

Service Manual

Cutee Serie

Please be aware that all product codes beginning with GPC are to be seen as the TOSOT units beginning with TPC.

TOSOT unit in this manual:

TPC09AI-K3NNC6B

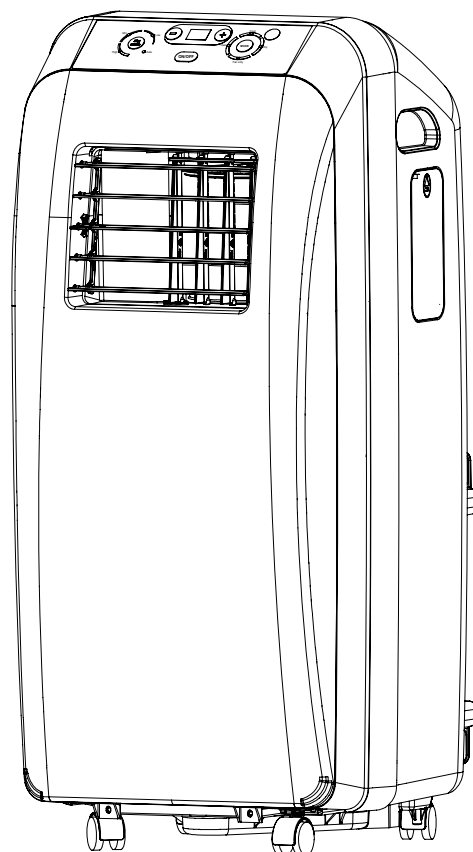
Table of Contents

Summary and Features	1
1.Safety Precautions	2
2.Specifications	3
3.Part Name	5
4.Outline and Installation Dimension	6
5.Refrigerant System Diagram	7
6.Schematic Diagram	8
6.1 Electrical Data	8
6.2 Electrical Wiring	8
6.3 Printed Circuit Board	10
7.Function and Control	12
7.1 Remote Controller Description	12
7.2 Panel Control Description	14
7.3 Description of Each Control Operation	15
8.Installation Instructions	17
9.Exploded Views and Parts List	19
10.Troubleshooting	23
10.1 Confirm Below 2 Points Before Any Failures Occurred	23
10.2 Error Code	23
10.3 Failure Repair	24
10.4 Failure Phenomenon and Solution	28
11.Removal Procedure	29

Summary and Features

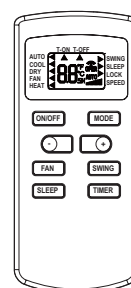
MODELS:

GPC08AI-K3NNC6A(CK010017400)
GPC08AI-K3NNC6A(CK010017402)
GPC09AI-K3NNC6B(CK010019100)
GPC10AI-K3NNC6A(CK010017500)
GPC10AI-K3NNC6A(CK010017501)



Remote Controller:

YX1F



1.Safety Precautions

Installing, starting up, and servicing air conditioner can be hazardous due to system pressure, electrical components, and equipment location, etc.


Only trained, qualified installers and service personnel are allowed to install, start-up, and service this equipment.


Untrained personnel can perform basic maintenance functions such as cleaning coils. All other operations should be performed by trained service personnel.

When handling the equipment, observe precautions in the manual and on tags, stickers, and labels attached to the equipment. Follow all safety codes. Wear safety glasses and work gloves. Keep quenching cloth and fire extinguisher nearby when brazing.

Read the instructions thoroughly and follow all warnings or cautions in literature and attached to the unit. Consult local building codes and current editions of national as well as local electrical codes.

Recognize the following safety information:

 **Warning** Incorrect handling could result in personal injury or death.

 **Caution** Incorrect handling may result in minor injury, or damage to product or property.

 **Warning**

All electric work must be performed by a licensed technician according to local regulations and the instructions given in this manual.

- Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.
- Never supply power to the unit unless all wiring and tubing are completed, reconnected and checked.
- This system adopts highly dangerous electrical voltage. Incorrect connection or inadequate grounding can cause personal injury or death. Stick to the wiring diagram and all the instructions when wiring.
- Have the unit adequately grounded in accordance with local electrical codes.
- Have all wiring connected tightly. Loose connection may lead to overheating and a possible fire hazard.

All installation or repair work shall be performed by your dealer or a specialized subcontractor as there is the risk of fire, electric shock, explosion or injury.

- Follow all the installation instructions to minimize the risk of damage from earthquakes, typhoons or strong winds.
- Avoid contact between refrigerant and fire as it generates poisonous gas.
- Apply specified refrigerant only. Never have it mixed with any other refrigerant. Never have air remain in the refrigerant line as it may lead to rupture and other hazards.
- Make sure no refrigerant gas is leaking out when installation is completed.
- Should there be refrigerant leakage, the density of refrigerant in the air shall in no way exceed its limited value, or it may lead to explosion.
- Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position.
- There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.
- Keep your fingers and clothing away from any moving parts.
- Avoid using heating appliance near the air conditioner.
- Clear the site after installation. Make sure no foreign objects are left in the unit.
- Always ensure effective grounding for the unit.

 **Caution**

- Never install the unit in a place where a combustible gas might leak, or it may lead to fire or explosion.
- Make a proper provision against noise when the unit is installed at a telecommunication center or hospital.
- Provide an electric leak breaker when it is installed in a watery place.
- Never wash the unit with water.
- Handle unit transportation with care. The unit should not be carried by only one person if it is more than 20kg.
- Never touch the heat exchanger fins with bare hands.
- Never touch the compressor or refrigerant piping without wearing glove.
- Do not have the unit operate without air filter.
- Should any emergency occur, stop the unit and disconnect the power immediately.

2.Specifications

Parameter		Unit	Value		
Model			GPC08AI-K3NNC6A	GPC10AI-K3NNC6A	GPC09AI-K3NNC6B
Product Code			CK010017400 CK010017402	CK010017500 CK010017501	CK010019100
Power Supply	Rated Voltage	V ~	220-240	220-240	220-240
	Rated Frequency	Hz	50	50	50
	Phases		1	1	1
Cooling Capacity		Btu/h	8000	9500	9000
Heating Capacity		Btu/h	-	-	-
Cooling Power Input		W	900	1065	1010
Heating Power Input		W	-	-	/
Cooling Power Current		A	4.0	4.7	4.48
Heating Power Current		A	-	-	-
Rated Input		W	1100	1250	1250
Rated Current		A	4.78	5.40	6.44
Input of Heater		W	-	-	-
Air Flow Volume(H/M/L)		m³/h	250/200/180	250/200/180	250/200/180
Dehumidifying Volume		L/h	1	1	-
EER		(Btu/h)/W	8.91	8.91	8.91
COP		(Btu/h)/W	-	-	-
SEER		W/W	-	-	-
HSPF		W/W	-	-	-
Application Area		m²	10-16	12-18	10-16
Climate Type			T1	T1	T1
Isolation			I	I	I
Moisture Protection			IP24	IP24	IPXO
Permissible Excessive Operating Pressure for the Discharge Side		MPa	3.8	3.8	3.8
Permissible Excessive Operating Pressure for the Suction Side		MPa	1.0	1.0	1.0
Throttling Method			Capillary	Capillary	Capillary
Defrosting Method			-	-	-
Fuse		A	3.15	3.15	3.15
Operation Temp		°C	16 ~ 30	16 ~ 30	16~30
Ambient Temp (Cooling)		°C	18 ~ 35	18 ~ 35	18~35
Ambient Temp (Heating)		°C	-	-	-
Sound Pressure Level (H/M/L)		dB (A)	56/54/52	56/54/52	56/54/52
Sound Power Level (H/M/L)		dB (A)	66/64/62	66/64/62	66/65/64
Dimension (WXHXD)		mm	340X780X394	340X780X394	340X780X394
Dimension of Carton Box (LXWXH)		mm	397X547X800	397X547X800	397X547X800
Dimension of Package (LXWXH)		mm	400X550X815	400X550X815	400X550X815
Net Weight		kg	23.5	27	27
Gross Weight		kg	29	32.5	32.5
Refrigerant			R410A	R410A	R410A
Refrigerant Charge		kg	0.48	0.55	0.59

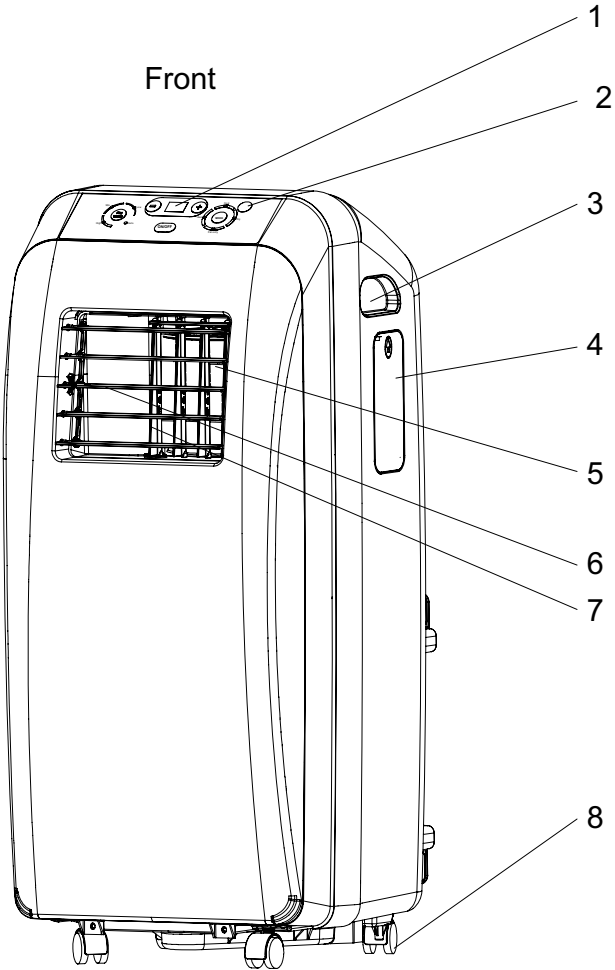
Compressor	Compressor Manufacturer/ Trademark		Xi'an Qing'an Refrigeration Equipment Co.,LTD/QINGAN	ZHUHAI LANDA COMPRESSOR Co.,LTD/GREE	ZHUHAI LANDA COMPRESSOR CO., LTD/GREE
	Compressor Model		YZG-A082Y2T2	QXA-B102T130	QXA-B092T130
	Compressor Oil		RB68EP	POE(ZE-GLES RB 68EP)	POE(RB68EP)
	Compressor Type		Rotary	Rotary	Rotary
	L.R.A.	A	17	19	25.5
	Compressor RLA	A	3.5	3.9	3.6
	Compressor Power Input	W	730	850	780
	Overload Protector		B135-140-241E	Build in	UP3-B1
Evaporator	Fan Type		Centrifugal	Centrifugal	Centrifugal
	Diameter Length(DXL)	mm	Φ108.5X146	Φ108.5X146	Φ146X108.5
	Fan Motor Speed(H/ML)	r/min	1250/1150/1050	1250/1150/1050	1250/1150/1050
	Output of Fan Motor	W	45	45	45
	Fan Motor RLA	A	0.41	0.41	0.41
	Fan Motor Capacitor	μF	3.5	3.5	3.5
	Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Pipe Diameter	mm	Φ7	Φ7	Φ7
	Row-fin Gap	mm	2-1.3	3-1.3	3-1.3
	Coil Length (LXDXW)	mm	379.5X25.4X228.6	366.2X38.1X228.6	379.5X38.1X228.6
	Swing Motor Model		-	-	-
	Output of Swing Motor	W	-	-	-
Condenser	Fan Type		Centrifugal	Centrifugal	Centrifugal
	Fan Diameter	mm	Φ185X77	Φ185X77	Φ185X77
	Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Pipe Diameter	mm	Φ7	Φ7	Φ7
	Rows-fin Gap	mm	2-1.4	2-1.4	2-1.4
	Coil Length (LXDXW)	mm	354.2X38.1X266.7	354.2X38.1X266.7	354.2X25.4X266.7
	Fan Motor Speed(H/ML)	rpm	-	-	1250/1150/1050
	Output of Fan Motor	W	-	-	45
	Fan Motor RLA	A	-	-	0.41
	Fan Motor Capacitor	μF	-	-	3.5

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

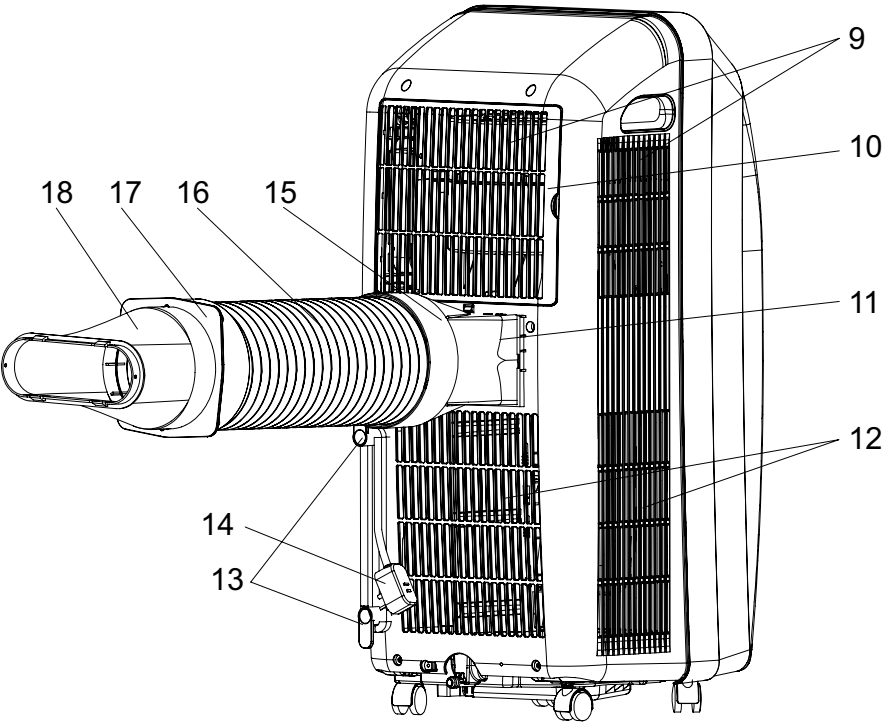
3.Part Name

1	Contro panal and display lamp
2	Remove control signal receiver window
3	Handel
4	Remote conrtoller box
5	Air outlet
6	Vertical louvers
7	Horizontal louvers
8	Wheel
9	Air inlet
10	Grille
11	Air outlet
12	Air inlet
13	Power cord clamp
14	Power cord
15	Window exhaust adapter B
16	Exhaust hose
17	Window exhaust adapter A
18	Window exhaust adapter C

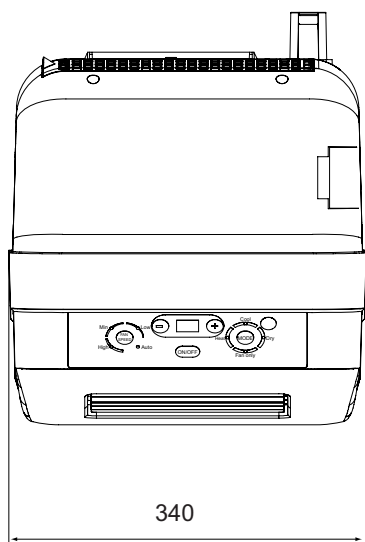
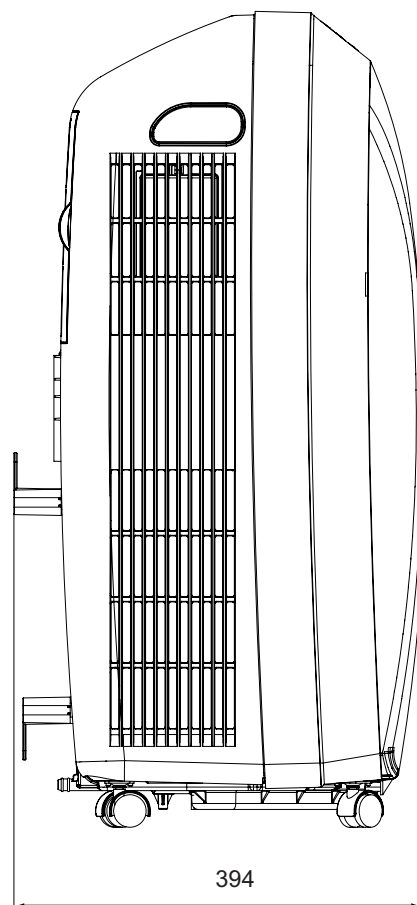
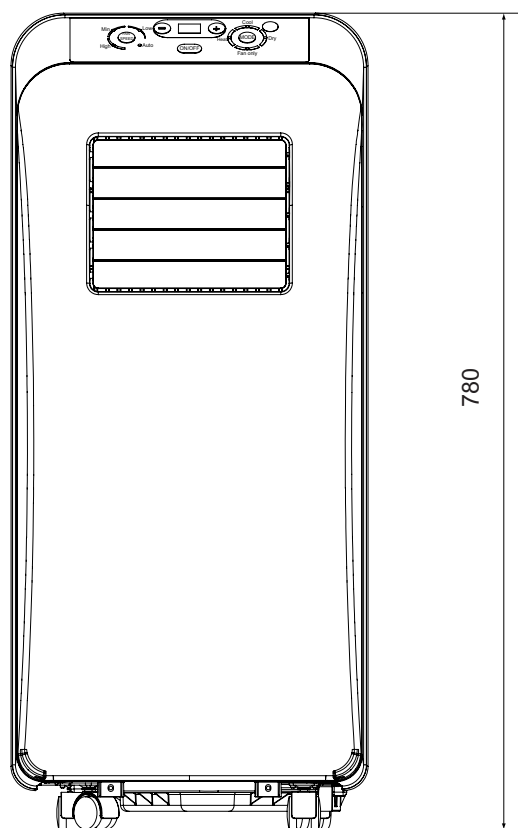
Front



Rear

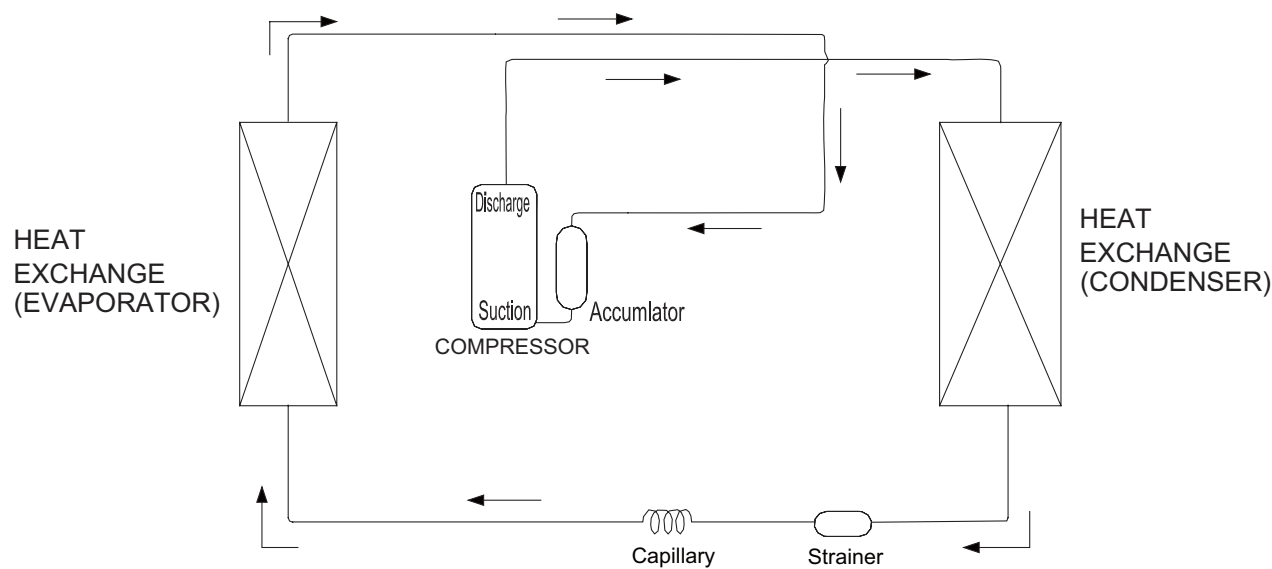


4.Outline and Installation Dimension



Unit:mm


5.Refrigerant System Diagram



6.Schematic Diagram

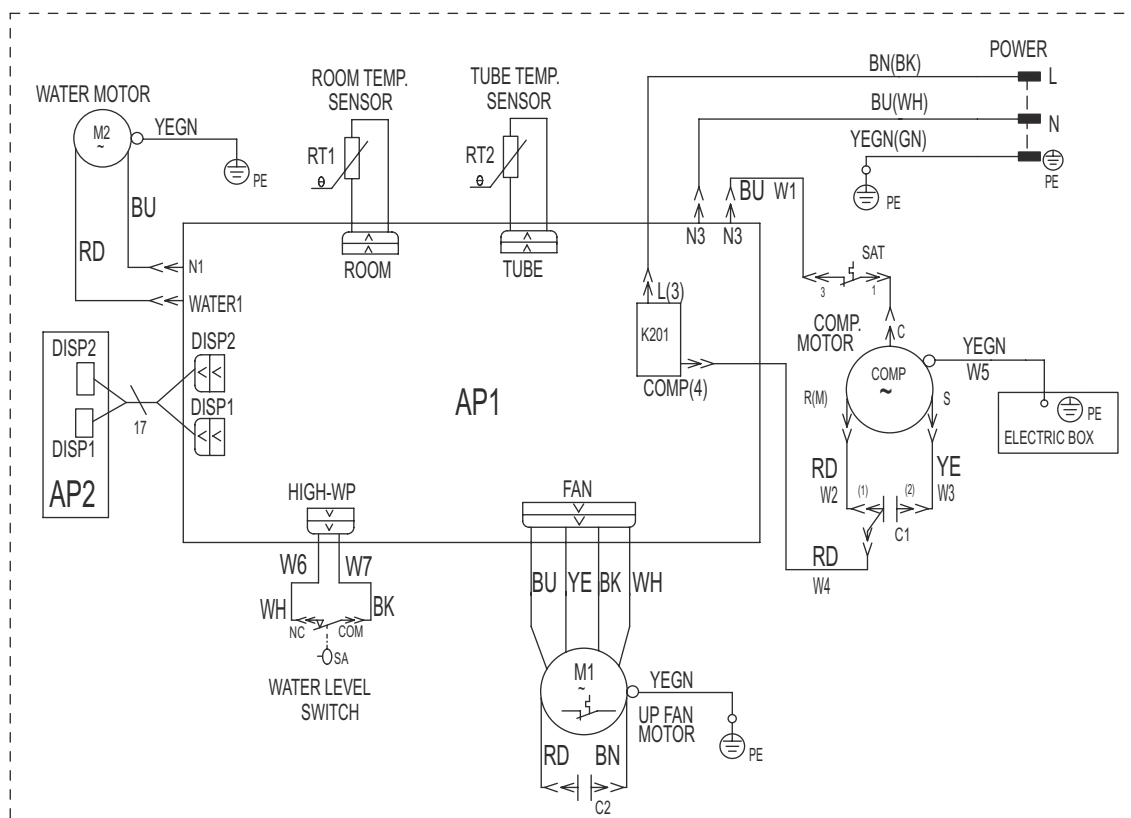
6.1 Electrical Data

Meaning of marks

Symbol	Color symbol	Symbol	Color symbol
OG	ORANGE	BN	BROWN
WH	WHITE	BU	BLUE
YE	YELLOW	BK	BLACK
RD	RED	Symbol	Parts name
YEGN	YELLOW GREEN		PROTECTIVE EARTH
/	/	COMP	COMPRESSOR

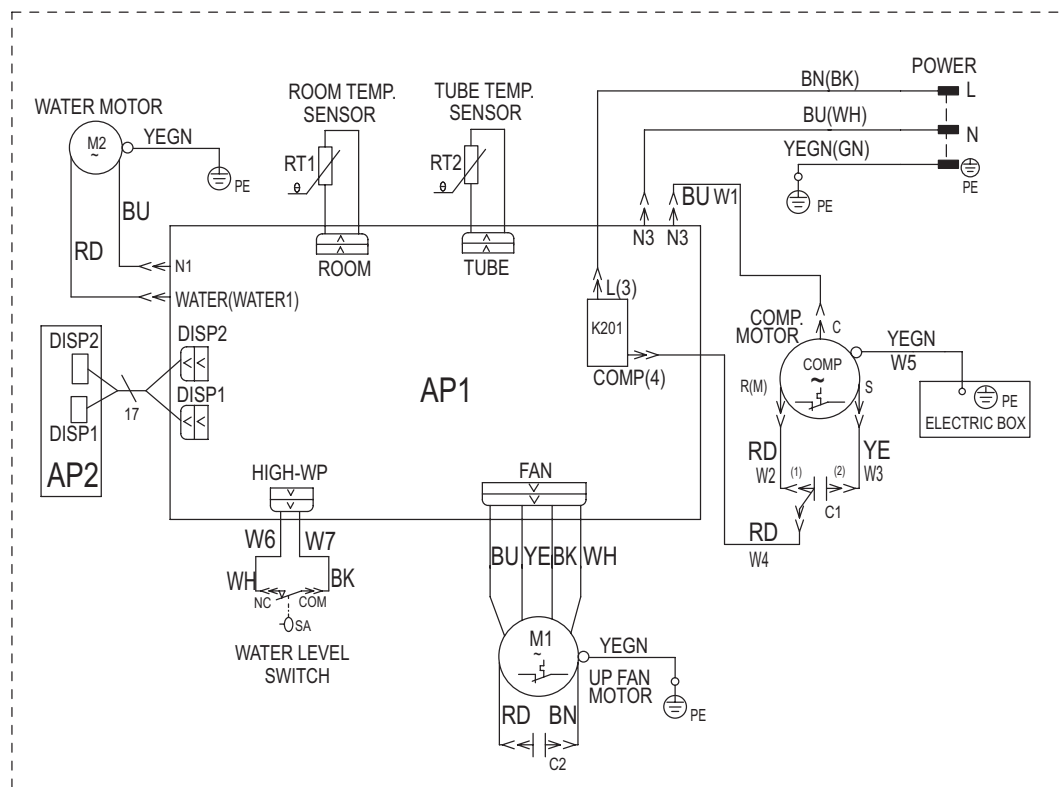
6.2 Electrical Wiring

GPC08AI-K3NNC6A(CK010017400/CK010017402)



GPC10AI-K3NNC6A(CK010017500)

— 111 —

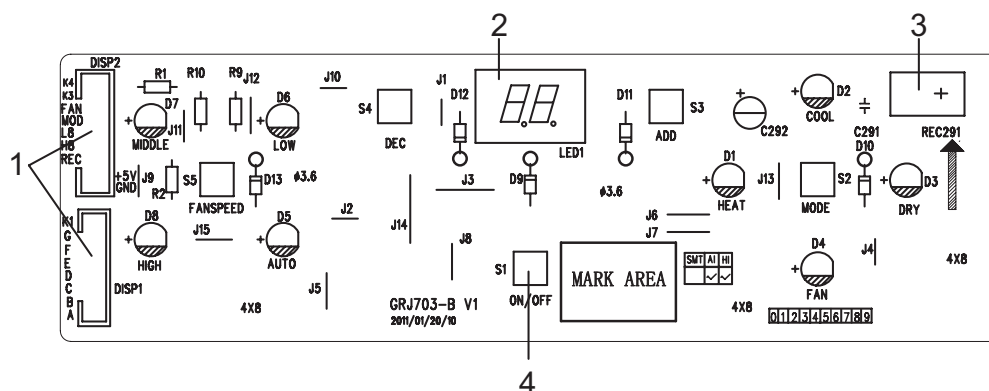


These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.

6.3 Printed Circuit Board

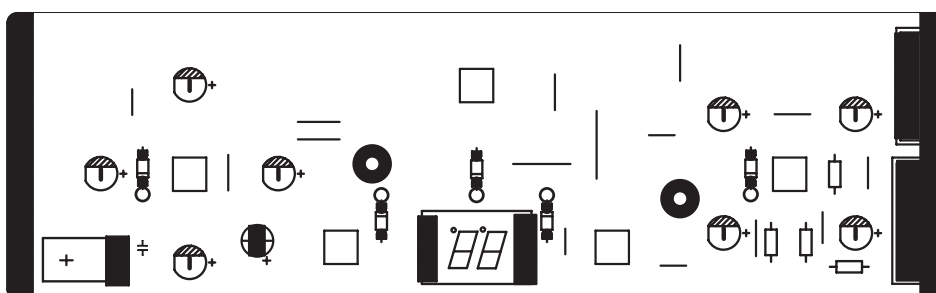
(1) Display Board

● TOP VIEW



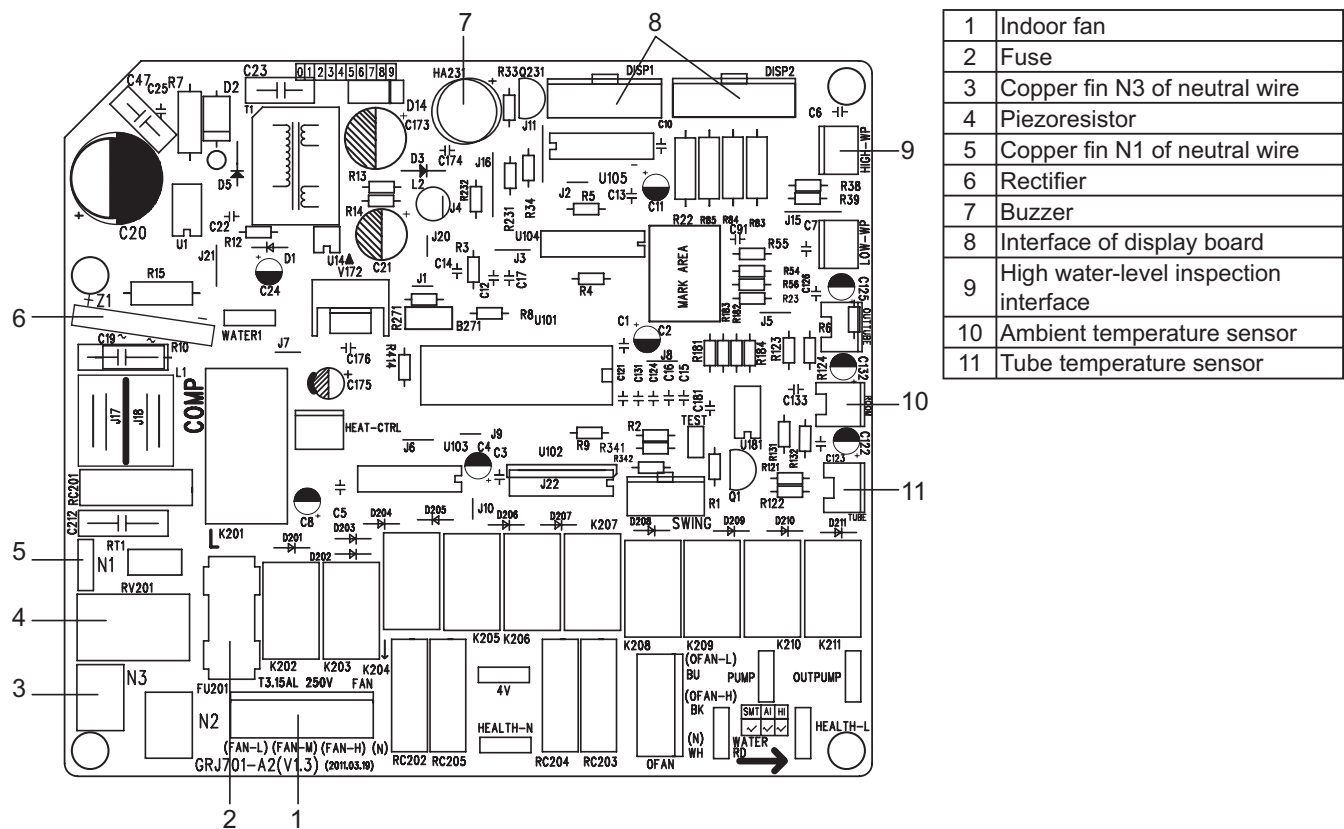
1	Wire connection among display panel
2	Dual-8 display
3	Infrared receiver
4	ON/OFF button

- **BOTTOM VIEW**

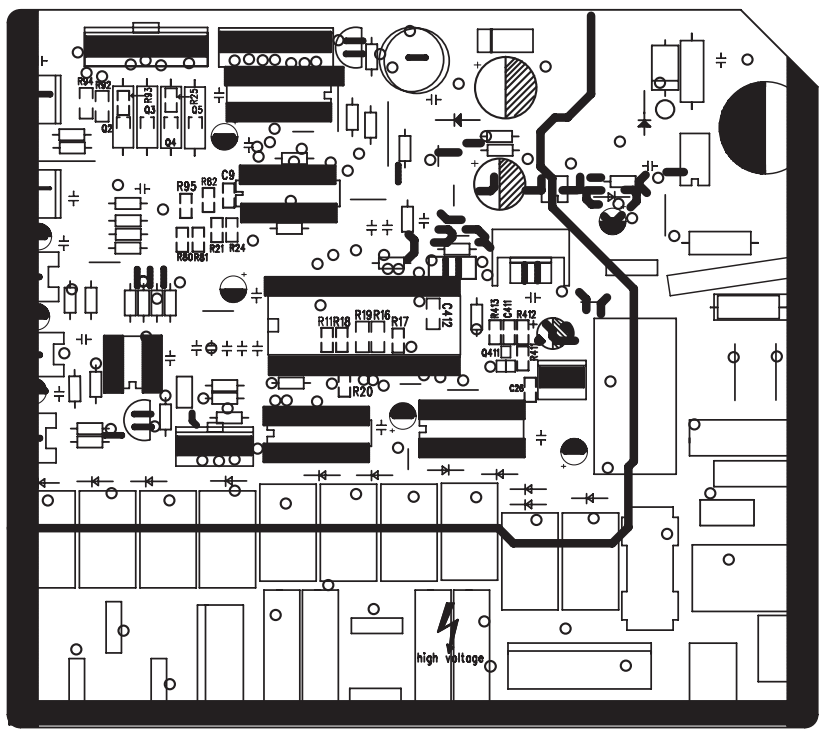


(2)Main Board

● TOP VIEW



● BOTTOM VIEW



7.Function and Control

7.1 Remote Controller Description



- 1 ON/OFF**
Press it to start or stop operation.
- 2 MODE**
Press it to select operation mode(AUTO/COOL/DRY/FAN/HEAT).
- 3 +** :Press it to increase temperature setting.
- 4 -** :Press it to decrease temperature setting.
- 5 FAN**
Press it to set fan speed.
- 6 SWING(Not available on this unit)**
Press it set swing angle.
- 7 SLEEP**
- 8 TIMER**
Press it set auto-on/auto-off timer.

Notice: This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model doesn't have, if press the corresponding button on the remote controller that the unit will keep the original running status.

1 ON/OFF :

Press this button, the unit will be turned on, press it once more, the unit will be turned off. When turning on or turning off the unit, the Timer, Sleep function will be canceled, but the presetting time is still remained.

2 MODE :

Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Auto mode, the temperature will not be displayed; Under Heat mode, the initial value is 28 (82°F); Under other modes, the initial value is 25 (77°F).



*Note: Only for models with heating function.

3 + :

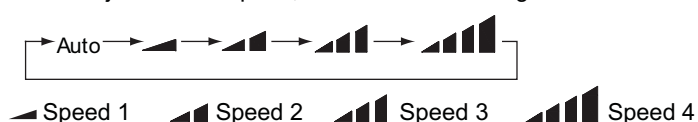
For presetting temperature increasing. Press this button, can set up the temperature, when unit is on. Continuously press and hold this button for more than 2 seconds, the corresponding contents will be changed rapidly, until unpress the button then send the information, (°F) is displaying all along. In Auto mode, the temperature can not be set up, but operate this button can send the signal. Centigrade setting range: 16-30; Fahrenheit scale setting range: 61-86.

4 - :

Presetting temperature can be decreased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the (°F) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent by if pressing this button.

5 FAN:

By pressing this key, you may select AUTO, FAN 1, FAN 2, FAN 3 or FAN 4, and may also cycle between them. FAN 4 only in cool mode. After being energized, AUTO is defaulted. Only LOW fan can be set under DRY mode, pressing this key can not adjust the fan speed, but can send message.



Note: fan 4 is same as fan 3 on this unit.

6 SWING: (Not available On this unit)

Press this key to activate or deactivate the swing.

7 SLEEP:



Press this button, Sleep On and Sleep Off can be selected. After powered on, Sleep Off is defaulted. After the unit is turned off, the Sleep function is canceled. After Sleep function set up, the signal of Sleep will display. In this mode, the time of timer can be adjusted. Under Fan and Auto modes, this function is not available.

8 TIMER:

- By pressing this key under switch-off state, you may set the time for auto switch-on. The range of setting is 0.5 ~ 24 hours. The characters "T-ON" and "H" will flash for 5 seconds. Within 5 seconds, you may make one press of this key to complete the setting and send the message. If the setting is valid, the set time will be displayed for 2 seconds before display of the temperature message. During flash, you may press "+" key to increase the value and press "-" key to decrease the value. The time will increase or decrease by 0.5 hours with each press of this key. If pressing "+" or "-" key continuously, the time value will change rapidly. The remote controller can increase the set time by 0.5 hours every 0.25 seconds. After being energized, the fault is no timer setting, and there is no display of "T-ON" or "H". Press ON/OFF key to switch on the unit and cancel the auto switch-on. When the temperature display becomes constant, you may press this key again to display the remaining set time. The time value, "T-On" and "H" will display constantly for 2 seconds. After 2 seconds, the preset temperature will be displayed. Within these 2 seconds, you may press this key again to cancel the auto switch-on and send the message.

- By pressing this key under switch-on state, you may set the time for auto switch-off. The method of setting as the same as for auto switch-on.

9 Combination of "+" and "-" buttons: About lock

Press "+" and "-" buttons simultaneously to lock or unlock the keypad. If the remote controller is locked,  is displayed. In this case, pressing any button,  blinks three times.

10 Combination of "MODE" and "-" buttons: About switch between fahrenheit and cennigrade

At unit OFF, press "MODE" and "-" buttons simultaneously to switch between  and .

11 Combination of "+" and "FAN" buttons: About Lamp

Under switch-on or switch-off state, you may hold "+" and "FAN" buttons simultaneously for 3 seconds to set the lamp on or off and send the code. After being energized, the lamp is defaulted on.

Replacement of Batteries

1. Remove the battery cover plate from the rear of the remote controller. (As shown in the figure)

2. Take out the old batteries.

3. Insert two new AAA1.5V dry batteries, and pay attention to the polarity.

4. Close the battery cover plate.

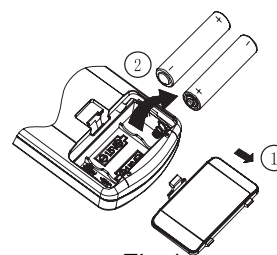


Fig.1

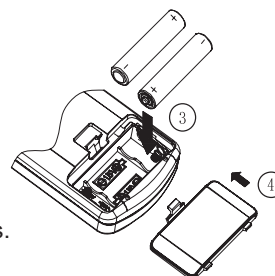
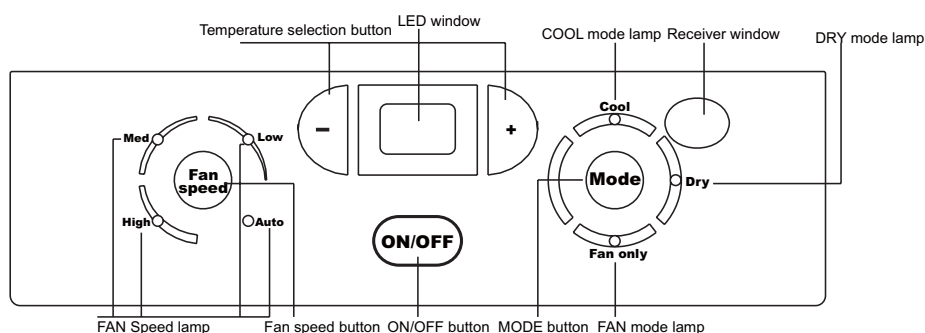


Fig.2

★ Notes:

- When replacing the batteries, do not use old or different types of batteries otherwise, it may cause malfunction.
- If the remote controller will not be used for a long time, please remove batteries to prevent batteries from leaking.
- The operation should be performed in its receiving range.
- It should be kept 1m away from the TV set or stereo sound sets.
- If the remote controller does not operate normally, please take the batteries out and replace them after 30 seconds. If still not operating properly, replace the batteries.

7.2 Panel Control Description



When pressing key is valid, buzzer makes a sound, indicated light indicates relevant state, system will last for 2 seconds.

1. ON/OFF Button

Press the button once to manually turn the unit on. Press once more to turn the unit off.

2. "+", "-" Button

In COOL mode, press "-" once, the set temperature will decrease 1°C(°F), press "+" once, the set temperature will increase 1°C(°F). The set temperature range from 61 -86°F(16 -30°C).

3. MODE Button

Press MODE Button repeatedly to cycle between the modes: Cooling, Dry, and Fan only mode. Each press of the MODE button will light up a different lamp on the control panel. The exhaust hose and window kit must be installed when the unit is in Cool or Dry mode. When using the unit as a fan, it is unnecessary to keep the exhaust hose and window kit connected to the unit.

4. Fan speed Button

When the unit is running in Cool mode, press the Fan speed Button to select the fan speed in High, Middle, Low, Auto.

In cool mode, it can decrease the temperature of the room, and make people very comfortable.

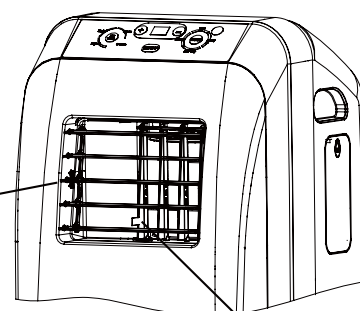
5. Water Full

When COOL or DRY is running, condensate will drain to water tank. When water tank is filled. Buzzer will sound 8 times, LED screen show error code 'H8'. In this case, reference Owners' Manual to drain out water tank.

6. Louver Direction

This unit has 4-Way directional louvers. Use the louver guides to direct air where cooling or fanning is needed most. Hold the louver and adjust the air flow direction, as shown in the right diagram.

Hold this hand grip to adjust the direction of Horizontal Louvers



Hold this hand grip to adjust the direction of Vertical Louvers

7.3 Description of Each Control Operation

The temperature in this manual is expressed by Centigrade. If Fahrenheit is used, the switchover between them is $T_f = T_c \times 1.8 + 32$

1. Temperature Parameters

- Indoor preset temperature (T_{preset})
- Indoor ambient temperature ($T_{\text{amb.}}$)

2. Basic functions

2.1 Cool Mode

Once the compressor is energized, there should be a minimum interval of 3 minutes between two start-ups. Once the compressor operates, the unit will not stop within 6 minutes due to temperature change.

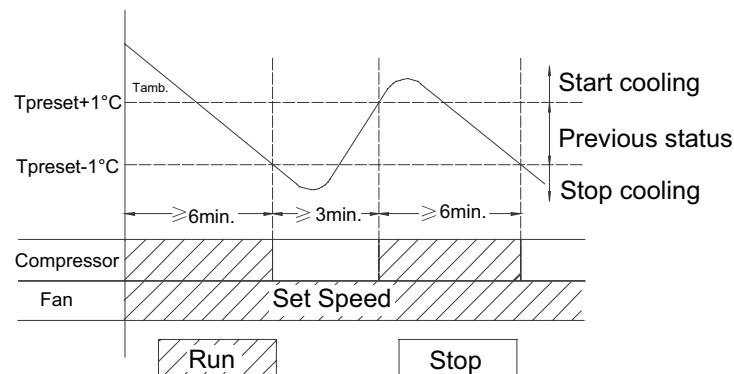
Cooling conditions and process

(a) When $T_{\text{amb.}} \geq T_{\text{preset}} + 2^\circ\text{F}(1^\circ\text{C})$, the unit starts cooling operation. In this case, the compressor and motor operate and the fan operates at set speed.

(b) When $T_{\text{amb.}} \leq T_{\text{preset}} - 2^\circ\text{F}(1^\circ\text{C})$, the compressor and the motor stop while the fan runs at set speed.

(c) When $T_{\text{preset}} - 12^\circ\text{F}(1^\circ\text{C}) < T_{\text{amb.}} < T_{\text{preset}} + 12^\circ\text{F}(1^\circ\text{C})$, the unit will maintain its current running status.

In cooling mode, temperature setting range is $61 \sim 86^\circ\text{F}(16 \sim 30^\circ\text{C})$.



2.2 Dry Mode

Dry Conditions and Process

In this mode, the set temperature and ambient temperature will not be displayed. Fan will operate at low speed while compressor, fan and motor continuously operate.

2.3 Fan Mode

In fan mode, set temperature and ambient temperature will not be displayed. Fan will operate at set speed while compressor and motor stop operating.

In this mode, temperature setting range is $61 \sim 86^\circ\text{F}(16 \sim 30^\circ\text{C})$.

2.4 Auto Mode

In AUTO mode, T_{preset} in standard cooling is $77^\circ\text{F}(25^\circ\text{C})$, while in standard heating is $68^\circ\text{F}(20^\circ\text{C})$.

When $T_{\text{amb.}} > 79^\circ\text{F}(26^\circ\text{C})$, the unit enters auto cooling mode;

When $T_{\text{amb.}} < 68^\circ\text{F}(20^\circ\text{C})$, the unit enters auto fan mode;

When $20 \sim 68^\circ\text{F}(20^\circ\text{C}) < T_{\text{amb.}} \leq 73^\circ\text{F}(23^\circ\text{C})$ if the unit is in fan mode, it will keep its status; If not, it will enter auto dry mode;

When $79^\circ\text{F}(26^\circ\text{C}) \geq T_{\text{amb.}} \geq 74^\circ\text{F}(24^\circ\text{C})$, the unit enters auto dry mode;

When $79^\circ\text{F}(26^\circ\text{C}) \geq T_{\text{amb.}} \geq 68^\circ\text{F}(20^\circ\text{C})$, If the unit is energized for the first time, it will enter dry mode.

3. Other Functions

3.1 Buzzer

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

3.2 Sleep Function

(a) After setting the sleep function in cooling mode, T_{preset} will increase $2^\circ\text{F}(1^\circ\text{C})$ in 1 hour later and $4^\circ\text{F}(2^\circ\text{C})$ totally in 2 hours later. After that, the set temperature will not increase any more and the upper limit of set temperature after increase is $86^\circ\text{F}(30^\circ\text{C})$.

(b) After setting the sleep function in heating mode, T_{preset} will decrease $2^\circ\text{F}(1^\circ\text{C})$ in 1 hour later and $4^\circ\text{F}(2^\circ\text{C})$ totally in 2 hours later. After that, the set temperature will not decrease any more and the lower limit of set temperature after decrease is $61^\circ\text{F}(16^\circ\text{C})$.

(c) There is no sleep function in Fan or Dry mode.

(d) After setting sleep function, it will be cancelled by switching operation mode.

(e) The set temperature displayed on remote controller will not change with the decrease or increase of the set temperature in this mode.

3.3 Auto Fan

(a) fan speed in cooling mode:

$T_{\text{amb.}} \geq T_{\text{preset}} + 4^\circ\text{F}(2^\circ\text{C})$ High speed;

$T_{\text{preset}} < T_{\text{amb.}} < T_{\text{preset}} + 4^{\circ}\text{F}(2^{\circ}\text{C})$ Medium speed;

$T_{\text{amb.}} \leq T_{\text{preset}}$ Low speed;

(b) There is 210s' delay for switch of Auto Fan mode.

3.4 Timer Function

General Timer

Timer ON can be set at unit OFF. If selected ON time is reached, the unit will start to operate according to previous setting status. Time setting range is 0.5-24hr in 30-minute increments.

Timer OFF can be set at unit ON. If selected OFF time is reached, the unit will stop operation. Time setting range is 0.5-24hr in 30-minute increments.

Clock Timer

Timer ON

If timer ON is set during operation of the unit, the unit will continue to operate. If timer ON is set at unit OFF, upon ON time reaches the unit will start to operate according to previous setting status.

Timer OFF

If timer OFF is set at unit OFF, the system will keep standby status. If timer OFF is set at unit ON, upon OFF time reaches the unit will stop operation.

3.5 Memory Function

If the unit is de-energized, it will operate at the previous mode after it is energized again. If the unit operates before de-energization, the compressor will operate in 3 min later after the unit is energized again.

3.6 Indicator Lamp and "Dual 8" Nixie Tube

(a) When the unit operates at cooling mode, the cooling indicator lamp is on and "dual 8" nixie tube displays set temperature.

(b) When the unit operates at fan mode, the fan indicator lamp is on and "dual 8" nixie tube will not display anything.

(c) When the unit operates at dry mode, the dry indicator lamp is on and "dual 8" nixie tube will not display anything.

(d) When the unit operates at heating mode, the heating indicator lamp is on and "dual 8" nixie tube displays set temperature.

3.7 Button

(a) ON/OFF : control ON/OFF of the unit

(b) Mode: The setting of mode is circulated as the cooling mode Dry mode Fan mode.

(c) +/-: Press "+" to increase the set temperature while press "-" to decrease the set temperature when the unit operates. The set temperature will increase or decrease 1°C or 1°C for each press. The set temperature can't be decreased if it reaches 16°C or 61°F while it can't be increased when it reaches 30°C or 86°F . In that case, Auto, Dry or Fan mode will be invalid.

(d): Fan speed button: the setting of fan speed will circulate as follows: Low speed→Med. speed→High speed→Auto speed→Low speed

3.8 Light Control

If light is turned on by remote control, the indicator lamp and "dual 8" nixie tube will display the current status. If it is turned off, all lights will be turned off. If the button on front panel or remote controller is pressed when the light is turned off, the indicator lamp and "dual 8" nixie tube will display the current status for 5s and then the light will be turned off. The display of malfunction is not affected by remote light control.

3.9 Protection Function

Freeze Prevention Protection

When the freeze prevention protection is detected, the compressor will stop and the fan will operate at set speed. Once such protection is removed, the previous status will be resumed in 3 minutes later.

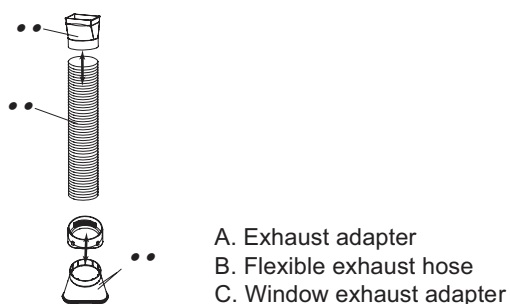
Overflow Prevention Protection

When detecting that the water is full for continuous 3 seconds, overflow prevention protection will occur, and malfunction code H8 will be displayed

8.Installation Instructions

● Install Exhaust Hose and Adapter

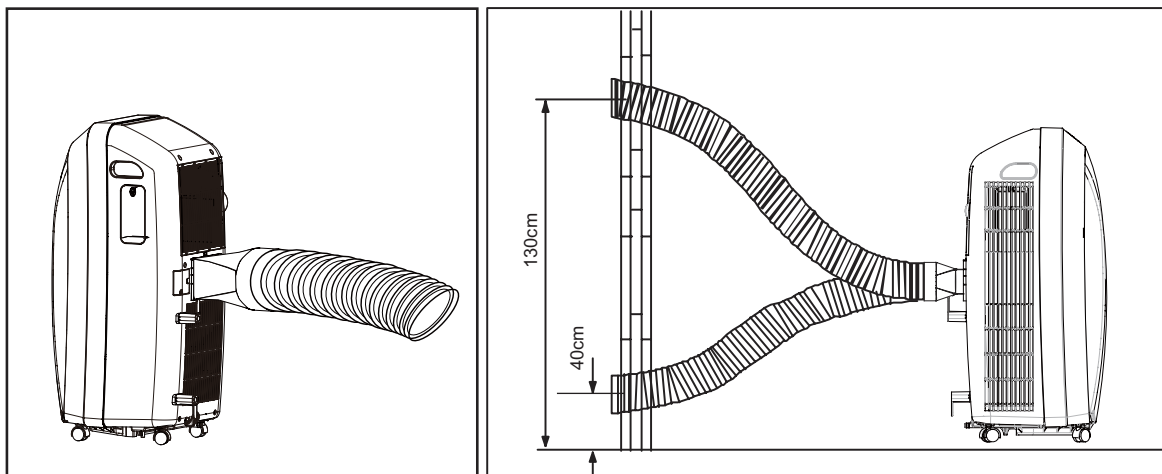
1. Roll air conditioner to its selected location. See Location Requirements.
2. Insert one end of the flexible exhaust hose into the exhaust adapter.
3. Twist clockwise to lock hose into place.
4. Insert the other end of the flexible exhaust hose into the window exhaust adapter.
5. Twist clockwise to lock hose into place.



● Accessories and installation of heat exhaust hose

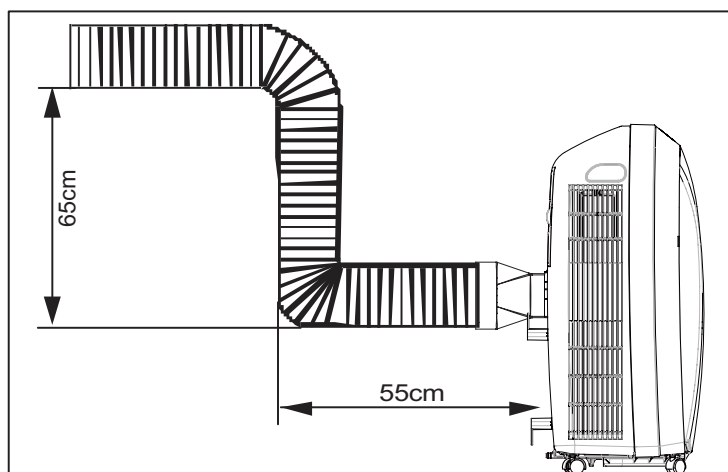
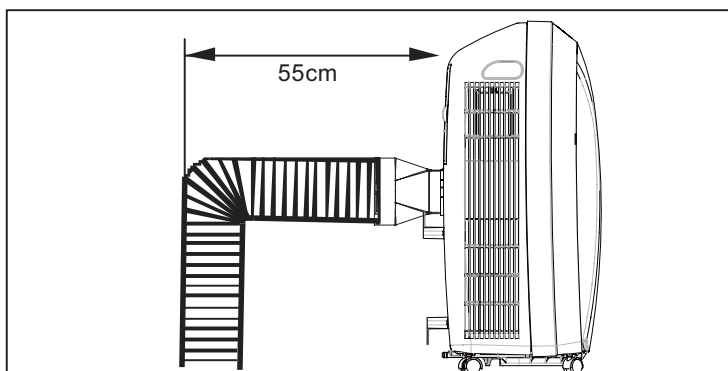


- Length range of exhaust pipe should be 500mm-1500mm.
It is recommended to use it with shortest length.
- When installing, exhaust pipe should be as flat as possible.
Don't prolong the pipe or connect it with other exhaust pipe, or
Correct installation is as shown in figure (When installing it on wall, height of hall should be about 40cm-130cm from floor)

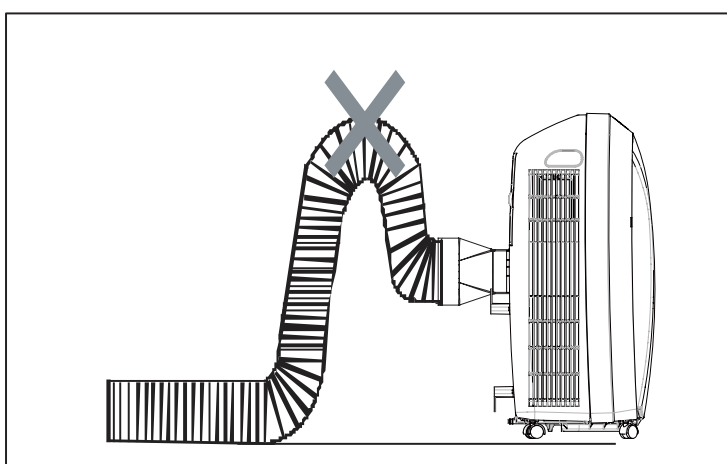




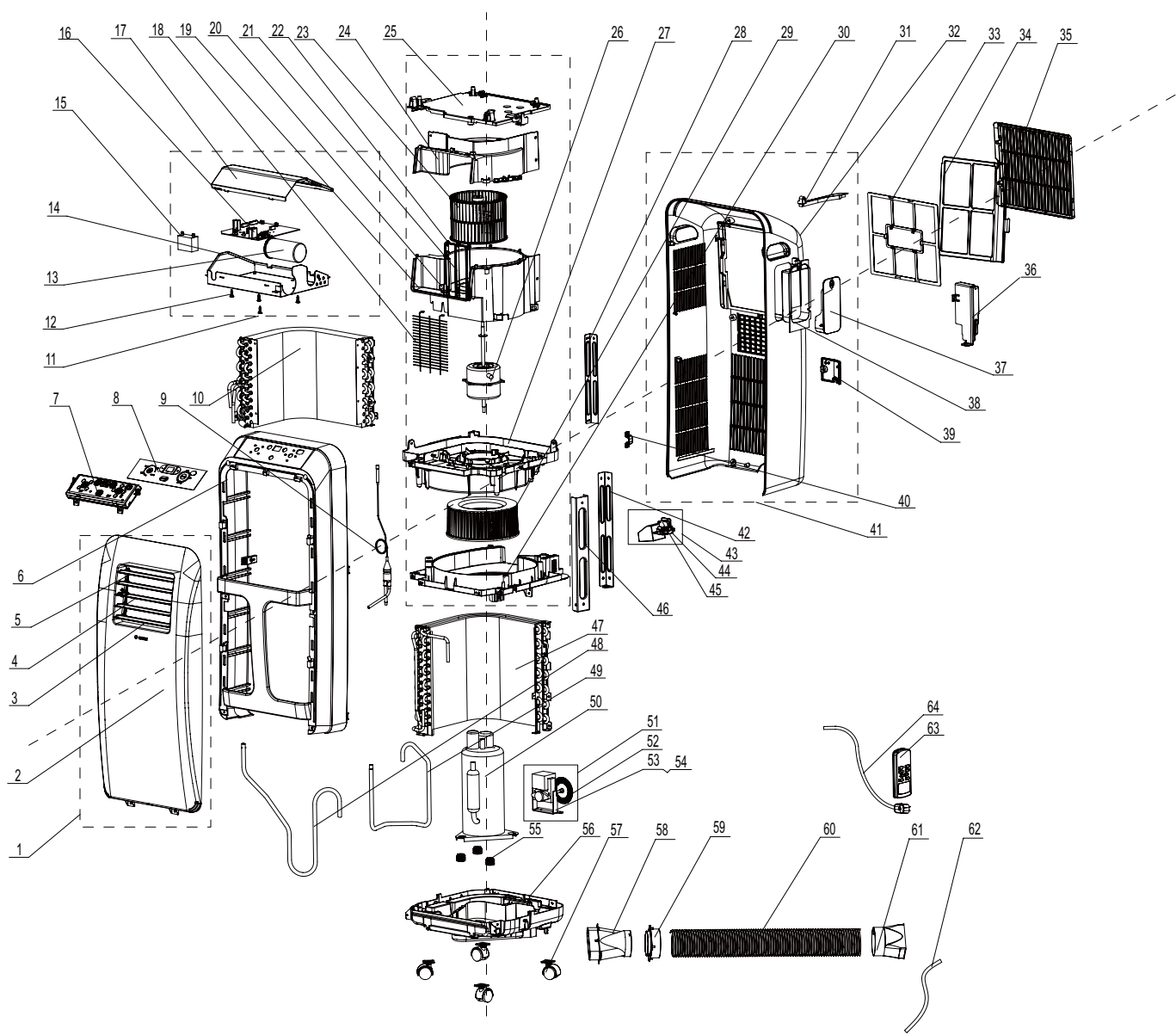
If the pipe are to be bent, please install it by considering following dimension.



Wrong installation is shown in following figure (If the pipe is bent too much, it would easily cause malfunction.)



9.Exploded Views and Parts List



NO.	Description	Part Code		Qty
		GPC08AI-K3NNC6A		
	Product Code	CK010017400	CK010017402	
1	Front Panel Assy	20006125	2000612502	1
2	Front Panel 2	20006122S	2000612201	1
3	Guide Louver 7	10516074	1051607401	4
4	Guide Louver 6	10516073	1051607301	1
5	Guide Blade Lever 2	10586022	1058602201	1
6	Front Case	20006116	2000611604	1
7	Display Board	30567021	30567021	1
8	Membrane	63026168	63026168	1
9	Capillary Sub-assy	03006175	03006175	1
10	Evaporator Assy	01006093	01006093	1
11	Electric Box Assy	01406255	01406255	1
12	Partition Pole (PC board)	7671101601	7671101601	5
13	Capacitor CBB65	33000017	33000017	1
14	Electric Box Sub-Assy	01406050	01406050	1
15	Capacitor CBB61	33010010	33010010	1
16	Main Board	30137023	30137023	1
17	Electric Box Cover	01416019	01416019	1
18	Rear Grill	01476027	01476027	1
19	Propeller Housing(Lower)	22206066	22206066	1
20	Air Louver 2	10516071	1051607101	1
21	Air Louver 1	10516066	1051606601	2
22	Swing Lever	10586020	1058602001	1
23	Centrifugal Fan	10316060	10316060	1
24	Propeller Housing(Upper)	22206067	22206067	1
25	Cover of Propeller Housing	22246095	22246095	1
26	Fan Motor	15016044	15016044	1
27	Motor Holder	26156069	26156069	1
28	Supporting Board 1	01796032	01796032	1
29	Centrifugal Fan	10316061	10316061	1
30	Diversion Circle	10376043	10376043	1
31	Filter Support	24216059	24216059	1
32	Rear Plate	26116124	2611612404	1
33	Filter Sub-assy 1	11126104	1112610402	1
34	Filter Sub-assy 2	11126105	1112610502	1
35	Front Grill	22416055	2241605504	1
36	Water Retaining Box	20186531	20186531	1
37	Cover of Remote Control Box	20126122	2012612204	1
38	Remote Control Box	20116036	2011603604	1
39	Cable Cross Plate	26116125	2611612504	1
40	Wire Clamp	/	/	1
41	Rear Plate Assy	20056130	2005613004	1
42	Supporting Board 2	01796022	01796022	1
43	Water level switch sub-assy	26156045	26156045	1
44	water level switch base	26156041	26156041	1
45	Water Level Switch	45010211	45010211	1
46	Supporting Board 3	01796031	01796031	1
47	Condenser Assy	01106071	01106071	1
48	Discharge Tube	03616163	03616163	1
49	Inhalation Tube	03626192	03626192	1
50	Compressor and Fittings	00106069	00106069	1
51	Motor Sub-assy(Flutter)	15006032	15006032	1
52	Splash Water Flywheel	10336003	10336003	1
53	Motor holder (Shaded Pole Motor)	1706211	1706211	1
54	Fan Motor	150162122	150162122	1
55	Compressor Gasket	76710291	76710291	3
56	Chassis	22226068	22226068	1
57	Castor	24236009	24236009	4
58	Rear Clip	2611601001	2611601001	1
59	Plastic Pipe End	6646017	6646017	1
60	PP hose	523602203	523602203	1
61	Joint	26116087	26116087	1
62	Drainage Hose	5230013	5230013	1
63	Remote Controller	30510065	30510065	1
64	Power Cord	4002046423	4002046423	1

The data above are subject to change without notice.

Exploded Views and Parts List

NO.	Description	Part Code		Qty
		GPC10AI-K3NNC6A		
		Product Code		
		CK010017500	CK010017501	
1	Front Panel Assy	20006125	20006125	1
2	Front Panel 2	20006122S	20006122S	1
3	Guide Louver 7	10516074	10516074	4
4	Guide Louver 6	10516073	10516073	1
5	Guide Blade Lever 2	10586022	10586022	1
6	Front Case	20006116	2000611603P	1
7	Display Board	30567021	30567021	1
8	Membrane	63026168	63066067	1
9	Capillary Sub-assy	03006174	03006174	1
10	Evaporator Assy	01006090	01006090	1
11	Electric Box Assy	01406255	01406255	1
12	Partition Pole (PC board)	7671101601	7671101601	5
13	Capacitor CBB65	33000017	33000017	1
14	Electric Box Sub-Assy	01406050	01406050	1
15	Capacitor CBB61	33010010	33010010	1
16	Main Board	30137023	30137023	1
17	Electric Box Cover	01416019	01416019	1
18	Rear Grill	01476027	01476027	1
19	Propeller Housing(Lower)	22206066	22206066	1
20	Air Louver 2	10516071	10516071	1
21	Air Louver 1	10516066	10516066	2
22	Swing Lever	10586020	10586020	1
23	Centrifugal Fan	10316060	10316060	1
24	Propeller Housing(Upper)	22206067	22206067	1
25	Cover of Propeller Housing	22246095	22246095	1
26	Fan Motor	15016044	15016044	1
27	Motor Holder	26156069	26156069	1
28	Supporting Board 1	01796032	01796032	1
29	Centrifugal Fan	10316061	10316061	1
30	Diversion Circle	10376043	10376043	1
31	Filter Support	24216059	24216059	1
32	Rear Plate	26116124	2611612402	1
33	Filter Sub-assy 1	11126104	1112610402	1
34	Filter Sub-assy 2	11126105	1112610502	1
35	Front Grill	22416055	2241605502	1
36	Water Retaining Box	20186531	20186531	1
37	Cover of Remote Control Box	20126122	2012612202	1
38	Remote Control Box	20116036	2011603602	1
39	Cable Cross Plate	26116125	2611612502	1
40	Wire Clamp	71010103	71010103	1
41	Rear Plate Assy	20056130	20056130	1
42	Supporting Board 2	01796022	01796022	1
43	Water level switch sub-assy	26156045	26156045	1
44	water level switch base	26156041	26156041	1
45	Water Level Switch	45010211	45010211	1
46	Supporting Board 3	01796031	01796031	1
47	Condenser Assy	01106064	01106064	1
48	Discharge Tube	03616162	03616162	1
49	Inhalation Tube	03626191	03626191	1
50	Compressor and Fittings	00101241	00101241	1
51	Motor Sub-assy(Flutter)	15006032	15006032	1
52	Splash Water Flywheel	10336003	10336003	1
53	Motor holder (Shaded Pole Motor)	1706211	1706211	1
54	Fan Motor	150162122	150162122	1
55	Compressor Gasket	76710247	76710247	3
56	Chassis	22226068	22226068	1
57	Castor	24236009	24236009	4
58	Rear Clip	2611601001	2611601001	1
59	Plastic Pipe End	6646017	6646017	1
60	PP hose	523602203	523602203	1
61	Joint	26116087	26116087	1
62	Drainage Hose	5230013	5230013	1
63	Remote Controller	30510065	30510065	1
64	Power Cord	4002046423	4002046423	1

The data above are subject to change without notice.

NO.	Description	Part Code	Qty
		GPC09AI-K3NNC6B	
		CK010019100	
1	Front Panel Assy	20006125	1
2	Front Panel 2	20006122S	1
3	Guide Louver 7	10516074	4
4	Guide Louver 6	10516073	1
5	Guide Blade Lever 2	10586022	1
6	Front Case	20006116	1
7	Display Board	30567021	1
8	Membrane	63026188	1
9	Capillary Sub-assy	03006523	1
10	Evaporator Assy	01006099	1
11	Electric Box Assy	0140625501	1
12	Partition Pole (PC board)	7671101601	5
13	Capacitor CBB65	3300008101	1
14	Electric Box Sub-Assy	01406050	1
15	Capacitor CBB61	33010010	1
16	Main Board	30137023	1
17	Electric Box Cover	01416019	1
18	Rear Grill	01476027	1
19	Propeller Housing(Lower)	22206066	1
20	Air Louver 2	10516071	1
21	Air Louver 1	10516066	2
22	Swing Lever	10586020	1
23	Centrifugal Fan	10316060	1
24	Propeller Housing(Upper)	22206067	1
25	Cover of Propeller Housing	22246095	1
26	Fan Motor	15016069	1
27	Motor Holder	26156088	1
28	Supporting Board 1	01796032	1
29	Centrifugal Fan	1031606101	1
30	Diversion Circle	10376043	1
31	Filter Support	24216059	1
32	Rear Plate	26116124	1
33	Filter Sub-assy 1	11126104	1
34	Filter Sub-assy 2	11126105	1
35	Front Grill	22416055	1
36	Water Retaining Box	20186531	1
37	Cover of Remote Control Box	20126122	1
38	Remote Control Box	20116036	1
39	Cable Cross Plate	26116125	1
40	Wire Clamp	71010103	1
41	Rear Plate Assy	20056130	1
42	Supporting Board 2	01796022	1
43	Water level switch sub-assy	26156045	1
44	water level switch base	26156041	1
45	Water Level Switch	45010211	1
46	Supporting Board 3	01796031	1
47	Condenser Assy	01106064	1
48	Discharge Tube	03636598	1
49	Inhalation Tube	03636592	1
50	Compressor and Fittings	00106078	1
51	Motor Sub-assy(Flutter)	15006032	1
52	Splash Water Flywheel	10336003	1
53	Motor holder (Shaded Pole Motor)	1716211	1
54	Fan Motor	1501606202	1
55	Compressor Gasket	76711004	3
56	Chassis	22226068	1
57	Castor	24236009	4
58	Rear Clip	2611601001	1
59	Plastic Pipe End	6646017	1
60	PP hose	523602203	1
61	Joint	26116087	1
62	Drainage Hose	5230013	1
63	Remote Controller	30510065	1
64	Power Cord	4002046423	1

The data above are subject to change without notice.

10.Troubleshooting

10.1 Confirm Below 2 Points Before Any Failures Occurred

(1) Confirm power supply is OK

Check the plug of power line is normal energized and work.

(2) Confirm power voltage

Make sure the voltage is between normal range, if exceed the range, the unit may abnormally runs.AC 230+/-10%

10.2 Error Code

Please see the blow failure contents and repair methods when the unit is energized or the error code occurred during the unit runs.

Code	Failure Name	Failure Display		Repair Method
		Dual-8 Display	Indicator Lamp	
1	Environment temperature sensor is open, short circuit.	F1	Cooling indicator lamp goes out 3S blinks 1 time, and lights up 0.5S goes out 0.5S	If loose, text resistance value; if normal by universal meter.
2	Temperature sensor for indoor pipe temperature is open, short circuit.	F2	Cooling indicator lamp goes out 3S blinks 2 times, and lights up 0.5S goes out 0.5S	If loose, text resistance value; if normal by universal meter.
3	Over-blow protection	H8	Over-blow indicator lamp goes out 3S blinks 8 times	Refer to the indication of instruction to discharge the water of chassis.
4	Overcurrent protection	E5	Overcurrent protection lamp goes out 3S blinks 5 times	Cut off power supply,after 10 minutes,turn on the unit,if E5 still be displays,please inform the maintenance man to maintain.

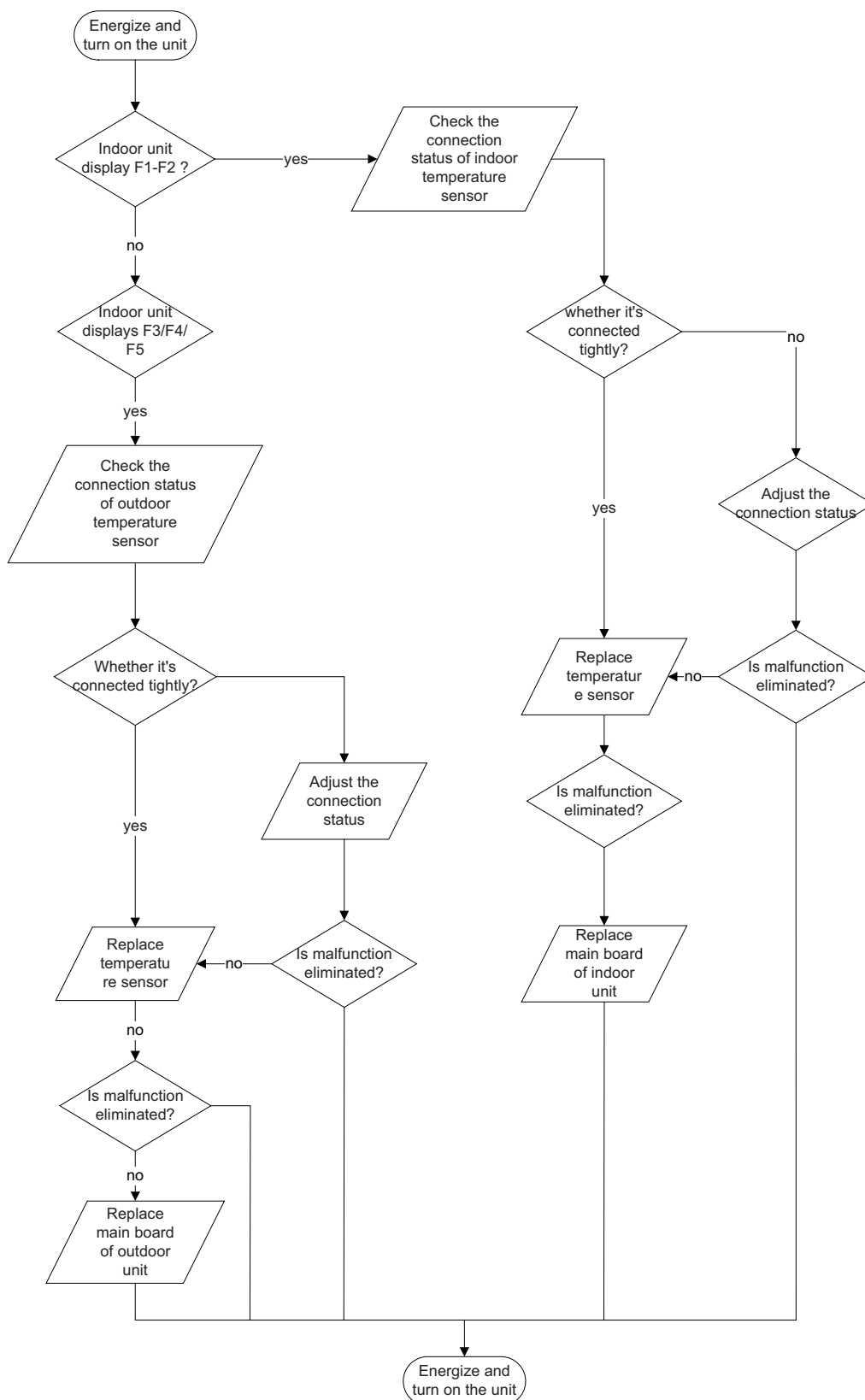
10.3 Failure Repair

10.3.1 Failure for temperature sensor

Main test point:

- If the outdoor environment temperature is in normal range
- If fan motor normally runs.
- If the radiating environment of indoor and outdoor unit is good

Check the flow process of failure is:

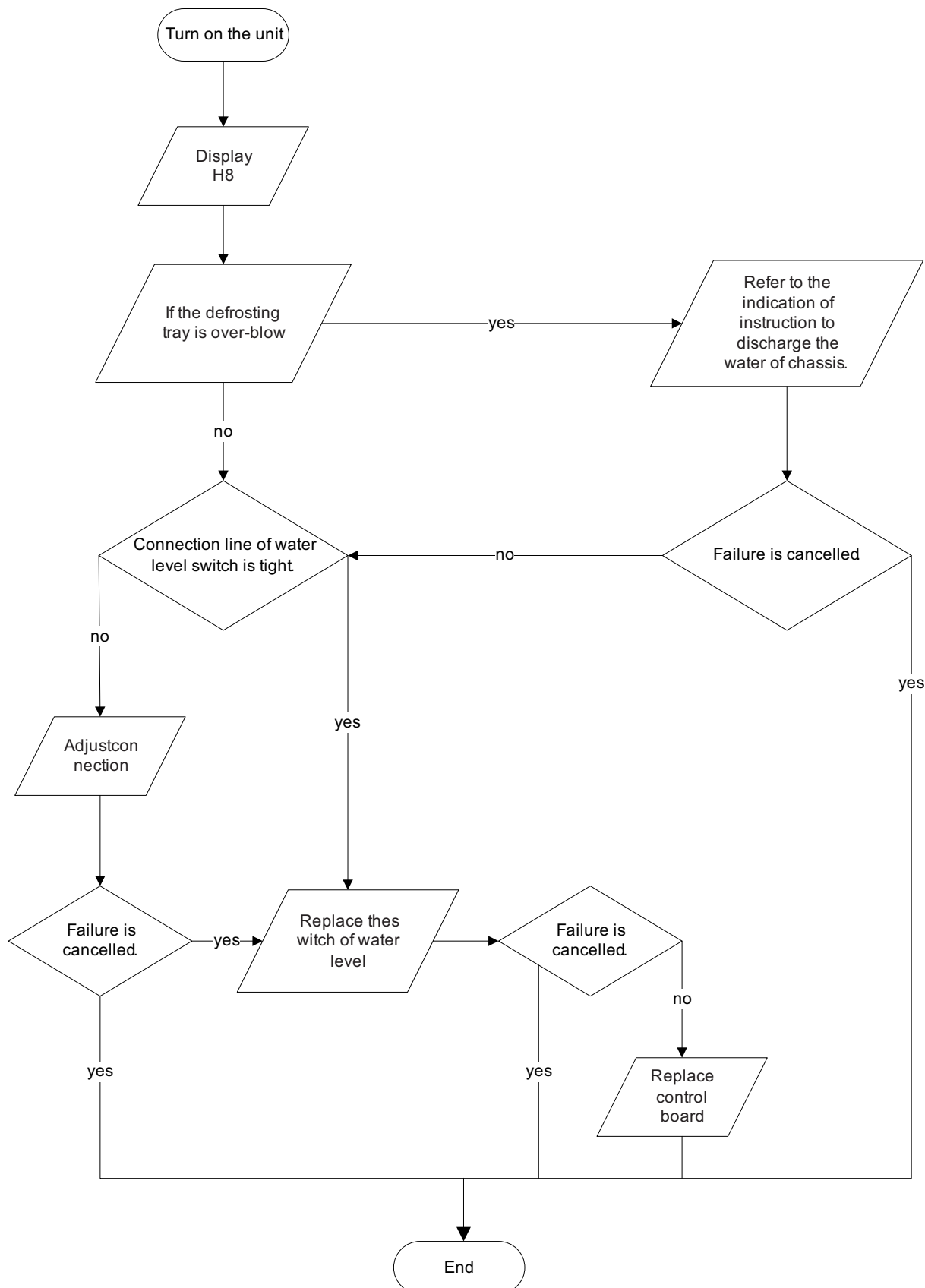


10.3.2 Failure for switch of water level

Main test point:

- If the defrosting tray is over-blow
- If the connection line of water level switch is good.
- If the water level switch is damaged.

Check the flow process of failure is:

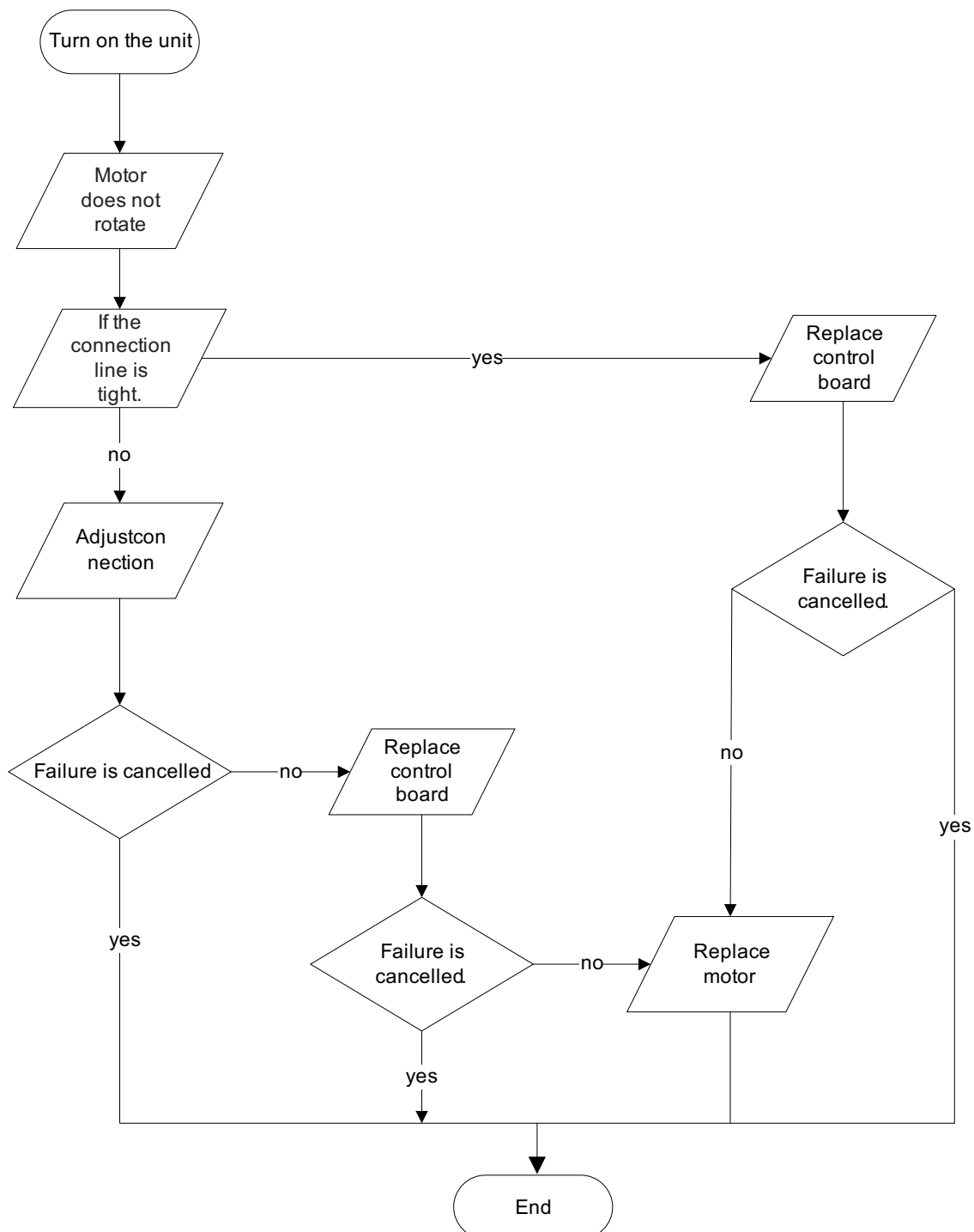


10.3.3 Motor failure (including upper motor and lower motor)

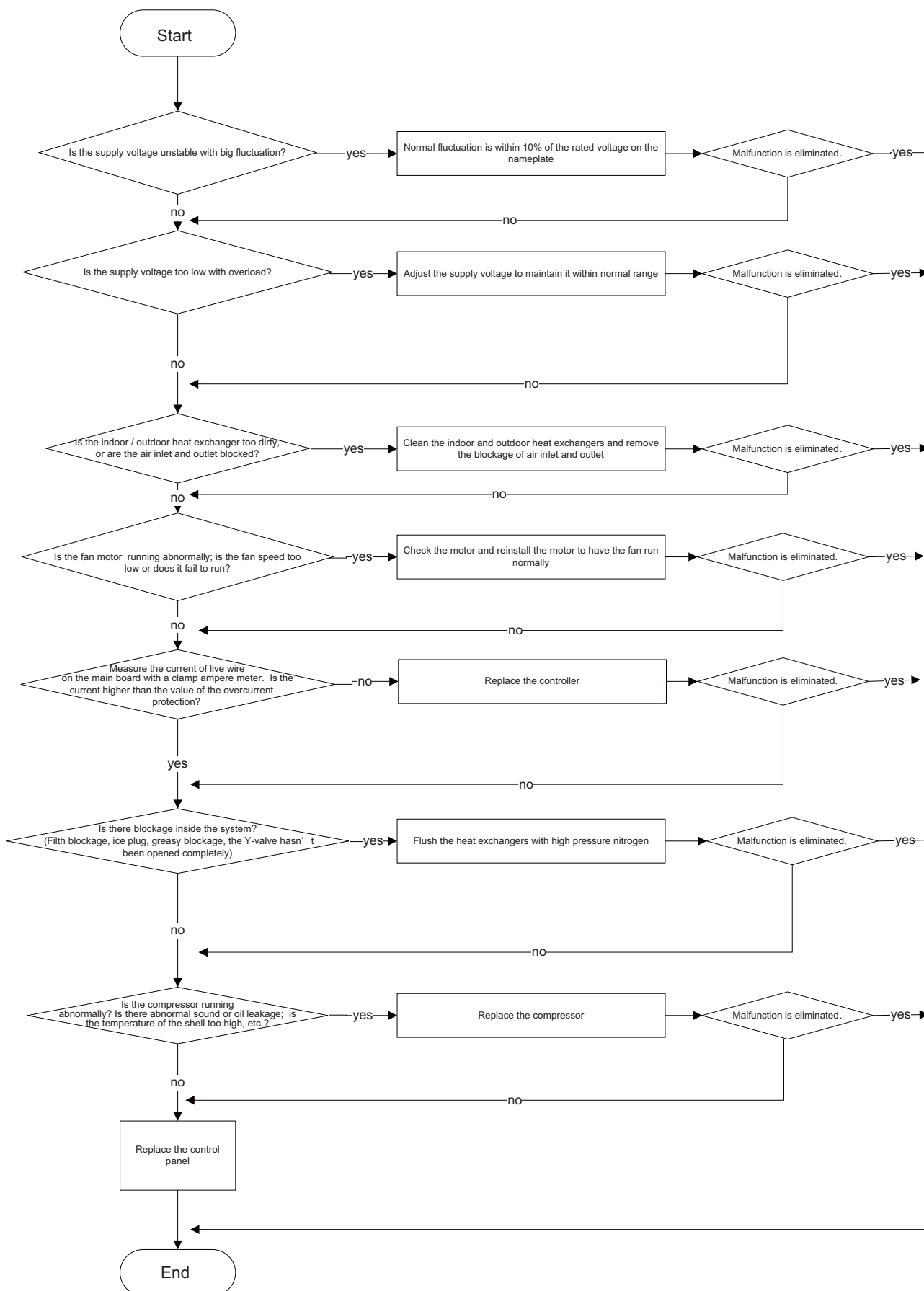
Main test point:

- If the motor does not rotate.

Check the flow process of failure is:



10.3.4 E5 Malfunction



10.4 Failure Phenomenon and Solution

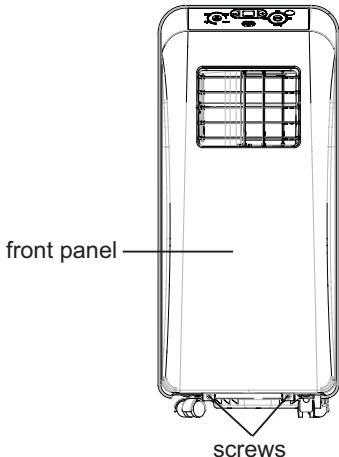
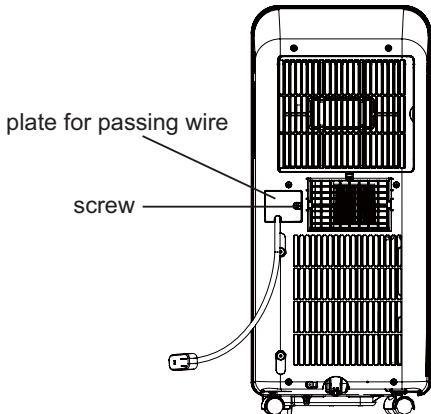
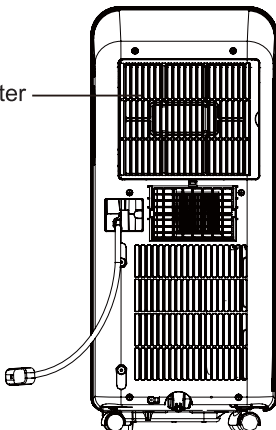
Phenomenon		Possible Causes	Solution
The unit does not start-up	There is no action after the unit is energized.	No power supply	Check the power circuit
		The power plug is not well insert or bad connection.	Check the plug is well insert, and make sure the connection is good.
		The fuse is damaged.	Replace the fuse
		The connection line of indoor unit is loose.	Re-insert it refer to the circuit diagram.
		Controller (power circuit, slug, crystal vibration) is damaged.	Replace controller
	The buzzer give out a beep when the unit is energized. But does not start-up if press ON/OFF.	indoor environment temperature sensor is damaged (bad contact, loose, leading-out wire is damaged, the resistance of temperatures terminal is abnormal and so on).	Temperature sensor is well connected or replace temperature sensor.
Turn on the fan, and the compressor does not start-up.	LED displays "H8", buzzer alarms 8 times (over-blow protection)	The water on the chassis is over-blow.	Drainage the wate
		Switch circuit of water level is damaged.	Check the switch of water level and circuit.
	Turn on or turn off compressor frequently under cooling or dry mode. (abnormal anti-freeze protection)	Filter is dirty.	Clean the filter.
		The inlet and outlet port are blocked.	Move the barrier or move the unit ro empty place.
		The rotational speed of fan is slow, or fan does not rotate.	Check if the fan motors supply circuit of controller is normal, if the connection wire of motor is loosen, and failure for capacity or motor.
		The refrigerant is leakage.	Detect the leakage or charge refrigerant.
		The cooling system is blocked.	Clean pipe system and recharge.
		Compressor (or its capacity) is failure.	Replace compressor (capacity)
	Display "E5"	Failure for tube temp. sensor (bad contact, loose, leading-out wire is damaged, the resistance of temperatures terminalis abnormal)	Temperature sensor is well connected or replace temperature sensor.
		Controller is damaged.	Replace the controller.
		The power is low.	Insure the power is under normal range and use voltage regulator.
		Load is large (the system or port is blocked or dirty; or failure for fan and compressor)	Solve failure or replace failure component
Poor cool operation		Filter is dirty.	Clean the filter.
		The inlet and outlet port are blocked.	Move the barrier or move the unit ro empty place.
		The refrigerant is leakage.	Detect the leakage or charge refrigerant.
		The cooling system is blocked.	Clean pipe system and recharge.
		The rotational speed of fan is slow, or fan does not rotate.	Check if the fan motors supply circuit of controller is normal, if the connection wire of motor is loosen, and failure for capacity or motor.
Set cooling (dry) mode, but no cool air blow out.		Indoor temperature is less than preset temperature (under cooling)	Normal phenomena (adjust lower preset temperature)
		Evaporator is frosting.	The system is defrost, and abnormally runs after defrost.
Abnormal noise		Sparepart is loose.	Bind the spareparts.
		The fan is decentred.	Replace the fan.
		Compressor is damaged.	Replace the compressor.
Not stop after over-blow		The switch of water level is open circuit.	Check and repair switch loop of water level.
Over-blow protection frequent		Kick motor is damaged.	Replace the kick motor.

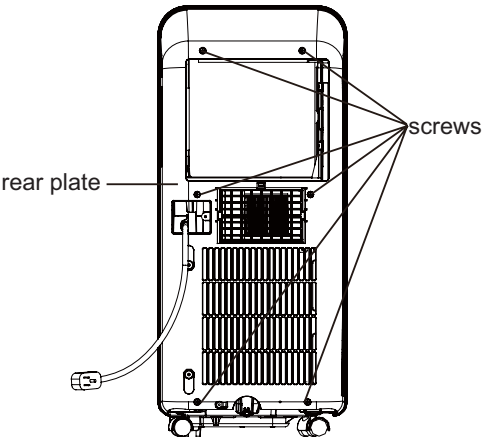
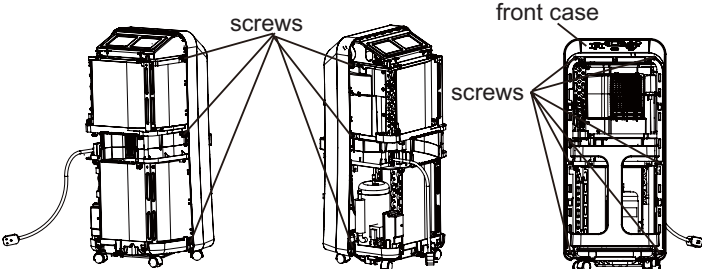
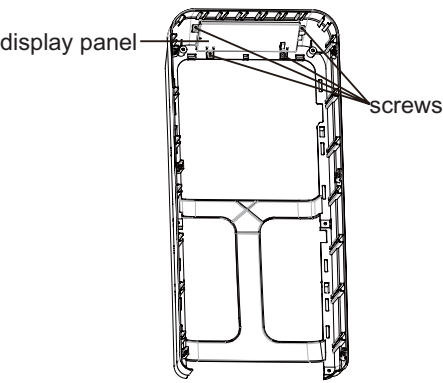
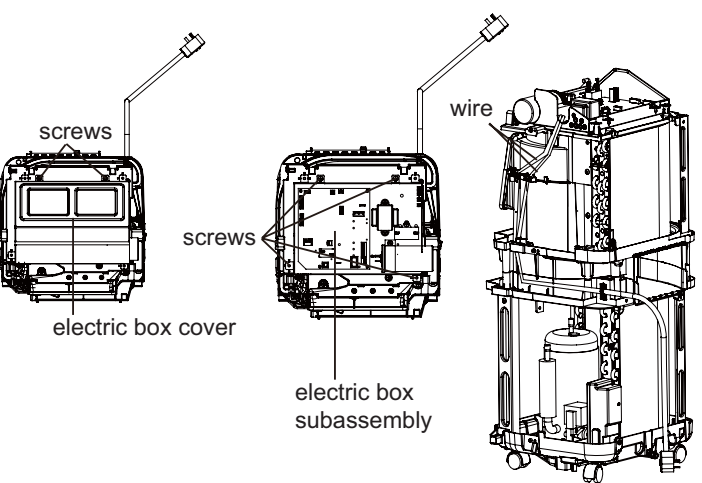
Note: The information above is for reference only.

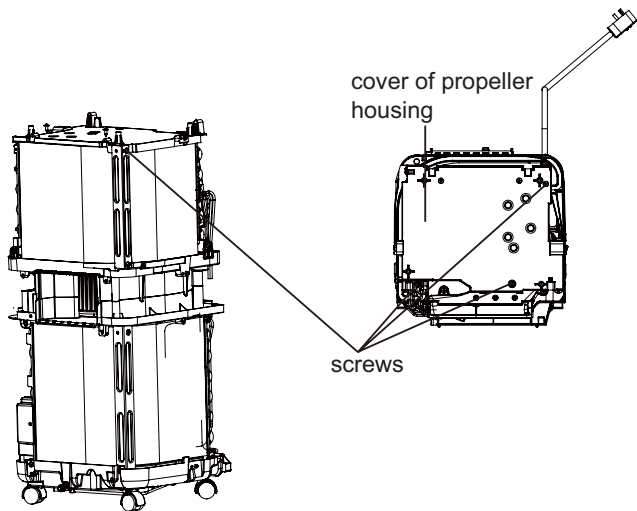
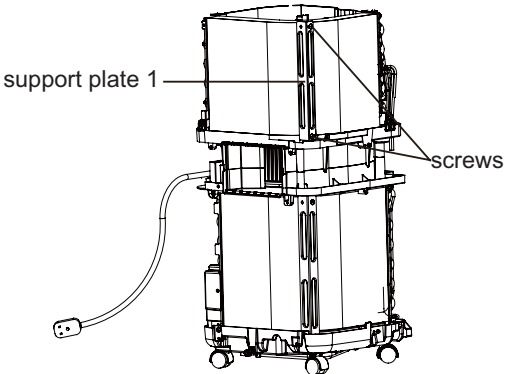
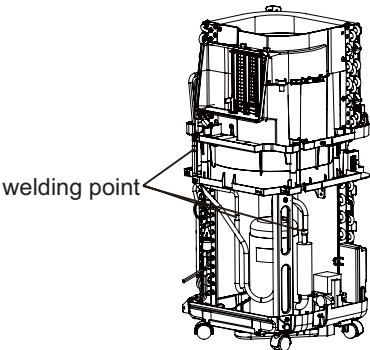
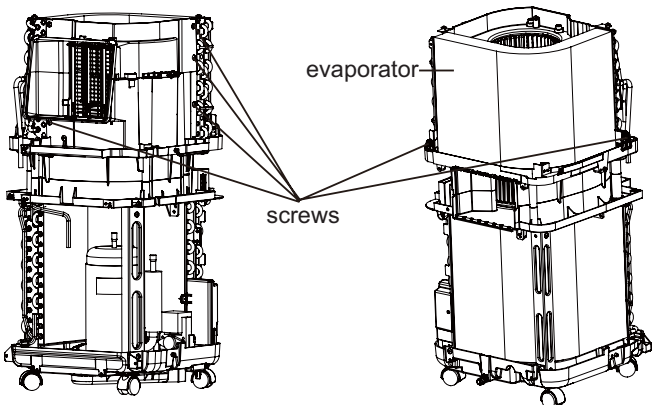
11. Removal Procedure

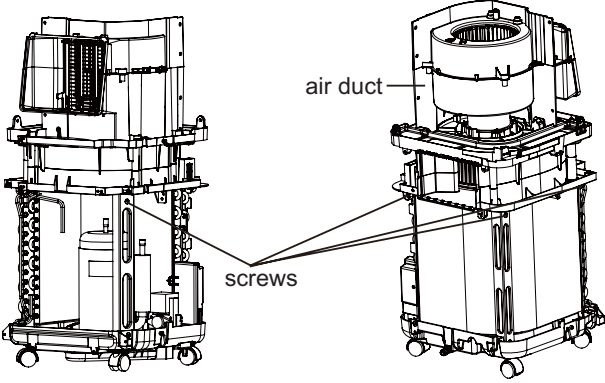
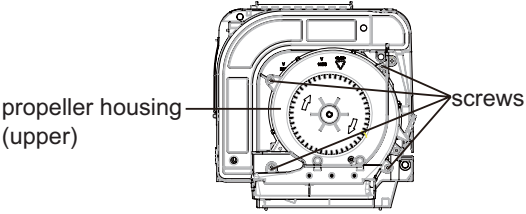
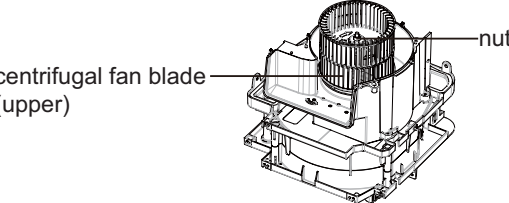
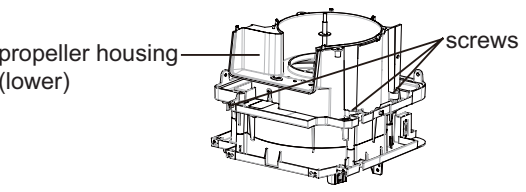
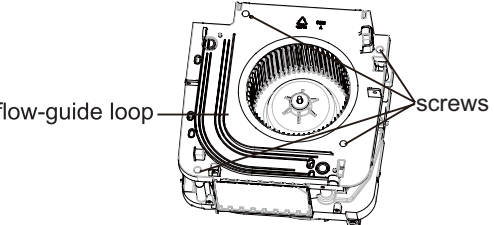
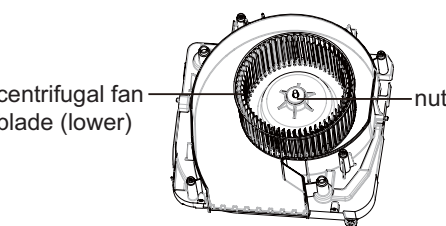
**Warning**

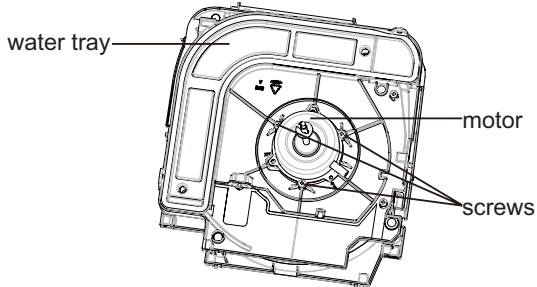
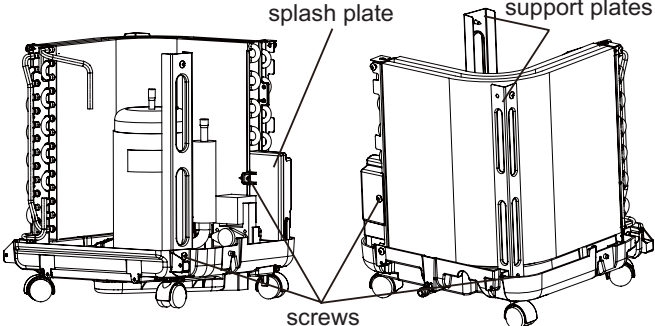
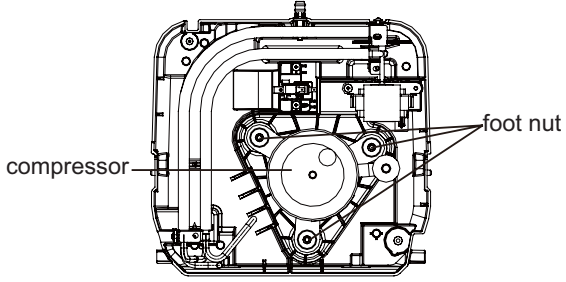
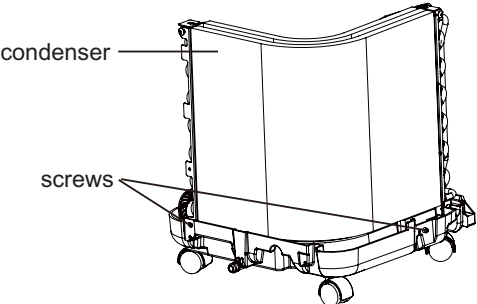
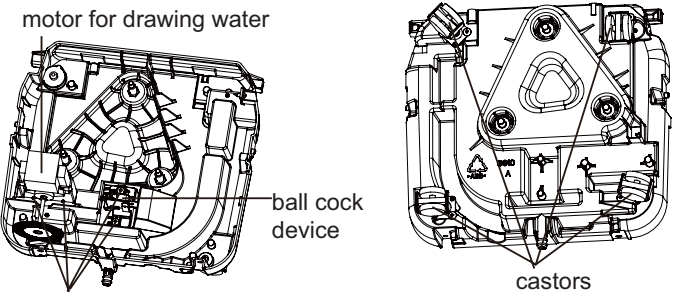
Be sure to wait for a minimum of 10 minutes after turning off all power supplies before disassembly.

Steps		Procedure
1.Remove front panel		
	Remove 2 retaining screws on front panel and then lift the front panel up to remove it.	
2.Remove plate for passing wire		
	Remove retaining screws on the plate for passing wire. Then remove the plate.	
3.Remove grill and filter		
	Draw filter and grill outwards to remove them.	

Steps	Procedure
<p>4.Remove rear plate</p> <p>Remove 6 retaining screws on rear plate. Then remove rear plate.</p>	
<p>5.Remove front case</p> <p>Remove retaining screws on front case. Then remove front case.</p>	
<p>6.Remove display panel</p> <p>Remove retaining screws on display panel. Then remove display panel.</p>	
<p>7.Remove electric box subassembly</p> <p>Remove 2 screws on electric box cover. Then remove electric box cover. Unplug wire inside the electric box. Remove screws on electric box and then remove electric box subassembly.</p>	

Steps	Procedure
8.Remove cover of propeller housing	
Remove screws on cover of propeller housing. Then remove the cover.	
9.Remove support plate 1	
Remove screws on support plate and then remove support plate 1.	
10.Remove connecting pipe	
Unsolder each welding point of connecting pipe and then unsolder connecting pipe. (Eliminate refrigerant before unsoldering.)	
11.Remove evaporator	
Remove screws on evaporator and then remove evaporator.	

Steps	Procedure
12.Remove air duct	
Remove 4 retaining screws on air duct. Then remove air duct.	
13.Remove propeller housing (upper)	
Remove 4 screws of propeller housing (upper). Then remove propeller housing (upper).	
14.Remove centrifugal fan blade (upper)	
Remove nuts and washer of centrifugal fan blade (upper). Then remove the centrifugal fan blade (upper).	
15.Remove propeller housing (lower)	
Remove 3 screws on propeller housing (lower) and then remove propeller housing (lower).	
16.Remove flow-guide loop	
Remove 4 screws fixing flow-guide loop. Then remove flow-guide loop.	
17.Remove centrifugal fan blade (lower)	
Remove nut and washer of centrifugal fan blade(lower).	

Steps	Procedure
18.Remove motor	 <p>water tray</p> <p>motor</p> <p>screws</p>
<p>Remove water tray, and then remove 3 screws fixing motor. Then remove motor.</p>	
19.Remove splash plate and support plates 2, 3	 <p>splash plate</p> <p>support plates 2, 3</p> <p>screws</p>
<p>Remove screws of splash plate and then remove splash plate. Remove screws on support plates 2,3. Remove support plates 2 and 3.</p>	
20.Remove compressor	 <p>compressor</p> <p>foot nut</p>
<p>Remove 3 hold-down nuts of compressor. Then remove compressor.</p>	
21.Remove condenser	 <p>condenser</p> <p>screws</p>
<p>Remove connection screws between condenser and chassis. Then remove condenser.</p>	
22.Remove motor for drawing water, ball cock device and castors	 <p>motor for drawing water</p> <p>ball cock device</p> <p>castors</p> <p>screws</p>
<p>Remove screws of motor for drawing water. Then remove the motor. Remove screws of ball cock device and then remove the ball cock device. Remove screws of castors and then remove castors.</p>	