

<p>© ELECTROLUX HOME PRODUCTS Customer Care - EMEA Training and Operations Support Technical Support</p>	<p>Publication number</p> <p style="text-align: center;">599 78 58-78</p> <p>EN</p>	<p>7KL Chest Freezer</p> <p>A51020HSW0 A51020HSW0 EC1005AOWRC 1006ADWRC100 5AOWRSP100A ZFC1042WA ZFC1040WA ZFC1040WA JLCH102</p>	
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NOTE: This is a basic model. The shape and specification of freezer is subject to change

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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 overloaded, it may cause fire. The refrigerator must be plugged into its own dedicated electric outlet

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 damage, bend heavily, 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 customer repair, disassemble and reconstruct the refrigerator by them.

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.

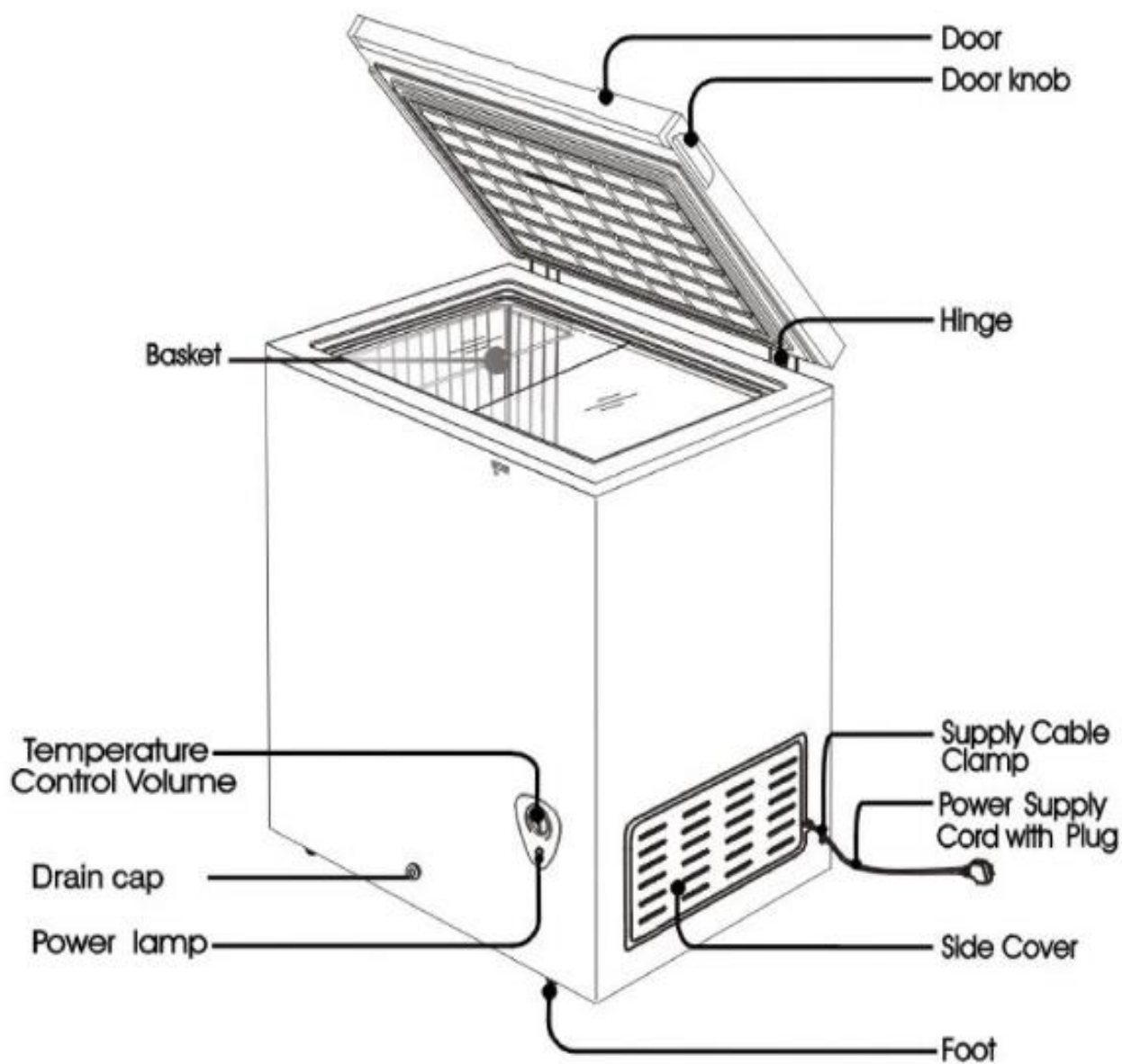
13. Do not put flower vase, cup, cosmetics, chemicals, etc., or container with full of water on the top of the refrigerator.

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

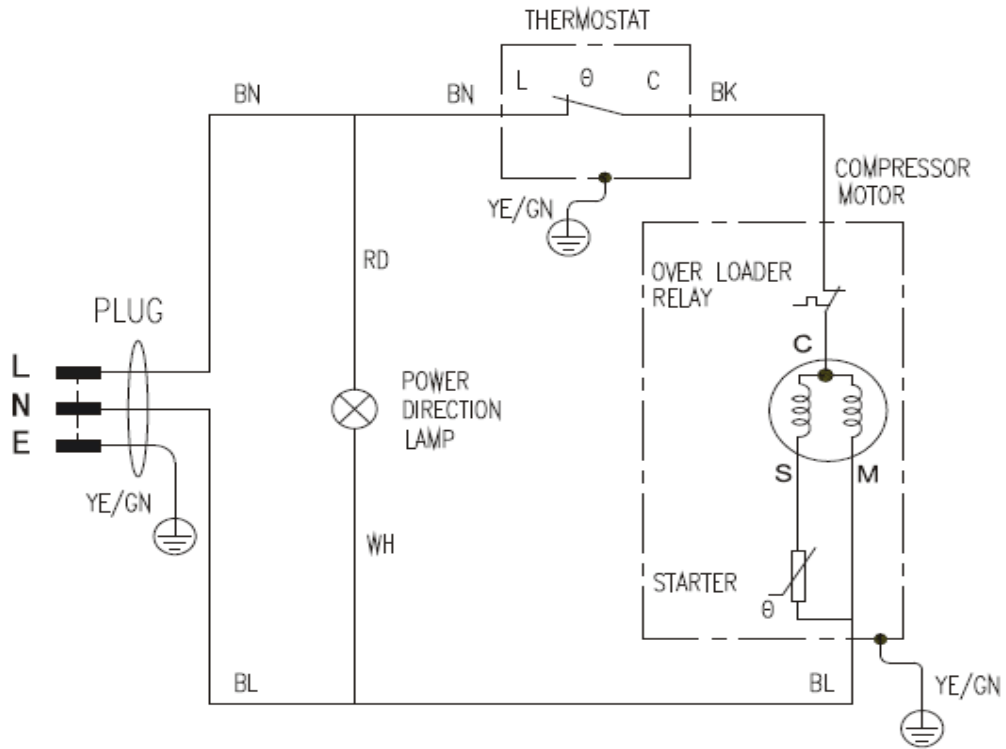
The contents shall freeze and break the glass bottles.

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

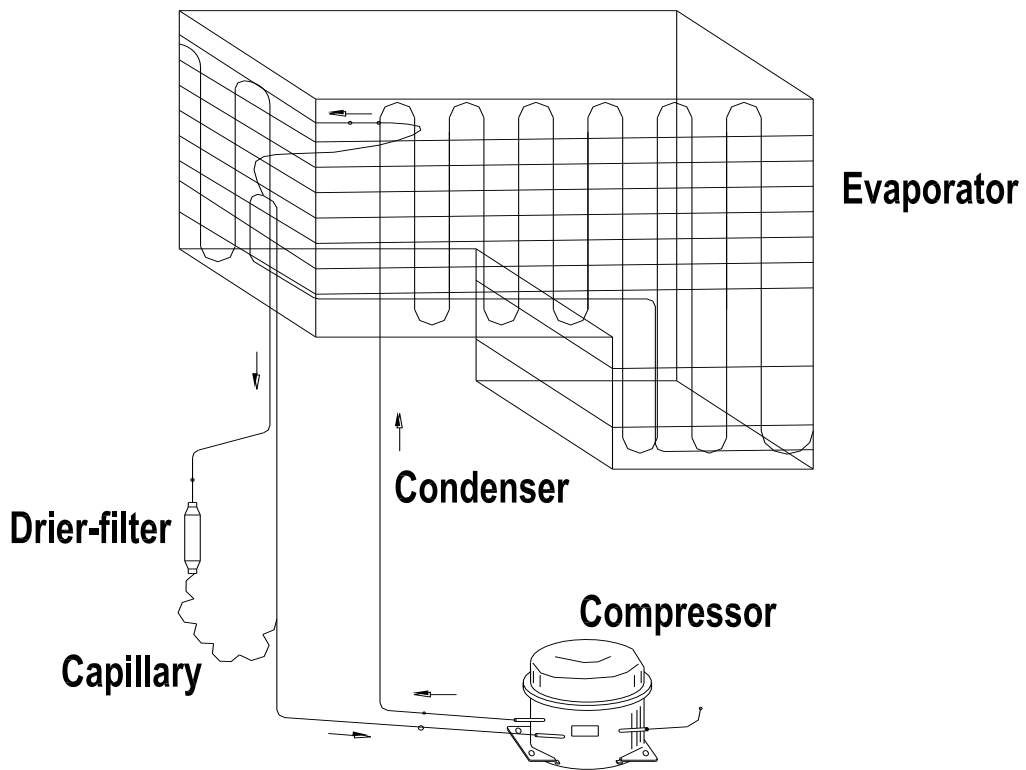
Parts Description



CIRCUIT DIAGRAM








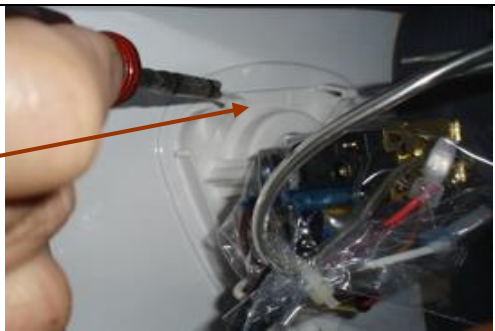


COOLING DIAGRAM









The guide for disassembling common parts of the freezer

◆ Instructions

Instruction of replacing the thermostat

<p>The location of thermostat</p>		
<p>Remove the screws of the Side cover</p>		
<p>Loose the fixing buckle of the thermostat panel with a screwdriver</p>		
<p>Cut off the lace and remove the screw of the thermostat panel</p>		

<p>Unplug the connecting wire</p>		
<p>Instructions of replacing PTC starting relay and overload protector</p>		
<p>Use a screwdriver to take down spring tap and cover</p>		
<p>Loose the screws</p>		
<p>Unplug the connecting wire of the PTC starting relay and of the overload protector</p>		

TROUBLESHOOTING

■ Common default tests method

Check the problem by observing	
Request	Details
a) Check whether the temperature is according to the specifications	Temperature should be between 18-43 degrees
b) Good ventilation with enough room for heat dissipation around the freezer	The appropriate space for running unit will be below: Freezer back \geq 10mm Freezer two sides \geq 20mm Freezer top side \geq 30mm
c) Whether the voltage range meet the requirement of the rating plate	On normal conditions voltage fluctuation is allowed to be between 10% of rated voltage whilst if it exceeds or changing often the compressor would be effected and even burned down. When voltage is too high the motor coil will be burnt down whilst if it is too low, it would be difficult for the compressor to restart and too frequent restarts would burn down of the motor.
Check if the freezer's appearance and internal parts are in good condition	
a) Check the gasket	Open the freezer door to see whether the gasket is tight and if there's gap between the cabinet and seal.
b) Check the door switch	If the lamp is in good condition but it doesn't work when you open the door --check the door switch
c) Check the thermostat knob	Checking the location of thermostat knob is directly connected with the freezer's cooling.
Observe all parts of the freezer	
a) Check the cooling speed	Check the cooling speed of freezing cabinet with electronic thermometers. Check whether the freezer is able to lock the cooling and if it is in good cooling condition.
b) Check the outside tube	Check the freezer's pipeline system. Check if there is leakage: Carefully examine: <ul style="list-style-type: none"> • the seal of process tube • the suction pipe • the exhaust pipe welding • the connection of drying filter and whether it is prone to leak Checking method is to wipe the connection of the tube with a piece of white cloth and see if there's oil. If there is, it's leakage.
Define default by temperature	
a) Check the default by measuring compressor's temperature	When the compressor is in normal operation it will obviously hot.
b) Check the default by measuring dry filter's temperature	When the dry filter is in normal condition it will be obviously a little hot.
c) Check the default by measuring suction tube's temperature	When the suction tube is in normal condition it will be obviously cold.
d) Check the default by measuring discharge tube's	When the discharge tube is in normal condition it will be obviously a little warm.

temperature	
e) Check the default by measuring condenser's temperature	When the condenser is in normal operation by testing its temperature we can assure that the temperature from the entrance to the exit is regressive (the entrance is hotter than the exit).
f)Check the default by touching the evaporator	During normal operation there is frost on the evaporator that should not be easy to remove.
Define default by running noises	
a)Check the compressor's noise	When the compressor is running it shall go with rhythmic low-frequency sound.
b)Check the freezer flow's noise	If there's "sisi" sound between capillary and evaporator's transition, the freezer works normally

■ The common problem judgment method

Problem	Cause
Freezer can't start	1.1 Is the power cord connecting well? 1.2 Is the power voltage too low? 1.3 Is the thermostat 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 is blocked by ice or dirt, please stop the unit and restart after 10 minutes to see if the compressor can restart
Weak cooling effects	2.1 Is there any heat source around the freezer? 2.2 Is there enough space around the freezer for rejection of heat? 2.3 Is the setting of the thermostat appropriate? 2.4 Is there too much food or overheated food in it? 2.5 Have you opened the door frequently? 2.6 Is the door completely closed? 2.7 Is the gasket destroyed or distorted? 2.8 Does the refrigeration leak?
The unit cannot stop running	3.1 Is there any heat source around the freezer? 3.2 Is there enough space around the freezer for rejection of heat? 3.3 Is the setting of the thermostat appropriate? 3.4 Is there too much food or overheated food in it? 3.5 Have you opened the door frequently? 3.6 Is the door completely closed? 3.7 Is the gasket destroyed or distorted? 3.8 Is the thermostat operating well? 3.9 Does the refrigeration leak?
There is too much frost and ice inside of the appliance	4.1 Is the setting of the thermostat appropriate? 4.2 Is there high-moisture food or is the food too close to the back wall of the freezer? 4.3 Is the ambient temperature too low? 4.4 Are the electric parts in good condition? (especially the thermostat which is in case of failure will be out of control and the appliance will work continuously.)
Abnormal noise	5.1 Is the freezer placed stably? 5.2 Does the freezer bump other objects? 5.3 Is the internal accessory of the freezer in the right place? 5.4 Is the water plate of compressor fallen out from the unit?

	<p>5.5 Does the tube of the refrigeration system bump each other?</p> <p>5.6 The noise sound likes water flow inside the freezer in fact it is normal. This is caused both when the freezer starts and shut-downs; in addition, frost-dissolving causes this sound too which is a normal phenomenon.</p> <p>5.7 When the cabinet or cabinet accessories are contracting or expanding there will be a cracking sound which is normal.</p> <p>5.8 The operation sound in the compressor seems to be louder at night or when the appliance starts running-- that is a normal phenomenon. Uneven placing can cause too much noise as well.</p>
There is a peculiar smell in the unit	<p>6.1 Is the food with special smell sealed tight?</p> <p>6.2 Have you stored food for too long or do you have spoiled food in the appliance?</p> <p>6.3 Does the internal cabinet need cleaning?</p>
The forefront or the middle part of the cabinet heats	7.1 As the appliance's anti-condensation tube is placed here it causes the above phenomenon, which is normal.
The sides and the back of the appliance is warm	8.1 As condensation tube is placed here it causes the above phenomenon, which is normal.
There is condensation on the surface of the cabinet	9.1 Air humidity is too high.

■ Solution for the common problems

1.Cooling is not good enough (Many reasons might cause that cooling not good enough-- see below)		
Reason	Analysis	Solution
1) Leakage of gas	<p>If some gas leaked, the unit will not work well.</p> <p>Phenomenon of failure:</p> <ul style="list-style-type: none"> a) lower pressure of liquid in the cycle system b) high temperature of copper tube because of discharging gas--hands feel very hot c) much noise--sounds like "ZZZZZ", comes from outlet of the capillary d) there is no or less ice on the evaporator 	<p>Solution:</p> <p>First, find out the point of leakage on the tube and then seal it by vacuuming it, finally recharge it with gas.</p> <p>Attention!</p> <p>If you find oil somewhere, it is possible that the 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 from the evaporator, so that the area of heat exchange becomes less, the unit will not work well.</p> <p>Phenomenon of failure:</p> <ul style="list-style-type: none"> a) higher pressure of liquid in the cycle system than normal b) higher temperature of condenser c) bigger electric current of the compressor 	<p>Solutions:</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>

	<p>d) there is less ice on evaporator, but there is ice on the absorbing tube</p> <p>e) when gas is too much, some gas liquid might go back into compressor—the compressor will be damaged by the liquid.</p>	
3) There is air in the liquid cycle system	<p>The air in the system will cause lower efficiency of cooling.</p> <p>Phenomenon of failure:</p> <p>a) higher pressure of liquid cycle system than normal, but the pressure is not over the limit</p> <p>b) higher temperature of discharging tube</p> <p>c) much noise</p>	<p>Solutions:</p> <p>First, stop the unit for several minutes then open the charging tube and discharge all of the gas. Change to a new filter then recharge the gas, finally seal the system.</p>
4)Low working efficiency of compressor	<p>Generally when a compressor works for many years some parts of the compressor were outworn so that compressor discharge less gas out and unit does not work strongly.</p> <p>Phenomenon of failure:</p> <p>a) lower pressure of discharging; check the pressure of the system with pressure meter to see if it is normal</p> <p>b) higher temperature of compressor surface</p> <p>c) cut off the discharging tube to see if you can block the gas coming out of the tube when the compressor is working</p>	<p>Solutions:</p> <p>Change a to new compressor</p>
5) There is thick ice on the evaporator	<p>In order to defrost the freezer you need to defrost ice regularly</p>	<p>Solutions:</p> <p>Turn off the unit open the doors for defrosting</p>
6) There is something that blocked the liquid cycle system	<p>Sometimes there is something that blocks the filter of the liquid cycle system so the unit is not cooling.</p> <p>Phenomenon of failure:</p> <p>a) lower pressure of discharging</p> <p>b) lower temperature of discharging</p>	<p>Solutions:</p> <p>Change to a new filter</p>
2.NOT COOLING		
(Common reasons of failure are below):		
Reason	Analysis	Solution
1) Leakage of gas	<p>Phenomenon of failure:</p> <p>a) leaking fast</p> <p>b) leaking slowly</p> <p>c) no sound of liquid flowing</p> <p>d) cut off the charging tube-- no gas goes out</p>	<p>Solution:</p> <p>First, find out the point of leakage on the tube, seal it, vacuum it and in the end recharge with gas.</p> <p>Attention!</p> <p>If you find oil somewhere, it is possible that leakage point is there.</p>
2)There is something	a) Ice blocking	Solution:

<p>that blocked the liquid cycle system</p>	<p>Sometimes because of unknown reason water comes into liquid cycle system, the capillary will be blocked by water after unit runs for a certain period of time.</p> <p>Phenomenon of failure: At the beginning the unit works well. After a certain period of time more ice appears in the capillary until it blocks the hole of capillary completely. You can find the ice on the evaporator. The noise of liquid flow disappears. The pressure of absorbance becomes negative. The above phenomenon will appear again and again.</p> <p>The way to check ice blocking: Warm the capillary with a hot towel. After a while the ice in the capillary melts and you can hear the sound of the gas flow coming from the capillary. The pressure of absorbance becomes higher. It is ice blocking.</p>	<p>First, stop the unit for several minutes. Open the charging tube, discharge all of the gas. Blow the cycle system with gas of nitrogen, recharge the gas and finally seal the system.</p>
	<p>b) there is offal that blocks the capillary</p> <p>Phenomenon of failure: If the capillary is blocked by something such as offal etc., the sound of liquid flow disappears. The ice defrosts on the evaporator The pressure of absorbance becomes negative. The temperature of the discharging tube is higher. Check offal blocking in the following way: Warm the capillary the same way as in the case of ice blocking. If you cannot see any changes then it must be offal blocking.</p>	<p>Solution: First stop the unit for several minutes, open the charging tube and discharge all of the gas. Blow the cycle system with gas of nitrogen. Change to a new capillary and filter, recharge the gas and finally seal the system.</p>

COMPRESSOR NEVER STOPS

Reason	Solution
1) The temperature setting is not reasonable	Readjust the thermostat
2) Thermostat is broken	Replace the thermostat
3) The sealing of the door is damaged	Replace the gasket
4) Too much food in the freezer	Please put the food properly
5) Wind door is broken	Replace wind door

6) Fan motor is broken	Replace fan motor
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■ **Note:**

- Unplug the appliance before carrying out any maintenance operation. Failure to do could result electrical shock or personal injury.
- If you need any detailed technical information please check with the technical specifications.