1 Introduction and Features

Model	Remarks
GWCN09AANK1A1A GWHN09AANK1A1A GWCN12ABNK1A1A GWHN12ABNK1A1A	1Ph 220－240V～ 50Hz R22

Model	Remarks
GWCN18ACNK1A1A GWHN18ACNK1A1A	1Ph 220－240V～ 50Hz R22

2 Specifications and Technical Parameters

Model		GWCN09AANK1A1A	
Function		COOLING	/
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		9000Btu/h	/
Power Input (W)		900	/
Rated Input (W)		1150	/
Rated Current (A)		5.2	/
Air Flow Volume (m^3/h) (H/M/L)		480**m^3/h** （SH）	
Dehumidifying Volume (l/h)		0.8	
EER / C.O.P (W/W)		2.93	
Energy Class		/	
Indoor unit	Model of Indoor Unit	GWCN09AANK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1250/1150/1000/900	
	Output of Fan Motor (w)	10	
	Input of Heater (w)	——	
	Fan Motor Capacitor (uF)	1	
	Fan Motor RLA(A)	——	
	Fan Type-Piece	Cross flow fan – 1	
	Diameter-Length (mm)	Φ85X 615	
	Evaporator	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	
	Row-Fin Gap(mm)	2.-1.6	
	Coil length (l) x height (H) x coil width (L)	603X264X25.4	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A Transformer 0.2A	
	Sound Pressure Level dB (A) (H/M/L)	37/35/ 33	
	Sound Power Level dB (A) (H/M/L)	——	
	Dimension (W/H/D) (mm)	815X165X267	
	Dimension of Package (L/W/H) (mm)	890X260X344	
	Net Weight /Gross Weight (kg)	10/13	

Outdoor unit	Model of Outdoor Unit		GWCN09AANK1A1A/O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-B15A030
	Compressor Type		revolving
	L.R.A. (A)		20
	Compressor RLA(A)		3.9
	Compressor Power Input(W)		825
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7℃≤T≤52℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ7
	Rows-Fin Gap(mm)		1-1.4
	Coil length (l) x height (H) x coil width (L)		680X400X12.7
	Fan Motor Speed (rpm)		950
	Output of Fan Motor (W)		20
	Fan Motor RLA(A)		0.13
	Fan Motor Capacitor (uF)		1.5
	Air Flow Volume of Outdoor Unit		2500
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ324
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		50
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		720X430X320
	Dimension of Package (L/W/H)(mm)		765X350X490
	Net Weight /Gross Weight (kg)		25/29
	Refrigerant Charge (kg)		R22/0.5
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe	Ø6(1/4")
		Gas Pipe	Ø9.52(3/8")
	Max Distance	Height (m)	10
		Length (m)	20

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

Model		GWHN09AANK1A1A	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		9000Btu/h	9500Btu/h
Power Input (W)		900	800
Rated Input (W)		1150	1000
Rated Current (A)		5.2	4.5
Air Flow Volume (m^3/h) (H/M/L)		480**m^3/h** （SH）	
Dehumidifying Volume (l/h)		0.8	
EER / C.O.P (W/W)		2.93/3.48	
Energy Class		/	
Indoor unit	Model of Indoor Unit	GWHN09AANK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1250/1150/1000/900	
	Output of Fan Motor (w)	10	
	Input of Heater (w)	——	
	Fan Motor Capacitor (uF)	1	
	Fan Motor RLA(A)	——	
	Fan Type-Piece	Cross flow fan – 1	
	Diameter-Length (mm)	Φ85X 615	
	Evaporator	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	
	Row-Fin Gap(mm)	2.-1.6	
	Coil length (l) x height (H) x coil width (L)	603X264X25.4	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A Transformer 0.2A	
	Sound Pressure Level dB (A) (H/M/L)	37/35/ 33	
	Sound Power Level dB (A) (H/M/L)	——	
	Dimension (W/H/D) (mm)	815X165X267	
	Dimension of Package (L/W/H) (mm)	890X260X344	
	Net Weight /Gross Weight (kg)	10/13	

Outdoor unit	Model of Outdoor Unit		GWHN09AANK1A1A/O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-B15A030
	Compressor Type		revolving
	L.R.A. (A)		20
	Compressor RLA(A)		3.9
	Compressor Power Input(W)		825
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7℃≤T≤52℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ7
	Rows-Fin Gap(mm)		1-1.4
	Coil length (l) x height (H) x coil width (L)		680X406X22
	Fan Motor Speed (rpm)		950
	Output of Fan Motor (W)		20
	Fan Motor RLA(A)		0.13
	Fan Motor Capacitor (uF)		1.5
	Air Flow Volume of Outdoor Unit		2500
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ324
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		50
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		720X430X320
	Dimension of Package (L/W/H)(mm)		765X350X490
	Net Weight /Gross Weight (kg)		25/29
	Refrigerant Charge (kg)		R22/0.63
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe	Φ6(1/4")
		Gas Pipe	Φ9.52(3/8")
	Max Distance	Height (m)	5
		Length (m)	10

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

Model		GWCN12ABNK1A1A	
Function		COOLING	/
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		12000Btu/h	/
Power Input (W)		1250	/
Rated Input (W)		1600	/
Rated Current (A)		7.3	/
Air Flow Volume (m^3/h) (H/M/L)		520**m^3/h** （SH）	
Dehumidifying Volume (l/h)		1.2	
EER / C.O.P (W/W)		2.82	
Energy Class		/	
Indoor unit	Model of Indoor Unit	GWCN12ABNK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1350/1150/1050/ 900	
	Output of Fan Motor (w)	10	
	Input of Heater (w)	——	
	Fan Motor Capacitor (uF)	1	
	Fan Motor RLA(A)	0.05	
	Fan Type-Piece	Cross flow fan – 1	
	Diameter-Length (mm)	Φ85X 668	
	Evaporator	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	
	Row-Fin Gap(mm)	2.-1.5	
	Coil length (l) x height (H) x coil width (L)	657X285X25.4	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A Transformer 0.2A	
	Sound Pressure Level dB (A) (H/M/L)	39/36/ 33	
	Sound Power Level dB (A) (H/M/L)	——	
	Dimension (W/H/D) (mm)	872X178 X283	
	Dimension of Package (L/W/H) (mm)	935X260X375	
	Net Weight /Gross Weight (kg)	11/14	

Outdoor unit	Model of Outdoor Unit		GWCN12ABNK1A1A/O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-208B030gA
	Compressor Type		revolving
	L.R.A. (A)		29
	Compressor RLA(A)		5.4
	Compressor Power Input(W)		1100
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7℃≤T≤52℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ8
	Rows-Fin Gap(mm)		1-1.5
	Coil length (l) x height (H) x coil width (L)		780X506X19.05
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.13
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		2500
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ400
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		52
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		848X540X320
	Dimension of Package (L/W/H)(mm)		878X360X590
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/0.78
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe	Φ6(1/4")
		Gas Pipe	Φ12(1/2")
	Max Distance	Height (m)	10
		Length (m)	20

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

Model		GWHN12ABNK1A1A	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		12000Btu/h	12800 Btu/h
Power Input (W)		1250	1280
Rated Input (W)		1600	1660
Rated Current (A)		7.3	7.5
Air Flow Volume (m^3/h) (H/M/L)		520**m^3/h** （SH）	
Dehumidifying Volume (l/h)		1.2	
EER / C.O.P (W/W)		2.82/2.93	
Energy Class		/	
Indoor unit	Model of Indoor Unit	GWHN12ABNK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1350/1150/1050/ 900	
	Output of Fan Motor (w)	10	
	Input of Heater (w)	——	
	Fan Motor Capacitor (uF)	1	
	Fan Motor RLA(A)	0.05	
	Fan Type-Piece	Cross flow fan – 1	
	Diameter-Length (mm)	Φ85X 668	
	Evaporator	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	
	Row-Fin Gap(mm)	2-1.5	
	Coil length (l) x height (H) x coil width (L)	657X285X25.4	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A Transformer 0.2A	
	Sound Pressure Level dB (A) (H/M/L)	39/36/ 33	
	Sound Power Level dB (A) (H/M/L)	——	
	Dimension (W/H/D) (mm)	872X178X283	
	Dimension of Package (L/W/H) (mm)	935X260X375	
	Net Weight /Gross Weight (kg)	11/15	

Outdoor unit	Model of Outdoor Unit		GWHN12ABNK1A1A/O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-21B030gA
	Compressor Type		revolving
	L.R.A. (A)		30
	Compressor RLA(A)		5.7
	Compressor Power Input(W)		1180
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7℃≤T≤52℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ7
	Rows-Fin Gap(mm)		2-1.4
	Coil length (l) x height (H) x coil width (L)		780X506X25.4
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.13
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		2500
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ400
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		52
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		848X540X320
	Dimension of Package (L/W/H)(mm)		878X360X590
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/1.05
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe	Φ6(1/4")
		Gas Pipe	Φ12(1/2")
	Max Distance	Height (m)	10
		Length (m)	20

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

Model		GWCN18ACNK1A1A
Function		COOLING
Rated Voltage		220-240V~
Rated Frequency		50Hz
Total Capacity (W/Btu/h)		18000Btu/h
Power Input (W)		1850
Rated Input (W)		2300
Rated Current (A)		10.5
Air Flow Volume (m^3/h) (H/M/L)**		780m³/h （SH）
Dehumidifying Volume (l/h)		1.8
EER / C.O.P (W/W)		2.8
Energy Class		/
Indoor unit	**Model of Indoor Unit**	GWCN18ACNK1A1A /I
	Fan Motor Speed (r/min) (H/M/L)	1380/1150/1050/950
	Output of Fan Motor (w)	20
	Input of Heater (w)	——
	Fan Motor Capacitor (uF)	1
	Fan Motor RLA(A)	0.21
	Fan Type-Piece	Cross flow fan – 1
	Diameter-Length (mm)	Φ98X733
	Evaporator	Aluminum fin-copper tube
	Pipe Diameter (mm)	Φ7
	Row-Fin Gap(mm)	2-1.5
	Coil length (l) x height (H) x coil width (L)	740X25.4X301
	Swing Motor Model	MP28VB
	Output of Swing Motor (W)	1.5
	Fuse (A)	PCB 3.15A、T12.5A Transformer 0.2A
	Sound Pressure Level dB (A) (H/M/L)	45/40/37/34
	Sound Power Level dB (A) (H/M/L)***	55/50/47/44
	Dimension (W/H/D) (mm)	960 X300X195
	Dimension of Package (L/W/H) (mm)	1035 X390X280
	Net Weight /Gross Weight (kg)	13/18

Outdoor unit	Model of Outdoor Unit		GWCN18ACNK1A1A/O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SHX33SC4-S
	Compressor Type		rotary
	L.R.A. (A)		40
	Compressor RLA(A)		8.35
	Compressor Power Input(W)		1815
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		≤48℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ8
	Rows-Fin Gap(mm)		1-1.4
	Coil length (l) x height (H) x coil width (L)		810X660X19.05
	Fan Motor Speed (rpm)		860
	Output of Fan Motor (W)		48
	Fan Motor RLA(A)		0.45
	Fan Motor Capacitor (uF)		3.5
	Air Flow Volume of Outdoor Unit		6500
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ473
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		56
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		913x680x378
	Dimension of Package (L/W/H)(mm)		994X428X720
	Net Weight /Gross Weight (kg)		46/50
	Refrigerant Charge (kg)		R22/1.7
Connection Pipe	Length (m)		5
	Gas additional charge(g/m)		50
	Outer Diameter	Liquid Pipe	Φ6(1/4")
		Gas Pipe	Φ12(1/2")
	Max Distance	Height (m)	15
		Length (m)	20

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

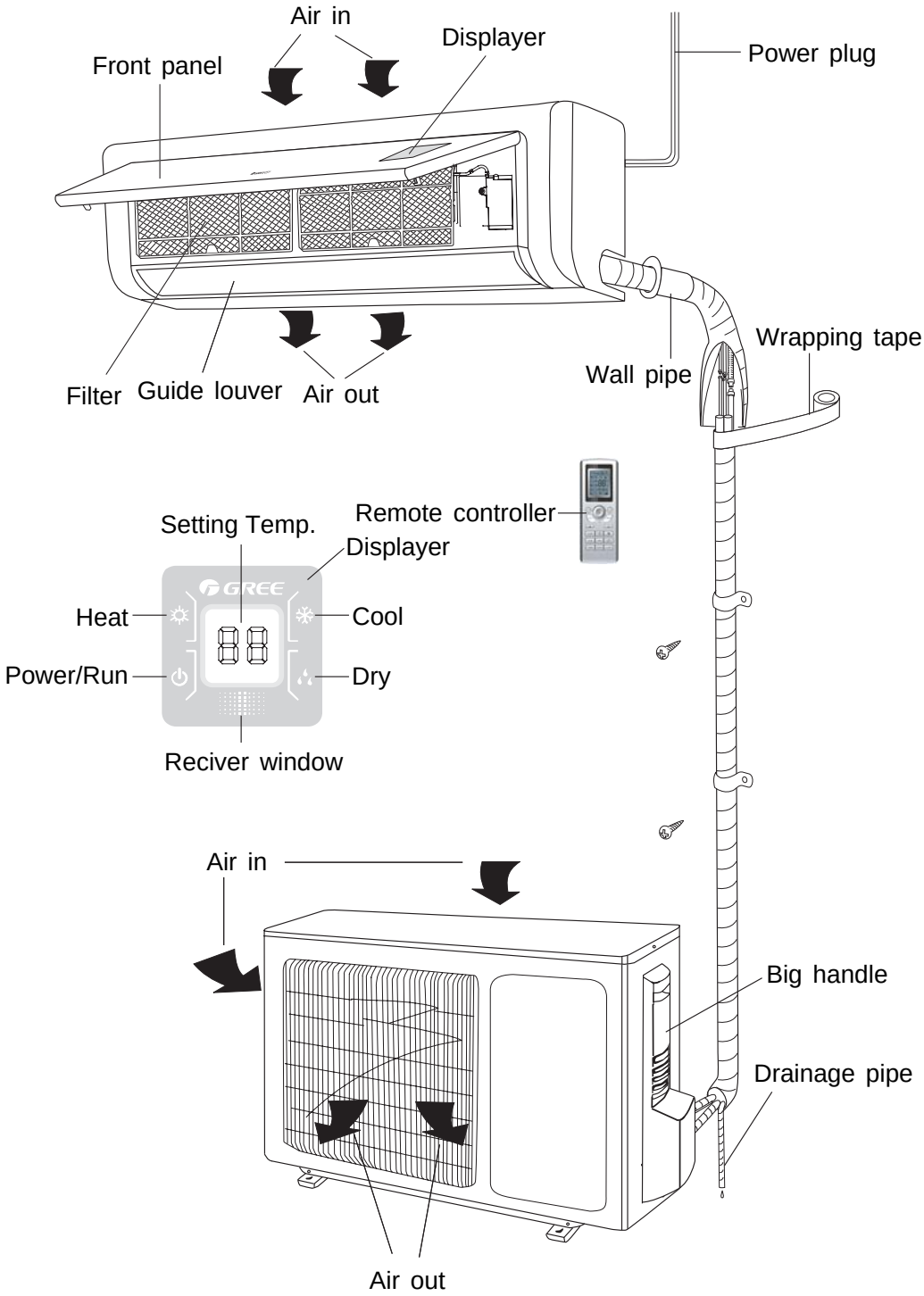
Model		GWHN18ACNK1A1A	
Function		COOLING/HEATING	
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		18000Btu/h	19500Btu/h
Power Input (W)		1850	1900
Rated Input (W)		2300	2300
Rated Current (A)		14	14
Air Flow Volume (m^3/h) (H/M/L)**		780**m^3/h** （SH）	
Dehumidifying Volume (l/h)		1.8	
EER / C.O.P (W/W)		2.8	
Energy Class		/	
Indoor unit	**Model of Indoor Unit**	GWHN18ACNK1A1A/I	
	Fan Motor Speed (r/min) (H/M/L)	1380/1150/1050/950	
	Output of Fan Motor (w)	20	
	Input of Heater (w)	——	
	Fan Motor Capacitor (uF)	1	
	Fan Motor RLA(A)	0.21	
	Fan Type-Piece	Cross flow fan – 1	
	Diameter-Length (mm)	Φ98X733	
	Evaporator	Aluminum fin-copper tube	
	Pipe Diameter (mm)	Φ7	
	Row-Fin Gap(mm)	2.-1.5	
	Coil length (l) x height (H) x coil width (L)	740X25.4X301	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A、T12.5A Transformer 0.2A	
	Sound Pressure Level dB (A) (H/M/L)	45/40/37/34	
	Sound Power Level dB (A) (H/M/L)***	55/50/47/44	
	Dimension (W/H/D) (mm)	960 X300X195	
	Dimension of Package (L/W/H) (mm)	1035 X390X280	
	Net Weight /Gross Weight (kg)	13/18	

Outdoor unit	Model of Outdoor Unit		GWHN18ACNK1A1A/O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SHX33SC4-S
	Compressor Type		rotary
	L.R.A. (A)		40
	Compressor RLA(A)		8.35
	Compressor Power Input(W)		1815
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		≤48℃
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ7
	Rows-Fin Gap(mm)		2-1.4
	Coil length (l) x height (H) x coil width (L)		800X650X25.4
	Fan Motor Speed (rpm)		860
	Output of Fan Motor (W)		48
	Fan Motor RLA(A)		0.45
	Fan Motor Capacitor (uF)		3.5
	Air Flow Volume of Outdoor Unit		-
	Fan Type-Piece		Axial fan –1
	Fan Diameter (mm)		Φ473
	Defrosting Method		/
	Climate Type		T1
	Isolation		I
	Moisture Protection		IP24
	Permissible Excessive Operating Pressure for the Discharge Side(MPa)		2.5
	Permissible Excessive Operating Pressure for the Suction Side(MPa)		0.6
	Sound Pressure Level dB (A) (H/M/L)		56
	Sound Power Level dB (A) (H/M/L)		——
	Dimension (W/H/D) (mm)		913x680x378
	Dimension of Package (L/W/H)(mm)		994X428X720
	Net Weight /Gross Weight (kg)		52/57
	Refrigerant Charge (kg)		R22/1.7
Connection Pipe	Length (m)		5
	Gas additional charge(g/m)		50
	Outer Diameter	Liquid Pipe	Φ6(1/4")
		Gas Pipe	Φ12(1/2")
	Max Distance	Height (m)	15
		Length (m)	20

Parameter data are subject to change withour prior notice. Refer to the nameplate of the unit.

3 Parts name

Indoor Unit

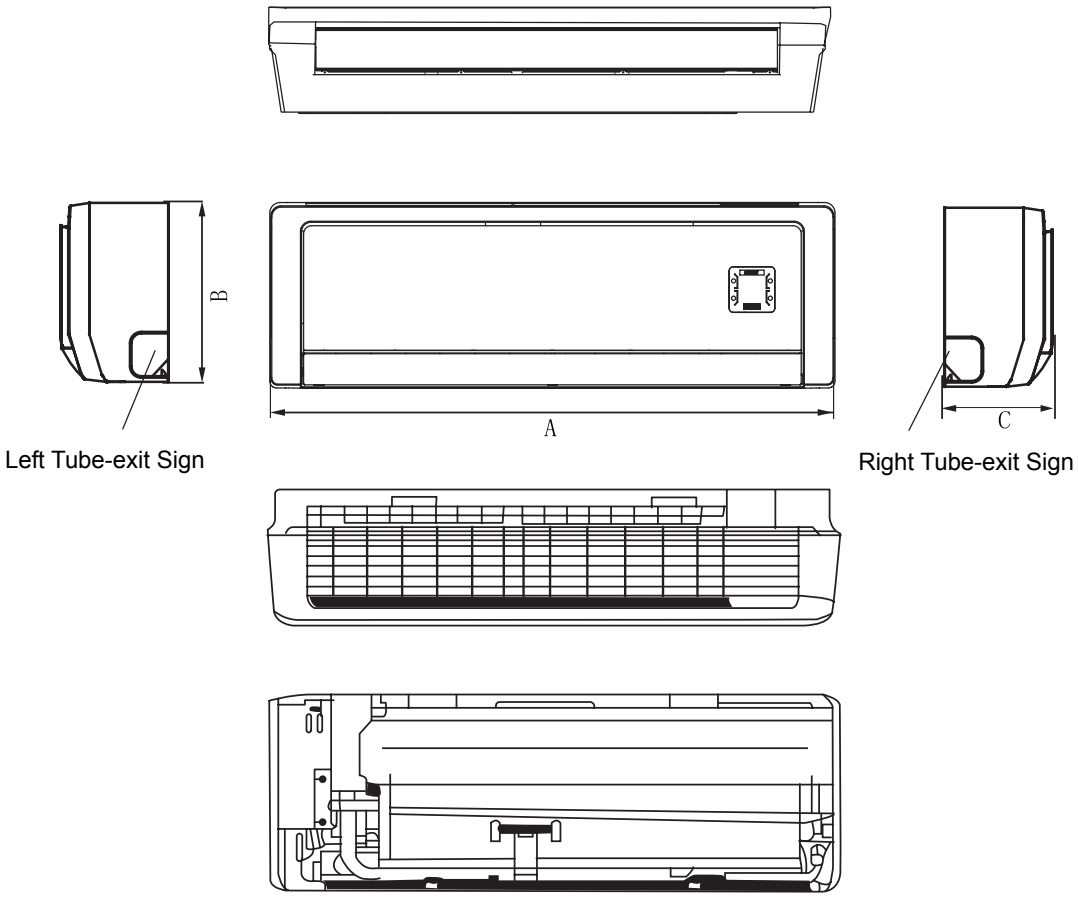


Outdoor Unit

Note: This photo is about the models of 9K, 12K, the appearance of model of 18K and 24K are a little different from this picture.

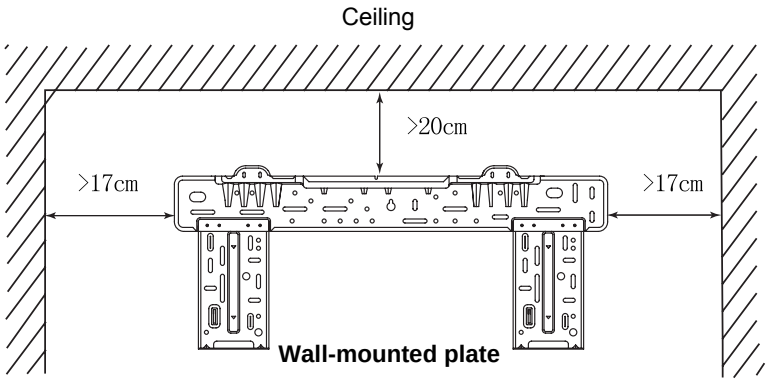
4 Outline and Installing Dimension

4.1 Outline and Installing Dimension of Indoor Unit



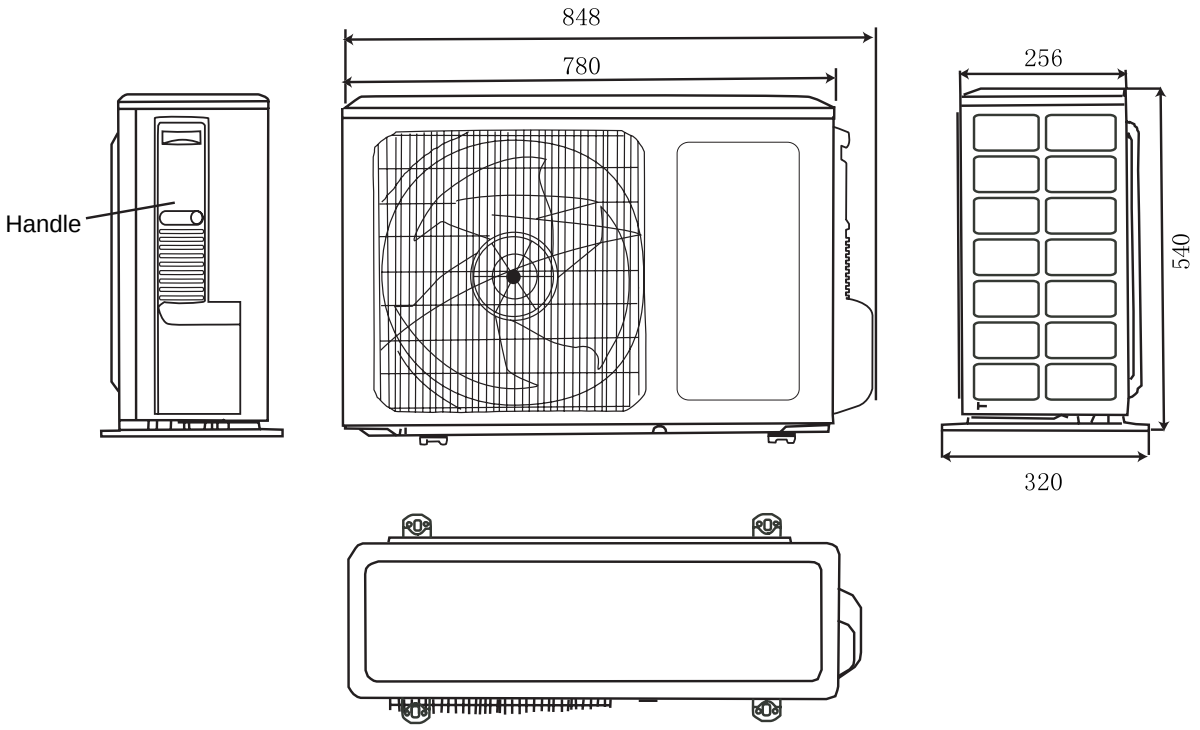
Unit:mm

Dimension			Applicable models
A	B	C	
872	283	178	09K、12K
960	300	195	18K

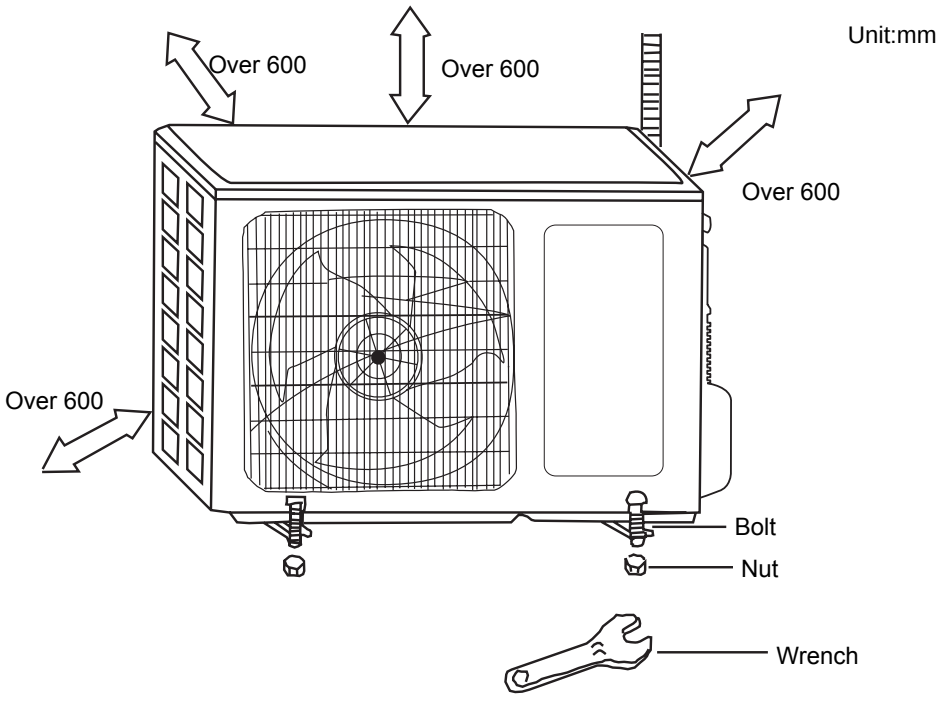


4. 2 Outline and Installing Dimension of Outdoor Unit

Applicable to GWCN09AANK1A1A, GWHN09AANK1A1A, GWCN12ABNK1A1A, GWHN12ABNK1A1A

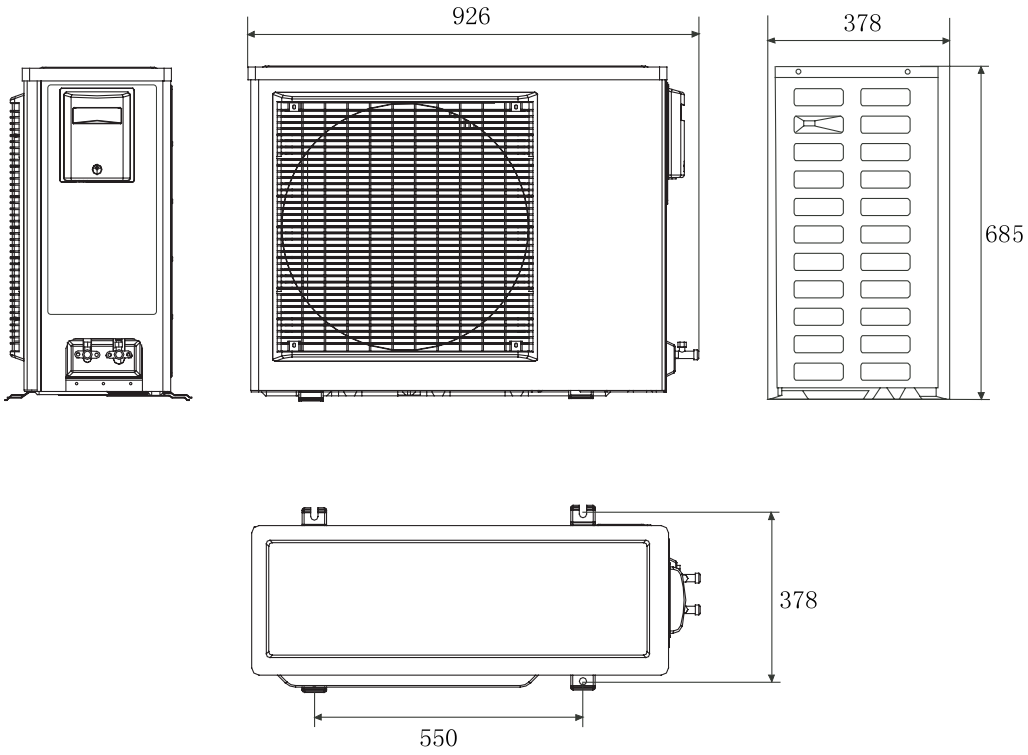


Unit:mm

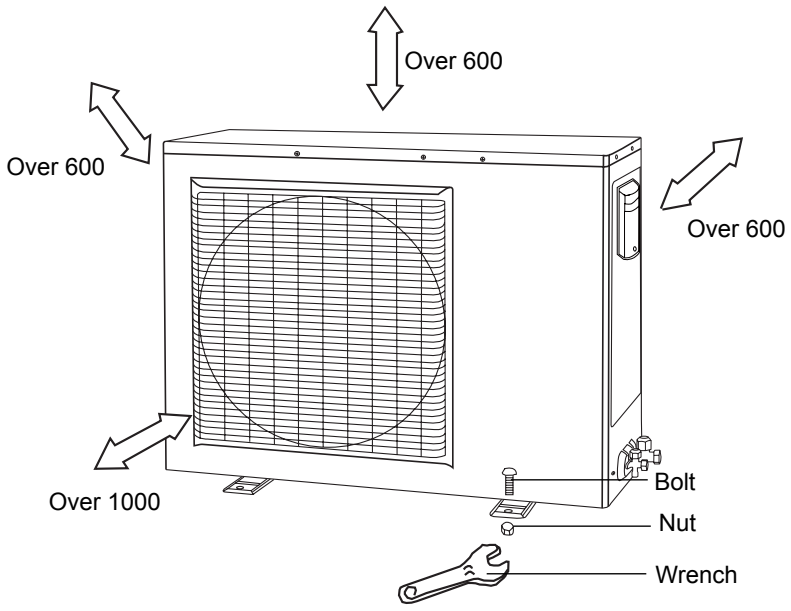


4.3 Outline and Installing Dimension of Outdoor Unit (2)

Applicable to GWCN18ACNK1A1A、GWHN18ACNK1A1A

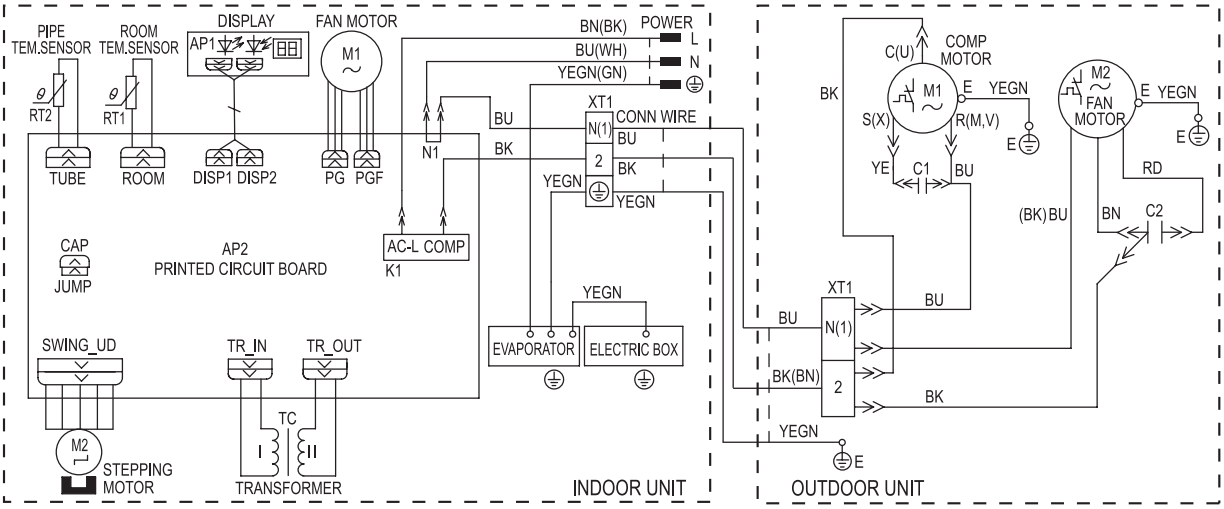


Unit:mm

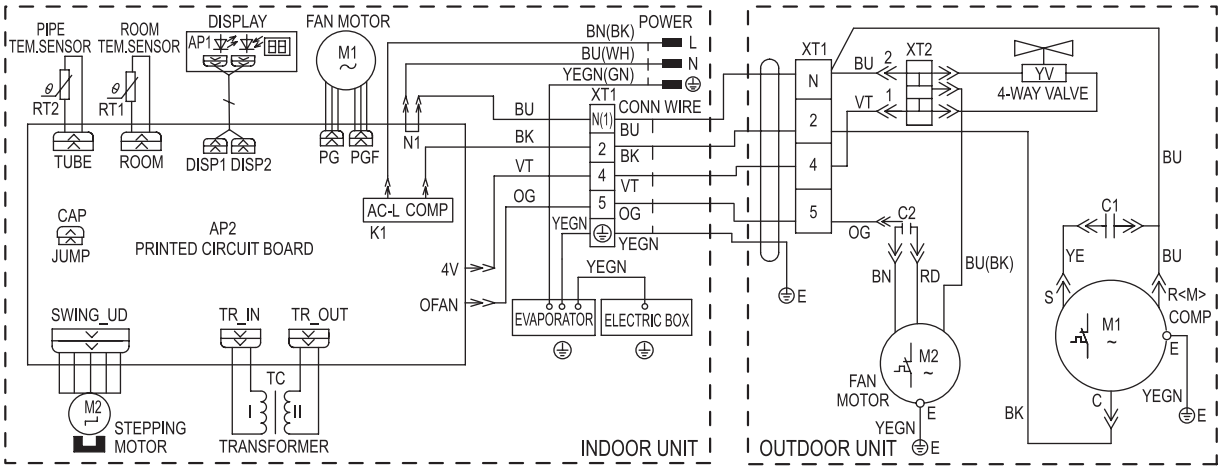


5 Electrical Diagram

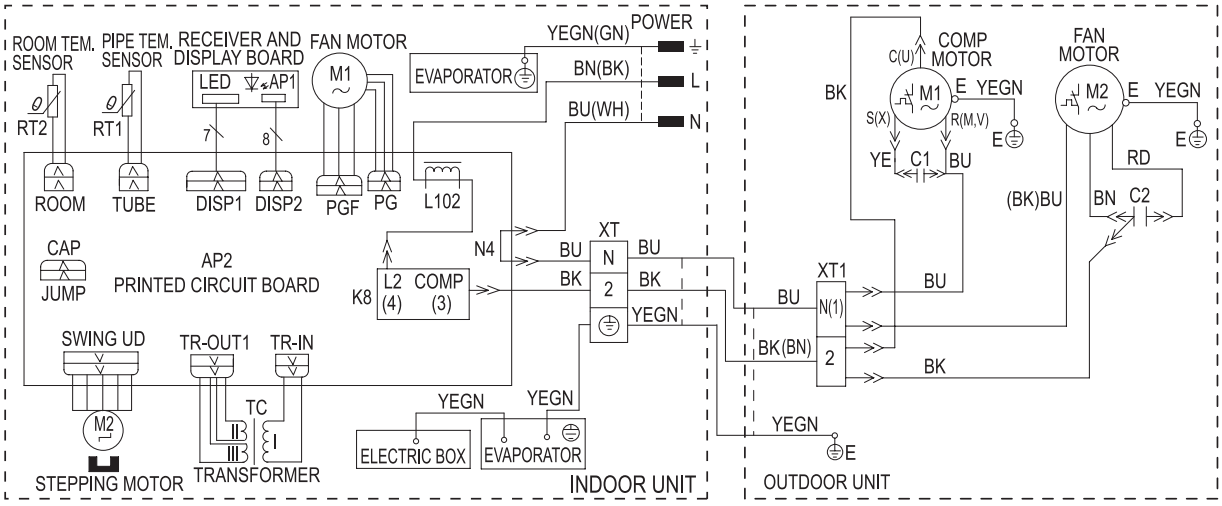
GWCN09AANK1A1A GWCN12ABNK1A1A



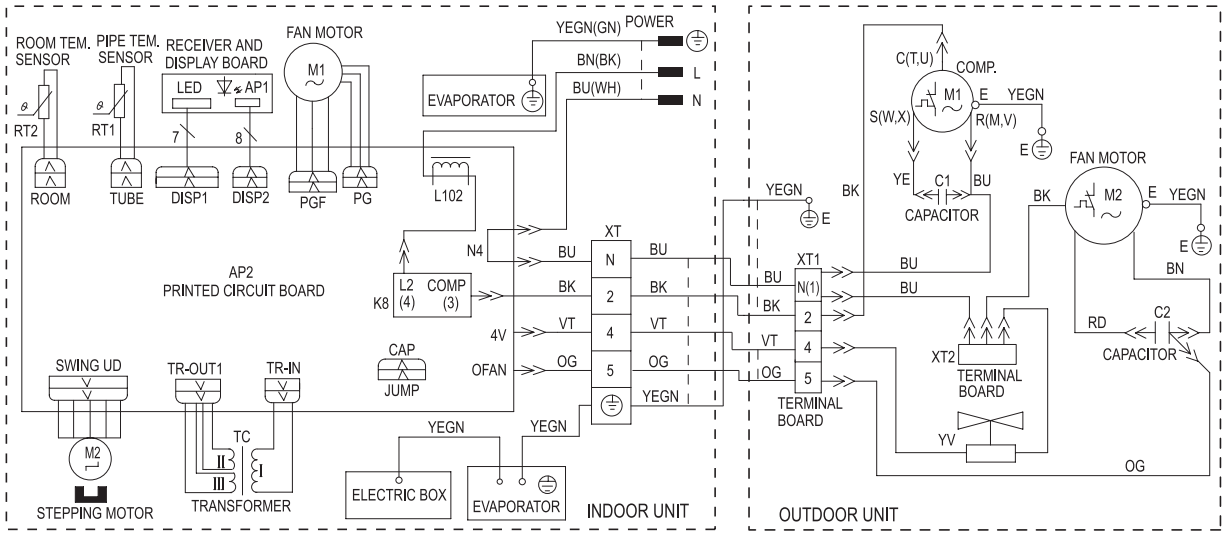
GWHN09AANK1A1A GWHN12ABNK1A1A



GWCN18ACNK1A1A



GWHN18ACNK1A1A



6 Manual of functions of remote controller and operation method

6.1 Manual of functions of remote controller

This function manual is for: GWCN09AANK1A1A GWHN09AANK1A1A GWCN12ABNK1A1A GWHN12ABNK1A1A

1 Temperature parameter

◆The room setting temperature(Tpreset)

◆The room ambient temperature (Tamb)

2 Basic Functions

Once energized, the compressor should in no way be restarted unless after 3-minute time interval at least. For the first energization, the compressor will be started without 3-minute lag. The compressor, once started,will not be stopped within 6 minutes with the change of room temperature.

（1）Cooling Mode

① Cooling Conditions and Process

If ambient temperature is higher than presetting temperature, compressor, outdoor fan will run, indoor fan will run at setting fan speed.
If ambient temperature is lower than presetting temperature, compressor, outdoor fan will stop to run, indoor fan will run at setting fan speed.

➢ Under this mode the setting temperature range is16 ~30℃.

② Protection

◆Antifreeze Protection

If it is detected that the system is under antifreeze protection, the compressor and outdoor fan will be stopped, Antifreeze protection is released when temp. is too high

（2）DRY Modes

① The conditions and process of DRY

Setting dry, compressor will run or stop according to actual ambient information,indoor fan will run with low fan speed.

➢ Under this mode the setting temperature range is16 ~30℃.

（3）Heating Mode(No this function for Cooling only unit)

① Heating Condition and Process

If set up heating, when ambient temp., is lower than setting temperature, compressor, outdoor fan will run, indoor fan will run at setting fan speed;
If ambient temperature is higher than setting temperature, compressor, outdoor fan will stop to run, indoor fan will run.

➢ Under this mode, the temperature can be set within a range from 16 to 30℃.

② Protection funtion

Anti-cool wind: When heating started up, in order to avoid cool air blow out, the compressor will be delayed 0-3mins to start up; firstly it will run at low speed then will run at presetting fan speed or directly turn to run at setting fan speed.
Anti-high temperature: in heat mode, when detected the temperature is higher, outdoor unit will stop to run; If temp. descend, outdoor fan will resume to run.
Blowing surplus heat: In heat mode, due to temperature reached, compressor, outdoor fan will stop running, indoor fan will accord to actual circumstance will run at low fan speed for a while then stop running.

③ Defrosting

This unit adopt intelligent defrosting, it can defrost according to the frosting conditions and display H1.

（4）Fan mode

The indoor fan will run at preset speed.

（5）Auto mode

Under this mode, the system will automatically select its run mode (cool, dehumidify, or fan) with the change of ambient temperature, the protection function is the same with that of cool, heat mode.

3 Other control

（1）Sleep

If set sleep for several minutes,unit will adjust the setting temp. according to intelligent judgement when unit is cool or heat mode.

（2）Up\Down swing fan control

Swing for timer setting/fully swing/swing stop, the user can set up swing by wireless remteo control or adjust the position of swing stop.

（3）Buzzer

The air conditioner will send out "Hua" alert when it is energized or receives a control command.

（4）Press key

After powered on, unit runs with auto mode when you press this key. Unit will be off when you press this key again.

（5）Displayer

◆ Running figure and mode figure display

A、After powered on, the figure will be displayer,then only Power/running indicator turn on.

B、When using remote controller to open unit,it will turn on,at the same time to display current setting running modes

Run and cool lights are green under the cool and auto cool mode

Run and heat lights are green under the heat and auto heat mode.

Run light is green under fan and auto fan mode.

Run and dehumidify lights are green under the dehumidify mode.

C、If turn off light key,then turned off all display(it's available when unit is off)

D、After setting sleep function,displayer continus former display. it's to say sleep function don't influence the ON/OFF of light

◆ Dual 8 display

The nixie tube will display the setting temp.(setting range is 16-30℃).Under aoto mode cool and fan display 25℃It displays 20℃, cool controller only display 25℃and motor lock mulfunction display H6 under heat mode.It display H1 under defrost mode.

◆ Accessional display

When air conditioner is running and light function is set up as ON, four pieces decoration rim will display.

（6）Automatic Control of Fan Speed

The indoor fan will automatically select high, medium or low speed with the change of ambient temperature.

（7）Timer funticon

Setting time-on,when it's reach the setting time,unit will run according to the setting mode.Setting time-off,unit will auto be off according to the setting time

（8）PG motor lock protection

When turn on the fan motor,ifmotor continuously run for a while and the running speed is very slow,in order to prevent motor automatically self-protection,it will stop running and display lock;If currently turns unit on,that dual 8 will display lock error code H6;If current is unit off,unit will not display the block error information.

（9）Dry function

The dry off is defaulted on the wireless remote control.

This function can be set up by wireless remote control.

Under Cool mode, to set up Dry function, after unit turned off, indoor fan will run a few minutes, after the water of unit inside has been dried off, the function will be automatically turned off.

（10）TURBO function

In Cool and Heat modes (Auto, Dehumidifying, Fan modes without turbo function), press the Turbo function, the "Turbo" will be displayed on wireless remote control, the fan speed will not be changed, at the same time, the indoor fan will run at high speed; When repressed this button, Turbo function will be exited, the "Turbo" on displayer will disappear, indoor fan will run at presetting fan speed, the fan speed will change accordingly.

（11）Memory

Upon re-energization after de-energization, the system will run under the status as such prior to de-energization.

6.2 Manual of functions of remote controller

This function manual is for: GWCN18ACNK1A1A GWHN18ACNK1A1A

1 Temperature parameter

◆The room setting temperature(Tpreset)

◆The room ambient temperature (Tamb)

2 Basic Functions

Once energized, the compressor should in no way be restarted unless after 3-minute time interval at least. For the first energization, the compressor will be started without 3-minute lag. The compressor, once started,will not be stopped within 6 minutes with the change of room temperature.

（1）Cooling Mode

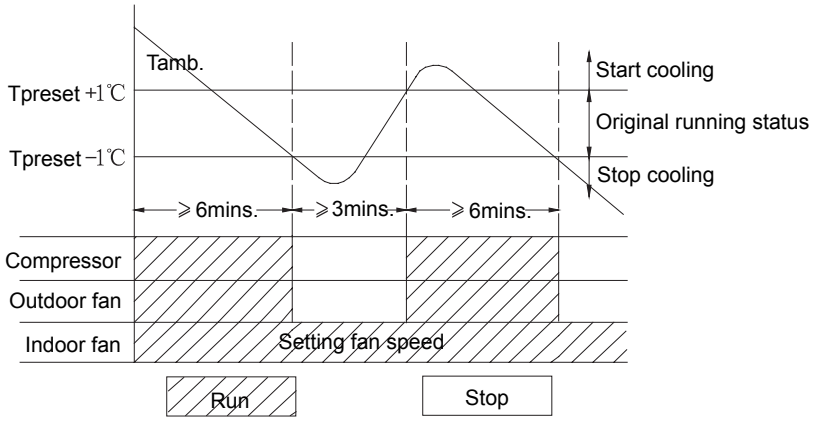
① Cooling Conditions and Process

When T amb.≥Tpreset＋1℃, in which case the compressor and outdoor fan will start, and the indoor fan will run at setting speed.

When T amb.≤Tpreset －1℃, the compressor and the outdoor fan will stop, the indoor fan will run at setting speed.

When Tpreset －1℃＜T amb ＜Tpreset ＋1℃, the unit will keep the original running status.

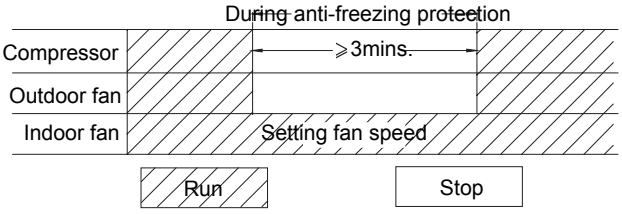
➢ Under this mode, the switch valve will not be powered on, and the setting temperature range is16 ~30℃.



②Protection

◆Antifreeze Protection

If it is detected that the system is under antifreeze protection, the compresor will stop and outdoor fan will stop running, the indoor fan will run at low speed. When antifreeze protection is released and the compressor has stopped for 3 minutes, the complete unit will resume its original operating status.



③Overcurrent Protection

If it is detected that the system exceeds 22A in 3 successive seconds,only the indoor fan run. After three minutes and overcurrent protection is released, the main unit will resume its original operating status. If it is 6 times continuously detected overcurrent protection (if the compressor has run over 5mins continuously, the times of protection will be cleared), the main unit will be stopped and the nixie tube will display the code"E5", the running indicator will blink.

（2）Dehumidifying Mode

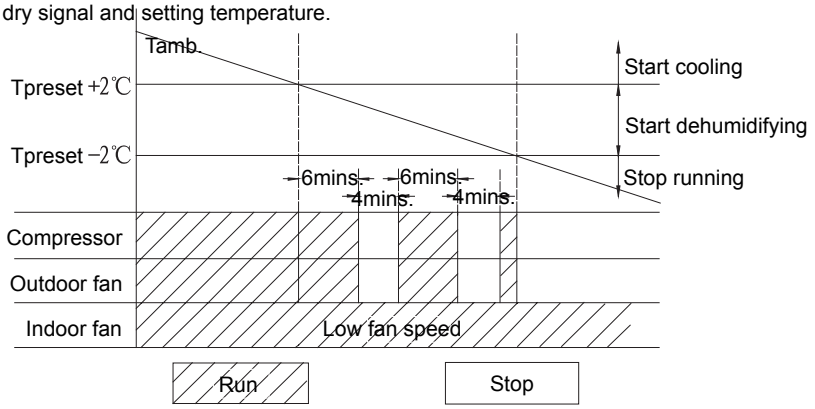
① Dehumidifying Conditions and Process

When T amb≥Tpreset+2℃, the unit will run under dehumidifying and cooling mode, in which case the compressor, outdoor fan will run, and indoor fan will run at low speed.

When Tpreset −2℃≤Tamb.≤Tpreset + 2℃, the unit will run under dehumidifying mode, in which case the compressor and outdoor fan will be stopped after running 6 minutes,After 4 minutes, the compressor and outdoor fan will be restarted. Dehumidifying process is repeated in cycle.Indoor fan will run at low speed.

When Tamb. < Tpreset − 2℃, the compressor , outdoor fan and indoor fan will be stopped.

➢ Under this mode, the four-way valve will be de-energized and the temperature can be set from 16 to 30℃ , the displayer will display running signal, dry signal and setting temperature.



② Protection

◆ Antifreeze Protection

Under dehumidifying and cooling mode, if it is detected that the system is under antifreeze protection, the compressor and outdoor fan will be stopped, and the indoor fan will run at low speed. When antifreeze protection is released and the compressor has stopped for 3 minutes, the complete unit will resume its original operating status.

Upon meeting "run 6 mins and stop 4 mins" dehumidify condition, if it is detected that the system is under antifreeze protection, the compressor and outdoor fan will be stopped, and the indoor fan will run at low speed. When antifreeze protection is released and the compressor has stopped for 4 minutes, the complete unit will resume its original operating status.

③ Other protection

Other protection is the same with that in cool mode.

（3 ）Heat mode (this function is not availbable for cooling only unit)

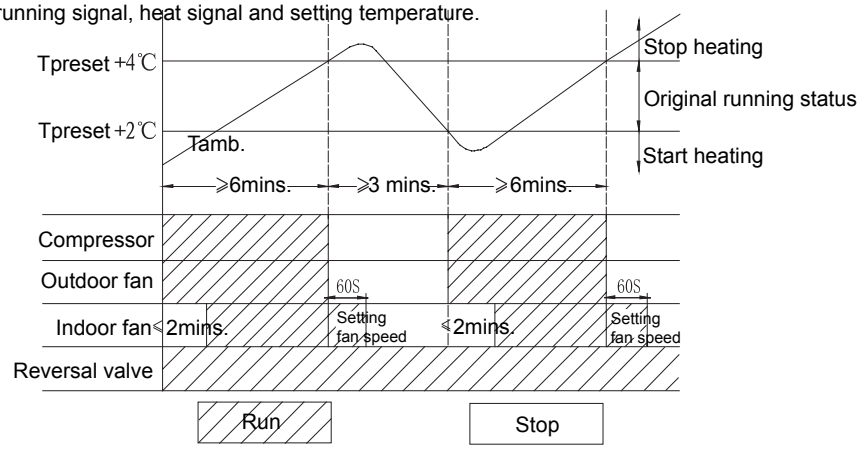
① Heating conditions and procedure

When Tamb ≤Tpreset +2 ℃, heating mode is active, outdoor fan, four-way valve will start to run at the same time. Indoor fan motor will run at the setting fan speed and anti-cool wind:

If T amb.≥T preset+4℃, the compressor, outdoor fan will be stopped, the outdoor 4-way valve will remain energized, and the indoor fan will be stopped after blowing at low speed for 60 seconds.

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

➢ Under this mode, the 4-way valve is energized and the temperature can be set within a range from 16 to 30 ℃. the displayer will display running signal, heat signal and setting temperature.



② Defrosting Conditions and Process

This unit adoopt intelligent defrosting, it can defrost according to the frosting conditions, dual 8 display H1.

③ Protection

◆ High Temp. Protection

If it is detected that the evaporator tube temperature is too high, the outdoor fan will be stopped. When the tube temp. resumes to normal, the outdoor fan will be restarted.

◆Noise Sliencing Protection

If the unit is stopped by pressing ON/OFF, or mode switching, the reversal valve will be stopped after 2-minute lag.

④ Over current protection

It is the same as that under cooling mode (only indoor fan will run at low speed for 60 seconds before it is stopped).

（4 ）Fan mode

Under FAN mode, only the indoor fan runs at preset speed, the compressor,outdoor fan and 4-way valve are stop.

➢Under this mode,the temperature can be set within a range from 16 to 30℃.

（5 ）Auto Mode

Under this mode, the system will automatically select its run mode (cool, dehumidify, heat or fan) with the change of ambient temp. Protection function is the same as that under each modes.There is 30s delay for mode switch.

3 Other Control

（1 ）Timer function

There are Ordinary Timer setting and Timer setting for hour function, by different kind of remote control to select the timer function.

① Ordinary Timer setting

Timer on: Under unit off, the timer on function could be set up, if timer on has arrived, controller will run at setting mode, the timer interval is 0.5hr, setting range is 0.5-24hrs.

Timer off: Under unit off, the timer off function could be set up, if timer off has arrived, controller will run at setting mode, the timer interval is 0.5hr, setting range is 0.5-24hrs.

② Timer setting for hour:

Timer on: If system is running, to set timer on, the system will continue to run, if unit is off to set up timer on, when timer on has arrived, the system will run at pressetting mode.

Timer off: If system is off to set up the timer off, when to set up timer off, the unit will standby, when unit is on, to set up timer off, when the timer off arrived, the system will stop to work.

Timer setting change:

When system is in Timer status, can set up timer on and timer off by wireless remote control, to reset up Timer also, the system will run at last setting status.

When system stop, at the same time to set up Timer on and Timer off, the system will stop, untile the timer arrived, the system will start to work.

Hereafter, when timer of timer on in every day arrived, it will run the presetting modes, after timer off arrived, the system will stop.

（2 ）Auto key

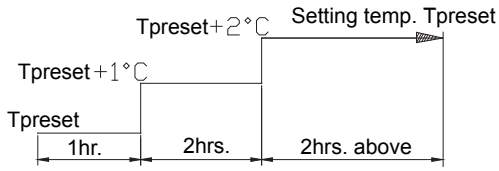
If one press of this key, the unit will run under AUTO mode and the indoor fan will run at AUTO SPEED. The swing motor is started when the indoor fan is working. Press this key again to stop the unit.

（3 ）Buzzer

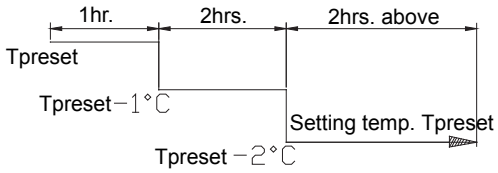
If air conditioner energized or the unit received the effective information sent by the wireless remote control. The buzzer will beep.

（4 ）Sleep Function

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



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



（5 ）Turbo function

The turbo function is available in Cool and Heat modes.

（6 ）Dry function

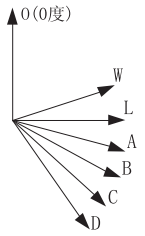
Dry function is available in Cool and Dehumidifying modes.

（7 ）Automatic Control of Fan Speed

Under this mode, the indoor fan will automatically select high, medium or low speed with the change of ambient temperature.

（8 ）UP\Down swing fan function

After powered on, the up and down swing motor will firstly rotate the air guide baord to position O in anticlockwise, turn off the air vent. After unit is turned on, if there is no siwng function set up, under the Heat mode or Auto Heat mode, the up and down air guide board will rotate to posi tion D in clockwise: In other modes, the up and down guide board will rotate to horizontal position L1 clockwise. When turning on the unit to set up swing function synchronously. If unit is turned on to set up the swing function that the guide louver will swing between L and D. There are 7 kinds of status of swing or guide louver. Position L, Position A, Position B, Position C, Position D, Position L and Position D, Position L to Position D to stop swing (the inclination between L-D is conformal). When unit is off the air guide louver will close and turn to position 0. The swing is only valid while setting swing order and indoor fan motor is running.



（9 ）Displayer

① Running figure and mode figure display

After powered on, the figure will be displayed, then only Power/running indicator turn on. When using remote controller to open the unit, it will turn on, at the same time to display current setting running modes. To turn off the light button, close all display, but except the indicator display (no light control). When defrosting dual 8 will display H1, the corresponding indicator display extinguish 3s and blink one time.

② Dual 8 display

The first power on, nixie tube will default to display current presetting temperature (temp. presetting range is 16-30 ℃ If received display setting temperature signal, the nixie tube will display the presetting temp.; if received display the ambient temp. signal, the nixie tube will display the current indoor ambient temp., when set up other mode by remote controller, the display will be maintained. In displaying ambient temp., the remote control received the effective remote control signal, then will display 5s setting temp., then return to display ambient temp., display. The ambient temp. sensor malfunction will display “F1”; Indoor tube sensor malfunction will display “F2”, wire-trip malfunciton protection will display “C5”.

（10）PG motor lock protection

When turn on the fan motor,ifmotor continuously run for a while and the running speed is very slow,in order to prevent motor automatically self-protection,it will stop running and display lock;If currently turns unit on,that dual 8 will display lock error code H6;If current is unit off,unit will not display the block error information.

（11）Power-off Memory

Memory contents: Mode, UP/DOWN Swing, light, Set temp, Set fan speed.

After de-energized, and re-energized, the unit will start to run with the memory function automatically. The system, if the last remote control signal do not set timer function, will memorize the last remote control signal and run according to it. If the last remote control signal has set timer function, the system is de-energized before the set time,when re-energized, the system will memorize the timer function, the set time will recalculate. If the last remote control signal has set timer function and the system is de-energized after the set time, when re-energized, the system will memorize the running status before de-energized.

7 Disassembly Process

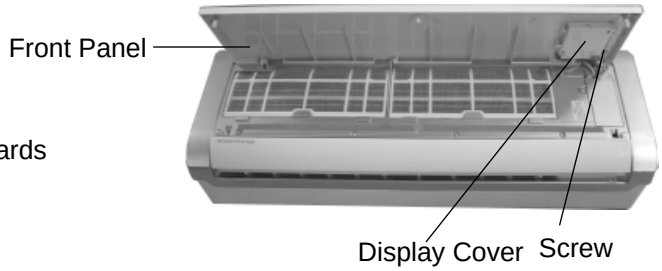
7.1 Disassembly Process of Indoor Unit

Operating Procedures/Photos

Applicable to GWCN09AANK1A1A, GWHN09AANK1A1A，GWCN12ABNK1A1A，GWHN12ABNK1A1A, GWCN18ACNK1A1A、GWHN18ACNK1A1A

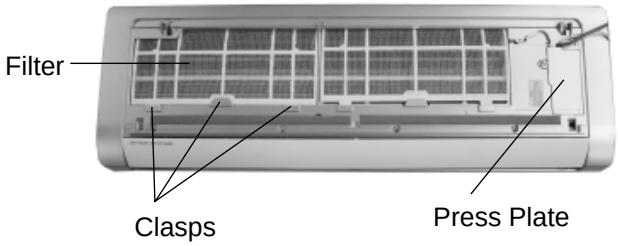
7.1.1 Disassemble Front Panel

Push the convex parts in the left and right sides of the front panel, and then lift the front panel. Unscrew the screws fixing the display cover and pull out the plug. Forcibly lift the front panel upwards from the clasps to take it out.



7.1.2 Disassemble Filter and Press Plate

Top the middle section of air filter from the clasps at both sides.Pull the air filter forward to remove it. Unscrew the 1 screw on press plate to open the press plate.

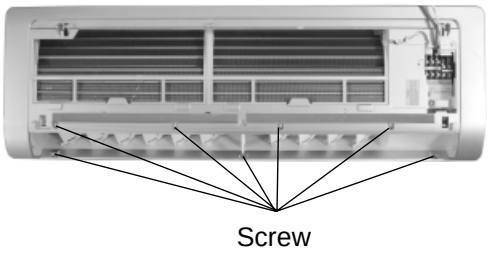


7.1.3 Disassemble Guide Louver

Push out the axile bush in the middle of guide louver .Then slightly bend the guide louver to remove it.

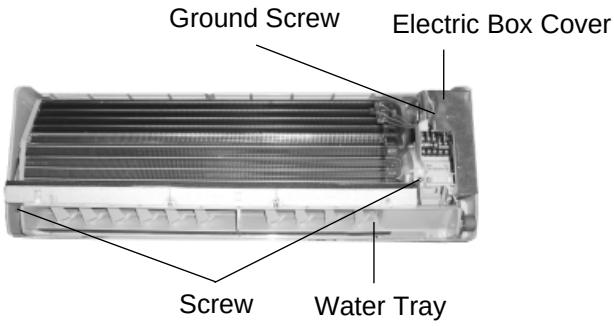
7.1.4 Disassemble Front Case

Unscrew the 7 tapping screws fixing the front case, and turn the front case backwards to remove it.



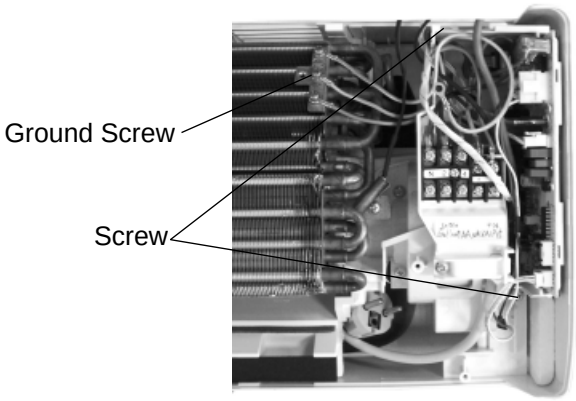
7.1.5 Disassemble Water Tray

Unscrew the ground screw on the electric box cover and loose the clasps to remove electric box cover.Pulll out the wiring terminal.Unscrew the 2 screws fixing the water tray to remove the water tray.



7.1.6 Disassemble Electric Box

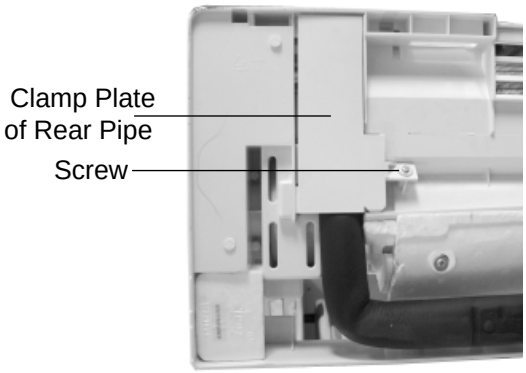
Unscrew the 2 screws fixing the electric box. Unplug the motor terminal.Unscrew the three ground screws.Lift the electric box upwards to remove it.



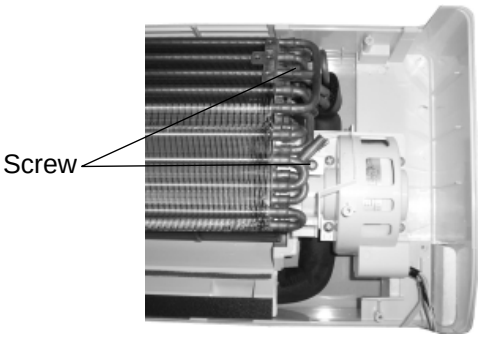
Operating Procedures / Photos

7.1.7 Disassemble Evaporator

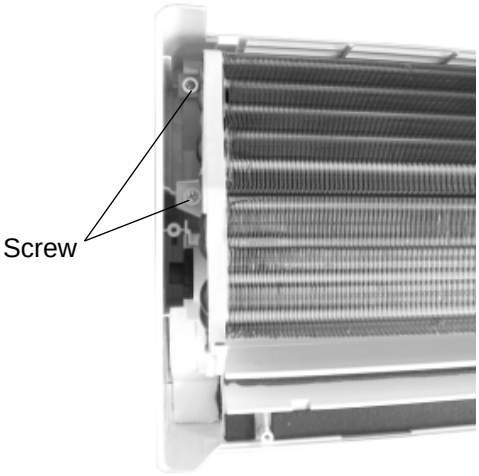
Unscrew the screws fixing the clamp plate of rear pipe at the back of evaporator to remove the plate.



Unscrew the 2 screws in the right of evaporator.

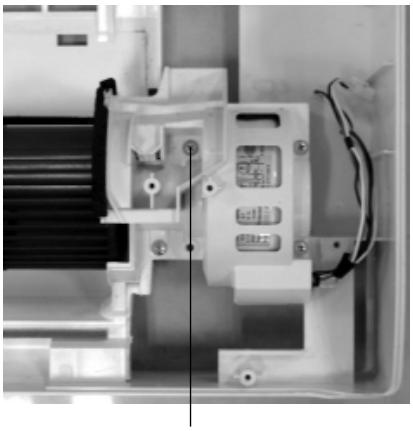


Unscrew the 2 screws in the left of evaporator
Turn the evaporator at certain angle to remove it.

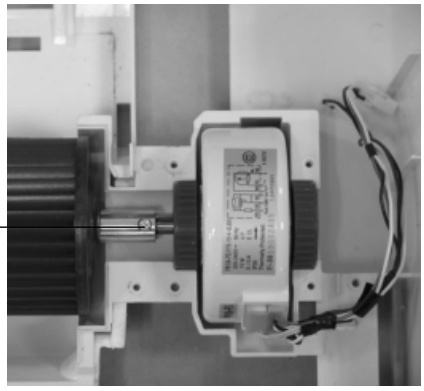


7. 1. 8 Disassemble Motor and Cross Flow Fan

Unscrew the screws fixing the press plate of motor and connecting motor and cross flow fan to remove the motor and cross flow fan.



Screw



Screw

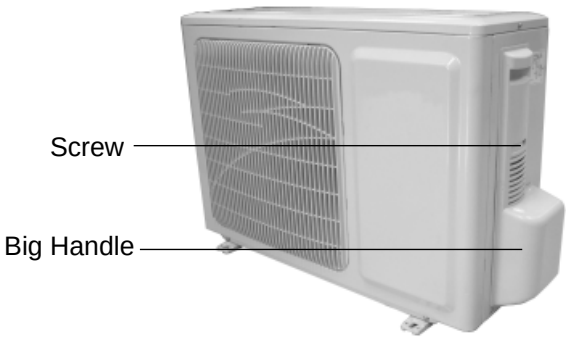
7.2 Disassembly Procedure of Outdoor Unit

Operating Procedures / Photos

Applicable to GWCN09AANK1A1A, GWHN09AANK1A1A，GWCN12ABNK1A1A，GWHN12ABNK1A1A

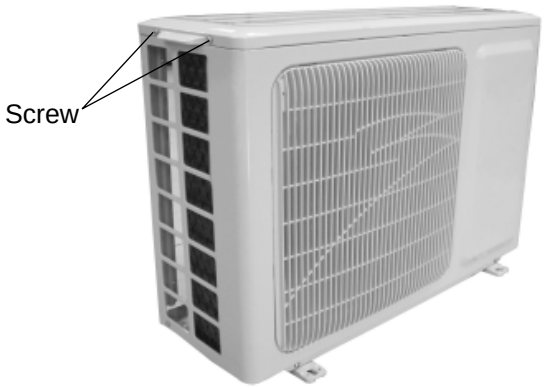
7.2.1 Disassemble Big Handle

Unscrew the screw fixing the big handle,and then remove it downwards to take it out.



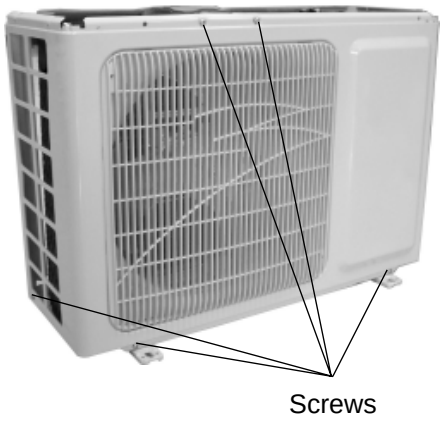
7.2.2 Disassemble Top Cover

Unscrew the 2 screws fixing left side of top cover and the 1 screw fixing the right side to remove the top cover.



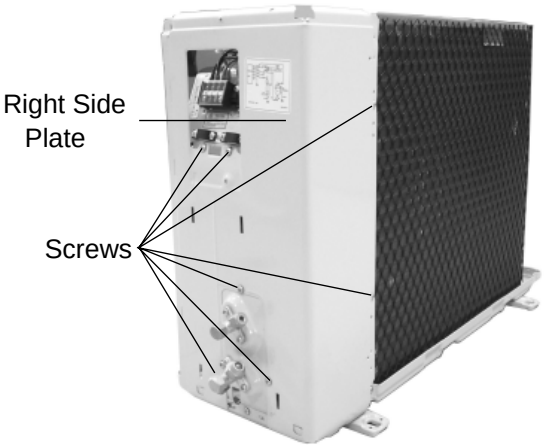
7.2.3 Disassemble Front Panel

Unscrew the 5 screws fixing the panel and dextro-rotate the front panel to pull it out from groove.



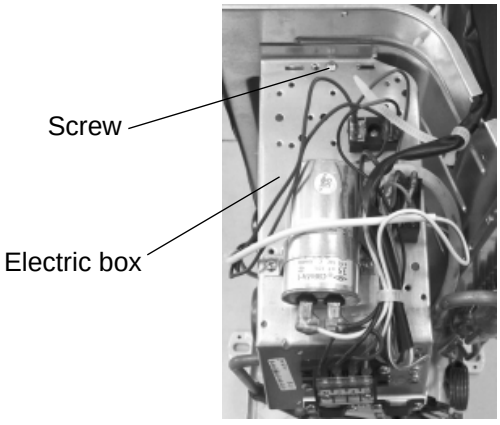
7.2.4 Disassemble Right Side Plate

Unscrew the 2 screws fixing electric box ,and then unscrew the 5 screws fixing the right side plate to remove it.



7.2.5 Disassemble Electric box

Unscrew the screws fixing on the electric box, loosen compressor, wiring terminal of 4-way valve, take off electric box.



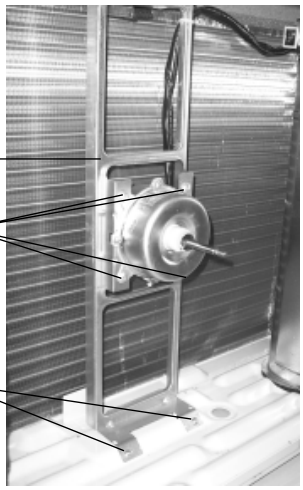
Operating Procedures / Photos

7.2.6 Disassemble Axial Flow Fan

Loosen the fastening nut fixing the axial flow fan with a spanner ,and then take out the nut,spring gasket and flap gasket in turn.

7.2.7 Disassemble Motor and Motor Support

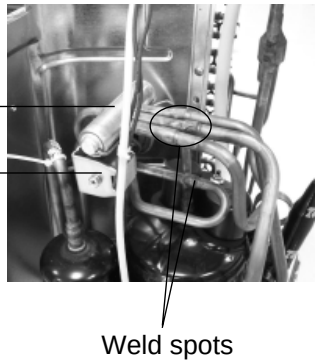
Unscrew the 4 screws fixing the motor to take out the motor,and then unscrew the 2 screws fixing the motor support to take it out.



7.2.8 Disassemble Four-way Valve

Unscrew the fastening 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. (Note:Refrigerant should be discharged firstly.)

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.



7.2.9 Disassemble Capillary

Respectively unsolder the weld spots of main capillary and auxiliary capillary to take off the capillary.

7.2.10 Disassemble Gas and Liquid Valves

Unscrew the two bolts fixing gas valve and liquid valve.Unsolder weld spots between gas valve and and air-return pipe to remove the gas valve.
Unscrew the two bolts fixing liquid valve. Unsolder weld spots between liquid valve and capillary to remove the liquid valve.
(Note:During unsoldering ,wrap the valves with wet cloth to avoid damage for high temperature.)

7.2.11 Disassemble Compressor

Unscrew the three foot-nuts at the foot of the compressor. Unsolder the suction and the discharge pipes of the compressor,and then carefully remove the pipes to take out the compressor.

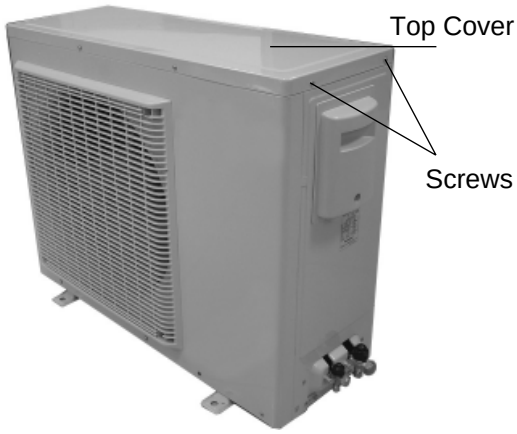
7.4 Disassembly Procedure of Outdoor Unit(2)

Operating Procedures / Photos

Applicable to GWCN18ACNK1A1A、GWHN18ACNK1A1A

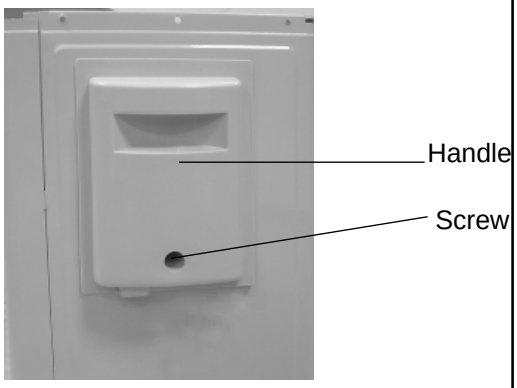
7.4.1 Disassemble Top Cover

Unscrew the screws fixing the top cover, and then lift the top cover to remove it.



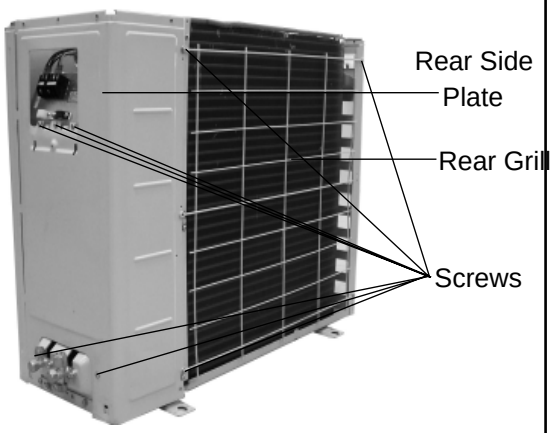
7.4.2 Disassemble Handle

Unscrew the screw fixing the handle,and then push it downwards to take it out.



7.4.3 Disassemble Rear Side Plate Sub-assay

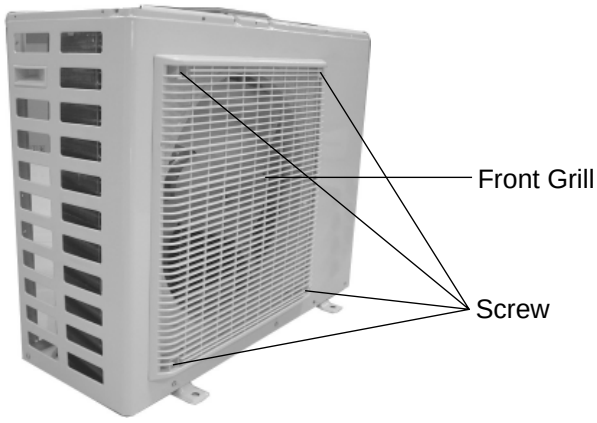
Unscrew the screws fixing the rear grill and rear side plate to remove rear side plate sub-assy after removing rear grill.



Operating Procedures / Photos

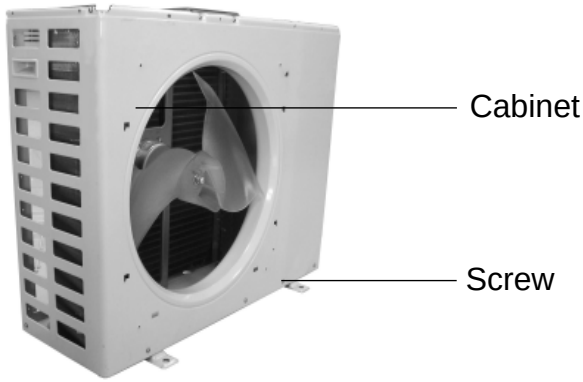
7.4.4 Disassemble Front Grill

Unscrew the screws fixing the front grill ,and then lift it upwards to remove it.



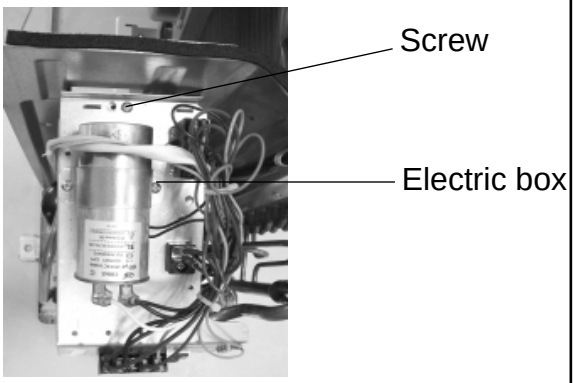
7.4.5 Disassemble Cabinet

Unscrew the screws fixing the cabinet to remove it.



7.4.6 Disassemble Electric Box Sub-assy

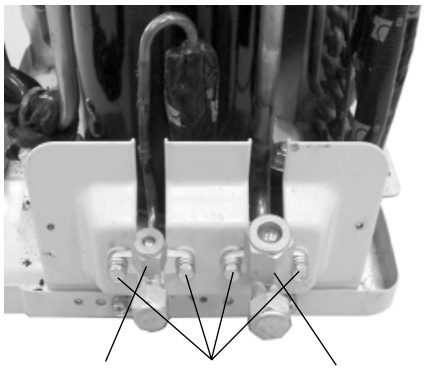
Unscrew the screws fixing electric box to pull out the connection line between fan motor and electric box and then lift the electric box to take it out.



Operating Procedures / Photos

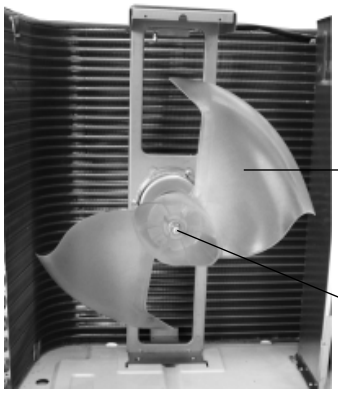
7.4.7 Disassemble Gas and Liquid Valves

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.)



7.4.8 Disassemble Axial Flow Fan

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



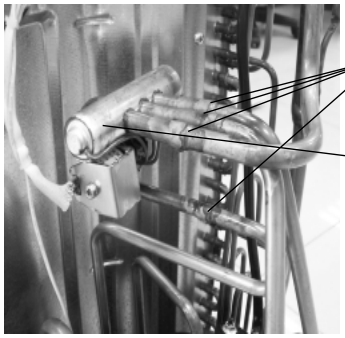
7.4.9 Disassemble Outdoor Motor

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.

7.4.10 Disassemble Four-way Valve

Only for cooling and heating unit

Unscrew the fastening 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.

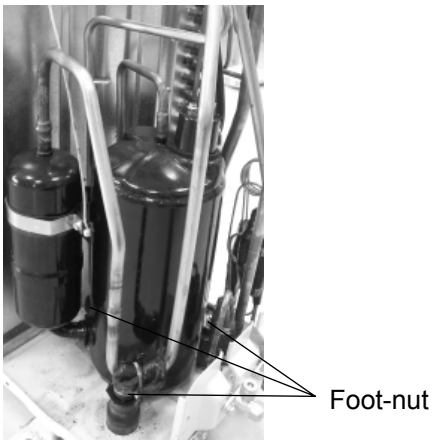


7.4.11 Disassemble Capillary

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

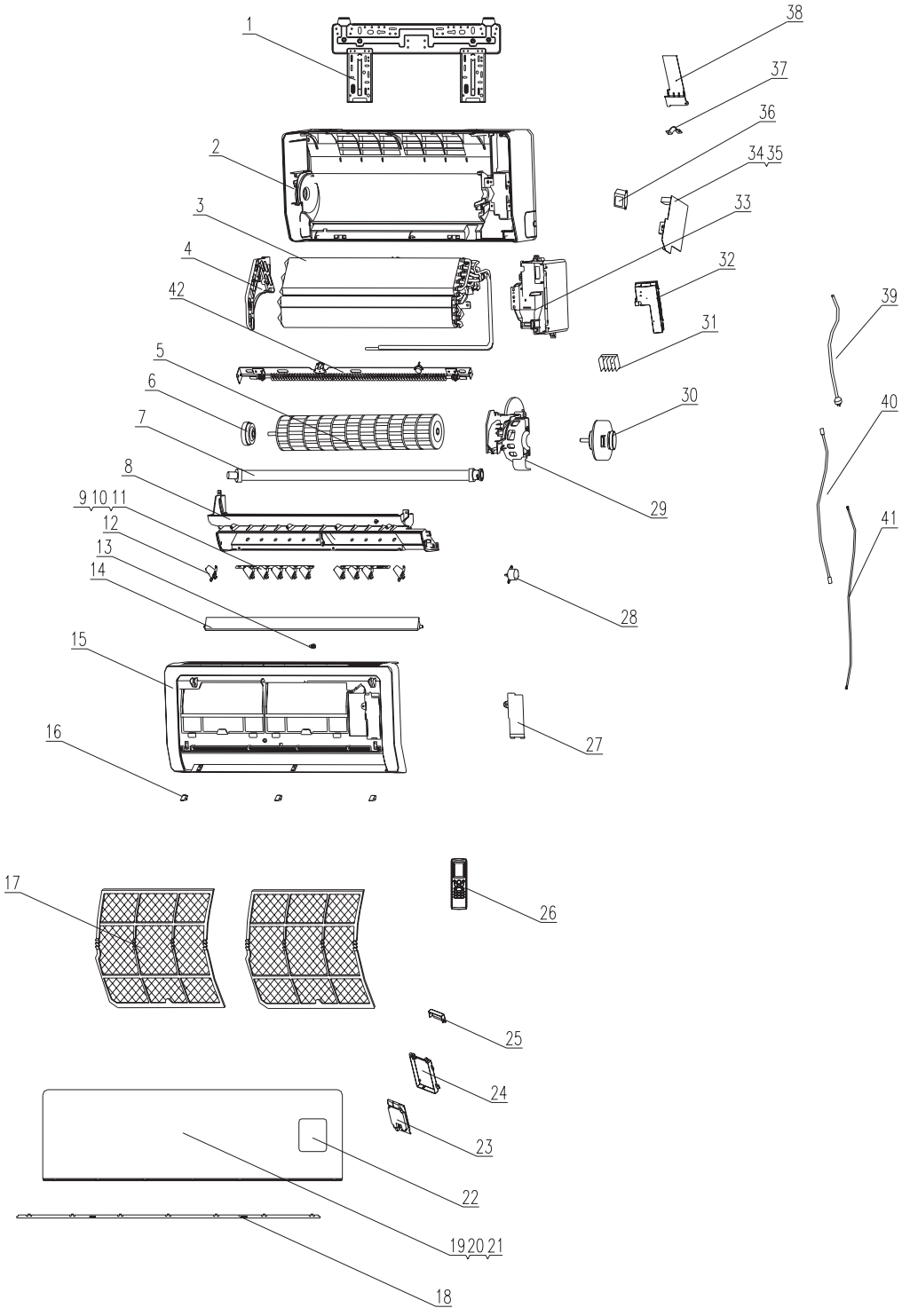
7.4.12 Disassemble Compressor

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



8 Exploded View and Components and Parts List

8.1 Exploded View of Parts of Indoor Unit



8.2 Parts List of Indoor Unit

No	Description	Part Code	Qty
		GWCN09AANK1A1A/I	
1	Wall-Mounting Frame	01252006	1
2	Rear Case	22202078	1
3	Evaporator Assy	010024931	1
4	Evaporator Support	24212075	1
5	Cross Flow Fan	10352422	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20182075	1
9	Swing Louver	10512099	8
10	Swing Linkage 1	10582071	1
11	Swing Linkage 2	10582072	1
12	Swing Louver	10512097	2
13	Axile Bush	10542008	1
14	Guide Louver	10512095	1
15	Front Case	20002720	1
16	Screw Cover	24252017	3
17	Filter	11122056	2
18	Decorative Strip	20192105	1
19	Front Panel	200027185	1
20	Clamp	None	——
21	Magnet	None	——
22	Transparent Mirror	22432262	1
23	Receiver Board	30565002	1
24	Display Box	20122041	1
25	Display Box Cover	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20102496P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26112116	1
30	Motor FN10A-PG	15012078	1
31	Terminal Board	42010266	1
32	Electric Box Cover	20102848	1
33	Electric Box	20112061	1
34	Main PCB M507F1J	30135127	1
35	Jumping Connector	4202300102	1
36	Transformer 48X26J	43110261	1
37	Wire Clamp	26112121	1
38	Rear Clamp	26112117	1
39	Power Cord	4002048710	1
40	Connecting Cable	40020540	1
41	Signal Cable	None	——

The above data are subject to change without prior notice.

No	Description	Part Code	Qty
		GWHN09AANK1A1A/I	
1	Wall-Mounting Frame	01252006	1
2	Rear Case	22202078	1
3	Evaporator Assy	010024931	1
4	Evaporator Support	24212075	1
5	Cross Flow Fan	10352422	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20182075	1
9	Swing Louver	10512099	8
10	Swing Linkage 1	10582071	1
11	Swing Linkage 2	10582072	1
12	Swing Louver	10512097	2
13	Axile Bush	10542008	1
14	Guide Louver	10512095	1
15	Front Case	20002720	1
16	Screw Cover	24252017	3
17	Filter	11122056	2
18	Decorative Strip	20192105	1
19	Front Panel	200027185	1
20	Clamp	None	——
21	Magnet	None	——
22	Transparent Mirror	22432262	1
23	Receiver Board	30565002	1
24	Display Box	20122041	1
25	Display Box Cover	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20102496P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26112116	1
30	Motor FN10A-PG	15012078	1
31	Terminal Board	42010262	1
32	Electric Box Cover	20102495	1
33	Electric Box	20112061	1
34	Main PCB M507F1J	30135128	1
35	Jumping Connector	4202300102	1
36	Transformer 48X26J	43110261	1
37	Wire Clamp	26112121	1
38	Rear Clamp	26112117	1
39	Power Cord	4002048710	1
40	Connecting Cable	40020540	1
41	Signal Cable	40020536	1

The above data are subject to change without prior notice.

No	Description	Part Code	Qty
		GWCN12ABNK1A1A/I	
1	Wall-Mounting Frame	01252008	1
2	Rear Case	22202081	1
3	Evaporator Assy	01002544	1
4	Evaporator Support	24212076	1
5	Cross Flow Fan	10352023	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20182080	1
9	Swing Louver	10512099	8
10	Swing Linkage 1	10582450	1
11	Swing Linkage 2	None	——
12	Swing Louver	10512097	2
13	Axile Bush	10542008	1
14	Guide Louver	10512102	1
15	Front Case	20002731P	1
16	Screw Cover	24252019P	3
17	Filter	11122059	2
18	Decorative Strip	20192109	1
19	Front Panel	2000273004	1
20	Clamp	02112013	3
21	Magnet	70840001	3
22	Transparent Mirror	22432262	1
23	Receiver Board	30565002	1
24	Display Box	20122041	1
25	Display Box Cover	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20122044P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26112123	1
30	Motor FN10A-PG	15012078	1
31	Terminal Board	42010266	1
32	Electric Box Cover	20102495	1
33	Electric Box	20112061	1
34	Main PCB M507F1J	30135127	1
35	Jumping Connector	4202300107	1
36	Transformer 48X26J	43110261	1
37	Wire Clamp	26112121	1
38	Rear Clamp	26112124	1
39	Power Cord	4002048712	1
40	Connecting Cable	400205401	1
41	Signal Cable	None	——

The above data are subject to change without prior notice.

No	Description	Part Code	Qty
		GWHN12ABNK1A1A/I	
1	Wall-Mounting Frame	01252008	1
2	Rear Case	22202081	1
3	Evaporator Assy	01002544	1
4	Evaporator Support	24212076	1
5	Cross Flow Fan	10352023	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20182080	1
9	Swing Louver	10512099	8
10	Swing Linkage 1	10582450	1
11	Swing Linkage 2	None	——
12	Swing Louver	10512097	2
13	Axile Bush	10542008	1
14	Guide Louver	10512102	1
15	Front Case	20002731P	1
16	Screw Cover	24252019P	3
17	Filter	11122059	2
18	Decorative Strip	20192109	1
19	Front Panel	2000273004	1
20	Clamp	02112013	3
21	Magnet	70840001	3
22	Transparent Mirror	22432262	1
23	Receiver Board	30565002	1
24	Display Box	20122041	1
25	Display Box Cover	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20122044P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26112123	1
30	Motor FN10A-PG	15012078	1
31	Terminal Board	42010262	1
32	Electric Box Cover	20102495	1
33	Electric Box	20112061	1
34	Main PCB M507F1J	30135128	1
35	Jumping Connector	4202300107	1
36	Transformer 48X26J	43110261	1
37	Wire Clamp	26112121	1
38	Rear Clamp	26112124	1
39	Power Cord	4002048712	1
40	Connecting Cable	400205401	1
41	Signal Cable	40020536	1

The above data are subject to change without prior notice.

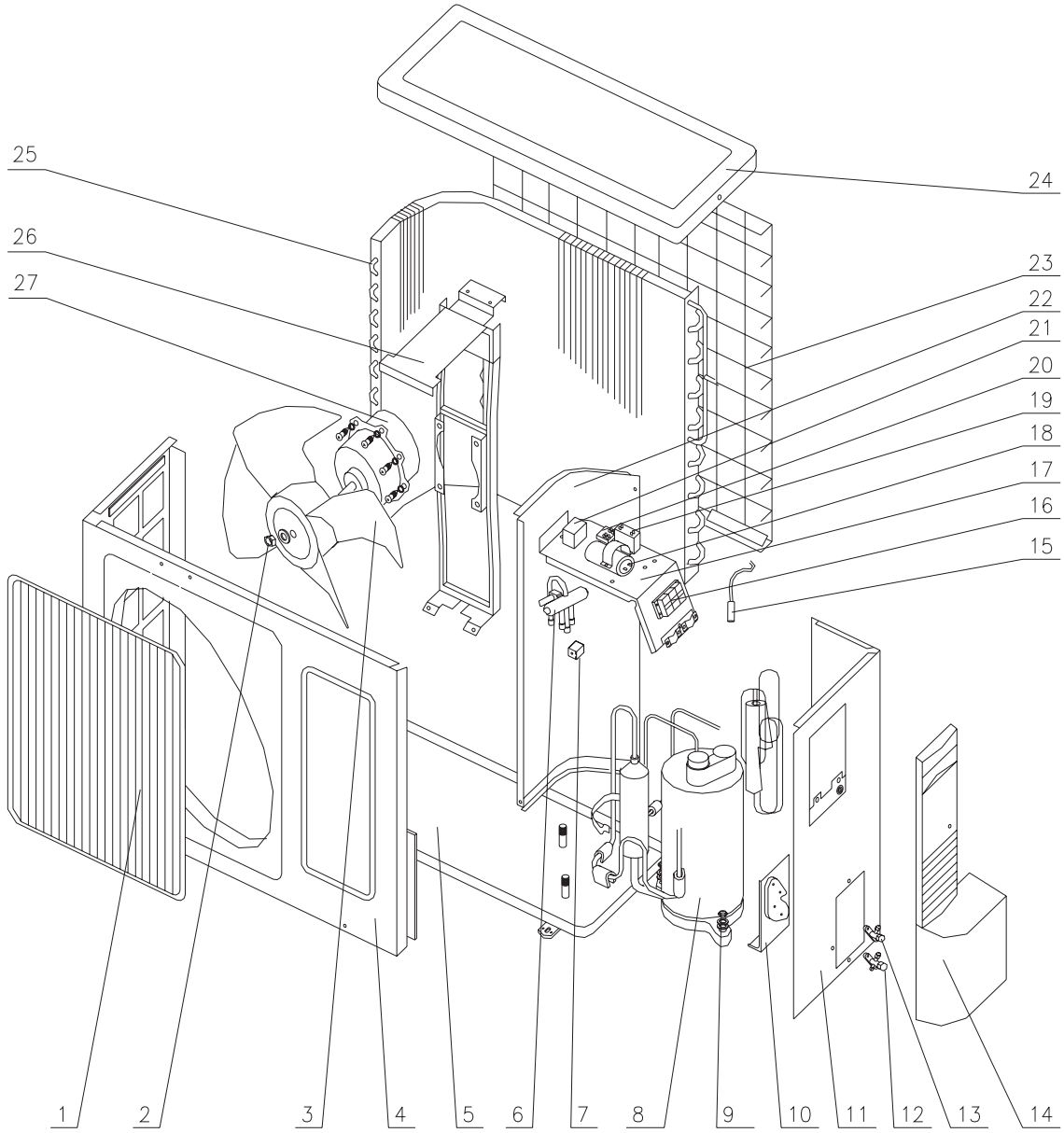
No	Description	Part Code	Qty
		GWCN18ACNK1A1A/I	
1	Wall-Mounting Frame	01252218	1
2	Rear Case	22204002	1
3	Evaporator Assy	0100208802	1
4	Evaporator Support	24214080	1
5	Cross Flow Fan	10352016	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20184074	1
9	Swing Louver	10512099	8
10	Swing Linkage	10584085	1
11	Swing Linkage 2	none	——
12	Swing Louver	10512097	2
13	Axile Bush	10542704	2
14	Guide Louver	10514096	1
15	Front Case	20004299P	1
16	Screw Cover	24252017	3
17	Filter	11124096	2
18	Decorative Strip	20194036D	1
19	Front Panel	20004298	1
20	Clamp	none	——
21	Magnet	none	——
22	Decorate Piece	22432269	1
23	Receiver Board D5003C	30565002	1
24	Clamp	20122041	1
25	Clamp	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20114009P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26114094	1
30	Motor FN20C-PG	15012077	1
31	Terminal Board	42010266	1
32	Electric Box Cover	20114008	1
33	Electric Box	20114007	1
34	Main PCB M509F1JJ	30135091	1
35	Jumping Connector	4202300108	1
36	Transformer 57X25C	43110237	1
37	Wire Clamp	71010103	1
38	Rear Clamp	26114095	1
39	Power Cord	400204877	1
40	Connecting Cable	400205406	1
41	Signal Cable	none	——

No	Description	Part Code	Qty
		GWHN18ACNK1A1A/I	
1	Wall-Mounting Frame	01252218	1
2	Rear Case	22204002	1
3	Evaporator Assy	0100208802	1
4	Evaporator Support	24214080	1
5	Cross Flow Fan	10352016	1
6	Ring of Bearing	76512203	1
7	Drainage Pipe	0523001401	1
8	Water Tray	20184074	1
9	Swing Louver	10512099	8
10	Swing Linkage	10584085	1
11	Swing Linkage 2	none	——
12	Swing Louver	10512097	2
13	Axile Bush	10542704	2
14	Guide Louver	10514096	1
15	Front Case	20004299P	1
16	Screw Cover	24252017	3
17	Filter	11124096	2
18	Decorative Strip	20194036D	1
19	Front Panel	20004298	1
20	Clamp	none	——
21	Magnet	none	——
22	Decorate Piece	22432269	1
23	Receiver Board D5003C	30565002	1
24	Clamp	20122041	1
25	Clamp	20122042	1
26	Remote Control YT1F	30510049	1
27	Covering Plate	20114009P	1
28	Motor MP28VB	15012086	1
29	Motor Clamp	26114094	1
30	Motor FN20C-PG	15012077	1
31	Terminal Board	42010262	1
32	Electric Box Cover	20114008	1
33	Electric Box	20114007	1
34	Main PCB M509F1JJ	30135092	1
35	Jumping Connector	4202300108	1
36	Transformer 57X25C	43110237	1
37	Wire Clamp	71010103	1
38	Rear Clamp	26114095	1
39	Power Cord	400204877	1
40	Connecting Cable	400205406	1
41	Signal Cable	4002053601	1

The above data are subject to change without prior notice.

8.3 Exploded View of of Outdoor Unit (1)

Applicable to GWCN09AANK1A1A, GWHN09AANK1A1A, GWCN12ABNK1A1A, GWHN12ABNK1A1A



8.4 Parts List of Outdoor Unit (1)

No	Description	Part Code	Qty
		GWCN09AANK1A1A/O	
1	Front Grill	22263002	1
2	Nut M6	70310132	1
3	Axial Flow Fan	10333005	1
4	Front Plate	01533014	1
5	Metal Base	01203548	1
6	4-way Valve	——	——
7	4-way Valve Coil	——	——
8	Compressor	00103019	1
	Overload Protector	Internal	
	Compressor Gasket	——	3
9	Nut with Washer	70310011	3
10	Valve Support	01713424	1
11	Right Side Plate	01303151	1
12	Valve 3/8"	07100145	1
13	Valve 1/4"	07100024	1
14	Handle	26233101	1
15	——	——	——
16	Terminal Board	42011241	1
17	Electric Plate Assy	01403012	1
18	Capacitor	33000017	1
19	Capacitor	33010035	1
20	Terminal Board	——	——
21	——	——	——
22	Isolation Sheet	01233101	1
23	Rear Grill	11123204	1
24	Top cover plate	01253027	1
25	Condenser Assy	01103863	1
26	Motor Support	01703019	1
27	Motor	15013156	1

The above data are subject to change without prior notice.

No	Description	Part Code	Qty
		GWHN09AANK1A1A/O	
1	Front Grill	22263002	1
2	Nut M6	70310132	1
3	Axial Flow Fan	10333005	1
4	Front Plate	01533014	1
5	Metal Base	012035481	1
6	4-way Valve	43000402	1
7	4-way Valve Coil	43000400	1
8	Compressor	00103019	1
	Overload Protector	Internal	
	Compressor Gasket	76710247	3
9	Nut with Washer	70310011	3
10	Valve Support	01713424	1
11	Right Side Plate	01303151	1
12	Valve 3/8"	07100145	1
13	Valve 1/4"	07100024	1
14	Handle	26233101	1
15	——	——	——
16	Terminal Board	42010254	1
17	Electric Plate Assy	01403012	1
18	Capacitor	33000017	1
19	Capacitor	33010035	1
20	Terminal Board	42011103	1
21	——	——	——
22	Isolation Sheet	01233101	1
23	Rear Grill	11123204	1
24	Top cover plate	01253027	1
25	Condenser Assy	01103848	1
26	Motor Support	01703054	1
27	Motor	15013156	1

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No	Description	Part Code	Qty
		GWCN12ABNK1A1A/O	
1	Front Grill	22413431	1
2	Nut M6	70310131	1
3	Axial Flow Fan	10333004	1
4	Front Plate	01533012	1
5	Metal Base	012032292	1
6	4-way Valve	——	——
7	4-way Valve Coil	——	——
8	Compressor	00103083	1
9	Overload Protector	Internal	
10	Compressor Gasket	76710247	3
11	Nut with Washer	70310011	3
12	Valve Support	01713041	1
13	Right Side Plate	01302004	1
14	Valve 1/2"	07100147	1
15	Valve 1/4"	07100024	1
16	Handle	26233433	1
17	——	——	——
18	Terminal Board	42011241	1
19	Electric Plate Assy	01403117	1
20	Capacitor	33010743	1
21	Capacitor	33010026	1
22	Terminal Board	——	——
23	——	——	——
	Isolation Sheet	01233417	1
	Rear Grill	11123205	1
24	Top cover plate	01253443	1
25	Condenser Assy	01103985	1
26	Motor Support	017030511	1
27	Motor	150130671	1

The above data are subject to change without prior notice.

No	Description	Part Code	Qty
		GWHN12ABNK1A1A/O	
1	Front Grill	22413431	1
2	Nut M6	70310131	1
3	Axial Flow Fan	10333004	1
4	Front Plate	01533012	1
5	Metal Base	012032292	1
6	4-way Valve	43000402	1
7	4-way Valve Coil	43000400	1
8	Compressor	00102001	1
9	Overload Protector	Internal	
10	Compressor Gasket	——	3
11	Nut with Washer	70310011	3
12	Valve Support	01713041	1
13	Right Side Plate	01302004	1
14	Valve 1/2"	07100147	1
15	Valve 1/4"	07100024	1
16	Handle	26233433	1
17	——	——	——
18	Terminal Board	42010254	1
19	Electric Plate Assy	01403117	1
20	Capacitor	33000018	1
21	Capacitor	33010026	1
22	Terminal Board	42011103	1
23	——	——	——
	Isolation Sheet	01233417	1
	Rear Grill	11123205	1
24	Top cover plate	01253443	1
25	Condenser Assy	01103959	1
26	Motor Support	017030511	1
27	Motor	150130671	1

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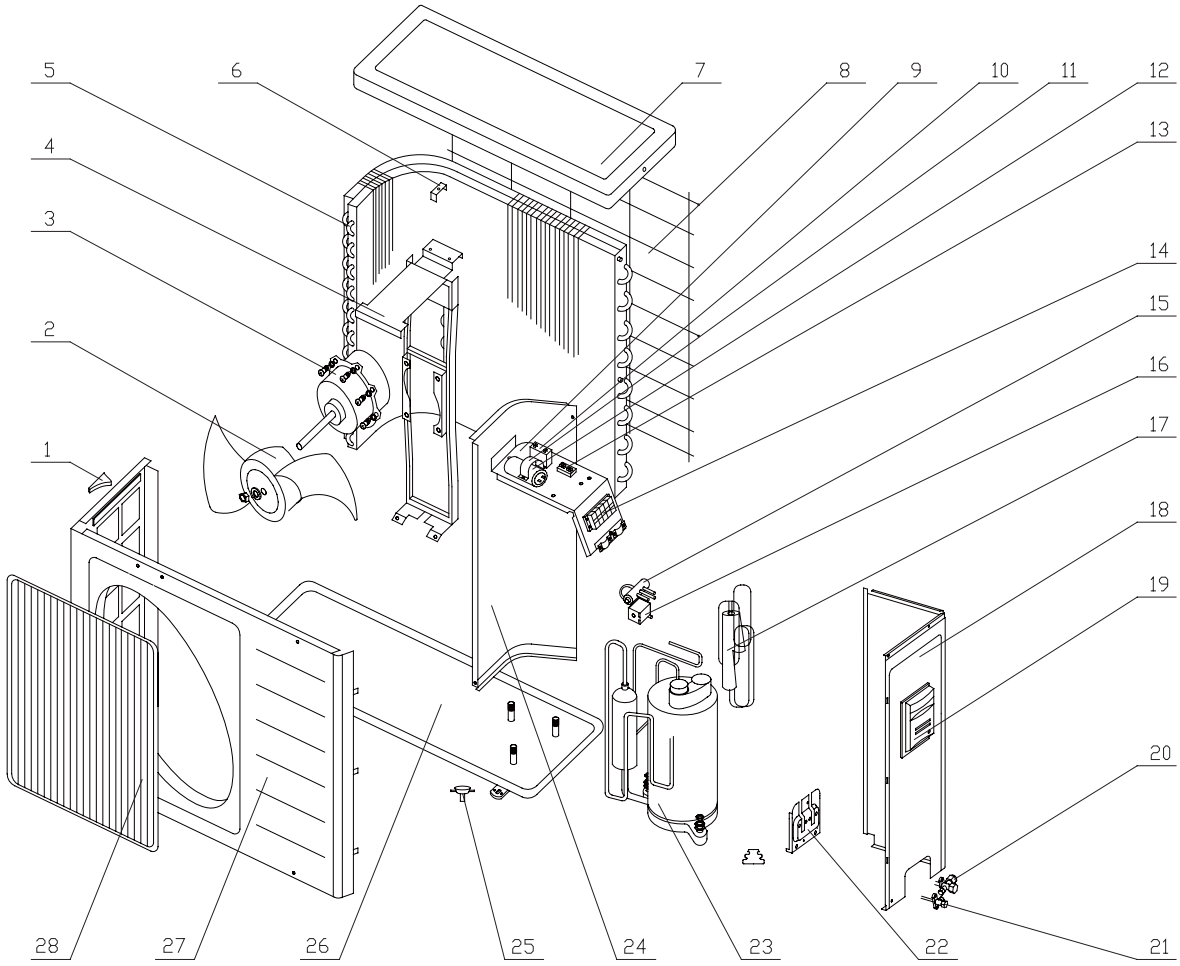
8. 5 Exploded View of of Outdoor Unit (2)

Applicable to GWCN18ACNK1A1A GWHN18ACNK1A1A



8.6 Parts List of Outdoor Unit (2)

No	Description	Part Code	Qty
		GWCN18ACNK1A1A/O	
1	Handle	26235401	1
2	Axial Flow Fan	10333426	1
3	Motor LW48B	15013070	1
4	Motor Support	01703098	1
5	Condenser Assy	0110399801	1
6	Condenser Clamp	none	——
7	Top Cover	01255001	1
8	Rear grill	01475004	1
9	Electrical Box	01405039	1
10	Capacitor CBB61 3.5uF/450V	33010010	1
11	Capacitor Clamp	02141375	1
12	Capacitor CBB65 60 μ F	33000039	1
13	Terminal Board	42011241	1
14	Terminal Board	none	——
15	4-way Valve Assy	none	——
16	4-way valve coil	none	——
17	Capillary Assy	0300378801	1
18	Rear Side Plate	01305013	1
19	Handle	26235254	1
20	Valve Assy 1/2	07100105	1
21	Valve Assy 1/4	071302111	1
22	Valve support	01715006	1
23	Compressor SHX33SC4-S	00120051	1
	Overload Protector	built in	
	Compressor Gasket	76710202	3
24	Mid Clapboard	01233035	1
25	Drainage Connecter	none	——
26	Chassis	0120362602P	1
27	Front Side Plate	01305015	1
28	Front Grill	22415001	1

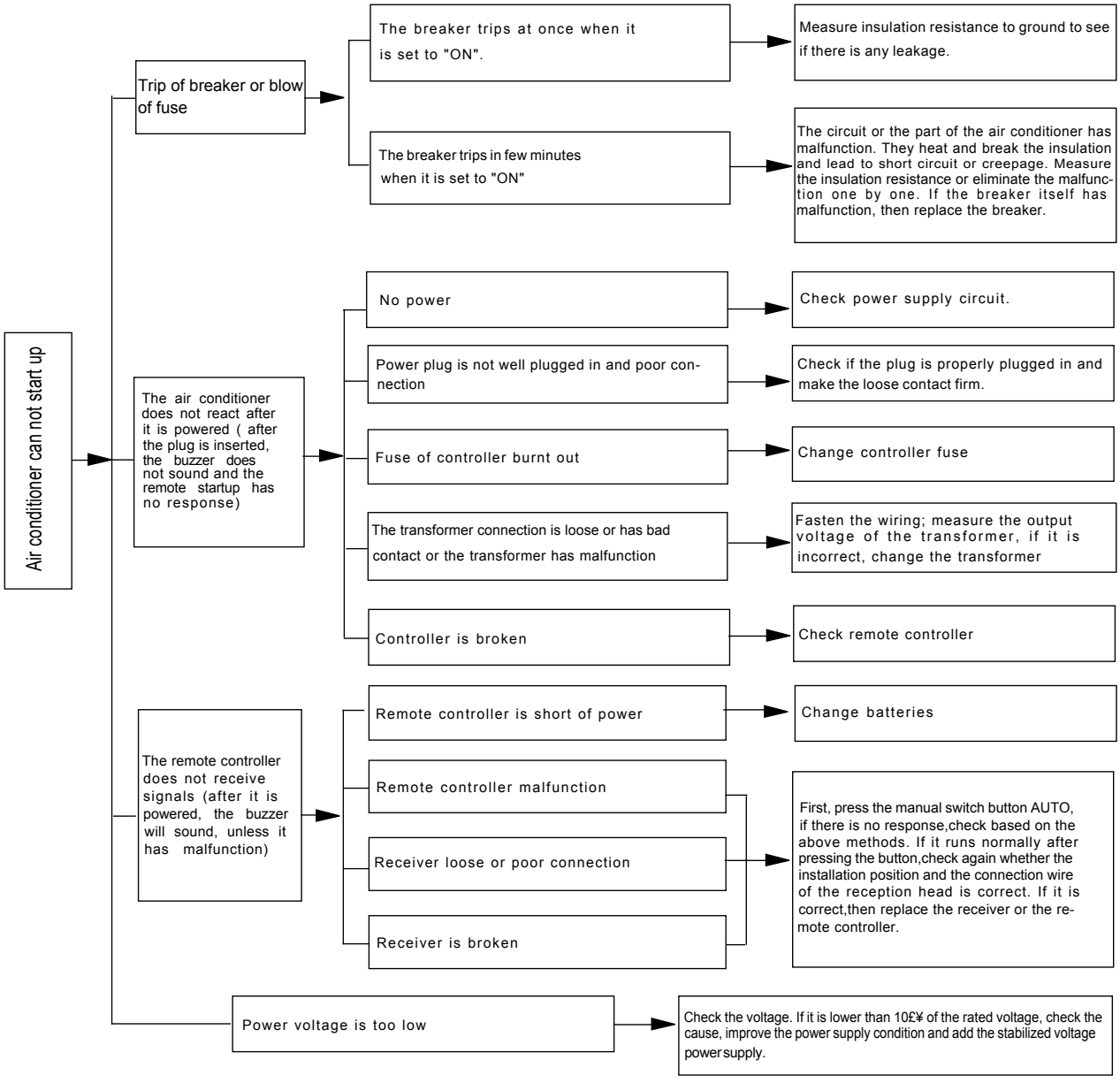
The above data are subject to change without prior notice.

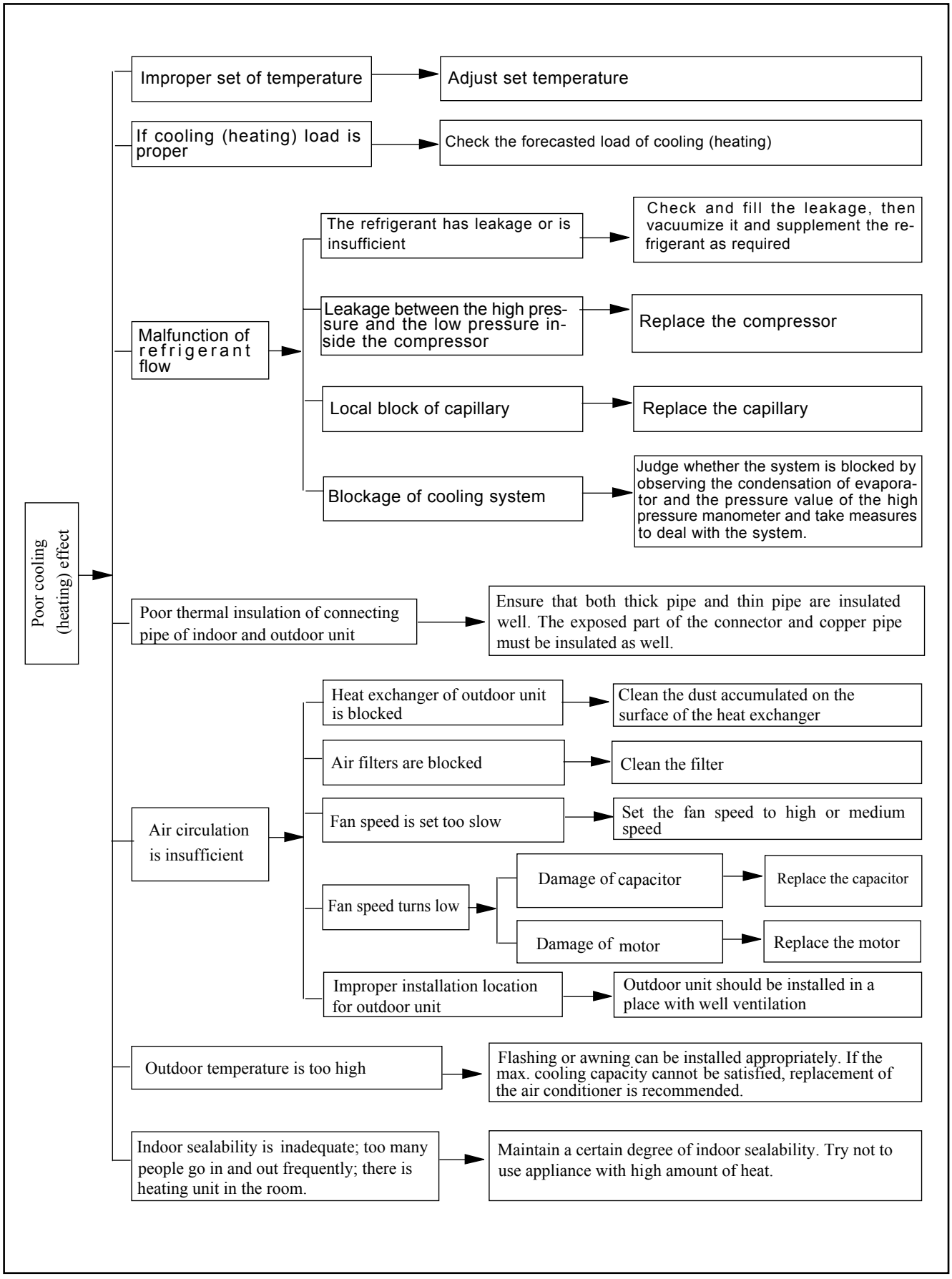
No	Description	Part Code	Qty
		GWHN18ACNK1A1A/O	
1	Handle	26235401	1
2	Axial Flow Fan	10333426	1
3	Motor LW48B	15013070	1
4	Motor Support	01705107	1
5	Condenser Assy	01113016	1
6	Condenser Clamp	01175202	2
7	Top Cover	01255001	1
8	Rear grill	01475004	1
9	Electrical Box	01405039	1
10	Capacitor CBB61 3.5uF/450V	33010010	1
11	Capacitor Clamp	02141375	1
12	Capacitor CBB65 60 μ F	33000039	1
13	Terminal Board	42010265	1
14	Terminal Board	42011147	1
15	4-way Valve Assy	43000403	1
16	4-way valve coil	430004002	1
17	Capillary Assy	03103552	1
18	Rear Side Plate	01305013	1
19	Handle	26235254	1
20	Valve Assy 1/2	071302115	1
21	Valve Assy 1/4	071302111	1
22	Valve support	01715006	1
23	Compressor SHX33SC4-S	00120051	1
	Overload Protector	built in	
	Compressor Gasket	76710202	3
24	Mid Clapboard	01233035	1
25	Drainage Connecter	06123401	1
26	Chassis	01205127P	1
27	Front Side Plate	01305015	1
28	Front Grill	22415001	1

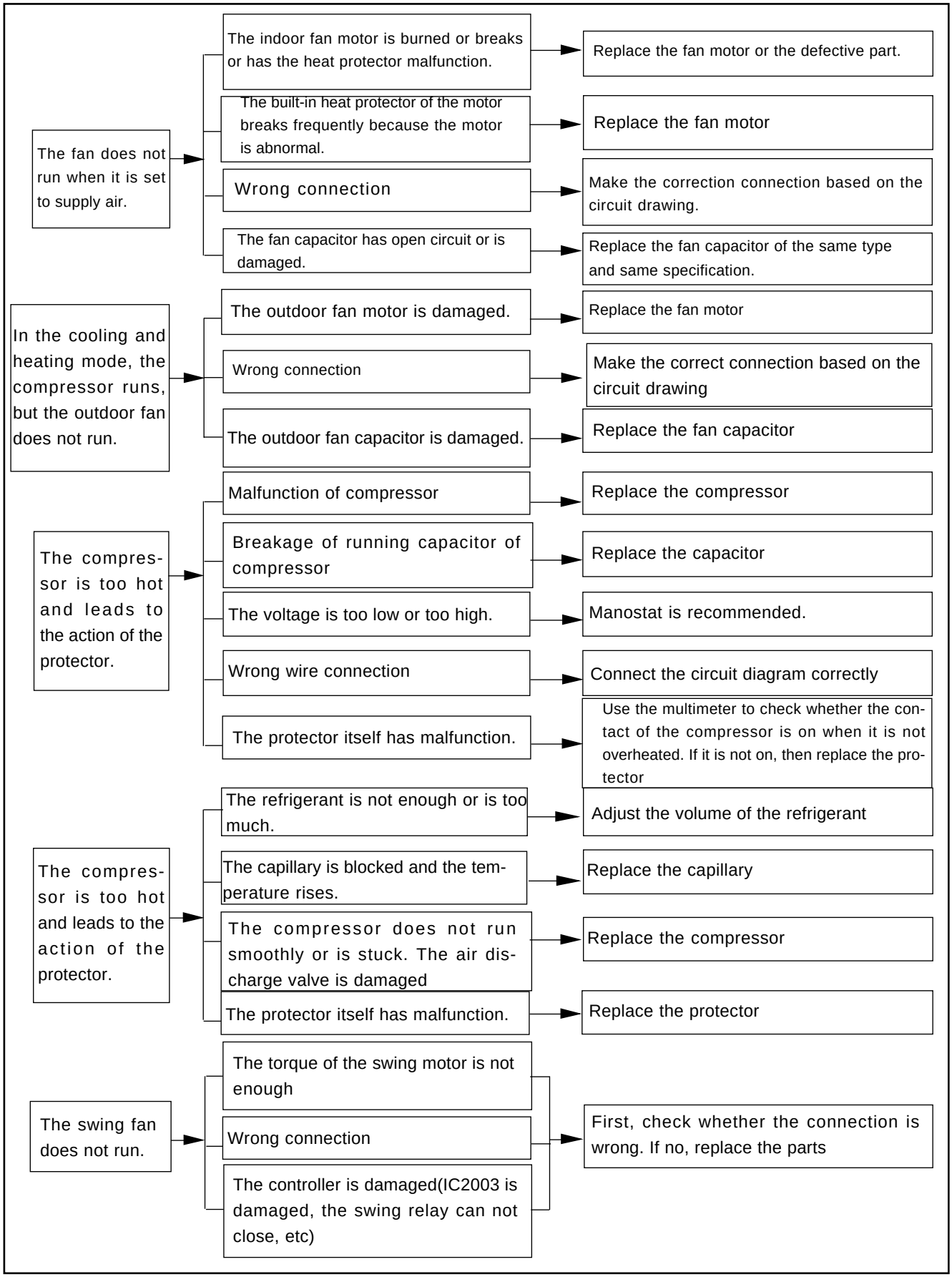
The above data are subject to change without prior notice.

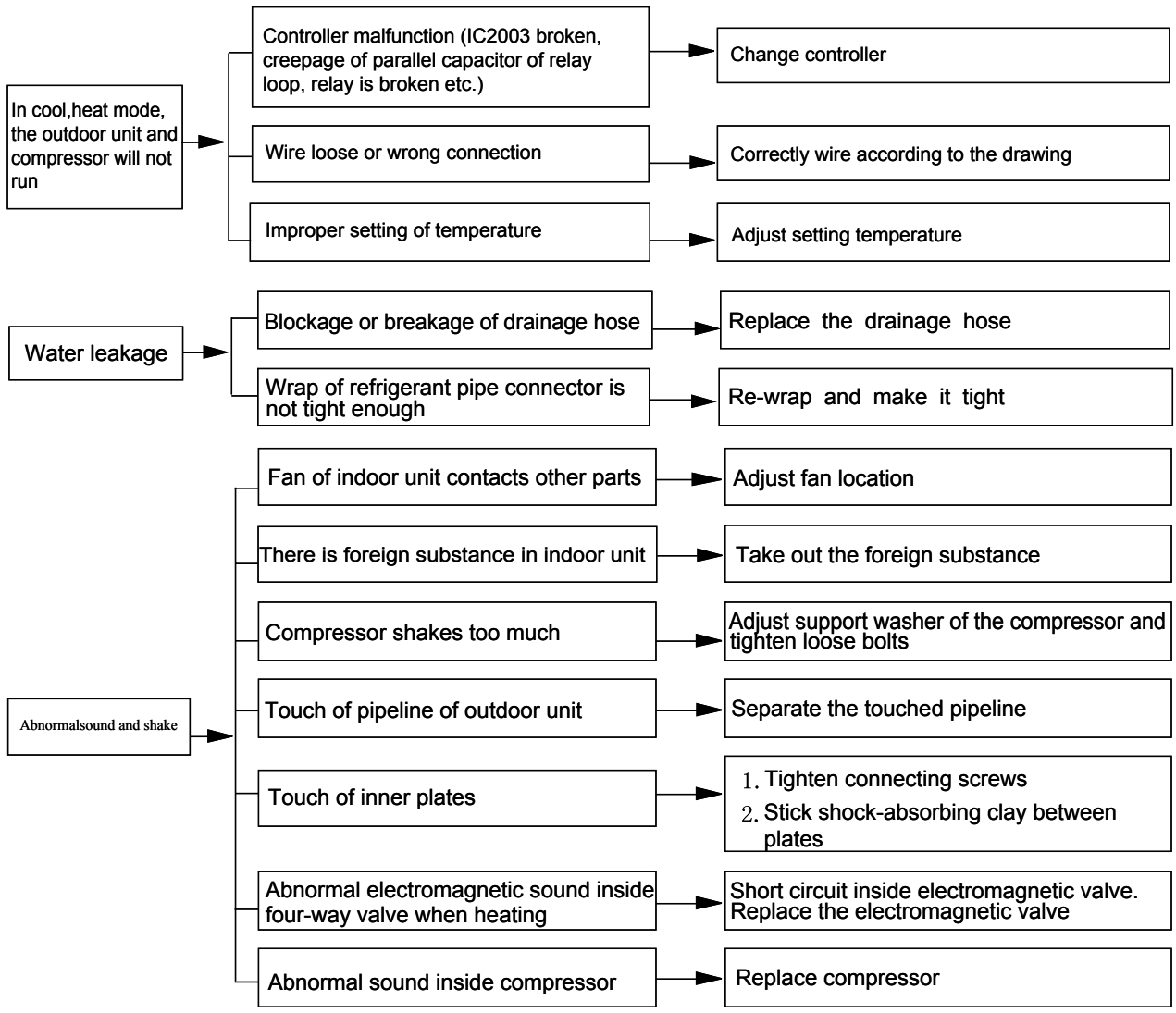
9 Failure and analysis

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




Poor cooling (heating) effect
Improper set of temperature
Adjust set temperature
If cooling (heating) 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
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.
Poor thermal insulation of connecting pipe of indoor and outdoor unit
Ensure that both thick pipe and thin pipe are insulated well. The exposed part of the connector and copper pipe must be insulated as well.
Air circulation is insufficient
Heat exchanger of outdoor unit is blocked
Clean the dust accumulated on the surface of the heat exchanger
Air filters are blocked
Clean the filter
Fan speed is set too slow
Set the fan speed to high or medium speed
Fan speed turns low
Damage of capacitor
Replace the capacitor
Damage of motor
Replace the motor
Improper installation location for outdoor unit
Outdoor unit should be installed in a place with well ventilation
Outdoor temperature is too high
Flashing or awning can be installed appropriately. If the max. cooling capacity cannot be satisfied, replacement of the air conditioner is recommended.
Indoor sealability is inadequate; too many people go in and out frequently; there is heating unit in the room.
Maintain a certain degree of indoor sealability. Try not to use appliance with high amount 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



Note: There is no heating malfunction in cooling only unit

PG motor locked protection H6:

Probable reasons:

1. Air vents were blocked which may cause the fan speed is too slow;
2. Fan blade locked;
3. Motor locked;
4. Fan motor capacitor damaged;
5. Motor damaged (ordors, winding, open circuit or shortcircuit are not normal, when testing the winding, pls distinguish whether the motor body cause temperature is too high so that bring on the thermal protector starts up)
6. IC board damaged (during normally running, there are voltage at both capacity input and output)
7. Mainboard damaged.
8. Motor thermal protection.

Disposal methods:

1. Remove the obstruction;
2. Reassembling;
3. Replace motor;
4. Replace capacitor;
5. Replace motor;
6. Replace circuit board;
7. Replace mainboard;

8.Under the normal circumstances, the motor will not act, but in other circumstances, such as evaporator is very dirty, to much dust attached on the fan blade that will cause the motor overload running, so that during the operation, frequent thermal protection will happen, so it is need to be cleaned or replaced.