

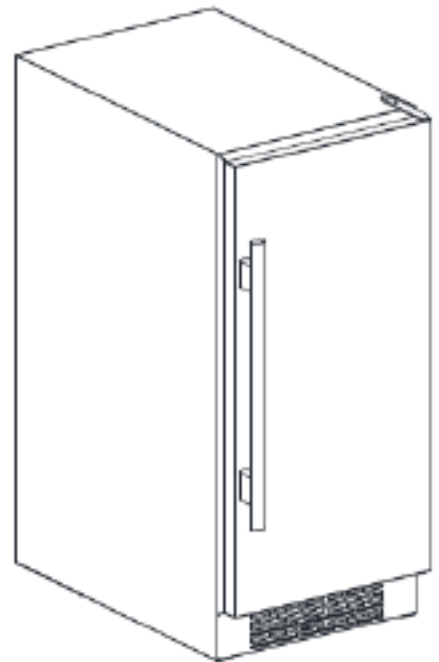
# Landmark Service Manual

## Wine Cooler

Landmark L3015UI1XXX Series

Landmark L3024UI1XXX Series

Landmark L3024UI2XXX Series



**CAUTION: READ ALL SAFETY PRECAUTIONS IN  
THIS MANUAL BEFORE SERVICING THE UNIT**

\*Warranty service should be performed by an authorized service representative only

# SAFETY PRECAUTIONS

**WARNING:** This manual and the information contained herein is intended for use by certified technicians. The manufacturer or seller is not responsible for the interpretation or misuse of the information provided, nor does it assume any liability in connection with its use.

The safeguards and warnings indicated in this manual do not cover all possible conditions which may occur. Common sense, caution, and care must be exercised.

The design, color, and parts of this product are subject to change without prior notice.

- To prevent electric shock, always unplug an appliance from the power supply before attempting any service.
- Disconnect the power cord by grasping the plug, not the cord.
- Do not bypass, cut, or remove the grounding plug.
- Prevent water from spilling onto electric elements or the machine parts.
- Always refer to the rating label on the appliance for rated current and voltage.
- Always check line voltage and amperage.
- Always use exact replacement parts.
- Any attempt to repair a major appliance may result in personal injury and property damage.

## General Safety

- Always unplug an appliance from the power supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
- Do not allow children or pets to play on or in the appliance.
- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
- Do not install or store this appliance where it will be exposed to the weather.
- Disconnect from the power socket before cleaning or maintenance.
- If the plug (power cord) is damaged, it must be replaced by the manufacturer or an authorized service representative.
- This machine shall be repaired only by an authorized service representative. Only genuine replacement parts should be used.
- If connected to a circuit protected by fuses, use time-delay fuses with this appliance.
- Do not lean items against the glass door.
- Please do not close the door with excessive force. If it is found difficult to close the door, please check for obstruction.
- When you plan to dispose of this unit in the future, please comply with the local waste disposal regulations. Remove any doors so that children and pets will not be trapped in the unit.

## Electrical Safety

- Do not exceed the power outlet ratings.
- It is recommended that the unit be connected to its own circuit.
- A standard electrical supply that is properly grounded in accordance with the National Electrical Code and all state and local codes and ordinances is required.
- Do not use outlets that can be turned off by a switch or pull chain.
- Always turn the unit off and unplug it from the outlet when cleaning.
- Unplug the unit if it is not going to be used for an extended period of time.
- Do not operate the unit with a power plug missing the ground plug, a damaged cord, or a loose socket.
- Be sure the appliance is properly grounded.
- Do not bypass, cut, or remove the grounding plug.
- If the power cord is damaged, it must be replaced by the manufacturer or a qualified technician.
- Do not use extension cords or power strips with this unit. You may need to contact an electrician if it is necessary to use a longer cord or if you do not have a properly grounded outlet. Do not modify the power cord's length or share the outlet with other appliances.
- Do not start or stop the unit by switching the electrical circuit's power on and off.
- Immediately unplug the unit if it makes strange sounds, emits an odor or smoke and contact customer service.
- Do not remove any part of the casing unless instructed by an authorized technician.
- Before the appliance is removed from service or discarded, remove any doors and cut off the power cord.



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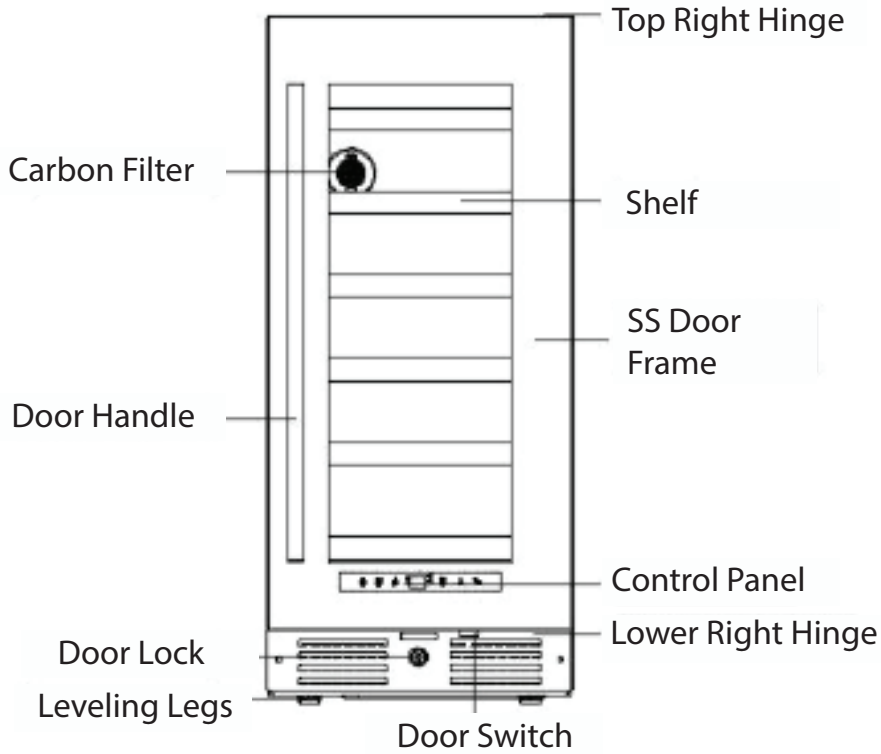
## ADDITIONAL SAFETY PRECAUTIONS

**Please read the followings before servicing your appliance.**

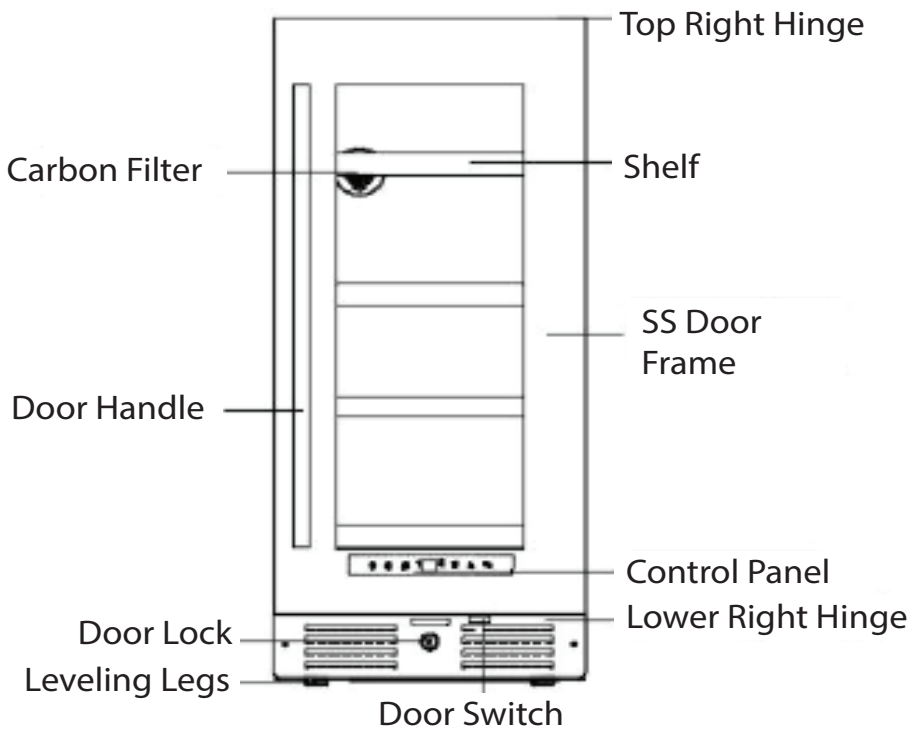
1. Check if electric leakage occurs in the set.
2. To prevent electric shock, unplug prior to servicing.
3. In case of testing with power on, wear rubber gloves to prevent electric shock.
4. If you use any appliances, check regular current, voltage and capacity.
5. Don't touch metal products in cold freezer with wet hand. It may cause frostbite.
6. Prevent water flowing to electric elements in mechanical parts.
7. When sloping the set, remove any materials on the set, especially thin plate type. (ex.: glass shelf or books.)
8. When servicing evaporator part, wear cotton gloves without fail. It is to prevent wound by sharp fin of evaporator.
9. Leave a breakage of refrigerating cycle to a heavy service center. The gas in cycle inside may soil ambient air.

# PARTS IDENTIFICATION

## Models: L3015UI1WSG-LH / L3015UI1WSG-RH

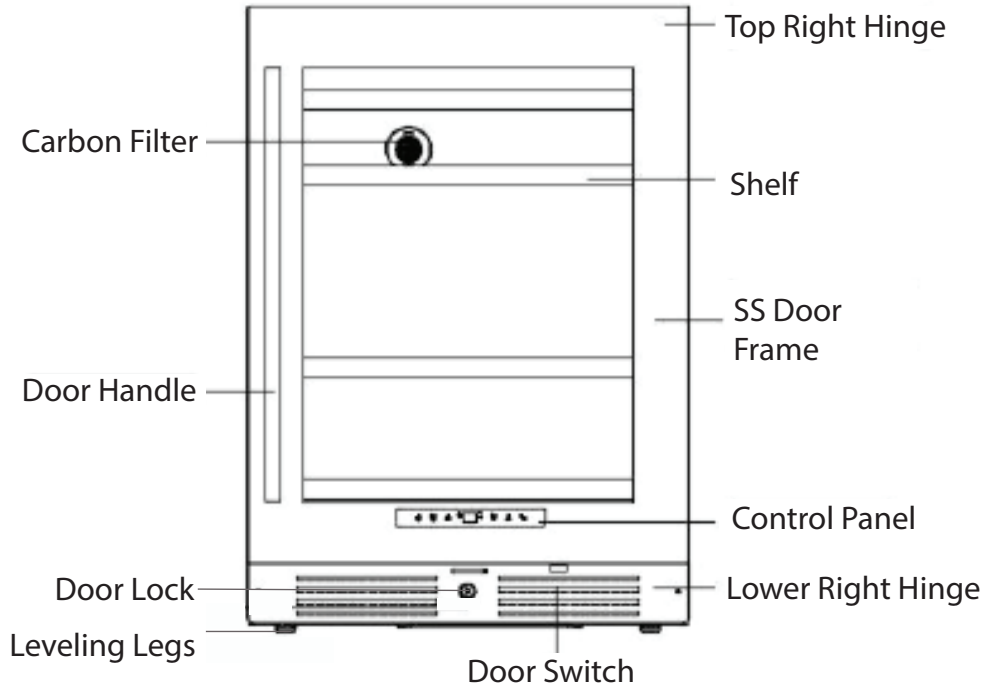


## Models: L3015UI1WSG-LH / L3015UI1WSG-RH

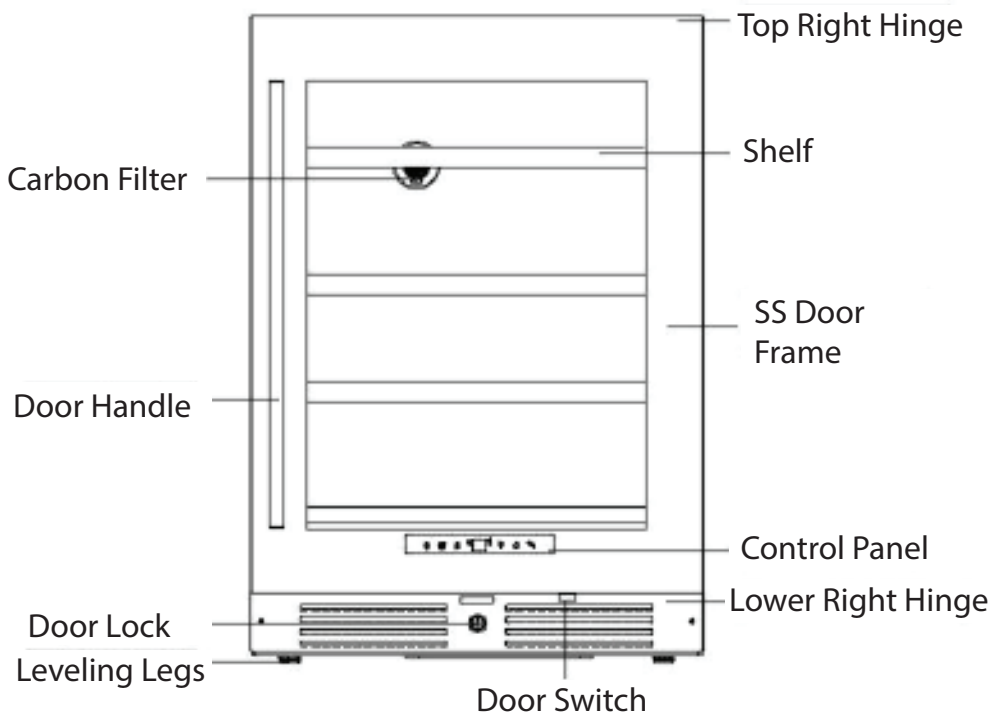


## PARTS IDENTIFICATION

### Models: L3024UI1MSG-LH / L3024UI1MSG-RH

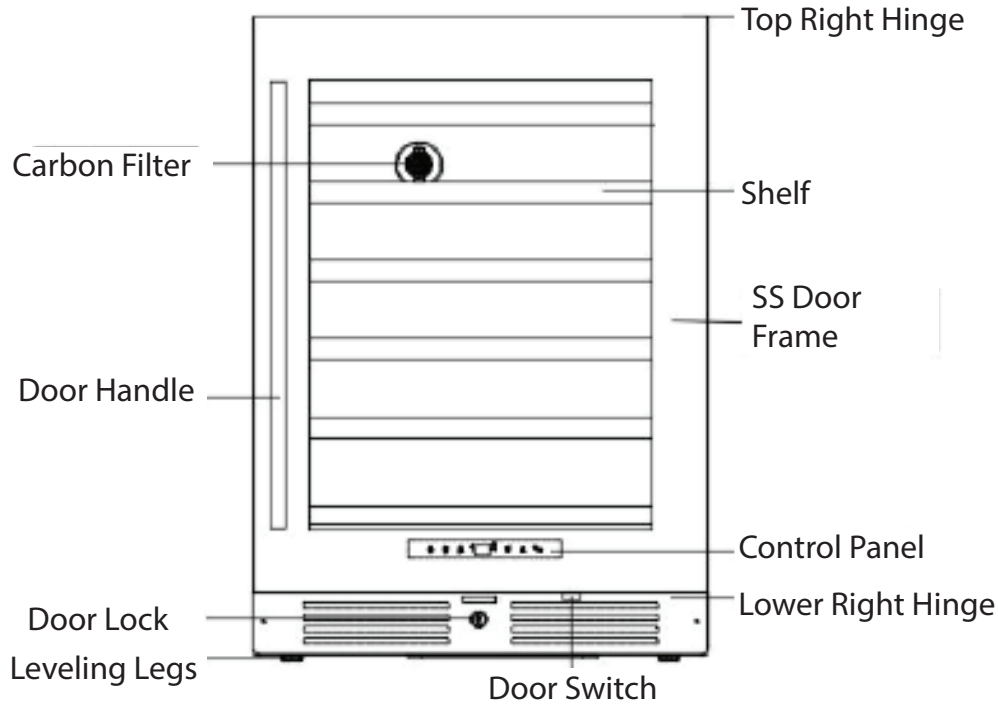


### Models: L3024UI1BSG-LH / L3024UI1BSG-RH

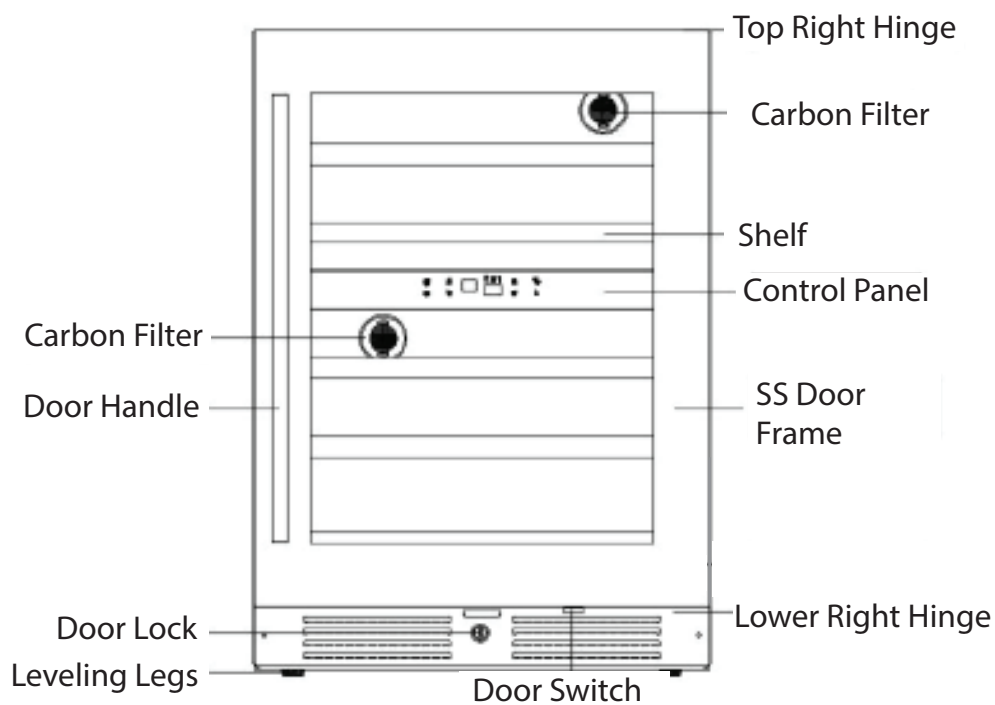


# PARTS IDENTIFICATION

## Models: L3024UI1WSG-LH / L3024UI1WSG-RH



## Models: L3024UI2WSG-LH / L3024UI2WSG-RH



# DISASSEMBLY

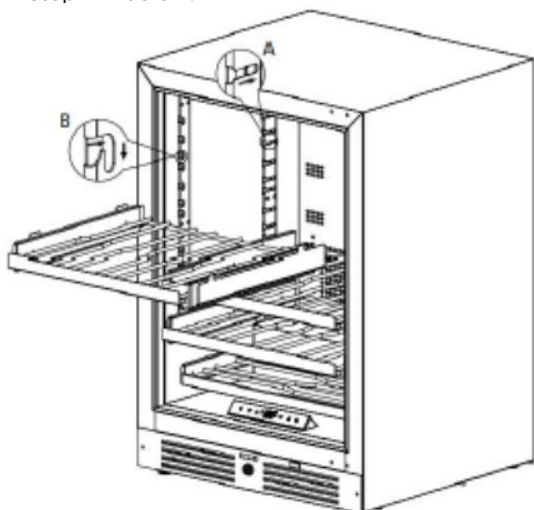
## Shelves

### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH  
 L3015UI1BSG-LH / L3015UI1BSG-RH  
 L3024UI1MSG-LH / L3024UI1MSG-RH  
 L3024UI1BSG-LH / L3024UI1BSG-RH  
 L3024UI1WSG-LH / L3024UI1WSG-RH  
 L3024UI2WSG-LH / L3024UI2WSG-RH

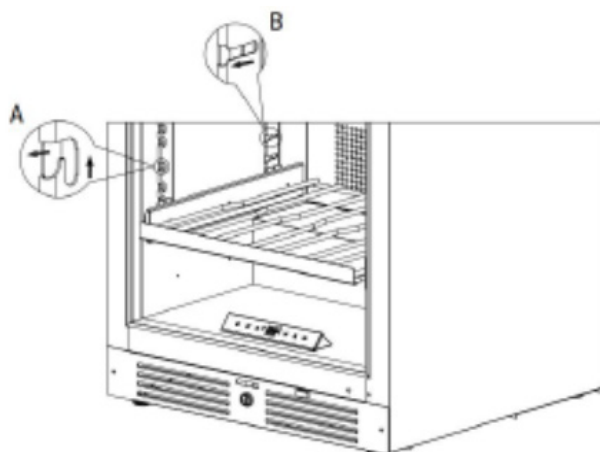
### Installing the shelves

1. Open the door completely. The door must be able to open at least 90 degrees for the shelves to properly clear the door gasket.
2. Identify the slots corresponding to your desired shelf height. Ensure that all four (4) track slots -left and right, front and back - are the same height so that your installed shelf will be level.
3. Lift the front of the shelf [closest to you] at a 20 degree angle above the back of the shelf. Insert the rear pegs on both sides of the shelf into the rear vertical track mounting slots as shown in step "A" below.
4. Push the rear pegs in. Then, set the front shelf pegs into the front vertical track mounting slots as shown in step "B" below.



### Removing the shelves

1. Open the door completely. The door must be able to open at least 90 degrees for the shelves to properly clear the door gasket.
2. Holding both the left and right sides of the shelf you intend to remove, lift the front up out of the key slot on the front vertical tracks. Then pull the shelf out of the cabinet and towards you. See step "A" below.
3. Pull the shelf approximately 1/3 out of the refrigerator cabinet. The rear shelf pegs will disengage from the rear vertical tracks as shown in step "B" below. With the front of the shelf angled 20 degrees above the back of the shelf, pull the shelf forward until it is completely removed from the cabinet.





# DISASSEMBLY

## Light

### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH  
 L3015UI1BSG-LH / L3015UI1BSG-RH  
 L3024UI1MSG-LH / L3024UI1MSG-RH  
 L3024UI1BSG-LH / L3024UI1BSG-RH  
 L3024UI1WSG-LH / L3024UI1WSG-RH  
 L3024UI2WSG-LH / L3024UI2WSG-RH

### Checking and changing the light

1. Use a flathead screwdriver or other tool to pry the bottom light cover off of the unit.



2. Remove the bottom cover.



3. Check the wired connection for a loose connection.



4. If the wiring connection is not loose, change the light.



5. To change the light, unplug the light connector from the wired connector and remove the faulty light from the groove.
6. Install the new light.
7. Reinstall the bottom light cover.

**NOTE:** The light connector and the wired connector must be aligned, in the same position.

# DISASSEMBLY

## Display Board

### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH

L3015UI1BSG-LH / L3015UI1BSG-RH

L3024UI1MSG-LH / L3024UI1MSG-RH

L3024UI1BSG-LH / L3024UI1BSG-RH

L3024UI1WSG-LH / L3024UI1WSG-RH

### Checking and changing the display board

1. Remove the two screws from the display board support panel.



2. Check the wired connector for a loose connection.



3. If the wired connection is not loose, change the display board.
4. To change the display board, unplug the board from the wired connector.
5. Remove the two screws from the board.



6. Remove the faulty display board.



7. Install a new supply board.
8. Reinstall the two display board screws.
9. Connect the new display board to the wired connector.
10. Replace the two screws in the display board support panel.

# DISASSEMBLY

## Display Board

### MODELS:

L3024UI2WSG-LH / L3024UI2WSG-RH

### Checking and changing the display board

1. Remove the two screws from the middle display board support bracket.



2. Lift the display board support bracket.



3. Check the wired connector for a loose connection.



4. If the wired connection is not loose, change the display board.
5. Unplug the faulty board from the wired connector.
6. Remove the board from the bracket.



7. Install a new display board.



8. Place the new control board in the bracket.
9. Connect the new display board to the wired connector.
10. Replace the display board support bracket in the unit.
11. Replace the two screws in the support bracket.

# DISASSEMBLY

## Control Board

### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH

L3015UI1BSG-LH / L3015UI1BSG-RH

### Checking and changing the control board

1. Remove the four screws from the back cover.

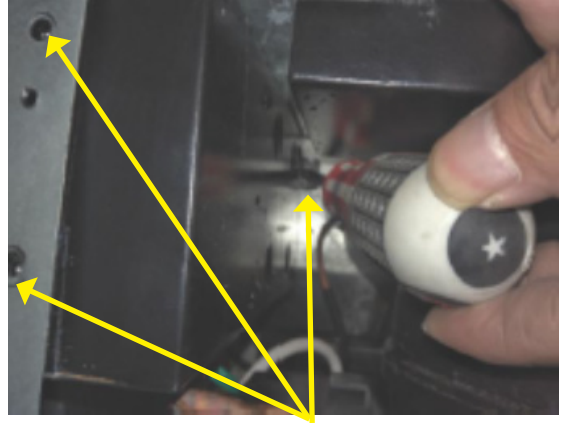


2. Remove the two screws from the water tank.
3. Remove the water tank and empty it.

**WARNING:** Do not get water on the control board bracket or the compressor connector.



4. Unscrew the three (3) screws from the control board bracket.



5. Check the wired connectors for a loose connection.



6. If the wired connectors are not loose, change the control board.
7. To change the control board, first disconnect all wired connections.

**NOTE:** For the power cord connector, use a needle inserted in the round hole to remove.



## DISASSEMBLY

8. Remove the screws from the faulty control board.



9. Depress the standoffs by squeezing them with a needle nose pliers.
10. Remove the old control board.
11. Install a new control board.
12. Reinstall the screws in the new control board.



13. Reconnect the wired connections to the control board.
14. Reinstall the board in the control board bracket with the three screws.
15. Replace the water tank and its two screws.
16. Replace the back cover and its four screws.

# DISASSEMBLY

## Control Board

### MODELS:

L3024UI1MSG-LH / L3024UI1MSG-RH

L3024UI1BSG-LH / L3024UI1BSG-RH

L3024UI1WSG-LH / L3024UI1WSG-RH

### Checking and changing the control board

1. Remove the four screws from the back cover.



2. Unscrew the four screws from the plastic box.



3. Check the wired connectors for a loose connection.



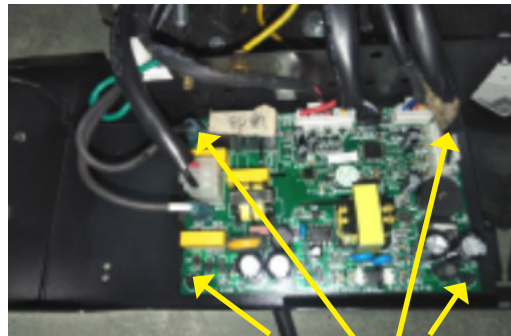
4. If the wired connectors are not loose, change the control board.

5. To change the control board, first disconnect all wired connections.

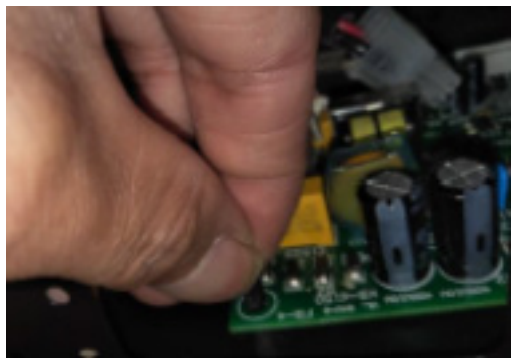
**NOTE:** For the power cord connector, use a needle inserted in the round hole to remove.



6. Remove the screws from the faulty controlboard.



7. Depress the standoffs by squeezing them with a needle nose pliers.
8. Remove the old control board.
9. Install a new control board.
10. Reinstall the screws in the new control board.



11. Reconnect the wired connections to the control board.
12. Replace the plastic box and its four screws.
13. Replace the back cover and its four screws.

# DISASSEMBLY

## Control Board

### MODELS:

L3024UI2WSG-LH / L3024UI2WSG-RH

### Checking and changing the control board

1. Remove the four screws from the back cover.



2. Unscrew the four screws from the plastic box.

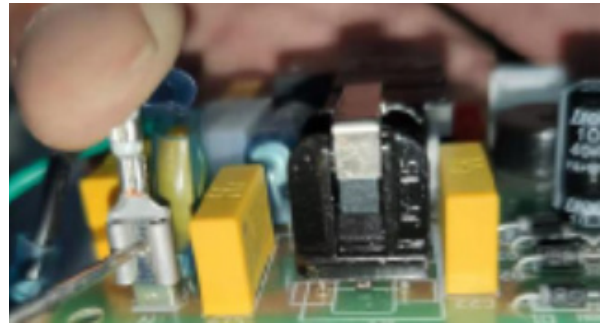


3. Check the wired connectors for a loose connection.

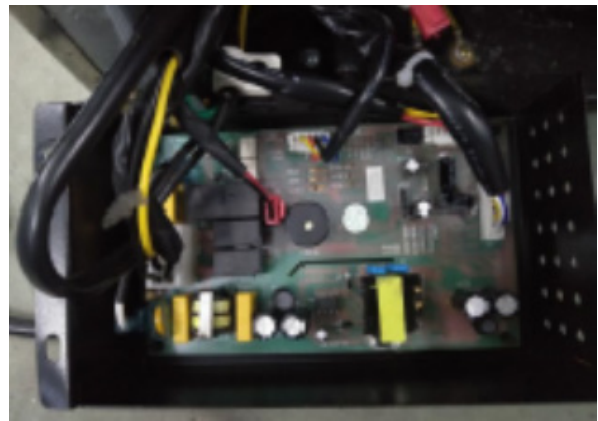


4. If the wired connectors are not loose, change the control board.
5. To change the control board, first disconnect all wired connections.

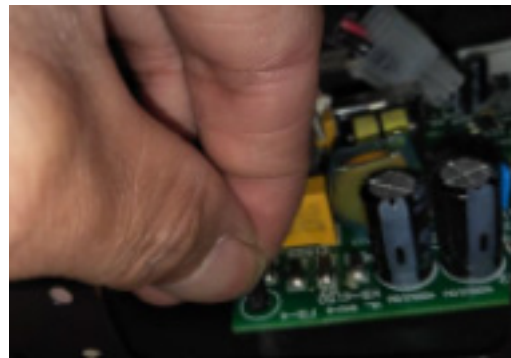
**NOTE:** For the power cord connector, use a needle inserted in the round hole to remove.



6. Remove the screws from the faulty controlboard.



7. Remove the old control board.
8. Install a new control board.
9. Reinstall the screws in the new control board.



10. Reconnect the wired connections to the control board.
11. Replace the plastic box and its four screws.
12. Replace the back cover and its four screws.

# DISASSEMBLY

## Sensor(s) and Fan

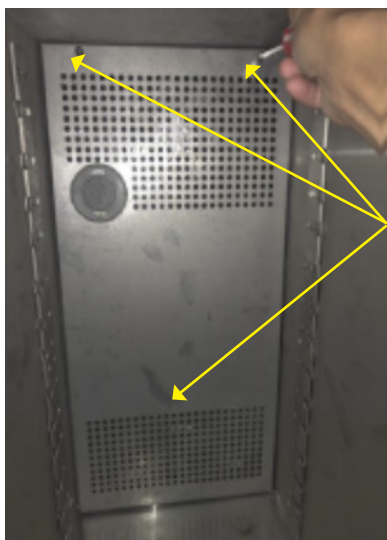
### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH

L3015UI1BSG-LH / L3015UI1BSG-RH

### Checking and changing the sensor(s) and/or fan

1. Take out all the shelves.
2. Unscrew the three screws from the air duct board.



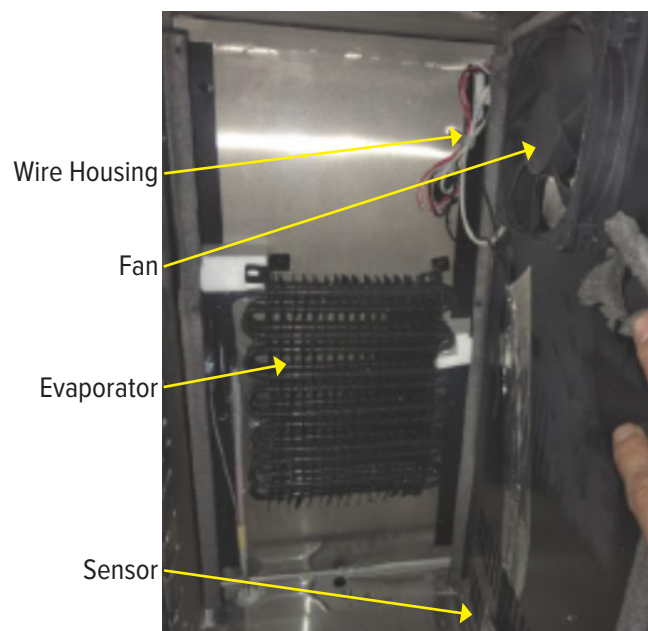
3. Use a hook or other tool inserted into one of the holes to remove the air duct board.



4. Unscrew the six screws from the air duct board



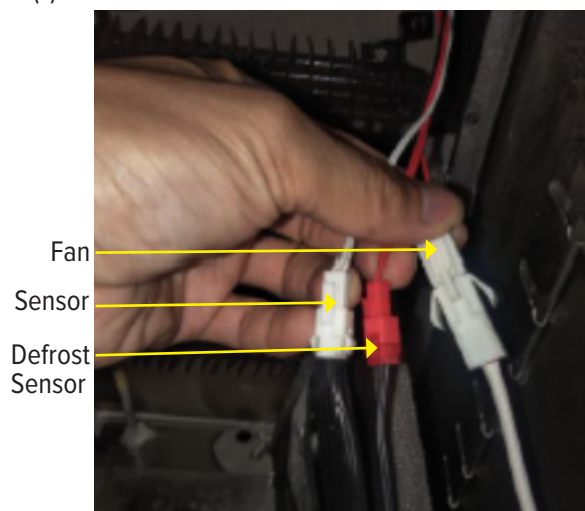
5. Pull open the air duct board and check the wired connections to see if any are loose.



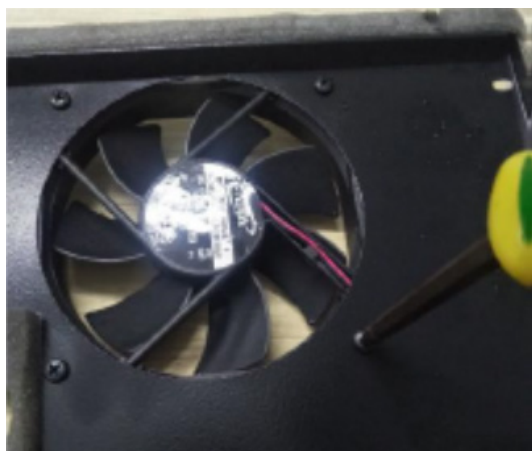


## DISASSEMBLY

6. If no connections are loose, replace the fan or the sensor(s).

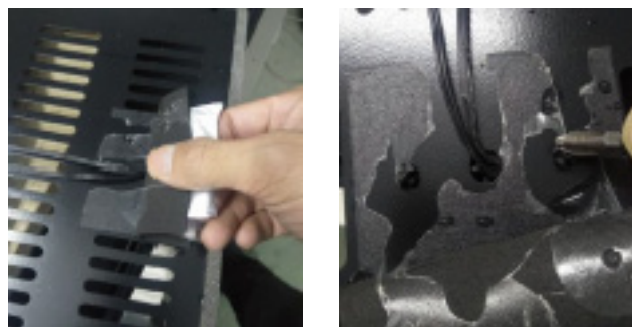


7. To replace the fan, unscrew the four screws.  
8. Remove the faulty fan.

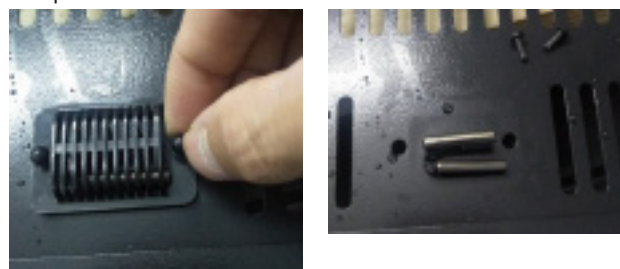


9. Install a new fan.  
10. Replace the four screws.

11. To replace a sensor, remove the EVA and tinfoil.  
12. Remove the sensor bracket.



13. Reverse the air duct board and remove the bracket.  
14. Remove the sensor.  
15. Replace the sensor with a new sensor.



16. Replace the bracket.  
17. Replace the EVA and tinfoil.

# DISASSEMBLY

## Sensor(s) and Fan

### MODELS:

L3024UI1BSG-LH / L3024UI1BSG-RH

L3024UI1WSG-LH / L3024UI1WSG-RH

L3024UI1MSG-LH / L3024UI1MSG-RH

### Checking and changing the sensor(s) and/or fan

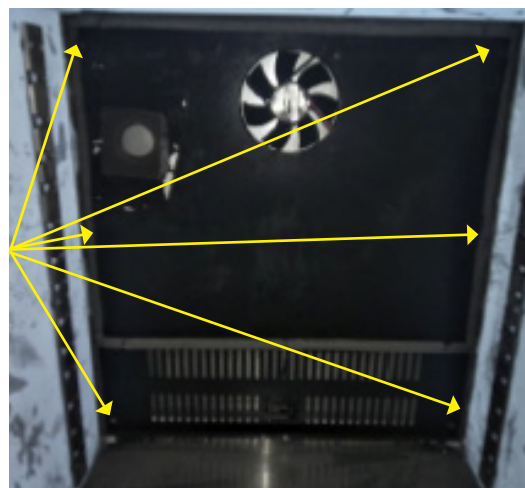
1. Take out all the shelves.
2. Unscrew the three screws from the air duct board.



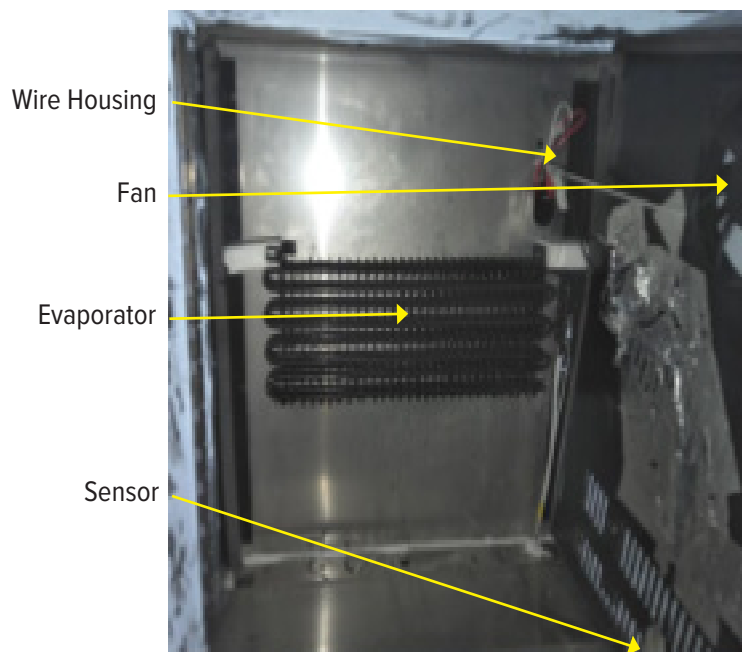
3. Use a hook or other tool inserted into one of the holes to remove the air duct board.



4. Unscrew six screws from the air duct board.

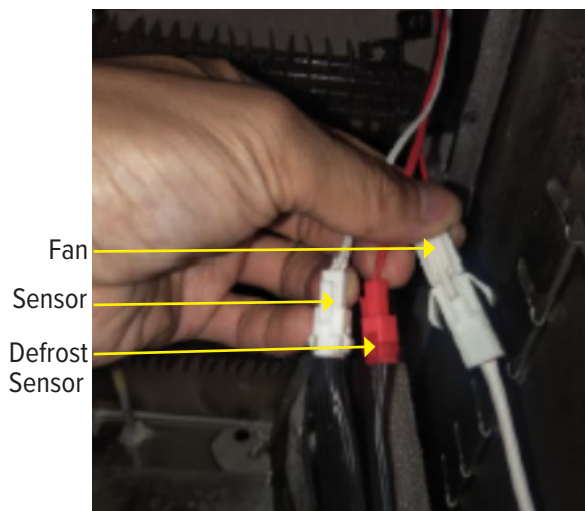


5. Pull open the air duct board and check the wired connections to see if any are loose.



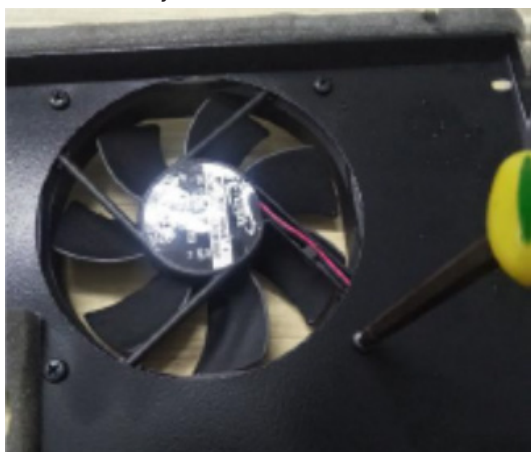
# DISASSEMBLY

6. If no connections are loose, replace the fan or the sensor(s).



7. To replace the fan, unscrew the four screws.

8. Remove the faulty fan.



9. Install a new fan.

10. Replace the four screws.

11. To replace a sensor, remove the EVA and tinfoil.

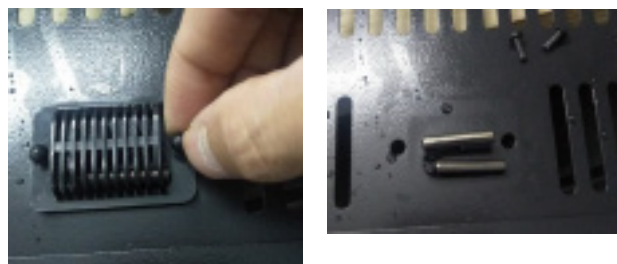
12. Remove the sensor bracket.



13. Reverse the air duct board and remove the bracket.

14. Remove the sensor.

15. Replace the sensor with a new sensor.



16. Replace the bracket.

17. Replace the EVA and tinfoil.

# DISASSEMBLY

## Sensor(s) and Fan

### MODELS:

L3024UI2WSG-LH / L3024UI2WSG-RH

### Checking and changing the sensor(s) and/or fan

1. Remove the two screws from the middle display board.



2. Take out the display board support box.



3. Unplug the display board connector.

4. Take out the display board box.



5. Unscrew the seven screws from the upper air duct board cover.

6. Take out the upper air duct cover.

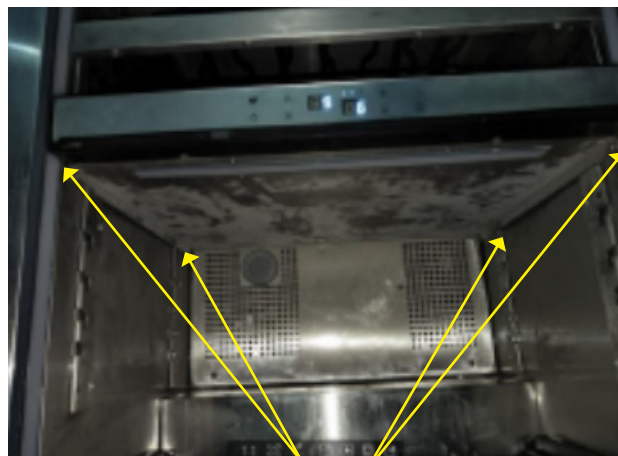


7. Unplug the LED light connector.



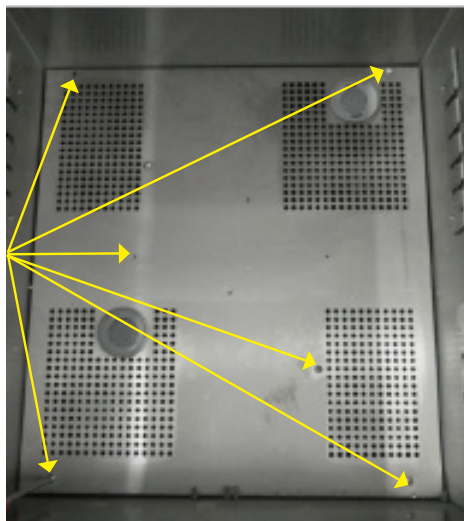
8. Unscrew five screws from the lower air duct board cover.

9. Take out the lower air duct board cover.



# DISASSEMBLY

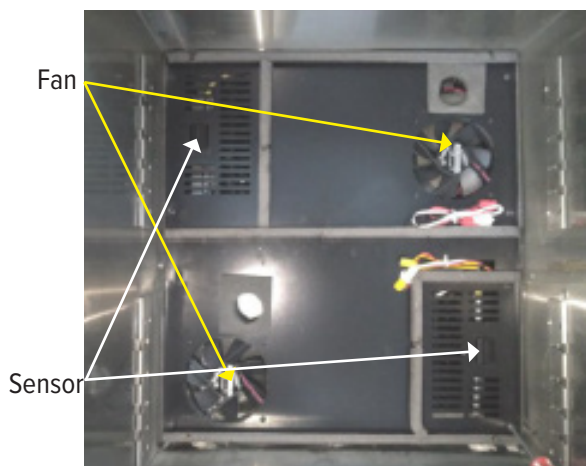
10. Unscrew the six screws from the air duct board.
11. Take out the air duct board.



12. Use a hook or other tool inserted into one of the holes to remove the duct board.



13. Check the wired connectors of the fans and sensors.



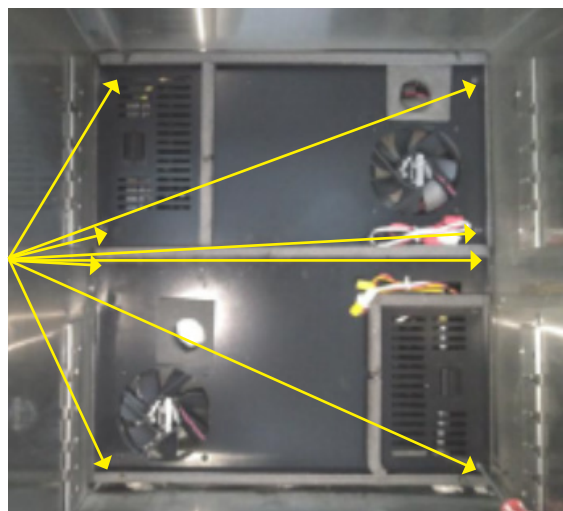
Upper sensor and fan connector



Lower sensor and fan connector



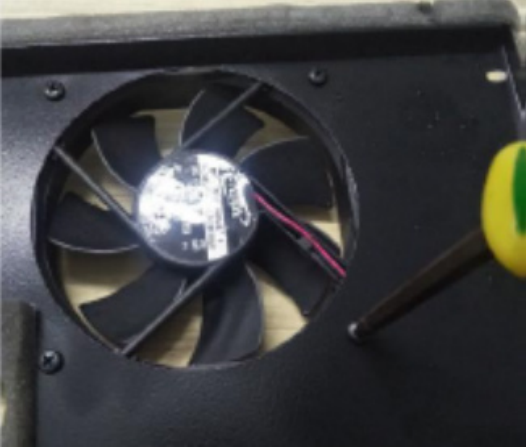
14. If no wired connections are loose, replace the fan(s) and/or sensor(s).
15. To replace the fan(s), unscrew the eight screws from the air duct board.



## DISASSEMBLY

16. Unscrew the four screws around the fan.

17. Remove the faulty fan.

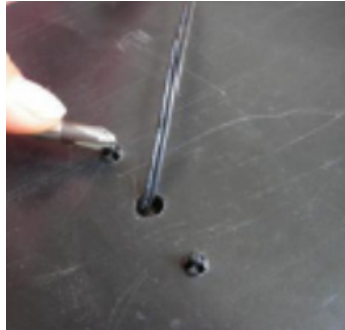


18. Install a new fan.

19. Replace the four screws.

20. To replace a sensor, remove the EVA and tinfoil.

21. Remove the sensor bracket.



22. Reverse the air duct board and remove the bracket.

23. Remove the sensor.



24. Replace the sensor with a new sensor.

# DISASSEMBLY

## Door Switch

### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH  
 L3015UI1BSG-LH / L3015UI1BSG-RH  
 L3024UI1MSG-LH / L3024UI1MSG-RH  
 L3024UI1BSG-LH / L3024UI1BSG-RH  
 L3024UI1WSG-LH / L3024UI1WSG-RH  
 L3024UI2WSG-LH / L3024UI2WSG-RH

### Checking and changing the door switch

1. Remove the two screws from the front of the bottom grill.



2. Remove the two screws on the bottom of the bottom grill



3. Remove the four screws on the support bar.



4. Remove the support bar.



5. Check the door switch connector for a loose connection.
6. If no wired connection is loose, replace the door switch.
7. To replace the door switch, first unscrew the two screws from the bottom grill.



## DISASSEMBLY

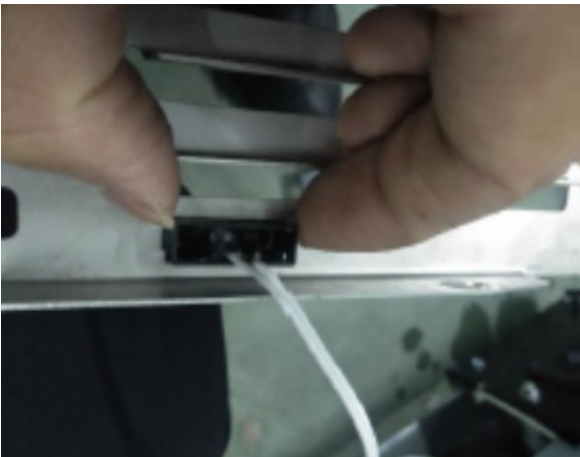
8. Remove the screw bracket



9. Unplug the connector.



10. Press the hook on door switch and remove it.



11. Install a new door switch.



12. Reassemble, using the steps in reverse..



## DISASSEMBLY

### Compressor/Starter Relay/ Overload Protector

#### MODELS:

L3015UI1WSG-LH / L3015UI1WSG-RH  
 L3015UI1BSG-LH / L3015UI1BSG-RH  
 L3024UI1MSG-LH / L3024UI1MSG-RH  
 L3024UI1BSG-LH / L3024UI1BSG-RH  
 L3024UI1WSG-LH / L3024UI1WSG-RH  
 L3024UI2WSG-LH / L3024UI2WSG-RH

#### Checking and changing the compressor- starter relay-overload protector

1. Unscrew the wire clamp.



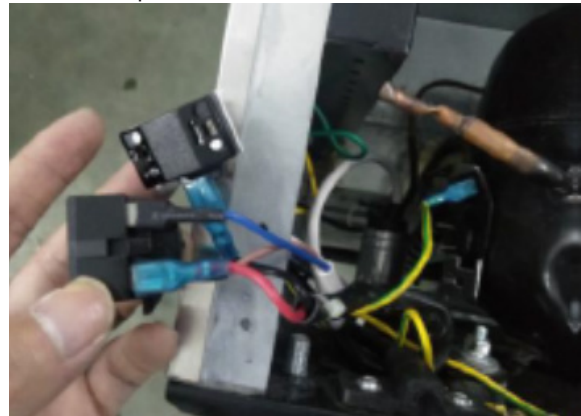
2. Open the cover.



3. Check the relay and overload connectors.



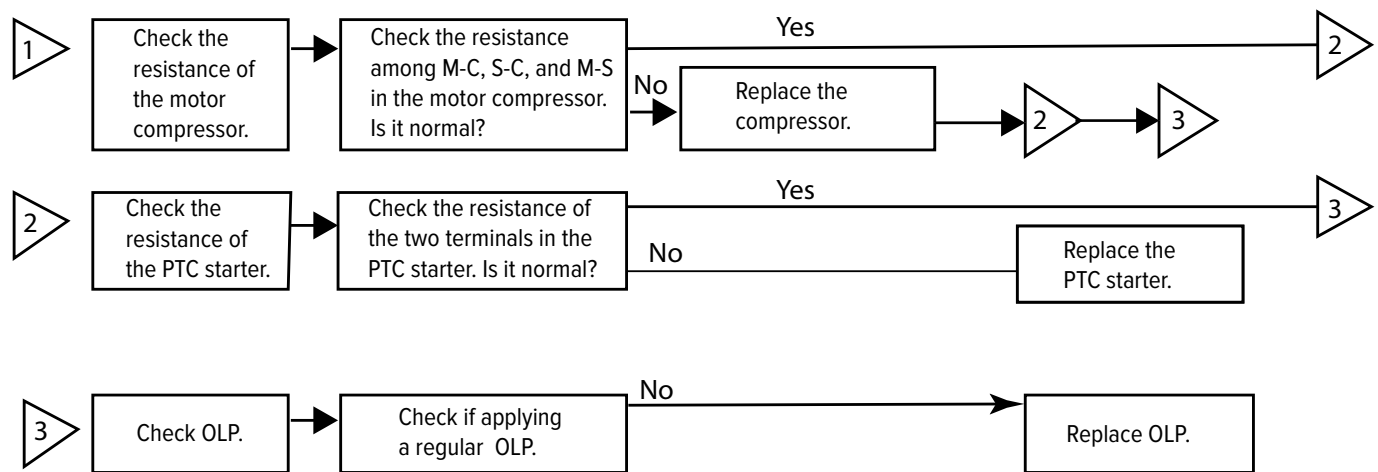
4. If the connectors are secure, replace the relay and/or overload protector.



5. Replace the cover.
6. Replace the wire clamp.

# TROUBLESHOOTING

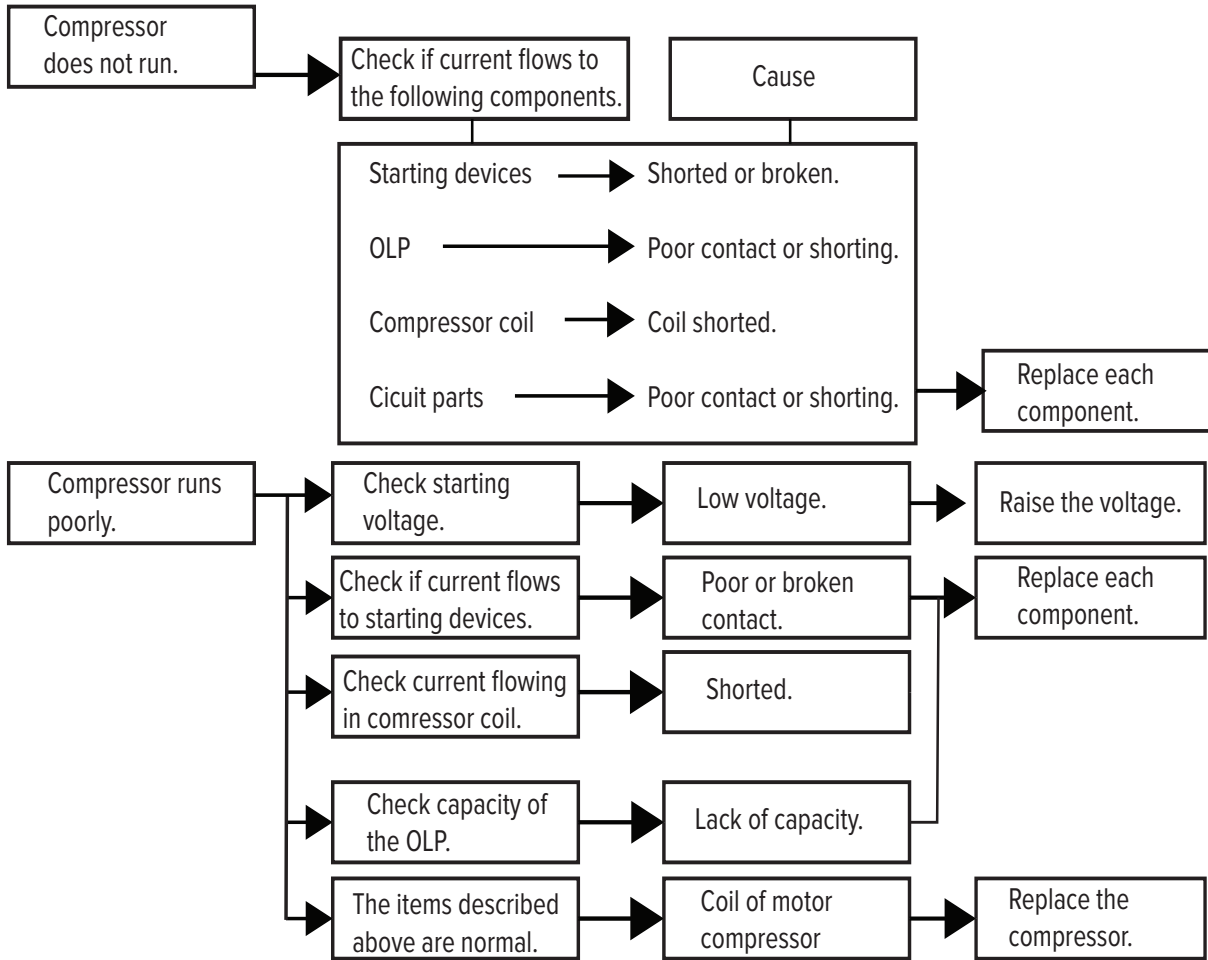
## Compressor Components



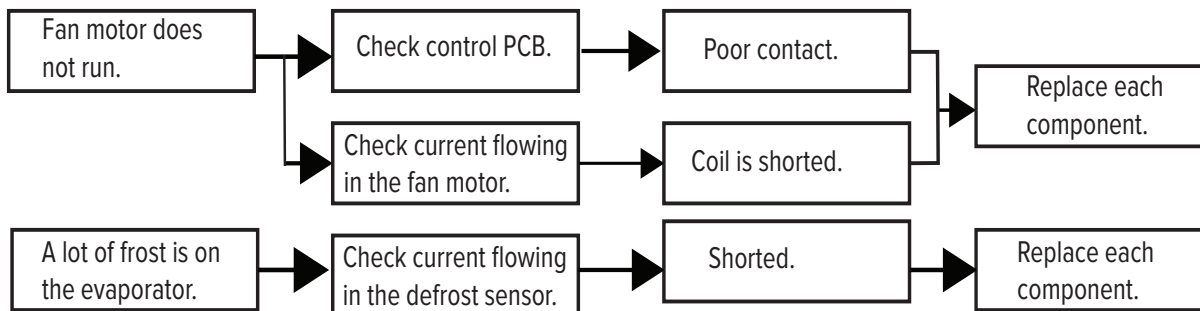
# TROUBLESHOOTING

## Electrical Components

### Cooling is impossible



### Cooling ability is poor



# TROUBLESHOOTING

## SERVICE DIAGNOSTIC CHART

Problem	Possible Cause
Appliance does not operate.	Not plugged in. The appliance is turned off. The circuit breaker tripped or a blown fuse.
Appliance is not cold enough.	Check the temperature control setting. External environment may require a higher setting. The door is opened too often. The door is not closed completely. The door gasket does not seal properly.
Turns on and off frequently.	The room temperature is hotter than normal. A large amount of contents has been added to the wine chiller. The door is opened too often. The door is not closed completely. The temperature control is not set correctly. The door gasket does not seal properly.
The light does not work.	Not plugged in. The circuit breaker tripped or a blown fuse. The bulb has burned out. The light button is "OFF". Energy conservation button is on.
Vibrations.	Check to assure that the Wine Chiller is level.
The Wine Chiller seems to make too much noise.	The rattling noise may come from the flow of the refrigerant, which is normal. As each cycle ends, you may hear gurgling sounds caused by the flow of refrigerant in your Wine Chiller. Contraction and expansion of the inside walls may cause popping and crackling noises. The Wine Chiller is not level.
The door will not close properly.	The Wine Chiller is not level. The door was reversed and not properly installed. The gasket is dirty. The shelves are out of position.

# TROUBLESHOOTING

<b>Single zone</b>	
Display error code "E1" (Single zone)	The air sensor is open circuit failed. Connection main control PCB is with <b>white</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E2" (Single zone)	The air sensor is short circuit failed. Connection main control PCB is with <b>white</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E3". (Single zone)	The defrost sensor is open circuit failed. Connection main control PCB is with <b>red</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E4". (Single zone)	The defrost sensor is short circuit failed. Connection main control PCB is with <b>red</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
<b>Dual zone</b>	
Display error code "E1" (Dual zone)	Upper zone the air sensor is open circuit failed. Connection main control PCB is with <b>red</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E2" (Dual zone)	Upper zone the air sensor is short circuit failed. Connection main control PCB is with <b>red</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E3". (Dual zone)	Lower zone the air sensor is open circuit failed. Connection main control PCB is with <b>yellow</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.
Display error code "E4". (Dual zone)	Lower zone the air sensor is short circuit failed. Connection main control PCB is with <b>yellow</b> color wires. Check the circuit, if it is normal, the sensor need to be replaced.

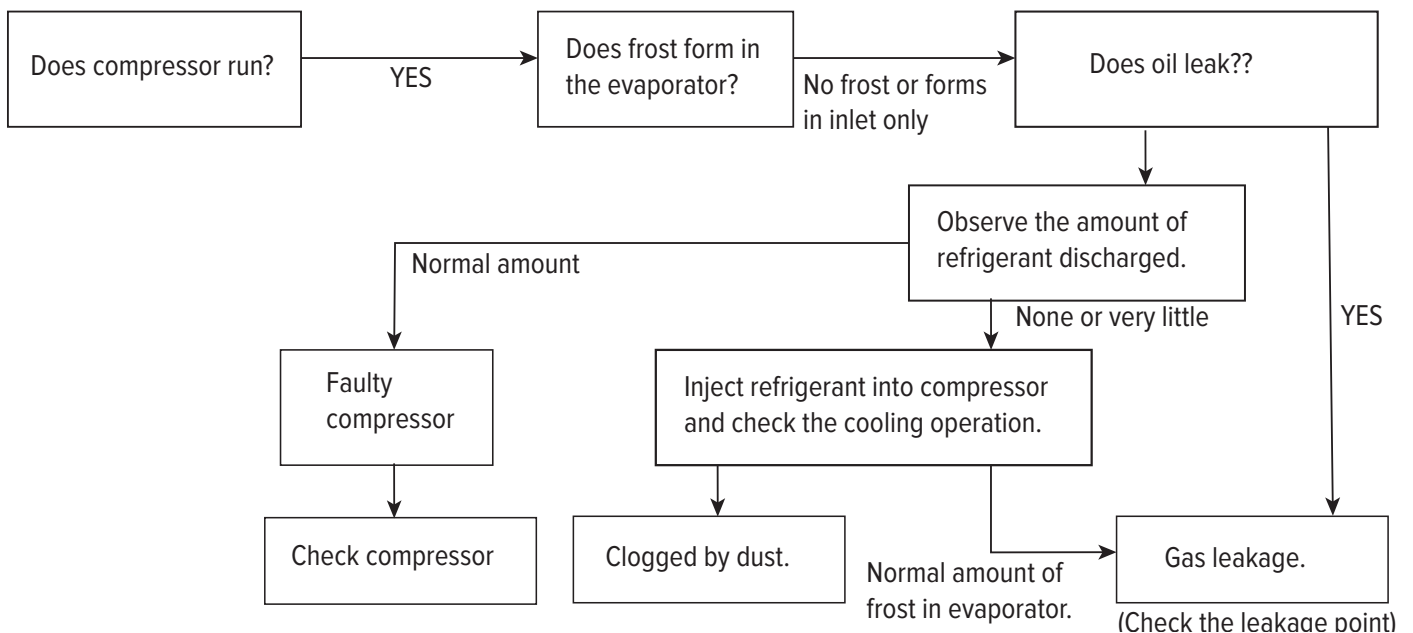
# TROUBLESHOOTING

## REFRIGERATING CYCLE

CAUSE		STATE OF THE SET	STATE OF THE EVAPORATOR	TEMPERATURE OF THE COMPRESSOR	REMARKS
LEAKAGE	PARTIAL LEAKAGE	Appliance don't get cold normally.	Low flowing sound of Refrigerant is heard and frost forms in inlet only	A little high more than ambient temperature.	<ul style="list-style-type: none"> <li>• A little Refrigerant discharges.</li> <li>• Normal cooling is possible when injecting Refrigerant of regular amount.</li> </ul>
	WHOLE LEAKAGE	Appliance don't get cold at all.	Flowing sound of Refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	<ul style="list-style-type: none"> <li>• No discharging of Refrigerant.</li> <li>• Normal cooling is possible when injecting Refrigerant of regular amount.</li> </ul>
CLOG IN CAPILLARY	PARTIAL CLOG	Appliance don't get cold normally.	Flowing sound of Refrigerant is heard and frost forms in inlet only.	A little high more than ambient temperature.	<ul style="list-style-type: none"> <li>• No discharging of refrigerant.</li> <li>• The capillary tube is faulty.</li> </ul>
	WHOLE CLOG	Appliance don't get cold.	Flowing sound of Refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	<ul style="list-style-type: none"> <li>• No discharging of Refrigerant.</li> </ul>

### Leakage Detection

Observe discharging point of refrigerant which may be in the oil discharging part in the compressor and the hole of the evaporator.

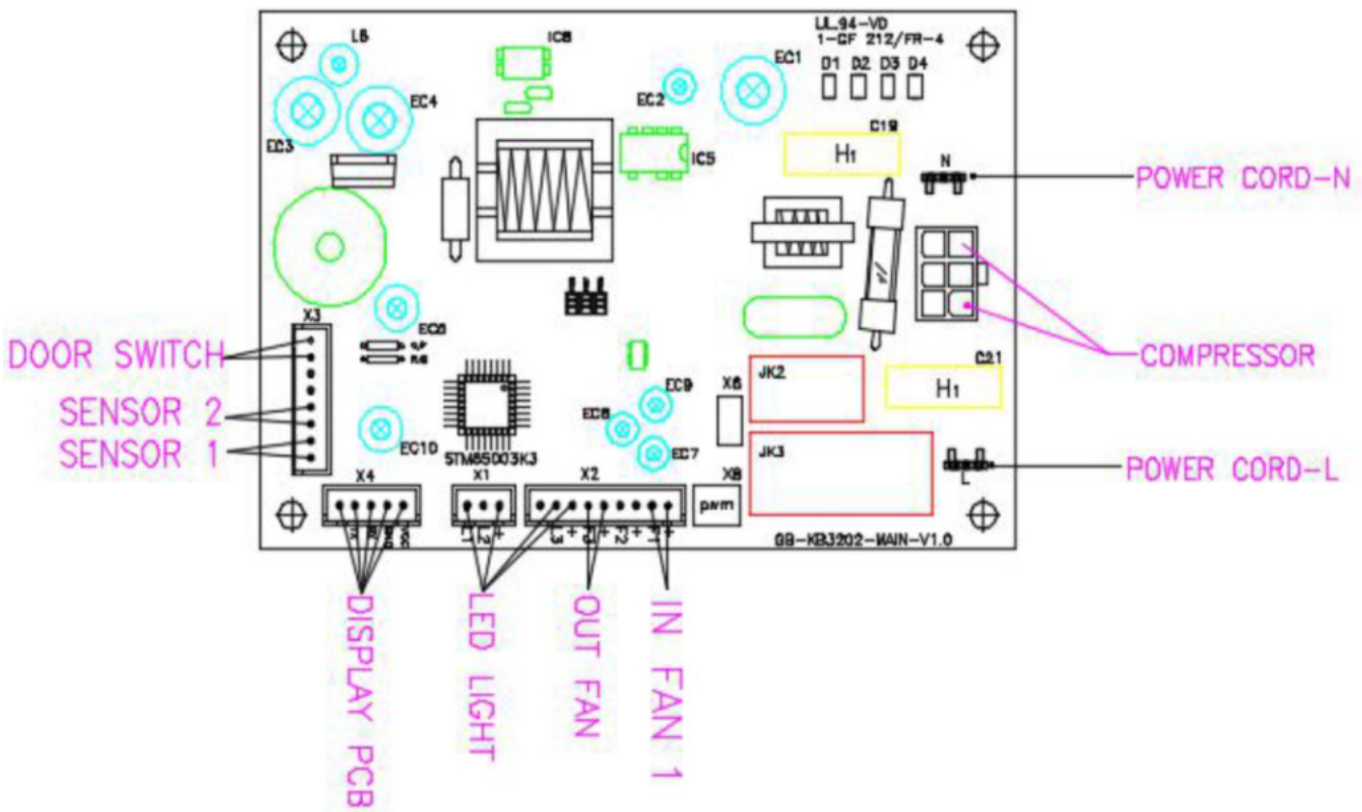


# PCB BOARD

## PCB DESCRIPTION

### MODELS:

- L3015U11WSG-LH / L3015U11WSG-RH
- L3015U11BSG-LH / L3015U11BSG-RH
- L3024U11MSG-LH / L3024U11MSG-RH
- L3024U11BSG-LH / L3024U11BSG-RH

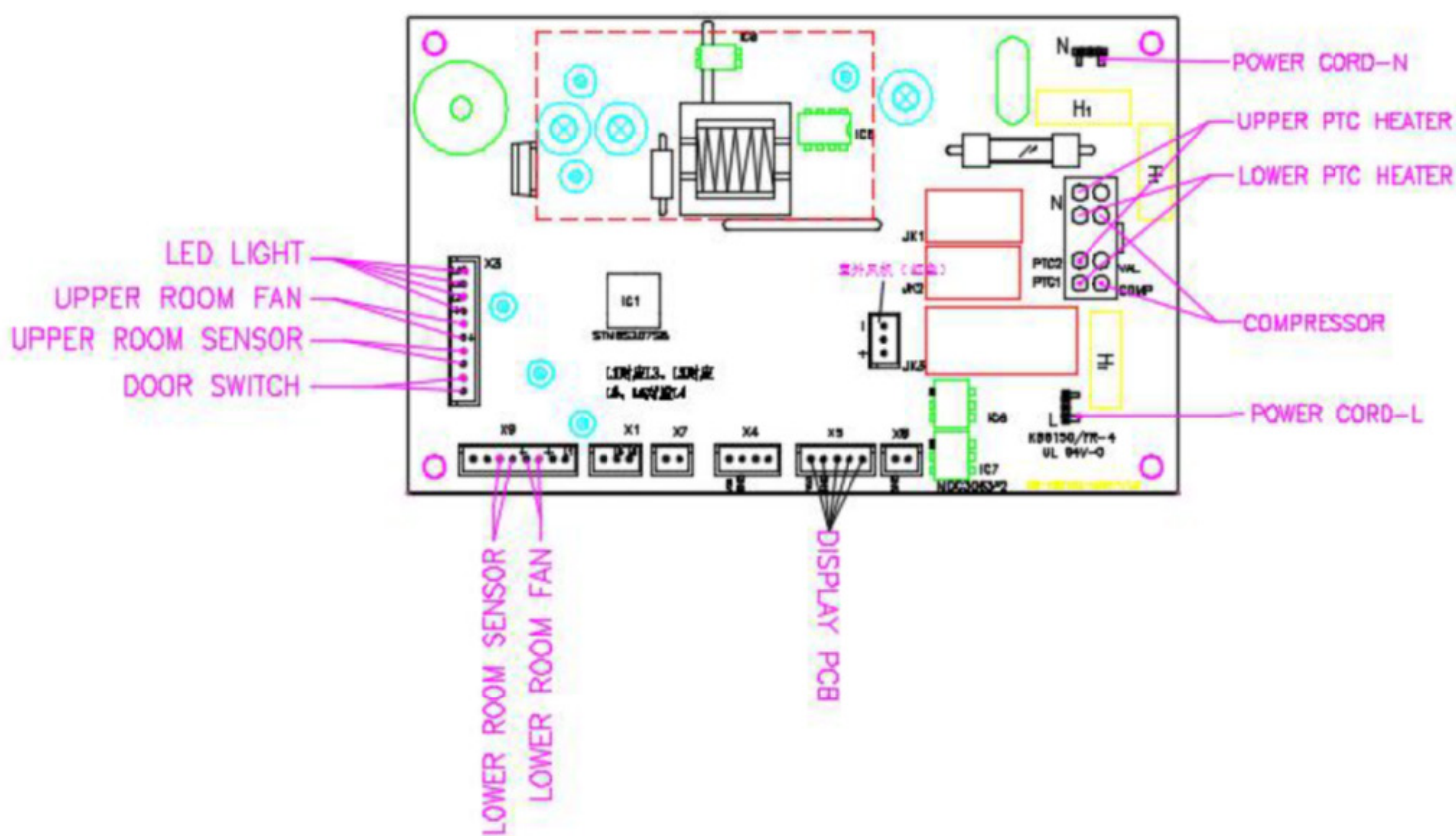


# PCB BOARD

## PCB DESCRIPTION

### MODELS:

L3024UI2WSG-LH / L3024UI2WSG-RH





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<b>DATE</b>	<b>REVISION NOTES</b>
10/26/2022	Initial Release