

# SPLIT TYPE ROOM AIR CONDITIONER

## Wall Mounted Type

MODEL : ASU30/AOU30

# INSTALLATION MANUAL

(PART NO. 9359460015)

### IMPORTANT!

#### Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

#### For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- Observe all local, state, and national electrical codes.
- Pay close attention to all danger, warning, and caution notices given in this manual.

**WARNING:** This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

**CAUTION:** This symbol refers to a hazard or unsafe practice which can result in personal injury and the potential for product or property damage.

- Hazel alerting symbols



Electrical



Safety / alert

#### If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

#### In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

### SPECIAL PRECAUTIONS

#### When Wiring

**ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.**

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause **accidental injury or death**.
- **Ground the unit** following local electrical codes.
- Connect all wiring **tightly**. Loose wiring may cause overheating at connection points and a possible fire hazard.

#### When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

#### When Installing...

##### ...In a Ceiling or Wall

Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

##### ...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

##### ...In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

##### ...In an Area with High Winds

Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

#### When Connecting Refrigerant Tubing

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

#### NOTE:

Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either "small" or "large" rather than as "liquid" or "gas".




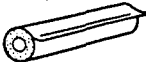


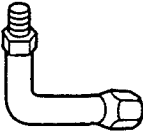
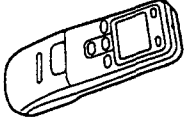
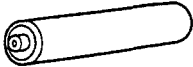

#### When Servicing

- Turn the power **OFF** at the main circuit breaker panel before opening the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.
- After installation, explain correct operation to the customer, using the operating manual.

# STANDARD PARTS

The following installation parts are furnished.  
Use them as required.

## INDOOR UNIT ACCESSORIES

Name and Shape	Qty	Application
Wall clamp 	1	For installing the indoor unit
Template 	1	For making hole of piping
Coupler heat insulation (Large) 	2	For indoor side pipe joint (Large pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Small pipe)
Screw 	15	<ul style="list-style-type: none"> <li>• For installing the wall clamp (12)</li> <li>• For installing the remote controller holder clamp (2)</li> <li>• Indoor unit and wall clamp mounting screw (1)</li> </ul>
Screw (Painted) 	2	For installing the Cover plate-R
Coupling A 	1	For installing the connection pipe to the indoor unit
Remote controller 	1	
Battery 	2	For remote controller
Remote controller holder 	1	For remote controller installation

# GENERAL

This INSTALLATION MANUAL briefly outlines where and how to install the air conditioning system. Please read over the entire set of instructions for the indoor and outdoor units and make sure all accessory parts listed are with the system before beginning.

## 1. TYPE OF COPPER PIPE AND INSULATION MATERIAL

Copper tubing for connecting the outdoor unit to the indoor unit and insulation material is available for purchase locally. When you purchase them, please specify the following.

A. Deoxidized annealed copper pipe for refrigerant piping as:

Table 1

	Outer diameter	Thickness
Small pipe	3/8" (9.52 mm)	1/32" (0.8 mm)
Large pipe	3/4" (19.05 mm)	3/64" (1.0 mm)

Cut each pipe to the appropriate length + 12" (30 cm) to 16" (40 cm) to dampen vibration between units.

B. Foamed polyethylene insulation for copper pipes as required to precise length of piping. Wall thickness of the insulation should not be less than 5/16" (8 mm).

C. Use insulated copper wire for field wiring.



### CAUTION:

*Check local electrical codes and regulations before obtaining wire. Also, check any specified instructions or limitations.*

## 2. ADDITIONAL MATERIALS REQUIRED FOR INSTALLATION

- A. Refrigeration (armored) tape
- B. Insulated staples or clamps for connecting wire  
(See your local electrical codes.)
- C. Putty
- D. Refrigeration lubricant
- E. Clamps or saddles to secure refrigerant piping

## 3. OPERATING RANGE




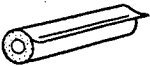


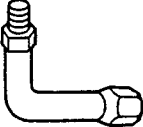
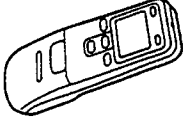
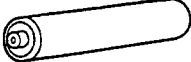

Table 2

	Temperature	Indoor air intake	Outdoor air intake
Cooling	Maximum	90°F DB, 73°F WB	115°F DB
	Minimum	65°F DB, 57°F WB	70°F DB




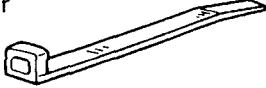


# STANDARD PARTS

The following installation parts are furnished.  
Use them as required.

## INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Wall clamp 	1	For installing the indoor unit
Template 	1	For making hole of piping
Coupler heat insulation (Large) 	2	For indoor side pipe joint (Large pipe)
Coupler heat insulation (Small) 	1	For indoor side pipe joint (Small pipe)
Screw 	15	<ul style="list-style-type: none"> <li>• For installing the wall clamp (12)</li> <li>• For installing the remote controller holder clamp (2)</li> <li>• Indoor unit and wall clamp mounting screw (1)</li> </ul>
Screw (Painted) 	2	For installing the Cover plate-R
Coupling A 	1	For installing the connection pipe to the indoor unit
Remote controller 	1	
Battery 	2	For remote controller
Remote controller holder 	1	For remote controller installation

## OUTDOOR UNIT ACCESSORIES

<p>Auxiliary pipe assembly</p> 	<p>1</p>	<p>For wiring conduit (gas side) connection (May not be supplied, depending on the model)</p>
<p>Edge cover</p> 	<p>1</p>	<p>For wiring conduit installation hole edge protection</p>
<p>Tapping screw</p> 	<p>2</p>	<ul style="list-style-type: none"> <li>• For cabinet A and cabinet D mounting (1)</li> <li>• Spare (1)</li> </ul>
<p>Binder</p> 	<p>1</p>	<p>For power cord binding</p>
<p>Putty</p> 	<p>1</p>	<p>For sealing</p>
<p>Coupler heat insulation</p> 	<p>1</p>	<p>For outdoor side pipe joint</p>

# SELECTING THE MOUNTING POSITION

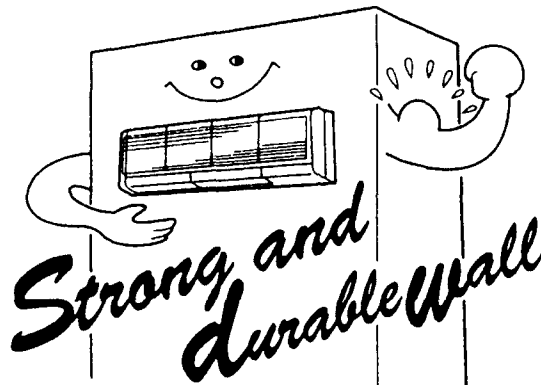
The installation place is especially important for the split type air conditioner because it is very difficult to move from place to place after installation.

Decide the mounting position together with the customer as follows:

## 1. INDOOR UNIT

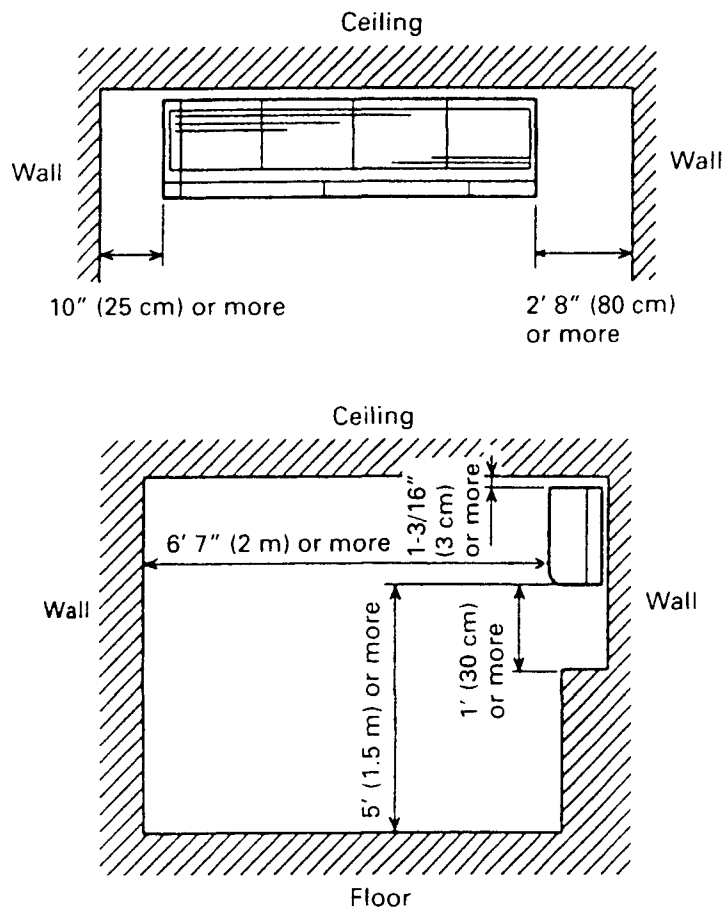
- A. Install the indoor unit in a place having sufficient strength to withstand the weight of the indoor unit.
- B. The inlet and outlet ports should not be obstructed; the air should be able to flow below all over the room.
- C. Leave the space required to service the air conditioner. (Fig. 2)
- D. A place which is wide enough for the unit and its accessible spaces as shown in the Dimension drawing.
- E. A place from where the air can be distributed evenly throughout the room by the unit.
- F. A place from where drainage can be extracted outdoors easily.

Fig. 1



Ensure necessary space for installation and servicing

Fig. 2



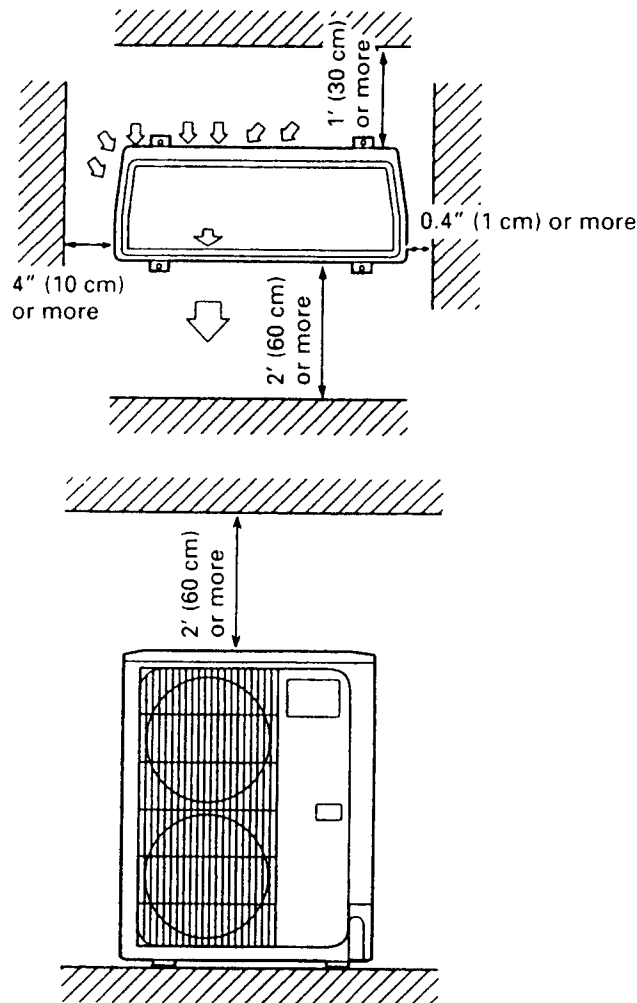
**NOTE**

*When there are friezes on both sides, that measurement should be considered.*

## 2. OUTDOOR UNIT

A. Leave the space indicated for good air flow (Fig. 3)

Fig. 3



- B. If possible do not install the unit where it will be exposed to direct sunlight. (If necessary, install a blind that does not interfere with the air flow.)
- C. Install the outdoor unit where it will not get dirty or get wet by rain as much as possible.
- D. Install the unit when connection to the indoor unit is easy, and nearby.



### CAUTION:

- **Limit the height difference between the indoor and outdoor units to within 49 ft. (15 m).**
- **The maximum length of the piping is 99 ft. (30 m). If the units are further apart than this, correct operation can not be guaranteed.**

# **ELECTRICAL REQUIREMENT**

Always make the air conditioner power supply a special branch circuit and provide a special switch and receptacle. Do not extend the power cord.



**CAUTION:**

<i>MINIMUM CIRCUIT AMPACITY</i>	<b>20 A</b>
<i>MAXIMUM OVERCURRENT PROTECTION</i>	<b>30 A</b>
<i>(TIME DELAY FUSE OR HACR TYPE CIRCUIT BREAKER)</i>	

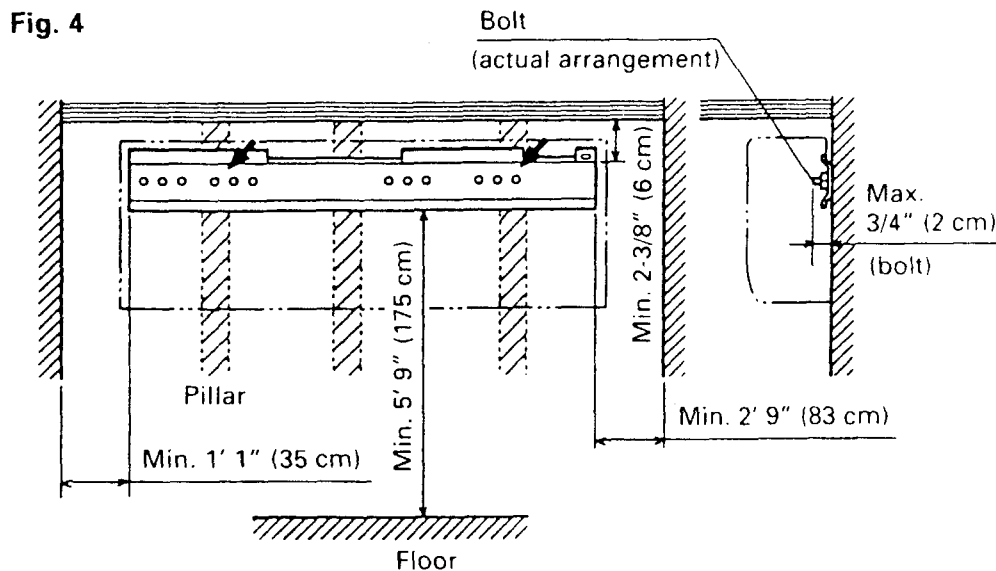
# INSTALLATION PROCEDURE

Install the room air conditioner as follows:

## INDOOR UNIT INSTALLATION

### 1. MOUNTING THE WALL CLAMP

Secure the wall clamp firmly ensuring that the left and right sides are horizontal.

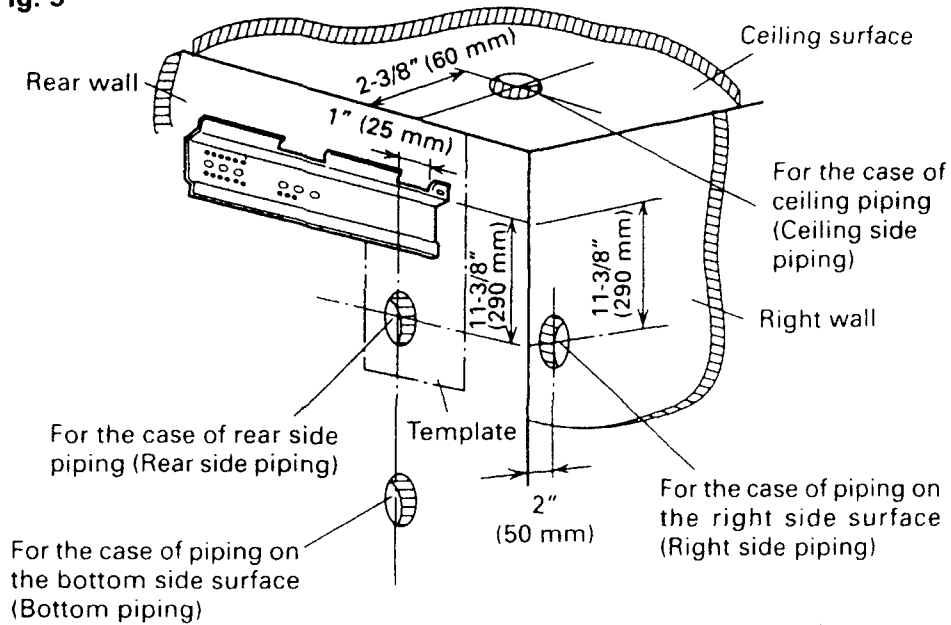


- As the weight of the indoor unit is 53-66 lbs (24-30 kg), it should be installed after properly examining the place where it is intended to be installed. If the place is not strong enough, a plank or girder should be used to make the place sufficiently strong so that the wall can support the weight.
- Using the hole shown by the bold arrow in the figure, firmly fasten the wall clamp with screws (large).  
Do not install the wall clamp at only one place or at an angle.  
For a concrete wall, embed anchor bolts (3/8" (10 mm) dia.) into the wall at the wall clamp holes (1/2" (12 mm) dia.). Allow the anchor bolts to stick out at least 3/4" (20 mm) from the wall. (Fig. 4) Install the unit to the anchor bolts with nuts through the wall clamp. Use 2 bolts for concrete wall and 4 bolts for blister concrete wall.
- Having used the level indicator to confirm that the clamp is horizontal, tighten the bolts and wood screws.

## 2. CONSTRUCTING THE HOLES FOR PIPING

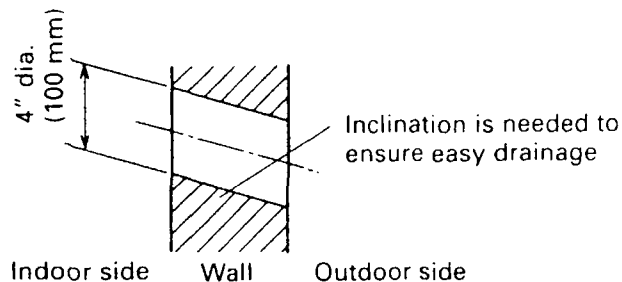
Select the connection pipe positions and drill the holes.

Fig. 5



- Cut the pipe penetration hole by using a 4" dia. (100 mm) hole core drill along the piping direction at the positions shown in the above figure. (The hole position measurements given in the figure are from the right upper end of wall clamp.)
- Piping hole should be inclined towards the outdoor side as shown in the figure.

Fig. 6



When the piping selection used is the rear side option, the template at the bottom right of the wall clamp facilitates installation. (Fig. 5)

### NOTE

**Hole should be made at a slight downward slant to the outdoor side.**



### WARNING:

**Avoid areas where electrical wiring or conduits are located. Accidentally cutting a live wire can cause death or injury.**

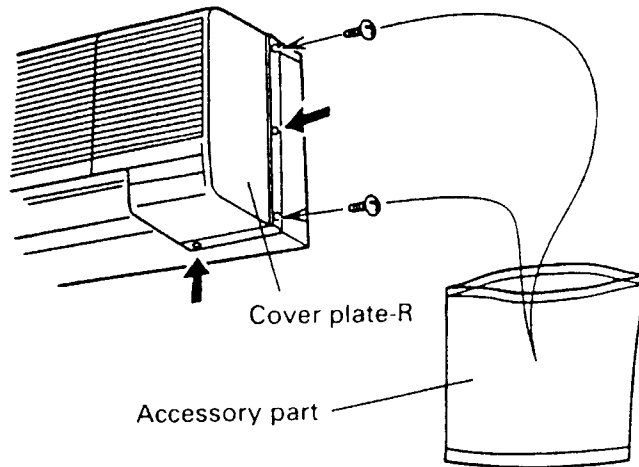
### 3. PREPARING THE INDOOR UNIT FOR INSTALLATION HANDLE WITH CARE

#### A. Removing the "Cover Plate-R".

- Pull out the "Cover Plate-R" after removing 2 screws marked by arrow heads ↑ . (Fig. 7)

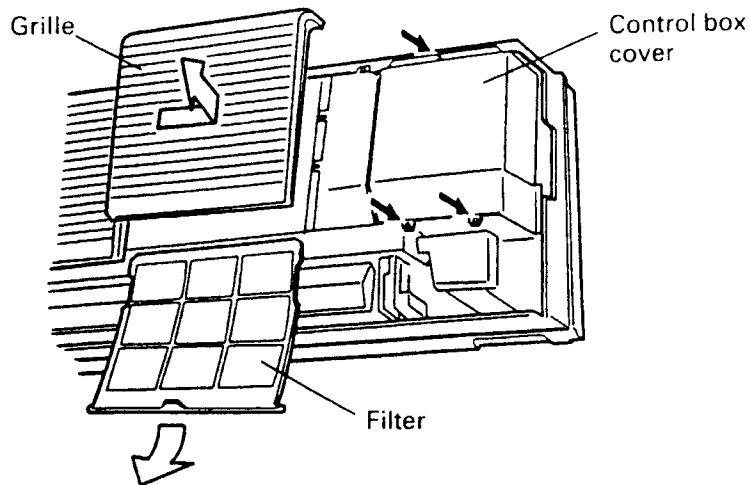
After finishing the installation, the plate should be fitted back in the original position.

Fig. 7



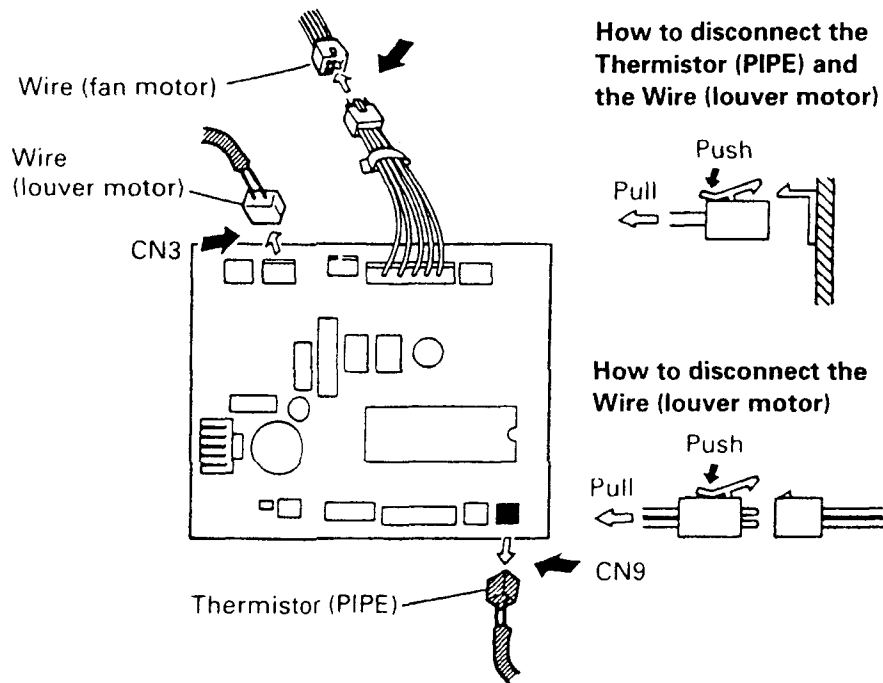
- Removing the right side filter and grille. (Fig. 8)
- Removing the "Control Box Cover" mounting screw, marked by arrow heads ↑ . (3 screws) (Fig. 8)

Fig. 8



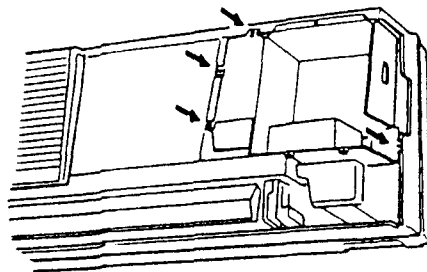
- Disconnect the "Wire (louver motor)" and the "Thermistor (PIPE)" from the PC Board. (Fig. 9)  
Disconnect the "Connector (fan motor)". (Fig. 9)

Fig. 9



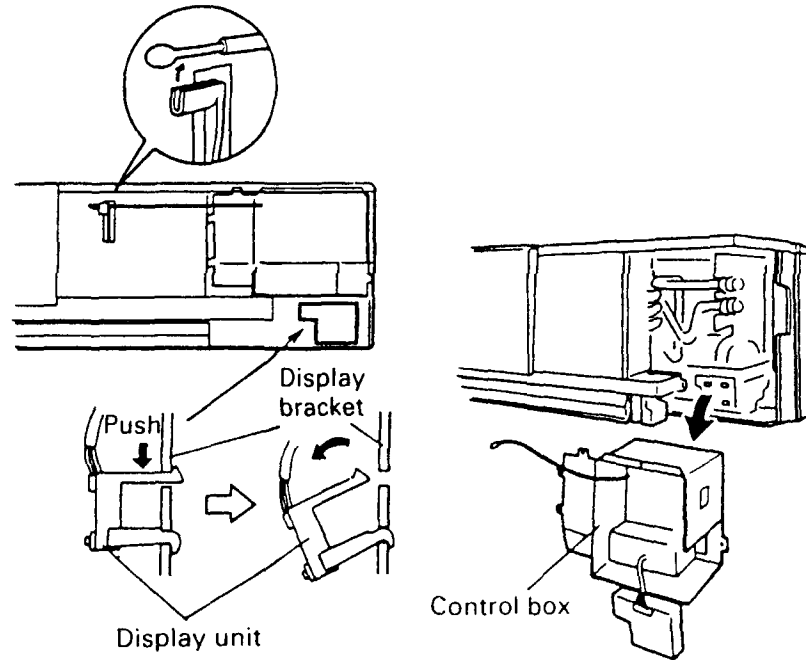
- Removing the "Control Box" mounting screw marked by arrow heads ↑ . (4 screws) (Fig. 10)

Fig. 10



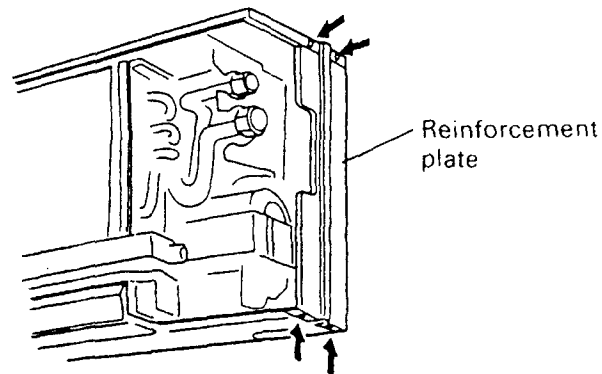
- Remove the "Display Unit" and "Thermistor (Room Temp)" and remove the "Control Box" from the unit. (Fig. 11)

Fig. 11



- Remove the "Reinforcement Plate". (4 screws) (Fig. 12)

Fig. 12

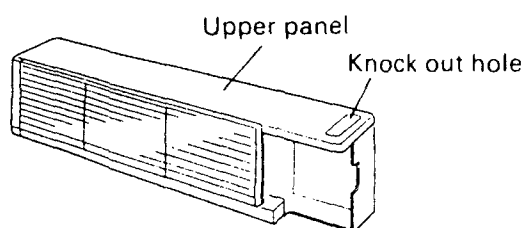


B. Cutting the piping take out holes

Make the piping take out hole as shown in the Fig. 13 along the piping take out direction.

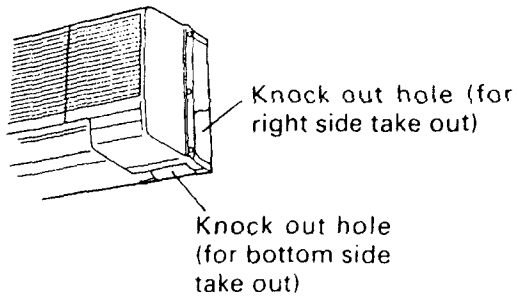
- For the case of rear side piping, use the space at the right end of indoor unit rear surface.

Fig. 13

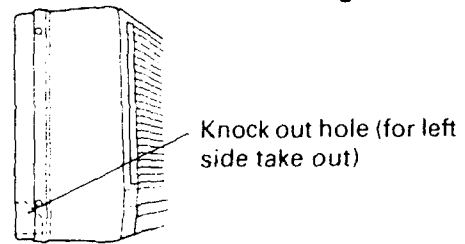


- For the case of refrigerant piping upper side take out (Take out drainage piping from rear, right and bottom sides).

**Fig. 14**



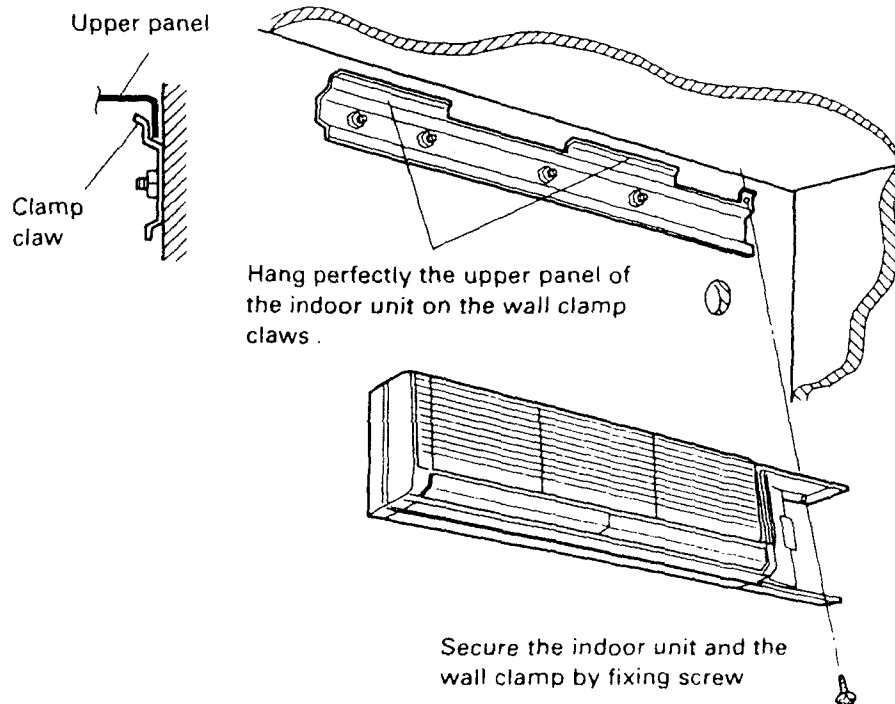
**Fig. 15**



- For the case of refrigerant piping / drainage piping right, left and bottom side take out.

#### 4. INSTALLING AND SECURING THE INDOOR UNIT

**Fig. 16**

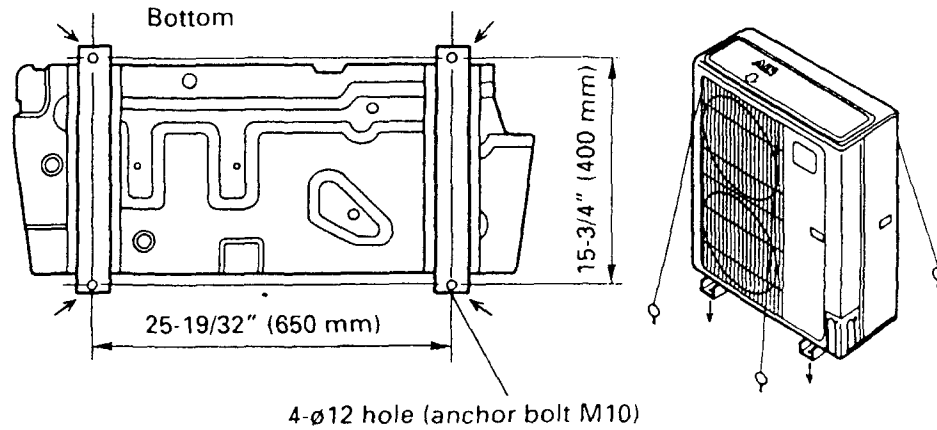


# OUTDOOR UNIT INSTALLATION

## 1. Outdoor unit processing

When the outdoor unit will be exposed to strong wind, fasten it with bolts at the places indicated by the arrows. (Fig. 17)

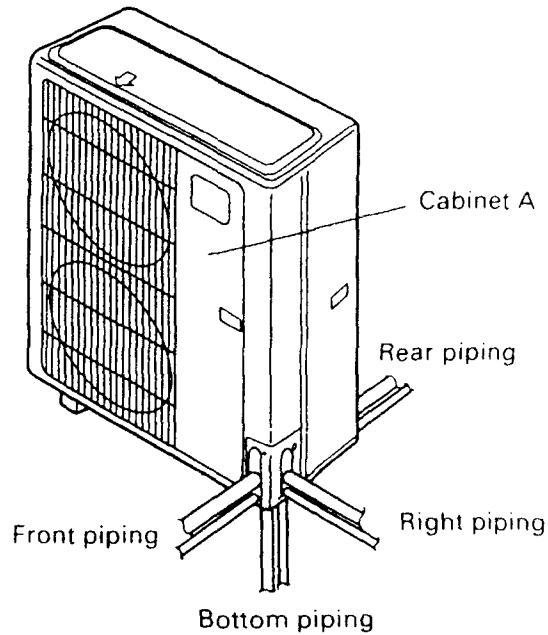
Fig. 17



## 2. Outdoor unit connection cord and pipe connection preparations

(1) Piping and connection cord mounting direction (4-way mounting possible).

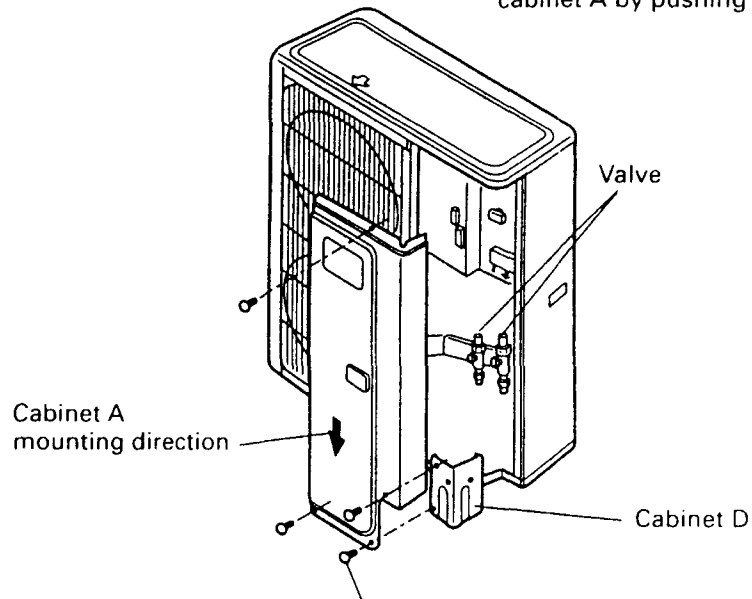
Fig. 18



(2) Remove outdoor unit cabinet A and cabinet D.

**Fig. 19**

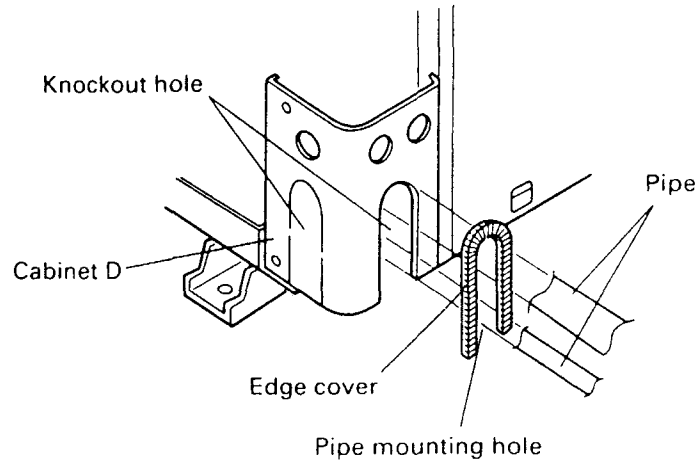
\* After removing the screws, remove cabinet A by pushing it down.



\* Use the accessory screws at these points only

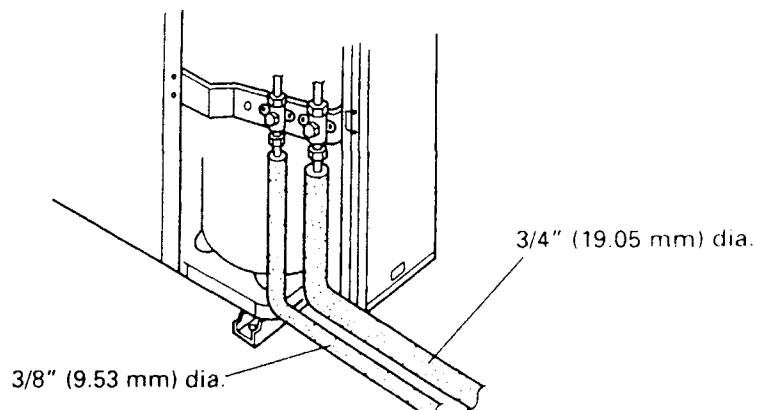
(3) Open the piping knockout holes of the desire direction with nippers, etc. After opening the knockout holes, install the accessory edge cover to protect the opened places.

**Fig. 20**



(4) Always use a drain pipe at two places.

**Fig. 21**



# CONNECTING THE PIPING

## 1. FLARE PROCESSING

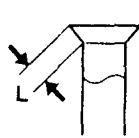
- A. Cut the connection pipe with pipe cutters so that the pipe is not deformed.
- B. Holding the pipe downward so that cuttings cannot enter the pipe, remove the burrs.
- C. Remove the flare nut from the indoor unit pipe and outdoor unit and assemble as shown in (Table 3). Insert the flare nut onto the pipe, and flare with a flaring tool.
- D. Check if the flared part "L" (Fig.22) is spread uniformly and that there are not cracks.

Table 3

Pipe	Flare nut	
Small pipe	Small (width across flats	7/8" (22 mm))
Large pipe	Large (width across flats	1-13/32" (36 mm))

Fig. 22

Width across flats



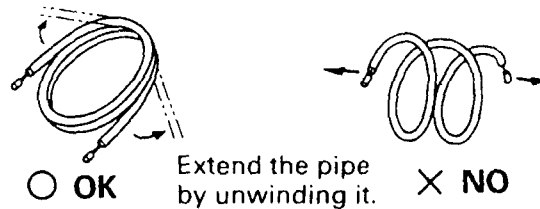
L dimension

- Small pipe 3/8" (9.53 mm) dia.  
5/64" (1.8 to 2.0 mm)
- Large pipe 3/4" (19.05 mm) dia.  
7/64" (2.6 to 3.0 mm)

## 2. BENDING PIPES

Be careful not to collapse them.

Fig. 23



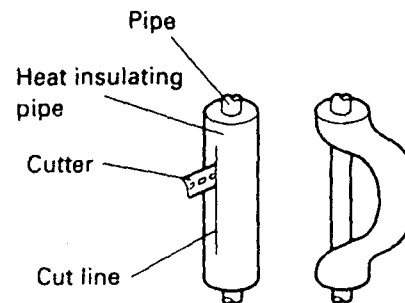
Do not bend the pipes at an angle less than 90°.

When the pipes are bent and stretched repeatedly, the material becomes hard. Avoid ultimate rigidity by limiting these adjustments to 3 times.

When bending the pipe, do not bend it as is. The pipe will collapse. In this case, cut the heat insulating pipe with a sharp cutter as shown in Fig. 20, and bend it after exposing the pipe.

After bending the pipe as you want, be sure to put the heat insulating pipe back on the pipe, and secure it with tape.

Fig. 24



### IMPORTANT

***Because capillary tubing is installed in the outdoor unit, both the wide and narrow tubes of this air conditioner become cold. Therefore, to prevent heat loss and wet floors due to dripping of condensation water, both tubes must be well insulated with proper insulation material. The thickness of the insulation material should be a min. 5/16" (8 mm).***



### CAUTION:

***After a tube has been insulated, never try to bend it into a narrow curve, as this may cause the tube to break or crack.***

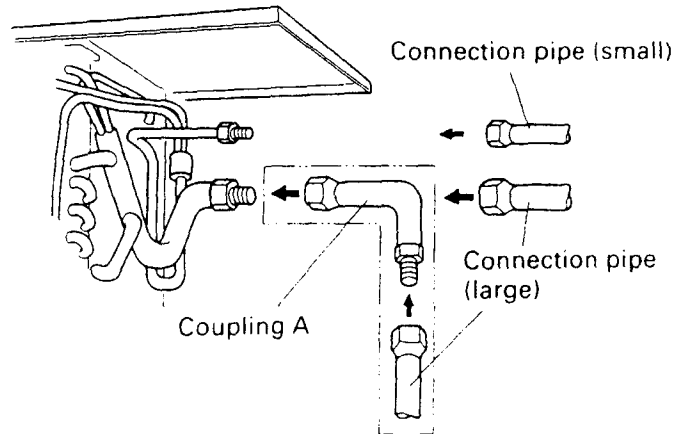
### 3. CONNECTION PIPES

#### A. Indoor unit side

Detach the caps and plugs from the pipes. (Fig. 25)

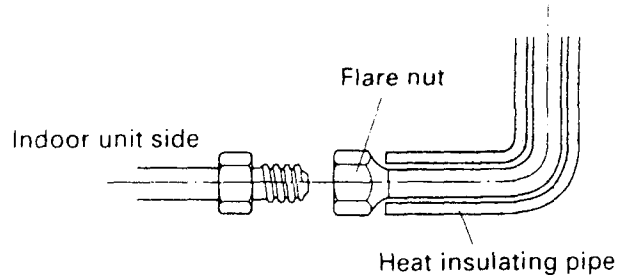
Use accessory coupling A according to the installation site. (Fig. 25)

Fig. 25



Centering the pipe against port on the indoor unit, turn the flare nut with your hand. (Fig. 26)

Fig. 26

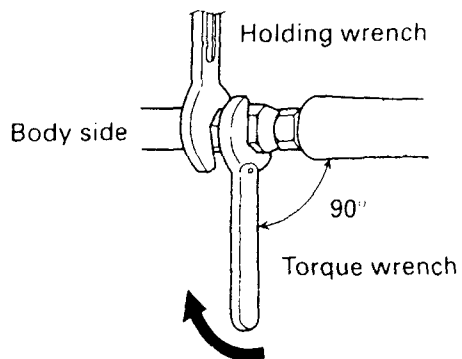


**CAUTION:**

***Be sure to center the pipe against the port on the indoor unit correctly. If centering is improper, the flare nut is forced to turn and the threads will be damaged.***

When the flare nut is tightened properly by your hand, hold the body side coupling with a separate wrench, then tighten with a torque wrench. (Fig. 27)

Fig. 27



**CAUTION:**

*Hold the torque wrench at its grip, keeping it as a right angle with the pipe as shown in Fig. 23, in order to tighten the flare nut correctly.*

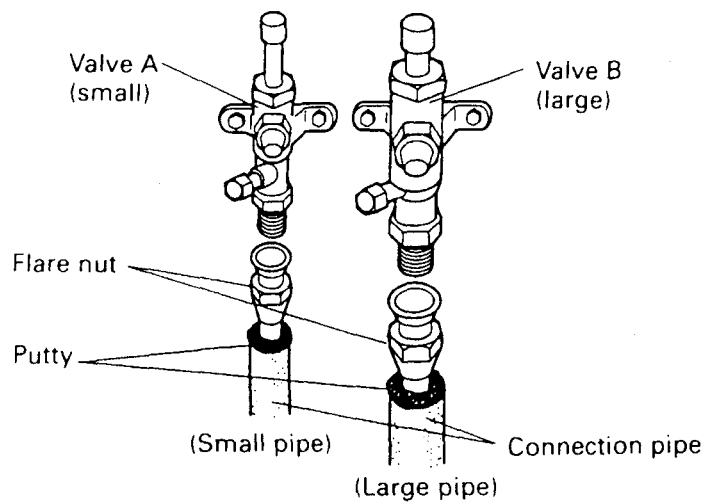
Table 4 Flare nut tightening torque

Pipe	Tightening torque
Small pipe	22.42 to 25.32 ft. lbs (310 to 350 kgf·cm)
Large pipe	57.86 to 72.37 ft. lbs (800 to 1000 kgf·cm)

## B. Outdoor unit side

- (1) Tighten the flare nut of the connection pipe at the outdoor unit valve connector. The tightening method is the same as that as at the indoor side.
- (2) Seal with the accessory putty so that water does not enter at the top of the pipe insulation installed to the connection pipe (large pipe and small pipe).

Fig. 28



# AIR PURGE




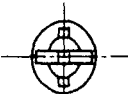
## 1. AIR PURGE

- A. Purge the air inside the indoor unit and the piping to a pressure of 1.5 mmHg abs or less from the charging valve with a vacuum pump.
- B. After purging the air inside the indoor unit and the piping, remove the cap of the two valves.
- C. Open the handle of the two valves from the closed state (Table 6).
- D. Tighten the cap of the two valves to the specified torque.

**Table 5**

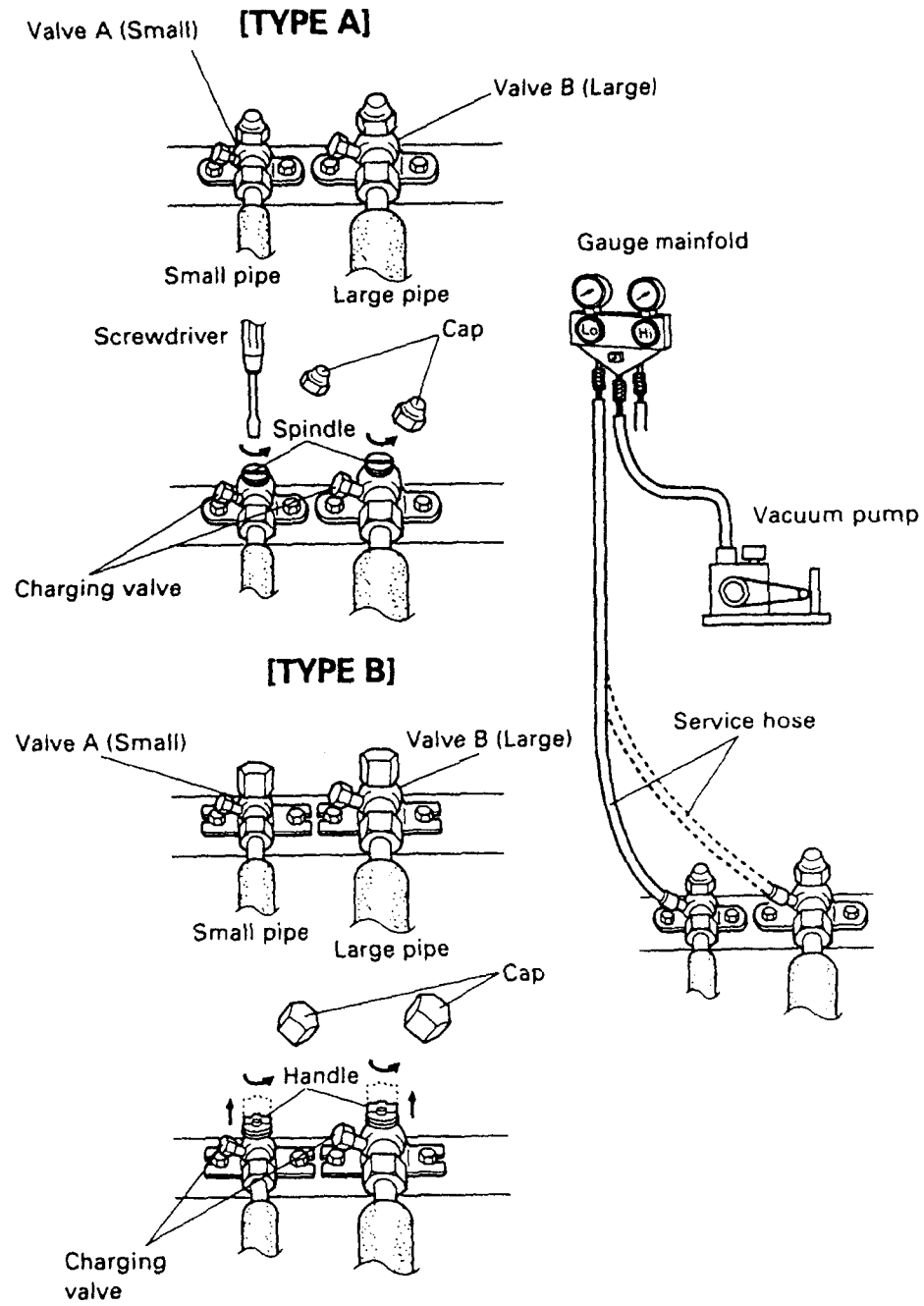
	Tightening torque	
	Large valve	Small valve
Handle	1.08 ft. lbs (15 kgf • cm) or less	
Cap	10.85 to 14.47 ft. lbs (150 to 200 kgf • cm)	

**Table 6**

Valve	Open valve state	Closed valve state
TYPE A		
TYPE B		

\* If the spindle (handle) is not fully open, performance will drop and an abnormal sound will be generated.

Fig. 29



## 2. ADDITIONAL CHARGE

Refrigerant suitable for a piping length of 25 ft (7.5 m) is charged in the outdoor unit at the factory.

When the piping is longer than 25 ft (7.5 m), additional charging is necessary.

For the additional amount, see the table below.

**Table 7**

Pipe length	25 ft (7.5 m)	33 ft (10 m)	66 ft (20 m)	99 ft (30 m)
Additional Refrigerant	None	1.5 oz (43 g)	7.5 oz (213 g)	13.5 oz (383 g)

Between 25 ft (7.5 m) and 99 ft (30 m), when using a connection pipe other than that in the table, charge additional refrigerant with 0.6 oz (17 g) / 3.3 ft (1 m) as the criteria.



**CAUTION:**

- *Always pump down the piping before use.*
- *Add refrigerant from the charging valve after the completion of the work.*

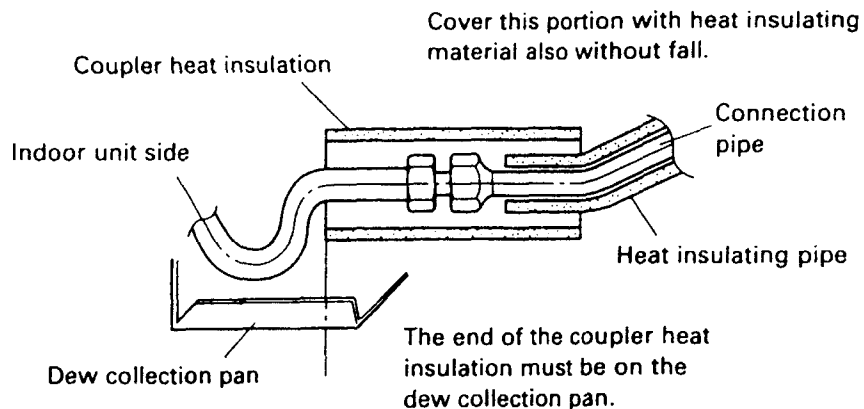
## CHECKING THE PIPE CONNECTIONS FOR GAS LEAKING

Check both the indoor and outdoor unit side joints for gas leaking by the use of a gas leakage detector when the pipes are connected.

## INSTALLING THE COUPLER HEAT INSULATION

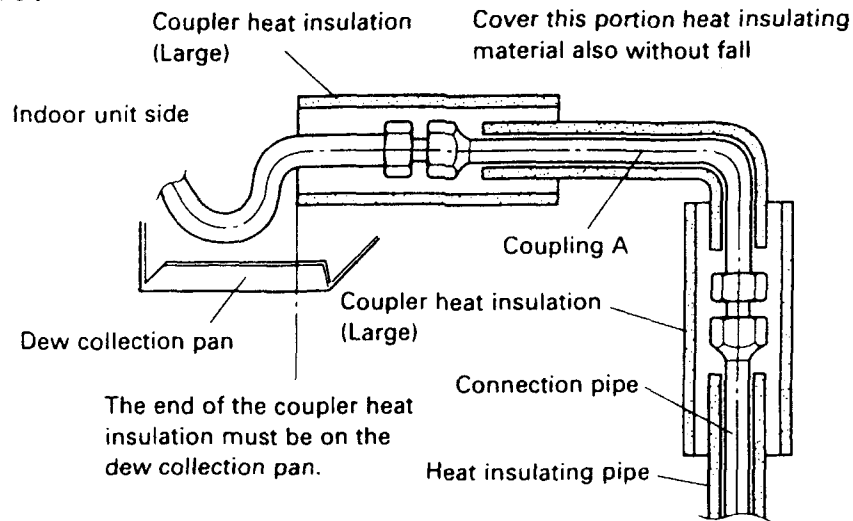
After checking for gas leaks, insulate by wrapping insulation around the two parts (large and small) of the indoor unit coupler, using the coupler heat insulation.

**Fig. 30**



When using coupling A, wrap the two coupler heat insulations (large) around the indoor unit coupling as described above. (Fig. 31)

**Fig. 31**



**CAUTION:**

***Be careful attention to the following point so that the dew falls into the collection pan.***

***Cover the coupler heat insulation so that it is on the dew collection pan.***

# ELECTRICAL WIRING

## 1. INDOOR UNIT SIDE

Install in Fig. 12 → Fig. 11 → Fig. 10 → Fig. 9 order.



**WARNING:**

*Do not supply power to the unit or operate it until all tubing and wiring to the outside unit are completed.*

### HOW TO CONNECT WIRING TO THE TERMINALS

#### ■ For solid core wiring (or F-cable)

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 15/16" (25 mm) of expose the solid wire. (Fig. 34)
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using pliers, bend the solid wire to form a loop suitable for the terminal screw.
- (4) Shape the loop wire properly, place it on the terminal board and tighten securely with the terminal screw using a screwdriver.

#### ■ For strand wiring

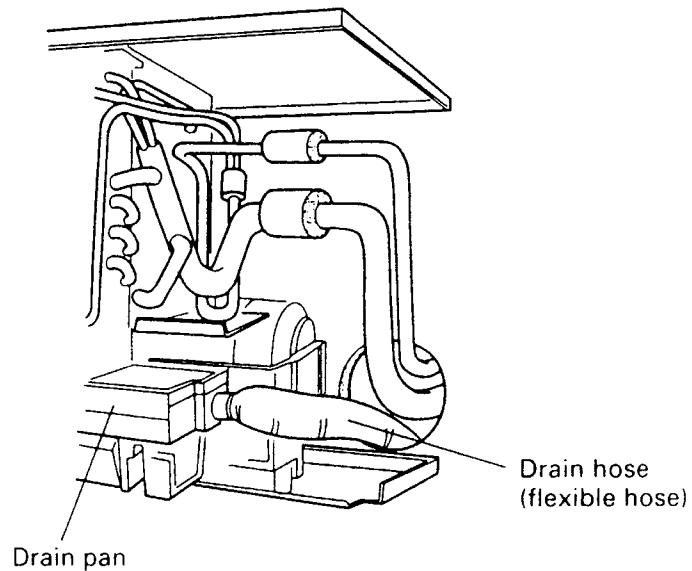
- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to about 3/8" (10 mm) of expose the strand wiring. (Fig. 35)
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using a round terminal fastener or pliers, securely clamp a round terminal to each stripped wire end. (Fig. 31)
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver. (Fig. 36)

# INSTALLING DRAIN HOSE

## INSTALL THE DRAIN HOSE

Be sure to arrange the drain hose so that it is leveled lower than the drain hose connecting port of the indoor unit.

Fig. 32



- Ensure that the drain hose is connected so that it slopes downward on the outdoor (discharge) side.
- After connecting the drain hose, pour water into the drain pan and check that the water is drained positively.

Fig. 33

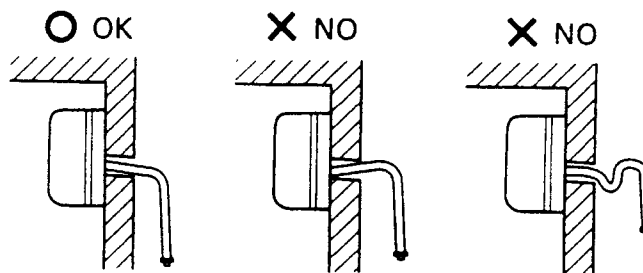


Fig. 34

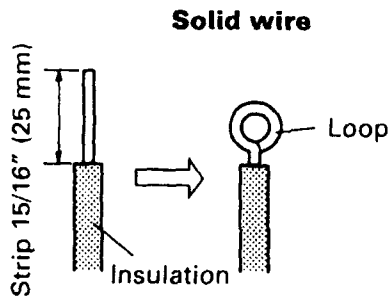


Fig. 35

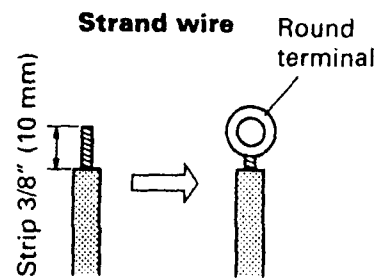
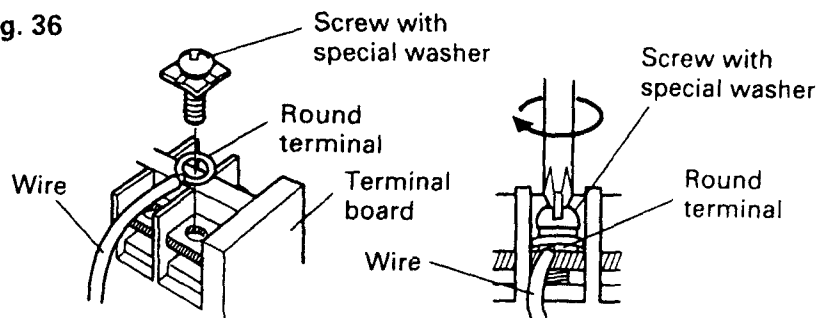


Fig. 36

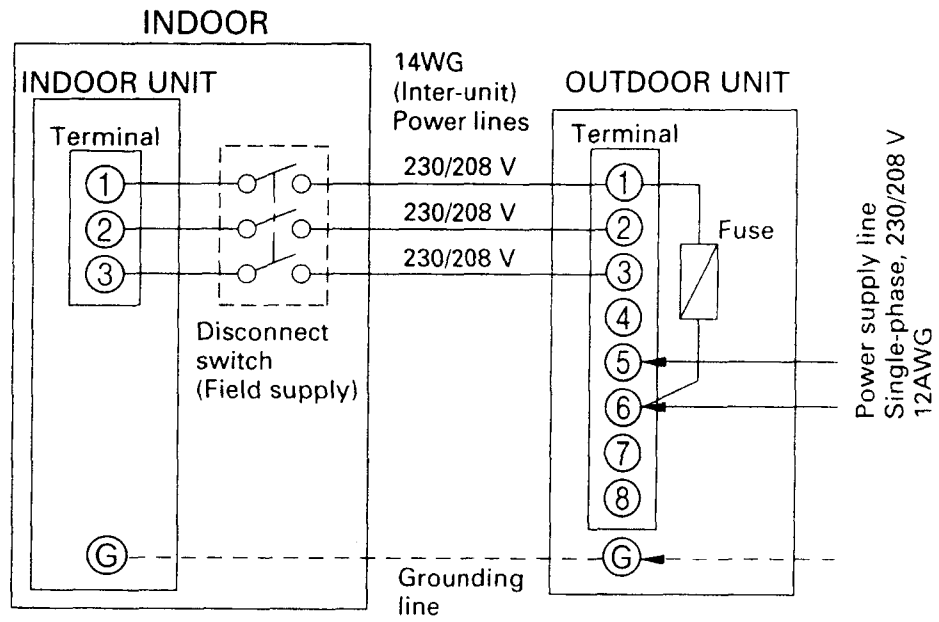


**WARNING:**

- *Be sure to comply with local codes while running the wire from the indoor unit to the outdoor unit (size of wire and wiring method, etc.).*
- *Every wire must be connected firmly.*
- *No wire should be allowed to touch refrigerant tubing, the compressor or any moving part.*
- *Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Therefore, be sure all wiring is tightly connected.*

Fig. 37

WIRING SYSTEM DIAGRAM







**CAUTION:**

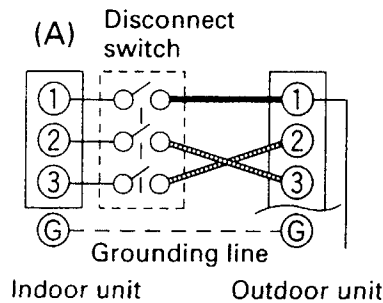
■ **EXAMPLE OF INCORRECT WIRING**

*The following are examples of improper wiring that results in system misoperation. You should confirm that you have wired the units correctly before beginning the test run.*

Fig. 40

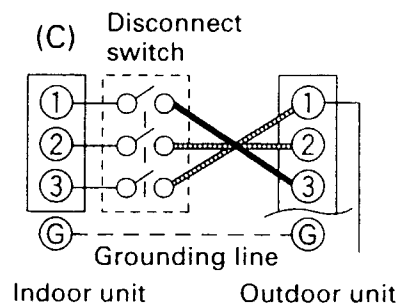
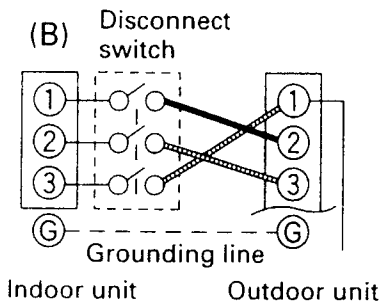
**Problem 1**

- Short circuit will occur after approx. 3 minutes and the power circuit fuse blows.



**Problem 2**

- Air conditioner will not operate.



**Problem 3**

**NOTE**

- Connector trade size for this unit is 1/2". The connector can be bought at a hardware store. Refer to "How to connect wiring to the terminals" for instructions on connecting depending on the wire type you are using.
- The fuse located in the outdoor unit provides power supply protection and may blow when power is applied if the system has been incorrectly wired.

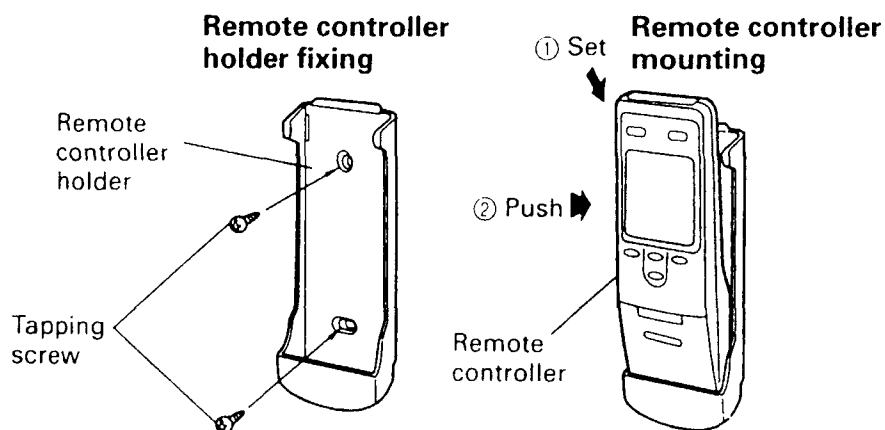
## **INSTALLING CONTROL BOX COVER AND COVER PLATE-R**

Install the "Control Box Cover" and "Cover Plate-R" in Fig. 8 → Fig. 7 order.

## INSTALLING THE REMOTE CONTROLLER HOLDER

Install the remote controller holder to a wall or pillar with the tapping screws.

Fig. 41



### CAUTION:

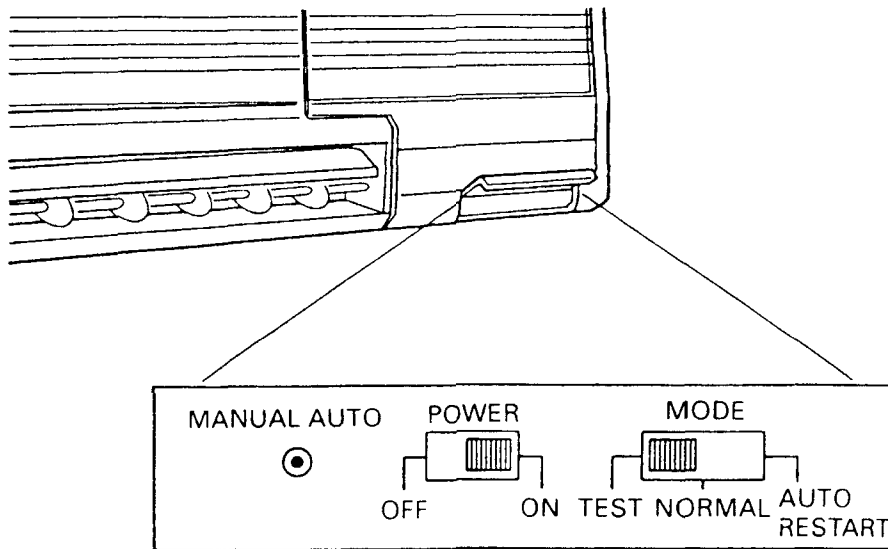
*When selecting the remote controller installation site, pay careful attention to the following:*

- *Avoid places in direct sunlight.*
- *Select a place where the affect of heat from a stove, etc. is small.*
- *Select a place where the remote controller is not exposed directly to the air discharged from the air conditioner.*

## TEST RUNNING

- The test run switch is at the bottom of the indoor unit. To test run the air conditioner, set this switch to the TEST position. At the end of test running, always return the switch to the NORMAL position. (Fig. 42)
- Do not leave the switch in the TEST position for a long time.

Fig. 42



- Operate the unit in accordance with the operating manual.

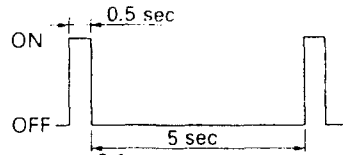
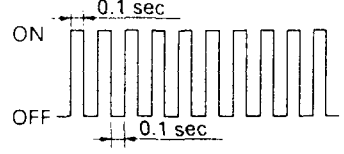
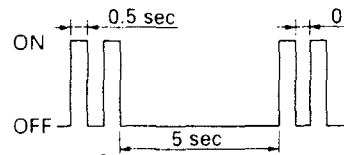
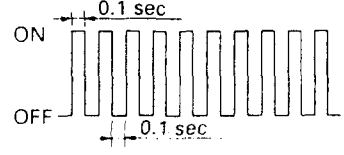
- Power ON

When the power is turned on, the display section OPERATION and TIMER lamps flash quickly and alternately.

- Error

The OPERATION and TIMER lamps operate as follows (Table 6) according to the error contents.

**Table 8**

Error display	Error contents
<p>OPERATION LAMP</p>  <p>Single quick flash repeated</p> <p>TIMER LAMP</p>  <p>0.1 sec ON/OFF repeated</p>	<p>Room temperature thermistor abnormal temperature detected</p>
<p>OPERATION LAMP</p>  <p>Two quick flashes repeated</p> <p>TIMER LAMP</p>  <p>0.1 sec ON/OFF repeated</p>	<p>Piping thermistor abnormal temperature detected</p>



FUJITSU GENERAL AMERICA, INC.  
353 ROUTE 46W., FAIRFIELD, N.J. 07004  
Tel. (973) 575-0380