



YC-55L/75L/130L

Pharmacy refrigerator

Service Manual

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1. INTRODUCTION

Dear Customer:

Thank you for choosing and using the product of our company. For your safe and convenient use and reasonable maintenance of the product, please read the service manual carefully and keep it properly for reference.

Our company has no obligation for damages of the instrument due to the fact that the user does not use the product according to the instrument operating environment declared in the handbook or injuries due to the fact that individual does not operate the product according to safety instructions.

The user must obey the following three points when using the product:







1. Always use protective devices correctly (including clothes, gloves, goggles, etc.);
2. Always operate according to the product instruction and with good hygiene habit;
3. Everyone is responsible for his own safety.





Due to the fast product update of our company, there may be differences between function of the product you bought and the function mentioned in the instruction, please refer to the final product.













2. PRECAUTIONS FOR SAFE OPERATION






When use this device, users must read the meaning of the following warning labels very carefully. Items and procedures are described so that you can use this unit correctly and safely. If the precautions advised are followed, this will prevent possible injury to the user and any other person.









Safety warning labels

 <p>WARNING. Failure to observe WARNING signs could result in a hazard to personnel possibly resulting in serious injury or death.</p>	 <p>CAUTION. Failure to observe WARNING signs could result in injury to personnel and damage to the unit and associated property.</p>
 <p>CAUTION HOT . The sign inform the users about the danger of burns for high temperature.</p>	 <p>DANGER OF EXPLOSION The sign inform the danger of the application of volatile, explosive chemical substances.</p>
 <p>NO TILTING .</p>	 <p>STAY OUT OF SUN .</p>

	<p>WARNING. Failure to observe WARNING signs could result in a hazard to personnel possibly resulting in</p>
	<p>As with any equipment that uses CO₂ gas, there is a likelihood of oxygen depletion in the vicinity of the equipment. It is important that you assess the work site to ensure there is suitable and sufficient ventilation. If restricted ventilation is suspected, then other methods of ensuring a safe environment must be considered. These may include atmosphere monitoring and warning devices.</p>
	<p>Do not touch any electrical parts such as the power supply plug or any switches with a wet hand. This may cause electric shock</p>
	<p>Only qualified engineers or service personnel should install the unit. The installation by unqualified personnel may cause electric shock or fire</p>

	Be sure to install the unit on a sturdy floor. If the floor is not strong enough or the installation site is not adequate, this may result in injury from the unit falling or tipping over
	Carefully with the power cord to avoid short circuit or open circuit. When removing the plug from the power supply outlet, grip the power supply plug, not the cord. Pulling the cord may result in electric shock or fire by short circuit. Don't make the power line pack and pressed by furnish or heavy goods. Also please don't close to the compressor and heat source.
	Please insert the power plug firmly to avoid leakage.
	Use a power supply outlet with ground (earth) to prevent electric shock. If the power supply outlet is not grounded, it will be necessary to install a ground by qualified engineers. Don't lengthen the line randomly. If you need, To use 2.5mm ² copper line, you should keep 4mm ² line to connect the electrical outlet. Or may cause fire.
	Make sure a dedicated power source is used as indicated on the rating label attached to the unit. Out of the rate, should install a property transformer and a proper voltage stabilizer for securely operation. Or the freezer may be damaged, and may cause injury.
	Be sure to install the unit on a sturdy floor, no shaking and tilting.
	Never install the unit in a flammable or volatile location. This may cause explosion or fire.
	Never install the unit in a humid place or outdoor or a place where it is likely to be basked straightly. Deterioration of the insulation may result which could cause current leakage or electric shock.
	Do not place the device lateral tilt, do not impact the device; the device is equipped with refrigeration systems, roll or shock will easily damage the freezer.
	Be sure to install the device in a dry dust-free environment to avoid overheating, short circuit and other dangers.
	If there is an unexpected sound, smell, smoke when the power is turned on, unplug the power and contact the manufacturer or supplier. Continued abnormal operation may cause electric shock or fire.
	Make sure to put the freezer in a dry and ventilated environment, to ensure that equipment vents and wall surface of the instrument or other items have not been blocked; Do not use the device in a poorly ventilated environment, or the equipment may be damaged by the release of heat.

	Never disassemble, repair, or modify the unit yourself. Any such work carried out by an unauthorized person may result in fire or injury due to a malfunction. Meiling will be no responsible for such work.
	Never store volatile or flammable substances in this unit. This may cause explosion or fire. Never store corrosive substances in this unit. This may lead to damage to the inner components or electric parts.
	Use this unit in safe area when treating the poison, harmful or radiate articles. Improper use may cause bad effect on your health or environment.
	Never ground the unit through a gas pipe, water main, telephone line or lightning rod. Such grounding may cause electric shock in the case of an incomplete circuit.
	Use a power supply outlet with ground (earth) to prevent electric shock. If the power supply outlet is not grounded, it will be necessary to install a ground by qualified engineers.

	CAUTION: Failure to observe WARNING signs could result in injury to personnel and damage to the unit and associated
	Ultra-low temperature freezers not available to store non-living things, flowers, or other critical articles which is not suitable for low temperature storage.
	The temperature inside the freezer is very low during the normal working. Do not touch the interior surface of the chamber or the object inside without wearing protective gear.
	Always disconnect the power plug when the unit is not used for long periods.
	Make sure to prepare a safety check sheet when you request any repair or maintenance for the safety of service personnel. Be sure to check set point of the controller prior to restart the freezer.
	The ultra-low temperature freezer is a storage device, not a production equipment!
	Always hold the handle when closing the door. This will reduce the likelihood of a trapped finger
	Keep the key properly avoiding the children take it to open the back door which may result in unexpected injury.



Select a level and sturdy floor for installation. This precaution will prevent the unit from tipping.

Improper installation may result in water spillage or injury from the unit tipping over



Check the filter mentioned in this manual and clean it as necessary. A dusty filter may cause temperature rise or failure.



Do not tilt the unit more than 45 degrees when moving the unit. All transportation should be carefully.

3.Appearance

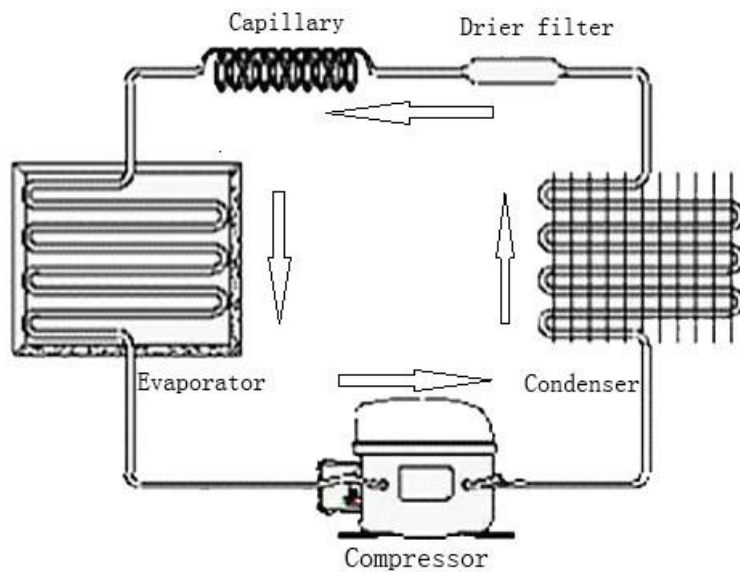


As the product is improved and the model is different, the actual product may be different from the simple diagram.

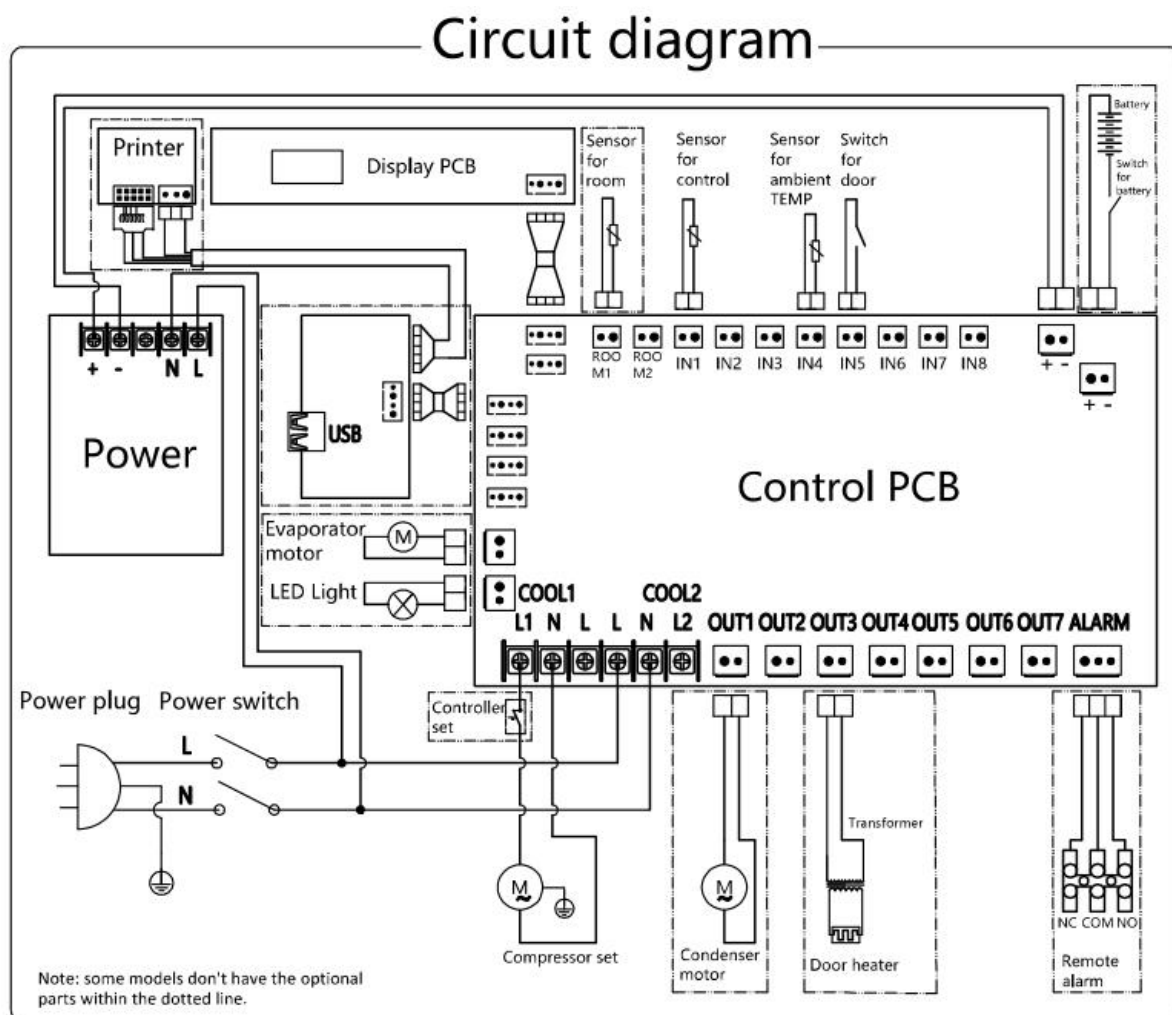
The above picture is only the example of identifier function piece. Structure and composition: the product consists of a box, a glass door structure, a refrigeration system and a control system. Scope of application: This product is suitable for hospitals, pharmacies, epidemic prevention stations, research institutions, bio pharmaceutical departments and so on.

4.Refrigerating system and electronic diagram

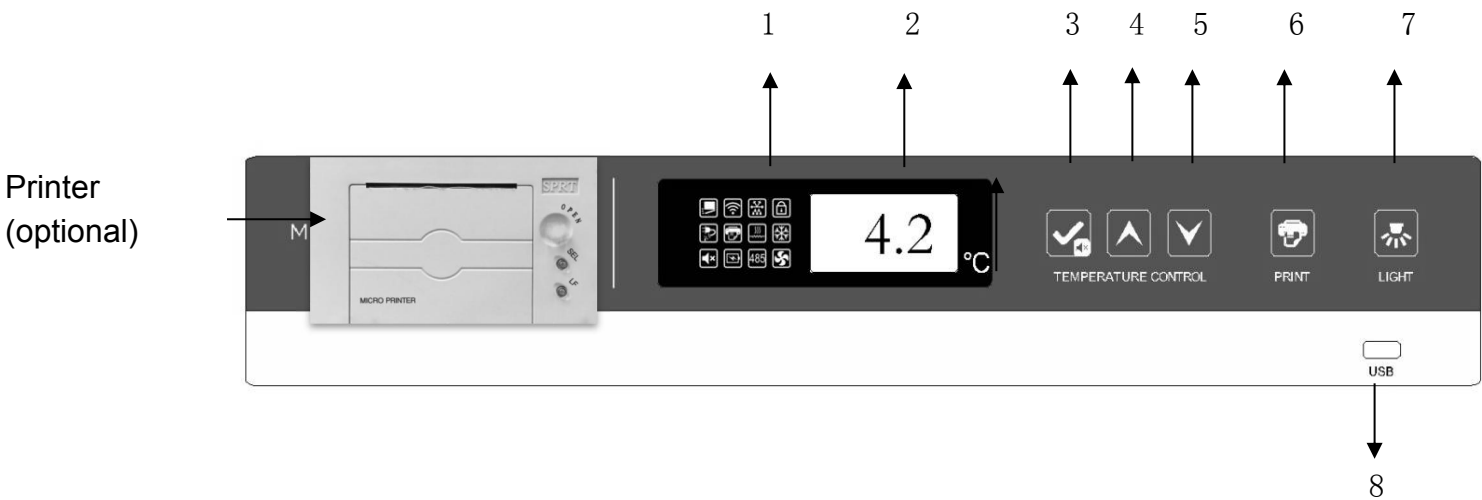
4.1 Refrigerating system schematic



4.2 Electronic circuit diagram



5. Display panel function description



1. Functions represented by each indicator: (the right table)



Door switch	WIFI	Defrosting	Key lock
Power failure	Print	Door heating	refrigeration
Mute	Electricity	serial port	Fan

a. Door switch indicator

When the door opened, the light on; when the door is closed, the light off.

b. Defrosting indicator

When the refrigerator enters the defrosting state, the defrosting indicator is often bright; when the refrigerator is out of the frosting state, the defrosting indicator is often extinguished.

c. key lock indicator lamp

When the key is locked, the key is not responding, and the key button is lit. At this time, the key is followed by the long key and the lower key 3S. It prompts the input password. The default is "005". After entering correctly, press the set / mute multiplex key, and the key is locked and released. At this time, the key lock indicator lights go out. In the unlocked state, 60s has no buttons, the key lock starts, and the key lock light is lit. Press the top key + lower

key 3S, the key is locked.

d. Power outage indicator

The refrigerator is normally powered by 220V. When the input power is off, the buzzer alarm. The digital tube alternates with the 3S interval. The power code is "PF". The power failure indicator lights up. When the input power is connected, it returns to normal, and the power off indicator lights go out.

e. Door heating indicator lamp

When the door is closed door heating, heating lights go out; when the door opened the door when heating, the heating indicator light.

f. Refrigeration indicator lamp

If the compressor is in the working state, the refrigerating indicator light is on; if the compressor is in a shutdown state, the cooling indicator off

g. Low power indicator lamp

When the battery voltage is less than 10.8V, the buzzer gives the alarm, and the electricity is low. The indicator lights up. the digital tube alternates with the 3S interval, the battery is low, the code is "bL". When the battery voltage is more than 12V, the buzzer is turned off, and the low power indicator lights go out ,it returns to normal,

h. Print indicator

When the printer is not working, the indicator lights out; when the printer is working, the indicator light is lit.

i. Serial port indicator

When the refrigerator is not connected to the reserved RS-485 serial port, the serial port light is extinguished; when the refrigerator is successfully connected to the RS-485 serial port, the serial port light is lit.

j. Fan indicator lamp




When the evaporator is opened, the fan indicator is opened; when the evaporator is closed, the fan indicator is extinguished.

k. Mute indicator lamp



When the alarm tone is silent, the indicator light is lit; when the alarm sound function is cancelled, the indicator light is extinguished.

1. temperature display window, in normal running state, display the average temperature inside the box, the unit is centigrade.



Environmental temperature view:


A key lock state, press the button , digital display temperature, no button operation after 5 seconds or press  ,  Return to normal display.

The key is not locked, press the button , digital display temperature, no button operation after 5 seconds to return to normal display.


Humidity check: key unlocked state, long press  and  , digital tube display humidity, no press


Key operation after 5 seconds or press  ,  , return to normal display.


2.  is a set / mute key; when there is no alarm state, when the key is unlocked, press  to display ambient temperature

When the ambient temperature display for 5S, it is restored to normal display; in the unlocked state, the press  can enter the user's menu for more than 3 seconds.


When the buzzer alarm (including the cabinet temperature beyond temperature alarm, the door open alarm, the sensor fault alarm, etc.), the button is not pressed


The unlocking state, the first press , the buzzer stops chirping, display the ambient temperature 5S, return to normal display (press the mute key is only close the abnormal

state of alarm buzzer, such as troubleshooting, abnormal alarm buzzer next to), press  again, buzzer alarm, display temperature for 5S, recovery display cabinet temperature and

alarm state. In the state of key unlocking, you can use  as the settings key.

In the unlocking state, when setting parameter mode, press this key to display the parameter and parameter name. If the press time is longer than 3 seconds, then save the settings and return to the normal interface.


3.  is the up-regulated key; in the parameter setting mode, you can move to the next parameter, or increase the parameter value. For example, when setting the set temperature, increase the set temperature. When the parameter values are set, the parameters increase quickly when the key is raised. In normal state, the U disk December data can be imported by pressing the top key for 3 seconds.

4.  is the down key;


In the parameter setting mode, move to the previous parameter or reduce the parameter value.

For example, when setting the set temperature, the setting temperature is reduced.

When the parameter values are set, the key is down and the parameters are reduced quickly.

5.  is the printing key;

The system can keep the data for 7 days to print, and press the print key to print the temperature in the setting time.

6.  is the key to the light opening.

The default lamp on the refrigerator is closed. The key is to press the light, and the turning light can be turned out. When the lamp is closed, the lamp is lit and the lamp closes when the door is closed; when the light is on, the light does not change when the door is closed. This machine has two functions of automatic lighting and manual lighting. In the automatic lighting condition, the door opened the door immediately lights lit, turn off the lights after 5 seconds off; the user can manually control the lights turn on the lights, not switch the door has been lit (indicating lamp button above the light), only once again press the key to open the lamp lighting lamp can turn off manually enter the automatic lighting state after automatic lighting (indicator button above out).

7. USB data export;

Automatic export: when the U disk is connected to the USB interface, the recorder buzzer calls once, displaying "on", and the PDF files in the U disk are generated during the month



and the last month. After the data transmission is completed, the buzzer calls once, displaying "End", and then returning to normal display after 6S.

Note: when the data is less, "on" and "End" are displayed on the digital tube.

Manually export: button keep unlocked, U disk connected, and not in the file generation, press the button 3 seconds, digital tube display "D01", according to the raised key or down

button to adjust the "d00~d12" . press  button, U disk made this file (D00) or push forward the month (1-12) PDF document data.



Note: when the digital tube alarm flickers "LoF", the recorder is not started;

press   at the same time, the "LoF" is disappearing for 3 seconds ,the buzzer sounded once and the recorder is started.


(2) functional settings:

A. connect the power supply, open the back power switch of the back of the box, and the machine can enter the working state.

B. user parameter settings:

To unlock: under normal operating conditions, and at the same time press   for 3 seconds, the digital display parameters

The code "000", enter the password "005" (the input menu user password, enter "099" can be the key to restore the default lock password "005".) It is unlocked at this time. After


unlocking press  for 3 seconds, digital display



The display parameter code "PS1", enter the set parameters.

Use   to adjust



Display → PS1 → b1 → b2 → Set → H → L


n → y → r → S → F → Pt → tH1 → P1 → P2

Press  to confirm the parameters, the first parameter name of this type of parameters will be displayed;

(1) rolling parameters with  or ;

(2)  displays the corresponding parameter value;

(3) use  or  increase or decrease the value;

(4) press  to return to the display parameters, value of the temporary storage.

(5) If other parameters are modified, repeat step 1 ~ (4);



(6)press the above 3 seconds, modify the parameters stored and returned to the display parameter category.


C. if there is no key in 60S. Exits the parameter setting program




D. parameter display




Serial number	menu	Parameter range	Suggest setting values	Remarks
1	b1	V1.0-9.9	1.0	Hardware version
2	b2	V1.0-9.9	1.1	Software version
3	Set	5.0	5.0	Temperature setting
4	H	0.0~10.0	3.0	High temperature alarm set value set+H; H=0 when the alarm is cancelled. When the temperature is too high, the high temperature alarm shows H1
5	L	0.0~10.0	3.0	Low temperature alarm set value set-L; L=0 when the alarm is cancelled, when the temperature is too low, the low temperature alarm display L1
6	Pt	0~240min	20	Print interval
7	tH1	20.0 ~ 50.0℃	40.0	Upper limit of ring temperature alarm
8	P1	1: automatic heating mode 1 2: automatic heating mode 2 3: automatic heating mode 3 4: open all the time 5; keep closing	1 the door body with condensation is set to 4	Mode 1: door door closing judgment once, heating 5min, (time can be set) if in the heating time period, the door opens again and closes again, refurbished heating time Mode 2: when the compressor is running, the heater opens; when the compressor is shut down, the heater is delayed for 1 minutes. Mode 3: when the humidity in the cabinet is greater than


				<p>80%, the door body is heated and opened, and the door body is heated and closed when the humidity is less than 60%.</p> <p>Mode 4: the door body heating has been opened.</p> <p>Mode 5: the door body heating has been closed.</p>
9	P2	<p>1: average temperature</p> <p>2: upper temperature</p> <p>3: lower temperature</p>	1	Display mode selection
10	PS1	000~999	005	User menu password settings

6.Factory setting mode

Under the unlock status, long press the " key" to enter the factory menu (till 000 display, before 000 display "PS1" display for a very short time. If you want enter user menu ,you should release when PS1 display, the PS1 password is 005 for user menu.) Then input "022" (password of PS2) to enter factory setting menu.

Then we can adjust the parameter of temperature fluctuates、Sensor correction、Print interval. When it shows the code: you may turn the code by the down button , (to turn backward the code with the up button ) ,to press the  key to show the number parameter. If you do not know the meaning of code, do not do any change.

When it shows the number parameter: to adjust the number parameter by the   button, to press the  key to show the code parameter.

When the  key is longer pressed , it will exit to the normal display status.

Menu Level	Item	parameter scope	default value	Remarks
factory menu	PS2	000~999	022	factory setting password
	tP1	~	~	alarm sensor temperature
	tP2	~	~	upper sensor temperature
	tP3	~	~	lower sensor temperature
	tP4	~	~	ambient sensor temperature
	tP5	~	~	evaporator sensor temperature
	tP6	~	~	condenser sensor temperature
	tH2	20~80	60	condenser sensor high temperature alarm
	Ad1	-8~8	0	alarm sensor temperature correction
	Ad2	-8~8	0	upper sensor temperature correction
	Ad3	-8~8	0	lower sensor temperature correction
	Ad4	-8~8	0	ambient sensor temperature correction
	Ad5	-8~8	0	evaporator sensor temperature correction
	Ad6	-8~8	0	condenser sensor temperature correction
	rd1	0~10	2	set the temperature fluctuates when the compressor turn on
	rd2	0~10	2	set the temperature fluctuates when the compressor turn off
	t1	1~30	3	compressor startup delay
	t2	1~10	1	condenser fan stop delay time after compressor stop
	t3	1~30	10	high temperature alarm delay time

	t4	1~30	3	door open alarm delay
	t5	1~30	6	compressor work time if sensor error
	t6	1~30	6	compressor turn off time if sensor error
	t7	0~199	8	defrosting interval (hours)
	t8	0~240	60	defrosting time (minutes)
	t9	1~30	3	door heat time of mode 1
	tP8	-20~20	8	defrosting stop temperature
	P3	1~2	1	condenser fan working mode selection
	P4	1~2	1	evaporator fan working mode selection
	Scy	1~240	10	temperature data record time
	n	~	~	year
	y	~	~	month
	r	~	~	day
	S	~	~	hour
	F	~	~	minute

7.Error code and solution

error code	description	solution
H1	alarm sensor high temperature alarm (Temp \geq MAX of setting warning temperature, usually happen when you just power on the unit ,because at that time the cabinet temp has not dropped to your setting temp)	<ol style="list-style-type: none"> 1.Check the settings of warning temperature are correct for you. If not, change the settings using buttons of display panel. 2.Check the sensor is good and its connection is correct. If sensor defective, replace sensor. 3.Try a known good main board. If the issue does not persist, replace main board. (rarely) 4.Refrigerating system failure, please see refrigerating system failure part.
L1	alarm sensor low temperature alarm (Temp \leq MIN of setting warning temperature, rarely happen)	<ol style="list-style-type: none"> 1.Check the settings of warning temperature are correct for you. If not, change the settings using buttons of display panel. 2.Check the sensor is good and its connection is correct. If sensor defective, replace sensor. 3.Try a known good main board. If the issue does not persist, replace main board. (rarely) 4.Refrigerating system failure, please see refrigerating system failure part.
H2	ambient temperature high alarm	Keep the unit at least 30CM far away from other objects, and open your air-conditioner to cool it.
H3	condenser temperature high alarm	<ol style="list-style-type: none"> 1.Keep the unit at least 30CM far away from other objects, and open your air-conditioner to cool it. 2.Check condenser-fan good or not. If not, replace it.
do	The door was not close longer than 1 min	Close the door.
PF	Power fail alarm	<ol style="list-style-type: none"> 1.Check the power line connect well with the 220VAC power source and freezer. 2. Make sure the 220VAC power is OK using multi-meter. Reconnect the power line to a known good power source. 3. Check if the fuse and power supply board are OK, replace the damaged part of the two.
bL	low battery alarm (battery volts <12V)	Replace battery
ER	recorder not connected	<ol style="list-style-type: none"> 1.Check the connection of recorder 2.Replace the recorder

LoF	recorder not startup	<p>1.Under the unlock status long press enter and up buttons till LoF disappear .If that does not work, check the connection of recorder</p> <p>2.Replace the recorder</p>
EE	communication fault	<p>Communication between display board and main board fault. Please check the connection between the two boards is OK. If it is OK, replace display board.</p>
E1	alarm sensor error	<p>1.Check the alarm sensor connection</p> <p>2.Replace the alarm sensor</p>
E2	upper sensor error	<p>1.Check the upper sensor connection</p> <p>2.Replace the upper sensor</p>
E3	lower sensor error	<p>1.Check the lower sensor connection</p> <p>2.Replace the lower sensor</p>
E4	ambient sensor error	<p>1.Check the ambient sensor connection</p> <p>2.Replace the ambient sensor</p>
E5	evaporator sensor error	<p>1.Check the evaporator sensor connection</p> <p>2.Replace the evaporator sensor</p>
E6	condenser sensor error	<p>1.Check the condenser sensor connection</p> <p>2.Replace the condenser sensor</p>
E7	humidity sensor error	<p>1.Check the humidity sensor connection</p> <p>2.Replace the humidity sensor</p>

8. Defrost, Stop using and Maintenance

Caution

- For personal safety, please cut the power supply before any maintenance!
- Don't inhale medications or aerosols around the device while maintaining a medical refrigerator, or it will endanger your health.

8.1 Defrost, Stop using and **Maintenance**

The medical refrigerator will be automatically defrosted during the working process.

If the unit is not used for long time, please disconnect power supply and maintain as the following procedures.

Maintenance: Once in a while, the medical refrigerator should be cleaned and maintained.

(For the sake of safety, remove the power plug firstly) and wipe the inner and outer surfaces of the refrigerator with a soft cloth.

Caution: DO NOT sprinkle water on the faces of cabinets, which may decrease insulating property of electric parts and rust metal parts. DO NOT use hot water, corrosive cleanser and organic solvent!

No violent vibration or collision during transportation. No rain drench.

Suitable conditions: temperature: $-40^{\circ}\text{C} \sim +55^{\circ}\text{C}$, relative humidity: 10% ~ 90%.

8.2 Disposal

Warning:

If the equipment is stored in unsupervised areas for a long period of time and left unused, ensure that the child is not close to the medical refrigerator and the door cannot be closed completely. The disposal of refrigerator shall be carried out by corresponding personnel to prevent the occurrence of such accidents as suffocation.

9. Troubleshooting and maintenance service

Any product has the possibility of failure. Please observe the operation of the medical refrigerator in the process of use. If there is any abnormality, please check and compare the errors with the following table. If you can't fix the issue, Please inform our service team in time. We will serve you wholeheartedly to avoid any losses.

Term of use: 10 years

Problem	Possible Cause
Refrigerator does not running	<ul style="list-style-type: none">● Power outage has occurred.● The plug is bad or not securely plugged-in.● Fuse is blown.● Voltage is too low or high.
Compressor does not running	<ul style="list-style-type: none">● Power in control panel is off.● Temperature setting is wrong.
Temperature is lower than setting	<ul style="list-style-type: none">● The door is not closed properly or is opened too frequently.● Overfull materials are put.● Ambient temperature is too high.
loud noise	<ul style="list-style-type: none">● Freezer is not leveled well.● Freezer leans upon the wall.
Surface condensation of glass door	<ul style="list-style-type: none">● Wet and moisture season, the door may be condensed. It belongs to normal phenomenon, just wipe it with dry cloth.
Alarm flashing, buzz warning	<ul style="list-style-type: none">● If you just put in the item, the temperature is stable and will be eliminated automatically after running for a period of time.● If the door is not closed tightly to cause the door open alarm.● If the battery is low, it will be eliminated automatically for a period of time.● Whether the temperature exceeds the standard

● Below are normal operations:

- ① There are some light clashes when the compressor starts up and stops.
- ② After opening the door and put in the hot subjects, the controlling system appears high

temperature and high humidity alarm. solution: The hot subjects should be cooled by natural cooling and then put into the cooler. Do not put too many subjects at one time. After the system is stable, the high temperature and high humidity alarm will be relieved.

- ③ The slight flowing noise of running water in the refrigerant pipe.
- ④ Before call the service engineer, Please clean and disinfect the freezer.
Condition: Cannot shake heavily, strike, prevent to drenching.
Storing environment temperature:-40℃～+55℃, Relative humidity: 10%～90%.

Battery Maintenance

- A. If the freezer does not run in a long time, it should be connected to the power on a regular basis (monthly), turn on the power switch to charge the freezer for a period of time, and the charging time is not less than 24 hours.
- B. When the power supply is interrupted, the power lock switch should be turned off in time, otherwise the battery will lose power, which may cause permanent damage to the battery.
- C. The battery is expendable and the battery life is about 2 to 3 years. If the battery is not properly used, such as the loss of electricity or reach the battery life, it will lead to low battery alarm. (It does not affect the usage of the refrigerator but there is alarm failure and influence on printing function. It is suggested that users should contact company after-sales service staff to replace.
 - 1. Battery Installation Position: Top inside of electrical box
 - 2. Battery replacement
 - a. Turn off the power switch and pull the plug from the socket (Pay attention to the electrical components in the electrical cabinet. Power supply must be turned off and also unplug the power cord and turn off the power switch of the freezer before opening. The electrical cabinet must be opened by qualified engineer or maintenance personnel).
 - b. Remove the battery connection plug.(Before unplugging the cord, pay attention to the sequence of the battery's positive and negative levels and the connecting line, does not

upside down the positive and negative levels to prevent the control system damage from the installation of new batteries. The red line is usually connected to the positive pole, and the black line is connected to the negative pole)

- c. Remove two fixed screws from the battery plate with a screwdriver and remove the battery.
- d. New replaced battery model: BT-12M4.0AC(12V4.0AH);
- e. The replacement battery is recyclable, please contact the local battery recycling agency for processing.

Note: In order to effectively ensure that the replacement tank battery meets there requirements of the control system and to avoid the impact of improper operation on the system during the replacement, it is recommended to contact the Meiling after-sale service staff to replace or guide.

Installation of printer paper for optional part printer.

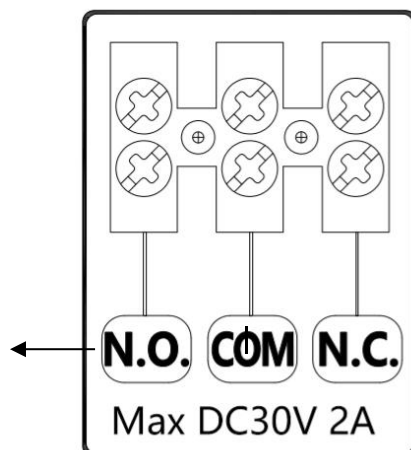
The printing paper has been installed in the factory. When the paper is used out for a long time, you can buy and replace it with the same roll paper .

The installation steps are as follows:

1. Press the cylinder button on the printer and open the cover of the printer.
2. put print paper into the printer box and pull the paper roll end of the printer cover after the note slightly exposed on the box cover port;
3. Cover the lid of the box.

Remote alarm terminal and RS485 interface

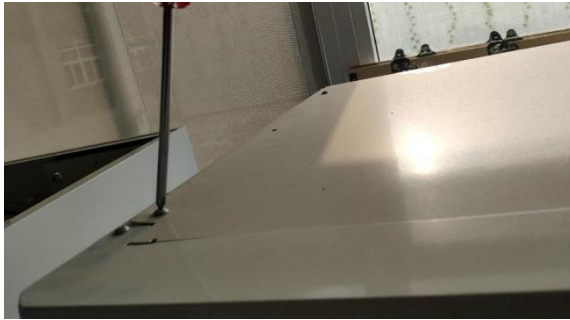
The remote alarm terminal is installed in the back of refrigerator and the alarm signal is output by the terminal. The terminal bearing capacity is DC 30V, 2A.



10. Assembly and disassembly

10.1 Electrical system

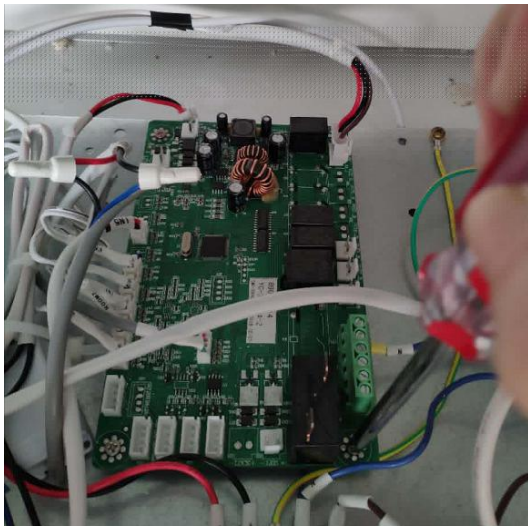
The electrical system mainly refers to control board, display board, USB temperature recorder, power supply board, transformer, battery and so on. It is at the top part of refrigerator. Remove the screws of top panel, the electrical system will be found after removing top panel. (Take YC-55L for example, the other refrigerator series is very similar)



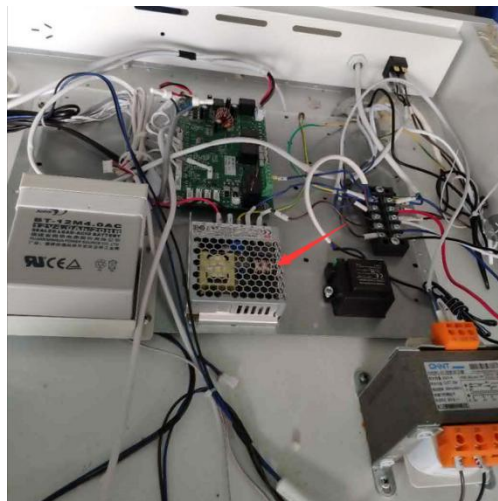
Remove top panel (YC-55L)



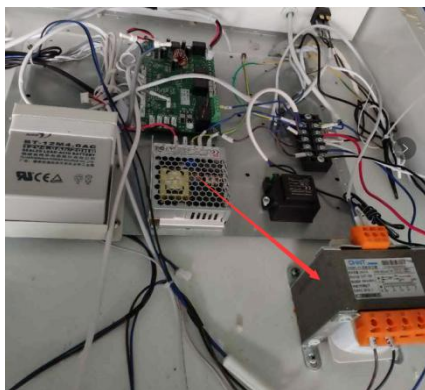
electrical system (YC-55L)



Controller board (YC-55L)



power supply board (YC-55L)



Transformer (YC-55L)



battery (YC-55L)



Display board at top-front panel (YC-55L)



USB temperature recorder (YC-55L)

10.2 Door gasket

The gasket can be easily taken out from the door.

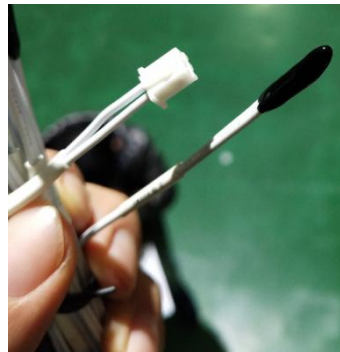


10.3 Parts inside cabinet

(1) Shelve can be easily taken out from cabinet. Shelve holder can be removed after removing screws.



(2) The sensor is in the bottle, can be easily taken out.



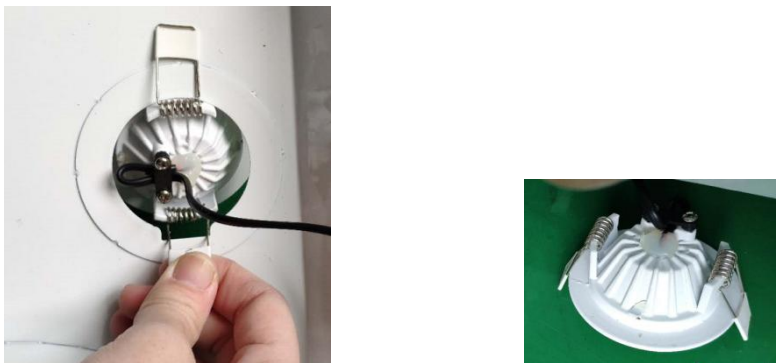
When placing sensor, please cut the sensor head, and only replace the sensor

head , wrap the joint part with insulation tape.

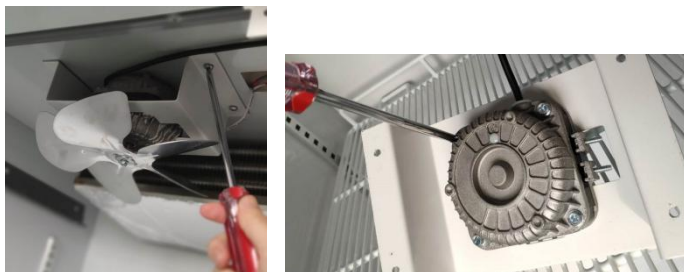
(3) Remove fan-plate after removing screws and disconnecting cables. The lamps are in the fan-plate.



Press the two spring brackets to remove lamps from notch:



(4) Remove evaporator fan after disconnect fan-wires and remove screws



10.4 Compressor and refrigeration system

The refrigeration system are mainly at the bottom of the refrigerator.

Remove the rear plate at the bottom:

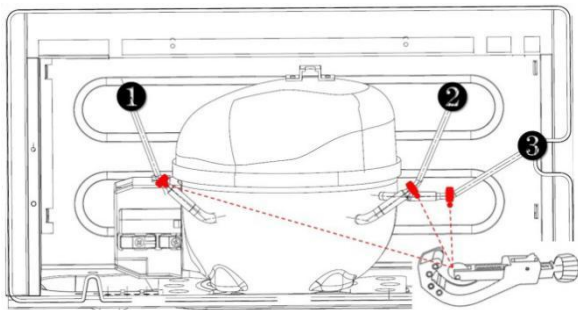


Then the compressor, condenser, filter, can be seen.

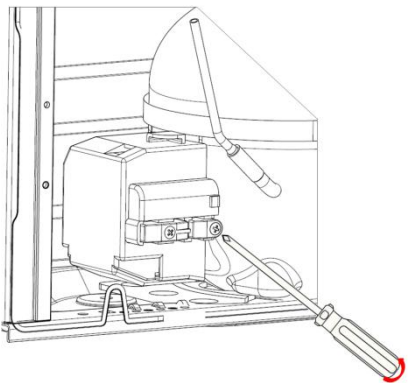


Compressor replacement:

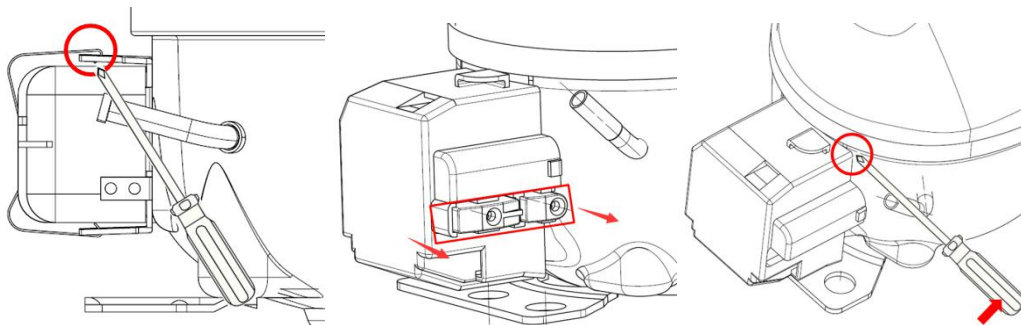
(1) cut tube 1,2,3 (process tube, low pressure tube, high pressure tube) to release refrigerant



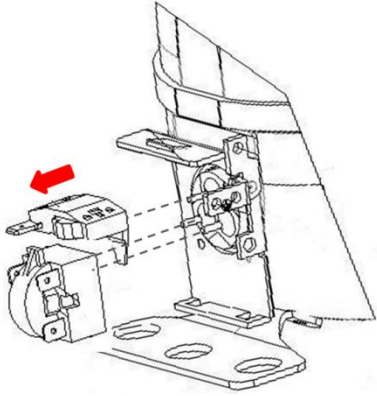
(2) remove screws as below:



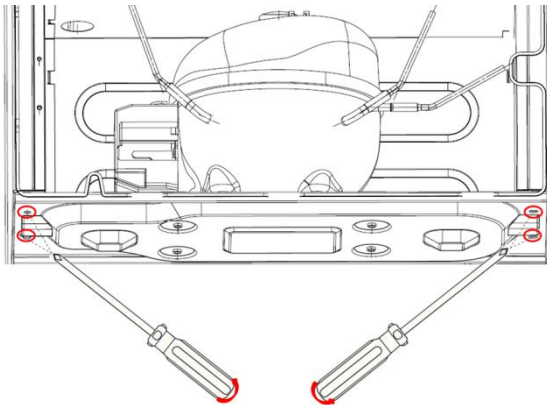
(3) remove protection cover as below:



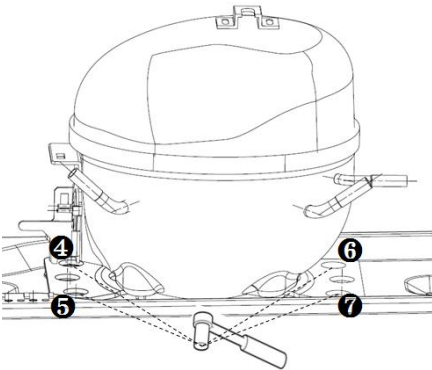
(4) remove accessory of compressor:



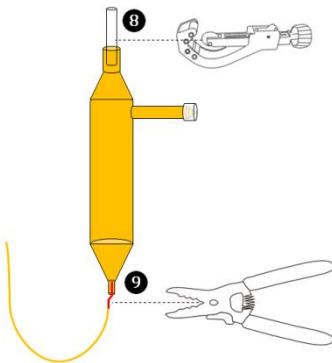
(5) remove the bottom plate after remove the below screws:



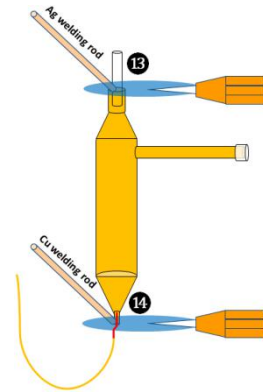
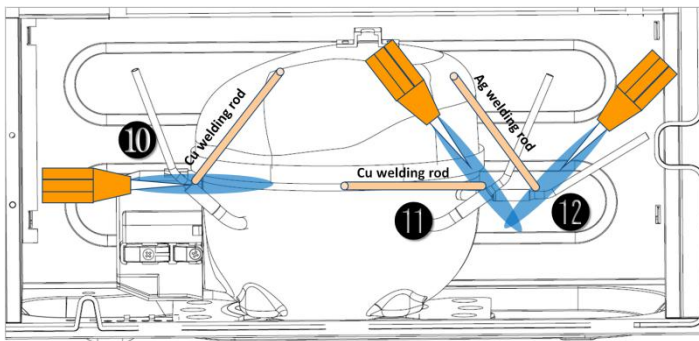
(6) Remove screws 4,5,6,7, then remove compressor from the bottom plate:



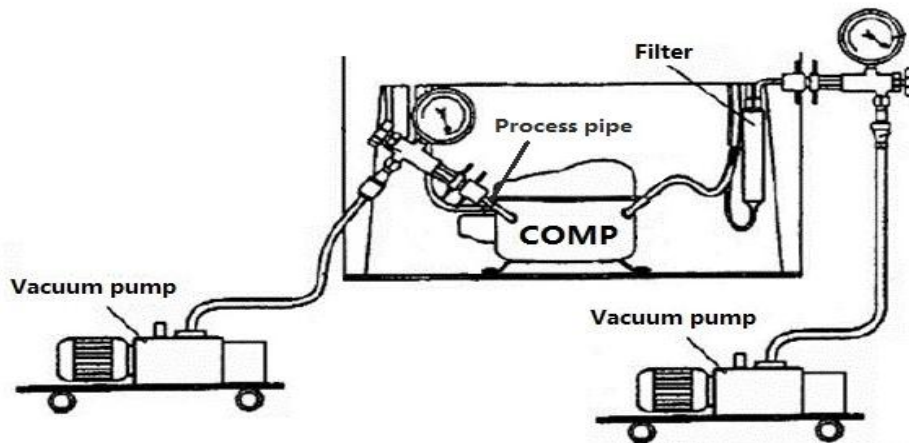
(7) remove filter by cutting tube 8 and 9:



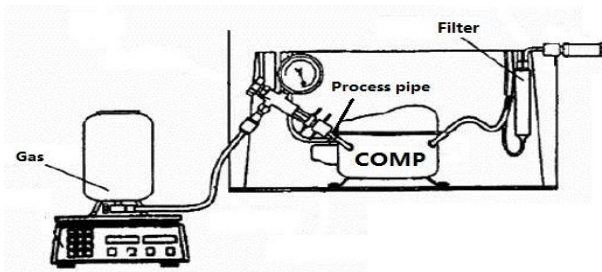
(8) replace new compressor and filter by welding way:



(9) vacuum refrigeration system to be lower than 6 Pa



(10) recharge refrigerant as nameplate require:



(11) make the process tube 15,16 closed.

