1 Summary and features

Model	Remarks
GWCN24FANK1A1A GWHN24FANK1A1A	1Ph 220-240V~ 50Hz R22

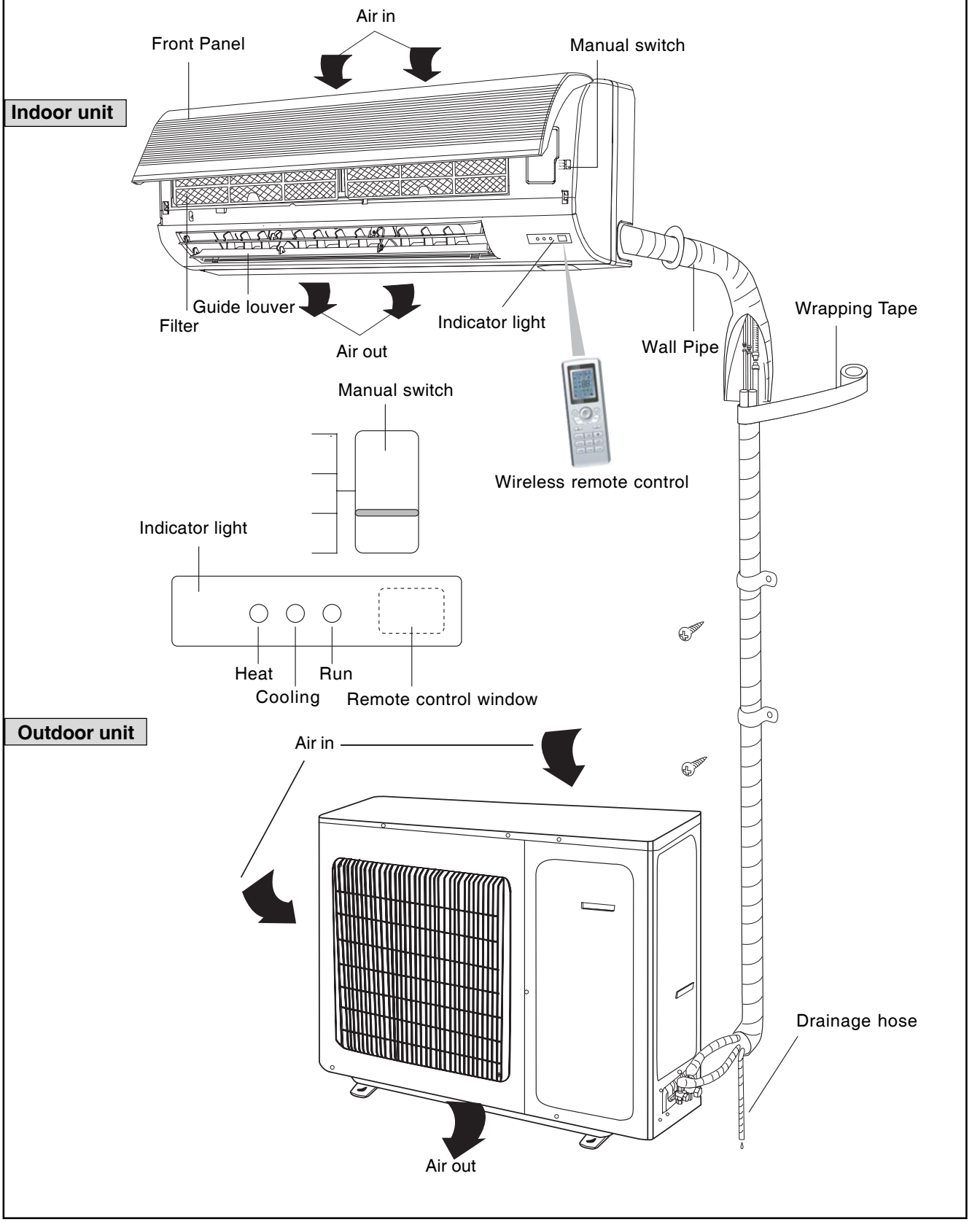
2 Technical specifications

Model		GWCN24FANK1A1A	GWHN24FANK1A1A	
Function		COOLING	COOLING	HEATING
Rated Voltage		220-240V~	220-240V~	
Rated Frequency		50Hz	50Hz	
Total Capacity (W/Btu/h)		7034/24000	7034/24000	7400/25200
Power Input (W)		2650	2600	2400
Rated Input (W)		3500	3400	3300
Rated Current (A)		15.9	15.5	15
Air Flow Volume (m^3/h) (H/M/L)		1100	1100	
Dehumidifying Volume (l/h)		3	3	
EER / C.O.P (W/W)		2.65	2.71/3.06	
Energy Class		-	-	
Indoor unit	Model of Indoor Unit	GWCN24FANK1A1A/I	GWHN24FANK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1410/1280/1150	1410/1280/1150	
	Output of Fan Motor (W)	30	40	
	Input of Heater (W)	/	/	
	Fan Motor Capacitor (μF)	3	3.5	
	Fan Motor RLA(A)	0.18	0.18	
	Fan Type-Piece	Cross flow fan - 1	Cross flow fan - 1	
	Diameter-Length (mm)	φ106 X 890	φ106 X 980	
	Evaporator	Aluminum fin-copper tube	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	Φ7	
	Row-Fin Gap(mm)	2-1.5	2-1.5	
	Coil length (l) x height (H) x coil width (L)	903X25.4X381	903X25.4X381	
	Swing Motor Model	MP24GA	MP24GA	
	Output of Swing Motor (W)	2	2	
	Fuse (A)	PCB 3.15A Transformer 0.4/0.1A	PCB 3.15A Transformer 0.4/0.1A	
	Sound Pressure Level dB (A) (H/M/L)	49/47/43	49/47/45	
	Sound Power Level dB (A) (H/M/L)	59/57/53	59/57/55	
	Dimension (W/H/D) (mm)	1178 X326X227	1178 X326X227	
	Dimension of Package(W/H/D)(mm)	1265X417X333	1265X417X333	
	Net Weight /Gross Weight (kg)	17.5/24	17.5/24	

Outdoor unit	Model of Outdoor Unit		GWCN24FANK1A1A/O	GWHN24FANK1A1A/O
	Compressor Manufacturer/trademark		Shanghai Hitachi	Shanghai Hitachi
	Compressor Model		SHV33YE6UU	SHV33YE6UU
	Compressor Type		ROTARY	ROTARY
	L.R.A. (A)		60	60
	Compressor RLA(A)		10.6	10.6
	Compressor Power Input(W)		2335	2335
	Overload Protector		PUT-IN	PUT-IN
	Throttling Method		Capillary	Capillary
	Starting Method		Capacitor	Capacitor
	Working Temp Range (℃)		-7~48	-7~48
	Condenser		Aluminum fin-copper tube	Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ9	Φ9.52
	Rows-Fin Gap(mm)		1-1.4	2-1.4
	Coil length(l) x height(H) x coil width(L)		765X660X22	730.5X660X44
	Fan Motor Speed (rpm) (H/M/L)		780	815
	Output of Fan Motor (W)		68	60
	Fan Motor RLA(A)		0.27	0.27
	Fan Motor Capacitor (uF)		3.5	3.5
	Air Flow Volume of Outdoor Unit		-	-
	Fan Type-Piece		Axial fan -1	Axial fan -1
	Fan Diameter (mm)		Φ460	Φ460
	Defrosting Method		Auto defrost	Auto defrost
	Climate Type		T1	T1
	Isolation		I	I
	Moisture Protection		IP24	IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.4	2.4
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6	0.6
	Sound Pressure Level dB (A) (H/M/L)		58	58
	Sound Power Level dB (A) (H/M/L)		68	68
	Dimension (W/H/D) (mm)		1018X700X412	950X700X412
	Dimension of Package (L/H/W)(mm)		1100X755X450	1100X755X450
	Net Weight /Gross Weight (kg)		55/60	65/70
	Refrigerant Charge (kg)		1.65	2.6
Connection Pipe	Length (m)		/	/
	Gas additional charge(g/m)		30	30
	Outer Diameter	Liquid Pipe (mm)	Φ9.52(3/8")	Φ9.52(3/8")
		Gas Pipe (mm)	Φ16(5/8")	Φ16(5/8")
	Max Distance	Height (m)	15	15
		Length (m)	30	30

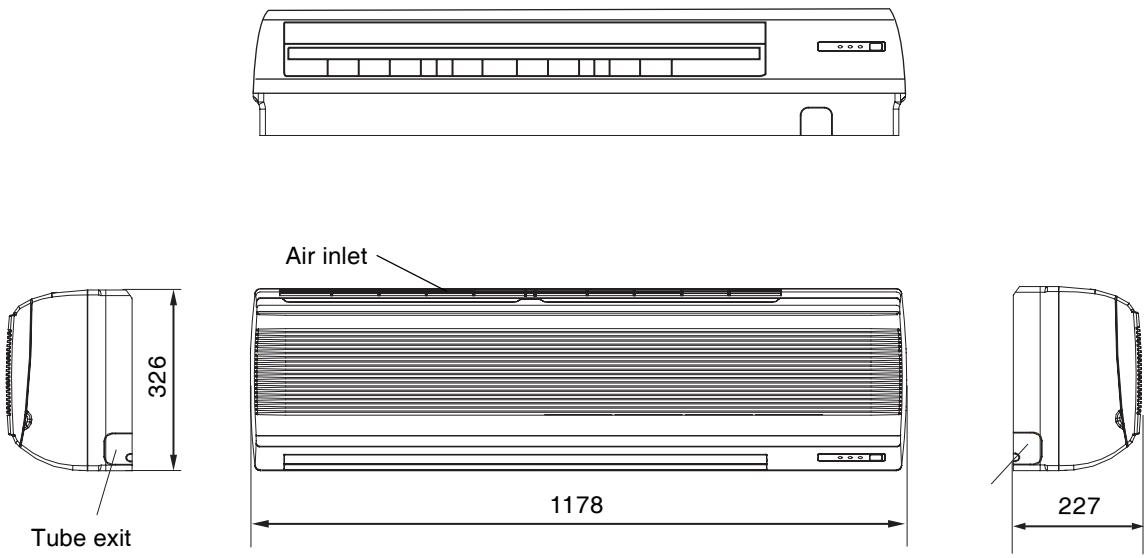
The above data is subject to change without notice. Please refer to the nameplate of the unit.

3 Part name

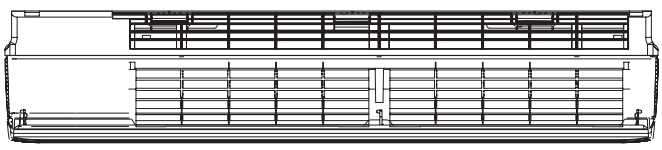

Indoor unit
Air in
Front Panel
Manual switch
Guide louver
Filter
Air out
Indicator light
Wall Pipe
Wrapping Tape
Manual switch
Wireless remote control
Indicator light
Heat
Cooling
Run
Remote control window
Outdoor unit
Air in
Drainage hose
Air out

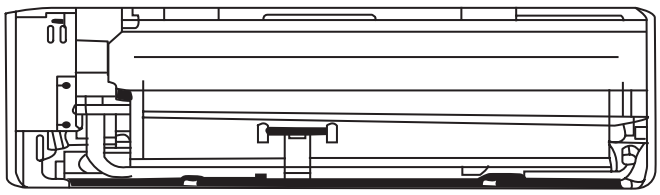
4 Outline and installation dimension

4.1 Outline and installation dimensions of indoor unit

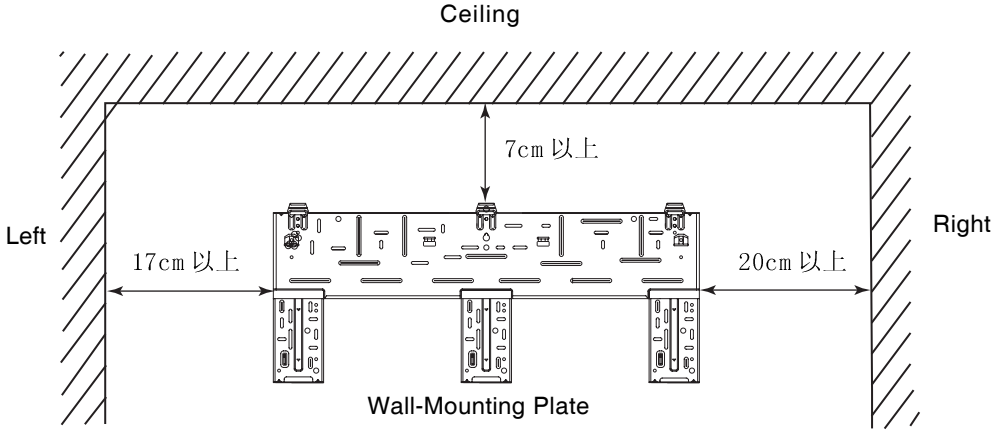


Rear View

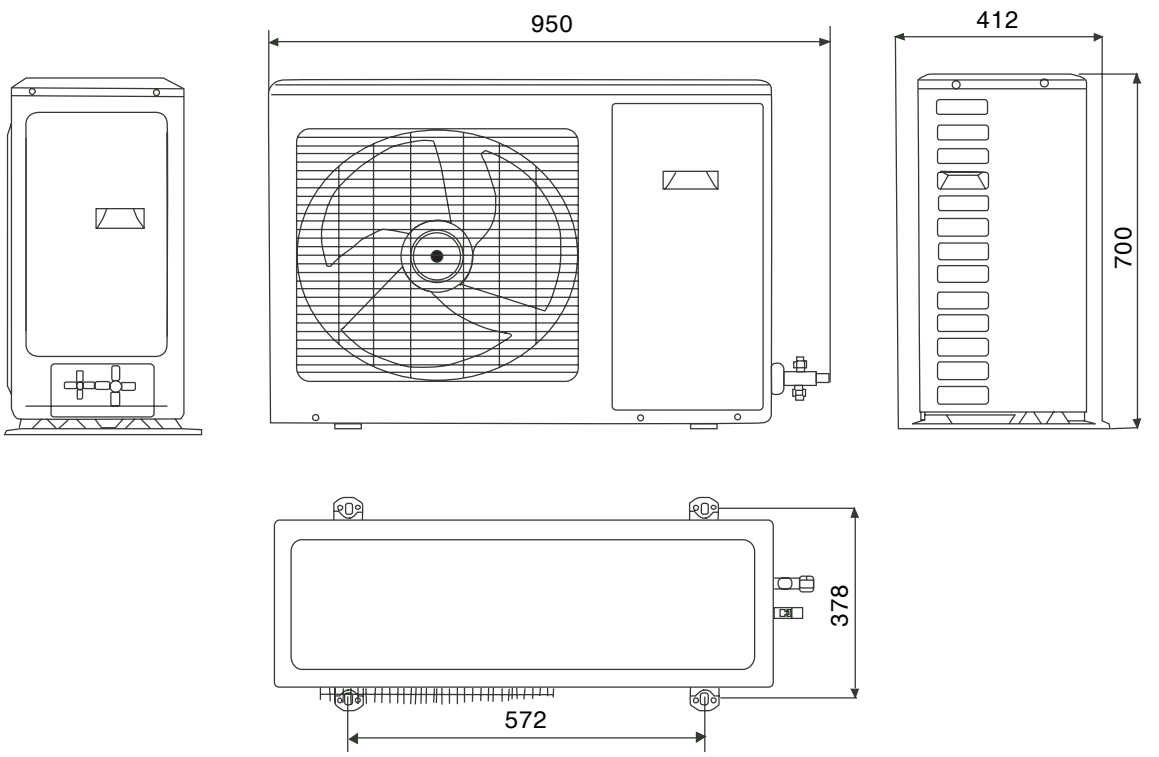




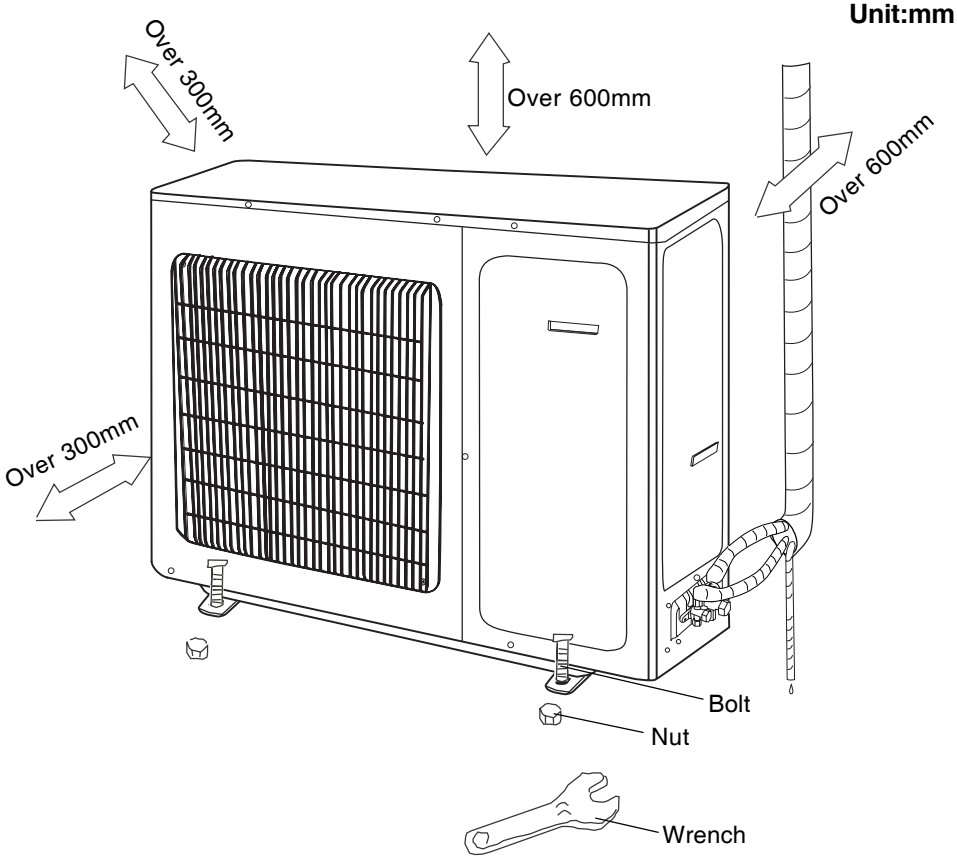
Ceiling



4. 2 Outline and installation dimensions of outdoor unit

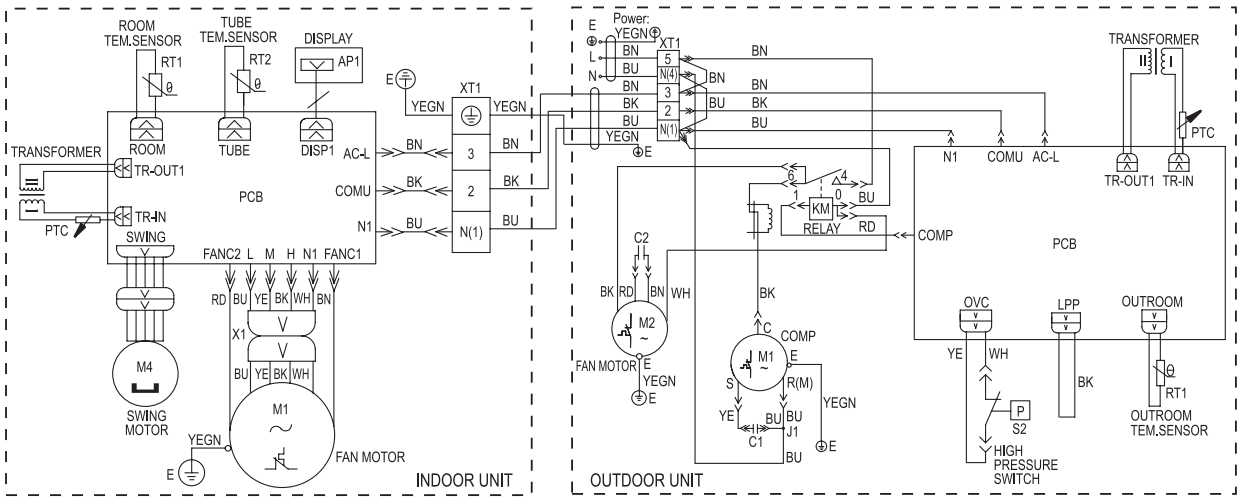


Unit:mm

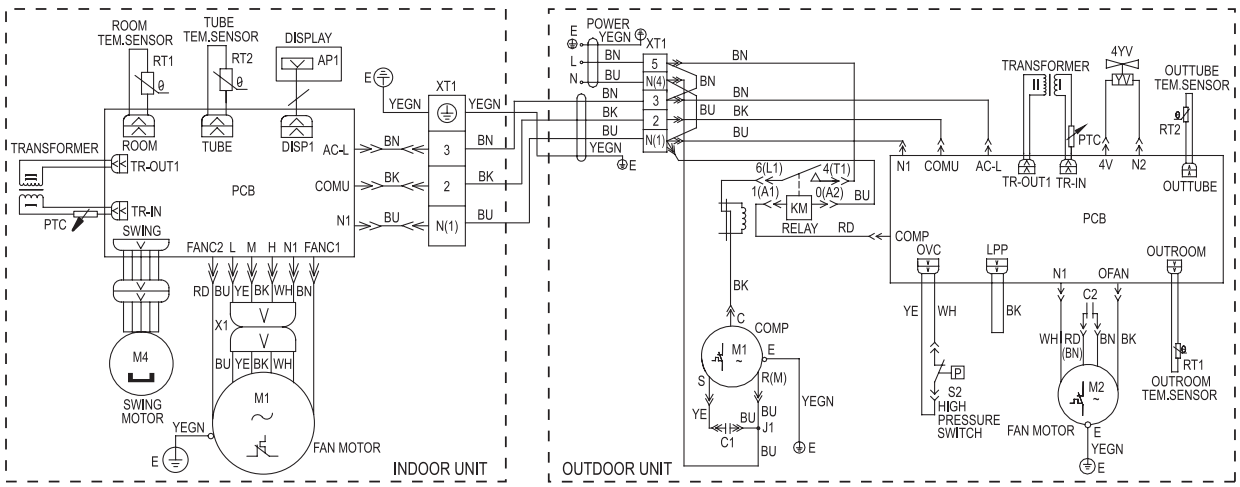


5 Electrical circuit diagram

GWCN24FANK1A1A



GWHN24FANK1A1A



These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.

6 PCB function manual and operation method

6.1 Manual of functions of remote controller 1

The centigrade is used for the following function manual, if there will be the Fahrenheit degree, that will be TF= TCX1.8+32.

1 Temperature parameter

◆The room setting temperature(Tset)

◆The room ambient temperature (Tamb)

2 Fundamental functions of the system

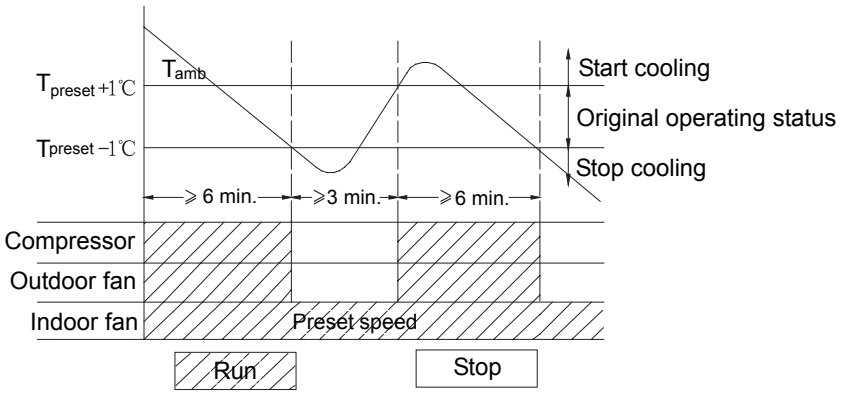
Under each mode, once compressor start up, within 6mins, it will work for a long time, once it stopped, after 3mins delayed, it will start up.

(1) COOL mode

① The conditions and processes of cooling

If Tamb ≥Tset+1℃, COOL mode will act, compressor and outdoor fan will run, indoor fan will run at the set speed.
If Tamb≤Tset－1℃,compressor and outdoor fan will stop, indoor fan runs at setting fan speed.
If Tset-1℃＜Ta mb＜T set+1℃, the unit will keep running in the fuzzy mode.

➢In this mode, the reversal valve will not power on, the setting temp. range 16~30℃



(2) DRY Modes

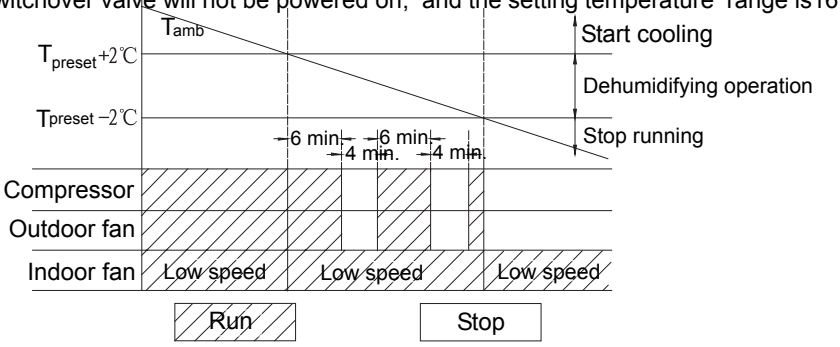
① The conditions and process of DRY

When $T_{amb.} > T_{preset}+2℃$, the unit will run under DRY cooling mode, in which case the compressor and outdoor fan will be started and the indoor fan will run at low speed.

When $T_{preset} -2℃ \leq T_{amb.} \leq T_{preset} +2℃$, the unit will run under DRY mode, in which case the indoor fan will keep run at low speed, the compressor and the outdoor fan will be stopped after 6 minutes . After 4 minutes,the compressor and the outdoor fan will be restarted. The dehumidifying process is so repeated in cycle.

When $T_{amb.} < T_{preset}-2℃$, the compressor and outdoor fan will be stopped, the indoor fan will run at low speed.

➢ Under this mode, the switchover valve will not be powered on, and the setting temperature range is16 ~30℃ .



（3）HEAT Mode (cooling only unit only)

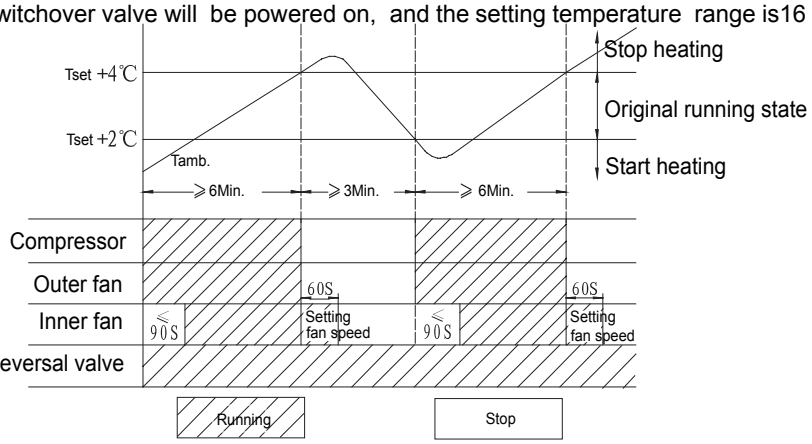
① The conditions and processes of heating

When Tamb ≤ Tset+ 2℃ ,the system enters heating running, in this case, the reversal valve, compressor, outer fan enter simultaneously running.The indoor fan will delay at most for 0.5min to run.

When Tamb ≥ Tset+4℃,the compressor and outdoor fan will stop, but the reversal valve is still with power on, the indoor unit will run at setting fan speed for 60s then will stop .

When Tset+2℃ < Tamb<Tset+ 4℃ ,the unit will maintain its original operating status.

➢ Under this mode, the switchover valve will be powered on, and the setting temperature range is16 ~30 ℃.



②The conditions and processes of defrosting

When the defrosting condition is satisfied, the system will enter into defrosting status, at this time, the four-way valve, inner and outer fan will stop to run, the heating indicator will blink. When defrosting is running 10mins or condensor tube temperature will resume to normal, after the defrosting finished, at this time, the outer fan, four-way valve will put into operation, inner fan will delay 90s at least for running.

Heating indicator stop blinking.

③Four-way valve anti-liquid shock control mode

In heat mode, the unit will off, when switching from Heat mode to other mode, the four-way valve will power off after compressor stopped for 2mins.

（4）Fan mode

The indoor fan runs at setting speed, temperature setting range is 16-30℃ , the initial value is 25℃.

（5）Auto Mode

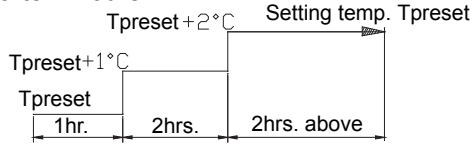
Under this mode, the system will automatically select its run mode (cool, dehumidify, heat or fan) with the change of ambient temperature. For protection function, same as under cooling and heating mode.

➢ In Cool and Heat Auto mode: In AUTO mode, if switch from Heat mode to other status, the reversal valve will delay 2mins and will power off.
In Cooling only mode: In this mode, there is no heating function. When remote controling the heat mode, the unit only receive unit off order.

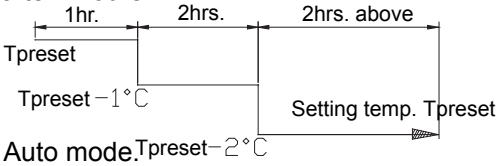
3 Other control

（1）Sleep function

Under cooling or dehumidifying mode, the preset temperature will automatically rise by 1℃, ine hour after setting of sleep program and rise by 1℃after 2hours.



Under heating mode, the preset temperature will automatically decrease by 1℃ one hour after setting of sleep program and decrease by another 1℃after 2hours.



There is no Sleep function in Fan and Auto mode.

（2）Timing function

Timer setting for hour:

Timer on: If unit is running to set up Timer on, the unit is go on running, if unit is off to set up Timer on, if time out, the unit will run at the presetting mode.

Timer off: If unit is off to set up Timer off, the unit will stand by, if unit is on to set up Timer off, if time out, the unit will stop to work.

Timer change:

a. When unit is under Timer, to operate ON/OFF button on remote control to turn on or turn off the unit, or reset the timer can set up the Timer, the unit will run at the last setting mode.

b. If system is running, to set up the Timer on and Timer off at the same time, the unit will keep running at the current presetting mode, until the Timer off is time out, the unit will stop to work.

c. If system is stop working, at the same time to set up the Timer on and Timer off, the unit is stopping, until the Timer on is time out, the unit will start to work.

Hereafter, when the Timer on in every day time out, the unit will run at presettting mode, when Timer off time out, the unit will stop to work.

d. If the presetting Timer off is the same with Timer on, that the Timer off will be executed

Timer interval setting:

Timer on: At unit off to set up the Timer on function, if time out, the controller will run at the original running status, the timer interval is 0.5hr, setting range is 0.5-24hrs.

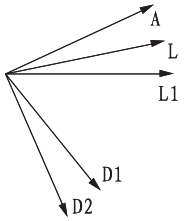
Timer off: At unit on to set up the Timer off function, if time out, the timer interval is 0.5hr, setting range is 0.5-24hrs.

（3）Swing control

When power on, the guide louver will anticlockwise rotate to A position to turn off the air vent.

After unit turned on, heating will return to the max. air outlet vent D2 to standby; cooling will firstly rotate to air outlet vent D1 and then return to air outlet vent D1 and then return to L1 to standby; If it is swinging, the cooling is winging between L1 and D1; the heating is swinging between the L and D2; Or if it stays, the swing will rotate to the corresponding staying status.

When unit is off, the guide louver will anticlockwise rotate to A position to turn off the air vent.



（4）Buzzer

The controller is powered on and detect the signal received, the buzzer will beep.

（5）Auto button

When whole unit is running, press this button, the unit is off; when whole unit stop, press this button, the unit will run at auto, auto fan, and swing mode.

（6）Auto fan speed control

Under this mode, inner fan will accord to ambient temperature change automatically select Hi, Mid, Low three speed.

（7）Indicator light

Running indicator (Red) : When remote control power on, the indicator will blink, when unit is on, it will turn on, while unit off, it is off. If malfunction happen, it will blink.

Cool, Dehumidify indicator (Blue):In Cool or Dry mode, auto cool or auto dehumifify mode, it will turn on, other mode it is off, in Fan mode, the running indicator will turn on.

Heat indicator (Yellow): In Auto Heat or Heat mode, the light will turn on, it will blink when defrosting, other mode it is off.

（8）Other

If use the remote controller to operate, if the remote controller displays Heat mode, but the unit is cooling only unit, except receiving unit off signal, the other singal cannot receive.

4 Protection method

（1）Anti-freezing protection

In Cool or Dehumidify mode, if system anti-freezing protection is detected that the compressor, outdoor fan will stop to run, inner fan, swing motor will keep the original running status.

When anti-freezing protection release and compressor has stopped 3mins, the running indicator will not turn off, the controller will run at presetting mode.

(2) System high-pressure protection

When detecting high-pressure protection, will turn off all overloads, all buttons and remote control signal will be shielded the running indicator will blink;If detected the compressor high-pressure protection released, the buttons and remote control shield will be released, the running indicator is still blink, it is need to press the ON/OFF button to turn off the unit, after the running indicator turns off, repress the ON/OFF button to resume to run.

(3) System low-pressure protection

1.After compressor started up 2mins later to start detect low-pressure switch signal, if continuously 1min. detected the low-pressure switch break, the whole unit will stop to run, indicator will blink,3mins later, if low-pressure switch resumed that the unit will automatically resume to run; If continuously low-pressure switch protection act for twice, the indicator blink but it cannot resume automatically, in order to inform user air exhust; Press ON/OFF button to turn off the unit, then repress ON/OFF button and low-pressure switch has resumed to run.

2. During defrosting, do not detect low-pressure switch signal, after defrosting finished, 10mins start to detect.

3. In heating mode, outdoor ambient temperature is lower 0℃, will shield low-pressure switch for testing.

4. When heating, compressor is running but outdoor fan is stopping (anti-high temp. protection), low-pressure switch test shield, outdoor fan will resume to run and start to test the low-pressure switch signal.

5. When compressor is stopping, continuously 30s detected low-pressure switch break off, the whole unit will stop, the indicator will blink, it cannot resume automatically, it is need to press ON/OFF button to turn off the unit, then repress ON/OFF button, the low-pressure switch can resume to work.

6. Once power on, before the compressor start up, if continuously 1s detect the low-pressure switch break,all loads will not open, to turn off the unit and turn on the unit, untile detected the low-pressure switch resume, the loads will run normally.

(4) Air exhaust tube high temperature protection

After compressor started up, continuously 30s detected air exhaust temperature is very high or air exhaust sensor malfunction, running indicator blink. The unit will stop according to indoor ambient temperature meet the setting temperature. After compressor stopped 3mins later, if the air exhaust temperature resuem to normal, that the whole unit will resume to run.

If the above protection phenomenon continuously happened twice, the whole unit can not resume to run, the running indicator will blink. Press ON/OFF button to turn off the unit, then repress ON/OFF button, if air exhaust temperature resume to normal that will run at setting mode.

The first time heating start-up of compressor or other modes switch to the Heat mode, the air exhaust temp. protection will be shielded for 1mins.

(5) Anti-high temperature protection

Under the Heat mode, when detected the evaporator tube temp. is very high, the outdoor unit will stop to run; When evaporator tube temp. resume to normal,the outdoor unit will resume to work.

(6) Overcurrent protection

When the compressor is turned on, if it has detected that the current exceed the stated value, the unit will stop as theindoor ambient temp. has arrived at the setting temp., after the compressor has stopped for 3mins, it will resume to run in the original running state, if the protections is more than 6 times (If compressor has continuously work more than 6mins, the protection times will reset), the running indicator will blink, it can not resume to run automatically, it is need to press ON/OFF button to turn off the unit, then repress ON/OF button to resume to work.

(7) Communication malfunction

When it is detected that the indoor and outdoor units have communication malfunction , the running indicator will blink, the unit will be stopped as the indoor ambient temperature has arrived the setting temperature .

(8) Power off memory function

Memory contents: Mode, Swing, Preset temp., Preset fan speed.

After powered off, when repower on, the unit will memorize the contents and automatically turn on and run.

(9) Indicatordisplay

State	Indicator display	Remark:
High-pressure protection	Outdoor malfunction indicator 1 turns on indoor run indicator blinks	Indoor Run indicator turn off 3s and blinks once
Low-pressure protection	Outdoor malfunction indicator 3 turns on, indicator run indicator blinks	Indoor Run indicator turn off 3s and blink 3 times
Air exhaust protection (compressor over heat protection)	Outdoor malfunction indicator 1, 3 turn on, indoor running indicator blinks	Indoor running indicator turn off 3s and blink four times
Over current protection	Outdoor malfunction indicator 2 turns on, indoor run indicator blinks	Indoor indicator turn off 3s and blinks five times
Communication malfunction	Outdoor malfunction indicators 1,2,3 turn on, indoor run indicator blinks	Indoor indicator turn off 3s and blink six times
Normal communication	Outdoor indicator 4, 5 blink in turn	

When there are several malfunctions existed at the same time, it will display the high level malfunction in priority bya sequence as: communication malfunction→air exhaust protection→ over current protection→ high pressure protection →low pressure protection.

When unit is on, detect outdoor unit ambient sensor malfunction, when there is short circuit, open circuit, the indoor cooling indicator turns off 3s and blink 3 times.

（10）Dry function

1.When unit is on, under the Cool, Dry mode (there is no Dry function in Auto, Heat, Fan mode), can set up the ON/OFF of Dry mode, if the Dry is on, press the ON/OFF button to turn off the unit, the inner fan will run at low fan speed and run for 10mins (within 10mins will run at original running status, the other loads will turn off), then will turn off the whole unit; When the presetting for Dry is off, press the ON/OFF button to turn off the unit directly.

2. When Dry operation is running, operate the Dry button, the inner fan will immediately stop then the guide louver will turn off immediately.

3. When power on, the Dry function is off.

4. When power on, the Dry function is defaulted off on the remote control

（11）I Feel function

When controller received the orders that the controller will work according to ambient temperature which is sent by remote control (Except Defrost and Anti-cool wind, it will still adopt the air conditioner self ambient sensor sampling value), the remote control in every 10mins, to sent the ambient temperature value to controller. 11mins later, the controller haven't received the ambient temperature value from the remote control that the air conditioner will run itself ambient temperature. If there is no setting function that the ambient temperature will adopt the AC sensor sampling value. Power off will not memorize this function.

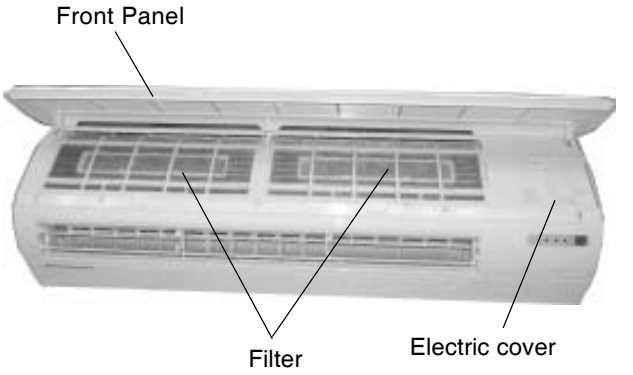
7 Dissassembly Procedures

7.1 Disassembly procedures for indoor unit

Operating Procedures / Photos

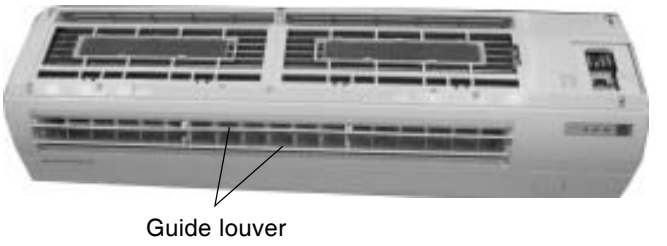
1. Disassemble the front panel, filter

Open the front panel ,Push the filter upwards to unloose the clasp, and then pull out the two filters.
Screw off the screws fixing the electric box cover to take the cover out.
Slightly push and pull out the rotating shaft of front panel from the groove to remove the front panel.



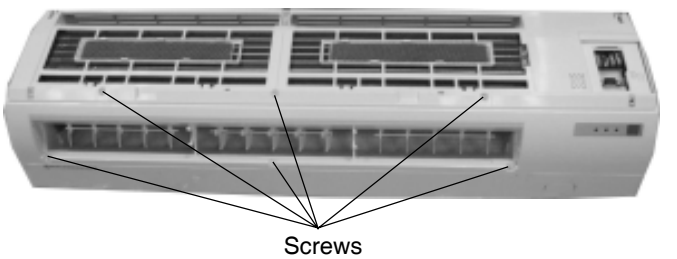
2. Disassemble the guide louver

Bend the guide louver so that the movable lock of guide louver is released to remove the guide louver.



3. Disassemble the front case

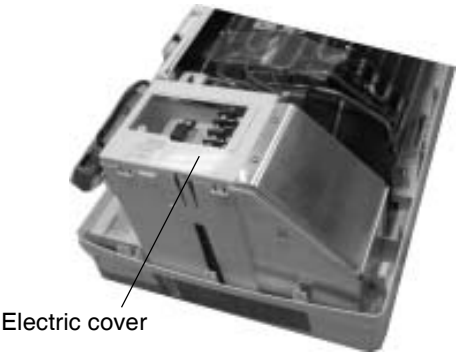
Open the 3 screw covers at the front case and screw off 6 screws. Pull out the movable latch at the front case with hand, disassemble the front case.



Operating Procedures / Photos

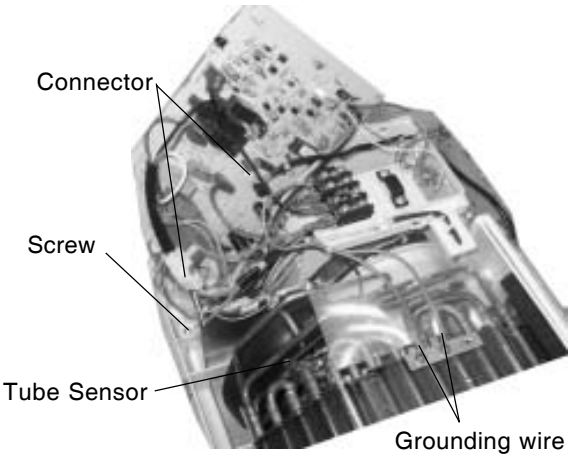
4. Disassemble the electric cover

Press the clasps in by till they loose, then lift up wards the electric cover.



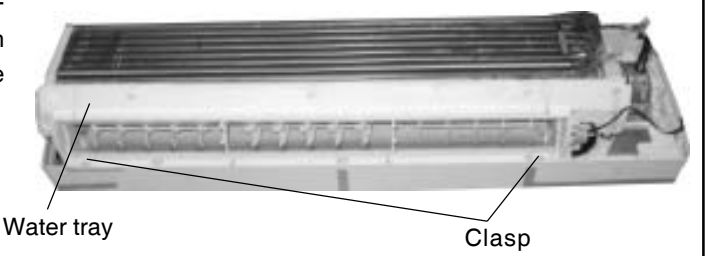
5. Disassemble the electric box

Loosen the grounding wire of the evaporator, remove the temperature sensor for the pipe, put out the connection lines of the step motor and the indoor motor. Screw off the screw fixing the electric box. Remove the electric box.



5. Disassemble water tray

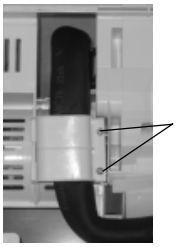
Loosen the clasps on both side of water tray and liftit upward, then can take off the water tray subassy.Note: Due to the water tray is connected with the water pipe,please becareful to take out the water tray, do not collapse thefin on evaporator.



Operating Procedures / Photos

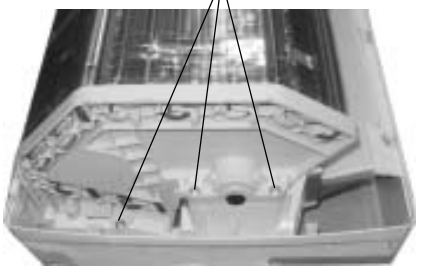
6. Disassembling the evaporator

Screw off 2 screws fixing the pipe clamp, loosen the clasp on the other side, can remove the pipe clamp.
Screw off 5 screws fixing the left and right side of the evaporator, then elevate left side the evaporator to remove it backward.



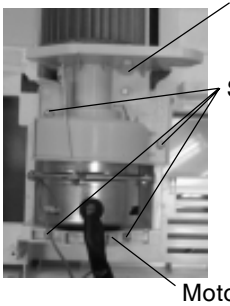
CAUTION:

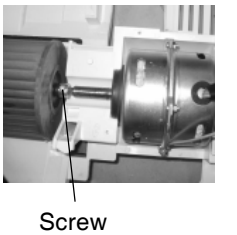
When repair, Carefully take out the evaporator and pay attention to protect the connecting pipe.



7. Disassembling motor and cross flow fan

Screw off 4 screws fixing the evaporator support (rihgt) and the motor clamp, screw off the holding screw at the left shaft sleeve of the cross flow fan, pull out the motor, and remove the cross flow fan.



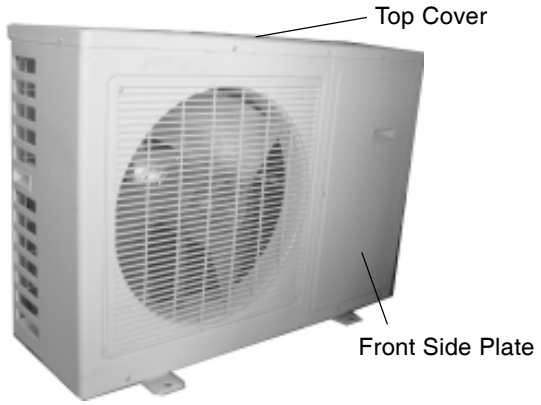


7. 2 Disassembly Procedures for Outdoor Unit

Operating Procedures / Photos

1. Disassemble Top Cover and Front Side Plate

Unscrew the screws fixing the top cover, and then lift the top cover to remove it.
Unscrew the 3 screws fixing the front side plate to remove it.

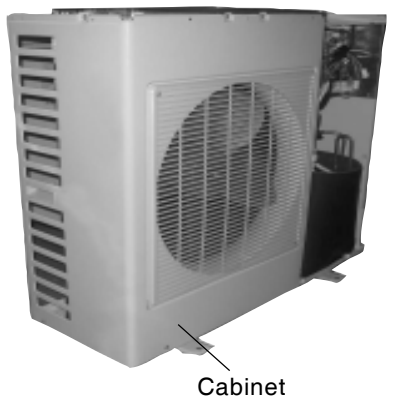


2. Disassemble Rear Grill

Unscrew the 4 screws fixing the rear grill to remove it.

3. Disassemble Cabinet

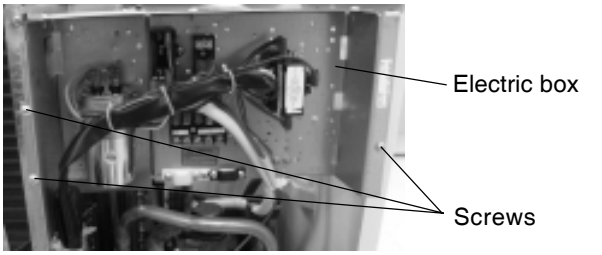
Unscrew the screws fixing the cabinet to remove it.



Operating Procedures / Photos

4. Disassemble Electric Box Sub-assy

Unscrew the 2 screws fixing electric box to pull out the connection line between fan motor, compressor,four-way valve, and then lift the electric box to take it out.



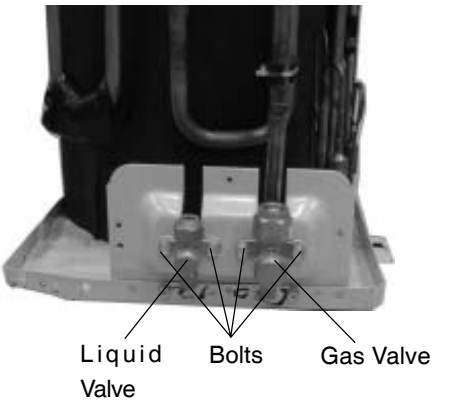
5. Disassemble Right side plate

Unscrew the screw of the right side plate, then take down the right side plate.

6. Disassemble Gas and Liquid Valves

Unsolder the pipeline connecting with valves (to prevent soldering gun from burning out the chassis). Unscrew 2 bolts fixing gas valve ,and then unsolder the weld spot between pipeline and gas valve to remove gas valve. Unscrew the 2 bolts fixing liquid valve, and then unsolder the soldering spot between pipeline and liquid valve to remove liquid valve.

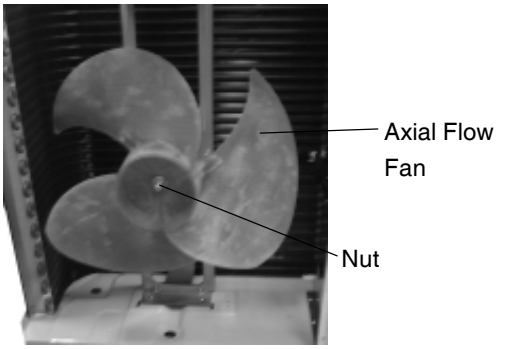
(Note:During unsoldering ,wrap the valves with wet cloth avoid damage for high temperature.)



Operating Procedures / Photos

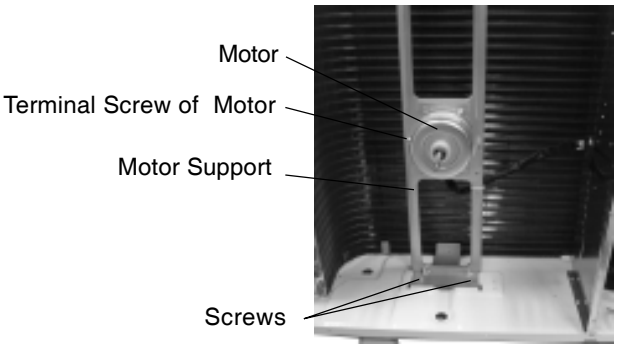
7. Disassemble Axial Flow Fan

Unscrew the nut fixing the fan with a spanner to take out the fan.



8. Disassemble Outdoor Motor

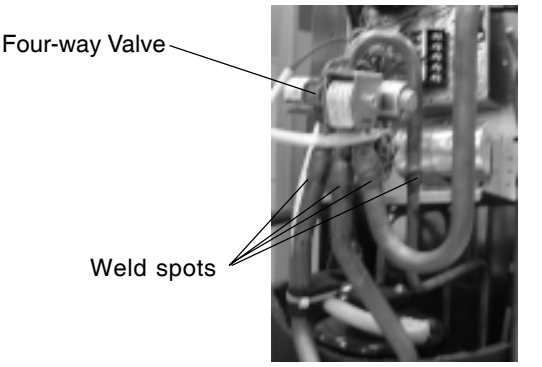
Unscrew the screws fixing the motor support, and then lift it upwards to remove it. Unscrew the screws fixing the motor and pull out the connection line between it and electric box to remove it.



9. Disassemble Four-way Valve

Only for cooling and heating unit

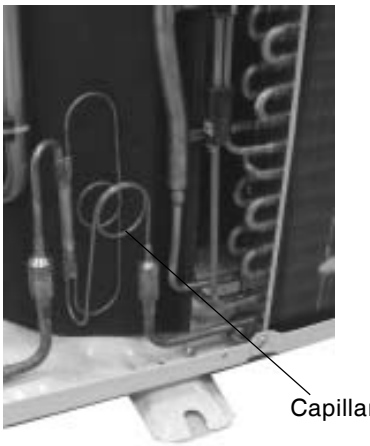
Unscrew the fixing nut of the four-way valve coil and remove the coil. Wrap the four-way valve with wet cotton and unsolder the 4 weld spots connecting the four-way valve to take it out. Welding process should be as quick as possible and keep wrapping cotton wet all the time. Be sure not to burn out the lead-out wire of compressor.



Operating Procedures / Photos

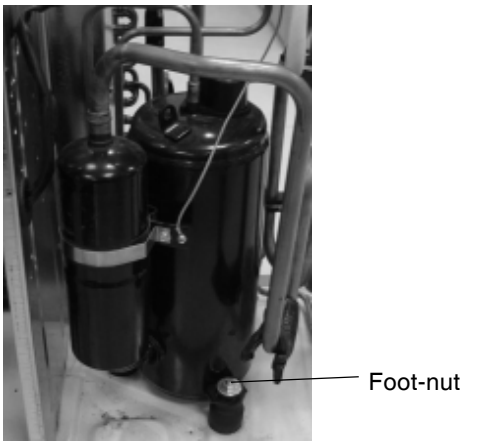
10. Disassemble Capillary

Unsolder the weld spots of capillary,valve and outlet tube of condenser to remove the capillary. Prevent welding slag from blocking the capillary.



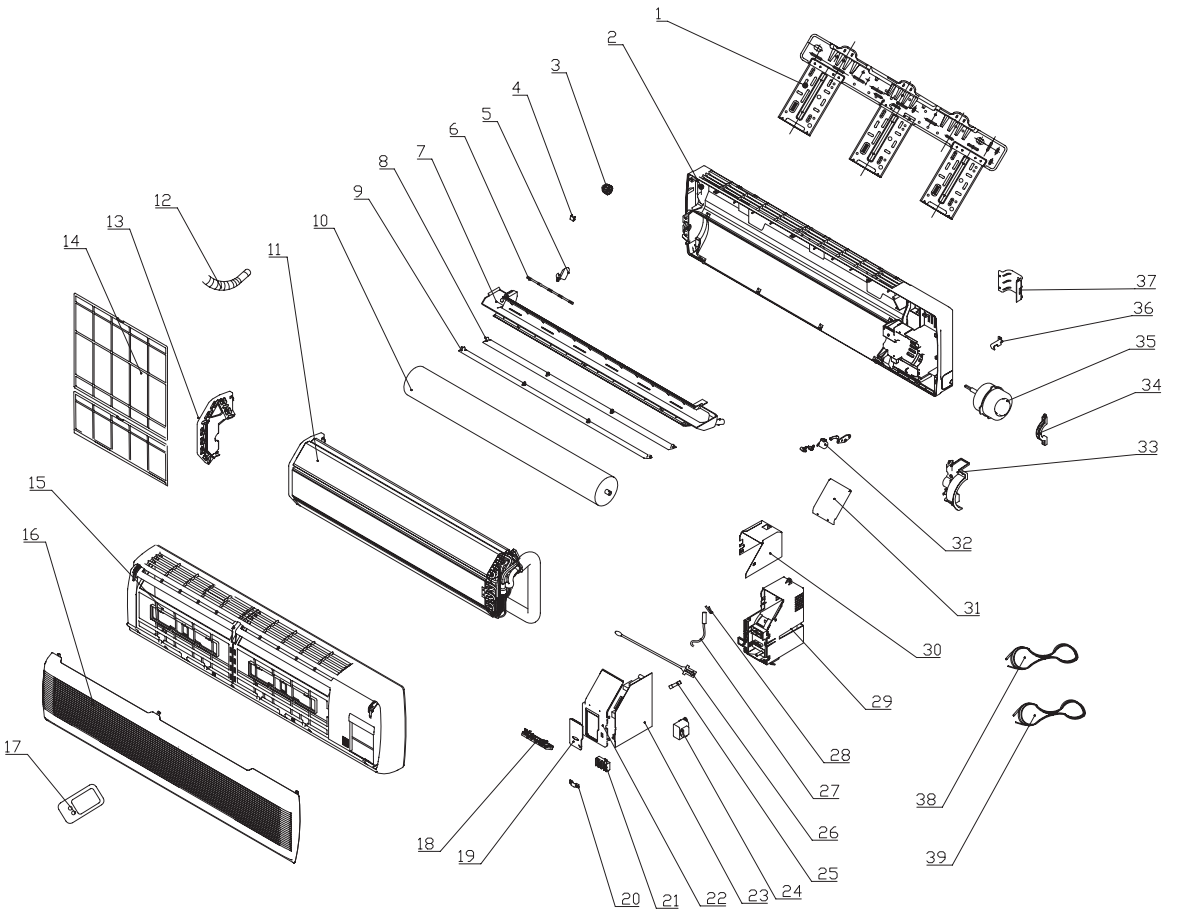
11. Disassemble Compressor

Unsolder the pipeline connecting the compressor, and then unscrew the 3 foot-nuts fixing conpressor to remove it.



8 Explosive view and spare parts list

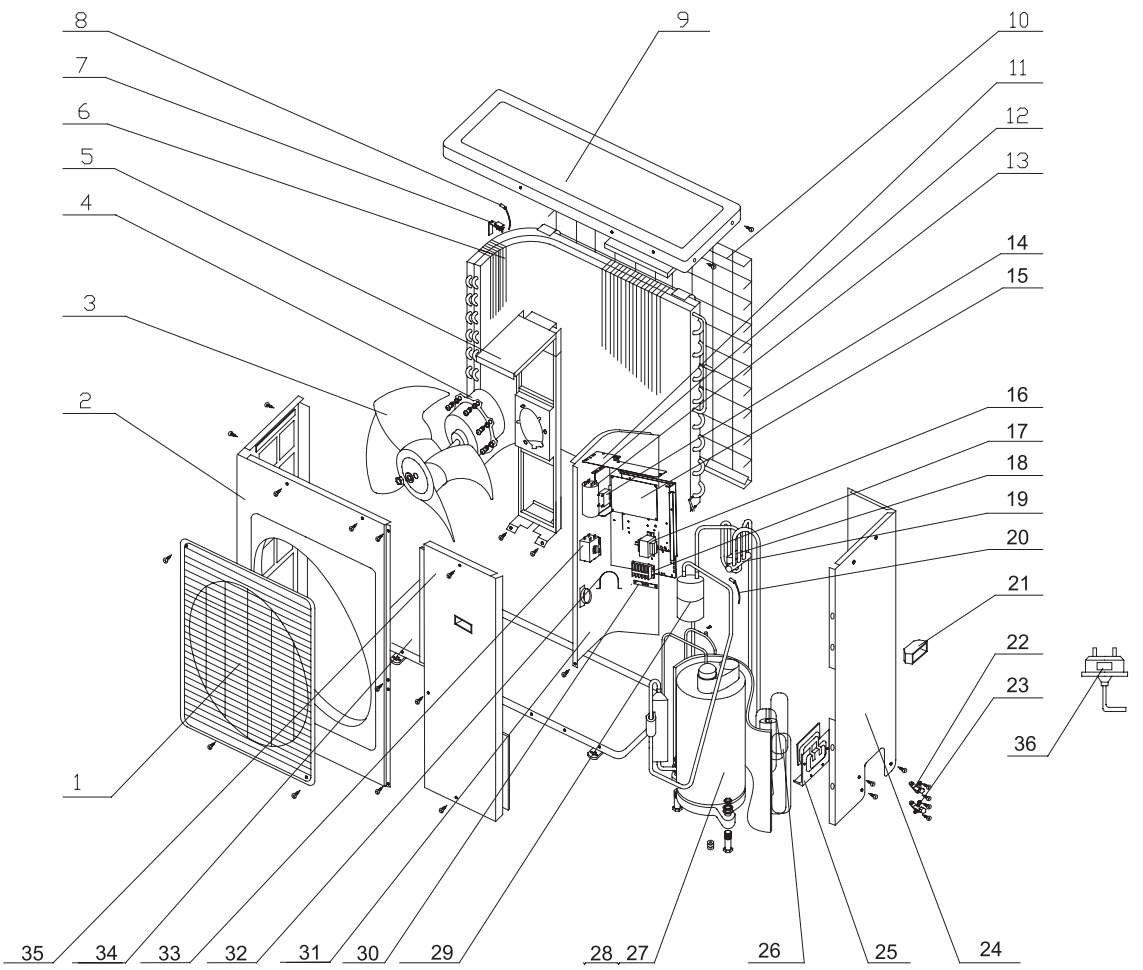
8. 1 Exploded View of Components and Parts of Indoor unit



No	Description	Part Code		Qty
		GWCN24FANK1A1A/I	GWHN24FANK1A1A/I	
1	Wall-Mounting Frame	01252398	01252398	1
2	Rear Case	22202091	22202091	1
3	Fan Bearing	76512203	76512203	1
4	Screw Cover	242520053	242520053	3
5	Swing Louver	10512110	10512110	15
6	Swing Link	10582040	10582040	3
7	Water Tray	20182043	20182043	1
8	Guide Louver（up）	10512062	10512062	1
9	Guide Louver（down）	10512063	10512063	1
10	Cross Flow Fan	10352420	10352420	1
11	Evaporator Assy	010041292	010041292	1
12	Drainage Pipe	0523001401	0523001401	1
13	Evaporator Support（left）	24212041	24212041	1
14	Filter	11122051	11122051	2
15	Front Case	20002923	20002923	1
16	Front Panel	20002375	20002375	1
17	Remote Controller YT1F	30510049	30510049	1
18	Receiver Board JD	30042029	30042029	1
19	Electric Box Cover	20102252	20102252	1
20	Wire Clamp	71010103	71010103	1
21	Terminal Board T4B3A	42011233	42011233	1
22	Electric Box Cover	20112044S	20112044S	1
23	Main PCB	30135137	30135138	1
24	Transformer 41X26.5G	43110236	43110236	1
25	Fuse T5AL 250V	46010013	46010013	1
26	Room Sensor	390000451	390000451	1
27	Tube Sensor	390000591	390000591	1
28	Sensor Insert	42020063	42020063	1
29	Electric Box	20102250	20102250	1
30	Lower Shield of Electric Box	01592034	01592034	1
31	Upper Shield of Electric Box	01592033	01592033	1
32	Stepping Motor MP24GA	15212102	15212102	1
33	Evaporator Support（rihgt）	24212042	24212042	1
34	Motor Clamp	26112069	26112069	1
35	Motor FN30D	150121052	150121052	1
36	Fixer(evaporator)	02112009	02112009	1
37	Pipe Clamp	26112071	26112071	1
38	Connecting Cable	400205235	400205235	1
39	Power Cable	400205405	400205405	1

The above data are subject to be changed without notice.

8. 2 Exploded View of Components and Parts of outdoor unit

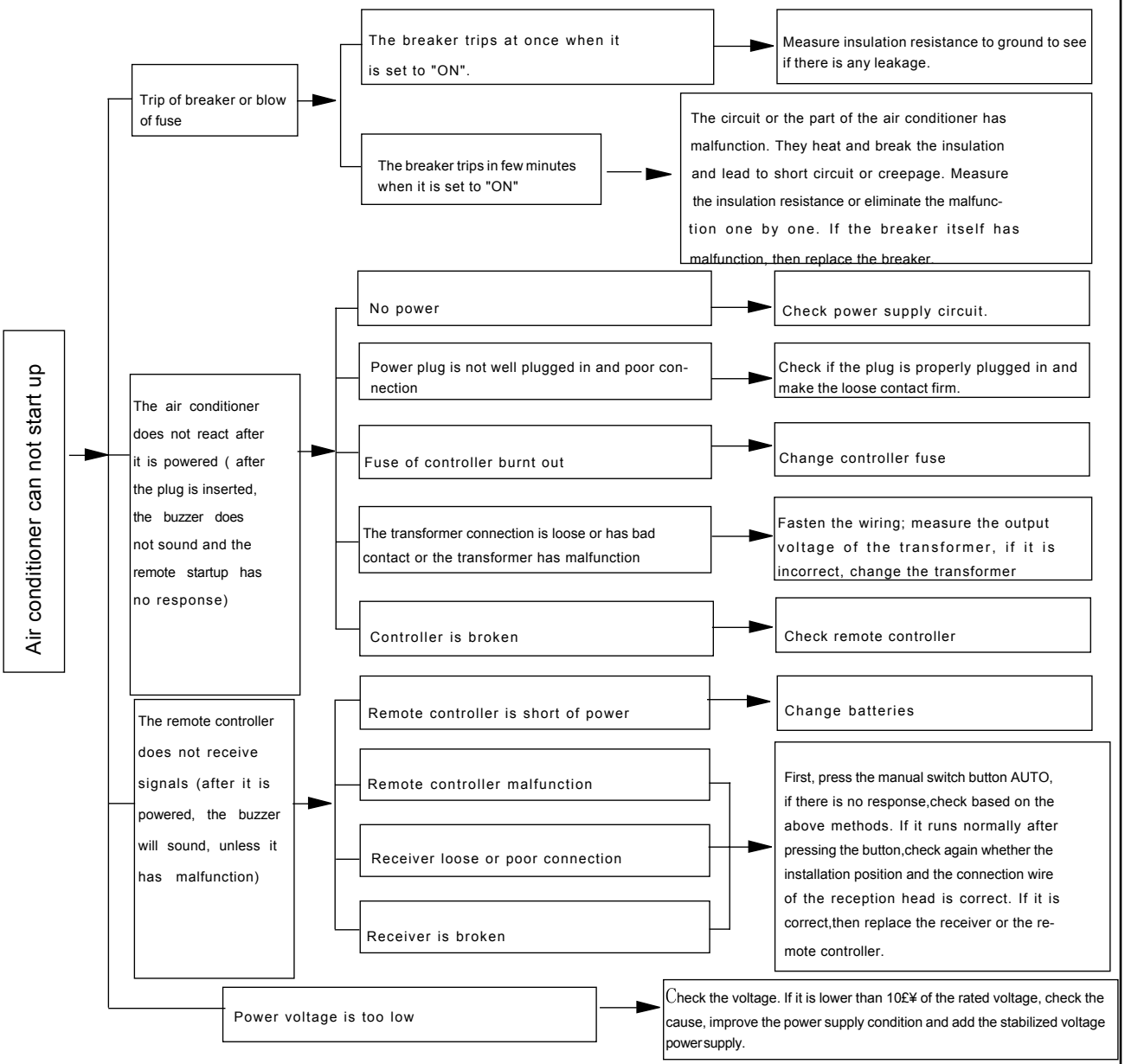


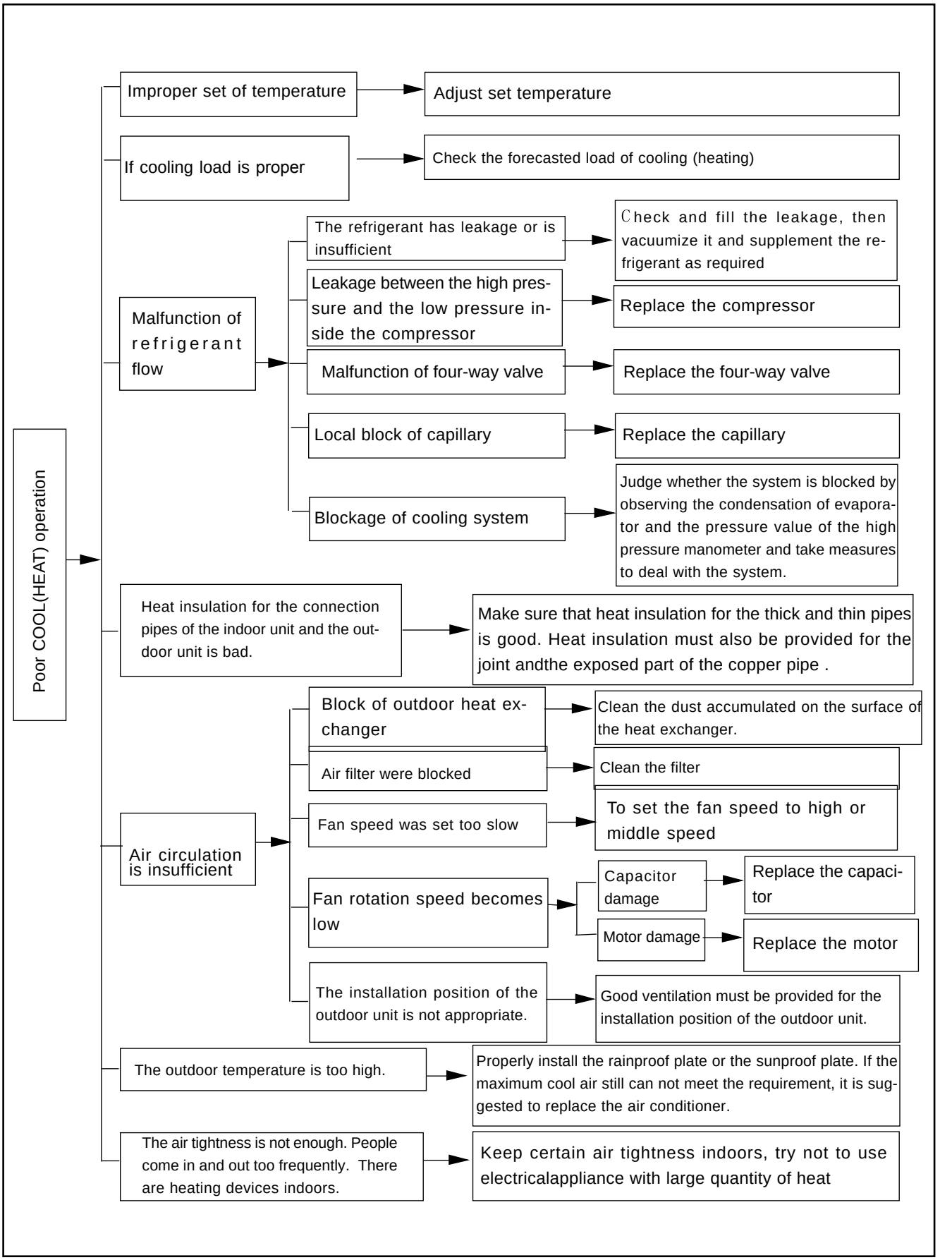
No	Description	Part Code		Qty
		GWCN24FANK1A1A/O	GWHN24FANK1A1A/O	
1	Front Grill	22265251	22414102	1
2	Front Plate	01433031	01433017P	1
3	Axial Flow Fan	10335257	10338731	1
4	Motor LW68B	15015057	15015421	1
5	Motor Support	01703403	01703025	1
6	Condenser Assy	01103961	01113052	1
7	Temp Sensor Support	24215101	24215101	1
8	Ambient Sensor	390002063	390002063	1
9	Top Cover	01255262	01255262	1
10	Rear Grill	01473028	01473028	1
11	upper Electric box cover	01413076	01413076	1
12	Electric Plate	01403377	01403902	1
13	Capacitor CBB65 50uF/450V	33000001	33000001	1
14	Capacitor CBB61 3.5uF/450V	33010010	33010010	1
15	Main PCB	30135141	30135142	1
16	Transformer 41X26.5G	43110236	43110236	1
17	Terminal Board	42010258	42010258	1
18	4-way Valve Coil	/	430004002	1
19	4-way Valve	/	43000404	1
20	Temp Sensor	/	3900012121	1
21	Handle	26235253	26235253	3
22	Gas Valve Assy 5/8"	07105252	07105252	1
23	Liquid Valve Assy 3/8"	07105256	071302113	1
24	Rear Side Plate	01305002	01305036	1
25	Valve Support	01715256	01715001	1
26	Capillary Assy	03103500	03003982	1
27	Compressor SHV33YE6UU	00100144	00100144	1
28	Overload Protector	Inset	Inset	1
29	Gas-liquid Separator	/	/	0
30	Isolation Washer C	70410523	70410523	1
31	Clapboard	01233024	01233024	1
32	Capacitor Clamp	02141005	02141004	1
33	AC Contactor CJX9B-25S/D	44010245	44010245	1
34	Metal Base	01203631P	01203631P	1
35	Front Side Plate	01303023	01303023	1
36	Pressure Switch	46020011	46020011	1

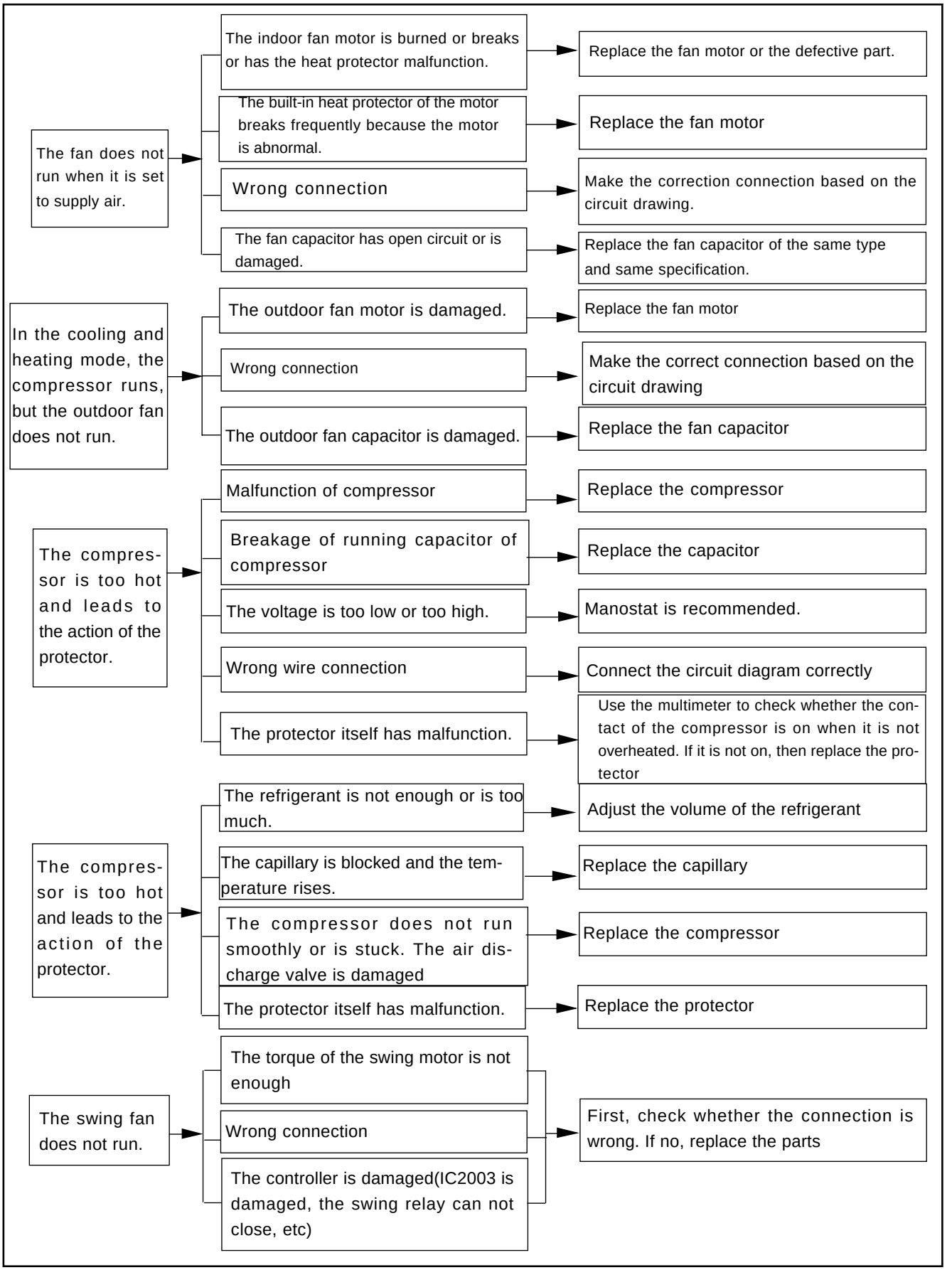
The above data are subject to be changed without notice.

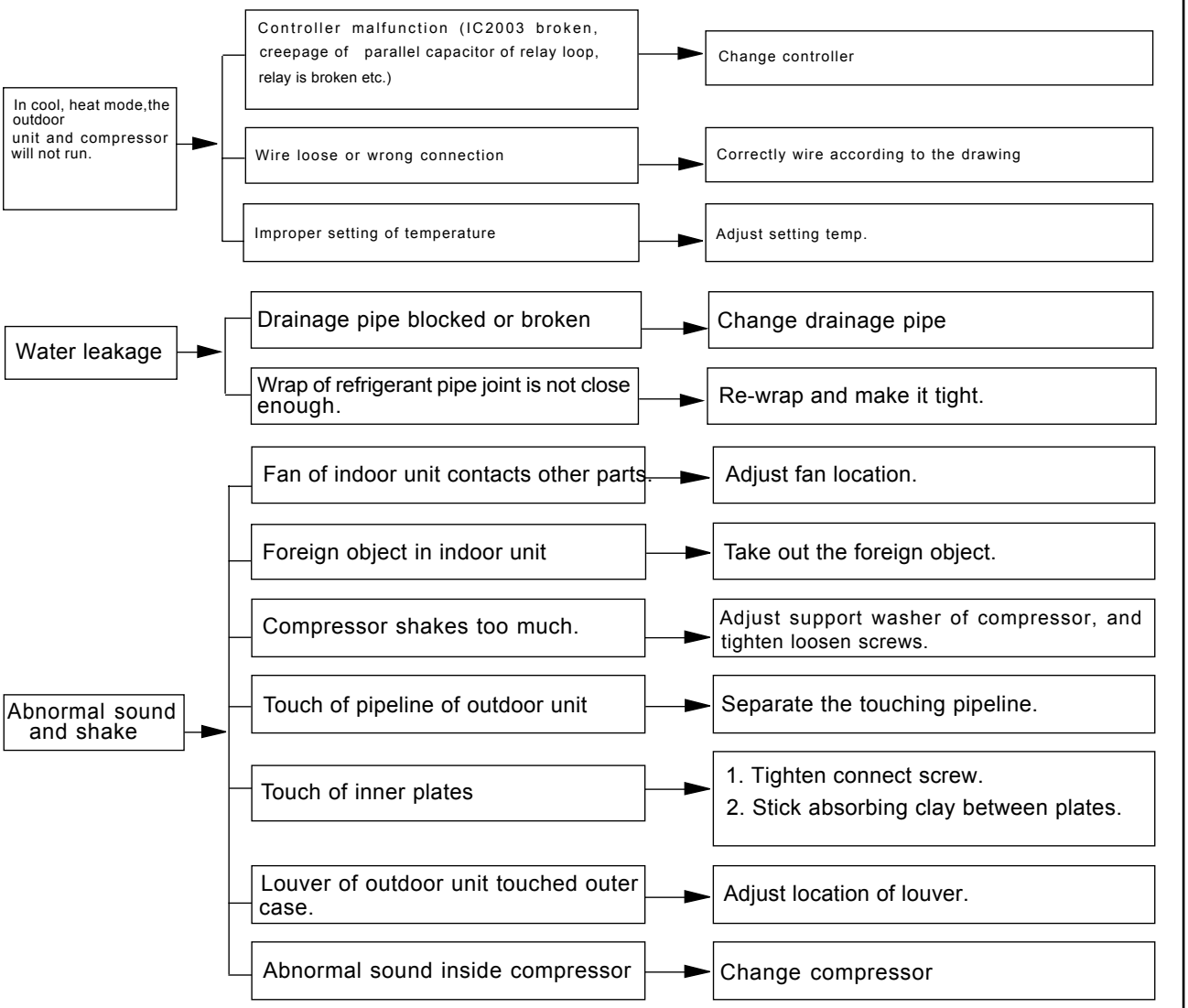
9 Trouble-Shooting

Note: When replacing the controller, make sure insert the wire jumper into the new controller, otherwise the unit display C5




Poor COOL(HEAT) operation
Improper set of temperature
Adjust set temperature
If cooling load is proper
Check the forecasted load of cooling (heating)
Malfunction of refrigerant flow
The refrigerant has leakage or is insufficient
Check and fill the leakage, then vacuumize it and supplement the refrigerant as required
Leakage between the high pressure and the low pressure inside the compressor
Replace the compressor
Malfunction of four-way valve
Replace the four-way valve
Local block of capillary
Replace the capillary
Blockage of cooling system
Judge whether the system is blocked by observing the condensation of evaporator and the pressure value of the high pressure manometer and take measures to deal with the system.
Heat insulation for the connection pipes of the indoor unit and the outdoor unit is bad.
Make sure that heat insulation for the thick and thin pipes is good. Heat insulation must also be provided for the joint andthe exposed part of the copper pipe .
Air circulation is insufficient
Block of outdoor heat exchanger
Clean the dust accumulated on the surface of the heat exchanger.
Air filter were blocked
Clean the filter
Fan speed was set too slow
To set the fan speed to high or middle speed
Fan rotation speed becomes low
Capacitor damage
Replace the capacitor
Motor damage
Replace the motor
The installation position of the outdoor unit is not appropriate.
Good ventilation must be provided for the installation position of the outdoor unit.
The outdoor temperature is too high.
Properly install the rainproof plate or the sunproof plate. If the maximum cool air still can not meet the requirement, it is suggested to replace the air conditioner.
The air tightness is not enough. People come in and out too frequently. There are heating devices indoors.
Keep certain air tightness indoors, try not to use electricalappliance with large quantity of heat


The fan does not run when it is set to supply air.
The indoor fan motor is burned or breaks or has the heat protector malfunction.
Replace the fan motor or the defective part.
The built-in heat protector of the motor breaks frequently because the motor is abnormal.
Replace the fan motor
Wrong connection
Make the correction connection based on the circuit drawing.
The fan capacitor has open circuit or is damaged.
Replace the fan capacitor of the same type and same specification.
In the cooling and heating mode, the compressor runs, but the outdoor fan does not run.
The outdoor fan motor is damaged.
Replace the fan motor
Wrong connection
Make the correct connection based on the circuit drawing
The outdoor fan capacitor is damaged.
Replace the fan capacitor
The compressor is too hot and leads to the action of the protector.
Malfunction of compressor
Replace the compressor
Breakage of running capacitor of compressor
Replace the capacitor
The voltage is too low or too high.
Manostat is recommended.
Wrong wire connection
Connect the circuit diagram correctly
The protector itself has malfunction.
Use the multimeter to check whether the contact of the compressor is on when it is not overheated. If it is not on, then replace the protector
The compressor is too hot and leads to the action of the protector.
The refrigerant is not enough or is too much.
Adjust the volume of the refrigerant
The capillary is blocked and the temperature rises.
Replace the capillary
The compressor does not run smoothly or is stuck. The air discharge valve is damaged
Replace the compressor
The protector itself has malfunction.
Replace the protector
The swing fan does not run.
The torque of the swing motor is not enough
Wrong connection
The controller is damaged(IC2003 is damaged, the swing relay can not close, etc)
First, check whether the connection is wrong. If no, replace the parts


In cool, heat mode,the outdoor unit and compressor will not run.
Controller malfunction (IC2003 broken, creepage of parallel capacitor of relay loop, relay is broken etc.)
Change controller
Wire loose or wrong connection
Correctly wire according to the drawing
Improper setting of temperature
Adjust setting temp.
Water leakage
Drainage pipe blocked or broken
Change drainage pipe
Wrap of refrigerant pipe joint is not close enough.
Re-wrap and make it tight.
Abnormal sound and shake
Fan of indoor unit contacts other parts.
Adjust fan location.
Foreign object in indoor unit
Take out the foreign object.
Compressor shakes too much.
Adjust support washer of compressor, and tighten loosen screws.
Touch of pipeline of outdoor unit
Separate the touching pipeline.
Touch of inner plates
1. Tighten connect screw.
2. Stick absorbing clay between plates.
Louver of outdoor unit touched outer case.
Adjust location of louver.
Abnormal sound inside compressor
Change compressor