



Electrolux

SERVICE MANUAL

Refrigeration

WINE COOLER
RWE72101DB
S72100WSB1



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Warnings and precautions for safety

Please observe the following safety precautions in order to use safely and correctly the refrigerator and to prevent accident and danger during repair.

1. Be care of an electric shock. Disconnect power cord from wall outlet and wait for more than three minutes before replacing PCB parts.

Shut off the power whenever replacing and repairing electric components.

2. When connecting power cord, please wait for more than five minutes after power cord was disconnected from the wall outlet.

3. Please check if the power plug is pressed down by the refrigerator against the wall.

If the power plug was damaged, it may cause fire or electric shock.

4. If the wall outlet is over loaded, it may cause fire.

Please use its own individual electrical outlet for the refrigerator.

5. Please make sure the outlet is properly earthed, particularly in wet or damp area.

6. Use standard electrical components when replacing them.

7. Make sure the hook is correctly engaged.

Remove dust and foreign materials from the housing and connecting parts.

8. Do not fray, damage, machine, heavily bend, pull out or twist the power cord.

9. Please check the evidence of moisture intrusion in the electrical components.

Replace the parts or mask it with insulation tapes if moisture intrusion was confirmed.

10. Do not touch the icemaker with hands or tools to confirm the operation of geared motor.

11. Do not let the customers repair, disassemble and reconstruct the refrigerator for themselves.

It may cause accident, electric shock, or fire.

12. Do not store flammable materials such as ether, benzene, alcohol, chemicals, gas, or medicine in the refrigerator.

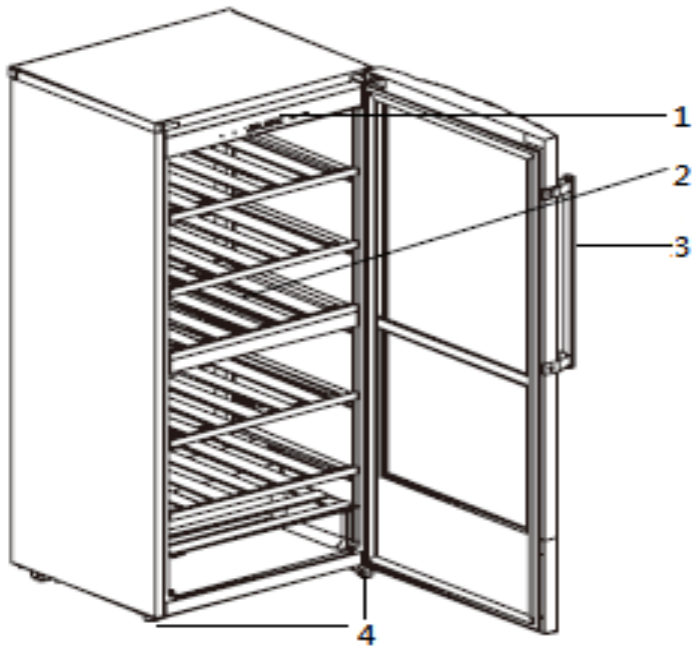
13. Do not put flower vase, cup, cosmetics, chemicals, etc., or container with full of water on the top of the refrigerator.

14. Do not put glass bottles with full of water into the freezer.

The contents shall freeze and break the glass bottles.

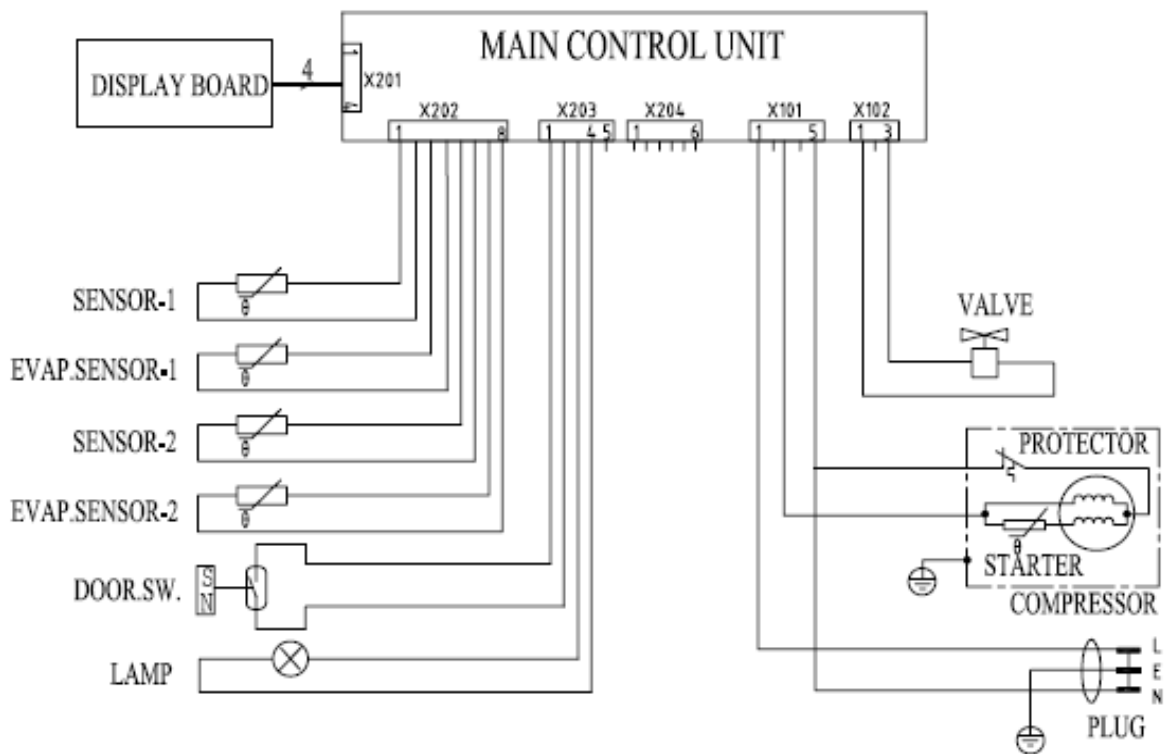
15. When you scrap the refrigerator, please disconnect the door gasket first and scrap it

Parts Description

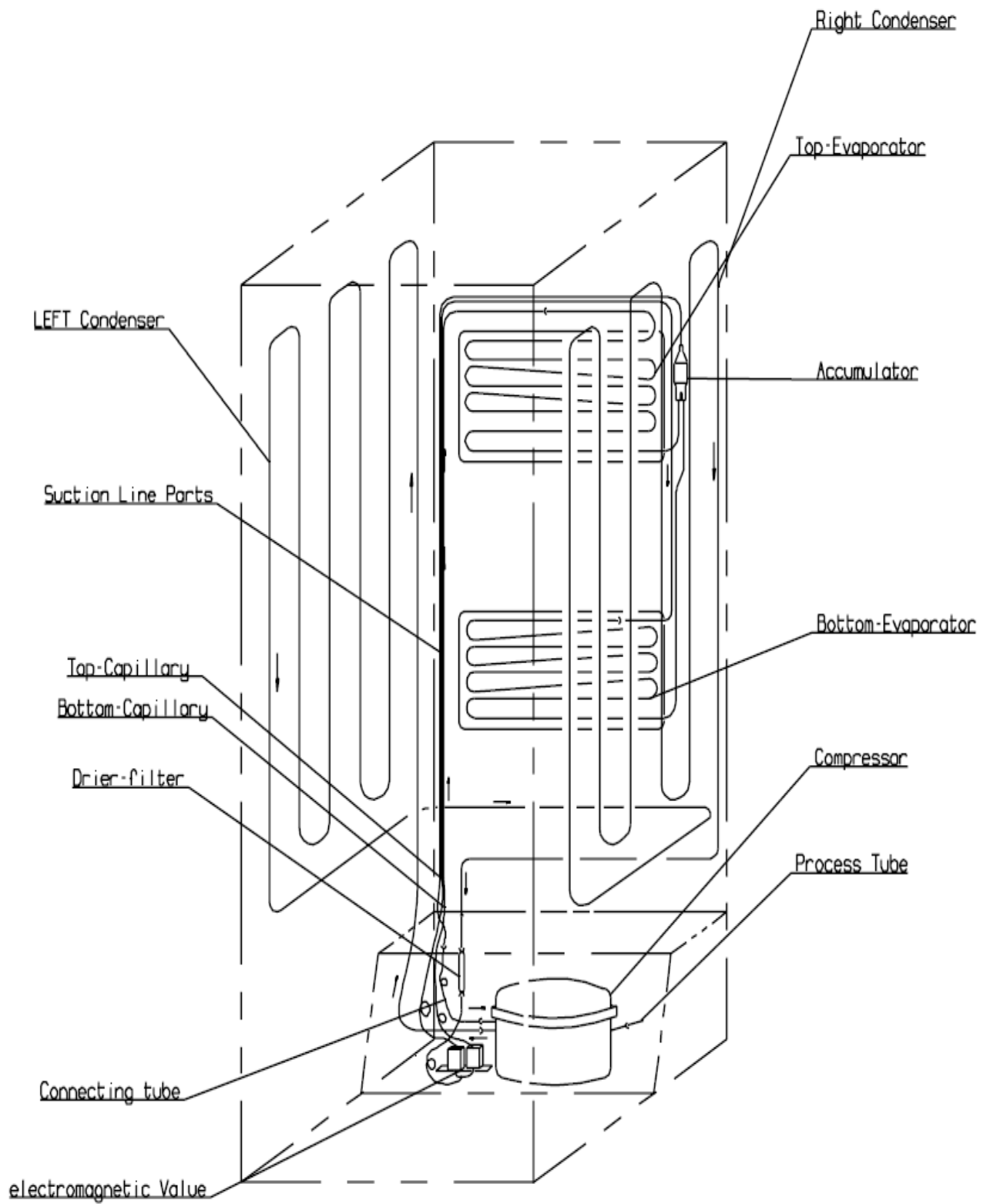


- 1. display board
- 2. bottle shelves
- 3. Handle
- 4. ajustable bottom feet

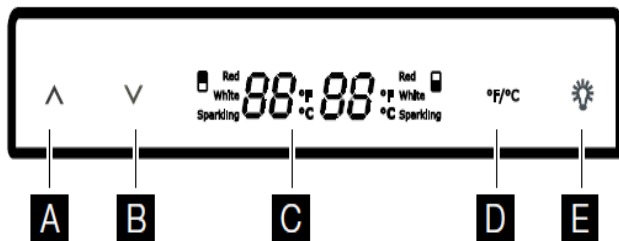
Circuit diagram



Cooling diagram

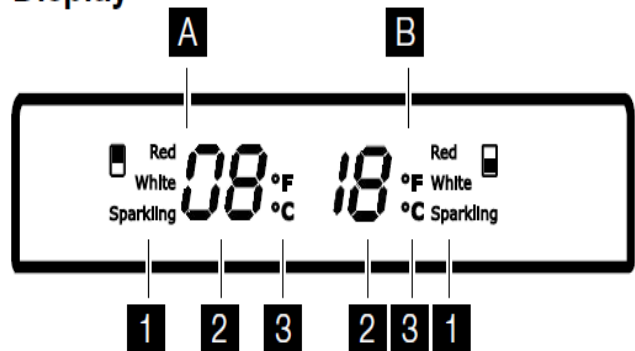


Control panel



- A** Temperature circle key of upper zone
- B** Temperature circle key of lower zone
- C** Display
- D** °F and °C exchanging key
- E** Light On/Off key

Display



- A** Display of upper zone
- B** Display of lower zone
- 1** Wine storage type
- 2** Temperature indicator
- 3** °F or °C indicator

Operation

After inserting the plug in the socket, the wine refrigerator will run immediately.

Temperature regulation

Press “^” key to cyclically regulate the temperature of upper zone.

Press “v” key to cyclically regulate the temperature of lower zone.

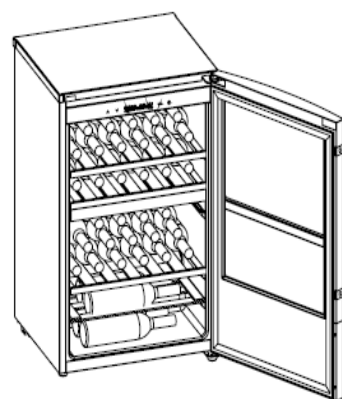
The correct position must in any case be determined bearing in mind that the inside temperature depends on these factors:

- Room temperature
- How often the door is opened
- The quantity of bottles stored
- The position of the appliance

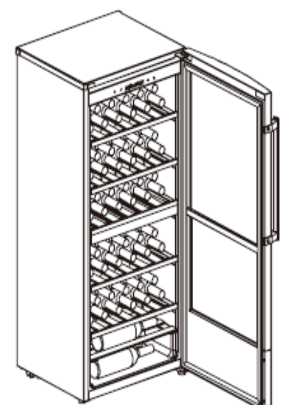
Use

Wine arrangement

Please place the wine bottles as shown below.



HR6WC36D



HR6WC58D

Keep the wine in the dark. The door is in anti-UV darkened triple glass to protect the wine from the light in case the refrigerator is located in well-lit place.

Lay the bottles down in such a way that the corks do not dry.

Avoid switching the appliance light on too often or for too long. Wine keeps better in dark.

Handle the bottles with care, to avoid agitating the wine.

Follow the recommendations and advice received at the time of purchase or given in the technical documentation regarding the quality, duration and optimum storage temperature of the wine.

Storage advice

The storage time for wine depends on ageing, the type of grapes, alcoholic content and level of fructose and tannin contained in it. At the time of purchase, check if the wine is already aged or if it will improve over time.

Recommended storage temperature:

- For champagne and sparkling wines, between 6 and 8 °C
- For white wines, between 10 and 12 °C
- For rose and light red wines, between 12 and 16 °C
- Aged red wines, 14-16 °C

When placing various bottles on top of each other, make sure they do not touch the refrigerator cooling plate.

Bottle “Light On”

Bottles can be illuminated in different ways.

1. The interior light will be on automatically for 5 minutes when the wine refrigerator is powered on.
2. The interior light can be turned on or off by pressing the light On/Off key.
3. Interior light will be switched on immediately when the door is open. And it will be off automatically after the door has been open for ten minutes.
4. Interior light will be switched off after the door is close for 5 minutes.

°F/°C exchange

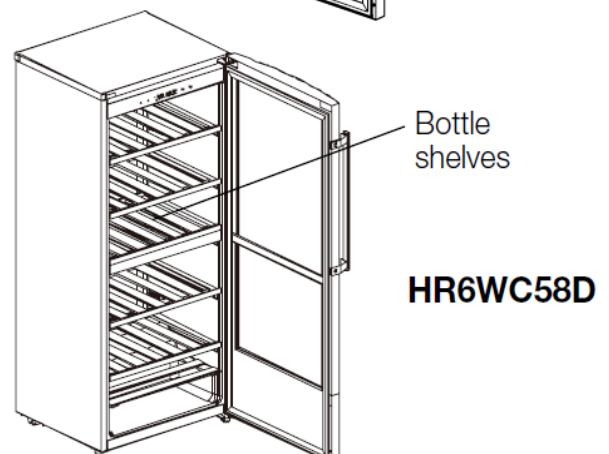
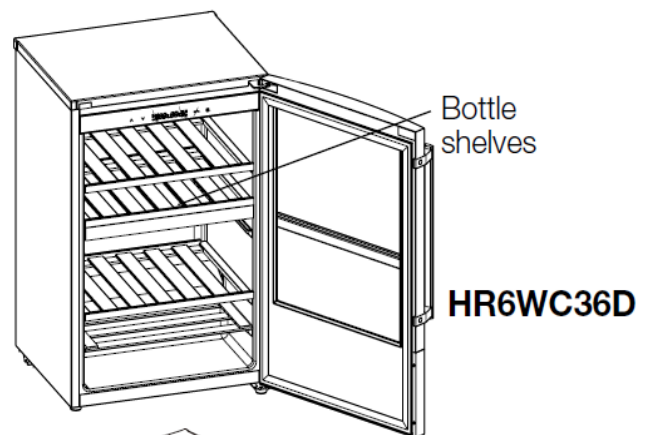
The temperature can be exchanged from °F to °C by pressing the °F/°C exchanging key.

Switching off

Switch the power point off and unplug the wine cooler.

Inside accessories Shelves

The shelves can be removed for cleaning.



Compressor checking

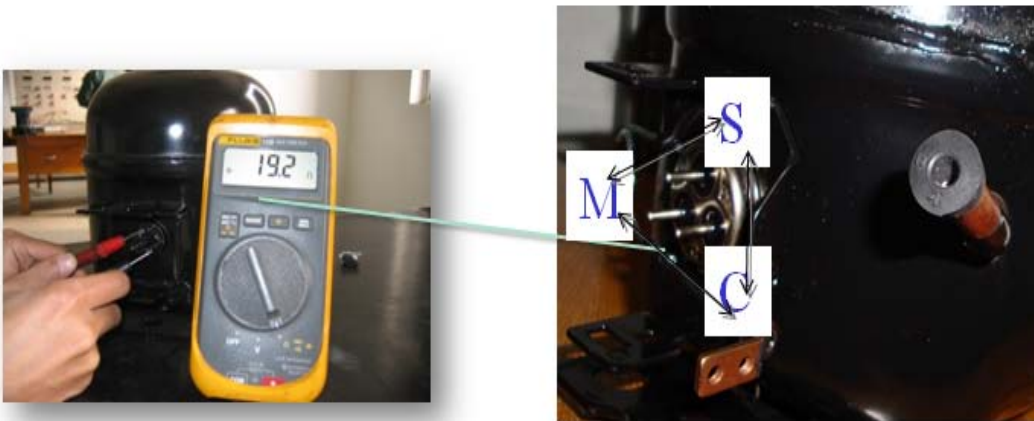
Use a multi-meter to test the resistance between C & S, M&S and M&C :

Normal range of C&S : About 5-20 Ω

Normal range of M&S : About 5-20 Ω

Normal range of M&C : About 10-40 Ω

If the test result is not in this range then it means the inner coil has some problem and the compressor can not work properly.

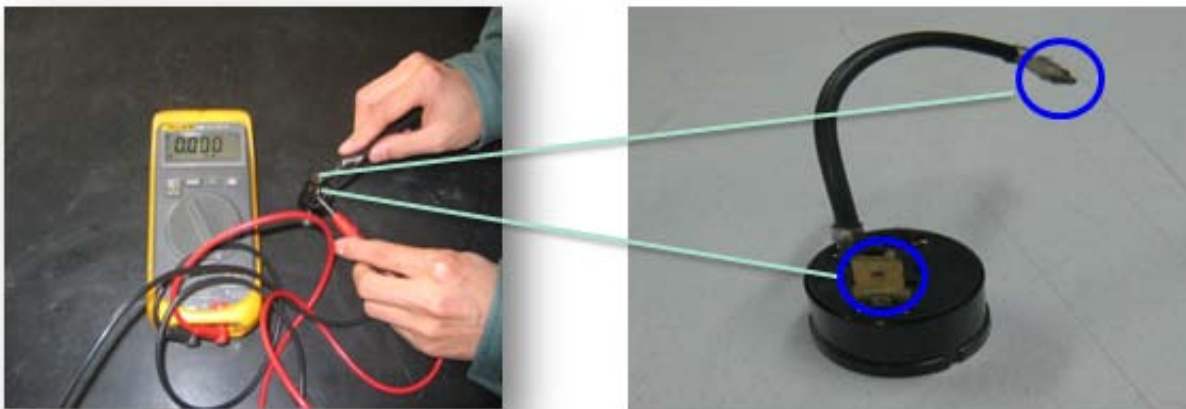


Compressor Protector test —

Use a multi-meter to test the resistance between the two end as the pic show :

If there show 000 or almost 0 then it is OK.

If there is no response then it is broken.

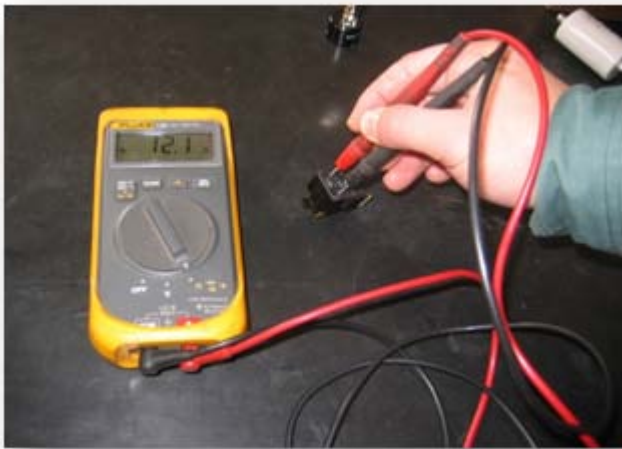


Compressor PTC starter test —

Use a multi-meter to test the resistance between the two end as the pic show :

If there show the number is between About 9-25 Ω then it is OK.

If there show 000 or no response then it is broken.







The guide for Disassembly Common parts of Refrigerator

◆ The instruction of replacing the main board .

<p>Remove the electrical box screws</p>		
<p>Remove the electron box cover and replace the main board.</p>		

◆ The instruction of replacing PTC Starting relay and Overload protector.

<p>1. The location of the PTC Starting relay and Overload protector.</p>		
<p>2. Disconnect the connecting wire of the PTC Starting relay and Overload protector.</p>		

◆ The instruction of replacing Display board and LED Light

<p>Tear the plastic-cover in front of the button.</p> <p>Remove the screws fixing plate</p>		
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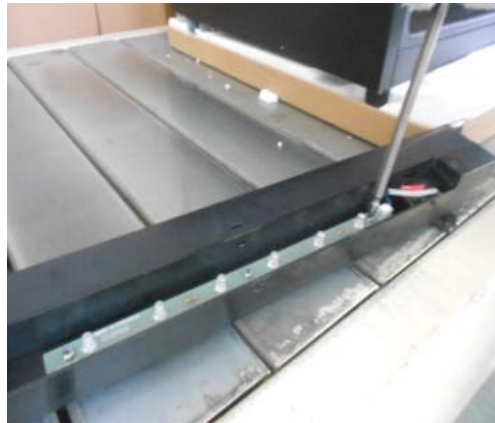
Unplug the display board wires



Remove the screws fixing .
Remove light cover



Remove the retaining screw



Take Out the Display board and LED Light



Troubleshooting

◆ The solution for digital display code problem:

1	Upper room digital display window show "E1" represents the upper Room sensor failure	<ol style="list-style-type: none"> 1. The Upper room Sensor is open circuit or short circuit. 2. The Upper room Sensor is bad. 3. The control PCB is bad. 	<ol style="list-style-type: none"> 1. Using a Multimeter with the ohm switch to measure the resistor of sensor or checking the connecting is well or not. 2. Change the sensor 3. Change the control PCB
2	Lower room digital display window show "E1" represents the lower Room sensor failure	<ol style="list-style-type: none"> 1. The Lower room Sensor is open circuit or short circuit. 2. The Lower room Sensor is bad. 3. The control PCB is bad. 	<ol style="list-style-type: none"> 1. Using a Multimeter with the ohm switch to measure the resistor of sensor or checking the connecting is well or not. 2. Change the sensor 3. Change the control PCB
3	Upper room digital display window show "E2" represents the upper Room Evaporator sensor failure	<ol style="list-style-type: none"> 1. The Upper Evaporator Sensor is open circuit or short circuit. 2. The Upper Evaporator Sensor is bad. 3. The control PCB is bad. 	<ol style="list-style-type: none"> 1. Check the wire terminal is well or not between the main electrical PCB and display PCB. 2. Change the main electrical PCB. 3. Change the display PCB.
4	Lower room digital display window show "E2" represents the lower Room Evaporator sensor failure	<ol style="list-style-type: none"> 1. The Lower Evaporator Sensor is open circuit or short circuit. 2. The Lower Evaporator Sensor is bad. 3. The control PCB is bad. 	<ol style="list-style-type: none"> 1. Using a Multimeter with the ohm switch to measure the resistor of Fan motor or checking the connecting is well or not. 2. Change the Fan motor 3. Change the control PCB
5	Digital display window show ". " represents communication fault	<ol style="list-style-type: none"> 1. The receive communication fault between the main electrical PCB and the display PCB. 2. The control PCB is bad. 3. The display PCB is bad. 	<ol style="list-style-type: none"> 1. Check the wire terminal is well or not between the main electrical PCB and display PCB. 2. Change the main electrical PCB. 3. Change the display PCB.
6	Digital display window show "HH" represents High temperature ($T > 38^{\circ}\text{C}$)	<ol style="list-style-type: none"> 1. Connecting powered. Ambient temperature is higher than 38°C 2. Sensor failure 	<ol style="list-style-type: none"> 1. Cooling will be automatically eliminated. 2. Change the sensor
7	Digital display window show "LL" represents Low temperature ($T < -1^{\circ}\text{C}$)	<ol style="list-style-type: none"> 1. Connecting powered. Ambient temperature is below -1°C 2. Sensor failure 	<ol style="list-style-type: none"> 1. ambient temperature rise automatically eliminate 2. Change the sensor
The testing method of sensor:			
Using the multimeter with the ohm switch to measure the resistor of sensor, normally at surrounding 25°C the			

resistor should be about 2kohm and every with the temperature decreases 1°C the corresponding resistor value would increase about 45ohm.If the measured value is not within the normal scope, the sensor is bad and needs to repair or change.

◆ The common problem judgement method

Problem	Cause
Refrigerator can't start	1.1 Is the power cord connecting well? 1.2 Is the power voltage too low? 1.3 Is the sensor irrational setting? 1.4 Is the ambient temperature too low? 1.5 Is the circuit on power? 1.6 Is there some default in compressor 1.7 Is the refrigeration system blocked by ice or dirty, please stop the unit and restart after 10 minutes to see if the compressor can start.
Weak cooling effects	2.1 Is there any heat source around the refrigerator? 2.2 Is there enough space around the refrigerator for rejection of heat? 2.3 Is the setting of the temperature appropriate? 2.4 Is there too much food or overheating food in it? 2.5 Does there open the door frequently? 2.6 Is the door completely closed? 2.7 Does the gasket destroyed or distort? 2.8 Does the gas leak?
The unit can not stop running	3.1 Is there any heat source around the refrigerator? 3.2 Is there enough space around the refrigerator for rejection of heat? 3.3 Is the setting of the temperature appropriate? 3.4 Is there too much food or overheating food in it? 3.5 Does there open the door frequently? 3.6 Is the door completely closed? 3.7 Does the gasket destroyed or distort? 3.8 Is the thermostat good operation? 3.9 Does the gas leak?
Ice up in the freezing chamber	4.1 Is the setting of the temperature appropriate? 4.2 Is there multi-moisture food and too close to the back wall of the refrigerator? 4.3 Is the ambient temperature too low? 4.4 Is the electric parts on good condition, specially the thermostat which will cause the unit non-stopping.
Abnormal noise	5.1 Is the refrigerator stably placed? 5.2 Does the refrigerator bump other objects? 5.3 Whether the internal accessory of the refrigerator is in the right place. 5.4 Whether the water plate of compressor is fall from the unit. 5.5 Does the tube of the refrigeration system bump each other? 5.6 The noise sound likes Water flow inside the refrigerator, in fact, it is normal, which is caused both when refrigerator start and shut-down; in addition, frost-dissolving causes this sound, too, which is a normal phenomenon.

	<p>5.7 There will be a cracking sound in the cabinet ,when the cabinet or cabinet accessory contracting or expanding, this sound will be made, which is normal.</p> <p>5.8 The motor operation sound in the compressor is appears to be louder at night or begin starting. which is a normal phenomenon; also the uneven placing would lead to too much running noise.</p>
There is a peculiar smell in the units	<p>6.1 Is the food with special smell sealed tight?</p> <p>6.2 Does it have long time storing food or degenerated food?</p> <p>6.3 Whether the internal cabinet needs cleaning.</p>
the forefront or the middle cabinet heats	7.1 As fridge Anti-condensation tube is placed here and caused the above phenomenon, which is normal.
Refrigerator's two sides or the back heat	8.1 As condensation tube is placed here and caused the above phenomenon, which is normal.
the cabinet surface condensation	9.1 Air humidity is too large.

◆ **The solution for the common problem.**

<p>1.Cooling is not enough good (Many reasons might cause that cooling not enough good, as blow :)</p>		
Reason	analysis	Solutions
1) Leakage of Gas	<p>If some gas leaked unit will work not well.</p> <p>Phenomenon of failure:</p> <p>a. lower pressure of liquid cycle system</p> <p>b. high temperature of copper tube of discharging gas, hand feels very hot.</p> <p>C. much noise, sounds like "ZZZZZ", comes from outlet of capillary.</p> <p>d. the temperature fell down very slowly.</p>	<p>First find out the point of leaking on tube, and then sealed it, vacuuming it, finally recharge with Gas.</p> <p>Note: If you find oil on somewhere, it is possible that leakage point is there.</p>
2)The quantity of Gas is too much	<p>If too much Gas was charged into the cycle system, the extra gas will occupy some space of evaporator, so that the area of heat exchange becomes less, unit will work not well.</p> <p>Phenomenon of failure:</p> <p>a, higher pressure of liquid cycle system than norm.</p> <p>b, higher temperature of condenser.</p> <p>c, larger electric current of compressor</p> <p>d, there maybe ice on the suction tube.</p> <p>e, when gas is too much, some gas liquid might goes back into compressor, compressor will be damaged by liquid.</p>	<p>First stop unit for several minutes, and then open charging tube, discharge all of gas. Change a new filter, and then recharge gas, finally sealed the system.</p>
3) There is air in the liquid cycle system	<p>The air in system will cause lower efficiency of cooling.</p> <p>Phenomenon of failure:</p> <p>a, higher pressure of liquid cycle system than</p>	<p>First stop unit for several minutes, and then open charging tube, discharge all of gas. Change a new filter, and then recharge gas, finally</p>

	norm, but the pressure is not over the limit. b, higher temperature of discharging tube. C, much noise	sealed the system.
4)Low working efficiency of compressor	General when a compressor works for many years, some parts of compressor were wear, so that compressor discharge less gas out, unit does not work strongly. Phenomenon of failure: a, lower pressure of discharging, check the pressure of system with pressure meter to see if it is normal. b, higher temperature of compressor surface. C, cut off the discharging tube, to see if you can block the gas coming out of the tube when compressor is working.	Change a new compressor.
5) There is something that blocked the liquid cycle system	Some time there is something blocked the filter of liquid cycle system, so that unit is not cold. Phenomenon of failure: a, lower pressure of discharging b, lower temperature of discharging.	Change a new filter
2.NO COOL (Popular failure reasons are below):		
Reason	analysis	Solutions:
1) Leakage of gas	Phenomenon of failure: a, leaking fast b, leaking slowly c, no voice of liquid flowing d, cut off charging tube, no gas goes out.	First find out the point of leaking on tube, and then sealed it, vacuuming it, finally recharge with gas. Note: If you find oil on somewhere, it is possible that leakage point is there.
2)There is some thing that blocked the liquid cycle system	A,Ice blocking Sometime because unknown reason water comes into liquid cycle system, the capillary will be blocked by water after unit runs for period of time. Phenomenon of failure: The unit works well in the inception, after period of time the ice appears in the capillary and becomes more and more, till blocks the hole of capillary completely. In the moment you can find the ice on the evaporator defrosts. The noise of liquid flow disappears. The pressure	First stop unit for several minutes, and then open charging tube, discharge all of gas. Blow the cycle system with gas of nitrogen, and then recharge Gas, finally sealed the system.

	<p>of absorbing becomes negative. The phenomenon above will appear again and again. The way to check ice blocking: Warm the capillary with a hot towel, after a while the ice in the capillary melt, you can hear a sound of gas flow comes from the capillary abruptly. The pressure of absorbing becomes higher. It is Ice blocking.</p>	
	<p>B, there is offal block the capillary Phenomenon of failure: If the capillary is blocked by something such as offal etc., the sound of liquid flow disappears. The ice on the evaporator defrosts The pressure of absorbing becomes negative. Higher temperature of discharging tube The way to check offal blocking: If you warm capillary with the way of checking ice blocking, there is no change. It must be offal blocking.</p>	<p>First stop unit for several minutes, and then open charging tube, discharge all of gas. Blow the cycle system with gas of nitrogen. Change a new capillary and filter, and then recharge Gas, finally sealed the system.</p>

COMPRESSOR NEVER STOPS:

Reason	Solutions
1)The setting temperature is not reasonable.	Readjust the temperature setting.
2) the sensor is bad.	Replace the sensor.
3)Seal of door is damaged.	Replace the gasket
4)Too much food in the refrigerator	Please put the food properly.
5)Wind door is broken.	Replace wind door.
6)Fan motor is broken.	Replace fan motor

■ **NOTE:**

- Before doing these operations above, disconnect the main power supply. Failure to do so could result in electrical shock or personal injury.
- In case of any detailed technical information please check with the technical specifications.

