

**Can Help Service:**

VT-46TS-2Z; VT-46SBB; VT-46SSDST

VT-36TS-SM; EL-1958BWC; VT-36TS

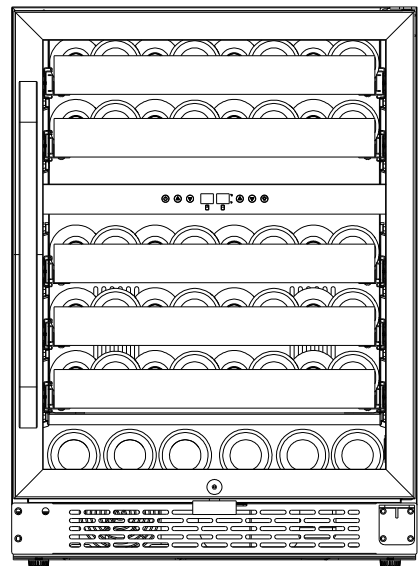
VT-32TS-FE; VT-32TSFE-SM; VT-28-2Z-SSDST; VT-BC32TSSM-L

**Compressor Built-in Model**

# SERVICE MANUAL

## CONTENT

- 3. REFRIGERATING COOLING SYSTEM**
- 4. COMPRESSOR ROOM VIEW AND PARTS LIST**
- 5. HOW TO REPLACE THE MAIN PARTS**
- 6. HOW TO REVERSE THE DOOR SWING**
- 7. AUTO DEFROST**
- 8. STORAGE**
- 9. PARTS**
- 10. INSTALLATION INSTRUCTION**
- 11. ELECTRIC CONNECTION**
- 12. SAFETY PRECAUTIONS**
- 13. MAINTENANCE AND CARE**
- 14. TROUBLE SHOOTING**

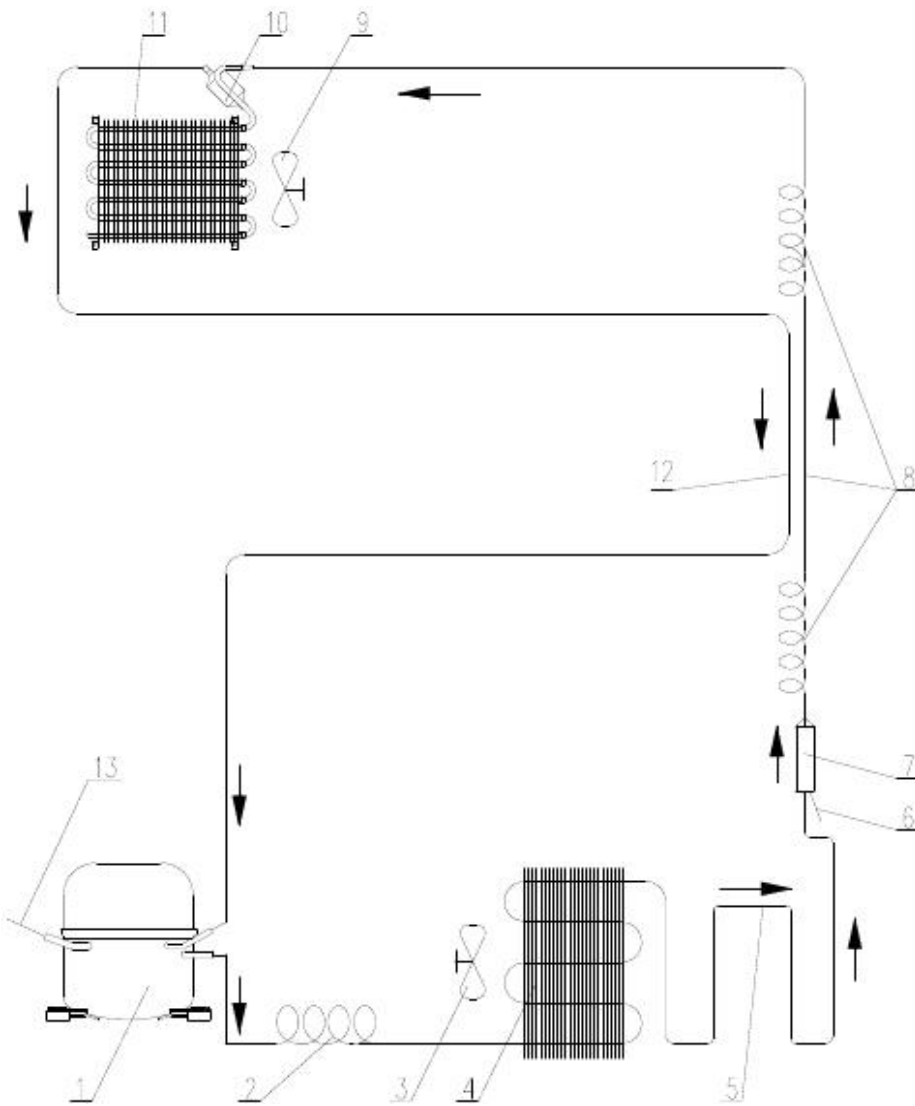


Before use, please read and observe all safety rules and operation instructions.

### 3. REFRIGERATING COOLING SYSTEM

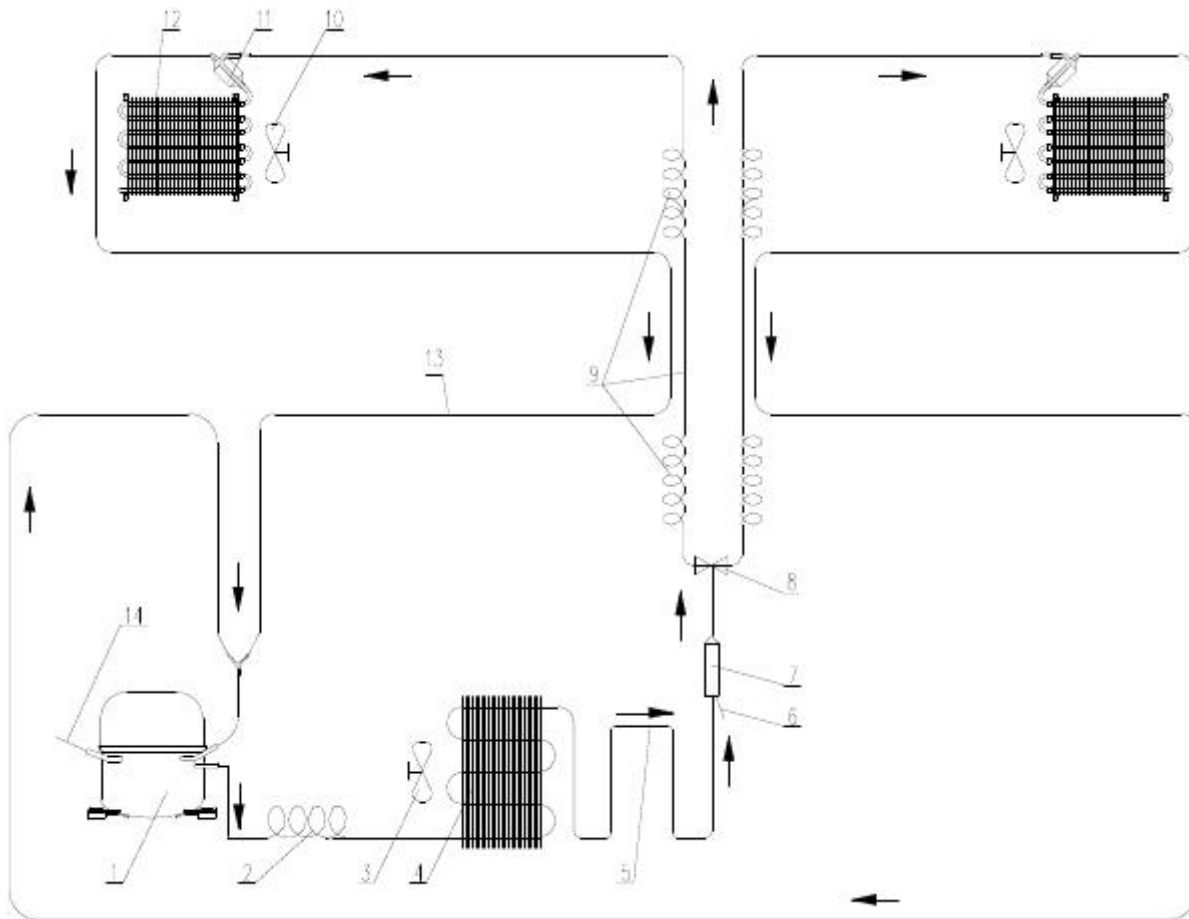
#### 3.1 REFRIGERANT CYCLE DIAGRAM

For models with Without Solenoid Valve



1. Compressor
2. Spiral Tube (Not available for some models)
3. Condenser Fan (Not available for some models)
4. Condenser
5. Hot Pipe
6. Process Tube
7. Filter Drier
8. Capillary
9. Evaporator Fan
10. Accumulator
11. Evaporator
12. Suction Tube
13. Process Tube

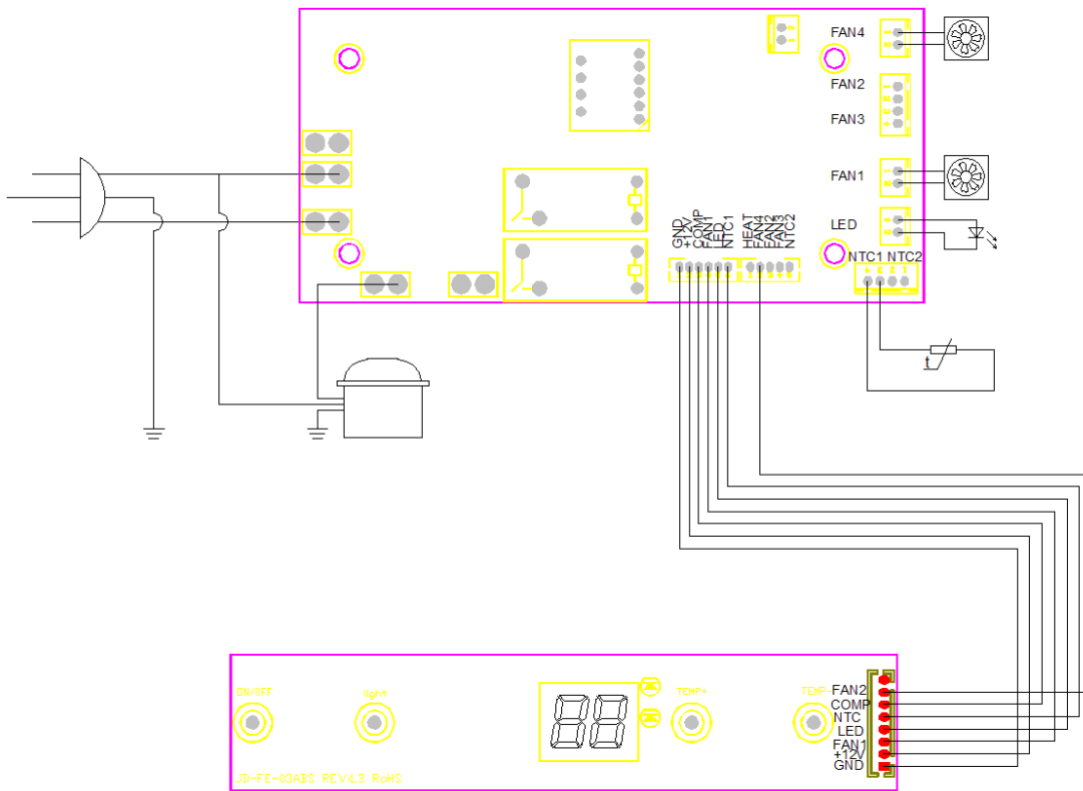
### 3.2 For models with Solenoid Valve



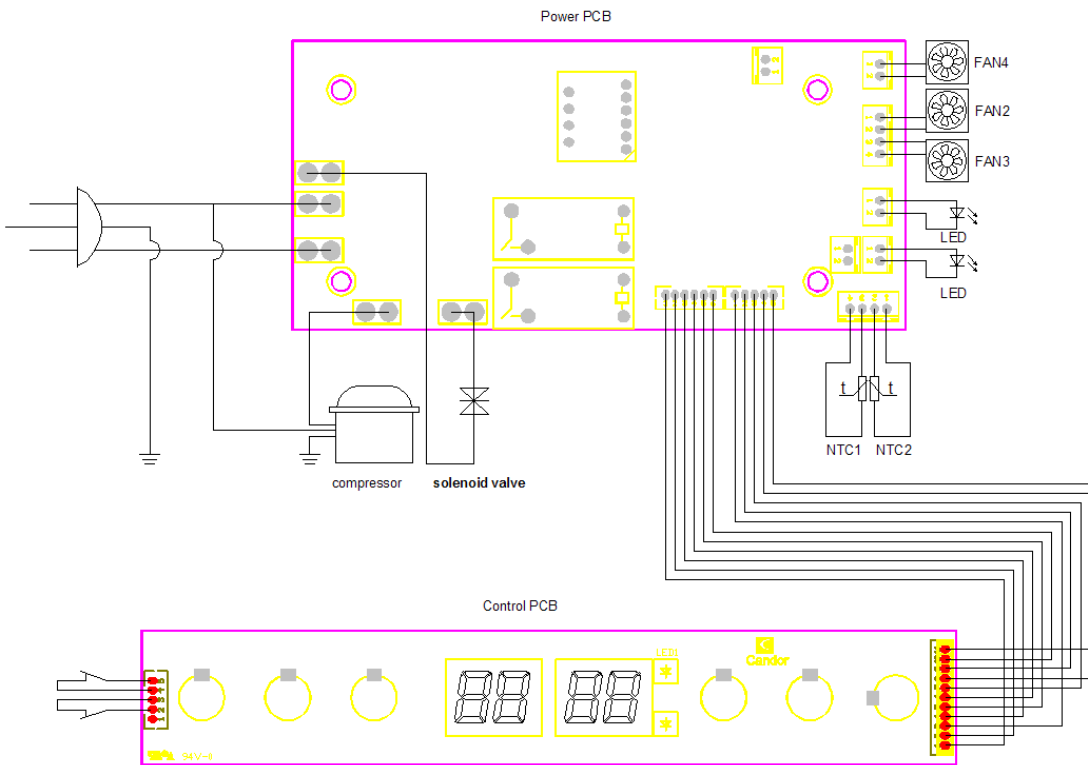
1. Compressor
2. Spiral Tube
3. Condenser Fan
4. Condenser
5. Hot Pipe
6. Process Tube
7. Filter Drier
8. Solenoid Valve
9. Capillary
10. Evaporator Fan
11. Accumulator
12. Evaporator
13. Suction Tube
14. Process Tube

### 3.3 Circuit connection diagram

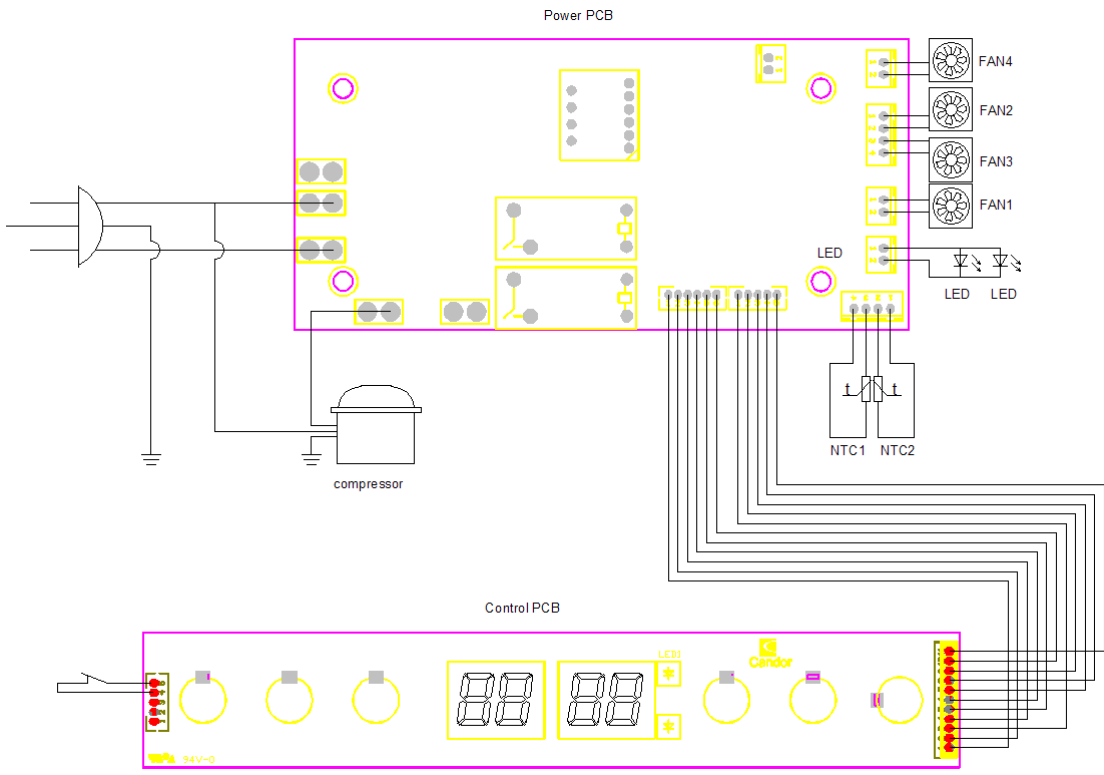
#### Single temperature without heating:



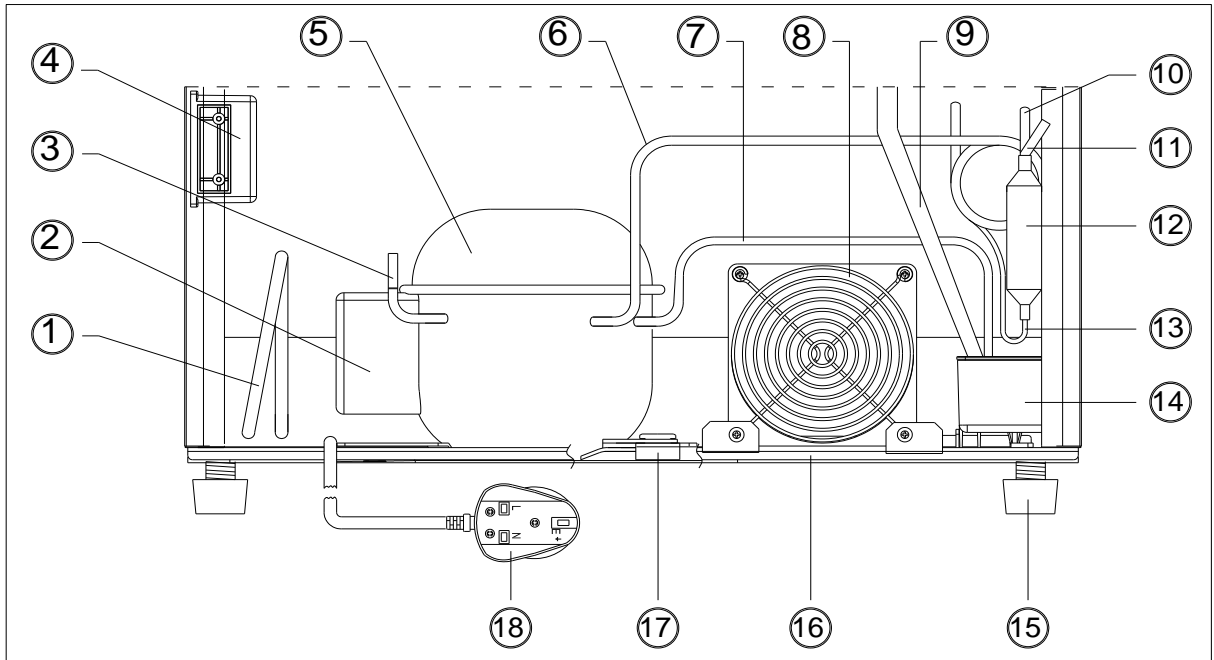
#### Dual temperature with solenoid valves:



### 3.4 Dual temperature without solenoid valves:



#### 4. COMPRESSOR ROOM VIEW AND PARTS LIST

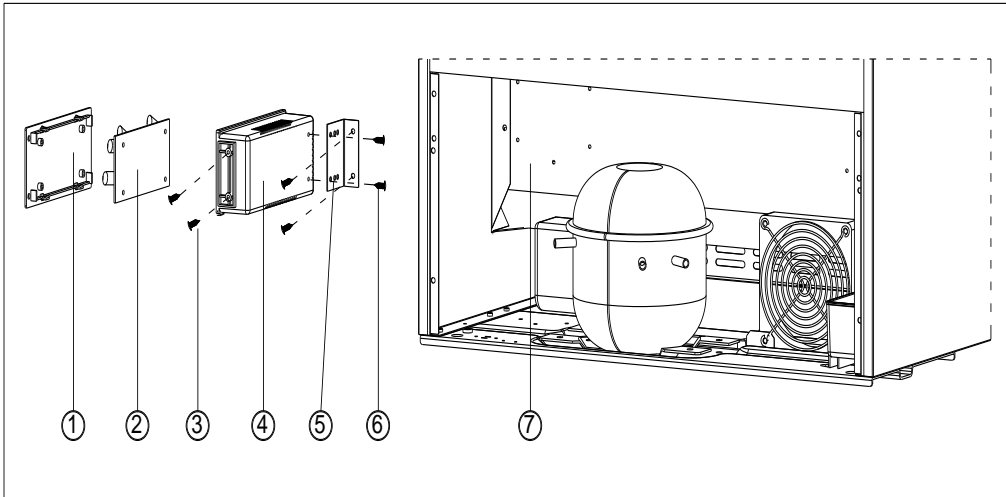


1. Joint of condenser outlet tubing and hot pipe inlet tubing
2. Electrical Box of Compressor
3. Process Pipe
4. Electrical Box (Power PCB inside)
5. Compressor
6. Suction Pipe
7. Discharge Pipe
8. Condenser Fan Motor (Not available for some models)
9. Drainage Hose
10. Outlet Tubing of Hot Pipe
11. Process Pipe
12. Filter Drier
13. Capillary
14. Water Drip Tray
15. Leveling Leg
16. Compressor Base
17. Compressor Leg
18. Power Supply Cord with Plug

## 5. HOW TO REPLACE THE MAIN PARTS

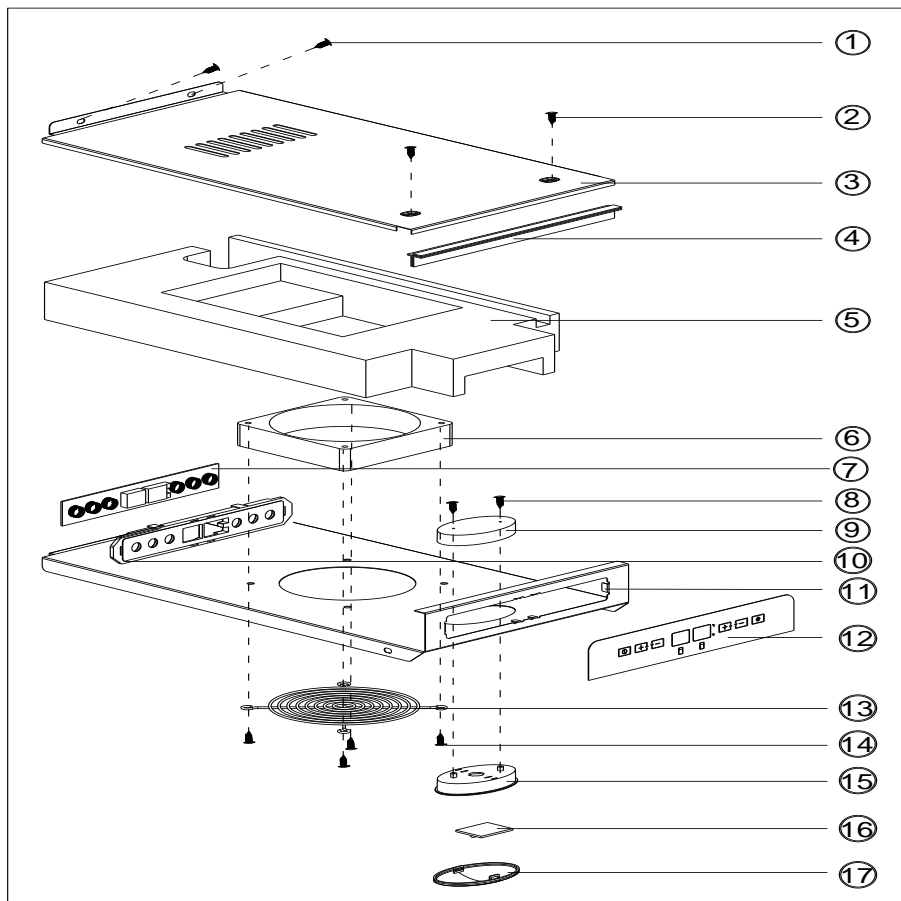
### 5.1 REPLACE THE POWER PCB

1. Remove the screws 5.
2. Pull out the electrical box and Power PCB 6.
3. Disconnect the cables from the Power PCB and then you can replace the Power PCB.

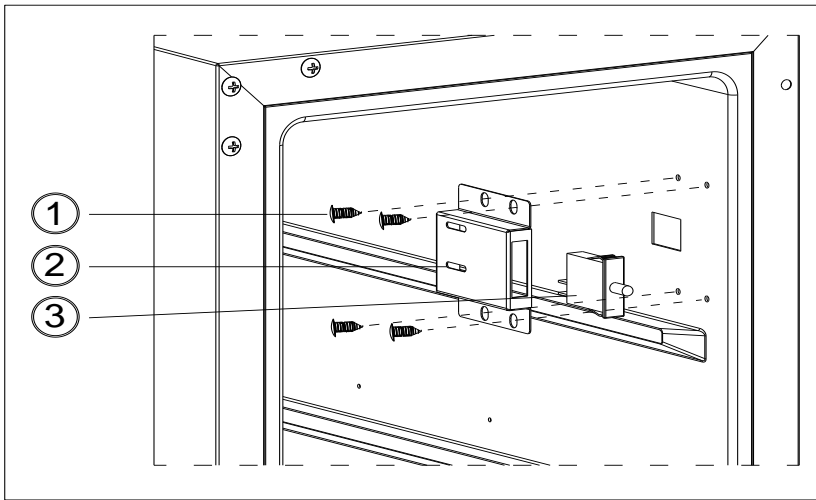


### 5.2 REPLACE THE DISPLAY PCB

1. Replace parts from ① to ⑤.
2. Replace 4 hooks from the display panel support ⑩ of the display panel ⑦.

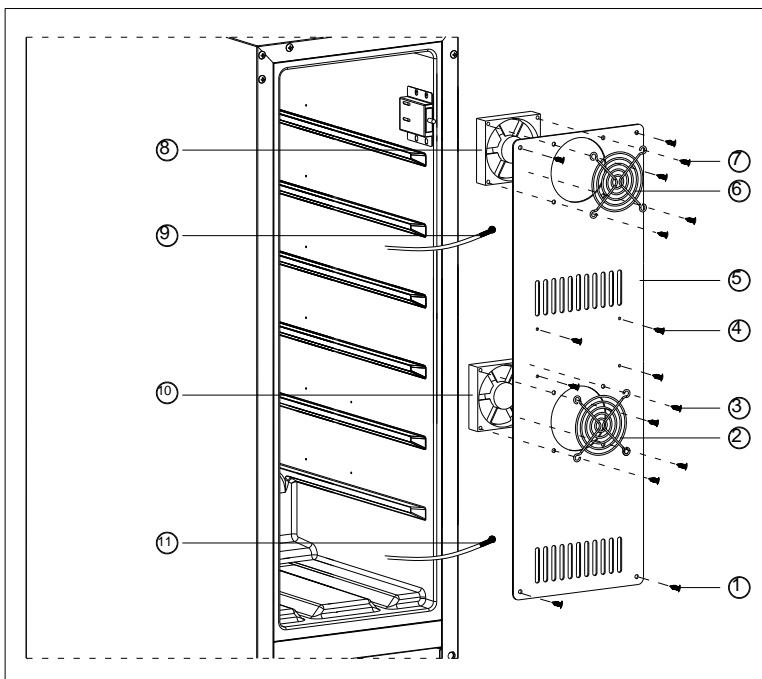


### 5.3 Replace door alarm switch (BWR-171DS.BWR-281DZ.BWR-401DS.BWR-462DZ)



1. Remove 4 screws ① first.
2. From the door alarm switch box ②, take out the door alarm switch ③ replace it.

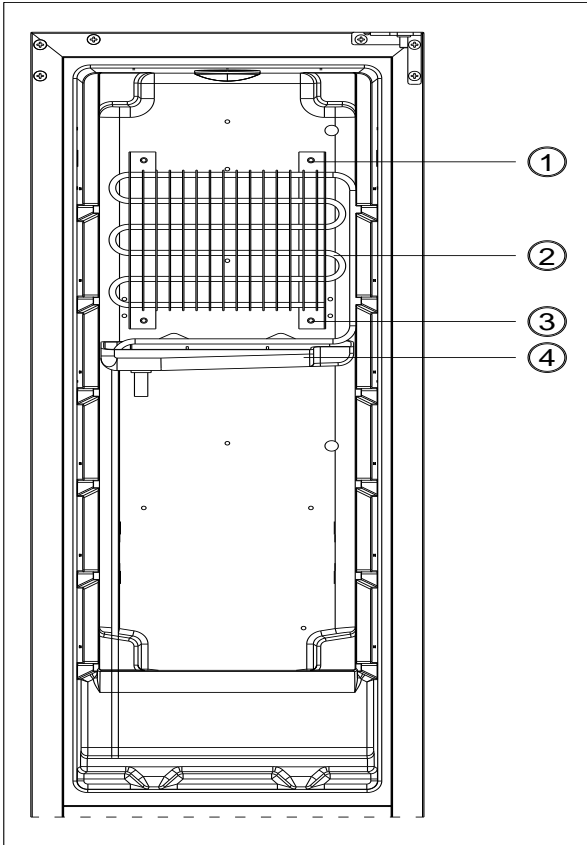
### 5.4 Replace the temperature sensor and interior fans



1. Remove 4 screws ① and 4 screws ④.
2. Change interior fans: remove 4 screws ⑦ to finish the replacement.
3. Change the temperature sensor: ⑨ ⑪



## 5.5 REPLACING THE EVAPORATOR ASSEMBLY

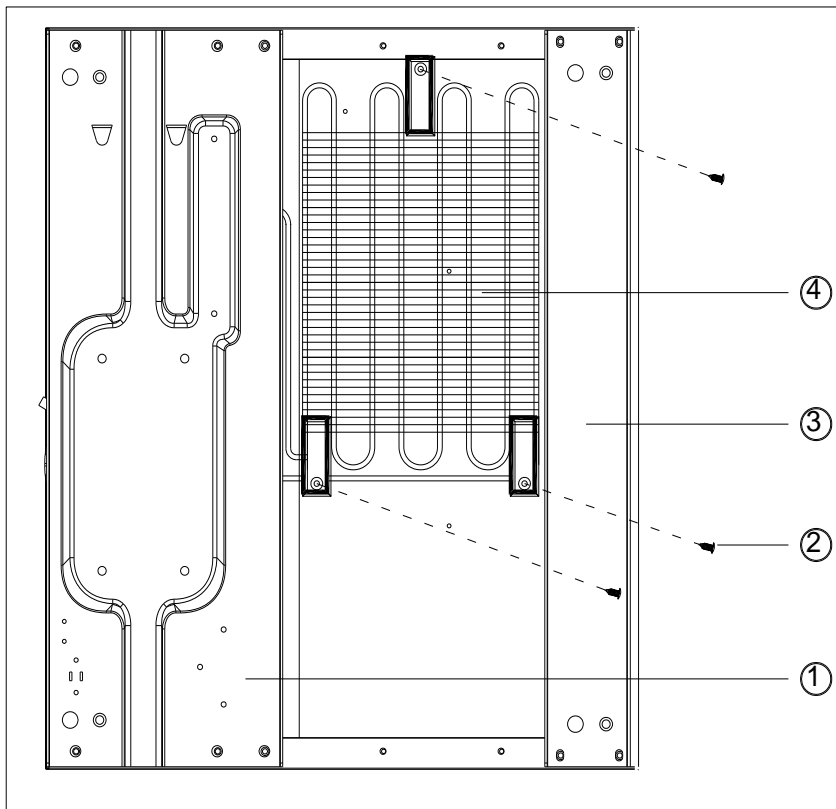


1. Cut off the process tubes of the compressors at the specified place (to release the cooling media).
2. Using the welding gun to melt the interface between the evaporator and the condenser, and then pull out the pipeline.
3. Remove the water tray ④.
4. Remove 4 screws ① and ③ of the evaporator.
5. Remove the evaporator ②.
6. Install the evaporator in the box and lead the inner tank out of the muffler.
7. Apply 4 screws to fix the evaporator.
8. Inset the muffler of the evaporator back to the location of compressor muffler and weld it.
9. Perform vacuum pumping and fill cooling media.

## 5.6 REPLACING THE CONDENSER

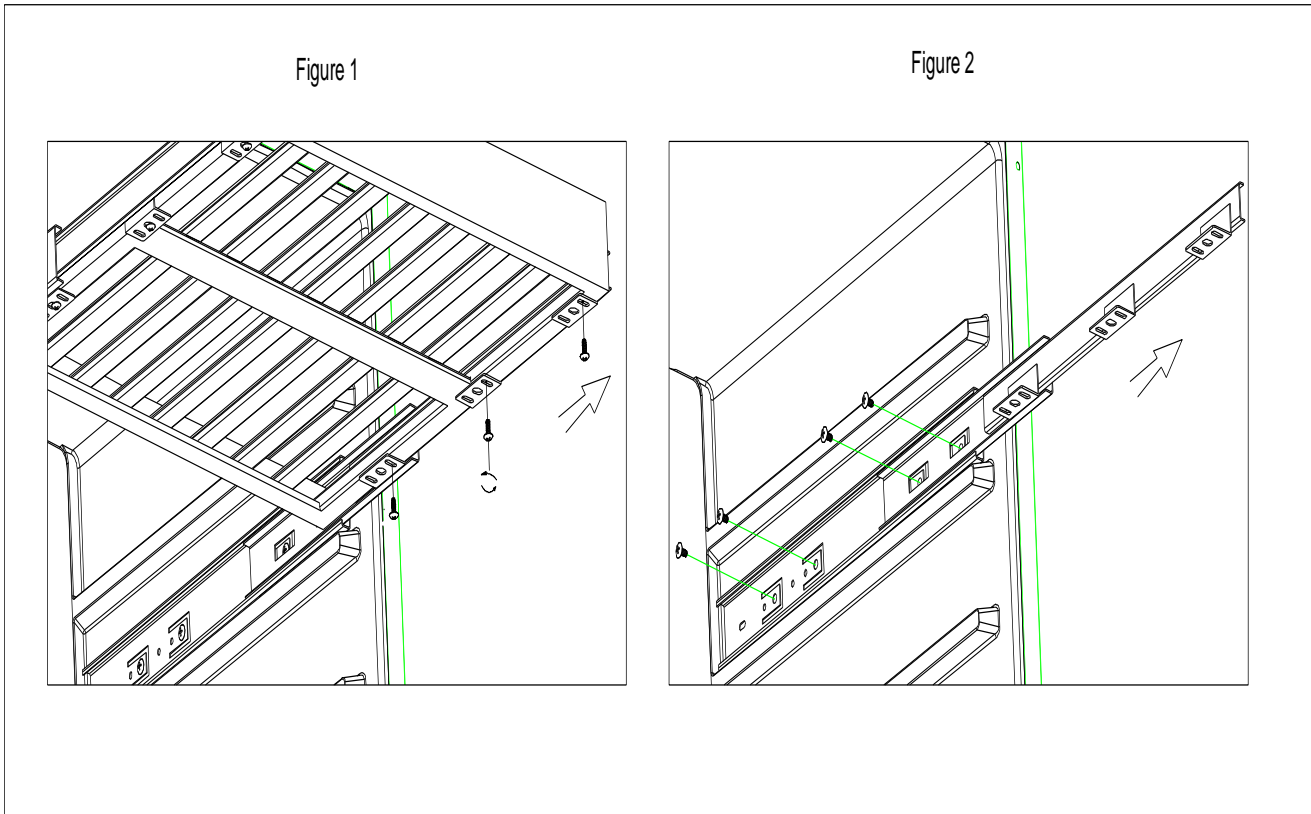
**NOTE:** Before replacing any component of the refrigeration system, make sure to read the instructions “Service Precautions for R600A System” or “Service Precautions for R134a System”.

1. Disconnect the unit from the power source.
2. Clean and then solder the inlet and the outlet tube from the old condenser.
3. With assistance, tilt the cabinet side and remove the screws 2 which secure the condenser to the cabinet bottom.
4. Install the new replacement condenser to the cabinet by screws.
5. Clean then connect the hot pipe to the outlet tubing. Clean again and connect the inlet tubing of the condenser to the spiral pipe.
6. Solder all joints. Silver solder and proper flux should be used on copper to steel or steel to steel joints. Excess flux should be wiped off all tubing.

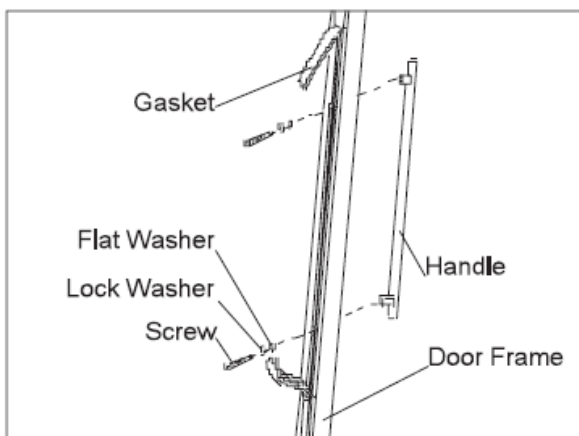


## 5.7 Replace the guide rail

1. As shown in Figure 1, remove 3 screws on the left and right of the fixed wood frame;
2. As shown in Figure 2, remove 8 fixed screws at the left and right guide rail;
3. Change new guide rails. Align the inner tank steps underneath and below, and fix 4 screws on the left and right;
4. Pre-fix the wooden supports, and then pull and push them, and fasten these 6 screws after they are unblocked.



## 5.8 Installation of the handle



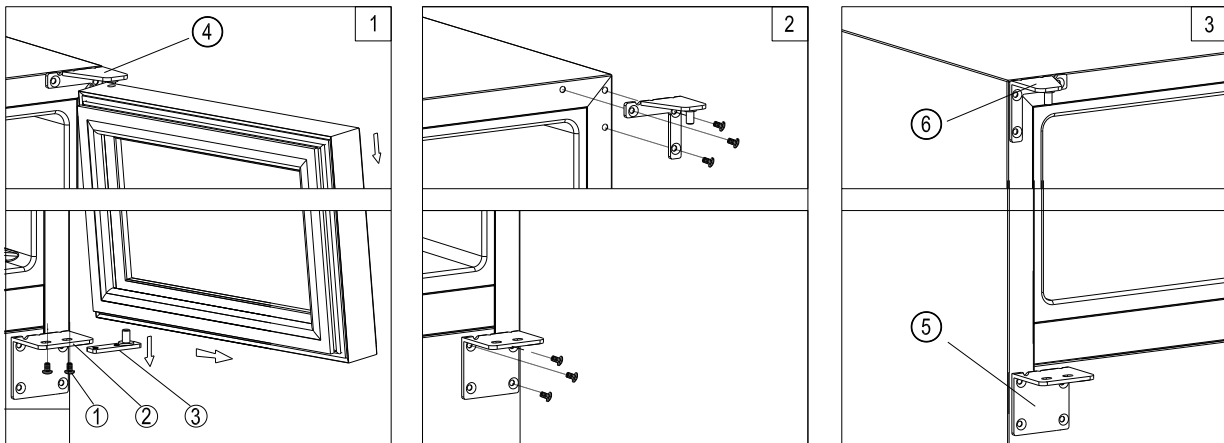
Handle

Door frame

1. Remove the door gasket on the side of the handle you want to install, and you will see two holes specially designed for the installation of the handle.
2. As shown in the figure above, use two screws to install the handle. Lock up the gasket and the flat washer provided.
3. Check the door gasket.

## 6. HOW TO REVERSE THE DOOR SWING

If you want to open the door in an opposite direction, please follow the following instructions.



- ① Lockup screw
- ② Lower door hinge
- ③ Door pivot assembly
- ④ Right upper door hinge
- ⑤ Lower door hinge (the same for the left and right)
- ⑥ Left upper door hinge

**Cautions: All removed parts and components must be kept for later reinstallation of the door.**

1. Open the glass door and fasten two lockup screws ①, and support the door pivot towards the glass door. After taking out the screws, be careful to support the glass door. (as shown in Figure 1)
2. Pull the glass down downwards and remove it, and place the glass door onto the soft gasket to prevent any scratch to the glass surface.
3. Remove 3 screws from the right side of the door bottom, and 3 screws from the right side of the door top. (as shown in Figure 2)
4. Remove the hinge for the right upper door ④. Take out the hinge for the left upper door hinge ⑥ from the plastic bag of installation instructions, and install it at the left specific position. Then, accordingly mount the upper door shaft assembly. (as shown in Figure 3)
5. Remove the door pivot ③ from the right lower hinge ③, and then insert it in the door pivot at the left lower part of the door front.
6. Turn the glass door at 180°, and then mount it back at its specific location, and lock up the screw ① using two screws to connect the door pivot ③ assembly and the glass door, and fasten the screws before door leveling.

## 7. AUTO DEFROST

- The wine cooler can automatically defrost.
- The wine cooler can work for a total of 10 hours (If power off, the working hours will be reset to 0). than will defrost automatically for 45 minutes.
- During defrosting, the temperature of the product will rise automatically. After defrosting is over, the refrigeration of the wine cooler will continue.
- The evaporator behind the rear wall of the wine cooler will defrost automatically. The coagulation is collected in the drainage canal behind the rear wall of the drinks cabinet, and it will flow to the drip pan beside the compressor along the drain hole, where it will be evaporated.

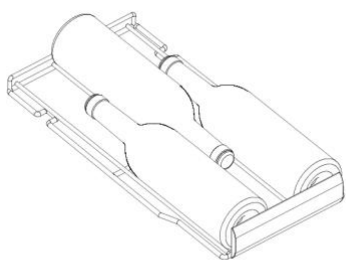
## 8. STORAGE

Many bottles may differ in sizes or dimensions. Therefore, the actual number of bottles you can store may be different.

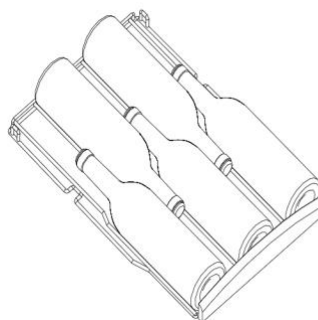
### **Cautions:**

- 1. Two models like JC58A2EQ(B) and JC116A2EQ(B): Two bottles can be put at the bottom of the inner tank of the box. Three bottles of drinks may be placed at the bottom of the inner tank of the JC85A1EQ(B) and JC85A2EQ(B) boxes. During placement of drinks, they need not be placed at the bottom shelf. Just place them between two slots at the bottom of inner tank.**

When the storage of bottles of traditional 750ml and plenty of storage is made, it may be close to the maximum capacity of storage.



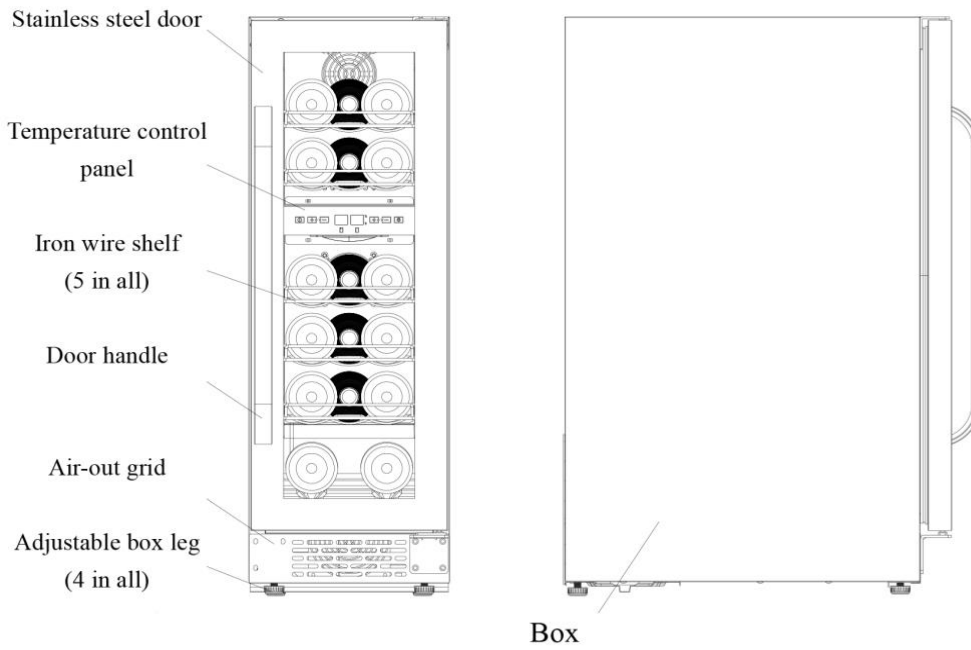
3-bottle series (JC58A2EQ(B), JC116A2EQ(B))



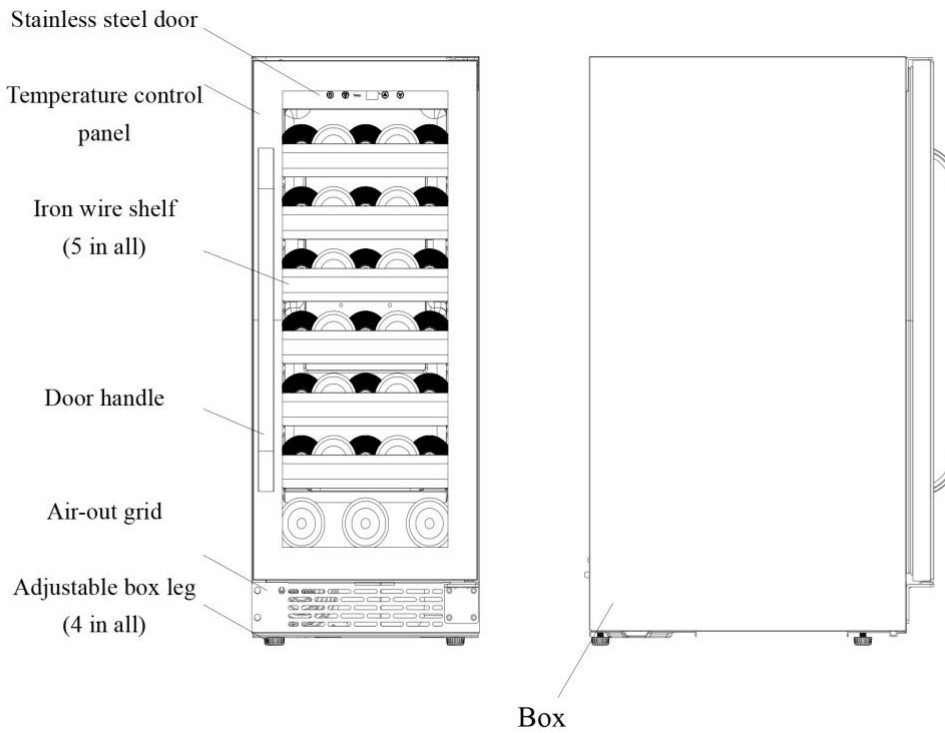
5-bottle series (JC85A2EQ(B), JC85A1EQ(B))

## 9. PARTS

### 9.1 With Sabbath mode, door opening alarm and temperature memory function



### 9.2 Without Sabbath mode, door opening alarm and temperature memory function



## 10. INSTALLATION INSTRUCTION

### Before use of drinks cabinets

- Remove all interior and exterior packing.
- Before connection of the drinks cabinet to power, make it at an upright position for about 2 hours.
- This will reduce the possibility of failure in the refrigerating system arising from the transportation process.
- Use soft rags dipped with lukewarm clean water to clean the exterior surface.
- This device can be opened from the left or the right. The door opening direction of the device delivered home is on the left. If you want to open the door from the right, follow the instructions set out in “Turning the door wing of the device”.

### Installation of drinks cabinet

- This device is designed as built-in, or dented or freely standalone mounted.
- Place the drinks cabinet on a solid ground enough to support the drinks cabinet. It is required to adjust your drinks cabinet flat. You can adjust the front leveling feet at the bottom of the drinks cabinet.
- Put the drinks cabinet far away from direct sunshine and heats sources (such as furnaces, heaters and radiators). Direct sunshine will affect acrylic coatings, and heat source will increase power consumption. An extremely cold ambient temperature will result in abnormality in device running.
- Try not to put the device at a damp place.
- Insert the drinks cabinet at a standalone socket that can be easily reached. For power supply and/or grounding, it is required to directly consult qualified technicians or the authorized product service center.
- In no case may the air vent located in the front of the device be covered or blocked.
- This device must be mounted on electric, water supply and drainage devices complying with national and local laws and regulations.

### Notice of the built-in cupboard

These devices are designed as built-in installation or freely standalone installation. If you want these devices to be in a built-in installation, please follow the requirements as set out in the form below.

Opening dimension of the cupboard (minimum)				
Model	JC58A2EQ(B) JC58EQ	JC85A1EQ(B) JC85A2EQ(B) JC85BEQ	JC116A2EQ(B)	JC145A2EQ2
Width	30 cm	38 cm	60 cm	60 cm
Depth	59 cm	59 cm	59 cm	59 cm
Height	87.5 cm	87.5 cm	87.5 cm	82.5 cm

### Caution

- Use sealed bottles to store drinks.
- Do not make the cabinet overloaded.
- Do not open the door unless it is necessary.
- Do not cover the shelves using aluminum foils or any other airtight materials.
- If the drinks cabinet lies idle for long, we recommend you pull out the device plug. After careful cleaning, make the door half open so that air will flow to the cabinet to avoid condensation, mildew or odor.

## ***11. ELECTRIC CONNECTION***

Check whether the voltage marked on the product is consistent with your supply voltage.

**Warning:** Improper use of grounding plugs may result in risk in electric shock. If the power cord is damaged, allow eligible technicians or an authorized service center to replace it.

For your safety, this device must be properly grounded. This electric device is provided with 3-pin plugs applicable to 3-hole wall mounted socket so as to minimize the possibility of electric shock.

In no case may the third grounding pin attached to the power cord be reduced or removed. For personal safety, this device must be properly grounded.

This device must have a standard American style 3-pin electric grounding socket. Qualified technicians will be requested to check the socket and circuits on the wall to ensure proper grounding of the socket. If it is a standard 2-pin wall-mounted socket, you will have the liability and obligation to have somebody replace it as the 3-pin wall mounted socket with good grounding.

Power cords must be fixed at the back of the device, and may not be in the state of exposure or shaking so as to prevent incidental injury.

This device must always be inserted on a standalone electric socket consistent with the rated voltage as shown on the label of rated voltage and device. This can enable the electric device to have the optimal performance, and can put indoor circuit circulating overload so as to prevent any risk in a fire caused by overheat. Never pull the power cord to remove the device socket. Always hold the plug, and directly pull it out of the socket. The worn or damaged power cords must be repaired or replaced immediately. Do not use power cords cracked or damaged in the middle or at both ends. When the device is moved, be careful not to damage the power cords.

It is required to provide at least 10 ampere electric fuse protection. If the socket is unable to reach after the installation of the device, then it is required to take corresponding actions in the electric installation process so as to ensure that the device will be disconnected from the main power supply.

Do not use any extended wires for your device, unless such an extended wire is checked by qualified electricians or service personnel. The extended wire must meet the local relevant requirements, with the rated power of the extended wire at 110V~ and at least 10 amperes.



## 12. SAFETY PRECAUTIONS

When the equipment is used, it is required to always observe basic precaution measures so as to minimize fire, electric shock and personal hazard. These basic precautions include:

### 12.1 For Your Safety:

Even if you are familiar with this device, you are required to read all the instructions carefully.

- This device will be used only based on the description in these Instructions. Other operation methods not suggested may lead to fire, electric shock or personal injury.
- This device is not intended to be operated or used by children or the old or the weak, unless under the adequate custody by personnel responsible so as to ensure that they can use this device safely.
- Take good care of children to ensure that they will not play with this device.
- In order to avoid any risk in electric shock, never spray any liquid onto the body of the device, power cords or plugs or dip it in water.
- When this device is not used, or before it is moved to another place or is cleaned, please pull the plug of the device out of the socket.
- To disconnect the device, please hold the plug, and pull it out of the socket on the wall. Never pull the power cord.
- Do not operate this device at flammable and explosive places.
- Do not put this device or any part thereof in the vicinity of open fire, cookware or other electric heating devices.
- Do not use damaged power cords or plugs. Do not use defective or dropped or otherwise damaged devices.
- Use of any accessory device not recommended for use by the manufacturer might cause dangers.
- Put the device on a dry and horizontal surface.
- If the housing is damaged or removed, do not operate or use this device.
- Loose connection between the AC power socket and the plug may result in overheat or deformation of the plug. Contact an electrician holding his certificate to replace the loose or damaged socket.
- Put the device far away from direct sunshine and heat sources (such as furnaces, heaters and radiators).
- This device contains no CFC or HFC, but contains a small amount of environment friendly coolant called isobutane (R600a).
- During device installation, make sure that it will not damage refrigerant cycle. In any case, if the refrigerant cycle is damaged, please try not to be close to open fire and heat sources of various kinds. The room where the device is put must be ventilated for several minutes.
- Never use the device whose cooling cycle is damaged.
- Ensure that the air inlet vent of the built-in drinks cabinet will not be blocked or kept out. For any damage due to improper use of this device or operation of this device by unqualified personnel, we will not assume any liability. This case will not be covered by the warranty, and will not be applicable to any claim for damages.
- Warning: Do not operate any electric device within this device.
- Except expressly stated in these Instructions, do not attempt to repair this device or change any device parts. For all other repairs, please consult qualified technicians.
- Before operation, please mount back all panels.
- Two or more persons are required to move or install the device. Otherwise, it may result in injury at the back or other parts.
- Never use flammable liquid to clean parts and components of the device. These volatile gases may result in a fire or explosion. Do not store or use gasoline or other flammable gases or liquids near this electric appliance or other electric devices, for volatile gases may result in a risk in fire or explosion.
- When hands are wet, do not connect or disconnect the power plug.
- It is recommended that you use standalone circuit circulation to supply power for your device. Use the socket that can be switched off by switches or pull locks.

**Warning: To reduce risk in fire, electric shock or personal injury, please pull out the plug or disconnect the power with the electric device.**

## 12.2 Keeping these instructions

In the case of any failure in the operation process, please consult the guide to troubleshooting attached to these instructions. Causes of small operation failures have been listed for you to remove such small troubles by yourself.


## 12.3 Disposal of old equipment

Properly treat your device packing.

Refrigerating equipment must be properly treated as per methods for environmental protection. This term and condition is applicable to your old equipment and your new equipment having reached its service life.

**Warning:** Please ensure that plugs have been pulled out before treatment of the old and damaged devices, and connecting wires have been cut off or all clinched fasteners or bolts have been destroyed so that they will no longer be useful so as to prevent lock of children in the equipment (be careful of suffocation) while they are playing or threat to their life for any other causes.

Notice of disposal:

- This device may not be discarded in dust bins or disposed of with general domestic rubbish.
- Do not damage the cooling cycle, especially the heat exchangers of the machine rear wall/bottom.
- The icon  on the product or its packing indicates that such product should not be disposed of along with common domestic rubbish. However, it is required to deliver it to the electronic and electric product trash recycling station for disposal thereof. By proper disposal of such products, you will make contributions towards environmental protection and health of human beings. For more information on product recycling, you can acquire it from your municipal government trash recycling agency or the stores where you buy such products.



**Danger**

Mind electric shock

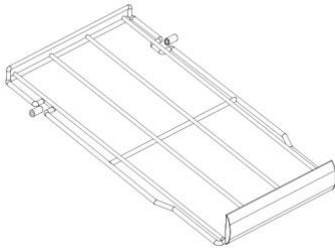


## 13. MAINTENANCE AND CARE

### 14.1 Demounting the shelves

#### For common shelves

- It is required to take out any shelf from the gap on both sides of the shelf. Please move the shelf at the gap on both sides to be just located at the lower position of the plastic pillar, and then lift the shelf. When placing the shelf back, ensure the reverse operation of the abovementioned steps.



#### Door locks (Some models of products have no door locks)

- Your drinks cabinet is provided with the combination of locks and keys.
- The key is placed in the plastic bag with user's manual. Put the key in the lock hole, and turn it counterclockwise to open the door. Turn the key in an opposite direction to lock the door. Ensure that the metal bolts will be completely engaged. Pull out the key, and keep it at a safer place for proper custody.

#### Cleaning the drinks cabinet

- Switch off the power supply, and pull out the device plug and take out all items, including shelves and trusses.
- Use lukewarm water plus soda solution to clean the interior surface. The solution ration should be one spoonful of soda with one pint of water.
- Use mild detergent to clean the shelf.
- When cleaning control areas, wire out redundant water content in sponge or rags.
- Clean the exterior of the drinks cabinet using mild detergent. Rinse it clean and wipe it dry using clean and soft rags.

#### Power disconnection

In most of circumstances, power supply will be recovered after power disconnection for hours. If you minimize door opening, this will not affect the temperature of your device. If power off lasts for a long time, you must take appropriate actions to protect your drinks.

#### Holiday period

- **Short-term period:** Do not allow the drinks cabinet to work for more than 3 weeks.
- **Staying away for long:** If you do not use the device for months, please take out all items, close the door and remove the plug. Do thorough cleaning and drying of the interior of the drinks cabinet. For avoidance of odor and mildew, slightly open the door: if it is necessary, please use something to make it slightly open.

#### Moving the drinks cabinet

- Take all items.
- Tightly bind the loose items (shelves) in the device using adhesive tapes.
- Adjust the adjustable feet to the bottom as so not to cause damage.
- Stick the closed door using adhesive tapes.
- Ensure that the device will always be in an upright position in moving the device. Similarly, protect the exterior of the device using carpets or similar items.

#### Energy saving tips

- The drinks cabinet should be put at the coolest place indoors far away from heating devices free from direct sunshine.
- Ensure the drinks cabinet will be adequately ventilated. Never cover the air vent.
- Open the drinks cabinet door only when it is necessary.

## 14. TROUBLE SHOOTING

You can solve many common troubles in the drinks cabinet very easily. This can help you save costs and expenses to be incurred in possible repairs.

Before you call the customer service, try the following recommendations to see whether you can do troubleshooting yourself.

### A Guide to Troubleshooting

Possible failures	Causes
The drinks cabinet does not work	The plug is not inserted. The device is in the off status. It is tripped or the fuse melted.
The drinks cabinet is not so cooling	Check the temperature control device. The external environment may need a higher setting. Door opening is too frequent. The door has not been completely shut. The door gasket is improperly sealed.
Switch on and off too frequently	The indoor temperature is hotter than the normal temperature. Many items are put in the drinks cabinet. Door opening is too frequent. The door is not completely closed. The temperature control is improperly set. The door gasket is improperly sealed.
The lamp is not on	The plug is not inserted. It is tripped or the fuse melted. The lamp is at the “off” position.
Vibration	Check whether the drinks cabinet is at a horizontal level.
The drinks cabinet sends forth too much noise	Clacks may come from the flowing refrigerants, which is a normal case. At the end of each cycle, you might hear the rumbling sound. This is given by the flowing refrigerants of the drinks cabinet. The expansion and shrinkage of interior walls may generate noise like cracks. The drinks cabinet is not horizontal.
Unable to close the door	The drinks cabinet is not at a horizontal level. When the door is in the turn-around direction, it is well mounted. The gasket is dirty. The shelf is not at its proper position.
Display “EL” or “EH”	The air temperature sensor loses control. Change the sensor.
Display “Ed”	When the door is opened for long, it will give the door opening alarm. Shut the glass door.
Unable to display but the machine is running	The drinks cabinet enters the “Sunday mode”. Exit according to the same operation.