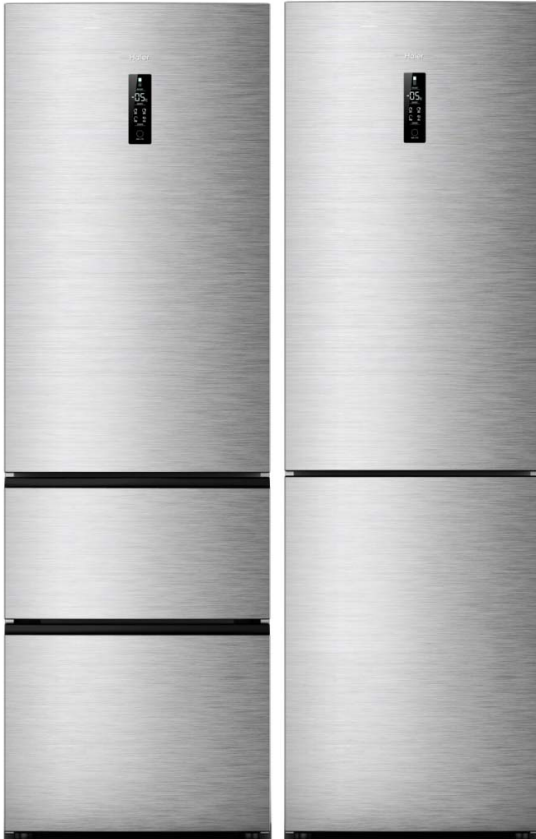


SERVICE MANUAL

Order No.Ref0902S006V0



**MODEL: A2FE635CFJRU
C2FE636CWJRU
C2FE636CFJRU
C2FE636CSJRU
A2FE637CXJRU
C2FE637CXJRU**

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 and cautions to advise non-technical individuals of potential dangers in attempting to service a product. Product 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.

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Chapter 1 General Information

1-1. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

- 1) Leakage Current Cold Check
- 2) Leakage Current Hot Check
- 3) Prevention of Electro Static Discharge (ESD) to Electrostatic Sensitive

1-2. Important notice

1-2-1. Follow the regulations and warnings

Most important thing is to list up the potential hazard or risk for the service personnel to open the units and disassemble the units. For example, we need to describe properly how to avoid the possibility to get electrical shock from the live power supply or charged electrical parts (even the power is off).



This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying the appliance.

1-2-2. Be careful to the electrical shock

To prevent damage which might result in electric shock or fire, do not expose this component to rain or excessive moisture. This component must not be exposed to dripping or splashing water, and objects filled with liquid, such as vases, must not be place on top of or above the component

1-2-3. Electro static discharge (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1-2-4. About lead free solder (PbF)


This product is manufactured using lead-free solder as a part of a movement within the consumer products industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

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1-2-5. Use the genewing parts (specified parts)

Special parts which have purposes of fire retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

Safety Component

- Components identified by  mark have special characteristics important for safety.

1-2-6. Safety Check after Repairmen

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

Insuration Test

1. Check if there is any leak of current.
2. Cut out the power supply before the repair to avoid an electrical shock hazard.
3. In the case of a live-line test, insulating gloves should be worn to avoid potential electrical shock.
4. Confirm the rated current, voltage and capacity before testing with any kinds of instruments.
5. Watch if the upper door is open when you check something at a lower position.
6. Take out every part in the cabinet before moving the machine, especially things like panels (e.g. glass shelf).
7. Please wear intact cotton gloves when repair any parts of the evaporator, so that scratches by the sharp fins can be avoided.
8. If there is a breakdown with the refrigeration system, please surrender the machine to the service center, else the leaked refrigerant may pollute the atmosphere.
9. The refrigerator use AC of 220~240V with a frequency of 50Hz.
10. A big fluctuation of voltage (exceed the range 220~240V) may cause a start failure of the refrigerator, a burn-out of the control panel and compressor, or an abnormal sound from the compressor in operation. In this condition an automatic voltage regulator over 750W should be added.
11. Take care not to damage the supply line. Don't yank at the line; pull the plug out gently from the receptacle. Don't press the line under the cabinet or step on it. Take care not to roll on or damage the supply line when moves the machine from the wall.
12. In the case of leakage of inflammable gases like carbon monoxide, open the door and windows. Don't pull out or insert the plugs of the appliance.
13. Don't touch the refrigeration surface of the freezing compartment when the refrigerator is in operation, especially when your hand is wet, else you may be glued to the surface.

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14. Pull out the plug of power supply during clearance or power outage. Wait at least five minutes to resume the power supply in order to prevent damage to the compressor caused by continuous restart.

1-2-7. Photo used in this manual

The illustration and photos used in this Manual may not base on the final design of products, which may differ from your products in some way.

1-3. How to read this Service Manual

1-3-1. Using Icons

Icons are used to attract the attention of the reader to specific information. The meaning of each icon is described in the table below:

Note: 

A “note” provides information that is not indispensable, but may nevertheless be valuable to the reader, such as tips and tricks.

Caution: 

A “caution” is used when there is danger that the reader, through incorrect manipulation, may damage equipment, lose data, get an unexpected result or has to restart (part of) a procedure.

Warning: 







A “warning” is used when there is danger of personal injury.

Reference: 

A “reference” guides the reader to other places in this binder or in this manual, where he/she will find additional information on a specific topic.

Chapter 2 Product Feature

2-1. Specifications

Pictures							
Model		A2FE635CFJRU	C2FE636CFJRU	C2FE636CSJRU	C2FE636CWJRU	A2FE637CXJRU	C2FE637CXJRU
		BEST	GOOD	GOOD	GOOD	BEST	GOOD
Product Properties							
Product description (Refrigerator/Freezer)		Refrigerator	Refrigerator	Refrigerator	Refrigerator	Refrigerator	Refrigerator
Type of appliance (FS= freestanding / BI= built-in)		FS	FS	FS	FS	FS	FS
Type of cooling system(NF=no frost/ S=static)		NF	NF	NF	NF	NF	NF
Enegey Class		A+	A+	A+	A+	A+	A+
Unit dimensions (H/W/D)	mm	1905/595/670	1905/595/670	1905/595/670	1905/595/670	1998/595/672	1998/595/672
Total net capacity	L	347	352	352	352	369	374
Climate class*		SN/T	SN/T	SN/T	SN/T	SN/T	SN/T
Freezer compartment / Star rating		4*	4*	4*	4*	4*	4*
Approvals (VDE / TÜV / IMO / NF / ÖVE / DEMKO etc.)		TÜV/GS (Rhl.)	TÜV/GS (Rhl.)	TÜV/GS (Rhl.)	TÜV/GS (Rhl.)	-	-
		PCT	PCT	PCT	PCT	PCT	PCT
Certifications (CE / ISO 9001/2)		CE / ISO 9001	CE / ISO 9001	CE / ISO 9001	CE / ISO 9001	CE / ISO 9001	CE / ISO 9001
Rohs		Y	Y	Y	Y	Y	Y
Key features							
Gross capacity	L	400	/400	400	400		
Total net capacity	L	347	352	352	352	369	374
Net capacity refrigerator compartment	L	201	201	201	201	223	223
My zone compartment	L	47	47	47	47	47	47
Freezing capacity	kg/24h	12	12	12	12	12	12
Energy consumption/year	kwh	348	353	353	353	376	381

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Max storage time at breakdown <i>Freezer</i>	Hours	13	13	13	13	13	13
Defrosting: (M=manual;A=automatic)		A	A	A	A	A	A
Ventilated fan motor in Refrigerator		N	N	N	N	N	N
Frost free system		Y	Y	Y	Y	Y	Y
Defrost water outlet		Y	Y	Y	Y	Y	Y
Air circulating ventilator		Y	Y	Y	Y	Y	Y
Kind of coolant (R134a/R600a)		R600a	R600a	R600a	R600a	R600a	R600a
Foaming components (R141b / R134a / C-P)	PU/	C-P	C-P	C-P	C-P	C-P	C-P
Technical data							
Voltage / frequency	V/Hz	220-240/ 50	220-240/ 50	220-240/ 50	220-240/ 50	220-240/ 50	220-240/ 50
Input power / mains fuse minimum	W / A	120/ (DC)	120/ (DC)	120/ (DC)	120/ (DC)	120/ (DC)	120/ (DC)
Temperature range (from>to)	°C						
Refrigerator		2~8°C	2~8°C	2~8°C	2~8°C	2~8°C	2~8°C
Vegetable Crisper		2~8°C	2~8°C	2~8°C	2~8°C	2~8°C	2~8°C
My zone (3 mode :Thaw ;Q,cool;Chiller)	yes/no	Y	Y	Y	Y	Y	Y
	Tem	-2~+3°	-2~+3°	-2~+3°	-2~+3°	-2~+3°	-2~+3°
Chiller	yes/no	Y	Y	Y	Y	Y	Y
Chiller	°C	-2~+3°	-2~+3°	-2~+3°	-2~+3°	-2~+3°	-2~+3°
Freezer	-16 ~-24°C	-16 ~-24°C	-16 ~-24°C	-16 ~-24°C	-16 ~-24°C	-16 ~-24°C	-16 ~-24°C
Features: (DIN 8950 resp. 8953)							
Energy consumption (EN 153) per / 24h	kWh	0.95	0.96	0.96	0.96	1.030136986	1.043835616
Cooling system: K=Compressor / In=Inverter compressor		In	In	In	In	In	In
Max noise level	dB(A)	40	42	42	42	40	42
Aesthetics							
Colours: W=white S=silver B=Obsidian X=stainless steel F=SS looking		F	F	S	W	X	X
Cabinet / Door / Top / Frame (w / c)		S/F/B/B	S/F/B/B	S/S/S/S	W/W/W/W	S/x/S/S	S/x/S/S
Door:							
F= flat / R= rounded / S= streamline		R	R	R	R	R	R
Inside colour		W	W	W	W	w	w
Bottle compartment	n°	3	3	3	3	4	4

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Hinged (r =right l =left) / reversible		R/R	R/R	R/R	R/R	R/R	R/R
Lock	yes/no	N	N	N	N	N	N
Freezing compartment integrated with door		Y	N	N	N	Y	N
Shelves:							
Number Fridge / Freezer		3/-	3/-	3/-	3/-	3/-	3/-
Type (gr=grill / g=glass / p=plastic)		g	g	g	g	g	g
Colour w=white / b=blue / g=green / t=transpar.		t	t	t	t	t	t
Adjustable (Y=yes / N=not)	yes/no	N	N	N	N	Y	Y
Foldable Shelf	yes/no	N	N	N	N	Y	Y
Bottle Rack	yes/no	N	N	N	N	Y	N
Drawers:							
Plastic drawers (fully freezing comp.)	n°.	2	4	4	4	2	4
half freezing comp	n°.						
Colour of drawer (w=white/t=transp./g=green)		w	w	w	w	w	w
Crisper:							
Chiller / Meat (salad crisper) transparent / white		t	t	t	t	t	t
Vegetable crisper(s) transparent / white		t	t	t	t	t	t
Equipment & accessories							
Control panel:							
Power on/off		Y	Y	Y	Y	Y	Y
Interior / exterior		Exterior	Exterior	Exterior	Exterior	Exterior	Exterior
Display type		Display on door	Display on door	Display on door	Display on door	Display on door	Display on door
Control Type		LED	LED	LED	LED	LED	LED
Control lamps green& yellow / white		white	white	white	white	white	white
Over temperature alarm freezer LED / Acoustic		-	-	-	-	-	-
Door open alarm fridge LED / Acoustic		A	A	A	A	A	A
Fast freeze switch /-function		Y	Y	Y	Y	Y	Y
Fast cooling		Y	Y	Y	Y	Y	Y
Holiday function		Y	Y	Y	Y	Y	Y
Deodorizing		N	N	N	N	N	N
UV-light		N	N	N	N	N	N
Icon-sliver		N	N	N	N	N	N

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Antibacteria		N	N	N	N	N	N
VC(Vitamin C,keep fresh longer)		N	N	N	N	N	N
Interior light	W						
LED light	Type	Full	Top Points	Top Points	Top Points	Top Points	Top Points
Freeze pack(s)	n°	2	3	3	3	2	3
ice maker		N	N	N	N	N	N
Ice cube tray(s)	n°	1	1	1	1	1	1
Water dispenser		N	N	N	N	N	N
Water dispenser with/without gas		N	N	N	N	N	N
Butter holder		N	N	N	N		
Egg trays		Y	Y	Y	Y	Y	Y
Adjustable feet front / rear	n°	2 / -	2 / -	2 / -	2 / -	2 / -	2 / -
Castors front / rear		-/x	-/x	-/x	-/x	-/x	-/x
Length of cable/incl. plug	cm	200	200	200	200	200.000	200.000
Condenser Backwall / Integrated / Under		U	U	U	U	U	U
Product dimensions							
Unit dimensions (H/W/D)	mm	1905/595/670	1905/595/670	1905/595/670	1905/595/670	1998/595/670	1998/595/670
Depth Without handle	mm	670	670	670	670	672	672
Depth with open door	mm	1204	1204	1204	1204	1204.0	1204.0
Door open angle	n°	>125	>125	>125	>125	>125	>125
Crisper fully extension with door open angle	n°	>125	>125	>125	>125	>125	>125
Net weight	kg	84	80	80	80	86	83
Packing dimensions & loadability							
Packing dimensions (H/W/D)	cm	200/66.3/74.1	200/66.3/74.1	200/66.3/74.1	200/66.3/74.1	210/66.3/74.1	210/66.3/74.1
Gross weight	kg	92	88	88	88	96.0	93.0
40' Container load	pcs	54	54	54	54	54	54
40' HC Container load	pcs	71	71	71	71	54	54
Recycling symbols							
Packing materials / Recycling symbols (RS)	RS	RS	RS	RS	RS	RS	RS
Carton weight in gr		8Kg	8Kg	8Kg	8Kg	8kg	8kg
Polystyrene weight in gr	06	1.6 Kg	1.6 Kg	1.6 Kg	1.6 Kg	1.6kg	1.6kg
Polyethylene foil weight in gr	04	0.3 Kg	0.3 Kg	0.3 Kg	0.3 Kg	0.3 Kg	0.3 Kg
Wood weight in kg	-	0.000	0.000	0.000	0.000	0.000	0.000
Service							
Users instruction (languages)		D / F / I / GB / E / P / NL / PL / RO / CZ / HU	D / F / I / GB / E / P / NL / PL / RO / CZ / HU	D / F / I / GB / E / P / NL / PL / RO / CZ / HU	D / F / I / GB / E / P / NL / PL / RO / CZ / HU	RUSSIAN	RUSSIAN

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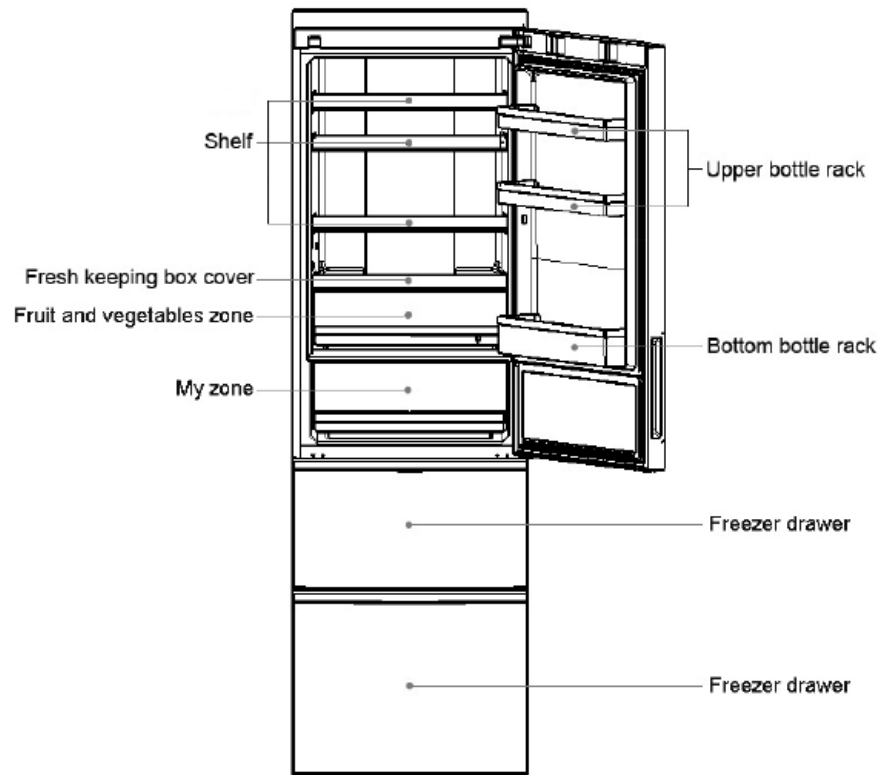
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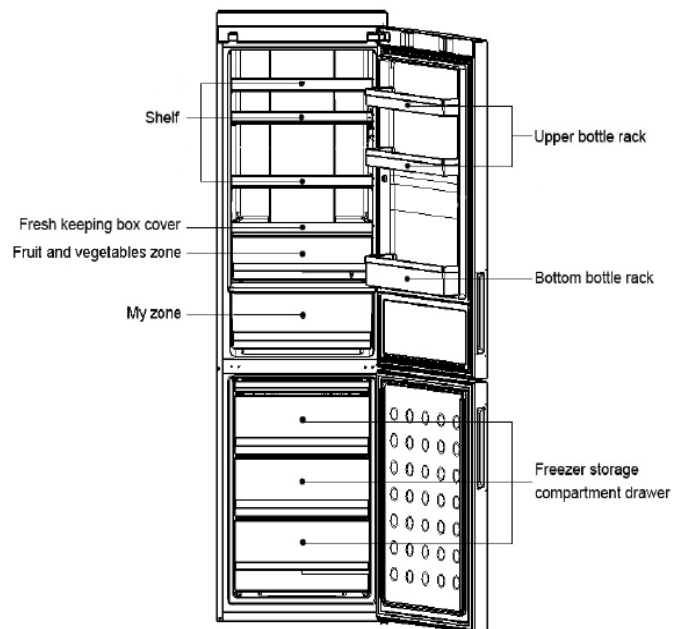
2-2. External views

2-2-1.A2FE635CFJRU

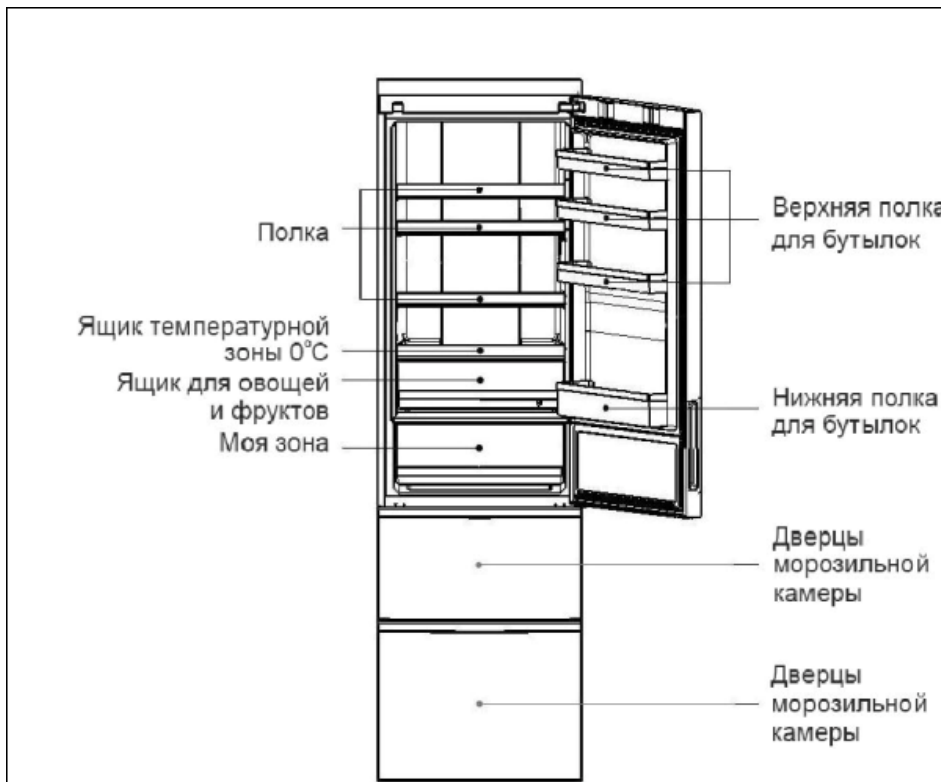
12



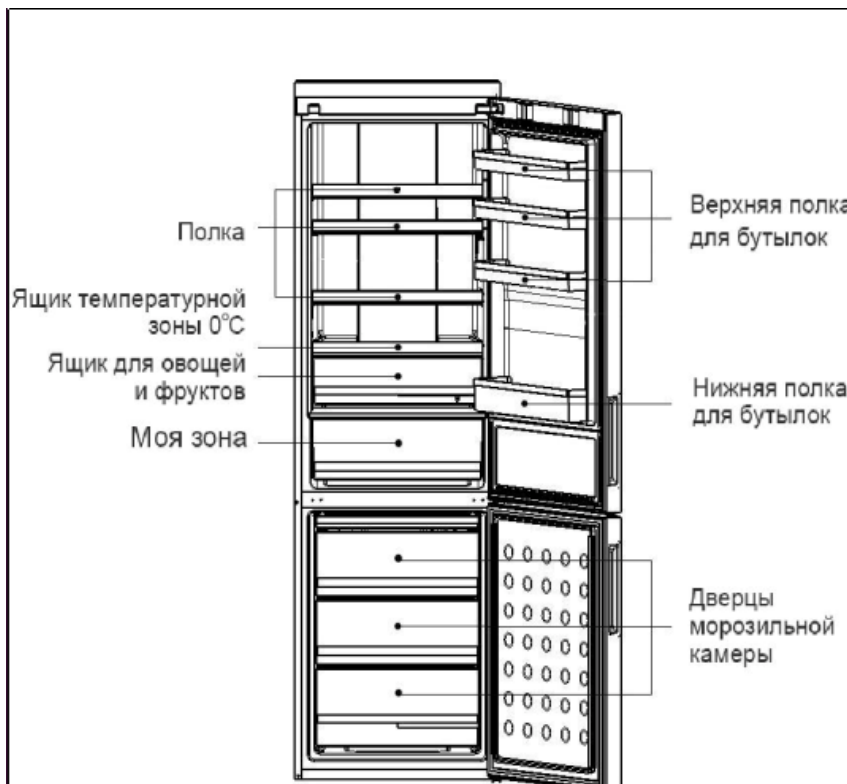
2-2-2.C2FE636CFJRU /C2FE636CSJRU/C2FE636CWJRU



2-2-3.A2FE637CXJRU



2-2-4.C2FE637CXJRU



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2-3. Major features

2-3-1.Features

1. New appearance of three stainless steel doors, fashionable and luxurious, satisfies the demands of the modern high-income families. Fully closed freezing system and drawer storage can avoid food tainting, keep cold and are energy-saving. As warm air can't easily enter into the storage area when opening the door.
2. Fully frequency control: it integrates the techniques of frequency conversion, de-noise, energy-saving and quick-freezing which can benefit mutually to make better performance. The refrigerator can automatically adjust the working efficiency of the frequency conversion compressor by comparing the inside temperature with the setting temperature and keeps the refrigerator in the optimized status all the time.
3. Two functions are added to the Chiller chamber: defrost(D-Frost)、quick cool(Q-Cool), when defrost function works, the temperature of the Chiller chamber will reach to +1℃; When quick cool function works, the temperature of the Chiller chamber is -1℃。
4. Cool wind but no frost: adopting fully air cooled refrigeration system, deep cooling and quick freezing.
5. Quick cool function: the refrigerating chamber can be adjusted to quick cool status, after being at this status, it will automatically turn on the function of quick cool and make the food go through the max ice crystal zone and thus effectively reserve the nutrition.
6. Holiday function: when you are out for holiday, refrigerator will run at the low energy consumption to make sure there's no odor in the refrigerating chamber and guarantee soft freezing and the normal storage of frozen food.
7. LED display: adopting dynamic LED to display the operational situation of refrigerator.
8. Sliding shelf, folding bottlerack: there are designs of sliding shelf and folding bottlerack for the refrigerating chamber to make storing and taking articles easier.
9. LED light guide plate illumination: adopting the technique of light guide plate illumination, the light is soft, even, bright and no illumination dead angle.
10. Double-drawer freezing door body: the freezing chamber adopts the double-drawer door body which can be opened straightly and completely. It makes storing and taking food easier. The imported slide rail with automatic door closing device can save labor as well as electric power.

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2-3-2.Explanation of The Models

A2	F	E	7	35
PRODUCT FAMILY	COOLING TECHNOLOGY	USER INTERFACE	CLASS	VOLUME
A1 = 3D Gen 1 A2 = 3D Gen 2 C1 = 2D Gen 1 C2 = 2D Gen 2 D1= Double doors Gen 1	F= FULL NO FROST S= DIRECT COOLING T= HYBRID	M= Mechanical S= Semi Electronical E= Electronic (= display on the door)	9= A++++ 8=A+++ 7=A++ 6=A+	05 = 45-54 lt 14 = 135-144 lt 21 = 195-204 lt 31 = 305-314 lt 32 = 315-324 lt 33= 325-334 lt 35 = 345-354 lt 36 = 355-364 lt

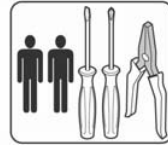
C	X	J
SPECIAL FEATURES	COLOUR	HANDLES
A = Without chiller C = Chiller I = Automatic Ice Device / ice maker with water tank in the fridge T = ATD (Adj. T° Drawer) W = Water through the door	W = White T = Titanium S = Silver X = Inox (Stainless steel) G = Glass (Transparent Door) GW = Glass white GR = Glass red GB = Glass black GS= Glass stainless steel N = Black SS (VCM) A = Aluminium SS (VCM) B = Obsidian F = Inox looking	J= Recessed/integrated T= External E= Easy handles

Chapter 3 Installation, adjustments and maintenance

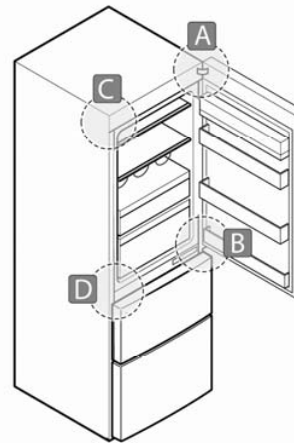
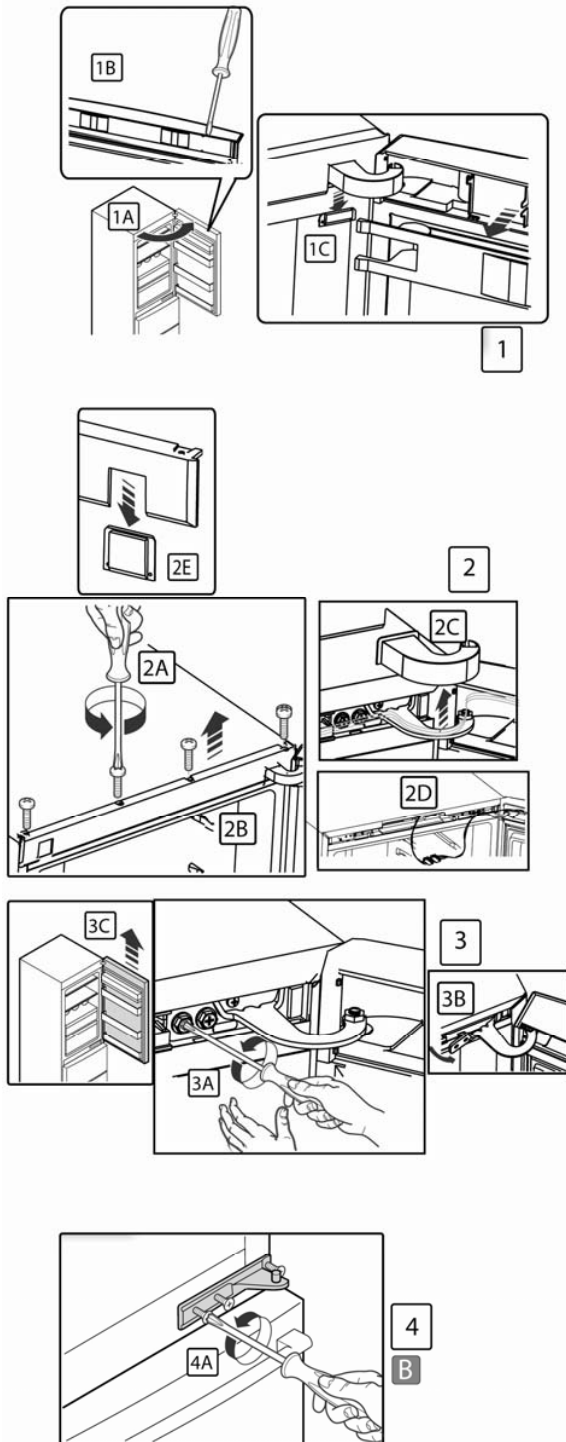
3-1. Door (Refrigerator door, Freezer door)

3-1-1. Removing and replacing the right door of refrigerator compartment

Door reversibility: dismantling door from the right



! Disconnect power and empty the appliance before you start the operation.



- 1
 - A) Open the refrigerator door;
 - B) using a normal screwdriver, work on the two clips to remove the head from the top end of the door and withdraw it forward;
 - C) using a normal screwdriver, withdraw downward the clips from the right side – the clips are under the upper hinge, take care not to damage them.

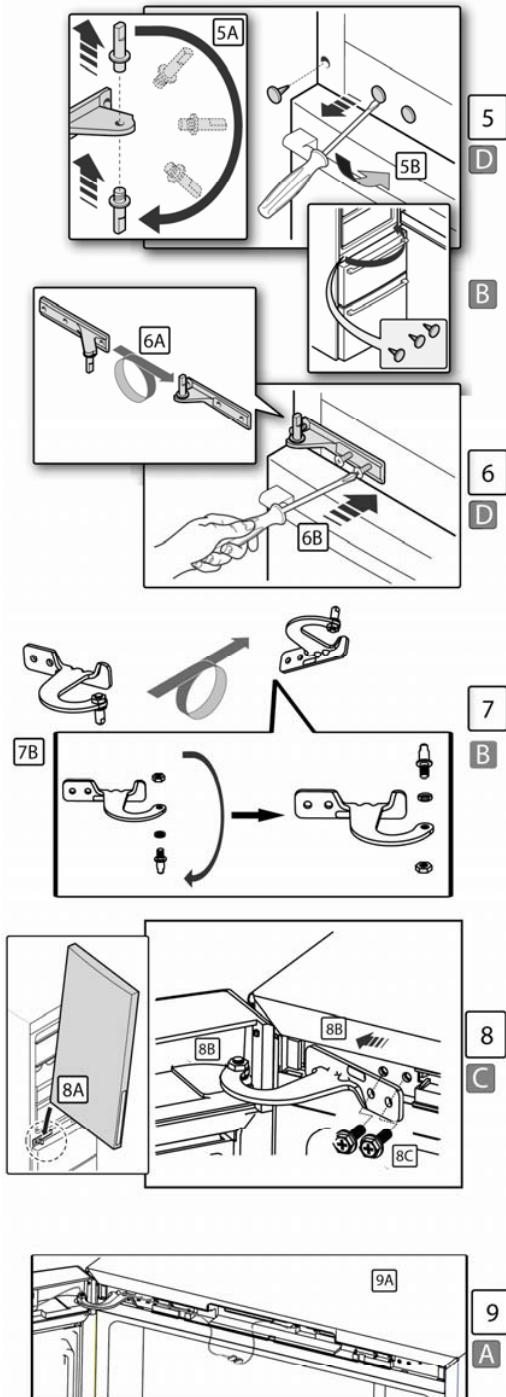
- 2
 - A) Unscrew the four screws which secure the front panel located at the top;
 - B) Push the front panel upward to withdraw the front panel;
 - C) Pull the hinge cover upward;
 - D) Disconnect the two connected terminals of electric cable;
 - E) Push the small cover on the right side of the front panel by one hand to withdraw the small cover;

- 3
 - A) While firmly holding the refrigerator door, unscrew the two screws which restrain the upper hinge on the left.
 - B) Remove the upper hinge, first turning it anti-clockwise and then withdrawing it forward.
 - C) Next, remove the door from the refrigerator, with drawing it upward and re-position it carefully, paying attention not to damage it.

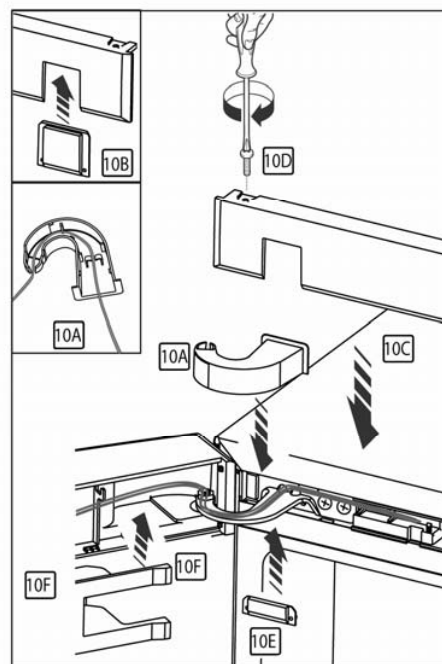
- 4
 - A) Unfasten the three screws which restrain the central hinge so that you can remove it;

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Door reversibility: mounting door from the left



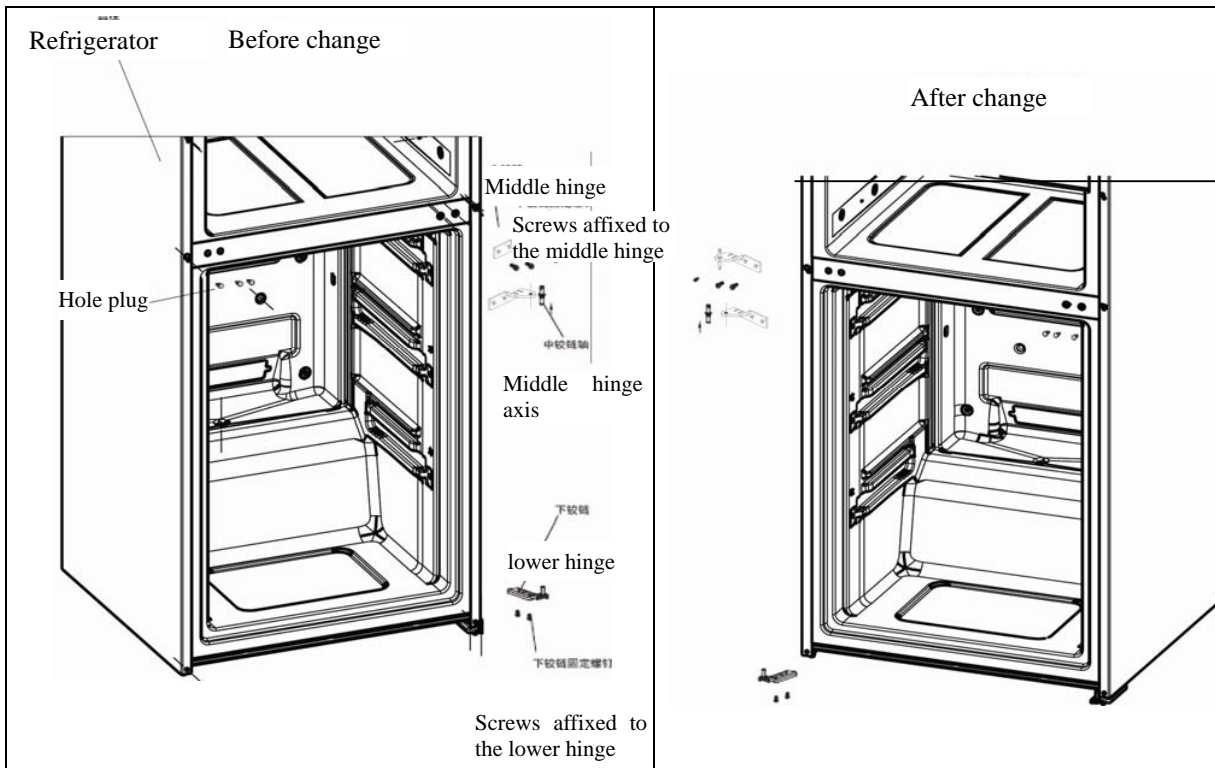
- 5
 - A) Take the central hinge, and with the aid of pliers, unscrew the pin, turn it upside down and re-fasten it on the hinge.
 - B) With the help of a normal screwdriver, withdraw the three hole-covers of the central cross piece from the left, and re-install them on the right.
- 6
 - A) Take the central hinge and turn it through 180°;
 - B) fasten it with the screws on the left of the central cross-piece.
- 7
 - A) Remove the top hinge from the refrigerator door;
 - B) With the aid of pliers, unscrew and remove the screws on the top of the hinge, then loosen and remove the pin on the bottom of the hinge; then re-install the
- 8
 - A) Take the refrigerator door, and insert it on the pin of the central hinge,
 - B) Fit the upper hinge on the door and take it toward its location on the appliance
 - C) Insert the hinge slot on the screw at the left.
- 9
 - A) transfer the display cable located in the slit above the refrigerator door from left to right, always keeping it inside the slit, and connect it to the electric cable which is extending from the cabinet above the cabinet;
- 10
 - A) Click-fit the hinge cover, firstly to clip the electric cable into the hinge cover, then clip it to the hinge;
 - B) install the small cover to the right side of the front panel from bottom to top direction;
 - C) Click-fit the front panel from top to bottom direction, applying pressure on several points to secure the bottom clips being inserted into the slit of the cross beam;
 - D) secure it with four screws;
 - E) fit the clips on the left sides (previously removed);
 - F) Click-fit the front panel onto the refrigerator door;



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3-1-2. Removing and replacing the right door of freezer compartment

(For C2FE636CFJRU /C2FE636CSJRU/C2FE636CWJRU/C2FE637CXJRU)



Directions on how to dismantle and install the middle and lower hinges

- (1) Detach the 3 screws affixed to the middle hinge and remove the hinge. Unscrew the hinge axis and then screw it from the reversed direction.
- (2) Remove the upper and lower doors separately. Dismantle the stop blocks on the bottom of the doors. Turn them by 180 degrees and refit them on the other side.
- (3) Tilt the refrigerator to the required angle. Detach the screws fixing the lower hinge and remove the hinge.
- (4) Fix the lower hinge to the bottom of the other side of the cabinet. Then, mount the lower door on the lower hinge.
- (5) Take out the 3 hole plugs on the other side of the cabinet.

Turn the middle hinge by 180 degrees and install it on the other side of the cabinet. Attach the 3 screws removed in step 1. Mount the 3 hole plugs into the holes where the hinge is seated originally.

Note: For 3-door refrigerators, the operation concerning the lower hinge is not needed.

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3-2. Adjustable foot

Level the cabinet. The refrigerator should be placed on a flat and solid surface. If the refrigerator is placed on an uneven surface, flat strong and fire- resistant materials must be used. Never use the foam packing material as a pedestal. If the refrigerator is slightly unstable, you can lengthen or shorten the adjustable feet of the refrigerator by turning them clockwise or anticlockwise.

3-3 Maintenance

3-3-1. Defrosting and cleaning

Defrosting the freezer

The freezer defrosts automatically. No manual operation is needed.






Cleaning

The refrigerator should be cleaned regularly to prevent bad stored food odors. For safety, unplug the power cord before cleaning the refrigerator.

Clean the refrigerator with a soft cloth or sponge with warm water (mild detergent may be added).

Dry water droplets on the refrigerator surfaces with a dry soft cloth.

Always keep the door gasket clean.

-  The refrigerator is very heavy. When you are moving it for cleaning or repairs, take care not to damage the floor. Keep the refrigerator upright during moving. Do not move the refrigerator by rocking it to avoid damage to the floor.
-  Do not spray or flush the refrigerator with water to avoid impact on its electrical insulation property.
-  Do not clean with hard brush, wire brush, detergent powder, gasoline, amyl acetate, acetone and similar organic solutions, acid or alkaline solutions. Please clean with special refrigerator detergent to avoid damage or warm water and a mild detergent.
-  Do not touch the cold metal parts with your hands; otherwise your skin may stick on the cold metal parts.
-  When cleaning, do not clean the cold glass shelves with warm water. Otherwise the glass may break due to sudden temperature change and cause personal injury or property loss.

3-3-2. Measures on power interruption

Even in summer, food may be stored in the refrigerator for a few hours after a power interruption. If a

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power interruption occurs, please call the power company to ask about the interruption duration. Do not put additional food into the refrigerator during a power interruption and try to open the door as few times as possible.

If prior notice of a power interruption is given and the interruption duration is over 24 hours, make some ice and put it in a container in the top of the fridge storage compartment.

⚠ A temperature in the refrigerator will rise during a power interruption or other failures, the storage period and edible quality of food will be reduced.

3-3-3. Stopping use

If the refrigerator will not be used for an extended period, please unplug the power cord, disconnect the water source, and clean it with the method described above.

Keep the refrigerator door open to prevent any food remaining in the compartment from producing bad odors.

⚠ To ensure the service life of the refrigerator, it is recommended that the refrigerator not be turned off unless it is necessary.

3-3-4. Before leaving for a holiday or vacation

If leaving on an extended vacation, please disconnect the power and water source. Remove any food; wait for the frost to melt. Afterwards, clean and dry the interior, and keep the door open to prevent any food remaining in the compartment from producing bad odors. If the room temperature is expected to drop below 0°C, please ask a qualified service person to drain the water in the water supply system. Otherwise, serious property loss may be caused due to overflow of water if the water pipe or joint breaks.

3-3-5. Move the refrigerator

Unplug the refrigerator.

Remove all food.

Secure the shelves and crisper in the fridge storage compartment as well as the shelves and other movable parts in the freezer with adhesive tape. Close the door and secure with adhesive tape.

Do not tilt the refrigerator more than 45 degrees (angle to vertical) to avoid damaging the refrigerating system.

Do not move the refrigerator by its handle to avoid property damage or personal injury.

⚠ Never place the refrigerator horizontally down.

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Chapter 4 Disassembly

4-1.A2FE635CFJRU/A2FE637CXJRU Freezer doorassembly

4-1-1. Disassembly of the freezer's upper door body

	<p>① Open upper drawer of the freezer;</p> <p>② Make the front-ends of the drawer and the tray lean upward a little according to illustration ②;</p> <p>③ Take out the drawer and the tray from the side;</p>
<p>① ②③</p>	
	<p>④ Turn the decoration caps of the slide rail outward, and then take off the 2 decoration caps;</p> <p>⑤ Use Phillips screwdriver to take off the left and right screws.</p> <p>⑥ As shown in illustration ⑦, catch and pluck the bracket from the slide rail, then take off the door body;</p>
<p>④⑤⑥⑦</p>	

4-1-2. Disassembly of the freezer's bottom door body

	<p>① Open the bottom drawer of freezer;</p> <p>② As shown in the illustration, make the front-end of the tray lean upward a little, then take off the tray from the top;</p> <p>③ As shown in illustration ④, make the back of the drawer lean upward, then take off the drawer from the top;</p>
<p>②③④</p>	
	<p>⑤ Use Phillips screwdriver to take off the left and right screws.</p> <p>⑥ As shown in illustration ⑦, catch and pluck the bracket from the slide rail, then take</p>

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⑤⑥⑦

off the bottom door body,;

4-2. Display screen assembly



①②③④

Press a sucker onto the middle of the display screen gently, and take off the display screen from the door body of the refrigerating chamber, and then take apart the terminal.

4-3. Air passage assembly

4-3-1. Disassembly of the air duct of refrigerating chamber



① ②③

- ① Carefully take down the lampshade;
- ② Use Phillips screwdriver to take off the 2 screws on the top of the refrigerating air duct;
- ③ Unplug the terminal connected with the refrigerating air duct and take off the refrigerating air duct.

4-3-2. Disassembly of the air duct of the chiller chamber



①②

- ① Use Phillips screwdriver to take off the left and right screws of the air duct of the chiller chamber;
- ② Unplug the 2 terminals connected with the air duct of the chiller chamber and take off the air duct of the chiller chamber.

4-3-3. Disassembly of the air door

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① ②

- ① Take the air duct of the chiller chamber out of the cover board;
- ② Unplug the terminal of the air door and take off the air door.

4-3-4. Disassembly of the air duct of the freezer



①②③④

- ① Use Phillips screwdriver to take off the 5 screws of the air duct of the freezer;
- ② Pull out 4 slide rails and uplift the bottom of the air duct slightly, make the right side onward a little and take off the air duct of the freezer a little;
- ③ Unplug the 2 terminals connected with the air duct of the freezer;
- ④ Make the air duct of the freezer slide from the bottom.

4-3-5. Disassembly of the freezer fan



①

- ① Prize up the upper and down cover boards of the air duct of the freezer gently from the side;

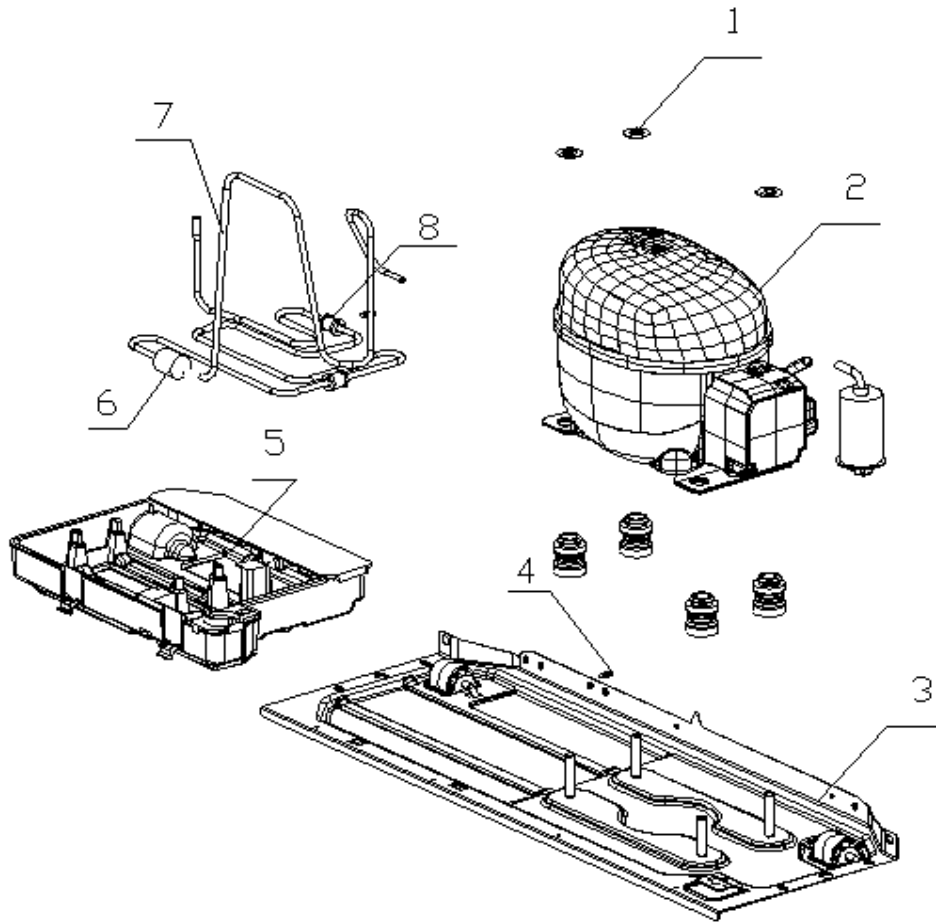


②

- ② Take out the fan cable, open the claw of the fan gently and take off the freezer fan.

4-4. Compressor assembly

Illustration of the compressor chamber components:



Material list:

No.	Name of material	Specific No.	Qty.
1	Self-tapping screw	0060112284	3
2	Compressor NX1116Y(Include Capacity)	0060702332	1
3	Supporting plate assembly of compressor	0060830615	1
4	SCREW	0060600186	1
5	Evaporating utensil	0060222122	1
6	DAMPING MAT	0060220107	1
7	Heating pipe of evaporating utensil	0060703847	1
8	POWER CORD FIXING RUBBER	0060405012	1

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4-5. Disassembly of the heating wire for defrosting



①②③

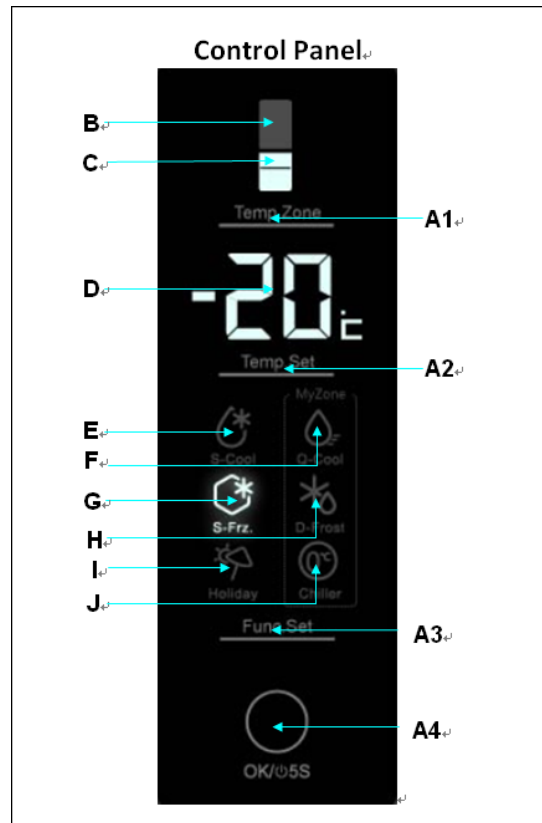
① Take out the 2 plug terminals connected with the defrosting cable in the red circles;

② As the red circle shown in illustration ②, gently break apart the 2 chips which are used to fix the defrosting and heating wire, and then get the defrosting and heating wire to go through the right chip;

③ Make the defrosting and heating wire go through the left chip.

Chapter 5 Control and display system

5-1. Control and display panel



5-2. Function adjustment

Fridge storage temperature setup

Press key A1 repeatedly until indicators B illuminates; press A2 to set the refrigerator temperature. corresponding indicators B and D begin to flash simultaneously. The temperature increases by 1°C by each single press; The refrigerator setting position sequences through "2"- "3"- "4"- "5"- "6"- "7"- "8"- "2". The refrigerator temperature range is from a minimum value of 2°C to a maximum value of 8°C. Stop to press A2 to confirm the set temperature.

Freezer storage temperature setup

Press key A1 repeatedly until indicators C illuminates; press A2 to set the freezer temperature. corresponding indicators C and D begin to flash simultaneously. The temperature reduces by 1°C by each single press; The freezer setting sequences through "-16"- "-17"- "-18"- "-19"- "-20"- "-21"- "-22"- "-23"- "-24"- "-16". The freezer temperature ranges from a minimum value of -24°C to a maximum value of -16°C. Stop to press A2 to confirm the set temperature.

Supercool

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Press key A3 repeatedly until indicators E begin to flash; press A4 to confirm the activation of the Super Cooling function. This function can be disabled by repeating the activation procedure manually. This function will be automatically disabled when temperature drops below minimum level.

In this mode, the Super Cool function will be disabled by the operation of setting the refrigerator temperature.

SuperFreeze

Press key A3 repeatedly until indicators G begin to flash; press A4 to confirm the activation of the Super Freeze function. This function can be disabled by repeating the activation procedure manually. This function will be automatically disabled after 56 hours.

In this mode, the Super Freeze function will be disabled by the operation of setting the freezer temperature.

HolidayFunction

Press key A3 repeatedly until indicators I begin to flash; press A4 to confirm the activation of the Holiday Function. This function can be disabled by repeating the activation procedure manually. In Holiday mode, the refrigerator compartment operates at a temperature of 17°C automatically.

In this mode, the Holiday Function will be disabled by the operation of setting the refrigerator temperature.

My Zone Q-cool Function

Press key A3 repeatedly until indicators F begin to flash; press A4 to confirm the activation of the My Zone Q-cool Function. This function can be automatically disabled by choosing the other functions of My Zone box.

My Zone D-Frost Function

Press key A3 repeatedly until indicators H begin to flash; press A4 to confirm the activation of My Zone D-Frost function. This function can be automatically disabled by choosing the other functions of My Zone compartment.

My Zone Chiller Function

Press key A3 repeatedly until indicators J begin to flash; press A4 to confirm the activation of My Zone Chiller Function. This function can be automatically disabled by choosing the other functions of My Zone compartment.

Note: Among the three functions of My Zone compartment, one of the functions must be activated.

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DisplayControl

The displayscreen willturnoff automatically 30 seconds after anoperationisfinished.Itwillbelitup by openingthe dooror pressinganykey. (Alarmdoesnotlightupthedisplayscreen)

DoorOpeningAlarm

Whenthefrigeratordooris open formorethan3minutes, thebuzzerwillsoundbeepsall the time. Thebuzzercanbesilencedbyclosingthedoor or pressing any keys. If the refrigerator door is left open for over 7 minutes, the internal light automatically switches off.

Turningoff/on theRefrigerator

When the refrigerator is working, if you press key A4 for 5 seconds, the whole refrigerator will be switched off. The buzzer will begin to beep after pressing key A3 for 5 seconds. The whole refrigerator will stop to work after the beep.

When the refrigerator is switched off, if you press key A4 for 5 seconds, the relevant indicator lights up, the refrigerator begins to operate.






Note: The refrigerator needs to be emptied before operating this function; this operation does not equivalent to tuning off the power.

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5-3. Error code display and sensor positions

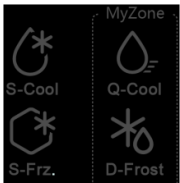
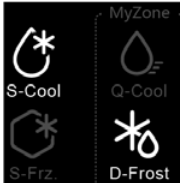

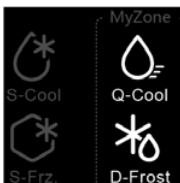
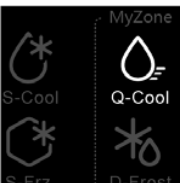
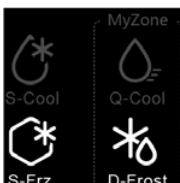

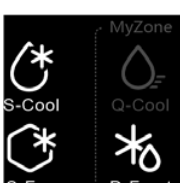
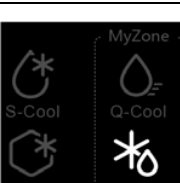
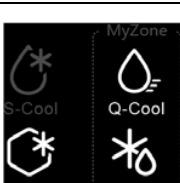
When the refrigerator runs abnormally, it can enter into the mode of malfunction check by manually adjusting the display board.

Entering method: Open the refrigerator door, after the display board is lighted, press the key of “Temp Zone”, and at the same time press the key of “Temp Set” 5 times to enter into the mode of malfunction code and sensor temperature display. After entering into this mode, it will display the malfunction code in the temperature display area according to display priority level. Press the key of “Temp Set” to display next code. After the malfunction code is displayed, every time you press the key of “Temp Set”, it will display AT SNR, R SNR, S SNR, F SNR, D SNR practical temperatures one by one. Notes: if no malfunction, then it will display the practical temperatures of each sensor directly after entering. The following table shows the display methods of each sensor:

Sensor	Display method	Displayed icon
RT SNR	All the icons in the temperature display area are dark.	
R SNR	The R area is lighted among all the icons in the temperature display area.	
S SNR	The R area is lighted and flashing among all the icons in the temperature display area.	
F SNR	The F area is lighted among all the icons in the temperature display area.	
D SNR	All the icons are lighted in the temperature display area.	

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Notes: when checking the practical temperature of each sensor, distinguish the name of the presently displayed sensor according to the above table. The temperature display area of “-88” displays the integer figures of the practical temperature of the current sensor. One decimal figure of the practical temperature is displayed through 4 functional icons as shown in the following table:

Representative No.	Displayed icon	Lighted icon	Representative No.	Displayed icon	Lighted icon
0.0		None	0.5		S-Cool + D-Frost
0.1		S-Cool	0.6		Q-Cool + D-Frost
0.2		Q-Cool	0.7		S-Frz. + D-Frost
0.3		S-Frz.	0.8		S-Cool + S-Frz. + D-Frost
0.4		D-Frost	0.9		Q-Cool + S-Frz. + D-Frost

Log-out method: after entering into this mode, press the key of “Temp Zone” again for 3seconds to log out from this mode. If there’s no key press operation for 2minutes after entering into this mode, it will log out automatically.

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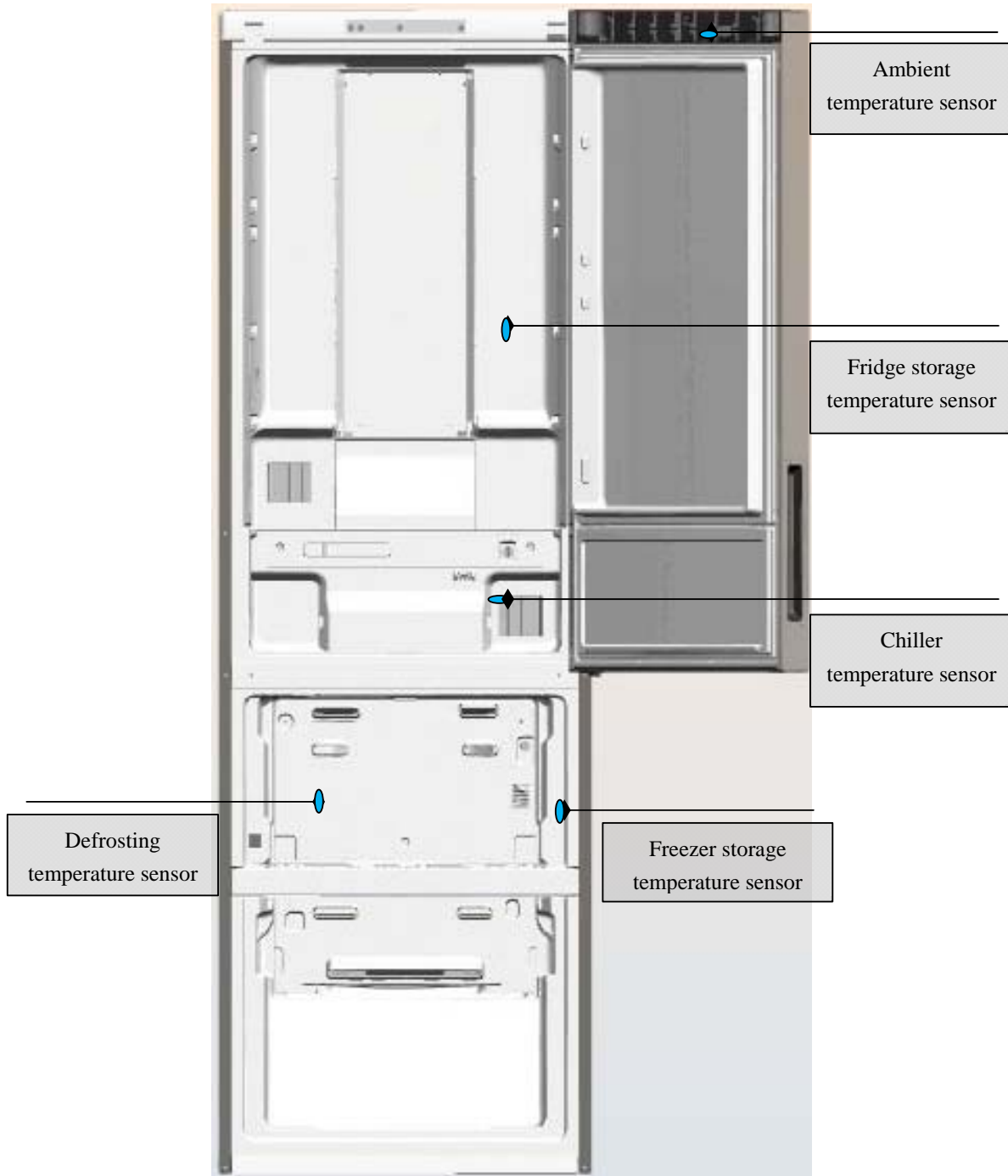
Correspondence table of refrigerator malfunction codes:

NO.	Item	Code	Content	Position of sensor
1	RT SNR error	F2	RT SNR short circuit or open circuit	Door body
2	R SNR error	F3	R SNR short circuit or open circuit	Air duct of refrigerating chamber
3	F SNR error	F4	F SNR short circuit or open circuit	Air duct of freezer chamber
4	S SNR error	F5	S SNR short circuit or open circuit	Air duct of chiller chamber
5	D SNR error	F6	D SNR short circuit or open circuit	Evaporator
6	Communication error	E0	No signal, More than 2 minutes	/
7	F FAN error	E1	No signal, More than 10 seconds	/
8	C FAN error	E2	No signal, More than 10 seconds	/
9	Defrosting error	Ed	D SNR Can't reach 8°C, 90 minutes	/

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Graphic display of the sensor location



Name of sensors	Distance to the top (mm)	Distance to the right side (mm)	Distance to the left side (mm)
Environment temperature sensor	13	286	309
Refrigerating sensor	390	194	401
Freezing sensor	1270	112	483
Chiller sensor	912.5	203	392
Defrosting sensor	1275	461	134

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Chapter 6 Control principle of electronic component

6-1. Fan cooling system

(1) Air escaper's open and close is controlled by fridge sensor R SNR.

(2) Air escaper is closed firstly and then opened once, then open or close of air escaper is controlled according condition (1).

(3) If air escaper is closed more than an hour, it will be opened at a time. Then open or close of air escaper is controlled according fridge sensor R SNR.

6-2. Ice maker system

6-3. Defrost function

Refrigerator will start defrosting for the 1st time after 8 hours of the initial operation.

After refrigerator runs normally, the refrigerator will start defrosting after 30 hours' operation when the environment temperature is over 28°C; or after 49 hours' operation when the environment temperature is not over 28°C.

When the refrigerator runs normally, the compressor continuously runs for 90 minutes, or after defrosting, the compressor continuously runs for 180 minutes, or the air door of the refrigerating chamber continuously opens for 60 minutes, or the temperature of the freezing sensor is over -5°C and the temperature of the refrigerating sensor is equal or higher than the sum of the set refrigerating temperature and 6°C, when the environment temperature is over 28°C, the refrigerator will start defrosting after 12 hours' operation. When the environment temperature is equal or lower than 28°C, the refrigerator will start defrosting after 25 hours' operation.

During the process of turning on the compressor, the air door of the refrigerating chamber never reaches to the turning off point, and then the refrigerator will start defrosting after 8 hours.

When the temperature of the defrosting sensor reaches to 8°C during defrosting, the refrigerator will log out of defrosting mode.

The compressor is stop and fridge air escaper is close when defrosting.

If the defrosting time is over 90 minutes, the refrigerator will start defrosting control after 5 hours' operation, until the temperature of the defrosting sensor reaches to 8°C in 90 minutes, then the refrigerator starts defrosting control normally.

The product can enter into defrosting mode, and exit defrosting mode after the defrosting time is more

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than 90 minutes, when the defrosting sensor malfunction (short circuit or open circuit).

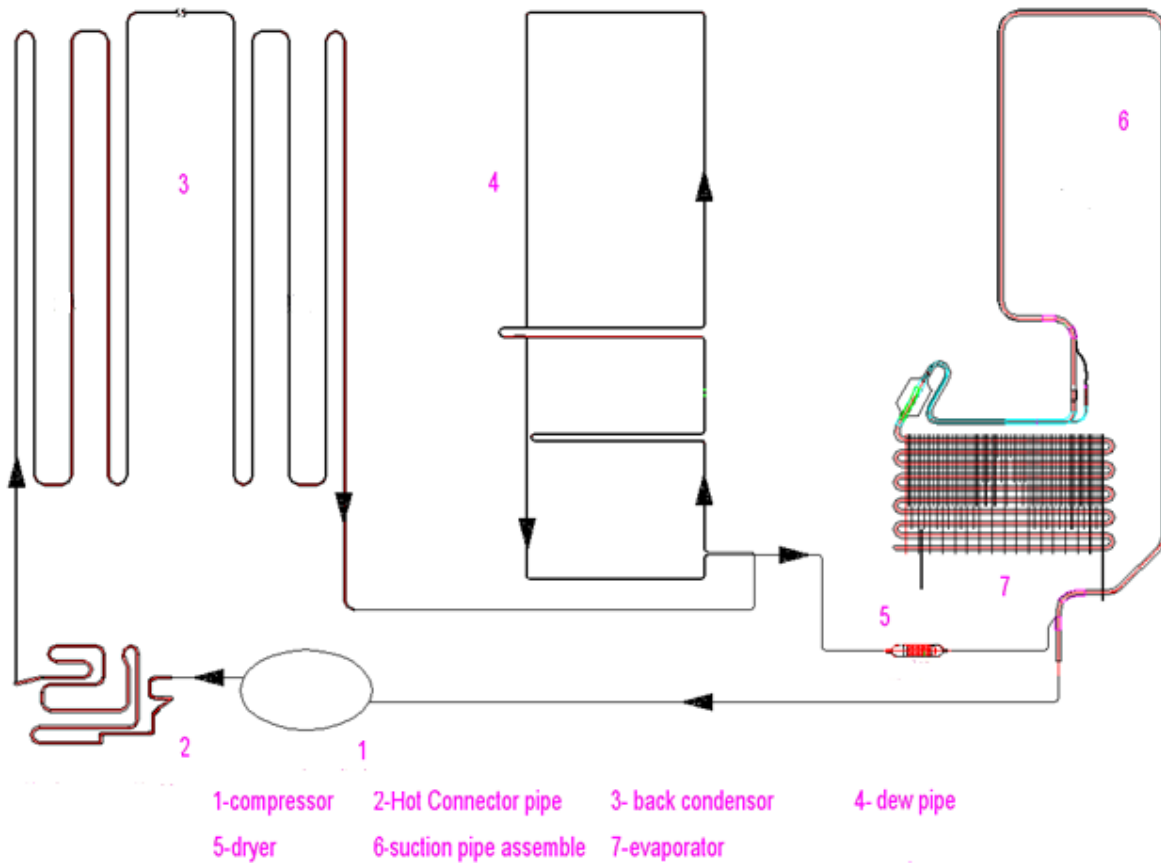
If defrosting time is more than 90 minutes and the defrosting sensor temperature can't reach 8°C, the product will disconnect defrosting heater, and display ED on fridge display area under malfunction mode until in some defrosting cycle the defrost sensor temperature reach 8 °C.

If the product is set to enter into fast freezer or fast fridge, the icon of fast freezer or fast fridge will light, but the defrosting process will go on, fast freezer or fast fridge mode will not execute until finishing this defrosting cycle. The surplus defrosting time is not reckoned in the time of fast freezer or fast fridge.

6-4. Electromagnetic valve

Chapter 7 System flow principle

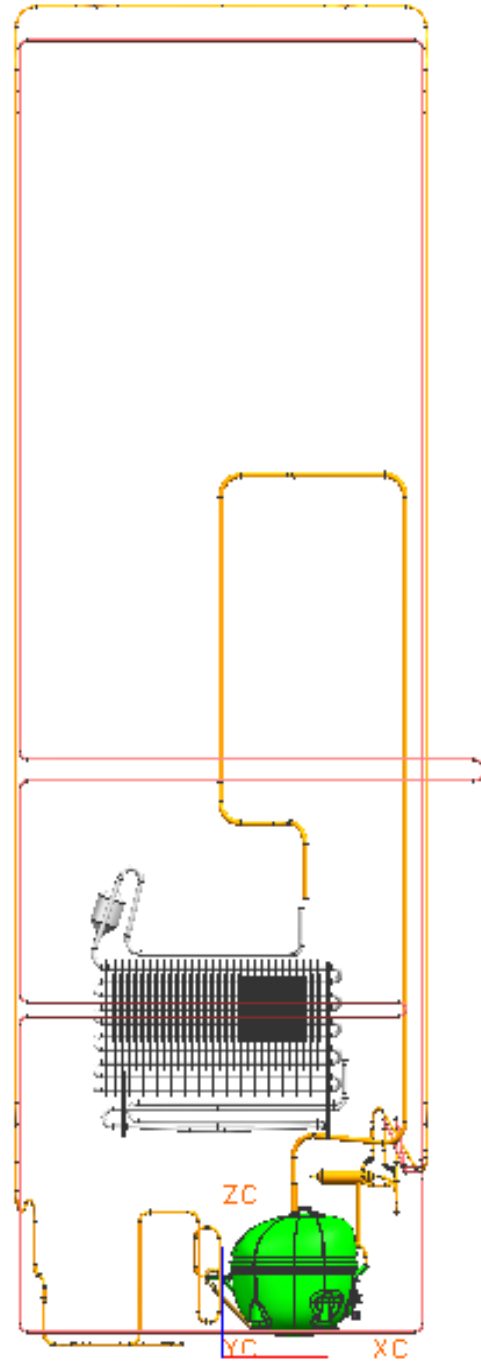
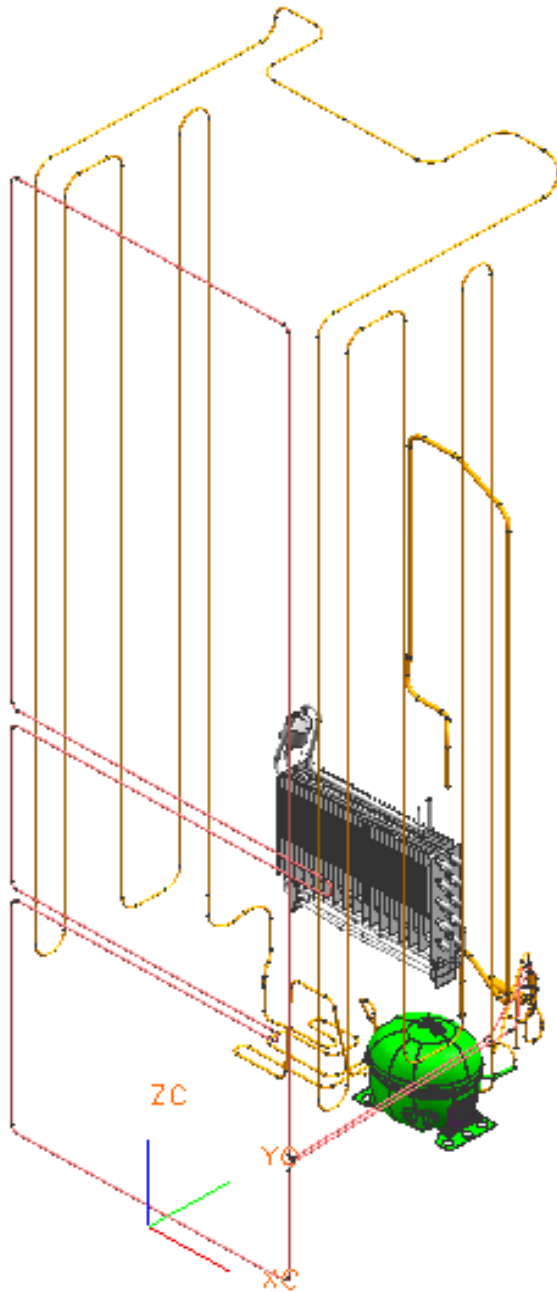
7-1. Refrigeration flow chart



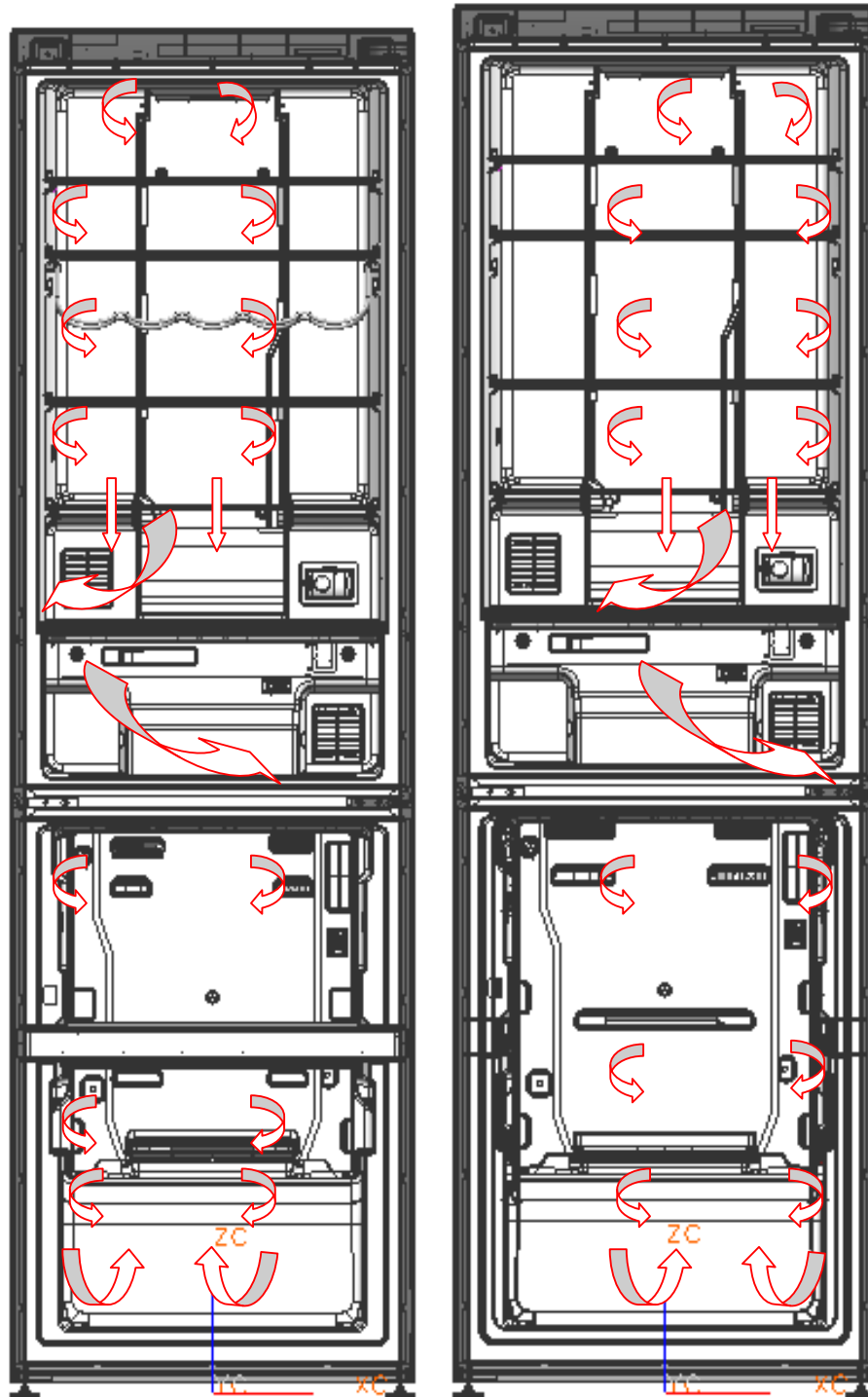
The refrigeration system of direct cooling single-system cooler belongs to the category of a single-temperature and single-control refrigerating system with one evaporators and is controlled by a single temperature control.

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7-2. Refrigeration flow scenograph



7-3. Air flow scenograph

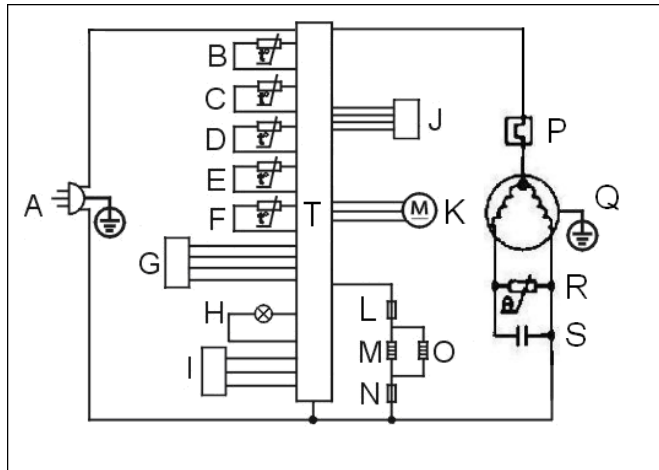


7-4. Water supply flow scenograph

None

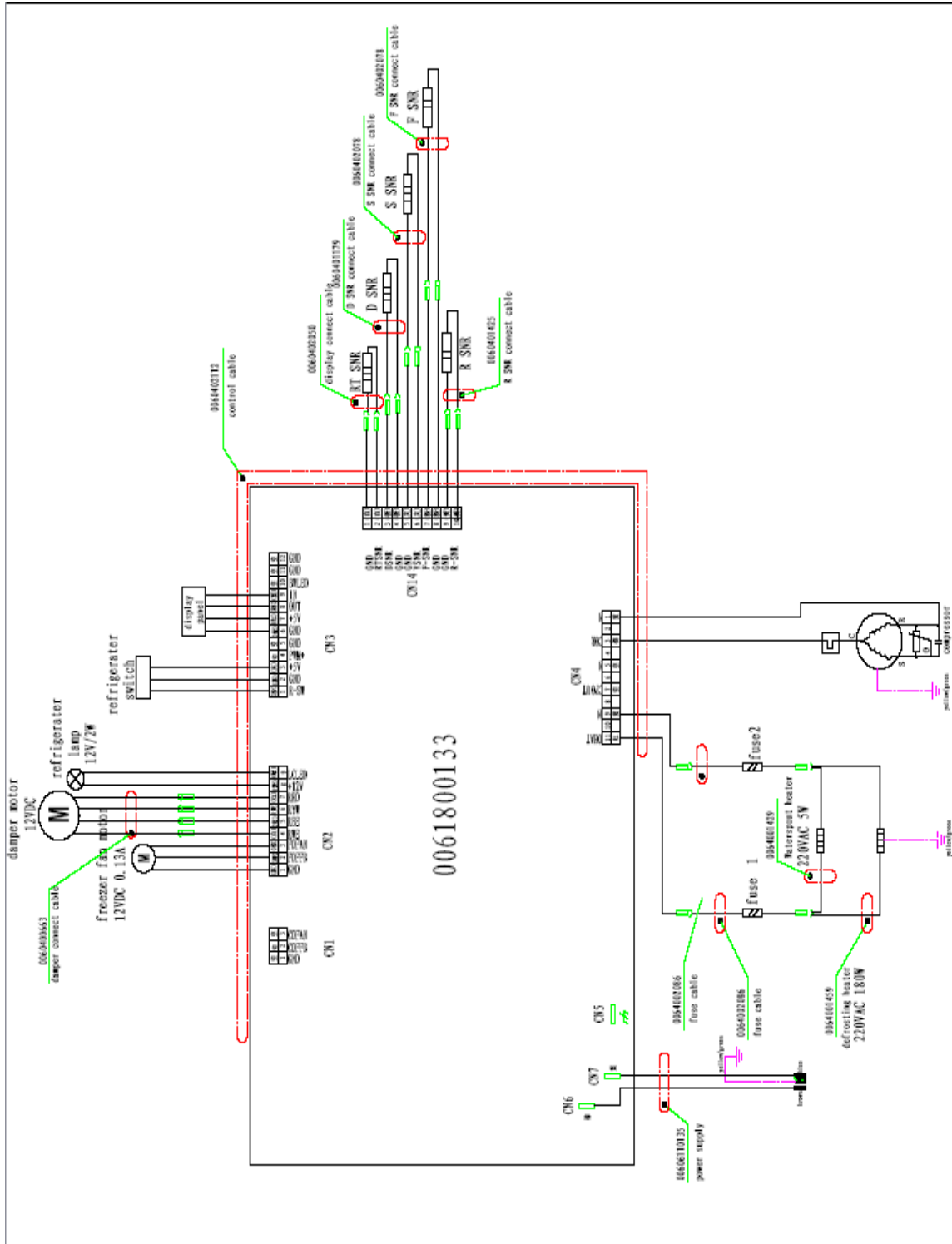
Chapter 8 Circuit diagram

8-1. Brief principle diagram



A.Power plug	B. Refrigerator sensor	C. Chiller sensor	D. Freezer sensor	E .Defrost sensor
F.Ambient sensor	G.Display panel	H. Refrigerator lamp	I.Hall IC	J.Damper
K.Freezer Fan Motor	L. Fuse1	M. Defrost Heater	N. Fuse2	O. Heater near water drain hole
P. Over load protector	Q. Compressor	R. PTC	S.Capacitor	T.Control board

8-2. Main control PCB diagram



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Chapter 9 Quick check

9-1. Self test model

Entering method of TEST function: Open the refrigerator door, press the keys of "Func.Set" and "OK" at the same time, press the key of "OK" and press the key of "Func.Set" for 10 times at the same time to enter the TEST function mode.

TEST adjustment: after entering into the TEST function mode, every time pressing the key of "Func.Set", TEST mode will go from T1→T2→T3→T4→Log out, controlling the operation normally.

TEST1: For testing the capability of cooling, "T1" will show on the display screen and force appliance to cool down immediately: during this time the compressor runs at a high speed, F FAN motor runs at a middle speed. Air door of the refrigerating chamber is normally turned on and off according to previous set mode, the air door of the temperature adjusting chamber is opened by 30° and turned on and off normally according to the set mode. And defrost heater is switched off.

TEST2: Under TEST1 MODE, press "Func.Set" key, "T2" will show on the display screen and force appliance to defrost immediately: during this time the compressor and fan motor are switching off, defrost heater is switching on. Power of the defrost heater should be 205±5W here.

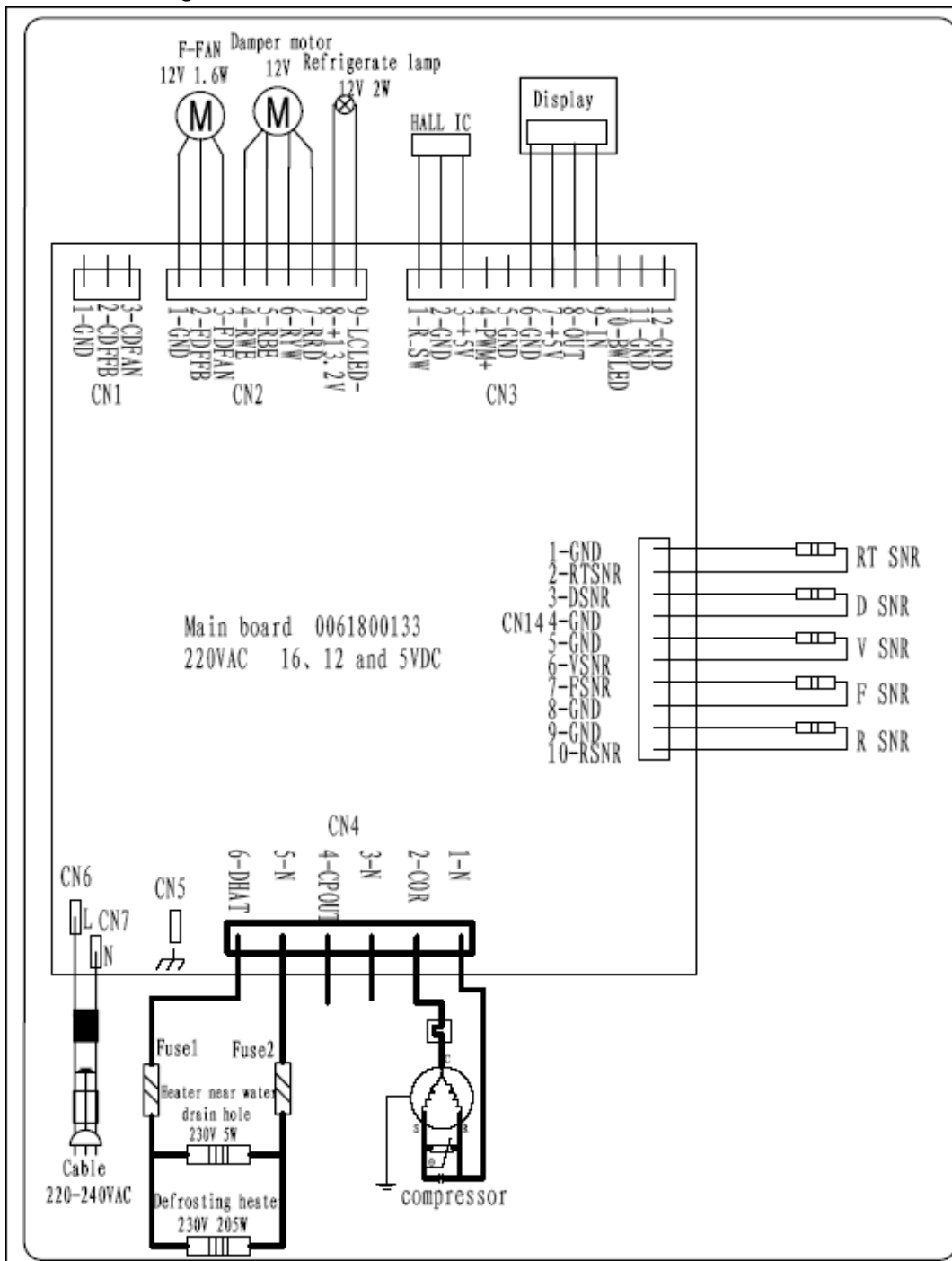
When temperature around defrost sensor above 8 degree, appliance will exit "T2" mode. After heater working 1 minute! When temperature around defrost sensor below 8 degree, heater will work continually until reach 8 degree, appliance then exit "T2"!

TEST3: Under TEST2 MODE, press "Func.Set" key, "T3" will show on the display screen. The refrigerator enters into normal operation and non-defrosting control until manual adjustment to log out of "T3" mode.

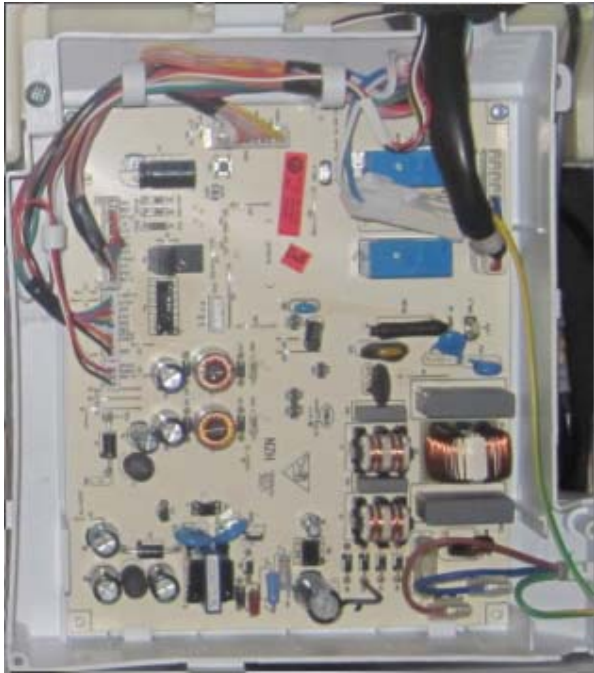
TEST4: Under TEST3 MODE, press "Func.Set" key, "T4" will show on the display screen. The refrigerator loads are all turned off at this mode, and the refrigerator will log out of TEST mode after 30 seconds, and then runs normally.

9-2. PCB checkout

9-2-1. PCB diagram



9-2-2. PCB photo



9-2-3. PCB connection technical data

Connector NO.	Connection	Testing part	Testing part location	Normal data
CN1	1.NULL 2.NULL 3.NULL	/	/	/
CN2	1.Black 2.Orange 3. Brown	Evaporating motor	Fan The inside of the air duct of the freezer	Working volt 8V-13V
	4.White 5.Blue 6.Yellow 7. Red	Damper motor	The inside of the air duct of the chiller chamber	Working volt 12V
	8.Purple 9. Green	Refrigerating LED	The top of the refrigerating chamber	Working volt 12V, power 2W
CN3	1.Pink 2.Black 3. Grey	Switch of the refrigerating chamber door	The door body of the refrigerating chamber	Working volt 5V
	4.Grey 5. Black	Frequency signal wire	Connect to the frequency conversion board	Working volt 5V

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	6.Green 7.Red 8.Brown 9.Blue 10-12 NULL	Display board of the door body	The outside of the door body of the refrigerating chamber	Working volt 5V
CN14	1.White 2.White	Environment temperature sensor	The door body of the refrigerating chamber	Working volt 0-5V
	3.Orange 4. Orange	Defrosting sensor	Liquid storage bag of the evaporating utensil	Working volt 0-5V
	5.Grey 6. Grey	Chiller sensor	The air duct of the temperature adjusting chamber	Working volt 0-5V
	7.Pink 8. Pink	Freezing sensor	The air duct of the freezer	Working volt 0-5V
	9.Yellow 10.Yellow	Refrigerating sensor	The air duct of the refrigerating chamber	Working volt 0-5V
CN5	1.Red 2.blue	Heating wire for defrosting	Under the evaporating utensil	Working volt 220-240V
	3.Brown 4.Blue 5-6 NULL	Power supply of frequency conversion board	The end of the power supply of the frequency conversion board	Working volt 220-240V

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Chapter 10 Trouble shooting

10-1.Abnormal phenomena

Symptom:food in the fridge storage compartment is frozen

Check:

- 1) Verify that the temperature in the fridge storage compartment is too low and the food is frozen there;
- 2) Disconnect the connection wires of the damper and the LED lamps. Take out the air door-foam assembly. Tear the adhesive tape wrapped around the foam and separate the foam. Check if the seal between the damper and the foam is tight.
- 3) If the seal is tight, check if the fridge storage temperature sensor R SNR is OK.
- 4) If the R SNR sensor R is OK, then the main control panel is probably malfunctioning.
- 5) If the wiring of the damper is OK, check the circuit from the connector of the main control panel to the connector in the cabinet. If there is no problem in this circuit, the damper is malfunctioning.

Solutions:

- 1) If the seal between the damper and the foam is found to be not tight, please affix seal strip on the interface between the damper and the foam;
- 2) If the R SNR sensor is malfunctioning, please replace it with a new one;
- 3) If the main control panel is malfunctioning, please replace it with a new one;
- 4) If the connector of the damper is connected with reverse polarity, please reconnect it correctly;
- 5) If the damper is malfunctioning, please replace it with a new one.

Symptom:no defrosting

Check:

- 1) Entering into "T2" mode by manually pressing keys on the display board. Then, check if the temperature of the defrosting heating wire is rising. If the temperature of the heating wire does not change, remove the fan cover plate to check if all the connectors are connected properly and test if there is 220V voltage output across the terminals of the heating wire.
- 2) Measure the resistance of the heating wire with a multimeter. It should be around 268Ω.
- 3) Measure the resistance of the defrosting fuse. If it is zero, the fuse is OK. If it is infinite, the fuse is malfunctioning.
- 4) If no malfunction is found in the above checks, please test the defrosting temperature sensor with a multimeter.

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Symptom:neither displaying nor starting when powering on

Check:

- 1) Check if the power supply is connected properly.
- 2) Remove the main control panel and examine its back side carefully to see if there are solder skips or open soldering;
- 3) Check if the connector of the freezer door hinge is connected properly.
- 4) Verify the display panel to see if the refrigerator is in OFF state. If so, press and hold the button on the power board for 5s to turn it on.

Solutions:

- 1) If there is dry soldering or open soldering on the control panel, resolder it with an electrical iron.
- 2) If any connector is not connected properly, replug it firmly.
- 3) Press and hold the button on the power board for 5s to turn the refrigerator on.

Symptom:poor freezing effect accompanied by loud noise

Check:

- 1) Check if there is apparent abnormal sound in the freezer storage compartment. Remove the fan cover plate, close the refrigeration air door, and check if the freezer fan is operating normally. (The fan does not operate when the refrigeration air door is open. Please first eliminate the possibility of improper installation of the door on-off)
- 2) If the freezer fan does not run, remove it and check if its connector and the cabinet connector are connected properly. Test if there is approximately 12VDC voltage across pin1 and pin 3 of CN2. If there is no 12VDC voltage, the main control panel can generally be determined to be malfunctioning. If there is 12VDC voltage, the freezer fan can generally be determined to be malfunctioning.
- 3) If the fan rotates abnormally, the fan is malfunctioning.

Solutions:

- 1) If there is apparent abnormal sound in the freezer storage compartment, check if the fan base is firmly fixed, if the fan vanes are installed properly, and if they intervene with the wires. If any of these problems is found, please remove the fan and reinstall it properly.
- 2) If the fan connector is not installed properly, disconnect the terminals and reinstall the connector.
- 3) If the main control panel or the fan is malfunctioning, replace the malfunctioning one with a good spare part.

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Sincere forever

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