

1 Introduction and Features



Model

GWHD (07) AANK3A1B I

GWHD (09) AANK3A1B I

GWHD (12) ABNK3A1B I

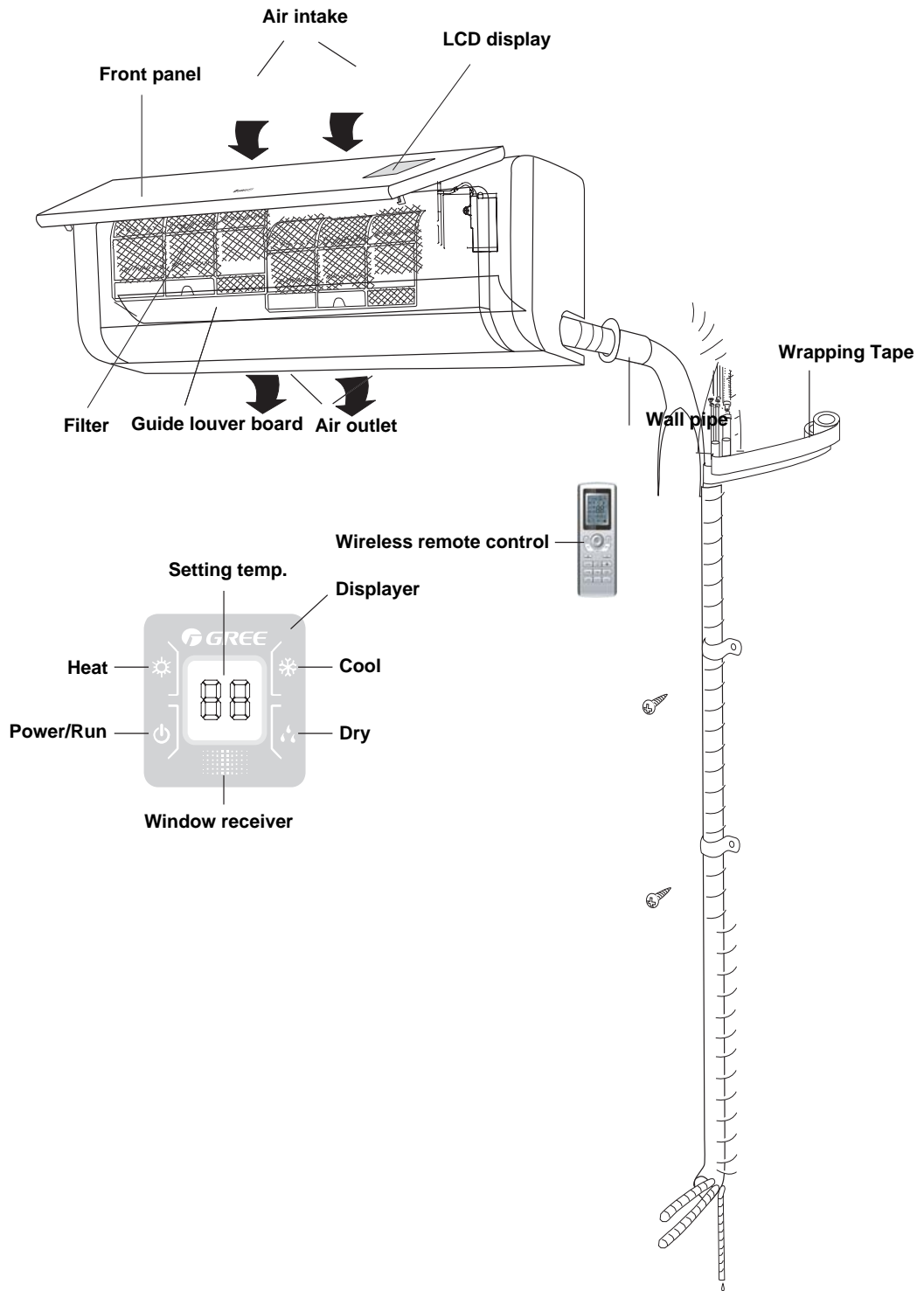
2 Specifications and Technical Parameters

| | | | |
|--|-------------------------------|-------------------------------|-------------------------------|
| Model | GWHD(07)AANK3A1BI | GWHD(09)AANK3A1BI | GWHD(12)ABNK3A1BI |
| Fan Motor Speed (r/min) (SH/H/ML) | 1250/1150/1000/850 | 1250/1150/1000/850 | 1350/1150/1050/900 |
| Output of Fan Motor (w) | 10 | 10 | 10 |
| Input Power of Heater (w) | / | / | / |
| Fan Motor Capacitor (uF) | 1 | 1 | 1 |
| Fan Motor RLA(A) | 0.23 | 0.23 | 0.23 |
| Fan Type-Piece | Cross flow fan – 1 | Cross flow fan – 1 | Cross flow fan – 1 |
| Diameter-Length (mm) | Ø85X615 | Ø85X615 | Ø85x668 |
| Evaporator | Aluminum fin-copper tube | Aluminum fin-copper tube | Aluminum fin-copper tube |
| Pipe Diameter (mm) | Ø7 | Ø7 | Ø7 |
| Row-Fin Gap(mm) | 2-1.4 | 2-1.4 | 2-1.4 |
| Coil length (l) x height (H) x coil width (L) | 603X264X25.4 | 603X264X25.4 | 657X285X25.4 |
| Swing Motor Model | MP28VB | MP28VB | MP28VB |
| 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/ML) | 37/35/32/29 | 38/35/32/29 | 40/35/33/30 |
| Sound Power Level dB (A) (H/ML)*** | 47/45/42/39 | 48/45/42/39 | 50/45/43/40 |
| Dimension (W/H/D) (mm) | 815X267X165 | 815X267X165 | 872X283X178 |
| Dimension of Package (L/W/H)(mm) | 890X344X260 | 890X344X260 | 935X374X260 |
| Net Weight /Gross Weight (kg) | 11/13 | 11/13 | 12/15 |

The above parameters are subject to change without notices, please refer to nameplate for reference.

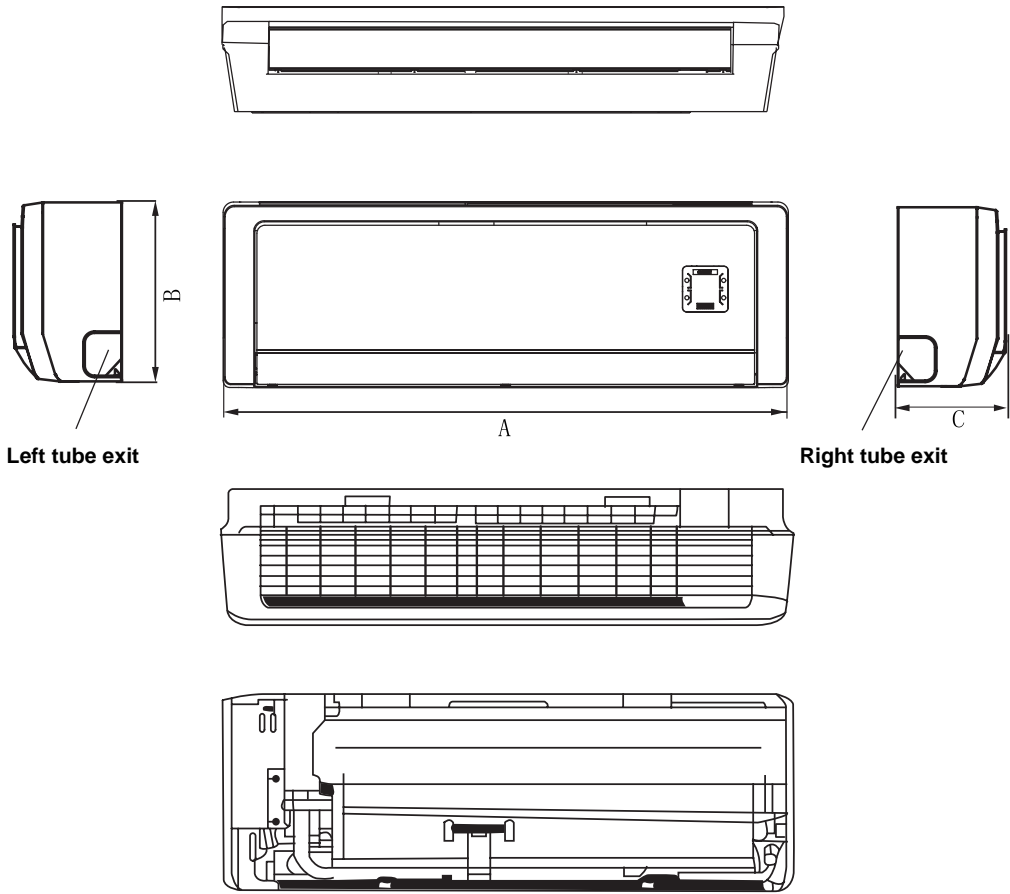
3 Part name

Indoor unit



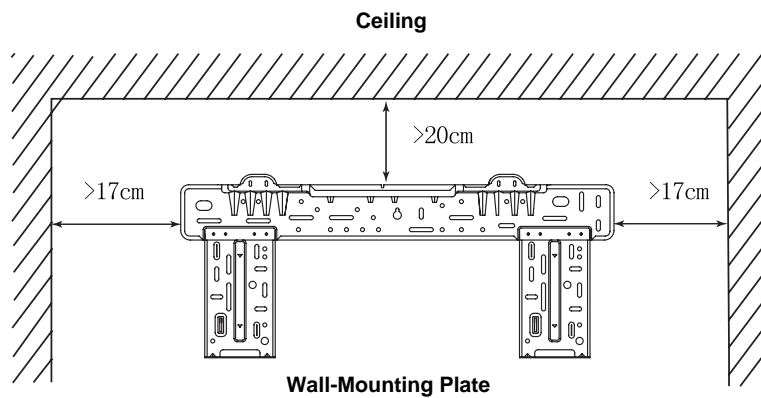
4 Outline and installation dimension

4.1 Outline and dimension



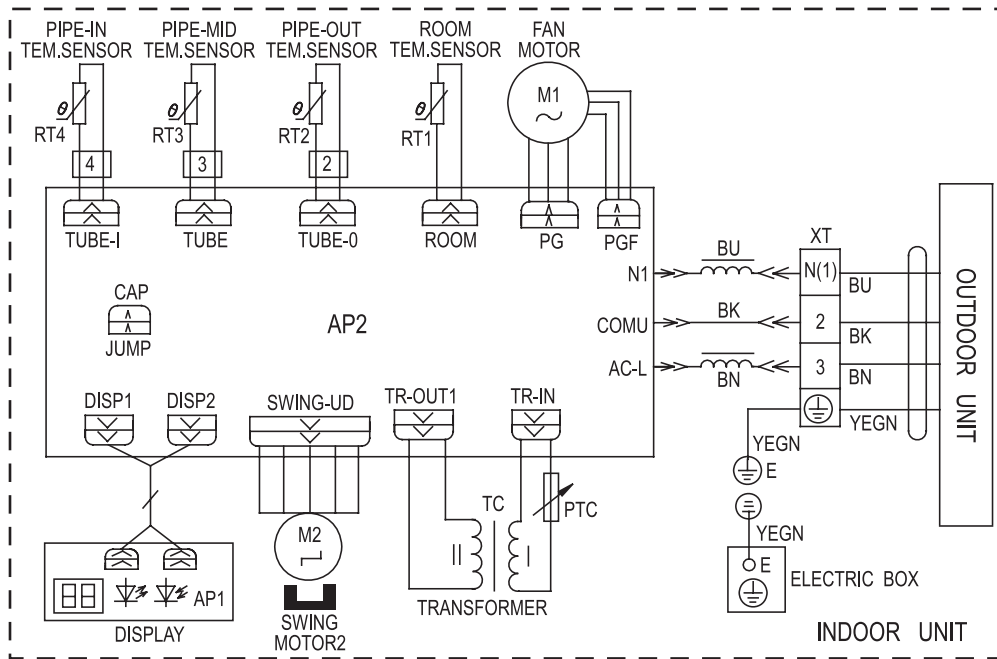
Unit: mm

| Dimension | | | Applicable models |
|-----------|-----|-----|-------------------|
| A | B | C | |
| 815 | 267 | 165 | 07K、09K |
| 872 | 283 | 178 | 12K |



5 Wiring diagram

GWHD (07) AANK3A1B1 GWHD (09) AANK3A1B1 GWHD (12) ABNK3A1B1



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

6

Manual of functions of remote controller and operation method

6.1 Manual of functions of remote controller

The following function manual, the temperature unit is centigrade, if there is Fahrenheit, there will be $TF=TC \times 1.8+32$.

1 Temperature parameter

- ◆ Room ambient temperature (Tamb)
- ◆ Indoor unit copper tube surface temp. (T_{copper})
- ◆ Evaporator inlet tube temp (Tinlet)
- ◆ Evaporator outlet tube temp (Tout)

2 Basic Functions

2.1 Cooling Mode

- (1) Fan motor, swing motor run at presetting status.
- (2) Outdoor unit malfunction or protection unit will stop, indoor unit will keep original running status, LCD malfunction indicates.
- (3) Modes conflict indoor unit will stop to run.
 - Under this mode, the setting temperature range is 16-30 °C .

2.2 DRY Modes

- (1) Fan motor will run at low fan speed, swing motor will run at its presetting status.
- (2) Outdoor unit malfunction or protection unit stop, indoor unit will keep original running status, and display the malfunction indication.
 - Under this mode, the setting temperature range is 16-30 °C .

2.3 Fan Mode

Under Fan mode, only the indoor fan runs. in Auto mode, it will run in Cool condition. It will run at Cool Auto fan condition.

2.4 Heating Mode

- (1) At Heat mode, the unit enters into opening status, the indoor unit enters into anti-cool wind; when the unit enters into stopping status, and indoor fan will start up and enters into blowing surplus heat.
- (2) Protection function, at Heat mode, due to the malfunction the compressor stops running (including any sensor malfunction), indoor unit blows surplus heat.
- (3) Anti-cool wind: indoor fan will run after 2mins delayed.
Blowing surplus heat: Indoor fan will stop running after 60s and running at the speed before it stop, the fan speed can not be changed.
Blowing surplus heat, the guide board opened at minimum angle.
- (4) When defrosting, oil return, indoor unit will stop do not blow surplus heat. During defrosting, oil return procedure and quit 3mins will not detect all the sensor malfunction.
 - Under this mode, the setting temperature range is 16-30 °C .

2.5 Auto mode

In this mode, the system selects COOL, HEAT and FAN mode automatically according to the change of ambient temperature. The protection function is the same with that of COOL/HEAT mode.

2.6 Modes confliction

If indoor received the information modes confliction position 1 of outdoor unit, indoor unit overload will stop (Indoor fan motor, swing), malfunction indication will be displayed, the mode sent to outdoor unit is still the mode that received by the remote control.

If timer on has arrived, if indoor received the information modes confliction position 1 of outdoor, indoor overload(indoor fan motor,swing) , the malfunction display, the mode sent to outdoor unit is still the mode that received by the remote control.

3 Others

3.1 Buzzer

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

3.2 Auto button

When turn off the unit, press this button, the whole unit will run at auto mode, indoor fan motor will run in auto fan speed, turn on the swing. At unit turns on, press the Auto button that the unit will turn off.

3.3 Auto fan speed control

Under Cool, Heat, Fan modes, indoor fan will accord to the ambient temperature select Hig, Mid, Low three speeds, the dehumidifying mode auto fan speed is low. The switch of each fan mode should be 3mins and 30s.

3.4 Sleep

When unit is running in cooling and dehumidifying mode, after sleep set up 1hr later, Tset will be increased 1°C; 2hrs later, Tset will be increased 2°C, the Tset will not be exceeded 30°C ; In heating mode, after sleep procedure set up 1hr later, Tset declined 1°C, 2hrs later, Tset will be declined 2°C; the Tset will not be exceed 16°C , under Fan and Auto modes, the setting temperature will not be changed.

3. 5 Timer function

The common setting for Timer:

- a. Timer on: At unit off, can set up the Timer On function, when Timer On act, the controller will run at original setting mode, the Timer interval is 0.5hr, setting range is 0.5-24hrs.
- b. Timer off: At unit on, can set up the Timer Off function, when Timer Off act, the unit will turn off, the Timer interval is 0.5hr, setting range is 0.5-24hrs.

Hours setting for Timer:

- a. Timer on: If unit is running then to set up the Timer On, the unit will go on running, if the unit is off to set up the Timer On, when Timer On act, the unit will run at the presetting modes.
- b. Timer off: If unit is off then to set up the Timer Off, when setting the Timer off, the unit stand by, if unit is turned on to set up Timer Off, when the Timer Off act, the system will stop to work.
- c. Timer change: When unit is running in Timer mode, by operate the On/Off of remote controller to turn on or turn off the unit, can reset up the Timer function, the unit will run at the mode of last setting.

If unit is running, at the same time to set up Timer On and Timer Off, the system will keep the present setting status, after the Timer Off When system is running, at the same time to set up Timer On and Timer Off, the unit will keep the current presetting working status, if Timer Off act, the unit will stop working.

When unit is stop running, at the same time to set up the Timer On and Timer Off, the unit will keep stop running, until Timer On act, the unit will start to work, after this when Timer On of every day act, it will run at presetting modes, when Timer Off act, the unit will stop to work. If the setting for the Timer Off and Timer On are the same, the Timer Off will act.

3. 6 Memory function

Contents of memory: Modes, Up and Down Swing, Light, Setting Temp. Setting fan speed, Common setting for Timer (Hours will not memorized). After Timer Off, when repower on, the unit will automatically turn on and run at memorized contents.

There is no Timer Setting in the remote control order that the unit will memorize the remote control order of last setting and it will run at that mode.

There is common setting for Timer of last setting by remote controller, before the Timer act, if power off and after powered on, the unit will memorize the timer of last setting by remote control, the timer will recalculate after powered on.

There is Timer function at last setting by remote control, if Timer function has act, the power off after Timer On or Timer Off, after powered on, the unit will memorize the running mode before power off, under Hours setting for Timer, the memory is invalid.

3. 7 I Feel function

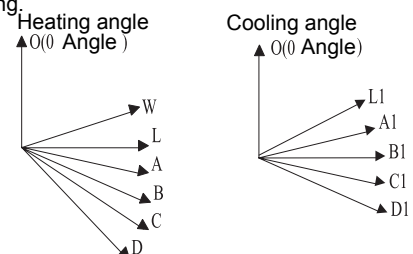
When controller received the orders that the controller will work according to ambient temperature which is sent by remote control (Except Defrost and Anti-cool wind, it will still adopt the air conditioner self ambient sensor sampling value), the remote control in every 10mins, to sent the ambient temperature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

3. 8 TURBO function

Only in Cool or Heat mode, the Turbo setting is available, when controller received this order, the indoor fan will run at super high, sent the outdoor unit Turbo signal and sent the high fan speed.

3.9 Up\Down swing fan function

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



4 Displayer

4. 1 Basic display

(1) After powered on, the displaying fure will fully displayed then only power indicator light on.

(2) Remote control to turn on the unit, the running indicator and cooling indicator will light on; Heat mode: the running indicator and heating indicator will light on; In Heat mode, running indicator and dehumidifying indicator light on; Fan mode, running indicator light on; Auto mode: running indicator and actual running mode indicator will light on.

(3) If turns off the Light button, that all display will be turned off (still valid at unit off)

(4) After set up the SLEEP function, the displayer will keep original displaying status that is Sleep function will not affect the light on and off.

4. 2 Dual 8 display

The nixie tube will display current setting temperature that the setting temperature range is 16-30 °C. In Auto mode, the Cool and Fan will display 25 °C, in Heat will display 20 °C, cooling only controller only display 25 °C Display indoor temperature, the temperature setting range is 0 °C to 60 °C

4. 3 Adhered display

When unit is running and light function was set up as Open that will display four pcs of decoration frame.

4. 4 Indoor unit malfunction display

| Malfunction | Dual 8 display | Running light | Heating light | Cooling light |
|---|----------------|----------------|----------------|---------------|
| System abnormal (anti-high temp, unit will stop, cooling overload) | H4 | | Blink 4 times | |
| Compressor overload protection | H3 | | Blink 3 times | |
| Modes protection | H5 | | Blink 5 times | |
| High pressure protection | E1 | Blink once | | |
| Anti-freeze protection unit will stop | E2 | Blink twice | | |
| Air exhaust tempeature protection | E4 | Blink 4 times | | |
| Low voltage overcurrent protection | E5 | Blink 5 times | | |
| Modes conffliction | E7 | Blink 7 times | | |
| Communication malfunction | E6 | Blink 6 times | | |
| Defrost or heating oil return | H1 | | Blink once | |
| Indoor ambient temp sensor opened, short circuit | F1 | | | Blink once |
| Any of indoor evaporator sensor opened, short circuit | F2 | | | Blink twice |
| Outdoor ambient sensor opened, short circuit | F3 | | | Blink 3 times |
| Outdoor condensor sensor opened, short circuit | F4 | | | Blink 4 times |
| Outdoor air exhaust sensor opened, short circuit | F5 | | | Blink 5 times |
| Start up failure | H7 | | Blink 7 times | |
| PFC malfunction | HC | | Blink 6 times | |
| Compressor demagnetization protection | HE | | Blink 14 times | |
| The following malfunction need to use remote control for transfer, within 3s continuously press SLEEP button for 6 times will display, 5min will automatically quit detection status (invalid in Auto mode) or within 3s continuously press SLEEP button for 6 times will quit. | | | | |
| Over current frequency decline | F6 | | | Blink 6 times |
| Whole unit over current frequency decline | F8 | | | Blink 8 times |
| Compressor air exhaust frequency decline | F9 | | | Blink 9 times |
| Whole unit AC current voltage decline frequency decline | E0 | Blink 10 times | | |
| Heating anti-high temperature frequency decline | H0 | | Blink 10 times | |
| Anti-cool wind protection | E9 | Blink 9 times | | |
| Cooling oil return | F7 | | | Blink 7 times |

Note: if several malfunction exist synchronously, the malfunction code will display circularly. Indicator will blink 0.5s and extinguish 0.5s. Defrosting, oil return procedure, and quit within 3mins, will not detect indoor unit all sensor malfunction.

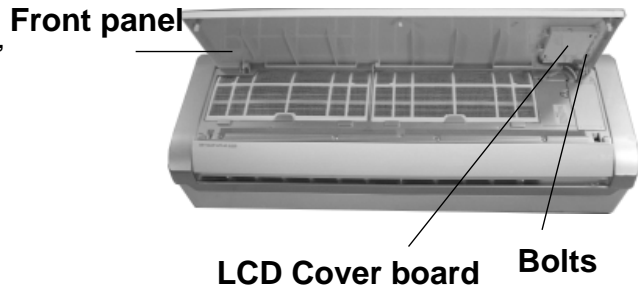
7 Disassembly Procedures

7.1 Disassembly Procedures of Indoor Unit

Operating Procedures / Photos

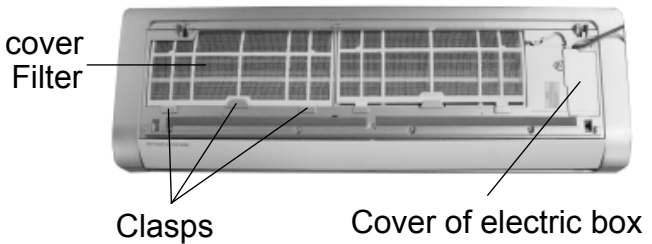
7.1.1 Disassemble Front Panel

To push the raised parts of front panel left and right sides, open the front panel, screw off the screws which fix on the LCD cover board, take off the joint, to lift up the panel, to make the front panel get clear of the clasps, can take down the front panel.



7.1.2 Disassemble Filter and top cover

Push the filter inward, and then pull it upward to remove it. Unscrew the screw fixing the top cover of electric box to remove the top cover.



7.1.3 Disassemble Guide Louver

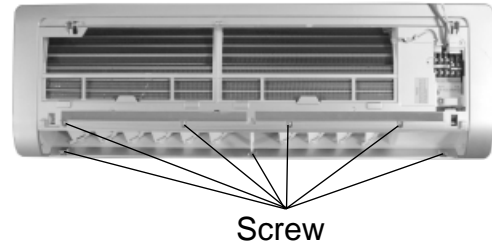
Manually bend the guide louver to loose the clasp at the guide louver. Remove the guide louver.



Operating Procedures / Photos

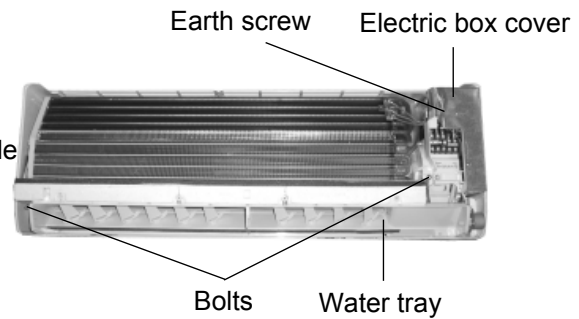
7. 1. 4 Disassemble Front Case

Unscrew the seven screws, pull open the clasp at the front case, and remove the front case.



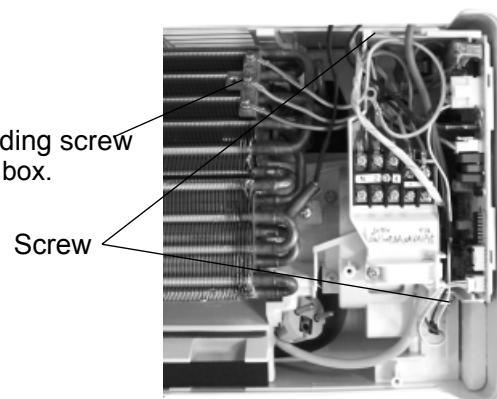
7. 1. 5 Disassemble Water Tray

Firstly to screw off earth screw of electric box cover, loosen clasp, disassemble the electric box cover, then take off the wire terminal of air guide motor, to screw off 2pcs screw from water tray to disassemble it.



7. 1. 6 Disassemble electric box

Firstly screw off 2pcs screw from electric box. Then pull out the wire terminal of motor, screw off 3pcs earth screw, lift it up can take down the electric box.

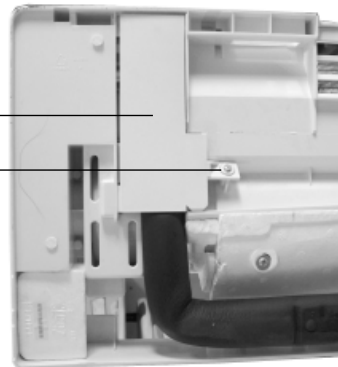


Operating Procedures / Photos

7.1.7 ||||| Disassemble Evaporator

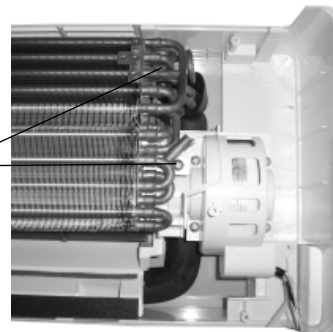
Unscrew the screw to remove the rear pipe clamp.

Rear pipe clamp
Screw



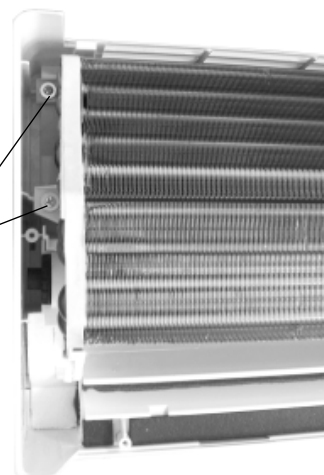
Remove the left two screws at the evaporator,

Screw



Remove the left two screws at the evaporator, turn the evaporator with certain angle, then move the evaporator

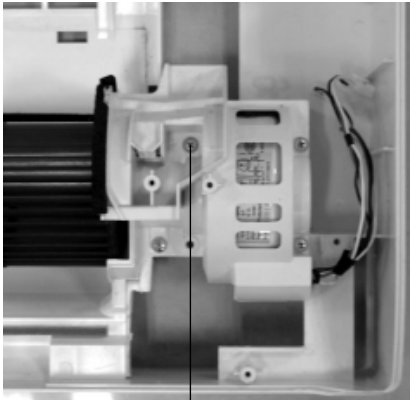
Screw



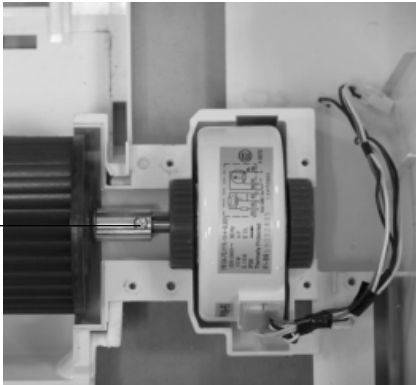
Operating Procedures / Photos

7.1.8 ||||| **Disassemble Motor and cross flow fan**

Unscrew the three screws fixing the motor clamp, loosen the screws holding on the motor and cross flow fan, then you can remove motor and cross flow fan.



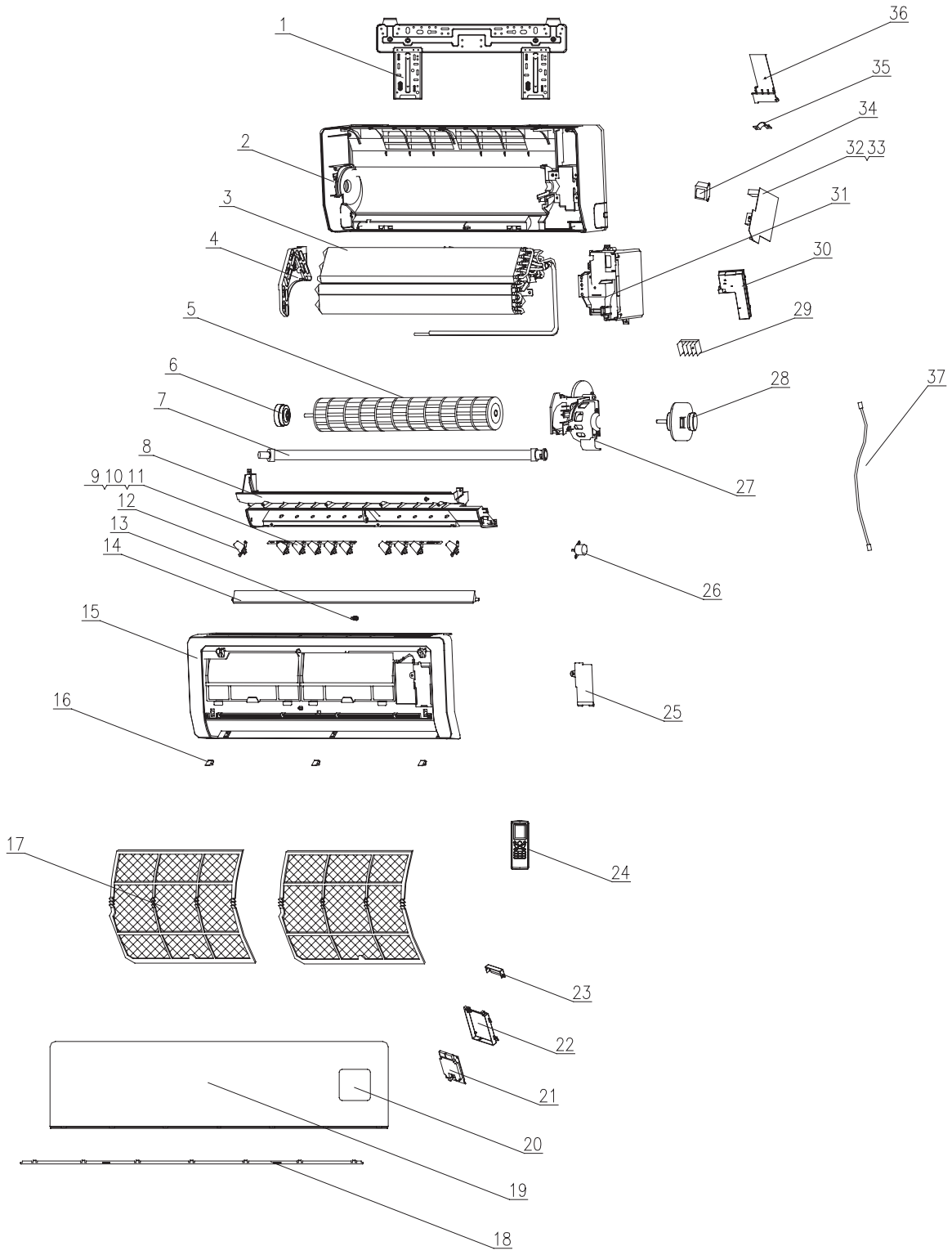
Screw



Screw

8 Explosive view and parts list for indoor unit

8.1 Explosive view for indoor unit

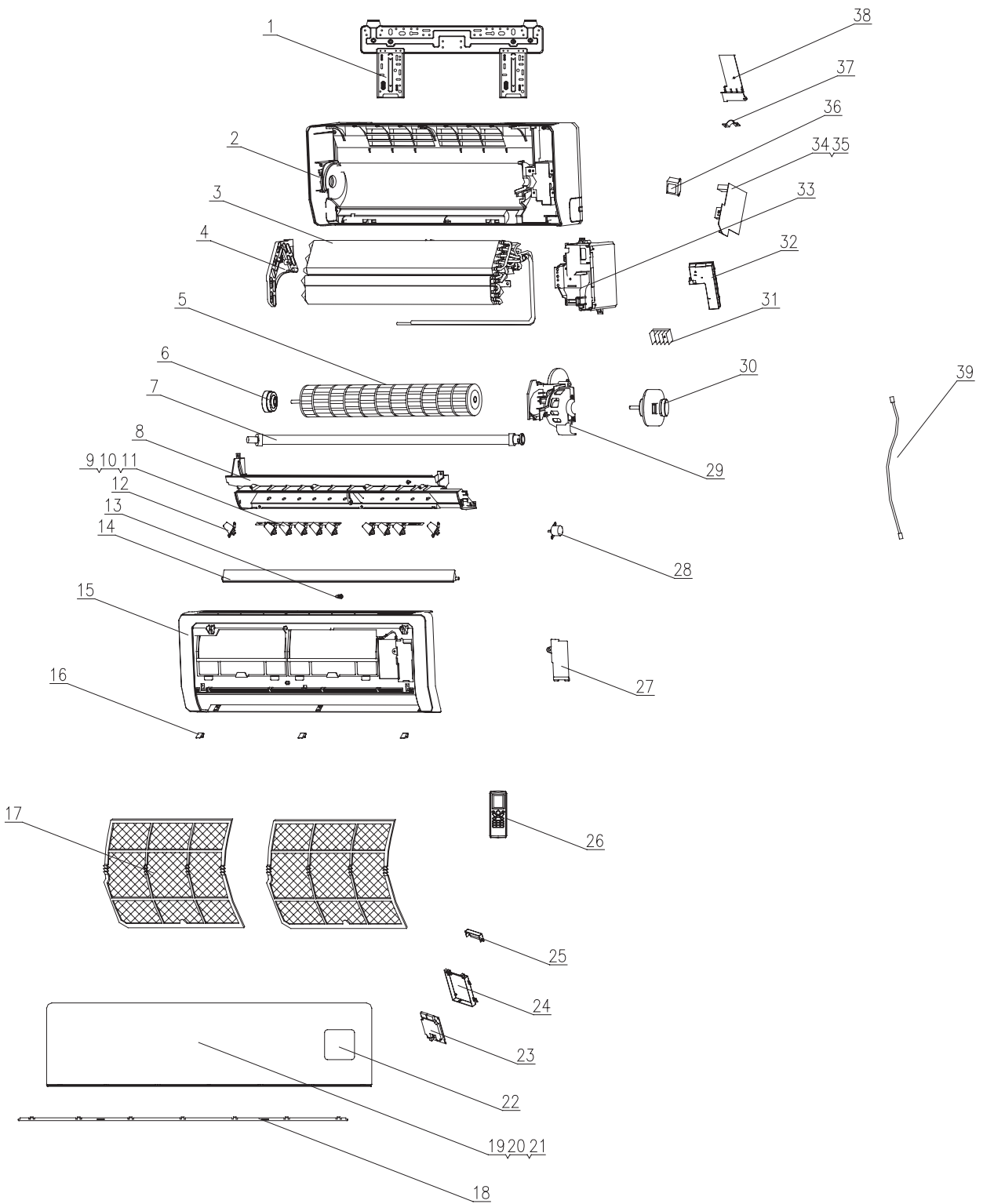


8. 2 Spare parts list for indoor unit

| No | Description | Part Code | | Qty |
|----|-----------------------|-------------------|-------------------|-----|
| | | GWHD(07)AANK3A1BI | GWHD(09)AANK3A1BI | |
| 1 | Wall-Mounting Frame | 01252006 | 01252006 | 1 |
| 2 | Rear Case | 22200092 | 22200092 | 1 |
| 3 | Evaporator Assy | 01002548 | 01002548 | 1 |
| 4 | Evaporator Support | 24212075 | 24212075 | 1 |
| 5 | Cross Flow Fan | 10352422 | 10352422 | 1 |
| 6 | Ring of Bearing | 76512203 | 76512203 | 1 |
| 7 | Drainage Pipe | 0523001401 | 0523001401 | 1 |
| 8 | Water Tray | 20182075 | 20182075 | 1 |
| 9 | Swing Louver | 10512099 | 10512099 | 8 |
| 10 | Swing Linkage 1 | 10582071 | 10582071 | 1 |
| 11 | Swing Linkage 2 | 10582072 | 10582072 | 1 |
| 12 | Swing Louver | 10512097 | 10512097 | 2 |
| 13 | Axle Bush | 10542008 | 10542008 | 1 |
| 14 | Guide Louver | 10512095 | 10512095 | 1 |
| 15 | Front Case | 20002720 | 20002720 | 1 |
| 16 | Screw Cover | 24252016 | 24252016 | 3 |
| 17 | Filter | 11122056 | 11122056 | 2 |
| 18 | Decorative Strip | 20192104 | 20192104 | 1 |
| 19 | Front Panel | 200027185 | 200027185 | 1 |
| 20 | Transparent Mirror | 22432262 | 22432262 | 1 |
| 21 | Receiver Board D5003C | 30565002 | 30565002 | 1 |
| 22 | Display Box | 20122041 | 20122041 | 1 |
| 23 | Display Box Cover | 20122042 | 20122042 | 1 |
| 24 | Remote Control YT1F | 30510049 | 30510049 | 1 |
| 25 | Covering Plate 2 | 20122075 | 20122075 | 1 |
| 26 | Motor MP28VB | 15012086 | 15012086 | 1 |
| 27 | Motor Clamp | 26112116 | 26112116 | 1 |
| 28 | Motor FN10A-PG | 15012078 | 15012078 | 1 |
| 29 | Terminal Board | 42011233 | 42011233 | 1 |
| 30 | Electric Box Cover 1 | 20102848 | 20102848 | 1 |
| 31 | Electric Box | 20112061 | 20112061 | 1 |
| 32 | Main PCB M514F2CJ | 30055060 | 30055060 | 1 |
| 33 | Jumping Connector | 4202300104 | 4202300104 | 1 |
| 34 | Transformer 48X26M | 43110283 | 43110283 | 1 |
| 35 | Wire Clamp | 26112121 | 26112121 | 1 |
| 36 | Rear Clamp | 26112117 | 26112117 | 1 |
| 37 | Connecting Cable | 400204056 | 400204056 | 1 |

The above data are subject to be changed without notice.

8.3 Explosive view of parts for indoor unit



8. 4 Parts list of indoor unit

| No | Description | Part Code | Qty |
|----|-----------------------|-------------------|-----|
| | | GWHD(12)ABNK3A1BI | |
| 1 | Wall-Mounting Frame | 01252008 | 1 |
| 2 | Rear Case | 22200092 | 1 |
| 3 | Evaporator Assy | 01002549 | 1 |
| 4 | Evaporator Support | 24212076 | 1 |
| 5 | Cross Flow Fan | 10352023 | 1 |
| 6 | Ring of Bearing | 76512203 | 1 |
| 7 | Drainage Pipe | 0523001401 | 1 |
| 8 | Water Tray | 20182080 | 1 |
| 9 | Swing Louver | 10512099 | 8 |
| 10 | Swing Linkage | 10582450 | 1 |
| 11 | / | / | / |
| 12 | Swing Louver | 10512097 | 2 |
| 13 | Axle Bush | 10542008 | 1 |
| 14 | Guide Louver | 10512102 | 1 |
| 15 | Front Case | 20002760 | 1 |
| 16 | Screw Cover | 24252019P | 3 |
| 17 | Filter | 11122059 | 2 |
| 18 | Decorative Strip | 20192109 | 1 |
| 19 | Front Panel | 2000276104 | 1 |
| 20 | Clamp | 02112013 | 3 |
| 21 | Magnet | 70840001 | 3 |
| 22 | Transparent Mirror | 22432262 | 1 |
| 23 | Receiver Board D5003C | 30565002 | 1 |
| 24 | Display Box | 20122041 | 1 |
| 25 | Display Box Cover | 20122042 | 1 |
| 26 | Remote Control YT1F | 30510049 | 1 |
| 27 | Covering Plate | 20122074 | 1 |
| 28 | Motor MP28VB | 15012086 | 1 |
| 29 | Motor Clamp | 26112123 | 1 |
| 30 | Motor FN10A-PG | 15012078 | 1 |
| 31 | Terminal Board | 42011233 | 1 |
| 32 | Electric Box Cover 1 | 20102848 | 1 |
| 33 | Electric Box | 20112061 | 1 |
| 34 | Main PCB M514F2CJ | 30055060 | 1 |
| 35 | Jumping Connector | 4202300106 | 1 |
| 36 | Transformer 48X26M | 43110283 | 1 |
| 37 | Wire Clamp | 26112121 | 1 |
| 38 | Rear Clamp | 26112124 | 1 |
| 39 | Connecting Cable | 400204056 | 1 |

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