91 CM WIDTH SIDE BY SIDE FACELIFT PRODUCT ASSEMBLY AND DISASSEMBLY INSTRUCTION (V1-V2)

G91640NEX	V1
G91640NEFX	V1
G91635NEX	V2
G91635NEFX	V2
G91635NEPX	V2
G91635NEFKPX	V2

Sensitivity: Public

G91640NEX V1

Sensitivity: Public

Sensitivity: Public

G91635NEX V2

Sensitivity: Public

Sensitivity: Public

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Sensitivity: Public

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Sensitivity: Public

1. REVISION HISTORY

NO	REVISION	DATE
00	First issued: SBS Facelift refrigerator service manual	26/02/2021
01		
02		
03		
04		
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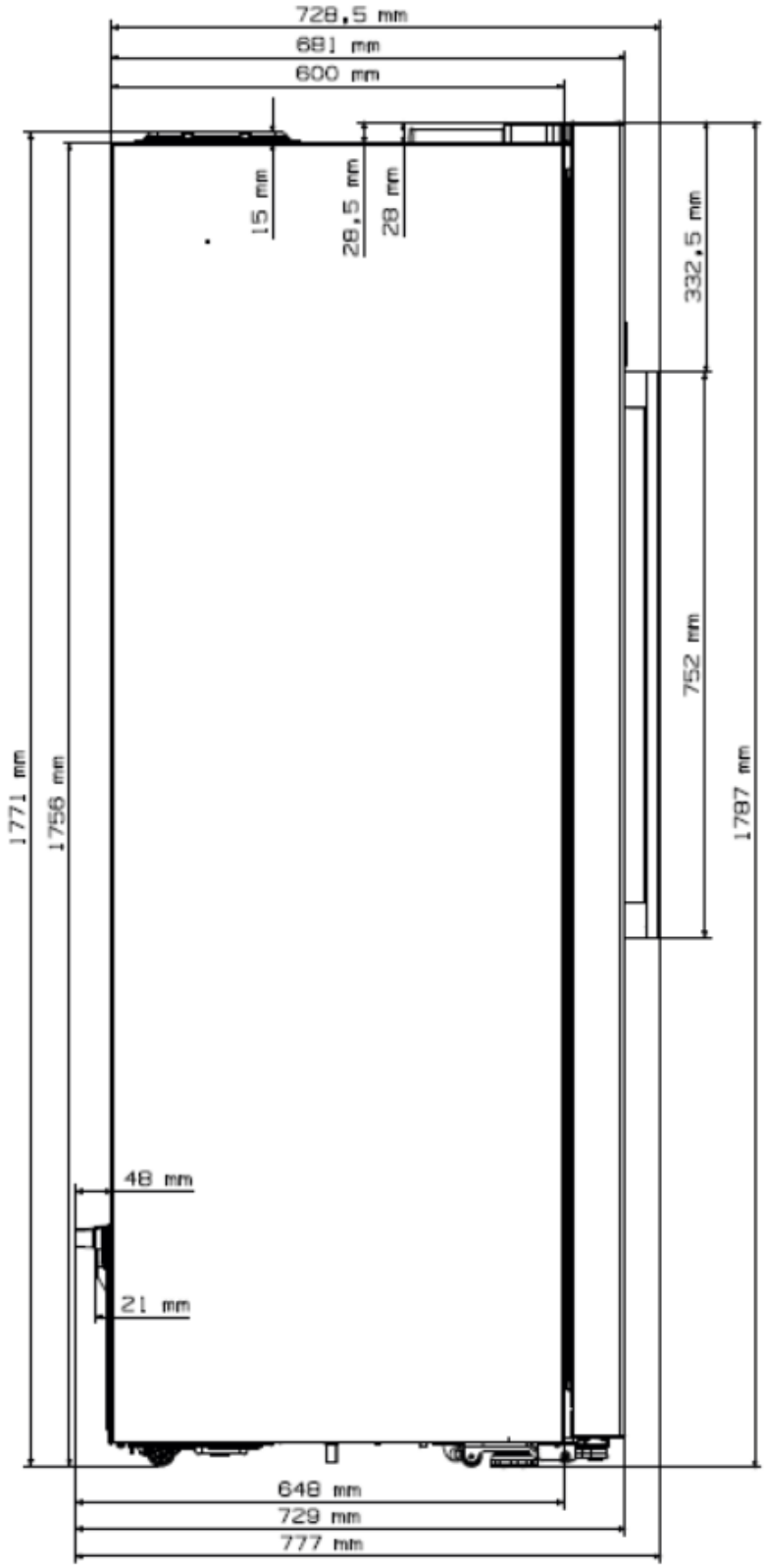
Sensitivity: Public

1.1. Product General Dimensions

- **(Length x Width x Height:** 908 x 1787 x 729 mm (Rear support mount included, Handle not included)



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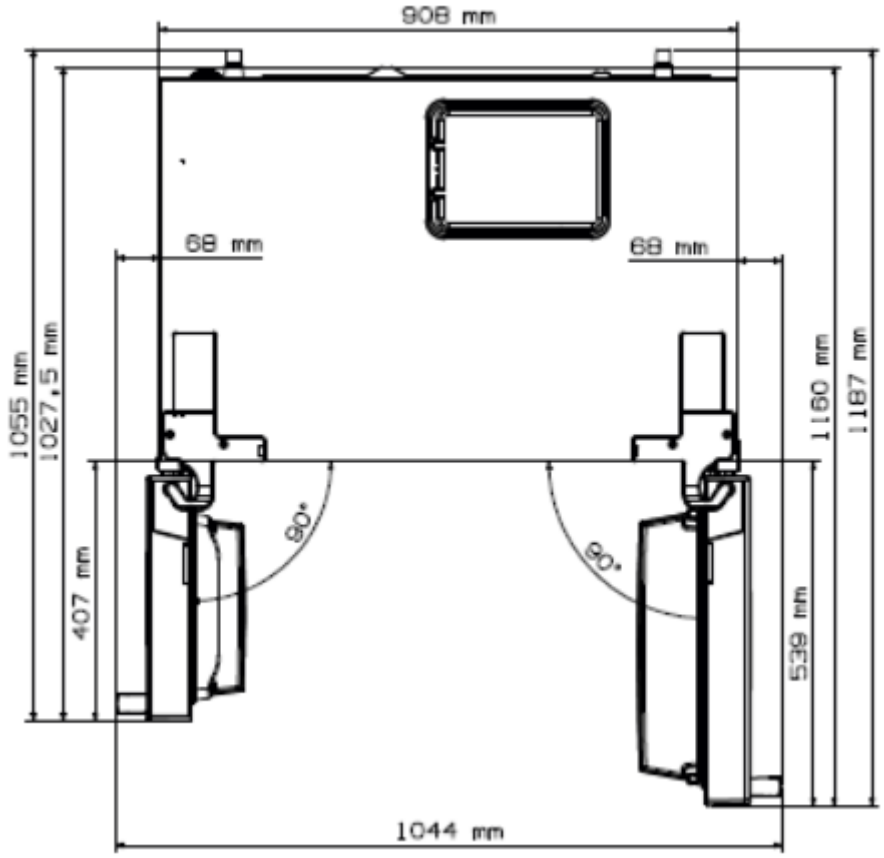
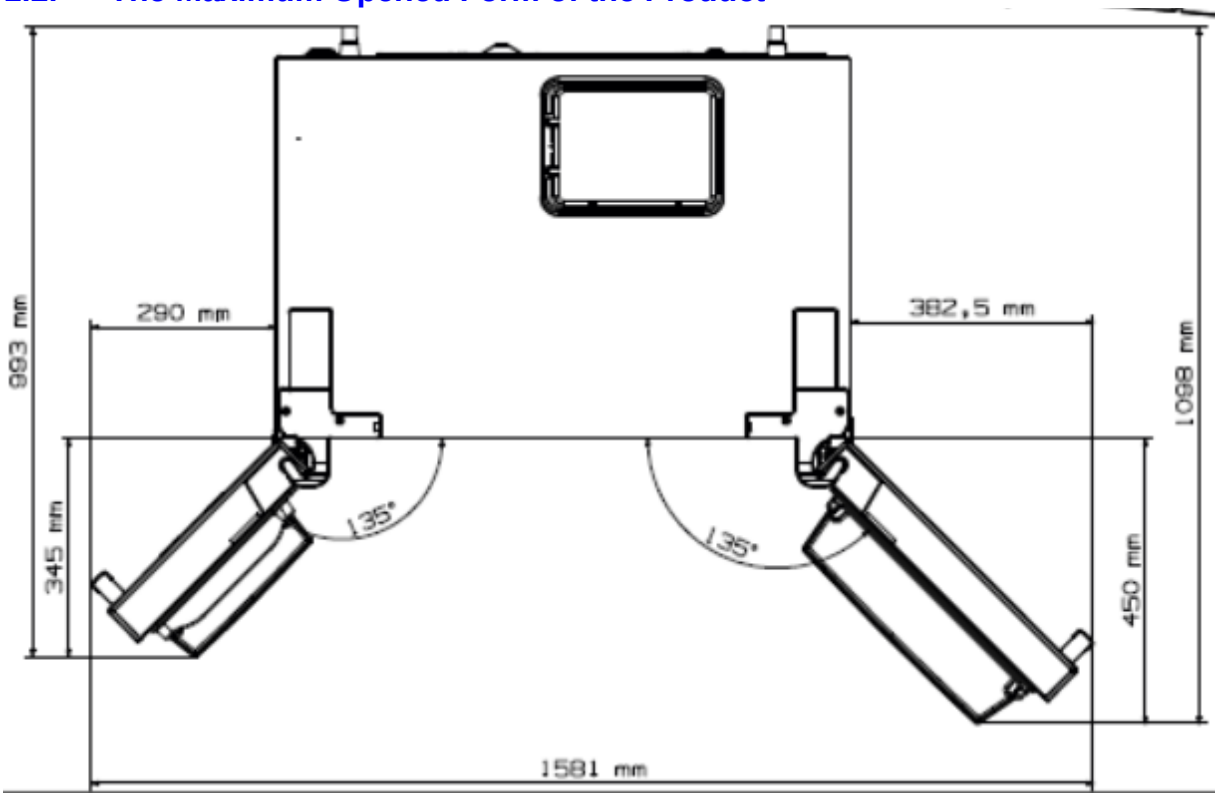


1.2. The Maximum Opened Form of the Product



Sensitivity: Public

2. INSTALLATION AND REMOVAL OF THE COMPONENTS

2.1. Handle Grouping

2.1.1. Beko/Arçelik handle grouping

- Fix the handle assembly by locking it on the support as seen in the figure. Reverse the operation to remove the handle with ease.

Sensitivity: Public

2.1.2. Smeg handle group

2

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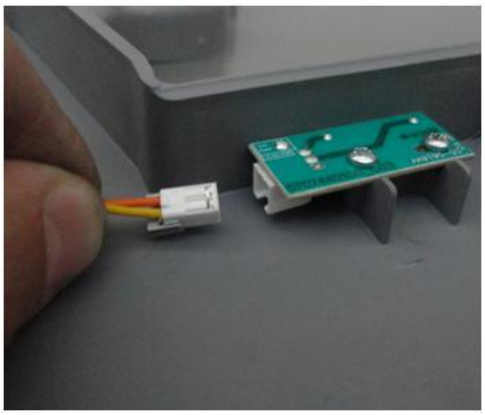
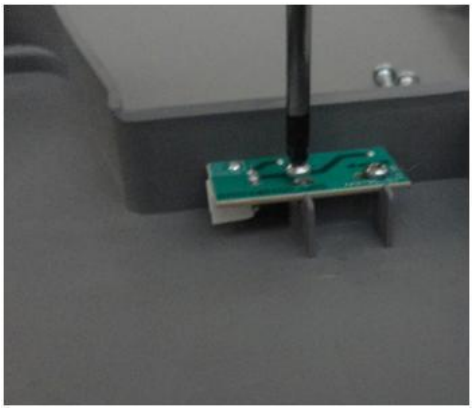
- Smeg handle group is shown in picture 1.
- Use Allen as shown in Picture 4 and 5 to remove the 4 screws.
- Remove the smeg handle from the screws as in picture 6.
- Remove the 4 screws used in the Cooler and Freezer handles by attaching a flat tip to the rechargeable gun.

Sensitivity: Public

2.2. Upper hinge cover group

1 2





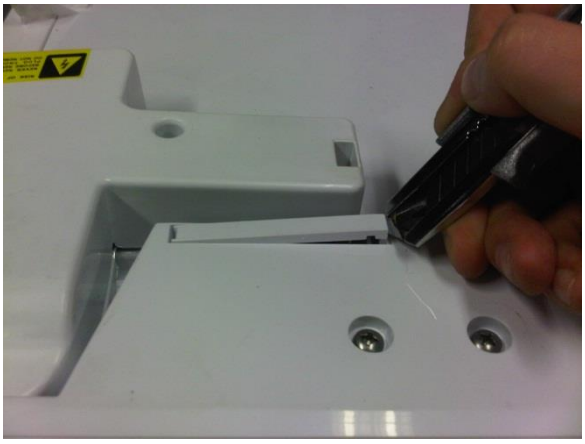
3 4

5.

- Using a Phillips screwdriver, unscrew the PT 4.2x25 of the hinge cover.
- Remove the tab of the hinge cover as shown in the figure.
- Open the cover and remove the socket connection of the reed switch card shown in Figure 3.
- Using a Phillips screwdriver, remove the 2 card screws of the reed switch board.
- Unplug the socket connector of humidity sensor.
- NOTE: Make sure that the top hinge cover is not crushing the cable while tightening the screw.

Sensitivity: Public

2.3. Reed Switch Groups



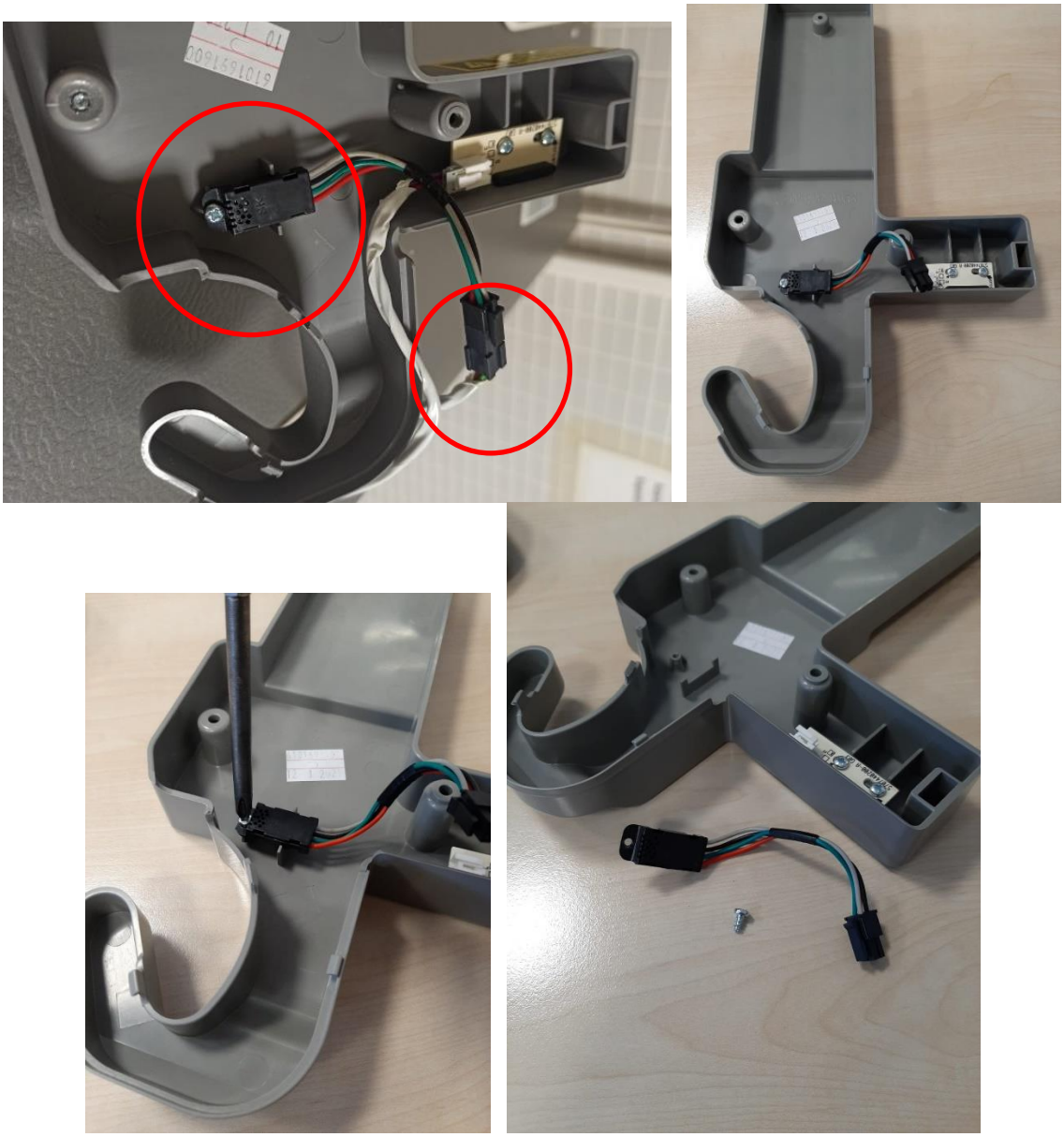
1 2

3.

- It is used in door open alert system. It turns lights on and off.
- Using a flat screwdriver, remove the magnet cover as shown in picture 1.
- Remove the magnet shown in Image 2 by pulling it.
- The magnet on the top covers of the cooler and freezer doors interacts with the reed switch card on the top hinge covers.

Sensitivity: Public

2.4. Humidity Sensor



Humidity Sensor is located on the right hinge cover.
To remove the humidity sensor, remove 3 screws of the hinge cover.
When the cover is removed, the cable connections will hold the cover.
The reed sensor and humidity sensor socket are also removed.
There is 1 screw on the released hinge cover that holds the moisture sensor.
Using the star tip, this screw is also removed and the humidity sensor is removed.

Sensitivity: Public

2.5. 80-Door Shelf

- 4 pieces are used in the cooler door.
- Remove it by pulling up.

2.6. Egg Holder

- The type and number of ovaries placed in the product are taken from MDM.
- Right door is used in 80-door shelf.

Sensitivity: Public

2.7. 100-Door Shelf

- The cooler door is used 1 piece at the bottom.
- Remove it by pulling up.

2.8. Freezer door shelf group

- Remove it by pulling up.

Sensitivity: Public

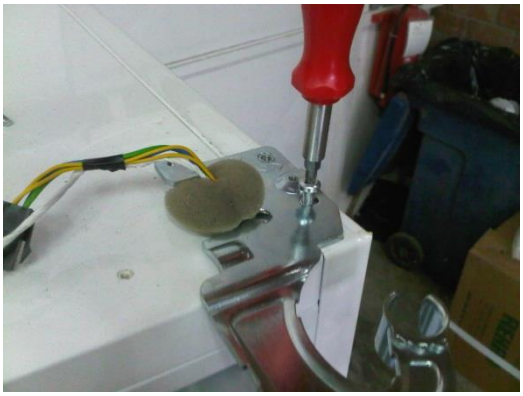
2.9. Upper Hinge

2.9.1. Upper hinge left

- First, remove the upper hinge cover, attach the star tip to the rechargeable drill and remove 3 PT (3 x 5) screws.
- Take out the reed switch socket and other socket connections.
- Unscrew the M 4x5.5 screw fixing the ground wire by inserting a star tip on the charger.
- Remove 3 M 5x18 spiral screws of the upper hinge by attaching a torx tip to the cordless gun.

Sensitivity: Public

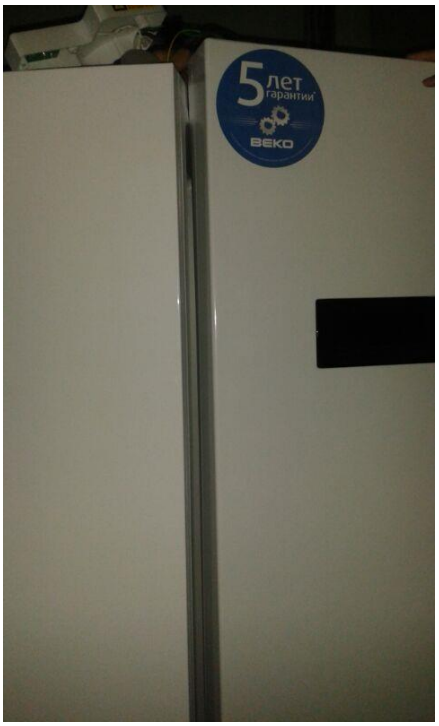
2.9.2. Upper hinge right



- The difference of the upper right hinge from the upper left hinge is that there is no display cable.
- Unscrew the plug connections.
- Remove 3 M 5x18 spiral screws of the upper hinge by attaching a torx tip to the cordless gun.

2.10. Freezer left door

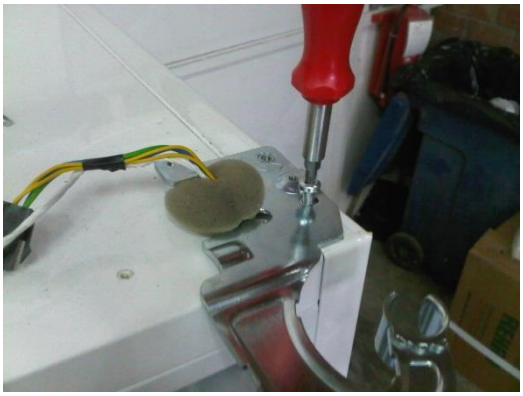
Sensitivity: Public



3.

- Remove the socket connections as shown in picture 2.
- Unscrew the M 4x5.5 screw fixing the ground wire by inserting a star tip on the charger.
- As shown in Picture 3, lift the door upwards and remove it from the lower hinge pin.

2.11. Cooler right door



1 2

- Remove the socket connections as shown in picture 1.
- Unscrew the M 4x5.5 screw fixing the ground wire by inserting a star tip on the charger.
- Remove 3 M 5x18 spiral screws of the upper hinge by attaching a torx tip to the cordless gun.
- As shown in Picture 3, lift the door upwards and remove it from the middle hinge pin.

Sensitivity: Public

2.12. Things to watch out for when removing and installing doors

⚠	When installing the doors, attention should be paid to the alignment of the corners, the handles to be on the same axis and the door openings.

- Make sure that the ground balance separation is made while adjusting the door.

Sensitivity: Public

2.13. Cooler and Freezer door seals

- Remove the door seals without deforming them as shown in the picture.

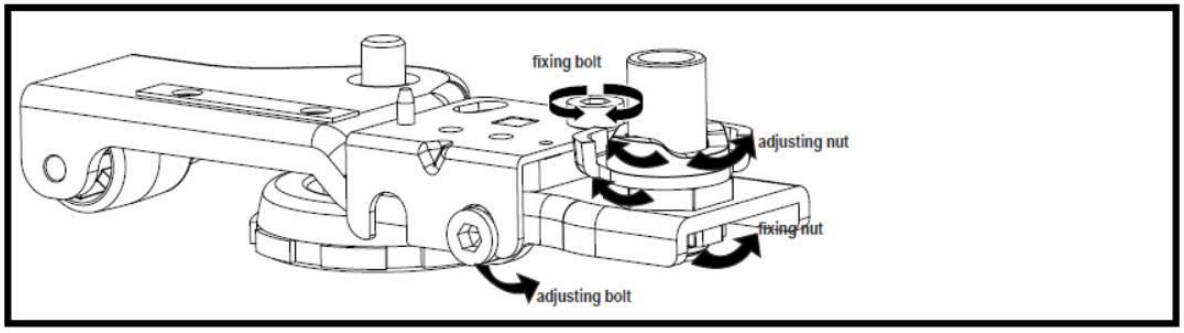
⚠	When installing the door seals, corners should be installed first. Deformations such as elongation and margin should not occur on the seals. Air should not enter when the doors of the product are closed.

2.14. Lower Hinge Group Right/Left

Sensitivity: Public

When changing the bottom hinges, the product should not be fully tilted to prevent oil from leaking into the system, it should be tilted 40-45° on the bottom hinge part.

- Unscrew and remove 3M 5x20 spiral screws by attaching a torx tip to the rechargeable drill.



Sensitivity: Public

2.15. Stopper door pulling mechanism

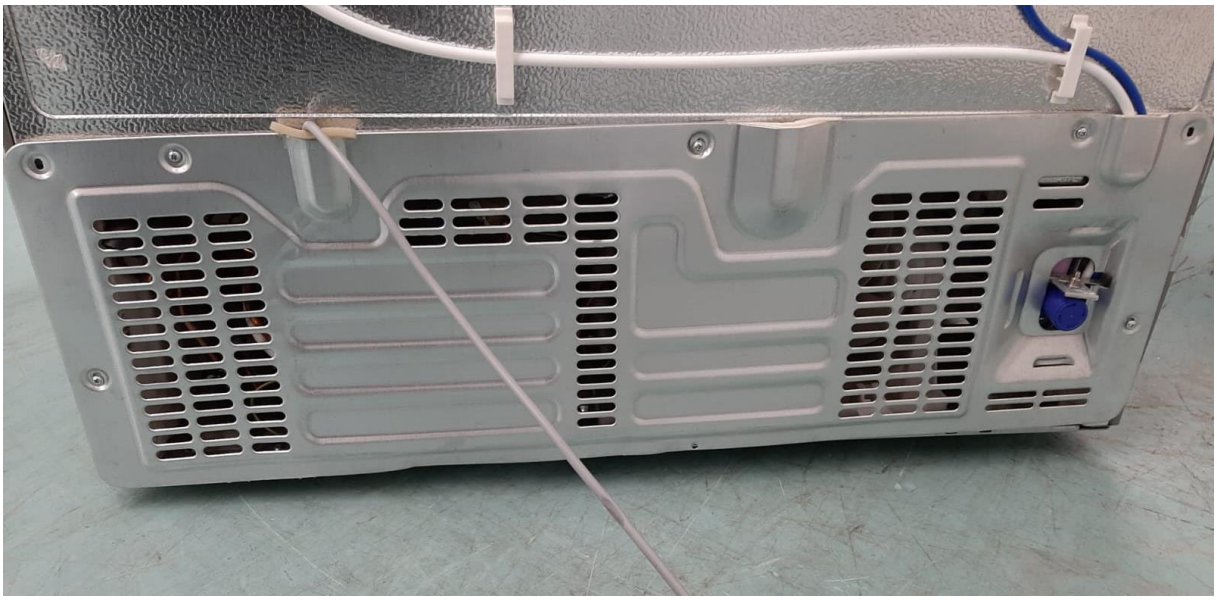

- It is located on the bottom hinge and bottom covers of fresh food and freezer doors.
- Remove the screw on the bottom hinge and bottom cover by attaching a PH2 star tip to the rechargeable drill.
- Remove the parts from their place.

2.16. Main board cover


Sensitivity: Public

- Using a Phillips screwdriver, unscrew the 1 piece PT 4x12 screws.
- There is a service warning label on the inside of the cover.

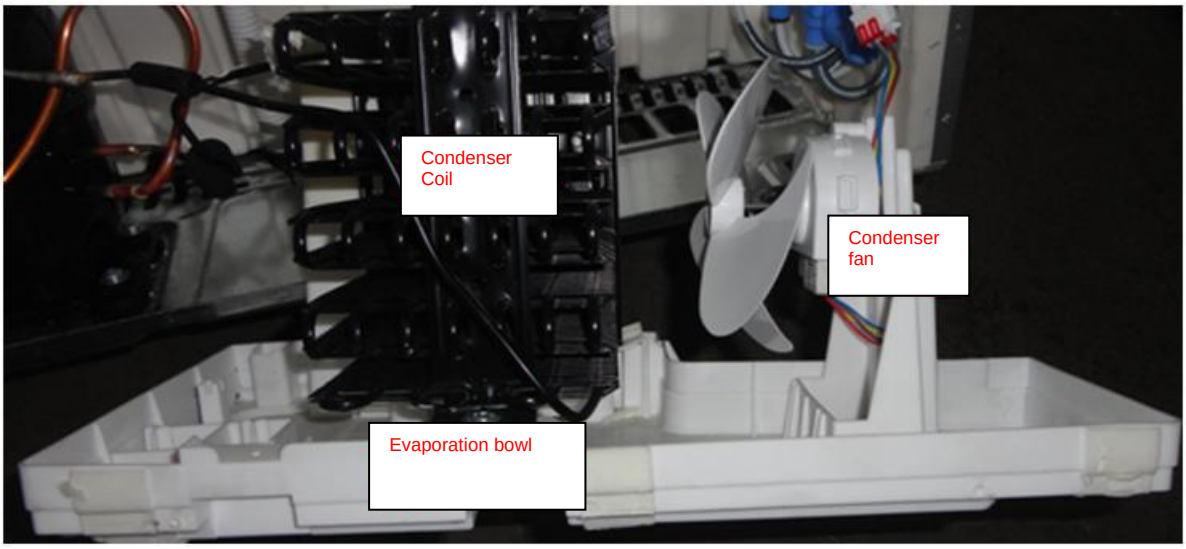
2.17. Back cover group



- Remove 5 screws PT 3.9x12 of the rear cover assembly using a Phillips screwdriver.

Sensitivity: Public

2.18. Evaporation bowl group



"1":

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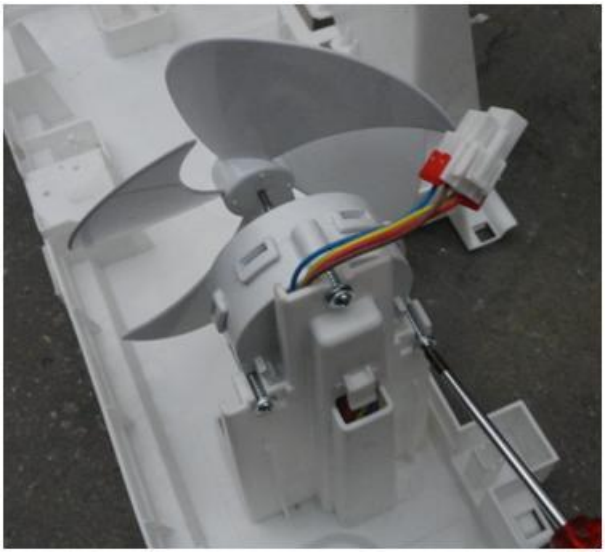
3

- Remove 2 screws PT 4x12 of the Evaporation bowl group using a Phillips screwdriver.
- Separate the evaporation bowl group from the rear foot plate by flexing the notches marked in red in Picture 3.

Sensitivity: Public

2.19. DC_Panasonic Condenser fan

"1":



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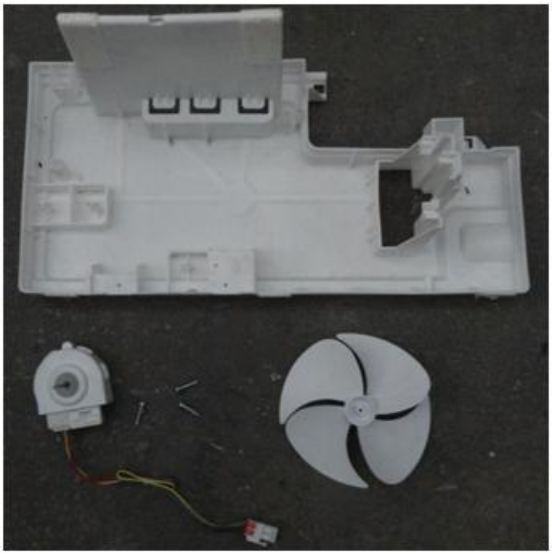


3

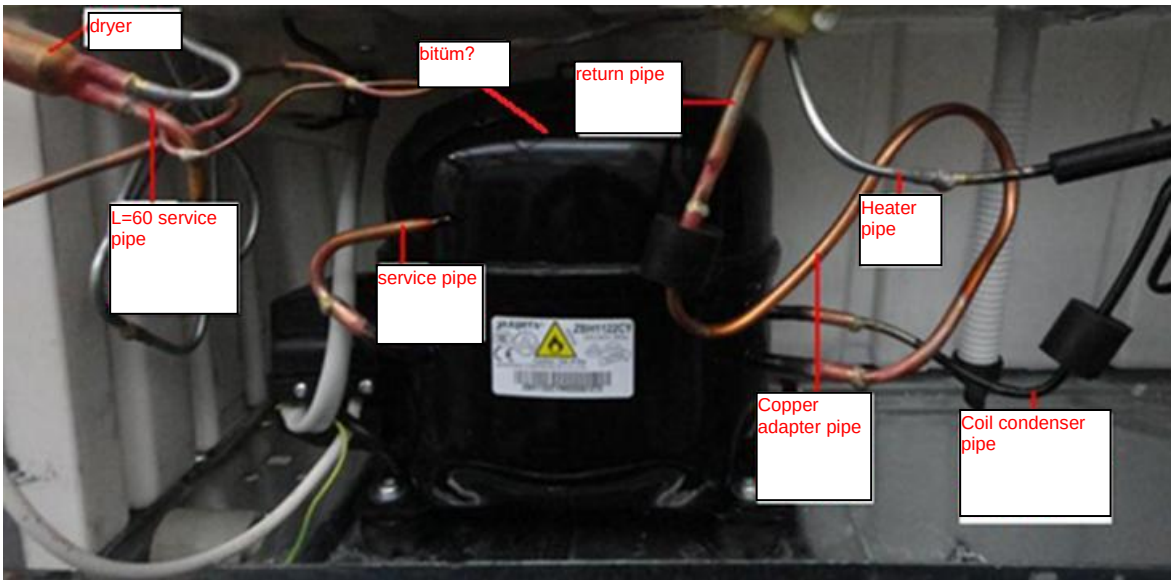
- Using a Phillips screwdriver, unscrew the 1 piece PT 4x12 screws of coil condenser.
- Using a Phillips screwdriver, unscrew the 3 piece delta PT K4x20 screws.
- Remove the fan from its seat.
- When installing the fan blade (impeller), do not damage the blades.

Sensitivity: Public

2.20. Return pipe guarding rubber

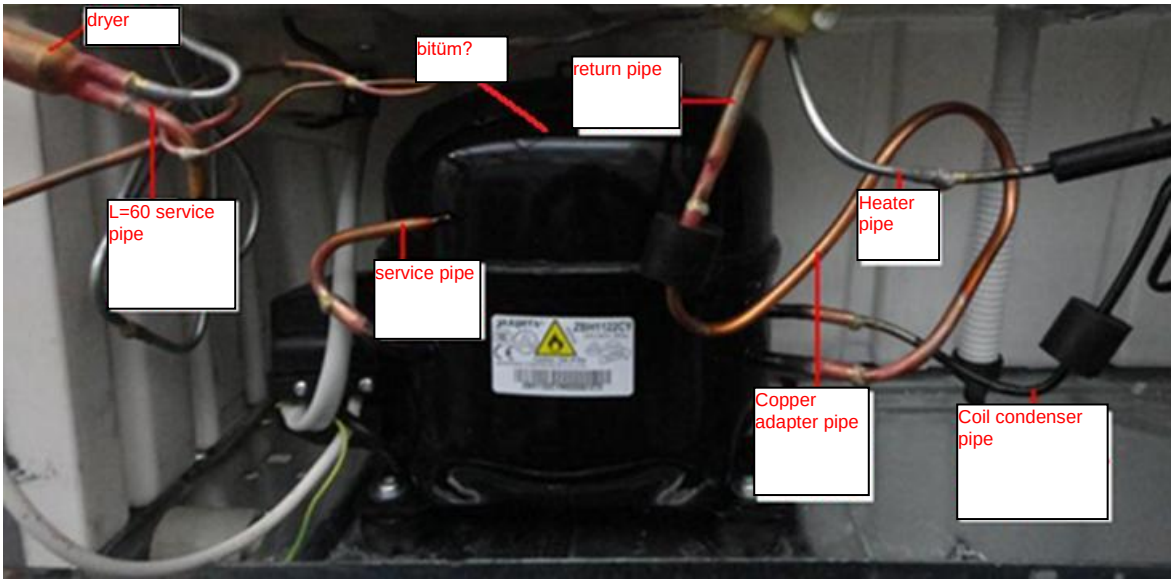
- It is grouped on the return pipe.

2.21. Service pipe



Sensitivity: Public

2.22. Compressor



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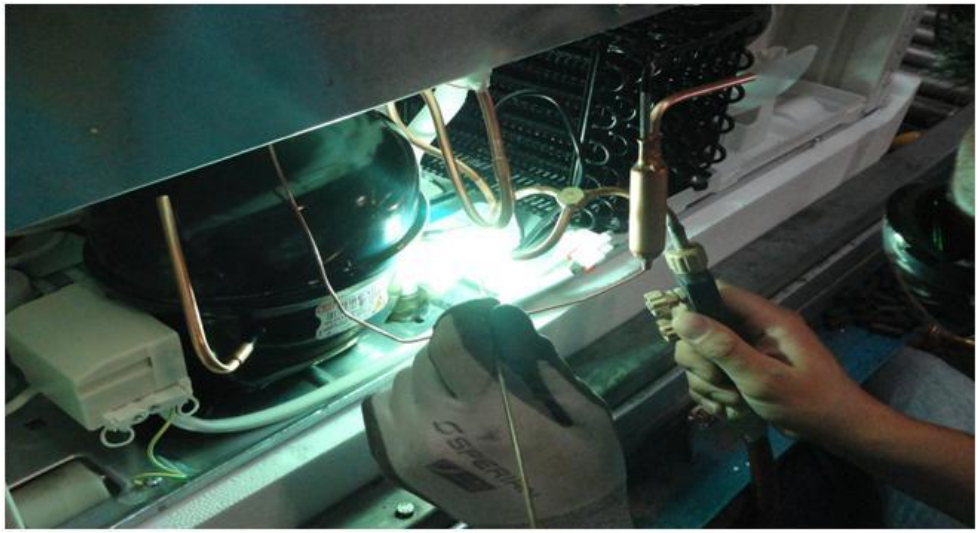
Sensitivity: Public



3

- In the compressor replacement process, first evacuate the R600 gas in the system (by cutting the service pipe).

⚠	Since the gas is flammable, wait for a while and make sure that the gas has completely evacuated.

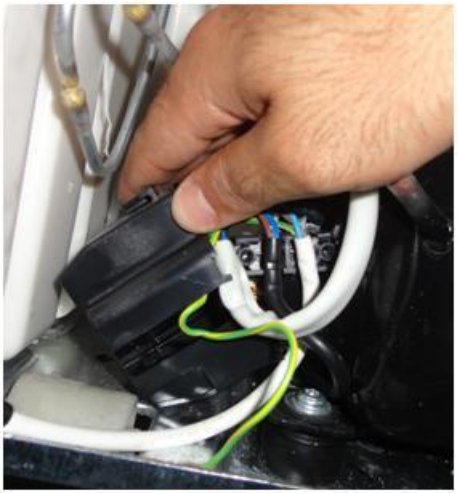
- When the compressor is to be replaced, unscrew the 4 allen screws.
- Compressor pads and sleeve are grouped with compressor screws.

⚠	When the compressor is changed or when the cooling system is switched on for any reason, moisture may enter the system, and the gel in the dryer may lose their properties. Therefore the dryer must be replaced.

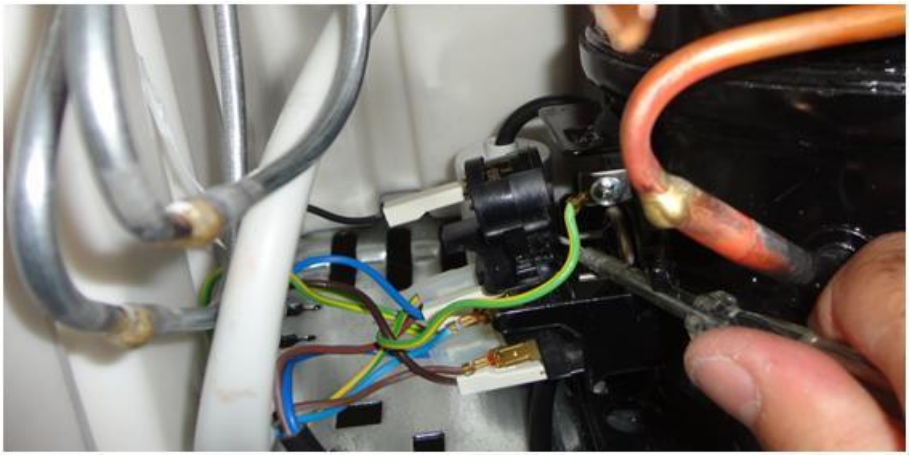
- Acetylene + gasplax mixture soft solder welding is used for connecting the compressor pipes.
- For this, 8004 alloyed yellow welding wire, torch is used.
- For safety, it should be used with gloves and protective glasses.
- Welding points; condenser 1, copper adapter bottom point 9, top point 9A, drier 2, bottom point of dryer 5, service pipe 10.

Sensitivity: Public

2.23. Terminal cover



1 2



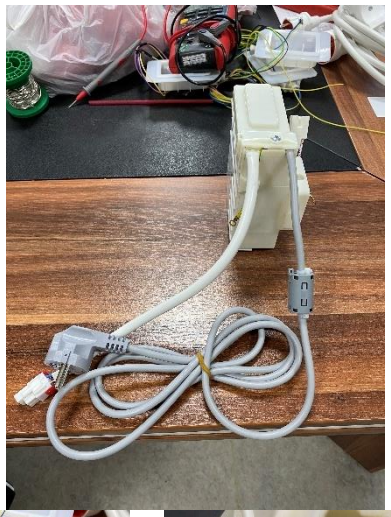
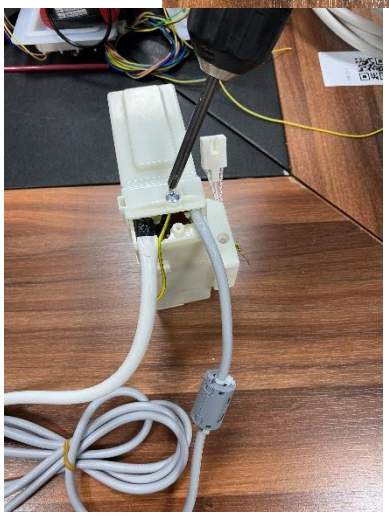
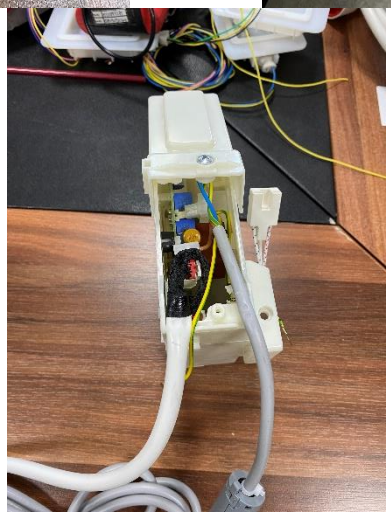
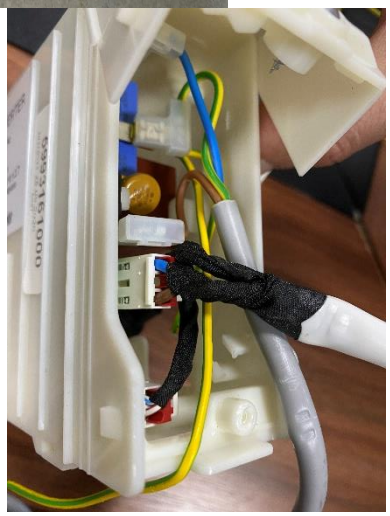
3

- Using a flat screwdriver, remove the terminal cover as shown in pictures 1 and 2.
- As shown in Figure 3, remove the terminal group from the compressor inlet.

Sensitivity: Public

2.24. Mains cable group

Note: Mains cable may differ according to the country used.

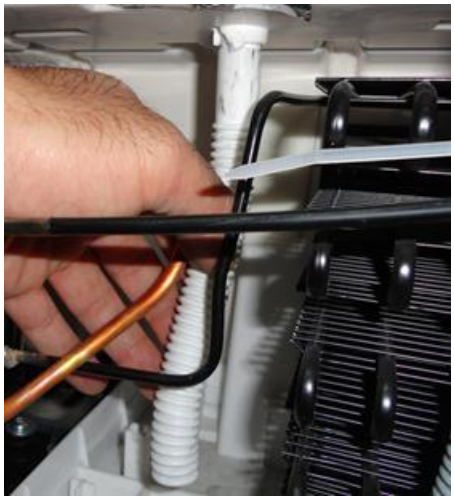






2.25. Rear leg plate

- Remove the 4 rear leg plate screws using a socket.

Sensitivity: Public

2.26. Water Drain Group



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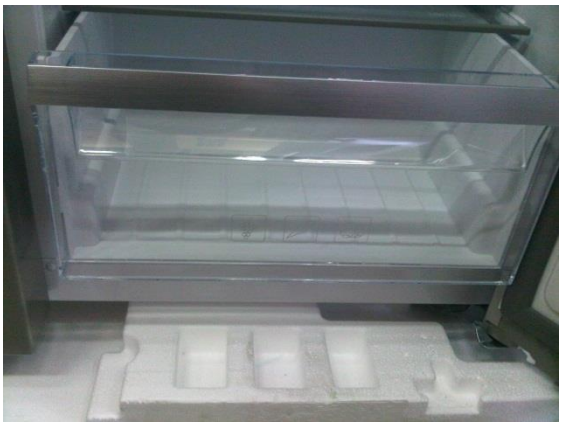
- Hoses are intertwined.

2.27. Cooler crisper groups



Sensitivity: Public

1

- 1 piece 0° partition group is used in the fresh food compartment of the product.
- 2 pieces crisper groups are used under 0° partition in the fresh food compartment of the product. There is a blue light glass behind the crisper body at the top.

2.28. Freezer drawer groups

- In the freezer part of the product, 1 upper drawer and 1 middle drawer group are used.

Sensitivity: Public

2.29. Cooler-freezer glass shelf groups

1 2

- In the freezer part of the product, 4 long glass shelf groups and 2 glass shelf groups are used.
- In the cooler part of the product, 4 long glass shelf groups, 1 narrow and 1 glass shelf group over the crisper are used.

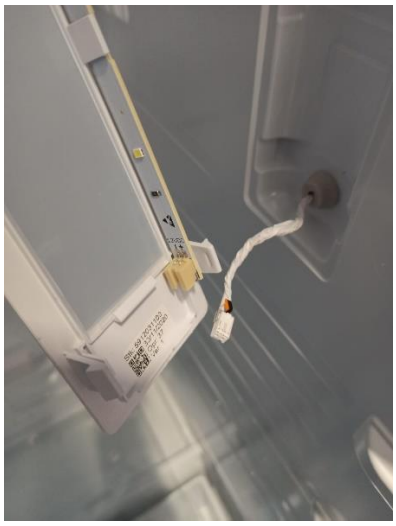
Sensitivity: Public

2.30. Cooler/freezer rail groups

3 4

- Total 10 rails are used of right and left, are used in the product.
- Remove 1 PT 4x19 screws by attaching a torx tip to the rechargeable drill.
- Remove the rail by pulling it out as shown in pictures 3 and 4.

2.31. Cooler lighting glass group short/long

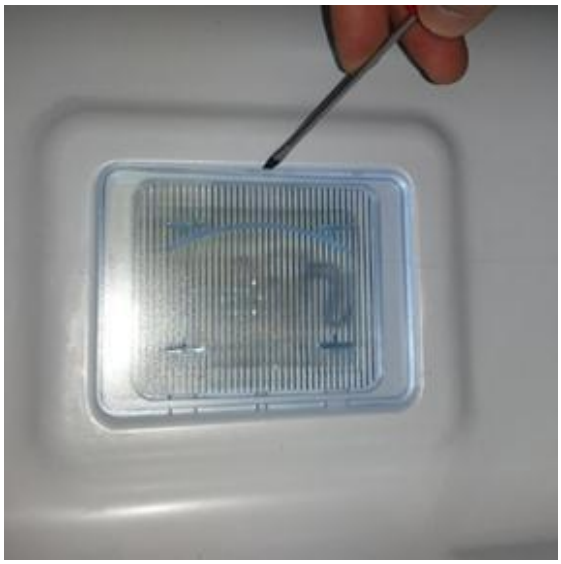


1 2 3

Sensitivity: Public

- Remove the rail by using a flat screwdriver as shown in pictures 1.
- Remove the socket connections as shown in picture 3.
- Remove the socket connection.

2.32. Blue light glass



- Remove the blue light glass using a flat screwdriver as shown in the picture.

2.33. Evaporator Cover Plug

- Unscrew the plug using a thin edged tool.

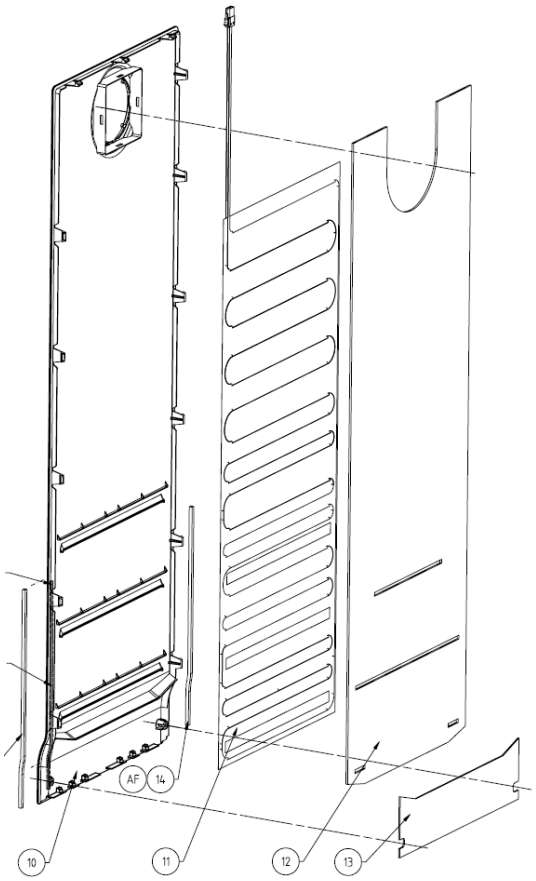
Sensitivity: Public

2.34. Cooler eva cover group

- Using a Phillips screwdriver, unscrew the 2 pieces of PT 4x19 screws highlighted in picture.
- Gently pull the Eva cover off.
- Remove the fan and heater socket.

There is a 10-watt anti-condensation heater under the FF evaporator cover.

Sensitivity: Public



The heater on the FF Eva cover works depending on the moisture sensor in the product. Start-stop times vary according to the ambient temperature and humidity values.

Relative Humidity (%)	Start-Stop Time Min		
	16 °C	22 °C	32 °C
0-10	0	0	0
10-20	0	0	0
20-30	0	0	0
30-40	0	0	0
40-50	0	0	0
50-60	0	0	0
60-70	0	0	10-10
70-80	0	2-18	15-5
80-90	10-10	10-10	19-1
90-100	10-10	10-10	19-1

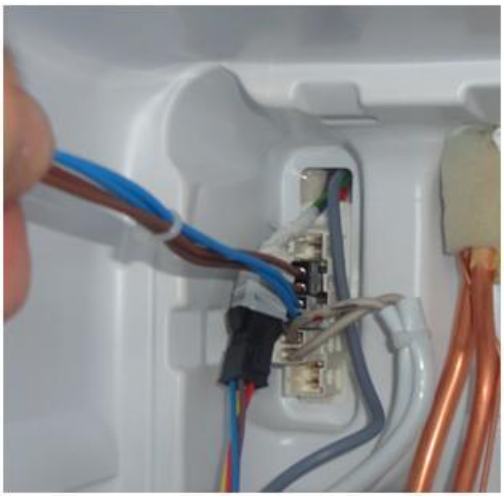
Sensitivity: Public

2.35. Ionizer

1 2 3

- It is used behind the cooler eva cover.
- Remove the ionizer plug connector.
- Remove 1 PT 4x19 screws by attaching a torx tip to the rechargeable drill.

2.36. Thermal fuse




1 2

- Behind the freezer / joker eva cover groups are grouped into the Finli eva return pipe.
- The tab on the thermal fuse passes to the return pipe and is grouped into the 10 socket as in picture 1.

Sensitivity: Public

2.37. Finli evaporator

2.38. Sensor covers

Used service number: 1439

Cooler

1 2 3

Freezer

4

- Remove the sensor covers using the thin edged tool.
- When attaching the sensor covers, pay attention to their orientation in the picture.

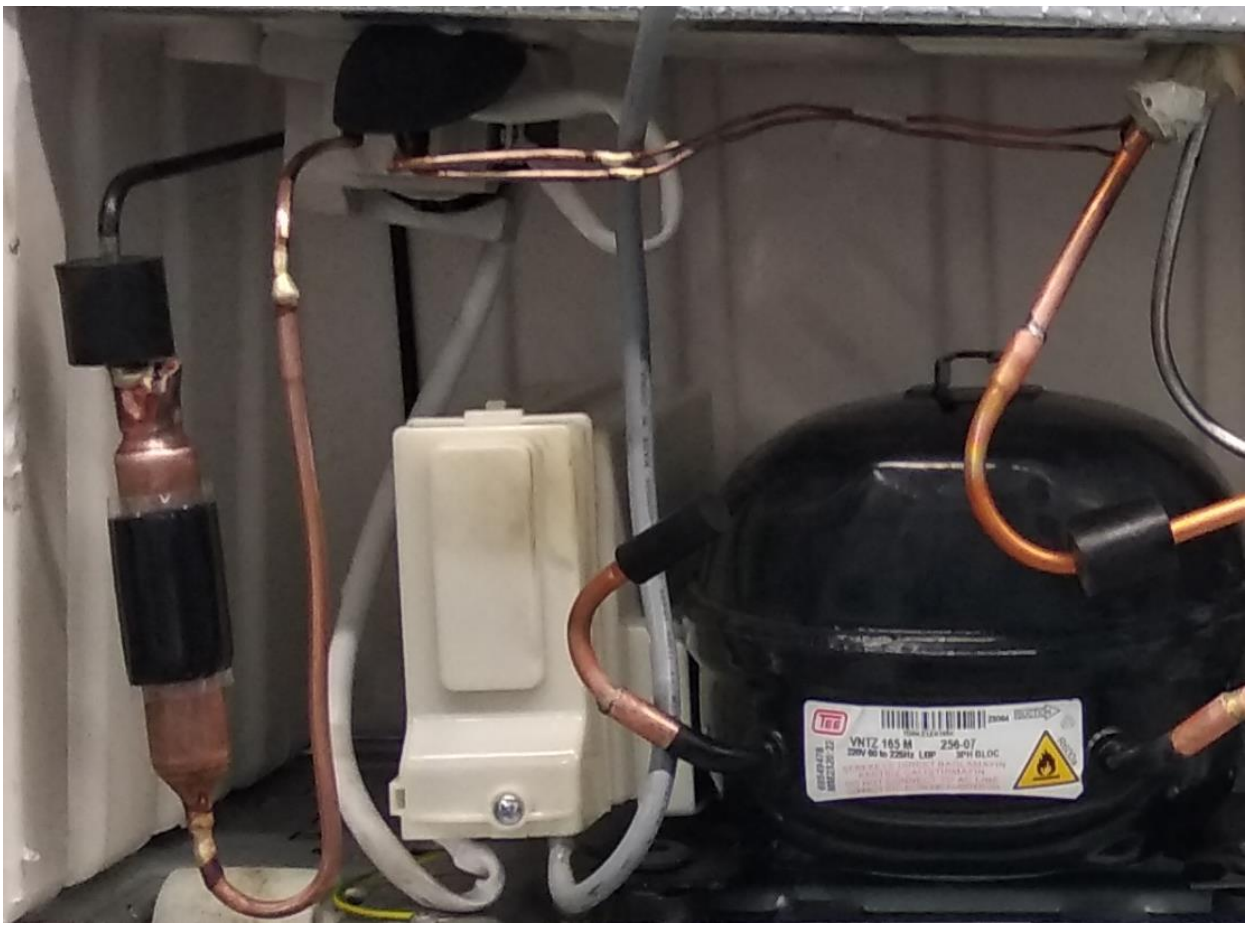
Sensitivity: Public

11.38 Cooler Evaporator

Sensitivity: Public

2.39. Solenoid Valve and Cabinet Bottom

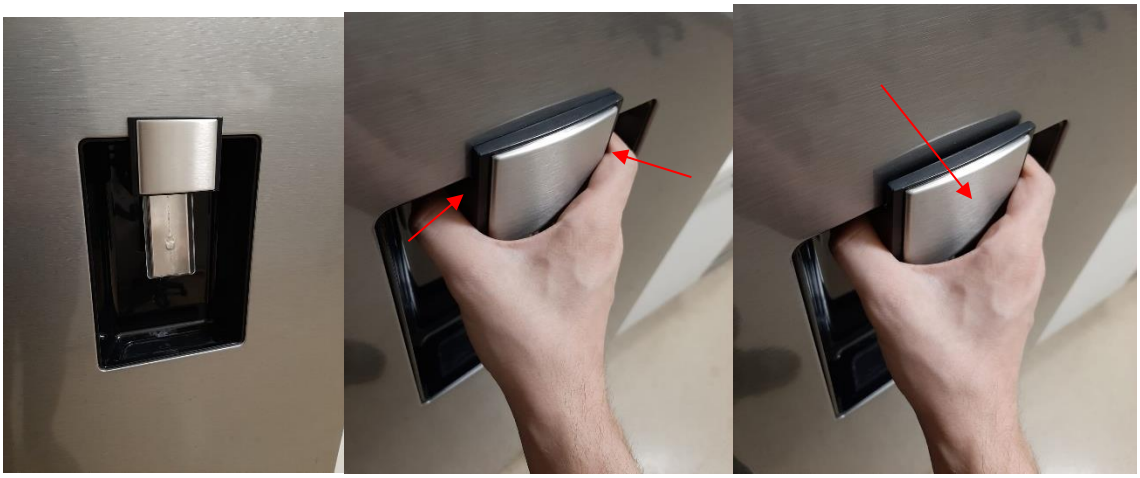
Solenoid Valve and Capillary connections are shown in the photo below
White Flag Sign → Freezer Compartment Capillary
Mavi Flag Sign → Cooler Compartment Capillary



Sensitivity: Public

2.40. Water Fountain Trigger Group

For the water dispenser trigger group disassembly, the trigger body is held and pressed inward. It is pulled back during pressing. Then the trigger is carefully pulled down and the tabs are released.



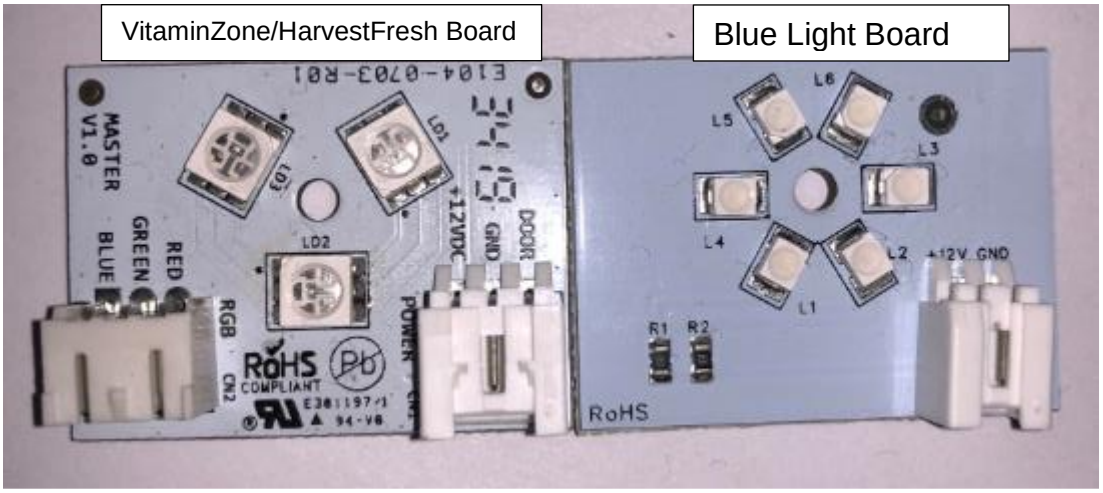
Sensitivity: Public

2.41. Vitaminzone / Harvestfresh

VitaminZone/ HarvestFresh technology simulates daylight in blue, green and red colors. In this way, the A and C vitamin values of the foods in the crisper are preserved.

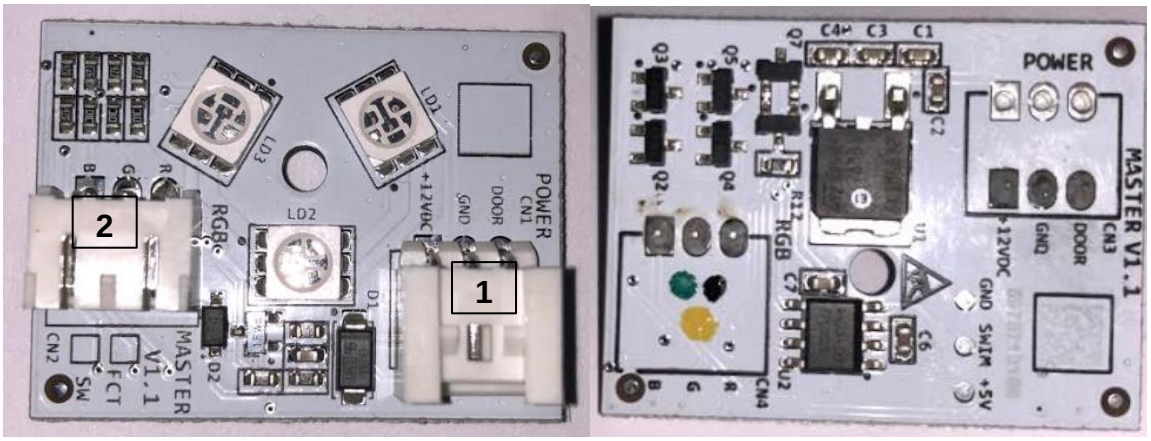
Vitaminzone/Harvestfresh Master Board

The VitaminZone/HarvestFresh board has the same dimensions as the Blue light board.



There are 2 3-pin connectors on the VitaminZone/HarvestFresh board.

1. A connector with the text 12VDC, GND, DOOR is available for feeding this board and door information.
2. The terms of use of the connector with BLUE (B), GREEN (G), RED (R) are described in VITAMINZONE / HARVESTFRESH MASTER and SLAVE BOARDS USAGE.



***There should not be more than one MASTER card in a refrigerator.*

Vitaminzone/Harvestfresh First Setup Test

When the refrigerator is plugged in for the first time in the customer's home, VitaminZone/HarvestFresh is activated and follows the steps mentioned below in order.

1. Blue light illuminates for 5 seconds.
2. Blue light illuminates for 1 seconds.
3. Green light illuminates for 1 seconds.
4. Red light illuminates for 1 seconds.
5. It does not illuminate for 1 second,

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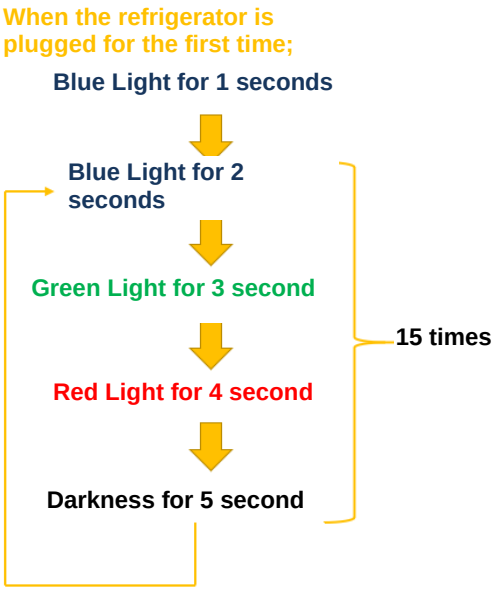
2, 3, 4 and 5. Steps are repeated 15 times then the blue light is illuminated.



(First setup test may not appear in all refrigerators. The reason for this is explained below in the step named VITAMINZONE / HARVESTFRESH MEMORY.)

Vitaminzone/Harvestfresh Working Principle

After the first installation test, VitaminZone/HarvestFresh card will respectively;

1. illuminate blue light for 4 hours,
2. illuminate green light for 2 hours,
3. illuminate red light for 6 hours, and
4. not illuminate for 12 hours,

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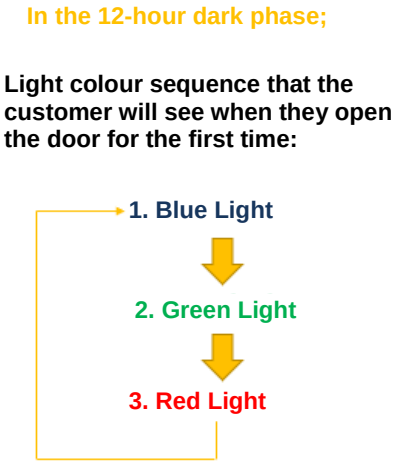
There is no change in the colour of the refrigerator crisper when the door is opened and closed when it is lit for 4 hours blue, 2 hours green or 6 hours red, but when the customer opens the refrigerator door and can see the VITAMINZONE/ HARVESTFRESH board that finishes blue for 4 hours and turn green (or from green to red).

VitaminZone /HarvestFresh Dark Phase Working Principle

VITAMINZONE/HARVESTFRESH board changes colour whenever the door is opened while in the 12-hour dark phase. The reason for this is that when the user opens the refrigerator door in the dark phase, it is not desired to be regarded as broken. When the refrigerator door is closed, the lights are turned off again.
During the 12-hour dark phase, the blue light turns on when the refrigerator door is opened for the first time, the green light turns on when the refrigerator door is closed and opened for the second time, and the red light turns on when it is closed and opened for the third time. When the refrigerator door is opened for the fourth time, the blue light turns on again and this cycle goes on in this way.



Sensitivity: Public

Vitaminzone/Harvestfresh Grouping

VitaminZone/HarvestFresh board can be grouped into all slots and glasses used in blue light technology.

Vitaminzone / Harvestfresh Memory

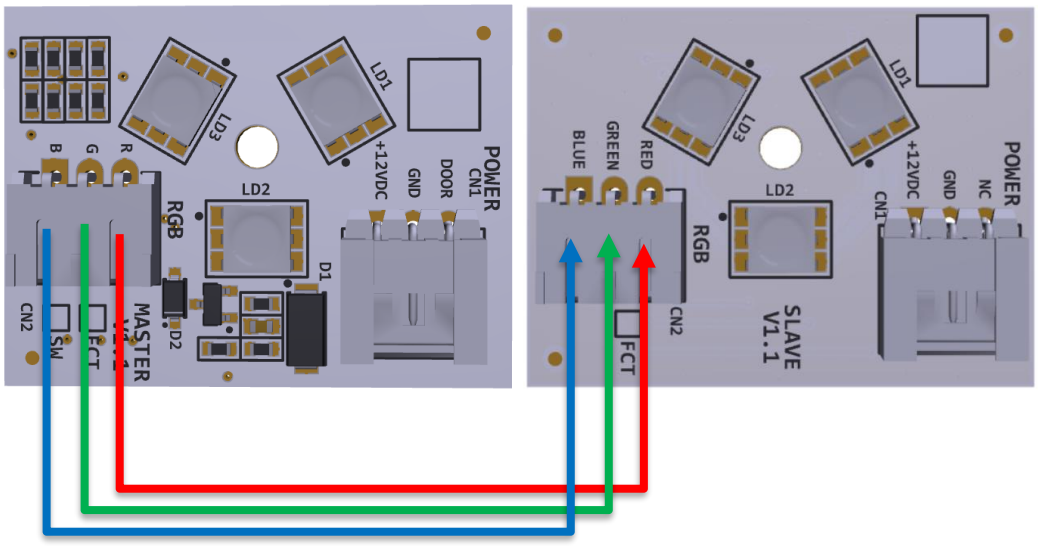
VitaminZone/HarvestFresh board has its own memory. In this way, the VitaminZone/HarvestFresh cycle, which is expected to start over again due to power outages, has been prevented and the cycle continues where it left off.

To activate the memory, the refrigerator must remain in continuous power for at least 20 hours. Otherwise, the memory function will not be activated and will start over with the production test when it is energized.

*** The refrigerators can remain in power for 20 hours before leaving the factory. Therefore, production testing or service testing may not appear in every refrigerator.*

USE OF VITAMINZONE/HARVESTFRESH MASTER and SLAVE BOARDS

MASTER BOARD **SLAVE BOARD**



There must be a 3-pin connector between the Master Board and the Slave Board. Thus, the colour information on the Master Board can be transferred to the Slave Board.

Feeding connectors on Master Board and Slave Board are with 3 pins. Both connectors receive 12V, GND and door information. Thus, Master Board and Slave Board combinations can be interchanged.

There can be at least and at most one Master Board in a refrigerator.

Sensitivity: Public

2.42. Violed Assembly / Disassembly

Violed is located on the top side of the FF cooler cabin.

Violed box is opened when you push the box to the back side of the cabin.

After the box is opened, the socket inside is disassembled. Then the Violed gets free from the cabin.

Sensitivity: Public

For reassembly, the socket of violed needs to be plugged. While assembling the box, the nails on the box are positioned on the slots on the cabin. Then pull the Violed box to yourself direction to lock the part.

Sensitivity: Public