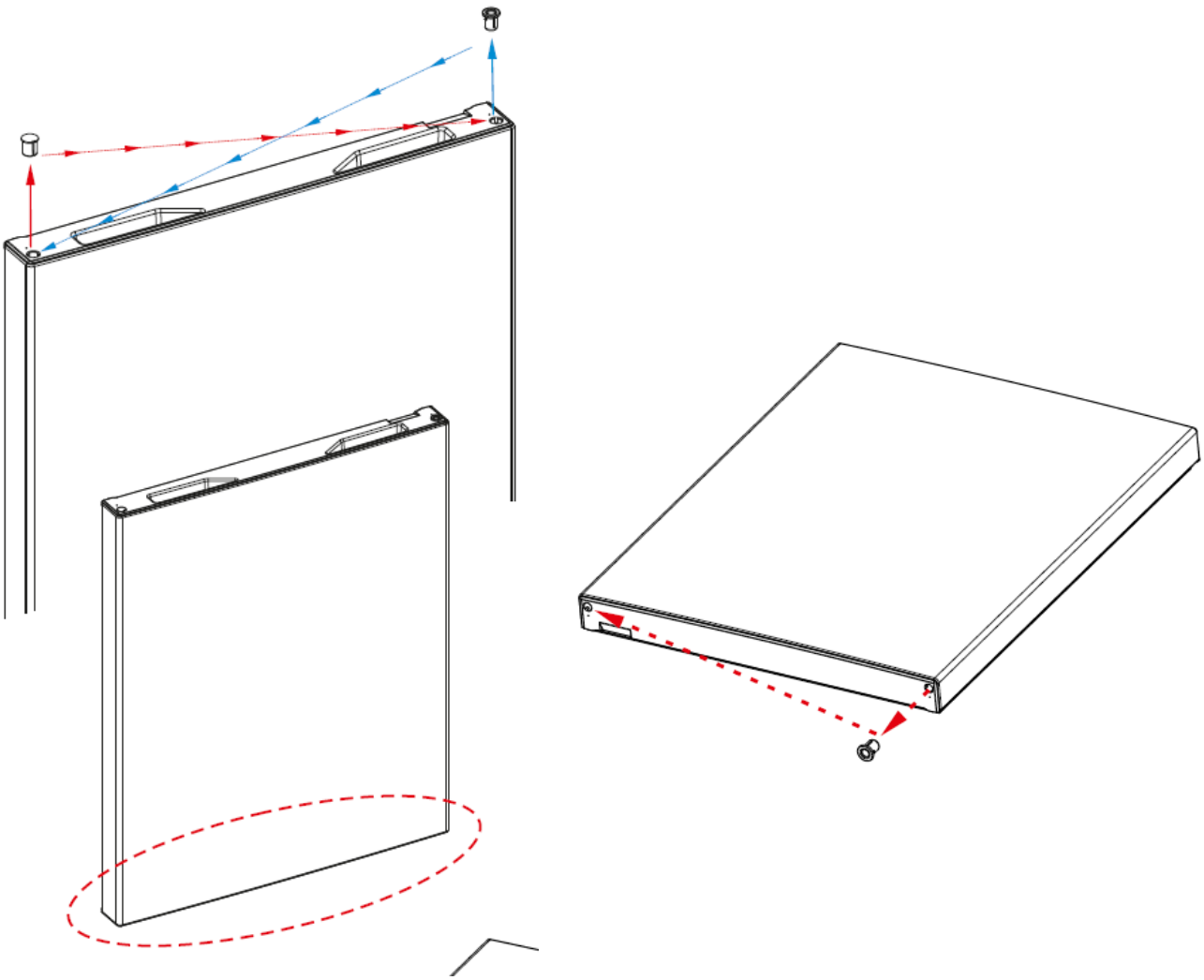
Picture-7

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



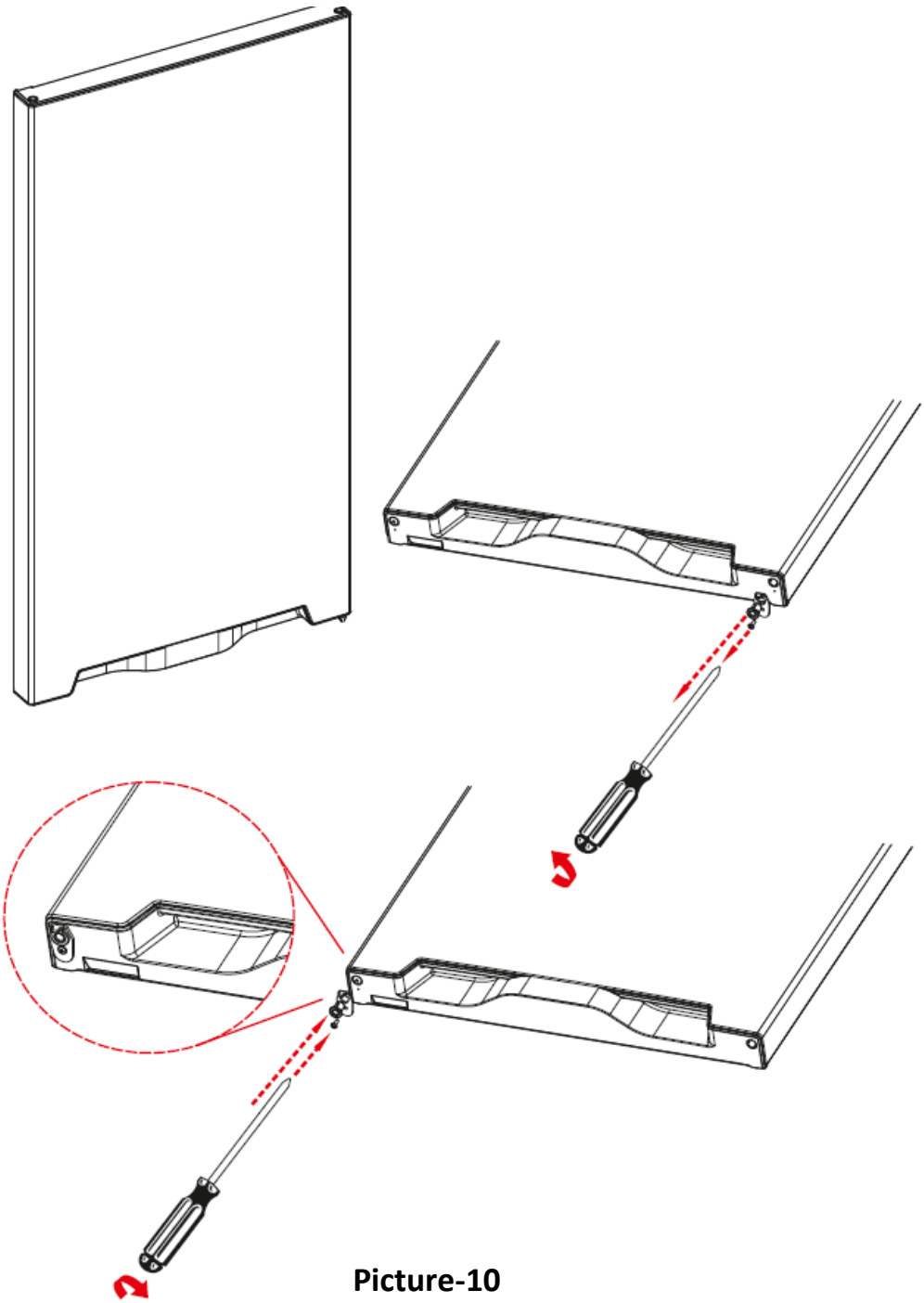
Picture-8

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



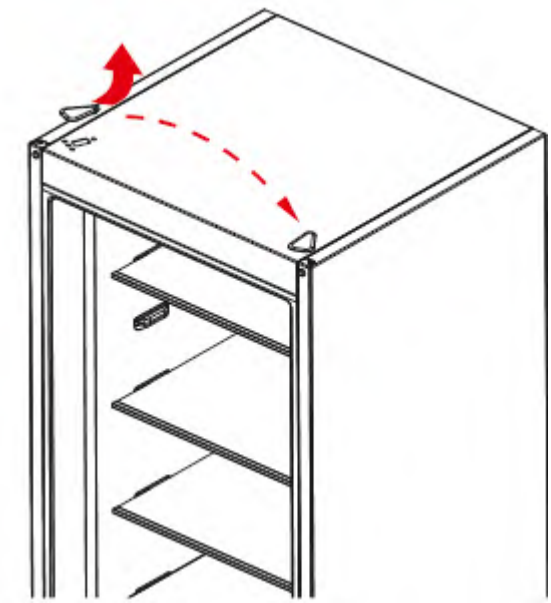
Picture-9

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.



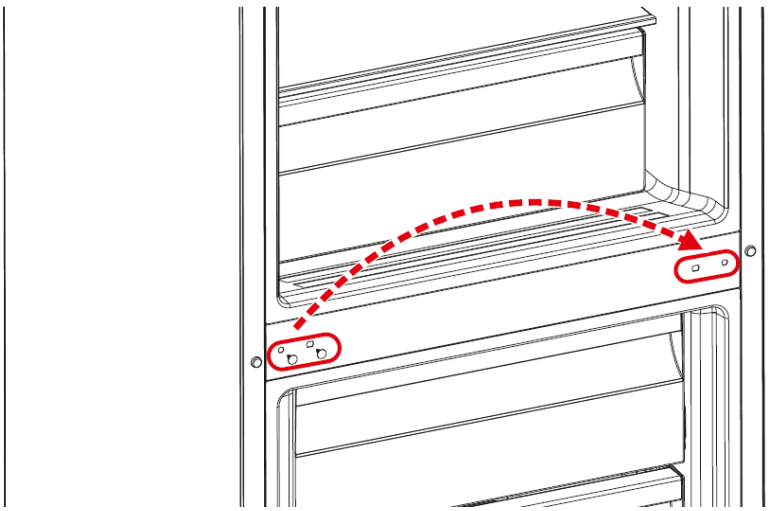
Picture-10

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



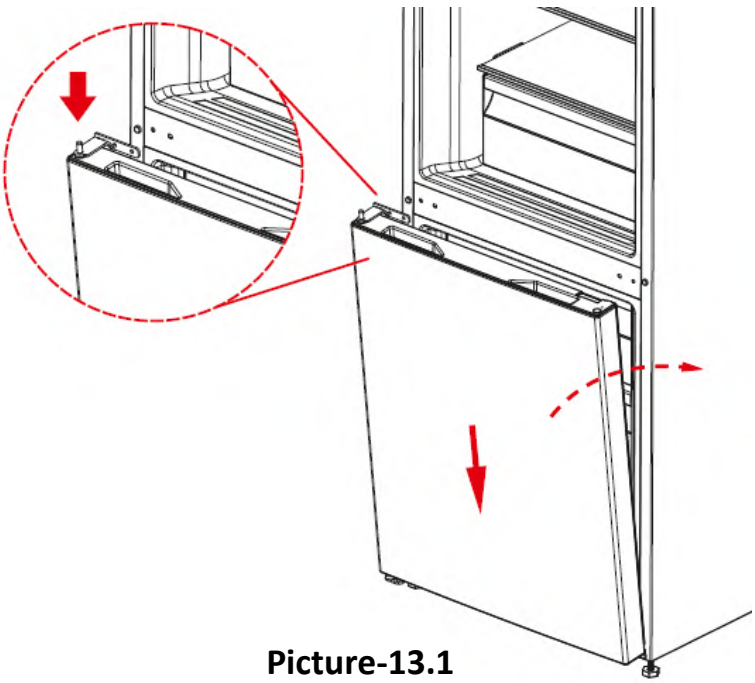
Picture-11

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

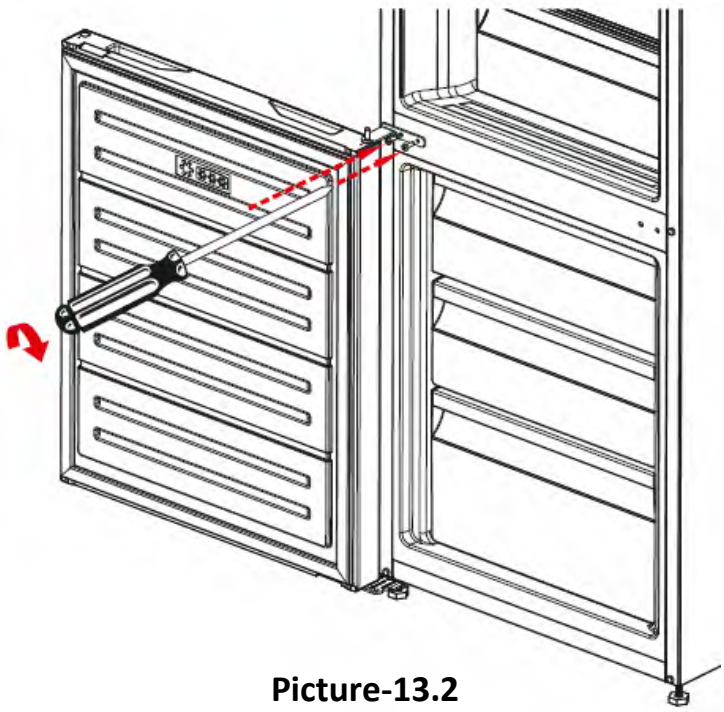


Picture-12

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

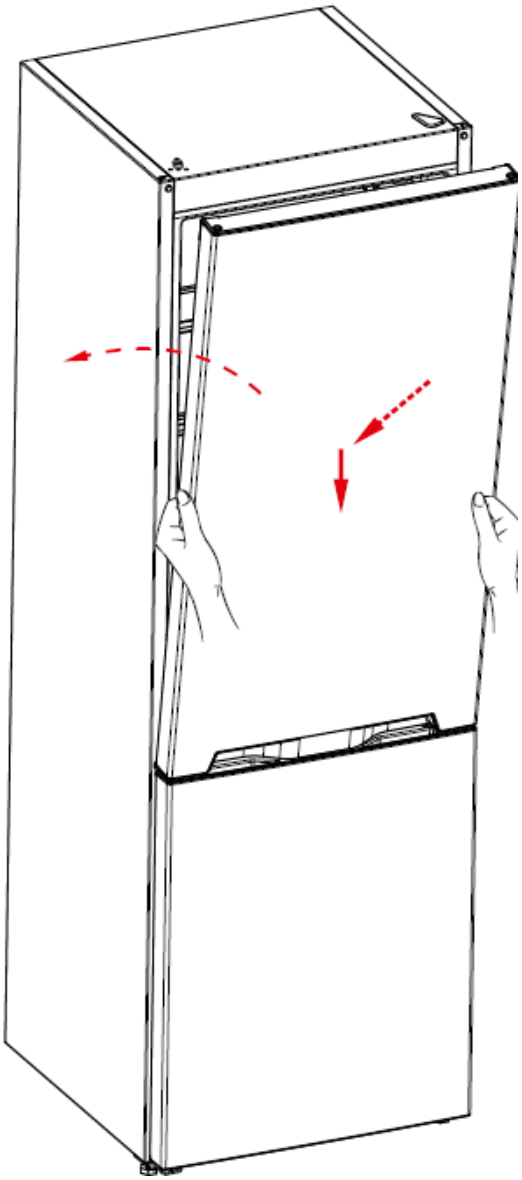


Picture-13.1

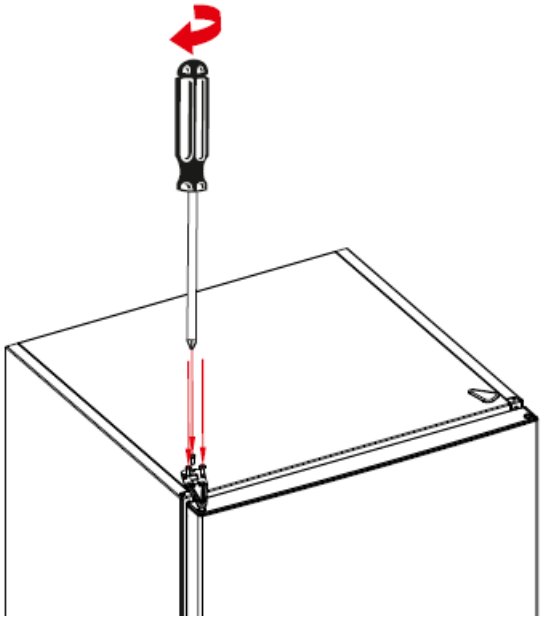


Picture-13.2

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

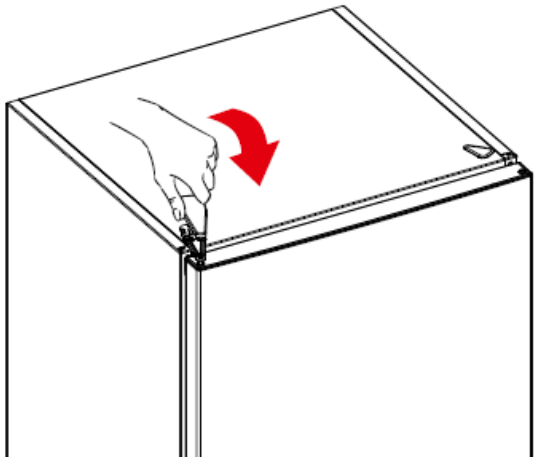


Picture-14.1



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.

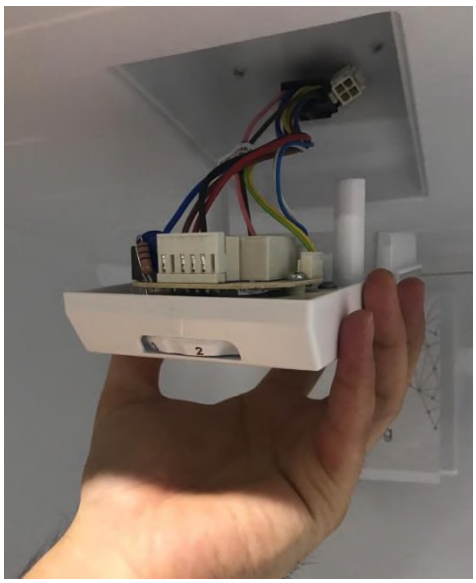
1. Unscrew the screws which are fixing the main board box. (Pic-1-2)

Picture-1

Picture-2

2. Pull the mainboard box slightly forward and disconnect all the connectors. (Pic-3)

3. Then place the front side of the box to the housing and then place box entirely and screw the screws with cross point screwdriver. (Pic-4)



Picture-3

Picture-4

1. Press the snap fit cover with finger (Pic-1) and remove the box cover (Pic-2). After that operations, you can change the LED bulb.

Picture-1

Picture-2

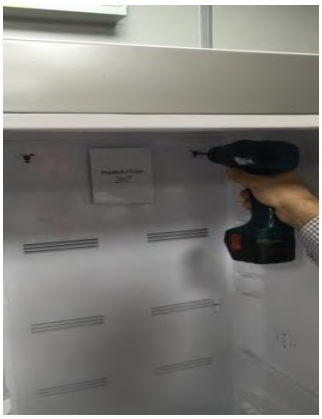
2. For assembling, reverse the above operations..

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

Picture-1

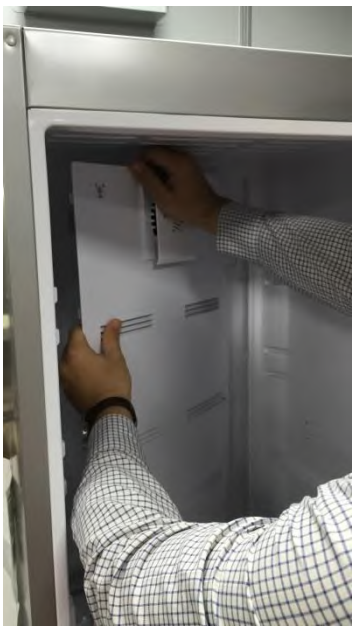
2. Stick one tape to each air duct to avoid scratching. (Pic-2) Remove the screw caps by using a flat screwdriver and screw the screws. (Pic-3)

Picture-2

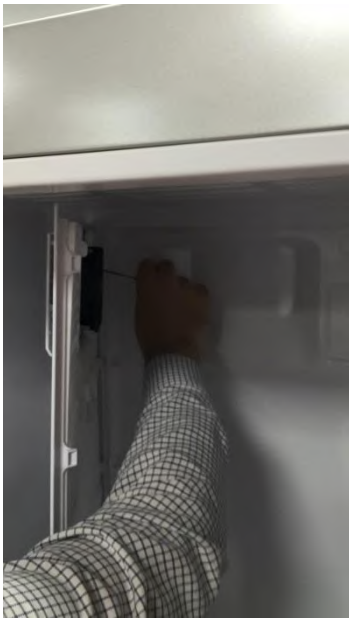


Picture-3

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)

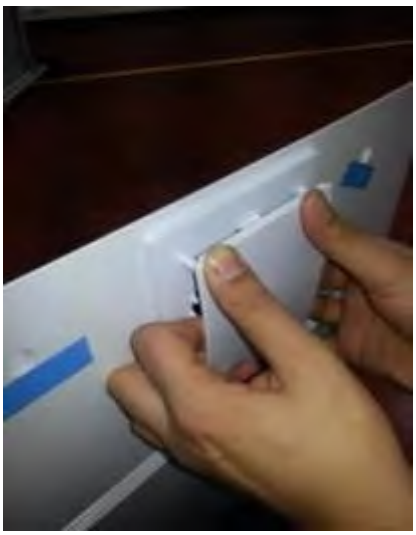


Picture-4



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

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

Picture-1

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)

Picture-2

CAUTION: Pay attention not to damage to the sensor cover details!

Removing The Freezer Multi Flow Group

1. Displace the glass shelfs 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

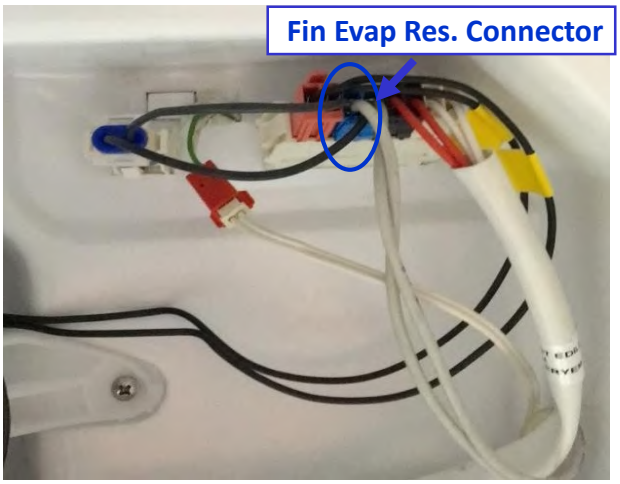
Picture-2

Picture-3

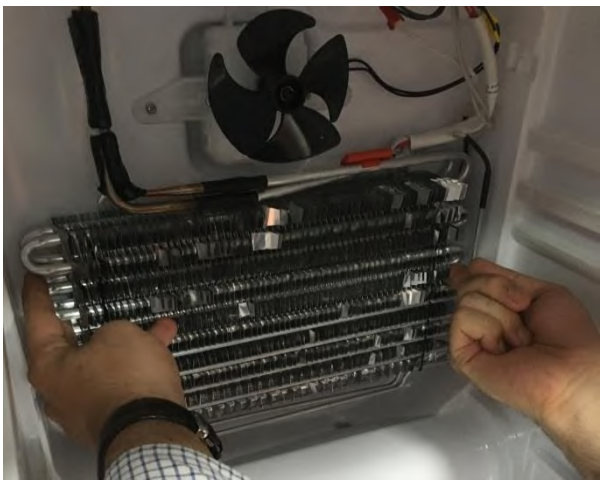
Picture-4

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



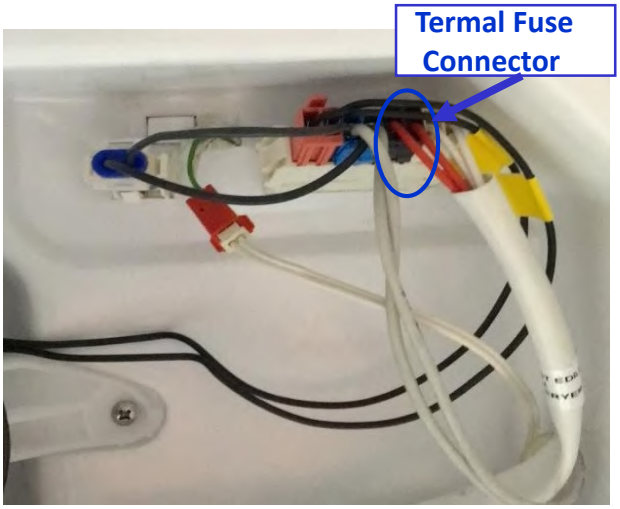
Picture-2

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

SOGEDIS ELECTROMENAGER	289 MECHANIC (HIDDEN CAP)	
	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)

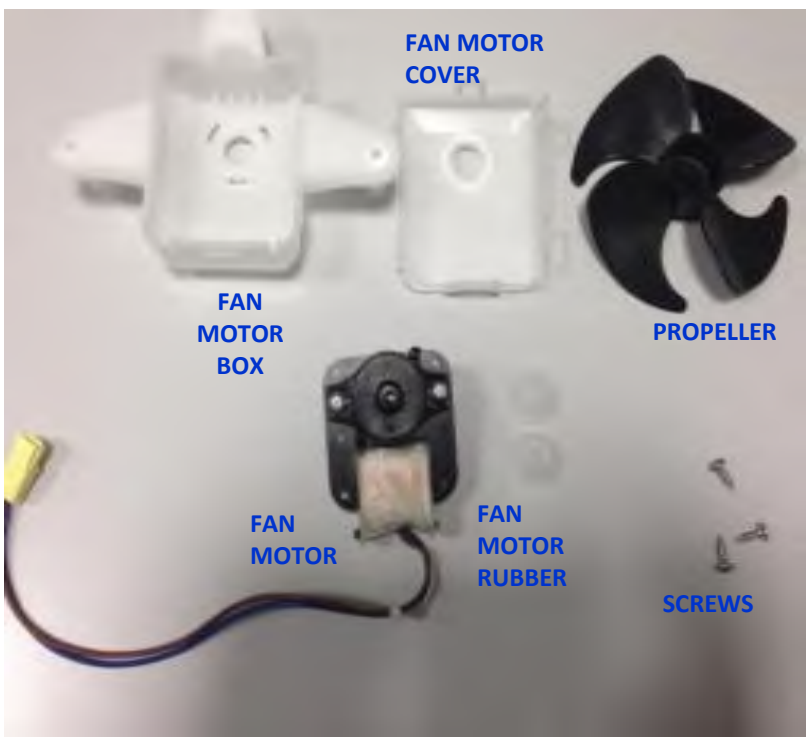
Picture-1

Picture-2

Picture-3

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

Picture-4



Fan Motor Components