

Haier

CAUTION

READ THIS MANUAL CAREFULLY TO
DIAGNOSE TROUBLE CORRECTLY
BEFORE OFFERING SERVICE .

Wine cellar

SERVICE MANUAL



MODEL: **JC-398G**

● Features

- Optimized for Preservation of Wine Flavors.
- Adjustable feet and Remove roller.
- Adjustable temperature display from 6°C to 18°C.
- Active carbon deodorization implement .
- Interior light.
- Interior fan keep well-proportioned temperature.
- Store Wine quantity:174 bottle.

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Safety Precautions

Read all of the instructions before using this appliance. When using this appliance, always exercise basic safety precautions, including the following:

1. Use this appliance only for its intended purpose as described in this uses and care guide.
 2. This Wine cellar must be properly installed in accordance with the installation section. Instructions before it is used, See grounding instructions in the installation section.
 3. Never unplug your Wine cellar by pulling on the power cord, Always grasp the plug firmly and pull straight out from the outlet.
 4. Repair or replace immediately, all electric service cords that have become frayed or otherwise damaged, Do not use a cord that shows cracks or abrasion damage along its length, the plug or the connector end.
 5. Unplug your Wine cellar before cleaning or before making any repairs, Note: If for any reason this product requires service, we strongly, recommend that a certified technician perform the service.
 6. If your old Wine cellar is not being used, we recommend that you remove the door and leave the shelves in place; this will reduce the possibility of danger to children.
 7. This Wine cellar should not be recessed or built-in an enclosed Cabinet. It is designed for freestanding installation only
 8. Do not operate your Wine cellar in the presence of explosive fumes.
 9. Do not damage the refrigerant circuit.
 10. Do not use any electrical device or any sharp instrument in defrosting your Wine cellar.
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Specifications

WINE CELLAR

1.	Model		JC-398G
	Photo		
	Commercial brand		Haier
	Product description		WINE CELLAR
	Type of Appliance (FS= freestanding BI= built-in)		FS
	Energy efficiency class		/
	Climate class (N= + 18-32 °C T=+ 18-43 °C)		ST
	Freezer compartment / Star rating		/
	Approvals (VDE / TÜV / IMQ / NF / ÖVE / DEMKO etc.)		TUV/GS (Rh1)
	Certifications (CE / ISO 9001/2)		CE/ISO9001/2
	EAN codes		/
2.	Key features		
	Gross capacity	l	398
	Total net capacity	l	390
	Freezing capacity	kg/24 h	/
	Energy consumption	kWh/year	299.3
	Defrosting (H=manual A=automatic) <i>Fridge/Freez</i>		A
	Frost free system		/
	Defrost water outlet	Ye	s
	Air circulating ventilator		Yes
	Kind of coolant (R134a/R600a)		R600a
	Foaming components		CP-IP
3.	Technical data		
	Voltage / frequency	V/Hz	220-240 V~/ 50
	Input power / mains fuse minimum	W /A	180W/1.20A
	Length of cable / incl. plug	cm	200/205
	Temperature range (from>to) <i>Fridge / Freez</i>	°C	6~18
	Features: (DIN 8950 resp. 8953)		
	Energy consumption (EN 153) per l 100	kWh/year	75.2
	Energy consumption (EN 153) per l 100	kWh/24 h	0.206
	Cooling system: K=Compressor / A=Absorbtion		K
	Max noise level	dbA	42
4.	Aesthetics		
	Colours (see L):		
	Top		Black
	Cabinet		Gray Black
	Door Glass		Intransparent
	Door Frame		Black

Fascia panel / Handle	(w / b / g / s)		Black
Inside door/-drawers	(w=white t=transpar.)		- / -
Door:			
F= Flat / R= Rounded / S= Streamline			S
Hinged	(r =right l =left) / reversible		r / reversible
Deco frame:	panel thickness till:	mm 90	
Compartments	number / adjustable		- / adjustable
Lock			Yes
Shelves:			
Number			7
Number of bottles	(total)		174
Type	(gr=grill/g=glass/p=plastic)		wood:7
Colour of shelves			Wood
Adjustable			YES
Drawers:			
Number		n°.	0
Crisper:			
Salad crisper(s)	transparent / white		-/-
5. Equipment & Accessories			
Control Panel:			
Control panel	interior / exterior		Exterior
Thermometer	interior / exterior	Ex	terior
Control lamps	green / yellow / red		/
Over temperature ALARM	LED / acoustic		acoustic
Adjustable thermostat			Yes
Fast freeze switch		-	
Interior light		W	11
Adjustable feet	front / rear	n° f	ront
Castors	front / rear		rear
Wall spacer grid /-distance holder / Flush back		cm	10/10/10
6. Product dimensions			
Unit dimensions	H / W / D	cm	167*66.5*67
Depth with open door		cm	132
Net weight		kg	82.0
7. Packing dimensions & loadability			
Packing dimensions	H / W / D	cm 1	74x 73 x74
Gross weight		kg	92.0
40 ' Container load		pcs	48
40 ' HC Container load		pcs	48
8. Recycling symbols			
Carton	weight in g	kg	
Polystyrene	weight in g	kg	
Polyethylene foil	weight in g	kg	
Wood	weight in kg	-	
9. Service			
Users instruction	(languages)		D / F / I / GB
Max. failure rate	(during first 12 Months)	%	-

Installation and Accessory Parts

Unpacking Your Wine cellar

1. Remove all packaging material; this includes the foam base and all adhesive tape holding the Wine cellar accessories inside and outside.
2. Inspect and remove any remains of packing, tape or printed materials before powering on the Wine cellar.

Adjusting Your Wine cellar

1. Your Wine cellar is designed for freestanding installation only. It should not be recessed or built-in.
2. Place the Wine cellar on a floor strong enough to support it fully loaded.
3. When moving the Wine cellar, never tilt it more than a 45-degree angle. This could damage the compressor and the sealed system.
4. If the Wine cellar is tilted let it stand in an upright position for at least 24 hours prior to plugging. This is to allow the refrigerant to settle.

• Proper Air Circulation

- To assure your Wine cellar works at the maximum efficiency it was designed for, you should install it in a location where there is proper air circulation,
- Plumbing and electrical connections.
- The following are recommended clearances around the Wine cellar:

Sides.....0.8”(20mm)

Top.6.3”(630mm)

Back.....4”(100mm)

·Do not over fill wine cellar for proper internal air circulation.

Electrical Requirement

- Make sure there is a suitable power Outlet (220~240V) with proper grounding to power the wine cellar.
- Make sure there is effective grounding for the wine cellar, this is a dangerous practice since it provides no effective grounding for the freezer and may result in shock hazard.

Install Limitations

- Do not install your wine cellar in any location not properly insulated or heated e.g. garage etc, your wine cellar was not designed to operate in temperature settings below 32 • F ahrenheit.
- Select a suitable location for the wine cellar on a hard even surfaces away from direct sunlight or heat source e.g. radiators, baseboard heaters, cooking appliances etc, Any floor unevenness should be corrected.

• Initial Setup

1.Operating Your Wine cellar

Once the wine cellar is in its proper place, plug it in an electrical outlet having 220~240 volts.

Set the temperature, the temperature is adjustable from 4°C to 18°C. After using the wine cellar for 5 hours set the wine cellar to your desired setting. Place wine inside the wine cellar.

2.Wine Storage shelves

Your Freezer has 5 removable even shelves and 1 removable catercorner shelf. It allows you to store wine more accessibly or you can remove it if not needed.

3. Defrosting and cleaning The Wine cellar

- Defrost whenever the frost becomes 1/4" thick. Never use a sharp or metallic instrument to remove the frost as it may damage the cooling coils. (A punctured coil will void the warranty)
- Unplug the power pin, then take out stored wine and place in a safety place. Defrosting usually takes a few hours. To defrost faster keep the freezer door open.
- When frost buildup has melted, wipe water off with a dry cloth. Replace the electrical plug in the electrical outlet.
- Reset the temperature control to the desired setting.

Parts identifications

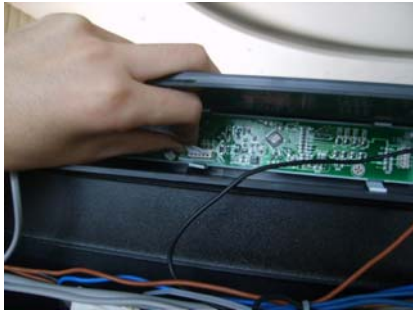


1. Control panel

- a. Firstly, loosen the philip screw on the top Hinge, the door should open for 135° when loosening the right side philip screw.
- b. Hold the control panel, meanwhile push the wiring harness button with your thumb to take the control wire apart.



c. One side of the signal wire was connecting with the control panel, the other side was connecting with the middle of the display panel. Take it apart firstly, note that you should unplug it softly in order to protect the plug.



d. The socket of sensor wire is connecting with the display panel, please refer to the signal wire to take it apart.



e. When changing the control panel, you should push the button to pull out of the control panel. Do never pull it wildly without pushing the button. That will break it.

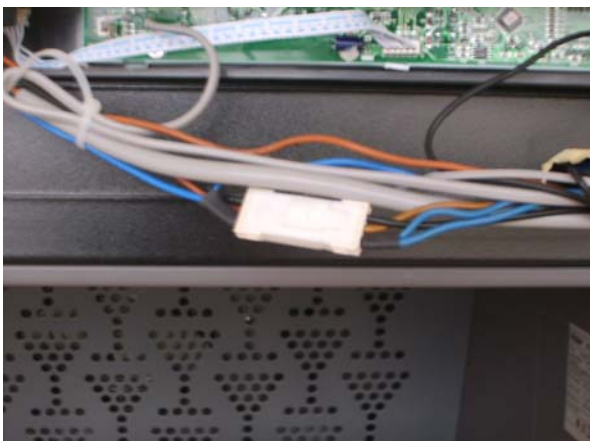


f. The display panel is fixed on the plastic panel with three philip screws, you should regulate the philip screw properly to make the button on the display panel sensitive. On the right side of the picture is fan switch, you can connect it directly with the wire without thinking of the direction, but remember to push the button on the wire when you take it apart from the fan switch.



2.Connectting wires

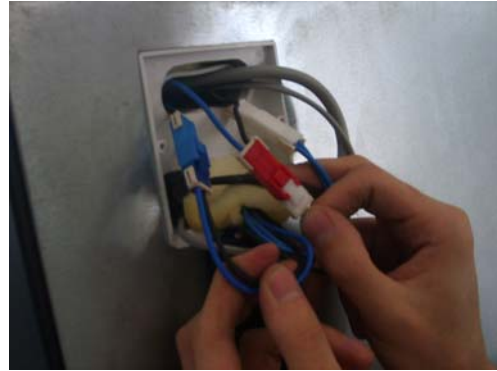
a. On the picture is the connection of the control and connect wire.



b. On the left top of the back of the cabinet is box cover, take it apart you will find the Cord stopper cover.



c. When you take the box cover apart, as on the picture, the blue one is lamp wire, connecting with the connect wire and ballast wire. The red one is fan wire, connecting with the control wire. The white one is connect wire, connecting with heater wire.



3. Fix the power wire and ballast

a. Take the Wire Seat apart first to loosen the Power wire.



b. Then take the Ballast cover apart



c. The Power and control wire in the Ballast cover is fixed in the slot with accessory. In the picture is the plug connecting the control wire and power wire. The black one is ballast wire, spring out from the Cord stopper cover.



d. Take the Phillips screw apart from the ballast, then you can take the ballast apart. When assembling it, please fix the below screw first.



e. The ballast wire has a locked one-side port. When changing it, you can use a thin steel bar insert in the faucet and then pull the wire out, when fix the wire again you need to use the other two faucets, the used one is broken for it is one-off.



4. The compressor

a. The assemble step of the compressor accessory is showing on the picture. The earth wire is connecting to the compressor, the live wire and zero wire is connected to the compressor power panel, rotate the plastic bolt to fix the wire. The compressor power panel is one whole part.



b. There is buckle on the Water box to fix on the compressor, and also some anti-shock material between them.



5. Fix the door

a. Pull the bottom Hinge cover out flatly.



b. The bottom Hinge is fixed with four bolts, you should use a M6 sleeve to unfix it, then you can take the door out.



Control panel principle

Brief description of control panel principle about :JC-398G



1. Adjustable temperature display: While you are entering the temperature by pressing the temperature buttons about 3 seconds, the set temperature will flash on the display.

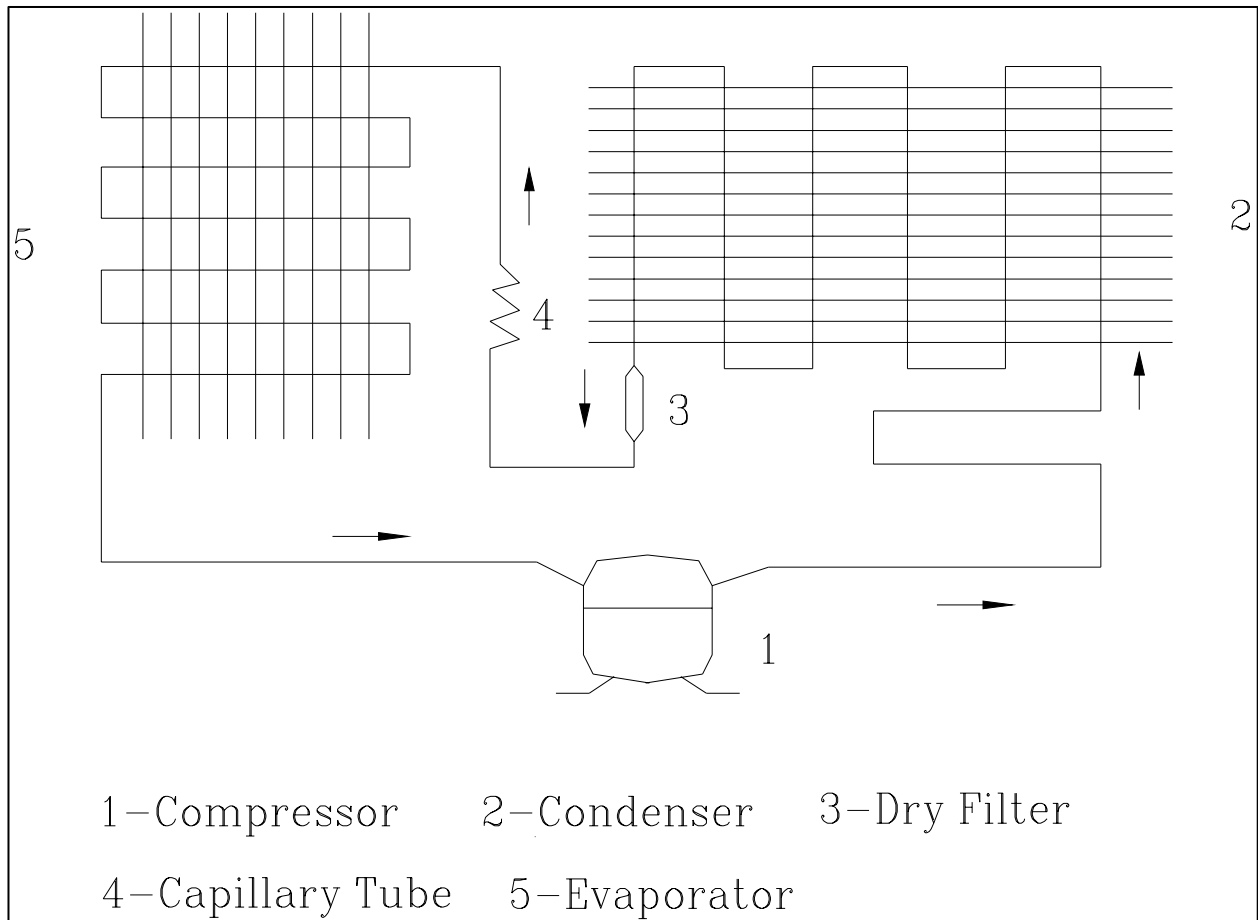
To reduce the temperature, press the bottom button “▼”.

To increase the temperature, press the top button “▲”.

2.The small yellow lamp is the LAMP switch. When the lamp is on, the Interior light will run

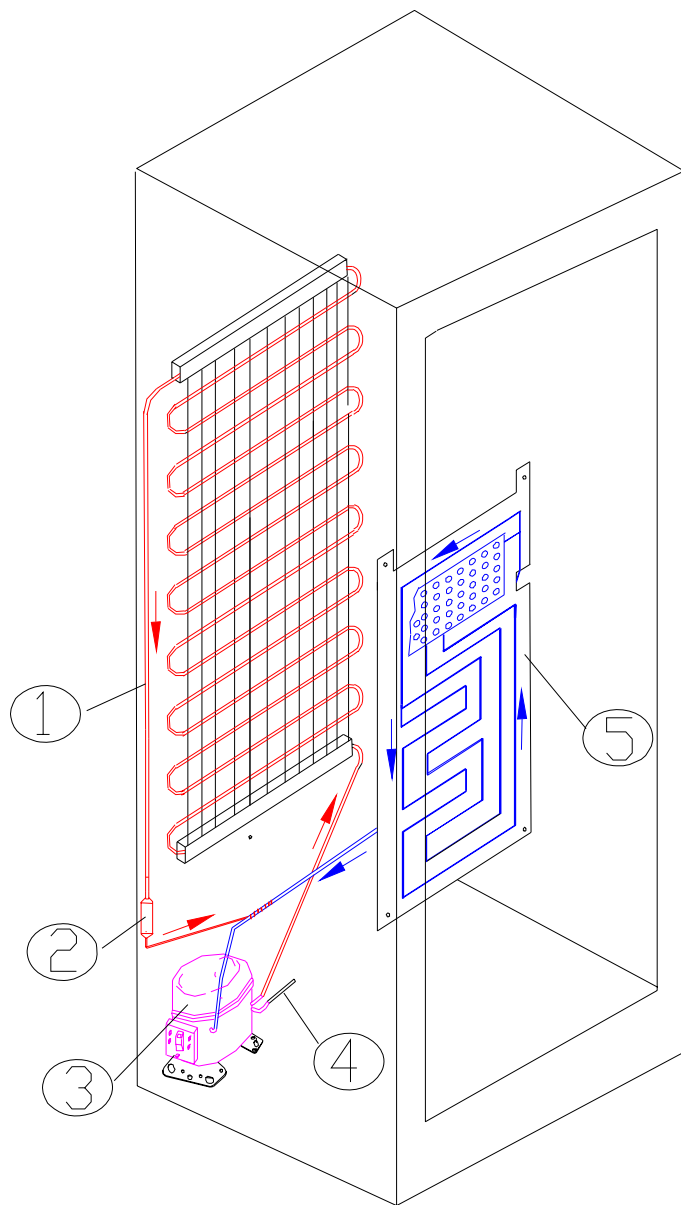
3.The small red lamp is the ALARM lamp. When the lamp is on, the alarm will be on.

System 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.

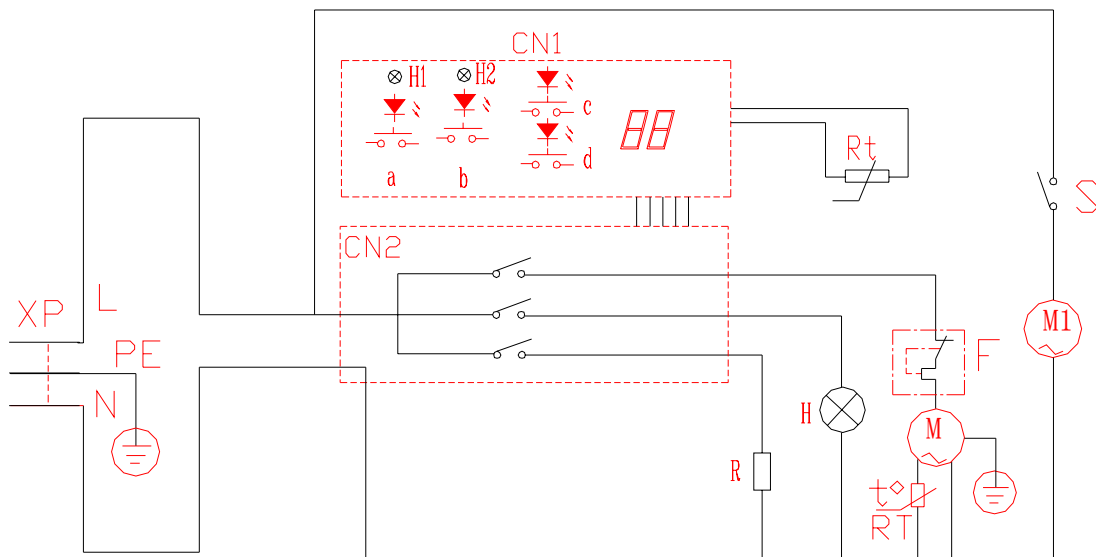
System flow scenograph



- 1 condenser
- 2.dryer filter
- 3.compressor
- 4,process tube
- 5.evaporator

Circuit diagram

1. Brief principle diagram

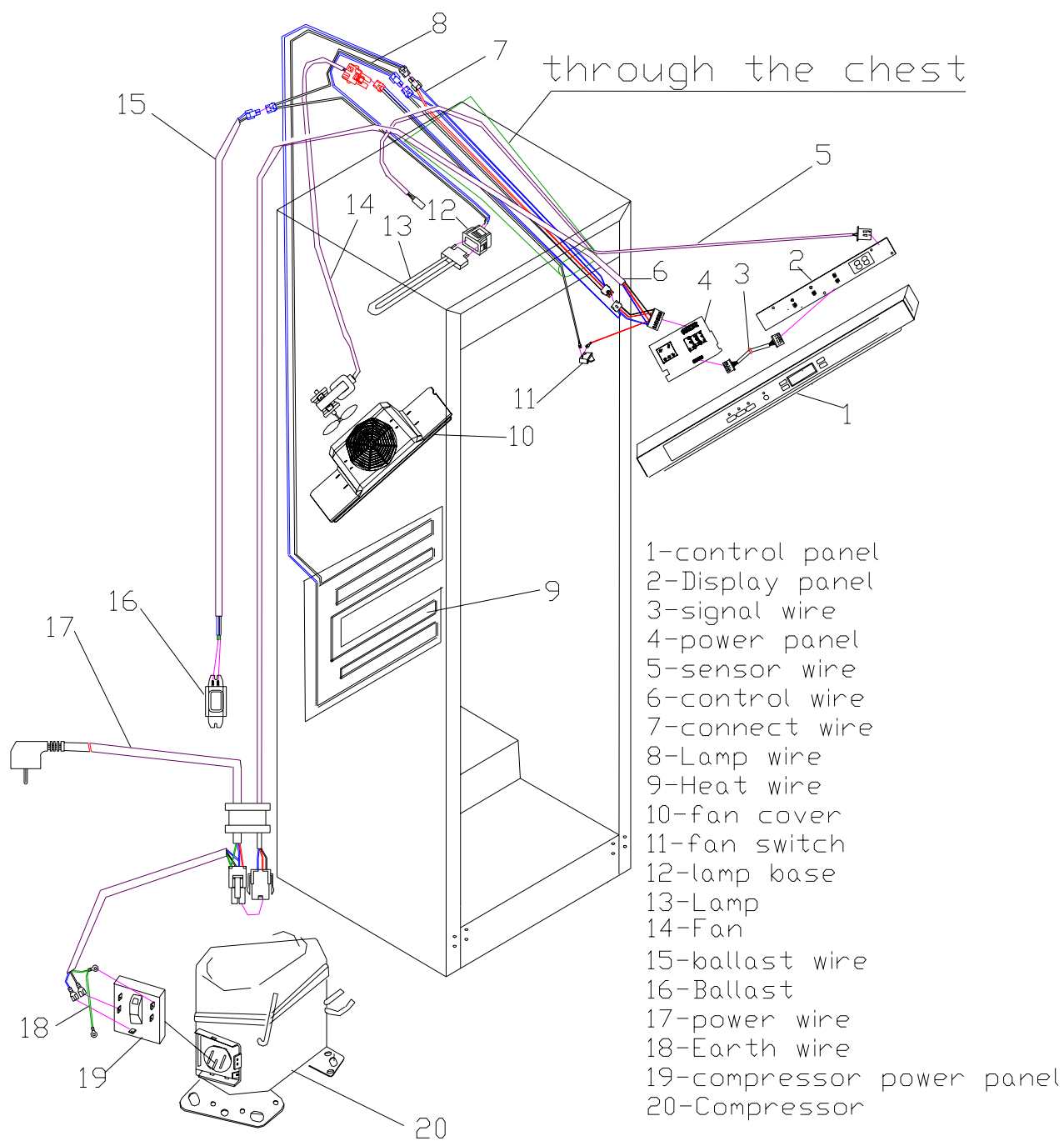


XP-Power Plug CN1-Display Panel CN2-Control panel M-Compressor
a-Alarm b-Set/Lamp ON/OFF c-Temperature adjust up
d-Temperature adjust down e-Temperature Displayer
F-Motor Protector Rt-Temperature Sensor
R-Temperature compensation H-Lamp RT-Starting Relay

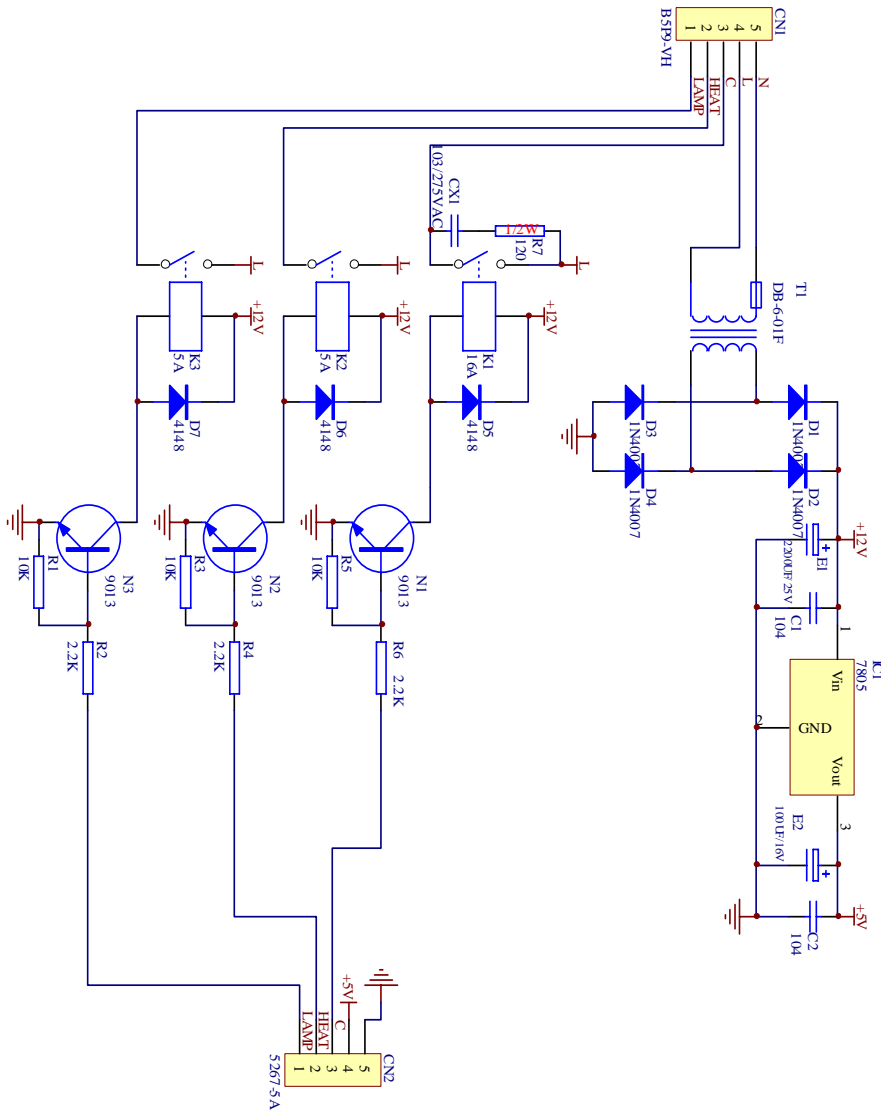
Notes:

1. If the wine cellar has been placed in a horizontal or tilted position for any period of time wait 24 hours before plugging the unit in.
2. The alarm will sound when the appliance is switched on for the first time and when the appliance is warm. Press the Alarm button to switch it off. The temperature display will also flash until set temperature is reached.
3. The appliance has been tested and is supplied set for normal operation of 12°C.

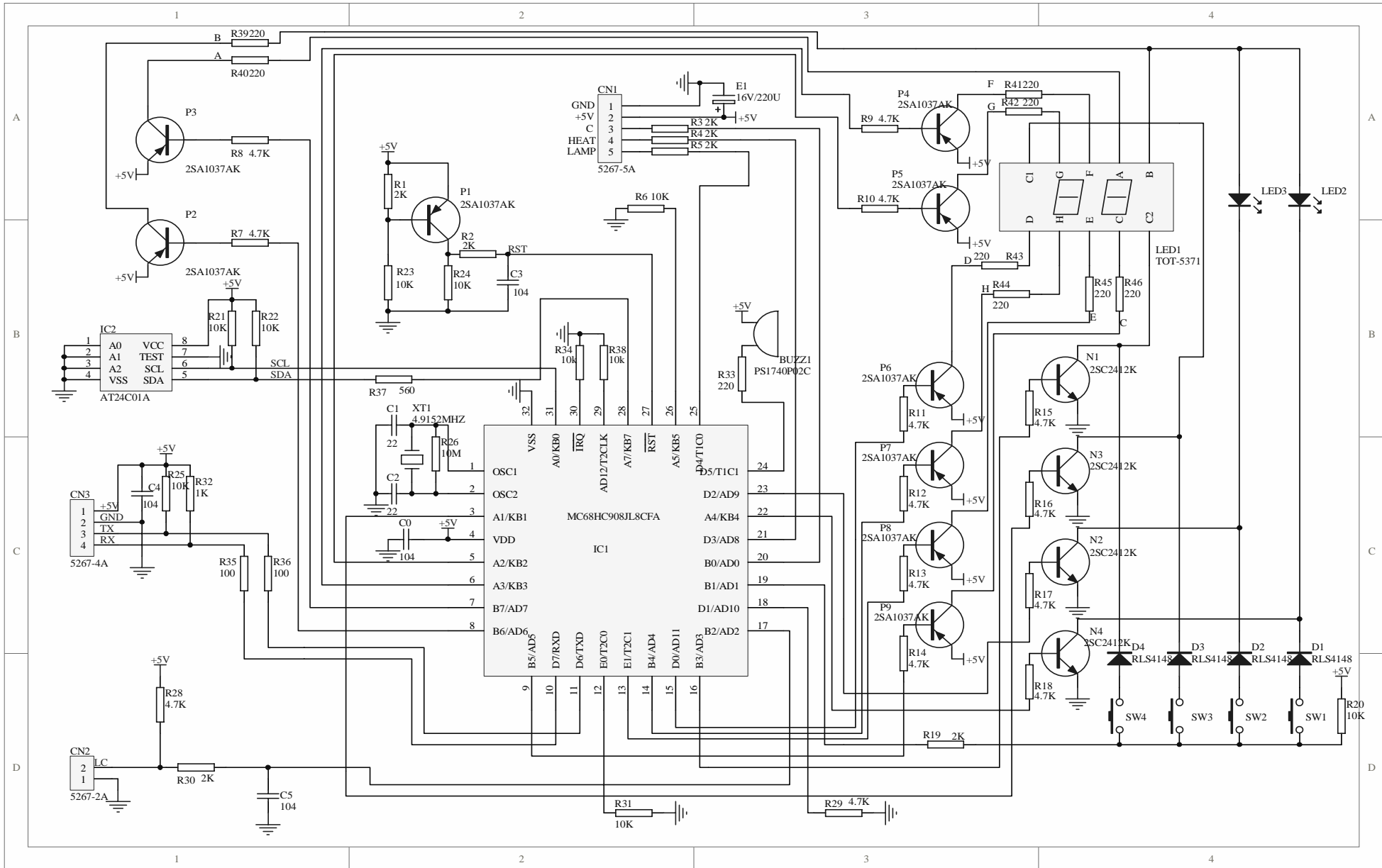
2.Connect di agram



3. Control panel diagram



4. Display board diagram



Normal problems

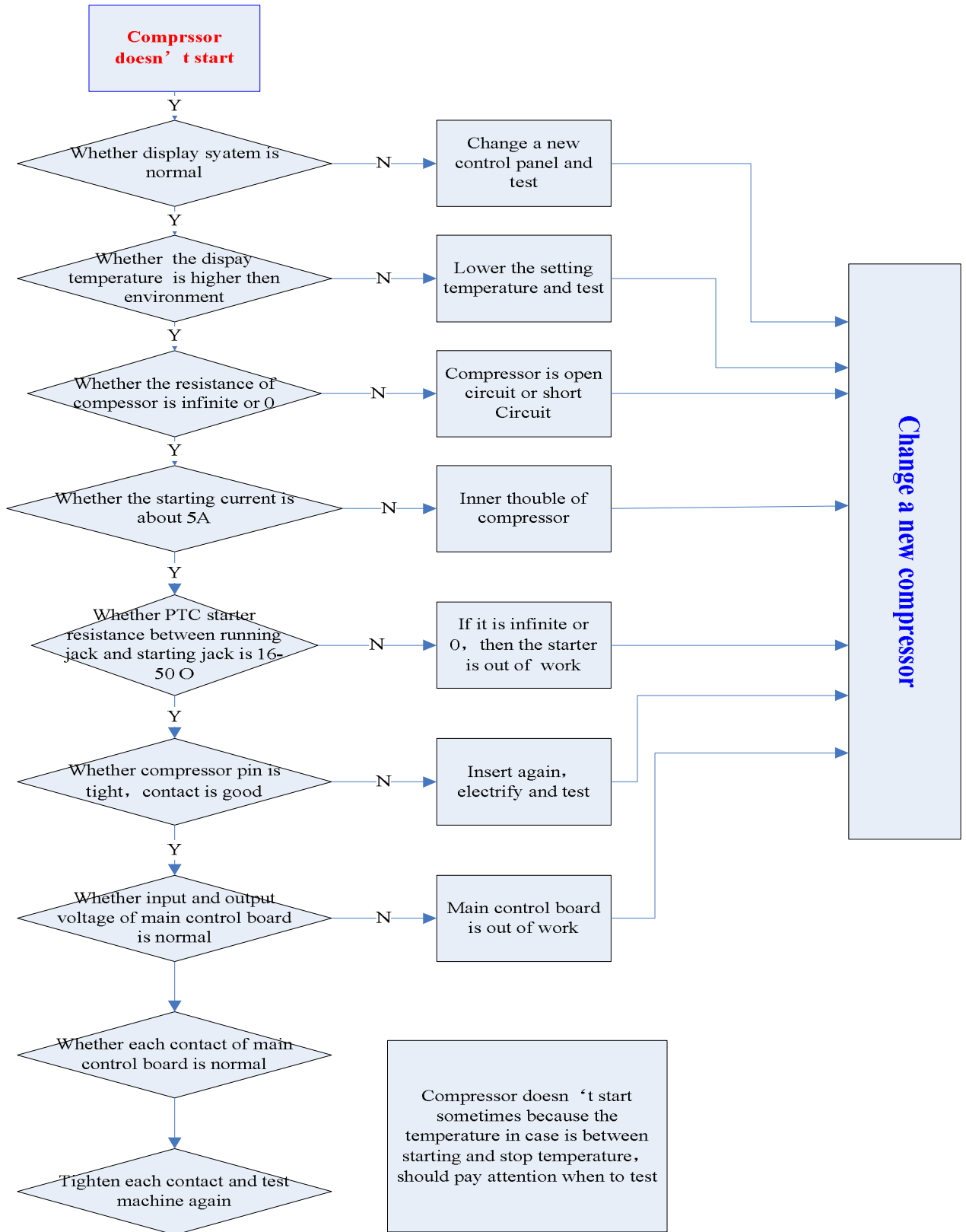
Problems	Reasons	Removing methods
Compressor can not be started	<ol style="list-style-type: none"> 1. Fuse is broken 2. The contact of plug, socket, and cable is not good. Cable broken. 3. The voltage is too low, 10-15% less than rated voltage 4. The knob of temperature controller is at "rest" position. 5. The temperature controller is out of order. 6. Starting relay or thermal protection unit is out of order or broken. 7. Wire broken of motor starting coil or operation coil. 8. The compressor motor is burned or rotor and stator are blocked to dead. 9. There is leakage of high-pressure gas valve or the shaft is embraced to dead. 	<ol style="list-style-type: none"> 1. Check if the relay is short circuit and solve it, if not, change capable fuse 2. Check and connect tightly, or change. 3. Use till voltage rises to rated value or attach a stabilizer. 4. Rotate the knob to wanted position for suitable temperature. 5. Change the controller. 6. Change starting relay or thermal protection unit. 7. Measure using R × 1 position of avometer, if the relay wire broken, change compressor. 8. Change compressor. 9. Change compressor.
Compressor starts too frequent, operation time too long, but temperature drop in wine cellar is too slow	<ol style="list-style-type: none"> 1. The point of sensor was moved. 2. The temperature controller is out of order. 3. The environment temperature is too high, humidity too high, airflow is impeded. 4. The frost layer at the evaporator is too thick. 5. The refrigerant is insufficient or leakage. 6. Compressor efficiency is reduced. 7. The drying filter is blocked. 	<ol style="list-style-type: none"> 1 Check the point of sensor, and move it to original place. 2. Change the temperature controller. 3. Put the wine cellar to suitable place and make air circulate well. 4. Remove frost regularly. 5. Check or supplement refrigerant. 6. Change compressor. 7. Change new drying filter.
Compressor runs without stop, temperature in freezer is too low	<ol style="list-style-type: none"> 1. The point of sensor was moved. 2. The temperature sensing probe of controller is not placed well, and causes maladjustment 3. Compressor efficiency reduced. 	<ol style="list-style-type: none"> 1. Check the point of sensor, and move it to original place. 2. Adjust to suitable position, normally contact tightly with evaporator cover. 3. Change compressor.

Compressor buzzes and cannot be started, thermal protection unit jump repeatedly.	<ol style="list-style-type: none"> 1. Voltage is too low. 2. Starting relay out of order. 3. The starting coil of starting motor is broken. 4. Compressor does not run. 	<ol style="list-style-type: none"> 1. Supplement a stabilizer, adjust to rated value. 2. Change starting relay. 3. Change compressor. 4. The shaft and piston in the compressor is blocked, please change.
After short time of operation, over load protection unit cuts off	<ol style="list-style-type: none"> 1. The voltage is too high. 2. Over load protection unit is not good, it jumps earlier. 3. Starter contacting point is adhered. 4. There is short circuit in compressor. 5. There is mechanical problem in the compressor. 6. Temperature around compressor is too high. 	<ol style="list-style-type: none"> 1. Supplement a stabilizer and adjust its value to rated. 2. Change over load protection unit. 3. Change starting relay. 4. Change compressor. 5. Change compressor. 6. Increase heat radiation space.
Too much noise when compressor runs	<ol style="list-style-type: none"> 1. The floor is loose. 2. The wine cellar body is not stable and in level. 3. When compressor runs, friction between tubes and wine cellar body causes resonance. 4. Compressor fixing screw is loose. 5. The vibration absorption cushion for compressor fixing is too tight, or too loose or ageing. 6. Compressor inside noise is too big or vibration absorption suspending spring is broken. 	<ol style="list-style-type: none"> 1. Reinforce the floor. 2. Make the wine cellar body stable. 3. Move the tube a little away to avoid friction. 4. Make the screw tight. 5. Adjust the degree of tight or loose of vibration absorption cushion, or change cushion. 6. Change compressor.
Electricity leakage of wine cellar body, you will feel tingle when touching by hand	<ol style="list-style-type: none"> 1. Wine cellar body has not been connected to the ground. 2. The compressor terminal contacts body shell and causes short circuit. 3. When the components of electrical system get wet, insulation ability is dropped, electricity leaks. 	<ol style="list-style-type: none"> 1. Make the ground connection as stipulated. 2. Change compressor. 3. Check carefully step by step, if insulation is seriously damaged, please change; remove wet parts and put them into drying box to make them dry.

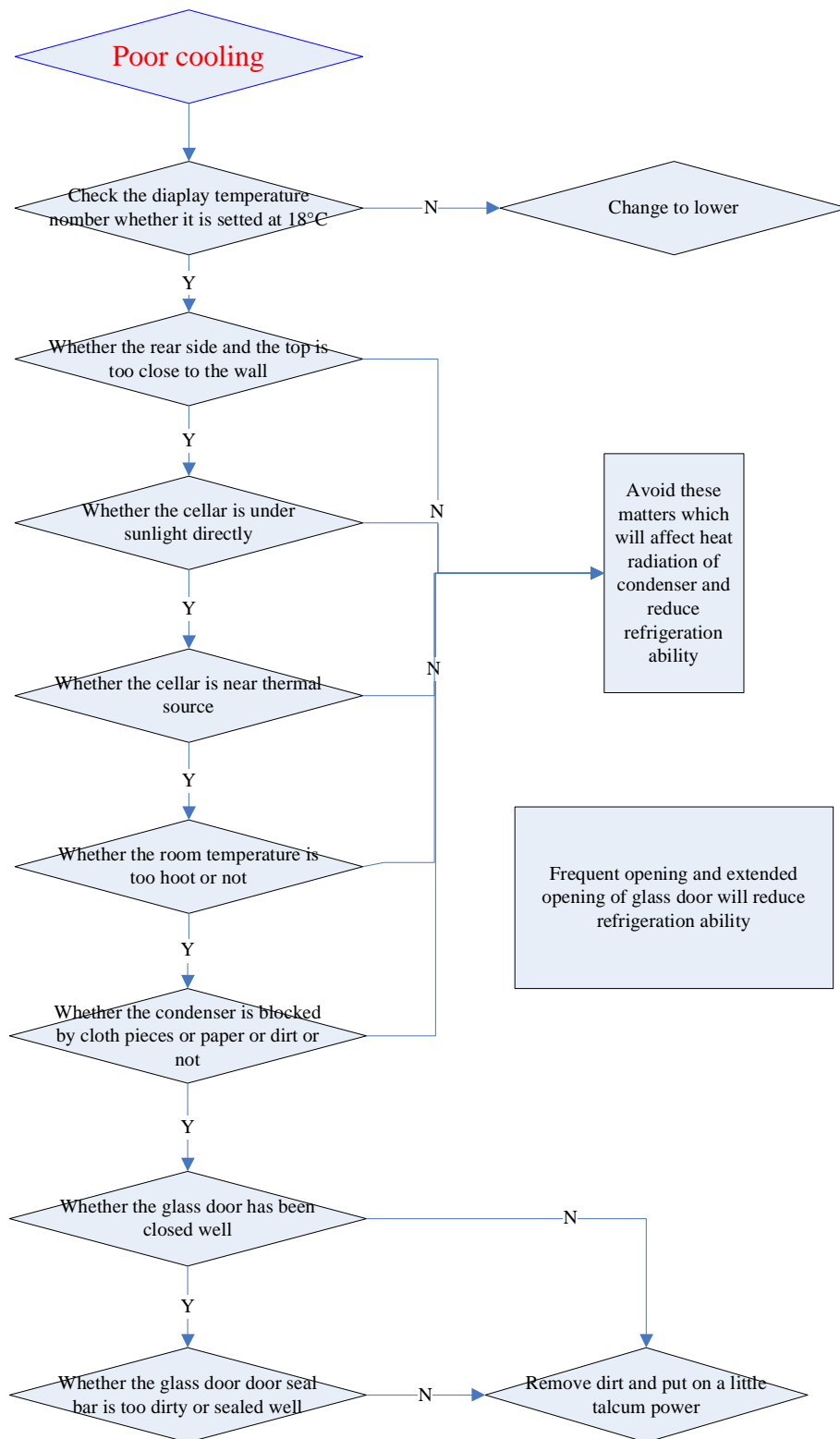
Electricity leakage of temperature controller	<ol style="list-style-type: none"> 1. The service time is too long. 2. The environment is too dirty. 3. Humidity is too high. 	<ol style="list-style-type: none"> 1. Change temperature controller. 2. Use brush to remove dust. 3. Make the temperature dry and control the environment humidity.
Temperature controller out of order	<ol style="list-style-type: none"> 1. There is leakage of temperature sensing medium. 2. Damage of cam of contacting point spring, etc. 	Change temperature controller.
The probe of temperature sensing tube doesn't contact evaporator well	It has not been mounted to position or changed during transportation.	Mount it again.

Trouble shooting

1. Compressor doesn't start



2. Poor cooling



Failure code display

Error indicator	Description and reason	Solutions
F1	Sensor A is failure (broken circuit or open circuit). Red indicator is light with buzzing.	Check sensor A and it's connecting status, replace sensor if necessary.
F2	Sensor B is failure (broken circuit or open circuit). Red indicator is light with buzzing.	Check sensor B and it's connecting status, replace sensor if necessary.
F3	When the sensor A and sensor B are all failure (broken circuit or open circuit), it shows "F3". Red indicator is light with buzzing. Compressor enter into protection mode (stop cooling).	Check sensor A and sensor B and their connecting status, replace sensor if necessary.
F4	Continuous compressor running time is more than 3 hours, and Sensor B felt the inner temperature change is within 1 °C. Compressor enter into protection mode (stop cooling).	Check if sensor B and it's connecting status is failure, check cooling system.

REMARK:

Buzzing sound can hear when "F1" or "F2" or "F3" or "F4" appears on the display panel. Press the "ALARM" button can remove the buzzing sound.



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