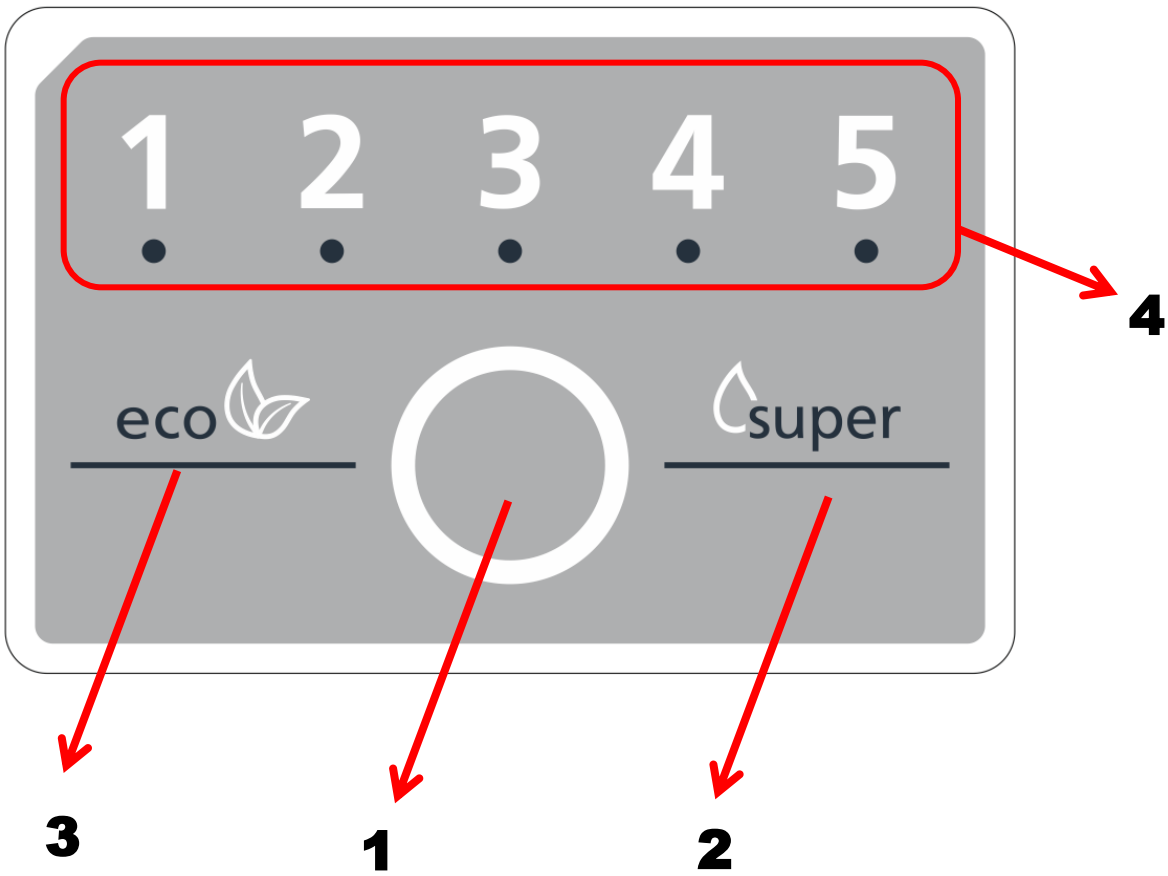


1	Set Button-Ring LED
2	Super LED
3	Eko LED
4	Set Values

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.

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 ?

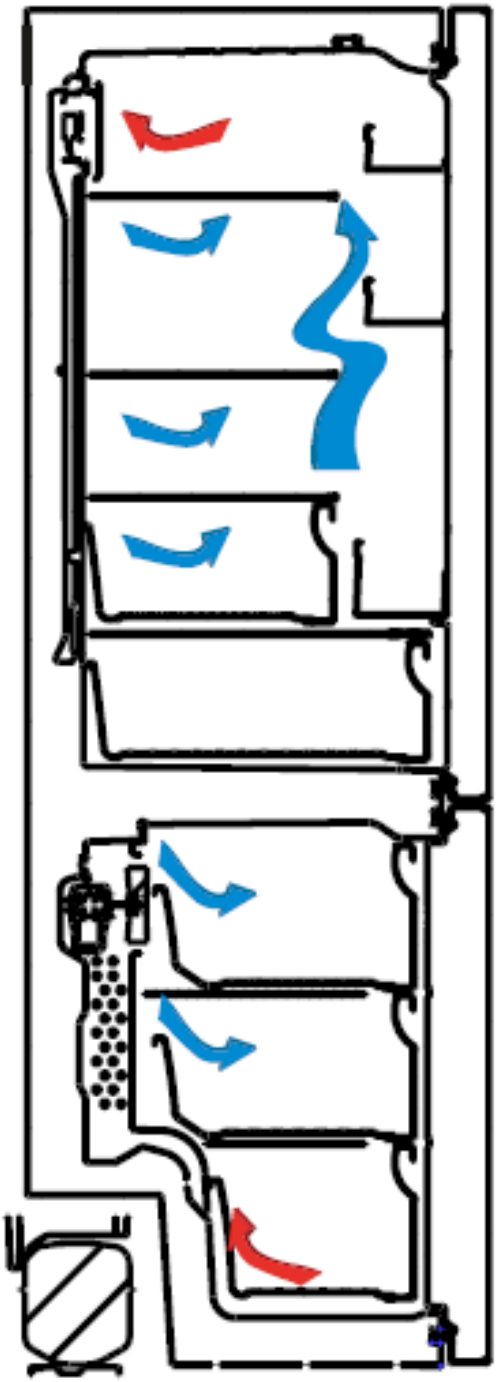
Yes. Interruption in electricity will not terminate the DEMO Mode. You can only cancel DEMO Mode by pushing Mode button for 10 secs.

Other info:

Refrigerator will not give any service alarm in DEMO Mode.

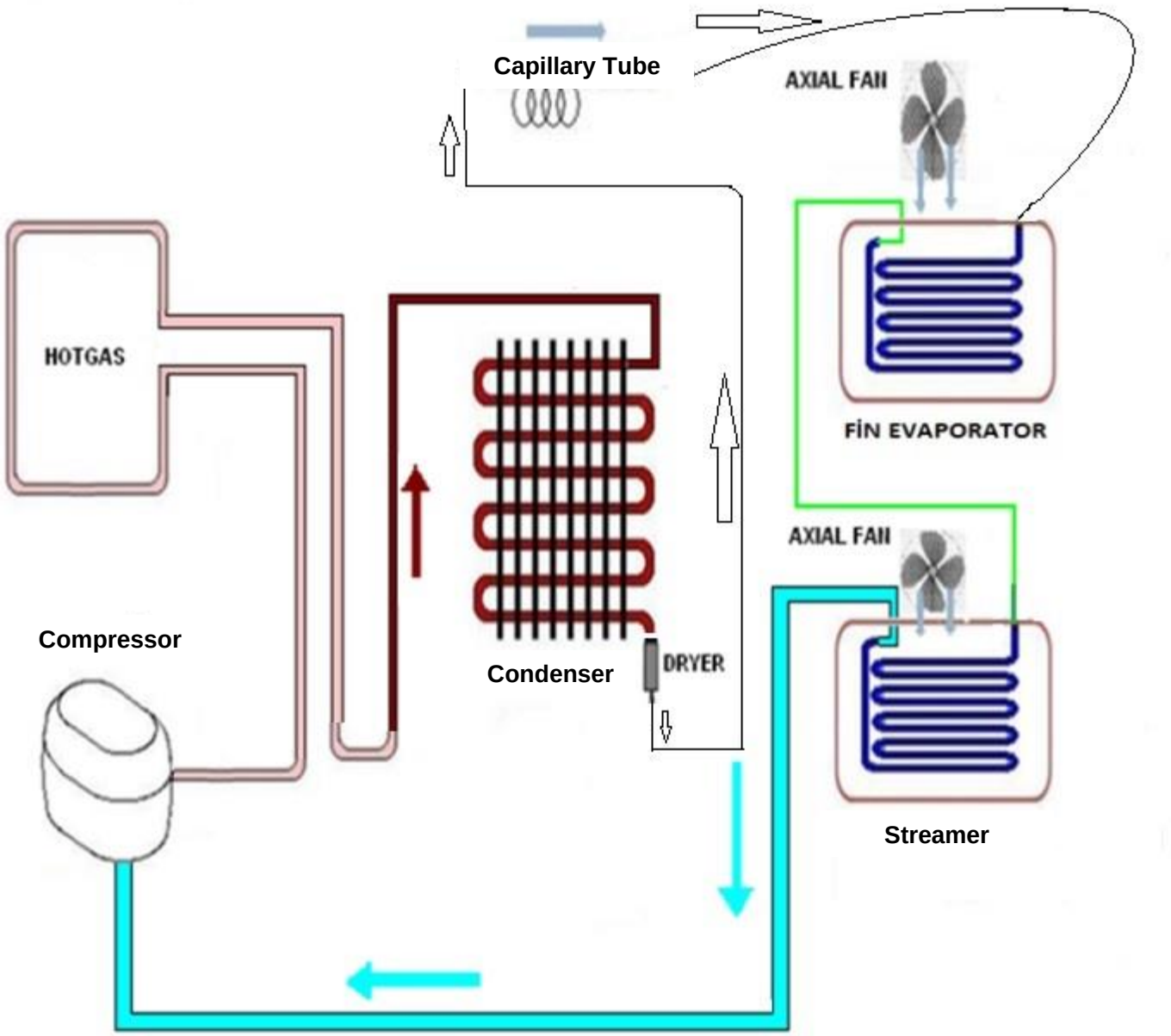
Will there be a low cooling alarm?

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



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/4.02k6Ω	-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. At the low ambient temperature or when the compressor stops; to balance, defrost stops when the defrost sensor temperature feels 15°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.

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.

VESTEL WHITE GOODS	373-353-383 MECHANIC	CUSTOMER SUPPORT
	Service Mode	

Entering service mode :

The appliance will enter service mod, if push set button continously 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 continously in 5 seconds

SERVICE FUNCTION0	
	While display is on servıce mode, it could be changed among service functions by touching set icon
TOUCHING M (SET) BUTTON ONE TİME.	**STARTING MODE**
	Buzzer will sound beep
	The number of components which is control, the led is shown at segments of display will blink
TOUCHING M (SET) BUTTON TWO TİMES.	**MANUAL DEFROST**
	"2" led blink continously 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

SENSOR	TEMPERATURE	USER MODE REACTION	SERVICE MODE REACTION
(1)Refrigerator	> +50 ^{0}C or <-50 ^{0}C (sensor is short or open)	Display Ring Leds Blink& Eco Led Blink Buzzer 'beep'	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

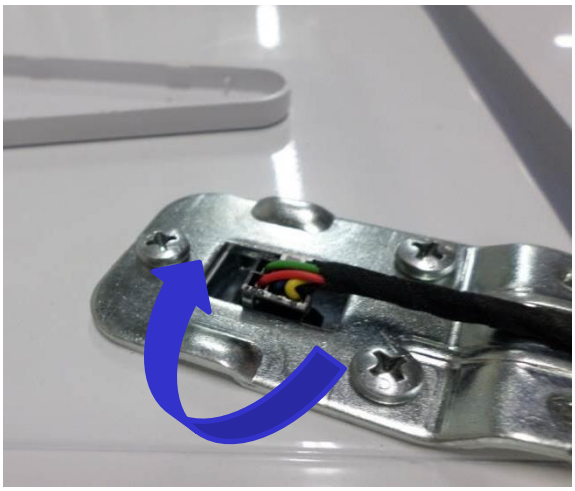
Component defect on display

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

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 (Pic-6)

Picture-6

7. Unscrew the bottom hinge screws. (Pic-7)

Picture-7

8. Unscrew the bottom hinge pin and screw it to other hole. (Pic-8)

9. Screw the bottom hinge to the left bottom side of refrigerator. Screw the adjustable foot there. (Pic-9)

Picture-8

Picture-9

10. Unscrew the two screws fixing stopper and stopper support plate under the cooler door. After that screw the other side. (Pic-10)

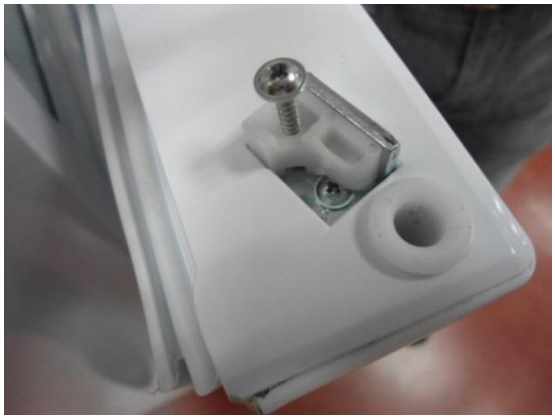
Picture-10

11. Replace the top bushing and the top bushing cap at the bottom door. (Pic-11)

Picture-11

12. Remove the support plastic and then metal stopper placed under the upper door. (Picture-12.2) 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-12.1



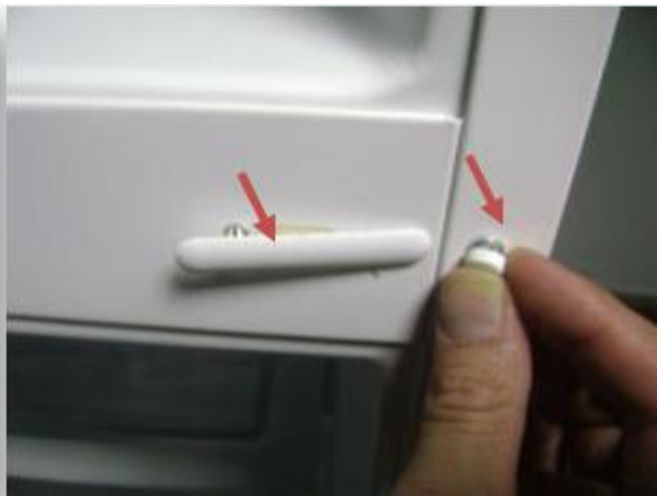
Picture-12.2

13. Remove the hinge cover on the top panel and replace to other side.(Pic-13)

Picture-13

14. Remove the middle hinge cover and then screw the screw on the side panel (Pic-14.1) and assemble to the right side panel (Pic-14.2)

Picture-14.1



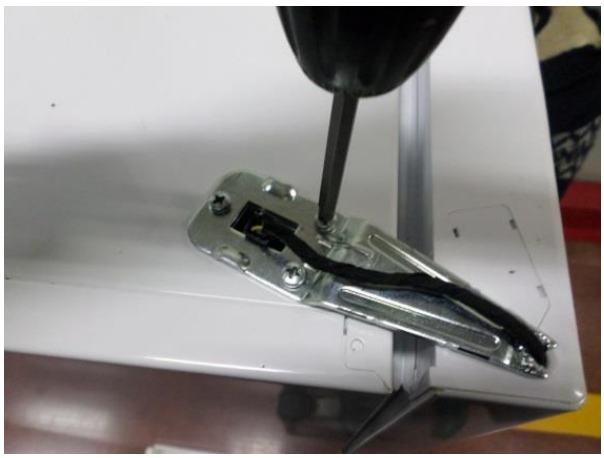
Picture-14.2

15. Place the bottom door (Pic-15.1) and rotate the middle hinge by 180º. After that, Screw to the right side on the middle sheet. (Pic-15.2)

Picture-15.1

Picture-15.2

16. Place the top door to the middle hinge and screw the top hinge to the top panel. (Pic-16)



Picture-16

17. Place the top hinge cover. (Pic-17)

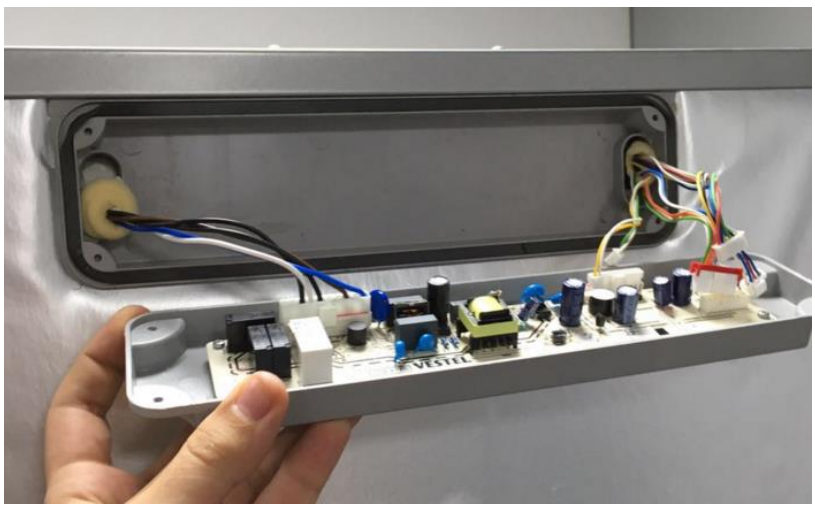
Picture-17

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

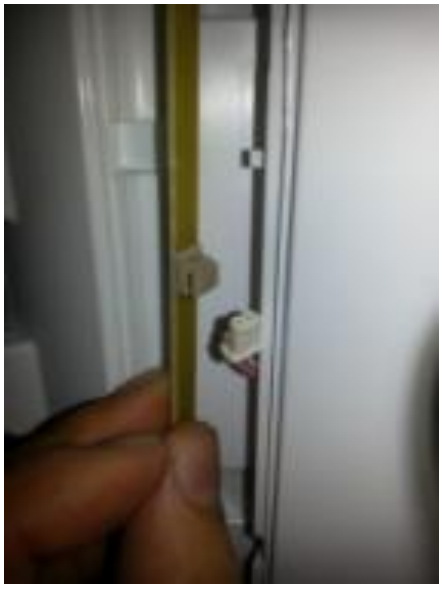
1. Stick a tape to protect plastic. Insert a flat screwdriver into the gap and remove the cover. (Pic-1)

Picture-1

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

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

1. Remove the cooler glass shelves and the chiller. (Pic-1/ Pic-2)

Picture-1

Picture-2

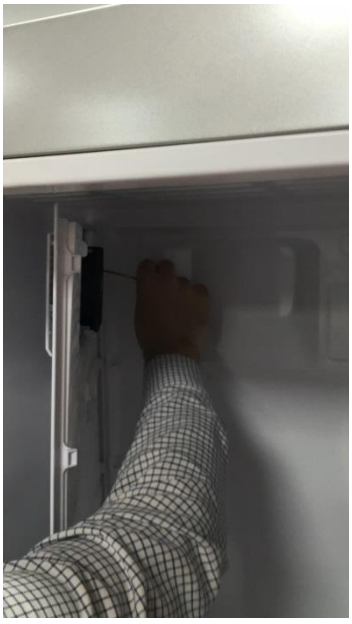
2. Stick one tape to each air duct to avoid scratching. (Pic-3) Remove the screw caps by using a flat screwdriver and screw the screws. (Pic-4)

Picture-3

Picture-4

3. Flex the multi flow by holding the fan cover and remove it. (Pic-5)
Disconnect the connector after removing the multi flow. (Pic-6)

Picture-5



Picture-6

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!

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)

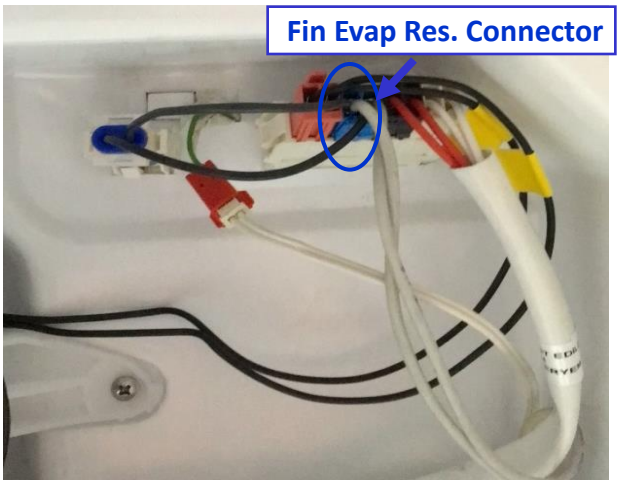
Picture-1

Picture-2

Picture-3

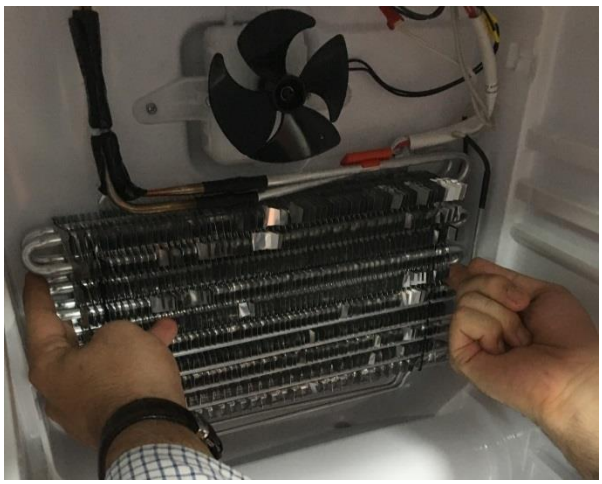
Picture-4

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



Picture-1

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

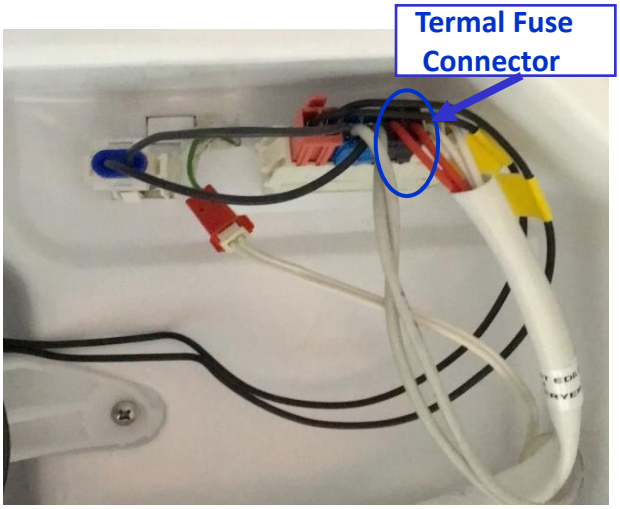


Picture-2

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) (**black-white** connector)



Picture-1

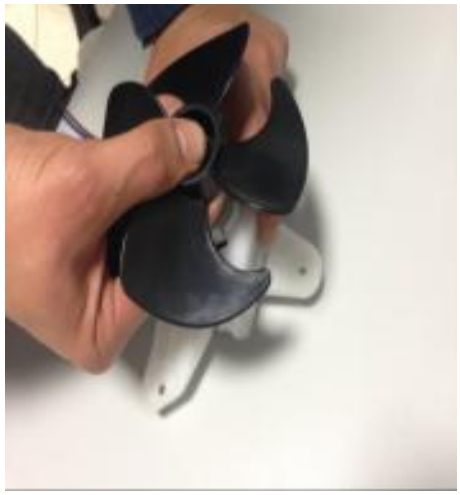
2. Thermal fuse has two details. These details hold on to the pipe.
It could be removed easily.(Pic-2)

Picture-2

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

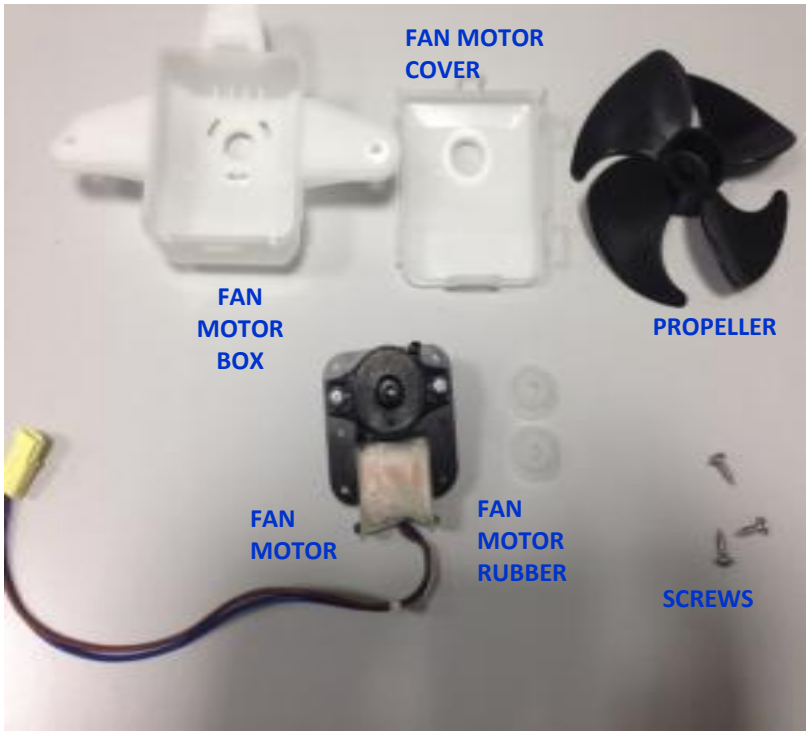
Picture-2



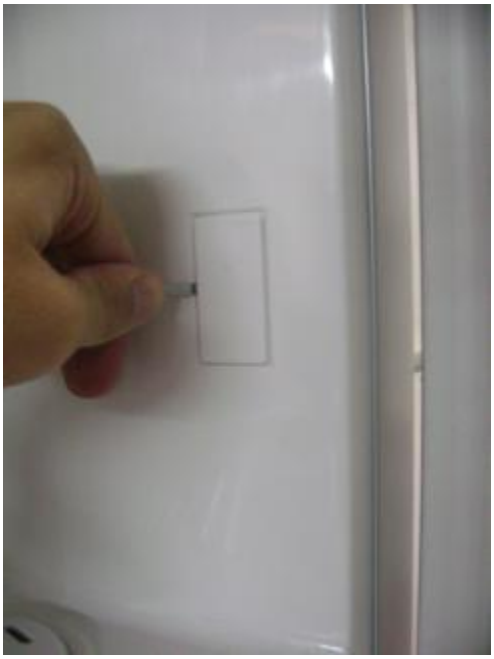
Picture-3

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

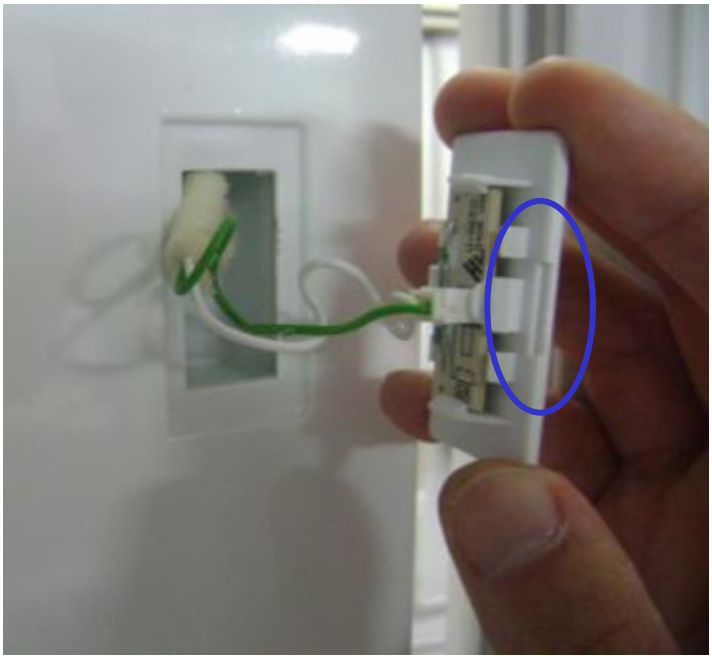
Picture-4



Fan Motor Components



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.

VESTEL WHITE GOODS	373-353-383 MECHANIC	CUSTOMER SUPPORT
	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