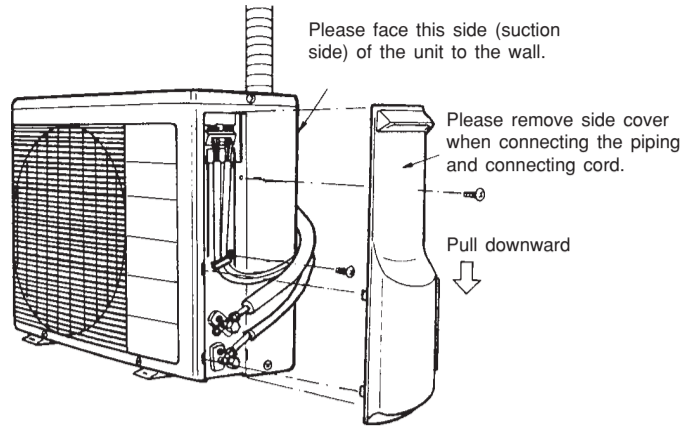


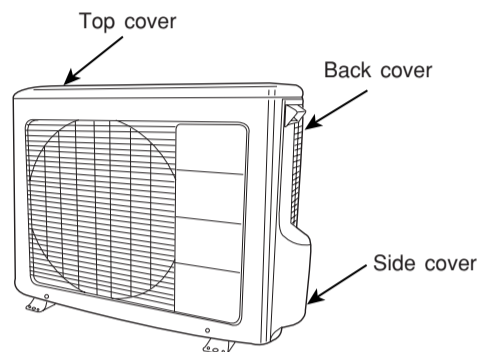


- Please mount the outdoor unit on stable ground to prevent vibration and increase of noise level.
- Decide the location for piping after sorting out the different types of pipe available.
- Open the side plate by unscrewing the screws as shown below.



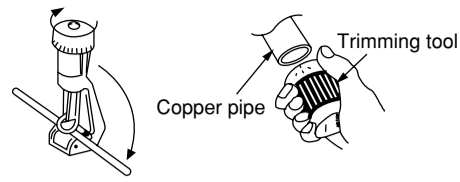
**CAUTION**

- Please make sure to remove all spacers inside the unit.
- Open the Top, Back and Side cover of the unit.
  - Pull out the spacers inside. (Spacers are only for transportation purpose). If not remove, vibration and noise will occur.



**1 Preparation of Pipe**

- Use a pipe cutter to cut the copper pipe.



**CAUTION**

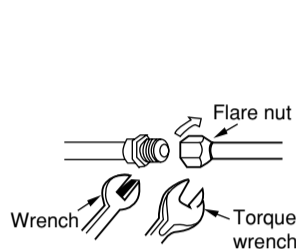
- Jagged edge will cause leakage.
- Point the side to be trimmed downwards during trimming to prevent copper chips from entering the pipe.
- Before flaring, please put on the flare nut.



Outer Diameter (ø)	A (mm)	
	Imperial flaring tool	Rigid flaring tool
6.35 (1/4")	0.8 - 1.5	0 - 0.5
12.7 (1/2")	1.0 - 2.0	0 - 1.0

**2 Pipe Connection**

- Please be careful when bending the copper pipe.
- Applied frozen grease to the connection points and then screw in manually. After that, use a torque wrench to tighten the connection.

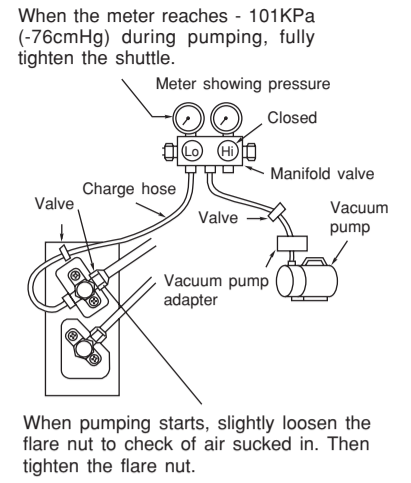


	Outer diameter of pipe	Torque N.m (kgf • cm)
Small diameter side	6.35 (1/4")	13.7 - 18.6 (140 - 190)
Big diameter side	12.7 (1/2")	44.1 - 53.8 (450 - 550)
Valve head cap		19.6 - 24.5 (200 - 250)
Valve core cap		12.3 - 15.7 (125 - 160)

**3 Removal Of Air From The Pipe And Gas Leakage Inspection**

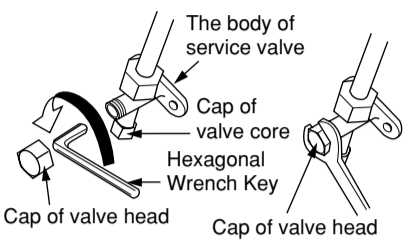
**Procedures of using Vacuum Pump for Air Removal**

- As shown in right figure, remove the cap of valve core. Then, connect the charge hose. Remove the cap of valve head. Connect the vacuum pump adapter to the vacuum pump and connect the charge hose to the adapter.
- Fully tighten the "Hi" shuttle of the manifold valve and completely unscrew the "Lo" shuttle. Run the vacuum pump for about 10-15 minutes, then completely tighten the "Lo" shuttle and switch off the vacuum pump.
- Completely unscrew the spindle of the service valve (at 2 places) in anti-clockwise direction to allow the flow of coolant (using Hexagonal Wrench key).
- Remove the charge hose and tighten the cap of valve head. Check the cap's periphery if there is any gas leakage. The task is then completed.



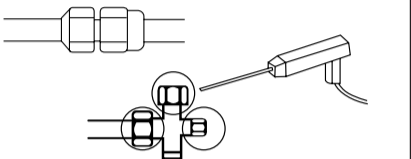
When the meter reaches - 101KPa (-76cmHg) during pumping, fully tighten the shuttle.

When pumping starts, slightly loosen the flare nut to check of air sucked in. Then tighten the flare nut.



**Gas Leakage Inspection**

Please use gas leakage detector to check if leakage occurs at the connection of Flare nut as shown on the right.



If gas leakage occurs, further tighten the connection to stop leakage.

**CAUTION**

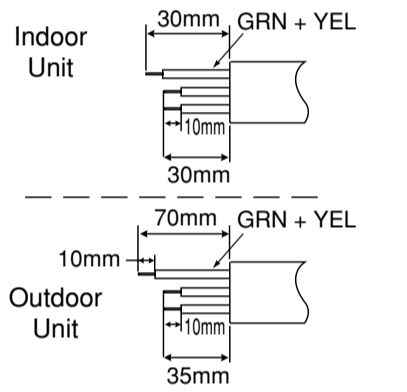
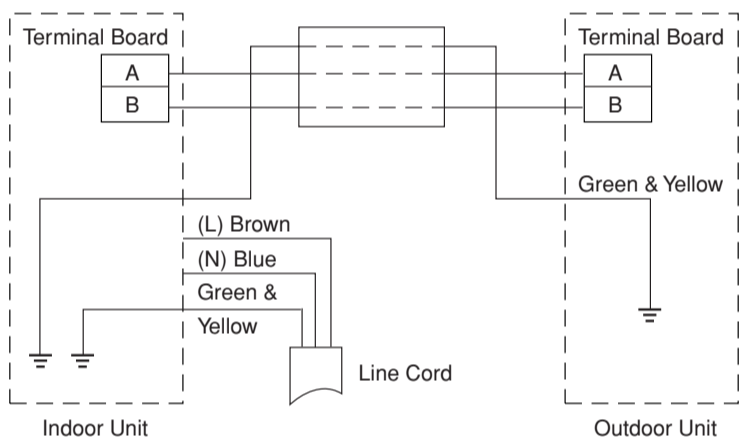
In case of removing Flare nut of a cooling unit, first remove a nut of small diameter side, or else seal cap of big diameter side will fly out.

**WARNING** • THIS APPLIANCE MUST BE EARTHED.

Power supply shall be connected at the rated voltage, otherwise the unit will be broken or could not reach the specified capacity.

**Procedures of Wiring**

- Connect the electrical wiring between the indoor and outdoor unit as shown in below Fig. Never connect the wiring by mistake.
- The connection cord must be fixed by the band which is located on the electrical box.



Detail of cutting the connecting cord

To remove the connecting wires for the indoor unit, please remove the low cover panel in front of the unit.

**WARNING**

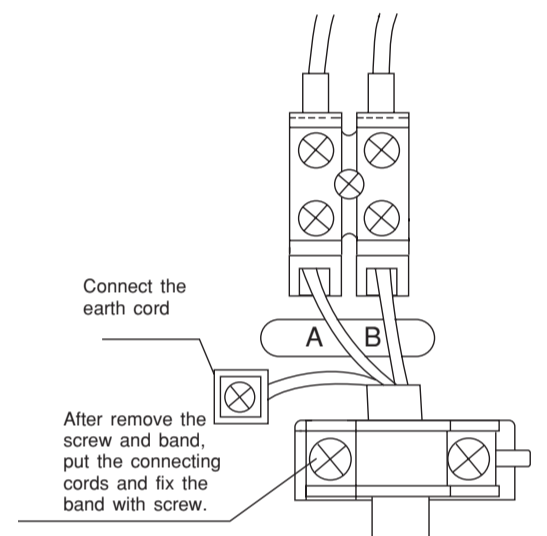
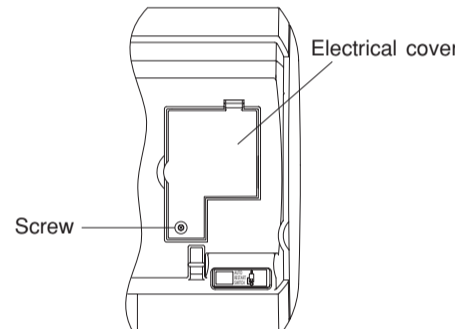
- The naked part of the wire core should be 10 mm and fix it to the terminal tightly. Then try to pull the individual wire to check if the contact is tight. Improper insertion may burn the terminal.
- Be sure to use only power cables approved from the authorities in your country. For example in Germany: Cable type: NYM 3x1.5mm<sup>2</sup>, (fuse = 20A time delay)
- Please refer to the installation manual for wire connection to the terminals of the units. The cabling must meet the standards of electrical installation.
- There is a AC voltage of 220V between the L and N terminals. Therefore, before servicing, be sure to remove the plug from the AC outlet or switch off the main switch.

**Wiring Of The Indoor Unit**

- For wire connection of the Indoor unit, you need to remove front panel and electrical cover.
- Method to remove front panel
- Refer to "How to Remove The Front Cover".

**Method to remove electrical cover**

- Remove the screw and electrical cover.
- Insert the connecting cord (A, B) from the bottom of unit.
- Fixed the wire to terminal wires firmly as shown in figure at right side.



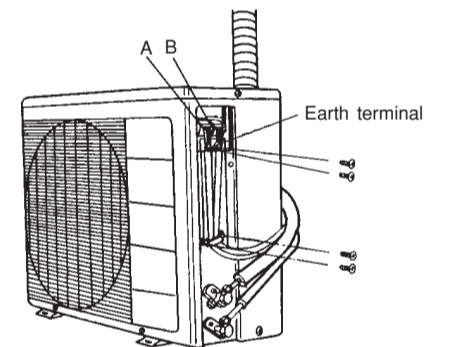
After remove the screw and band, put the connecting cords and fix the band with screw.

**Wiring Of The Outdoor Unit**

- Please remove the side cover for wire connection.

**WARNING**

- You may not be able to close the side cover due to the connecting cord, under such situation, please press against the wall of side cover to fix it.
- Be sure that the hooks (2 places) are plugged in. Otherwise, water leakage may occur and this causes short circuit or faults.



**Checking for the electric source and the voltage range**

- Before installation, the power source must be checked and necessary wiring work must be completed. To make the proper wiring capacity, use the wire gauges list below for the lead-in from a pole transformer and for the wiring from a switch board of fuse box to the outlet in consideration of the locked rotor current.

- Investigate the power supply capacity and other electrical conditions at the installation location. Depending on the model of room air conditioner to be installed, request the customer to make arrangements for the necessary electrical work etc. The electrical work includes the wiring work up the outlet. In localities where electrical conditions are poor, use of a voltage regulation is recommended.

**IMPORTANT**

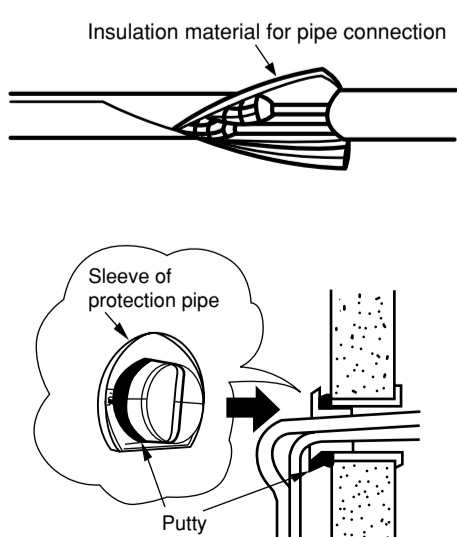
Wire length	Wire gauge
up to 6m	1.6mm (B.S. 14)
up to 10m	2.0mm (B.S. 12)
up to 15m	2.6mm (B.S. 10)
up to 25m	3.2mm (B.S. 8)
up to 42m	14mm <sup>2</sup> (B.S. 6)

USE 20A time delay FUSE

IMPORTANT

**1 Insulation And Maintenance Of Pipe Connection**

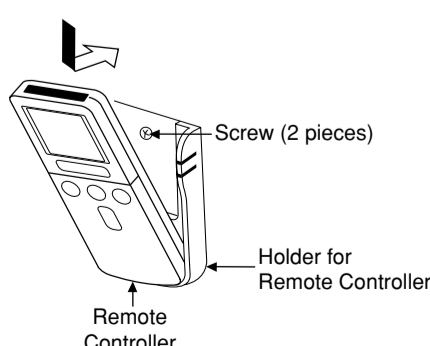
- The connected terminals should be completed sealed with heat insulator and then tied up with rubber strap.
- Please tie the pipe and power line together with vinyl tape as shown in the figure showing the installation of indoor and outdoor units. Then fix their position with holders.
- To enhance the heat insulation and to prevent water condensation, please cover the outdoor part of the drain hose and pipe with insulation pipe.
- Completely seal any gap with putty.



**2 Installation Of Remote Controller**

- The remote controller can be placed in its holder which is fixed on wall or beam.
- To operate the remote controller at its holder, please ensure that the unit can receive signal transmitted from the controller at the place where the holder is to be fixed. The unit will beep when signal is received from the remote controller. The signal transmission is weakened by the fluorescent light. Therefore, during the installation of the remote control holder, please switch on the light, even during day time, to determine the mounting location of the holder.

The controller must be hooked onto the hook at the lower part of the holder. Push in the remote controller in the direction as shown in figure below.



**3 Power Source And Operation Test**

**Power Source**

**CAUTION**

- Please use a new socket. Accident may occur due to the use of old socket because of poor contact.
- Please plug in and then remove the plug for 2 - 3 times. This is to ensure that the plug is completely plugged into the socket.
- Keep additional length for the power cord and do not render the plug under external force as this may cause poor contact.
- Do not fix the power cord with U-shape nail.

**Operation Test**

- Please ensure that the air conditioner is in normal operating condition during the operation test.
- Explain to your customer the proper operation procedures as described in the user's manual.