

# Safety Operation of Flammable Refrigerant

## Qualification requirement for installation and maintenance man

- All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry. If it needs other technician to maintain and repair the appliance, they should be supervised by the person who bears the qualification for using the flammable refrigerant.
- It can only be repaired by the method suggested by the equipments manufacturer.

## Installation notes

- The air conditioner is not allowed to use in a room that has running fire (such as fire source, working coal gas ware, operating heater).
- It is not allowed to drill hole or burn the connection pipe.
- The air conditioner must be installed in a room that is larger than the minimum room area.  
The minimum room area is shown on the nameplate or following table a.
- Leak test is a must after installation.

table a - Minimum room area(m<sup>2</sup>)

Minimum room area( m <sup>2</sup> )	Charge amount (kg)	≤1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5
	floor location	4	14.5	16.8	19.3	22	24.8	27.8	31	34.3	37.8	41.5	45.4	49.4	53.6
window mounted	4	5.2	6.1	7	7.9	8.9	10	11.2	12.4	13.6	15	16.3	17.8	19.3	
wall mounted	4	4	4	4	4	4	4	4	4	4.2	4.6	5	5.5	6	
ceiling mounted	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

## Maintenance notes

- Check whether the maintenance area or the room area meet the requirement of the nameplate.  
— Its only allowed to be operated in the rooms that meet the requirement of the nameplate.
- Check whether the maintenance area is well-ventilated.  
— The continuous ventilation status should be kept during the operation process.
- Check whether there is fire source or potential fire source in the maintenance area.  
— The naked flame is prohibited in the maintenance area; and the “no smoking” warning board should be hanged.
- Check whether the appliance mark is in good condition.  
— Replace the vague or damaged warning mark.

## Welding

- If you should cut or weld the refrigerant system pipes in the process of maintaining, please follow the steps as below:
  - a. Shut down the unit and cut power supply
  - b. Eliminate the refrigerant
  - c. Vacuuming
  - d. Clean it with N<sub>2</sub> gas
  - e. Cutting or welding
  - f. Carry back to the service spot for welding
- Make sure that there isnt any naked flame near the outlet of the vacuum pump and its well-ventilated.
- The refrigerant should be recycled into the specialized storage tank.

## Filling the refrigerant

- Use the refrigerant filling appliances specialized for R32. Make sure that different kinds of refrigerant wont contaminate with each other.
- The refrigerant tank should be kept upright at the time of filling refrigerant.
- Stick the label on the system after filling is finished (or havent finished).
- Dont overfilling.
- After filling is finished, please do the leakage detection before test running; another time of leak detection should be done when its removed.

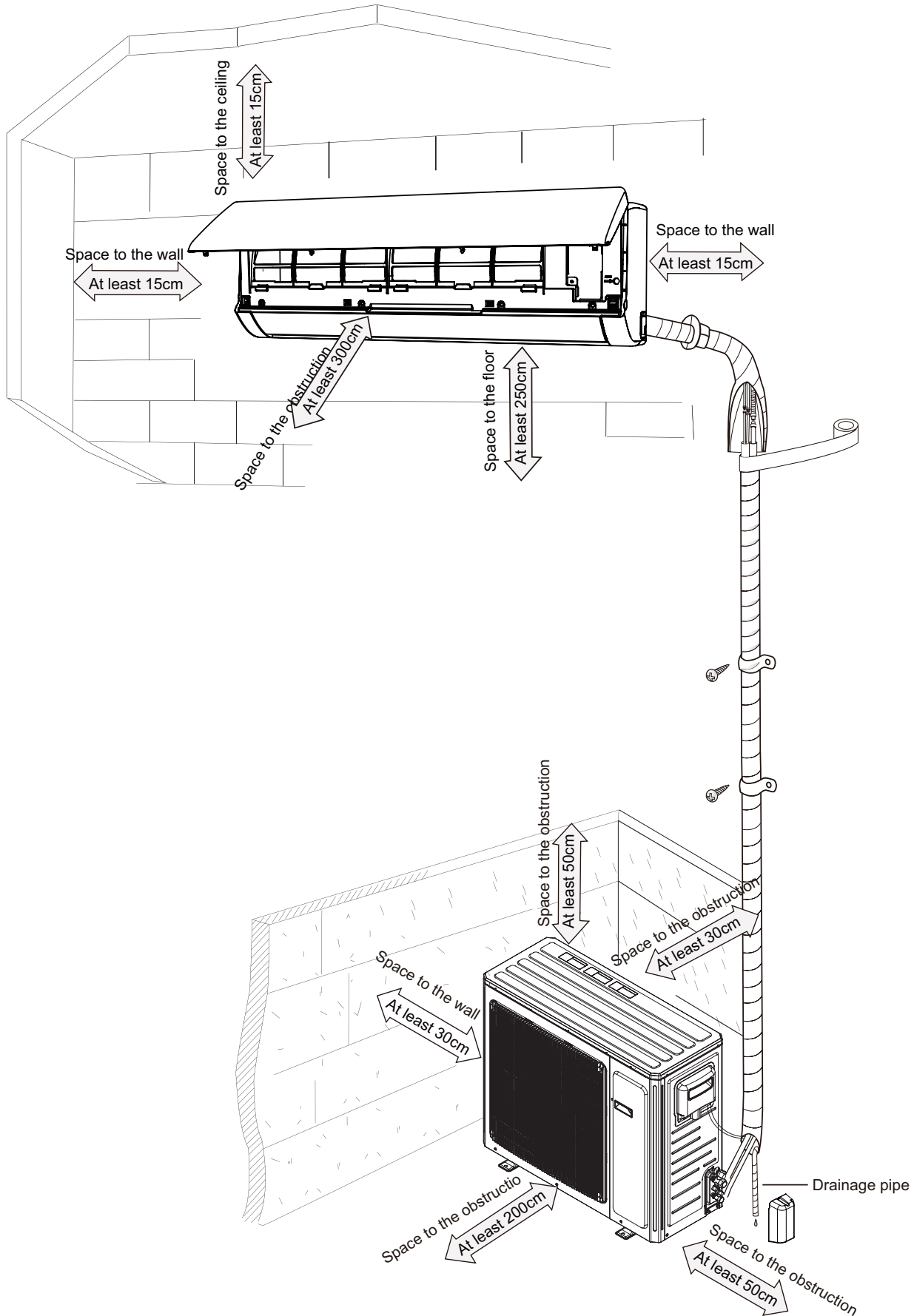
## Safety instructions for transportation and storage

- Please use the flammable gas detector to check before unload and open the container.
- No fire source and smoking.
- According to the local rules and laws.



# 8. Installation

## 8.1 Installation Dimension Diagram







## 8.2 Installation Parts-checking

No.	Name	No.	Name
1	Indoor unit	8	Sealing gum
2	Outdoor unit	9	Wrapping tape
3	Connection pipe	10	Support of outdoor unit
4	Drainage pipe	11	Fixing screw
5	Wall-mounting frame	12	Drainage plug(cooling and heating unit)
6	Connecting cable(power cord)	13	Owners manual, remote controller
7	Wall pipe		

### ⚠ Note:

- 1.Please contact the local agent for installation.
- 2.Dont use unqualified power cord.

## 8.3 Selection of Installation Location

### 1. Basic Requirement:

Installing the unit in the following places may cause malfunction. If it is unavoidable, please consult the local dealer:

- (1) The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.
- (2) The place with high-frequency devices (such as welding machine, medical equipment).
- (3) The place near coast area.
- (4) The place with oil or fumes in the air.
- (5) The place with sulfureted gas.
- (6) Other places with special circumstances.
- (7) The appliance shall not be installed in the laundry.
- (8) It's not allowed to be installed on the unstable or motive base structure (such as truck) or in the corrosive environment (such as chemical factory).

### 2. Indoor Unit:

- (1) There should be no obstruction near air inlet and air outlet.
- (2) Select a location where the condensation water can be dispersed easily and wont affect other people.
- (3) Select a location which is convenient to connect the outdoor unit and near the power socket.
- (4) Select a location which is out of reach for children.
- (5) The location should be able to withstand the weight of indoor unit and wont increase noise and vibration.
- (6) The appliance must be installed 2.5m above floor.
- (7) Dont install the indoor unit right above the electric appliance.
- (8) Please try your best to keep way from fluorescent lamp.

### 3. Outdoor Unit:

- (1) Select a location where the noise and outflow air emitted by the outdoor unit will not affect neighborhood.
- (2) The location should be well ventilated and dry, in which the outdoor unit wont be exposed directly to sunlight or strong wind.
- (3) The location should be able to withstand the weight of outdoor unit.
- (4) Make sure that the installation follows the requirement of installation dimension diagram.
- (5) Select a location which is out of reach for children and far away from animals or plants.If it is unavoidable, please add fence for safety purpose.

## 8.4 Requirements for electric connection

### 1. Safety Precaution

- (1) Must follow the electric safety regulations when installing the unit.
- (2) According to the local safety regulations, use qualified power supply circuit and air switch.
- (3) Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring may result in electric shock,fire hazard or malfunction. Please install proper power supply cables before using the air conditioner.
- (4) Properly connect the live wire, neutral wire and grounding wire of power socket.
- (5) Be sure to cut off the power supply before proceeding any work related to electricity and safety.
- (6) Do not put through the power before finishing installation.
- (7) If the supply cord is damaged,it must be replaced by the manufacturer,its service agent or similarly qualified persons in order to avoid a hazard.
- (8) The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- (9) The appliance shall be installed in accordance with national wiring regulations.
- (10) Appliance shall be installed, operated and stored in a room with a floor area larger than  $Xm^2$ (Please refer to table "a" in section of " Safety Operation of Inflammable Refrigerant" for Space X.)



Please notice that the unit is filled with flammable gas R32. Inappropriate treatment of the unit involves the risk of severe damages of people and material. Details to this refrigerant are found in chapter "refrigerant".

### 2. Grounding Requirement:

- (1) The air conditioner is first class electric appliance. It must be properly grounding with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
- (2) The yellow-green wire in air conditioner is grounding wire, which Can't be used for other purposes.
- (3) The grounding resistance should comply with national electric safety regulations.
- (4) The appliance must be positioned so that the plug is accessible.
- (5) An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- (6) Including an air switch with suitable capacity, please note the following table. Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload. (Caution: please do not use the fuse only for protect the circuit)

Air-conditioner	Air switch capacity
09/12K	16A
18/24K	25A

## 8.5 Installation of Indoor Unit

### 1. Choosing Installation location

Recommend the installation location to the client and then confirm it with the client.

### 2. Install Wall-mounting Frame

- (1) Hang the wall-mounting frame on the wall; adjust it in horizontal position with the level meter and then point out the screw fixing holes on the wall.

(2) Drill the screw fixing holes on the wall with impact drill (the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.

(3) Fix the wall-mounting frame on the wall with tapping screws (ST4.2X25TA) and then check if the frame is firmly installed by pulling the frame. If the plastic expansion particle is loose, please drill another fixing hole nearby.

### 3. Install Wall-mounting Frame

(1) Choose the position of piping hole according to the direction of outlet pipe. The position of piping hole should be a little lower than the wall-mounted frame.(As show in Fig.1)

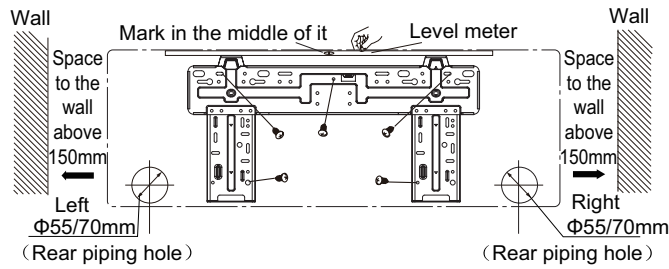


Fig.1

(2) Open a piping hole with the diameter of Φ55/70mm on the selected outlet pipe position. In order to drain smoothly, slant the piping hole on the wall slightly downward to the outdoor side with the gradient of 5-10°. (As show in Fig.2)

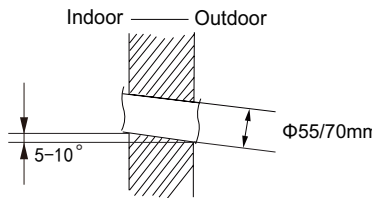


Fig.2

#### ⚠ Note:

- (1) Pay attention to dust prevention and take relevant safety measures when opening the hole.
- (2) The plastic expansion particles are not provided and should be bought locally.

### 4. Outlet Pipe

(1) The pipe can be led out in the direction of right, rear right, left or rear left.(As show in Fig.3)

(2) When selecting leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.(As show in Fig.4)

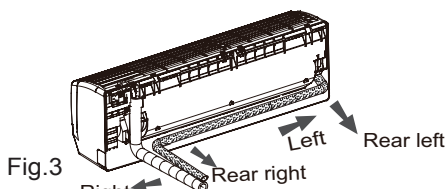


Fig.3

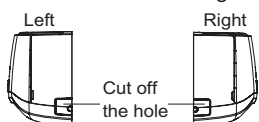


Fig.4

### 5. Connect the Pipe of Indoor Unit

(1) Aim the pipe joint at the corresponding bellmouth.(As show in Fig.5)

(2) Pretightening the union nut with hand.

(3) Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.(As show in Fig.6)

(4) Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape.(As show in Fig.7)

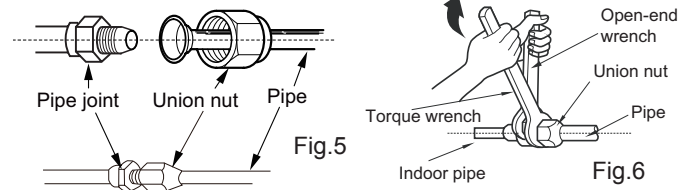


Fig.5

Fig.6

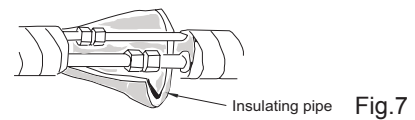


Fig.7

Refer to the following table for wrench moment of force:

Hex nut diameter(mm)	Tightening torque(N·m)
Φ6	15~20
Φ9.52	30~40
Φ12	45~55
Φ16	60~65
Φ19	70~75

### 6. Install Drain Hose

(1) Connect the drain hose to the outlet pipe of indoor unit.(As show in Fig.8)

(2) Bind the joint with tape.(As show in Fig.9)

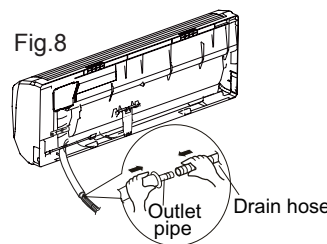


Fig.8

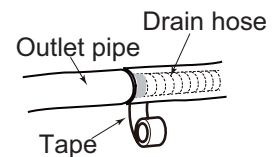


Fig.9

#### ⚠ Note:

- (1) Add insulating pipe in the indoor drain hose in order to prevent condensation.
- (2) The plastic expansion particles are not provided. (As show in Fig.10)

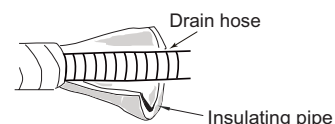


Fig.10

### 7. Connect Wire of Indoor Unit

(1) Open the panel, remove the screw on the wiring cover and then take down the cover.(As show in Fig.11)

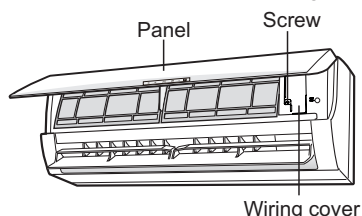


Fig.11

(2) Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side.(As show in Fig.12)

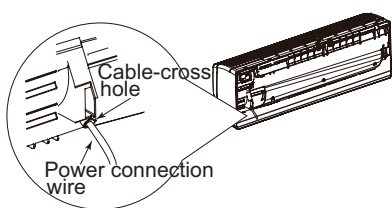


Fig.12

(3) Remove the wire clip; connect the power connection wire and signal control wire to the wiring terminal according to the color; tighten the screw and then fix them with wire clip.(As show in Fig.13)

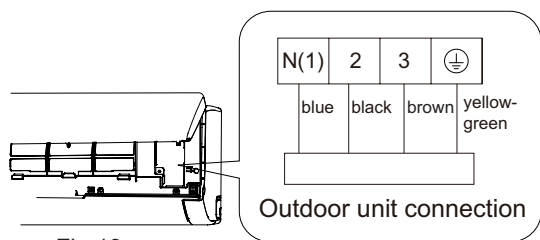


Fig.13

Note: the wiring connect is for reference only, please refer to the actual one.

(4) Put wiring cover back and then tighten the screw.  
 (5) Close the panel.

#### ⚠ Note:

- (1) All wires of indoor unit and outdoor unit should be connected by a professional.
- (2) If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.
- (3) For the air conditioner with plug, the plug should be reachable after finishing installation.
- (4) For the air conditioner without plug, an air switch must be installed in the line. The air switch should be all-pole parting and the contact parting distance should be more than 3mm.

### 8. Bind up Pipe

- (1) Bind up the connection pipe, power cord and drain hose with the band.(As show in Fig.14)
- (2) Reserve a certain length of drain hose and power cord for installation when binding to a certain degree, separate the indoor power and then separate the drain hose.(As show in Fig.15)
- (3) Bind them evenly.
- (4) The liquid pipe and gas pipe should be bound separately at the end.

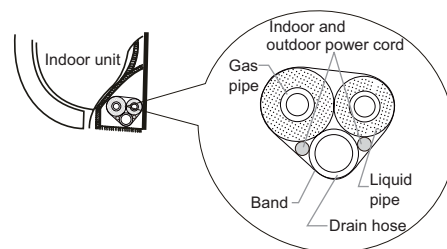


Fig.14

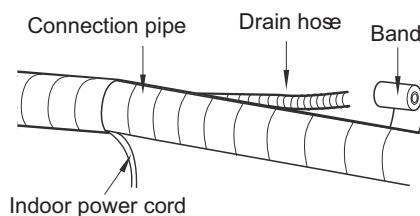


Fig.15

#### ⚠ Note:

- (1) The power cord and control wire Can't be crossed or winding.
- (2) The drain hose should be bound at the bottom.

### 9. Hang the Indoor Unit

- (1) Put the bound pipes in the wall pipe and then make them pass through the wall hole.
- (2) Hang the indoor unit on the wall-mounting frame.
- (3) Stuff the gap between pipes and wall hole with sealing gum.
- (4) Fix the wall pipe.(As show in Fig.16)
- (5) Check if the indoor unit is installed firmly and closed to the wall.(As show in Fig.17)

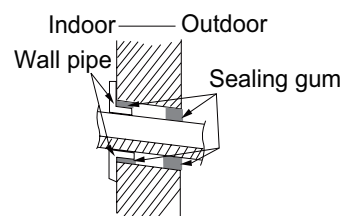
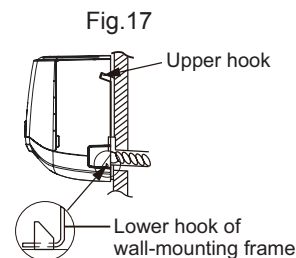


Fig.16



#### ⚠ Note:

Do not bend the drain hose too excessively in order to prevent blocking.

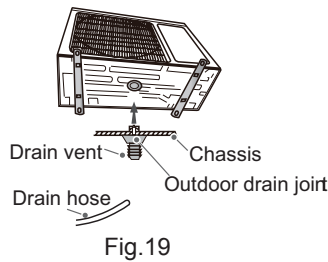
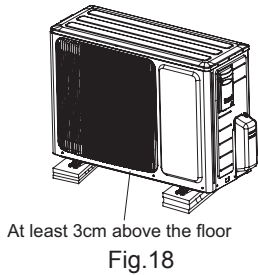
## 8.6 Installation of Outdoor Unit

### 1. Fix the Support of Outdoor Unit(Select it according to the actual installation situation)

- (1) Select installation location according to the house structure.
- (2) Fix the support of outdoor unit on the selected location with expansion screws.

**⚠ Note:**

- (1) Take sufficient protective measures when installing the outdoor unit.
- (2) Make sure the support can withstand at least four times the unit weight.
- (3) The outdoor unit should be installed at least 3cm above the floor in order to install drain joint.(As show in Fig.18)
- (4) For the unit with cooling capacity of 2300W~5000W, 6 expansion screws are needed; for the unit with cooling capacity of 6000W~8000W, 8 expansion screws are needed; for the unit with cooling capacity of 10000W~16000W, 10 expansion screws are needed.

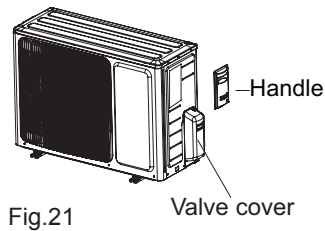
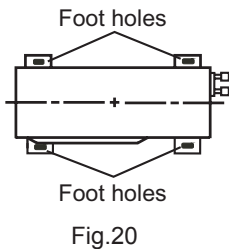


### 2. Install Drain Joint(Only for cooling and heating unit)

- (1) Connect the outdoor drain joint into the hole on the chassis.
  - (2) Connect the drain hose into the drain vent.
- (As show in Fig.19)

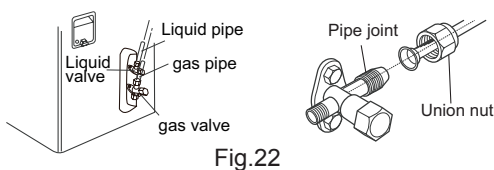
### 3. Fix Outdoor Unit

- (1) Place the outdoor unit on the support.
- (2) Fix the foot holes of outdoor unit with bolts. (As show in Fig.20)



### 4. Connect Indoor and Outdoor Pipes

- (1) Remove the screw on the handle and valve cover of outdoor unit and then remove the handle and valve cover.(As show in Fig.21)
- (2) Remove the screw cap of valve and aim the pipe joint at the bellmouth of pipe.(As show in Fig.22)



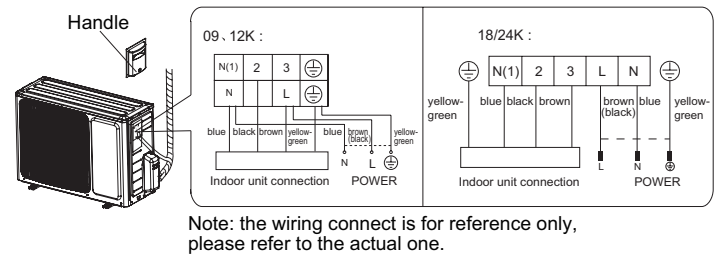
- (3) Pretightening the union nut with hand.
- (4) Tighten the union nut with torque wrench .

Refer to the following table for wrench moment of force :

Hex nut diameter(mm)	Tightening torque(N·m)
Φ6	15~20
Φ9.52	30~40
Φ12	45~55
Φ16	60~65
Φ19	70~75

### 5. Connect Outdoor Electric Wire

- (1) Remove the wire clip; connect the power connection wire and signal control wire (only for cooling and heating unit) to the wiring terminal according to the color; fix them with screws.(As show in Fig.23)



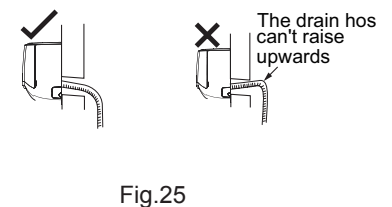
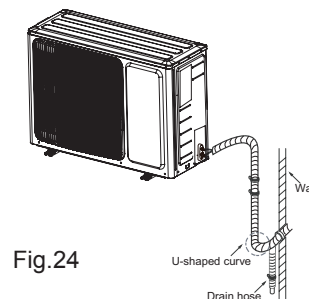
- (2) Fix the power connection wire and signal control wire with wire clip (only for cooling and heating unit).

**⚠ Note:**

- (1) After tightening the screw, pull the power cord slightly to check if it is firm.
- (2) Never cut the power connection wire to prolong or shorten the distance.

### 6. Neaten the Pipes

- (1) The pipes should be placed along the wall, bent reasonably and hidden possibly. Min. semidiameter of bending the pipe is 10cm.
- (2) If the outdoor unit is higher than the wall hole, you must set a U-shaped curve in the pipe before pipe goes into the room, in order to prevent rain from getting into the room.(As show in Fig.24)





**⚠ Note:**

- (1) The through-wall height of drain hose shouldnt be higher than the outlet pipe hole of indoor unit.(As show in Fig.25)
- (2) Slant the drain hose slightly downwards. The drain hose Can't be curved, raised and fluctuant, etc.(As show in Fig.26)
- (3) The water outlet Can't be placed in water in order to drain smoothly.(As show in Fig.27)

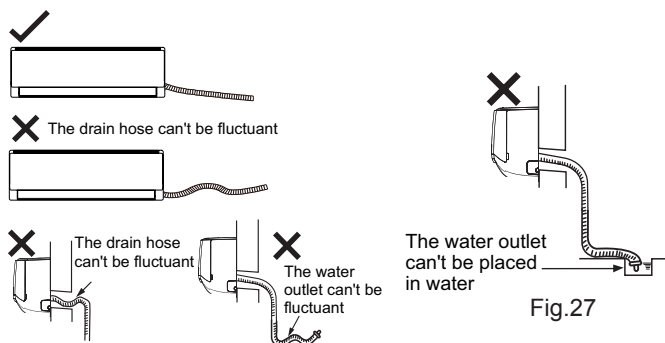


Fig.26

Fig.27

## 8.7 Vacuum Pumping and Leak Detection

### 1. Use Vacuum Pump

- (1) Remove the valve caps on the liquid valve and gas valve and the nut of refrigerant charging vent.
- (2) Connect the charging hose of piezometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.
- (3) Open the piezometer completely and operate for 10-15min to check if the pressure of piezometer remains in -0.1MPa.
- (4) Close the vacuum pump and maintain this status for 1-2min to check if the pressure of piezometer remains in -0.1MPa. If the pressure decreases, there may be leakage.
- (5) Remove the piezometer, open the valve core of liquid valve and gas valve completely with inner hexagon spanner.
- (6) Tighten the screw caps of valves and refrigerant charging vent.(As show in Fig.28)

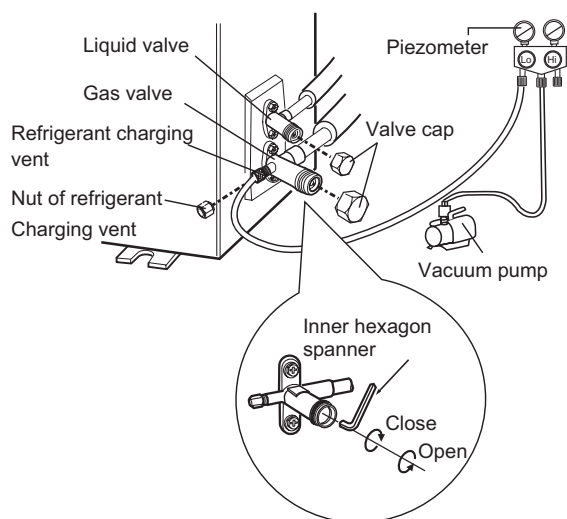


Fig.28

### 2. Leakage Detection

- (1) With leakage detector:  
Check if there is leakage with leakage detector.
- (2) With soap water:  
If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming out of this position, theres a leakage.

## 8.8 Check after Installation and Test Operation

### 1. Check after Installation

Check according to the following requirement after finishing installation.

NO.	Items to be checked	Possible malfunction
1	Has the unit been installed firmly?	The unit may drop, shake or emit noise.
2	Have you done the refrigerant leakage test?	It may cause insufficient cooling (heating) capacity.
3	Is heat insulation of pipeline sufficient?	It may cause condensation and water dripping.
4	Is water drained well?	It may cause condensation and water dripping.
5	Is the voltage of power supply according to the voltage marked on the nameplate?	It may cause malfunction or damage the parts.
6	Is electric wiring and pipeline installed correctly?	It may cause malfunction or damage the parts.
7	Is the unit grounded securely?	It may cause electric leakage.
8	Does the power cord follow the specification?	It may cause malfunction or damage the parts.
9	Is there any obstruction in air inlet and air outlet?	It may cause insufficient cooling (heating) capacity.
10	The dust and sundries caused during installation are removed?	It may cause malfunction or damaging the parts.
11	The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling (heating) capacity.
12	Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling (heating) capacity or waster electricity.

### 2. Test Operation

- (1) Preparation of test operation
  - The client approves the air conditioner installation.
  - Specify the important notes for air conditioner to the client.
- (2) Method of test operation
  - Put through the power, press ON/OFF button on the remote controller to start operation.
  - Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
  - If the ambient temperature is lower than 16°C , the air conditioner Can't start cooling.

## 9. Maintenance

### 9.1 Error Code List

NO.	Malfunction Name	Display Method of Indoor Unit			A/C status	Possible Causes	
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator			Heating Indicator
1	High pressure protection of system	E1				During cooling and drying operation, except indoor fan operates, all loads stop operation. During heating operation, the complete unit stops.	Possible reasons: 1. Refrigerant was superabundant; 2. Poor heat exchange (including filth blockage of heat exchanger and bad radiating environment ); Ambient temperature is too high.
2	Antifreezing protection	E2				During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates.	1. Poor air-return in indoor unit; 2. Fan speed is abnormal; 3. Evaporator is dirty.
3	Refrigerant leakage protection	F0				The Dual-8 Code Display will show F0 and the complete unit stops.	1.Refrigerant leakage; 2.Indoor evaporator temperature sensor works abnormally; 3.The unit has been plugged up somewhere.
4	High discharge temperature protection of compressor	E4				During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates. During heating operation, all loads stop.	Please refer to the malfunction analysis (discharge protection, overload).
5	Overcurrent protection	E5				During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates. During heating operation, all loads stop.	1. Supply voltage is unstable; 2. Supply voltage is too low and load is too high; 3. Evaporator is dirty.
6	Communication Malfunction	E6				During cooling operation, compressor stops while indoor fan motor operates. During heating operation, the complete unit stops.	Refer to the corresponding malfunction analysis.
7	High temperature resistant protection	E8				During cooling operation: compressor will stop while indoor fan will operate. During heating operation, the complete unit stops.	Refer to the malfunction analysis (overload, high temperature resistant).
8	EEPROM malfunction	EE				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1
9	Limit/decrease frequency due to high temperature of module	EU				All loads operate normally, while operation frequency for compressor is decreased	Discharging after the complete unit is de-energized for 20mins, check whether the thermal grease on IPM Module of outdoor control panel AP1 is sufficient and whether the radiator is inserted tightly. If its no use, please replace control panel AP1.
10	Malfunction protection of jumper cap	C5				Wireless remote receiver and button are effective, but can not dispose the related command	1. No jumper cap insert on mainboard. 2. Incorrect insert of jumper cap. 3. Jumper cap damaged. 4. Abnormal detecting circuit of mainboard.

NO.	Malfunction Name	Display Method of Indoor Unit			A/C status	Possible Causes	
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator			Heating Indicator
11	Gathering refrigerant	Fo				When the outdoor unit receive signal of Gathering refrigerant ,the system will be forced to run under cooling mode for gathering refrigerant	Nominal cooling mode
12	Indoor ambient temperature sensor is open/short circuited	F1				During cooling and drying operation, indoor unit operates while other loads will stop; during heating operation, the complete unit will stop operation.	<ol style="list-style-type: none"> <li>1. Loosening or bad contact of indoor ambient temp. sensor and mainboard terminal.</li> <li>2. Components in mainboard fell down leads short circuit.</li> <li>3. Indoor ambient temp. sensor damaged.(check with sensor resistance value chart)</li> <li>4. Mainboard damaged.</li> </ol>
13	Indoor evaporator temperature sensor is open/short circuited	F2				AC stops operation once reaches the setting temperature. Cooling, drying: internal fan motor stops operation while other loads stop operation; heating: AC stop operation	<ol style="list-style-type: none"> <li>1. Loosening or bad contact of Indoor evaporator temp. sensor and mainboard terminal.</li> <li>2. Components on the mainboard fall down leads short circuit.</li> <li>3. Indoor evaporator temp. sensor damaged.(check temp. sensor value chart for testing)</li> <li>4. Mainboard damaged.</li> </ol>
14	Outdoor ambient temperature sensor is open/short circuited	F3				During cooling and drying operating, compressor stops while indoor fan operates; During heating operation, the complete unit will stop operation	Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor)
15	Outdoor condenser temperature sensor is open/short circuited	F4				During cooling and drying operation, compressor stops while indoor fan will operate; During heating operation, the complete unit will stop operation.	Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor)
16	Outdoor discharge temperature sensor is open/short circuited	F5				During cooling and drying operation, compressor will sop after operating for about 3 mins, while indoor fan will operate; During heating operation, the complete unit will stop after operating for about 3 mins.	<ol style="list-style-type: none"> <li>1.Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor)</li> <li>2.The head of temperature sensor hasnt been inserted into the copper tube</li> </ol>
17	Limit/ decrease frequency due to overload	F6				All loads operate normally, while operation frequency for compressor is decreased	Refer to the malfunction analysis (overload, high temperature resistant)
18	Decrease frequency due to overcurrent	F8				All loads operate normally, while operation frequency for compressor is decreased	The input supply voltage is too low; System pressure is too high and overload



NO.	Malfunction Name	Display Method of Indoor Unit			A/C status	Possible Causes	
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator			Heating Indicator
19	Decrease frequency due to high air discharge	F9				All loads operate normally, while operation frequency for compressor is decreased	Overload or temperature is too high; Refrigerant is insufficient; Malfunction of electric expansion valve (EKV)
20	Limit/decrease frequency due to antifreezing	FH				All loads operate normally, while operation frequency for compressor is decreased	Poor air-return in indoor unit or fan speed is too low
21	Voltage for DC bus-bar is too high	PH				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	1. Measure the voltage of position L and N on wiring board (XT), if the voltage is higher than 265VAC, turn on the unit after the supply voltage is increased to the normal range. 2.If the AC input is normal, measure the voltage of electrolytic capacitor C on control panel (AP1), if its normal, theres malfunction for the circuit, please replace the control panel (AP1)
22	Voltage of DC bus-bar is too low	PL				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	1. Measure the voltage of position L and N on wiring board (XT), if the voltage is higher than 150VAC, turn on the unit after the supply voltage is increased to the normal range. 2.If the AC input is normal, measure the voltage of electrolytic capacitor C on control panel (AP1), if its normal, theres malfunction for the circuit, please replace the control panel (AP1)
23	Compressor Min frequency in test state	P0					Showing during min. cooling or min. heating test
24	Compressor rated frequency in test state	P1					Showing during nominal cooling or nominal heating test
25	Compressor maximum frequency in test state	P2					Showing during max. cooling or max. heating test

NO.	Malfunction Name	Display Method of Indoor Unit			A/C status	Possible Causes	
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator			Heating Indicator
26	Compressor intermediate frequency in test state	P3				Showing during middle cooling or middle heating test	
27	Overcurrent protection of phase current for compressor	P5			During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor).	
28	Charging malfunction of capacitor	PU			During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Refer to the part three—charging malfunction analysis of capacitor	
29	Malfunction of module temperature sensor circuit	P7			During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1	
30	Module high temperature protection	P8			During cooling operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	After the complete unit is de-energized for 20mins, check whether the thermal grease on IPM Module of outdoor control panel AP1 is sufficient and whether the radiator is inserted tightly. If its no use, please replace control panel AP1.	
31	Decrease frequency due to high temperature resistant during heating operation	H0			All loads operate normally, while operation frequency for compressor is decreased	Refer to the malfunction analysis (overload, high temperature resistant)	
32	Cold air prevention protection	E9				Not the error code. It's the status code for the operation.	
33	Overload protection for compressor	H3			During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	1. Wiring terminal OVC-COMP is loosened. In normal state, the resistance for this terminal should be less than 1ohm. 2.Refer to the malfunction analysis (discharge protection, overload)	

NO.	Malfunction Name	Display Method of Indoor Unit				A/C status	Possible Causes
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator	Heating Indicator		
34	System is abnormal	H4				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (overload, high temperature resistant)
35	IPM protection	H5				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor.
36	Internal motor (fan motor) do not operate	H6				Internal fan motor, external fan motor, compressor and electric heater stop operation,guide louver stops at present location.	<ol style="list-style-type: none"> <li>1. Bad contact of DC motor feedback terminal.</li> <li>2. Bad contact of DC motor control end.</li> <li>3. Fan motor is stalling.</li> <li>4. Motor malfunction.</li> <li>5. Malfunction of mainboard rev detecting circuit.</li> </ol>
37	Desynchronizing of compressor	H7				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor.
38	Outdoor DC fan motor malfunction	L3				Outdoor DC fan motor malfunction lead to compressor stop operation,	DC fan motor malfunction or system blocked or the connector loosed
39	power protection	L9				compressor stop operation and Outdoor fan motor will stop 30s latter , 3 minutes latter fan motor and compressor will restart	To protect the electrical components when detect high power
40	Indoor unit and outdoor unit doesn't match	LP				compressor and Outdoor fan motor can't work	Indoor unit and outdoor unit doesn't match
41	Failure start-up	LC				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis
42	Malfunction of detecting plate(WIFI)	JF				Loads operate normally, while the unit can't be normally controlled by APP.	<ol style="list-style-type: none"> <li>1.Main board of indoor unit is damaged;</li> <li>2.Detection board is damaged;</li> <li>3.The connection between indoor unit and detection board is not good;</li> </ol>

NO.	Malfunction Name	Display Method of Indoor Unit			A/C status	Possible Causes	
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)				
			Operation Indicator	Cool Indicator			Heating Indicator
43	Malfunction of phase current detection circuit for compressor	U1				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1
44	Malfunction of voltage dropping for DC bus-bar	U3				During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Supply voltage is unstable
45	Malfunction of complete units current detection	U5				During cooling and drying operation, the compressor will stop while indoor fan will operate; During heating operating, the complete unit will stop operation.	Theres circuit malfunction on outdoor units control panel AP1, please replace the outdoor units control panel AP1.
46	The four-way valve is abnormal	U7				If this malfunction occurs during heating operation, the complete unit will stop operation.	1.Supply voltage is lower than AC175V; 2.Wiring terminal 4V is loosened or broken; 3.4V is damaged, please replace 4V.
47	Zero-crossing malfunction of outdoor unit	U9				During cooling operation, compressor will stop while indoor fan will operate; during heating,the complete unit will stop operation.	Replace outdoor control panel AP1
48	Anti-freezing protection for evaporator	E2					Not the error code. It's the status code for the operation.
49	Defrosting				Heating indicator off for 0.5s and then blinks for 10s		Not the error code. It's the status code for the operation.
50	Undefined outdoor unit error	oE				Cool: compressor and outdoor fan stops operation, while indoor fan operates; Heat: compressor, outdoor fan and indoor fan stop operation.	1. Outdoor ambient temperature exceeds the operation range of unit (eg: less than -20oC or more than 60oC for cooling; more than 30oC for heating); 2. Failure startup of compressor? 3. Are wires of compressor not connected tightly? 4. Is compressor damaged? 5. Is main board damaged?

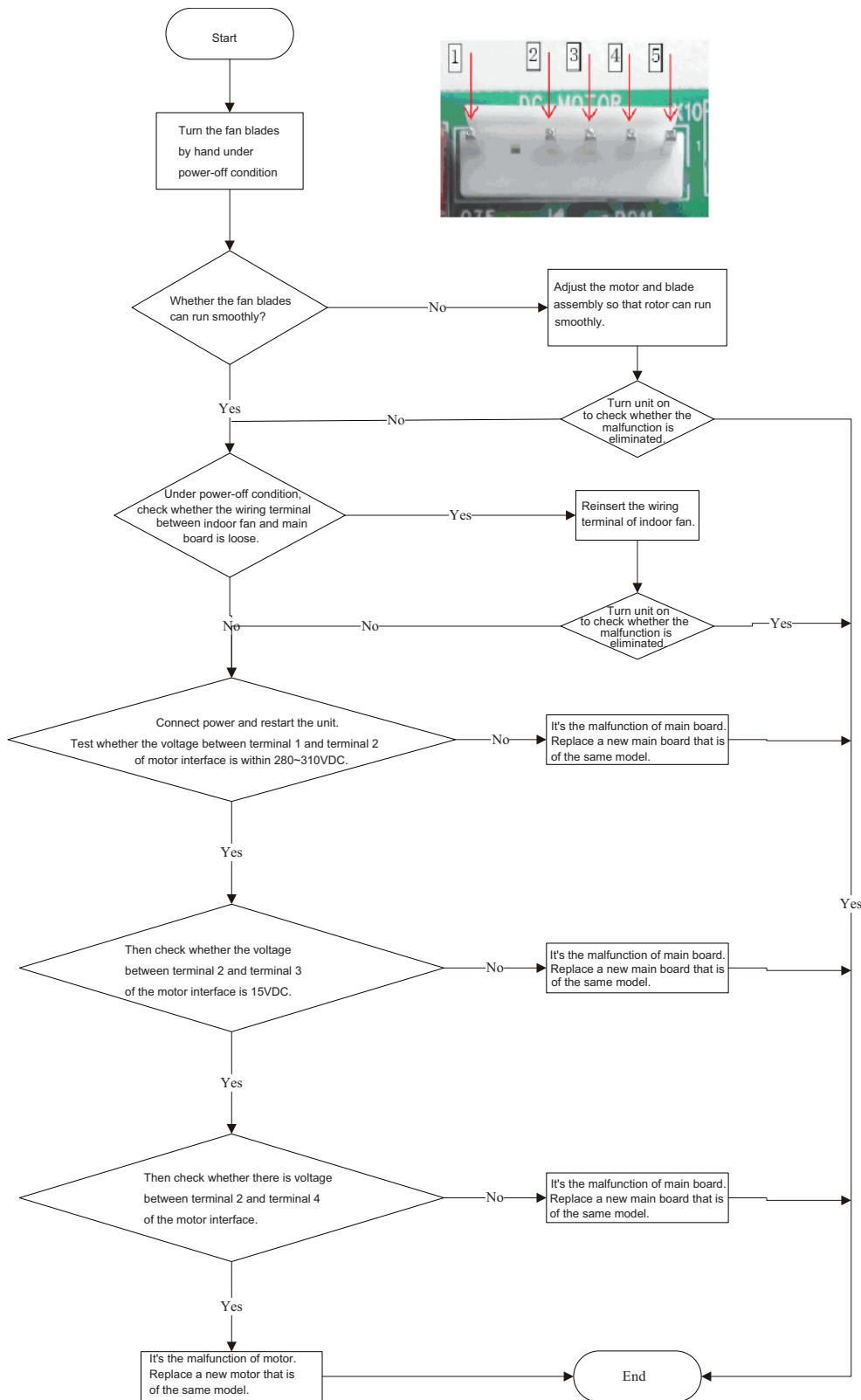


## 2. Malfunction of Blocked Protection of IDU Fan Motor H6

Main detection points:

- Smoothly Is the control terminal of PG motor connected tightly?
- Smoothly Is the feedback interface of PG motor connected tightly?
- The fan motor Can't operate?
- The motor is broken?
- Detection circuit of the mainboard is defined abnormal?

Malfunction diagnosis process:

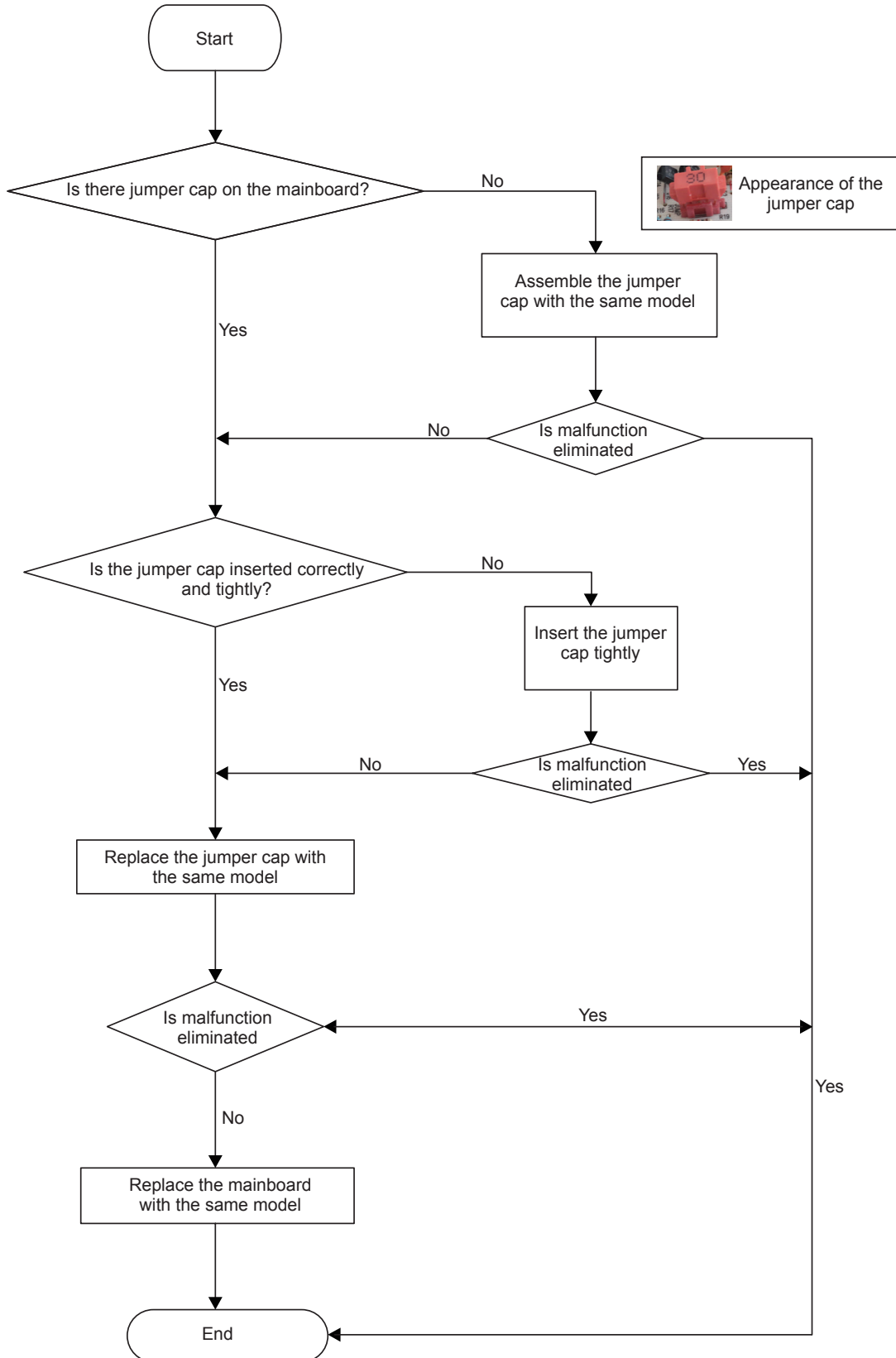


### 3. Malfunction of Protection of Jumper Cap C5

Main detection points:

- Is there jumper cap on the mainboard?
- Is the jumper cap inserted correctly and tightly?
- The jumper is broken?
- The motor is broken?
- Detection circuit of the mainboard is defined abnormal?

Malfunction diagnosis process:



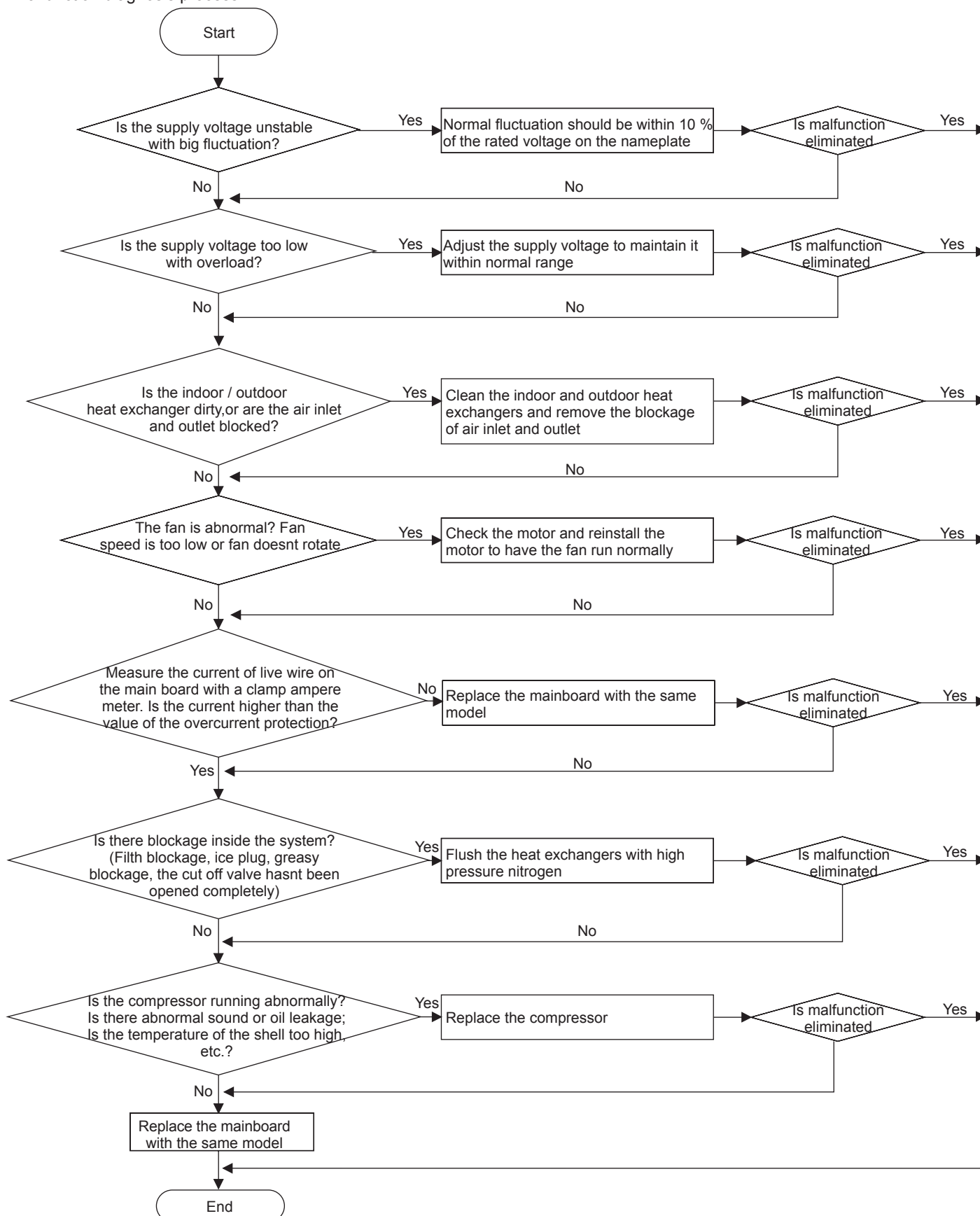


#### 4. Malfunction of Overcurrent Protection E5

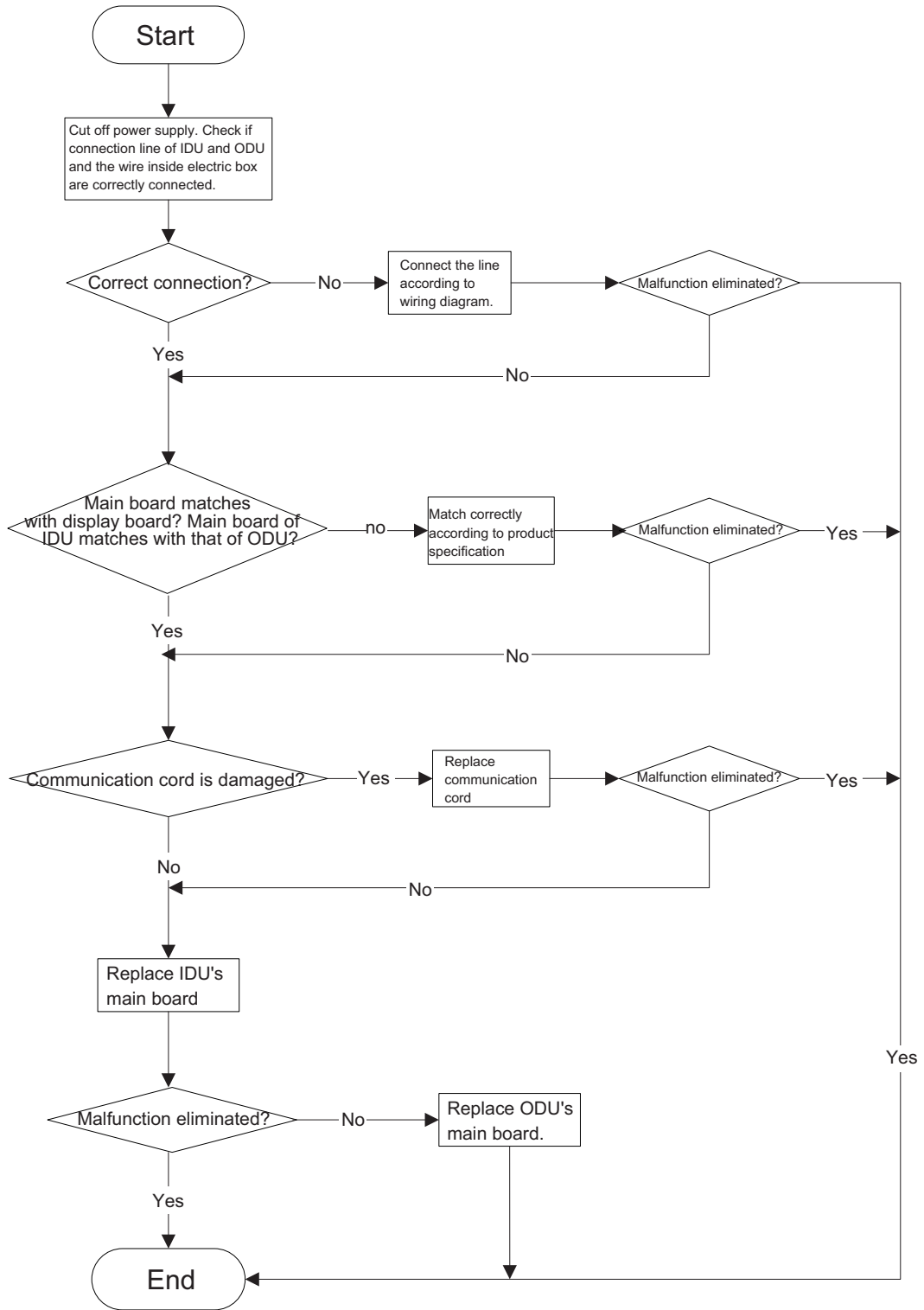
Main detection points:

- Is the supply voltage unstable with big fluctuation?
- Is the supply voltage too low with overload?
- Hardware trouble?

Malfunction diagnosis process:



### 5. Communication Malfunction E6

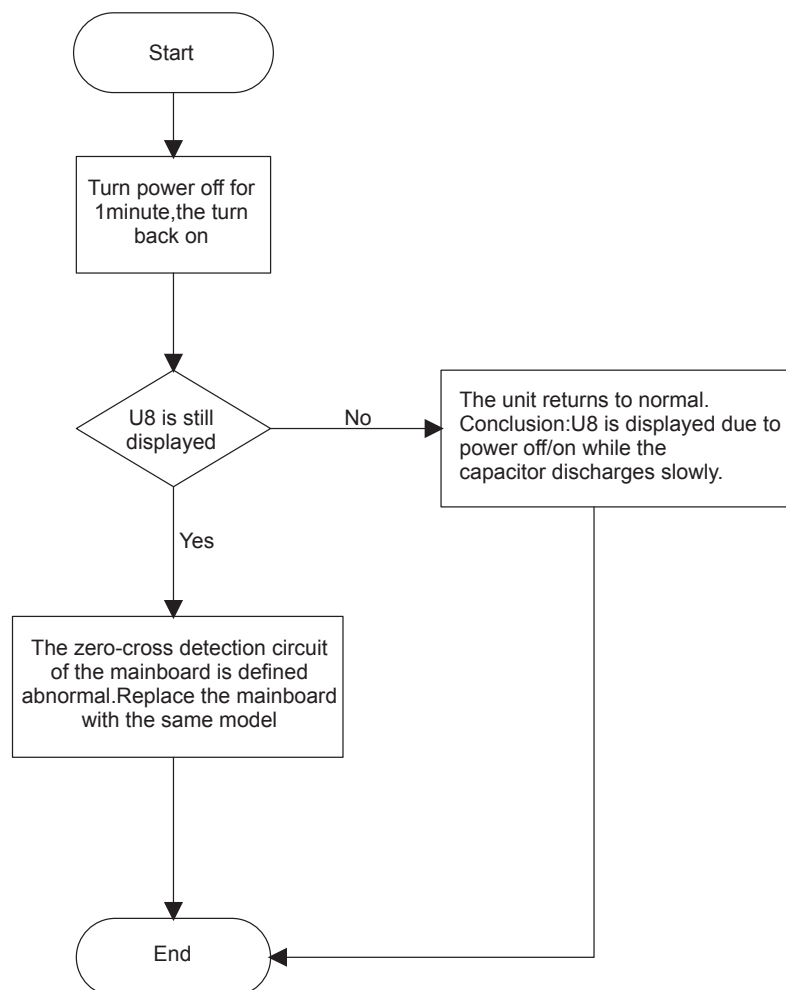


## 6. Malfunction of Zero-crossing Inspection Circuit Malfunction of the IDU Fan Motor U8

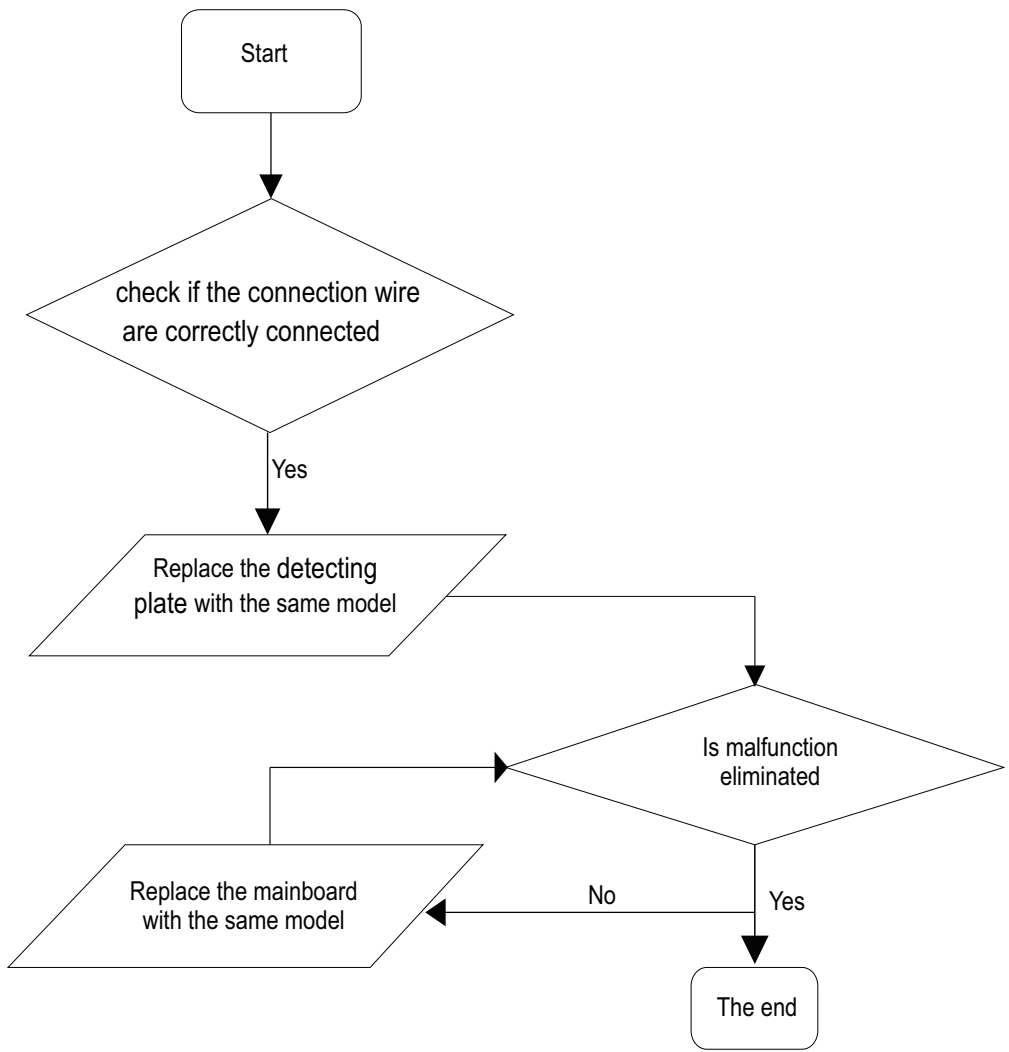
Main detection points:

- Instant energization after de-energization while the capacitor discharges slowly?
- The zero-cross detection circuit of the mainboard is defined abnormal?

Malfunction diagnosis process:



7. Malfunction of detecting plate(WIFI) JF

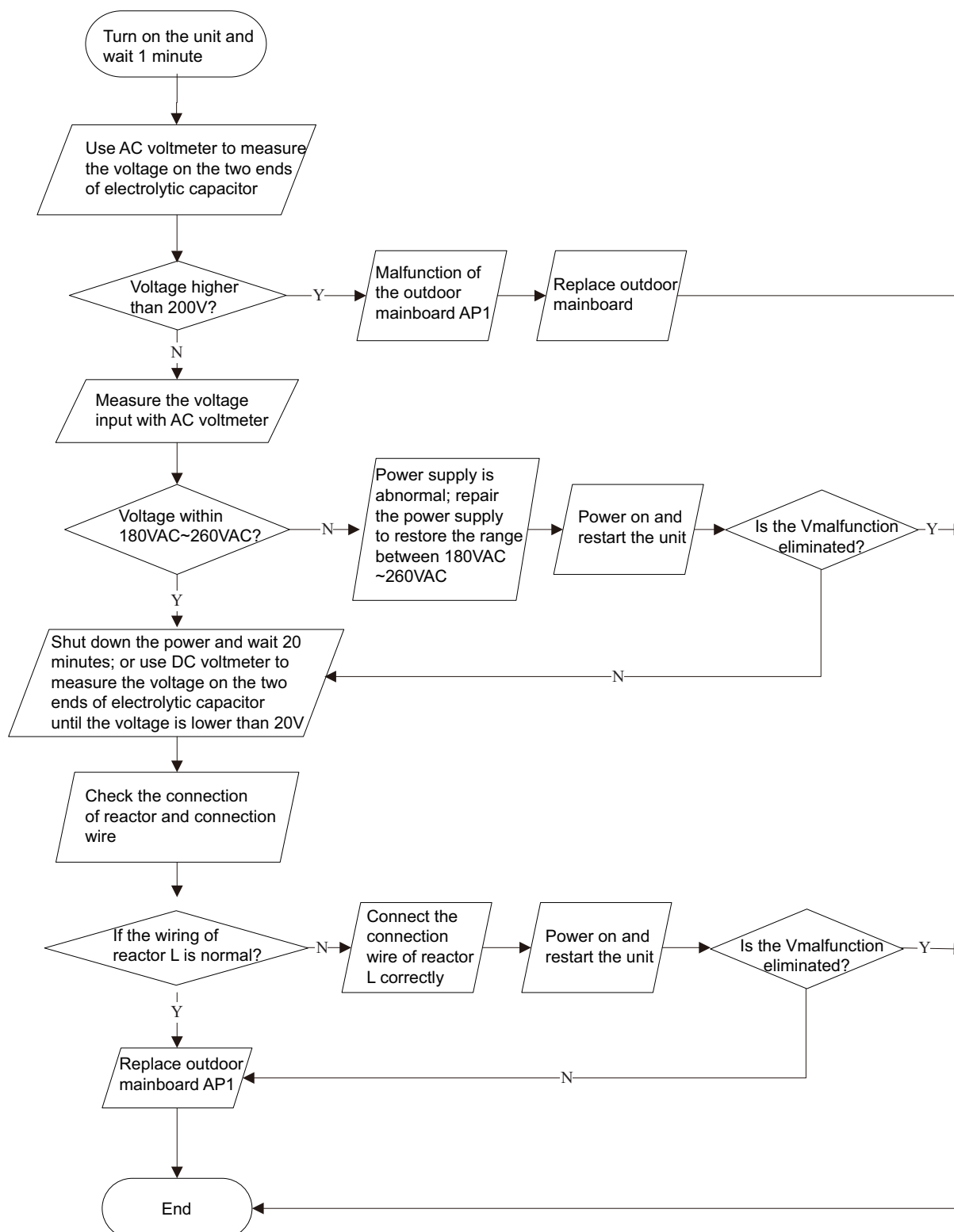


Outdoor Unit

1. Capacity charging malfunction (outdoor unit malfunction) (AP1 below means control board of outdoor unit)

Main detection points:

- Detect if the voltage of L and N terminal of XT wiring board is between 210VAC-240VAC by alternating voltage meter;
- Is reactor (L) well connected? Is connection wire loosened or pulled out? Is reactor (L) damaged?

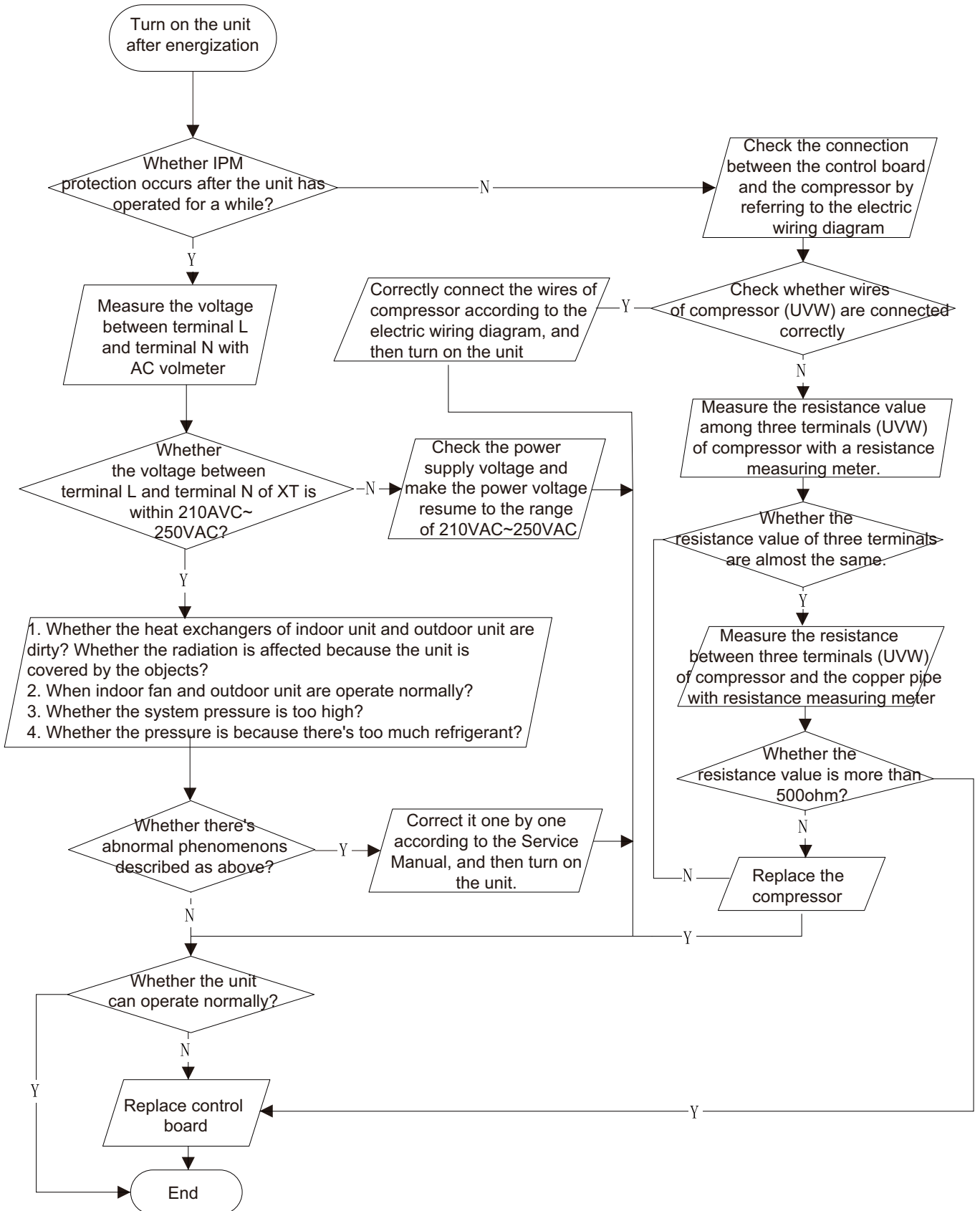


**2. IPM protection, phase current overcurrent (the control board as below indicates the control board of outdoor unit) H5/P5**

Mainly detect:

- (1) Compressor COMP terminal (2) voltage of power supply (3) compressor
- (4) Refrigerant-charging volume (5) air outlet and air inlet of outdoor/indoor unit

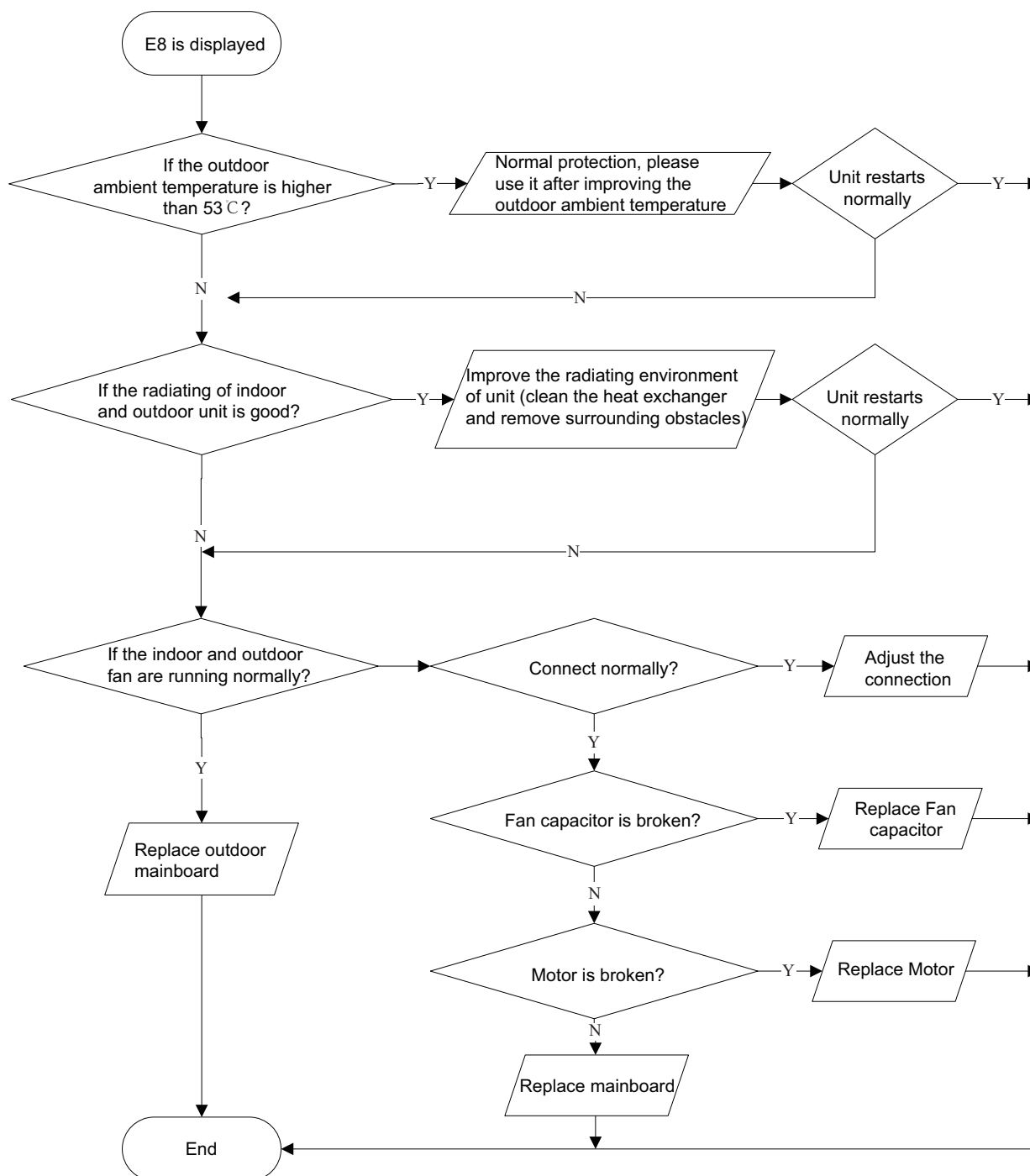
Troubleshooting:



### 3. High temperature and overload protection (E8)(AP1 below means control board of outdoor unit)

Main detection points:

- If the outdoor ambient temperature is in normal range;
- If the indoor and outdoor fan are running normally;
- If the radiating environment of indoor and outdoor unit is good.

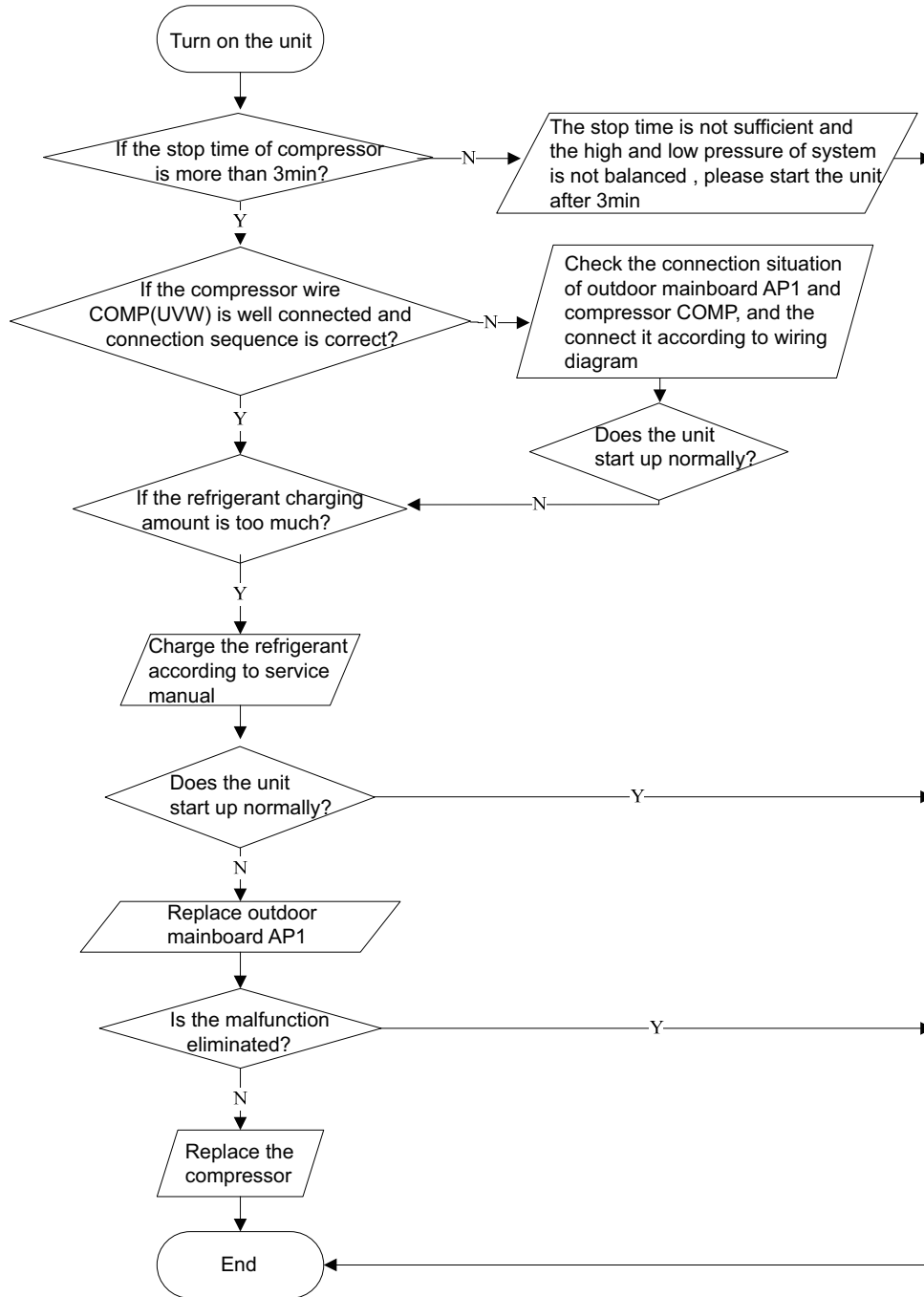




4. Start-up failure (LC) (AP1 below means control board of outdoor unit)

Main detection points:

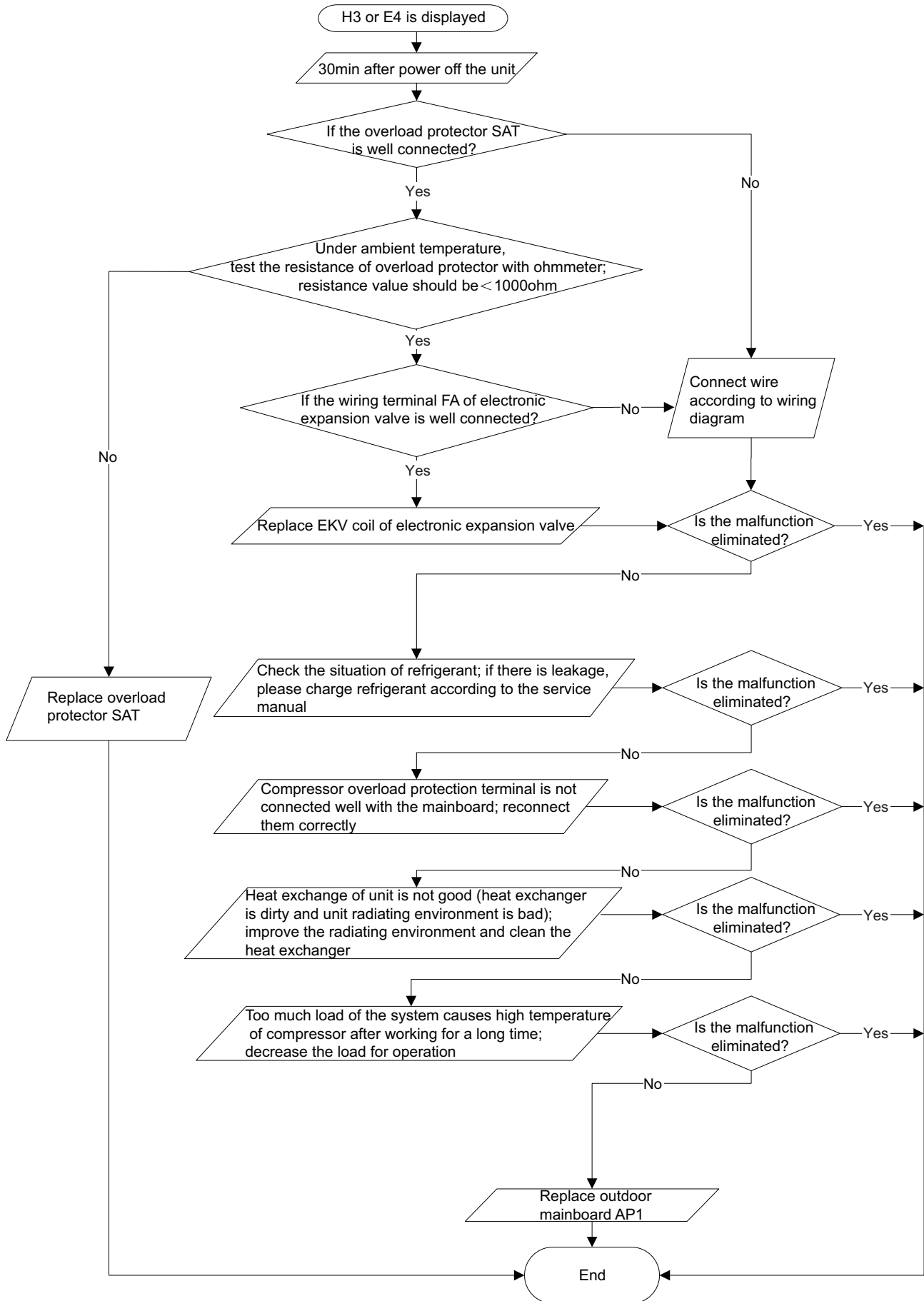
- If the compressor wiring is correct?
- If the stop time of compressor is sufficient?
- If the compressor is damaged?
- If the refrigerant charging amount is too much?



## 5. Overload and high discharge temperature malfunction

Main detection points:

- If the electronic expansion valve is connected well? Is the electronic expansion valve damaged?
- If the refrigerant is leaked?
- The compressor overload protection terminal is not connected well with the mainboard?
- If the overload protector is damaged?
- Heat exchange of unit is not good? (heat exchanger is dirty and unit radiating environment is bad)
- Too much load of the system causes high temperature of compressor after working for a long time?
- Malfunction of discharge temperature sensor?

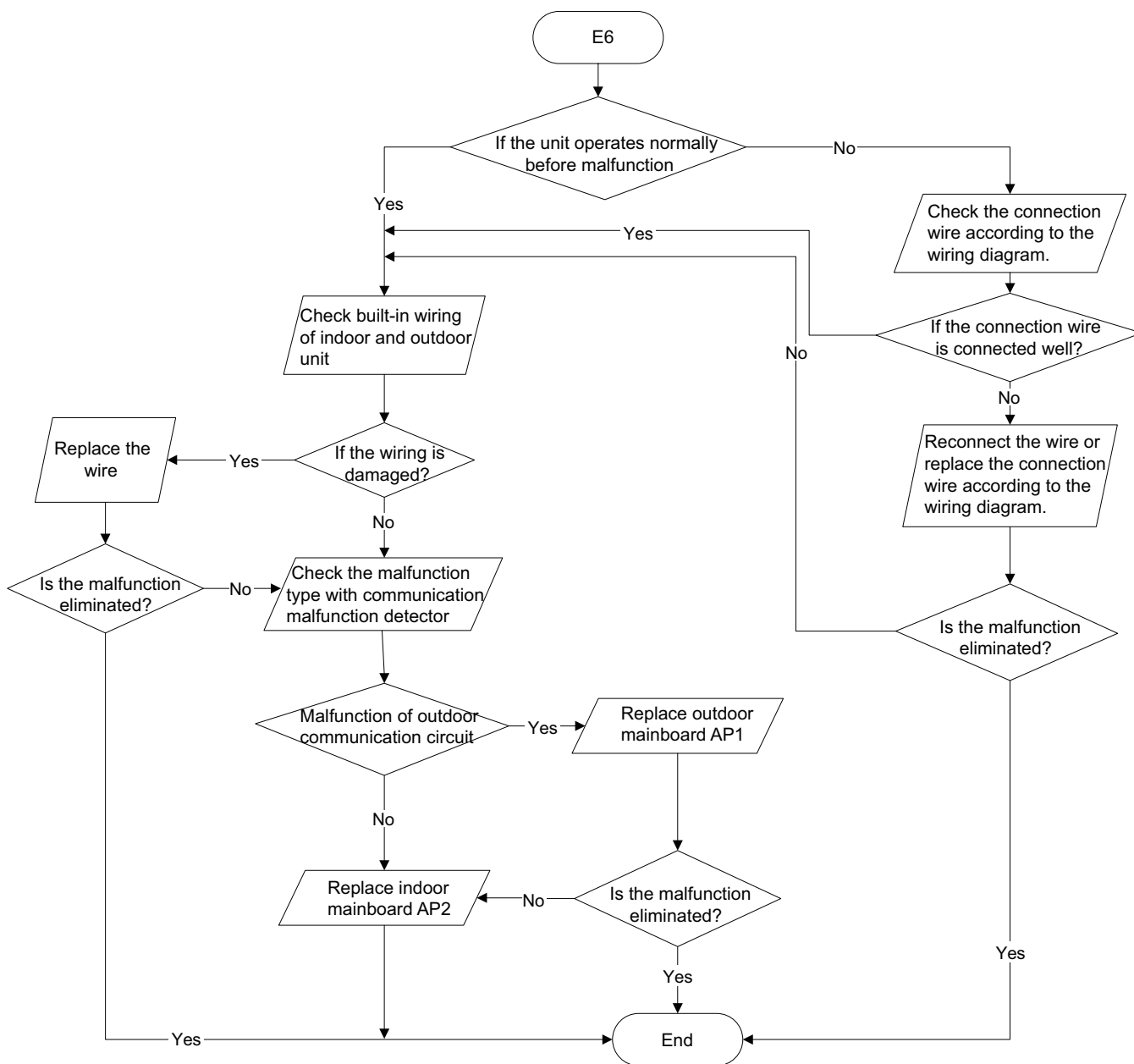


### 6. Communication malfunction (E6)

Main detection points:

- Check if the connection wire and the built-in wiring of indoor and outdoor unit are connected well and without damage;
- If the communication circuit of indoor mainboard is damaged? If the communication circuit of outdoor mainboard (AP1) is damaged?

Malfunction diagnosis process:



## 9.3 Maintenance Method for Normal Malfunction

### 1. Air Conditioner Can't be Started Up

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
No power supply, or poor connection for power plug	After energization, operation indicator isn't bright and the buzzer Can't give out sound	Confirm whether it's due to power failure. If yes, wait for power recovery. If not, check power supply circuit and make sure the power plug is connected well.
Wrong wire connection between indoor unit and outdoor unit, or poor connection for wiring terminals	Under normal power supply circumstances, operation indicator isn't bright after energization	Check the circuit according to circuit diagram and connect wires correctly. Make sure all wiring terminals are connected firmly
Electric leakage for air conditioner	After energization, room circuit breaker trips off at once	Make sure the air conditioner is grounded reliably Make sure wires of air conditioner is connected correctly Check the wiring inside air conditioner. Check whether the insulation layer of power cord is damaged; if yes, place the power cord.
Model selection for air switch is improper	After energization, air switch trips off	Select proper air switch
Malfunction of remote controller	After energization, operation indicator is bright, while no display on remote controller or buttons have no action.	Replace batteries for remote controller Repair or replace remote controller

### 2. Poor Cooling (Heating) for Air Conditioner

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
Set temperature is improper	Observe the set temperature on remote controller	Adjust the set temperature
Rotation speed of the IDU fan motor is set too low	Small wind blow	Set the fan speed at high or medium
Filter of indoor unit is blocked	Check the filter to see it's blocked	Clean the filter
Installation position for indoor unit and outdoor unit is improper	Check whether the installation position is proper according to installation requirement for air conditioner	Adjust the installation position, and install the rainproof and sunproof for outdoor unit
Refrigerant is leaking	Discharged air temperature during cooling is higher than normal discharged wind temperature; Discharged air temperature during heating is lower than normal discharged wind temperature; Units pressure is much lower than regulated range	Find out the leakage causes and deal with it. Add refrigerant.
Malfunction of 4-way valve	Blow cold wind during heating	Replace the 4-way valve
Malfunction of capillary	Discharged air temperature during cooling is higher than normal discharged wind temperature; Discharged air temperature during heating is lower than normal discharged wind temperature; Unit pressure is much lower than regulated range. If refrigerant isn't leaking, part of capillary is blocked	Replace the capillary
Flow volume of valve is insufficient	The pressure of valves is much lower than that stated in the specification	Open the valve completely
Malfunction of horizontal louver	Horizontal louver Can't swing	Refer to point 3 of maintenance method for details
Malfunction of the IDU fan motor	The IDU fan motor Can't operate	Refer to troubleshooting for H6 for maintenance method in details
Malfunction of the ODU fan motor	The ODU fan motor Can't operate	Refer to point 4 of maintenance method for details
Malfunction of compressor	Compressor Can't operate	Refer to point 5 of maintenance method for details

### 3. Horizontal Louver Can't Swing

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Stepping motor is damaged	Stepping motor Can't operate	Repair or replace stepping motor
Main board is damaged	Others are all normal, while horizontal louver Can't operate	Replace the main board with the same model

**4. ODU Fan Motor Can't Operate**

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Capacity of the ODU fan motor is damaged	Measure the capacity of fan capacitor with an universal meter and find that the capacity is out of the deviation range indicated on the nameplate of fan capacitor.	Replace the capacity of fan
Power voltage is a little low or high	Use universal meter to measure the power supply voltage. The voltage is a little high or low	Suggest to equip with voltage regulator
Motor of outdoor unit is damaged	When unit is on, cooling/heating performance is bad and ODU compressor generates a lot of noise and heat.	Change compressor oil and refrigerant. If no better, replace the compressor with a new one

**5. Compressor Can't Operate**

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Capacity of compressor is damaged	Measure the capacity of fan capacitor with an universal meter and find that the capacity is out of the deviation range indicated on the nameplate of fan capacitor.	Replace the compressor capacitor
Power voltage is a little low or high	Use universal meter to measure the power supply voltage. The voltage is a little high or low	Suggest to equip with voltage regulator
Coil of compressor is burnt out	Use universal meter to measure the resistance between compressor terminals and its 0	Repair or replace compressor
Cylinder of compressor is blocked	Compressor Can't operate	Repair or replace compressor

**6. Air Conditioner is Leaking**

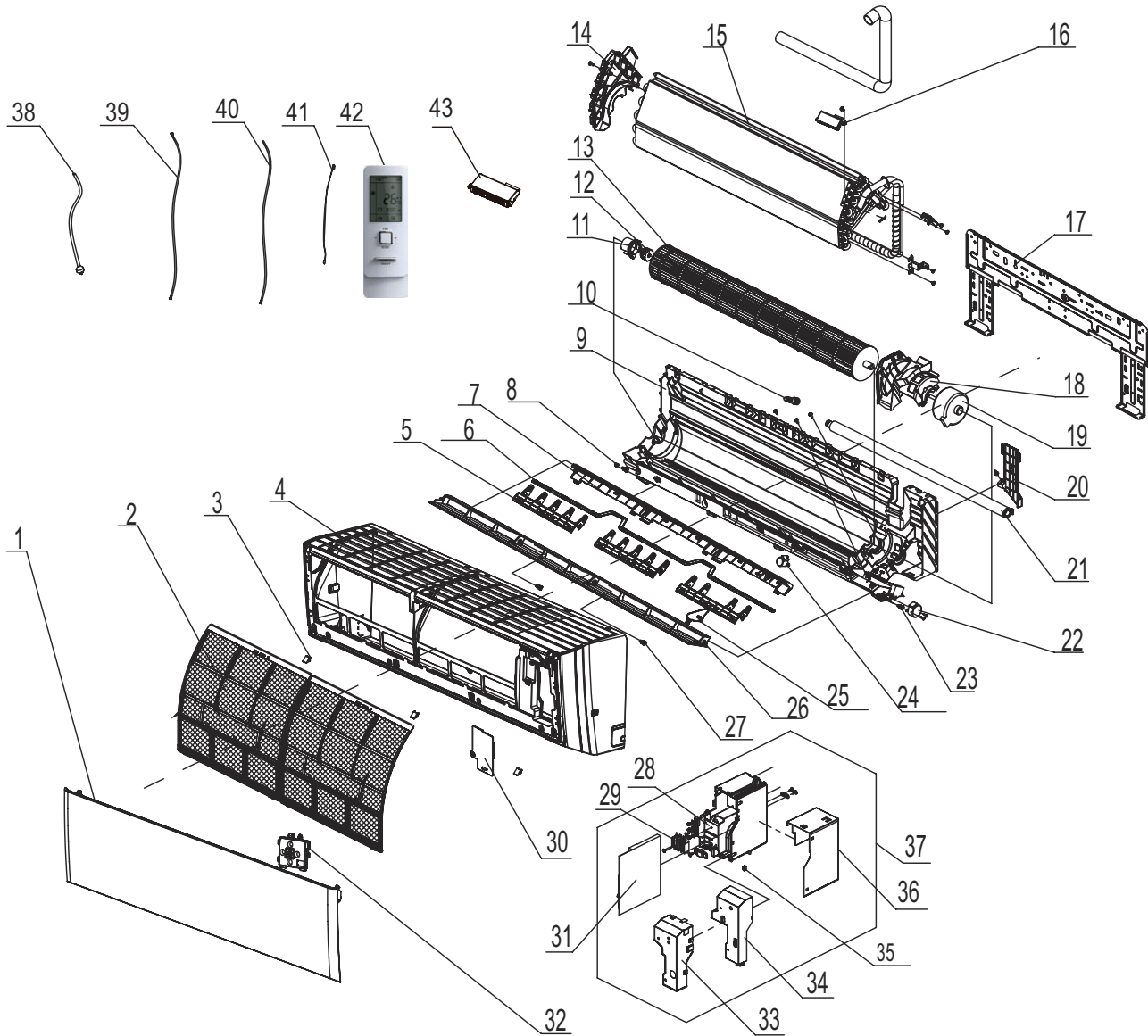
Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Drain pipe is blocked	Water leaking from indoor unit	Eliminate the foreign objects inside the drain pipe
Drain pipe is broken	Water leaking from drain pipe	Replace drain pipe
Wrapping is not tight	Water leaking from the pipe connection place of indoor unit	Wrap it again and bundle it tightly

**7. Abnormal Sound and Vibration**

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
When turn on or turn off the unit, the panel and other parts will expand and theres abnormal sound	Theres the sound of "PAPA"	Normal phenomenon. Abnormal sound will disappear after a few minutes.
When turn on or turn off the unit, theres abnormal sound due to flow of refrigerant inside air conditioner	Water-running sound can be heard	Normal phenomenon. Abnormal sound will disappear after a few minutes.
Foreign objects inside the indoor unit or therere parts touching together inside the indoor unit	Theres abnormal sound fro indoor unit	Remove foreign objects. Adjust all parts position of indoor unit, tighten screws and stick damping plaster between connected parts
Foreign objects inside the outdoor unit or therere parts touching together inside the outdoor unit	Theres abnormal sound fro outdoor unit	Remove foreign objects. Adjust all parts position of outdoor unit, tighten screws and stick damping plaster between connected parts
Short circuit inside the magnetic coil	During heating, the way valve has abnormal electromagnetic sound	Replace magnetic coil
Abnormal shake of compressor	Outdoor unit gives out abnormal sound	Adjust the support foot mat of compressor, tighten the bolts
Abnormal sound inside the compressor	Abnormal sound inside the compressor	If add too much refrigerant during maintenance, please reduce refrigerant properly. Replace compressor for other circumstances.

# 10. Exploded View and Parts List

## 10.1 Indoor Unit



The component picture is only for reference please refer to the actual product.



No.	Description	Part Code			Qty
		GWH24YE-S6DBA1A/I	GWH18YE-S6DBA1B/I	GWH18YE-S6DBA2B/I	
		Product Code	CB437N02802	CB437N03900	
1	Front Panel Assy	20000300059	20000300059	000003000093	1
2	Filter Sub-Assy	1101200703	1101200703	1101200703	2
3	Screw Cover	22242191	22242191	22242191	3
4	Front Case Assy	00000200064	00000200064	00000200064	1
5	Air Louver(Manual)	10512741	10512741	10512741	2
6	Flail(Gray)	10512743	10512743	10512743	1
7	Helicoid Tongue	26112513	26112513	26112513	1
8	Left Axile Bush	10512037	10512037	10512037	1
9	Rear Case assy	00000100170	00000100170	00000100170	1
10	Rubber Plug (Water Tray)	76712012	76712012	76712012	1
11	Ring of Bearing	26152025	26152025	26152025	1
12	O-Gasket sub-assy of Bearing	76512051	76512051	76512051	1
13	Cross Flow Fan	10352057	10352057	10352057	1
14	Evaporator Support	24212178	24212178	24212178	1
15	Evaporator Assy	011001000095	01100100007301	01100100007301	1
16	Cold Plasma Generator	1114001602	1114001602	1114001602	1
17	Wall Mounting Frame	01252229	01252229	01252229	1
18	Motor Press Plate	26112515	26112515	26112515	1
19	Fan Motor	15012136	15012136	15012136	1
20	Connecting pipe clamp	26112514	26112514	26112514	1
21	Drainage Hose	0523001405	0523001405	0523001405	1
22	Stepping Motor	1521210704	1521210704	1521210704	1
23	Crank	73012005	73012005	73012005	1
24	Stepping Motor	1521240210	1521240210	1521240210	1
25	Air Louver	10512744	10512744	10512744	1
26	Guide Louver	10512503	10512503	10512503	1
27	Axile Bush	10542036	10542036	10542036	2
28	Electric Box	2011221105	2011221105	2011221105	1
29	Terminal Board	42011233	42011233	42011233	1
30	Electric Box Cover2	20112210	20112210	2011221004	1
31	Main Board	300002060746	300002060746	300002060746	1
32	Display Board	30565260	30565260	300001000095	1
33	Shield cover of Electric Box	01592176	01592176	01592176	1
34	Electric Box Cover	20112209	20112209	20112209	1
35	Jumper	4202021908	4202021916	4202021916	1
36	Lower Shield of Electric Box	01592139	01592139	01592139	1
37	Electric Box Assy	100002067410	100002067411	100002066754	1
38	Power Cord	/	/	/	/
39	Connecting Cable	4002052317	4002052317	4002052317	0
40	Connecting Cable	/	/	/	/
41	Temperature Sensor	3900031302	3900031302	3900031302	1
42	Remote Controller	305001000139	305001000139	305001000139	1
43	Detecting plate(WIFI)	30110144	30110144	30110144	1

Above data is subject to change without notice.

No.	Description	Part Code			Qty
		GWH18YE-S6DBA2B/I	GWH18YE-S6DBA2A/I	GWH24YE-S6DBA2A/I	
	Product Code	CB466N02701	CB466N00400	CB466N00300	
1	Front Panel Assy	000003000093	000003000093	000003000093	1
2	Filter Sub-Assy	1101200703	1101200703	1101200703	2
3	Screw Cover	22242191	22242191	22242191	3
4	Front Case Assy	00000200064	00000200064	00000200064	1
5	Air Louver(Manual)	10512741	10512741	10512741	2
6	Flail(Gray)	10512743	10512743	10512743	1
7	Helicoid Tongue	26112513	26112513	26112513	1
8	Left Axile Bush	10512037	10512037	10512037	1
9	Rear Case assy	00000100170	00000100170	00000100170	1
10	Rubber Plug (Water Tray)	76712012	76712012	76712012	1
11	Ring of Bearing	26152025	26152025	26152025	1
12	O-Gasket sub-assy of Bearing	76512051	76512051	76512051	1
13	Cross Flow Fan	10352057	10352057	10352057	1
14	Evaporator Support	24212178	24212178	24212178	1
15	Evaporator Assy	01100100007301	01100100007301	011001000095	1
16	Cold Plasma Generator	1114001602	1114001602	1114001602	1
17	Wall Mounting Frame	01252229	01252229	01252229	1
18	Motor Press Plate	26112515	26112515	26112515	1
19	Fan Motor	15012136	15012136	15012136	1
20	Connecting pipe clamp	26112514	26112514	26112514	1
21	Drainage Hose	0523001405	0523001405	0523001405	1
22	Stepping Motor	1521210704	1521210704	1521210704	1
23	Crank	73012005	73012005	73012005	1
24	Stepping Motor	1521240210	1521240210	1521240210	1
25	Air Louver	10512744	10512744	10512744	1
26	Guide Louver	10512503	10512503	10512503	1
27	Axile Bush	10542036	10542036	10542036	2
28	Electric Box	2011221105	2011221104	2011221105	1
29	Terminal Board	42011233	42011233	42011233	1
30	Electric Box Cover2	20112210	20112210	2011221001	1
31	Main Board	300002060746	300002000101	300002000101	1
32	Display Board	300001000134	300001000095	300001000095	1
33	Shield cover of Electric Box	01592176	01592176	01592176	1
34	Electric Box Cover	20112209	20112209	2011220901	1
35	Jumper	4202021916	4202021916	4202021908	1
36	Lower Shield of Electric Box	01592139	01592139	01592139	1
37	Electric Box Assy	100002067369	100002001817	100002000608	1
38	Power Cord	/	/	/	/
39	Connecting Cable	4002052317	4002052317	4002052317	0
40	Connecting Cable	/	/	/	/
41	Temperature Sensor	3900031302	3900031302	3900031302	1
42	Remote Controller	305001000139	305001000081	305001000081	1
43	Detecting plate(WIFI)	30110144	30110144	30110144	1

Above data is subject to change without notice.

No.	Description	Part Code		Qty
		GWH18YE-S6DBA2A/I		
		Product Code		
		CB466N00403	CB466N00404	
1	Front Panel Assy	00000300009302	00000300009301	1
2	Filter Sub-Assy	1101200702	1101200702	2
3	Screw Cover	2224219101	2224219101	3
4	Front Case Assy	0000020006403	00000200064032	1
5	Air Louver(Manual)	10512741	10512741	2
6	Flail(Gray)	10512743	10512743	1
7	Helicoid Tongue	26112513	26112513	1
8	Left Axile Bush	10512037	10512037	1
9	Rear Case assy	00000100170	00000100170	1
10	Rubber Plug (Water Tray)	76712012	76712012	1
11	Ring of Bearing	26152025	26152025	1
12	O-Gasket sub-assy of Bearing	76512051	76512051	1
13	Cross Flow Fan	10352057	10352057	1
14	Evaporator Support	24212178	24212178	1
15	Evaporator Assy	01100100007301	01100100007301	1
16	Cold Plasma Generator	1114001602	1114001602	1
17	Wall Mounting Frame	01252229	01252229	1
18	Motor Press Plate	26112515	26112515	1
19	Fan Motor	15012136	15012136	1
20	Connecting pipe clamp	26112514	26112514	1
21	Drainage Hose	0523001405	0523001405	1
22	Stepping Motor	1521210704	1521210704	1
23	Crank	73012005	73012005	1
24	Stepping Motor	1521210704	1521210704	1
25	Air Louver	10512744	10512744	1
26	Guide Louver	1051250301P	1051250301P	1
27	Axile Bush	10542036	10542036	2
28	Electric Box	2011221104	2011221104	1
29	Terminal Board	42011233	42011233	1
30	Electric Box Cover2	2011221004P	2011221004	1
31	Main Board	300002000101	300002000101	1
32	Display Board	300001000095	300001000134	1
33	Shield cover of Electric Box	01592176	01592176	1
34	Electric Box Cover	20112209	20112209	1
35	Jumper	4202021916	4202021916	1
36	Lower Shield of Electric Box	01592139	01592139	1
37	Electric Box Assy	100002001817	100002060163	1
38	Power Cord	/	/	/
39	Connecting Cable	4002052317	4002052317	0
40	Connecting Cable	/	/	/
41	Temperature Sensor	3900031302	3900031302	1
42	Remote Controller	305001000081	305001000081	1
43	Detecting plate(WIFI)	30110144	30110144	1

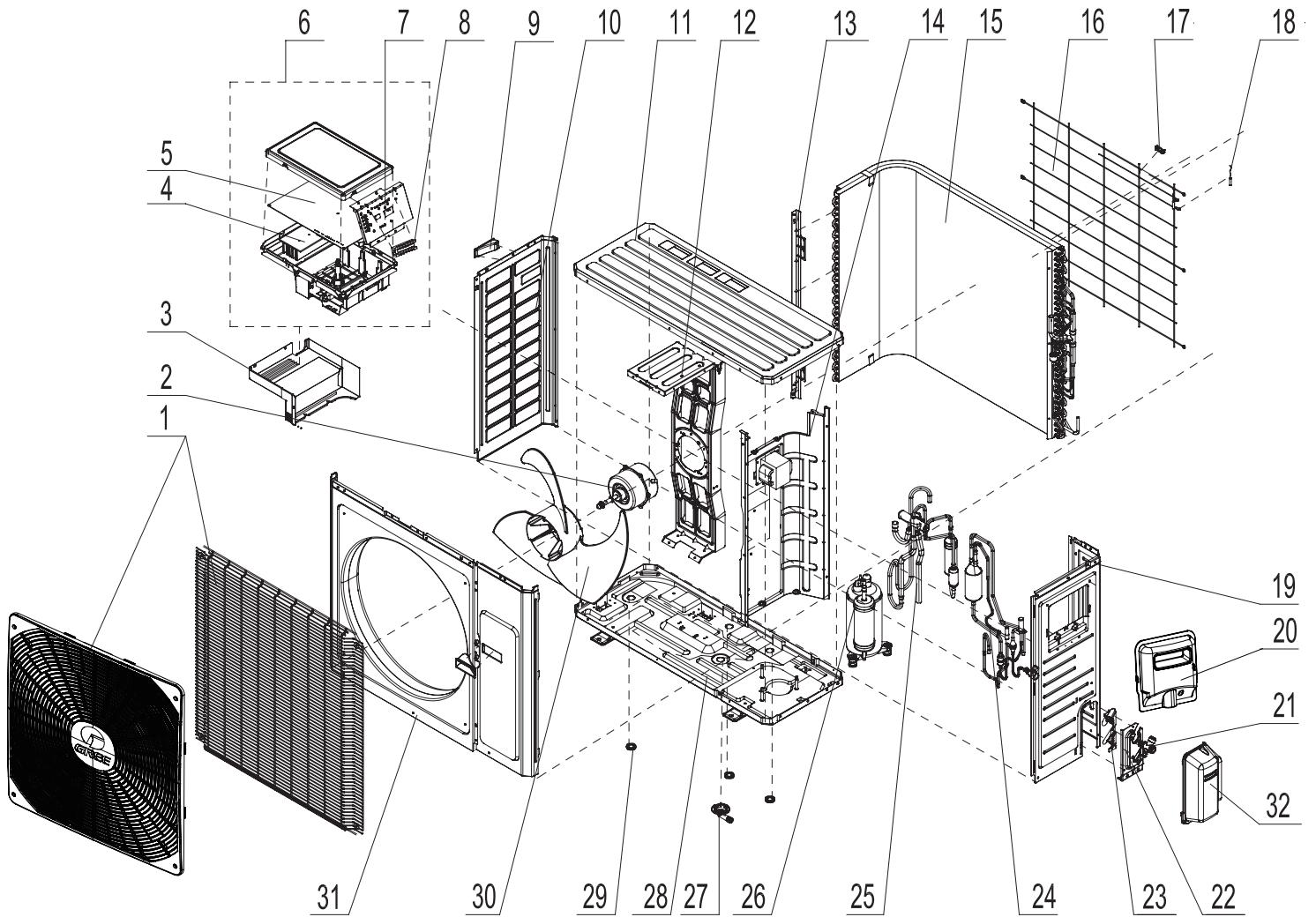
Above data is subject to change without notice.

No.	Description	Part Code			Qty
		GWH18YE-S6DBA2B/I	GWH18YE-S6DBA2B/I	GWH24YE-S6DBA2A/I	
	Product Code	CB466N02702	CB466N02703	CB466N00308	
1	Front Panel Assy	00000300009303	00000300009301	00000300009301	1
2	Filter Sub-Assy	1101200703	1101200703	1101200703	2
3	Screw Cover	2224219101	2224219101	22242191	3
4	Front Case Assy	0000020006404	0000020006402	00000200064	1
5	Air Louver(Manual)	10512741	10512741	10512741	2
6	Flail(Gray)	10512743	10512743	10512743	1
7	Helicoid Tongue	26112513	26112513	26112513	1
8	Left Axile Bush	10512037	10512037	10512037	1
9	Rear Case assy	00000100170	00000100170	00000100170	1
10	Rubber Plug (Water Tray)	76712012	76712012	76712012	1
11	Ring of Bearing	26152025	26152025	26152025	1
12	O-Gasket sub-assy of Bearing	76512051	76512051	76512051	1
13	Cross Flow Fan	10352057	10352057	10352057	1
14	Evaporator Support	24212178	24212178	24212178	1
15	Evaporator Assy	01100100007301	01100100007301	011001000095	1
16	Cold Plasma Generator	1114001602	1114001602	1114001602	1
17	Wall Mounting Frame	01252229	01252229	01252229	1
18	Motor Press Plate	26112515	26112515	26112515	1
19	Fan Motor	15012136	15012136	15012136	1
20	Connecting pipe clamp	26112514	26112514	26112514	1
21	Drainage Hose	0523001405	0523001405	0523001405	1
22	Stepping Motor	1521210704	1521210704	1521210704	1
23	Crank	73012005	73012005	73012005	1
24	Stepping Motor	1521240210	1521240210	1521240210	1
25	Air Louver	10512744	10512744	10512744	1
26	Guide Louver	1051250301P01	1051250301P01	10512503	1
27	Axile Bush	10542036	10542036	10542036	2
28	Electric Box	2011221105	2011221105	2011221105	1
29	Terminal Board	42011233	42011233	42011233	1
30	Electric Box Cover2	2011221004P01	2011221004	20112210	1
31	Main Board	300002060746	300002060746	300002060746	1
32	Display Board	300001000095	300001000134	300001000095	1
33	Shield cover of Electric Box	01592176	01592176	01592176	1
34	Electric Box Cover	20112209	20112209	20112209	1
35	Jumper	4202021916	4202021916	4202021908	1
36	Lower Shield of Electric Box	01592139	01592139	01592139	1
37	Electric Box Assy	100002067369	100002067370	100002067437	1
38	Power Cord	/	/	/	/
39	Connecting Cable	4002052317	4002052317	4002052317	0
40	Connecting Cable	/	/	/	/
41	Temperature Sensor	3900031302	3900031302	3900031302	1
42	Remote Controller	305001000139	305001000139	305001000139	1
43	Detecting plate(WIFI)	30110144	30110144	30110144	1

Above data is subject to change without notice.



## 10.2 Outdoor Unit



The component picture is only for reference; please refer to the actual product.

No.	Description	Part Code		Qty
		GWH24YE-S6DBA2A/O	GWH18ACE-S6DBA1A/O	
Product Code		CB466W00301	CB497W11000	
1	Front Grill	22413048	22415011	1
2	Fan Motor	15010400000106	15010400000102	1
3	Electric Box (Fireproofing)	20115003	20115003	1
4	Radiator	4901521501	4901521501	1
5	Main Board	300027060761	300027060855	1
6	Electric Box Assy	100002066187	100002066754	1
7	Terminal Board Support sub-assy	01715016	01715016A	1
8	Terminal Board	422000060009	422000060009	1
9	Handle	26233053	26233053	1
10	Left Side Plate	01305043P	01305043P	1
11	Coping	01255020P	01255020P	1
12	Motor Support Sub-Assy	01705079	017012000017	1
13	Condenser Support Plate	01175092	01175092	1
14	Clapboard Sub-Assy	017021000067	01235091	1
15	Condenser Assy	011002000285	011002000486	1
16	Rear Grill	/	/	/
17	Wiring Clamp	26115004	26115004	1
18	Temp Sensor	3900030901	3900030901	1
19	Right Side Plate	0130504401P	0130504401P	1
20	Big Handle	26235001	26235001	1
21	Cut off Valve	07130239	07130239	1
22	Valve Support Sub-Assy	0170506101P	0170506101P	1
23	Baffle(Valve Support)	0170505701	0170505701	1
24	Electronic Expansion Valve	072009000019	072009000019	1
25	4-Way Valve Assy	030152000260	030152000260	1
26	Compressor and Fittings	00105274	00105274	1
27	Drainage Connector	/	/	/
28	Chassis Sub-assy	017000060396P	017000060398P	1
29	Drainage hole Cap	/	/	/
30	Axial Flow Fan	10335013	10335013	1
31	Cabinet	01435004P	01435004P	1
32	Valve Cover	22245003	22245003	1

Above data is subject to change without notice.

No.	Description	Part Code		Qty
		GWH18YE-S6DBA2A/O	GWH24YE-S6DBA2A/O	
	Product Code	CB466W00400	CB466W00300	
1	Front Grill	22415011	22415011	1
2	Fan Motor	15010400000102	15010400000102	1
3	Electric Box (Fireproofing)	/	/	/
4	Radiator	49015215	4901521501	1
5	Main Board	300027000109	300027000308	1
6	Electric Box Assy	100002001814	100002000609	1
7	Terminal Board Support sub-assy	01715016A	01715016	1
8	Terminal Board	422000060009	420101943	1
9	Handle	26233053	26233053	1
10	Left Side Plate	01305043P	01305043P	1
11	Coping	01255020P	01255006P	1
12	Motor Support Sub-Assy	017012000017	017012000015	1
13	Condenser Support Plate	01175092	01175092	1
14	Clapboard Sub-Assy	01235091	017021000067	1
15	Condenser Assy	011002000486	011002000285	1
16	Rear Grill	01475013	01475013	1
17	Wiring Clamp	26115004	26115004	1
18	Temp Sensor	39000072/3900030901	39000072/3900030901	1/1
19	Right Side Plate	0130504401P	0130504401P	1
20	Big Handle	26235001	26235001	1
21	Cut off Valve	0713517901	0713517901	1
22	Valve Support Sub-Assy	0170506101P	0170506101P	1
23	Baffle(Valve Support)	26115007	26115007	1
24	Electronic Expansion Valve	072009000019	07133909	1
25	4-Way Valve Assy	030152000260	030152000260	1
26	Compressor and Fittings	00105274	00105274	1
27	Drainage Connector	06123401	06123401	1
28	Chassis Sub-assy	02803315P	017000000166	1
29	Drainage hole Cap	06813401	06813401	1
30	Axial Flow Fan	10335013	10335013	1
31	Cabinet	01435004P	01435004P	1
32	Valve Cover	22245003	22245003	1

Above data is subject to change without notice.

# 11. Removal Procedure



**Caution:** discharge the refrigerant completely before removal.

## 11.1 Removal Procedure of Indoor Unit

Step	Procedure
<p>1.Remove filter</p> <p>a. Open the panel.</p> <p>b. Loosen the clasp shown and then pull the left filter and right filter outwards to remove them.</p>	<p>Panel</p> <p>Left filter and right filter</p>
<p>2.Remove horizontal louver</p> <p>Push out the axle bush on horizontal louver. Bend the horizontal louver with hand and then separate the horizontal louver from the crankshaft of step motor to remove it.</p>	<p>horizontal louver</p> <p>Location of step motor</p> <p>Axile bush</p> <p>Horizontal louver</p>