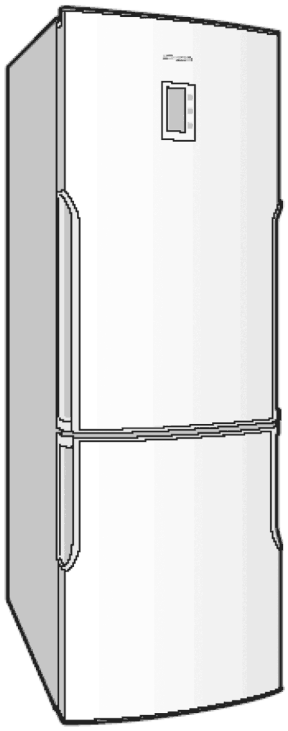
Order Number VESR120601CE

Service Manual

REFRIGERATOR-FREEZER



Model No. NR-B29SG2

Model No. NR-B29SW2

Model No. NR-B32SG2

Model No. NR-B32SW2

Product-Color G:Inox-look
W:White

Destination E(Europe Continental) except France
F(France)
B(U.K.)

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Safety Precautions

The following are instructions that you must follow in order to prevent accidents during work, and to ensure the safety of the repaired product.
Hazard and damages that may result from ignoring instructions are classified and explained, below.

⚠Danger	**This section warns of the urgent danger of death or serious injury.**
⚠Warning	**This section warns of the risk of death or serious injury.**
⚠Caution	**This section warns of the risk of injury or damage to property.**

The following labels describe the types of rules that need to be followed.

⚠	**This label shows a "reminder" action to be paid attention to.**
⃠	**This label shows a "prohibited" action.**
❗	**This label shows a "compulsory" action to be followed without fail.**

⚠ Danger	
❗	**Be sure to discharge remaining refrigerant from the refrigeration unit.**
❗	**Discharge refrigerant outdoors where there is no fire source.** Be sure to instruct the customer not to approach the place of discharge and not to use fire.
❗	**Always use a pipe cutter for removing pipes.** If you use a welding machine, the refrigerant remaining in the pipe or compressor could catch fire and explode.
❗	**Pipes must be blown out with nitrogen before welding, to discharge any remaining refrigerant.**
❗	**Always use the swage lock for sealing after filing with refrigerant.** If you use a welding machine, the refrigerant could catch fire and explode.
❗	**Ventilation close to the floor surface is required, as the refrigerant(R600) is heavier than air.** In particular, the basement must be adequately ventilated.
❗	**"Measurement/adjustment of refrigerant refill quantity" in a service must be performed outdoors where there is no fire source.** Otherwise, you could run the risk of fire/explosion.
❗	**Use always a gas alarm.** If any refrigerant remains in work area, there will be a risk of fire/explosion.
⃠ Prohibited	**Never use a naked flame in a place where any refrigerant might remain.**
⃠ Prohibited	**Do not leave the removed faulty compressor in doors.**

⚠ Warning

 Remove power plug	**Before repair** make sure to cut off the power line before disassembly, parts replacement and assembly. Otherwise, electrical shock or injury may occur.
 Electric shock hazard	**Be careful of electrical shocks** Be careful of electric shock from live parts or electrical lead terminal when conducting voltage measurement and other electrical servicing. Voltage of the control board is approximately 280V when power is ON. Do not touch live parts. When replacing parts, do not touch live parts for at least 3 minutes after disconnecting the plug the power supply. (A little time is required for electrical discharge of the condenser)
	**Use only fuses specified** When replacing fuses, use only specified in the circuit diagram. The use of non-specific fuses may cause fire or malfunction.
	**Punch the pipes of the faulty compressor securely** Otherwise, the refrigerant remaining in the compressor oil might leak out during transporting and could catch fire and explode.
	**Discharge refrigerant completely from the used service can for disposal in an outdoor place where there is no fire source.** Otherwise, you could run the risk of fire/explosion
 Prohibited	**Do not damage the refrigeration circuit (piping) of the refrigerator.** As the refrigerant is flammable, any damage could lead to fire/explosion.
	**If the refrigeration circuit is damaged, do not touch the refrigerator or use a naked flame. Open windows for ventilation.** As the refrigerant is flammable, any damage could lead to fire/explosion.
	**Disposal of a faulty compressor must be performed outdoors where there in no fire source.**
	**The quantity of refrigerant in a service can carried in the vehicle must be the least possible, and below the [regulation] [regulated] limit. Keep the service can upright and below 40℃, (Quantity on board:1.5kg or below)**
	**Use a designated part** Make sure to use a designated part when the part is marked (⚠) in circuit diagrams and parts lists. Otherwise, smoke, fire or failure occur.
	**Always conduct a safety inspection after completing service** And check the parts are reassembled correctly. Also confirm other fixings and wiring, for deterioration. Replace as required. Always use a ohmmeter to measure the insulating resistance between both terminals of the power plug and the earth terminal, and plug the power supply in after first confirming 1MΩ or above. When setting, check that the power cord or power plug is not jammed or pushed against the rear of the refrigerator. If the power cord or the power plug is damaged or loose, take appropriate measures such as replacing. If the pins of the plug or the area the pins attach to are dirty, make sure they are cleaned thoroughly.

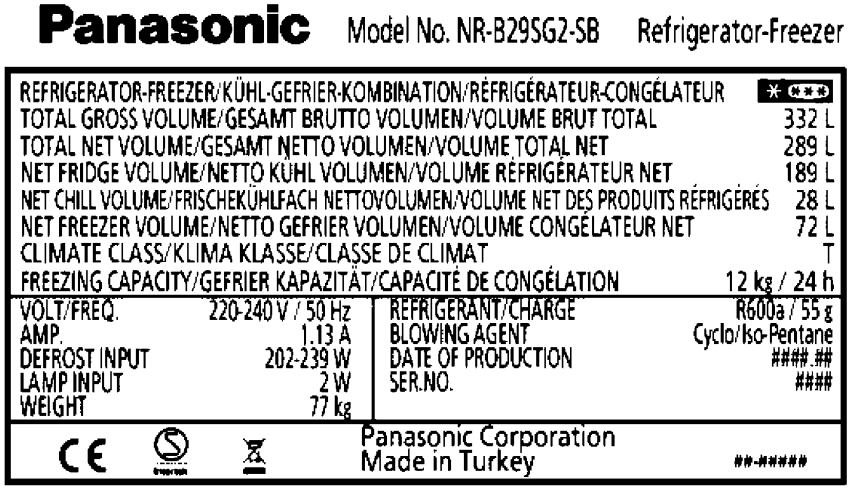
⚠ Caution	
	**Install and remove glass shelving securely to prevent risk of injury.**
	**When moving, raise the adjustable legs** Dragging the refrigerator will damage the floor. For flooring that may become easily damaged put a productive board in place.
	**Do not scrape the metal rails**
 High temperature hazard	**Take care of very hot parts.** The compressor, pipes etc. can be very hot during operation and directly after stopping. Also, the heater can be very hot during power supply and immediately after power supply is stopped. Be careful not to bum yourself by touching very hot parts.
 High temperature hazard	**Take care of very hot parts after welding** Pipes etc. are very hot after welding. Be careful not to burn yourself by touching very hot parts.
	**Take care when filling/discharging refrigerant.** Liquid refrigerant directly touching the skin may cause frostbite.
	**Take care of burrs** Be careful not to cut yourself on metal or plastic burrs.
	**Take care of condenser/evaporator fins** Be careful not to injure yourself on the fin edges

2 Specifications

2.1. NR-B29 models

Model		NR-B29SG2	NR-B29SW2
Destination		Europe - France - U.K.	
Volume capacity	Total effective volume capacity	289 L	
	Refrigerator compartment (PC)	217 L	
	Freezer compartment (FC)	72 L	
External dimensions	width/ depth/ height (mm)	600 x 652 x 1,898	
Installaion size		side : 20 mm or above	
		back : 40 mm or above	
		top : 150 mm or above	
Power supply plug	Rating	250V/16A	
Power supply code	Length	2.5m	
Interior lamp (LED)	Rating	15V DC	
IEC protection against electric shock classes		Class 1	
Climate Class		T	
Refrigerator compartment sensor	PCC	epcos NTC	
Freezer compartment sensor	FCC		
Ambient temperature sensor	ATC		
Defrost temperature sensor	DFC		
Compressor	Model	PANASONIC	
	Rotation speed	23 / 42 / 58 (r/s)	
	Curled resistance cord (at 20°C)	U-W, U-V, V-W = 7.2 Ohm	
Overlord relay	Model	PANASONIC	
	Operating temperature without power	95 ± 5°C	
	Return temperature	61 ± 8°C	
	Operating current (A)	6.40 A ± 7.5 %	
Fan motor	Model/Rating	EBM/1W AC -2200rpm	
Dumper	Model/Rating	SANKYO/12V DC -0.5W	
Defrost heater	Rating/Voltage	220V/188.5+10+7 W	
Thermal fuse	Rating	76°C	
Oil charge	Class / Fill	S8/215 ml	
Ice making ability		2.65kg/24h	
Freezing ability		12kg/24h	
Values of the energy consumption		0,662	
Energy efficiency grade		A++	
Refrigerant charge		55 gr	
Measurement of exterior noise emitted		42 dB	
Form polyurethane		Cyclo pentane	
Weight (Kg)	Without packaged	77	
	With packaged	82	

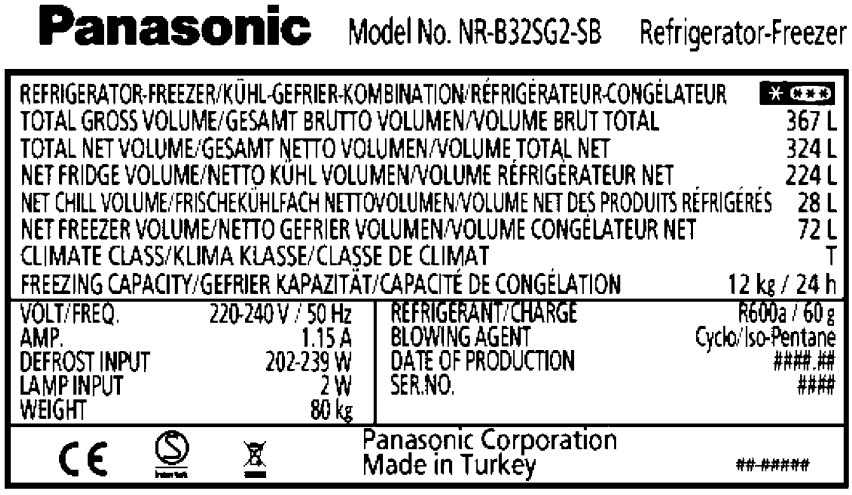
Name Plate



2.2. NR-B32 models

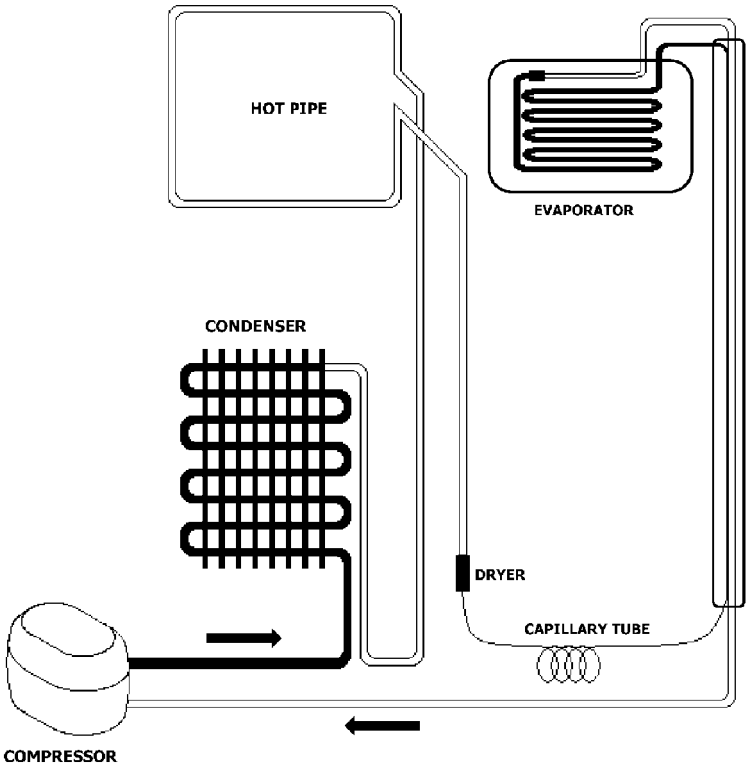
Model		NR-B32SG2	NR-B32SW2
Destination		Europe - France - U.K.	
Volume capacity	Total effective volume capacity	324 L	
	Refrigerator compartment (PC)	252 L	
	Freezer compartment (FC)	72 L	
External dimensions	width/ depth/ height (mm)	600 x 652 x 2,044	
Installaion size		side : 20 mm or above	
		back : 40 mm or above	
		top : 150 mm or above	
Power supply plug	Rating	250V/16A	
Power supply code	Length	2.5m	
Interior lamp (LED)	Rating	15V DC	
IEC protection against electric shock classes		Class 1	
Climate Class		T	
Refrigerator compartment sensor	PCC	epcos NTC	
Freezer compartment sensor	FCC		
Ambient temperature sensor	ATC		
Defrost temperature sensor	DFC		
Compressor	Model	PANASONIC	
	Rotation speed	23 / 42 / 58 (r/s)	
	Curled resistance cord (at 20°C)	U-W, U-V, V-W = 7.2 Ohm	
Overlord relay	Model	PANASONIC	
	Operating temperature without power	95 ± 5°C	
	Return temperature	61 ± 8°C	
	Operating current (A)	6.40 A ± 7.5 %	
Fan motor	Model/Rating	EBM/1W AC -2200rpm	
Dumper	Model/Rating	SANKYO/12V DC -0.5W	
Defrost heater	Rating/Voltage	220V/188.5+10+7 W	
Thermal fuse	Rating	76°C	
Oil charge	Class / Fill	S8/215 ml	
Ice making ability		2.65kg/24h	
Freezing ability		12kg/24h	
Values of the energy consumption		0,662	
Energy efficiency grade		A++	
Refrigerant charge		60 gr	
Measurement of exterior noise emitted		42 dB	
Form polyurethane		Cyclo pentane	
Weight (Kg)	Without packaged	80	
	With packaged	88	

Name Plate



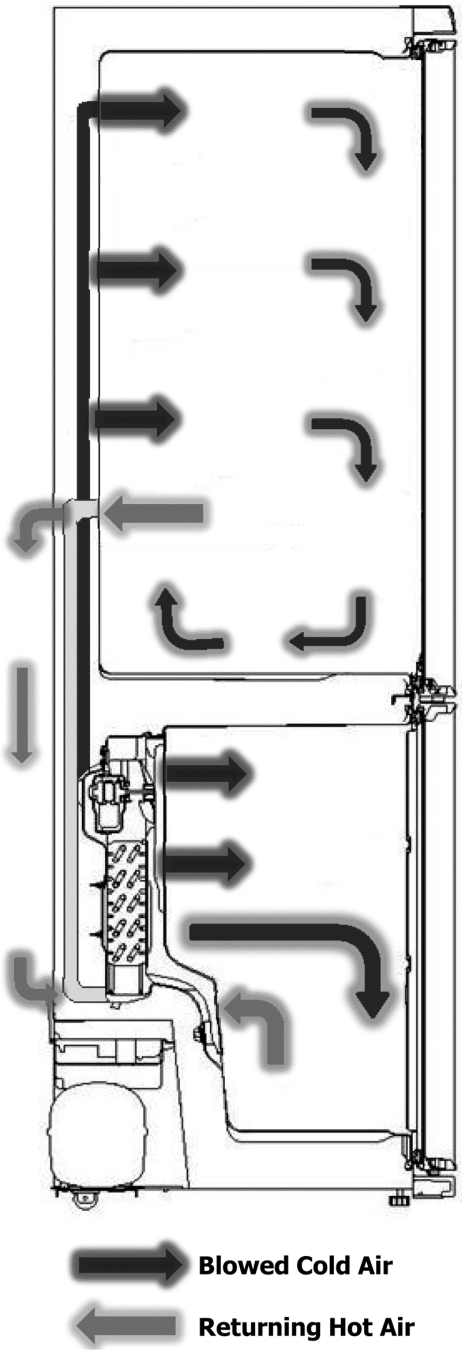
3 General/Introduction

3.1. Flow of Refrigerant



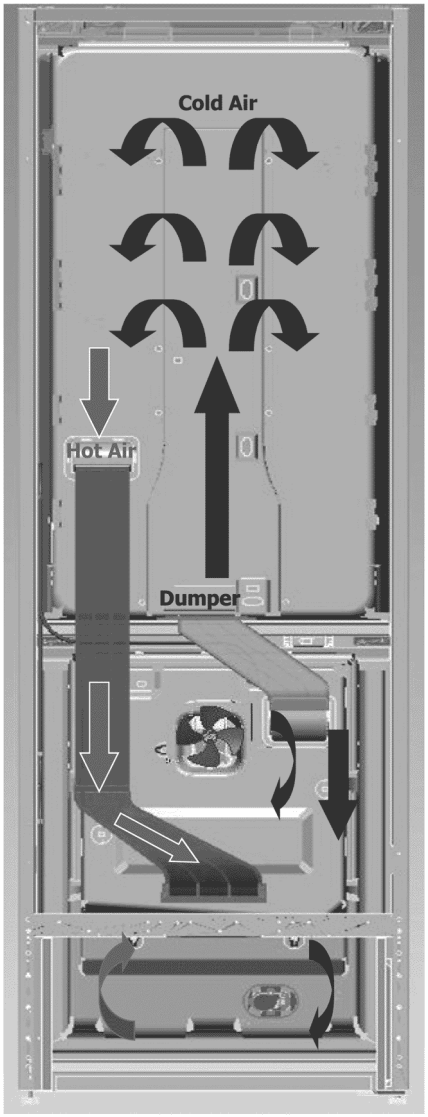
3.2. Flow of Air

3.2.1. Inside the Fridge



3.2.2. Flow of Air Through Air Ducts

(Front view)

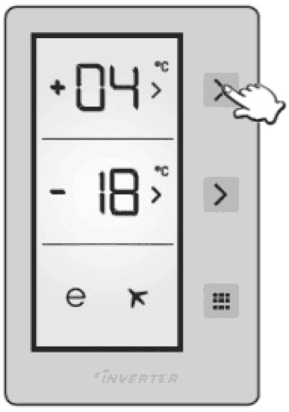


4 Technical Descriptions

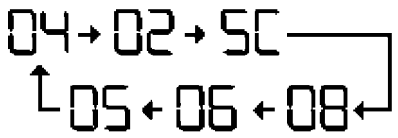
4.1. Setting the temperature

4.1.1. Fridge compartment (PC)

At the time of purchase, the temperature is set to 4°C



1. **Press [>] (upper) once and then press it again within 1 second.**
   - The temperature can be set.
2. **Press the button repeatedly until the desired temperature is set.**



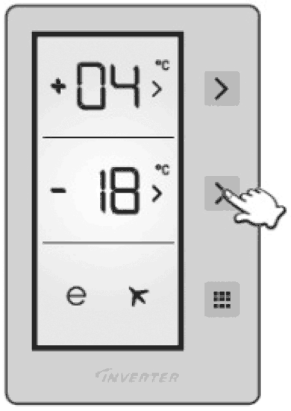
- If no operation is performed for 1 second during the setting process, the set value will flash and a beep will be heard indicating that the temperature is now set.

Note:

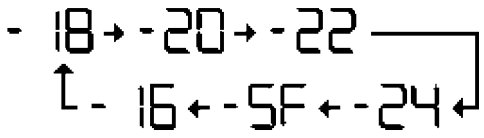
- When Super Cool Mode, Super Freeze Mode, Eco Mode, or Holiday Mode ends or is cancelled, the unit returns to its previous settings.

4.1.2. Freezer compartment (FC)

At the time of purchase, the temperature is set to -18°C



1. **Press [>] (lower) once and then press it again within 1 second.**
   - The temperature can be set.
2. **Press the button repeatedly until the desired temperature is set.**



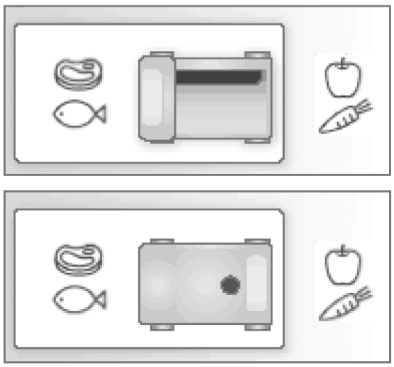
- If no operation is performed for 1 second during the setting process, the set value will flash and a beep will be heard indicating that the temperature is now set.

Note:

- When Super Cool Mode, Super Freeze Mode, Eco Mode, or Holiday Mode ends or is cancelled, the unit returns to its previous settings.

4.1.3. Chill compartment

You can adjust the temperature of the chill compartment by opening and closing the sliding part which is located inside the compartment.



Open

Turn the sliding part to the opening position to set the compartment temperature lower by 1 °C to 2 °C than that set for the PC, and make the compartment work as the chill compartment.

Closed

Turn the sliding part to the closing position to set the compartment temperature same as that set for the PC, and make the compartment work as a part of the fridge compartment.

- When this compartment is used as 0 °C compartment, keeping food in the chill compartment instead of the FC or PC allows food retain freshness and flavour longer, while preserving its fresh appearance, When chill compartment drawer becomes dirty, remove it and wash it with water. (Water freezes at 0 °C, but foods containing salt or sugar freeze at temperature lower than that) Normally people use the chill compartment for raw fish, lightly pickled and rice, etc...
- Pull the chill compartment drawer out toward you. the cover will open automatically.

Note:

- Do not put foods you want to freeze or ice trays in order to make ice.

4.2. Defrost Control

4.2.1. Calculating defrost starting time

According to this;

a) If ATC < 23 °C

Fix the defrost cycle to 16 hours (running + stopping)

b) If 23 °C < ATC < 28 °C

If door is not opened;

First Defrost cycle time will be fixed to 16 hours.
Second defrost cycle time will be fixed to 20 hours.

For next defrosts:
If doors isn't opened during defrost cycle time;
fix the defrost cycle to 30 hours (running + stopping)

c) If 28 °C > ATC ≥ 35 °C

If doors isn't opened during defrost cycle time;
defrost cycle is max. 8 hours of compressor running accumulated time (max at non door opens & close operation) or 16 hours of total time (runnig+stopping)

d) ATC ≥ 35 °C ;

If doors isn't opened during defrost cycle time;
defrost cycle is max. 12 hours of compressor running accumulated time or 16 hours of total time (running+stopping)

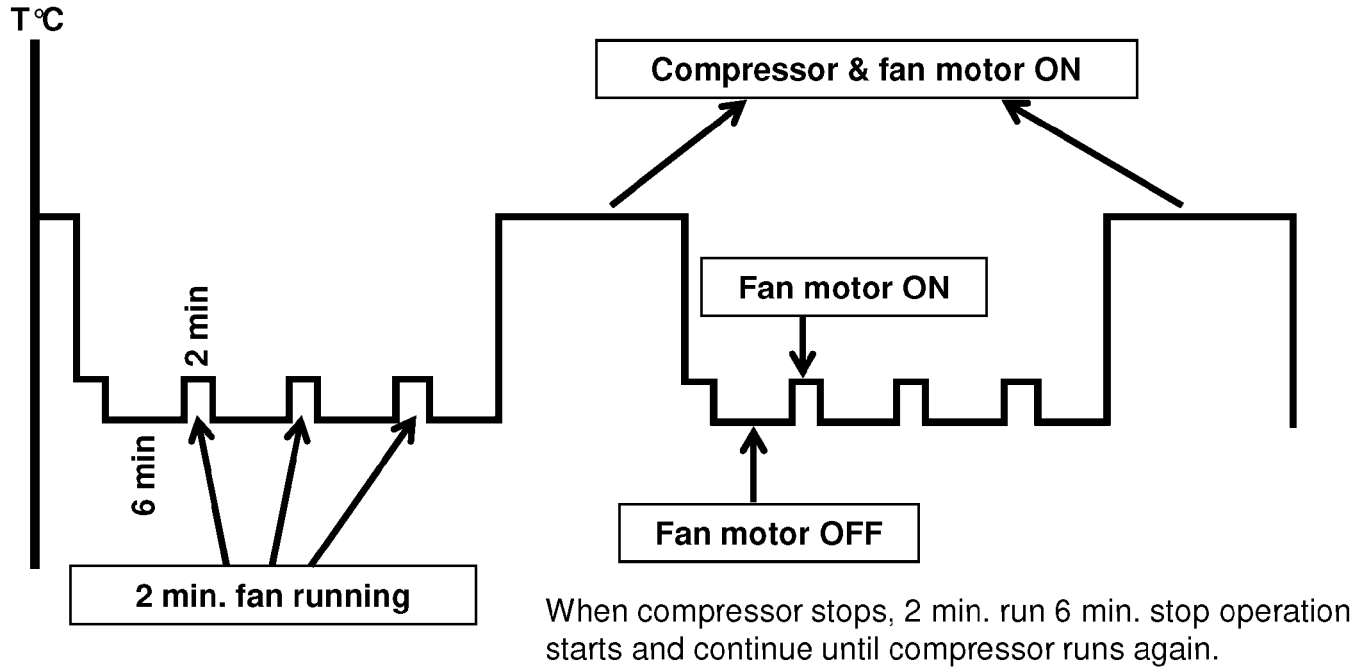
Checking of ambient temperature will be done every 10 min
Defrost conditions (durations) can be changed according to new ATC.

Step 1. When defrost accumulated time reach to appointed time;
Check if FCC sensor temp. < compressor OFF temp,
If YES, go to step 2 (1)
If NO and compressor running accumulated time is longer than 45min. go to step2. (2)
If NO and compressor running accumulated time is not longer than 45min. return to step1 (3)

Step 2. Set compressor OFF and evaporator fan motor ON. Wait 3 min. and start defrosting.

4.3. Fan Control

While compressor is running, evaporator fan is running.
When compressor stops and if damper motor is closed **2min run - 2 min** stop operation starts and continue until compressor runs or damper motor opens again.

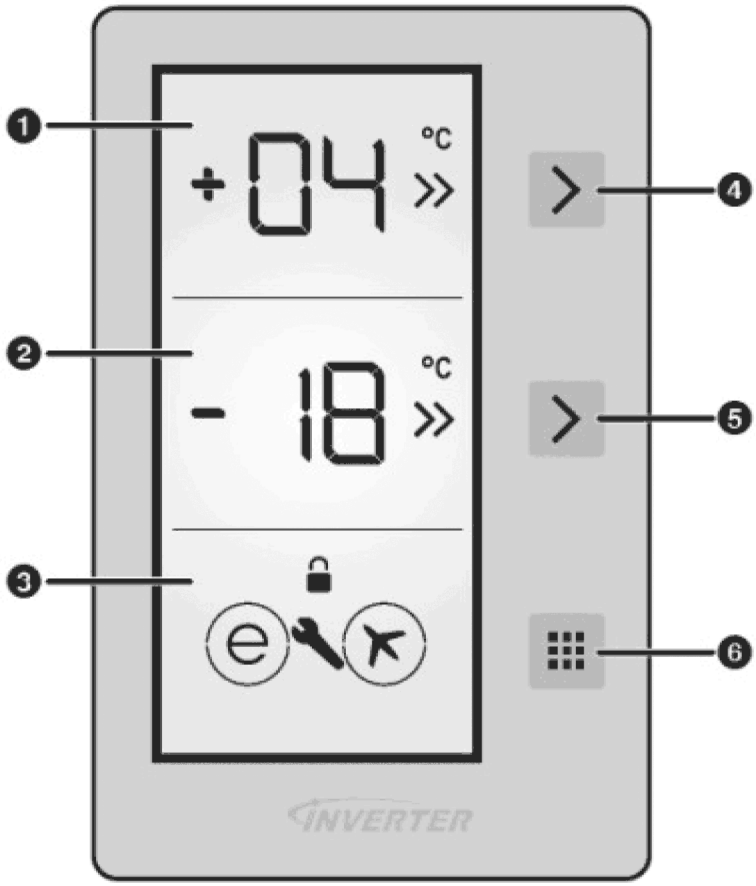


If ambient temperature is ATC ≤ 22 °C or ATC ≥ 30 °C

- While compressor is running, evaporator fan motor is running.
- If PCC sensor is warmer than damper on set values damper must be on and fan motor must work continiously untill PCC sensor reach to damper close set values.
- If PCC sensor is colder than damper close set values damper must be off and if compressor is stopping fan also must be off.

5 Location of Controls and Components

5.1. Display and Control Panel



Display area

1 PC temperature display
- The set temperature is displayed.
- While Super Cool Mode is activated, » flashes alternately.

2 FC temperature display
- The set temperature is displayed.
- While Super Freeze Mode is activated, » flashes alternately.

3 Function display
- When Eco Mode and Holiday Mode are set, circles are displayed around the marks.
- When the Child Lock and alarm functions are activated, the marks for those functions are displayed.

Control area

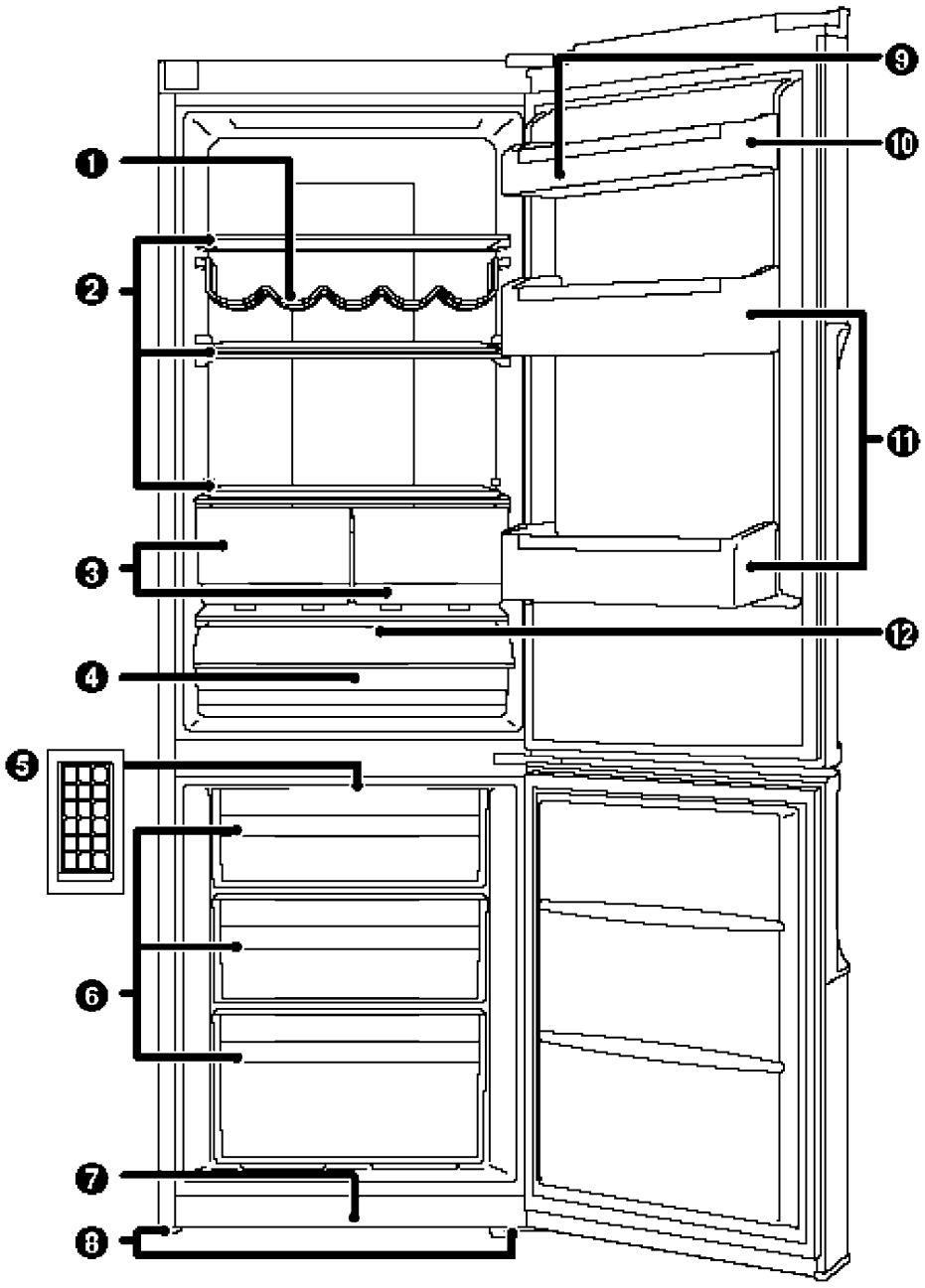
4 PC selection button

5 FC selection button

6 Mode button

Notes:
This refrigerator uses a microprocessor to control the temperature. The temperature inside the refrigerator varies depending on such factors as changes in the room temperature, how frequently the doors are opened and closed, and how much food is stored inside and how it is stored.

5.2. Components



1 - Wine Rack
2 - Glass shelves *
3 - Crispers
4 - Chill compartment drawer
5 - Ice trays
6 - Freezer drawers
7 - Kick plate
8 - Adjustable legs
9 - Egg trays (2 pcs)
10 - Door shelf *
11 - Bottle shelves
12 - Sliding part

* Following parts are added to NR-B32SG2/NR-B32SW2.
• Glass shelf
• Door shelf

Note:
• You can change the positions where the door and bottle shelves are installed.
Please use caution, however, because stored food and beverages could fall out when the door is opened and closed depending on the shelf positions.
• Closing the door with the drawers (Crispers/Chill/Freezer drawers) open may cause the drawers to break.

6 Installation Instructions

This section explains how to install your appliance for the most energy-efficient, safe and quiet operation.

Dimensions

NR-B29SG2/NR-B29SW2: W600 x D652 x H1898 (mm)
NR-B32SG2/NR-B32SW2: W600 x D652 x H2044 (mm)

Unpacking your appliance

Remove all packaging and tape.

Choosing the right location

Ventilation

As the appliance gives off heat during operation, it should be installed in a well-ventilated, dry room with plenty of space above and behind it, as shown in Figure 1.
If you can hear it vibrating, it needs more space.

Temperature

The room temperature affects the refrigerator's energyefficiency, i.e. how much electricity it uses to chill and freeze foods.
For the best results, install your refrigerator:

- away from direct sunlight
- away from radiators, cookers or other heat sources
- where the room temperature corresponds to the climate classification for which the appliance is designed. Refer to the Specifications Section for your appliance's climate classification.

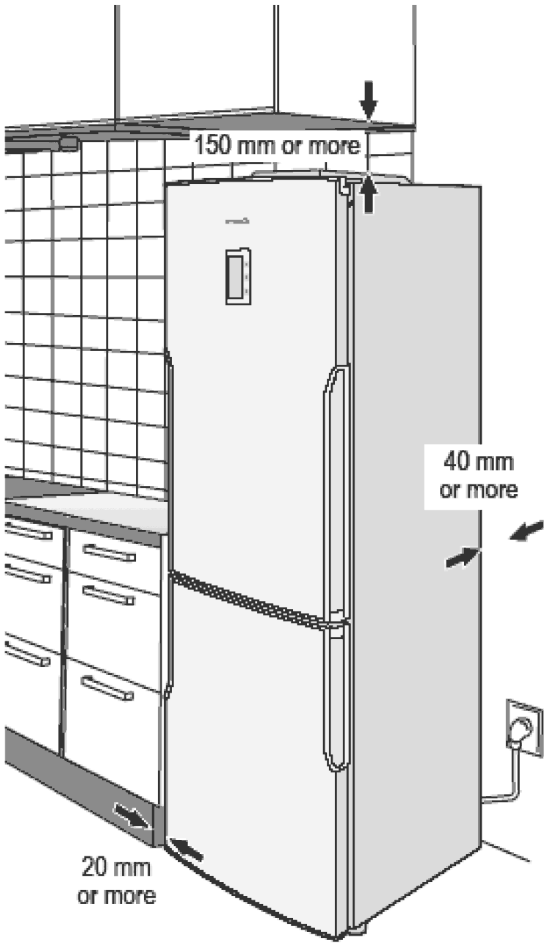


Figure 1

Level

Install on a level floor that's strong enough to support a fully loaded refrigerator.
You can adjust the level of the refrigerator by screwing or unscrewing the two adjustable front legs as shown in Figure 2.
This prevents vibration and noise.
If the appliance is to stand on a carpeted or vinyl floor, put a solid board underneath it first. This will protect your floor against possible color change due to heat given off by the appliance.

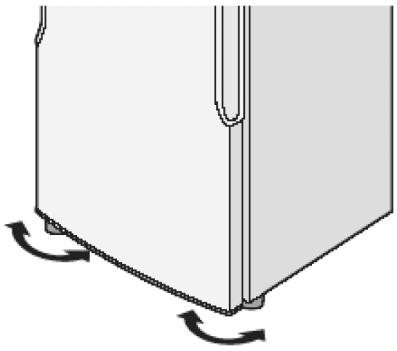


Figure 2

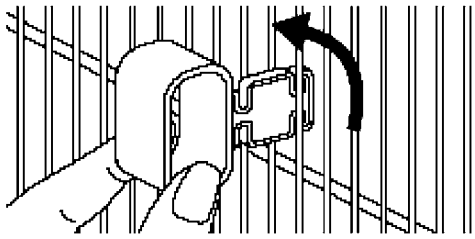
Refrigerator door

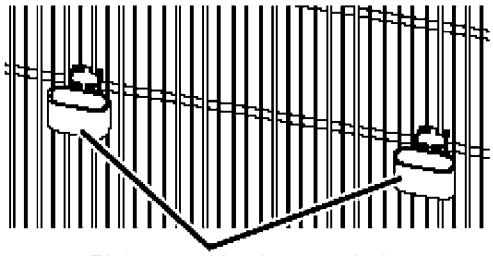
WARNING

The refrigerator's door hinges can be swapped over, from the right side to the left, so that the doors open in the opposite direction. If this is more convenient in your home, please contact our service centre listed on the attached sheet or access to our Web site (http://panasonic.net).
We could not be held responsible if you replace the hinges by yourself.
Parts for switching door opening direction are included in the unit packaging.

Installing the distance guides

To prevent the condenser (the black backside component with fins) from touching the wall, put on two plastic distance guides in its place rotating 90°.





Distance guides (accessories)

Cleaning

After installation, wipe the appliance clean with warm water.

Connecting the mains plug to the household mains socket

You can connect the mains plug immediately after installation.
After the appliance is plugged, all symbols will appear for a moment, and then the startup values will appear as -18 °C on freezer setting indicator and 4 °C on fridge setting indicator.
All buttons on the control panel are touch-operated. (Only press to activate the button you want to operate.)

Notes:

- Cooling may take longer in the summer months or at other times when the room temperature is higher.
- If you need to unplug the refrigerator, wait at least 10 minutes before you plug it back in again. If not, you might damage the compressor.

Ambient room temperature

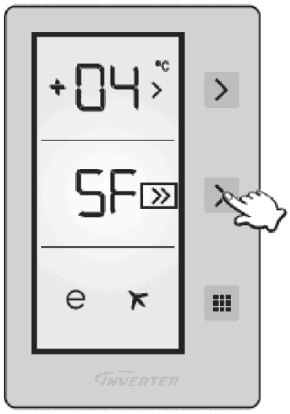
You'll find your refrigerator's climate classification on the rating plate in the left side of the fridge compartment. It shows the room temperature the appliance is designed to work in.

Climate classification	Permitted ambient temperature
SN (Extended Temperate)	+10 °C to 32 °C
N (Temperate)	+16 °C to 32 °C
ST (Subtropical)	+16 °C to 38 °C
T (Tropical)	+16 °C to 43 °C

7 Operating Instructions

7.1. Functions

7.1.1. Super Freeze Mode



Features :

- In this mode, the FC can be cooled rapidly, enabling the fresh foods, etc. which are placed there to be frozen.
- Super Freeze Mode will automatically end after 24 hours or when the FCC sensor temperature becomes lower than -32 °C.

Settings :

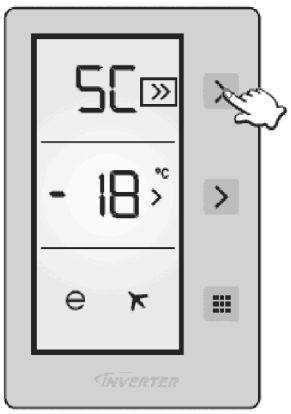
1. Press [>] (lower) until [SF] is shown.
2. If no operation is performed for 1 second during the setting process, [SF] will flash and a beep will be heard indicating that Super Freeze Mode is set.

- During this mode, [SF] is displayed, and flashes alternately.
- To release the mode, press [>] (lower).

Notes:

- During this mode:
  - By pressing [>] (lower), Super Freeze Mode will be cancelled and the desired temperature can be set.
  - Eco Mode and Holiday Mode cannot be selected.
  - The PC temperature can be adjusted.
- The effect on the stored food can be reduced if setting Super Freeze Mode several hours before storing the food in the FC.
- The alarm sounds 3 hours after setting Super Freeze Mode. You can then store a small amount of food.
- The following items are recommended in order to exert the maximum freezing capacity.
  1. Set the FC temperature to -24 °C and the PC temperature to 2 °C 24 hours before storing the food.
  2. Set Super Freeze Mode 10 hours before storing the food.
  3. If you wish to store a large amount of food, remove the two top drawers from the FC and place the food directly on the glass shelf or put it in the lowest drawer of the freezer.
     (A bigger freezing capacity can be exerted if placing the food directly on the top glass shelf.)
- The maximum freezing capacity within 24 hours is written in the rating label.

7.1.2. Super Cool Mode



Features :

- In this mode, fast food can be cooled before eating, a large amount of food can be cooled and stored, and drinks can be cooled quickly.
- Super Cool Mode will automatically end after 8 hours or when the PCC sensor temperature becomes lower than 0 °C.

Settings :

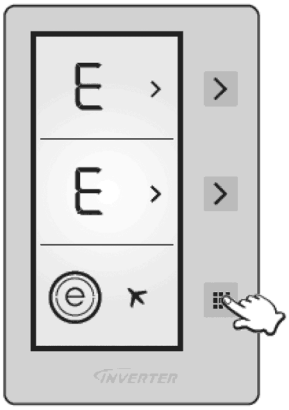
1. Press [>] (upper) until [SC] is shown.
2. If no operation is performed for 1 second during the setting process, [SC] will flash and a beep will be heard indicating that Super Cool Mode is set.

- During this mode, [SC] is displayed, and flashes alternately.
- To release the mode, press [>] (upper).

Notes:

- During this mode:
  - By pressing [>] (upper), Super Cool Mode will be cancelled and the desired temperature can be set.
  - Eco Mode and Holiday Mode cannot be selected.
  - The FC temperature can be adjusted.

7.1.3. Eco Mode



Features :

- In this mode, the control unit operates the FC and PC economically.
- In this mode, the PC temperature is automatically set to 4 °C and the FC temperature is automatically set to -18 °C.

Settings :

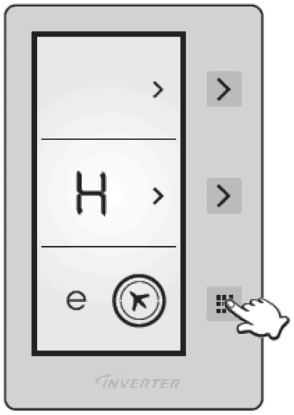
1. Press repeatedly until a circle appears around.
2. If no operation is performed for 1 second during the setting process, the circle around flashes and a beep will be heard, indicating that Eco Mode is set.

- During this mode, [E] is displayed on the PC / FC temperature display, and a circle is displayed around
- To release the mode, press

Notes:

- During this mode:
  - FC and PC can be adjusted. When Eco Mode is released, the adjustment will be maintained.
  - Super Cool Mode and Super Freeze Mode can be selected. Eco mode is released automatically, and the selected mode is activated.
  - After releasing Eco Mode, Holiday Mode can be selected, and the selected mode is activated.

7.1.4. Holiday Mode



Features :

- Set this mode when the fridge is not going to be used for a prolonged period such as during a long vacation.
- In this mode, the PC temperature is automatically set to 8 °C and the FC temperature is automatically set to -18 °C.

Settings :

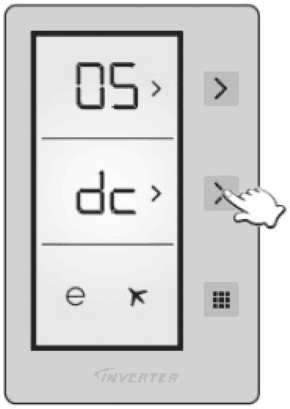
1. Press repeatedly until a circle appears around
2. If no operation is performed for 1 second during the setting process, the circle around flashes and a beep will be heard, indicating that Holiday Mode is set.

- [H] is displayed on the FC temperature display. No indication appears on the PC temperature display
- During this mode, [H] is displayed on the FC temperature display, and a circle is displayed around

Notes:

- Before using this mode, empty out the fridge, and close its door.
- When this mode is ended, the fridge will resume operation with its previous settings.
  - FC and PC can be adjusted. When Holiday Mode is released, the adjustment will be maintained.
  - Super Cool Mode and Super Freeze Mode can be selected. Holiday mode is released automatically, and the selected mode is activated.
  - After releasing Holiday Mode, Eco Mode can be selected, and the selected mode is activated.

7.1.5. Drink Cool Mode



Features :
- Drinks can be cooled quickly in the FC.
- This mode has a timer function, and can be set to beep when the timer reaches 5, 10, 15, 20, 25 or 30 minutes.
- Remove the bottles when the beep is heard. If bottles are left in the freezer for a long time, their contents could freeze and the bottles might break.

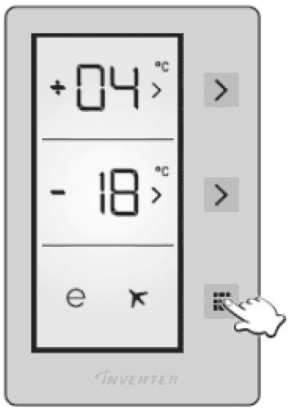
Settings :

1. Press [>] (lower) button for 5 seconds.
2. [dc] is displayed on the FC temperature display and [05] flashes on the PC temperature display.
3. Press [>] (upper) to adjust the time (05-10-15-20-25-30 minutes).
4. The selected time flashes on the display 3 times and a beep will be heard.
5. Countdown by minutes starts from the set time, and the remaining time flashes on the display.

- To release Drink Cool Mode, press [>] (lower) button for 5 seconds.
- When the set time comes, a beep will be heard, and both of the display indication (Example: [00] and [dc]) flash until you press [>] (lower).

Notes:
- When using this mode, check the temperature of the bottles regularly.
- When the bottles have cooled sufficiently, remove them from the FC.

7.1.6. Screen Saver Mode



Features :
- While setting this mode, the backlight of the display can be turned off to save energy.

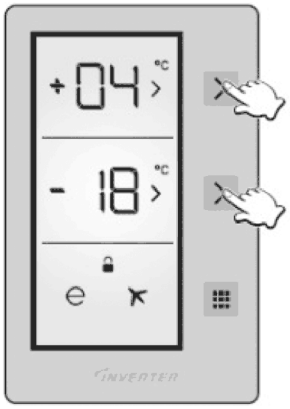
Settings :

1. Press [▦] for 3 seconds to set the automatic Screen Saver function.
2. If no operation is performed for 5 seconds and any door is not opened, the backlight of the display is turned off with all other marks and characters remaining on the display.

- The selected modes and functions are maintained.
- To set the automatic Screen Saver to off and keep the backlight of the display on, press [▦] for 3 seconds.

Notes:
- When the automatic Screen Saver function is set to on and the display backlight is turned off for a while, the display backlight will be turned on again and the set functions are indicated on the display, if any button is pressed or any door is opened.
- When the Screen Saver and Child Lock are set to on, the Screen Saver is activated. Therefore, while both of the functions are activated, the display backlight will be turned on again when any button is pressed or any door is opened.

7.1.7. Child Lock function



Features :

- Setting Child Lock can keep children from changing the settings while playing with the buttons.

Settings :

1. Press [>] (upper) and [>] (lower) for 5 seconds to set Child Lock.

- While Child Lock is set is lit.
- To release the mode, press [>] (upper) and [>] (lower) for 5 seconds.
  You cannot change the mode that is currently set until Child Lock is released.

Notes:

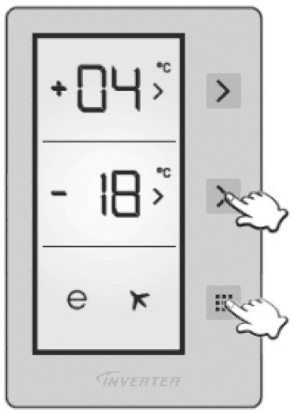
- If electricity is interrupted or the power plug is removed, Child Lock is released.

7.2. Demo Mode

This mode will be use for only sales points by salesman to show functions & modes to customer without operating components as a compressor, fan, motor..Etc

7.2.1. Entering Demo mode:

Demo mode can only be activated within one minute of switching on/plugging in the product



- User will press Freezer Selection button & Mode button at the same time for 5 sec.

Then appliance will go on [demo function] and the [demo symbol] will light during the mode. All functions can be adjusted to show customer how they are adjusted.

During the demo mode to show the alarm symbol , at the 3rd. pushing of the mode button Sr alarm symbol and the [Sr word] on the 7-segment will be active

7.2.2. Canceling Demo mode:

For cancelling; Same operation will be used. If user will push mode & freezer selection button at the same time for 5 sec. demo function will be cancelled.

When appliance is 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.

8 Service Mode

8.1. Entering service mode:

Push FC selection button continuously. During this time, open and close FC door for 3 times. Appliance will enter service mode 3 sec. later.

8.2. During service mode:

- Buzzer will sound beep for 0.1 sec. each 5 sec. during service mode
- Display will show error codes. Symbols will be OFF. And if error is disabled during service mode, error codes will be disabled in display.
- If service man pushes Mode button he will be able to choose functions listed below.
  Functions will be set if service man does not push any other button for 1 sec.
- Service man has 4 functions to select. First 4 push of Mode button will activate symbols.
  Service man will cancel mode selection if he stops pushing button on the 5th push.

1. Push

Starting program

Push one time to mode button Economy symbol in display will blink during mode.

[5] will light when Middle Bracket heater is ON
[4] will light when defrost heater is ON
[3] will light when evaporator fan motor is ON
[2] will light when compressor is ON
[1] will light , no function

As starting program finishes, first symbol will be OFF. Appliance will return to initial service mode reaction.

2. Push

Forced defrost and forced canceling of defrost

Push 2 time to mode button Holiday symbol will blink during mode.
Defrosting mode will start, mode can be canceled manually or automatically.

Manual canceling will be done by pushing PC selection button. Symbol will be OFF if defrost is canceled manually. Appliance will return to initial Service mode reaction.

If manual canceling of this function is not performed in 30 min.
Service mode will be canceled. Appliance will check if defrost is finished in this 30min.
If YES, appliance will go on from previous set values. But if defrost is not finished, appliance will go on defrost till it finishes and then go on from previous set values.

3. Push

Forced opening and forced closing of damper motor

Push 3 time to mode button Super Freezer symbol will blink during mode.
As function is selected damper will be opened if it was closed; it will close if it was opened.

If service man does not reset the function, damper will return to initial condition (open or close) after 5 min Appliance will return to initial service mode reaction.

Manual canceling will be done by pushing PC selection button. Symbol will be OFF as damper motor return to initial condition. Appliance will return to initial service mode reaction.

4. Push

Displaying actual temperatures in compartments

Push 4 time to mode button Super Cooling symbol will blink during mode.
FC number segment will show F and PC number segment will show FCC sensor actual temperature.

If service man pushes FC selection button;
Freezer number segment will show [r] and refrigerator number segment will show PCC sensor actual temperature.

If service man pushes FC selection button again;
FC sensor number segment will show [d] and PC number segment will show DFC sensor actual temperature.

If service man does not push FC selection button in 5 min, mode will be canceled.
Appliance will return to initial service mode reaction
If service man pushes PC selection button, function will be canceled.
Appliance will return to initial service mode reaction.

5. Push Empty. No function is set.

6. Cancelling the service mode

Push FC selection button continuously. During this time, open and close FC door for 3 times. Appliance will exit service mode 3 sec. later.

8.3. Display sign list

SENSOR	TEMPERATURE	USER MODE REACTION	SERVICE MODE REACTION
(1) Freezer (FCC)	> +50°C or < -50°C (sensor is short or open)	Display Sr (blinks) in FC number segment Sr Symbol blinks Set PC segment OFF till error is finished.	Display FE 01
(2) Refrigerator (PCC)	> +50°C or < -50°C (sensor is short or open)		Display FE 02
(3) Defrost (DFC)	Short (< 100Ω) or < -50°C		Display FE 03
(4) AT sensor (ATC)	Short or < -30°C		Display FE 04
Breakdown of (1) and (2)			Display FE 12
Breakdown of (1) and (3)			Display FE 13
Breakdown of (1) and (4)			Display FE 14
Breakdown of (2) and (3)			Display FE 23
Breakdown of (2) and (4)			Display FE 24
Breakdown of (3) and (4)			Display FE 34
Breakdown of (2) and (3) and (4)			Display FH 01
Breakdown of (1) and (3) and (4)			Display FH 02
Breakdown of (1) and (2) and (4)			Display FH 03
Breakdown of (1) and (2) and (3)			Display FH 04
Breakdown of all sensors			Display FU 00

DEFECT TYPE	DETAILS	USER MODE REACTION	SERVICE MODE REACTION
Compressor Defect	DFC sensor temp > -10°C (DFC sensor temp.unchanges for 10 min.continuous compressor run)	Display Sr (blinks) in FC temperature display and Set PC temperature display OFF till error is finished.	Display FO 05
Defrost Heater Defect	DFC sensor < 0°C		Display FO 06

DEFECT TYPE	DETAILS	USER MODE REACTION	SERVICE MODE REACTION
Low Voltage	Power supply < 170V	FC temperature display shows LO RC temperature display	Display LO PO

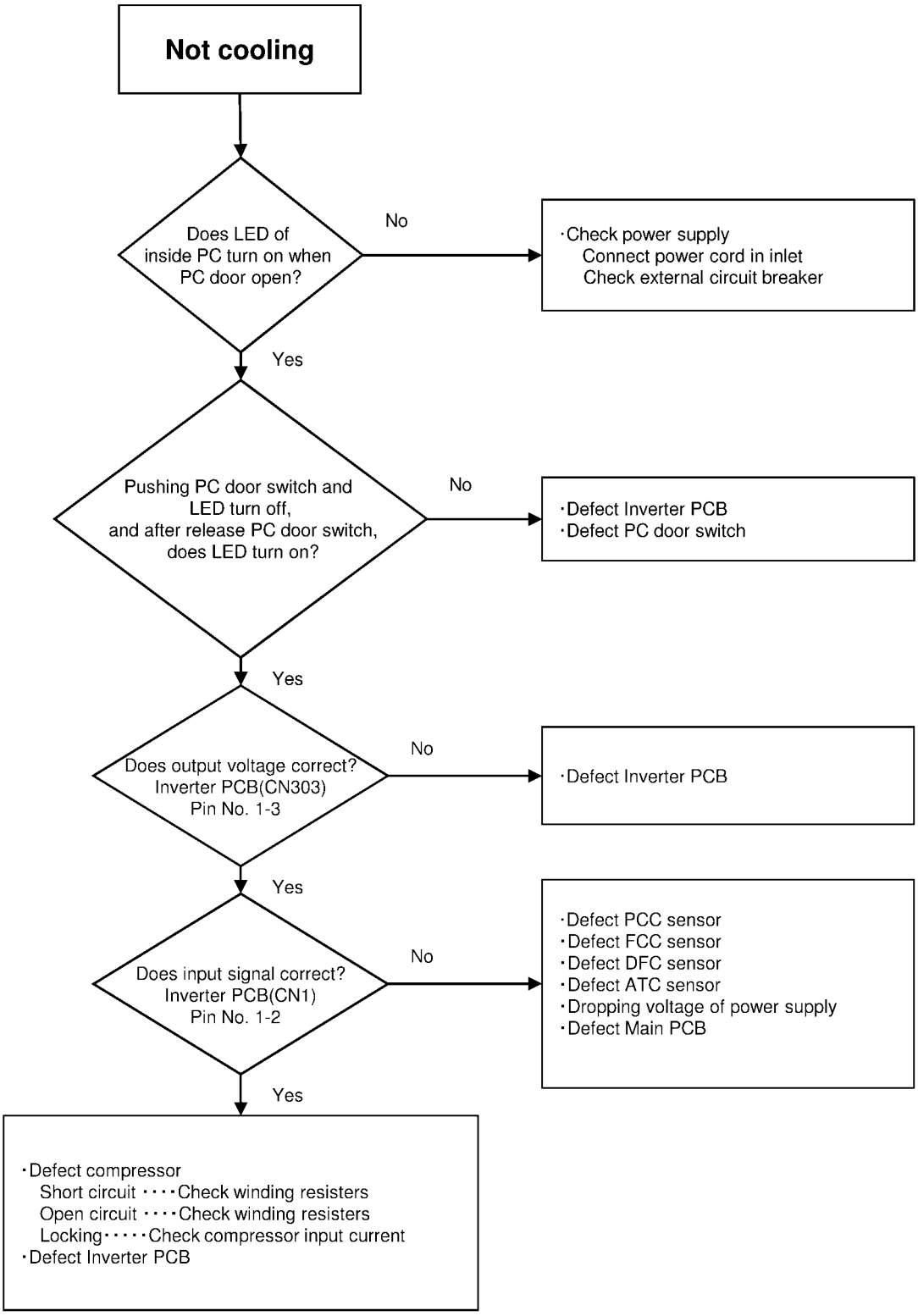
ERROR	DETAILS	USER MODE REACTION	SERVICE MODE REACTION
FCC sensor > -10°C	FC is not cool enough	FC temperature display LF blinks till error finishes	Display CO 01
PCC sensor > +20°C and if Holiday mode is not active	PC compartment is warm	PC temperature display LC blinks till error finishe	Display CO 02
PCC sensor < -5°C	PC is too cool	PC temperature display HC blinks till error finishes	Display CO 03
FCC sensor > -10°C and PCC sensor > +20°C and if Holiday mode is not active	FC and PC both are not cool enough	FC temperature display LF blinks and PC number segment LC blinks	Display CO 04

Summary of Error Codes

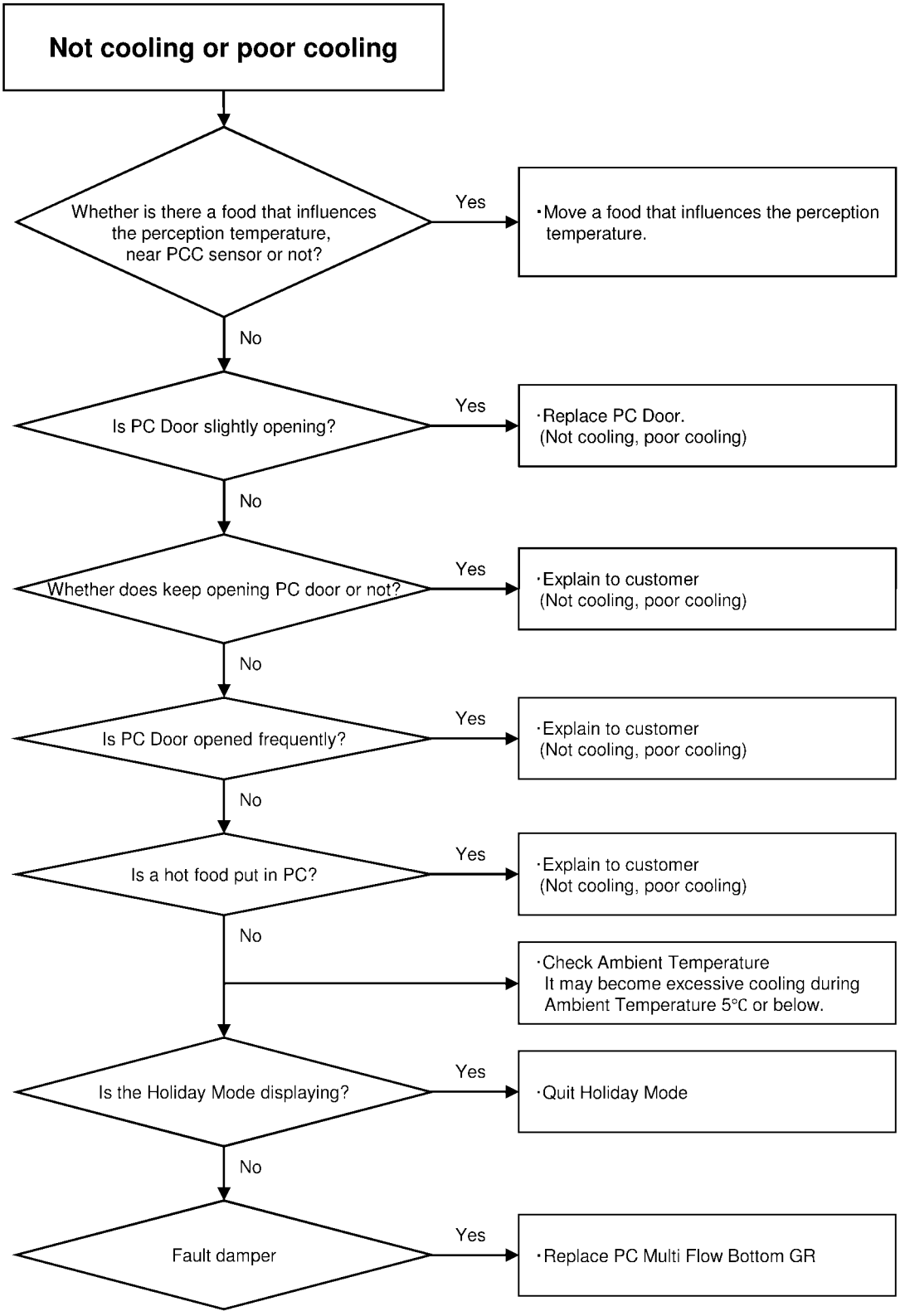
	USER MODE REACTION	SERVICE MODE REACTION
Compressor Defect	Sr	FO 05
Defrost Heater Defect	Sr	FO 06
Sensor Defect (Short-Open)	Sr	F* **
FCC sensor > -10°C and PCC sensor > +20°C	LF and LC	CO 04
FCC sensor > -10°C	LF	CO 01
PCC sensor > +20°C	LC	CO 02
PCC sensor > -5°C	HC	CO 03

9 Troubleshooting Guide

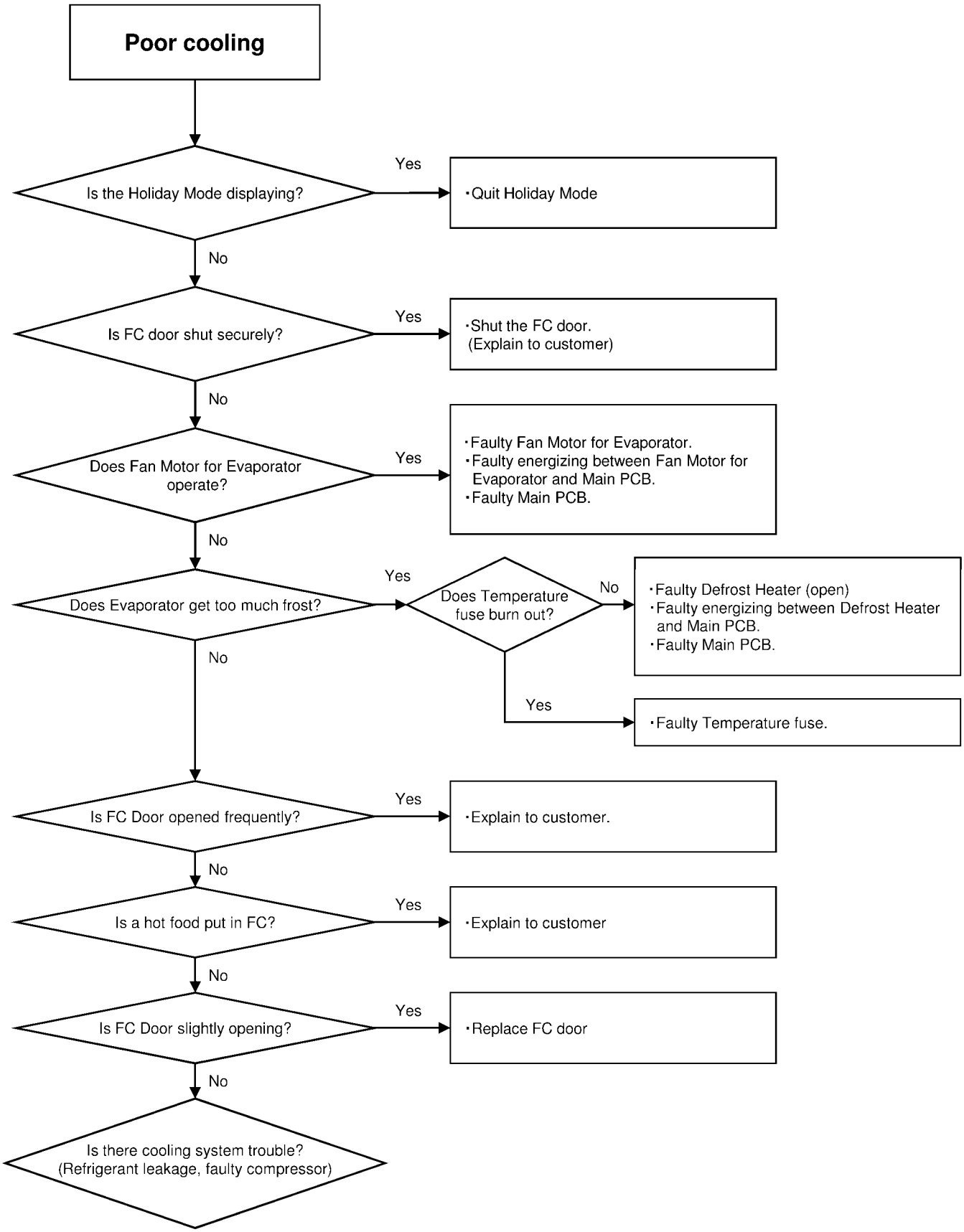
9.1. Not cooling at all [Both PC & FC (compressor does not operate)]



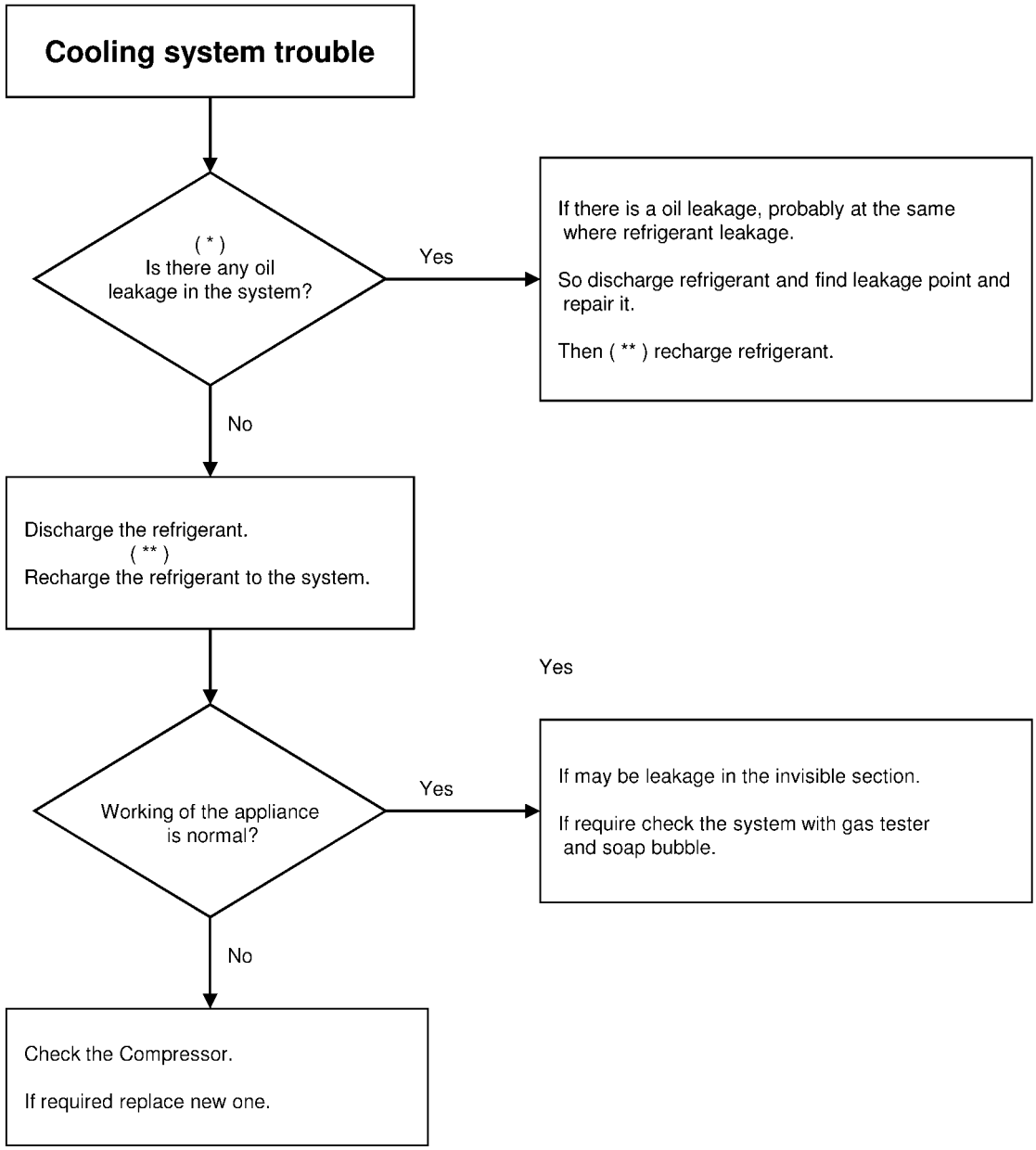
9.2. PC is not cooling or poor cooling. [FC cooling condition is normal]



9.3. FC is not cooling. [Compressor operate]



9.4. Cooling system trouble.



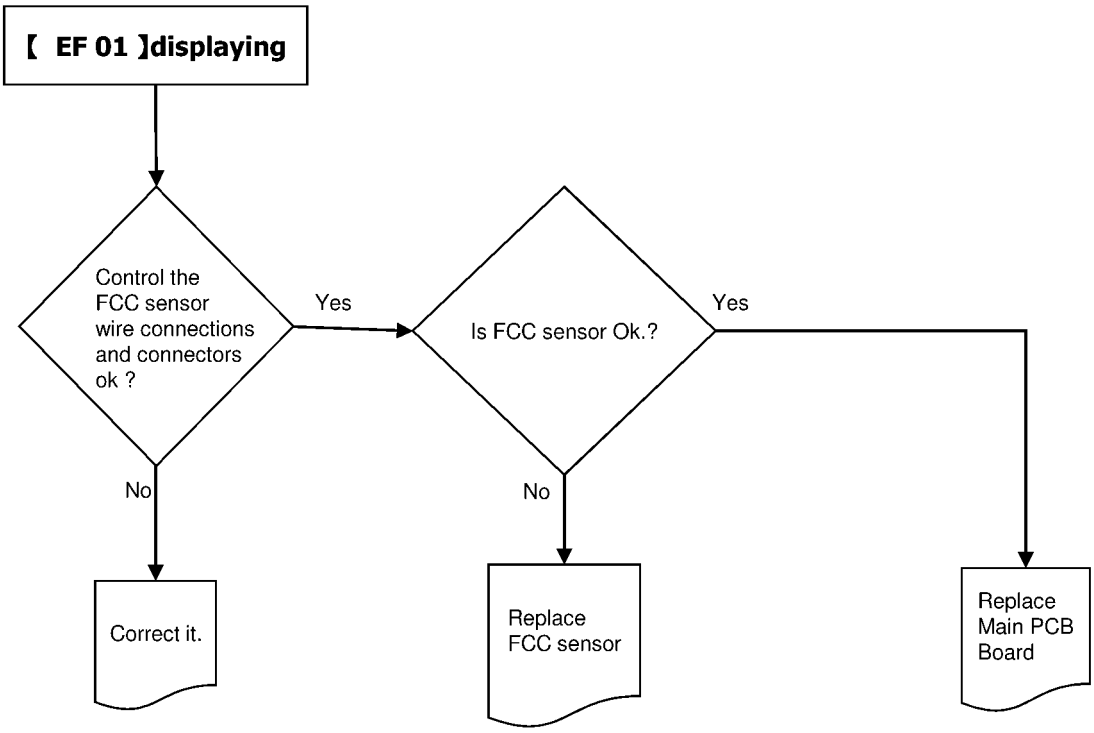
(*) Check all of the visible pipes and welding points against oil leakage.

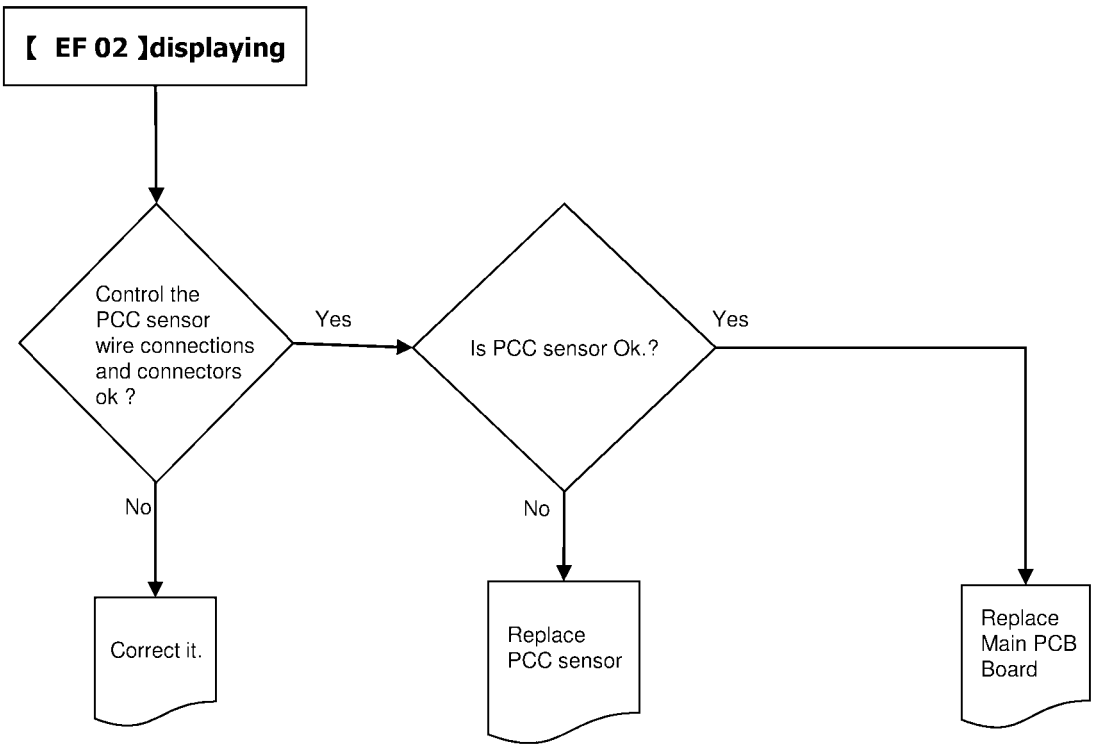
(**) Before recharging the refrigerant to the system; Dryer must be replaced and at least 30 minutes vacuum must be done.

(***) The three-phase motor is used for this compressor , Individual wire resister are as follows.

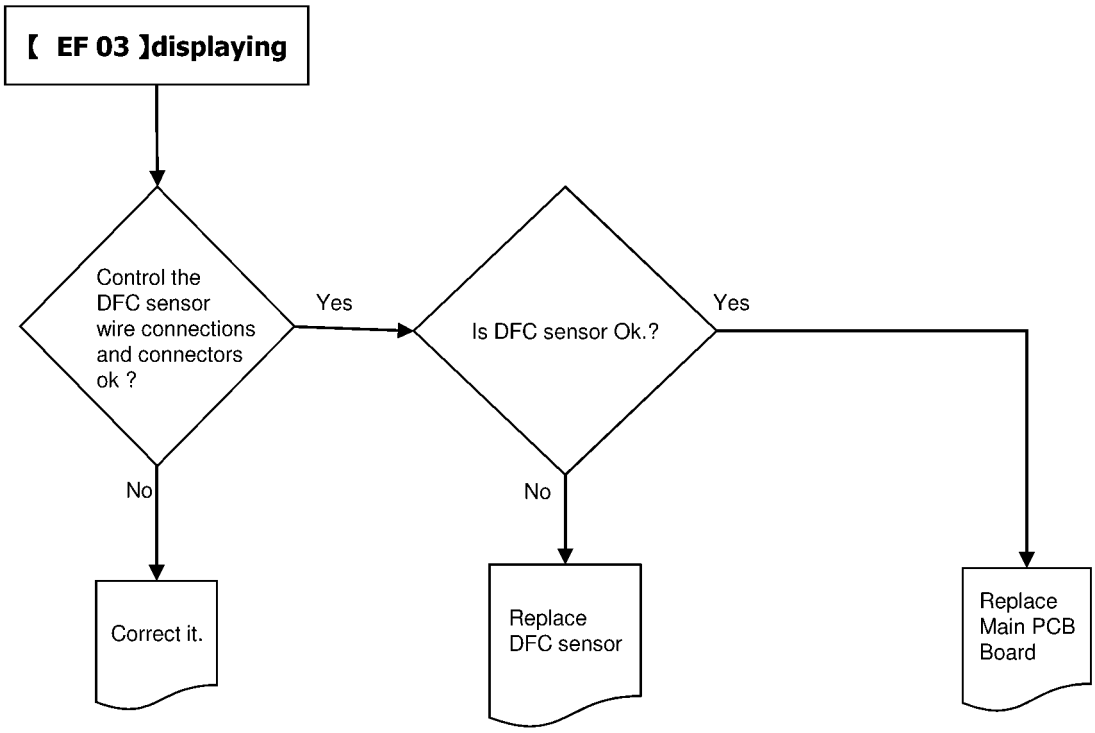
U - W : 7.2Ω U – V: 7.2Ω V – W: 7.2Ω

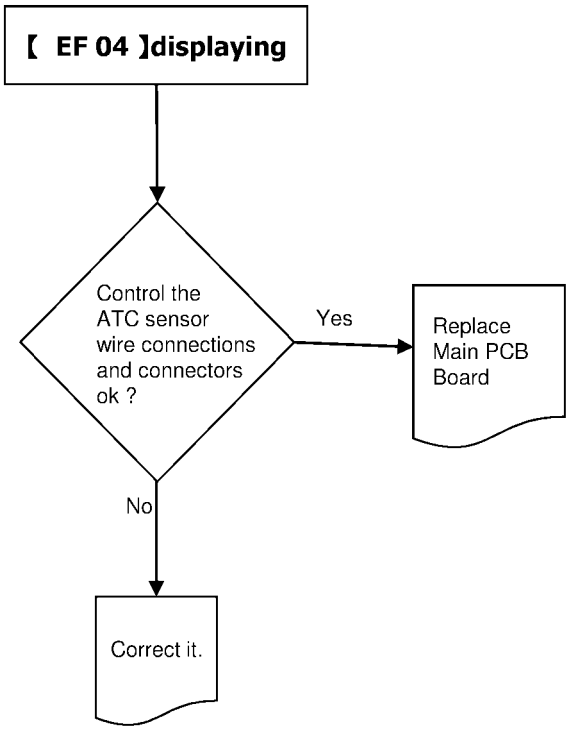
9.5. Temperature sensor trouble.





9.6. Temperature sensor trouble.

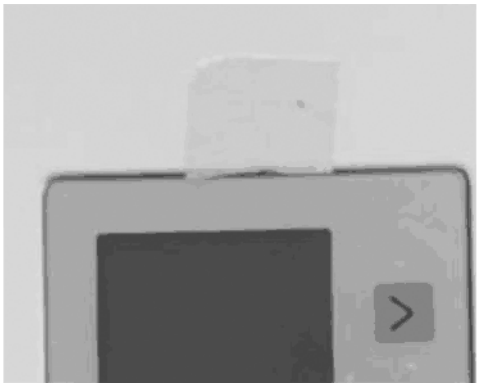




10 Disassembly and Assembly Instructions

10.1. Replacement of Display

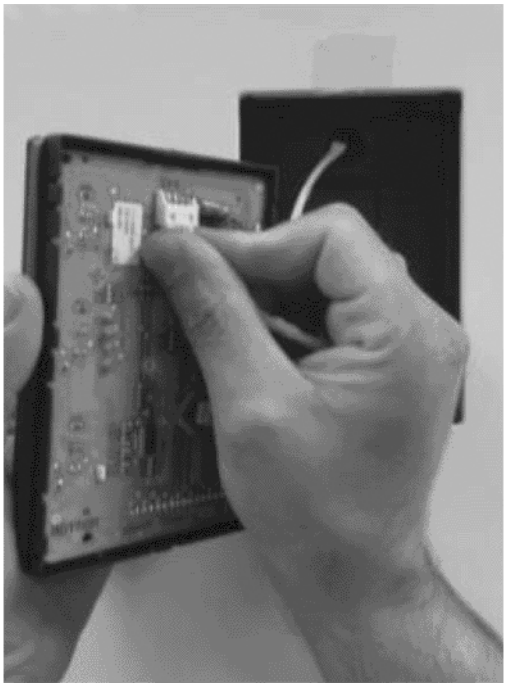
1. First, stick a tape on the corner of display to prevent any scratches.



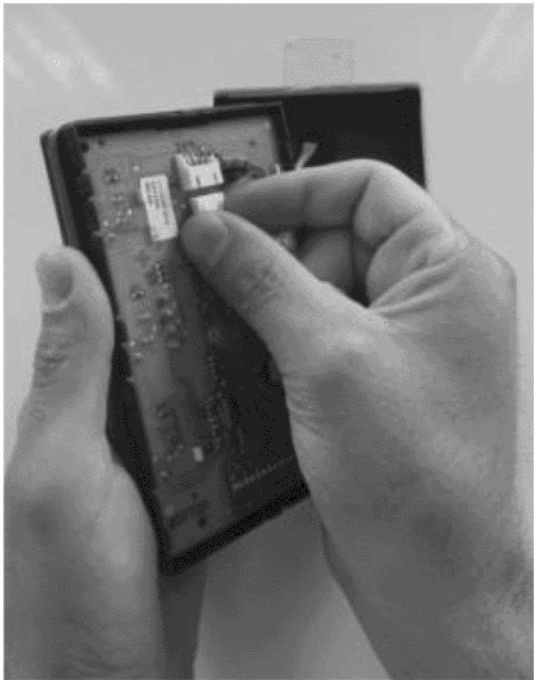
2. Take out the display panel cover by using a sharp/thin tipped tool.

3. Try to stretch it from one side, then remove it with your hand by pulling forward.

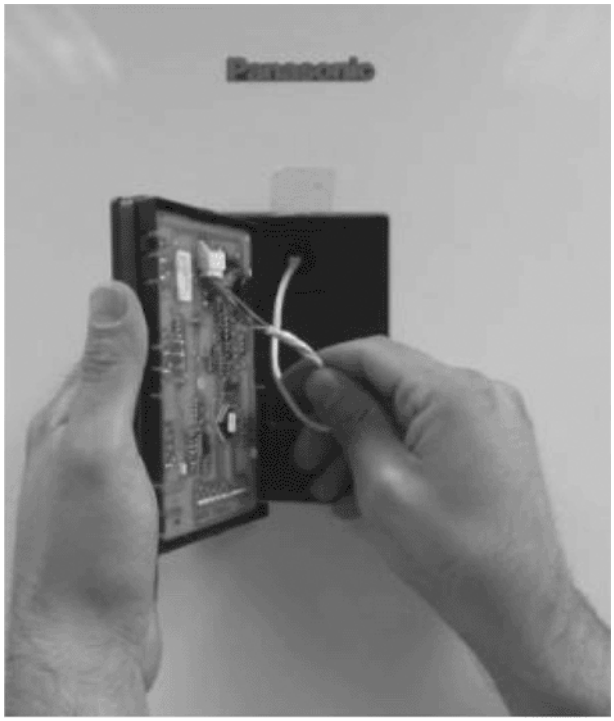
4. Take out the socket from the connector and remove the display panel assy.



5. Connect the sockets to the new display.



6. Tidy up the cables before placing the display to prevent jamming.

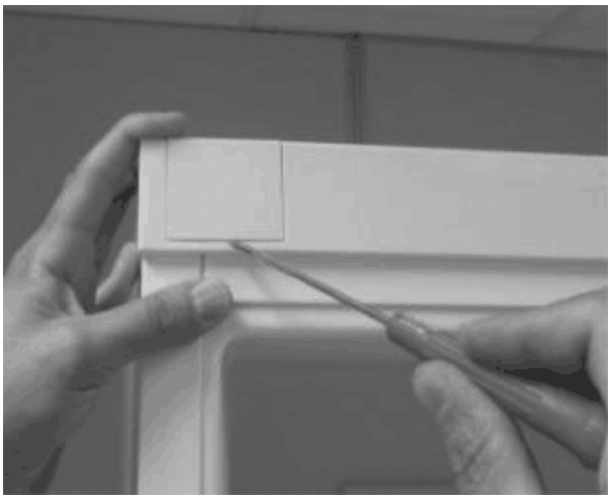


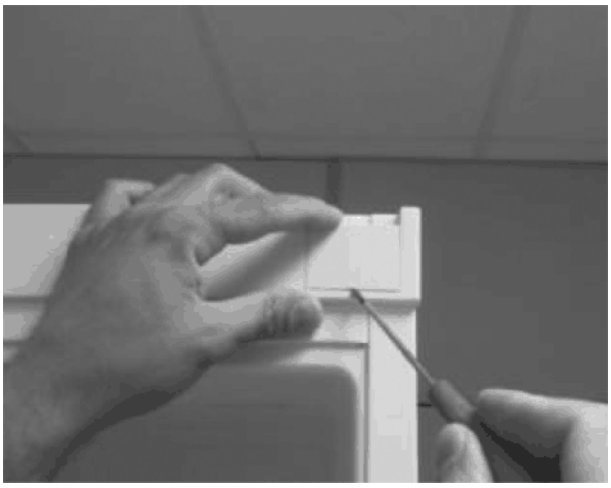
7. Place the display and press gently from upper and bottom corners to fit inside the display housing.

10.2. Replacement of Head Panel Group and Main PCB

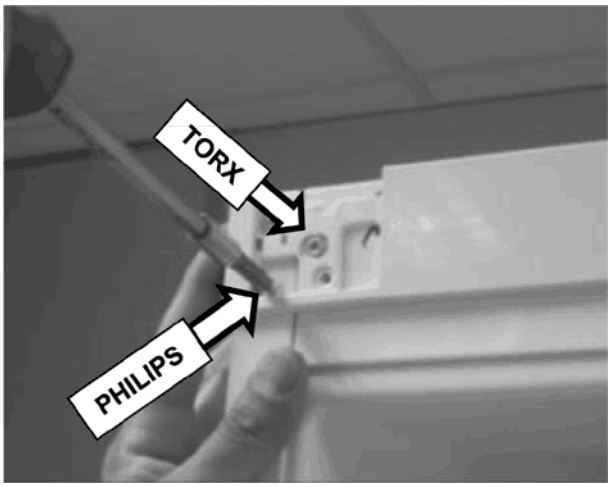
Note: Remove Refrigerator Door beforehand. (See the door way change section)

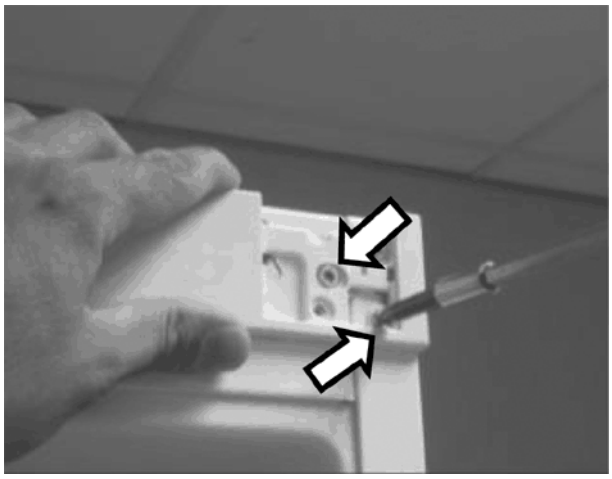
1. Remove the head panel right cover and left cover.





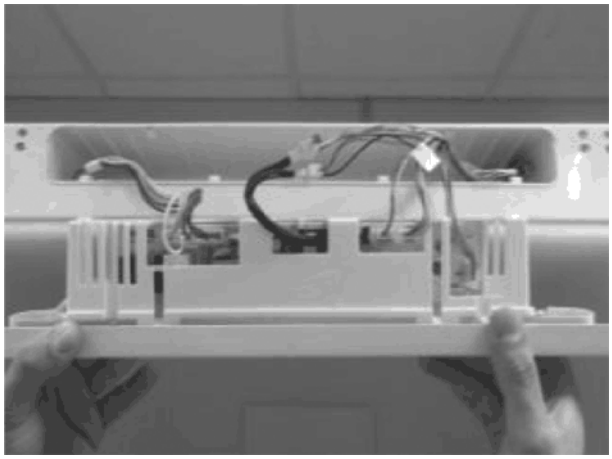
2. Unscrew the screws fixing the head panel.
   Use an appropriate screw driver head (torx)

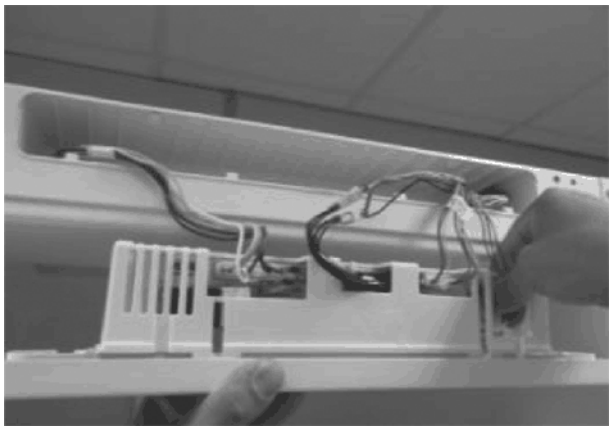


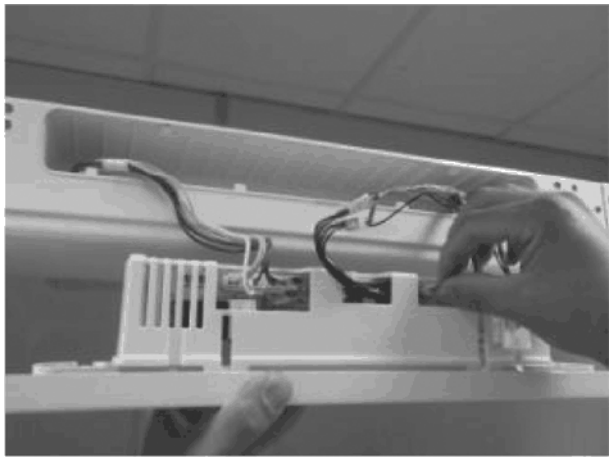


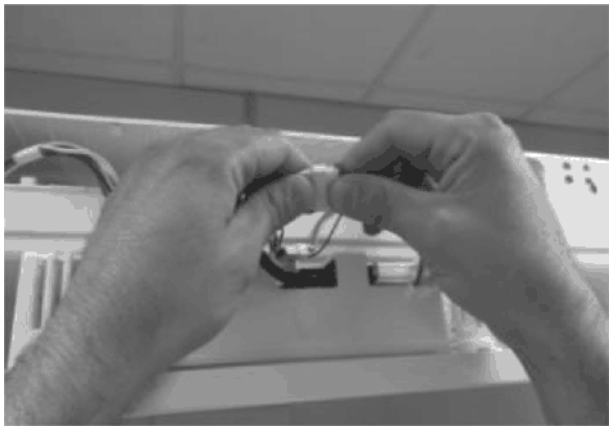
3. Remove the head panel.

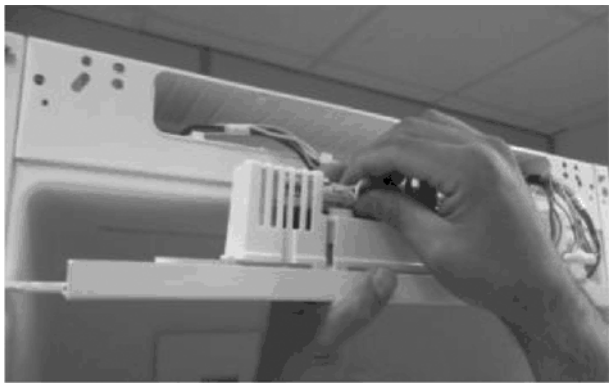
4. Disconnect all socket connections.



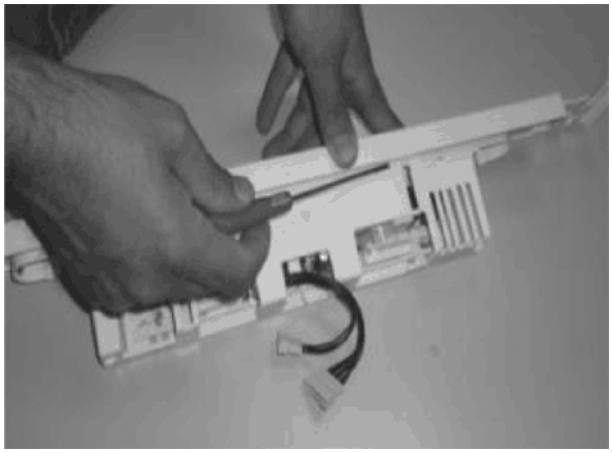


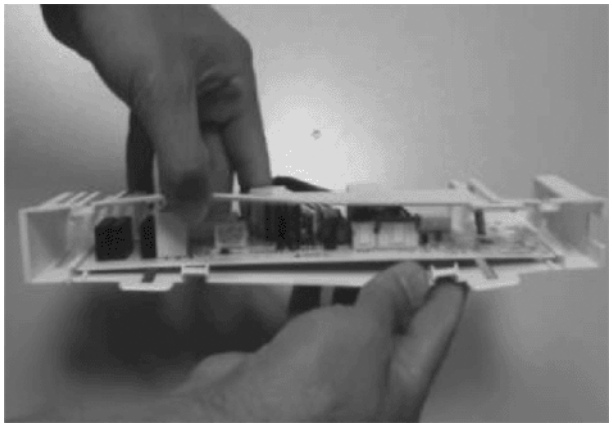




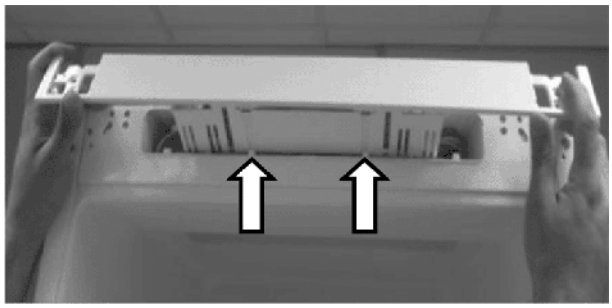


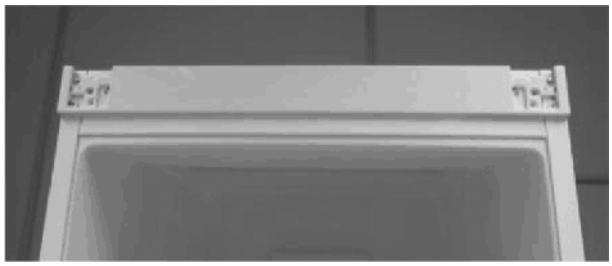
5. Remove the main PCB box and take out the main PCB.





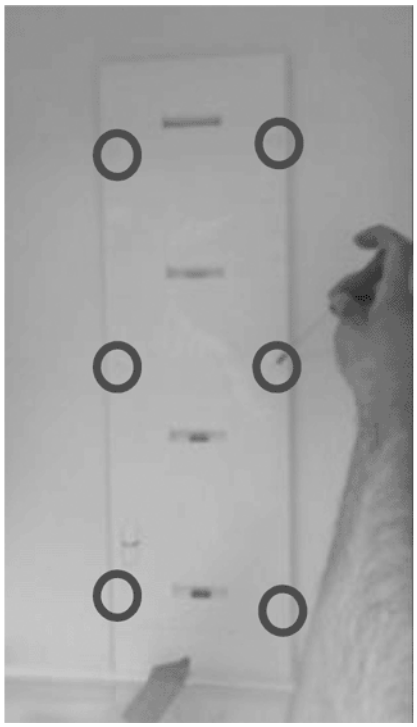
6. After changing the main PCB insert the new one into the main PCB box and make the connections then mount them to the head panel. Mount the head panel to the panel housing.





10.3. Replacement of PC Upper Multiflow & PCC sensor

1. First remove the glass shelves and bottle holder, then remove PC multiflow caps and unscrew the screws.
   Note: There are 6 caps and screws for model NR-B32 and 4 caps and screws for model NR-B29



2. Then pull multiflow cover slightly from the right side.

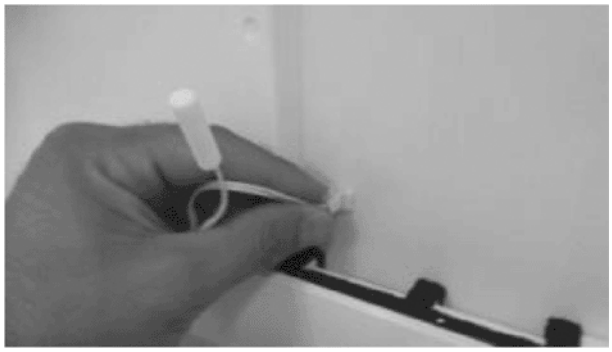
3. Take out the PCC sensor from the holders at the cover.

4. Pull multiflow styrofoam slightly from the left side.

5. Take out the putty from the socket housing.

Note: Keep putty for re-sealing the connectors after replacement.

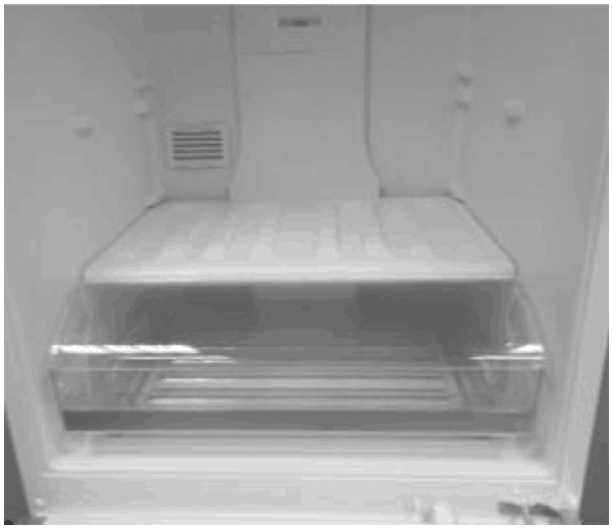
6. Take out the sockets and replace the PCC sensor & Multi-flow group.



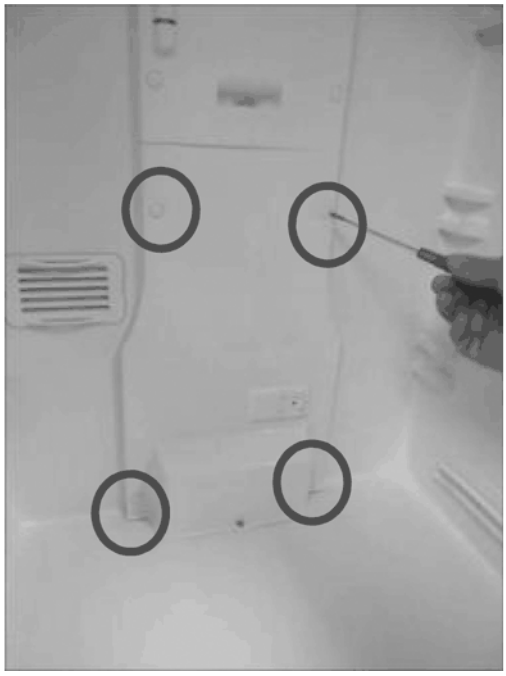
Reseal the putty and place the styrofoam into its place, also place the PCC sensor to its holder at cover and close the cover. Then fix the screws and place the caps.

10.4. Replacement of PC Bottom Multiflow (including the dumper motor)

1. First Remove the crispers, crisper shelf,chiller cover and chiller.



2. Remove PC bottom multiflow caps (4) and unscrew the screws(5).



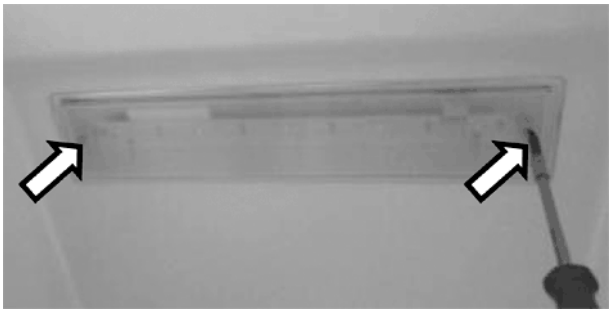
3. Pull multiflow bottom group slightly from the left side.

4. Take out the putty from the connector housing and remove the resistance socket and dumper socket. Replace the sensor & Multiflow group.
   Note: Keep sealing material for re-sealing the connectors after replacement.

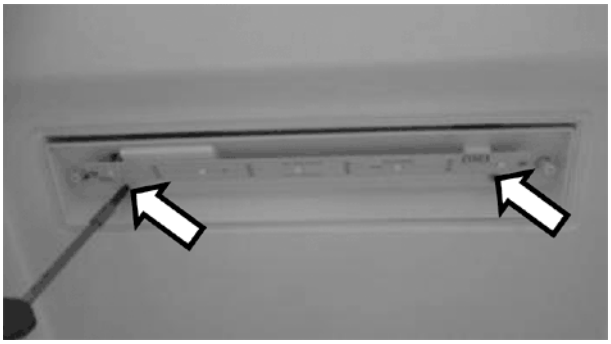
   Reseal the putty and place the multiflow group into its place, Then fix the screws and place the caps.

10.5. Replacement of PC LED

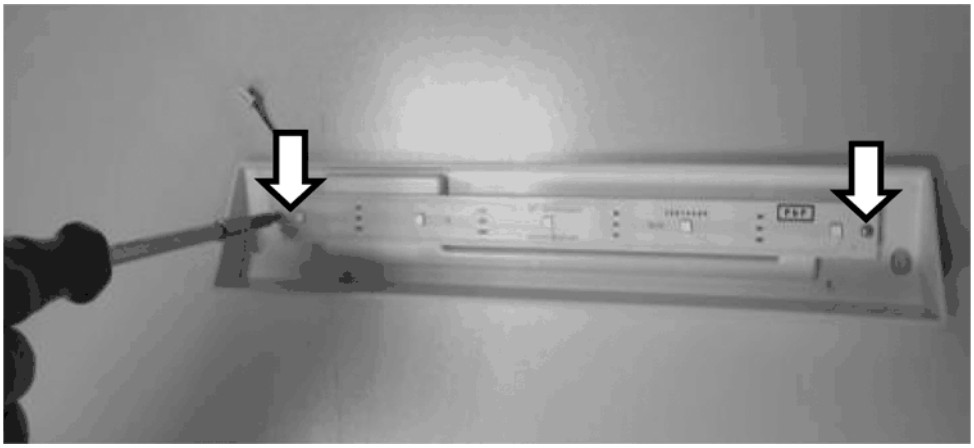
1. Unscrew the 2 screws fixing the PC LED cover and remove it.



2. Unscrew the 2 screws fixing the PC LED box and take out the connector and remove the box.

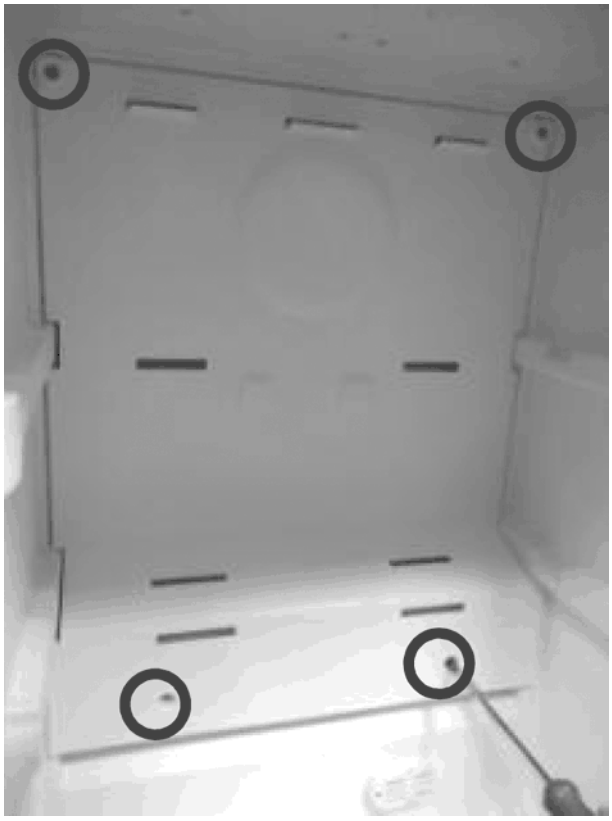


3. Unscrew the 2 screws fixing the PC LED and replace it.



10.6. Replacement of FC Multiflow Cover

1. Remove 4 caps and unscrew the 4 screws shown at the picture.



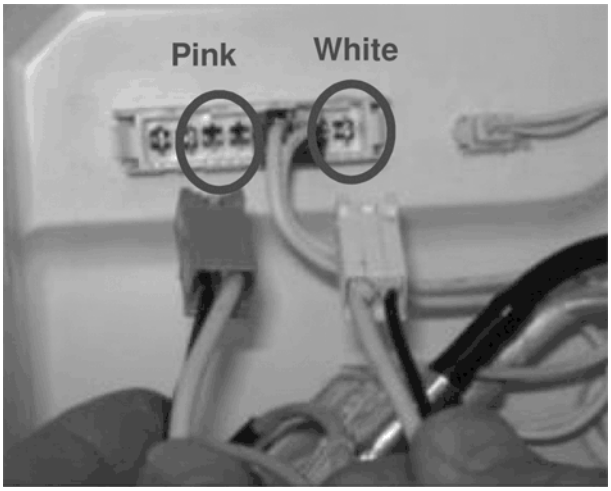
2. Then pull first part of multiflow cover slightly from the top.

3. Then remove the one screw.

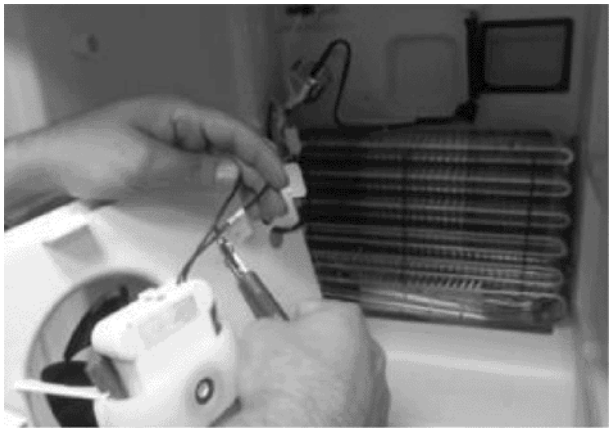
4. Then pull second part of multiflow cover slightly from the bottom and rotate to the left side
   (In case of icing between cover and evaporator, do not pull the cover with full force, slightly shake the cover to brake the icing then pull.)

5. Watch out the fan motor cables go through the multiflow. Remove the sealing material (putty).
   Note: Keep sealing material for re-sealing the connectors after replacement.

6. Remove the sealing material (putty) at left housing. Then pink and white connector can be seen in one housing. Black leaded wires are connected with fan motor. Disconnect the fan motor connectors.



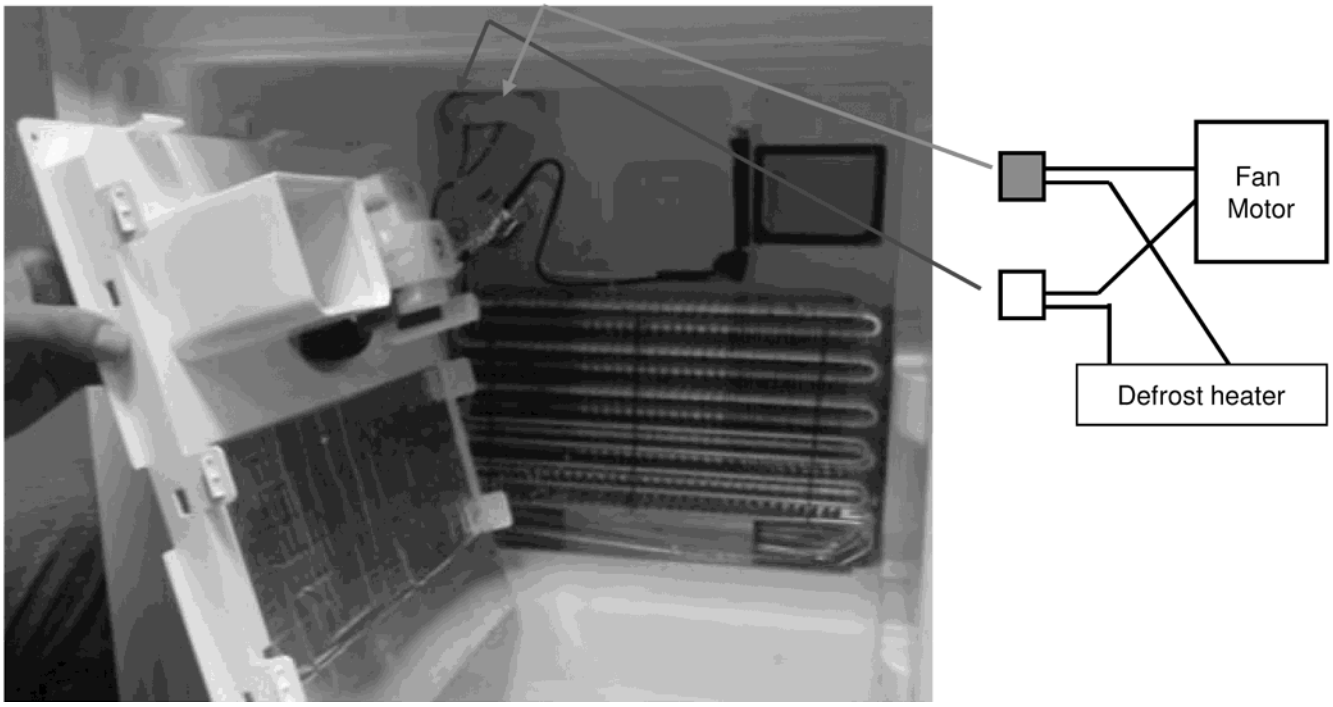
7. Cut both the black lead wires which comes from white and pink color connectors.



Replace the multiflow cover with new one, follow the steps for fan motor cable connections which described at next part. Then close the cover parts and fix the screws respectively.

Important Notice for F/M & Heater connection

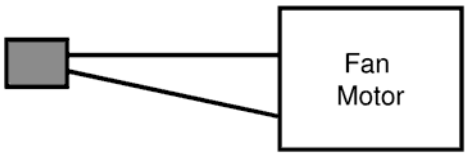
Wiring Connection



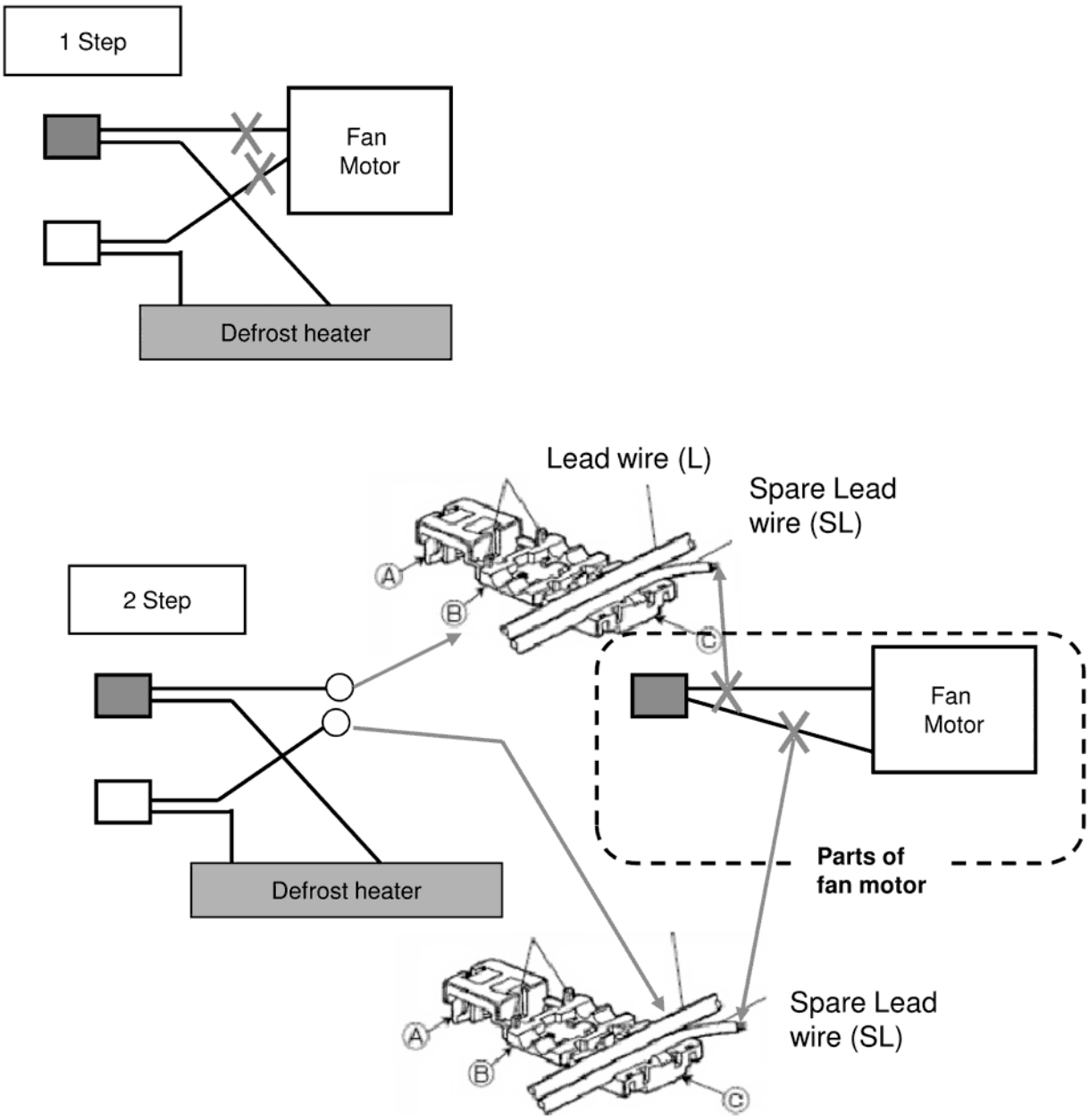
Connecter housing is fixed on the surface of inner liner (Can Not change).
To avoid short-circuit (tracking) by moisture, L side and N side should Not be jointed with one connecter. That is the reason of above connection.

Parts of fan motor

with connectors for both L & N
with lead wires (black) for fan motor



How to replace fan motor (Summary)

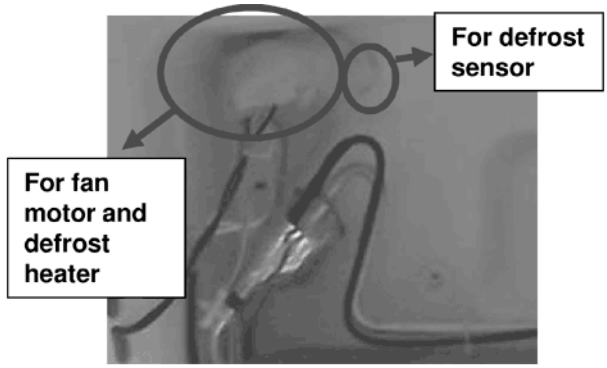


10.7. Replacement of FC Fan Motor

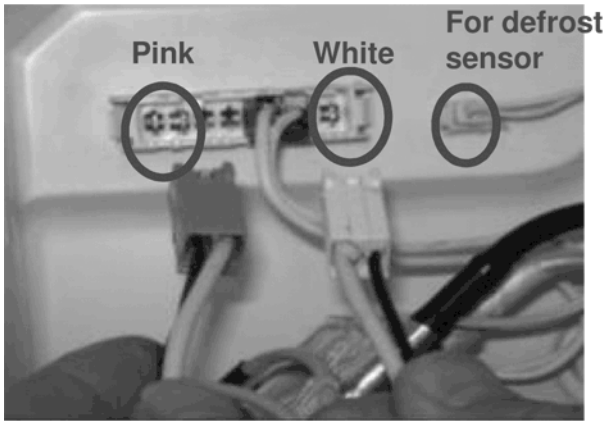
Warning: Make sure the unit is unplugged.

First you should open the multiflow cover as described at previous sections

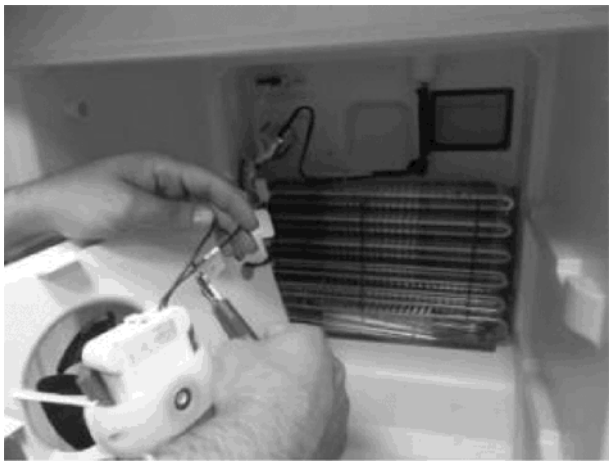
1. There are two housing at upper left corner in freezer compartment.
   Left housing (bigger): For fan motor and defrost heater.
   Right housing (smaller): For defrost sensor.



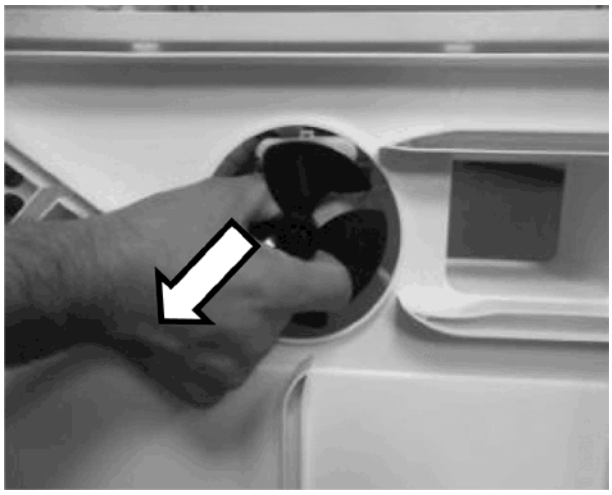
   Note: Keep sealing material for re-sealing the connectors after replacement.
2. Remove the sealing material (putty) at left housing. Then pink and white connector can be seen in one housing. Black leaded wires are connected with fan motor. Disconnect the fan motor connectors.



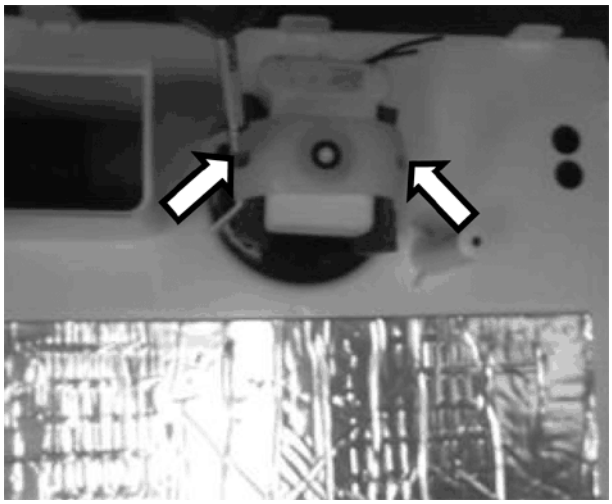
   Note: To disconnect the connectors pull Them to the down to release the tabs on connectors.
3. Cut both the black lead wires which comes from white and pink color connectors. Faulty fan motor can be removed from the multiflow cover.



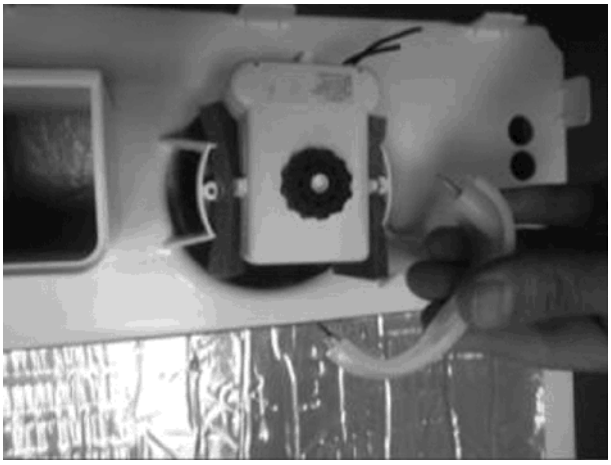
   Note: Cut the cables from a closer point to fan motor, so you have longer cables when you connect the new fan motor.
4. Remove the propeller by pulling forward.



5. Unscrew the two screws fixing the fan motor.

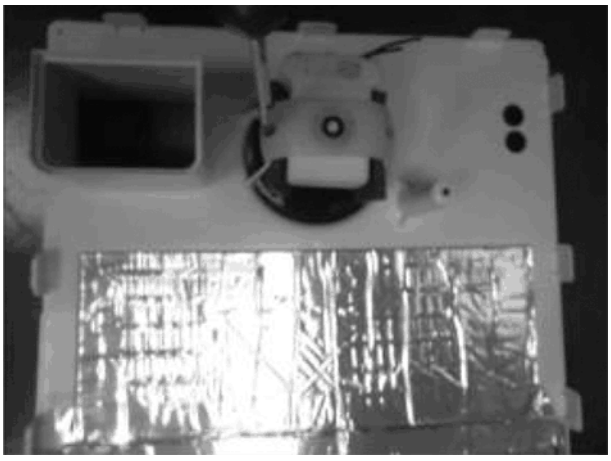


6. Take out the fan motor holder and remove the fan motor from it's place.

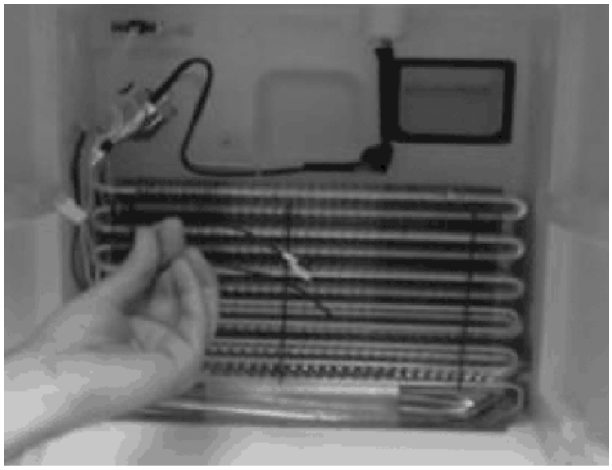


7. Cut off the pink connector socket coming with the spare part.

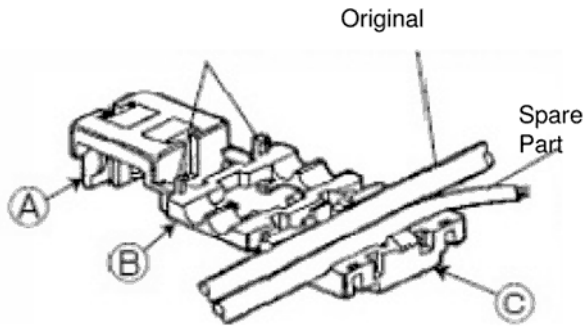
8. Place the new Fan motor and screw the fan motor to its place.

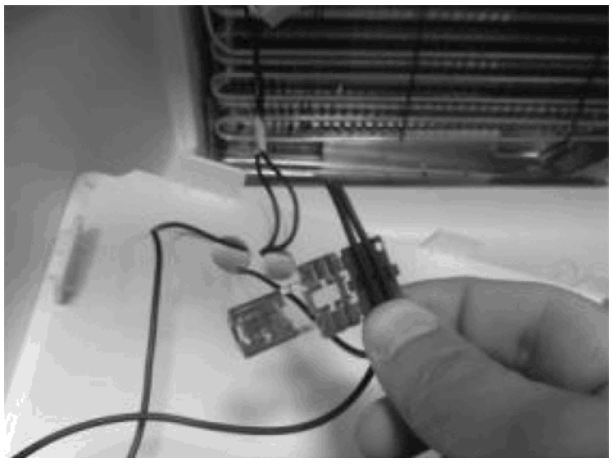


9. Pick up the black cables coming from connectors.

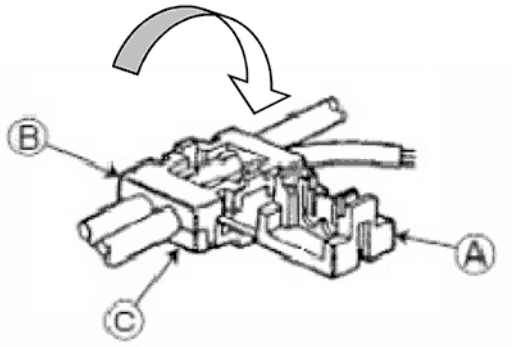


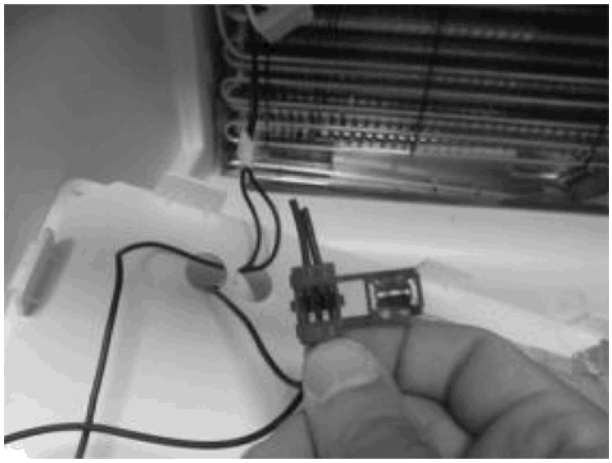
10. Place the lead wire (L) to be connected and the spare (LS) lead wire in the grooves of part C. Head of lead wire and of spare parts should protrude for approx. 2 - 3 cm beyond U-CONNECTOR. This is to prevent the lead wire from coming off.



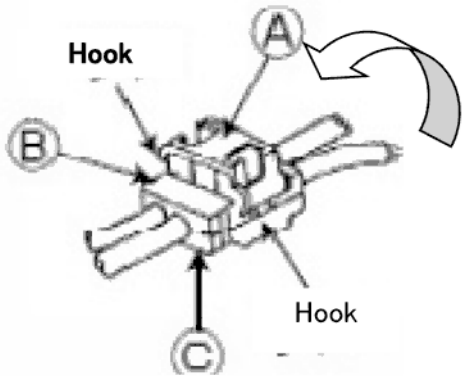


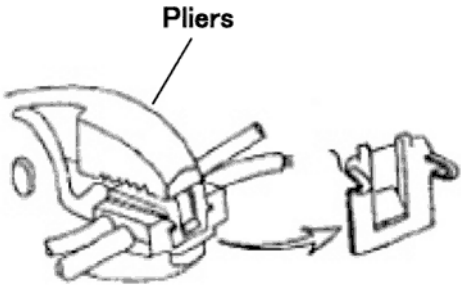
11. Fold part B onto part C until hook at part B is fixed.

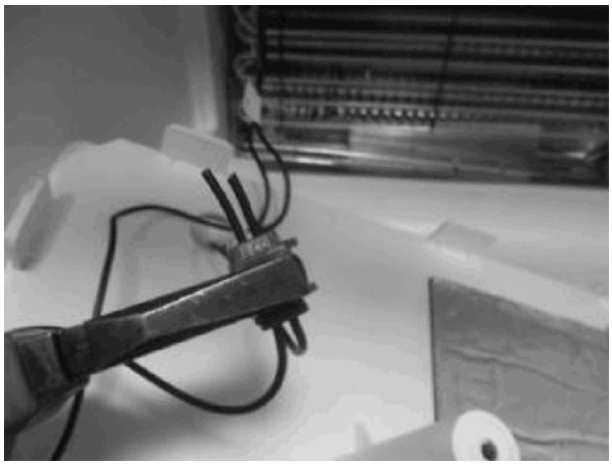




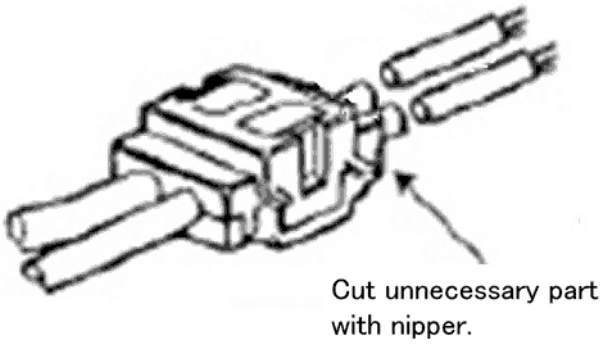
12. Fold part A onto part B. Both left hook and right hook at part A should be fixed tightly by pressing with a pliers.

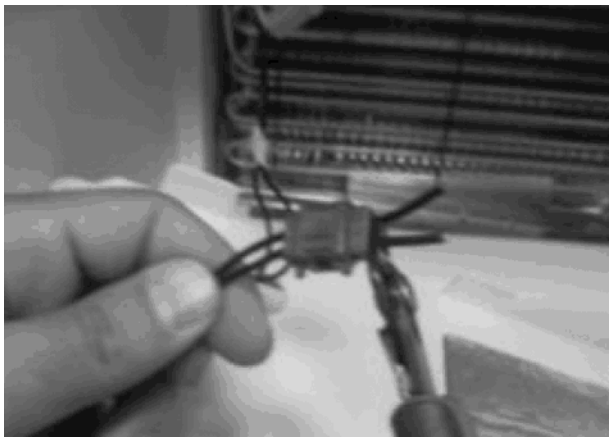




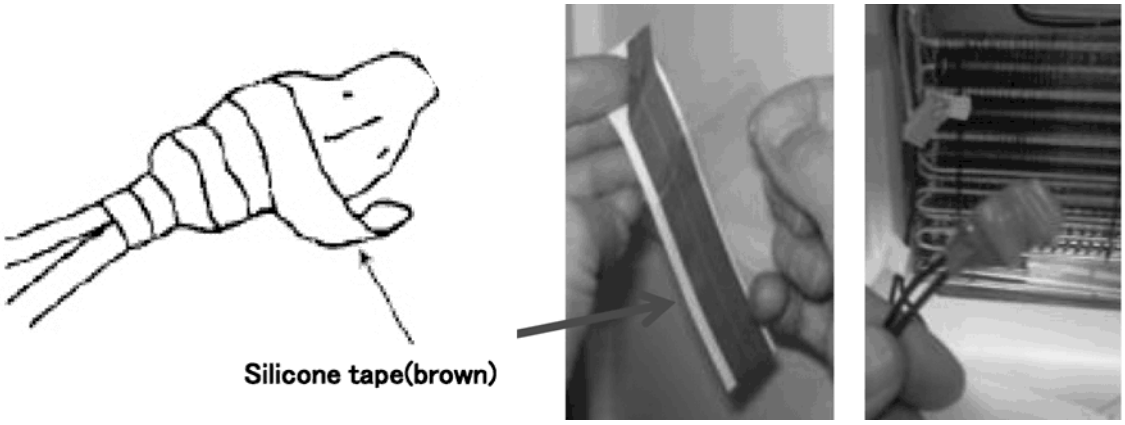


13. After connecting the two lead wires, cut the edge of lead wires using a cutter.

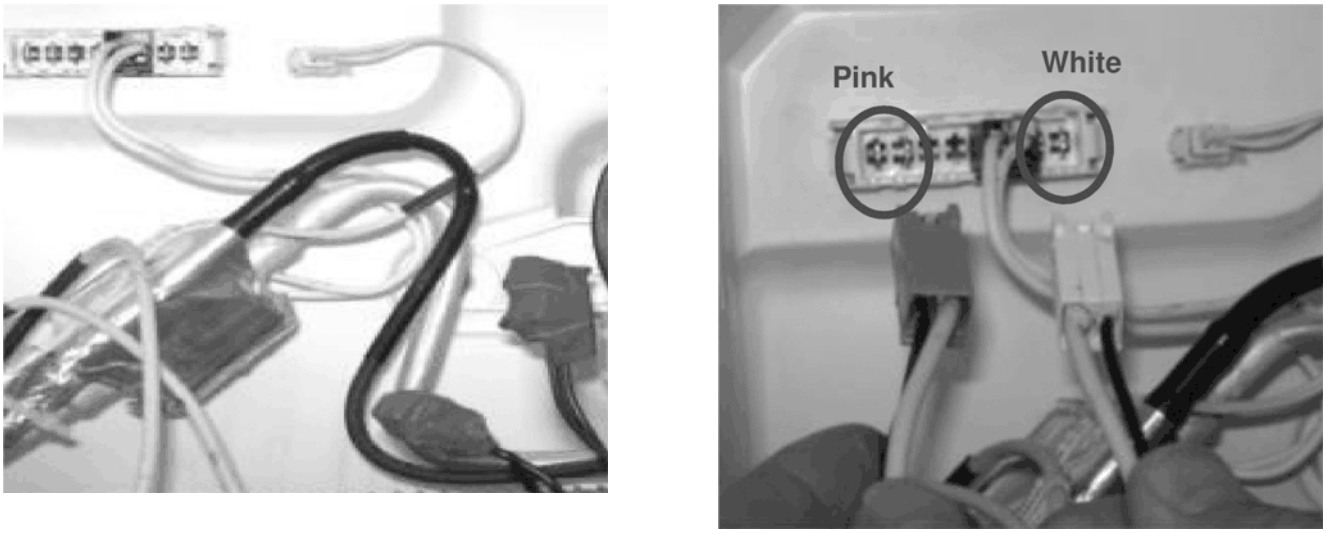




14. Wrap the U-CONNECTOR with silicon tape (brown color)



15. After connecting both cables with U-CONNECTOR, Connect the pink and white connectors to the housing.



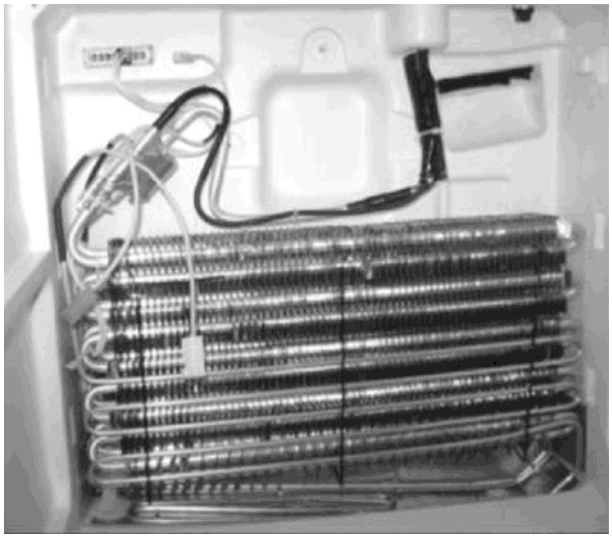
16. Re-seal the housing with sealing material.(putty)

10.8. Replacement of Fin Evaporator Assy.

Warning: This process needs gas deflation, gas re-charging and welding processes so its need to be done by trained professionals.
Instructions of gas deflation, gas re-charging and welding processes will be given at appendix as a separate presentation.

Warning: Make sure the unit is unplugged.

1. First remove the airflow cover, take out the fan connectors, cut off the fan connections (black cables) and remove the fan motor box from its place as told in [Fan motor replacement]section before.



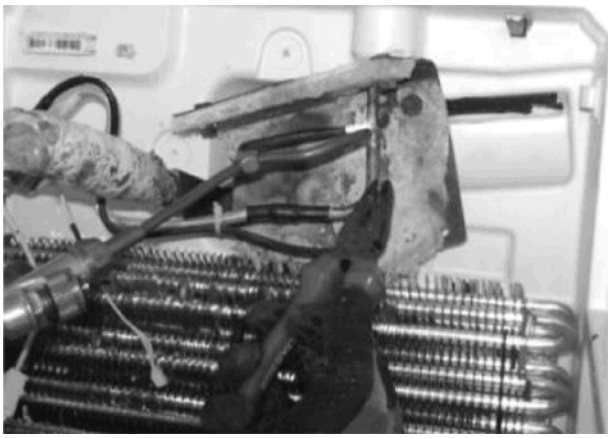
Note: To disconnect the connectors pull them to the down to release the tabs on connectors.

2. Cut off the cable tie ant remove the bitumen covering the tubes.

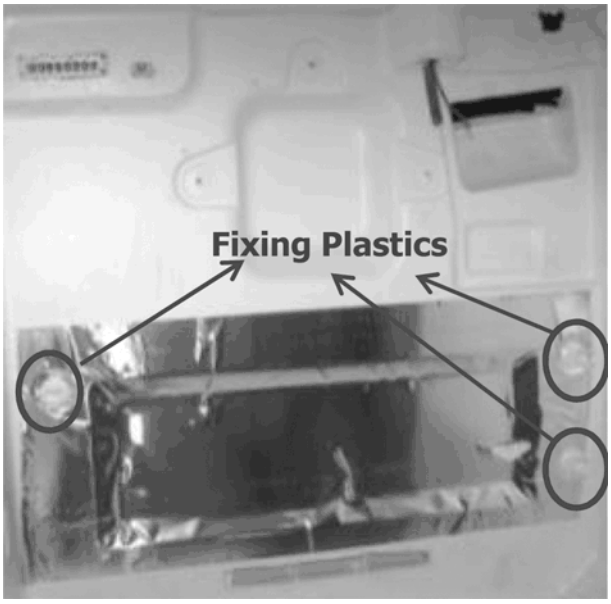
Note: Keep bitumen for re-sealing the tubes after replacement.

Warning: Before cutting the tube follow the Instructions of gas deflation, gas re-charging and welding given at appendix and make sure the gas is evacuated.

3. To take out the evaporator, tubes need to be cut with oxygen welding.
Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.

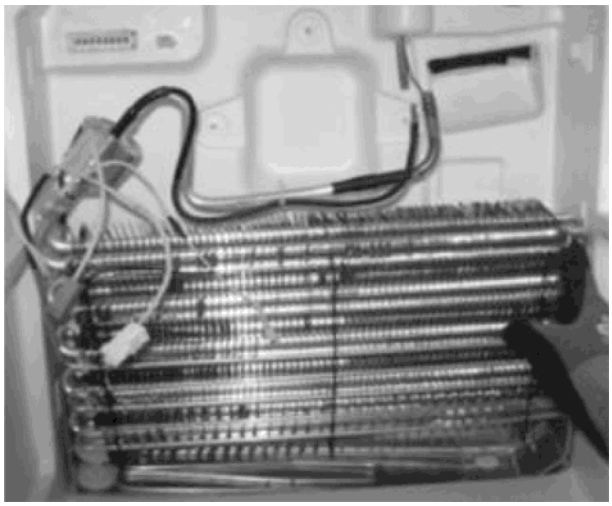


4. Remove the evaporator by pulling forward in a horizontal direction. Do not push it up or down. You may broke the fixing plastics.

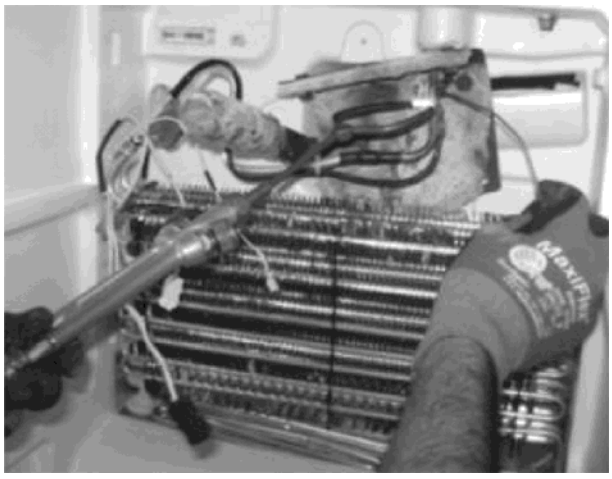


Warning: Operator should certainly wear gloves during evap replacement.

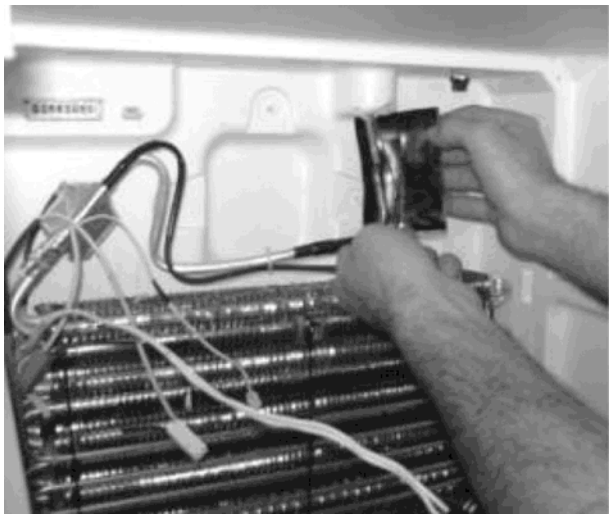
5. Place the new Evaporator Assy. to its place, when fixing the Evaporator Assy. press it horizontally otherwise you might damage the fixing plastics.

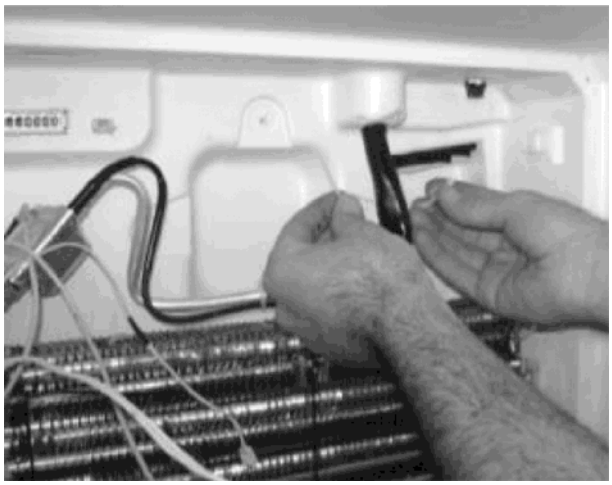


6. Weld the pipes with oxygen welding.
   Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.



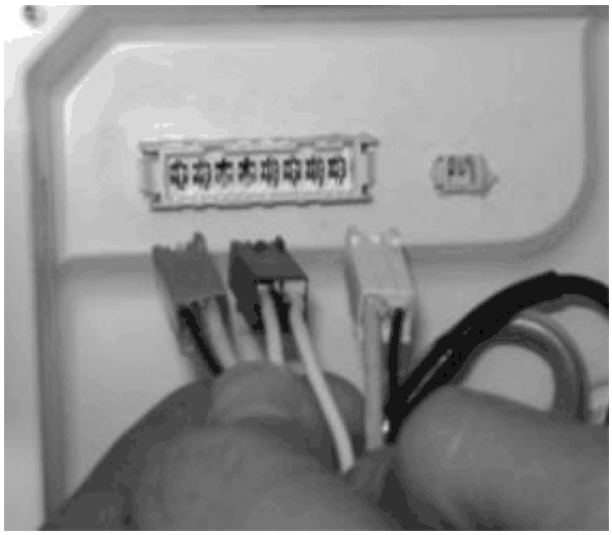
7. Seal the welding point with bitumen (after they cooled down) and tie with cable tie.

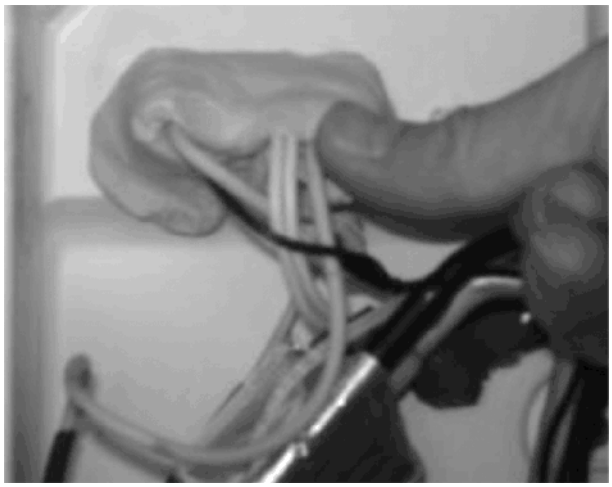




After welding process mount the fan motor box and make its connections with U-CONNECTOR as told in Fan Motor replacement section.

8. Re-connect all the connections and re-seal the housing with putty. Tie the cables with cable tie and close the airflow cover. (as told in previous sections)





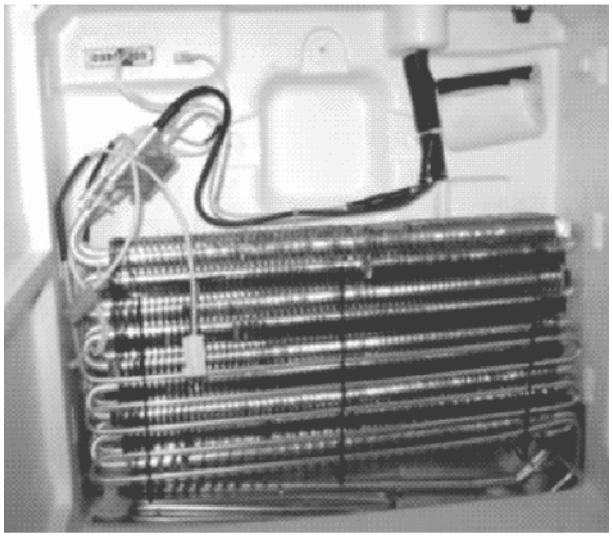
Warning: This process needs gas deflation, gas re-charging and welding processes so its need to be done by trained professionals.
Instructions of gas deflation, gas re-charging and welding processes will be given at appendix as a separate presentation.

10.9. Replacement of Fin Evaporator (only)

Warning: This process needs gas deflation, gas re-charging and welding processes so its need to be done by trained professionals.
Instructions of gas deflation, gas re-charging and welding processes will be given at appendix as a separate presentation.

Warning: Make sure the unit is unplugged.

1. First remove the airflow cover, take out the fan connectors, cut off the fan connections (black cables) and remove the fan motor box from its place as told in [Fan motor Replacement] section before.



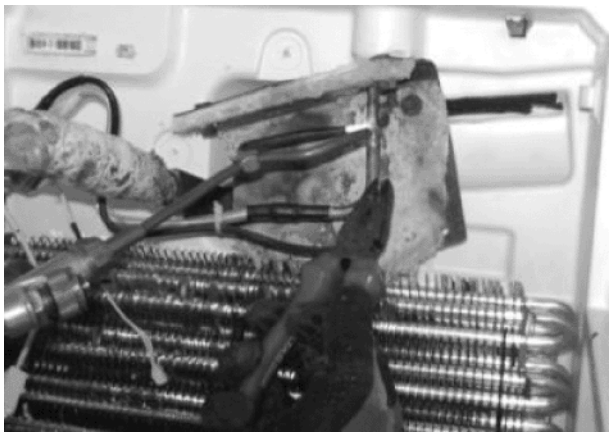
Note: To disconnect the connectors pull them to the down to release the tabs on connectors.

2. Cut off the cable tie ant remove the bitumen covering the tubes.

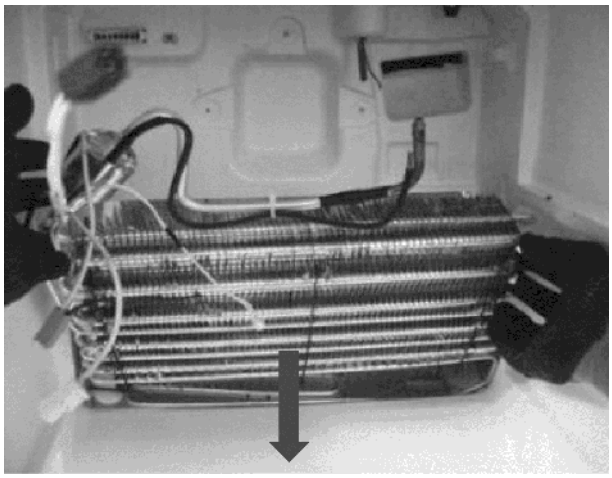
Note: Keep bitumen for re-sealing the tubes after replacement.

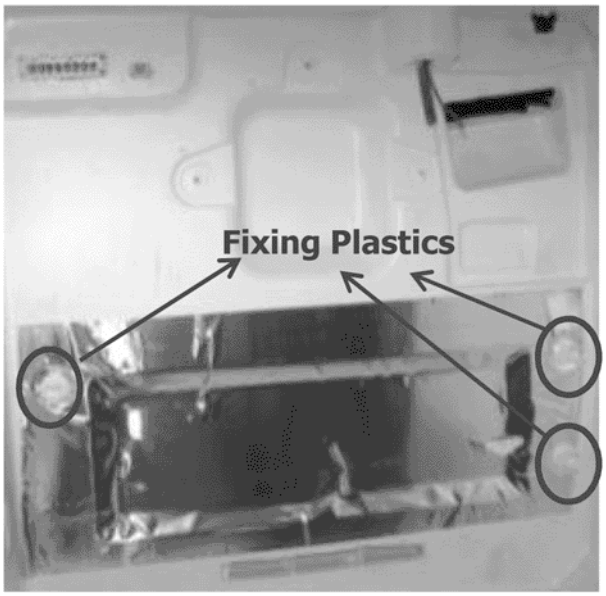
Warning: Before cutting the tube follow the Instructions of gas deflation, gas re-charging and welding given at appendix and make sure the gas is evacuated.

3. To take out the evaporator, tubes need to be cut with oxygen welding.
Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.



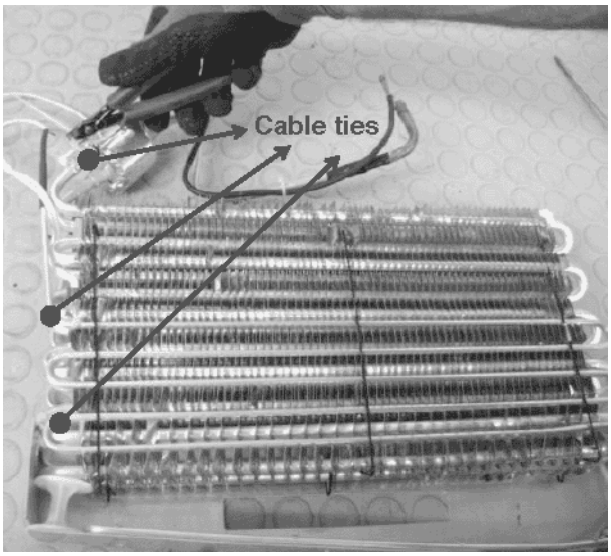
4. Remove the evaporator by pulling forward in a horizontal direction. Do not push it up or down. You may broke the fixing plastics.



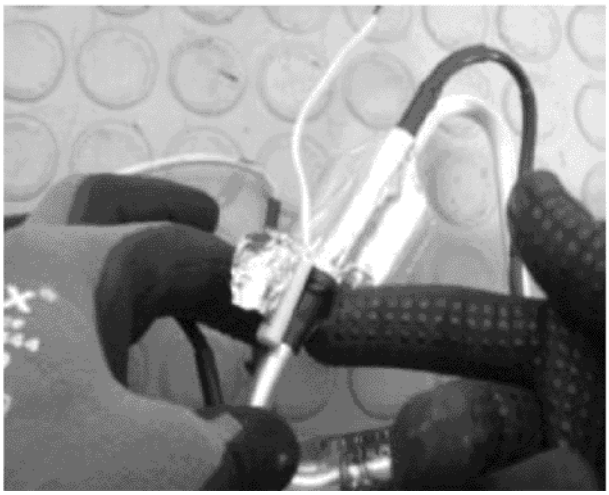


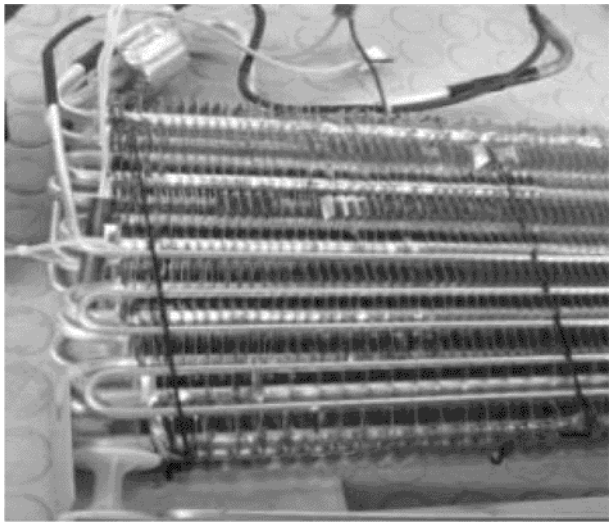
Warning: Operator should certainly wear gloves during evap replacement.

5. Cut the cable ties around the evaporator and sensors.

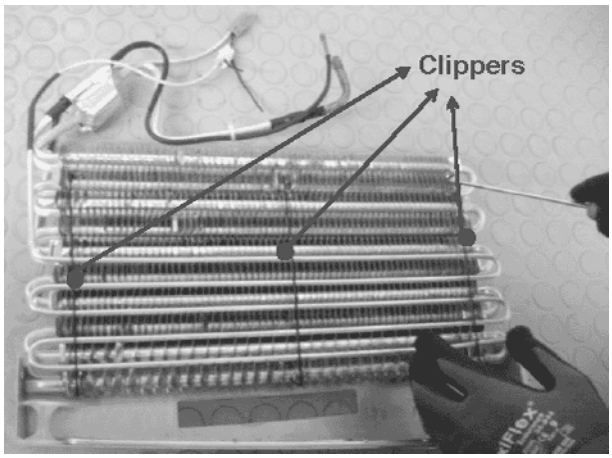


6. Remove the tape around defrost sensor and keep the tape for re-sealing. Remove the defrost sensor and thermal fuse.

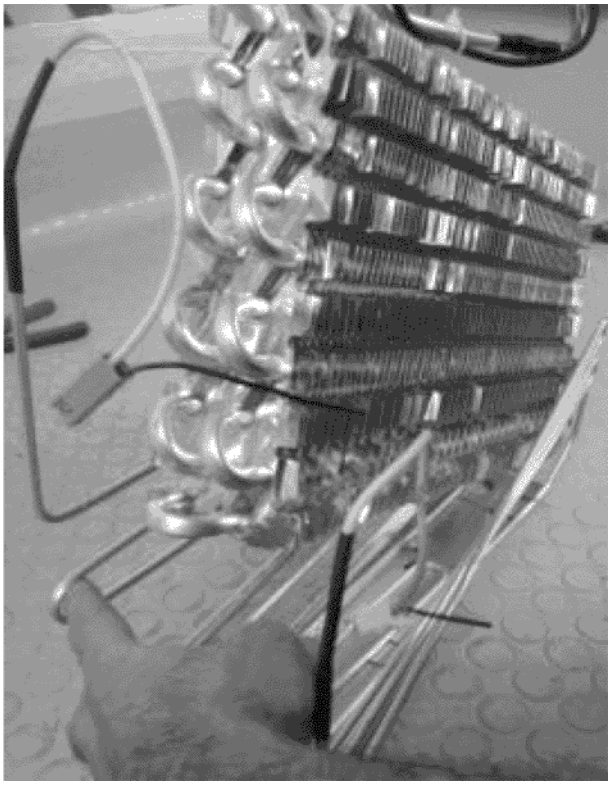


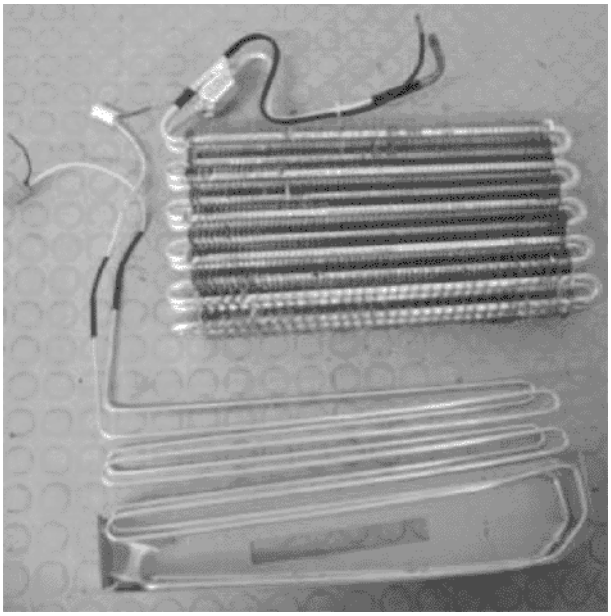


7. Remove the black metal clippers with the help of a screwdriver. (from both sides ofevaporator)

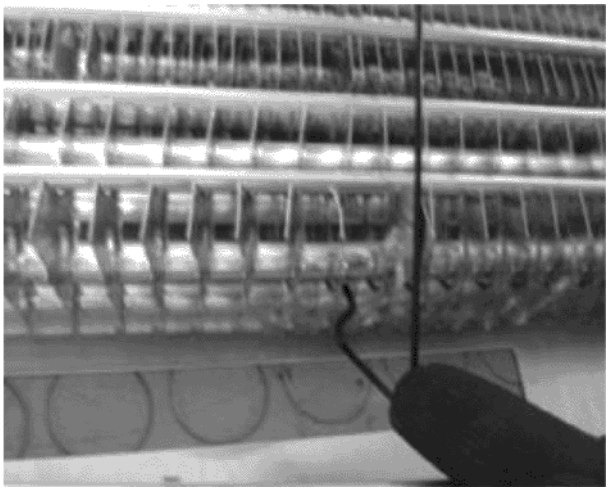


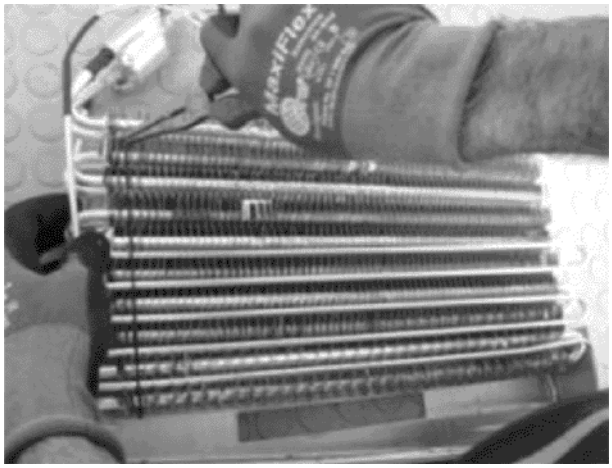
8. Detach the evaporator from the defrost heater.

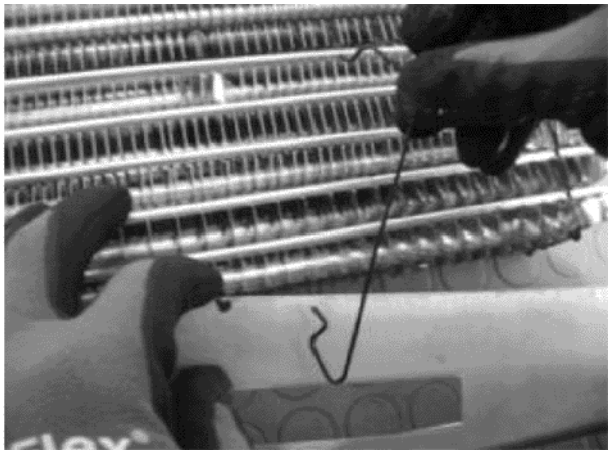




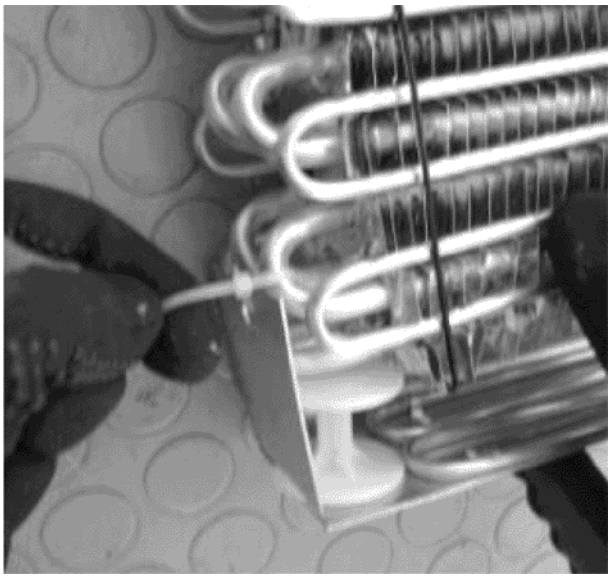
9. Place the new evaporator and re-attach the clippers with the help of a pliers.

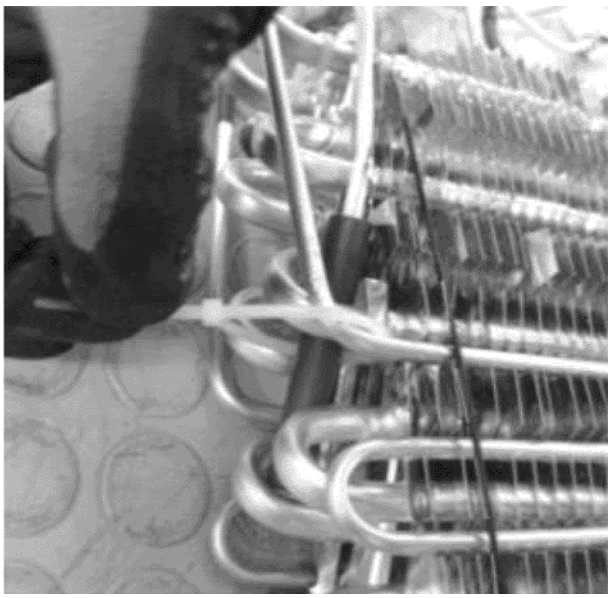




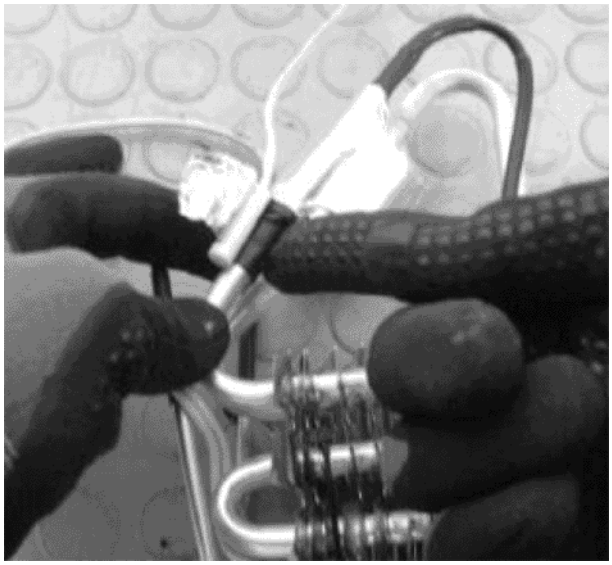


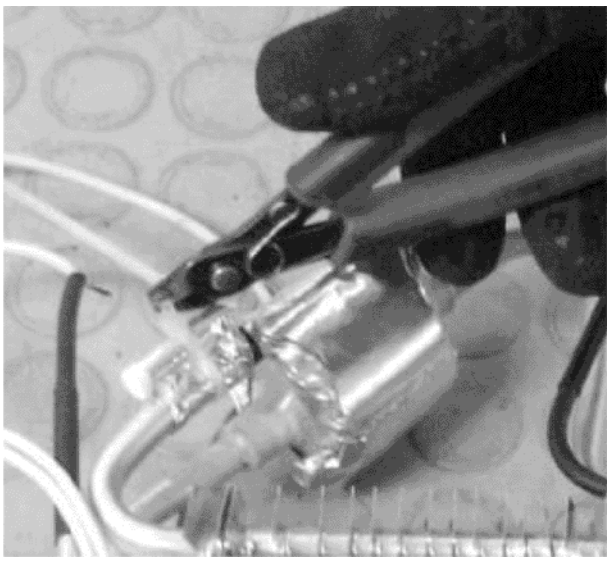
10. Tie the tray and thermal fuse to the evaporator with cable tie.



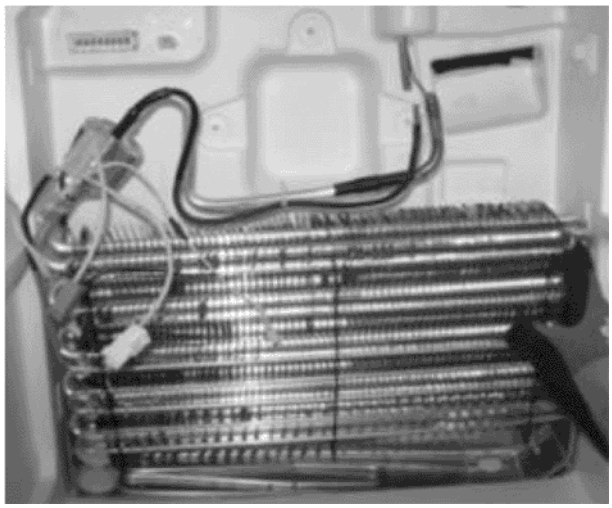


11. Re-seal the defrost sensor and tie with the cable tie.

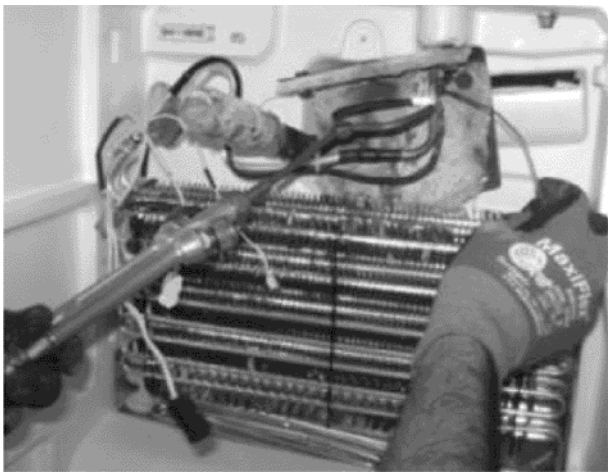




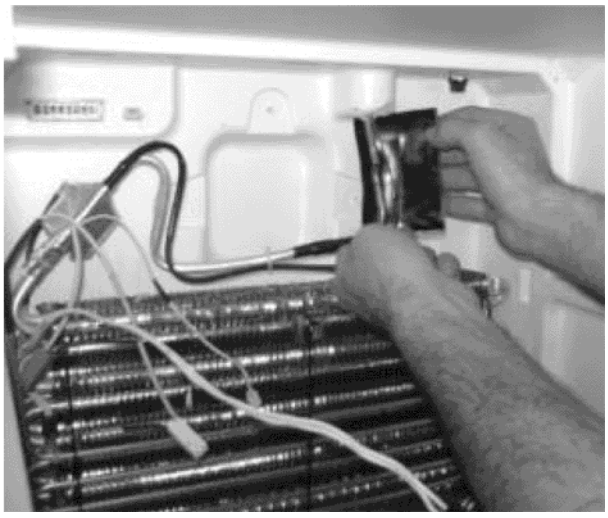
12. Place the new Evaporator Assy. to its place, when fixing the Evaporator Assy. press it horizontally otherwise you might damage the fixing plastics.

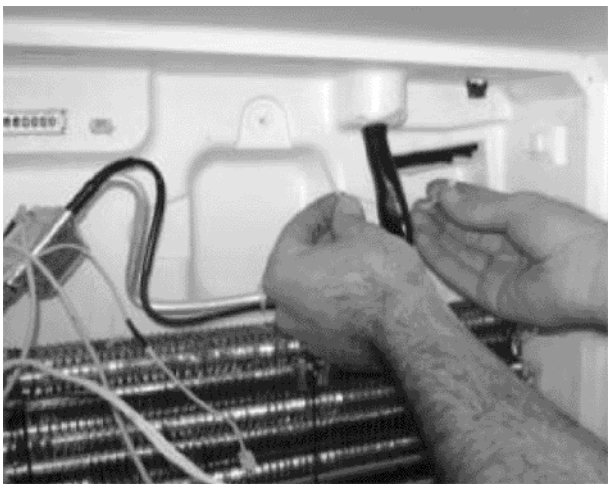


13. Weld the pipes with oxygen welding.
Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.



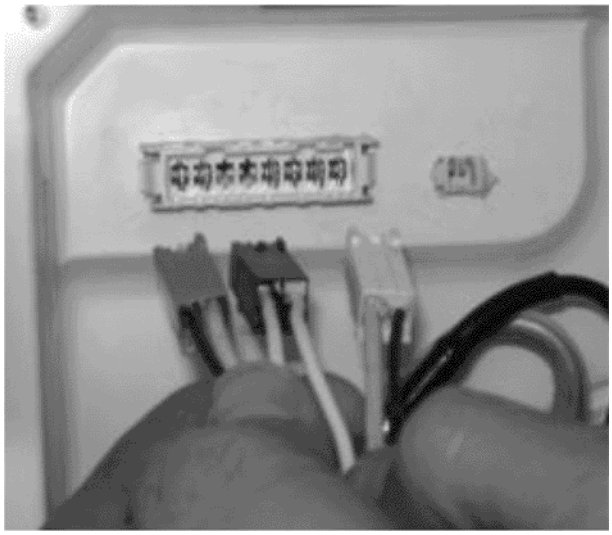
14. Seal the welding point with bitumen (after they cooled down) and tie with cable tie.





After welding process mount the fan motor box and make its connections with U-CONNECTOR as told in <u>Fan Motor replacement</u> section.

15. Re-connect all the connections and re-seal the housing with putty. Tie the cables with cable tie and close the air-flow cover. (as told in previous sections)



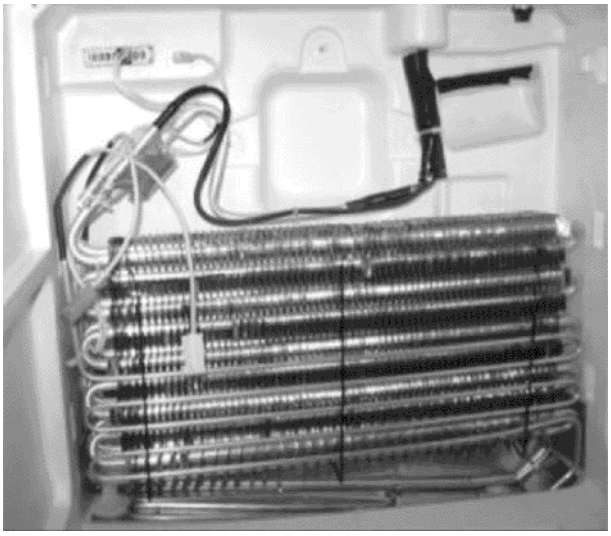
Warning: This process needs gas deflation, gas re-charging and welding processes so its need to be done by trained professionals.
Instructions of gas deflation, gas re-charging and welding processes will be given at appendix as a separate presentation.

10.10. Replacement of Defrost Heater

Warning: This process needs gas deflation, gas re-charging and welding processes so its need to be done by trained professionals.
Instructions of gas deflation, gas re-charging and welding processes will be given at appendix as a separate presentation.

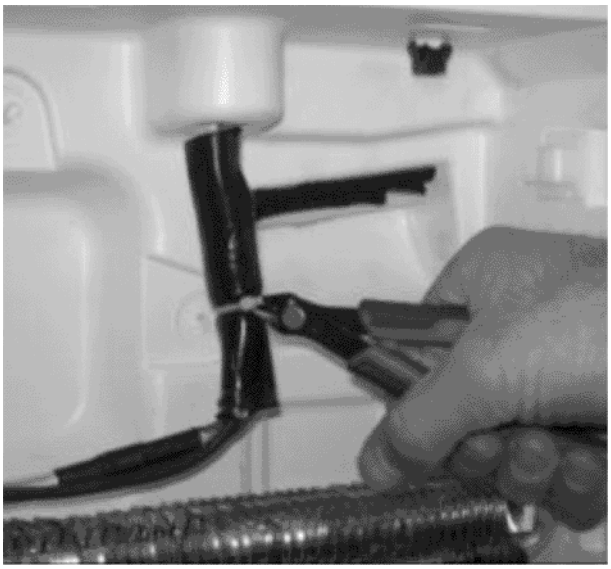
Warning: Make sure the unit is unplugged.

1. First remove the airflow cover, take out the fan connectors, cut off the fan connections (black cables) and remove the fan motor box from its place as told in [Fan motor Replacement] section before.



Note: To disconnect the connectors pull Them to the down to release the tabs on connectors.

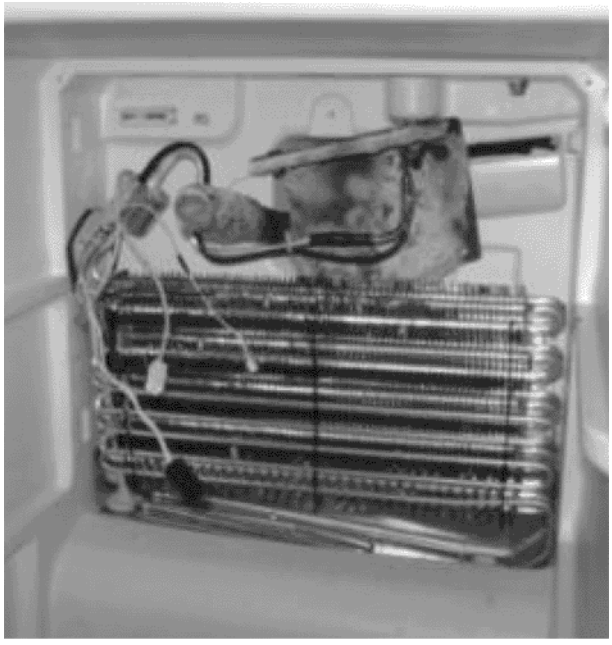
2. Cut off the cable tie ant remove the bitumen covering the tubes.

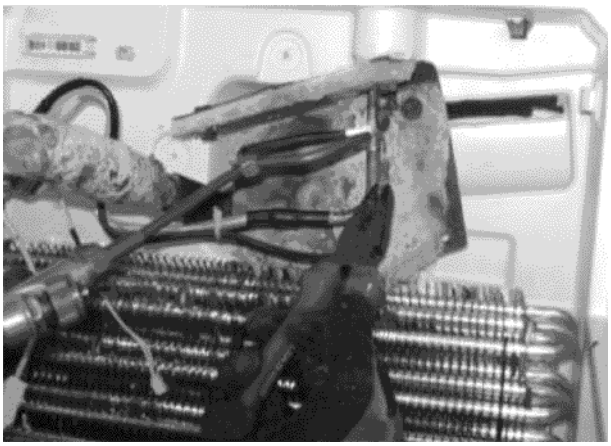


Note: Keep bitumen for re-sealing the tubes after replacement.

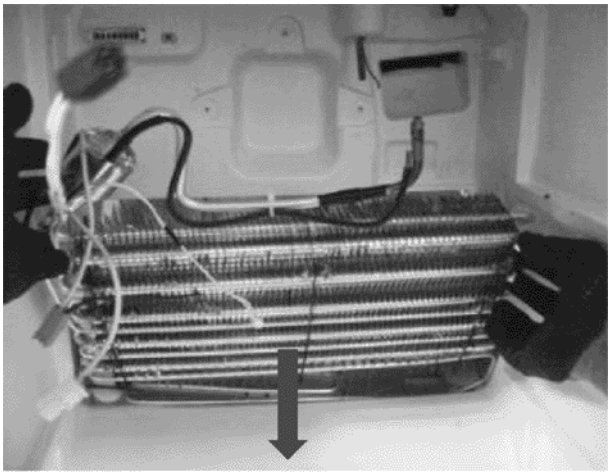
Warning: Before cutting the tube follow the Instructions of gas deflation, gas re-charging and welding given at appendix and make sure the gas is evacuated.

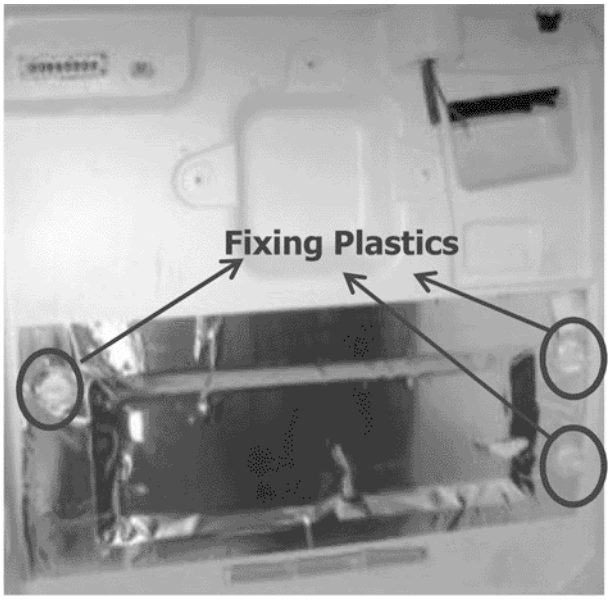
3. To take out the evaporator, tubes need to be cut with oxygen welding.
Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.





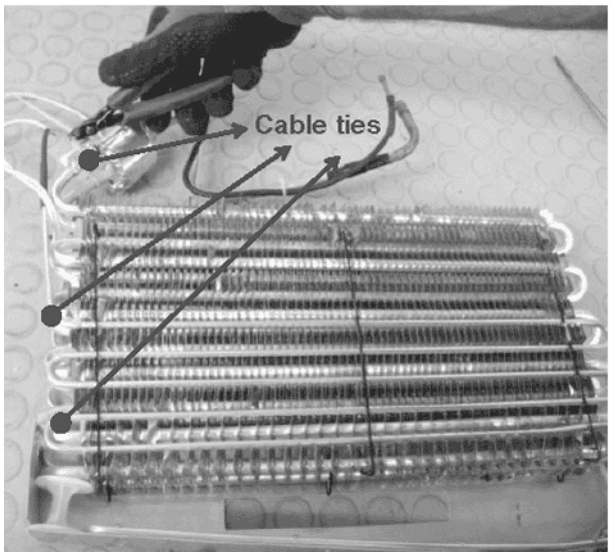
4. Remove the evaporator by pulling forward in a horizontal direction. Do not push it up or down. You may broke the fixing plastics.



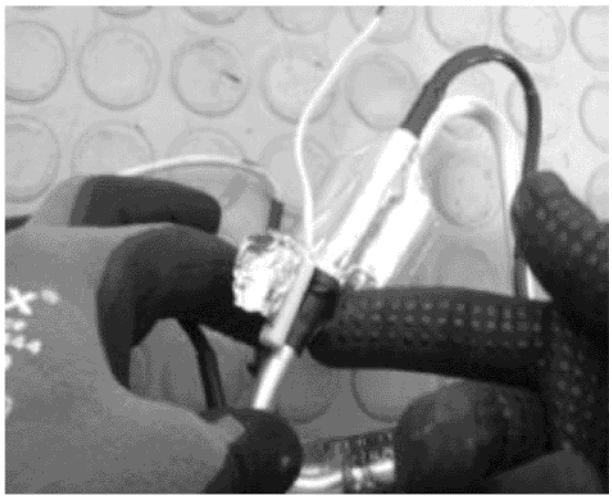


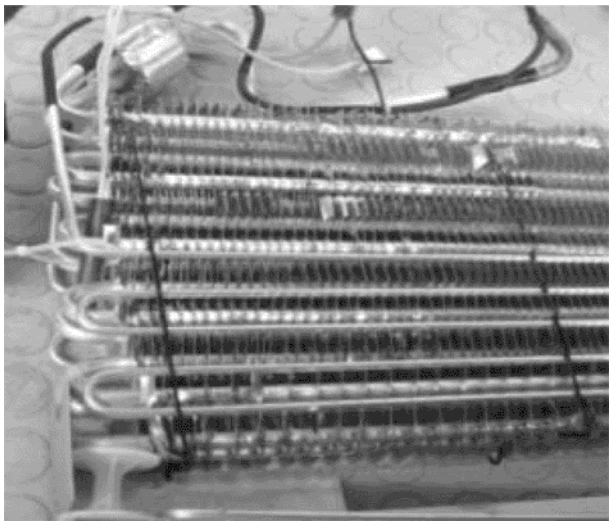
Warning: Operator should certainly wear gloves during heater replacement.

5. Cut the cable ties around the evaporator and sensors.

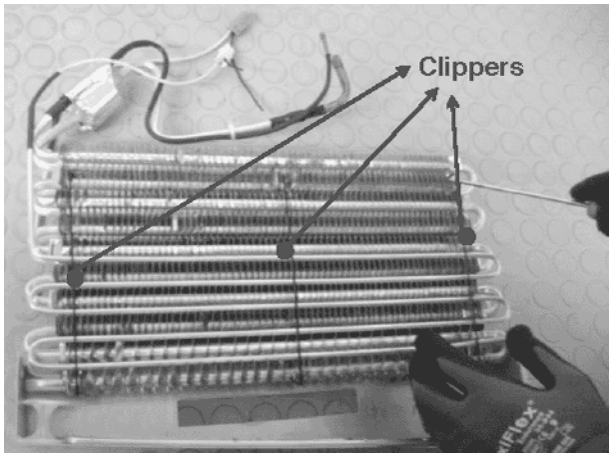


6. Remove the tape around defrost sensor and keep the tape for re-sealing.
   Remove the defrost sensor and thermal fuse.

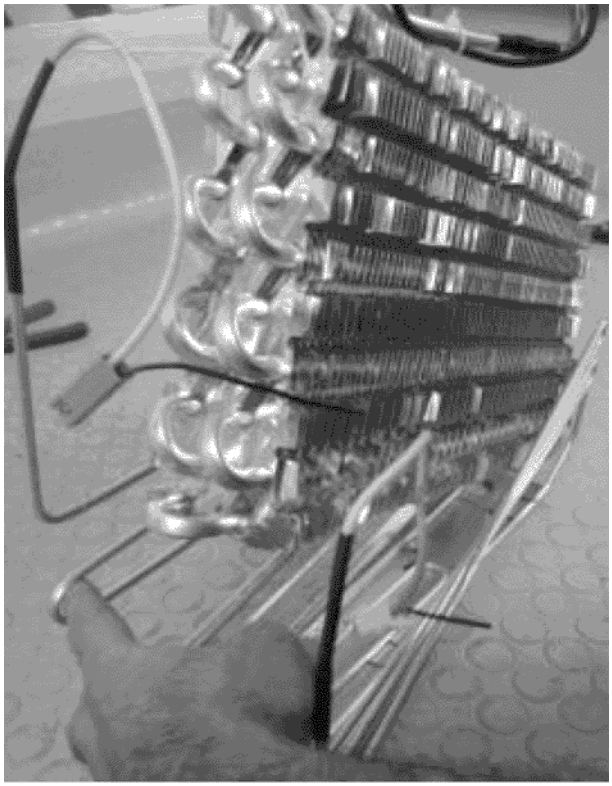




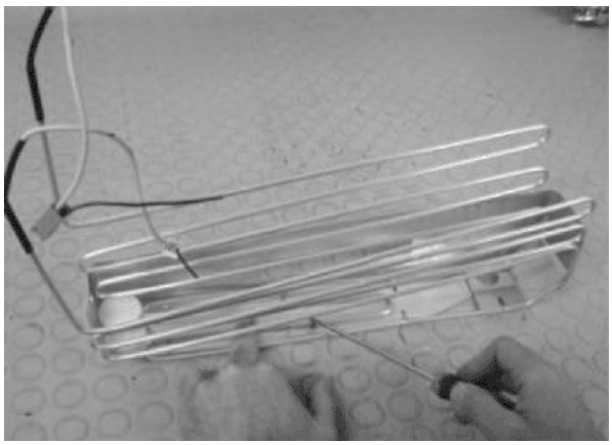
7. Remove the black metal clippers with the help of a screw-driver. (from both sides of evaporator)



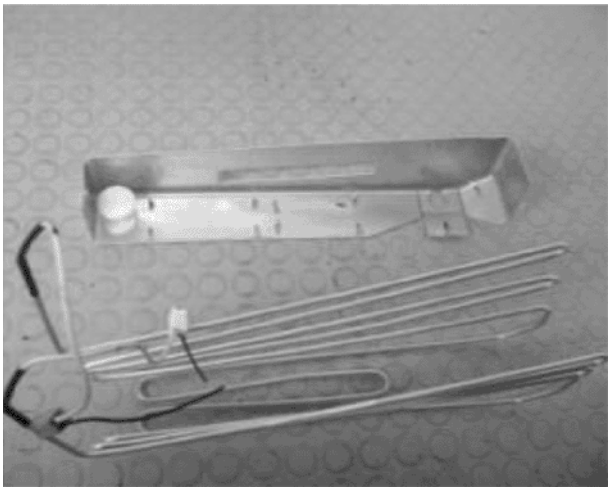
8. Detach the evaporator from the defrost heater.

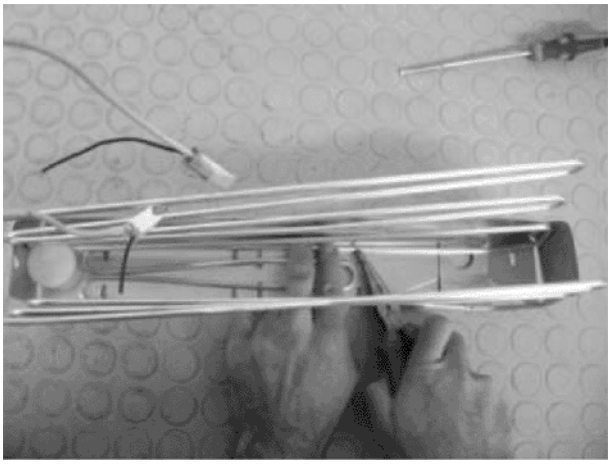


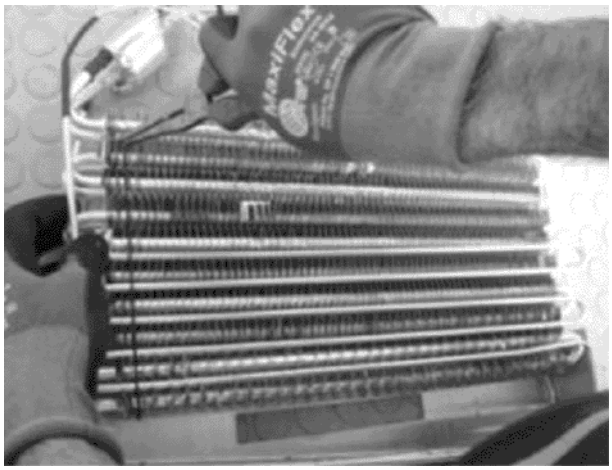
9. Open the holders at the bottom of the evaporator tray to release the defrost heater.

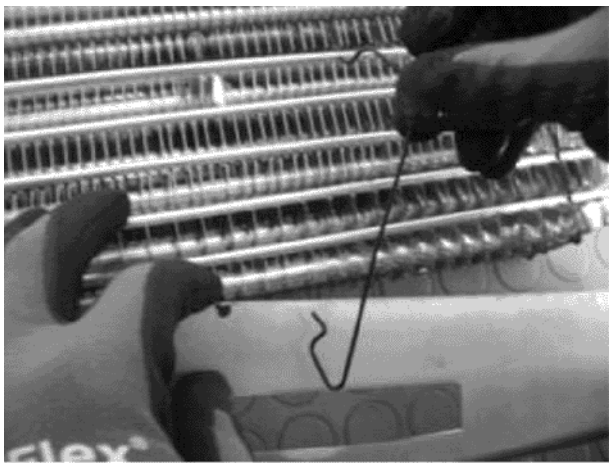


10. Detach the tray from defrost heater and Attach the new defrost heater to the tray.

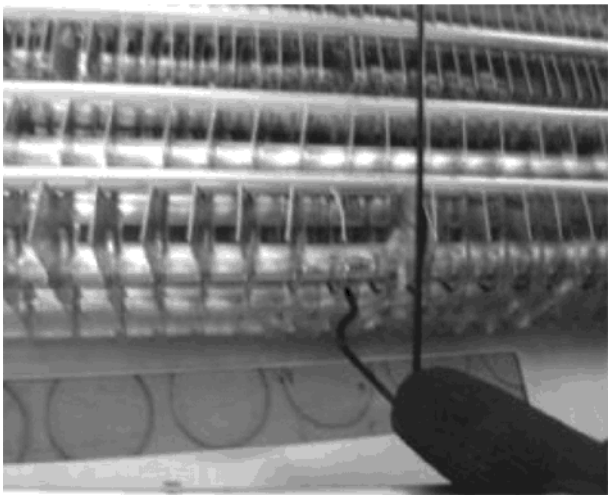


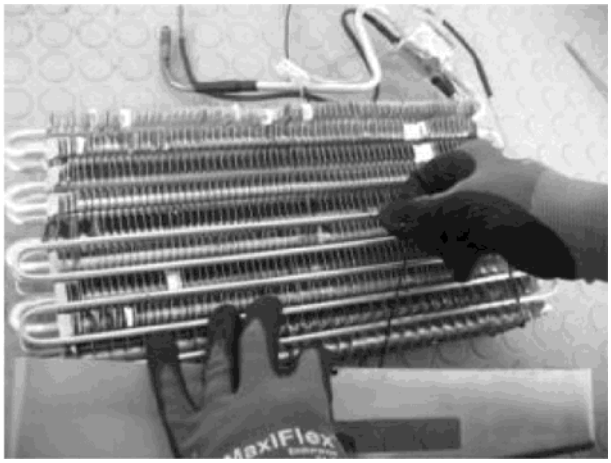




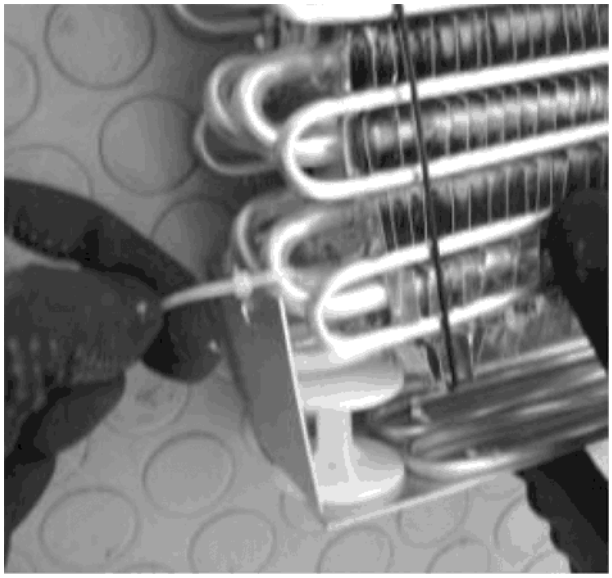


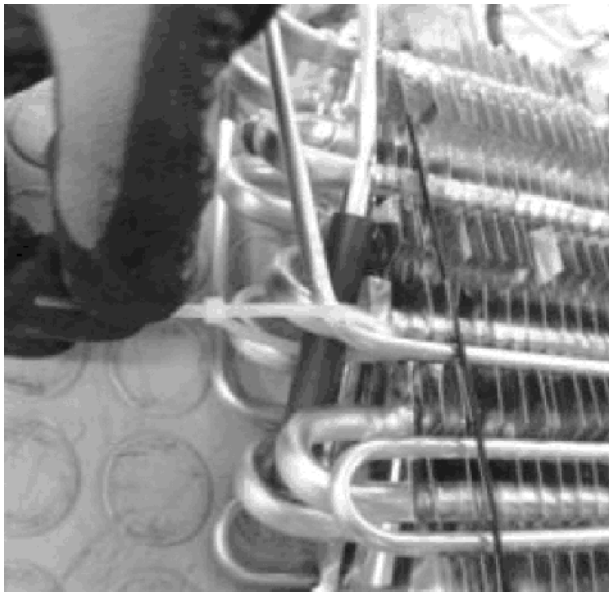
11. Place the evaporator and re-attach the clippers with the help of a pliers.



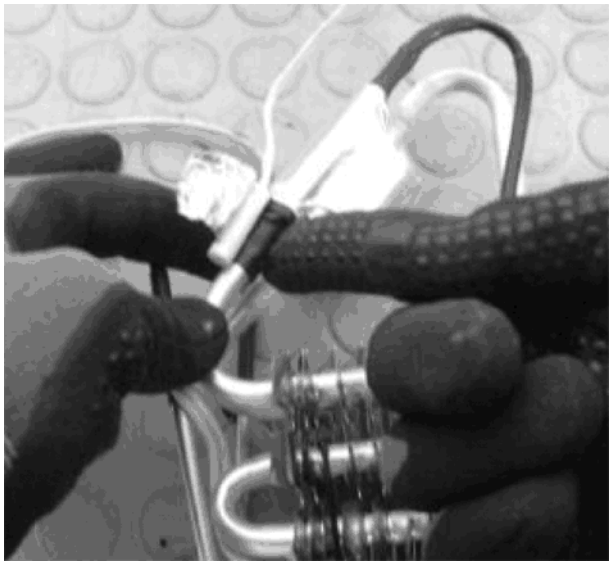


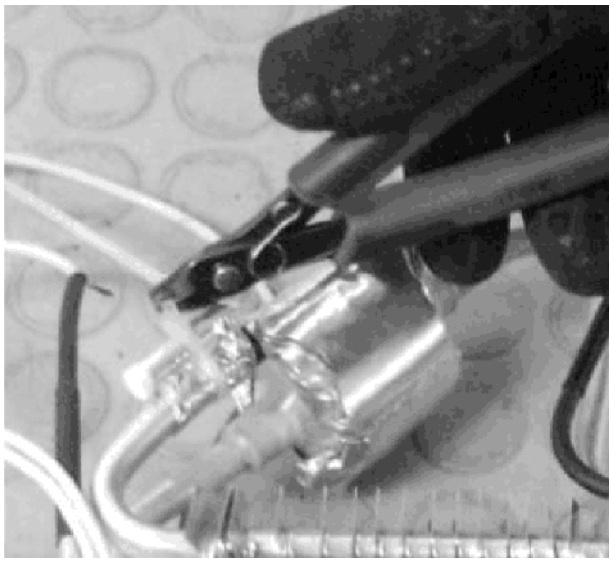
12. Tie the tray and thermal fuse to the evaporator with cable tie.



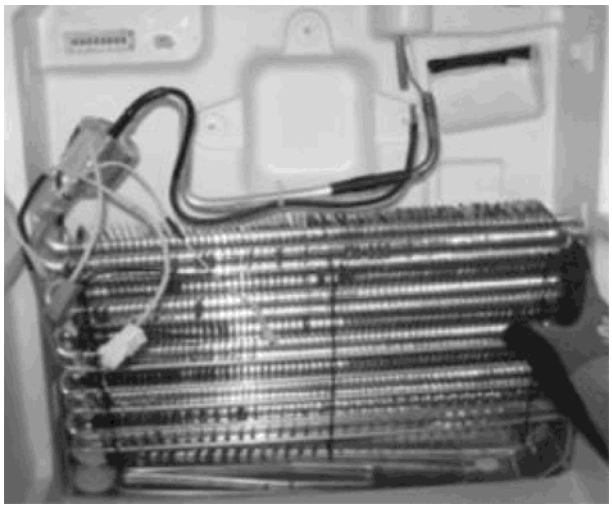


13. Re-seal the defrost sensor and tie with the cable tie.

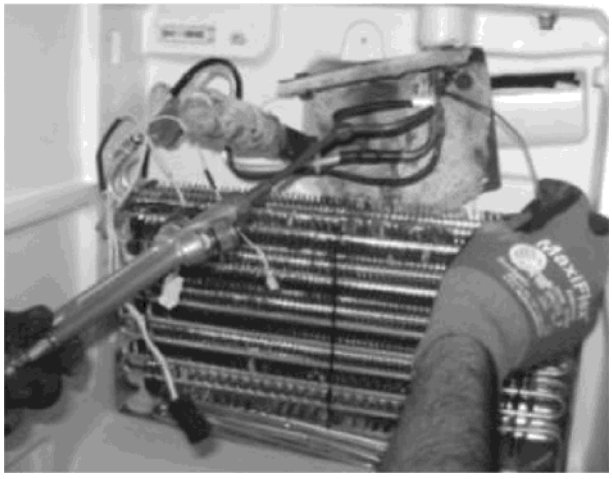




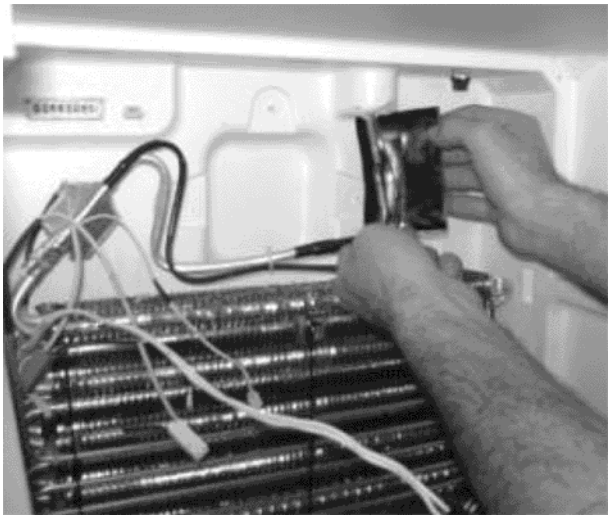
14. Place the new Evaporator Assy. to its place, when fixing the Evaporator Assy. press it horizontally otherwise you might damage the fixing plastics.

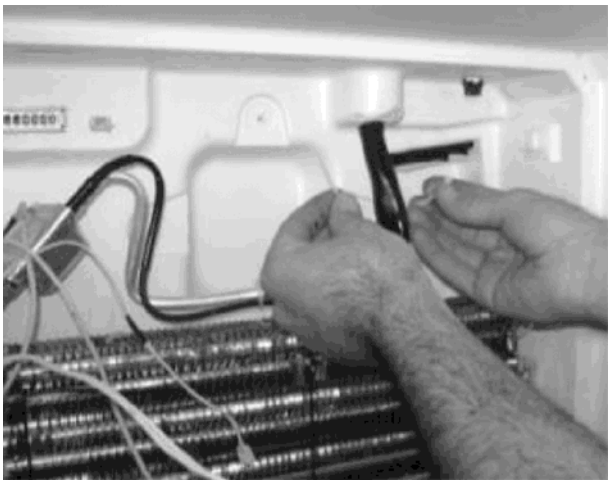


15. Weld the pipes with oxygen welding.
Note: You need to protect the plastic cabinet from the fire of welding with a protector as shown in the below pictures.



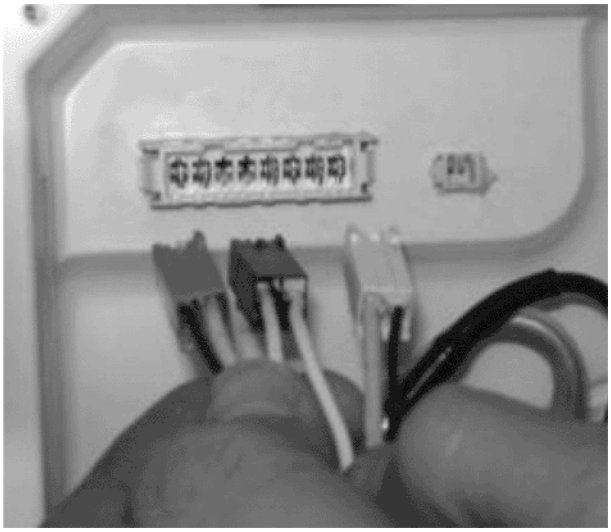
16. Seal the welding point with bitumen (after they cooled down) and tie with cable tie.





After welding process mount the fan motor box and make its connections with U-CONNECTOR as told in <u>Fan Motor replacement</u> section.

17. Re-connect all the connections and re-seal the housing with putty. Tie the cables with cable tie and close the air-flow cover. (as told in previous sections)



Instructions of gas deflation, gas re-charging and welding (This is the general information for gas charging)

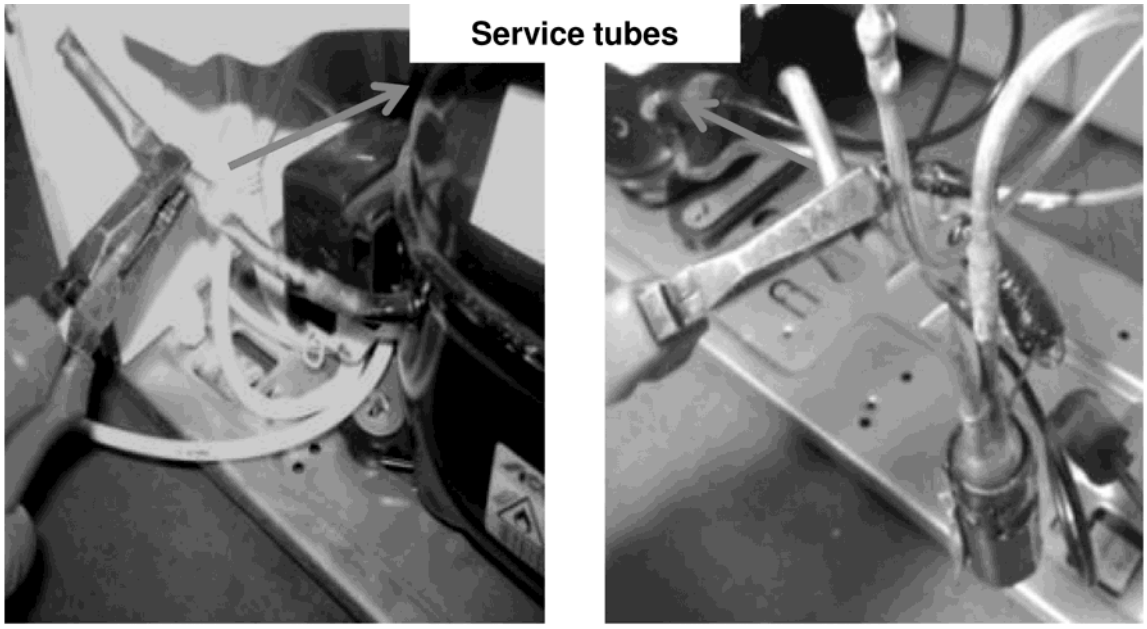
Warning: This process needs to be done by trained professionals.

Welding machine

Gas Charge Machine

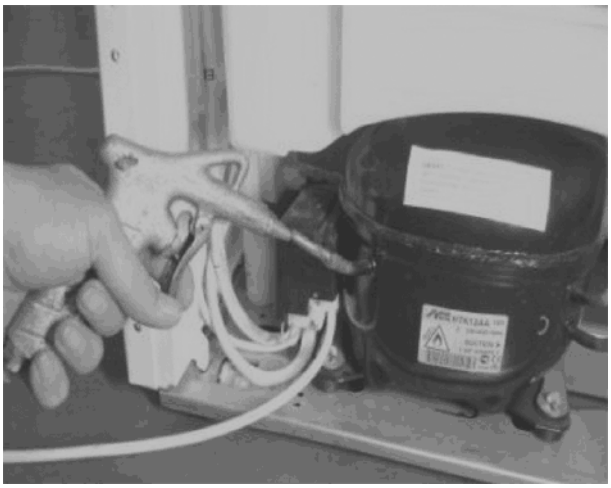
Before starting the process take the product in a spacious and good ventilated place.

1. Brake the service tubes on compressor and dryer.

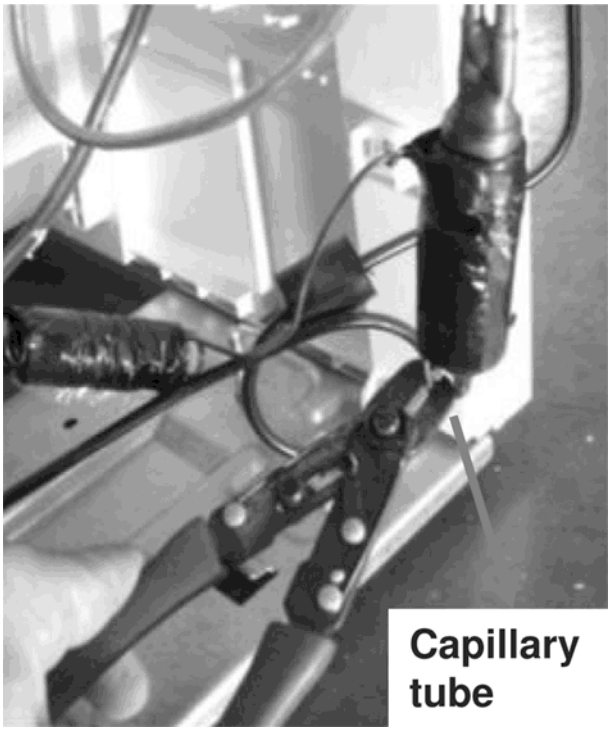


2. Before welding process make sure that all gas is evacuated from the system, shake the compressor to evacuate last remnants of gas. (You can blow air from the service tube.)

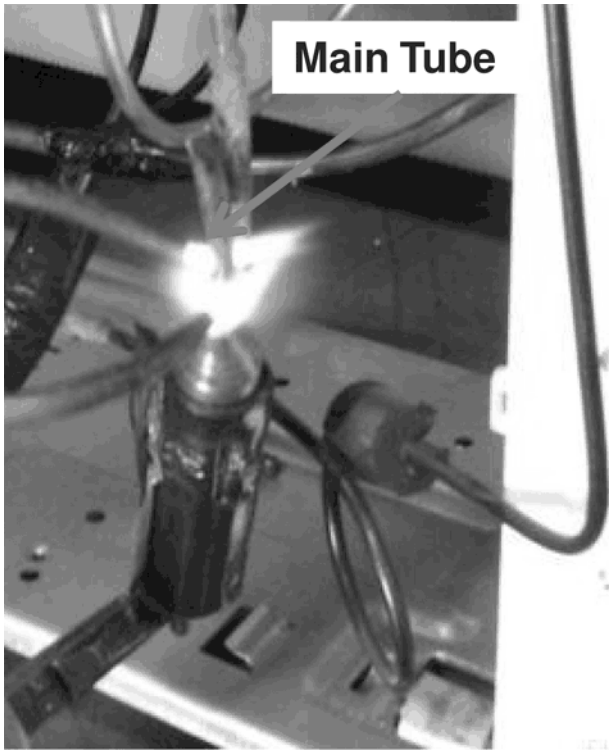
***** Do not perform any operations for min 30 minutes after you break the service tube.**



3. Cut the capillary tube from the bottom of dryer.



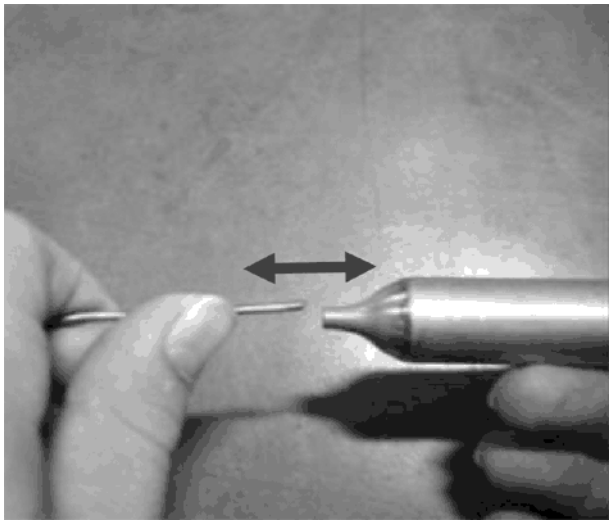
4. Detach the dryer from the main tube using oxygen welding



After replacement of Fin Evap Assy, or Fin evap (only) or Defrost heater, apply below instructions for recharging.

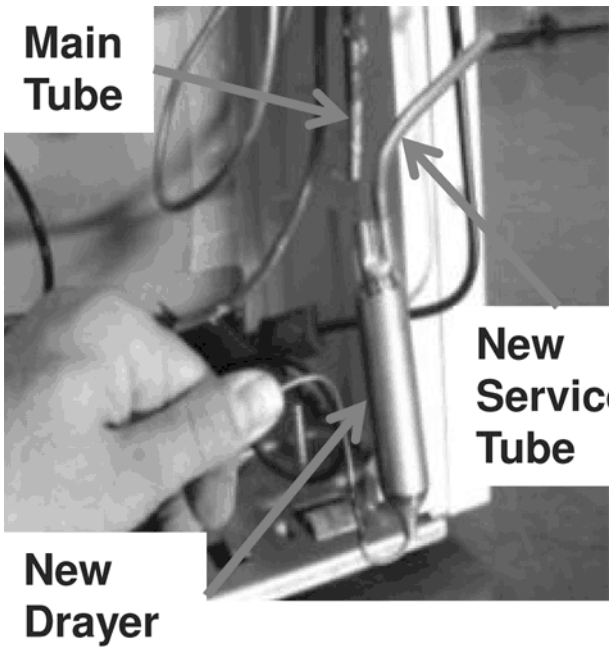
5. Cut the end of capillary tube with the capillary scissor with an angle of 45 °.

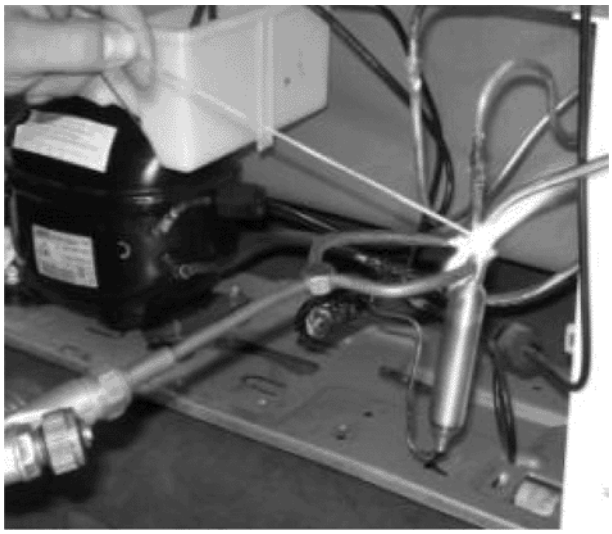
6. Insert the capillary tube at least 1 cm inside the new dryer and weld the connection.



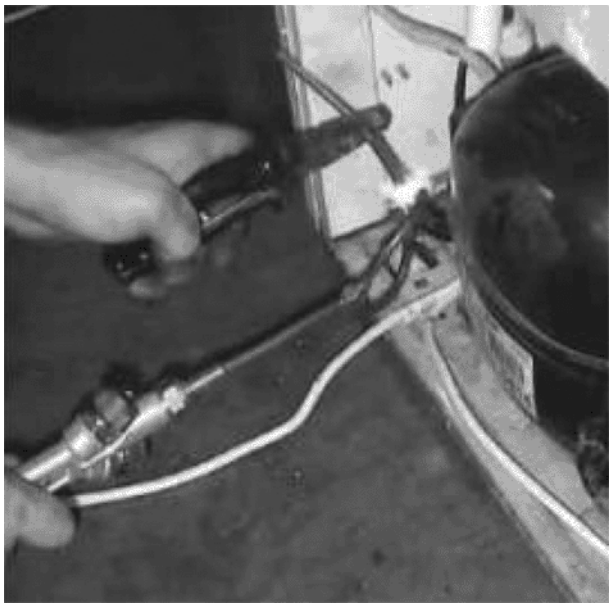
Note: Dryer must be changed in every time before gas charging.

7. Curl the capillary tube as in the below picture. Weld the main tube and new service tube to dryer.

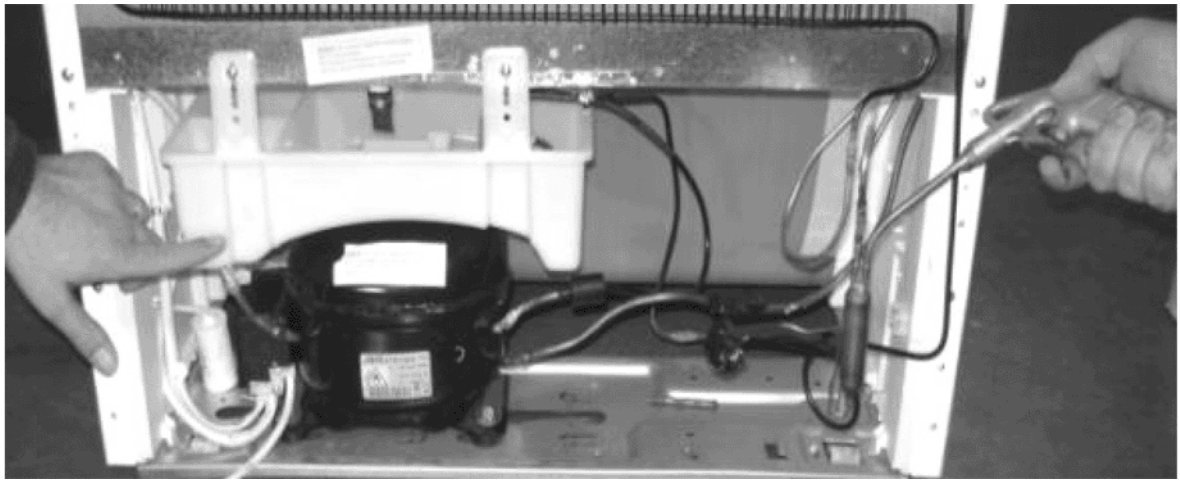




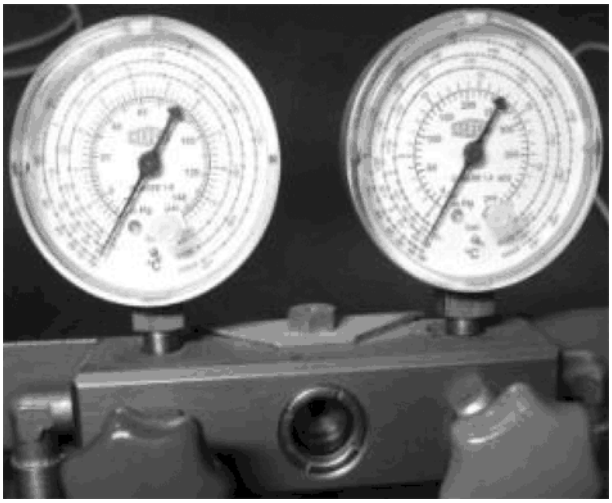
8. Change the service pipe of compressor with new one.



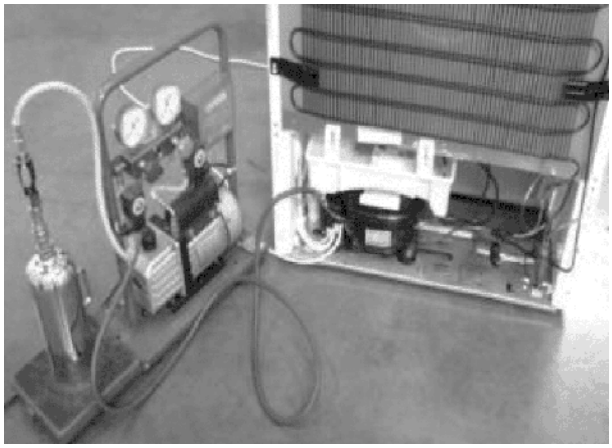
9. After all welding processes is done, press nitrogen from compressor and dryer service tubes to check if there any blockage.



10. Blank the service tube on dryer (with welding) and connect the gas charging machine via service tube on compressor for vacuuming. (Vacuuming should last at least 45 mins, after vacuuming check the pressure levels for ensuring there is not any leakage.)



11. Check the gas type and amount on label and charge with appropriate type and amount of gas.



12. After gas charge, pinch off the service tube and blank with welding.
    For R600a apply two pinch off.

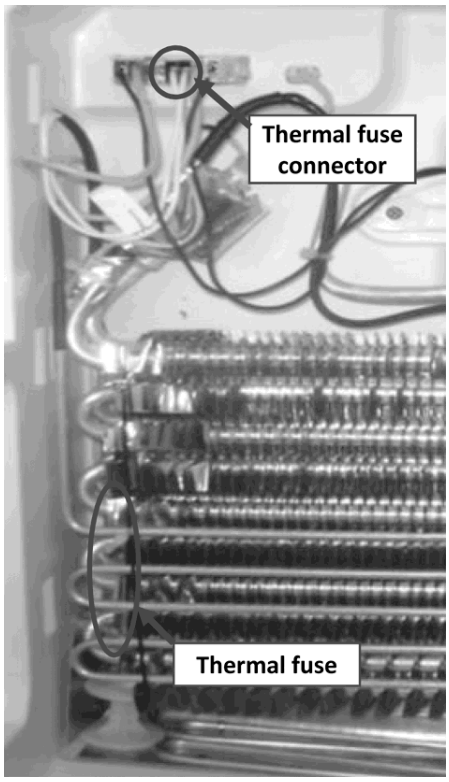
13. Check every welding point with a detector or foam against any leakage.

14. After all process, connect the product to an energy monitor and check if the consumption values are normal.

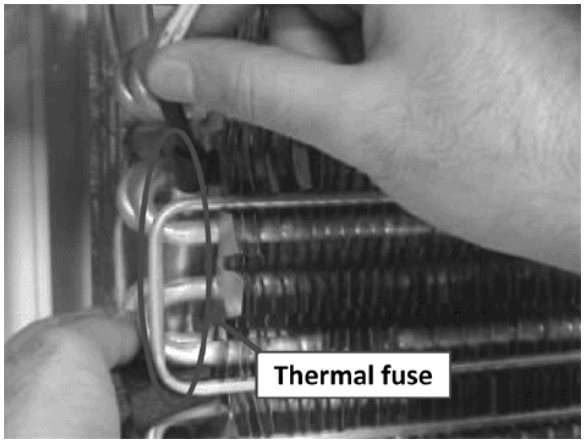
Value on the picture is sample

10.11. Replacement of Thermal Fuse Assy.

1. Disconnect thermal fuse connector. (black connector)

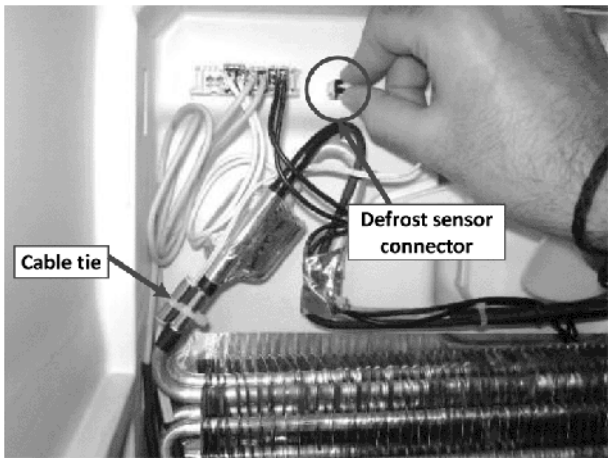


2. Remove the thermal fuse by pulling it. (mounted on the left side of the evaporator)
   Take out the thermal fuse.
   Note: Be sure to replace both thermal fuse and defrost sensor, in case that thermal fuse is blown.



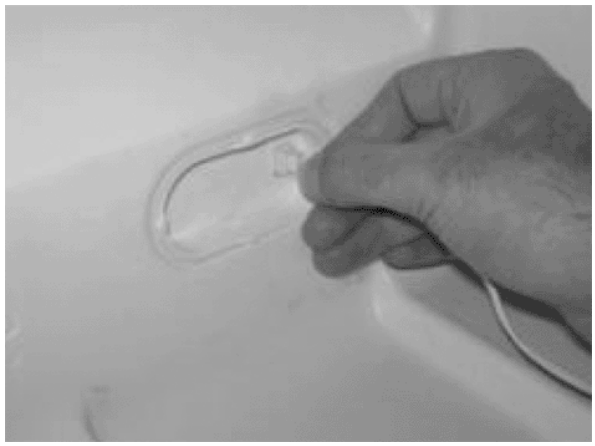
10.12. Replacement of DFC

1. Cut the cable tie.
2. Disconnect to defrost sensor connector.
3. You can take out the defrost sensor by removing the aluminum tape on it.



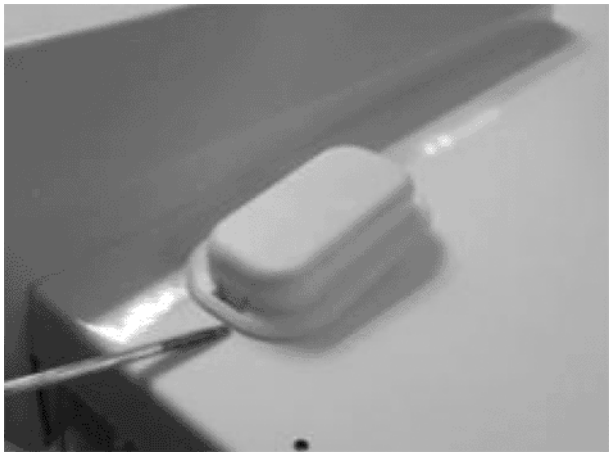
10.13. Replacement of FCC

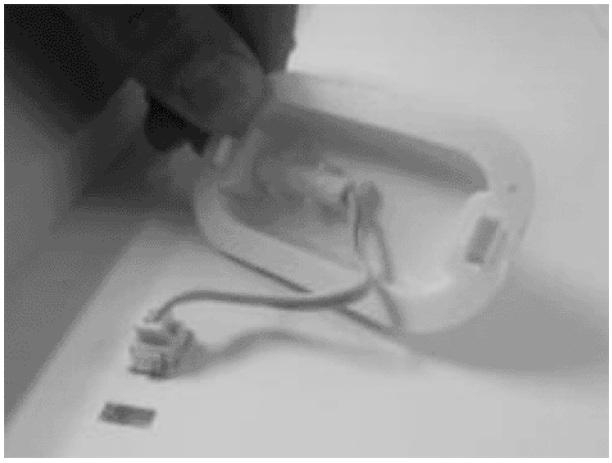
1. Remove the freezer sensor cover by pulling forward and disconnect sensor connector.



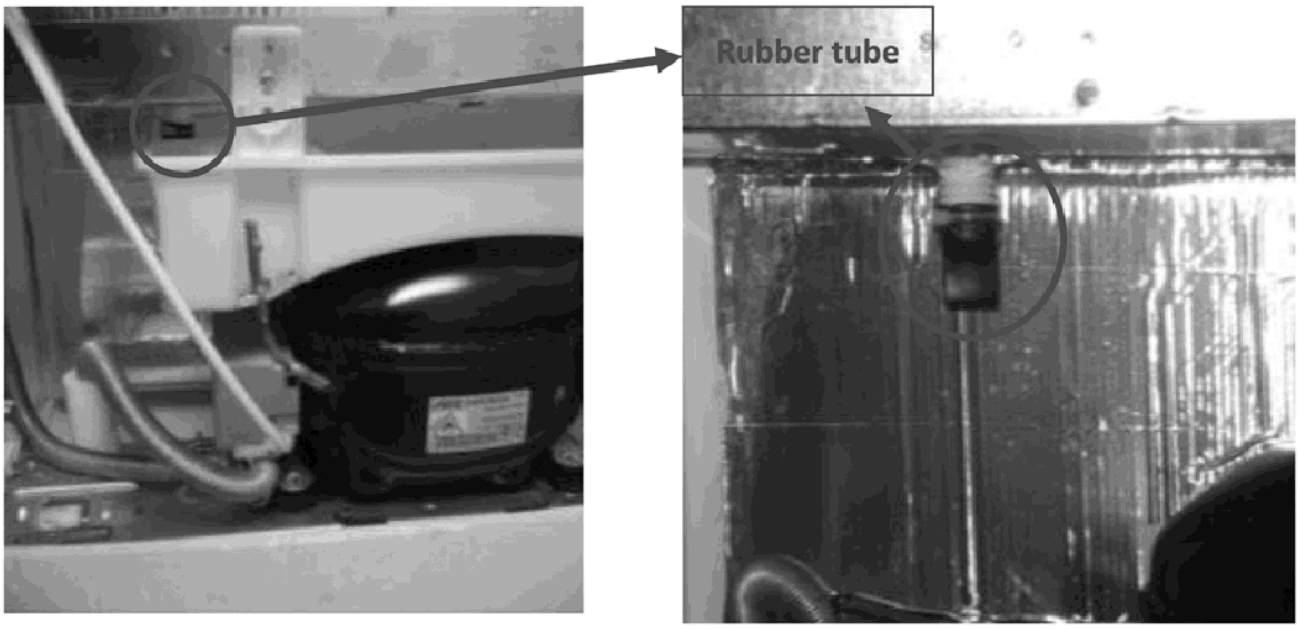
10.14. Replacement of ATC (At the top of the cabinet)

1. Remove the ambient sensor cover by pulling forward and disconnect sensor connector.



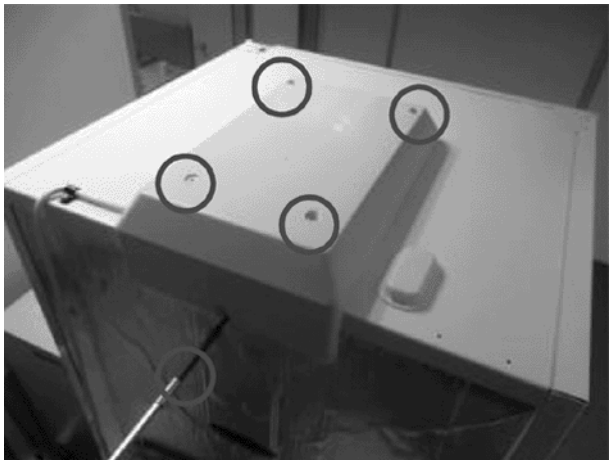


WARNING: Do not remove the black rubber tube in any case, which placed at the end of water evacuation pipe.



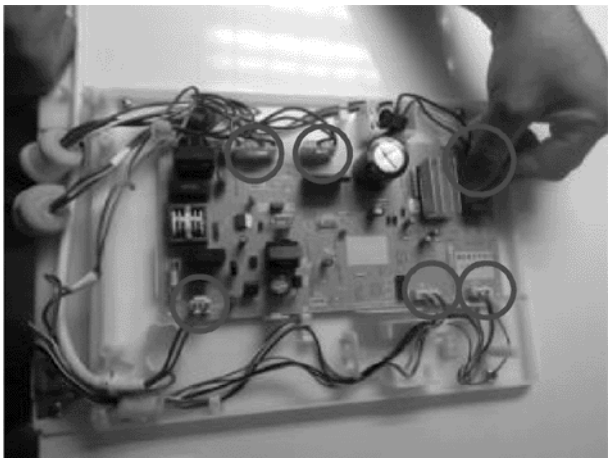
10.15. Replacement of Inverter

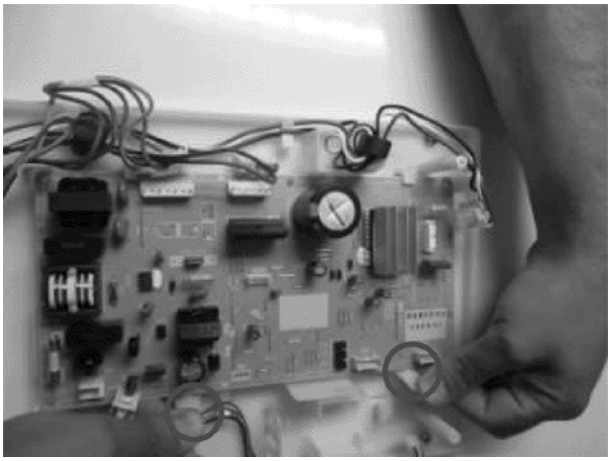
1. Unscrew the five screws (torx).



2. Remove the Invertor cover.

3. Remove all 6 socket connections and release the two holder to take out the inverter. Replace with new one connect the sockets and fix the screws after placing the cover.





10.16. Replacement the ice cube tray holders

1. Remove the ice cube trays.

2. Unscrew the 4 screws fixing the holders.

3. Take out the holders by pulling downwards.

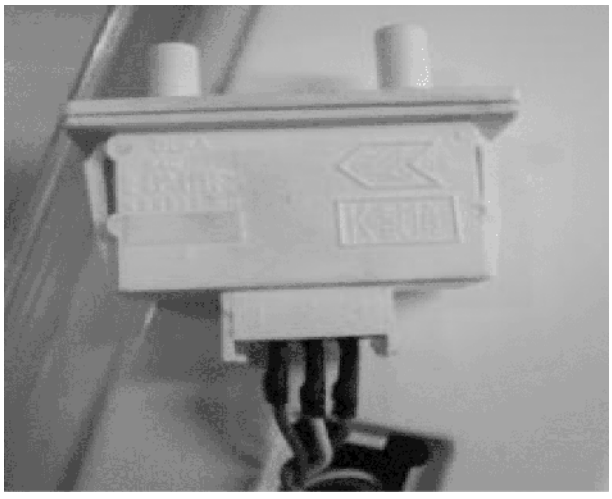
10.17. Replacement of Door Switch

1. First, stick a tape on the corner of switch to prevent any scratches.

2. Take out the switch using a sharp/thin tipped tool. Try to stretch it from one side, then remove it with your hand by pulling forward.

3. Disconnect the connector and replace the switch.

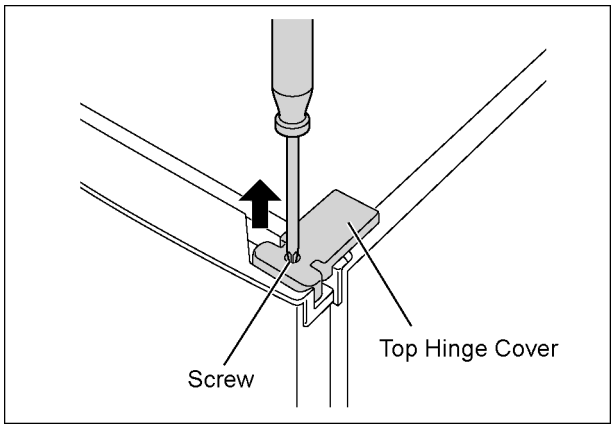
4. Cable colors and numbers must match at switch replacement.



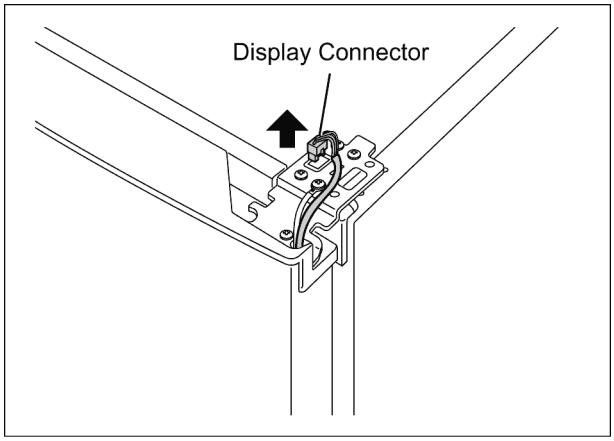
10.18. Changing The Doorway Direction

Warning: Make sure the unit is unplugged.

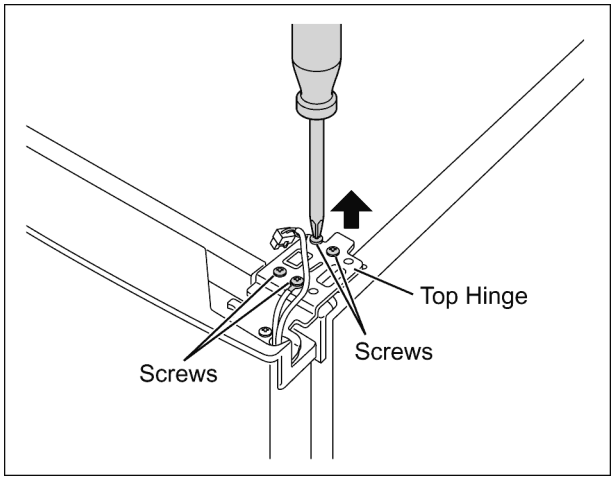
1. Unscrew the screw fixing the Top Hinge Cover and remove it.



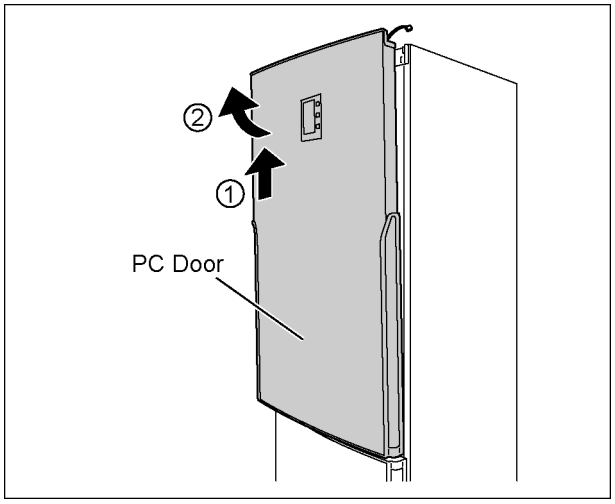
2. Disconnect the Display Connector.



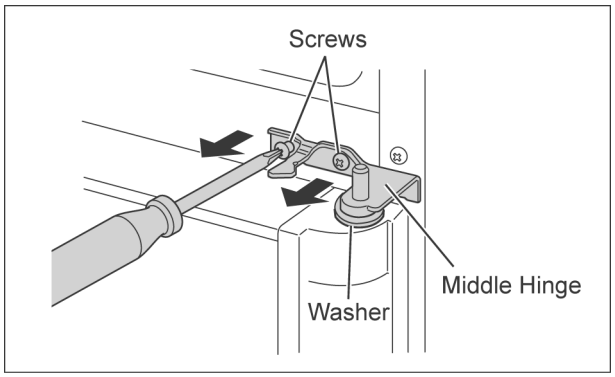
3. Unscrew the screws fixing the Top Hinge and remove it.



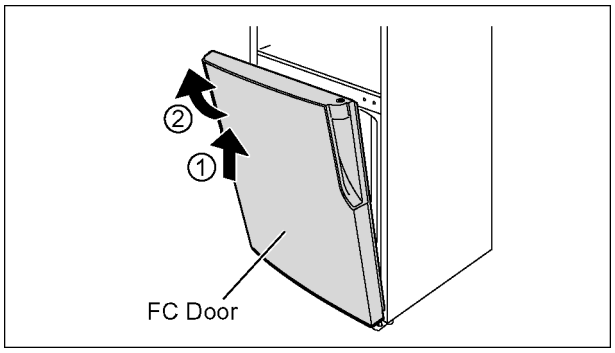
4. Remove the PC Door.



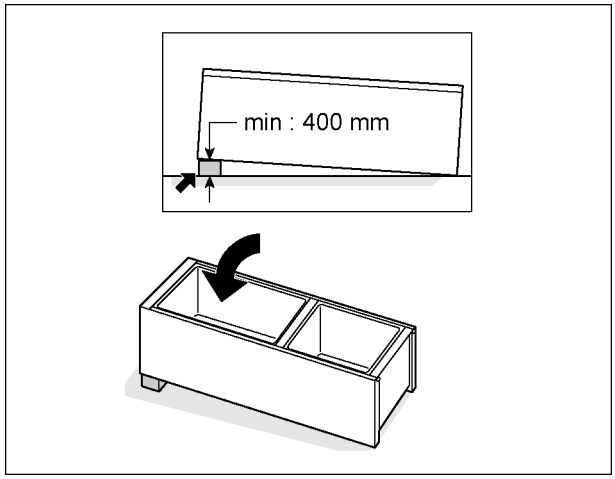
5. Unscrew the two screws which are fixing the Middle Hinge and remove the Washer.



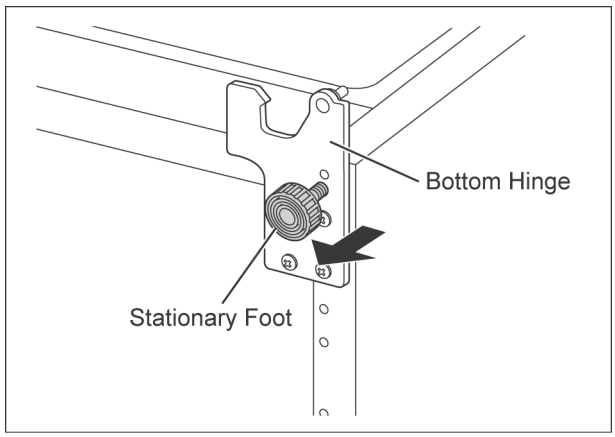
6. Remove the FC Door.



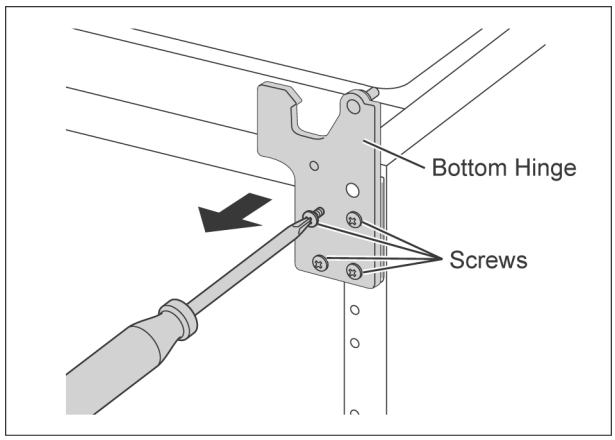
7. Lie down the appliance to the back. (min: 400mm)
CAUTION:Do not damage the outer condenser.



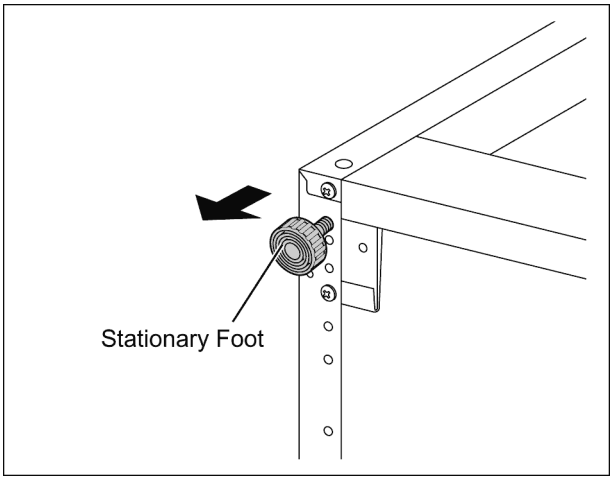
8. Unscrew the Stationary Foot under the Bottom Hinge.



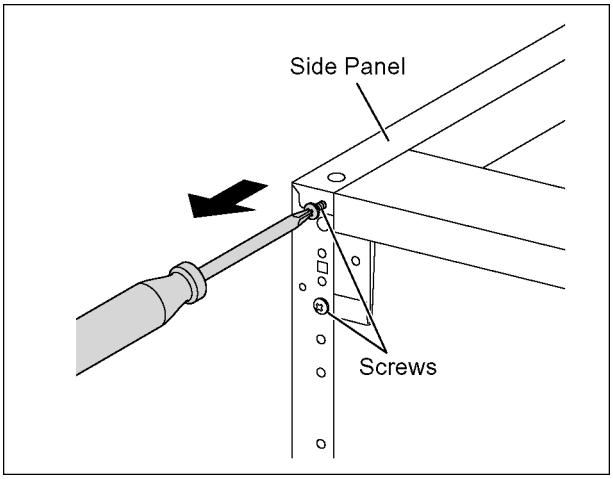
9. Unscrew the Bottom Hinge fixing screws and remove it.



10. Unscrew the Stationary Foot on the left side.



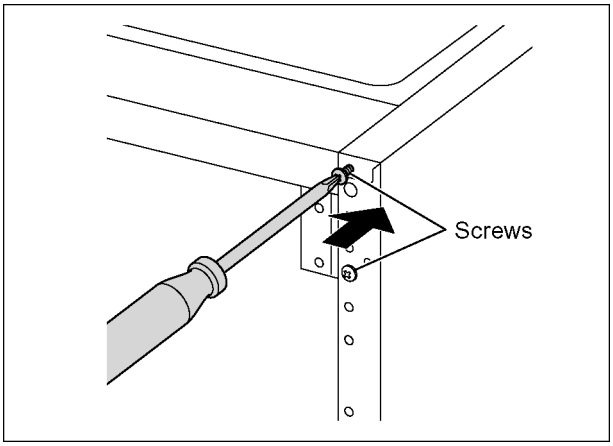
11. Unscrew the side panel fixing screws.



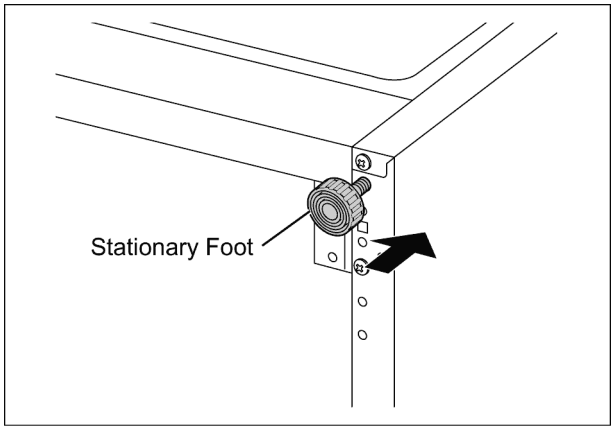
12. Then use that screw for the right side.

NOTICE

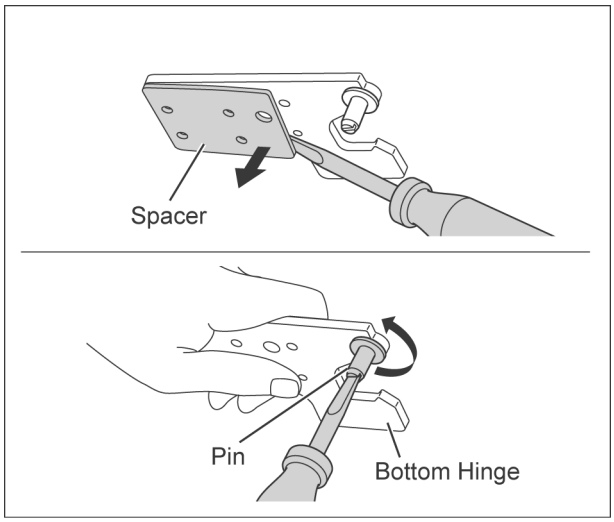
Be careful to screw stronger. Because the screw hole has blocked with the expanded polyurethane.



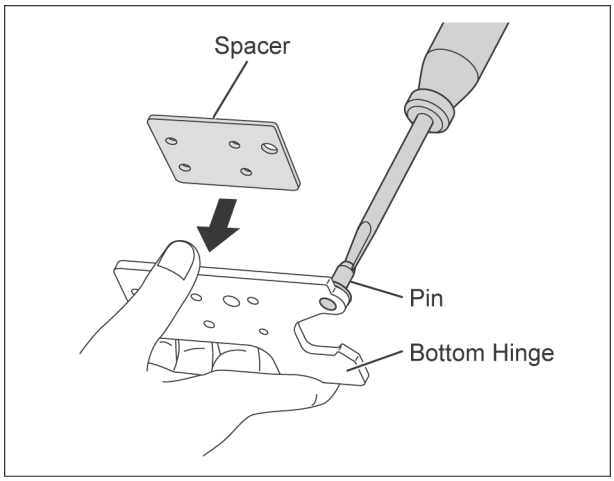
13. Screw the Stationary Foot for the right side.



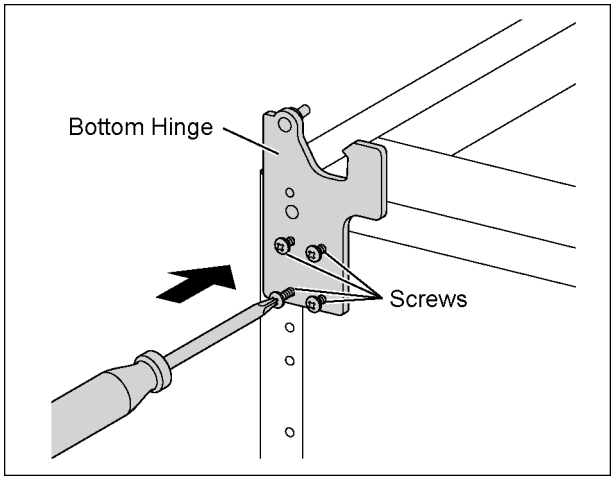
14. Insert the Flat screwdriver into the gap between the Spacer and the Bottom Hinge. Then pry off the Spacer. Unscrew the pin of hinge, rotate the Bottom Hinge 180°.



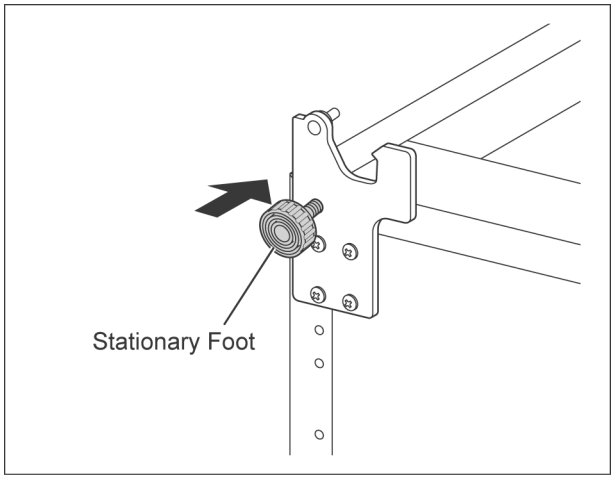
15. Screw the pin to the same hole from different direction. Paste the Spacer to the opposite side of the Bottom Hinge.



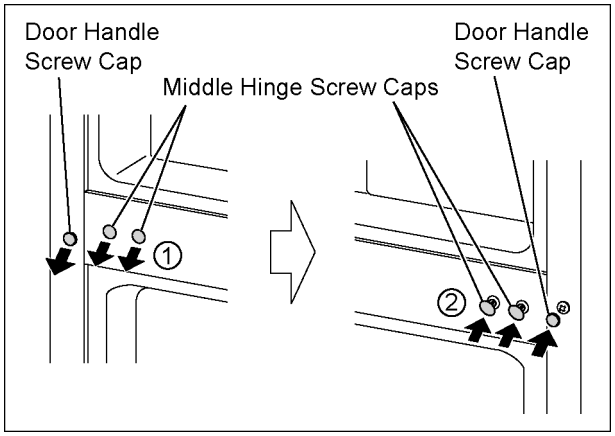
16. Then screw the Bottom Hinge to the left side.



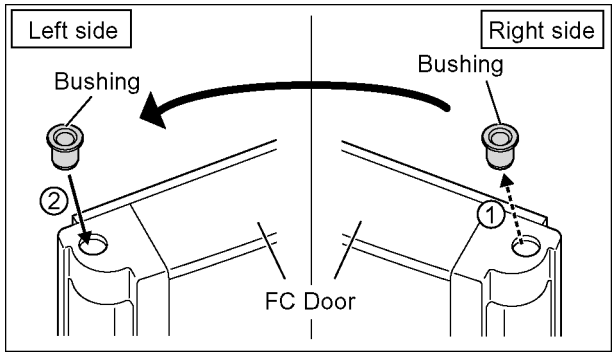
17. Screw the Stationary Foot for the left side.



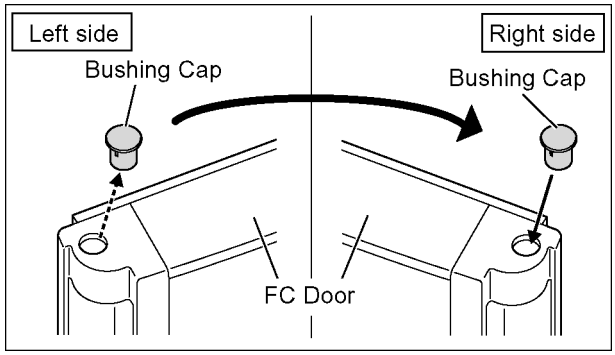
18. Remove the Door Handle Screw Cap and Middle Hinge Screw Caps on the left side.
19. Then insert that Door Handle Screw Cap and Middle Hinge Screw Caps on the right side.



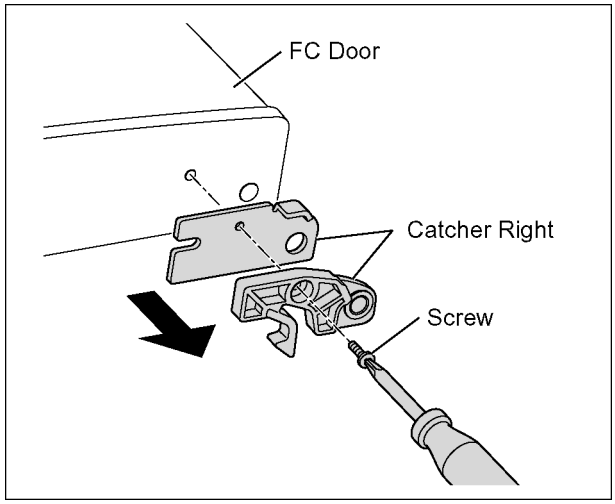
20. Put up the appliance.
21. Detach a right Bushing, and insert it in the left hole.



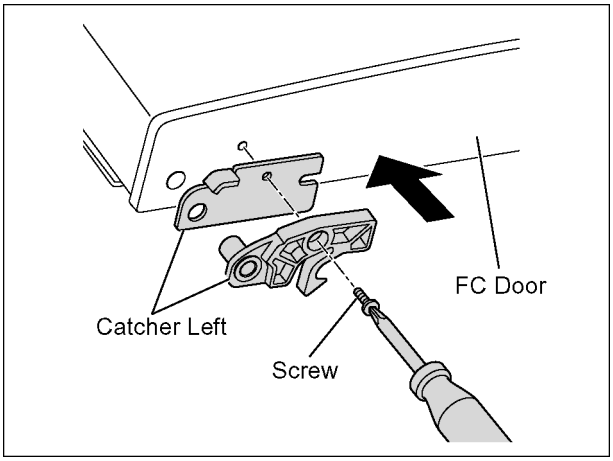
22. Remove a left Bushing Cap,and insert it in the left hole.



23. Turn the FC Door upside down.
24. Remove the Catcher Right of FC Door.



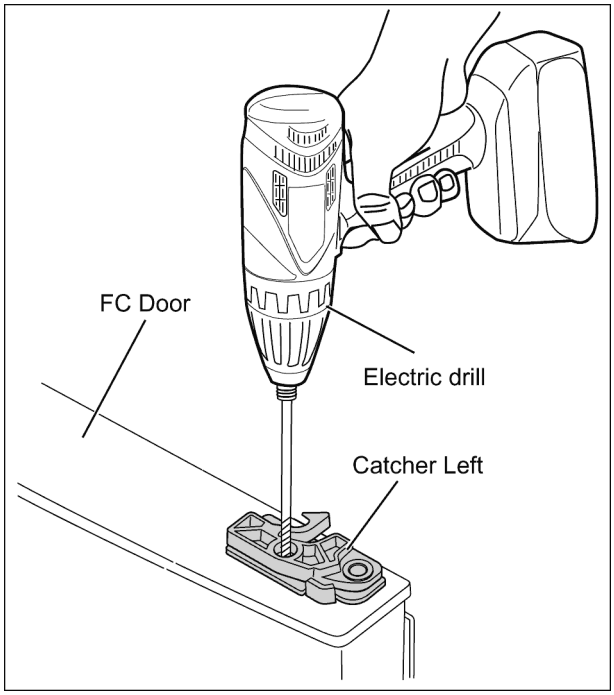
25. Insert the new Catcher Left in left. (You can find the new Catcher Left in the user manuel bag)



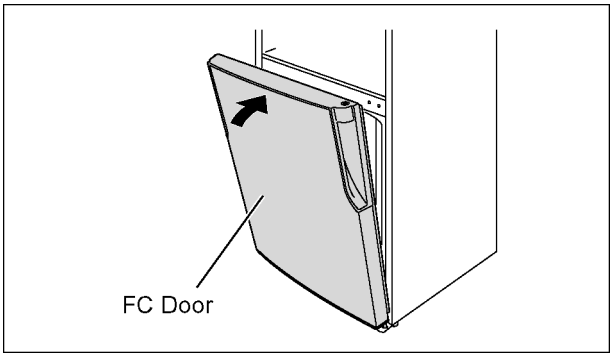
NOTICE

The screw hole is not open. Please drill it by an electric drill as shown in figure.

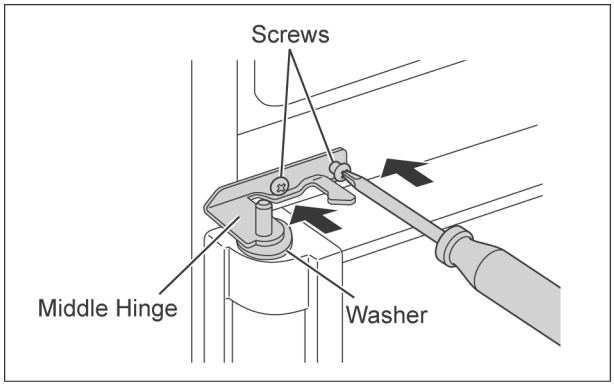
The drill diameter should be 2.5mm.



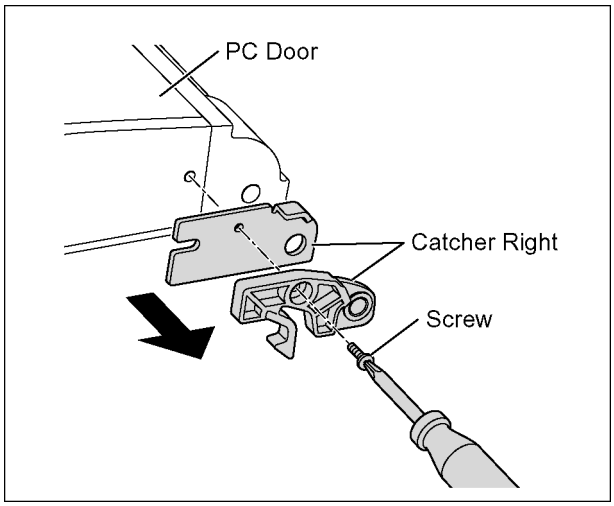
26. Assemble the FC Door.



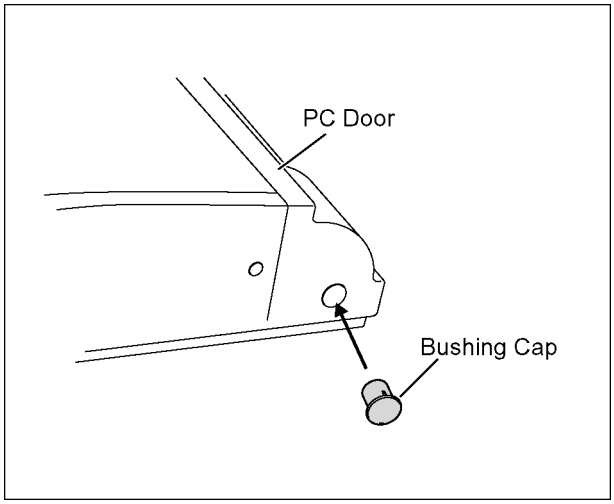
27. Turn the Middle Hinge upside down and screw it and Washer to the left side.



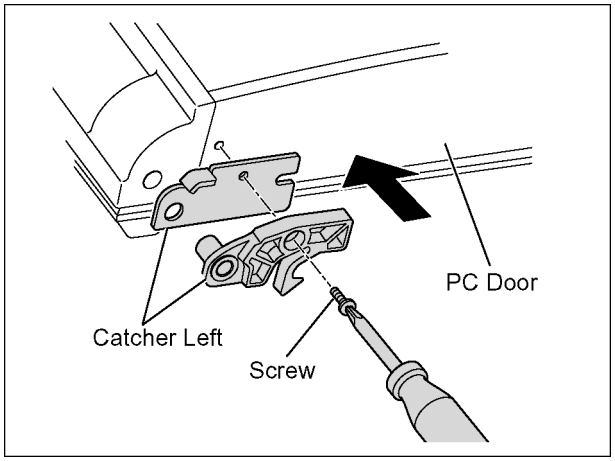
28. Remove the Catcher Right of PC Door.



29. Install left Bushing CAP in the right hole.



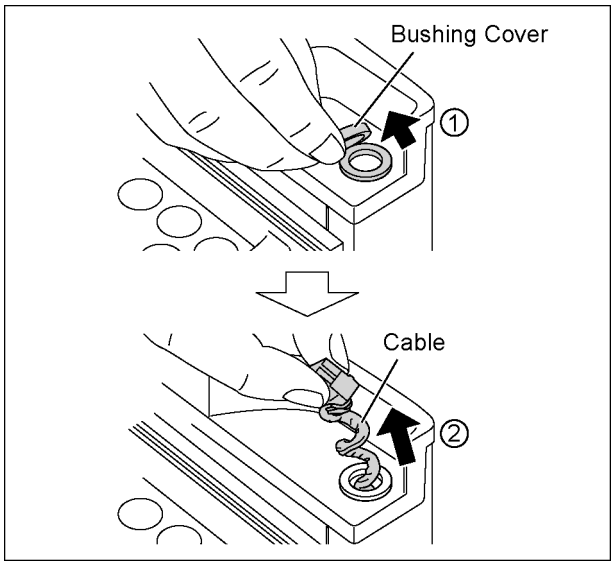
30. Insert the new Catcher Left in left. (You can find the new Catcher Left in the user manuel bag)



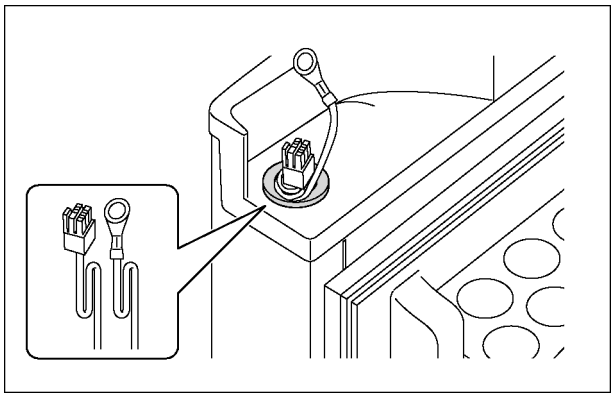
NOTICE

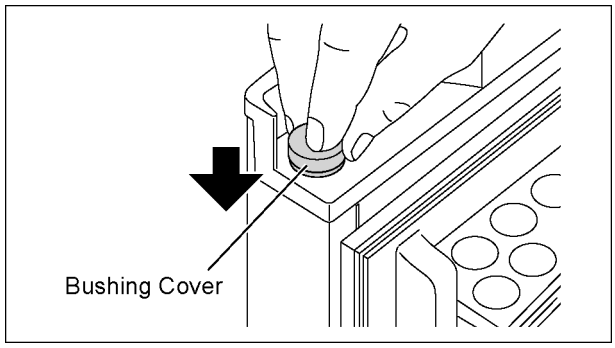
The screw hole is not open. Please drill it by an electric drill as like FC Door's Catcher Left.

31. Remove the Bushing Cover and pull the Cable to outside. The Bushing Cover is used on the right side.

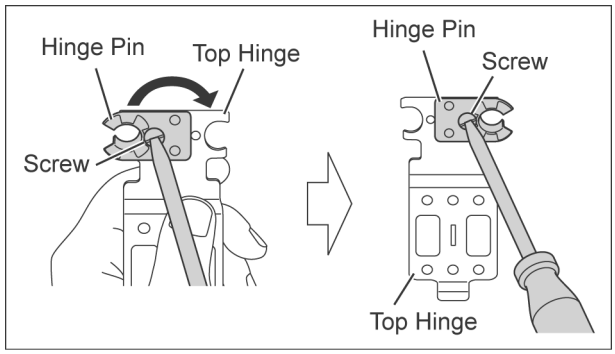


32. Fold and insert the lead wire as shown in figure and insert the bushing cover to the left side.

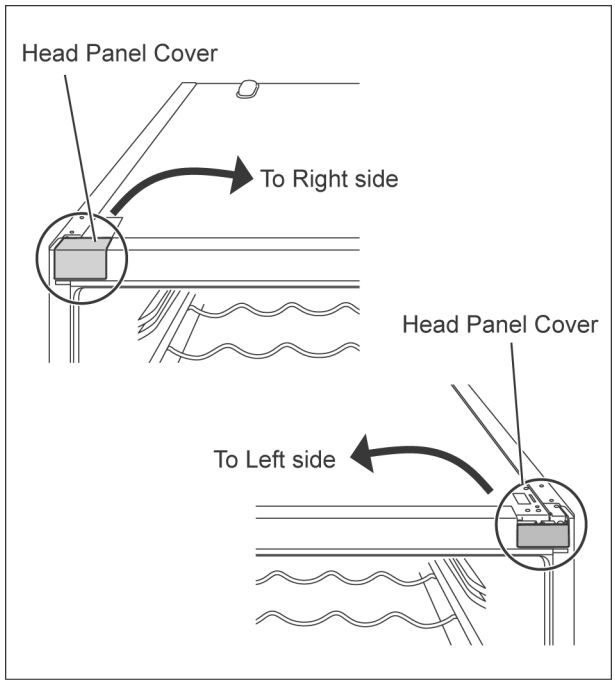




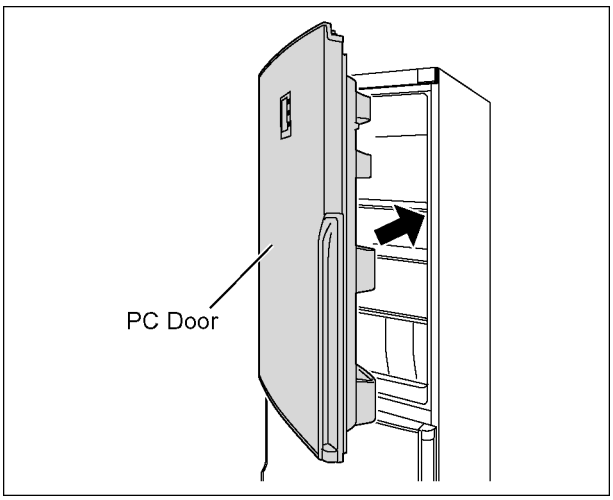
33. Unscrew the Hinge Pin and rotate the pin upside down then fix it to right side of the Top Hinge.



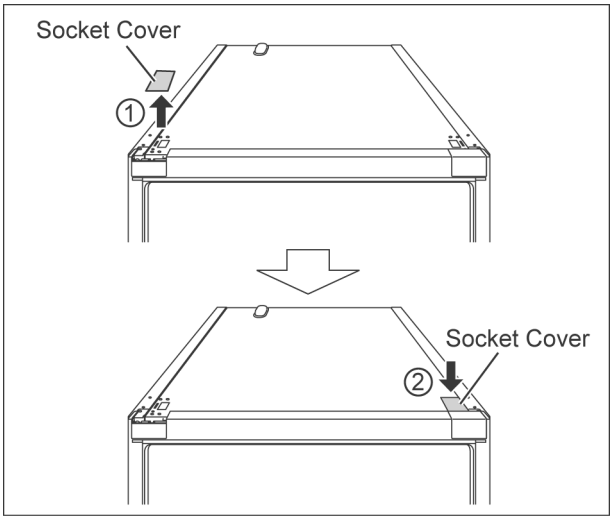
34. Swap the Head Panel Covers.



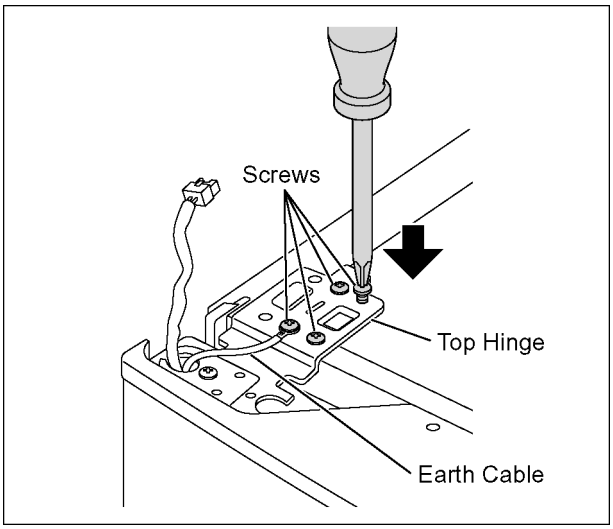
35. Assemble the PC Door.



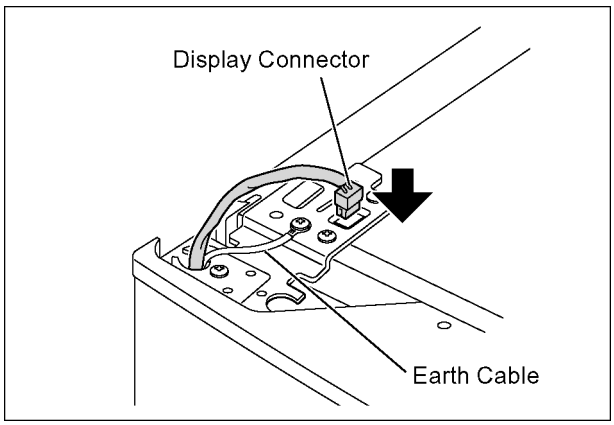
36. Remove the Socket Cover and attach it on the right side.



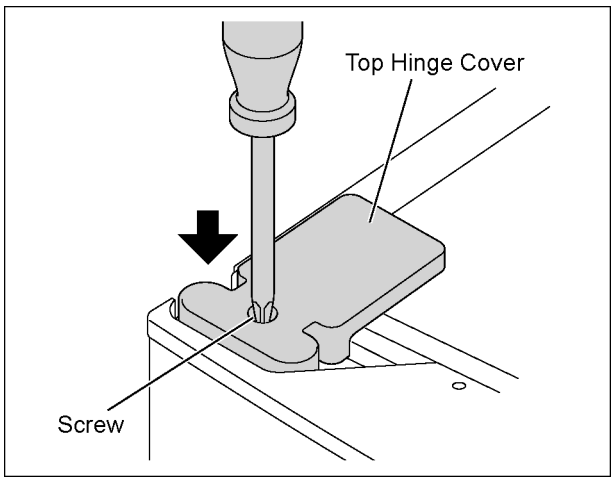
37. Screw the Top Hinge fixing screws.



38. Connect the Display Connector.



39. Mount the Top Hinge Cover and screw it.



11 Measurements and Adjustments

11.1. Component Controlling

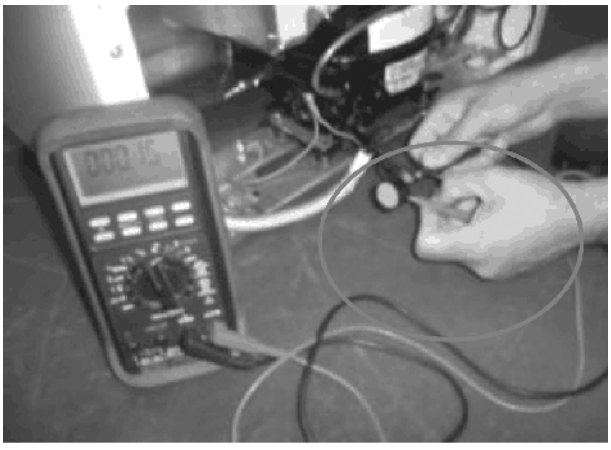
11.1.1. Compressor:

IIt pumps the refrigerant absorbed from the cooling system to the condenser. Basically it is consist of a cylinderpiston system and an electric motor. Electric motor creates the rotational motion which turns into vertical motion at cylinders to create exhaust & compression.

Possible compressor defects:

- Short circuit / bobbin fault
- Compressor locking
- Low compression pressure

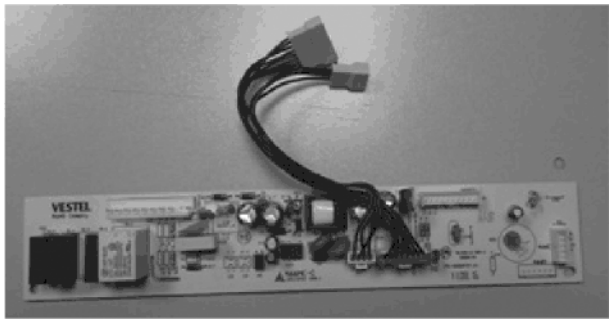
Check the OLP connections
If the OLP connections are open circuit they must have exchanged.



Check the compressor windings. If there is any open or short circuit the compressor must have exchanged.

11.1.2. Main PCB (control)

Being used in electronic No-frost models. Provides control over electrical components like heater, fan motor and damper motor. Controls the defrost time automatically through ATC.



11.1.3. Display

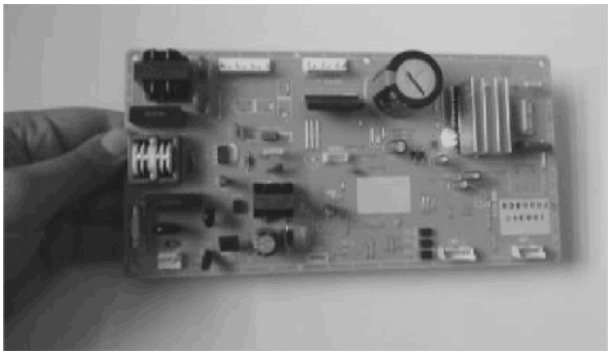
Being used in electronic No-frost models. PC & FC settings, menu & service mode and other settings are being adjusted with display buttons. All settings can be seen via display screen.

Possible Main PCB defects:

- Socket connection fault
- Damage on main PCB due to high voltage
- Relay contact fault on main PCB
- Display button fault
- Wavy display screen

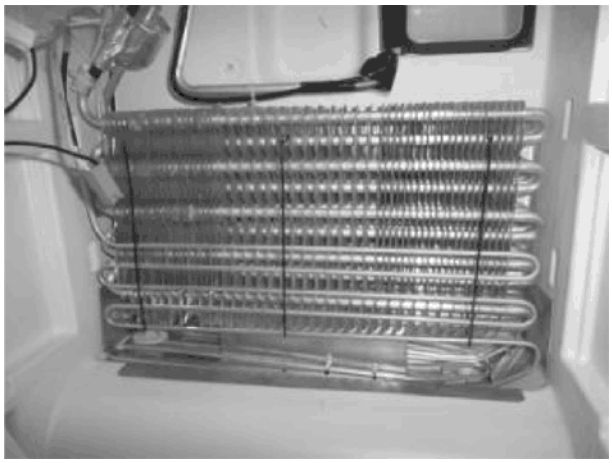
11.1.4. Inverter

Being used to control and adjust compressor working frequency also controls the LED inner lightning at product.



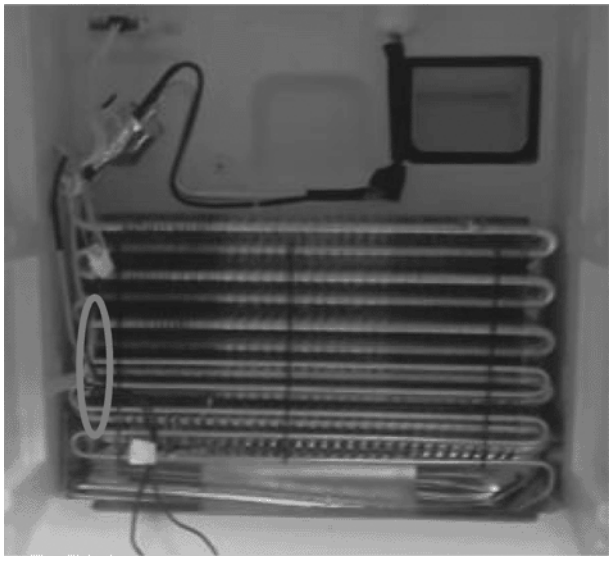
11.1.5. Defrost Heater:

Being used to defrost the icing formations.



11.1.6. Thermal fuse:

Being used in all no-frost models and placed on the right side of fin evaporator. Defrosting will be terminated by DFC. In case of faulty DFC, thermal fuse will switch off the circuit at +76 °C.



11.1.7. Damper motor:

Being used in electronic no-frost models.
It controls the cold air coming from the FC via air duct.

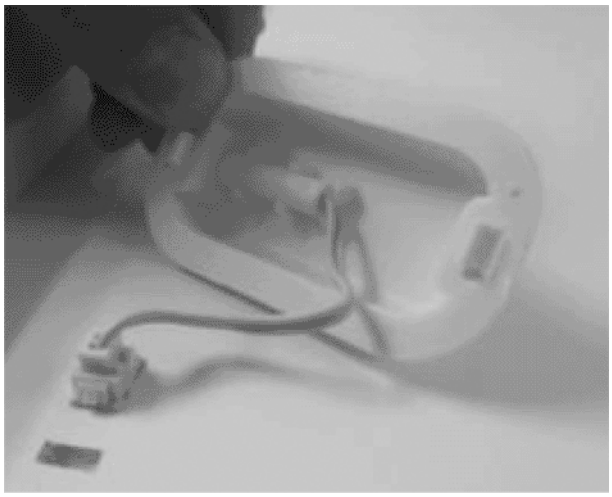
Note:
When to replace damper motor; replace PC multiflow cover assy (including damper motor). Because PC multiflow cover insulation will be broken when to disassemble PC multiflow cover assy. To take out damper motor.

11.1.8. Sensor

Sensors used at electronic models shows different resistance values for various ambiance temperatures.

These resistance values are indicated below:

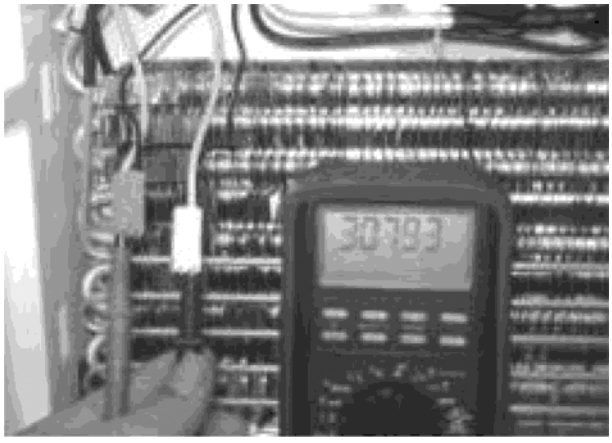
45 °C / 1 kΩ	-1 °C / 6.2 kΩ
35 °C / 1.5 kΩ	-3 °C / 6.8 kΩ
30 °C / 1.8 kΩ	-5 °C / 7.5 kΩ
25 °C / 2.2 kΩ	-7 °C / 8.2 kΩ
19 °C / 2.7 kΩ	-12 °C / 10 kΩ
14 °C / 3.3 kΩ	-15 °C / 12 kΩ
10 °C / 3.9 kΩ	-20 °C / 15 kΩ
5.5 °C / 4.7 kΩ	-24 °C / 18 kΩ



11.1.9. Thermal Fuse Control

Thermal fuse must be checked and if it is open circuit; needs to be replaced.

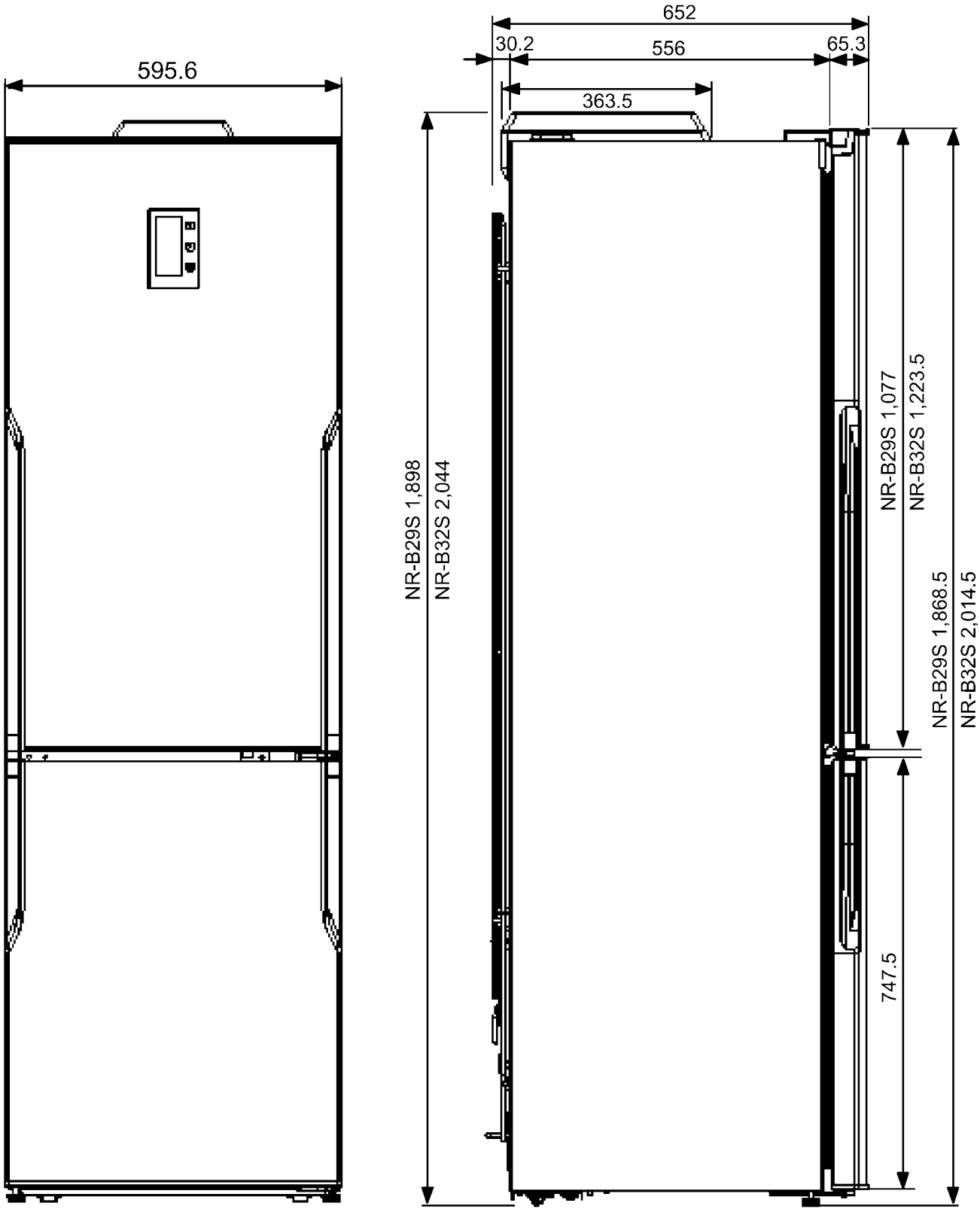
Notice:
DFC sensor and thermal fuse must be measured with ohm-meter.



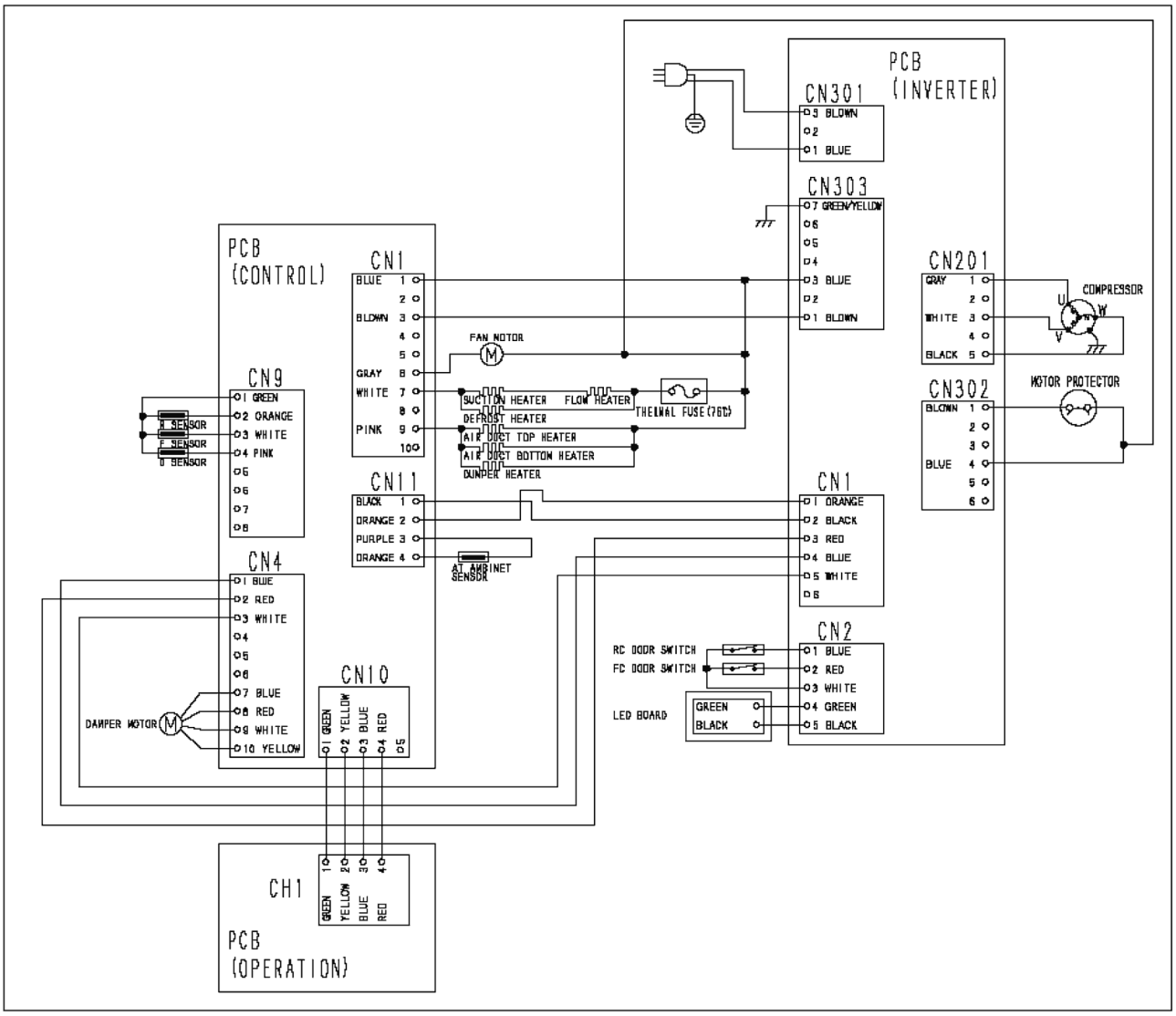
11.1.10. Defrost heater Durability Control

Defrost heater must be measured with ohm-meter. If there is open circuit it need to be replaced.

12 Dimensions



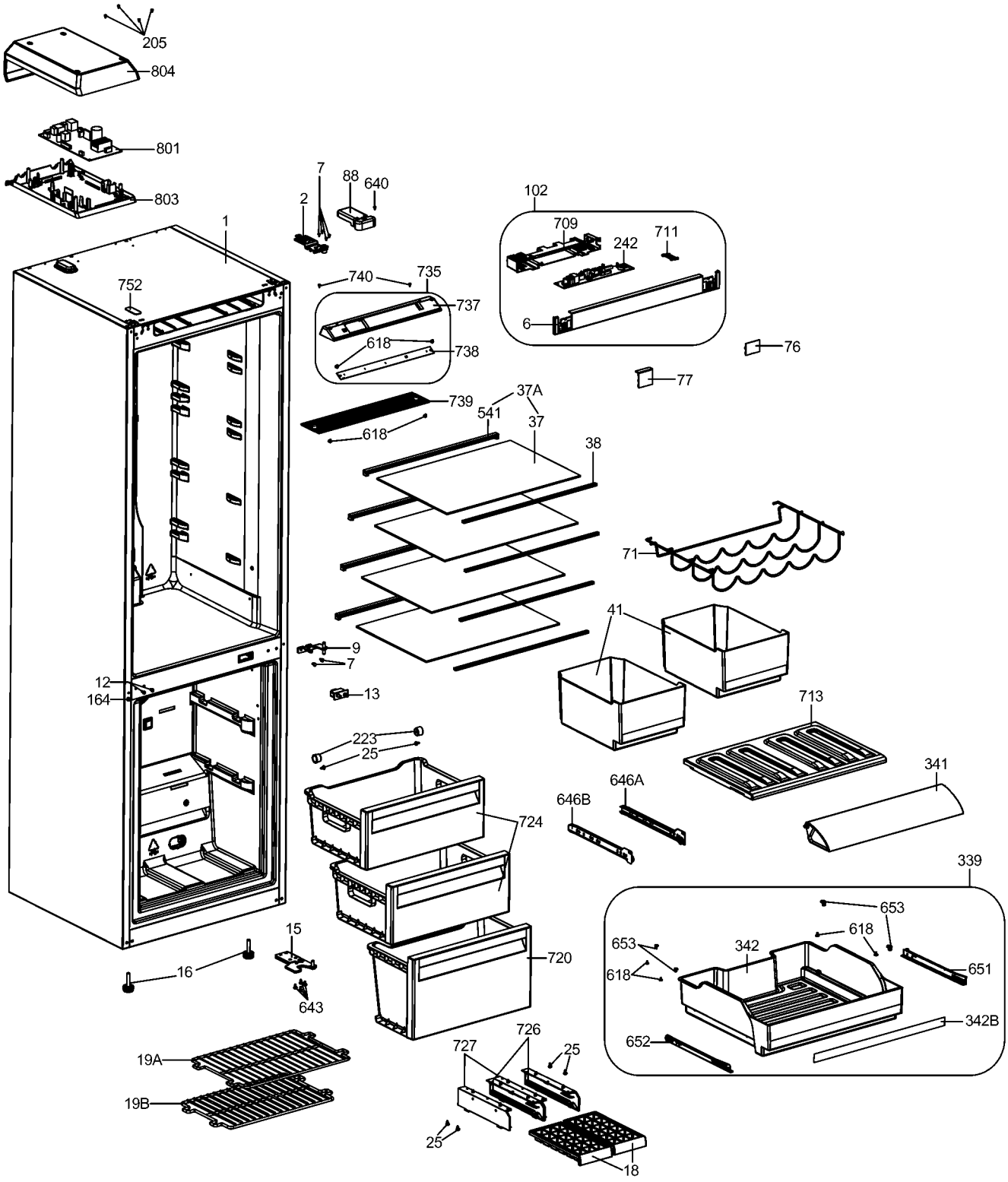
13 Schematic Diagram



14 Exploded View and Replacement Parts List

14.1. NR-B32SG2 / NR-B32SW2

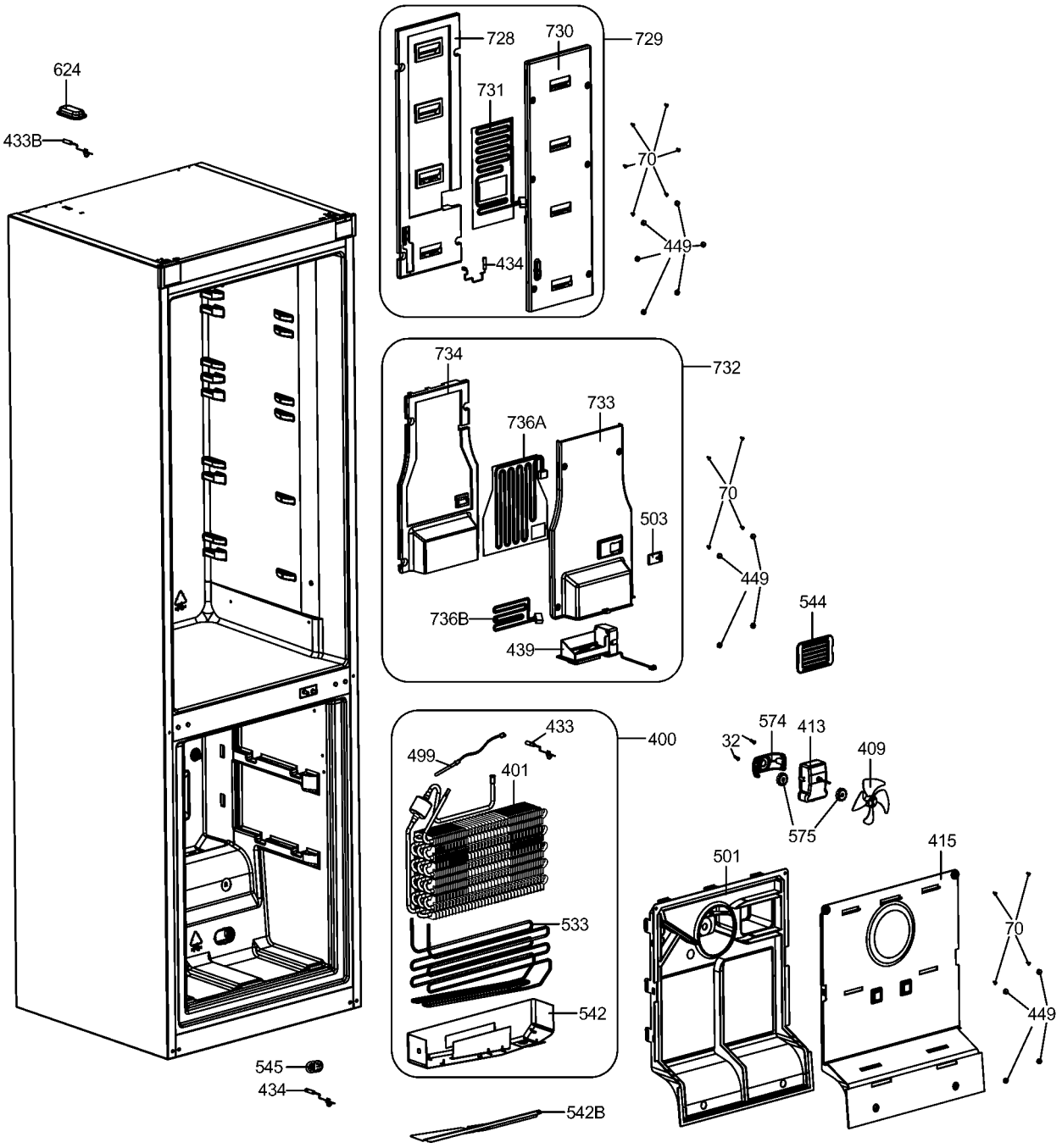
14.1.1. Interior Parts



14.1.2. Interior Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
	1	-	ASSY URT CAB	1	1	1	-	-	-
	1	-	ASSY URT CAB	-	-	-	1	1	1
⚠	2	CNRAE-152950	TOP HINGE GR	1	1	1	1	1	1
	6	CNRAC-776860	HEAD PANEL	1	1	1	-	-	-
	6	CNRAC-776820	HEAD PANEL	-	-	-	1	1	1
	7	AJ-007140	SCREW M5X14 YSB-F	6	6	6	6	6	6
⚠	9	CNRAE-159190	MIDDLE HINGE	1	1	1	1	1	1
	12	CNRAJ-327780	MIDDLE HINGE SCREW CAP	2	2	2	2	2	2
⚠	13	CNRAG-135770	MIDDLE BRACKET SWITCH GR	1	1	1	1	1	1
⚠	15	CNRAE-184130	BOTTOM HINGE	1	1	1	1	1	1
	16	CNRAJ-003380	STATIONARY FOOT	2	2	2	-	-	-
	16	CNRAJ-045180	STATIONARY FOOT	-	-	-	2	2	2
	18	CNRAH-531280	ICE TRAY	2	2	2	2	2	2
	19A	CNRAH-082230	F SHELF TOP	1	1	1	1	1	1
	19B	CNRAH-082220	F SHELF BOTTOM	1	1	1	1	1	1
	25	AJ-034820	SCREW 40X13 YSB-R-C-INOX	6	6	6	6	6	6
	37A	CNRAH-818630	R GLASS SHELF GR	4	4	4	4	4	4
	37	CNRAH-085990	R GLASS SHELF	4	4	4	4	4	4
	38	CNRAH-794540	CRISPER COVER TRIM	4	4	4	4	4	4
	41	CNRAH-815930	CRISPER/LEFT-EU	1	-	1	1	-	1
	41	CNRAH-815940	CRISPER/RIGHT-FR	1	-	1	1	-	1
	41	CNRAH-815970	CRISPER/LEFT-FR	-	1	-	-	1	-
	41	CNRAH-815990	CRISPER/RIGHT-FR	-	1	-	-	1	-
	71	CNRAH-082240	WINE SHELF	1	1	1	1	1	1
	76	CNRAC-582150	HEAD PANEL COVER RIGHT	1	1	1	-	-	-
	76	CNRAC-636440	HEAD PANEL COVER RIGHT	-	-	-	1	1	1
	77	CNRAC-582160	HEAD PANEL COVER LEFT	1	1	1	-	-	-
	77	CNRAC-636460	HEAD PANEL COVER LEFT	-	-	-	1	1	1
	88	CNRAC-589750	TOP HINGE COVER	1	1	1	-	-	-
	88	CNRAC-580530	TOP HINGE COVER	-	-	-	1	1	1
	102	CNRBC-787930	HEAD PANEL GR	1	1	1	-	-	-
	102	CNRBC-776870	HEAD PANEL GR	-	-	-	1	1	1
	164	CNRAJ-649370	DOOR HANDLE SCREW CAP	1	1	1	-	-	-
	164	CNRAJ-649480	DOOR HANDLE SCREW CAP	-	-	-	1	1	1
	205	AJ-097920	SCREW ST4.8X13 YSB-T-C	4	4	4	4	4	4
	223	CNRAH-329820	FOOT	2	2	2	2	2	2
⚠	242	CNRBG-168210	MAIN PCB	1	1	1	1	1	1
	339	CNRBH-815370	CHILLER SHELF GR EU	1	-	1	1	-	1
	339	CNRBH-819430	CHILLER SHELF GR FR	-	1	-	-	1	-
	341	CNRBH-710180	CHILLER SHELF COVER GR	1	1	1	1	1	1
	342	CNRAH-815400	CHILLER SHELF	1	1	1	1	1	1
	342B	CNRAH-710170	ACCESSORY FILM CHILLER	1	1	1	1	1	1
	541	CNRAH-710330	R CMPT SHELF TRIM-BACK	4	4	4	4	4	4
	618	AJ-101800	SCREW 30X8 YSB-F-INOX	8	8	8	8	8	8
	640	AJ-070790	SCREW TT M5X16 YSB-F	1	1	1	1	1	1
	643	AJ-145370	SCREW TT M5X25 YSB-F	4	4	4	4	4	4
	646A	CNRAH-116720	STRAGE BOX RAIL OUT (RIGHT)	1	1	1	1	1	1
	646B	CNRAH-116730	STRAGE BOX RAIL OUT (LEFT)	1	1	1	1	1	1
	651	CNRAH-116740	CHILLER RAIL INTERNAL (RIGHT)	1	1	1	1	1	1
	652	CNRAH-116710	CHILLER RAIL INTERNAL (LEFT)	1	1	1	1	1	1
	653	CNRAJ-402990	STRAGE BOX PIN	4	4	4	4	4	4
	709	CNRAC-532980	MAIN BOARD BOX	1	1	1	1	1	1
⚠	711	CNRAG-137800	WIRE HARNESS	1	1	1	1	1	1
	713	CNRBH-710200	CRISPER CHILLER SHELF GR	1	1	1	1	1	1
	720	CNRBH-710030	BOTTOM BASKET GR	1	1	1	1	1	1
	724	CNRBH-710110	TOP BASKET GR	2	2	2	2	2	2
	726	CNRAH-531300	ICE RAIL RIGHT	2	2	2	2	2	2
	727	CNRAH-531310	ICE RAIL LEFT	2	2	2	2	2	2
	735	CNRBG-179210	LED BOX GR	1	1	1	1	1	1
	737	CNRAH-709940	LED BOX	1	1	1	1	1	1
⚠	738	CNRBG-166490	LED STRIP	1	1	1	1	1	1
	739	CNRAH-709950	LED COVER	1	1	1	1	1	1
	740	AJ-154610	SCREW 30X14 YSB-R-C-INOX	2	2	2	2	2	2
	752	CNRAC-621810	TOP PANEL SOKET COVER	1	1	1	-	-	-
	752	CNRAC-621730	TOP PANEL SOKET COVER	-	-	-	1	1	1
⚠	801	CNRBG-172470	INVERTER PCB	1	1	1	1	1	1
	803	CNRAC-744650	INVERTER BOX	1	1	1	1	1	1
	804	CNRAC-791450	INVERTER BOX COVER	1	1	1	-	-	-
	804	CNRAC-744660	INVERTER BOX COVER	-	-	-	1	1	1

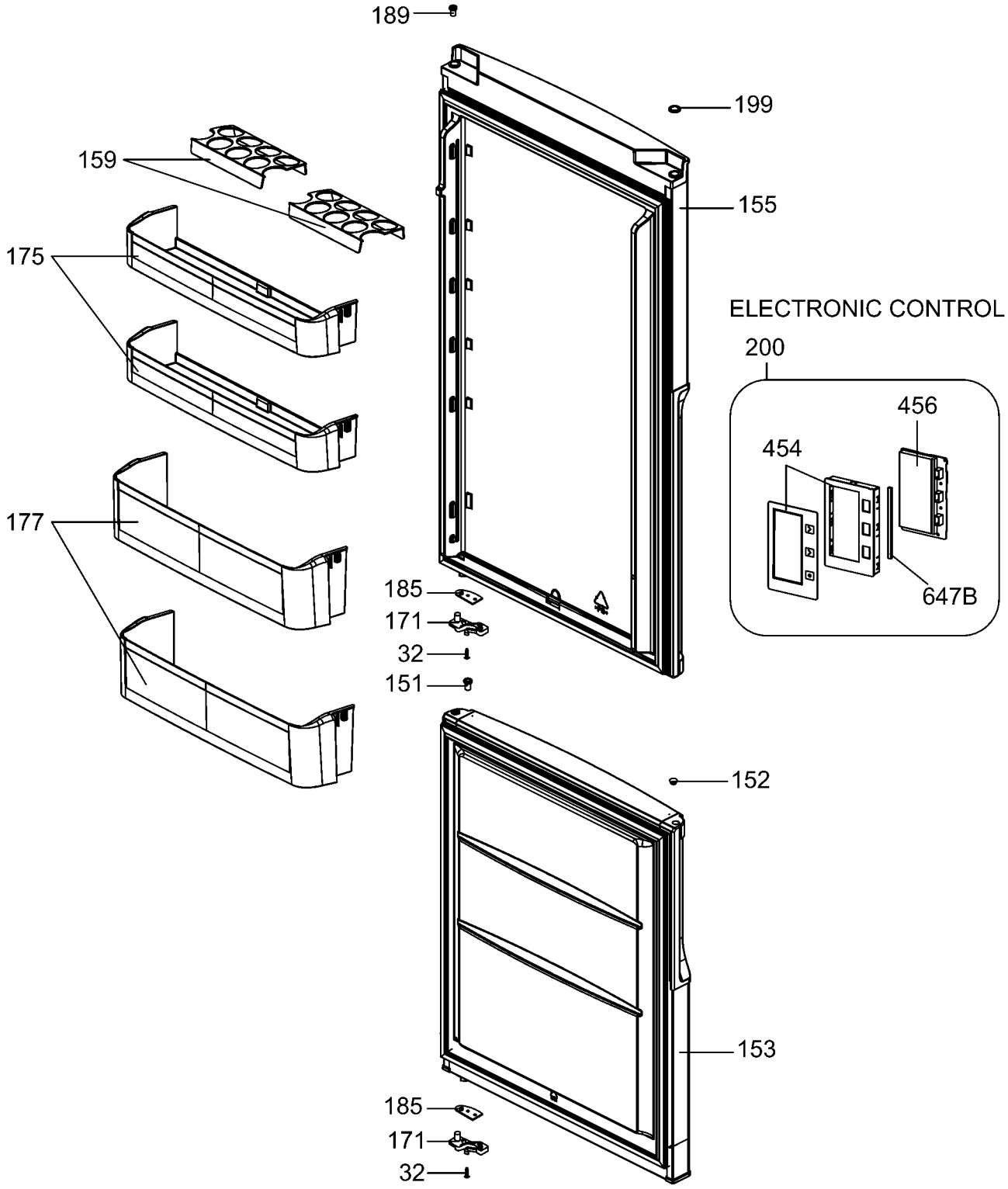
14.1.3. Multiflow Parts



14.1.4. Multiflow Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
	32	AJ-007440	SCREW KA 40X18 YSB-C-INOX	2	2	2	2	2	2
	70	AJ-016780	SCREW KA 40X14 YSB-R-F-INOX	14	14	14	14	14	14
⚠	400	CNRBF-589230	FIN EVAPORATOR ASSY	1	1	1	1	1	1
⚠	401	CNRAF-169400	FIN EVAPORATOR	1	1	1	1	1	1
	409	CNRAG-302630	PROPELLER	1	1	1	1	1	1
⚠	413	CNRBG-173210	EVAP FAN MOTOR	1	1	1	1	1	1
	415	CNRAF-710380	F MULTIFLOW COVER	1	1	1	1	1	1
⚠	433	CNRAG-148980	DEFROST SENSOR	1	1	1	1	1	1
⚠	433B	CNRAG-109090	AMBIENT SENSOR	1	1	1	1	1	1
⚠	434	CNRAG-149120	FREEZER SENSOR	2	2	2	2	2	2
⚠	439	-	MOTOR DUMPER GR	1	1	1	1	1	1
	449	CNRAJ-332440	R MULTIFLOW CAP	14	14	14	14	14	14
⚠	499	CNRAG-158580	THERMAL FUSE	1	1	1	1	1	1
⚠	501	CNRBF-183050	F MULTI FLOW GR	1	1	1	1	1	1
	503	-	R MULTI FLOW CLAPE	1	1	1	1	1	1
⚠	533	CNRAG-166470	FIN EVAP HEATER	1	1	1	1	1	1
	542	CNRAG-169410	FIN EVAPORATOR CASE	1	1	1	1	1	1
	542B	CNRAG-186400	FIN EVAPORATOR CASE AL	1	1	1	1	1	1
	544	CNRAC-580470	R AIRDUCKS COVER	1	1	1	1	1	1
	545	CNRAC-530500	SENSOR COVER	1	1	1	1	1	1
	574	CNRAG-272610	FAN BOX MOTOR FIXER	1	1	1	1	1	1
	575	CNRAG-272630	FAN MOTOR SEAL	2	2	2	2	2	2
	624	CNRAG-468400	HOLDER-SENSOR	1	1	1	1	1	1
	728	CNRAH-634690	R MULTI FLOW TOP INS	1	1	1	1	1	1
⚠	729	CNRAH-726040	R MULTI FLOW TOP GR	1	1	1	1	1	1
	730	CNRAH-726030	R MULTI FLOW TOP	1	1	1	1	1	1
⚠	731	CNRAG-175810	R MULTI FLOW TOP RES	1	1	1	1	1	1
	732	CNRBG-815410	R MULTI FLOW BOTTOM GR	1	1	1	1	1	1
	733	-	R MULTI FLOW BOTTOM	1	1	1	1	1	1
	734	-	R MULTI FLOW BOTTOM INS	1	1	1	1	1	1
⚠	736A	-	R MULTI FLOW BOTTOM HEATER	1	1	1	1	1	1
⚠	736B	-	DUMPER HEATER	1	1	1	1	1	1

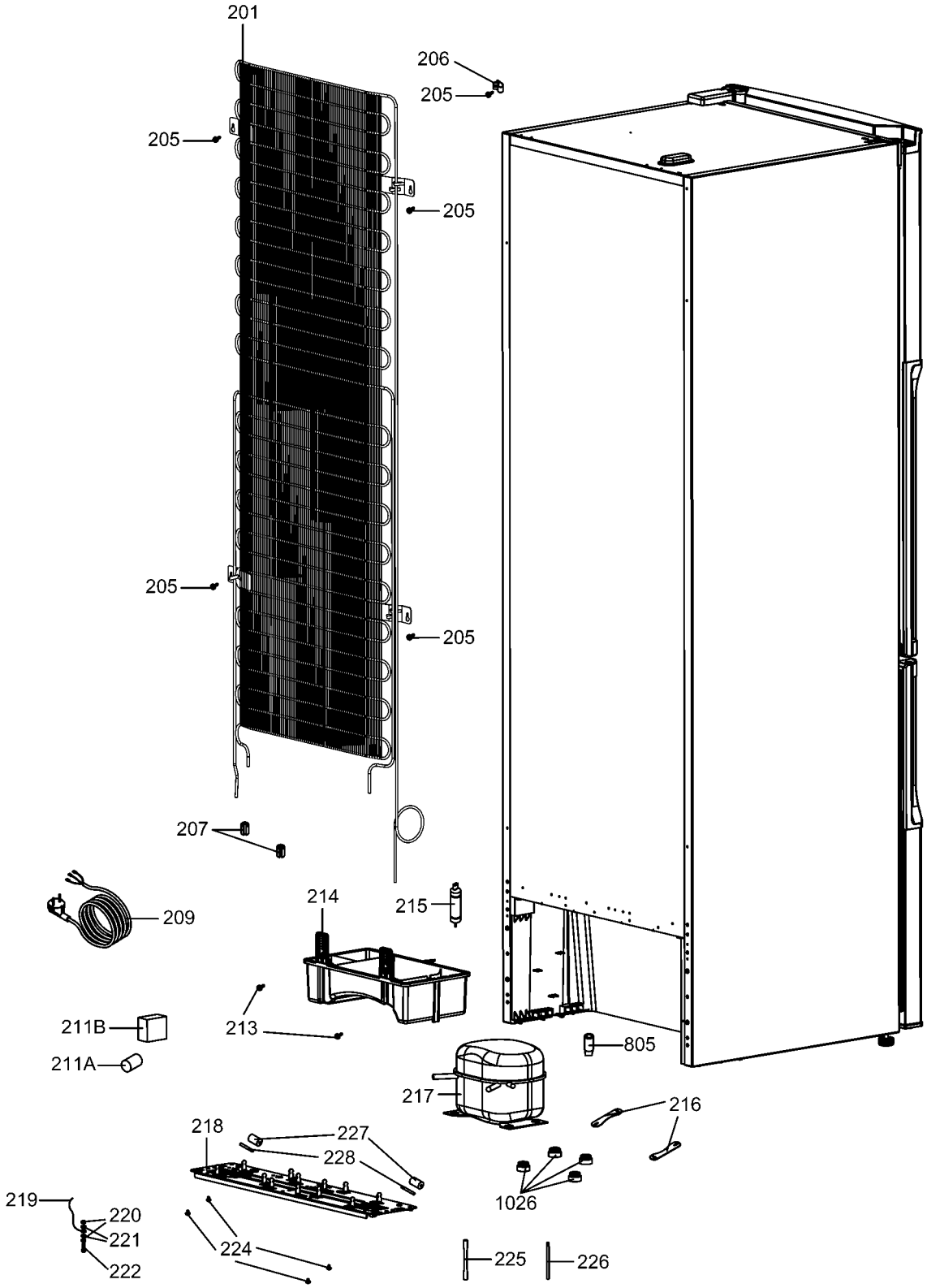
14.1.5. Door Assy Parts



14.1.6. Door Assy Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
	32	AJ-007440	SCREW KA 40X18 YSB-C-INOX	2	2	2	2	2	2
	151	CNRAE-076170	BUSHING/345P	1	1	1	1	1	1
	152	CNRAD-146140	BUSHING CAP	1	1	1	-	-	-
	152	CNRAD-315780	BUSHING CAP	-	-	-	1	1	1
	153	CNRBD-695280	F DOOR ASSY	1	1	1	-	-	-
	153	CNRBD-645570	F DOOR ASSY	-	-	-	1	1	1
	155	CNRBD-695230	R DOOR ASSY	1	1	1	-	-	-
	155	CNRBD-645520	R DOOR ASSY	-	-	-	1	1	1
	159	CNRAJ-153030	EGG HOLDER	2	2	2	2	2	2
	171	CNRAE-597910	CATCHER RIGHT	2	2	2	-	-	-
	171	CNRAE-597700	CATCHER RIGHT	-	-	-	2	2	2
	175	CNRAD-709980	CHEESE/BUTTER SHELF	2	2	2	2	2	2
	177	CNRAD-710000	BOTTLE SHELF	2	2	2	2	2	2
	185	CNRAE-160560	BOTTOM STOPPER/RIGHT	2	2	2	2	2	2
	189	CNRAE-115700	BUSHING/540P	1	1	1	-	-	-
	189	CNRAE-612500	BUSHING/540P	-	-	-	1	1	1
	199	CNRAD-617020	BUSHING COVER/540E	1	1	1	-	-	-
	199	CNRAD-117810	BUSHING COVER/540E	-	-	-	1	1	1
	200	CNRBD-179260	DISPLAY PANEL GR	1	1	1	-	-	-
	200	CNRBD-179220	DISPLAY PANEL GR	-	-	-	1	1	1
	454	CNRAG-791490	DISPLAY LENS	1	1	1	-	-	-
	454	CNRAG-791430	DISPLAY LENS	-	-	-	1	1	1
	456	CNRBG-165830	DISPLAY PANEL	1	1	1	1	1	1
	647B	CNRAG-072190	TAPE SPONGE	1	1	1	1	1	1

14.1.7. Unit Parts

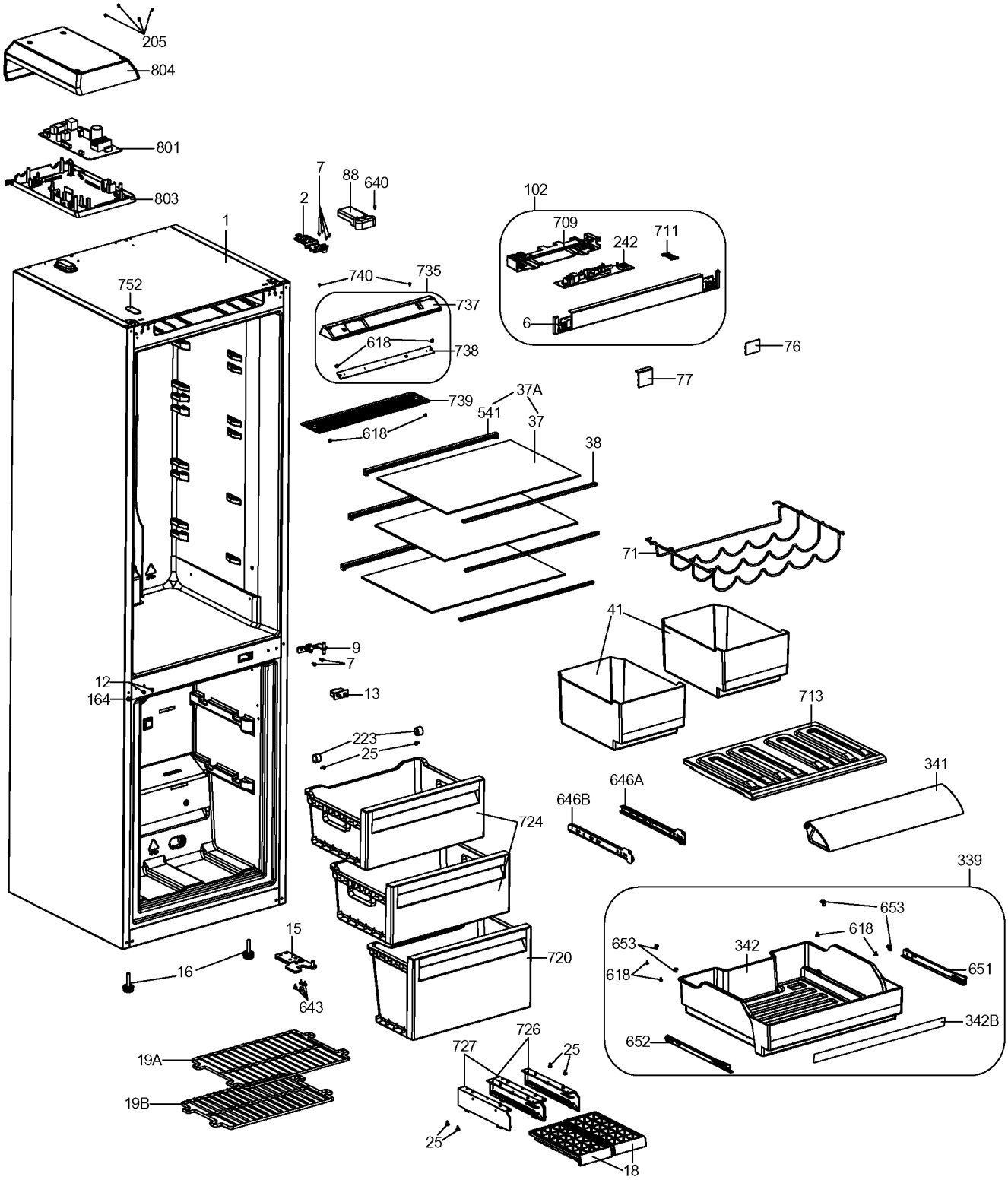


14.1.8. Unit Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
⚠	201	CNRBF-164000	MAIN CONDANSER	1	1	1	1	1	1
	205	AJ-097920	SCREW ST 4.8X13 YSB-T-C	5	5	5	5	5	5
	206	CNRAH-062350	CABLE HOLDER	1	1	1	1	1	1
	207	CNRAF-022100	ANTIVIBRATION (CONDENSER)	2	2	2	2	2	2
⚠	209	CNRBG-183550	POWER CORD GR	1	1	-	1	1	-
⚠	209	CNRBG-183640	POWER CORD GR	-	-	1	-	-	1
	213	AJ-018170	SCREW 4.2X9.5 YSB-C	2	2	2	2	2	2
	214	CNRAF-580540	EVAPORATING TRAY GR	1	1	1	1	1	1
⚠	215	CNRAJ-016970	DRYER	1	1	1	1	1	1
	216	CNRAF-200230	COMP FIXING BRACKET	2	2	2	2	2	2
⚠	217	CNRAB-172450	COMPRESSOR	1	1	1	1	1	1
	218	CNRBG-201080	COMP BASEMENT	1	1	1	1	1	1
	219	CNRAF-179100	GROUNDLY WIRE	1	1	1	1	1	1
	220	AJ-007210	NUT M4X3.2	2	2	2	2	2	2
	221	AJ-007220	WASHER 4.3X8X0.9	2	2	2	2	2	2
	222	AJ-007230	SCREW M4X16 AKB-F	1	1	1	1	1	1
	224	AJ-007280	SCREW KA 50X14 YSB-F	4	4	4	4	4	4
	225	CNRAF-026640	SERVICE TUBE	1	1	1	1	1	1
	226	CNRAF-007520	DRYER VACUUM TUBE	1	1	1	1	1	1
	227	CNRAC-022170	FRONT/BACK WHEEL	2	2	2	2	2	2
	228	CNRAC-095500	REAR WHELL PIN	2	2	2	2	2	2
	1026	CNRAB-186110	COMP RUBBER	4	4	4	4	4	4
⚠	211A	CNRAG-183230	OVER LOAD PROTECTOR	1	1	1	1	1	1
	211B	CNRAC-811440	OLP COVER	1	1	1	1	1	1
	805	CNRAF-174610	WATER DRAIN TRAY DIAPHRAGM	1	1	1	1	1	1

14.2. NR-B29SG2 / NR-B29SW2

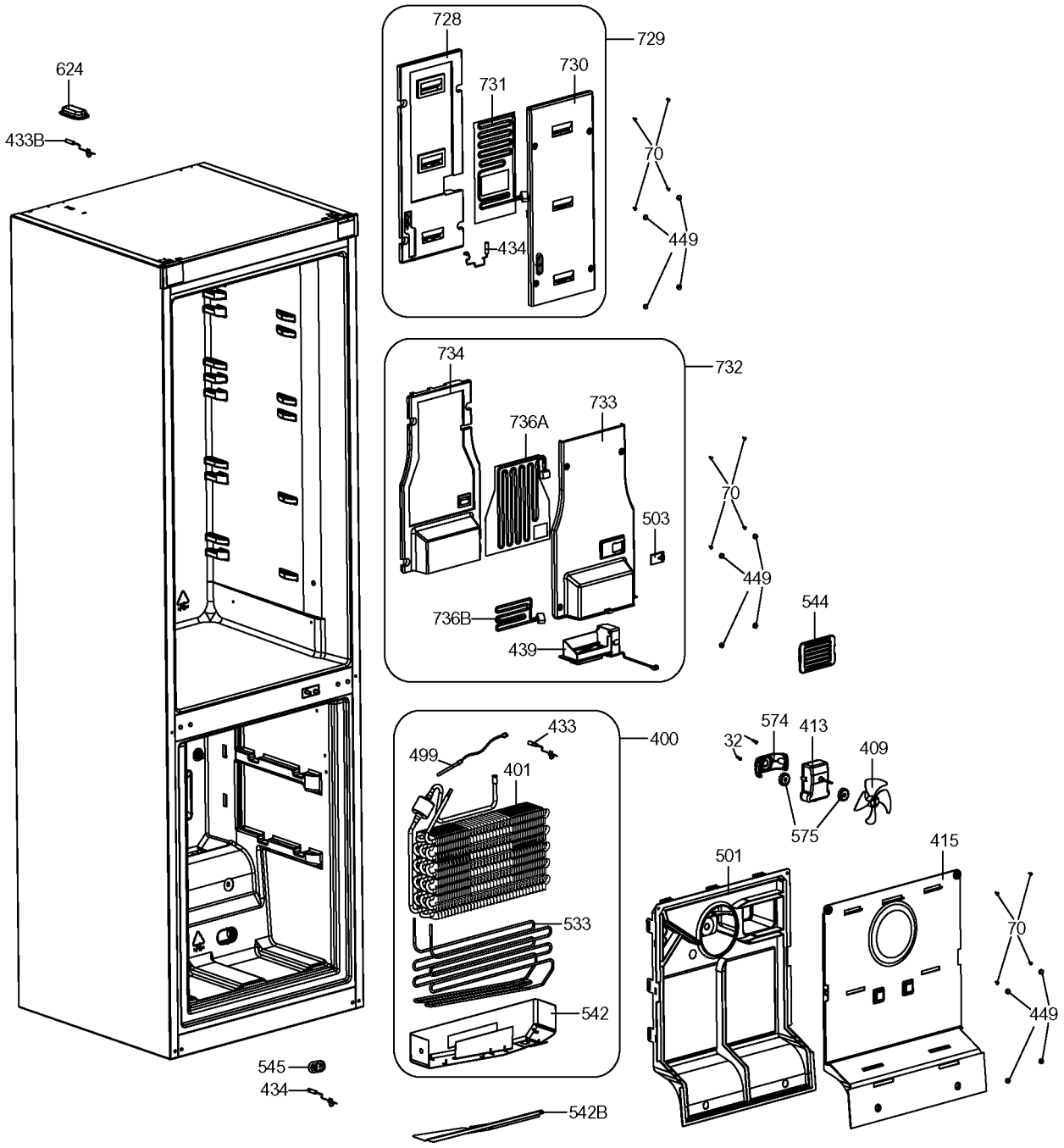
14.2.1. Interior Parts



14.2.2. Interior Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
	1	-	ASSY URT CAB	1	1	1	-	-	-
	1	-	ASSY URT CAB	-	-	-	1	1	1
⚠	2	CNRAE-152950	TOP HINGE GR	1	1	1	1	1	1
	6	CNRAC-776860	HEAD PANEL	1	1	1	-	-	-
	6	CNRAC-776820	HEAD PANEL	-	-	-	1	1	1
	7	AJ-007140	SCREW M5X14 YSB-F	6	6	6	6	6	6
⚠	9	CNRAE-159190	MIDDLE HINGE	1	1	1	1	1	1
	12	CNRAJ-327780	MIDDLE HINGE SCREW CAP	2	2	2	2	2	2
⚠	13	CNRAG-135770	MIDDLE BRACKET SWITCH GR	1	1	1	1	1	1
⚠	15	CNRAE-184130	BOTTOM HINGE	1	1	1	1	1	1
	16	CNRAJ-003380	STATIONARY FOOT	2	2	2	-	-	-
	16	CNRAJ-045180	STATIONARY FOOT	-	-	-	2	2	2
	18	CNRAH-531280	ICE TRAY	2	2	2	2	2	2
	19A	CNRAH-082230	F SHELF TOP	1	1	1	1	1	1
	19B	CNRAH-082220	F SHELF BOTTOM	1	1	1	1	1	1
	25	AJ-034820	SCREW 40X13 YSB-R-C-INOX	6	6	6	6	6	6
	37A	CNRAH-818630	R GLASS SHELF GR	3	3	3	3	3	3
	37	CNRAH-085990	R GLASS SHELF	3	3	3	3	3	3
	38	CNRAH-794540	CRISPER COVER TRIM	3	3	3	3	3	3
	41	CNRAH-815930	CRISPER/LEFT-EU	1	-	1	1	-	1
	41	CNRAH-815940	CRISPER/RIGHT-EU	1	-	1	1	-	1
	41	CNRAH-815970	CRISPER/LEFT-FR	-	1	-	-	1	-
	41	CNRAH-815990	CRISPER/RIGHT-FR	-	1	-	-	1	-
	71	CNRAH-082240	WINE SHELF	1	1	1	-	-	-
	76	CNRAC-582150	HEAD PANEL COVER RIGHT	1	1	1	-	-	-
	76	CNRAC-636440	HEAD PANEL COVER RIGHT	-	-	-	1	1	1
	77	CNRAC-582160	HEAD PANEL COVER LEFT	1	1	1	-	-	-
	77	CNRAC-636460	HEAD PANEL COVER LEFT	-	-	-	1	1	1
	88	CNRAC-589750	TOP HINGE COVER	1	1	1	-	-	-
	88	CNRAC-580530	TOP HINGE COVER	-	-	-	1	1	1
	102	CNRBC-787930	HEAD PANEL GR	1	1	1	-	-	-
	102	CNRBC-776870	HEAD PANEL GR	-	-	-	1	1	1
	164	CNRAJ-649370	DOOR HANDLE SCREW CAP	1	1	1	-	-	-
	164	CNRAJ-649480	DOOR HANDLE SCREW CAP	-	-	-	1	1	1
	205	AJ-097920	SCREW ST4.8X13 YSB-T-C	4	4	4	4	4	4
	223	CNRAH-329820	FOOT	2	2	2	2	2	2
⚠	242	CNRBG-168210	MAIN PCB	1	1	1	1	1	1
	339	CNRBH-815370	CHILLER SHELF GR EU	1	-	1	1	-	1
	339	CNRBH-819430	CHILLER SHELF GR FR	-	1	-	-	1	-
	341	CNRBH-710180	CHILLER SHELF COVER GR	1	1	1	1	1	1
	342	CNRAH-815400	CHILLER SHELF	1	1	1	1	1	1
	342B	CNRAH-710170	ACCESSORY FILM CHILLER	1	1	1	1	1	1
	541	CNRAH-710330	R CMPT SHELF TRIM-BACK	3	3	3	3	3	3
	618	AJ-101800	SCREW 30X8 YSB-F-INOX	8	8	8	8	8	8
	640	AJ-070790	SCREW TT M5X16 YSB-F	1	1	1	1	1	1
	643	AJ-145370	SCREW TT M5X25 YSB-F	4	4	4	4	4	4
	646A	CNRAH-116720	STRAGE BOX RAIL OUT (RIGHT)	1	1	1	1	1	1
	646B	CNRAH-116730	STRAGE BOX RAIL OUT (LEFT)	1	1	1	1	1	1
	651	CNRAH-116740	CHILLER RAIL INTERNAL (RIGHT)	1	1	1	1	1	1
	652	CNRAH-116710	CHILLER RAIL INTERNAL (LEFT)	1	1	1	1	1	1
	653	CNRAJ-402990	STRAGE BOX PIN	4	4	4	4	4	4
	709	CNRAC-532980	MAIN BOARD BOX	1	1	1	1	1	1
⚠	711	CNRAG-137800	WIRE HARNESS	1	1	1	1	1	1
	713	CNRBH-710200	CRISPER CHILLER SHELF GR	1	1	1	1	1	1
	720	CNRBH-710030	BOTTOM BASKET GR	1	1	1	1	1	1
	724	CNRBH-710110	TOP BASKET GR	2	2	2	2	2	2
	726	CNRAH-531300	ICE RAIL RIGHT	2	2	2	2	2	2
	727	CNRAH-531310	ICE RAIL LEFT	2	2	2	2	2	2
	735	CNRBG-179210	LED BOX GR	1	1	1	1	1	1
	737	CNRAH-709940	LED BOX	1	1	1	1	1	1
⚠	738	CNRBG-166490	LED STRIP	1	1	1	1	1	1
	739	CNRAH-709950	LED COVER	1	1	1	1	1	1
	740	AJ-154610	SCREW 30X14 YSB-R-C-INOX	2	2	2	2	2	2
	752	CNRAC-621810	TOP PANEL SOKET COVER	1	1	1	-	-	-
	752	CNRAC-621730	TOP PANEL SOKET COVER	-	-	-	1	1	1
⚠	801	CNRBG-172470	INVERTER PCB	1	1	1	1	1	1
	803	CNRAC-744650	INVERTER BOX	1	1	1	1	1	1
	804	CNRAC-791450	INVERTER BOX COVER	1	1	1	-	-	-
	804	CNRAC-744660	INVERTER BOX COVER	-	-	-	1	1	1

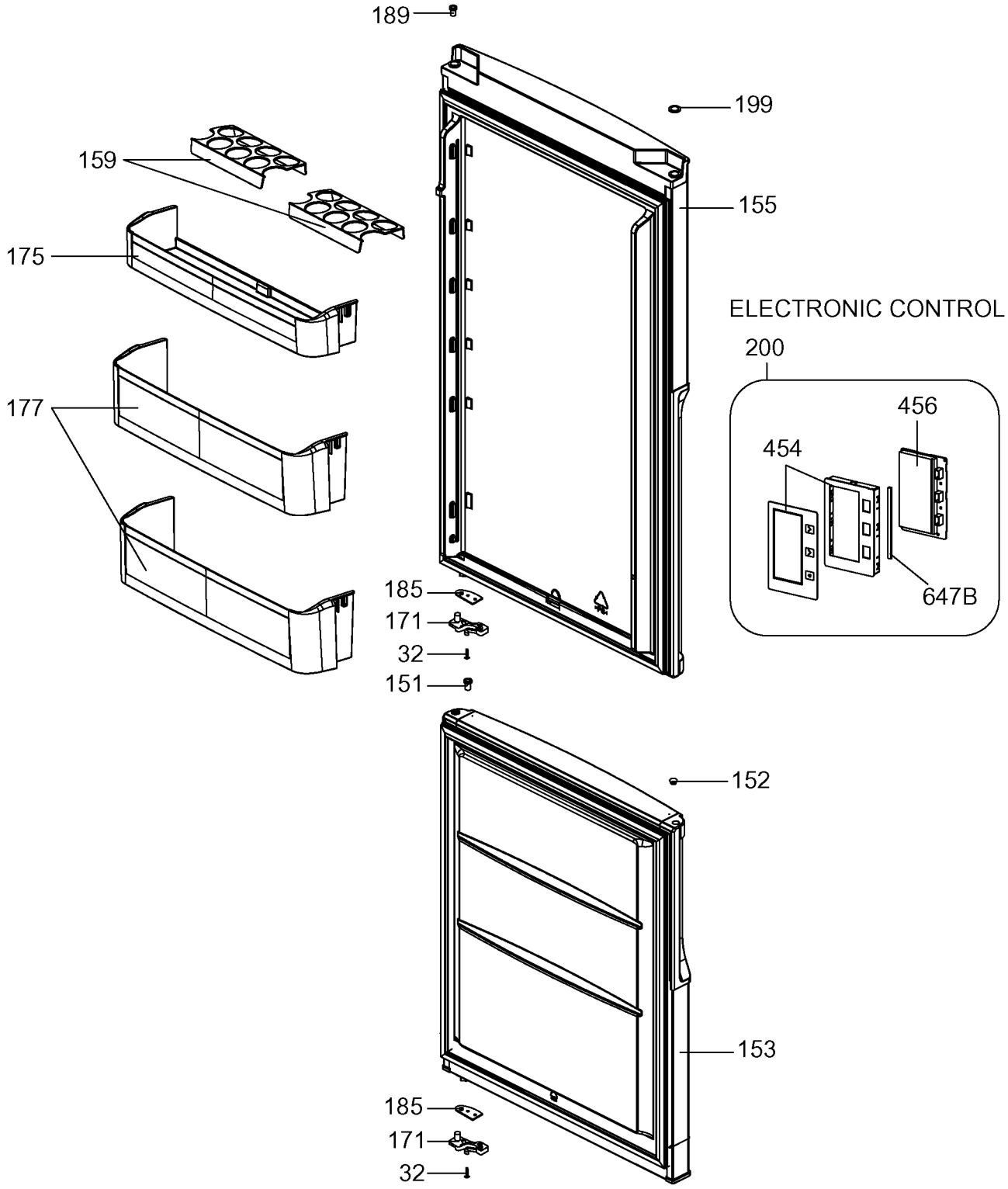
14.2.3. Multiflow Parts



14.2.4. Multiflow Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
	32	AJ-007440	SCREW KA 40X18 YSB-C-INOX	2	2	2	2	2	2
	70	AJ-016780	SCREW KA 40X14 YSB-R-F-INOX	12	12	12	12	12	12
⚠	400	CNRBF-589230	FIN EVAPORATOR ASSY	1	1	1	1	1	1
⚠	401	CNRAF-169400	FIN EVAPORATOR	1	1	1	1	1	1
	409	CNRAG-302630	PROPELLER	1	1	1	1	1	1
⚠	413	CNRBG-173210	EVAP FAN MOTOR	1	1	1	1	1	1
	415	CNRAF-710380	F MULTIFLOW COVER	1	1	1	1	1	1
⚠	433	CNRAG-148980	DEFROST SENSOR	1	1	1	1	1	1
⚠	433B	CNRAG-109090	AMBIENT SENSOR	1	1	1	1	1	1
⚠	434	CNRAG-149120	FREEZER SENSOR	2	2	2	2	2	2
⚠	439	-	MOTOR DUMPER GR	1	1	1	1	1	1
	449	CNRAJ-332440	R MULTIFLOW CAP	12	12	12	12	12	12
⚠	499	CNRAG-158580	THERMAL FUSE	1	1	1	1	1	1
⚠	501	CNRBF-183050	F MULTI FLOW GR	1	1	1	1	1	1
	503	-	R MULTI FLOW CLAPE	1	1	1	1	1	1
⚠	533	CNRAG-166470	FIN EVAP HEATER	1	1	1	1	1	1
	542	CNRAG-169410	FIN EVAPORATOR CASE	1	1	1	1	1	1
	542B	CNRAG-186400	FIN EVAPORATOR CASE AL	1	1	1	1	1	1
	544	CNRAC-580470	R AIRDUCKS COVER	1	1	1	1	1	1
	545	CNRAC-530500	SENSOR COVER	1	1	1	1	1	1
	574	CNRAG-272610	FAN BOX MOTOR FIXER	1	1	1	1	1	1
	575	CNRAG-272630	FAN MOTOR SEAL	2	2	2	2	2	2
	624	CNRAG-468400	HOLDER-SENSOR	1	1	1	1	1	1
	728	CNRAH-600230	R MULTI FLOW TOP INS	1	1	1	1	1	1
⚠	729	CNRAH-709800	R MULTI FLOW TOP GR	1	1	1	1	1	1
	730	CNRAH-709810	R MULTI FLOW TOP	1	1	1	1	1	1
⚠	731	CNRAG-175800	R MULTI FLOW TOP RES	1	1	1	1	1	1
	732	CNRBG-815410	R MULTI FLOW BOTTOM GR	1	1	1	1	1	1
	733	-	R MULTI FLOW BOTTOM	1	1	1	1	1	1
	734	-	R MULTI FLOW BOTTOM INS	1	1	1	1	1	1
⚠	736A	-	R MULTI FLOW BOTTOM HEATER	1	1	1	1	1	1
⚠	736B	-	DUMPER HEATER	1	1	1	1	1	1

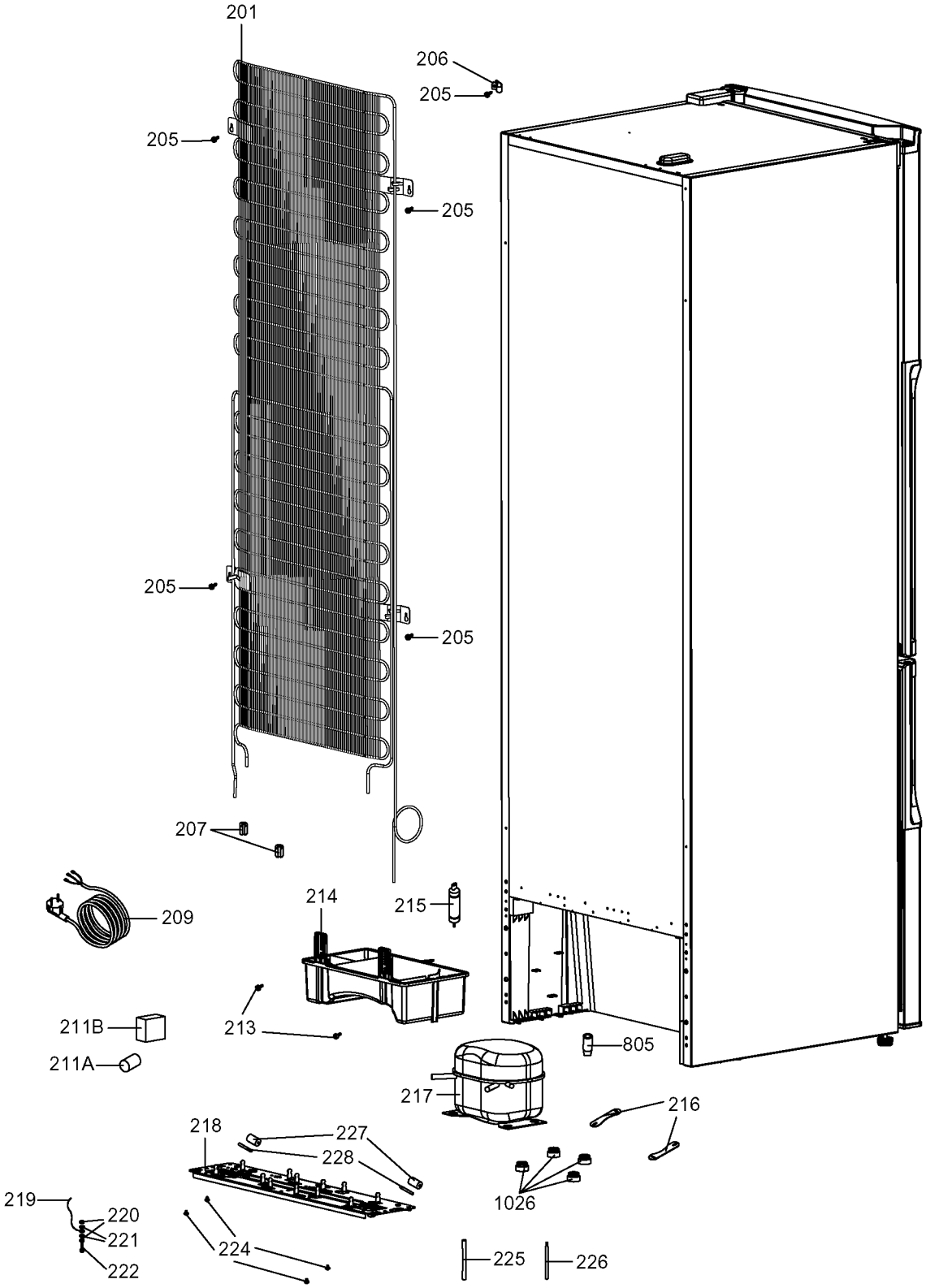
14.2.5. Door Assy Parts



14.2.6. Door Assy Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
	32	AJ-007440	SCREW KA 40X18 YSB-C-INOX	2	2	2	2	2	2
	151	CNRAE-076170	BUSHING/345P	1	1	1	1	1	1
	152	CNRAD-146140	BUSHING CAP	1	1	1	-	-	-
	152	CNRAD-315780	BUSHING CAP	-	-	-	1	1	1
	153	CNRBD-736670	F DOOR ASSY	1	1	1	-	-	-
	153	CNRBD-588990	F DOOR ASSY	-	-	-	1	1	1
	155	CNRBD-736590	R DOOR ASSY	1	1	1	-	-	-
	155	CNRBD-588960	R DOOR ASSY	-	-	-	1	1	1
	159	CNRAJ-153030	EGG HOLDER	2	2	2	2	2	2
	171	CNRAE-597910	CATCHER RIGHT	2	2	2	-	-	-
	171	CNRAE-597700	CATCHER RIGHT	-	-	-	2	2	2
	175	CNRAD-709980	CHEESE/BUTTER SHELF	1	1	1	1	1	1
	177	CNRAD-710000	BOTTLE SHELF	2	2	2	2	2	2
	185	CNRAE-160560	BOTTOM STOPPER/RIGHT	2	2	2	2	2	2
	189	CNRAE-115700	BUSHING/540P	1	1	1	-	-	-
	189	CNRAE-612500	BUSHING/540P	-	-	-	1	1	1
	199	CNRAD-617020	BUSHING COVER/540E	1	1	1	-	-	-
	199	CNRAD-117810	BUSHING COVER/540E	-	-	-	1	1	1
	200	CNRBD-179260	DISPLAY PANEL GR	1	1	1	-	-	-
	200	CNRBD-179220	DISPLAY PANEL GR	-	-	-	1	1	1
	454	CNRAG-791490	DISPLAY LENS	1	1	1	-	-	-
	454	CNRAG-791430	DISPLAY LENS	-	-	-	1	1	1
	456	CNRBG-165830	DISPLAY PANEL	1	1	1	1	1	1
	647B	CNRAG-072190	TAPE SPONGE	1	1	1	1	1	1

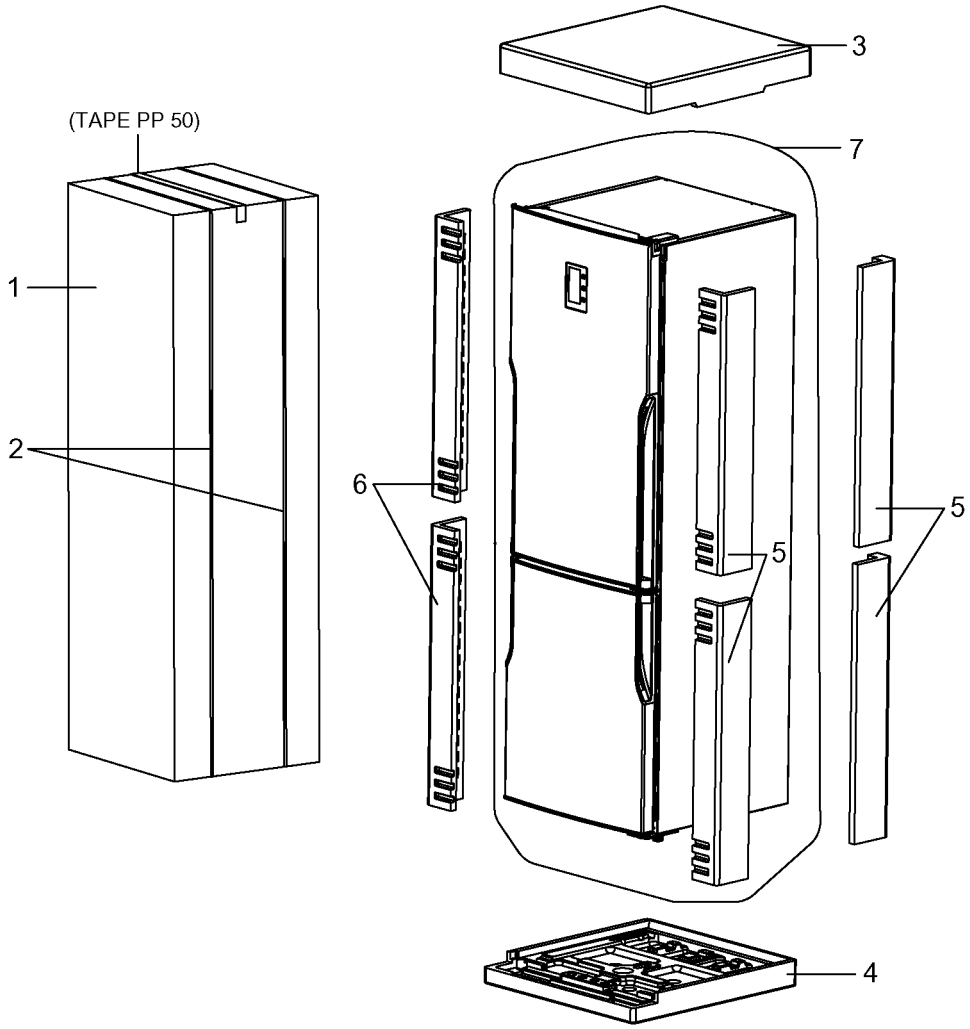
14.2.7. Unit Parts



14.2.8. Unit Parts List

Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
⚠	201	CNRBF-164000	MAIN CONDANSER	1	1	1	1	1	1
	205	AJ-097920	SCREW ST 4.8X13 YSB-T-C	5	5	5	5	5	5
	206	CNRAH-062350	CABLE HOLDER	1	1	1	1	1	1
	207	CNRAF-022100	ANTIVIBRATION (CONDENSER)	2	2	2	2	2	2
⚠	209	CNRBG-183550	POWER CORD GR	1	1	-	1	1	-
⚠	209	CNRBG-183640	POWER CORD GR	-	-	1	-	-	1
	213	AJ-018170	SCREW 4.2X9.5 YSB-C	2	2	2	2	2	2
	214	CNRAF-580540	EVAPORATING TRAY GR	1	1	1	1	1	1
⚠	215	CNRAJ-016970	DRYER	1	1	1	1	1	1
	216	CNRAF-200230	COMP FIXING BRACKET	2	2	2	2	2	2
⚠	217	CNRAB-172450	COMPRESSOR	1	1	1	1	1	1
	218	CNRBG-201080	COMP BASEMENT	1	1	1	1	1	1
	219	CNRAF-179100	GROUNDLY WIRE	1	1	1	1	1	1
	220	AJ-007210	NUT M4X3.2	2	2	2	2	2	2
	221	AJ-007220	WASHER 4.3X8X0.9	2	2	2	2	2	2
	222	AJ-007230	SCREW M4X16 AKB-F	1	1	1	1	1	1
	224	AJ-007280	SCREW KA 50X14 YSB-F	4	4	4	4	4	4
	225	CNRAF-026640	SERVICE TUBE	1	1	1	1	1	1
	226	CNRAF-007520	DRYER VACUUM TUBE	1	1	1	1	1	1
	227	CNRAC-022170	FRONT/BACK WHEEL	2	2	2	2	2	2
	228	CNRAC-095500	REAR WHELL PIN	2	2	2	2	2	2
	1026	CNRAB-186110	COMP RUBBER	4	4	4	4	4	4
⚠	211A	CNRAG-183230	OVER LOAD PROTECTOR	1	1	1	1	1	1
	211B	CNRAC-811440	OLP COVER	1	1	1	1	1	1
	805	CNRAF-174610	WATER DRAIN TRAY DIAPHRAGM	1	1	1	1	1	1

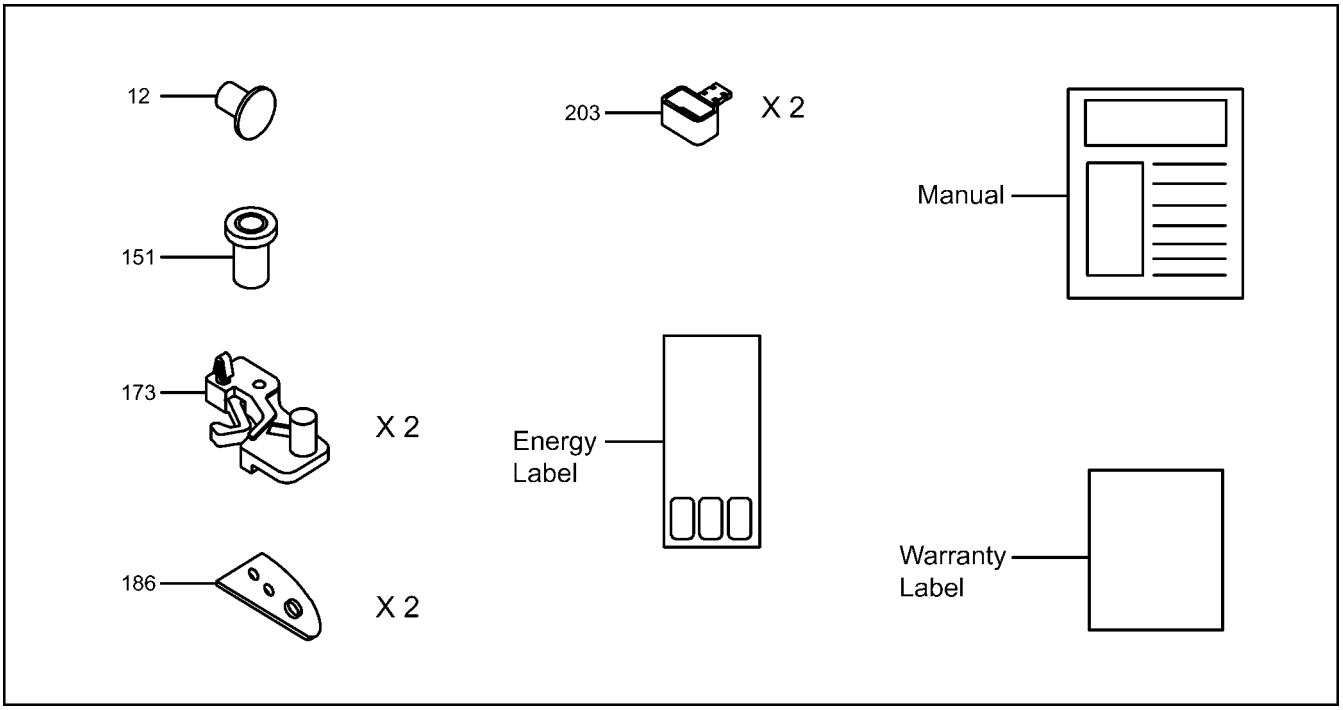
14.3. Packing Exploded View



Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
	1	CNRAK-736030	PACKAGE CARTOON	1	-	-	-	-	-
	1	CNRAK-736040	PACKAGE CARTOON	-	1	-	-	-	-
	1	CNRAK-736050	PACKAGE CARTOON	-	-	1	-	-	-
	1	CNRAK-736060	PACKAGE CARTOON	-	-	-	1	-	-
	1	CNRAK-736070	PACKAGE CARTOON	-	-	-	-	1	-
	1	CNRAK-736080	PACKAGE CARTOON	-	-	-	-	-	1
	2	CNRAK-074640	PACKAGE STRIP	1	1	1	1	1	1
	3	CNRAK-657670	PAD UPPER	1	1	1	1	1	1
	4	CNRAK-643410	PAD LOWER	1	1	1	1	1	1
	5	CNRAK-192990	PAD CORNER FRONT	4	4	4	4	4	4
	6	CNRAK-193000	PAD CORNER BACK	4	4	4	4	4	4
	7	CNRAK-6474040	PACKAGE BAG	1	1	1	1	1	1

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
	1	CNRAK-735970	PACKAGE CARTOON	1	-	-	-	-	-
	1	CNRAK-735980	PACKAGE CARTOON	-	1	-	-	-	-
	1	CNRAK-735990	PACKAGE CARTOON	-	-	1	-	-	-
	1	CNRAK-736000	PACKAGE CARTOON	-	-	-	1	-	-
	1	CNRAK-736010	PACKAGE CARTOON	-	-	-	-	1	-
	1	CNRAK-736020	PACKAGE CARTOON	-	-	-	-	-	1
	2	CNRAK-074640	PACKAGE STRIP	1	1	1	1	1	1
	3	CNRAK-657670	PAD UPPER	1	1	1	1	1	1
	4	CNRAK-643410	PAD LOWER	1	1	1	1	1	1
	5	CNRAK-192990	PAD CORNER FRONT	4	4	4	4	4	4
	6	CNRAK-193000	PAD CORNER BACK	4	4	4	4	4	4
	7	CNRAK-187240	PACKAGE BAG	1	1	1	1	1	1

14.4. Parts in document bag



Safety	Ref. No.	Part No.	Part Name & Description	NR-B29SG2			NR-B29SW2		
				SE	SF	SB	WE	WF	WB
	12	CNRAJ-327780	MIDDLE HINGE SCREW CAP	1	1	1	1	1	1
	151	CNRAE-076170	BUSHING/345P	1	1	1	1	1	1
	173	CNRAE-616900	CATCHER LEFT	2	2	2	-	-	-
	173	CNRAE-617010	CATCHER LEFT	-	-	-	2	2	2
	186	CNRBEE-60570	BOTTOM STOPPER/LEFT	2	2	2	2	2	2
	203	CNRBHE-83510	DISTANCE GUIDE	2	2	2	2	2	2
	-	CNRBHE-95550	ENERGY LABEL	1	-	-	-	-	-
	-	CNRBHE-95770	ENERGY LABEL	-	1	-	-	-	-
	-	CNRBHE-95810	ENERGY LABEL	-	-	1	-	-	-
	-	CNRBHE-95480	ENERGY LABEL	-	-	-	1	-	-
	-	CNRBHE-95730	ENERGY LABEL	-	-	-	-	1	-
	-	CNRBHE-95590	ENERGY LABEL	-	-	-	-	-	1
	-	CNRAKE-44470	OPERATING INSTRUCTIONS	1	1	1	1	1	1
	-	CNRAKE-38480	WARRANTY LABEL	1	1	1	1	1	1

Safety	Ref. No.	Part No.	Part Name & Description	NR-B32SG2			NR-B32SW2		
				SE	SF	SB	WE	WF	WB
	12	CNRAJ-327780	MIDDLE HINGE SCREW CAP	1	1	1	1	1	1
	151	CNRAE-076170	BUSHING/345P	1	1	1	1	1	1
	173	CNRAE-616900	CATCHER LEFT	2	2	2	-	-	-
	173	CNRAE-617010	CATCHER LEFT	-	-	-	2	2	2
	186	CNRBEE-60570	BOTTOM STOPPER/LEFT	2	2	2	2	2	2
	203	CNRBHE-83510	DISTANCE GUIDE	2	2	2	2	2	2
	-	CNRBHE-98520	ENERGY LABEL	1	-	-	-	-	-
	-	CNRBHE-98410	ENERGY LABEL	-	1	-	-	-	-
	-	CNRBHE-95350	ENERGY LABEL	-	-	1	-	-	-
	-	CNRBHE-95670	ENERGY LABEL	-	-	-	1	-	-
	-	CNRBHE-95630	ENERGY LABEL	-	-	-	-	1	-
	-	CNRBHE-95390	ENERGY LABEL	-	-	-	-	-	1
	-	CNRAKE-44470	OPERATING INSTRUCTIONS	1	1	1	1	1	1
	-	CNRAKE-38480	WARRANTY LABEL	1	1	1	1	1	1