1 Introduction and Features

Model	Remarks
GWCN09JANK1A1A GWHN09JANK1A1A GWCN12JBNK1A1A GWHN12JBNK1A1A	220V～240V 50Hz R22

Model	Remarks
GWCN18JCNK1A1A GWHN18JCNK1A1A	220V～240V 50Hz R22

Model	Remarks
GWCN24JDNK1A1A GWHN24JDNK1A1A	220V～240V 50Hz R22

Model		GWCN09JANK1A1A
Product Code		CA22500130
Function		COOLING
Rated Voltage		220-240V~
Rated Frequency		50Hz
Total Capacity (Btu/h)		9000
Power Input (W)		865
Rated Input (W)		1200
Rated Current (A)		5.45
Air Flow Volume (m3/h)		450
Dehumidifying Volume (l/h)		0.8
C.O.P / EER (W/W)		3.05
Indoor Unit	Model of Indoor Unit	GWCN09JANK1A1A/I
	Fan Motor Speed (r/min) (SH/H/M/L)	1270/1100/960/800
	Output of Fan Motor (w)	10
	Input of Heater (w)	/
	Fan Motor Capacitor (uF)	1
	Fan Motor RLA(A)	0.13
	Fan Type	Cross flow fan
	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
	Sound Pressure Level dB (A) (SH/H/M/L)	40/38/31/27/23
	Sound Power Level dB (A) (H/M/L)	50/48/41/37/33
	Dimension(W/H/D(mm)	815X168X267
	Dimension of Package (L/W/H) (mm)	815X344X260
	Net Weight /Gross Weight (kg)	10/13

Outdoor Unit	Model of Outdoor Unit		GWCN09JANK1A1A /O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-B16A030
	Compressor Type		revolving
	L.R.A. (A)		21
	Compressor RLA(A)		4
	Compressor Power Input(W)		880
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7≤T≤43
	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)		742X496X12.7
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.28
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		1500
	Fan Type		Axial fan
	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)		62
	Dimension (W/H/D) (mm)		776X540X320
	Dimension of Package (L/W/H)(mm)		848X360X580
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/0.7
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ9.52(3/8")
	Max Distance	Height (m)	5
		Length (m)	10

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

Model		GWHN09JANK1A1A	
Product Code		CA22500120	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		9000Btu/h	9500Btu/h
Power Input (W)		875	915
Rated Input (W)		1350	1250
Rated Current (A)		6	5.5
Air Flow Volume (m^3/h) (SH)		450	
Dehumidifying Volume (l/h)		1/-	
EER / C.O.P (W/W)		3.01/3.04	
Energy Class		/	
Indoor Unit	Model of Indoor Unit	GWHN09JANK1A1A /I	
	Fan Motor Speed (r/min) (SH/H/M/L)	1270/1100/960/800	1350/1200/1100/1050
	Output of Fan Motor (W)	10	
	Input of Heater (W)	/	
	Fan Motor Capacitor (μF)	1	
	Fan Motor RLA(A)	0.13	
	Fan Type	Cross flow fan	
	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	
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	40/38/31/27/23	40/38/35/33/30
	Sound Power Level dB (A) (SH/H/M/L/SL)	50/48/41/37/33	50/48/45/43/40
	Dimension (W/H/D) (mm)	815X168X267	
	Dimension of Package (L/W/H) (mm)	890X344X260	
	Net Weight /Gross Weight (kg)	10/13	

Outdoor Unit	Model of Outdoor Unit		GWHN09JANK1A1A
	Compressor Manufacturer/trademark		Hitachi
	Compressor Model		SG173CV-A5ETN
	Compressor Type		revolving
	L.R.A. (A)		18
	Compressor RLA(A)		4.3
	Compressor Power Input(W)		950
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7≤T≤43
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ9
	Rows-Fin Gap(mm)		1-1.6
	Coil length (l) x height (H) x coil width (L)		742X496X22
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.28
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		1500
	Fan Type		Axial fan
	Fan Diameter (mm)		Φ400
	Defrosting Method		Auto Defrost
	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)		62
	Dimension (W/H/D) (mm)		776X540X320
	Dimension of Package (L/W/H)(mm)		848X360X580
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/0.7
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ9.52(3/8")
	Max Distance	Height (m)	5
		Length (m)	10

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

Model		GWCN12JBNK1A1A
Product Code		CA22500150
Function		COOLING
Rated Voltage		220-240V~
Rated Frequency		50Hz
Total Capacity (W/Btu/h)		12000Btu/h
Power Input (W)		1160
Rated Input (W)		1550
Rated Current (A)		7.05
Air Flow Volume (m^3/h) (SH)		500
Dehumidifying Volume (l/h)		1.2
EER / C.O.P (W/W)		3.03
Energy Class		/
Indoor Unit	Model of Indoor Unit	GWCN12JBNK1A1A /I
	Fan Motor Speed (r/min) (SH/H/M/L)	1350/1100/980/860
	Output of Fan Motor (W)	10
	Input of Heater (W)	/
	Fan Motor Capacitor (μF)	1
	Fan Motor RLA(A)	0.13
	Fan Type	Cross flow fan
	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
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	41/39/34/31/25
	Sound Power Level dB (A) (SH/H/M/L/SL)	51/49/44/41/35
	Dimension (W/H/D) (mm)	872X178X283
	Dimension of Package (L/W/H) (mm)	935X375X260
	Net Weight /Gross Weight (kg)	11/15

Outdoor Unit	Model of Outdoor Unit		GWCN12JBNK1A1A/O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SL211SV－C5LU
	Compressor Type		revolving
	L.R.A. (A)		30
	Compressor RLA(A)		5.1
	Compressor Power Input(W)		1125
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7≤T≤43
	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)		742X496X12.7
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.28
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		1800
	Fan Type		Axial fan
	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)		53
	Sound Power Level dB (A) (H/M/L)		63
	Dimension (W/H/D) (mm)		776X540X320
	Dimension of Package (L/W/H)(mm)		848X360X580
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/0.75
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ12(1/2")
	Max Distance	Height (m)	5
		Length (m)	10

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

Model		GWHN12JBNK1A1A	
Product Code		CA22500140	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		12000Btu/h	12780Btu/h
Power Input (W)		1160	1230
Rated Input (W)		1700	1550
Rated Current (A)		7.8	7
Air Flow Volume (m^3/h) (SH)		500	
Dehumidifying Volume (l/h)		1.2/-	
EER / C.O.P (W/W)		3.03/3.05	
Energy Class		/	
Indoor Unit	Model of Indoor Unit	GWHN12JBNK1A1A /I	
	Fan Motor Speed (r/min) (SH/H/M/L)	1350/1100/980/860	1420/1200/1100/1050
	Output of Fan Motor (W)	10	
	Input of Heater (W)	/	
	Fan Motor Capacitor (μF)	1	
	Fan Motor RLA(A)	0.13	
	Fan Type	Cross flow fan	
	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	
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	41/39/34/31/25	41/39/35/33/30
	Sound Power Level dB (A) (SH/H/M/L/SL)	51/49/44/41/35	51/49/45/43/40
	Dimension (W/H/D) (mm)	872X178X283	
	Dimension of Package (L/W/H) (mm)	935X375X260	
	Net Weight /Gross Weight (kg)	11/15	

Outdoor Unit	Model of Outdoor Unit		GWHN12JBNK1A1A /O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SL222SV－C5LU
	Compressor Type		revolving
	L.R.A. (A)		30
	Compressor RLA(A)		5.4
	Compressor Power Input(W)		1190
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7≤T≤43
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ7
	Rows-Fin Gap(mm)		2-1.6
	Coil length (l) x height (H) x coil width (L)		742X496X25.4
	Fan Motor Speed (rpm)		830
	Output of Fan Motor (W)		30
	Fan Motor RLA(A)		0.28
	Fan Motor Capacitor (uF)		2.5
	Air Flow Volume of Outdoor Unit		1800
	Fan Type		Axial fan
	Fan Diameter (mm)		Φ400
	Defrosting Method		Auto Defrost
	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)		53
	Sound Power Level dB (A) (H/M/L)		63
	Dimension (W/H/D) (mm)		776X540X320
	Dimension of Package (L/W/H)(mm)		848X360X580
	Net Weight /Gross Weight (kg)		35/40
	Refrigerant Charge (kg)		R22/1.0
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		30
	Outer Diameter	Liquid Pipe (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ12(1/2")
	Max Distance	Height (m)	5
		Length (m)	10

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

Model		GWCN18JCNK1A1A
Product Code		CA22500170
Function		COOLING
Rated Voltage		220-240V~
Rated Frequency		50HZ
Total Capacity (W/Btu/h)		18000
Power Input (W)		1800
Rated Input (W)		2300
Rated Current (A)		10.5
Air Flow Volume (m^3/h) (SH)		780
Dehumidifying Volume (l/h)		1.8
EER / C.O.P (W/W)		2.93
Energy Class		/
Indoor Unit	Model of Indoor Unit	GWCN18JCNK1A1A/I
	Fan Motor Speed (r/min) (SH/H/M/L)	1380/1150/1000/800
	Output of Fan Motor (W)	20
	Input of Heater (W)	/
	Fan Motor Capacitor (μF)	1
	Fan Motor RLA(A)	0.21
	Fan Type	Cross flow fan
	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)	740X301X25.4
	Swing Motor Model	MP28VB
	Output of Swing Motor (W)	1.5
	Fuse (A)	PCB 3.15A 、T12.5A
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	44/40/36/32/29
	Sound Power Level dB (A) (SH/H/M/L/SL)	54/50/46/42/39
	Dimension (W/H/D) (mm)	960X300X198
	Dimension of Package (L/W/H) (mm)	1035X390X280
	Net Weight /Gross Weight (kg)	14/19

Outdoor Unit	Model of Outdoor Unit		GWCN18JCNK1A1A/O
	Compressor Manufacturer/trademark		LANDA
	Compressor Model		QX-F325F050g
	Compressor Type		rotary
	L.R.A. (A)		45
	Compressor RLA(A)		8.2
	Compressor Power Input(W)		1780
	Overload Protector		Internal
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7~43
	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		6500
	Fan Type		Axial fan
	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)		54
	Sound Power Level dB (A) (H/M/L)		64
	Dimension (W/H/D) (mm)		913X680X378
	Dimension of Package (L/W/H)(mm)		994X428X725
	Net Weight /Gross Weight (kg)		46/50
	Refrigerant Charge (kg)		R22/1.55
Connection Pipe	Length (m)		5
	Gas additional charge(g/m)		50
	Outer Diameter	Liquid Pipe (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ12(1/2")
	Max Distance	Height (m)	15
		Length (m)	20

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

Model		GWHN18JCNK1A1A	
Product Code		CA22500160	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50HZ	
Total Capacity (W/Btu/h)		18000	19500
Power Input (W)		1800	1900
Rated Input (W)		2300	2300
Rated Current (A)		10.5	10.5
Air Flow Volume (m^3/h) (SH)		780	
Dehumidifying Volume (l/h)		1.8	
EER / C.O.P (W/W)		2.93/3.01	
Energy Class		/	
Indoor Unit	Model of Indoor Unit	GWHN18JCNK1A1A/I	
	Fan Motor Speed (r/min) (SH/H/M/L)	1380/1150/1000/800	1400/1200/1100/950
	Output of Fan Motor (W)	20	
	Input of Heater (W)	/	
	Fan Motor Capacitor (μF)	1	
	Fan Motor RLA(A)	0.21	
	Fan Type	Cross flow fan	
	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)	740X301X25.4	
	Swing Motor Model	MP28VB	
	Output of Swing Motor (W)	1.5	
	Fuse (A)	PCB 3.15A 、T12.5A	
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	44/40/36/32/29	
	Sound Power Level dB (A) (SH/H/M/L/SL)	54/50/46/42/39	
	Dimension (W/H/D) (mm)	960X300X198	
	Dimension of Package (L/W/H) (mm)	1035X390X280	
	Net Weight /Gross Weight (kg)	14/19	

Outdoor Unit	Model of Outdoor Unit		GWHN18JCNK1A1A/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 (℃)		-7~43
	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		Axial fan
	Fan Diameter (mm)		Φ473
	Defrosting Method		Auto Defrost
	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)		55
	Sound Power Level dB (A) (H/M/L)		65
	Dimension (W/H/D) (mm)		913X680X378
	Dimension of Package (L/W/H)(mm)		994X428X725
	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 (mm)	Φ6(1/4")
		Gas Pipe (mm)	Φ12(1/2")
	Max Distance	Height (m)	15
		Length (m)	20

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

Model		GWCN24JDNK1A1A
Product Code		CA22500560
Function		COOLING
Rated Voltage		220-240V~
Rated Frequency		50Hz
Total Capacity (W/Btu/h)		22000
Power Input (W)		2140
Rated Input (W)		2900
Rated Current (A)		13.2
Air Flow Volume (m^3/h) (SH)		1000
Dehumidifying Volume (l/h)		4
EER / C.O.P (W/W)		3
Energy Class		/
Indoor Unit	Model of Indoor Unit	GWCN24JDNK1A1A/I
	Fan Motor Speed (r/min) (SH/H/M/L)	1300/1000/900/800
	Output of Fan Motor (W)	35
	Input of Heater (W)	/
	Fan Motor Capacitor (μF)	2.5
	Fan Motor RLA(A)	0.29
	Fan Type	Cross flow fan
	Diameter-Length (mm)	Φ98 X 424
	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)	847X286 X25.4
	Swing Motor Model	MP35XX
	Output of Swing Motor (W)	4
	Fuse (A)	PCB 3.15A
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	47/43/37/35/33
	Sound Power Level dB (A) (SH/H/M/L/SL)	57/53/47/45/43
	Dimension (W/H/D) (mm)	1090X331X210
	Dimension of Package (L/W/H) (mm)	1160X410X310
	Net Weight /Gross Weight (kg)	17.5/22.5

Outdoor Unit	Model of Outdoor Unit		GWCN24JDNK1A1A/O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SHV33ZC1-S
	Compressor Type		rotary
	L.R.A. (A)		60
	Compressor RLA(A)		10.1
	Compressor Power Input(W)		2175
	Overload Protector		/
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7~43
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ9.52
	Rows-Fin Gap(mm)		2-1.4
	Coil length (l) x height (H) x coil width (L)		660X735X44
	Fan Motor Speed (rpm)		780
	Output of Fan Motor (W)		68
	Fan Motor RLA(A)		0.75
	Fan Motor Capacitor (uF)		3
	Air Flow Volume of Outdoor Unit		/
	Fan Type		Axial fan
	Fan Diameter (mm)		Φ460
	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)		66
	Dimension (W/H/D) (mm)		1018X412X700
	Dimension of Package (L/W/H)(mm)		1100/450/755
	Net Weight /Gross Weight (kg)		51/56
	Refrigerant Charge (kg)		R22/1.7
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		50
	Outer Diameter	Liquid Pipe (mm)	Φ9.52
		Gas Pipe (mm)	Φ16
	Max Distance	Height (m)	15
		Length (m)	30

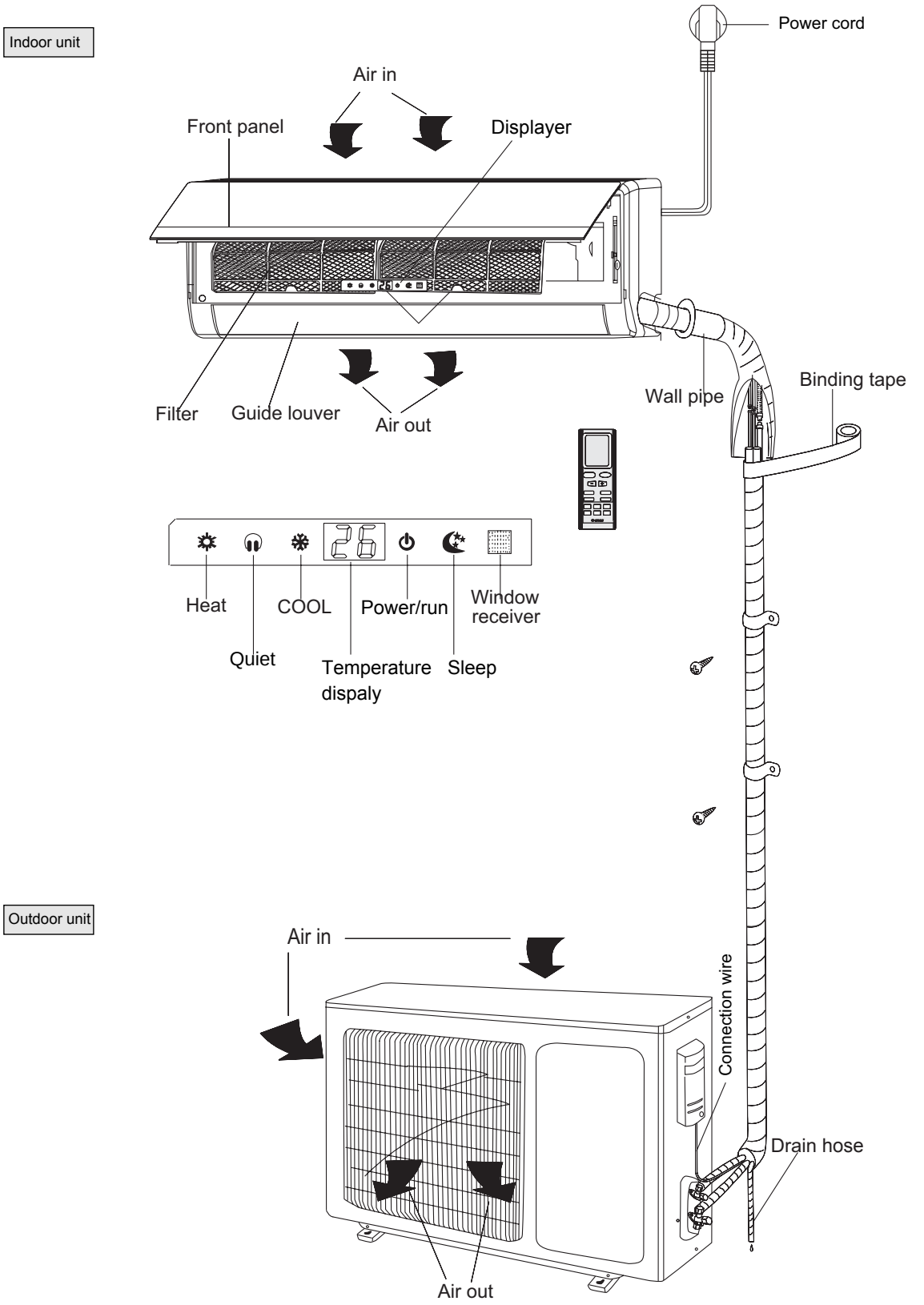
The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model		GWHN24JDNK1A1A	
Product Code		CA22500590	
Function		COOLING	HEATING
Rated Voltage		220-240V~	
Rated Frequency		50Hz	
Total Capacity (W/Btu/h)		22000	23200
Power Input (W)		2140	2150
Rated Input (W)		3000	3050
Rated Current (A)		13.6	13.9
Air Flow Volume (m^3/h) (SH)		1000	
Dehumidifying Volume (l/h)		4	
EER / C.O.P (W/W)		3	3.2
Energy Class		/	
Indoor Unit	Model of Indoor Unit	GWHN24JDNK1A1A/I	
	Fan Motor Speed (r/min) (SH/H/M/L)	1300/1000/900/800	1300/1050/950/900
	Output of Fan Motor (W)	35	
	Input of Heater (W)	/	
	Fan Motor Capacitor (μF)	2.5	
	Fan Motor RLA(A)	0.29	
	Fan Type	Cross flow fan	
	Diameter-Length (mm)	Φ98 X 424	
	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)	847X286 X25.4	
	Swing Motor Model	MP35XX	
	Output of Swing Motor (W)	4	
	Fuse (A)	PCB 3.15A	
	Sound Pressure Level dB (A) (SH/H/M/L/SL)	47/43/37/35/33	48/43/38/36/34
	Sound Power Level dB (A) (SH/H/M/L/SL)	57/53/47/45/43	58/53/48/46/44
	Dimension (W/H/D) (mm)	1090X331X210	
	Dimension of Package (L/W/H) (mm)	1160X410X310	
	Net Weight /Gross Weight (kg)	17.5/22.5	

Outdoor Unit	Model of Outdoor Unit		GWHN24JDNK1A1A/O
	Compressor Manufacturer/trademark		HITACHI
	Compressor Model		SHV33ZC1-S
	Compressor Type		rotary
	L.R.A. (A)		60
	Compressor RLA(A)		10.1
	Compressor Power Input(W)		2175
	Overload Protector		/
	Throttling Method		Capillary
	Starting Method		Capacitor
	Working Temp Range (℃)		-7~43
	Condenser		Aluminum fin-copper tube
	Pipe Diameter (mm)		Φ9.52
	Rows-Fin Gap(mm)		2-1.4
	Coil length (l) x height (H) x coil width (L)		660X735X44
	Fan Motor Speed (rpm)		780
	Output of Fan Motor (W)		68
	Fan Motor RLA(A)		0.75
	Fan Motor Capacitor (uF)		3
	Air Flow Volume of Outdoor Unit		/
	Fan Type		Axial fan
	Fan Diameter (mm)		Φ460
	Defrosting Method		Auto defrost
	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)		66
	Dimension (W/H/D) (mm)		1018X412X700
	Dimension of Package (L/W/H)(mm)		1100/450/755
	Net Weight /Gross Weight (kg)		62/67
	Refrigerant Charge (kg)		R22/2.15
Connection Pipe	Length (m)		4
	Gas additional charge(g/m)		50
	Outer Diameter	Liquid Pipe (mm)	Φ9.52
		Gas Pipe (mm)	Φ16
	Max Distance	Height (m)	15
		Length (m)	30

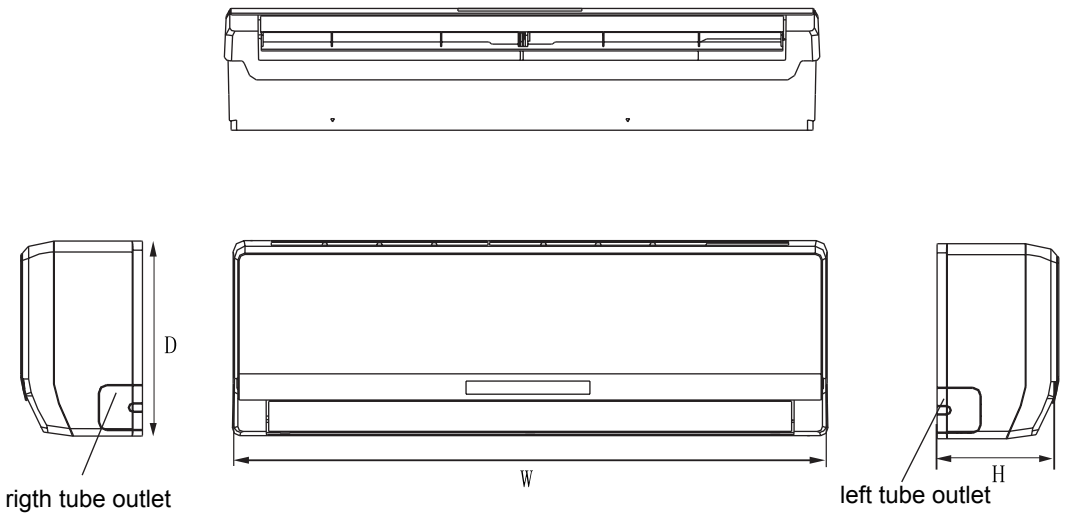
The above data is subject to change without notice. Please refer to the nameplate of the unit.

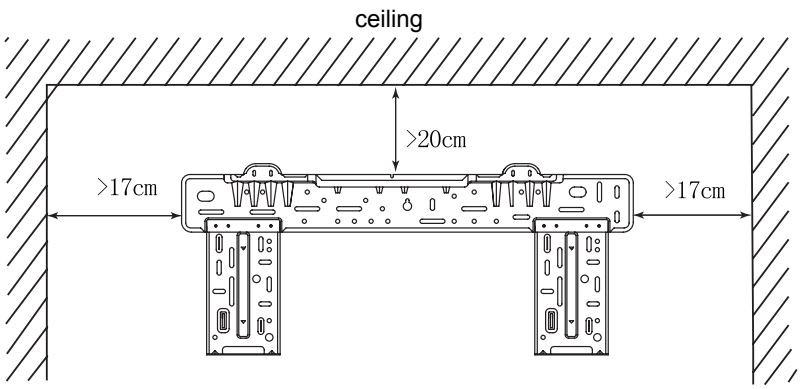
3 Parts' Name


Indoor unit
Power cord
Air in
Front panel
Displayer
Filter
Guide louver
Air out
Wall pipe
Binding tape
Heat
COOL
Power/run
Window receiver
Quiet
Temperature dispaly
Sleep
Outdoor unit
Air in
Connection wire
Drain hose
Air out

4 Outline and Installation Dimension

4.1 Outline and Installation Dimension for Indoor unit



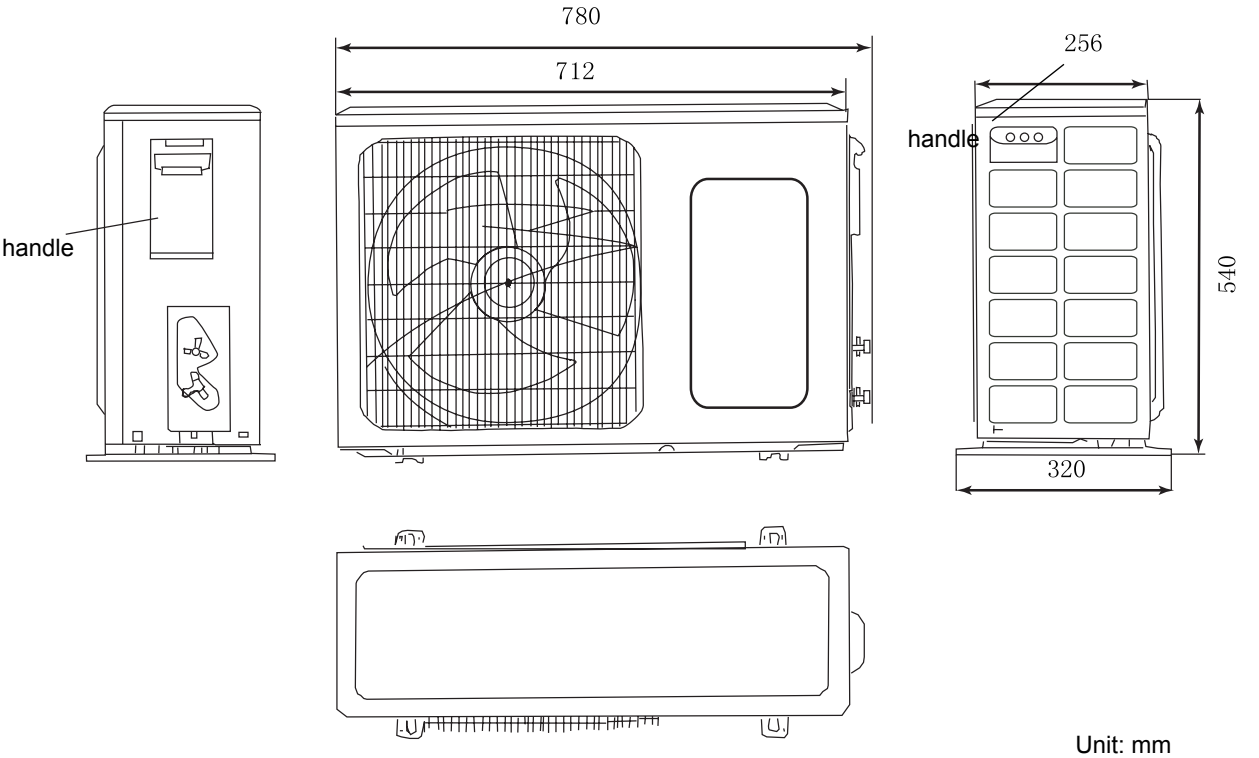


installation dimension

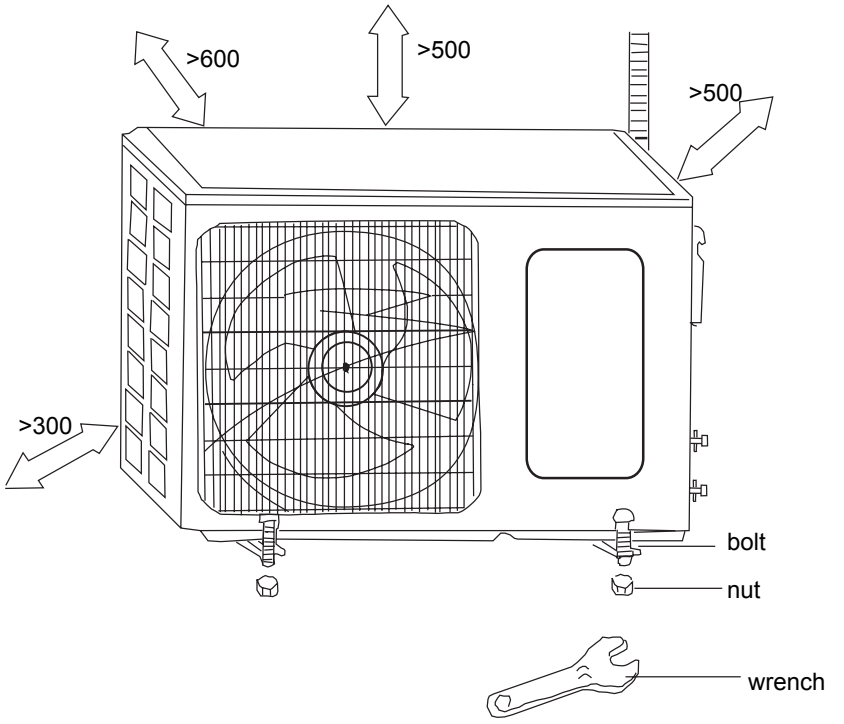
Model	W(mm)	H(mm)	D(mm)
9K	815	168	267
12K	872	178	283
18K	960	198	300

4.2 Outline and Installation Dimension for Outdoor Unit

GWCN09JANK1A1A, GWHN09JANK1A1A, GWCN12JBNK1A1A, GWHN12JBNK1A1A

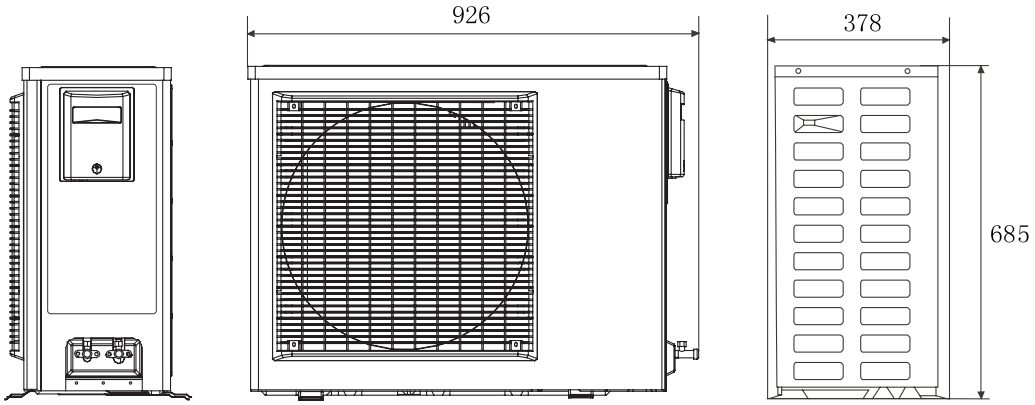


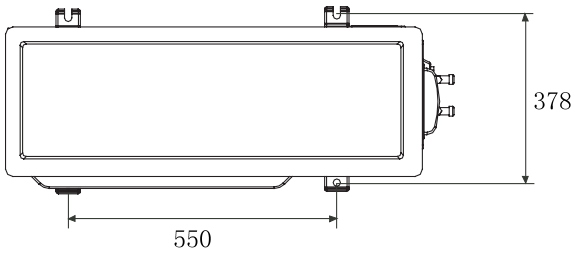
Unit: mm



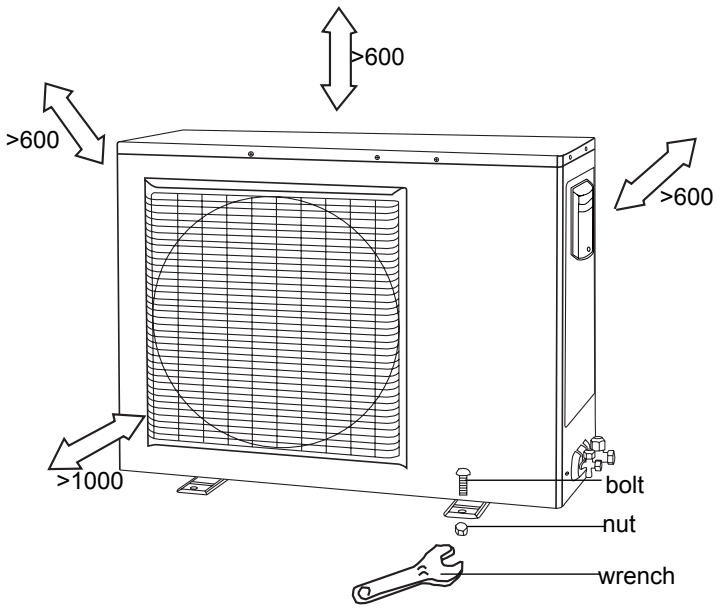
4.3 Outline and Installation Dimension for Outdoor Unit (2)

GWCN18JCNK1A1A、GWHN18JCNK1A1A



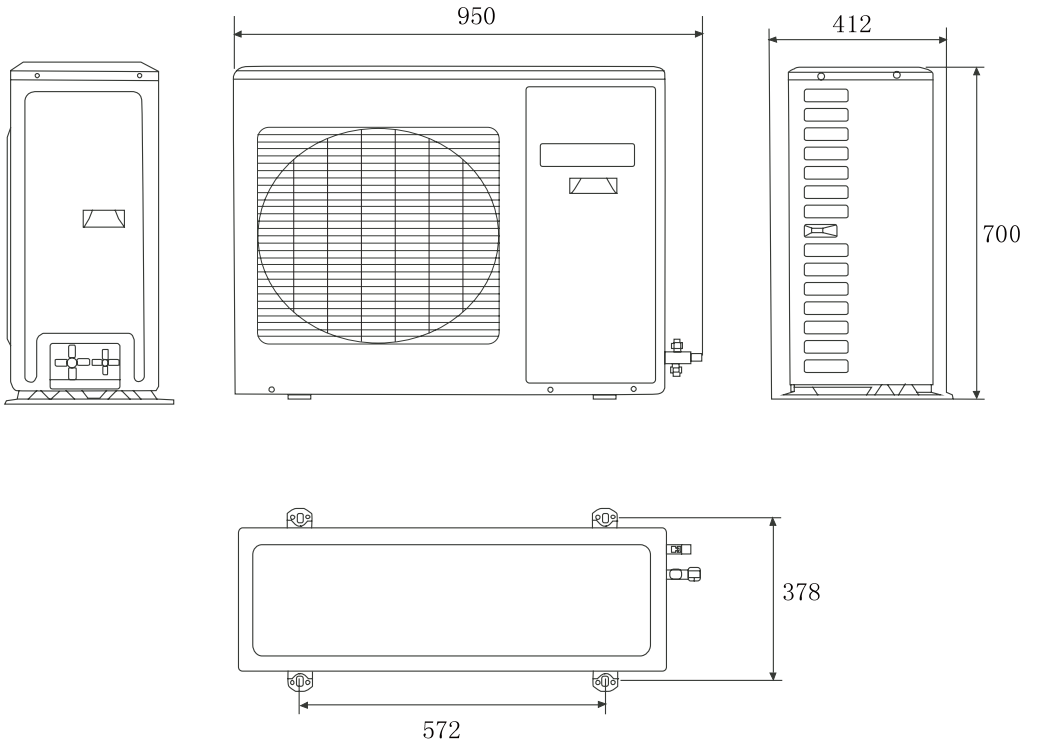


Unit: mm

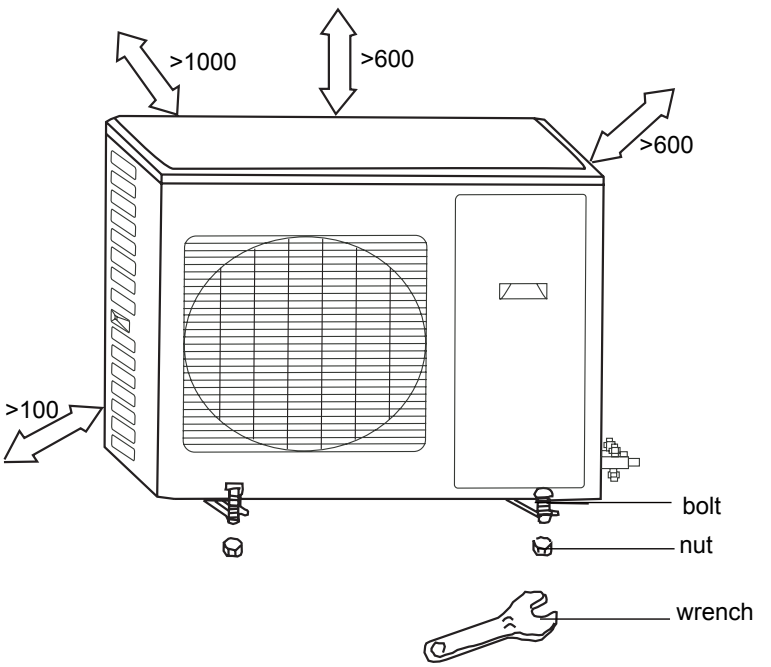


4.4 Outline and Installation Dimension for Outdoor Unit (3)

GWCN24JDNK1A1A、GWHN24JDNK1A1A

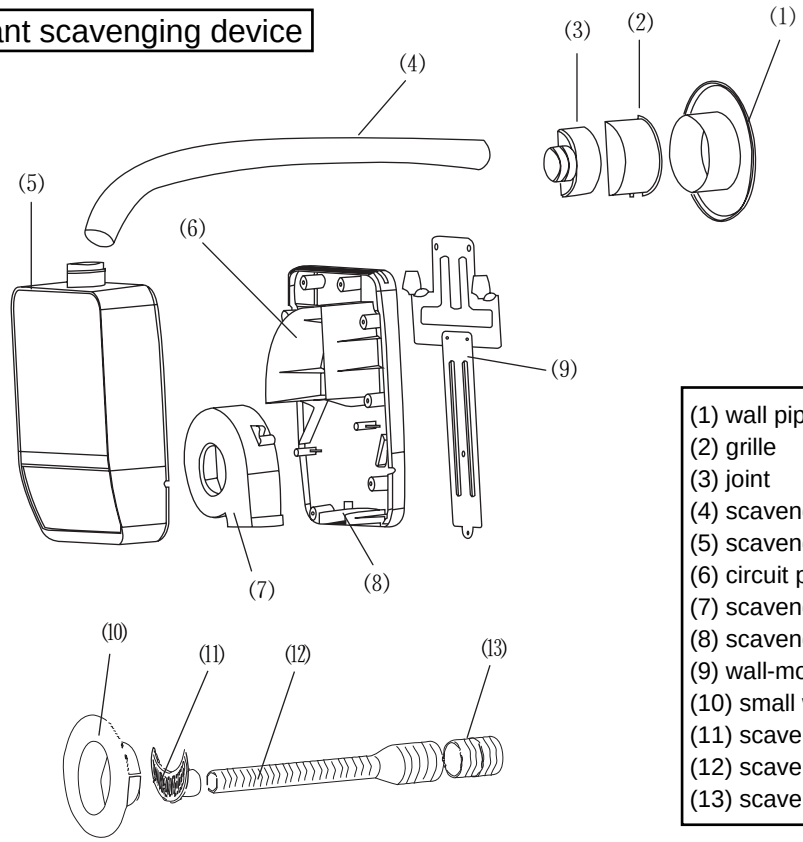


Unit: mm



4.5 Operation and installation for scavenging device

Independant scavenging device



(1) wall pipe
(2) grille
(3) joint
(4) scavenging duct
(5) scavenging box cover
(6) circuit part
(7) scavenging motor
(8) scavenging box bottom
(9) wall-mounted plate
(10) small wall pipe
(11) scavenging grill 1
(12) scavenging transition pipe
(13) scavenging pipe joint

Main parameter for independant scabenging device

Mode	HZ01、HZ02
Rated power (W)	2W
Rated current (A)	0.1A
Rated voltage (V/Hz)	220V/50Hz
Outline dimension (mm)(L*W*H)	270×190×85
Air volume (m3/h)	12m^3/h
Noise dB(A)	22dB(A)

Servicing and Maintenance:

Failure categories and treatments:

If there is any of the following conditions, please stop running the scavenging device immediately; cut off the power and contact the local dealer or visit local facilitator's website:

1. Abnormal noise in the independent scavenging device;
2. Foreign substance in the independent scavenging device;
3. Scavenging function failure;
4. Other abnormal conditions.

WARNING: Do not intend to replace the connecting line of the independent scavenging device by yourself.(If the connecting line of the independent scavenging device is damaged, it must be replaced with specified connecting line); do not intend to repair the independent scavenging device by yourself; Operations above must be carried out by local dealer or local facilitator's technician.

Maintenance

1. Before leaving the air conditioner unused for a long time, turn on the scavenging function to operate the scavenging device for a period of time, so as to dry the scavenging device.
2. If the scavenging function will be reused after leaving the air conditioner unused for a long time, you had better inspect the air inlet or water outlet of the scavenging device to find whether there is blockage; if blocked, please clean it immediately.

Basic Requirements on Installation Location

Installing at following places will cause failure to the independent scavenging device. If it is unavoidable, please consult the maintenance center of Gree Electrical Appliance:

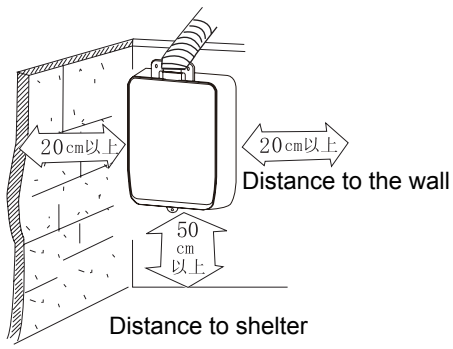
· Place with oil in the air;
· Place with vulcanized gas (vulcanization hot spring);
· Place with inflammable gas or volatile gas disseminated in the air;
· Place with high-frequency equipment, such as wireless equipment, welding machine and medical equipment.
· Sea saline and alkaline area;
· Place of special environment and conditions.

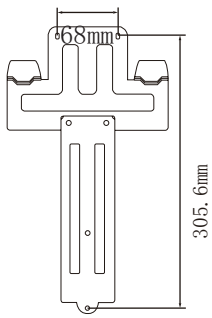
Selection of Installation Location of the Scavenging Device

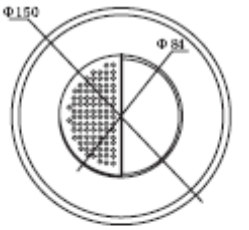
Please avoid the following locations as much as possible:

1. Avoid place where inflammable gas leaks or environment with highly corrosive gas.
2. Avoid place where artificial strong current or magnetic field directly makes effect.
3. Avoid place where there is barrier preventing the air outlet.
4. Avoid place easy to cause noise and vibration as much as possible.
5. Avoid place with vile natural conditions (such as lampblack, heavy sand wind, direct sunlight or high temperature heat source) as much as possible.
6. Place within contact of children.
7. Place inconvenient for maintenance, overhaul and ventilation.
8. Place unfavorable for public traffic and appearance of the city.

Dimension Drawing for Installation





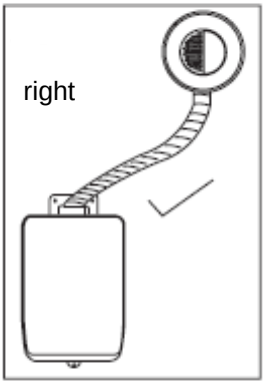


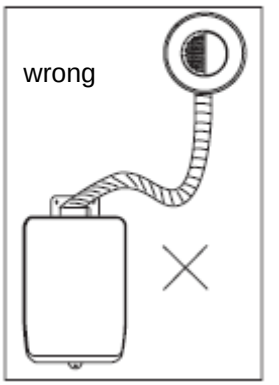
Installation Steps for Independent Scavenging Device

1. Enlarge the hole at the wall pipe hole of the original air conditioner, size of the hole shall be . 90. Size of the wall pipe is shown as the right picture.

2. Connect the scavenging duct to the independent scavenging device.

3. Please refer to length of the assorted scavenging duct of the independent scavenging device (1.5 m) and length of the scavenging connecting wire (3 m), not only to ensure the scavenging connecting wire and the opposite terminal in the unit room can be inter-connected, and other end of the scavenging duct can enter the room through the wall hole. Select the installation location at outdoor, and then drill three holes on the external wall in accordance with the size location in the installation dimensional drawing, put in the tagma and fix the independent scavenging device on the wall through sheet metal component with a screw; detailed size is shown in the installation dimensional drawing.





· Note: Height of the independent scavenging device must be lower than that of the indoor side wall hole, and the scavenging duct shall be ensured to lay out as oblique type with smooth running water, so as to avoid the possibility of water-logging in the duct, thereby ensuring the condensed water can smoothly flow to outdoor along the scavenging duct. See the picture:

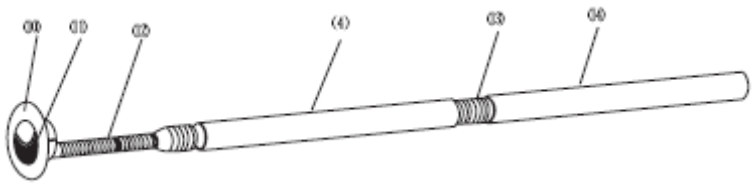
4. Put the scavenging connecting wire into indoor, abutting joint with the connecting terminal matching to the indoor unit, which shall be ensured of fixed connection. Straighten the scavenging connecting wire along the connecting duct, and tie it to the connecting duct with bridle.

5. Put the scavenging grid through the wall pipe, and lock it in the nick at middle of the wall pipe. Finally, cover the wall pipe at the wall hole.

6. Fix the scavenging duct on the external wall with big terminating, so as to avoid the scavenging pipe from swaying due to external force.

If the users disagrees or unavailable to enlarge the hole, the folloing installation scheme shall be applied. Installation steps are as follows:

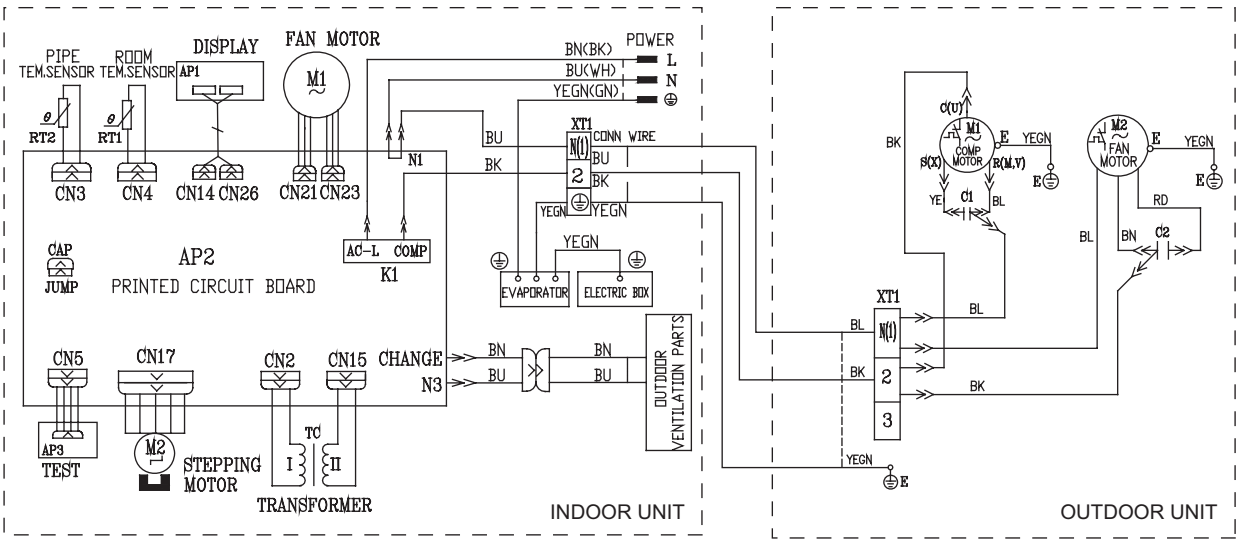
(wherein, (13) scavenging connector and (14) extension tube are optional component)



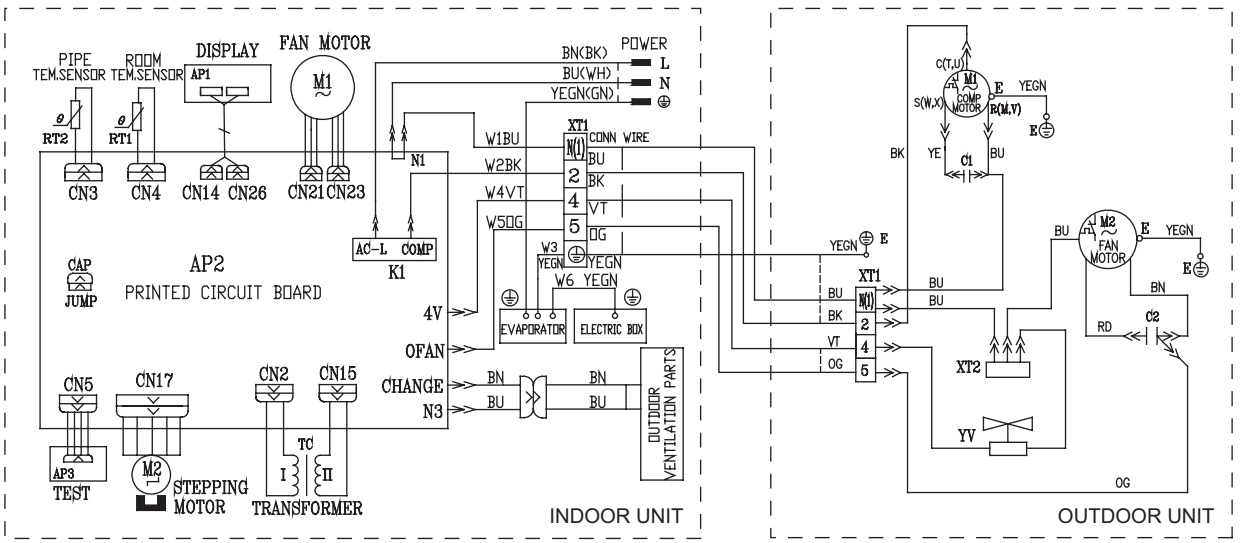
1. As shown in the picture, CW rotate (12) scavenging transition duct on (4) scavenging duct. Make sure to rotate it to the end, so as to prevent gas leakage.
2. If the user needs to lengthen the scavenging duct, 2 scavenging ducts can be connected with a scavenging duct connector (13). We don't not suggest to connect more scavenging ducts, or, the scavenging effect will be affected.
3. Put (12) scavenging transition duct from outdoor into the wall hole; cut off the part exceeding the wall thickness with a scissors, and screw on (11) scavenging grid 1.
4. Refer to length of the assorted scavenging duct of the independent scavenging device(1.5 m) and length of the scavenging connecting wire (3 m), not only to ensure the scavenging connecting wire and the opposite terminal in the unit room can be inter-connected, simultaneously, other end of the scavenging duct can enter the room through the wall hole. Select the installation location at outdoor, and then drill three holes on the external wall in accordance with the size location in the installation dimensional drawing, put in the tagma and fix the independent scavenging arrangement on the wall through sheet metal component with a screw, detailed size is shown in the installation dimensional drawing.
5. Put the scavenging connecting wire into indoor through the wall hole, abutting joint with the connecting terminal matching to the indoor unit, which shall be ensured of fixed connection.
6. Put (11) scavenging grid into (10) . 65 wall pipe and then fix it. Cover the wall pipe at the hole.
7. Straighten the scavenging connecting wire along the connecting duct, and tie it to the scavenging duct with bridle.
8. Finally, fix the scavenging duct on the external wall with big terminating, so as to avoid the scavenging pipe from swaying due to external force.

5 Electric Circuit Diagram

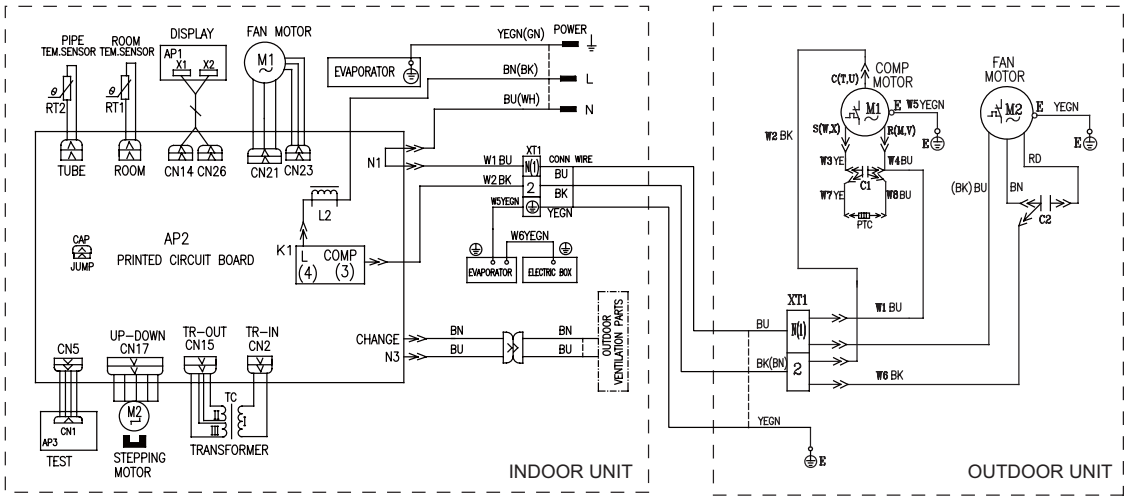
GWCN09JANK1A1A GWCN12JANK1A1A



GWHN09JANK1A1A GWHN12JANK1A1A



GWCN18JCNK1A1A



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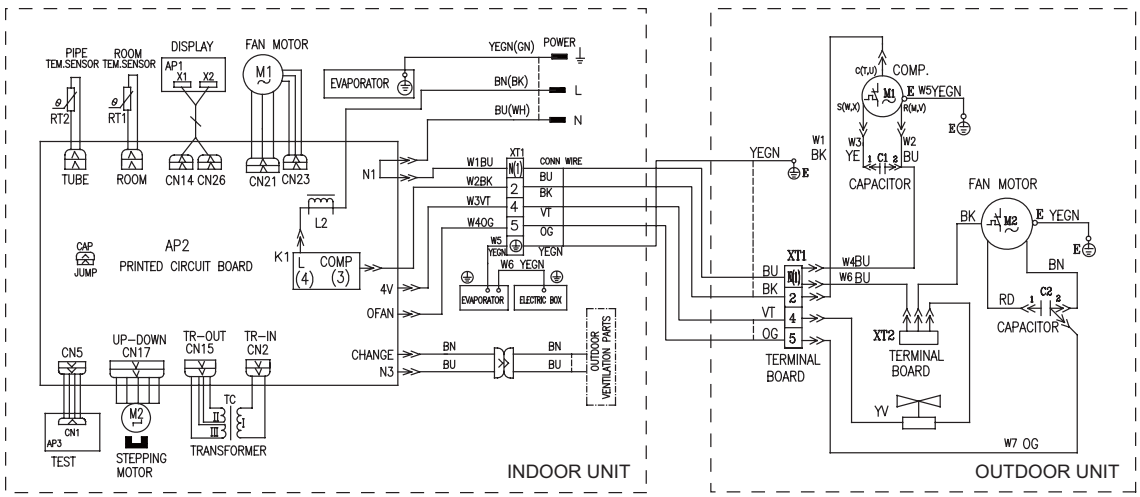
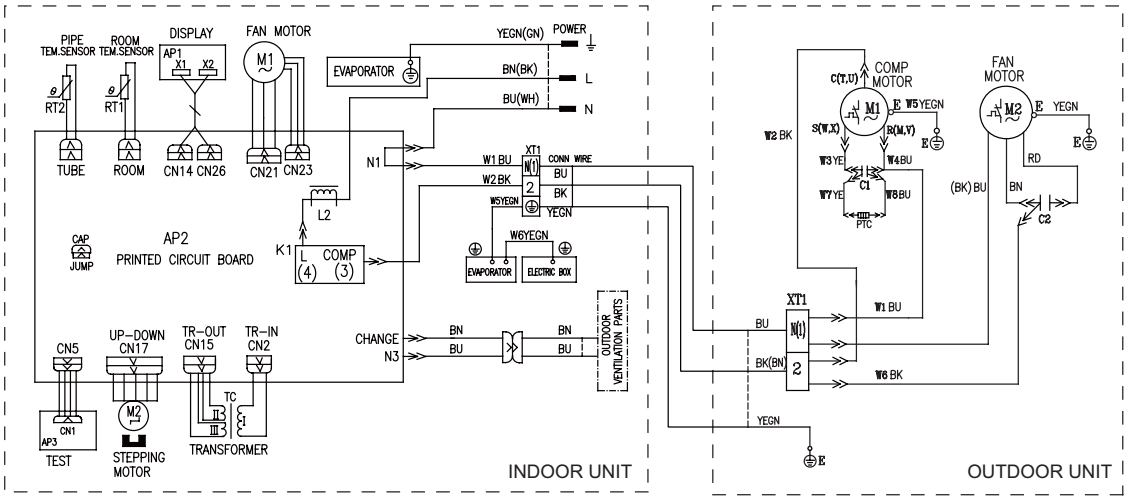


GWCN24JDNK1A1A



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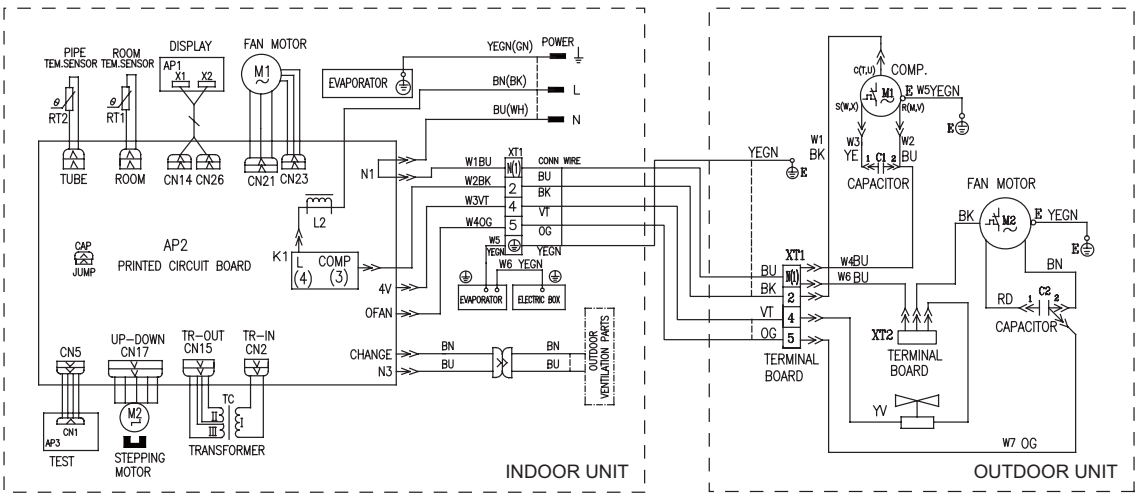


6 Controller Function Manual and Operating Method

6.1 Controller Function Manual

This function manual is applicable for admiral series.

1. Temperature Parameters

◆Indoor preset temperature (Tpreset)

◆Indoor ambient temperature (Tamb.)

2 Basic functions

Once the unit is energized, the compressor shall never be restarted except 3mins interval at least. For the first energization, the compressor can be restarted without 3-min delay. Once the compressor is started up, the compressor won't stop running within 6mins with the change of room temperature.

（1）Cooling Mode

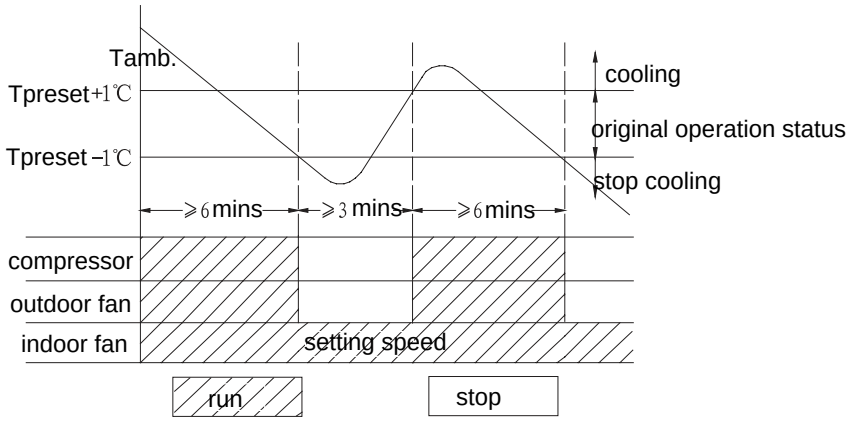
①Cooling conditions and process

When Tamb. ≥Tprese+1℃, the unit starts cooling operation. In this case, the compressor and the outdoor fan operate and the indoor fan operates at setting speed.

When Tamb. ≤Tpreset-1℃, the compressor and the outdoor fan stop while the indoor fan runs at setting speed.

When Tpreset-1℃＜Tamb. ＜Tpreset+1℃, the unit will maintain its previous operation status.

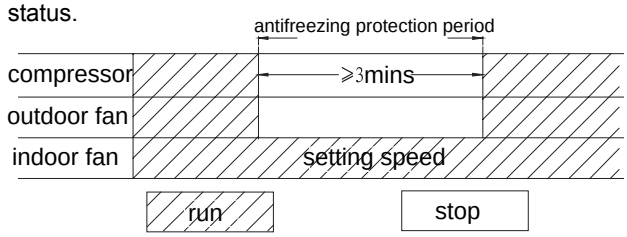
➢ In cooling mode, the four-way valve is de-energizing and the temperature setting range is 16～30℃.



② Protection Functions

◆Antifreezing protection

If the system is under antifreezing protection, the compressor and outdoor fan stop operation; the indoor fan operates at setting speed. If antifreezing protection is eliminated and the compressor has been stopped for 3 minutes, the unit will resume its previous operation status.



（2） Dry Mode

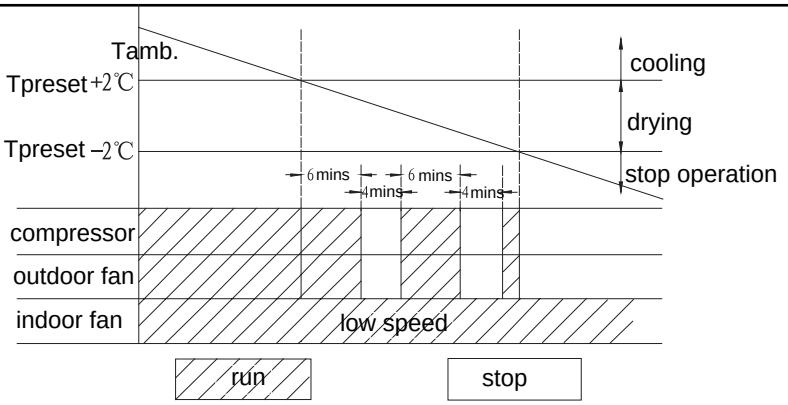
①Dry Conditions and Process

When Tamb. ＞Tpreset+2℃, the unit starts drying and cooling operation. In this case, the compressor and outdoor fan operates and the indoor fan operates at low speed.

When Tpreset-2℃≤Tamb. ≤Tpreset+2℃, the unit will start drying operation. In this case, the indoor fan operates at low speed, and the compressor and the outdoor fan operate 6 minutes and stop 4 minutes in cycle.

When Tamb.＜Tpreset-2℃, the compressor and the outdoor fan stops operation while the indoor fan operates at low speed.

➢ In drying mode, the four-way valve is de-energizing and the temperature setting range is 16～30℃.



② **Protection**

◆ Antifreezing protection

During drying and cooling operation, if the system is under antifreezing protection, the compressor and outdoor fan stop operation while indoor fan operates at low speed. If antifreezing protection is eliminated and the compressor has been stopped for 3 minutes, the complete unit will resumes its previous operation status.

During the cycle stage of operating 6 minutes and stopping 4 minutes, if antifreezing protection is detected, the compressor and the outdoor fan will stop operation and the indoor fan will operate at low speed. When the antifreezing protection is eliminated and the compressor has been stopped for 4 minutes, the complete unit will resume its previous operation state.

（3） Heating mode （not available for cooling only unit）

①Heating conditions and process

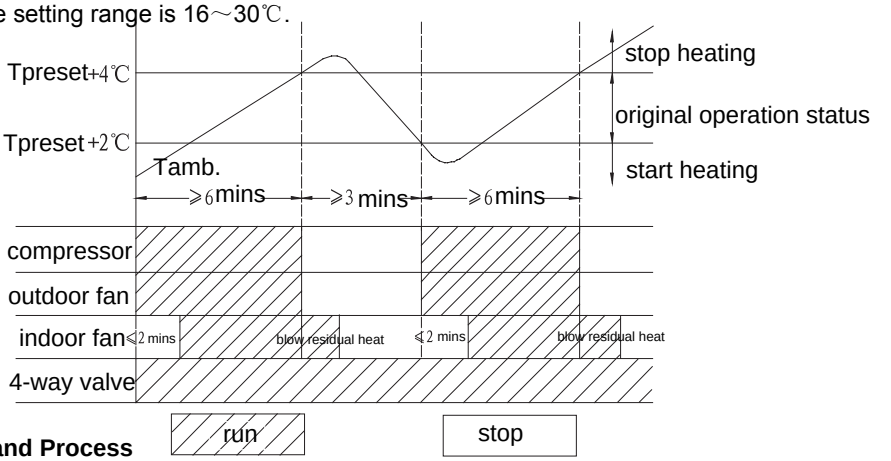
When Tamb. ≤Tpreset+2℃, the unit starts heating operation. In this case, the 4-way valve, compressor and outdoor fan operate simultaneously. The indoor fan operates after 2 minutes at most.

When Tamb≥Tpreset+4℃, the compressor and outdoor fan stop operation. The 4-way valve remains energizing and the indoor fan blows residual heat.

When T_{preset} +2℃＜$T_{amb.}$ ＜ T_{preset} +4℃, the unit will maintain its previous operation status.

Blow residual heat: When the temperature in heating mode reaches the OFF condition for compressor, the compressor and outdoor fan will stop running and up&down horizontal louver will turn to the breeze position. The indoor fan will run at setting fan speed for 60s and then run at the breeze speed until the compressor is restarted up in heating mode.

In this mode, the temperature setting range is 16～30℃.



② **Defrosting Conditions and Process**

With intelligent defrosting function, the unit can automatically defrost according to the condition. The indoor unit displays “H1”.

③ **Auxiliary Electric Heating**

When the compressor is energized, indoor fan is operating and Ttube is detected too low successively, the auxiliary electric heating will start operating.

When compressor stops operation, or Ttube is high or during the 10s before defrosting, the auxiliary electric heating will stop operation. Once the auxiliary electric heating stops running, it can resume operating only after 2mins delay. During the heating prevention protection period, the auxiliary electric heating stops operation.

④Protection Functions

◆Overheating Prevention Protection

If the evaporator tube temperature overheats, the outdoor fan stops operation. When the tube temperature resumes normally, the outdoor fan resumes operation.

(4) Fan Mode

In fan mode, the indoor fan operates at setting fan speed.

(5) Fan Mode

In AUTO mode, the unit will automatically select its operation mode (cooling, heating or fan) with the change of ambient temperature.

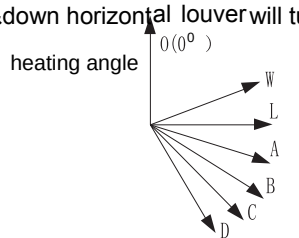
3 other control

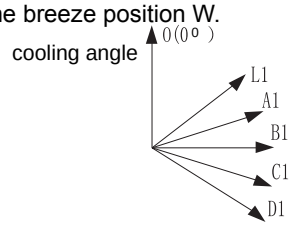
(1) Up&down swing control

After energization, up & down swing motor will firstly let the horizontal louver anticlockwise rotate to position 0 to close air outlet.

If swing function has not been set after startup of the unit, up & down horizontal louver will clockwise turn to position D in HEAT mode, or clockwise turn to level position L1 in other modes. Indoor fan and compressor can be energized only after the horizontal louver is opened at L1 position.

If setting swing function while starting up the unit, the horizontal louver will swing between L and D. There are 7 kinds of swing status of horizontal louver: Positions L, A, B, C and D, swing between Land D and stop at any position between L and D (angles between L and D are equiangular). Upon turning off the unit, the horizontal louver will close at position 0. Swing function is available only when swing function set and indoor fan is operating. In heating and auto heating mode, when Tamb.>Tpreset+2℃, the up&down horizontal louver will turn to the breeze position W.





(2) Buzzer

Upon energization or availably operating the unit or remote controller, the buzzer will give out a beep.

(3) Button

After energization, press this button once and then the unit will operate at auto mode; press it again to turn off the unit.

(4) Display of displayer

(1) Display of operation icon and mode icon

A. After energization, all the display icons will be displayed and then only the power LED is bright.

B. When turn on the unit by the remote controller, the operation LED will be bright. Meanwhile, the current operation mode LED will be bright;

In cooling mode and auto cooling mode, the operation LED and the cooling LED are bright;

In heating mode and auto heating mode the operation LED and the heating LED are bright;

C. Setting auto quiet or forced quiet, the quiet lamp is bright; if the correct humidity data does not receive for 10min continuously,

the quiet lamp blinks (only blinks after setting auto quiet or forced quiet, and stop to blink after turn off quiet function).

D. Sleep LED will be bright when setting sleep function.

E. All the display will be OFF if turn of the light button (this is still available in off status).

F. After setting sleep function, the displayer will keep the previous display status. That's the sleep function won't affect the on or off status of light.

(2) Dual-8 display

The nixie tube displays the current setting temperature (the setting temperature range is 16-30℃). In auto mode, it displays 25℃ in cooling and fan and 20℃ in heating. It only displays 25℃ for cooling only controller. H6 will be displayed for the motor locked information. H1 will be displayed during defrosting period.

(5) Auto fan speed control

In this mode, the indoor fan will select the high, medium and low fan speed according to the change of ambient temperature.

(6) X-Fan Function

① In the cooling or drying mode(X-Fan function is not available for auto, heating and fan mode), the X-Fan function can be set. After X-Fan function is turned on, if turn off the unit by pressing ON/OFF button, indoor fan will run at low fan speed for 10mins (within the 10mins, swing will operate at the original status, while other loads will be tuned off) and then the complete unit will be turned off; After the X-Fan function is turned off, the complete unit will be turned off after pressing ON/OFF button.

② When the X-Fan function is started, if press the X-Fan button, indoor fan will stop operation immediately and the guide louver will be closed.

③ When the X-Fan function is started up, the characters of “X-Fan” will be displayed on remote controller; when the X-Fan function is turned off, the characters of “X-Fan” won’t be displayed on remote controller.
④ Press the “X-Fan”button and switch to cooling or crying mode, the on/off status of “X-Fan”function will be kept at the original status. (Notice: “X-Fan” won’t be displayed if switch to heating or fan mode, but the “X-Fan”setting will be memorized. If turning back to cooling or drying mode, the on/off status of “X-Fan”function will be kept at the original status).
As for the controller with memory function, X-Fan setting won’t be memorized after de-energization.
As for the controller of split type unit, the X-Fan is defaulted OFF after energization.

(7) Timer Function

Time on can be set under the off state of the unit. When timer on is reached, the air conditioner will start operating according to the setting mode.
Timer off can be set under the on state of the unit. When timer off is reached the air conditioner will be turned off automatically.

(8) Turbo function

In cooling and heating mode, press the “turbo” button, the characters of “turbo” will be displayed on remote controller and the indoor fan will run at the super-high fan speed; press the “turbo” button again to quit the turbo function. The characters of “turbo” on remote controller will be disappeared and indoor fan will turn to run at setting fan speed. Turbo function will also be quited if press the fan speed button, and then fan speed will also be changed correspondingly.

(9) AIR function

a. press the AIR button, the air exchanger will operate successively;
b. press the AIR button again. The air exchanger will be de-energized and the AIR function will be turned off;
c. AIR function will be turned off when timer off is reached and press the ON/OFF button to turn off the unit;
d. At off status, the AIR function can also be set by remote controller.

(10) Quiet function

a. Pressing quiet function is valid under cooling, heating and auto mode, and invalid under dry and fan mode;
b. Press the button and after first sending signal, the “auto quiet” displays on the remote controller, it enters to auto quiet speed control, need to judge the conditions; Press the button and after second sending signal, the “quiet” displays on the remote controller, it enters to speed mode of quiet function, don’t need to judge the conditions; press the button and after third sending signal, cancel quiet, if repress it, it will resume to the first control contents above and cycle.
c. When the remote controller displays “auto quiet” under cooling mode, the indoor fan runs with high fan speed first; If the Tamb. is low and 10min later, it operates in quiet mode.

(11) Sleep

Setting sleep 1,2,3 mode by the sleep button on remote controller. First press sleep button it will enter into sleep 1 and auto quiet status, “auto quiet” symbol displays on the remote controller. Under sleep mode, press quiet button first time, it enters into force auto quiet function and “quiet” symbol displays on the remote controller. Presses the quiet button second time, cancel quiet; and recycle for the third time. Enter to auto quiet status if enter into sleep 2; and Enter to auto quiet status if enter into sleep 3
Sleep 1:
Under cooling dry mode, after setting sleep function for 1h, Tpreset increases 1℃; 2h later, Tpreset increases 2℃; and then there is no change for Tpreset.
Under heating mode, after setting sleep procedure 1h, Tpreset decreases 1℃; 2h later, Tpreset decreases 2℃; and then there is no change for Tpreset. There is no change for setting temperature of sleep function under auto mode.
Sleep 2:
It’s valid under cooling and heating mode, and under this mode, the unit runs with the preset sleep curve.
Sleep 3:
It’s valid under cooling and heating mode, and under this mode, the preset temperature (in 8h) can be set by remote controller.

(12) PG motor lock control function

When the fan is open, if the motor rotational speed is no more than 300rpm in 1min continuously, the motor is locked.
All the loads stops (indoor fan, outdoor fan, compressor, electric heating pipe and 4-way valve stops 2min later, and air deflector stops on the current position) under the motor lock protection.
If the motor lock protection occurred, it will resume after power-off. Under motor lock protection, the remote control and button are valid. There is no solution for certain purpose control (indoor fan, outdoor fan, compressor, electric heating pipe and 4-way valve stops 2min later, and air deflector stops on the current position).
Under motor lock protection, if the unit is on, the dual-8 nixie tube displays the lock malfunction code H6; if there is no dual-8 nixie tube, the running indicator lamp dark 3S and blinks 11 times, others don’t display. If the unit is off, the lock malfunction information isn’t displayed.

7 Removal Procedure

7.1 Removal Process for Indoor Unit

Operating Procedure/Photos

7.1.1 Remove panel

Open the panel, pull it slight by hand and then remove the panel.
(As shown in 7-1)

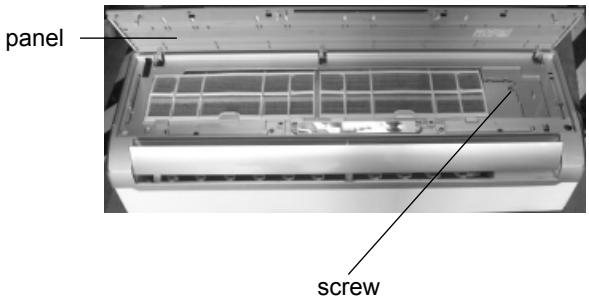


Fig. 7-1

7.1.2 Remove filter and wire-pressing board

Lift up the middle part of the air filter to loosen the clasps at both sides. Pull it forward to remove the air filter.
Twist off the one screw on wire-pressing board with screwdriver to open it. (As shown in fig 7-2)

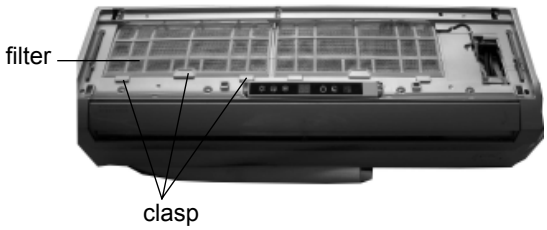


Fig.7-2

7.1.3 Remove guide louver

Push out the clasp at the middle of the guide louver, bend the guide louver slightly and then remove the guide louver. (As shown in fig 7-3)

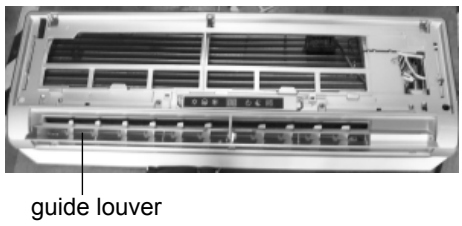


Fig. 7-3

7.1.4 Remove front case

Twist off the 6 tapping screws used for fixing the front case with screwdriver, open the front case and then to remove it. (As shown in fig 7-4)

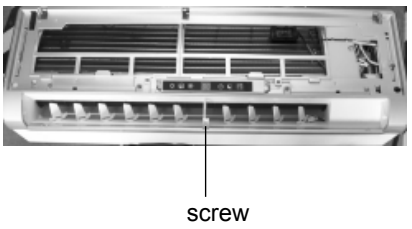


Fig. 7-4

7.1.5 Remove water tray

Twist off the earthing screws on electric box cover, loosen the clasps, remove the electric box cover and then pull out the wiring terminal of guide motor; Twist off the 2 screws used for fixing the water tray with screwdriver, pull out the connection wires and then remove the water tray. (As shown in fig 7-5 and 7-6)

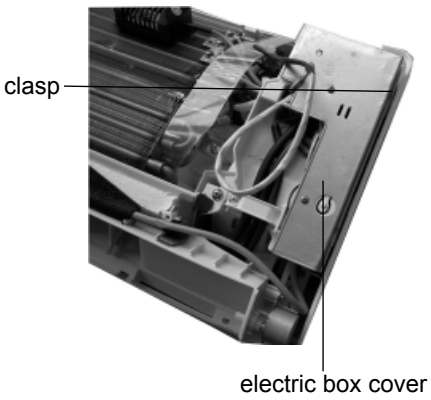


Fig. 7-5

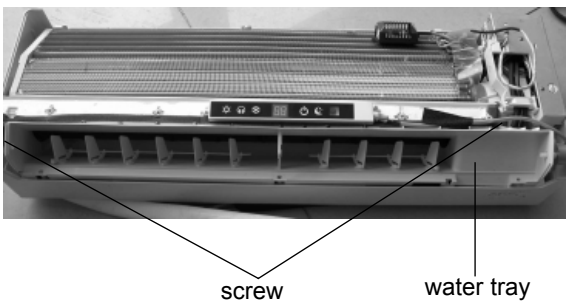


Fig. 7-6

Operating Procedure/Photos

7.1.6 Remove electric box

Twist off the 2 screws on electric box.

Pull out the wiring terminal of motor, twist off the earthing wire and the 3 screws used for fixing the electric box with screwdriver, pull it upward and then remove the electric box.

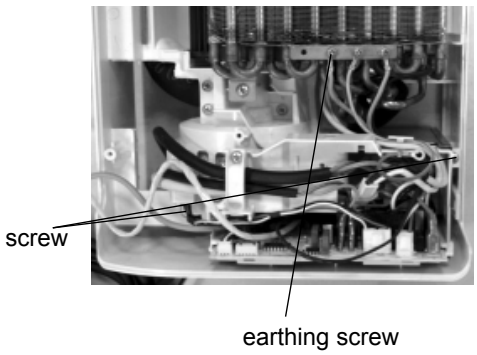
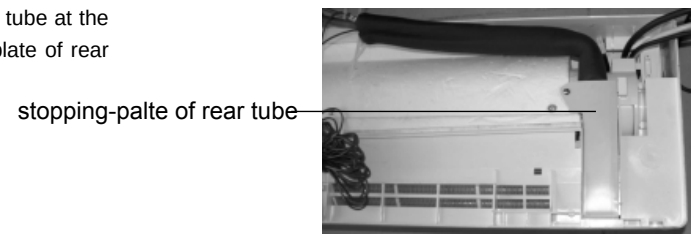


Fig. 7-7

7.1.7 Remove evaporator

Twist off the screws on the stopping-plate of rear tube at the back of the evaporator to remove the stopping-plate of rear tube. (As shown in fig 7-8)



Twist off the 2 screws at the right side of the evaporator. (As shown in fig 7-9)

Fig. 7-8

Fig. 7-9

Twist off the 2 screws at the left side of the evaporator. Rotate the evaporator to a certain angle and then remove the evaporator. (As shown in fig 7-10)

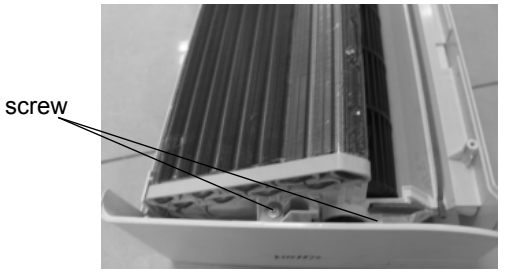


Fig. 7-10

7.1.8 Remove motor and cross flow blade

Twist off the fixing screws on the press plate of motor with screwdriver. Twist off the screws used for connecting the motor and cross flow blade and then remove the motor and cross flow blade. (As shown in fig 7-11, 7-12)

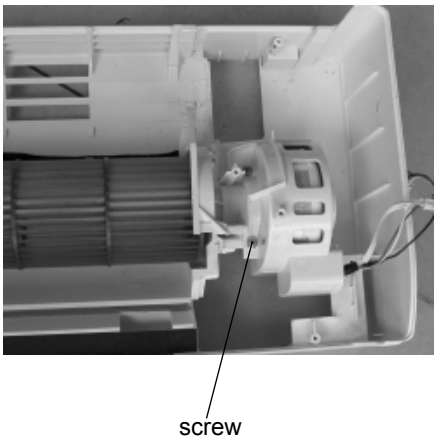


Fig. 7-11

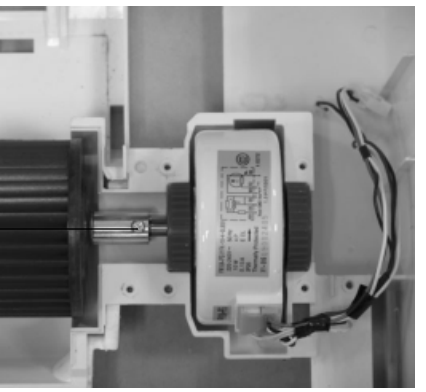


Fig. 7-12

7.2 Removal Process for Outdoor Unit

Operating Procedure/Photos

7.2.1 Remove top cover

Twist off the one screw used for fixing the handle with screwdriver, push it downward and then remove the handle.

Twist off the 3 screw around the top cover, pull it upward and then remove the top cover.

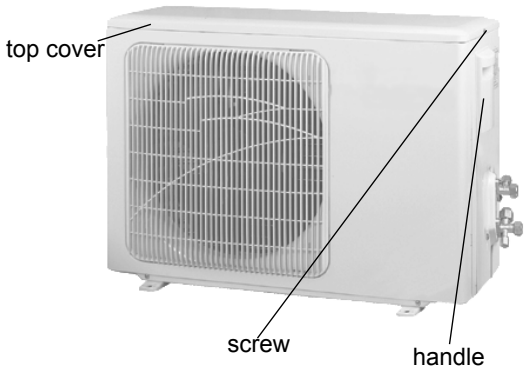


Fig. 7-13

7.2.2 Remove grille

Twist off the 4 tapping screws between the rear side plate and valve support, chassis and end plate of condenser and then remove the grille. As shown in fig 7-14.

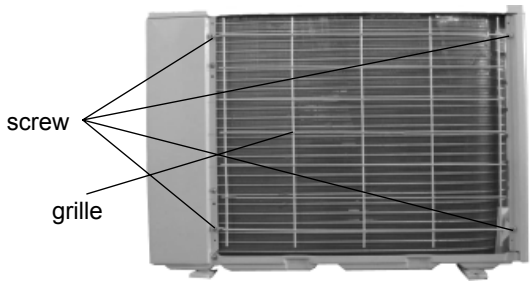


Fig. 7-14

7.2.3 Remove panel

Twist off the 7 screws between panel and valve support, chassis and end plate of condenser and then remove the panel. As shown in fig 7-15.

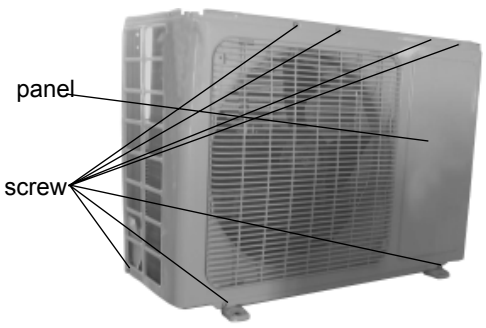


Fig. 7-15

7.2.4 Remove electric box

Twist off the 3 screws used for fixing the mounting plate, pull out the pin of lead-out wire for compressor and fan motor and then remove the mounting plate. As shown in fig 7-16.

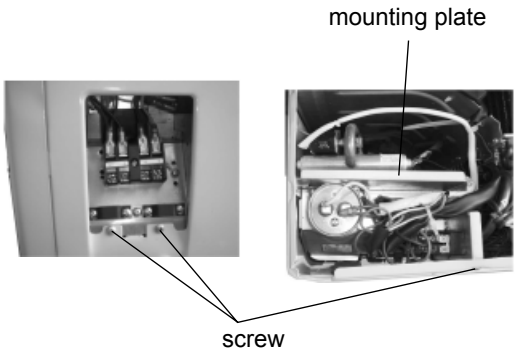


Fig. 7-16

7.2.5 Remove right side plate

Twist off the 5 screws at the right side plate to remove it. As shown in fig 7-17.

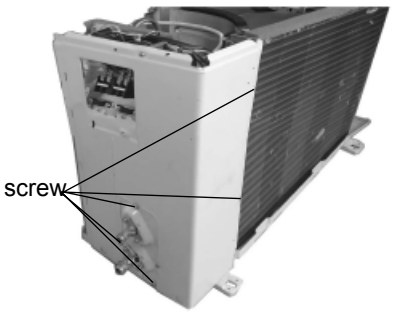


Fig. 7-17

7.2.6 Remove axial flow blade

Loosen the fixing nuts with wrench and then remove the nuts, spring shim, flat shim and then remove the axial flow blade. As shown in fig 7-18.

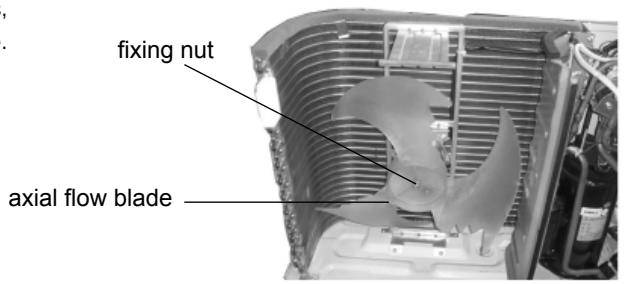


Fig. 7-18

Operating Procedure/Photos

7.2.7 Remove motor and motor support

Twist off the 4 tapping screws used for fixing the motor and then remove the motor. Twist off the 2 tapping screws used for fixing the motor support, pull it upward and then remove the motor support. As shown in fig 7-19.

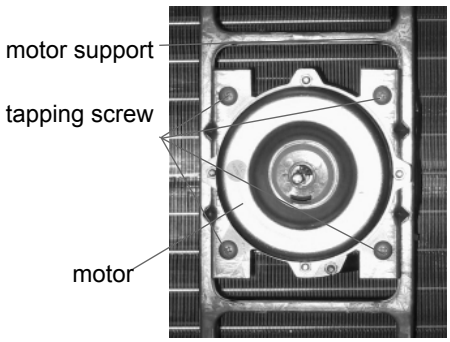


Fig. 7-19

7.2.8 Remove capillary

Unsolder the soldering joint between capillary and other pipelines and then remove the capillary. As shown in fig 7-20.

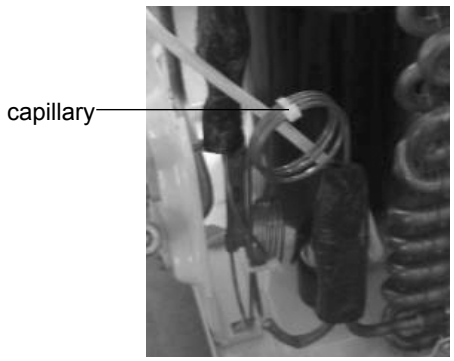


Fig. 7-20

7.2.9 Remove gas valve and liquid valve

Twist off the 2 bolts used for fixing the gas valve, unsolder the soldering joint between gas valve and air-return pipe and then remove the gas valve.

(Note: When unsoldering the soldering joint, wrap the gas valve with wet cloth completely to avoid the damage of valve due to high temperature.)

Twist off the 2 bolts used for fixing the liquid valve, unsolder the soldering joint between gas valve and Y-type tube and then remove the liquid valve. As shown in fig 7-21.

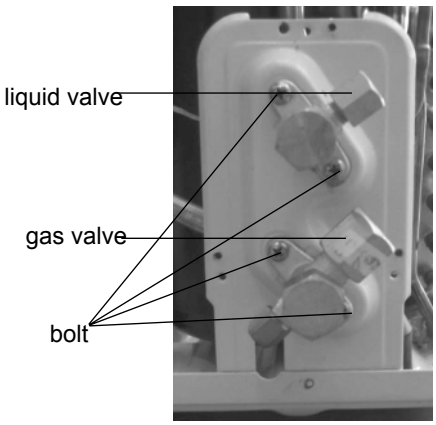


Fig. 7-21

7.2.10 Remove compressor

Loosen the 3 nuts with washer at the foot of the compressor, unsolder the soldering joint between intake pipe and discharge pipe of compressor, remove the pipeline and then remove the compressor. As shown in fig 7-22.

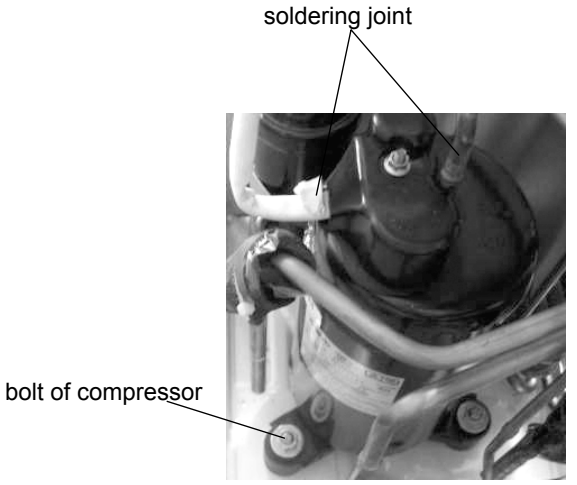


Fig. 7-22

7.3 Removal Process for Outdoor Unit

Operating Procedure/Photos

7.3.1 Remove top cover

Twist off the screws used for fixing the top cover, pull it upward and then remove the top cover. As shown in fig 7-23

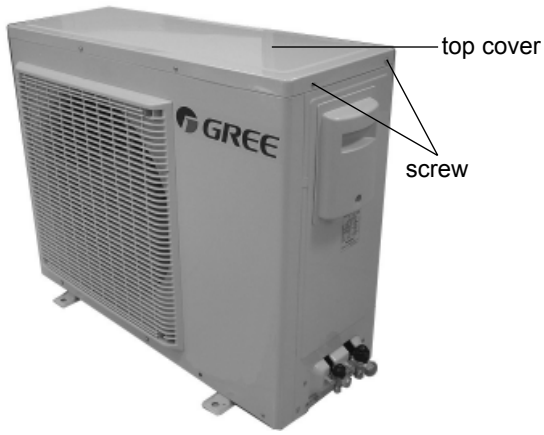


Fig. 7-23

7.3.2 Remove handle

After twisting off the one screw used for fixing the handle, hold the handle to push it downward and then remove the handle. As shown in fig 7-24

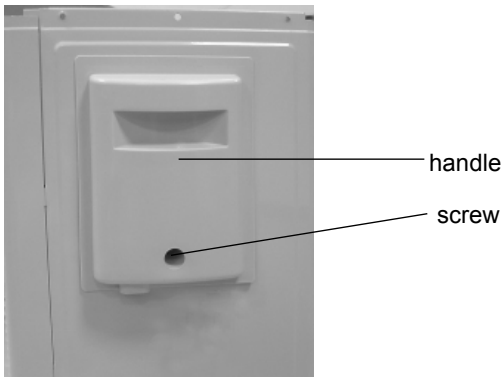


Fig. 7-24

7.3.3 Remove rear side plate

Twist off the screws used for fixing the rear guard grille and rear side plate, remove the rear guard grille and then remove the rear side plate. As shown in fig 7-25.

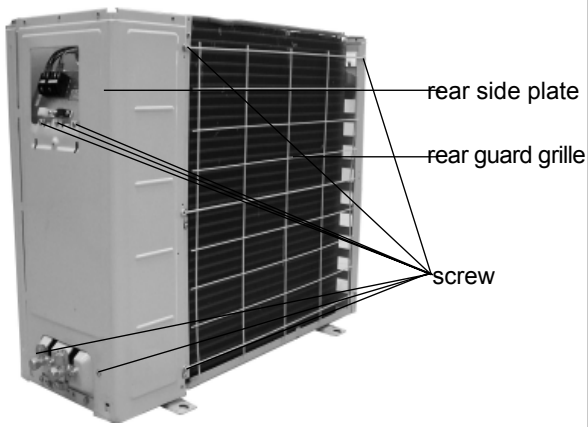


Fig. 7-25

7.3.4 Remove the cabinet

After twisting off the screws used for fixing the cabinet, pull it upward slight and then remove the cabinet. As shown in fig 7-26

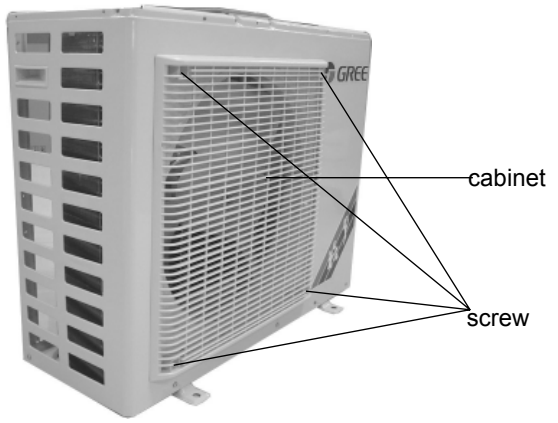


Fig. 7-26

7.3.5 Remove outer case

Twist off the screws used for fixing the outer case to remove it. As shown in fig 7-27

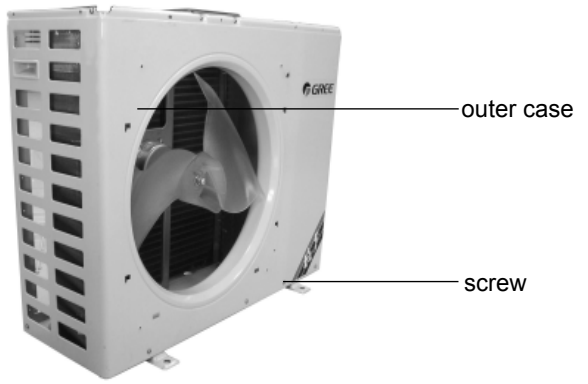


Fig. 7-27

7.3.6 Remove electric box

Twist off the screws used for fixing the electric box, pull out the connection used for connecting the compressor and fan motor with the electric box, pull it upward and then remove the electric box. As shown in fig 7-28

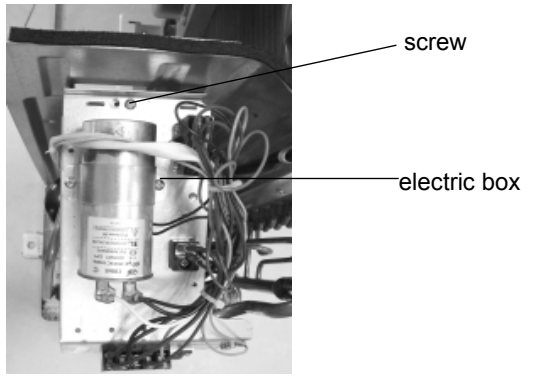


Fig. 7-28

Operating Procedure/Photos

7.3.7 Remove gas and liquid valves

Unsolder the pipelines connected with the valve (avoid the welding gun burn out the chassis). Twist off the 2 bolts used for fixing the gas valve, unsolder the soldering joint between pipeline and gas valve and then remove the gas valve. Twist off the 2 bolts used for fixing the liquid valve, unsolder the soldering joint between pipeline and liquid valve and then remove the liquid valve. (Note: when unsoldering the soldering joint, wrap the valve with wet cloth completely to avoid the damaged of valve due to high temperature). As shown in fig 7-29

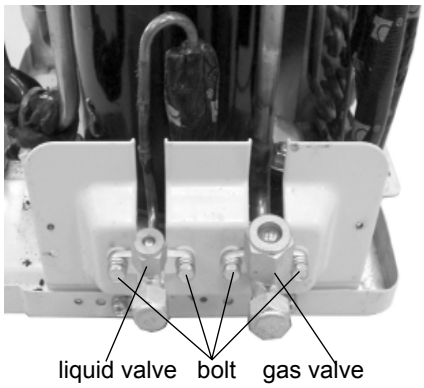


Fig. 7-29

7.3.8 Remove axial flow blade

Twist off the nuts on blade with wrench and then remove the blade. As shown in fig 7-30.

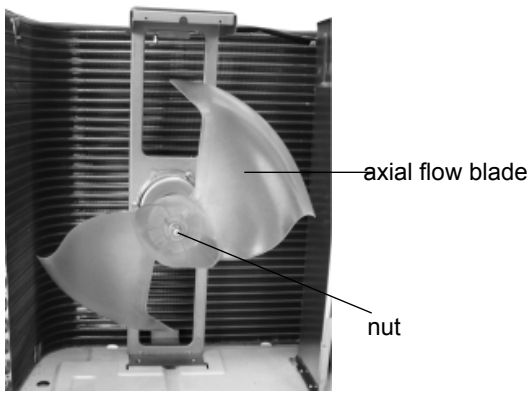


Fig. 7-30

7.3.9 Remove outdoor motor

Twist off the screws used for fixing the motor support, pull it upward and then remove the motor support. Twist off the screws used for fixing the motor, pull out the connection wire between motor and electric box and then remove the motor. As shown in fig 7-31

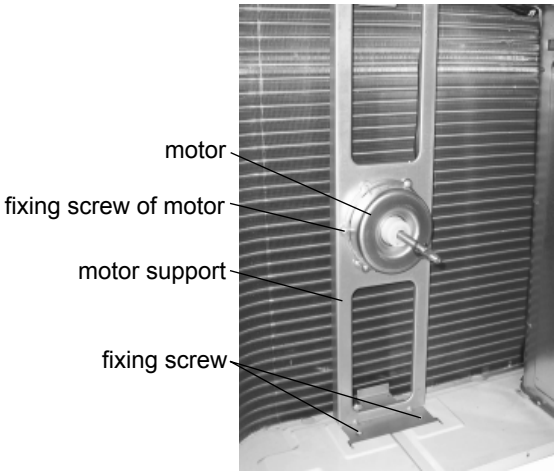


Fig. 7-31

7.3.10 Remove 4-way valve

(only for heat pump unit)

Twist off the fixing nut on 4-way valve coil and then remove the coil. Wrap the 4-way valve with wet cloth, unsolder the 4 soldering joint connected with the 4-way valve and then remove the 4-way valve. The welding process should be as soon as possible and please the cloth wet all the time. Do not let the welding flame burn out the lead-out wire of compressor. As shown in fig 7-32

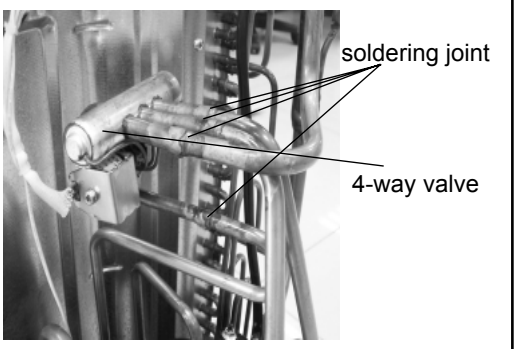


Fig. 7-32

7.3.11 Remove capillary

Unsolder the soldering joint between capillary and valve and exit tube of condenser and then remove the capillary. Please do not let the welding slag block the capillary when replacing the capillary. As shown in fig 7-33.

Fig. 7-33

7.3.12 Remove compressor

Unsolder the pipeline connected with the compressor, remove the 3 foot nuts on compressor and then remove the compressor. As shown in fig 7-34

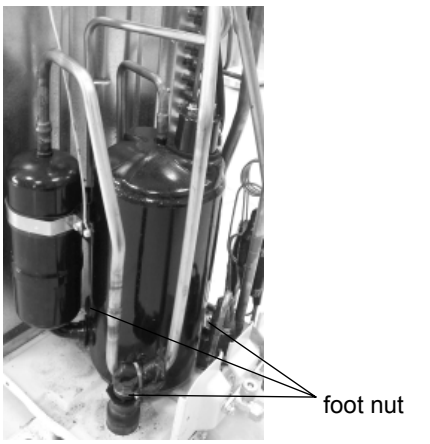


Fig. 7-34

7.4 Removal Process for Outdoor Unit

Operating Procedure/Photos

7.4.1 Remove front side plate

Twist off the screws used for fixing the front side plate, slide it downward and then remove the front side plate. As shown in fig 7-35

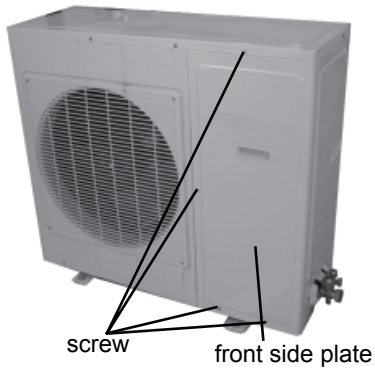


Fig. 7-35

7.4.2 Remove top cover

Twist off the screws used for fixing the top cover and then remove the top cover. As shown in fig 7-36

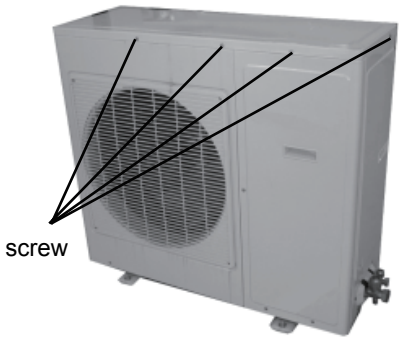


Fig. 7-36

7.4.3 Remove grille

Twist off the 8 tapping screws used for fixing the panel and then remove the panel. As shown in fig 7-38

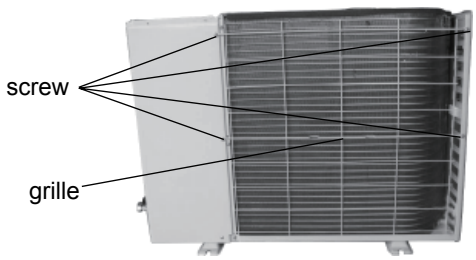


Fig. 7-37

7.4.4 Remove outer case

Twist off the 8 tapping screws used for fixing the panel and then remove the panel. As shown in fig 7-38

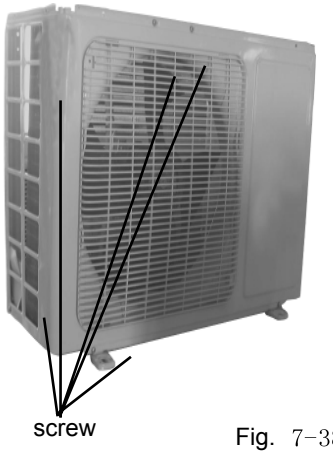


Fig. 7-38

7.4.5 Remove electric box

Twist off the screws used for fixing the electric box, pull out the connection wires between compressor, fan motor and electric box, pull it upward and then remove the electric box. As shown in fig 7-39

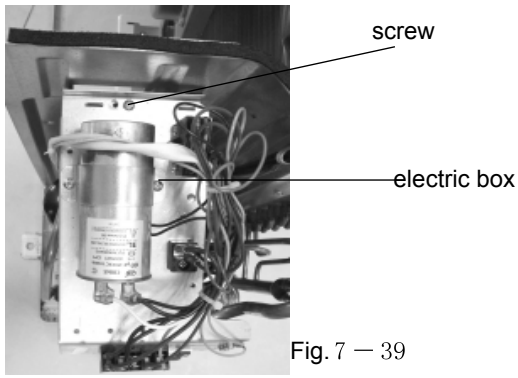


Fig. 7 — 39

7.4.6 Remove rear side plate

Twist off the 8 screws used for fixing the rear side plate and then remove the rear side plate. As shown in fig 7-40

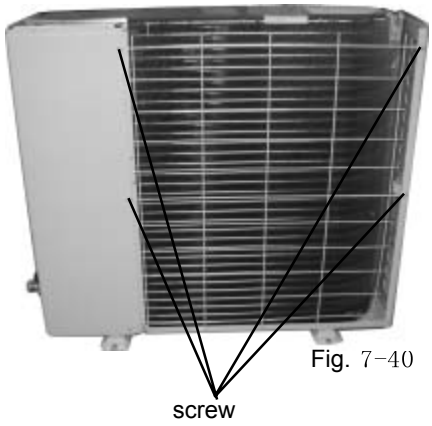


Fig. 7-40

Operating Procedure/Photos

7.4.7 Remove axial flow blade

Remove the nuts on blade with wrench and then remove the axial flow blade. As shown in fig 7-41

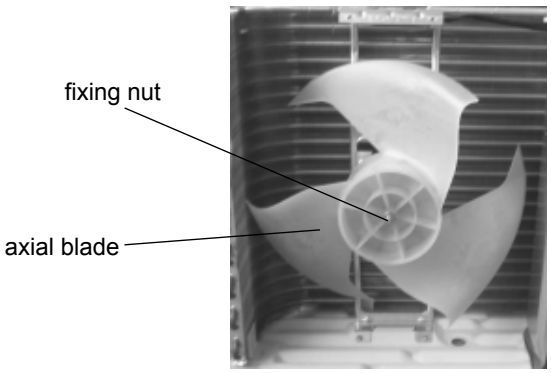


Fig.7-41

7.4.8 Remove outdoor motor

Twist off the 4 tapping screws used for fixing the motor, pull out the pin of lead-out wire for motor and then remove the motor. Twist off the 2 tapping screws used for fixing the motor support, pull it upward and then remove the motor support. As shown in fig 7-42

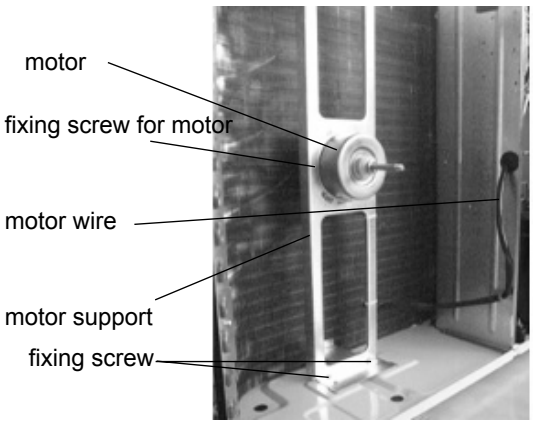


Fig. 7-42

7.4.9 Remove 4-way valve

Twist off the fixing nut on 4-way valve coil and then remove the coil. Wrap the 4-way valve with wet cloth, unsolder the 4 soldering joint connected with the 4-way valve and then remove the 4-way valve. The welding process should be as soon as possible and please the cloth wet all the time. Do not let the welding flame burn out the lead-out wire of compressor. As shown in fig 7-43

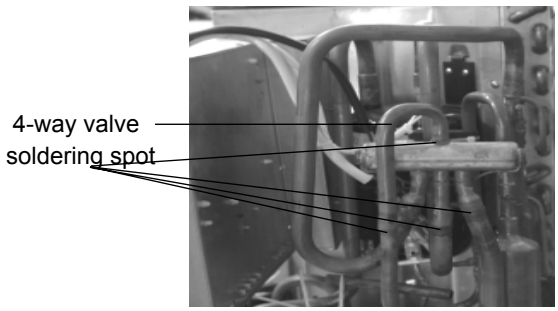


Fig. 7-43

7.4.10 Remove capillary

Unsolder the soldering joint between capillary and valve and exit tube of condenser and then remove the capillary. Please do not let the welding slag block the capillary when replacing the capillary. As shown in fig 7-44

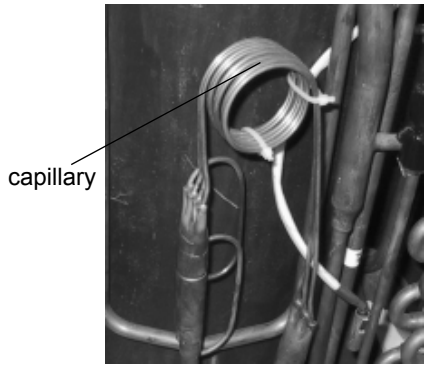


Fig. 7-44

7.4.11 Remove valve

Twist off the 2 bolts used for fixing the gas valve, unsolder the soldering joint between gas valve and air-return pipe and then remove the gas valve.

(Note: when unsoldering the soldering joint, wrap the gas valve with wet cloth completely to avoid the damage of valve due to high temperature)

Twist off the 2 bolts used for fixing the liquid valve, unsolder the soldering joint between liquid valve and Y-type tube and then remove the liquid valve. As shown in fig 7-45

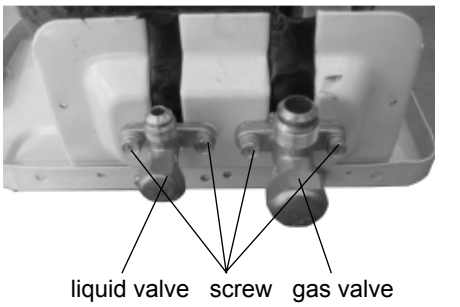


Fig. 7-45

7.4.12 Remove compressor

Unsolder the pipeline connected with the compressor and remove the 3 foot nuts on compressor, and then remove the compressor. As shown in fig 7-46

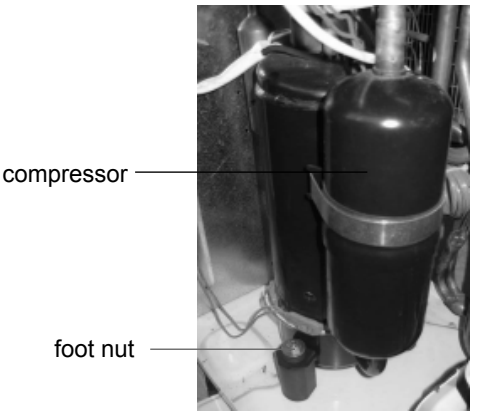
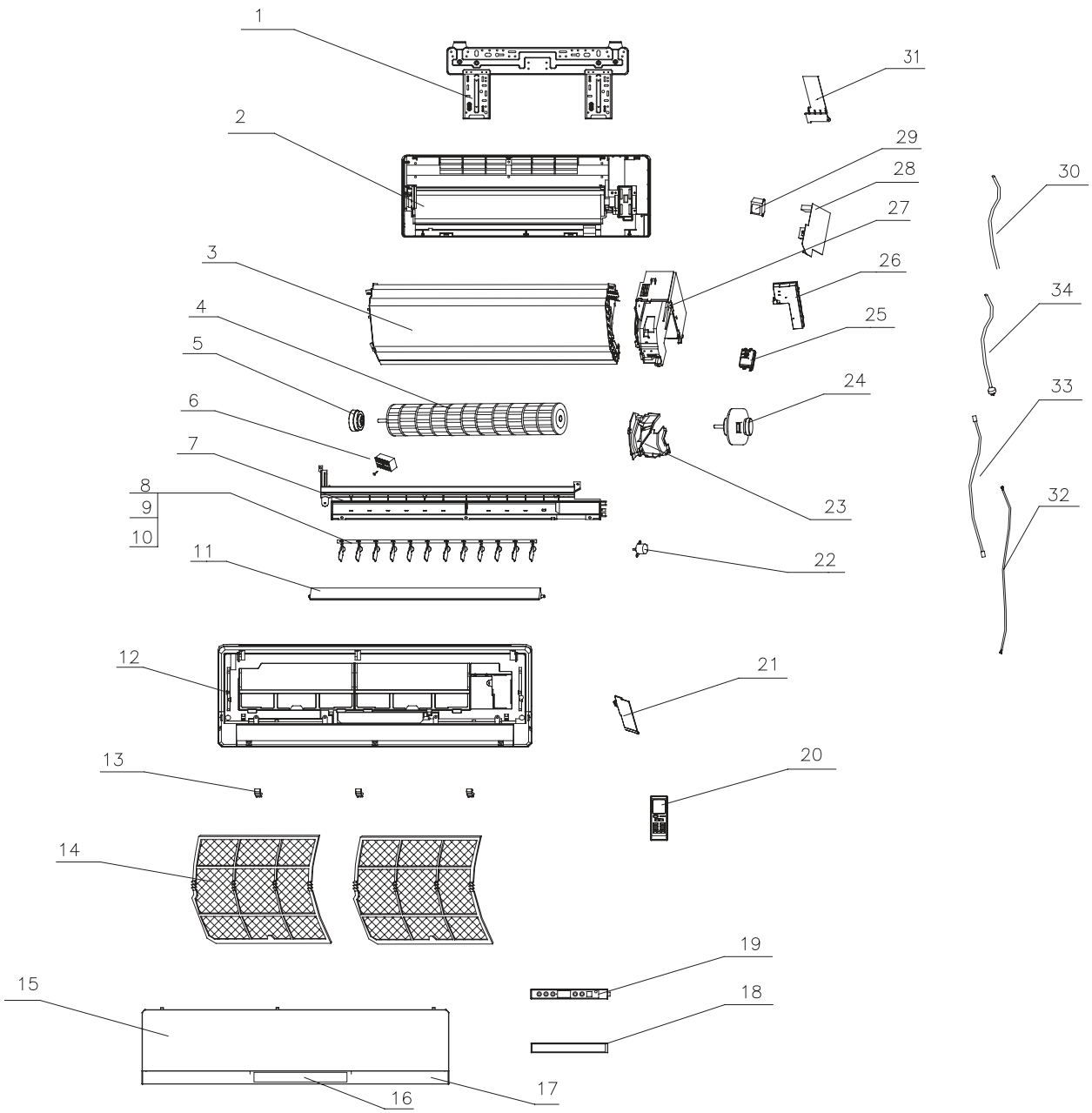


Fig. 7-46

8 Exploded View and Parts List

8.1 Exploded View for Indoor Unit



8.2 Parts' List for Indoor Unit

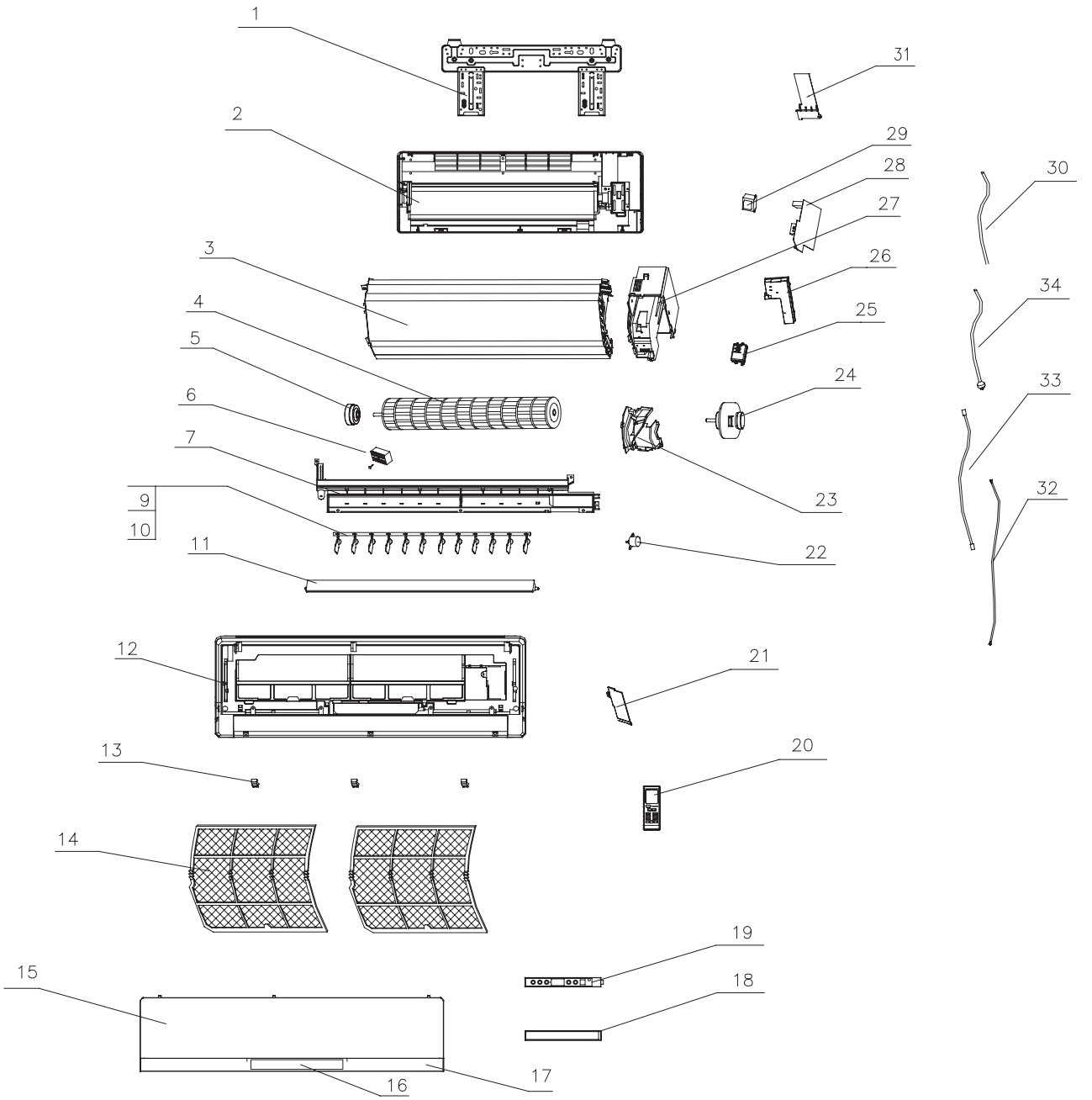
NO.	Description	Part Code		Qty
		GWCN09JANK1A1A/I	GWHN09JANK1A1A/I	
	Product Code	CA225N0130	CA225N0120	
1	Wall-Mounting Frame	1252006	1252006	1
2	Rear Case	22202078	22202078	1
3	Evaporator Assy	10024931	10024931	1
4	Cross Flow Fan	10352422	10352422	1
5	Ring of Bearing	76512203	76512203	1
6	Terminal Board	42010266	42010262	1
7	Water Tray	20182093	20182093	1
8	Swing Louver	10512099	10512099	8
9	Swing Linkage	10582071	10582071	1
10	Swing Louver	26112122	26112122	5
11	Guide Louver	26112138P	26112138P	1
12	Front Case	20002961P	20002961P	1
13	Screw Cover	24252017	24252017	3
14	Filter	11122056	11122056	2
15	Front Panel	20002968	20002968	1
16	Receiver Board	30549009	30549009	1
17	BASIC Board	26112137	26112137	1
18	Receiver Box	20122086	20122086	1
19	Receiver Box Cover	20122085	20122085	1
20	Remote Control YT1FI	30511031	30511031	1
21	Covering Plate	20122075P	20122075P	1
22	Motor MP28VB	15012086	15012086	1
23	Motor Clamp	26112116	26112116	1
24	Motor FN10A-PG	15012078	15012078	1
25	Temperature Sensor	30270006	30270006	1
26	Electric Box Cover	20122103	20122103	1
27	Electric Box	20112085	20112085	1
28	Main PCB	30135201	30135200	1
29	Transformer	43110236	43110236	1
30	Connecting Cord	4011006502	4011006502	1
31	Rear Clamp	26112117	26112117	1
32	Connecting Cable	\	40020536	1
33	Power Cord	4002048710	4002048710	1
34	Power Connecting Cord	40020540	40020540	1

The above data are subject to be changed without notice.

NO.	Description	Part Code		Qty
		GWCN12JBNK1A1A/I	GWHN12JBNK1A1A/I	
	Product Code	CA225N0150	CA225N0140	
1	Wall-Mounting Frame	1252008	1252008	1
2	Rear Case	22202081	22202081	1
3	Evaporator Assy	100252401	100252401	1
4	Cross Flow Fan	10352023	10352023	1
5	Ring of Bearing	76512203	76512203	1
6	Terminal Board	42010266	42010262	1
7	Water Tray	20182092	20182092	1
8	Swing Louver	10512099	10512099	8
9	Swing Linkage	10582450	10582450	1
10	Swing Louver	26112127	26112127	5
11	Guide Louver	26112136P	26112136P	1
12	Front Case	20002962P	20002962P	1
13	Screw Cover	24252019P	24252019P	3
14	Filter	11122059	11122059	2
15	Front Panel	20002980	20002980	1
16	Receiver Board	30549009	30549009	1
17	BASIC Board	26112135	26112135	1
18	Receiver Box	20122086	20122086	1
19	Receiver Box Cover	20122085	20122085	1
20	Remote Control YT1FI	30511031	30511031	1
21	Covering Plate	20122074P	20122074P	1
22	Motor MP28VB	15012086	15012086	1
23	Motor Clamp	26112123	26112123	1
24	Motor FN10A-PG	15012078	15012078	1
25	Temperature Sensor	30270006	30270006	1
26	Electric Box Cover	20122103	20122103	1
27	Electric Box	20112085	20112085	1
28	Main PCB	30135201	30135201	1
29	Transformer	43110236	43110236	1
30	Connecting Cord	4011006502	4011006502	1
31	Rear Clamp	26112124	26112124	1
32	Connecting Cable	\	40020536	1
33	Power Cord	4002048712	4002048712	1
34	Power Connecting Cord	400205401	400205401	1

The above data are subject to be changed without notice.

8.3 Exploded View for Indoor Unit

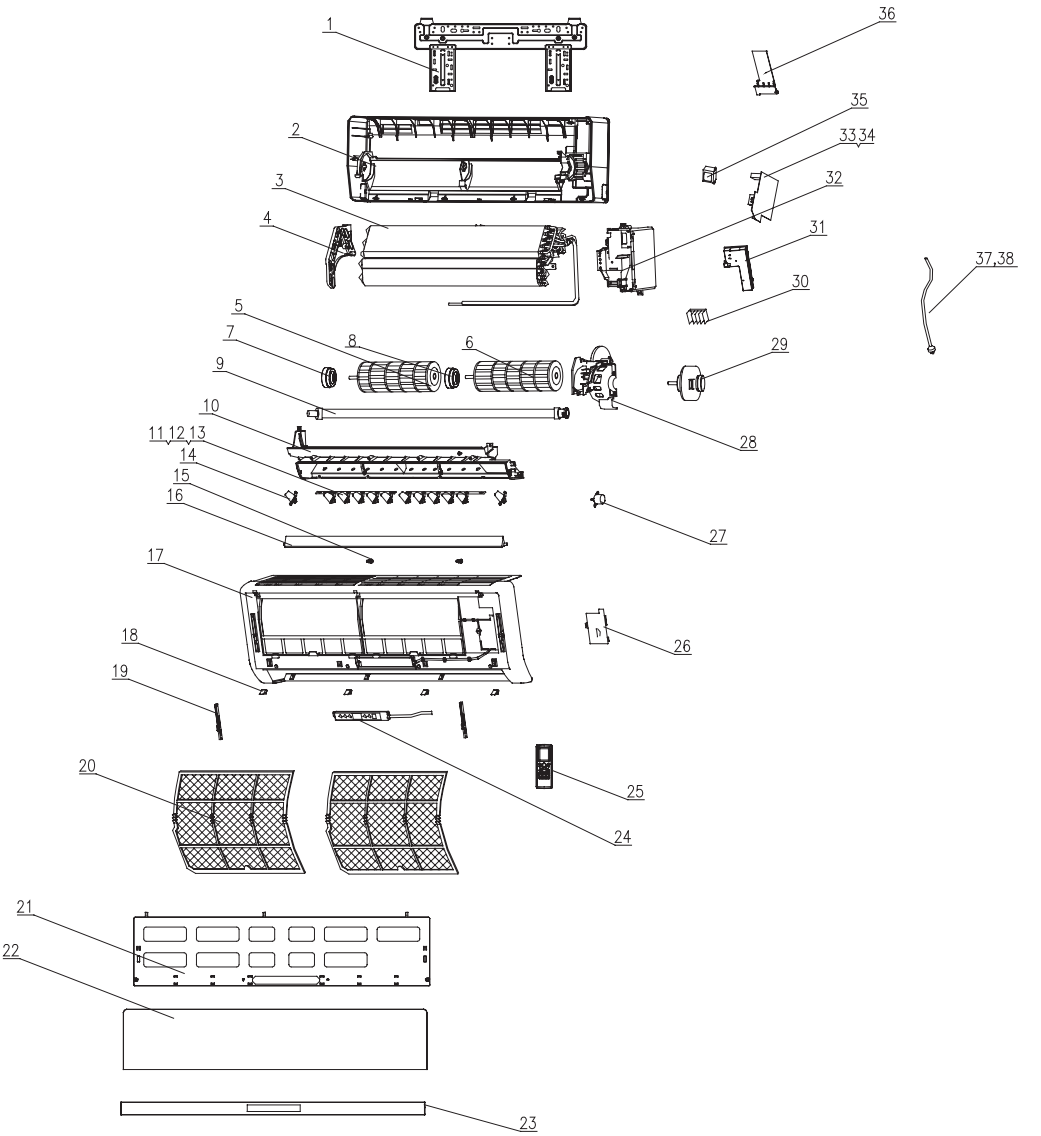


8. 4 Parts' List for Indoor Unit

NO.	Description	Part Code		Qty
		GWCN18JCNK1A1A/I	GWHN18JCNK1A1A/I	
	Product Code	CA225N0170	CA225N0160	
1	Wall-M ountingFrame	1252218	1252218	1
2	RearCase	22202095	22202095	1
3	Evaporator Assy	100291002	100291002	1
4	Cross Flow Fan	10352016	10352016	1
5	Ringof Bearing	76512203	76512203	1
6	Terminal Board	42010266	42010262	1
7	WaterTray	20182471	20182471	1
8	Swing Louver	20512099	20512099	1
9	SwingLinkage	10584085	10584085	1
10	SwingLouver	10512097	10512097	1
11	GuideLouver	1051409605P	1051409605P	1
12	FrontCase	20012069P	20012069P	1
13	ScrewCover	24252017	24252017	3
14	Filter	11124096	11124096	2
15	FrontPanel	2001215403	2001215403	1
16	Receiver Board	30549009	30549009	1
17	BASIC Board	26112157	26112157	1
18	Receiver Box	20122039	20122039	1
19	Receiver BoxCover	20122038	20122038	1
20	Remote Control	305110311	305110311	1
21	Covering Plate	20114009P	20114009P	1
22	MotorMP28VB	15012086	15012086	1
23	MotorClamp	26114094	26114094	1
24	PGMotor	15012077	15012077	1
25	HumiditySensor	30270006	30270006	1
26	Electric BoxCover	20114008	20114008	1
27	Electric Box	20114016	20114016	1
28	MainPCB	30035557	30035558	1
29	Transformer	43110237	43110237	1
30	Connecting Cord	4011006502	4011006502	1
31	RearClamp	26114095	26114095	1
32	Signal Cable	none	40020536	1
33	Power Cord	400204877	400204877	1
34	Power Connecting Cable	400205402	400205402	1

The above data are subject to be changed without notice.

8.5 Exploded View for Indoor Unit

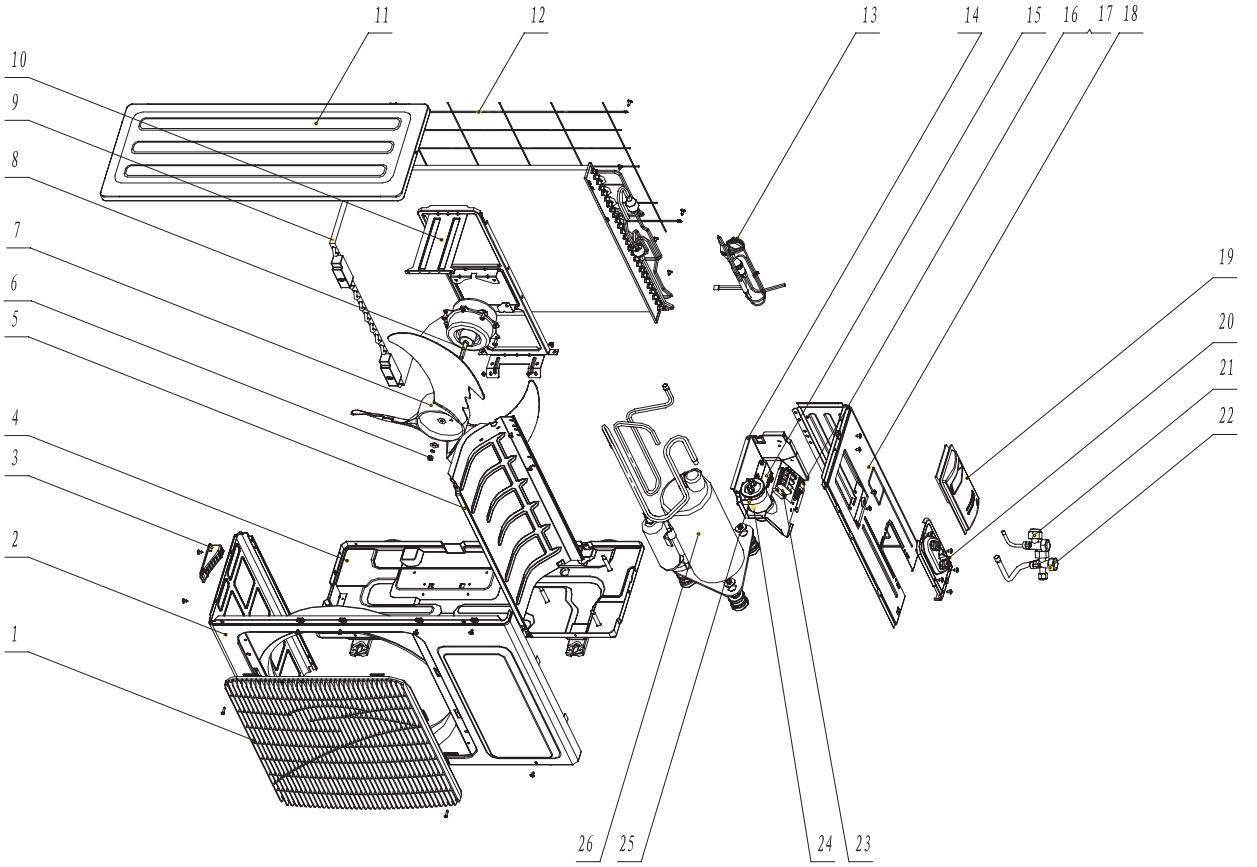


8.6 Parts' List for Indoor Unit

NO.	Description	Part Code		Qty
		GWCN24JDNK1A1A/I	GWHN24JDNK1A1A/I	
	Product Code	CA225N0560	CA225N0590	
1	Wall-Mounting Frame	01252229	01252229	1
2	Rear Case	22202094	22202094	1
3	Evaporator Assy	01002546	01002546	1
4	Evaporator Support	24214082	24214082	1
5	Cross Flow Fan1	10354002	10354002	1
6	Cross Flow Fan2	10354003	10354003	1
7	Ring of Bearing	76512203	76512203	1
8	Ring of Bearing	76712017	76712017	1
9	Drainage Pipe	0523001403	0523001403	1
10	Water Tray	20182099	20182099	1
11	Swing Louver	10512099	10512099	10
12	Swing Linkage	10584086	10584086	2
13	Swing Linkage 2	/	/	/
14	Swing Louver	10512097	10512097	2
15	Axile Bush	10542008	10542008	2
16	Guide Louver	10512153	10512153	1
17	Front Case	20012137P	20012137P	1
18	Screw Cover	24252017	24252017	4
19	stay bar	242120621	242120621	2
20	Filter	11122083	11122083	2
21	BASIC Board	26112173	26112173	1
22	Front Panel	2001215504	2001215504	1
23	Receiver bar	2611217201	2611217201	1
24	Receiver Board D5033C	30565020	30565020	1
25	Remote Control YT1F1	30511031	30511031	1
26	Covering Plate	20114009P	20114009P	1
27	Motor MP35XX	15213001	15213001	1
28	Motor Clamp	26114100	26114100	1
29	Motor FN25A-PG	15012085	15012085	1
30	Terminal Board	4201026601	4201026201	1
31	Electric Box Cover	20114008	20114008	1
32	Electric Box	20114016	20114016	1
33	Main PCB M503F1HJ	30135231	30135232	1
34	Jumping Connector	4202300103	4202300103	1
35	Transformer 57X25C	43110237	43110237	1
36	Rear Clamp	26112156	26112156	1
37	Connecting Cable	/	40020536	1
38	Connecting Cable	400205382	400205382	1

The above data are subject to be changed without notice.

8.7 Exploded View for Outdoor Unit

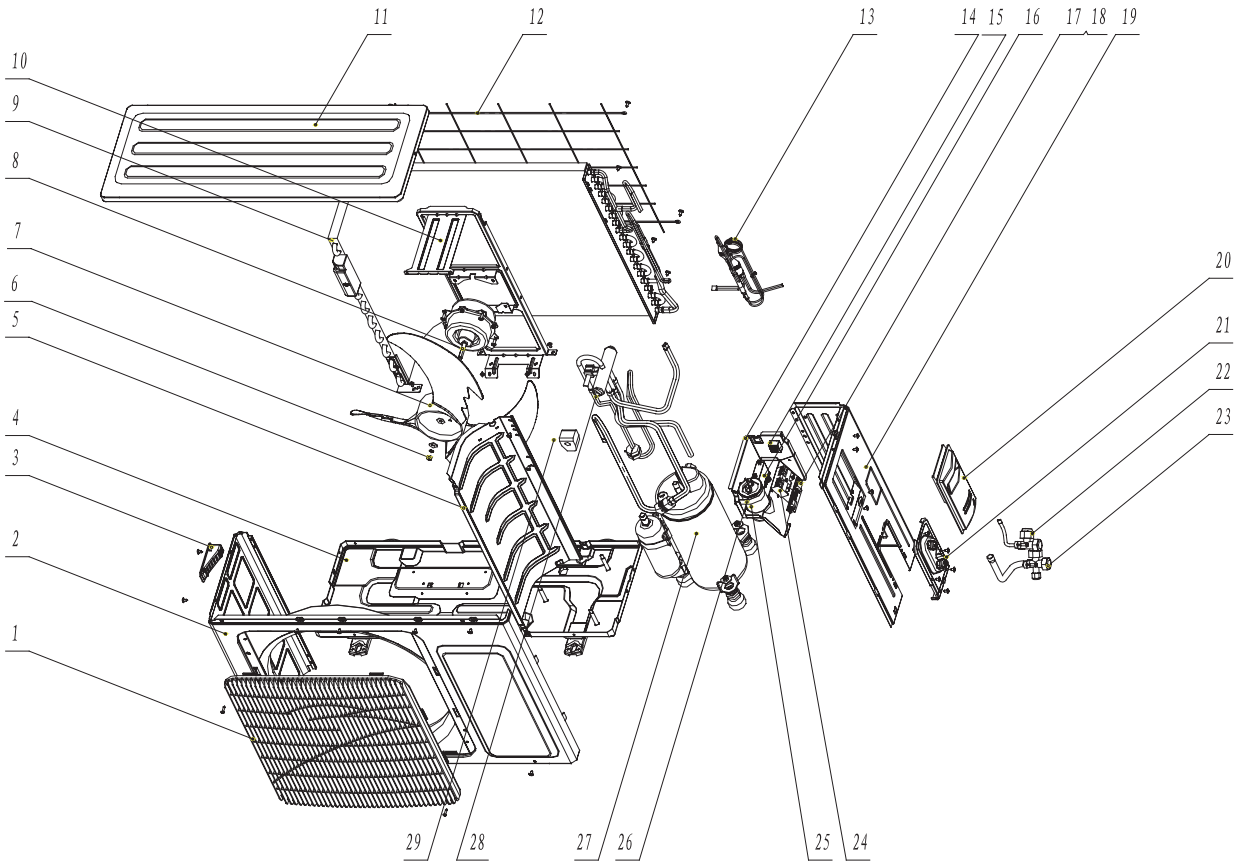


8.8 Parts' List for Outdoor Unit

NO.	Description	Part Code		Qty
		GWCN09JANK1A1A/O	GWCN12JBNK1A1A/O	
	Product Code	CA225W0130	CA225W0150	
1	Front Grill	22413433	22413433	1
2	Front Plate	01533027P	01533027P	1
3	Small Handle	26233100	26233100	1
4	Metal Base	01203656	01203727	1
5	Isolation Sheet	01233066	01233066	1
6	Nut M6	70310131	70310131	1
7	Axial Flow Fan	10333004	10333004	1
8	Motor FW25K	150130671	150130671	1
9	Condenser Assy	01133499	01133499	1
10	Motor Support	01703058	01703058	1
11	Top cover plate	0125303101	0125303101	1
12	Rear Grill	01473009	01473009	1
13	Capillary Assy	03003980	03103636	1
14	Electric Plate	01403946	01403945	1
15	Capacito	33010026	33010026	1
16	Capacitor clamp	71010103	71010103	2
17	Insulation Gasket	70410503	70410503	1
18	Right Side Plate Assy	01303239	01303239	1
19	Handle	26233431	26233431	1
20	Valve Support	01703089	01703089	1
21	Valve	07100024	07100024	1
22	Valve	07100145	07100147	1
23	Terminal Board	42011241	42011241	1
24	Capacitor	33010743	33010743	1
25	Capacitor clamp	02143401	02143401	1
26	Compressor	00103086	00100178	1

The above data are subject to be changed without notice.

8.9 Exploded View for Outdoor Unit

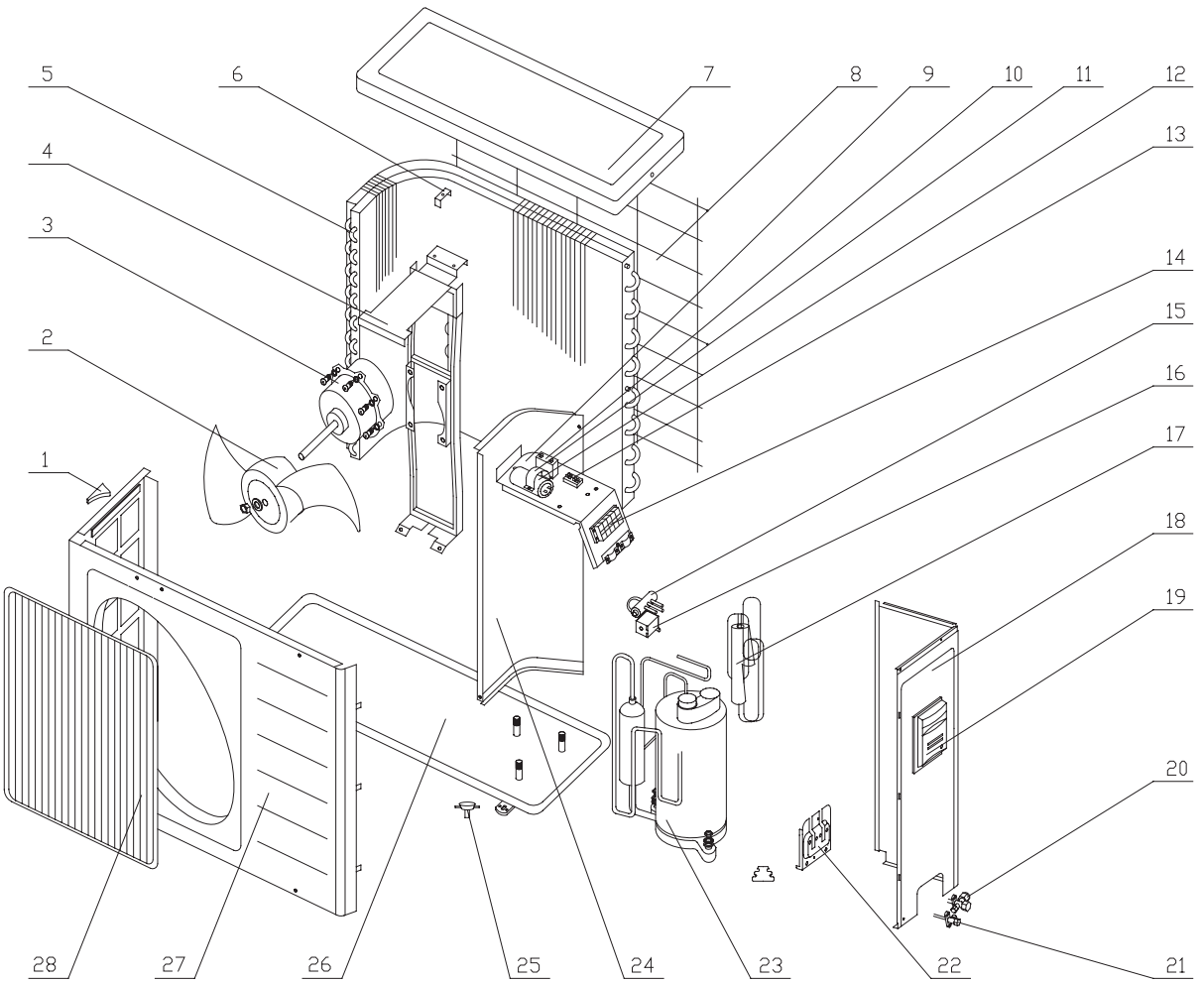


8.10 Parts' List for Outdoor Unit

NO.	Description	Part Code		Qty
		GWHN09JANK1A1A/O	GWHN12JBNK1A1A/O	
	Product Code	CA225W0120	CA225W0140	
1	Front Grill	22413433	22413433	1
2	Front Plate	01533027P	01533027P	1
3	Small Handle	26233100	26233100	1
4	Metal Base	01203727	01203727	1
5	Isolation Sheet	01233066	01233066	1
6	Nut M6	70310131	70310131	1
7	Axial Flow Fan	10333004	10333004	1
8	Motor	150130671	150130671	1
9	Condenser Assy	01133478	01133479	1
10	Motor Support	01703058	01703058	1
11	Top cover plate	01253031	0125303101	1
12	Rear Grill	01473009	01473009	1
13	Capillary Assy	03103644	03103646	1
14	Electric Plate	01403947	01403947	1
15	Terminal Board	42011147	42011147	1
16	Capacitor	33010026	33010026	1
17	Capacitor clamp	71010103	71010103	2
18	Insulation Gasket	70410523	70410523	1
19	Right Side Plate Assy	01303239	01303239	1
20	Handle	26233431	26233431	1
21	Valve Support	01703089	01703089	1
22	Valve	07100120	07100120	1
23	Valve	07100145	07100147	1
24	Terminal Board	42010265	42010265	1
25	Capacitor	33010743	33010743	1
26	Capacitor clamp	02143401	02143401	1
27	Compressor	00103719	00103066	1
28	4-way Valve	43000403	43000403	1
29	4-way Valve fittings	430004002	430004002	1

The above data are subject to be changed without notice.

8.11 Exploded View for Outdoor Unit

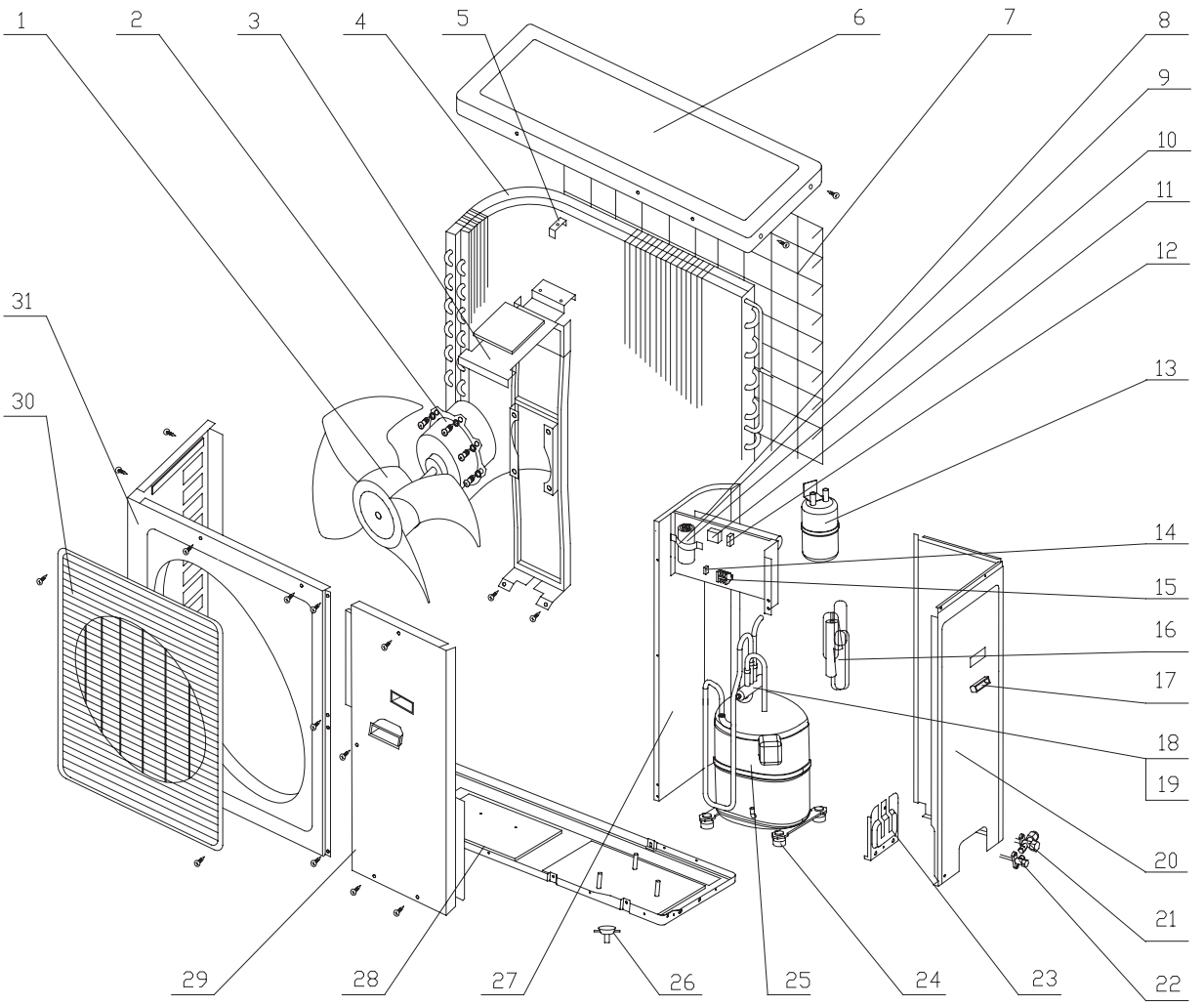


8.12 Parts' List for Outdoor Unit

NO.	Description	Part Code		Qty
		GWCN18JCNK1A1A/O	GWHN18JCNK1A1A/O	
	Product Code	CA225W0170	CA225W0160	
1	Handle	26235401	26235401	1
2	Axial Flow Fan	10333426	10333426	1
3	Motor LW48B	15013070	15013070	1
4	Motor Support	0170510701	0170510701	1
5	Condenser Assy	01113119	01113016	1
6	Condenser Clamp	01175202	01175202	2
7	Top Cover	01255001	01255001	1
8	Rear grill	01475004	01475004	1
9	Electrical Box	01405039	01405039	1
10	Capacitor	33010010	33010010	1
11	Capacitor Clamp	02143401	02141375	1
12	Capacitor	33000001	33000039	1
13	Terminal Board	42011241	42010265	1
14	Terminal Board	none	42011147	1
15	4-way Valve Assy	none	43000403	1
16	4-way valve coil	none	430004002	1
17	Capillary Assy	03103630	03103552	1
18	Rear Side Plate	01305013	01305013	1
19	Handle	26235254	26235254	1
20	Valve Assy 1/2	071302115	071302115	1
21	Valve Assy 1/4	071302111	071302111	1
22	Valve support	01715007	01715006	1
23	Compressor	00103112	00120051	1
24	Mid Clapboard	01233035	01233035	1
25	Drainage Connecter	none	06123401	1
26	Chassis	01205128P	01205127P	1
27	Front Side Plate	01305015	01305015	1
28	Front Grill	22415001	22415001	1

The above data are subject to be changed without notice.

8.13 Exploded View for Outdoor Unit



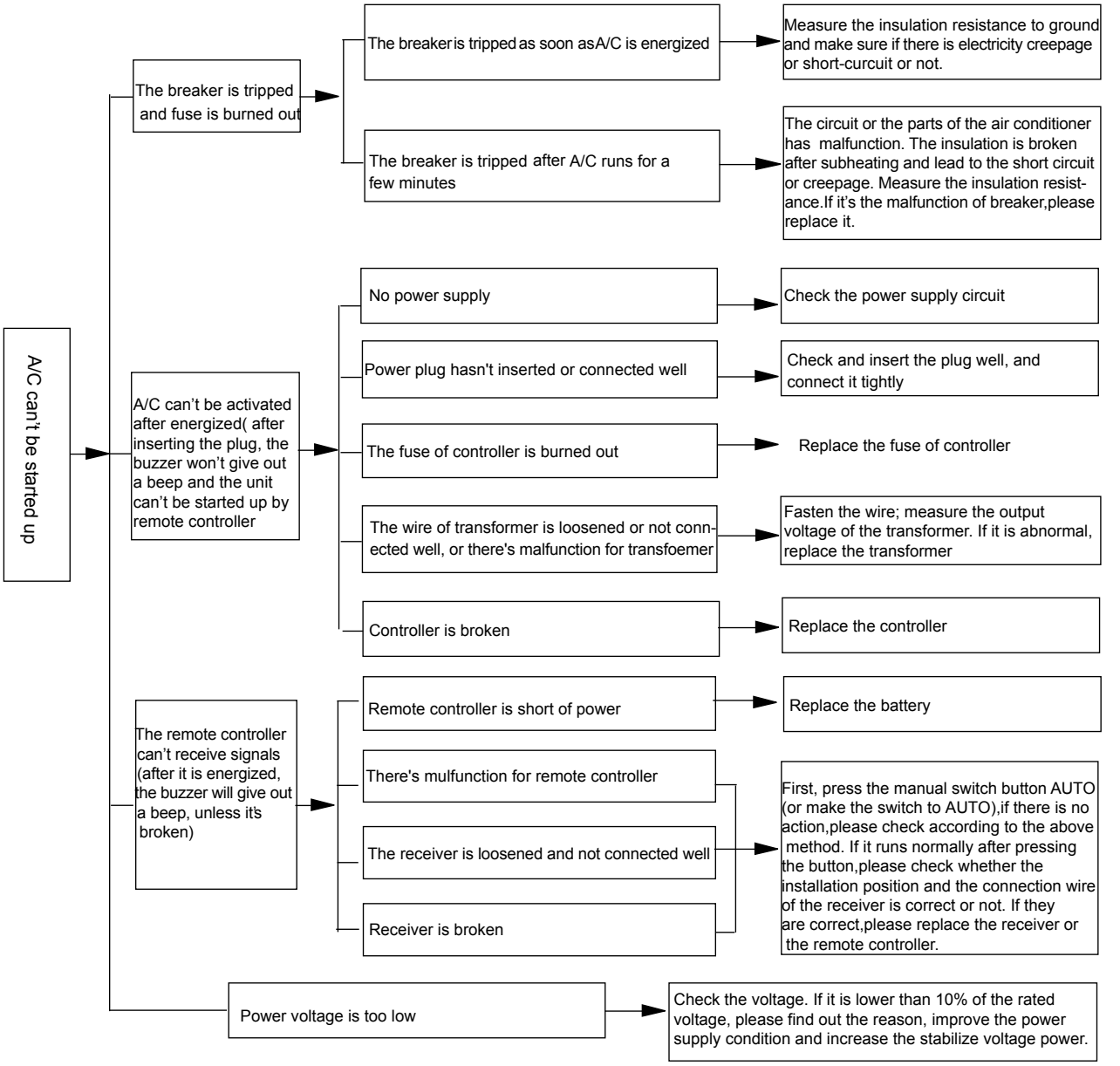
8.14 Parts' List for Outdoor Unit

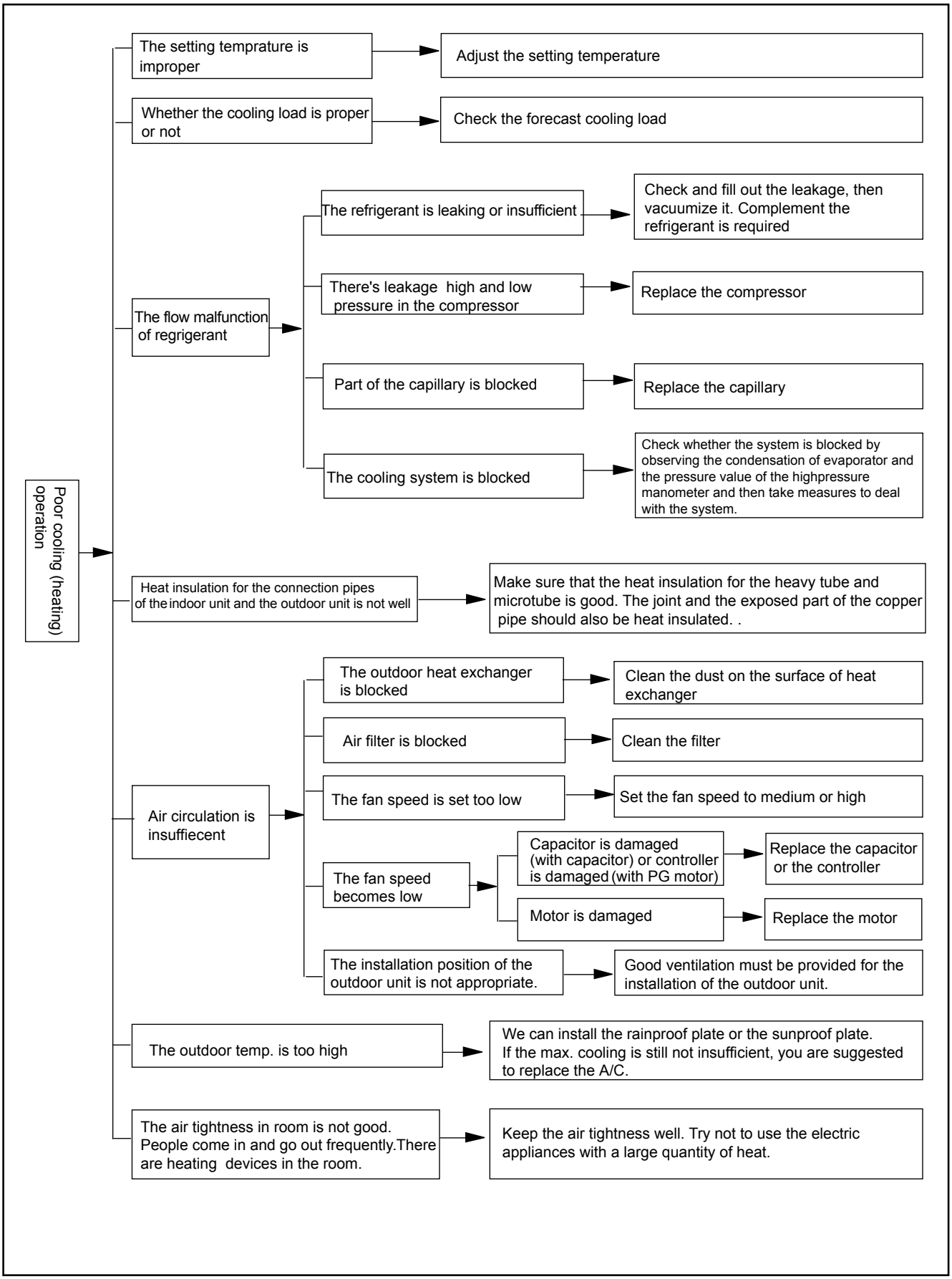
NO.	Description	Part Code		Qty
		GWCN24JDNK1A1A/O	GWHN24JDNK1A1A/O	
	Product Code	CA225W0560	CA225W0590	
1	Axial Flow Fan	10335257	10335257	1
2	Motor LW68B	15015057	15015057	1
3	Motor Support	01703027	01703025	1
4	Condenser Assy	01113217	01113220	1
5	Condenser Clamp	01172001	01172001	2
6	Top Cover	01255262	01255262	1
7	Rear grill	01473028	01473028	1
8	Electrical Box	01403248	01403248	1
9	Capacitor Clamp	02141005	02141005	1
10	Capacitor	33000039	33000039	1
11	AC Contactor	44010245	44010245	1
12	Capacitor	33010027	33010027	1
13	Gas-Liquid Separator Assy	none	none	1
14	Terminal Board	none	42011147	1
15	Terminal Board	42011113	420101941	1
16	Capillary Assy	03103755	03103761	1
17	Handle	26235253	26235253	2
18	4-way Valve Assy	none	43000082	1
19	4-way valve coil	none	430004002	1
20	Rear Side Plate	01305036	01305036	1
21	Valve Assy	07105252	07105252	1
22	Valve Assy	07105256	071302113	1
23	Valve Support Sub-assy	01715002	01715002	1
24	Compressor Gasket	压缩机自带	压缩机自带	3
25	Compressor	00103031	00103031	1
26	Drainage Connecter	none	06123401	1
27	Mid Clapboard	01233024	01233024	1
28	Chassis	01205073	01205074	1
29	Front Side Plate	01303023	01303023	1
30	Front Grill	22414102	22414102	1
31	Front Plate	01433017P	01433017P	1

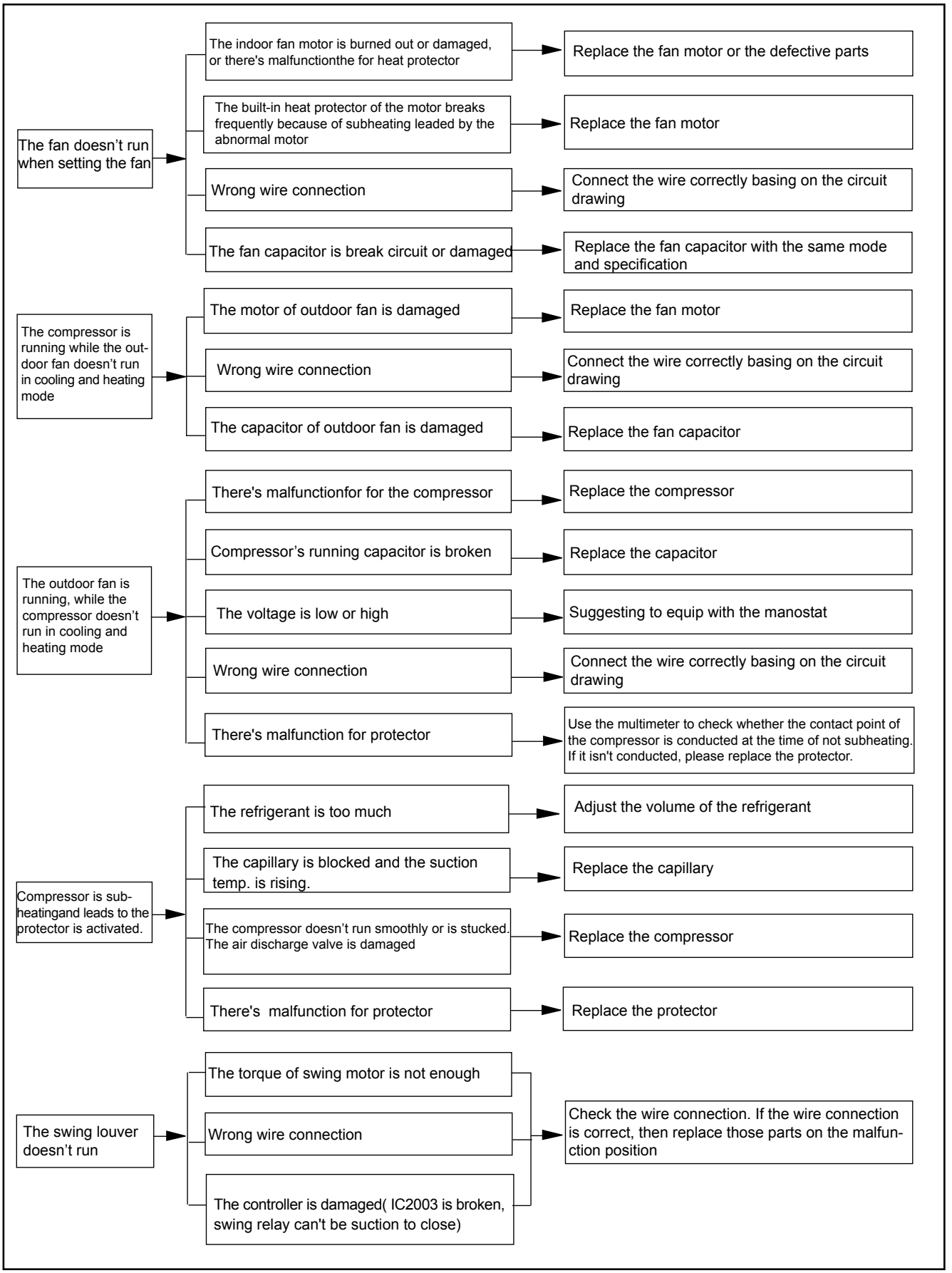
The above data are subject to be changed without notice.

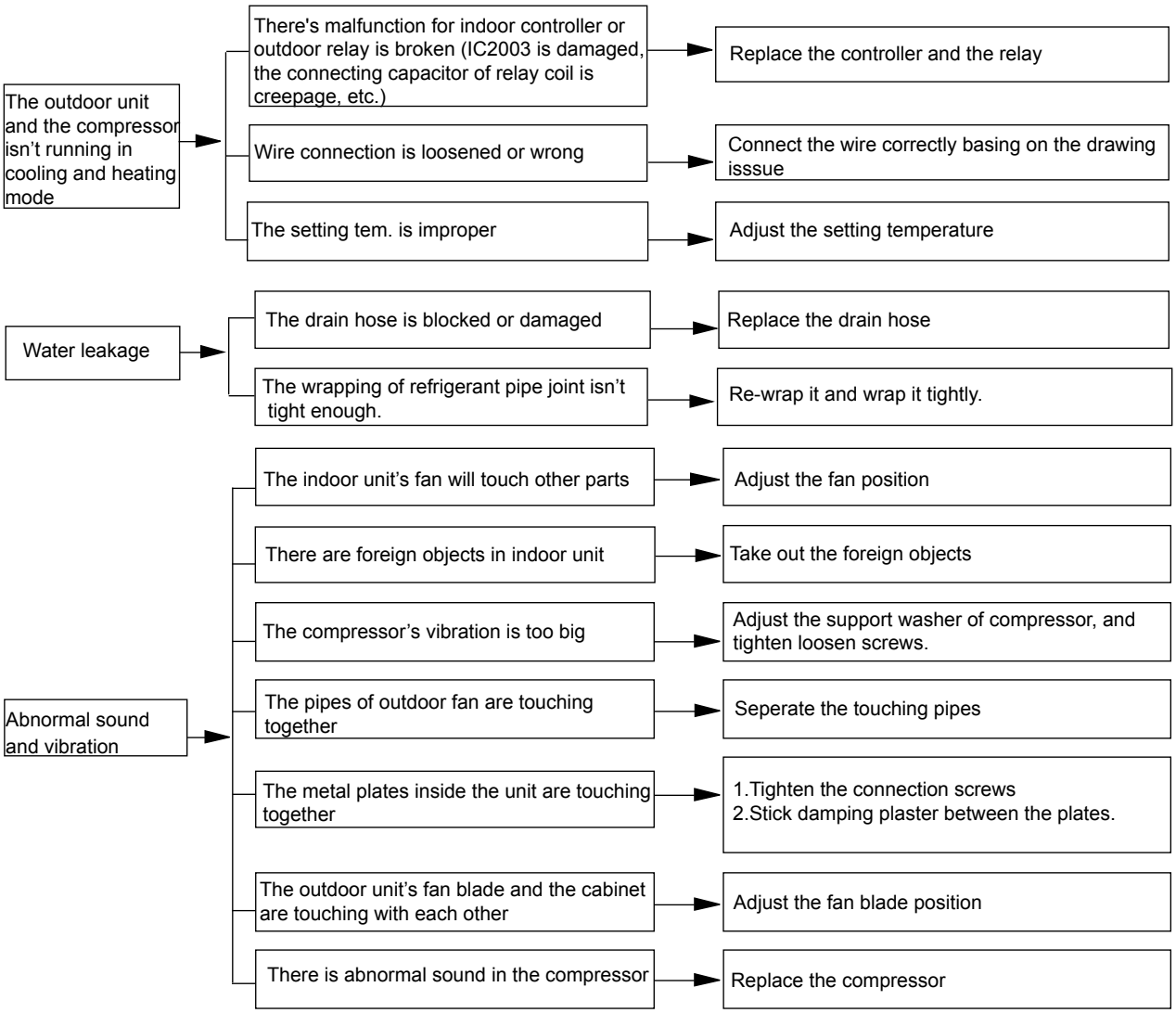
9 Trouble Analysis

Note: When replacing the controller, please make sure that the wire jumper is inserted into the new controller, otherwise the running LED will go out for 3s and blinks 15 times(the dual 8 will display C5) , and the unit can't be turned on.




Poor cooling (heating) operation
The setting temprature is improper
Adjust the setting temperature
Whether the cooling load is proper or not
Check the forecast cooling load
The flow malfunction of regrigerant
The refrigerant is leaking or insufficient
Check and fill out the leakage, then vacuumize it. Complement the refrigerant is required
There's leakage high and low pressure in the compressor
Replace the compressor
Part of the capillary is blocked
Replace the capillary
The cooling system is blocked
Check whether the system is blocked by observing the condensation of evaporator and the pressure value of the highpressure manometer and then take measures to deal with the system.
Heat insulation for the connection pipes of the indoor unit and the outdoor unit is not well
Make sure that the heat insulation for the heavy tube and microtube is good. The joint and the exposed part of the copper pipe should also be heat insulated. .
Air circulation is insuffiecent
The outdoor heat exchanger is blocked
Clean the dust on the surface of heat exchanger
Air filter is blocked
Clean the filter
The fan speed is set too low
Set the fan speed to medium or high
The fan speed becomes low
Capacitor is damaged (with capacitor) or controller is damaged (with PG motor)
Replace the capacitor or the controller
Motor is damaged
Replace the motor
The installation position of the outdoor unit is not appropriate.
Good ventilation must be provided for the installation of the outdoor unit.
The outdoor temp. is too high
We can install the rainproof plate or the sunproof plate. If the max. cooling is still not insufficient, you are suggested to replace the A/C.
The air tightness in room is not good. People come in and go out frequently.There are heating devices in the room.
Keep the air tightness well. Try not to use the electric appliances with a large quantity of heat.


The fan doesn't run when setting the fan
The indoor fan motor is burned out or damaged, or there's malfunctionthe for heat protector
Replace the fan motor or the defective parts
The built-in heat protector of the motor breaks frequently because of subheating leaded by the abnormal motor
Replace the fan motor
Wrong wire connection
Connect the wire correctly basing on the circuit drawing
The fan capacitor is break circuit or damaged
Replace the fan capacitor with the same mode and specification
The compressor is running while the out-door fan doesn't run in cooling and heating mode
The motor of outdoor fan is damaged
Replace the fan motor
Wrong wire connection
Connect the wire correctly basing on the circuit drawing
The capacitor of outdoor fan is damaged
Replace the fan capacitor
The outdoor fan is running, while the compressor doesn't run in cooling and heating mode
There's malfunctionfor for the compressor
Replace the compressor
Compressor's running capacitor is broken
Replace the capacitor
The voltage is low or high
Suggesting to equip with the manostat
Wrong wire connection
Connect the wire correctly basing on the circuit drawing
There's malfunction for protector
Use the multimeter to check whether the contact point of the compressor is conducted at the time of not subheating. If it isn't conducted, please replace the protector.
Compressor is sub-heatingand leads to the protector is activated.
The refrigerant is too much
Adjust the volume of the refrigerant
The capillary is blocked and the suction temp. is rising.
Replace the capillary
The compressor doesn't run smoothly or is stucked. The air discharge valve is damaged
Replace the compressor
There's malfunction for protector
Replace the protector
The swing louver doesn't run
The torque of swing motor is not enough
Wrong wire connection
The controller is damaged(IC2003 is broken, swing relay can't be suction to close)
Check the wire connection. If the wire connection is correct, then replace those parts on the malfun-ction position


The outdoor unit and the compressor isn't running in cooling and heating mode
There's malfunction for indoor controller or outdoor relay is broken (IC2003 is damaged, the connecting capacitor of relay coil is creepage, etc.)
Replace the controller and the relay
Wire connection is loosened or wrong
Connect the wire correctly basing on the drawing isssue
The setting tem. is improper
Adjust the setting temperature
Water leakage
The drain hose is blocked or damaged
Replace the drain hose
The wrapping of refrigerant pipe joint isn't tight enough.
Re-wrap it and wrap it tightly.
Abnormal sound and vibration
The indoor unit's fan will touch other parts
Adjust the fan position
There are foreign objects in indoor unit
Take out the foreign objects
The compressor's vibration is too big
Adjust the support washer of compressor, and tighten loosen screws.
The pipes of outdoor fan are touching together
Seperate the touching pipes
The metal plates inside the unit are touching together
1.Tighten the connection screws
2.Stick damping plaster between the plates.
The outdoor unit's fan blade and the cabinet are touching with each other
Adjust the fan blade position
There is abnormal sound in the compressor
Replace the compressor

PG Motor's Locked Protection H6

Possible Reasons:

1. The fan speed is too slow due to the blockage of the air outlet;
2. The fan blade is locked;
3. The motor is locked;
4. The capacitor of fan motor is damaged;
5. The motor is damaged;
6. IC board is damaged(there are voltage at both power input and output under the normal running.);
7. The mainboard is damaged;
8. Motor thermal protection.

Dealing Method:

1. Get rid of the obstruction;
2. Reassembling;
3. Replace the motor;
4. Replace the capacitor;
5. Replace the motor;
6. Replace the PCB;
7. Replace the mainboard;
8. Under the normal circumstances, the motor will be protected, but in other abnormal circumstances, such as evaporator is very dirty, lots of dust accumulated on the fan blade, which will cause the motor overloading and then it will cause frequent thermal protection during the running. We can solve the those problems according to the reasons.