

Safety Precautions

- Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.).
- Only trained, qualified installers and service mechanics should install, start-up, and serve this equipment.
- When working on the equipment, observe precautions in the literature 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. Use care in handling, rigging, and setting bulky equipment.
- Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and National Electrical Code for special requirements.

Ideal Installation Locations Include:

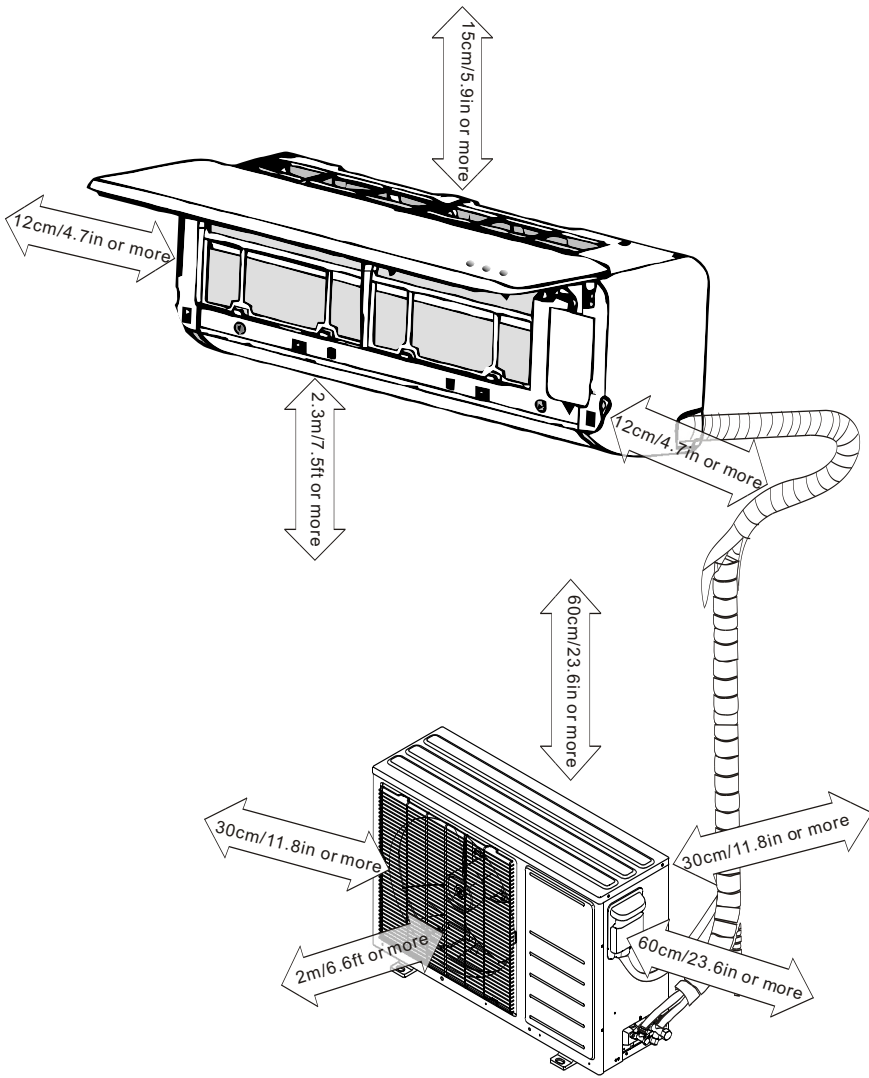
Indoor Unit

- A location which can bear the weight of indoor unit.
- Do not install indoor units near a direct source of heat such as direct sunlight or a heating appliance.
- A location which provides appropriate clearances as below figure.

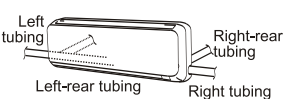
Outdoor Unit

- A location which is convenient to installation and not exposed to strong wind. If unit is exposed to strong winds it is recommended that a wind baffle be used.
- A location which can bear the weight of outdoor unit and where the outdoor unit can be mounted in a level position.
- A location which provides appropriate clearances as below figure.

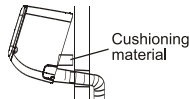
Do not install the indoor or outdoor units in a location with special environmental conditions.



The refrigerant lines may be routed in any of the four directions.



Put a cushioning material to have installation space for rear tubing.



If drain cap exist, the drain hose can be exchanged.

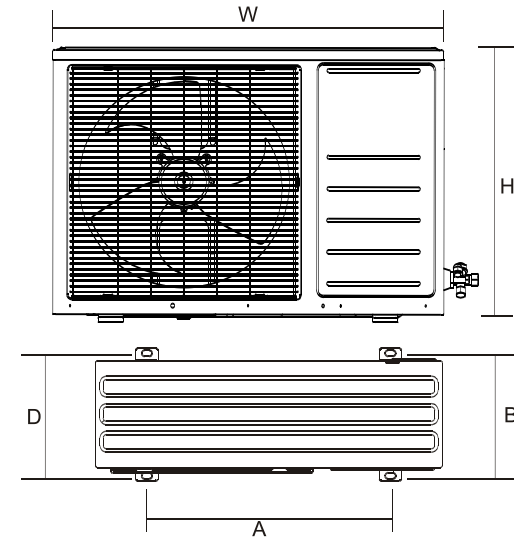


Accessories

No	Name (Qty)	No	Optional (Model Specific)
1	Installation plate (1)	4	Drain outlet (1) Gasket (1)
2	Anchor (5 or 8) Screw A (5 or 8)	5	Remote controller holder (1) Screw B (2)
3	Remote controller (1) Battery (2)	6	Air freshening filter(1) (used to install on Air filter)

Outdoor Unit Mounting Dimensions

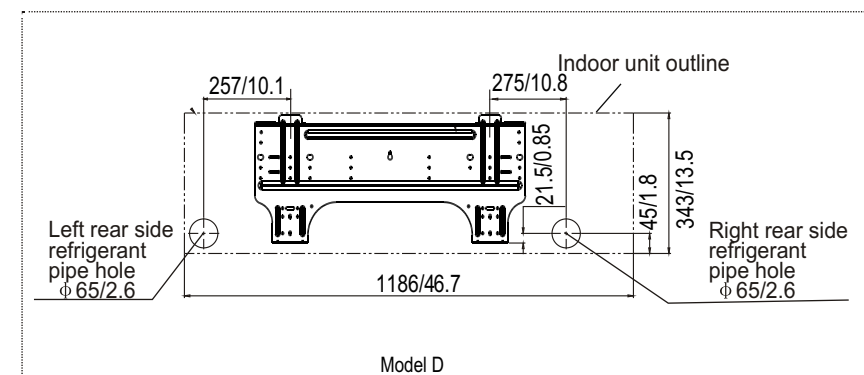
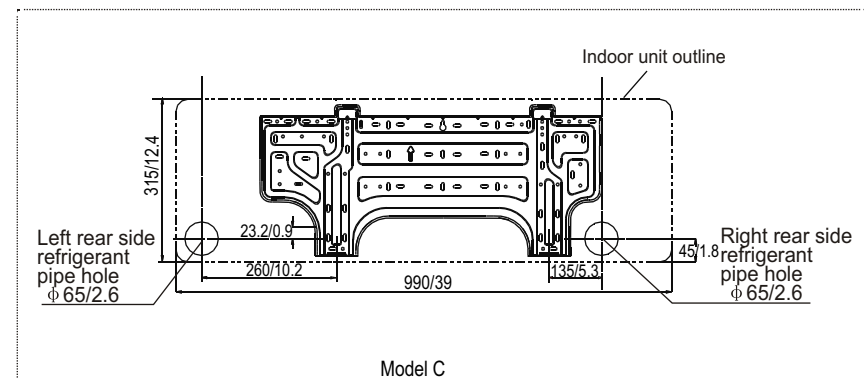
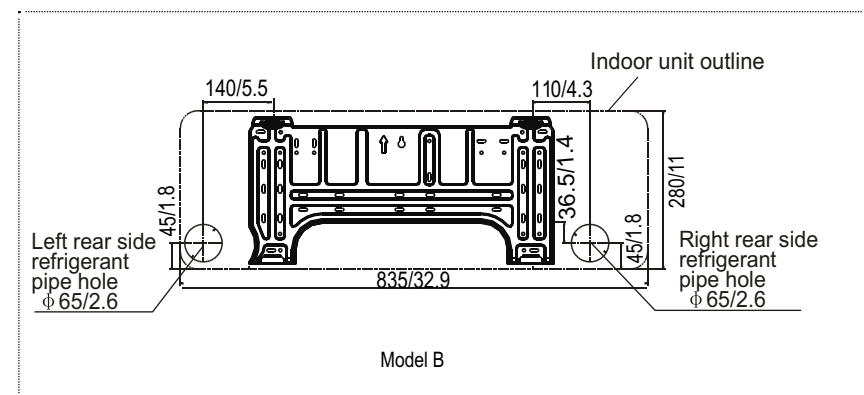
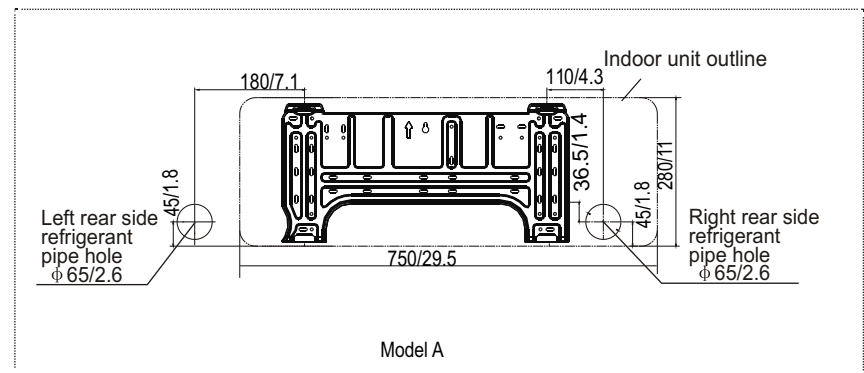
The mounting dimensions vary among different outdoor units.
The fixing bolt head diameter should be more than 10mm.



Outdoor unit dimension mm/inch(WxHxD)	Mounting dimensions	
	A(mm/inch)	B(mm/inch)
700x540x240 (29.5x21.3x9.4)	458(18)	250(9.8)
780x540x250 (30.7x21.3x9.8)	549(21.6)	276(10.9)
760x590x285 (29.9x23.2x11.2)	530(20.9)	290(11.4)
810x558x310(31.8x21.9x12.2)	549(21.6)	325(12.8)
845x700x320(33.3x27.6x12.6)	560(22.1)	335(13.2)
900x860x315(35.4x33.9x12.4)	590(23.2)	333(13.1)
945x810x395(37.2x31.9x15.6)	640(25.2)	405(15.9)

Indoor Unit Mounting Plate Dimensions

The mounting plate will look like one of the following depending on the unit size.
The holes for fixing anchors should be 5mm/0.2in. (Unit:mm/inch)



Piping Work

Connective pipe length will affect the capacity and energy efficiency of the unit. The nominal efficiency is tested based on the pipe length of 5 meter(16.4ft).

	Minimum length to reduce abnormal vibration & noise	Charge less length	Additional charge per meter	
			Liquid side: ϕ 6.35mm/1/4in	Liquid side: ϕ 9.52mm/3/8in
R22	3m(9.8ft)	5m(16.4ft)	30g(1.06oz)	60g(2.12oz)
R410A*			15g(0.53oz) (For Inverter type)	30g(1.06oz) (For Inverter type)
			20g(0.71oz)	40g(1.41oz)

* Please use tools for R410A system.

Align the Center to tighten the flare nut and finish connection using two wrenches. Tightening torque for flaring connection is as below.

Wrench Flare nut Torque wrench	Outer diam.	Tightening torque (N.cm/lbf.in)	Additional tightening torque(N.cm/lbf.in)
	ϕ 6.35mm/1/4in	1500/132.8	1600/141.59
ϕ 9.52mm/3/8in	2500/221.34	2600/230.02	
ϕ 12.7mm/1/2in	3500/309.73	3600/318.56	
ϕ 15.88mm/5/8in	4500/398.23	4700/415.93	

Wiring Work

- A main switch and circuit breaker or fuse must be installed, the capacity should be above 1.5 times of maximum current in circuit.
- An individual branch circuit and single socket used only for this appliance must be available.
- The indoor power cord type should be H05VV-F or H05V2V2-F.
- The outdoor power cord and interconnecting cable type should be H07RN-F.
- Wire cross section is depending on the rated current which is indicated on the nameplate.

Suggest Minimum Wire Size (AWG:American Wire Gage):

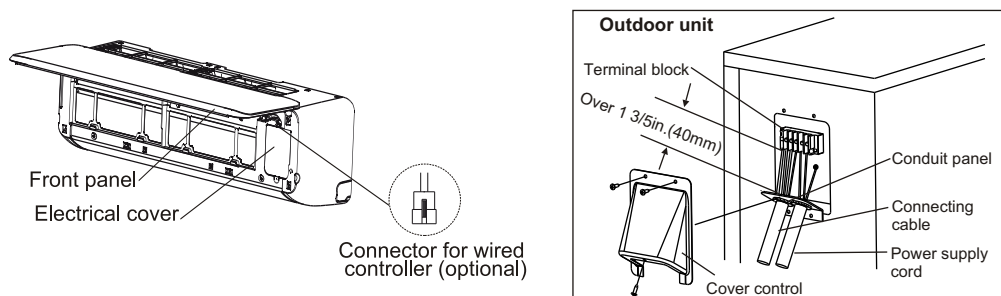
Appliance Amps	AWG Wire Size
10	18
13	16
18	14
25	12
30	10

Indoor Wire Connection

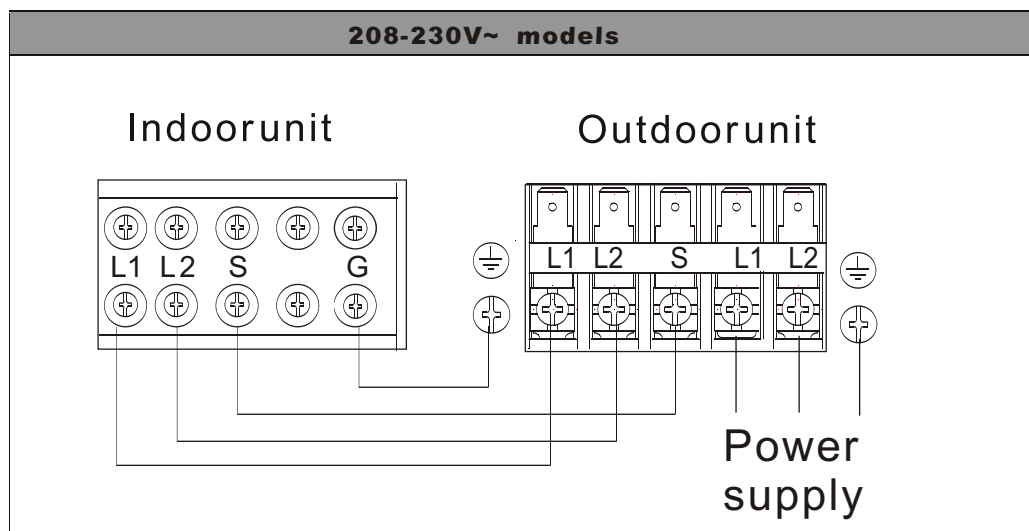
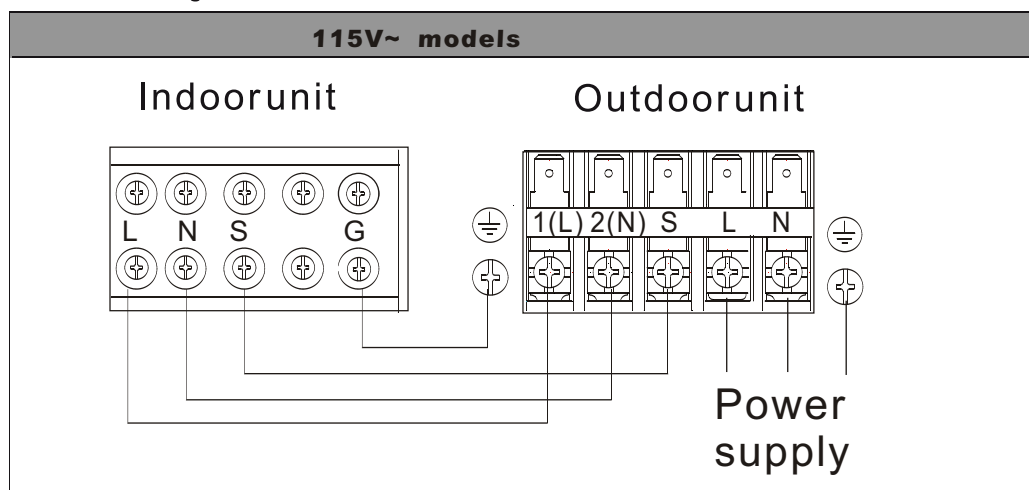
1. Lift the indoor unit front panel.
2. Remove the indoor unit electrical cover and cord clamp by loosening the screws.
3. Pass the connecting wires from the back of indoor unit and connect to the indoor terminal block.

Outdoor Wire Connection

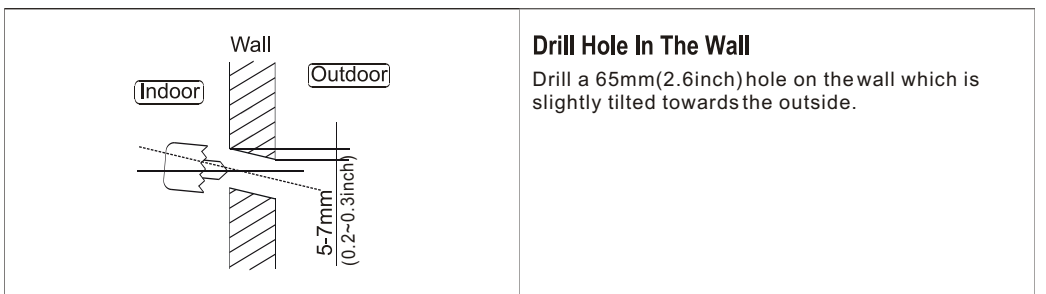
1. Remove the electrical cover and cord clamp by loosening the screws.
2. Connect wires to the outdoor terminal block by same sequence to indoor unit.



Connection Diagrams

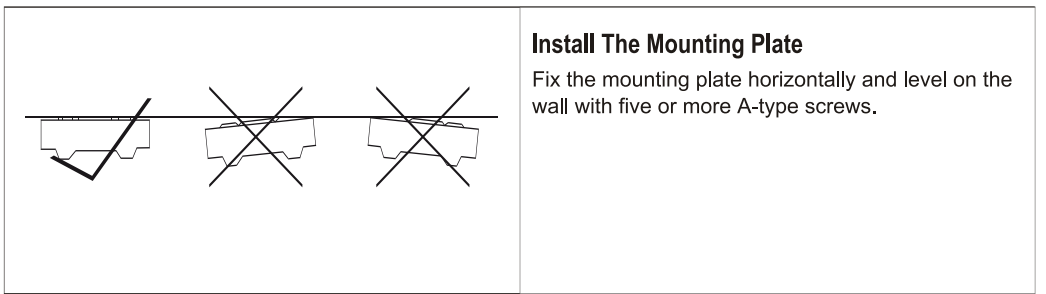


Installation Process



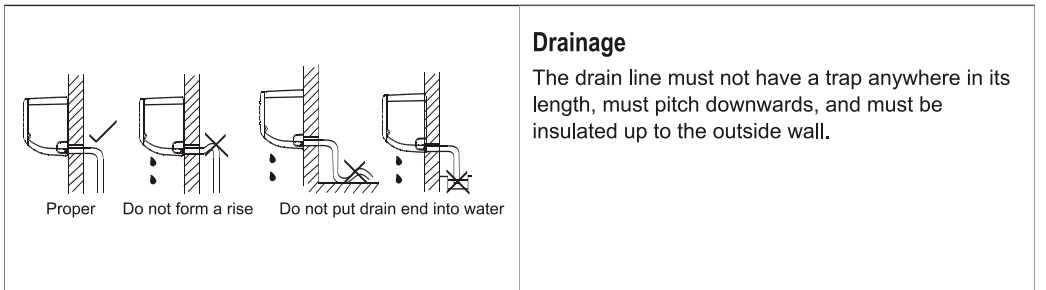
Drill Hole In The Wall

Drill a 65mm(2.6inch)hole on the wall which is slightly tilted towards the outside.



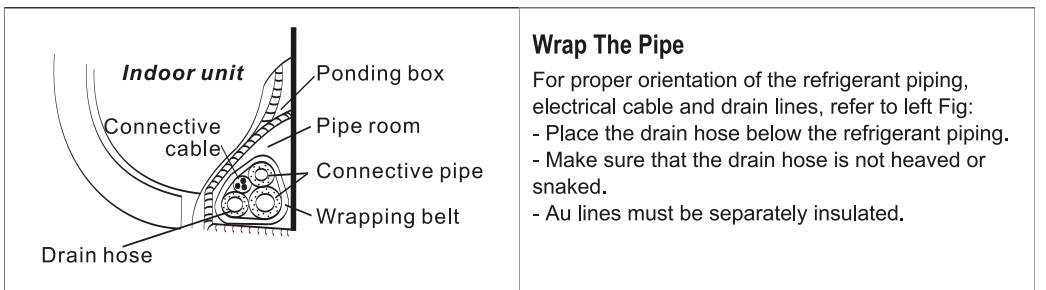
Install The Mounting Plate

Fix the mounting plate horizontally and level on the wall with five or more A-type screws.



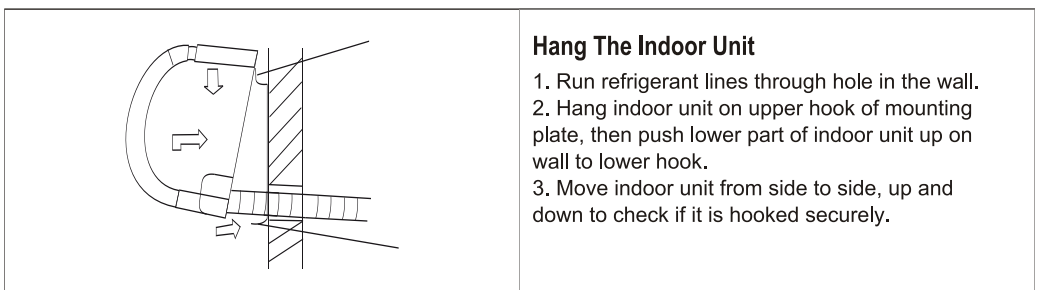
Drainage

The drain line must not have a trap anywhere in its length, must pitch downwards, and must be insulated up to the outside wall.



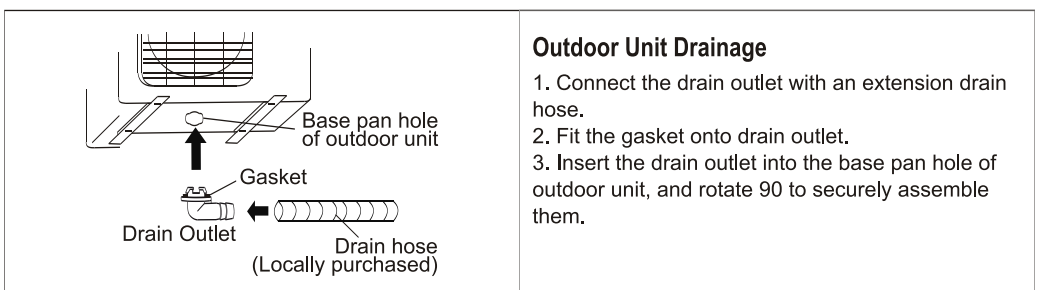
Wrap The Pipe

For proper orientation of the refrigerant piping, electrical cable and drain lines, refer to left Fig:
 - Place the drain hose below the refrigerant piping.
 - Make sure that the drain hose is not heaved or snaked.
 - Au lines must be separately insulated.



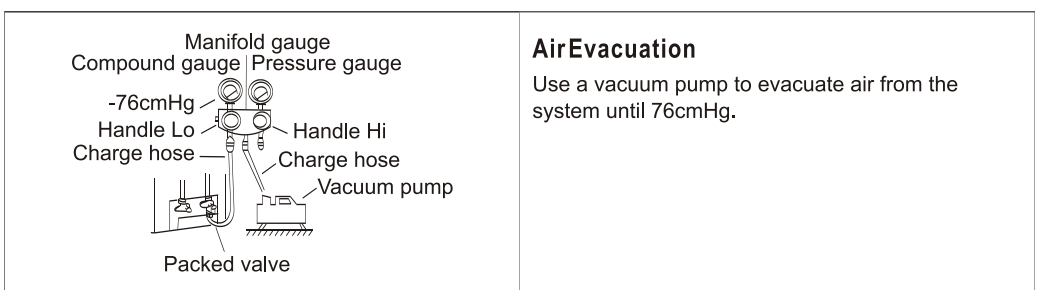
Hang The Indoor Unit

1. Run refrigerant lines through hole in the wall.
2. Hang indoor unit on upper hook of mounting plate, then push lower part of indoor unit up on wall to lower hook.
3. Move indoor unit from side to side, up and down to check if it is hooked securely.



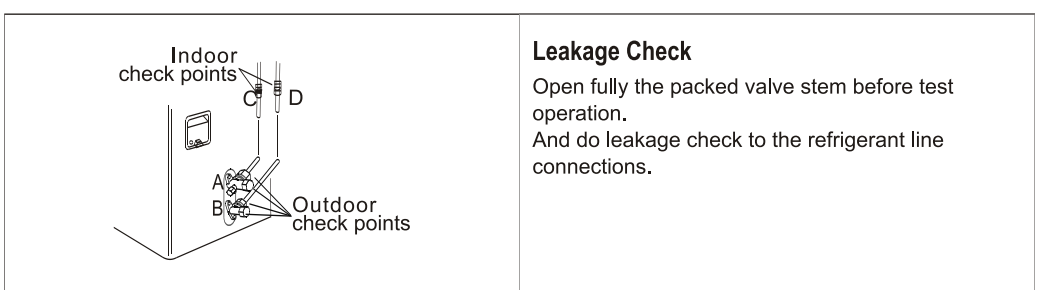
Outdoor Unit Drainage

1. Connect the drain outlet with an extension drain hose.
2. Fit the gasket onto drain outlet.
3. Insert the drain outlet into the base pan hole of outdoor unit, and rotate 90 to securely assemble them.



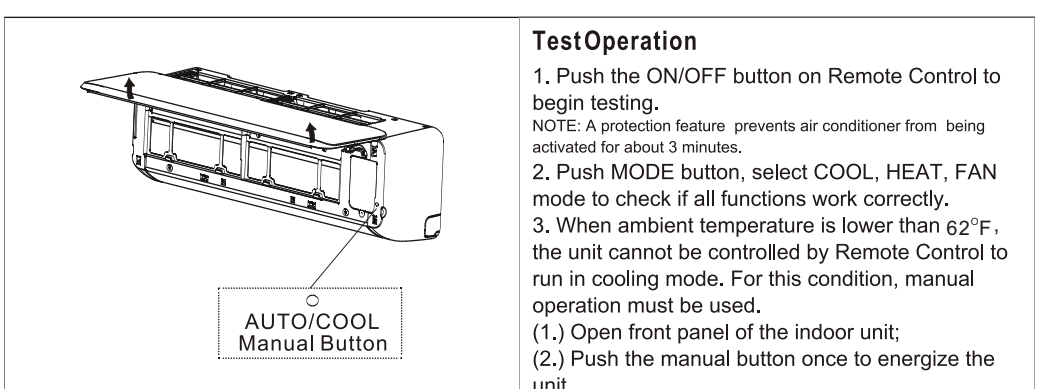
Air Evacuation

Use a vacuum pump to evacuate air from the system until 76cmHg.



Leakage Check

Open fully the packed valve stem before test operation. And do leakage check to the refrigerant line connections.



Test Operation

1. Push the ON/OFF button on Remote Control to begin testing.
NOTE: A protection feature prevents air conditioner from being activated for about 3 minutes.
2. Push MODE button, select COOL, HEAT, FAN mode to check if all functions work correctly.
3. When ambient temperature is lower than 62°F, the unit cannot be controlled by Remote Control to run in cooling mode. For this condition, manual operation must be used.
 (1.) Open front panel of the indoor unit;
 (2.) Push the manual button once to energize the unit.