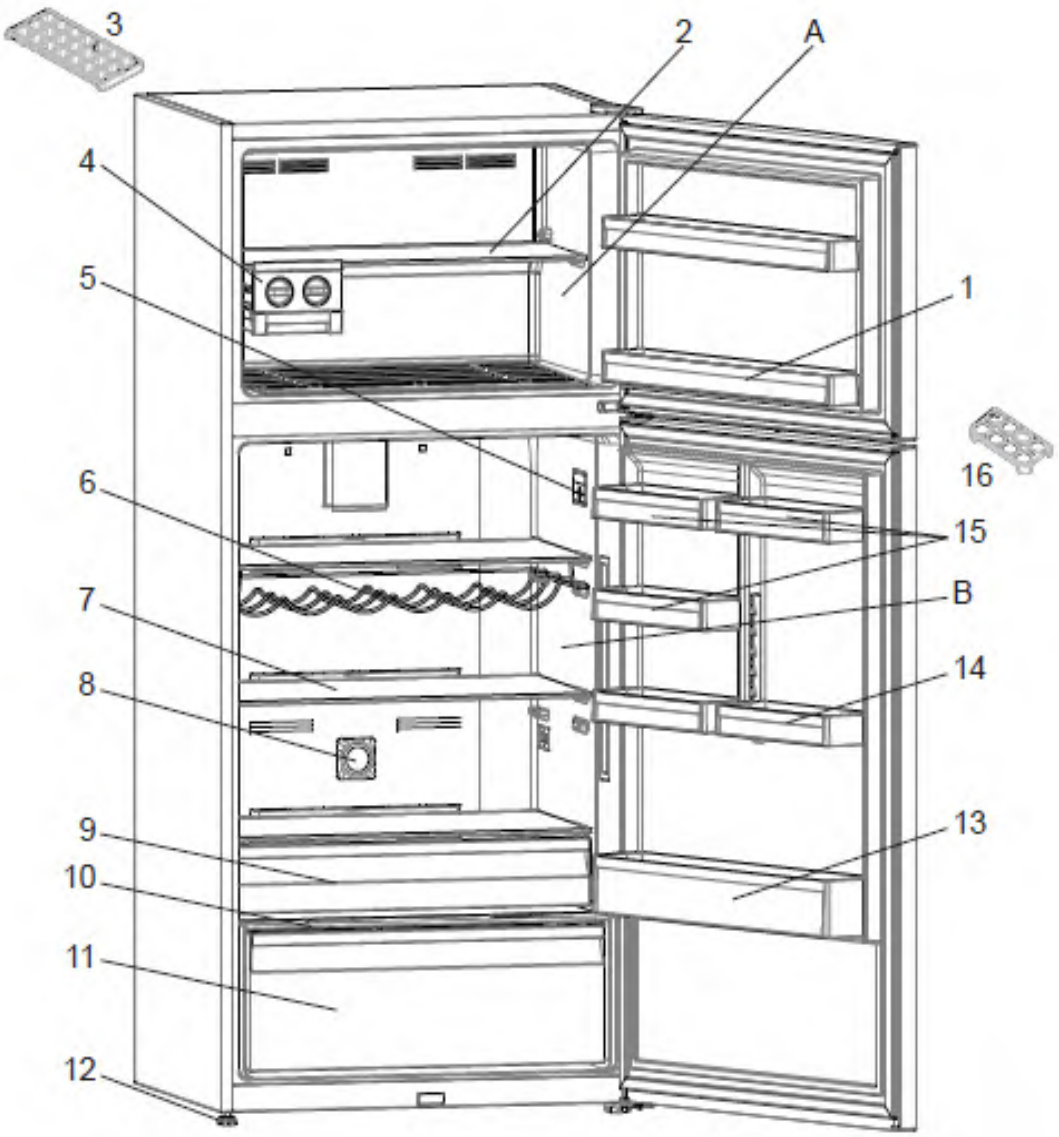
NO-FROST 643 INNER DISPLAY

General Features

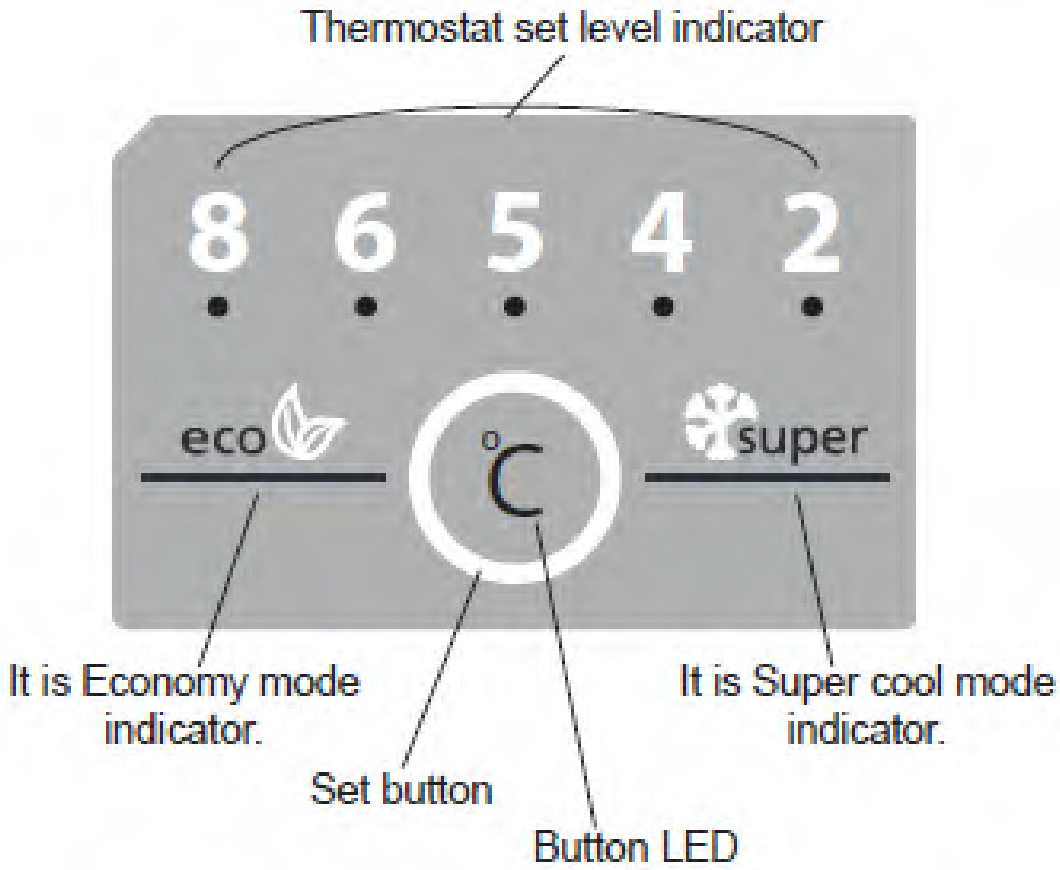


A. Freezer compartment
B. Fridge compartment

1. Freezer door shelves
2. Freezer shelf
3. Icematic *
4. Ice box tray*
5. Interior display / In room control
6. Bottle shelf / Wine rack *
7. Fridge compartment shelves
8. Ionisier *
9. Chiller shelf *
10. Glass shelf over the crisper
11. Crisper
12. Levelling feet
13. Bottle shelf
14. Adjustable door shelf *
15.Door shelves
16. Egg holder

***It is available on some modals.**

	NO-FROST 643 INNER DISPLAY	
	Temperature Setting	



Cooler temperature settings

• Initial temperature value for cooler setting indicator is 6 oC.

• Press set button once, the set value will start to blink.

• If you keep pressing set button, lower temperatures will be selected. (8, 6, 5, 4, 2, super and eco)

• If no button is pressed for 1 second, your choice will be set, it will blink 3 times. Buzzer will sound beep beep.

• The temperature value selected before super cool mode or economy mode is activated will remain the same when the mode is over or cancelled. The appliance continues to operate with this temperature value.

Super cool mode

How would it be used?

Press set button until super cool symbol will be seen on the screen. Buzzer will sound beep beep. Mode will be set.

During this mode:

• Economy mode can not be selected.

• Super cool mode can be cancelled by the same operation of selecting.

Economy mode

How would it be used?

Press set button until eco symbol will be seen on the screen. Buzzer will sound beep beep. Mode will be set.

During this mode:

• Super cool can be selected. Economy mode is automatically cancelled and the selected mode is activated.

• Eco mode can be cancelled by the same operation of selecting.

Door open alarm function

If cooler or freezer door is opened more than 2 minutes, appliance sounds ‘beep beep’.

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Control Panel

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 ?

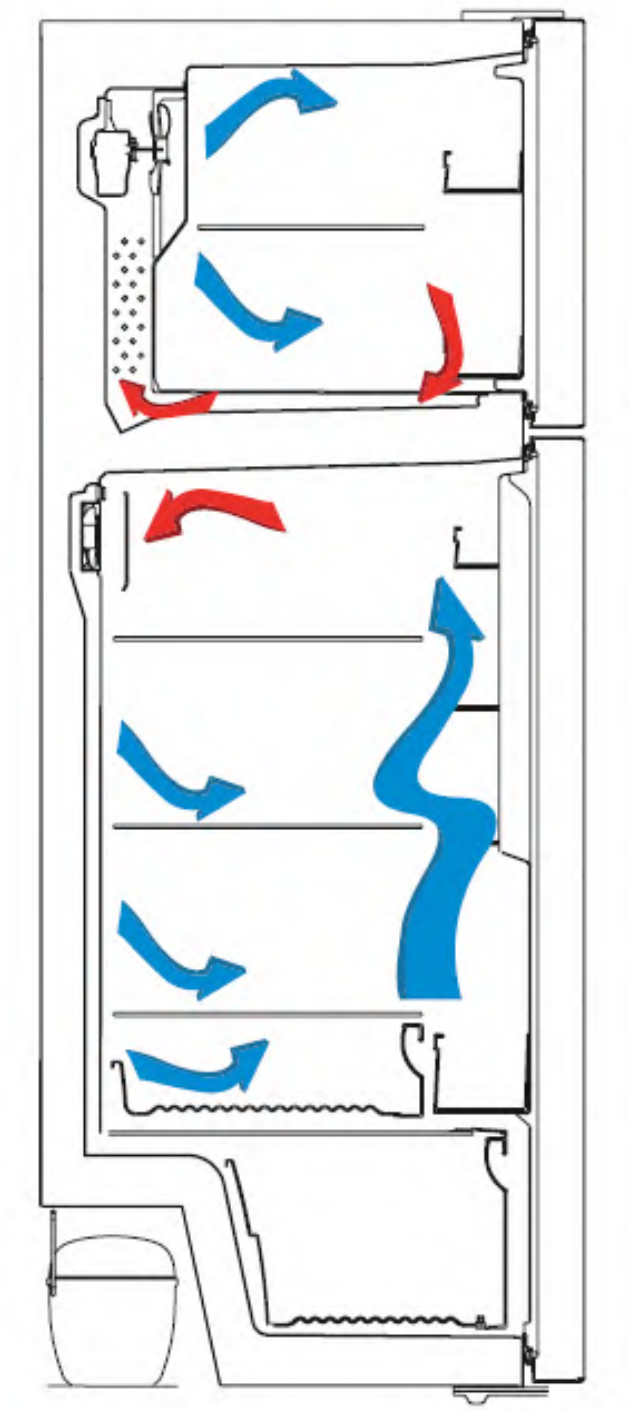
Yes. Interruption in electricity will not terminate the DEMO Mode. You can only cancel DEMO Mode by pushing Mode button for 10 secs.

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.

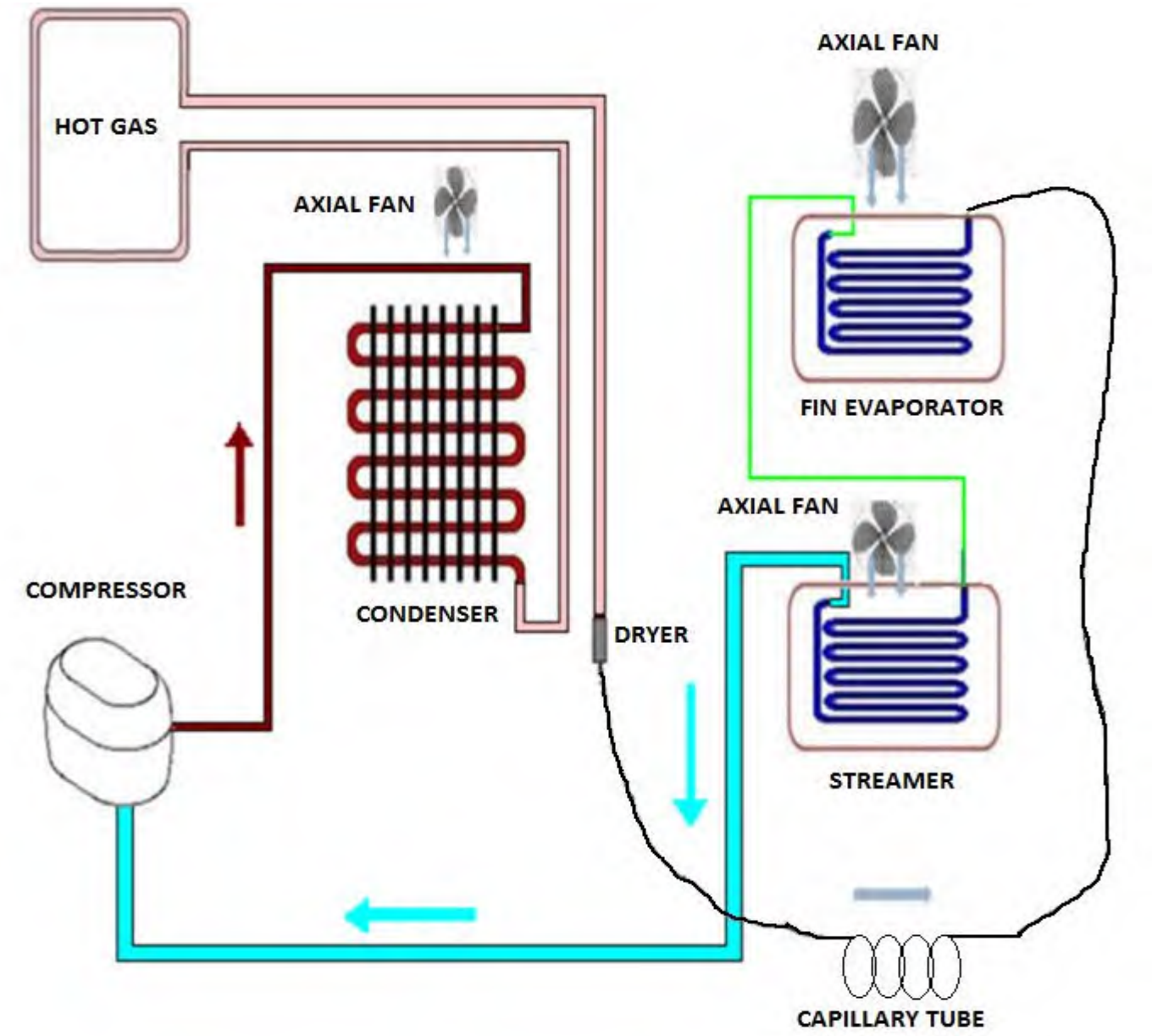


Cutaway view: Air Flow Direction

Blown : Cold Air

Returned: Hot Air

Air Flow Diagram



The freezer fan motor and the condenser fan motor work parallel time with the compressor. The freezer fan motor works when the freezer compartment door is opened. It is normal.

The cooler fan motor works parallel time with the compressor. However it could work while the compressor is stopped or the cooler is defrosting.

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. At the low ambient temperature or when the compressor stops; to balance, defrost stops when the defrost sensor temperature feels 15^{o}C. But if the defrost time or the compressor stopping time goes over 6 hours, the resistance will be stopped.

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.

Entering service mode :

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

Starting Test

To start component self test, please continue to push set button until lighting set number «8»
Starting Program

- 8 Led will light when Compressor is ON
- 6 Led will light when Defrost Heater is ON
- 5 Led will light when Balance Heater is ON
- 4 Led will light when Cooler Fan is ON
- 2 Led will light when Freezer Fan is ON
- 'Super' Led will light when Condanser Fan is ON

Manual Defrost

To activate manual forced defrost, please push set button two times. Then set number 6 will blink, and manual defrost will start. When defrost sensor reaches 10°C, it will stop and set number 6 will go off.

ERROR CODES - Sensor

SENSOR	SERVICE MODE REACTION
(1)Refrigerator Sensor is short or open	8 Led ON
(2)Defrost Sensor is short or open	6 Led ON
(3)RDS Sensor is short or open	5 Led ON
(4)Freezer Sensoris short or open	SUPER Led ON
Breakdown of (1) and (2)	8 and 6 Led ON
Breakdown of (1) and (3)	8 and 5 Led ON
Breakdown of (1) and (4)	8 and SUPER Led ON
Breakdown of (2) and (3)	6 and 5 Led ON
Breakdown of (2) and (4)	6 and SUPER Led ON
Breakdown of (3) and (4)	5 and SUPER Led ON
Breakdown of (1) and (2) and (3) and (4)	8, 6, 5 and SUPER Led ON

ERROR CODES - Component

COMPONENT	SERVICE MODE REACTION
Compressor Defect	4 Led ON
Defrost Heater	2 Led ON

• Fin Evaporator Resistance	230V/150W
• Evaporating Tray Resistance	230V/32W (Drain Heater)
• Thermal Fuse	72 ºC
• Cooler Defrost Resistance	230V/10W
• Cooler Fan Motor	DC 12V
• Evaporator Fan Motor	AC 230 V 50 Hz
• Cabin Bottom Fan Motor	AC 220 - 240 V 50 Hz
• Mainboard (Power Card	VESTEL ELECTRONIC
• Thermostat Card	VESTEL ELECTRONİC
• Freezer Defrost Sensor	EPCOS - VISHAY
• Cooler Defrost Sensor	EPCOS (it is not possible to change in the body)
• Cooler Sensor	EPCOS - VISHAY
• LED Illumination	4.8W

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/4.02k9Ω	-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

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

1. Unscrew the three screws which are fixing the mainboard cover by using the screwdriver. (Pic-1 / Pic-2 / Pic-3)

2. Remove the cover after the screws are removed.(Pic-4)

Picture-1

Picture-2

3. Pull the mainboard slightly forward and disconnect all the connectors and then replace it. Finally, place the mainboard cover and screw it.

Picture-3

Picture-4

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

Picture-1

2. Stick one tape to each air duct to avoid scratching. Remove the screw caps by using a flat screwdriver and screw the screws. (Pic-2.1/Pic-2.2)

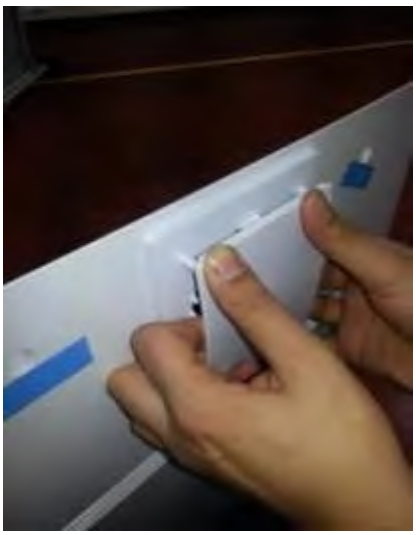
Picture-2.1

Picture-2.2

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

Picture-3

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

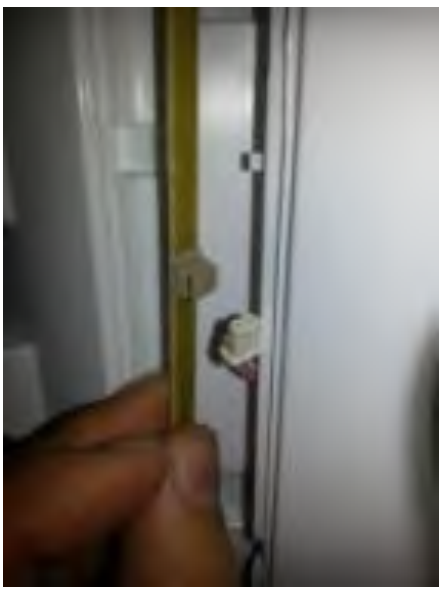
1. Stick a tape to protect plastic. Insert a flat screwdriver into the gap and remove the cover. (Pic-1)

Picture-1

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

Picture-2

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



Picture-3

4. First, place the bottom 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

Chancing The Cooler Sensor

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 shelf or the ice box group if there is. (Pic-1)
2. Insert a flat screwdriver into the gap and then support the lateral surface of the multi flow with the help of a hand and remove the freezer multi flow group. (Pic-2)
3. Removing the freezer bottom cover. (Pic-3)

Picture-1

Picture-2

Picture-3

Assembling The Freezer Multi Flow Group

1. Recline the bottom cover against one side and place the freezer multi flow cover details. (Pic-4)
2. Hold the back side of the bottom cover and flex it. After that, reassemble the other side details. Finish the assembly by pulling the cover. (Pic-5 / Pic-6)
3. First, place the freezer multi flow details to the backside of the bottom cover (Pic-7/Pic-8) and reassemble the freezer multi flow cover by pushing back. (Pic-9)
Note: The freezer multi flow should be removed before the freezer bottom cover.

Picture-4

Picture-5

Picture-6

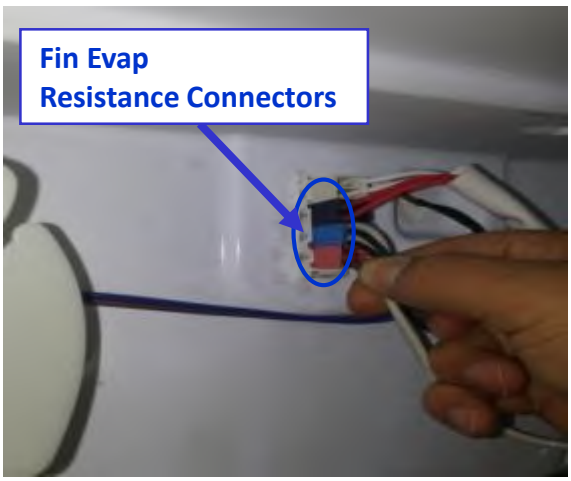
Picture-7

Picture-8

Picture-9

Removing Fin Evaporator Group

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



Picture-1

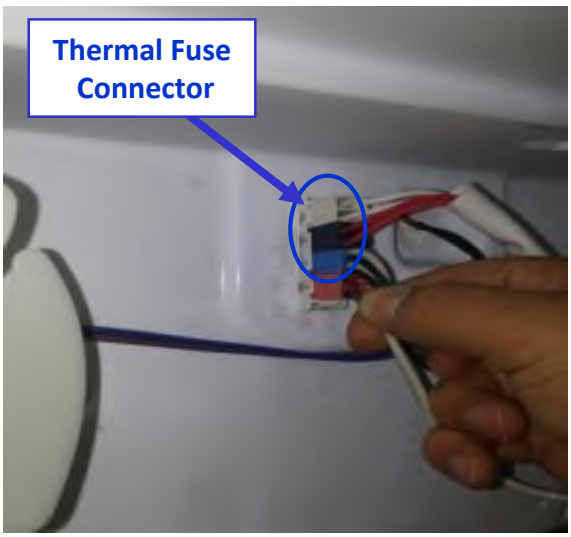
2. Displace the fin evaporator balanced by holding on both sides. (Pic-2)

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) (**white-black** connector)



Picture-1

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

Picture-2

Changing The Freezer Defrost Sensor

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

1. Remove the putty around the freezer defrost sensor. (Pic-1)

Picture-1

2. Disconnect the sensor connector. (Pic-2)

Picture-2

3. Assemble the new sensor to the evaporator resistance as shown in the picture. (Pic-3)

Picture-3

4. Connect the sensor socket and apply putty. (Pic-4)

Picture-4

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)

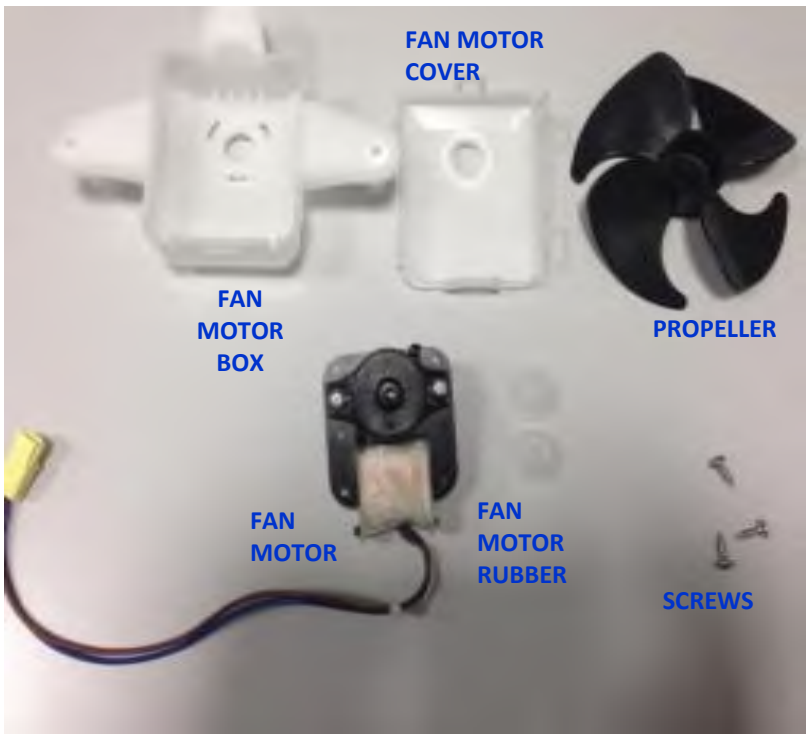
Picture-1

Picture-2

Picture-3

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

Picture-4



Fan Motor Components

1. Unscrew the bottom tray screws and displace it from the compressor basement. After that, remove the fan motor connector. (Pic-1)
2. Unscrew the screws fixing the evaporating tray. (Pic-2)
3. Remove the evaporating tray to displace the fan motor. (Pic-3)

Picture-1

Picture-2

Picture-3

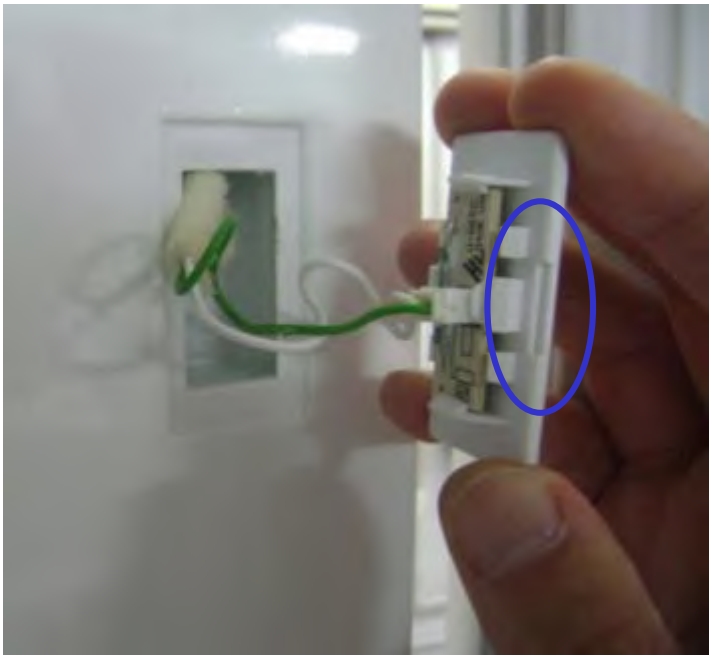
4. Unscrew the fan motor screws. (Pic-4)
5. Remove the propeller. (Pic-5,Pic-6)

Picture-4

Picture-5

Picture-6

Picture-1



Picture-2

Take the reed switch out of its place with a screwdriver. (Picture-2) Then Disconnect the connectors of the Switch and remove it. (Picture-2)

NOTE: Reed Switch is a very sensitive miniature electronic card. So during the assembly and disassembly be carefull not to damage it.

During the disassembly of the reed switch, there is a step on the edge of the plastic part which provides easier dissassembly and by that tool it can be taken out from the same place every time.

It must be assembled as this step should be in the invisible(inside of the refrigerator)part. Otherwise The distance which the lamp turn on/off may change.

After the assembly or replacement the service should check if the reed switch is damaged by giving energy and opening and closing the door.

NO-FROST 643 INNER DISPLAY

Removing/Assembling Display

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

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

Picture-4

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