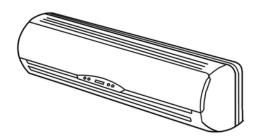
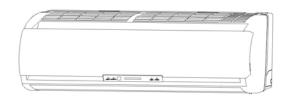




Room Air-conditioner indoor units Wall Mounted Type

OPERATION AND INSTALLATION MANUAL





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- Please read this manual carefully before using.
- Please keep this manual carefully and safely.

CAUTIONS

Disposal of the old air conditioner

Before disposing an old air conditioner that goes out of use. please make sure it's inoperative and safe. Unplug the air conditioner in order to avoid the risk of child entrapment.

It must be noticed that air conditioner system contains refrigerants, which require specialized waste disposal. The valuable materials contained in a air conditioner can be recycled. Contact your local waste disposal center for proper disposal of an old air conditioner and contact your local authority or your dealer if you have any question. Please ensure that the pipework of your air conditioner does not get damaged prior to being picked up by the relevant waste disposal center, and contribute to environmental awareness by insisting on an appropriate. anti-pollution method disposal.

Disposal of the packaging of your new air conditioner

All the packaging materials employed in the package of your new conditioner may be disposed without any danger to the environment.

The cardboard box may be broken or cut into smaller pieces and given to a waste paper diposal service. The wrapping bag made of polyethylene and the polyethylene foam pads contain no fluorochloric hydrocarbon.

All these valuable materials may be taken to a waste collecting center and used again after adequate recycling.

Consult your local authorities for the name and address of the waste materials collecting centers and waste paper diposal services nearest to your house.

Safety Instructions and Warnings

Before starting the air conditioner, read the information given in the User's Guide carefully. The user's Guide contains very important observations relating to the assembly, operation and maintenance of the air conditioner.

The manufacturer does not accept responsibility for any damages that may airse due to non-observation of the following instruction.

- Damaged air conditioners are not to be put into operation. In case of doubt, consult your supplier.
- Use of the air conditioner is to be carried out in strict compliance with the relavtive instructions set forth in the User's Guide.
- Installation shall be done by professional people,don't install unit by yourself.
- The distance between the indoor unit and the floor should be more than 2.0m.
- For the purpose of safety, the air conditioner must be properly grounded in accordance with specifications.
- Always remember to unplug air conditioner before opening inlet grill. Never unplug your air conditioner by pulling on the power cord. Always grip plug firmly and pull straight out from the outlet.
- All electrical repairs must be carried out by qualified electricians. Inadequate repairs may result in a major source of danger for the user of the air conditioner.
- Do not damage any parts of the air conditioner that carry refrigerant by piercing or perforating the air conditioner's tubes with sharp or pointed items, crushing or twisting any tubes, or scraping the coatings off the surfaces. If the refrigerant spurts out and gets into eyes, it may result in serious eye injuries.
- Do not obstruct or cover the ventilation grille of the air conditioner. Do not put fingers or any other things into the inlet/outlet and swing louver.
- Do not allow children to play with the air conditioner. In no case should children be allowed to sit on the outdoor unit.

■ CAUTIONS

Safety cautions

Carefully read the following information in order to operate the air conditioner correctly. Below are listed three kinds of Safety Cautions and Suggestions.

WARNING! Incorrect operations may result in severe consequences of death or serious injuries.

CAUTION! Incorrect operations may result in injuries or machine damages; in some cases may cause serious consequences.

INSTRUCTIONS: These information can ensure the correct operation of the machine.

Be sure to conform with the following important Safety Cautions.

The Safety Cautions should be at hand so that they can be checked at any time when needed.

If the conditioner is transferred to the new user, this manual should be as well transferred to the new user.

WARNING!

 Don't blow the human body with the cooling air too long, and don't let the room temperature decrease too low either.

Otherwise the one will feel unpleasant or harm ones' health.

 If any abnormal phenomena is found (e. g. smell of firing), please cut off the power supply immediately, and contact the dealer to find out the handling method.

In such case, to continue using the conditioner will damage the conditioner, and may cause electrical shock or fire hazard.

 When need maintenance and repairment, call dealer to handle it.

Incorrect maintenance and repairment may cause water leak, electrical shock and fire hazard.

 Please let the dealer be responsible for installing the conditioner.

Incorrect installation may cause water leak, electrical shock and fire hazard.

 Don't put fingers or any other things into the inlet/outlet and swing louver while the conditioner is in operation.

Because the highspeed fan is very dangerous and may cause injuries.

 Call the dealer to take measures to prevent the refrigerant from leaking.

If conditioner is installed in a small room be sure to take every measure in order to prevent suffocation accident even in case of refrigerant leakage.

 When conditioner is deinstalled or reinstalled dealer should be responsible for them.

Incorrect installation may cause water leaking, electrical shock and fire hazard.

CAUTIONS

CAUTIONS!

 Conditioner should not be used for any other purpose other than air conditioning.

Don't use air-conditioner for any other special purposes, e.g. the preservation and protection of food, animals, plants, pecision apparatus as well as work of art, otherwise the qualities of these stuffs may be damaged.

- When air-conditioner is co-used with other heat-radiator the frequent replacement of room atmosphere should be required.
 Inefficient ventilation may cause suffocation.
- Pets and plants should not be blowed directly in the air flow.

Otherwise will suffer damage.

 When use the fumigating insecticide don't open air-conditioner.

Otherwise the poisonous chemicals may settle in air-conditioner which harm the health of chemical-allergic people. • Don't operate the air-conditioner with damp hands.

Otherwise will be shocked.

- Only use correctly-typed fuse.
 May not use wire or any other materials replacing fuse, otherwise may cause faults or fire accidents.
- Don't place any burning unit in the air flow of air-conditioner, which may cause incomplete combustion.
- No inflammable spray fluid should be permitted to be placed or used near to air-conditioner otherwise may cause fire accidents.
- Air-conditioner should be cleaned only after power supply is cut off to keep from shock or hurt.
- Don't clean air-conditioner with water. Otherwise may cause shock.

Added part

Some information for the colorful screen wall mounted type unit:

- 1. The unit address setting method has been changed to use dial switch on PC B, which is the same as that of the duct unit and ceiling concealed type unit. The address-setting controller is invalid. When out of factory, the address is set as No. 3. There are maximum 8 indoor units according to the communication method.
- 2. The unit has auto restart function. Press "SLEEP" button 10 times within 5 seconds, after the buzzer sounds 4 times, auto restart function will be activated. Press "SLEEP" button 10 times within 5 seconds again, after the buzzer sounds 2 times, this function will be cancelled.
- 3. The unit has temperature compensation function in heating mode. When out of factory, temperature compensation is set as 4 degrees. Cut off the wire of CN4, the compensation will be cancelled.
- 4.CN3 is short wire for short time function. CN4 is short wire for temperature compensation. CN6 is testing port for serial communication.
- 5. Ambient temp. sensor must be away from the evaporator and pipes, and must be easy to act as the room temp

■ CAUTIONS

Installation

Please ask the dealer or specialist to install, never try by the users themselves. After the installation please be sure of the following conditions.

WARNING!

Please call dealer to install the air-conditioner.
 Incorrect installation may cause water leaking, shock and fire hazard.

CAUTION!

- Air-conditioner can't be installed in the environment with inflammable gases because the inflammable gases near to air-conditioner may cause fire hazard.
- Installed electrical-leaking circuit breaker.

It easily cause electrical shock without circuit breaker.

· Connect earthing wire.

Earthing wire should not be connected to the gas pipe, water pipe, lightning rod or phone line, incorrect earthing may cause shock.

Earth

 Use discharge pipe correctly to ensure efficient discharge.

Incorrect pipe use may cause water leaking.

[Location]

- Air-conditioner should be located in well-vented and easily-accessible place.
- Air-conditioner should not be located in the following places:
 - (a) Place with machine oils or other oil vapours.
 - (b) Seaside with high salt content in the air.
 - (c) Near to hot spring with high content of sulfide gases.
 - (d) Area with frequent fluctuation of voltage e.g. factory, etc.
 - (e) In vehicles or ships.
 - (f) Kitchen with heavy oil vapour or humidity.
 - (g) Near to the machine emitting electric-magnetic waves.
 - (h) Places with acid, alkali vapuor.
- TV, radio, acoustic appliances etc are at least 1 m far away to the indoor unit, outdoor unit, power

- supply wire, connecting wire, pipes, otherwise images may be disturbed or noises be created.
- · As required, take measures against heavy snow.

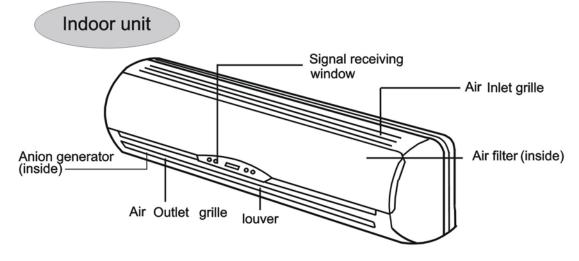
[Wiring]

 Air-conditioner should be equipped with special power supply wire.

[Operating noise]

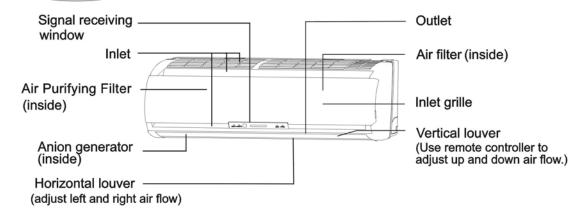
- · Chose the following locations:
 - (a) Capable of supporting air-conditioner weight, don't increase operating noise and vibration.
 - (b) Hot vapour from outdoor unit outlet and operating noise don't disturb neighbour.
- · No obstacles around the outdoor unit outlet.

■ PARTS AND FUNCTIONS



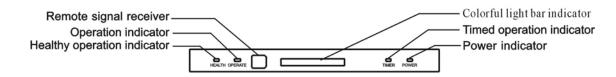
07~12 Series modle size:795×197×265mm

Indoor unit



14~18 Series modle size:938×197×265mm

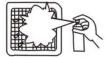
Control panel



■ NOTES FOR SAFETY

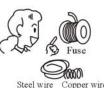
Clean the dust filter periodically:

Blockage of the dust filter would reduce the cooling and heating effect, consume more power, water would be leaked during cooling, and other failures would also occur.





Use the fuse of required capacity: Never use steel wire or copper wire to take place of the fuse.





Never connect the earth wire with the gas pipe, water pipe, lightening arrester, or phone line.





Never install the air conditioner where the flammable gas is easily leaked.





Do not spray any paint or insecticide on the air conditioner.





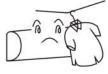


Never pour water on the indoor unit.



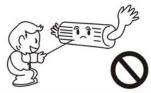


Keep the inlet and outlet of the indoor unit unblocked.





When the louver is being swung, never touch the outlet or put anything into the air grille.



Operate the unit with the remote controller.





The instructions with this warning mark must be carried out strictly, for they are all concerned with safety of the product or human beings.



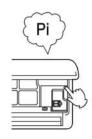
The instructions with this prohibiting mark must be completely forbidden, otherwise the product would be damaged or the human being would be injured.

■Operation and Maintenance

Emergency and Test Operation

Emergency operation:

- use this operation only when the remote controller is defective or lost.
- When the emergency operation switch is pressed "Pi" sound is heard once, which means the start of this operation.
- In this operation, the system automatically selects the operation modes, cooling or heating, according to the room temperature.
- When machine is running in emergency, the set value and wind speed of temperature could not be altered; meanwhile, it can not operate for dehumidifying or under timing mode.



Test operation

Test operation switch is the same as emergency switch.

- Use this switch in the test operation when the room temperature is below 16°C, do not use it in the normal operation.
- Continue to press the test operation switch for more than 5 seconds. After you hear the "Pi" sound twice, release your finger from the switch: the cooling operation starts with the air flow speed "Hi".



Removal of the restriction of emergency or test operation

- Press the emergency operation switch once more, or manipulate through the remote controller; the "Pi" sound, the emergency or test operation is terminated.
- When the remote controller is manipulated, it gets the system back to the normal operation mode.

Disconnect power supply before clean the unit

- · Don't touch it with wet hand
- Don't wash with hot water or solvent to clean the unit

Air filter cleaning

- 1. Open the inlet grill
- 2. Detach the Air filters.
- 3. Use water or vacuum cleaner to clean it. If it is extremely dirty, wash it with neutral detergent or soap water.
- 4. Wash it with clean water and install it after complete dry.
- 5. Close the inlet grill.

Caution:

- Do not use hot water over 40°C, as this Don't use insecticide or other chemical may cause damage to air filter.
- Wipe air filter carefully.

Indoor and outdoor cleaning

- Clean it with warm and wet cloth or with neutral detergent, then wipe it dry with clean and soft cloth.
- If air conditioner is very dirty, clean it with cloth soaked in neutral detergent, then wipe off the detergent with clean water.
- Don't use water higher than 40°C, which will cause discoloring and deformation.
- detergents.

■TROUBLE SHOOTING

	The followings are not malfunction					
Water flowing sound is heard.	When the air conditioner is started, when the compressor starts or stops during operation or when the air conditioner is stopped, it sometimes sounds "shuru shuru" or "gobo gobo". It is the flowing sound of the refrigerant, and it is not a trouble.					
Cracking sound is heard.	This is caused by heat expansion or contraction of plastics.					
It smells.	Air which blows out from the indoor unit sometimes smells. The smell results from residents of tobacco smoke or cosmetics stuck inside of unit.					
During operation, white fog comes out of indoor unit.	When the air conditioner is used at restaurant etc. where dense edible oil fume is always exists, white fog sometimes blows out of air outlet during operation. In this case consult sales dealer for cleaning the heat exchanger.					
It is switched into the FAN mode during cooling.	To prevent frost from being accumulated on the indoor unit heat exchanger, it is sometimes automatically switched to the FAN mode but it will soon return to the cooling mode.					
The air conditioner can not be restarted soon after it stops.	Even if the operation switch is turned on, cooling dehumidifying or heating is not operable for three minutes after the air conditioner is stopped. Because the protecting circuit is activated. (During this time air conditioner operates in fan mode.)					
Air does not blow of the fan speed can not be changed during dehumidifying.	When it is excessively cold during dehumidifying, the blower automatically repeats reducing and lowering the fan speed.					
During heating the fan in the indoor unit still works even after the unit operation stops.	To eliminate the afterheat, the fan in the indoor unit will still operate for a while after the unit automatically stops.					

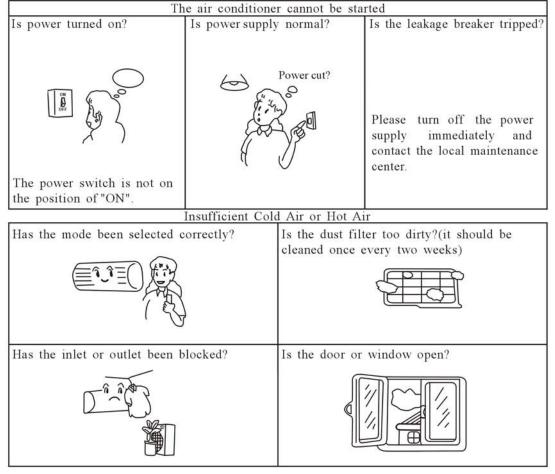
There would be sooting around the outlet and a sound "Si Si" list due to the accumulation of anion, which can be cleaned after the unit is turned off. The sound "Si Si" is due to

generation of anion.

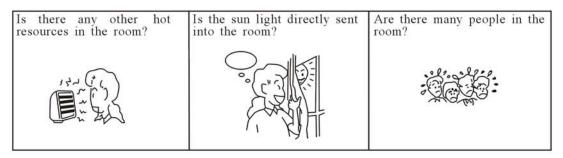
would be heard.

■ TROUBLE SHOOTING

Please check your air conditioner as the procedure below before contacting the local maintenance center for after sales service:



Insufficient Cold Air?

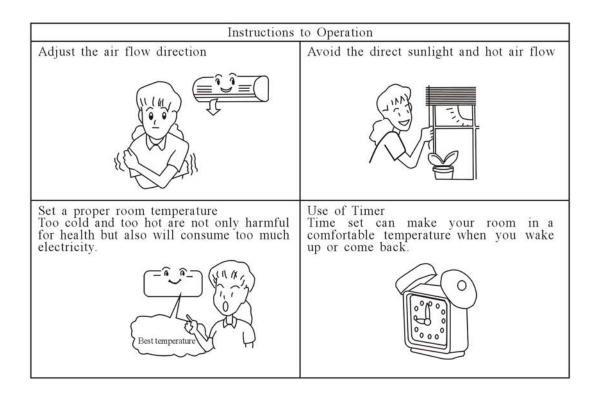


If, after the above-mentioned checks are made and treated accordingly, the air conditioner still cannot work normally or one of the following facts are found, please stop the operation and contact your local service center:

- Fuse or circuit breaker often breaks;
- Water is leaked during cooling and dehumidifying;
- Working abnormally or abnormal sound is heard.

■ INSTRUCTIONS TO USERS

- To enable the air conditioner to work well, please install it as required by this manual.
- When moving the air conditioner, please don't scratch the shell.
- Connect the indoor unit and the outdoor unit with the connecting pipe supplied by manufacturer, the installation method described in this manualmust be carried out with the tools required by manufacturer.
- The max. length of the connection pipe is 50 meters, and the max. height difference between the indoor unit and outdoor unit is 30 meters.
- Please keep this manual carefully for maintenance and installation.
- After installation, please operate the air conditioner as per this manual.



Notes: After installation, please confirm that the refrigerant is not leaked.

■ INSTRUCTIONS TO INSTALLATION

- Please read these "Safety Precautions" first then accurately execute the installation work.
- The precautionary points indicated herein are divided under two headings:

<u>AWARNING</u> and <u>ACAUTION</u> those points which are related to the strong possibility of an installation done in error resulting in death or serious injury are listed in the <u>AWARNING</u> section. However, there is also a possibility of serious consequences in relationship to the points listed in the <u>ACAUTION</u> section as well.

In either case, important safety related information is indicated, so by all means, properly observe all that is mentioned.

After completing the installation, along with confirming that no abnormalities were seen
from the operation tests, please explain operating methods as well as maintenance methods to
the user of this equipment, based on the owner's manual.
 Moreover, ask the customer to keep this sheet together with the owner's manual.

WARNING

- Please entrust installation to either the company which sold you the equipment or to a
 professional contractor. Defects from improper installations can be the cause of water leakage
 electric shocks and fires.
- Execute the installation accurately, based on following the installation manual. Again improper installations can result in water leakage, electric shocks and fires.
- Please install your air conditioner on a wall or any place which can holder the weight of the air conditioner. And it cannot be installed on a non-professional metal structure (such as a burglary-resisting net). Otherwise injury would occur due to a falling of the unit.
- Execute the prescribed installation construction to prepare for earthquakes and the strong airs
 of typhoons and hurricanes, etc. Improper installations can result in accidents due to a violent
 falling over of the unit.
- Wiring shall be done with the specified cable and the connection shall be firm and reliable.
 And the terminal connector shall be fixed firmly and reliably not to let external force exercise on the cables. Any improper connection or fixing would cause heat, fire, and other accidents.
- Wiring shall be done in a correct shape not to make any section rise upward, and accurately
 install the air conditioner. The cable shall not be clamped by the lid or outer plate. Any
 improper installation would lead to fire, heat, or other accidents.
- When setting up or moving the location of the air conditioner, do not mix air etc, or anything other than the designated refrigerant (R407C) within the refrigeration cycle, for such mixing would result in rupture and injury caused by abnormal high pressure.
- Always use accessory parts and authorized parts for installation construction. Using parts not authorized by this company can result in water leakage, electric shock, fire and refrigerant leakage.
- The drain pipe must not be placed or connected into the sewage tank where harmful gas such as sulphurous gas and etc would exist, otherwise the harmful gas would enter the room.
- During installation, if the refrigerant is leaked, please immediately take measures of ventilation, otherwise a harmful gas would be generated whenever the refrigerant meets fire.
- After installation, please ensure that the refrigerant is not leaked, because the leakage of refrigerant would produce a harmful gas if it meets fire or heating stoves.
- Don't install the air conditioner where a flammable gas would be probably produced, otherwise in case the flammable gas is leaked and exists around the unit, fire would be caused
- For the drain pipe, follow the installation manual to insure that it allows proper drainage and thermally insulate it to prevent condensation. Inadequate plumbing can result in water leakage and water damage to interior items.
- The refrigerant gas pipe and liquid pipe shall all be thermally insulated to preserve the temperature. Any improper insulation would make the unit moist and the water would drop onto the floor or wet the indoor items.

■ INSTRUCTIONS TO INSTALLATION

PRECAUTION

• Execute proper grounding. Do not connect the earth wire to a gas pipe, water pipe, lightening rod, or a telephone ground wire.

Improper placement of earth wires can result in electric shock.

- An electric leakage breaker must be installed, otherwise electric shock or other accidents would occur.
- After completion of the installation, the air conditioner shall be electrified to check for electric leakage.

Preparation for installation

Installation Tools

- 1. Screw Driver (flat head, wabbler, triangle)
- 2. Steel Saw
- 3. 60mm Drill
- 4. Inner Hexagon Spanner
- 5. Shifting Spanner
- 6. Spanner
- 7. Pipe Cutter

- 8. Pipe Expander
- 9. Knives
- 10. Clippers
- 11. Leakage Checker or Soap Liquid
- 12. Measuring Tape
- 13. Scraper or File
- 14. Refrigeration Oil

Self-contained Accessories

	No.	A	В	С	D	Е	F
-1	Name of Parts	Non-adhesive Tape		Connecting Hose		Gypsum powder	Drain hose

△ WARNING

BE SURE TO READ THESE INSTRUCTIONS CAREFULLY BEFORE BEGINNING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE SERIOUS INJURY OR DEATH, EQUIPMENT MALFUNCTION AND/OR PROPERTY DAMAGE.

BE SURE TO READ INSTALLATION MANUAL FOR INDOOR UNIT WITH THIS MANUAL.

1. Accessories

Confirm accessories shown below are attached in the bag with this Installation manual.

Accessories Delivered with Your Air Conditioner

Please check if your unit is delivered with the following accessories.

No.	1	2	3	4	5	6	7	8	9
Name and shape	Remote controller	Batteries	Remote controller bracket	Mounting plate	Drain hose	4×25 screw	Screw cap	Piping hole cover	Plastic supporting plate
Qty	1	2	1	1	1	6	1+1	1	1

Indoor Unit

- Install the indoor unit where the weight of the unit can be supported.
- Install the indoor unit where the heat source and steam source are not close and the unit inlet and outlet are not blocked.
- Install the indoor unit where the drainage is easy and the outdoor unit can be easily connected.
- Install the indoor unit where its cold air and hot air can be easily sent to all the comers of the room.
- Install the indoor unit where the power socket is near and there is sufficient space around the indoor unit.
- Install the indoor unit where there is no T.V set, radio set, and wireless appliance underneath, and the sunlight lamp is over one meter away.
- If the remote controller is installed on the wall, the indoor unit shall be ensured to receive the signal while the sunlight lamp is on.

INSTRUCTIONS TO INSTALLATION

Method for Cutting and Expanding Pipes.

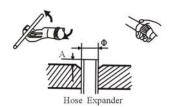
When the pipe is too long or the mouth is damaged, the pipe needs to cut or expanded.

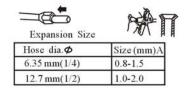
1.cutting hose

2.Removing burr

3.Put on nut

4.Expand Hose

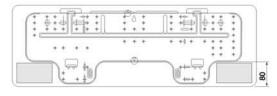


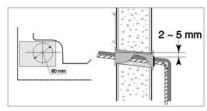


Correct	Not Cor	rect			
	Tilting	cracks on expanded mouth	burr	incomplete	too long

When the mounting plate is first fixed

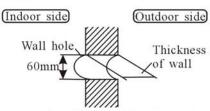
- 1. Carry out, based on the neighboring pillars or lintels, a proper leveling for the plate to be fixed against the wall, then temporarily fasten the plate with one steel nail.
- 2. Make sure once more the proper level of the plate, by hanging a thread with a weight from the central top of the plate, then fasten securely the plate with the attachment steel nail.





- 3. Making a Hole on the wall and Fitting the piping Hole cover
- Make a hole of 60mm in diameter, slightly descending to outside the wall.
- Install piping hole cover and seal it off with putty after installation.
- 4. Drawing of pipe Rear piping

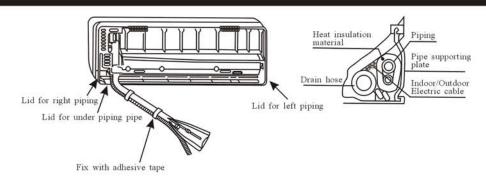
 Draw pipes and the drain hose, then fasten them with
 the adhesive tape. Left Left-rear, piping
- In case of left side piping, cut away, with a nipper, the lid for left piping.
- In case of left-rear piping, bend the pipes according to the piping direction to the mark of hole for left-rear piping which is marked on heat insulation materials.



(Section of wall hole) Piping hole pipe

- a. Insert the drain hose into the dent of heat insulation materials of indoor unit.
- b. Insert the indoor/outdoor electric cord from backside of indoor unit, and pull it out on the front side, then connect them.
- c. Coat the flaring seal face with refrigerant oil and connect pipes.
 Cover the connection part with heat insulation materials closely, and make sure fixing with adhesive tape.

■ INSTRUCTIONS TO INSTALLATION



 Indoor/outdoor electric cord and drain hose must be bound with refrigerant piping by protecting tape.

Other direction piping

- Cut away, with a nipper, the lid for piping according to the piping direction and then bend the pipe according to the position of wall hole. When bending, be careful not to crash pipes.
- Connect beforehand the indoor/outdoor electric cable, and then pull out the connected to the heat insulation of connecting part specially.
- 5. Fixing the indoor unit body
- Hang surely the unit body onto the upper notches of the mounting plate. Move the body from side to verify its secure fixing.
- In order to fix the body onto the mounting plate, hold up the body aslant from the underside and then put it down perpendicularly.

INSTALLATION CHECK AND TRIAL OPERATION

Check the Layout of the Drain Pipe and Connection Wires

The drain pipe should be placed underneath, and the connection wires should be placed upside; and the drain pipe especially the section inside the machine and indoors must be wound up with insulating material to preserve heat. The drain pipe shall be sloped and no concave and convex shall occur along the whole pipe. And the cases as the right figure indicates shall not occur.

Installation check

- Is power supply voltage required?
- Is water completely drained to outdoors?
- Are power wire and connection wires between indoor and outdoor units correctly connected?
- Is any gas leaked from the pipe connectors?
- Are series numbers of the terminals on the indoor and outdoor units corresponding to each other? Is the connection section of the auxiliary pipe insulated? Is the indoor unit fixed firmly?
- Is noise big?

Trial Operation

The person who has completed this installation shall be requested to conduct a test operation for check:

- Is the temperature adjuster working normally?
- Does the location for installation conform to requirements?

Winding up with Protective Plastic Tape

The connection pipes, drain pipe, and the connection wires shall be wound up with PVC tape. Notes: The connection pipes shall also be wound up with insulating material to preserve the temperature. The airing direction shall be from bottom to top.