Model	GWHD(07)GANK3A2AI	GWHD(09)GANK3A2AI	GWHD(12)GANK3A2AI
Fan Motor Speed (r/min) (H/M/L)	1400/1300/930	1400/1300/930	1460/1330/930
Output of Fan Motor (w)	20	20	20
Input Power of Heater (w)	/	/	/
Fan Motor Capacitor (uF)	0.8	0.8	1
Fan Motor RLA(A)	0.15	0.15	0.15
Fan Type-Piece	Cross flow fan – 1	Cross flow fan – 1	Cross flow fan – 1
Diameter-Length (mm)	φ77 X 748	φ77 X 748	φ77 X 748
Evaporator	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
Pipe Diameter (mm)	Φ7	Φ7	Φ7
Row-Fin Gap(mm)	2-1.4	2-1.4	2.5-1.4
Coil length (l) x height (H) x coil width (L)	749X230X25.4	749X230X25.4	749X230X25.4
Swing Motor Model	MP24GA/MP24GB	MP24GA/MP24GB	MP24GA/MP24GB
Output of Swing Motor (W)	2	2	2
Fuse (A)	PCB 3.15A Transformer 0.2A	PCB 3.15A Transformer 0.2A	PCB 3.15A Transformer 0.2A
Sound Pressure Level dB (A) (H/M/L)	38/34/28	38/34/28	40/36/30
Sound Power Level dB (A) (H/M/L)***	48/44/38	48/44/38	50/46/30
Dimension (W/H/D) (mm)	1005X290 X150	1005X290 X150	1005X290 X150
Dimension of Package (L/W/H)(mm)	1080X358 X243	1080X358 X243	1080X358 X243
Net Weight /Gross Weight (kg)	11/13	11/13	11/13

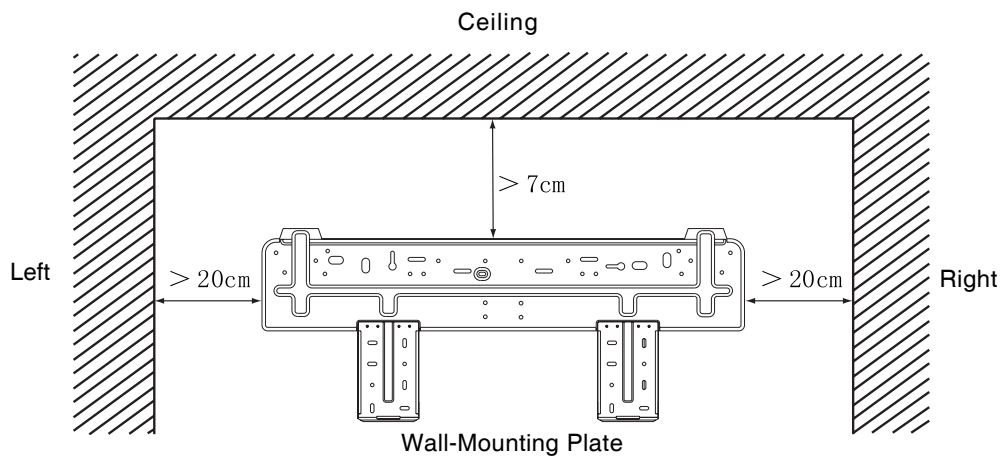The above data is subject to change without notice. Please refer to the nameplate of the unit.

Air intake

Front panel

Guide louver

Air outlet

Remote control window

Wireless remote control

Wrapping Tape

❈ Heat (This light doesn't on in cool only unit)

❈ Cool / Dry

⏻ Run

⌂ Auto

1005

Left tube exit

Right tube exit

150

290

Unit: mm

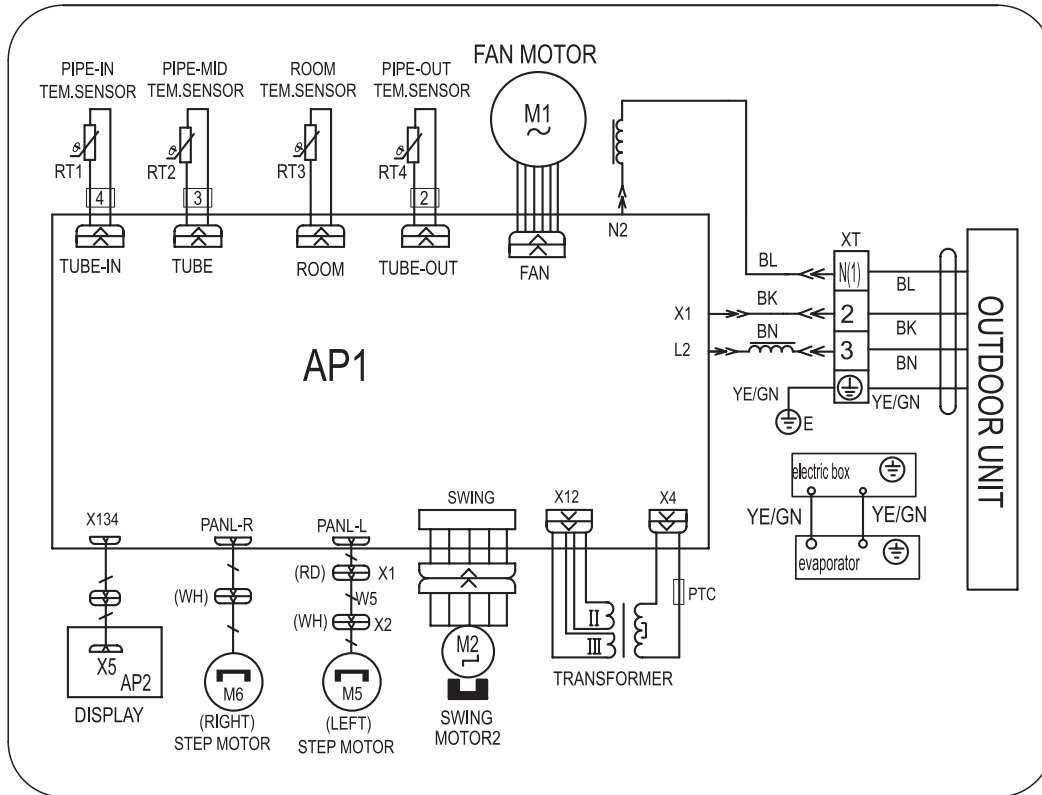Ceiling

> 7cm

Left

> 20cm

> 20cm

Right

Wall-Mounting Plate
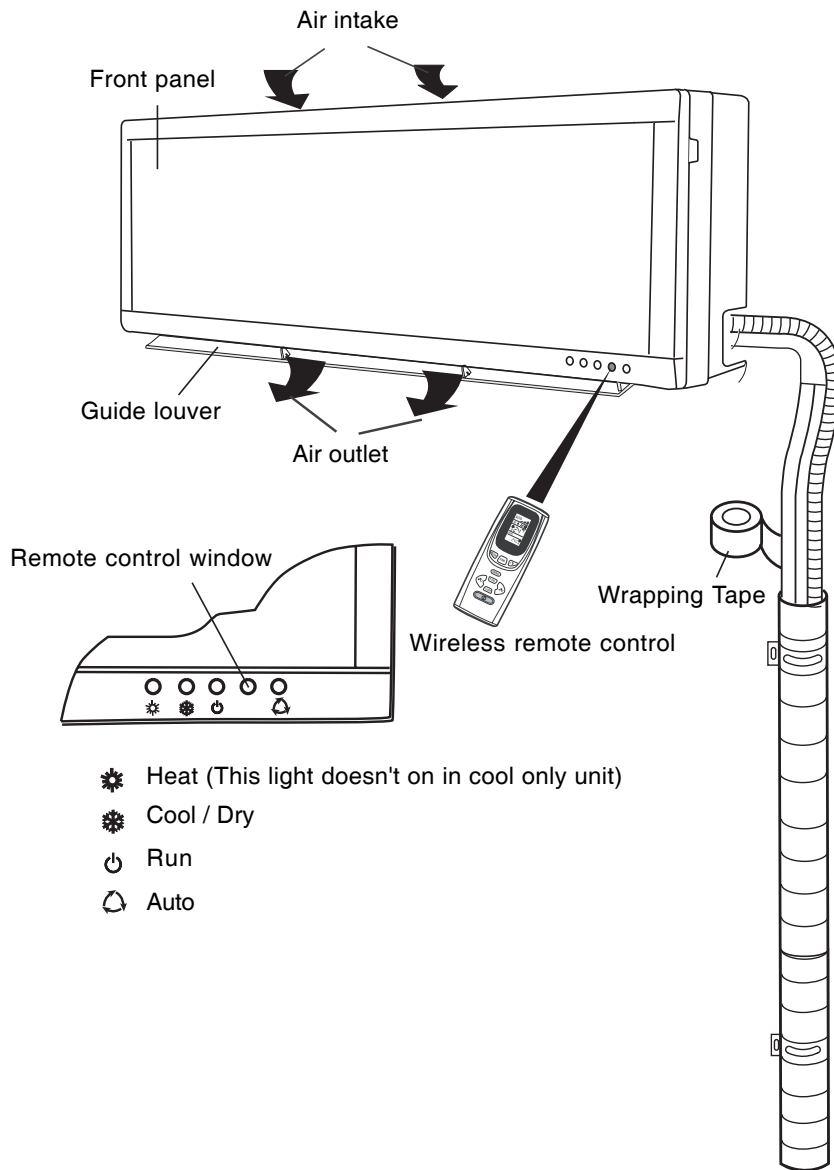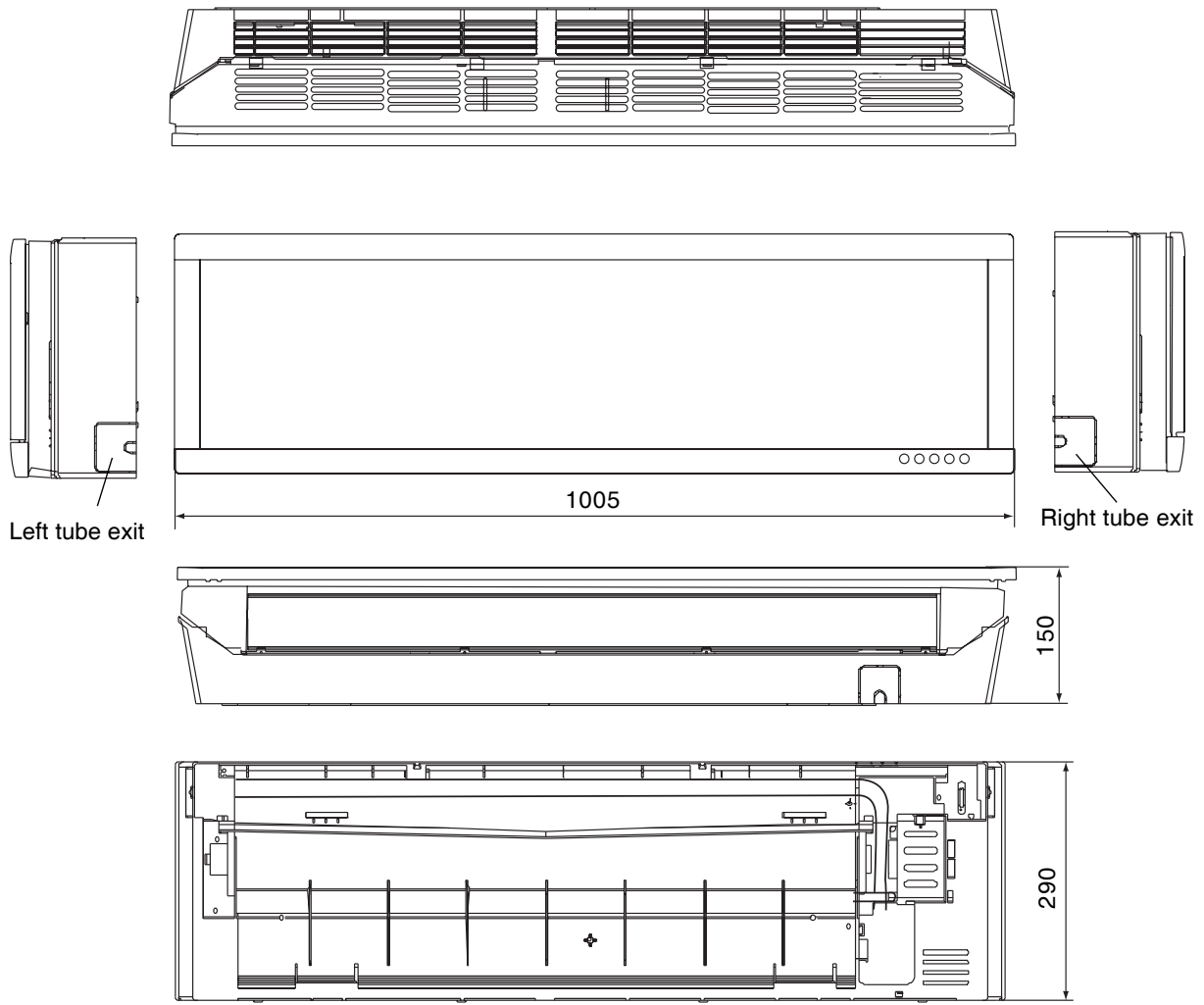
4.Wiring Diagram

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

1 Temperature Parameters

◆ Indoor preset temperature(Tpreset)

◆ Indoor ambient temperature (Tamb.)

◆Indoor heat-exchanger inlet pipe temp. sensor (Tinlet)

◆ Indoor heat-exchanger pipe inside temp. sensor (Tinside)

◆ Indoor heat-exchanger pipe outlet temp. sensor (Toutlet)

2 Basic Functions

2．1 Cooling Mode

（1）Under this mode, fan motor, swing motor will run at preset mode.

（2）Unit will stop when outdoor unit has malfunction or protection, indoor unit will keep original running status, the LED blinks.

➢ Under this mode, the temperature setting range is 16-30 ℃.

2．2 Dehumidifying Mode

（1）Under this mode, fan motor will run at low speed and swing at preset mode.

（2）Unit will stop when outdoor unit has malfunction or protect, indoor will keep original running status, malfunction LED will blink.

➢Under this mode, the temperature setting range should be 16-30℃.

2．3 FAN mode

Under fan mode, only indoor fan will run. in Auto fan speed, it will run at cool auto fan mode.

2．4 Heating Mode

（1）If compressor is turned on and the corresponding electric expansion valve opend more than 65, indoor unit enter anti-cool wind; when compressor stopped or corresponding electric expansion valve less than 65, and the inner fan motor will open, enters into blow surplus heat.

（2）Protection function: Under heat mode, the compressor will stop due to malfunction (including any temp. sensor malfunction), inner fan will run at blow surplus heat.

（3）Anti-cool wind: Indoor unit will run after at least 2mins delayed.
Blow surplus heat:At the fan speed before unit stop running, after 60s later, inner fan will stop to run, during the blowing surplus heat, the fan speed cannot be changed.
The compressor protection is the same with the compressor protection under cool mode.

（4）When defrosting and oil returning, inner fan will stop will not blow surplus heat.

➢Under this mode, the temperature setting range should be 16-30℃.

2．5 AUTO mode

Under this mode, the system will accord to the ambient temp. change automatically its running modes (Cool, Fan, Heat). The protection is the same with the protection under Cool, Heat modes.

2．6 Modes confliction

Take the first one as an example: the Cool will not conflict with Dehumidify and Fan, but will conflict with Heat. The Heat will not conflict with Fan, but it conflict with Cool, Dehumidifying(the modes confliction is judged by outdoor unit, it will send the modes confliction position value to indoor unit).

If indoor unit received the modes confliction position1 from the outdoor unit, after indoor buzzer beep, the indoor unit load (inner fan motor, swing) the running light will blink, the other indicators are still displaying, the mode sent to outdoor unit still should be the mode received by remote controller.

After the timer on has arrived, if indoor unit received the modes confliction position1 from outdoor unit, after indoor buzzer beep, the indoor unit load (inner fan motor, swing), the running indicator blink, the other indicators are still displaying, the mode sent to outdoor unit still should be the mode received by remote controller.

3 Other control

3．1 Front panel stepping motor control

After powered on, front panel stepping motor will turn to close the front panel.
After unit is turned on, the stepping motor will turn to open the front panel, after unit is turned off the stepping motor will turn to close the front panel.

3．2 Swing motor control

Use the SWING button of wirless remote control to control SWING On and Off, Swing will only act when the indor fan is running. After power on, the step motor will turn the guide louver back to 0 position to close the air outlet vent; after the vent; after the unit is turned on, the guide louver will be turned to L, if the siwng function has set, the guide louver will swing between L and D, when the unit is turned off, the guide louver will be turned to 0.
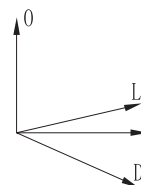
3．3 Buzzer

When controller is powered on or received the remote control signal, the buzzer will beep.

3．4 AUTO button

When the button pressed, unit will run under Auto mode, inner fan motor will run at Auto fan speed and start to swing, if the button be pressed once again, the unit will be turned off.

3．5 LCD display

Red: Running indicator;
Yellow: Heating indicator;
Blue: Cooling, Dry indicators

3．6 Fan speed control

Hi, Mid, Lo three fan speed could be selected, in Dry mode, the auto fan speed is low.
The switch among each fan speed, there should be at least 3min and 30s running guaranteed.

3．7 Sleep

When in Cool, Dry mode, after sleeping procedure has been set up 1hr, Tpreset increase 1℃ ; 2hrs later, Tpreset increase 2℃.
In Fan and Auto modes, the presetting temperature will not change.

3．8 Memory

When controller is powered off and repowered on, the controller will memorize the state before power off. If memory is running status, that the compressor has 3mins delay. If powered off after the timer set up, if the timer has arrived and power on, it will run the state before timer arrived, otherwise, the timer will recalculate.

### 3．9 Indoor unit malfunction LED display

When several malfunction existed simultaneously, it will display circularly.

Indoor unit malfunction indicator display: indicator blink 0.5s and off 0.5s.

Malfunction	Red light (Run)	Yellow light (Heat)	Blue light (Cool)
system abnormal running (unit will stop when anti-high temp., cooling overload)		3s off 4 times blink	
Compressor overload protection		3s off 3 times blink	
Module protection		3s off 5 times blink	
Air exhaust temp. protection	3s off 4 times blink		
Low voltage over current protection	3s off 5 times blink		
Modes confliction	3s off 7 times blink		
Communication malfunction	3s off 6 times blink		
Defrosting or heating oil return		3s off one time blink	
Indoor ambient temp. open/short circuit (30s continuously detect temp. sensor malfunction)			3s off one time blink
any one of the indoor evaporator temp. sensor open/short circuit (30s continuously detect temp. sensor malfunction)			3s off 2 times blink
Outdoor ambient temp. sensor open/short circuit (30s continuously detect temp. sensor malfunction)			3s off 3 times blink
Outdoor condensor temp. sensor open/short circuit (30s continuously detect temp. sensor malfunction)			3s off 4 times blink
Outdoor air exhaust temp. sensor open/short circuit (30s continuously detect sensor malfunction)			3s off 5 times blink
The following malfunction should be adjusted by the remote controller, Y512N be adopted but no Light button, within 3s continuously press Sleep button for 6 times, it will display, 5mins it will automatically exit the testing status (invalid under Auto mode) or exit when 3s continuously press the Sleep button for 6 times.			
Cooling over load frequency deline			3s off 6 times blink
Whole unit over current frequency decline			3s off 8 times blink
Compressor air exhaust frequency decline			3s off 9 times blink
Whole unit AC voltage frequency decline	3s off 10 times blink		
Heating anti-high temp. frequency decline		3s off 10 times blink	
Anti-cool wind protection	3s off 9 times blink		
Cooling oil return			3s off 7 times blink
Unit off when anti-freezing protection	3s off 2 times blink		

## Operating Procedures / Photos

1. Disassemble Front panel

Push upward the front panel and pull it outward at the same time, open the front panel at an angle, pull out the dowels at both sides of the front panel, and remove the front panel.

Front Panel

Front Panel Dowel
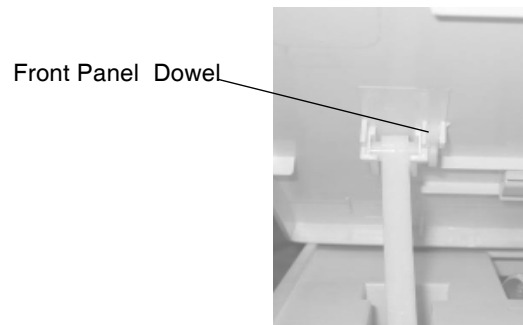
2. Disassemble Filter, Cover of Electric Box

Push upward slightly, release the filter from the groove at the lower position, and pull out the filter. Unscrew the screw at the covering plate, and re-move the covering plate.

Filter   Screw
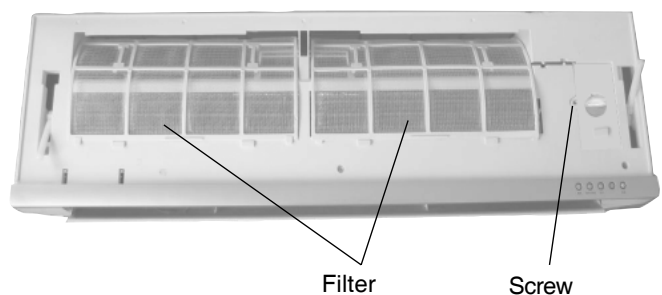
3. Disassemble Front Case

Unscrew the three screws fixing the front case, pull open the clasp at the back, pull out the termi-nal board of the step motor. remove the front case.
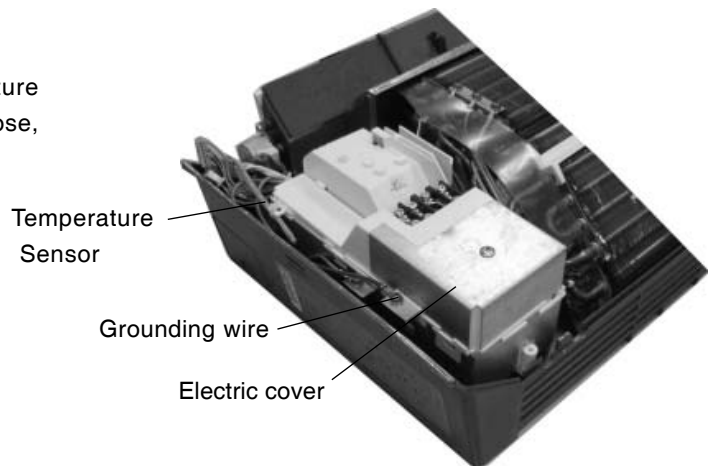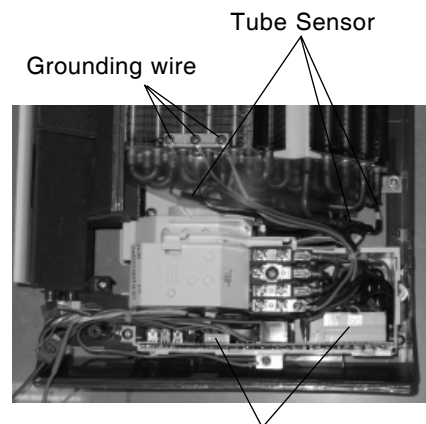
Screw
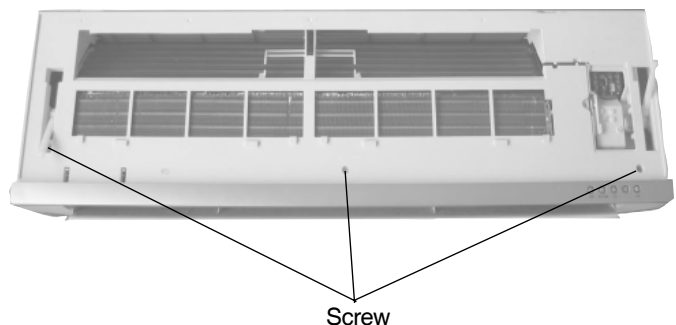
Terminal board

4. Disassemble the electric cover

Remove the grounding wire and tempertature sensor, Press the 3 clasps in by till they loose, then lift up wards the electric cover.

Temperature Sensor

Grounding wire

Electric cover

Tube Sensor

Grounding wire

5. Disassemble the electric box

Remove the grounding wire of the evaporator, and remove the tube sensor. Remove the connection lines for the indoor motor and step motor. Screw off the screws fixing the electric box. Remove the electric box

Connector

5. Disassemble water tray

Use screwdriver to unscrew the screws fixing both sides of the water tray sub-assy. Disconnect the terminal of the stepping motor.

Take out the water tray sub-assy. Pay attention not to damage the drainage pipe as it is situated together with the water tray sub-assy
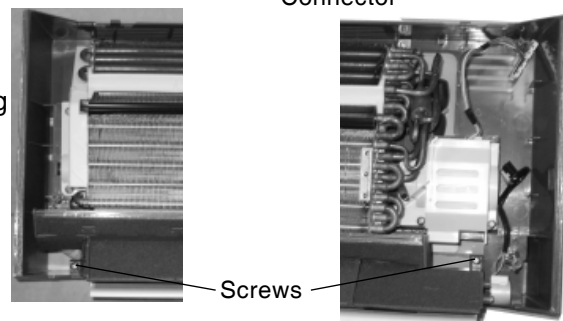
Screws

7. Disassemble evaporator

Screw off the three screws fixing the motor pressure plate and remove the pressure plate.

Screw off the screw at the connecting pipe clamp, and remove the connecting pipe clamp.

Screw off the two screws at the left side and the two at the right side. Manually lift slightly the left side of the evaporator, move it backward, and release the side bayonet of the evaporator from the groove. Carefully take out the evaporator and pay attention to protect the connecting pipe.
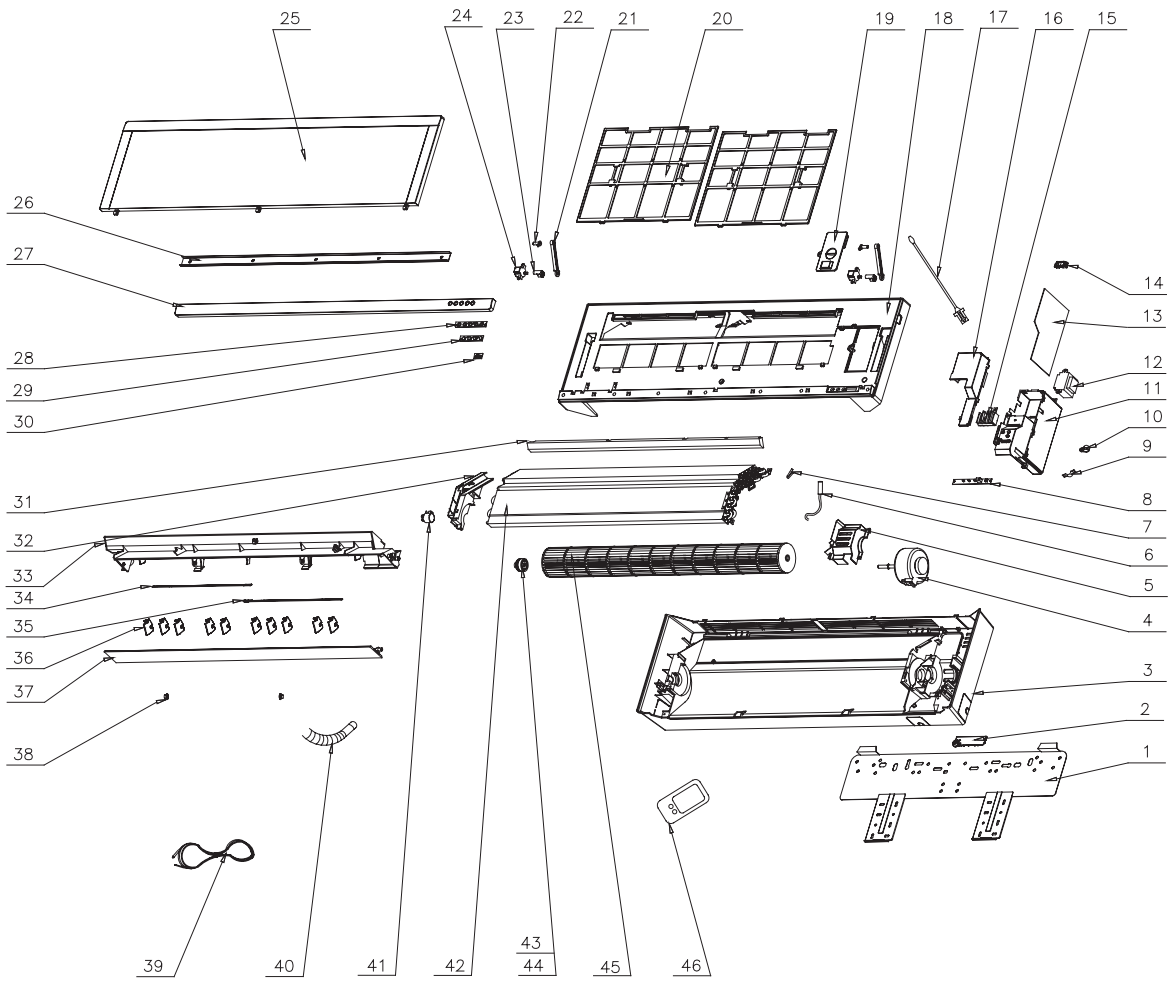

Pipe Clamp

Motor Press Plate
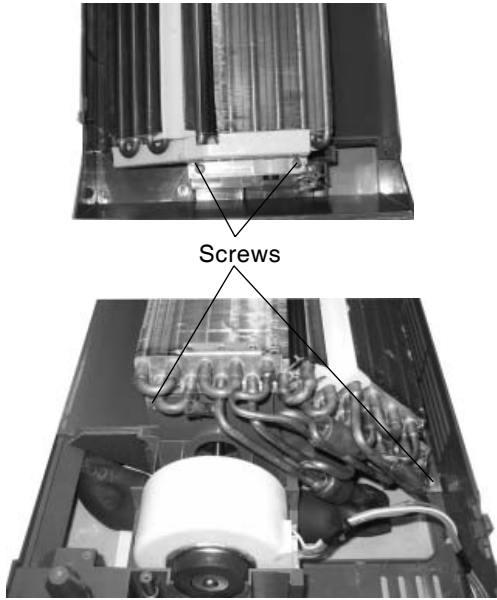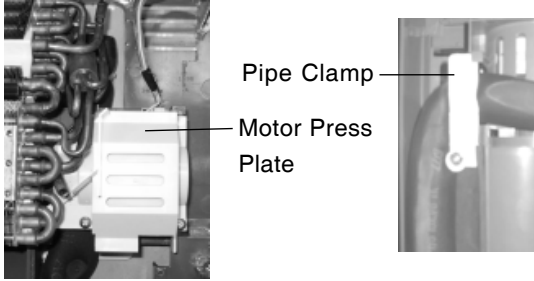
Screws

8.Disassemble motor

Screw off the holding screw at the left shaft sleeve of the cross flow fan, pull out the motor, and remove the cross flow fan.

Screw
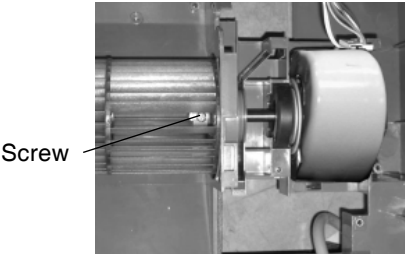
No	Description	Part Code			Qty
		GWHD(07)GANK3A2AI	GWHD(09)GANK3A2AI	GWHD(12)GANK3A2AI	
1	Wall Mounting Frame	01252001	01252001	01252001	1
2	Pipe Clamp	24242001	24242001	24242001	1
3	Rear Case	222023272	222023272	222023272	1
4	Motor FN20S	`15012110	15012110	15012110	1
5	Motor Clamp	22242034	22242034	22242034	1
6	Tube Sensor(20K)	3900019814	3900019814	3900019814	1
		`3900019815	3900019815	3900019815	1
		3900019816	3900019816	3900019816	1
7	Sensor insert	42020063	42020063	42020063	3
8	Receiver Board JKD	30046074	30046074	30046074	1
9	Wire Clip	42012415	42012415	42012415	1
10	Wire Clamp	71010103	71010103	71010103	1
11	Electric Box	20102186	20102186	20102186	1
12	Transformer 48X26G	43110233	43110233	43110233	1
13	Main PCB B9Q525DJ	30039194	30039194	30039196	1
14	Wire Slot	70482001	70482001	70482001	1
15	Terminal Board T4B3A	42011233	42011233	42011233	1
16	Electric Box Cover 1	20102187	20102187	20102187	1
17	Room Sensor(15K)	390000451	390000451	390000451	1
18	Front Case	20002119	20002119	20002119	1
19	Electric Box Cover 2	20102188	20102188	20102188	1
20	Filter	11122016	11122016	11122016	2
21	Front Panel Link	10582026	10582026	10582026	2
22	Front Panel Dowel	10562002	10562002	10562002	2
23	Front Panel Crank	10562001	10562001	10562001	2
24	Stepping Motor MP24GB	15212111	15212111	15212111	2
25	Front Panel	20002076	20002076	20002076	1
26	Front Panel Holder	01792006	01792006	01792006	1
27	Ornamental Bar	68012022	68012022	68012022	1
28	Pilot Lamp Frame	26112045	26112045	26112045	1
29	Pilot Lamp Panel	22432066	22432066	22432066	1
30	Button Panel	26112046	26112046	26112046	1
31	Evaporator Flashboard	010723101	010723101	010723101	1
32	Evaporator Support	24212028	24212028	24212028	1
33	Water Tray	20182032	20182032	20182032	1
34	/	/	/	/	/
35	/	/	/	/	/
36	Swing Louver	10512089	10512089	10512089	2
37	Guide Louver	10512042	10512042	10512042	1
38	Guide Louver Bearing	10542011	10542011	10542011	3
39	Connecting Cable	400204056	400204056	400204056	1
40	Drainage Pipe	05230014	05230014	05230014	1
41	Stepping Motor MP24GA	15212102	15212102	15212102	1
42	Evaporator Assy	010025323	01002514	01002531	1
43	Fan Bearing	/	76512210	76512210	1
44	Ring of Bearing	76512203	76512203	76512203	1
45	Cross Flow Fan	10352004	10352004	10352004	1
46	Remote Controller Y512N	30515018	30515018	30515018	1

The above data are subject to be changed without notice.