



LG

Life's Good

ENGLISH

ITALIANO

ESPAÑOL

FRANÇAIS

DEUTSCH

INSTALLATION MANUAL AIR CONDITIONER

- Please read this installation manual completely before installing the product.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
- Please retain this installation manual for future reference after reading it thoroughly.

TYPE : Wall Mounted



P/NO : MFL59506819

www.lg.com

TABLE OF CONTENTS

<i>Installation Requirements</i>	<i>Required Parts</i>	<i>Required Tools</i>
Safety Precautions3	<input type="checkbox"/> Some pieces of type "A" screws	<input type="checkbox"/> Level gauge
	<input type="checkbox"/> Connecting cable	<input type="checkbox"/> Screw driver
Introduction6	<input type="checkbox"/> Installation guide map	<input type="checkbox"/> Electric drill
Symbols used in this manual.....6	<input type="checkbox"/> Pipes: Gas side	<input type="checkbox"/> Hole core drill(ø70mm)
	Liquid side	<input type="checkbox"/> Horizontal meter
Installation7	<input type="checkbox"/> Insulation materials	<input type="checkbox"/> Flaring tool set
Installation parts.....7	<input type="checkbox"/> Additional drain pipe	<input type="checkbox"/> Specified torque wrenches
Installation tools.....7	(Outer diameter15.5mm)	1.8kg.m, 4.2kg.m, 5.5kg.m,
Installation map.....8	<input type="checkbox"/> Some pieces of type "B" screws	6.6kg.m
Selecting the best location8		(different depending on model No.)
Fixing installation plate9		<input type="checkbox"/> SpannerHalf union
Drilling a hole in the wall9		<input type="checkbox"/> A glass of water
Flaring work10		<input type="checkbox"/> Hexagonal wrench(4mm)
Connecting the piping11		<input type="checkbox"/> Gas-leak detector
Connecting the cables16		<input type="checkbox"/> Vacuum pump
Checking the drainage.....17		<input type="checkbox"/> Gauge manifold
Test running18		<input type="checkbox"/> Owner's manual
		<input type="checkbox"/> Thermometer
		<input type="checkbox"/> Remote controller holder

Safety Precautions



To prevent the injury of the user or other people and property damage, the following instructions must be followed.

- Be sure to read before installing the air conditioner.
- Be sure to observe the cautions specified here as they include important items related to safety.
- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

⚠ WARNING This symbol indicates the possibility of death or serious injury.

⚠ CAUTION This symbol indicates the possibility of injury or damage to properties only.

- The meanings of the symbols used in this manual are as shown below.

	Be sure not to do.
	Be sure to follow the instruction.

⚠ WARNING

■ Installation

Always perform grounding.

- Otherwise, it may cause electrical shock.

Don't use a power cord, a plug or a loose socket which is damaged.

- Otherwise, it may cause a fire or electrical shock.

For installation of the product, always contact the service center or a professional installation agency.

- Otherwise, it may cause a fire, electrical shock, explosion or injury.

Securely attach the electrical cover to indoor and pipe cover to outdoor unit.

- If the electrical part cover to indoor unit and pipe cover to outdoor unit are not attached securely, it could result in a fire or electric shock due to dust, water, etc.

Always install a current leakage breaker and a dedicated switching board.

- No installation may cause a fire and electrical shock.

Do not keep or use flammable gases or combustibles near the air conditioner.

- Otherwise, it may cause a fire or the failure of product.

Ensure that an installation frame of the outdoor unit is not damaged due to use for a long time.

- It may cause injury or an accident.

Do not disassemble or repair the product randomly.

- It will cause a fire or electrical shock.

Do not install the product at a place where there is concern of falling down.

- Otherwise, it may result in personal injury.

Use caution when unpacking and installing.

- Sharp edges may cause injury.

There is a risk of fire and explosion.

- Inert gas (nitrogen) should be used when you check plumbing leaks, cleaning or repairs of pipes etc. If you are using combustible gases including oxygen, product may have the risk of fires and explosions.

Use a vacuum pump or Inert (nitrogen) gas when doing leakage test or air purge. Do not compress air or Oxygen and Do not use Flammable gases. Otherwise, it may cause fire or explosion.

- There is the risk of death, injury, fire or explosion.

■ Operation

Do not share the outlet with other appliances.

- It will cause an electric shock or a fire due to heat generation.

Do not use the damaged power cord.

- Otherwise, it may cause a fire or electrical shock.

Do not modify or extend the power cord randomly.

- Otherwise, it may cause a fire or electrical shock.

Take care so that the power cord may not be pulled during operation.

- Otherwise, it may cause a fire or electrical shock.

Unplug the unit if strange sound, smell, or smoke comes from it.

- Otherwise, it may cause electrical shock or a fire.

Keep the flames away.

- Otherwise, it may cause a fire.

Take the power plug out if necessary, holding the head of the plug and do not touch it with wet hands.

- Otherwise, it may cause a fire or electrical shock.

Do not use the power cord near the heating tools.

- Otherwise, it may cause a fire and electrical shock.

Do not open the inlet of the indoor/outdoor unit during operation.

- Otherwise, it may cause electrical shock and failure.

Do not allow water to run into electrical parts.

- Otherwise, it may cause the failure of machine or electrical shock.

Hold the plug by the head when taking it out.

- It may cause electric shock and damage.

Never touch the metal parts of the unit when removing the filter.

- They are sharp and may cause injury.

Do not step on the indoor/outdoor unit and do not put anything on it.

- It may cause an injury through dropping of the unit or falling down.

Do not place a heavy object on the power cord.

- Otherwise, it may cause a fire or electrical shock.

When the product is submerged into water, always contact the service center.

- Otherwise, it may cause a fire or electrical shock.

Take care so that children may not step on the outdoor unit.

- Otherwise, children may be seriously injured due to falling down.

 **CAUTION****■ Installation**

Install the drain hose to ensure that drain can be securely done.

- Otherwise, it may cause water leakage.

Always inspect gas leakage after the installation and repair of product.

- Otherwise, it may cause the failure of product.
- The Power cord connected to the unit should be selected according to the following specifications .

Install the product so that the noise or hot wind from the outdoor unit may not cause any damage to the neighbors.

- Otherwise, it may cause dispute with the neighbors.

Keep level parallel while installing the product.

- Otherwise, it may cause vibration or water leakage.

■ Operation

Avoid excessive cooling and perform ventilation sometimes.

- Otherwise, it may do harm to your health.

Do not use the appliance for special purposes such as preserving animals vegetables, precision machine, or art articles.

- Otherwise, it may damage your properties.

Use a soft cloth to clean. Do not use wax, thinner, or a strong detergent.

- The appearance of the air conditioner may deteriorate, change color, or develop surface flaws.

Do not place obstacles around the flow inlet or outlet.

- Otherwise, it may cause the failure of appliance or an accident.

Introduction

Symbols used in this Manual



This symbol alerts you to the risk of electric shock.



This symbol alerts you to hazards that may cause harm to the air conditioner.

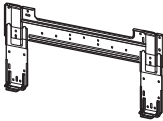
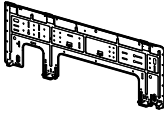






NOTICE

This symbol indicates special notes.

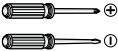




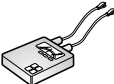



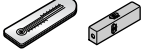


Installation

Read carefully, and then follow step by step.

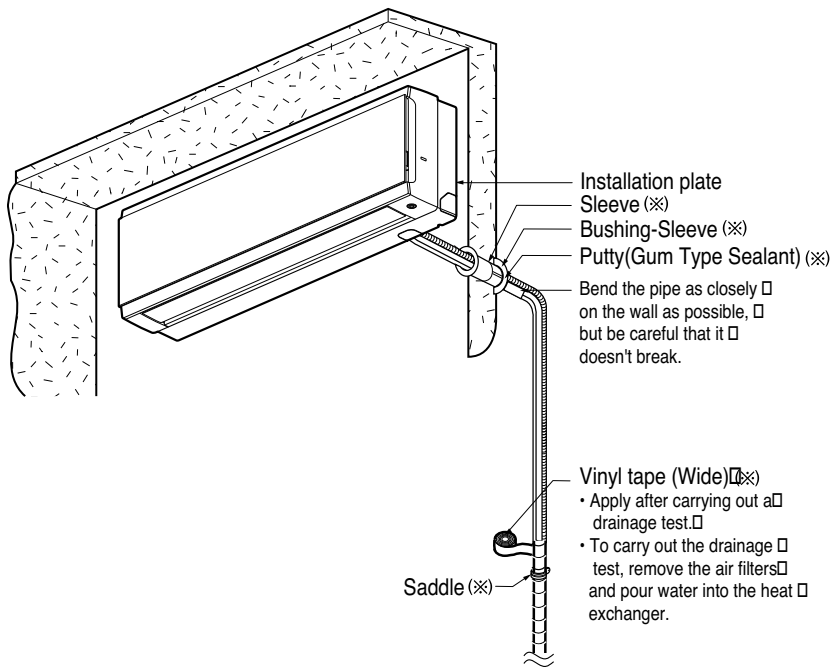
Installation Parts

Type 1	Type 2
Installation plate	Installation plate
	
Type "B" screw	Type "B" screw
	
Type "A" screw (6 EA)	Type "A" screw (8 EA)
	
Remote control holder	Remote control holder
	

Installation Tools

Figure	Name	Figure	Name
	Screw driver		Ohmmeter
	Electric drill		Hexagonal wrench
	Measuring tape, Knife		Ammeter
	Hole core drill		Gas-leak detector
	Spanner		Thermometer, □ Horizontal meter
	Torque wrench		Flaring tool set

Installation Map



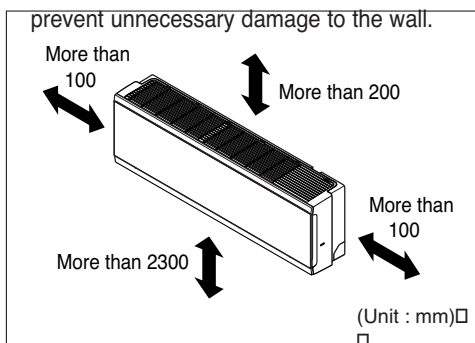
- The feature can be changed according to type of model. □

NOTICE

(⊗) You should purchase the installation parts.

Select the best Location

1. There should not be any heat or steam near the unit.
2. Select a place where there are no obstacles around the unit.
3. Make sure that condensation drainage can be conveniently routed away.
4. Do not install near a doorway.
5. Ensure that the interval between a wall and the left (or right) of the unit is more than 100mm. The unit should be installed as high as possible on the wall, allowing a minimum of 200mm from ceiling.
6. Use a metal detector to locate studs to



CAUTION

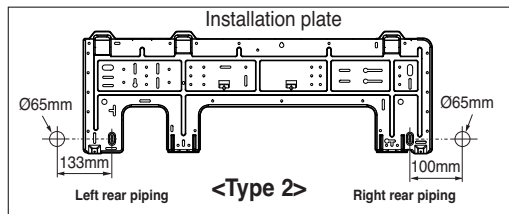
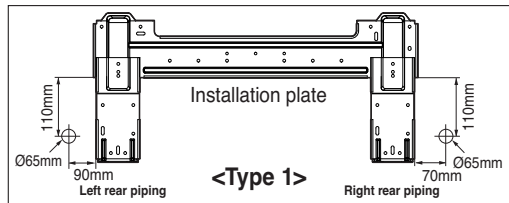
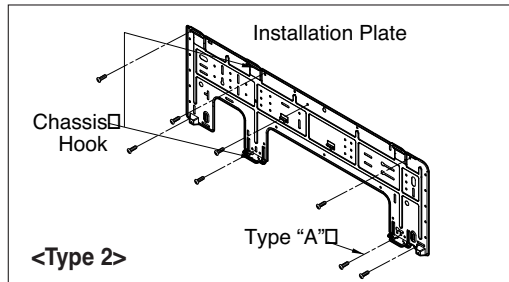
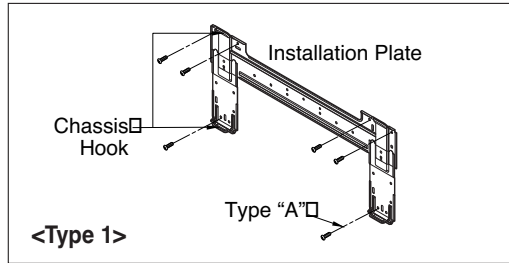
Install the indoor unit on the wall where the height from the floor is more than 2300mm.

Fixing Installation Plate

The wall you select should be strong and solid enough to prevent vibration

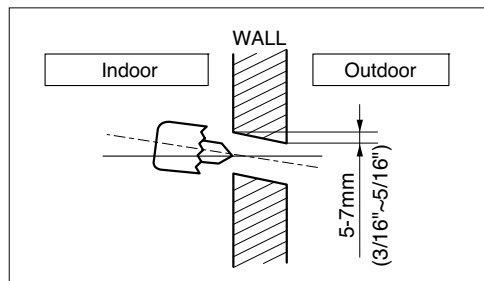
1. Mount the installation plate on the wall with type "A" screws. If mounting the unit on a concrete wall, use anchor bolts.
 - Mount the installation plate horizontally by aligning the centerline using a level.

2. Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate—routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



Drill a Hole in the Wall

- Drill the piping hole with a $\phi 65\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

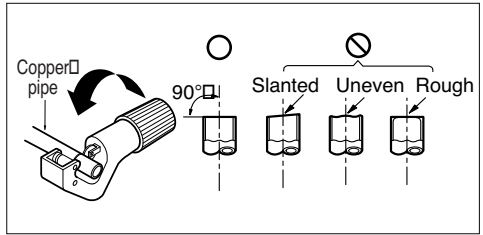


Flaring Work

Main cause for gas leakage is due to defect of flaring work. Carry out correct flaring work in the following procedure.

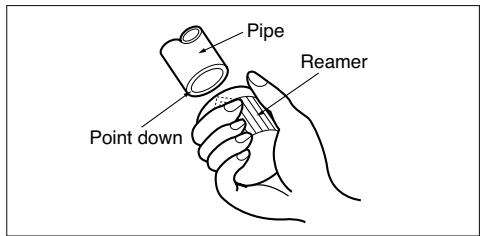
Cut the pipes and the cable.

1. Use the piping kit accessory or the pipes purchased locally.
2. Measure the distance between the indoor and the outdoor unit.
3. Cut the pipes a little longer than measured distance.
4. Cut the cable 1.5m longer than the pipe length.



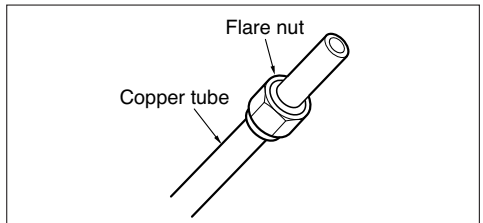
Burrs removal

1. Completely remove all burrs from the cut cross section of pipe/tube.
2. While removing burrs put the end of the copper tube/pipe in a downward direction while removing burrs location is also changed in order to avoid dropping burrs into the tubing.



Putting nut on

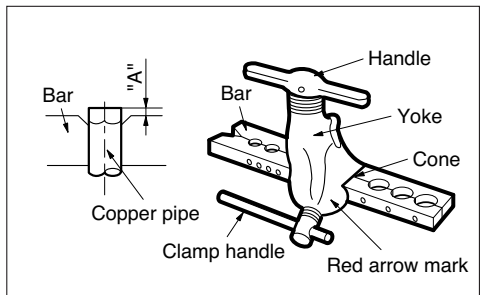
- Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal.
(not possible to put them on after finishing flare work)



Flaring work

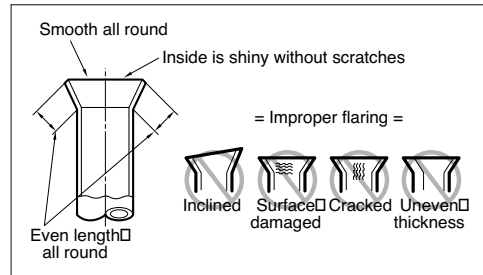
1. Firmly hold copper pipe in a bar with the dimension shown in below table.
2. Carry out flaring work with the flaring tool.

Outside diameter		A
mm	inch	mm
Ø6.35	1/4	1.1~1.3
Ø9.52	3/8	1.5~1.7
Ø12.7	1/2	1.6~1.8
Ø15.88	5/8	1.6~1.8
Ø19.05	3/4	1.9~2.1

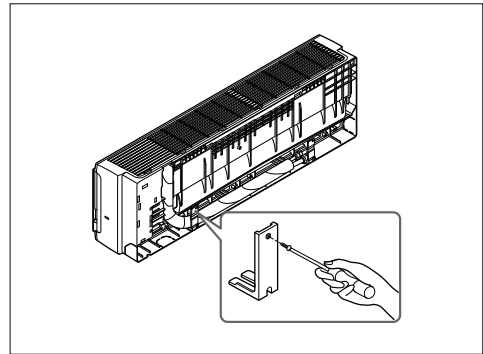


Check

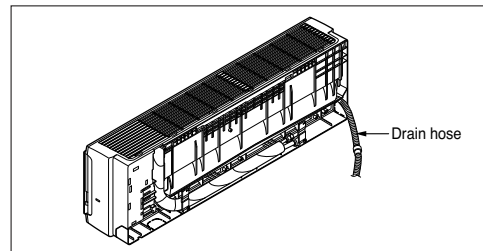
1. Compare the flared work with the figure by.
2. If a flared section is defective, cut it off and do flaring work again.

**Connecting the Piping****Indoor**

1. Prepare the indoor unit's piping and drain hose for installation through the wall.
2. Remove the plastic tubing retainer (see the illustration by) and pull the tubing and drain hose away from chassis.
3. Replace only the plastic tubing holder 1, not the holder 2 in the original position.

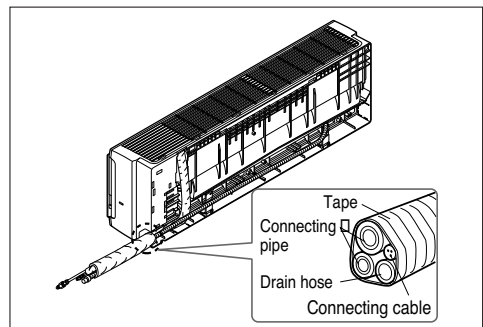
**For right rear piping**

1. Route the indoor tubing and the drain hose in the direction of rear right.
2. Insert the connecting cable into the indoor unit from the outdoor unit through the piping hole.
 - Do not connect the cable to the indoor unit.
 - Make a small loop with the cable for easy connection later.
3. Tape the tubing, drain hose, and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.

**CAUTION**

If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating" (condensation) will not damage furniture or floors.

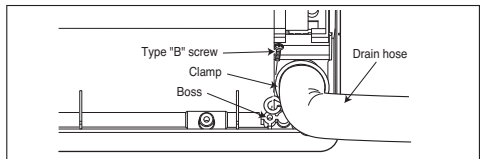
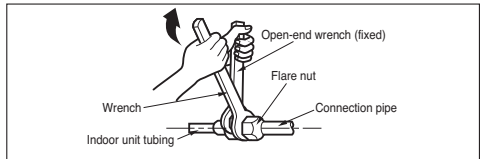
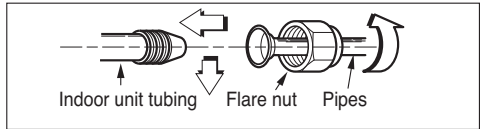
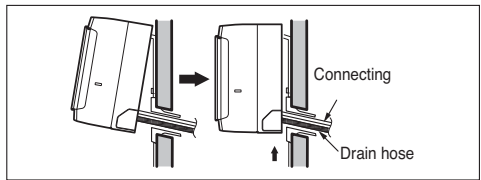
*Foamed polyethylene or equivalent is recommended.



4. Indoor unit installation

Hook the indoor unit onto the upper portion of the installation plate.(Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.) Ensure that the hooks are properly seated on the installation plate by moving it left and right.

Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).

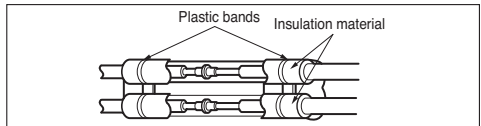
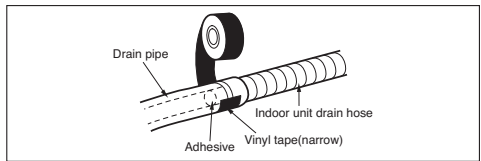


Connecting the piping to the indoor unit and drain hose to drain pipe.

1. Align the center of the pipes and sufficiently tighten the flare nut by hand.
2. Tighten the flare nut with a wrench.

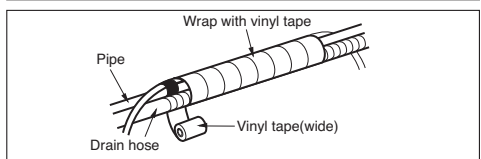
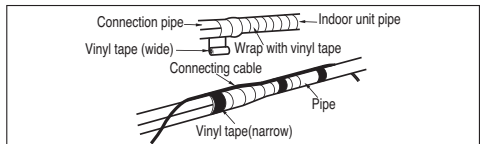
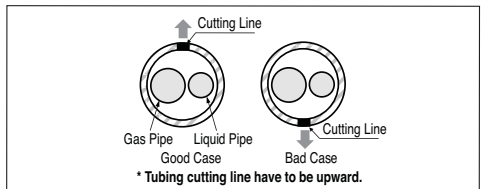
Outside diameter		Torque
mm	inch	kgf-m
Ø6.35	1/4	1.8~2.5
Ø9.52	3/8	3.4~4.2
Ø12.7	1/2	5.5~6.6
Ø15.88	5/8	6.3~8.2

3. Mount the clamp on the boss with a type "B" screw.(optional)
4. When extending the drain hose at the indoor unit, install the drain pipe.



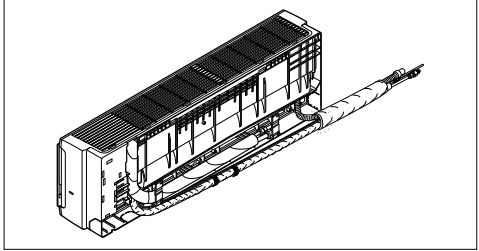
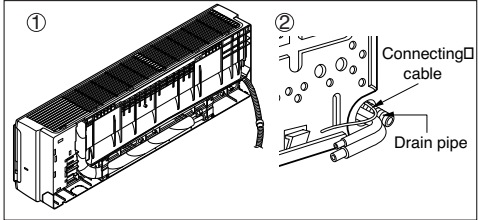
Wrap the insulation material around the connecting portion.

1. Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there may be no gap.
2. Set the tubing cutting line upward. Wrap the area which accommodates the rear piping housing section with vinyl tape.
3. Bundle the piping and drain hose together by wrapping them with vinyl tape sufficient enough to cover where they fit into the rear piping housing section.

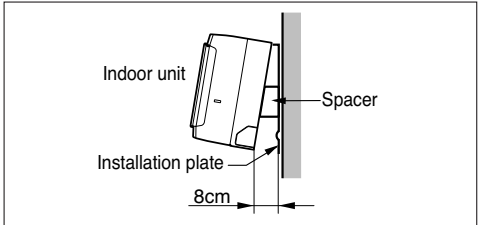


For left rear piping

1. Route the indoor tubing and the drain hose to the required piping hole position.
2. Insert the piping, drain hose, and the connecting cable into the piping hole.
3. Insert the connecting cable into the indoor unit.
 - Don't connect the cable to the indoor unit.
 - Make a small loop with the cable for easy connection later.
4. Tape the drain hose and the connecting cables.

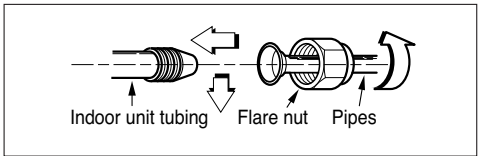


5. Indoor unit installation
 - Hang the indoor unit from the hooks at the top of the installation plate.
 - Insert the spacer etc. between the indoor unit and the installation plate and separate the bottom of the indoor unit from the wall.



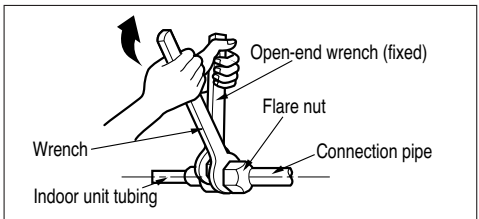
Connecting the piping to the indoor unit and the drain hose to drain pipe.

1. Align the center of the pipes and sufficiently tighten the flare nut by hand.

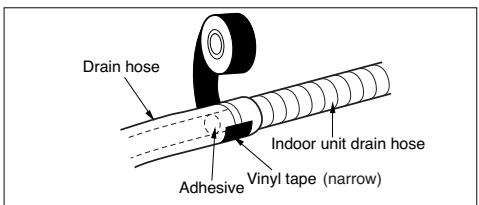


2. Tighten the flare nut with a wrench.

Outside diameter		Torque
mm	inch	kgf-m
Ø6.35	1/4	1.8~2.5
Ø9.52	3/8	3.4~4.2
Ø12.7	1/2	5.5~6.6
Ø15.88	5/8	6.3~8.2

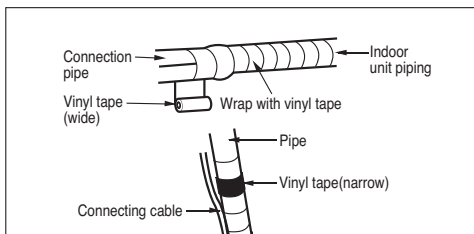
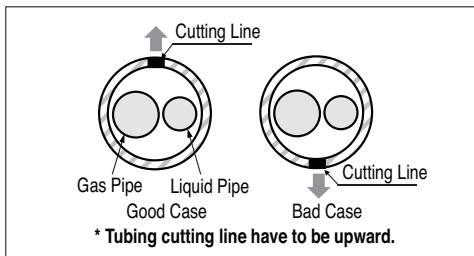
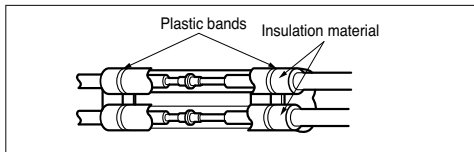


3. When extending the drain hose at the indoor unit, install the drain pipe.



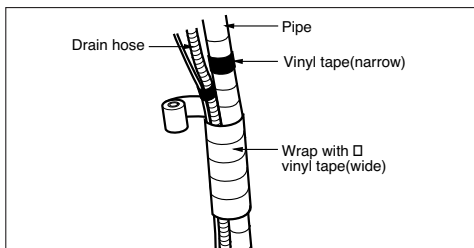
Wrap the insulation material around the connecting portion.

1. Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there may be no gap.
2. Set the tubing cutting line upward. Wrap the area which accommodates the rear piping housing section with vinyl tape.



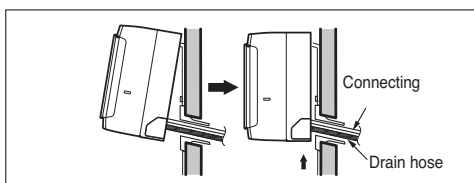
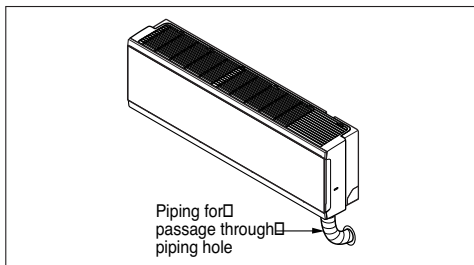
3. Bundle the piping and drain hose together by wrapping them with cloth tape over the range within which they fit into the rear piping housing section.

Reroute the pipings and the drain hose across the back of the chassis.



Indoor unit installation

1. Remove the spacer.
2. Ensure that the hooks are properly seated on the installation plate by moving it left and right.
3. Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking sound).

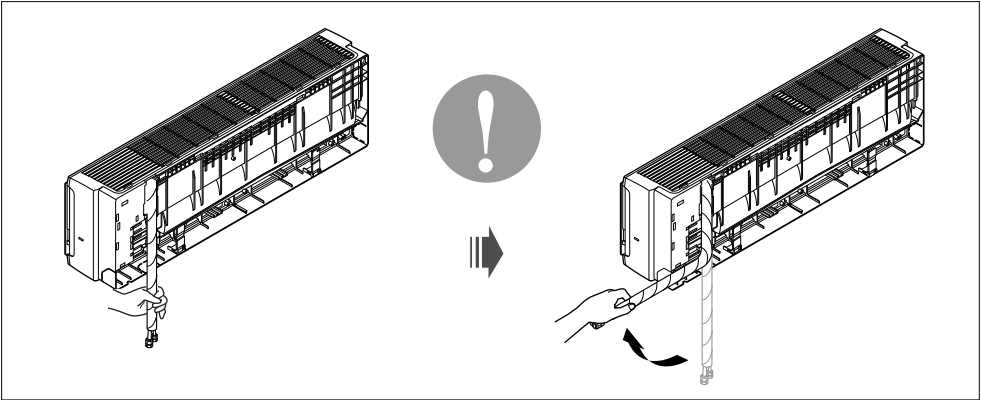


▲ CAUTION

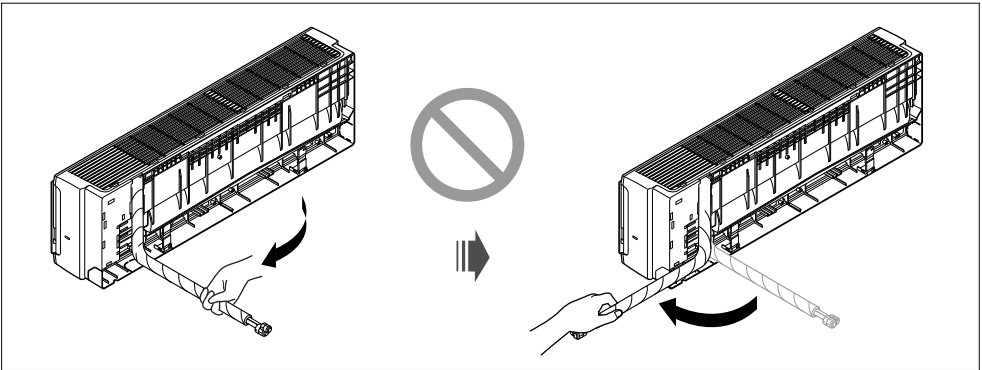
Installation Information. For left piping. Follow the instruction below.

Good case

- Press on the upper side of clamp and unfold the tubing to downward slowly.

**Bad case**

- Following bending type from right to left may cause damage to the tubing.



Connecting the Cables

Indoor

Connect the cable to the indoor unit by connecting the wires to the terminals on the control board individually according to the outdoor unit connection. (Ensure that the color of the wires of the outdoor unit and the terminal No. are the same as those of the indoor unit.)

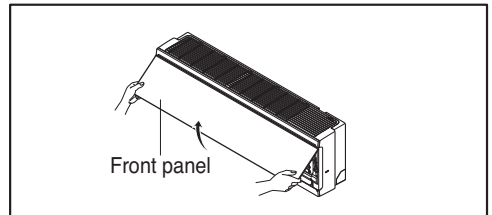
※ Field wiring shall be done such that the current-carrying conductors become taut before the earthing conductor if the cord slips out of the cord anchorage.

▲ CAUTION

How to use the front panel

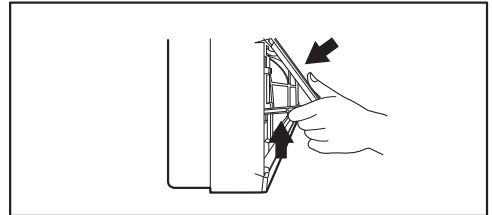
1. Front panel opening

Hold the two ends of the front panel at the bottom and move it upward.



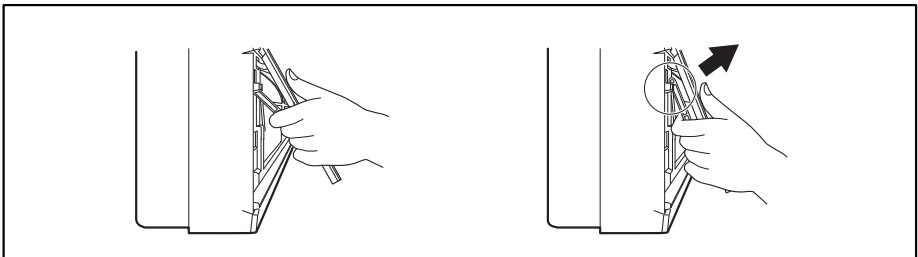
2. Front panel closing

Move the link upward and close the front panel.



3. Front panel removing

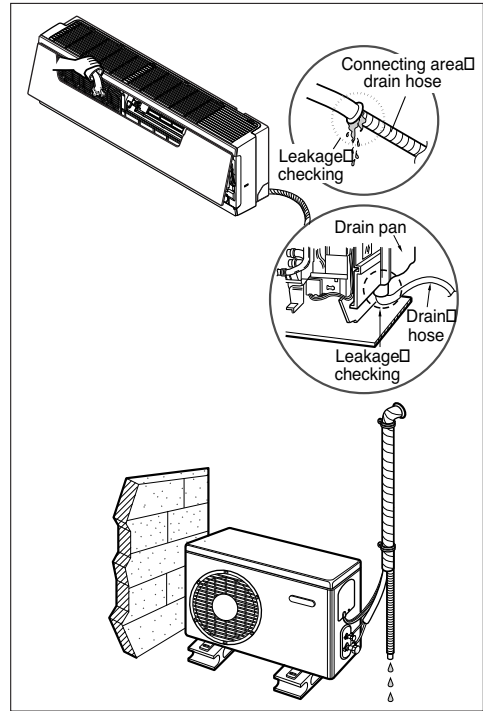
Raise the link up to hook hanger and remove front panel forward.



Checking the Drainage

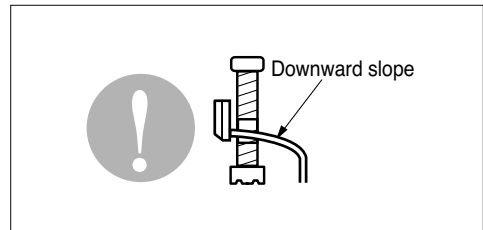
To check the drainage.

1. Pour a glass of water on the evaporator.
2. Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

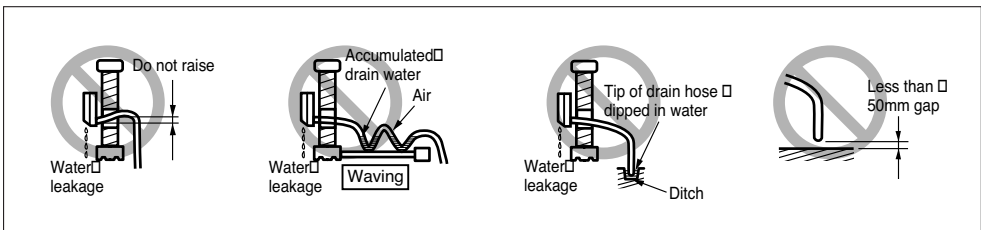


Drain piping

1. The drain hose should point downward for easy drain flow.



2. Do not make drain piping like the following.



Test Run

1. Check that all tubing and wiring are properly connected.
2. Check that the gas and liquid side service valves are fully open.

Prepare remote controller

1. Remove the battery cover by pulling it according to the arrow direction.
2. Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
3. Reattach the cover by pushing it back into position.

NOTICE

- Use 2 AAA(1.5volt) batteries. Do not use rechargeable batteries.
- Remove the batteries from the remote controller if the system is not used for a long time.

