

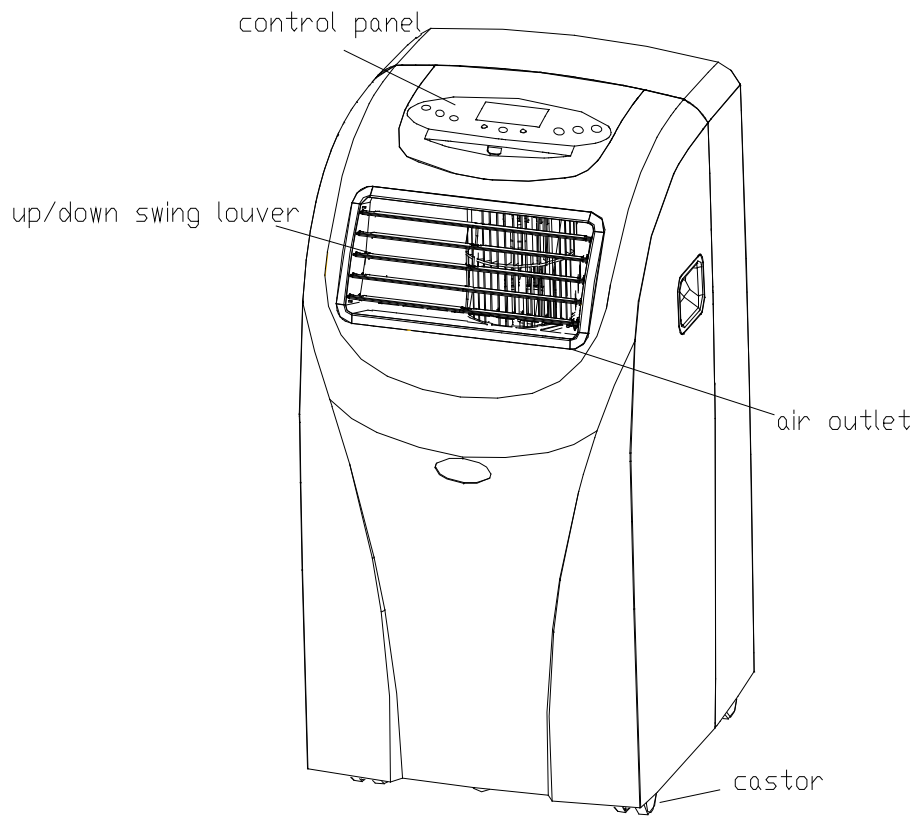
# **Portable Air-conditioner Service Manual**

For Model : RM-F52CN-E

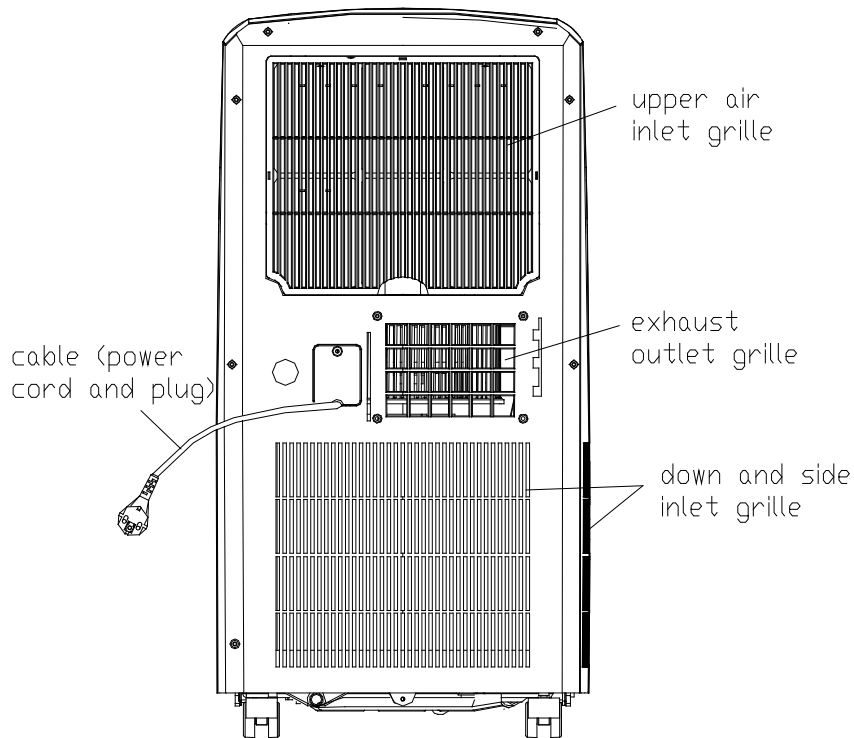
Please read this user's manual carefully to ensure proper use, maintenance  
and installation

# THE NAME OF EACH PART AND ITS FUNCTION

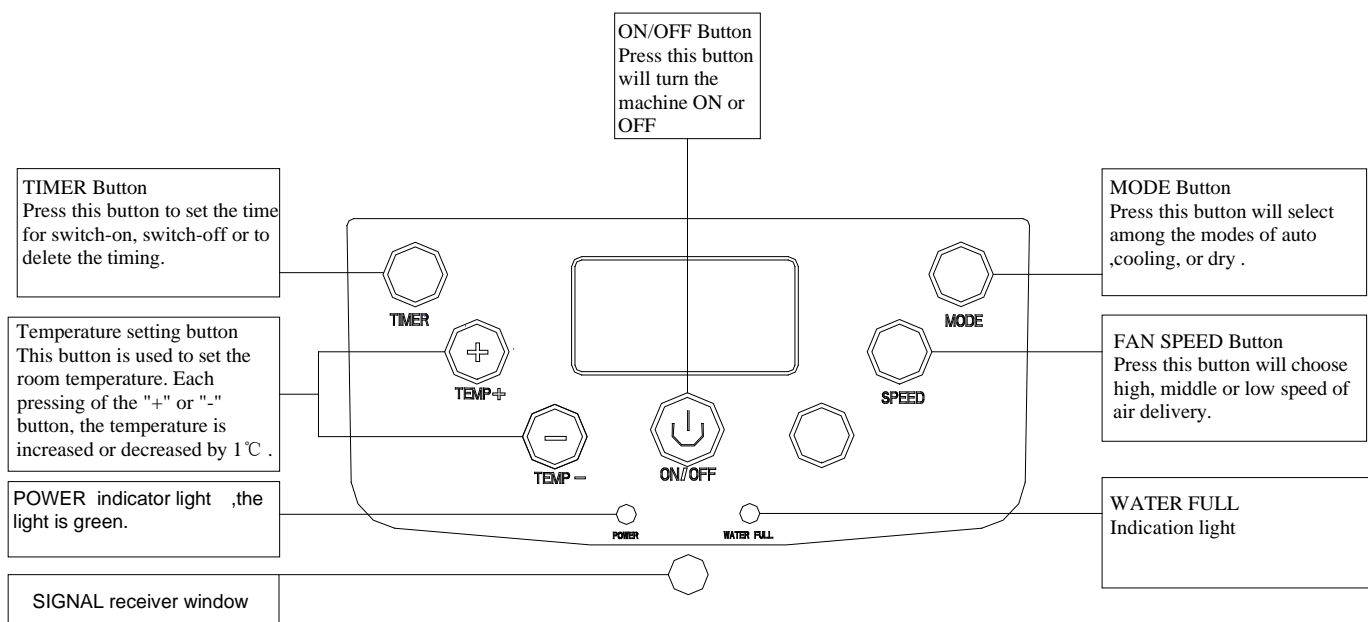
## FRONT



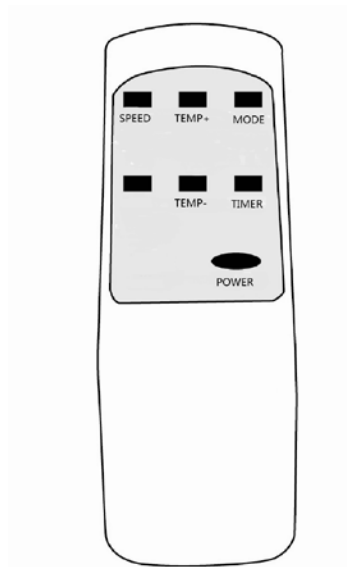
# BACK



## THE NAME OF EACH PART AND ITS FUNCTION



# Appearance and Function of Remote Controller



1. POWER
2. MODE
3. TIMER
4. SPEED
5. TEMP+
6. TEMP-

- On/Off switch
- MODE selector
- Hourly programming
- Fan speed selector
- Temperature selector up
- Temperature selector down

## USE OF CONTROL PANEL

### POWER SOURCE

The AC socket must be firm and reliable.

Don't connect the portable air-conditioner to a multiply socket outlet which is also being used for other electrical appliances.

Inset the AC power plug securely into the AC socket using the unit, when it beeps after two seconds, press "POWER" button, the unit begins to run.

### AUTO MODE


- According to the current room temperature ,automatically select the mode: cooling, dehumidifying or fan (see table 1).

Table 1

Room Temperature (Tr)	$Tr < 23 \text{ } ^\circ\text{C}$	$23 \text{ } ^\circ\text{C} \leq Tr < 26 \text{ } ^\circ\text{C}$	$Tr \geq 26 \text{ } ^\circ\text{C}$

Mode	Fan	Dehumidify	Cooling
Set Temperature	/	23°C	25°C

## COOLING OPERATION


1. Repeatedly press "MODE" button to choose the cooling mode, LED window will show "  ".  
During the cooling operation, always place the duct through an open window to exhaust warm air from the room.
2. Repeatedly press "TEMP+" or "TEMP-" button to set a proper room TEMP. at 16°C-31°C.
3. Press "SPEED" button to choose a proper fan speed, high, middle, low speed.

NOTE:


In order to improve the cooling efficiency, be careful that:

- a) If your room is directly exposed to the sun, draw the curtains please.
- b) Do no place near other heat source.

## DEHUMIDIFYING OPERATION

1. Keep the windows and the doors closed to aid in effectively dehumidifying the room.
2. Repeatedly press the "MODE" button to choose the dehumidifying mode, LED window will show "  ", the fan speed cannot be adjusted.
3. When used as dehumidifier only, do not use the air exhaust dust.

## TIME SET FUNCTION

To set time to start the machine with the unit off (but power supplied), press "TIMER" button, the LED window will show "  ", press the "TIME" button, set the time to start as you like. The setting range is 1-24 hours.

If have set switch on/off after 24 hours, press this key again there could cancel the timing.

## FAN SPEED FUNCTION

Press the "SPEED" button, you can choose high, middle or low-speed of air delivery.

## DRAINAGE

### Internal Tank Water Full Alarm Function

The inner water tank in the air-conditioner has one water level safety switches, it controls water level. When water level reaches an anticipated height, the water full indicator lamp lights up. (If water pump is damaged, when the water is full, please remove the rubber blockage at the bottom of unit, and all water will drain outside.)

### CONTINUOUS DRAINAGE

- When you plan to leave this unit unused for a long time, please remove the rubber blockage from the drainage hole at the bottom of unit, and connect a drain hose to the lower fixing clip. All the water in the water tank will drain outside.
- If water pump is damaged, continuous drainage can be used, and under this condition, the water pump is not activated. The unit can also work well.
- If water pump is damaged, intermittent drainage can also be used. Under

this condition, when the water full indicator lamp lights up, please connect a drain hose to the lower fixing clip, then all the water in the water tank will drain outside. The unit can also work well.

## **MAINTENANCE/SERVICE**

### **MAINTENANCE METHODS**

Pull the plug out of the socket before cleaning.

Make sure there is no power to the unit before beginning to maintain or repair, prevent accident caused by elec. Shock.

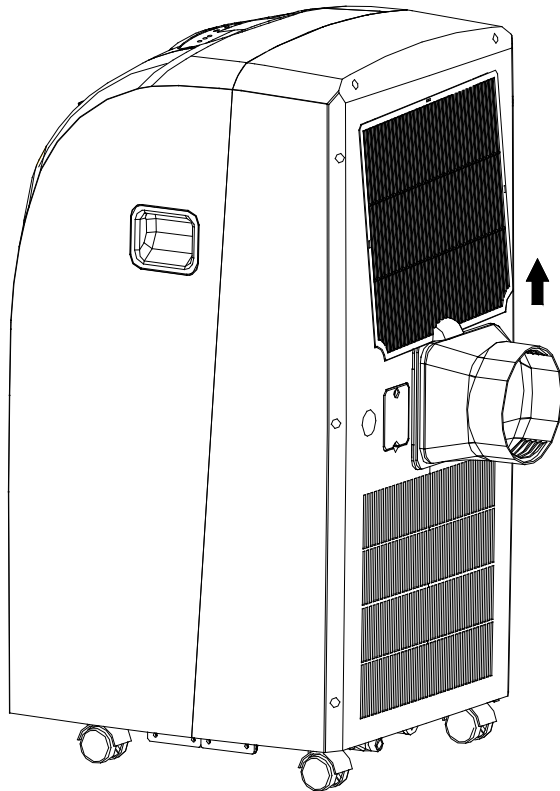
Do not use chemical solvent (like benzene, alcohol glazer) to clean the surface of the unit. If you do so, the surface will be scratched, damaged, even the whole casing could become deformed.

### **AIR FILTER**

If the air filter is blocked with a lot of dust, the air flow volume will reduce. Clean the filter once every two weeks.

#### **Open the air filter**

1. Open the air filter cover downwards, then take off the air filter.
2. Take the air filter and active carbon filter out of filter cover.



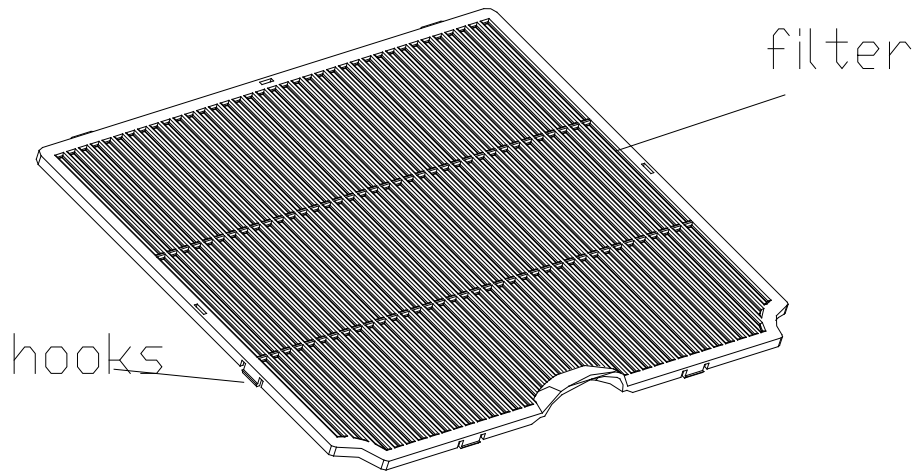
#### **Clean**

1. Wash the air filter by immersing it gently into warm (about 40<sup>0</sup>C or 104<sup>0</sup>F) water with a neutral detergent, rinse the filter of detergent and dry it thoroughly in a shaded place.

#### **Mounting**

1. Attach the filters to the filter cover with the attachment hooks on the inside surface of the cover.
2. Place the hooks at the bottom of the filter cover into the holes in the case, push it back into its original position.

## MAINTENANCE/SERVICE



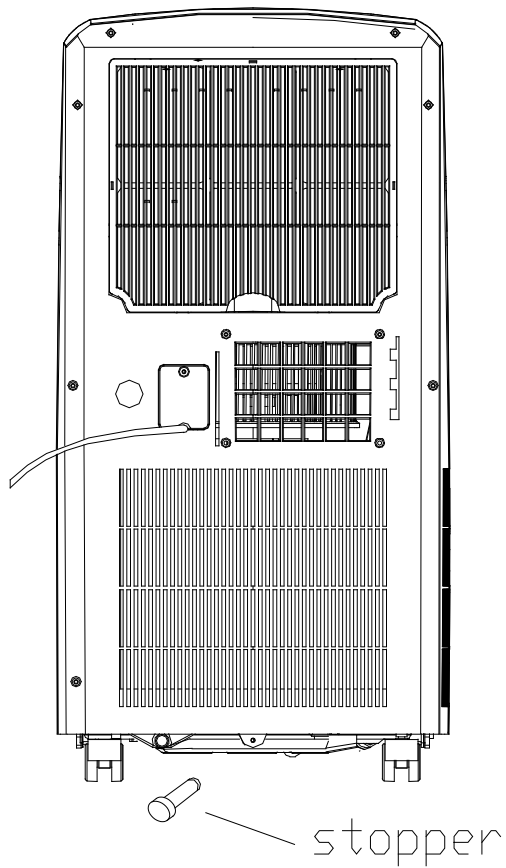
### KEEP SURFACE CLEAN

Clean the surface of the unit with a damp cloth, then dry using a duster or similar.

### RESERVATION METHODS

#### END OF SEASON OPERATIONS

1. To remove the stopper of continuous water drainage. Then operate the unit in fan mode for half a day until the pipe dry.
2. Switch off the unit and disconnect the plug from the power supply.
3. Tie the cable with the string.
4. Wrap the machine with the plastic bag, and keep it in the dry.



## **SAFETY CAUTIONS**

- Do not use the unit in a very narrow room with obstacle so as to avoid breakdown.
- Do not use the unit where the sunlight is shining directly onto it so as to avoid surface color changing
- Do not use the unit in water or near water, avoiding leakage of electricity.
- Do not use the unit in water or near water, avoiding leakage of electricity.
- Do not use near gas appliances, fires or in the vicinity of flammable liquids.

## **POWER SOURCES**

- Do not use a damaged or improper A/C socket.
- When unplugging the unit, hold the power plug securely and pull it out carefully.

## **OTHERS**

- Keep the unit one meters away from TV sets or radios to avoid the risk of electromagnetic interference.
- Do not use with the air outlet close to walls or cover the outlet to avoid overheating.

## **SERIOUS CAUTION**

- Do not toggle over or incline, if the unit does toggle please unplug at once and seek advice from your reseller.



Do not spray with insecticide or other chemicals as the plastic case may be deformed.

### FEATURES OF HEATING OPERATION MODE

When the air conditioner heats the room air, the compressor does not work, PTC electric tube works.

## TROUBLESHOOTING

Before seeking repair or service, please firstly check the following.

Trouble	Check	Action
Air conditioner does not operate at all	Is there power? Is it plugged in? Did the fuse or circuit breaker break off? If SET TIME suitable?	It is normal Push the plug into the wall socket. Change the fuse. Change SET TIME.
Cooling efficiency is not good	Is air inlet or outlet locking? Is there any other heat source in room? Are air filters very dirty? Is SET TEMP. suitable? Is indoor fan speed set at low?	Clear the locking Move the heat source Clean the air filter Set temperature suitable Set suitable fan speed.
Too noise and vibration	It is the inner liquid (refrigerant-gyration) Flowing inside. Is unit leveled?	It is normal Place it in a horizontal floor
The machine start and stop frequently	Is the voltage of the power source normal? Is the air exhaust fixed rightly or be bended? Are you adding air exhaust yourself?	Keep the power source in rated Try to keep the air exhaust horizontal not permit enlarge Don't add air exhaust yourself and

### CAUTION

In case of major malfunction as below, pull plug out immediately and call for service.

The fuse and switch often break.

The power cord is superheat or the sleeve of the cord broken.

Something abnormal.

### Self-diagnosis function

Our company provides the end-users with thoughtful services by installing various

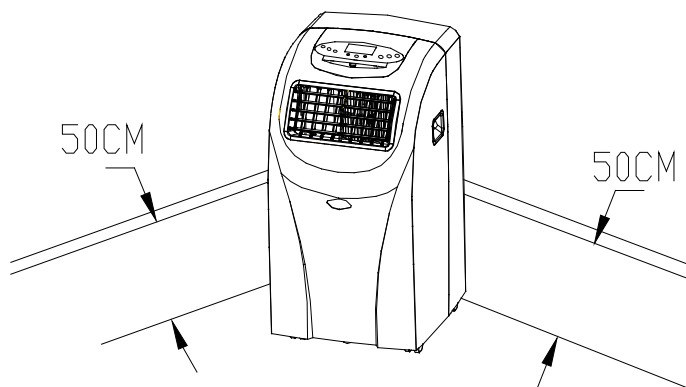
Diagnostic system to indicate the following irregular performances.

CHECK CODE	DIAGNOSIS OF MALFUNCTION
FAULT E0	Open circuit or short circuit in room temperature sensor.
FAULT E2	Indicates waterfull

## INSTALLTION

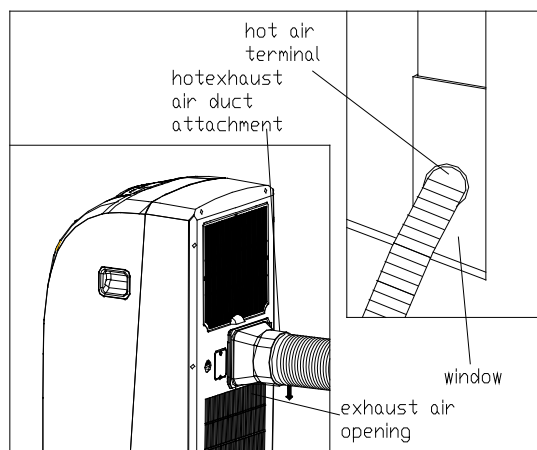
### Selection of installation location

Put the portable air condition in a flat location where the air outlets cannot be covered up, place the unit no less than 50cm(20 inch) away from a wall or other obstacle.



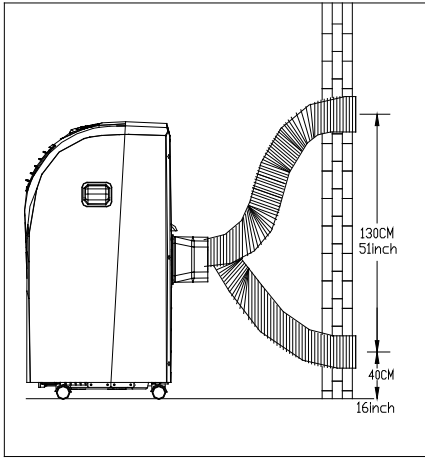
### The air exhaust duct mounting method

- 1) Fix the square end of the exhaust duct to the exhaust terminal of the unit
  - 2) Put the other end (discharge) to the nearest window Attention: The length of the air exhaust between 500mm-1500mm, use the Min Length when working, we suggested
- When mounting, try to keep the air exhaust horizontal not permit enlarge or connect the other discharge or will cause malfunction.

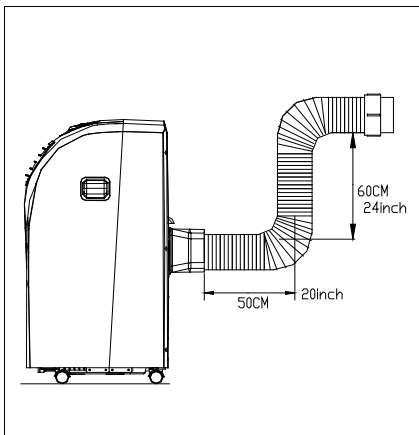
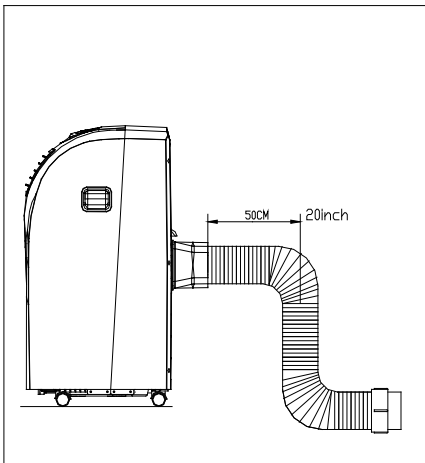


## INSTALLATION

Correct mounting shown below (if mounting in the wall, the height of the hole should be 40cm-130cm(16inch-51inch))

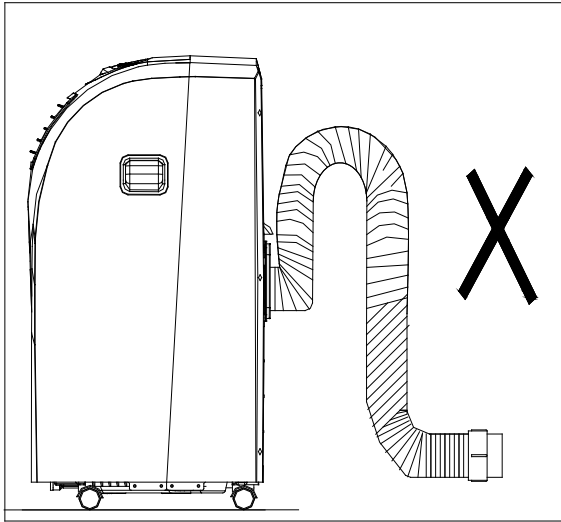


If the air exhaust requires bending, see below.



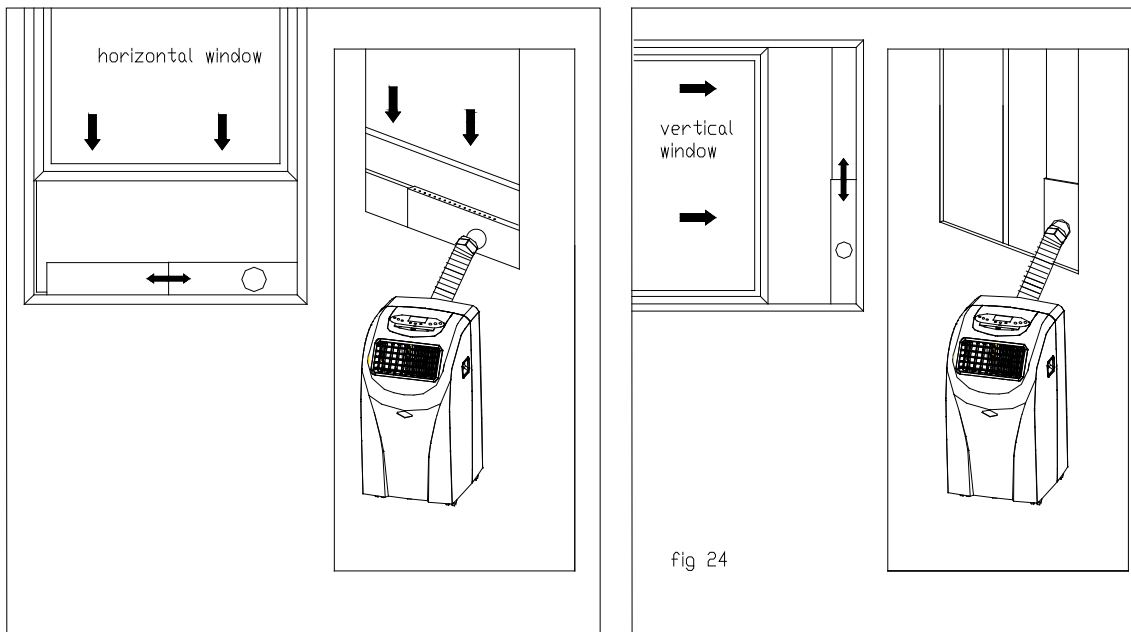
## INSTALLATION

Incorrect hose mounting (air exhaust bend too large, easily cause malfunction.)



### Window Kit Installation

Your window kit has been designed to fit most standard “vertical” and “horizontal” window application. However, it may be necessary for you to improvise/modify some aspects of the installation procedures for certain types of windows. Please refer to below figs for minimum and maximum window openings.



# INSTALLATION

## Installation Accessories

### Description

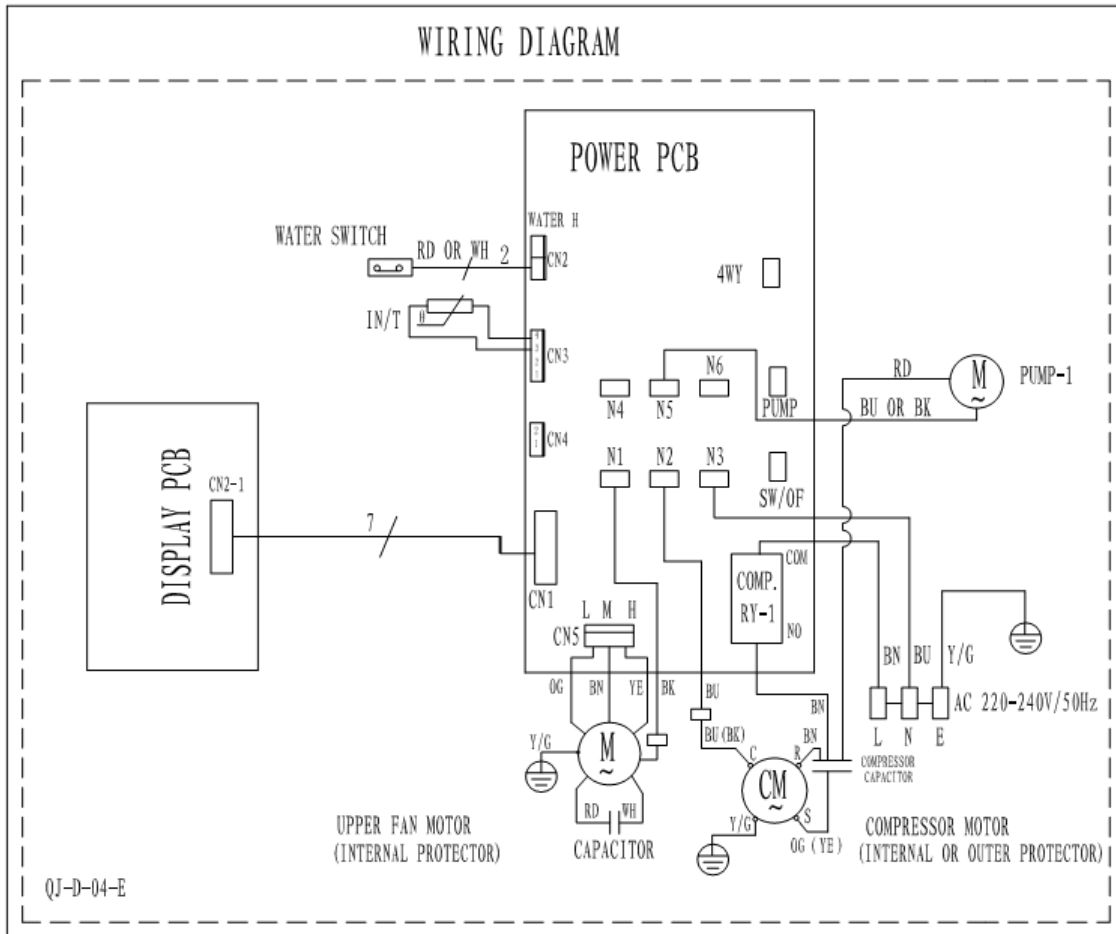
#### Installation accessories

Flexible exhaust hose-----1/set

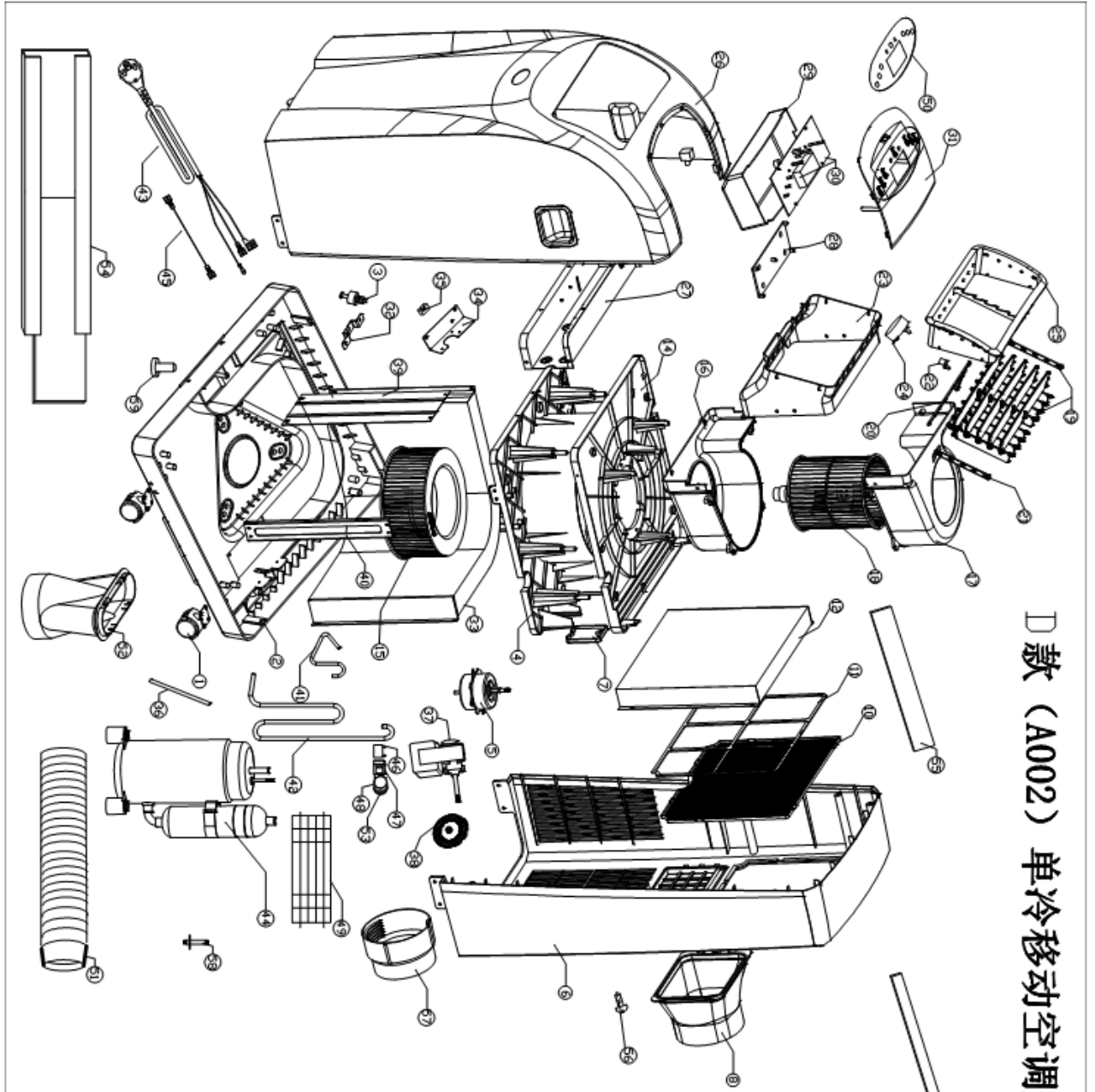
Flexible exhaust hose connector-----1/set

Cycle exhaust adapter-----1/set

# Wiring Diagram



# Explosive View



15	Condenser Centrifugal Wind Wheel	30	Controller	45	Wire	60	
14	Cover of Container	29	Cover of Electrical Control Box	44	Compressor	59	Nut of Drainage
13	Sponge	28	Control Board Base	43	Electrical Wire	58	Compressor Bolt
12	Evaporator	27	Control Box	42	Low-Pressure Duct	57	Exhausting Fan Outlet
11	Dust Proof Mesh	26	Front Panel	41	High-pressure Duct	56	Tube Clip
10	Dust Proof Lattice	25	Venting Frame	40	Bracket	55	Foam
9	Front Panel Assy.	24	Synchronous Motor	39	Protection Plate Under Machine Body	54	Mounting Board
8	Exhausting Fan Outlet	23	Venting Frame	38	Pump Wheel	53	Capacitor Setscrew
7	Base Cover of Power Line	22	Crank Draft	37	Water Pump	52	Flat Fixing Clip(2)
6	Back Panel	21	Vertical Connecting Pole	36	Water Hose	51	Exhausting Hose
5	Fan Motor	20	Right Connecting Pole	35	Shock-Proof Rubber	50	Exhausting Frame Fence
4	Exhausting Fan Motor Valve	19	Guide Louver Assy.	34	Pump Bracket	49	Venting From Fence
3	Floating Foam	18	Evaporator	33	Condenser	48	Compressor Motor Capacitor
2	Under Pan	17	Supplying Fan Motor Valve(2)	32	Floating Foam Bracket	47	Transformer
1	Caster	16	Supplying Fan Motor Valve(1)	31	PVC Decorative Film	46	Fan Motor Capacitor