

# SPLIT TYPE ROOM AIR CONDITIONER INSTALLATION MANUAL

(PART No. 9309281011-02) Systems: 9C1, 12C1, 9R1, 12R1


## 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.

- Hazard 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.

#### ...In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

### 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.

# 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**

	Small pipe		Large pipe	
	Outer diameter	Thickness	Outer diameter	Thickness
9,000 BTU Model	1/4" (6.35 mm)	1/32" (0.8 mm)	3/8" (9.52 mm)	1/32" (0.8 mm)
12,000 BTU Model	1/4" (6.35 mm)	1/32" (0.8 mm)	1/2" (12.7 mm)	1/32" (0.8 mm)

Cut each pipe to the appropriate length + 12" (30 cm) to 16" (40cm) 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

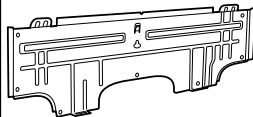


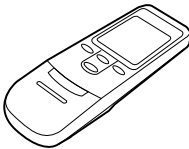

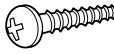



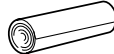
## 3. OPERATING RANGE

**Table 2**

		INDOOR	OUTDOOR
Cooling	Max.	95°F DB / 71°F WB (35 °C) / (21.5 °C)	115°F DB (46 °C)
	Minimum	64°F DB / 55°F WB (18 °C) / ( 13 °C)	32°F DB ( 0 °C)
Heating	Max.	88°F DB (31 °C)	75°F DB / 65°F WB (24 °C / 18 °C)
	Minimum	35°F DB ( 2 °C)	17°F DB / 15°F WB (-8 °C / -9.5 °C)

# STANDARD ACCESSORIES

The following installation accessories are supplied. Use them as required.

Name and Shape	Q'ty	Use
Wall hook bracket 	1	For indoor unit installation
Wall cap-B 	1	For through hole connection pipe protection
Seal A 	1	Supplied with 12,000BTU unit only.
Remote control unit 	1	
Battery (AAA size) 	2	For remote control unit
Tapping screw (big) (ø4 x 25) 	8	
Tapping screw (small) (ø3 x 12) 	2	
Hexagon wrench 	1	For air purge (Supplied with outdoor unit)
Remote control unit holder 	1	For remote control unit installation
Cloth tape 	1	For indoor unit installation

# SELECTING THE MOUNTING POSITION

Decide the mounting position together with the customer as follows:

## 1. INDOOR UNIT

- Install the indoor unit level on a strong wall which is not subject to vibration.
- The inlet and outlet ports should not be obstructed: the air should be able to blow all over the room.
- Install the unit away from heat, steam and flammable gas sources.
- Install the unit away from direct sunlight exposure.
- Install the unit where connection to the outdoor unit is easy.
- Install the unit where the drain pipe can be easily installed.
- Take servicing, etc. into consideration and allow for the spacings shown in (Fig. 13). Also install the unit where the filter can be removed.

## 2. OUTDOOR UNIT

- Allow for the spacings shown in (Fig. 13) for good air flow.
- 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.)
- Install the unit away from heat, steam and flammable gas sources.
- Do not install the unit where a strong wind blows or where it is very dusty.
- Do not install the unit where people pass.
- Take your neighbors into consideration so that they are not disturbed by air blowing into their windows or by noise.
- Install the unit near an electric outlet or private circuit.
- During heating operation, water flows out of the hole at the bottom of the base. Install the unit where this water flow is also good.

Fig. 13

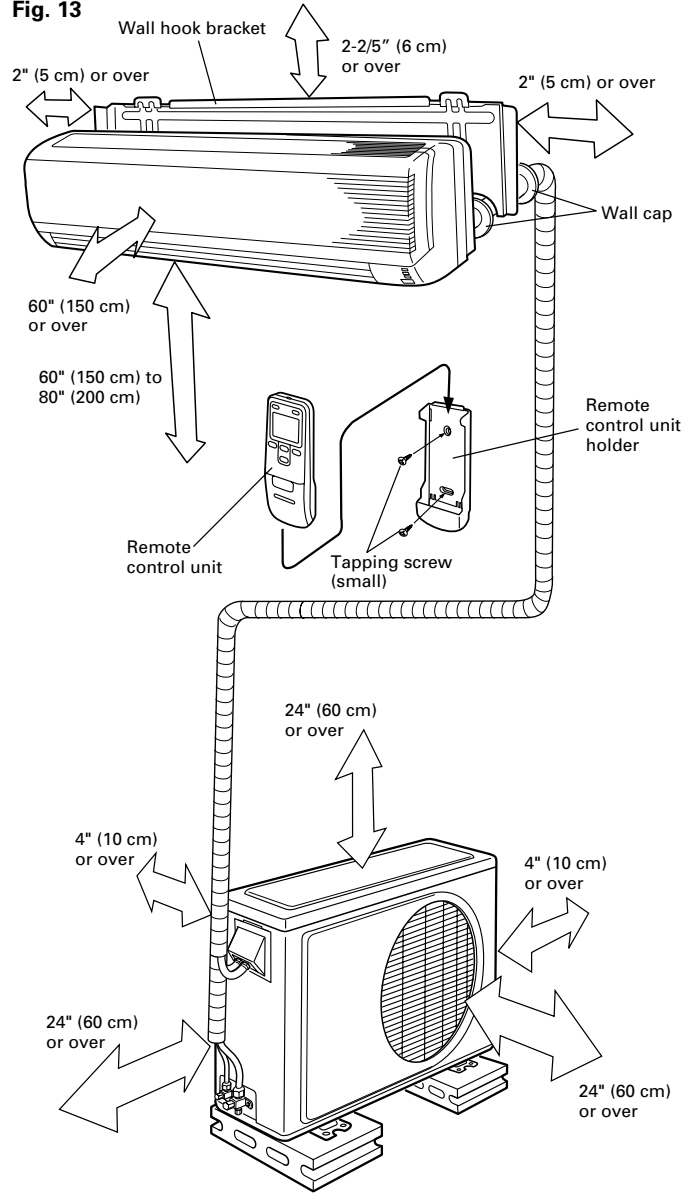
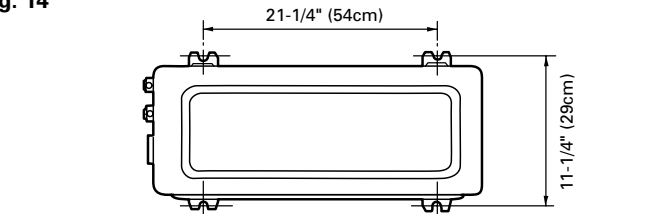


Fig. 14



### ⚠ CAUTION

**Limit the height difference between the indoor and outdoor units to within 26 ft (8 m).**

**The maximum length of the piping is 49 ft (15 m).  
If the units are further apart than this, correct operation cannot 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

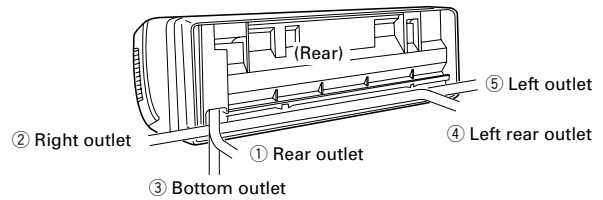
	9000 BTU/h	12000 BTU/h
MINIMUM CIRCUIT AMPACITY	12 A	15 A
MAXIMUM OVERCURRENT PROTECTION (TIME DELAY FUSE OR HACR TYPE CIRCUIT BREAKER)	15 A	20 A

# INDOOR UNIT

## INDOOR UNIT PIPING DIRECTION

The piping can be connected in the five directions indicated by ①, ②, ③, ④, and ⑤ in (Fig. 1). When the piping is connected in direction ② or ⑤, cut along the piping groove in the side of the front cover with a hacksaw. When connecting the piping in direction ③, cut a notch in the thin wall at the front bottom of the front cover.

Fig. 1



## INSTALLING THE WALL HOOK BRACKET

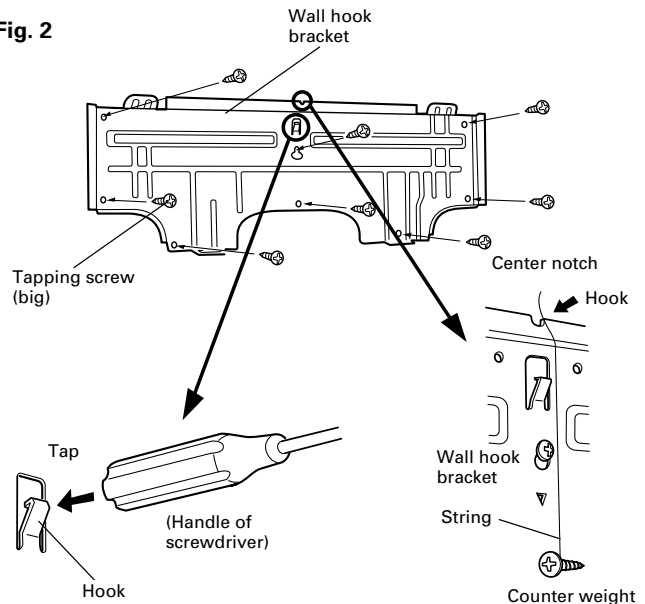
### CAUTION

Install the wall hook bracket so that it is correctly positioned horizontally and vertically. If the wall hook bracket is tilted, water will drip to the floor.

Install the wall hook bracket so that it is strong enough to withstand the weight of an adult.

- Before fastening the wall hook bracket to the wall with the screws, level it by tapping the hook at the center of bracket to the wall with the handle of a screwdriver.
- Fasten the wall hook bracket to the wall with 6 or more screws through the holes near the outer edge of the bracket.
- Check that there is no rattle at the wall hook bracket.

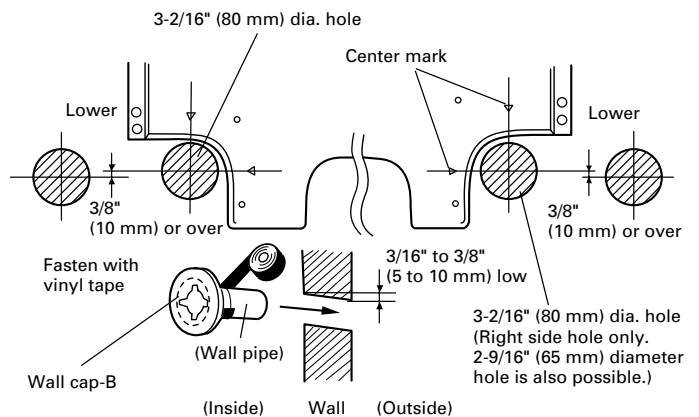
Fig. 2



## CUTTING THE HOLE IN THE WALL FOR THE CONNECTING PIPING

- Cut a 3-2/16" (80 mm) diameter hole in the wall at the position shown in (Fig. 3).
- When cutting the wall hole at the inside of the wall hook bracket, cut the  $\phi 80$  mm hole within the range of the left and right center marks. When cutting the wall hole at the outside of the wall hook bracket, cut the hole at least 3/8" (10 mm) below the center line.
- Cut the hole so that the outside end is lower 3/16" to 3/8" (5 to 10 mm) than the inside end.
- Always align the center of the wall hole. If misaligned, water leakage will occur.
- Cut the wall pipe to match the wall thickness, stick it into the accessory wall cap-B, fasten the cap with vinyl tape, and stick the pipe through the hole. (The connection pipe is supplied in the installation set.) (Fig. 3)
- For left piping and right piping, cut the hole a little lower so that drain water will flow freely. (Fig. 3)

Fig. 3



### NOTE:

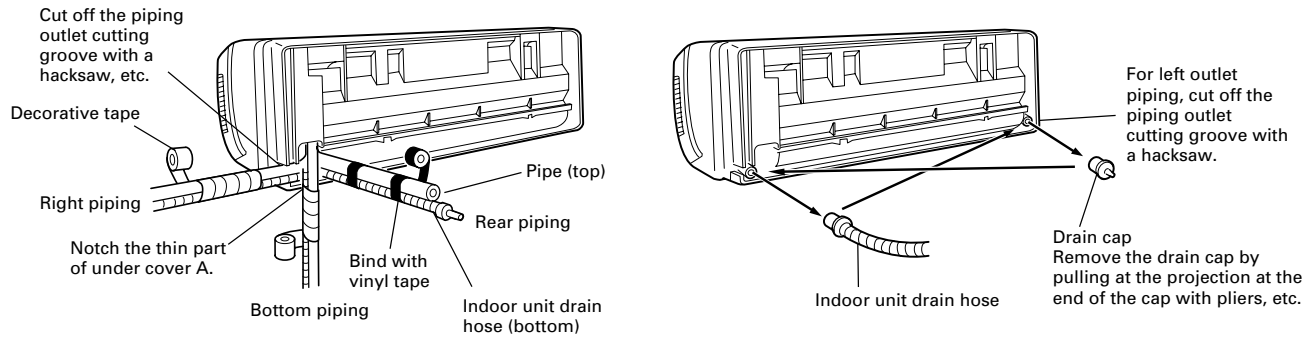
- Always align the center of the wall hole. If misaligned, water leakage will occur.
- If the wall hole pipe is not used, the cord interconnecting the indoor and outdoor units may touch metal and cause electric leakage.

# FORMING THE DRAIN HOSE AND PIPE

## [Rear piping, Right piping, Bottom piping]

- Install the indoor unit piping in the direction of the wall hole and bind the drain hose and pipe together with vinyl tape. (Fig. 4)
- Install the piping so that the drain hose is at the bottom.
- Wrap the pipes of the indoor unit that are visible from the outside with decorative tape.

Fig. 4

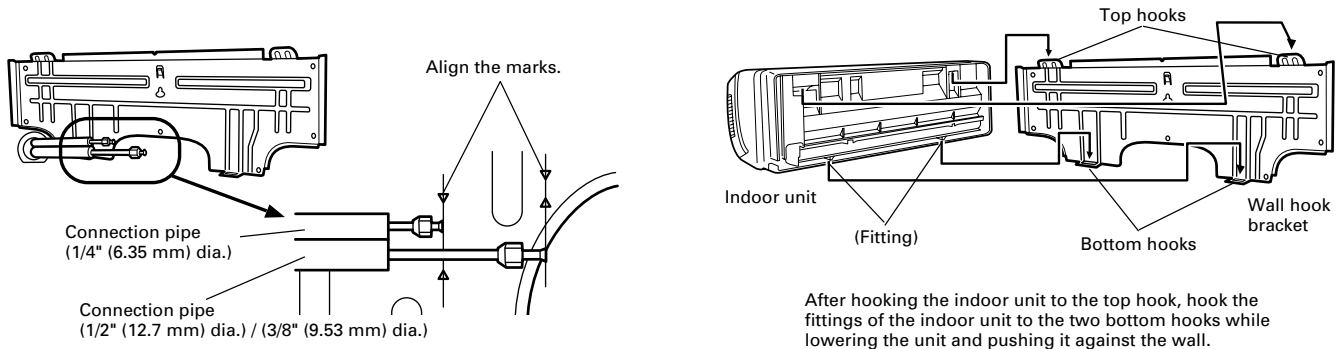


## [For Left rear piping, Left piping]

Interchange the drain cap and the drain hose.

- For left piping and left rear piping, align the marks on the wall hook bracket and shape the connection pipe.
- After passing the indoor piping and drain hose through the wall hole, hang the indoor unit on the hooks at the top and bottom of the wall hook bracket.

Fig. 5



## [Installing the indoor unit]

- Hang the indoor unit from the hooks at the top of the wall hook bracket.
- Insert the spacer, etc. between the indoor unit and the wall hook bracket and separate the bottom of the indoor unit from the wall.

Fig. 6

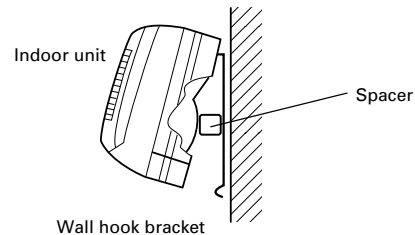
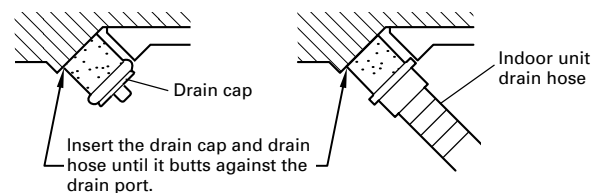


Fig. 7



### CAUTION

After removing the drain hose, do not forget to install the drain cap.

### NOTE:

- To prevent breaking of the pipe, avoid sharp bends. Bend the pipe with a radius of curvature of 4" (100 mm) or more.
- If the pipe is bent repeatedly at the same place, it will break.
- Do not remove the flare nut from the indoor unit pipe until immediately before connecting the connection pipe.

# ELECTRICAL WIRING

## 1. INDOOR UNIT SIDE

### HOW TO REMOVE THE INTAKE GRILLE

#### 1. Open the intake grille.

- (1) Place your fingers at both lower ends of the grille panel, and lift forward; if the grille seems to catch partway through its movement, continue lifting upward to remove.
- (2) Pull past the intermediate catch and open the intake grille wide so that it becomes horizontal.

#### 2. Unlock the intake grille.

Hold the intake grille with one hand and pull the knobs on the right and the left all the way to unlock the intake grille.

#### 3. Remove the intake grille.

### HOW TO REMOVE THE FRONT PANEL

- (1) Remove the two screws.
- (2) Unhook the tab at the center of the front panel.
- (3) Remove the front panel by lifting it in the arrow direction.

### HOW TO INSTALL THE INTER-UNIT WIRE HARNESS

- (1) Remove the screw ①, and remove Cover-C.
- (2) Remove the screw ②, and remove Cover-D.
- (3) Remove the screw ③, and remove the Conduit holder.
- (4) Fasten the Inter-unit wire harness to the Conduit holder using the Lock nut.  
(With the Heat &Cool model, Cut the 6 slit seam with a Cutter, then fasten the Inter-unit wire harness to the Conduit holder using the Lock nut.)
- (5) Install the Conduit holder to its original state with the screw ③.

Fig. 11 [Heat & Cool model]

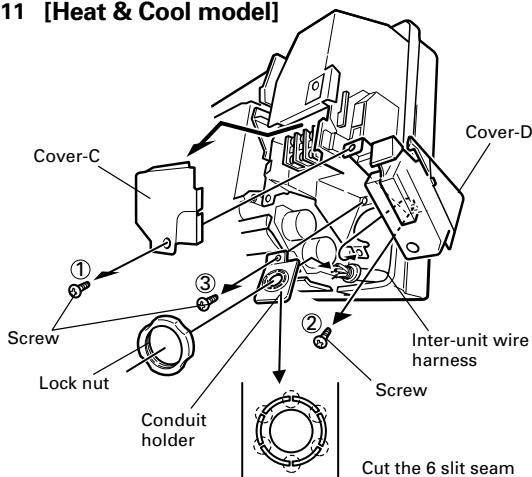


Fig. 8

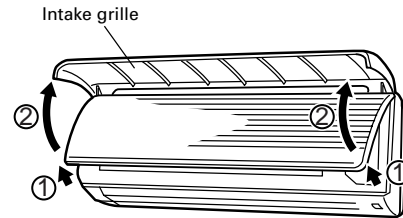
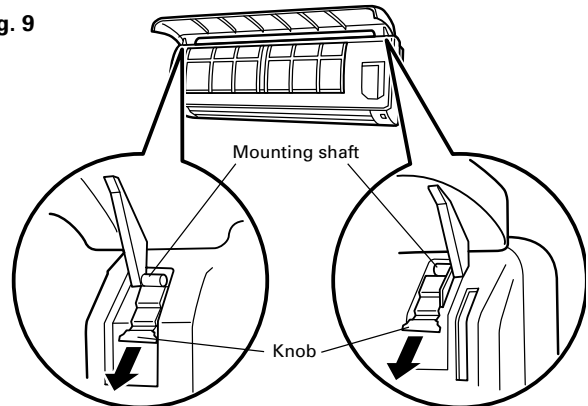


Fig. 9



Raise the horizontal intake grille to remove it.

Fig. 10

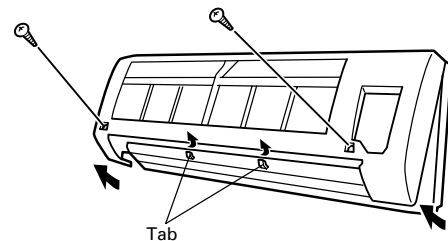
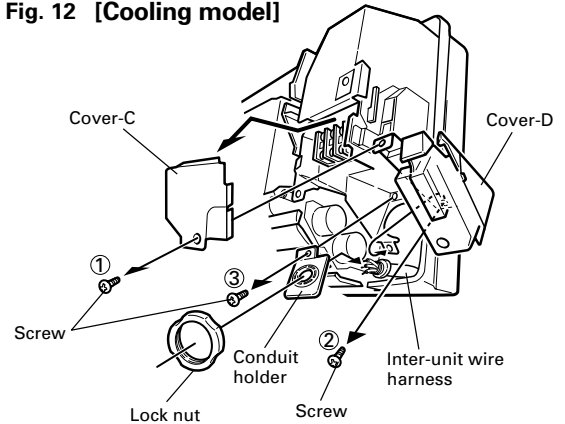


Fig. 12 [Cooling model]



Continued on back

## 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) to expose the solid wire. (Fig. 19)
- (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.

Fig. 19

#### Solid wire

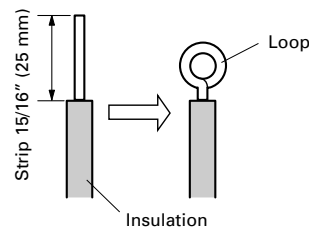
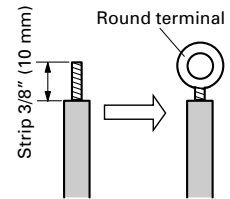


Fig. 20

#### Strand wire



### ■ 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) to expose the strand wiring. (Fig. 20)
- (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. 20)
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver. (Fig. 21)

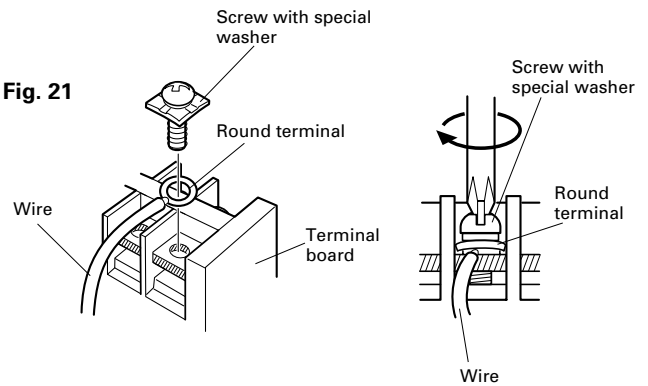
[Cooling model]

Refer to the wiring diagram in Fig. 24.

[Heat & Cool model]

Refer to the wiring diagram in Fig. 26.

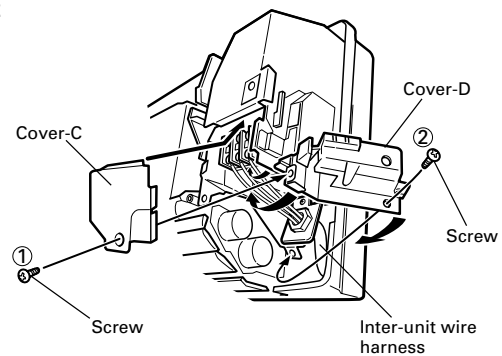
Fig. 21



## HOW TO INSTALL THE COVER

- (1) Install Cover-D to its original state with the screw ②.
- (2) Install Cover-C to its original state with the screw ①.

Fig. 22

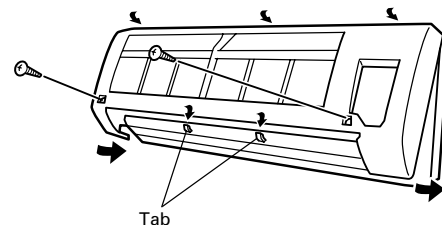


## FRONT PANEL INSTALLATION

Install the front panel in the opposite order of "HOW TO REMOVE THE FRONT PANEL".

- (1) Engage the body tabs by pressing on the top of the unit at the three points indicated by the arrows until the tabs make a sound.
- (2) Engage the tab at the center of the front panel and fasten the front panel with the two screws.

Fig. 23



# OUTDOOR UNIT

## OUTDOOR UNIT INSTALLATION

- Set the unit on a strong stand, such as one made of concrete blocks to minimize shock and vibration.
- Do not set the unit directly on the ground because it will cause trouble.

### NOTE:

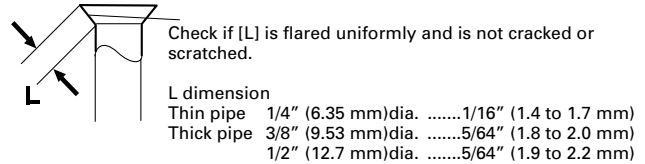
- Install the unit where it will not be tilted by more than 5°.
- When installing the outdoor unit where it may be exposed to strong wind, fasten it securely.

## CONNECTING THE PIPING

### 1. FLARING

- Cut the connection pipe to the necessary length with a pipe cutter.
- Hold the pipe downward so that cuttings will not enter the pipe and remove the burrs.
- Insert the flare nut onto the pipe and flare the pipe with a flaring tool.

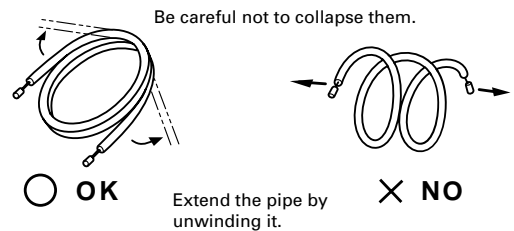
Fig. 15



### 2. BENDING

- When bending the pipe, be careful not to crush it.
- To prevent crushing of the pipe, do not bend the pipe at a radius curvature of 4" (100 mm) or less.
- If the copper pipe is bent or pulled too often, it will become stiff. Do not bend the pipe more than three times at one place.

Fig. 16



### 3. CONNECTION

- Install the outdoor unit wall cap (should be locally available) to the wall hole pipe.
- Connect the outdoor unit and indoor unit piping.
- After matching the center of the flare surface and tightening the nut hand tight, tighten the nut to the specified tightening torque with a torque wrench. (Tighten the flare nut of the outdoor unit 3-way valve after air purging.)

Fig. 17

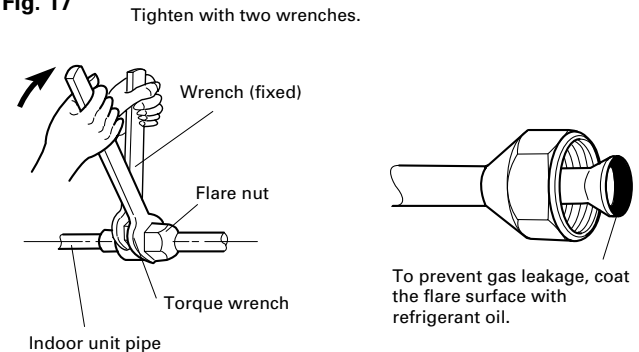


Table 3 Flare nut tightening torque

Flare nut	Tightening torque ft•lbs (kgf•cm)	Tightening torque standard (using a 8" (20 cm) wrench)
1/4" (6.35 mm) dia.	11.57 (160) to 13.02 (180)	Wrist strength
3/8" (9.53 mm) dia.	21.70 (300) to 30.38 (420)	Arm strength
1/2" (12.7 mm) dia.	36.17 (500) to 39.78 (550)	Arm strength

Do not remove the cap from the connection pipe before connecting the pipe.

### 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.**

# AIR PURGE

## 1. AIR PURGE

Close the high pressure side valve of the gauge manifold fully and do not operate it during the following work.

1. Check if the piping connections are secure.
2. Check that the stems of 2-way valve and 3-way valve are closed fully.
3. Connect the gauge manifold service hose to the charging port of the 3-way valve (side with the projection for pushing in the valve core).
4. Open the low pressure side valve of the gauge manifold fully.
5. Operate the vacuum pump and start pump down.
6. Slowly loosen the flare nut of the 3-way valve and check if air enters, then retighten the flare nut. (When the flare nut is loosened the operating sound of the vacuum pump changes and the reading of the compound pressure gauge goes from minus to zero.)
7. Pump down the system for at least 15 minutes, then check if the compound pressure gauge reads  $-100\text{ kPa}$  ( $-76\text{ cm}\cdot\text{Hg}$ ,  $-1\text{ bar}$ ).
8. At the end of pump down, close the low pressure side gauge of the gauge manifold fully and stop the vacuum pump.
9. Slowly loosen the valve stem of the 3-way valve. When the compound pressure gauge reading reaches  $0.07$  to  $0.14\text{ ft}\cdot\text{lbs}$  ( $1\text{--}2\text{ kg}/\text{cm}^2$ ), retighten the valve stem and disconnect the service hose from the 3-way valve charging port. (If the stem of the 3-way valve is opened fully before the service hose is disconnected, it may be difficult to disconnect the service hose.)
10. Fully open the valve stems of the 2-way valve and 3-way valve using a hexagon wrench. (After the valve stem begins to turn, turn it with a torque of less than  $2.17\text{ ft}\cdot\text{lbs}$  ( $30\text{ kgf}\cdot\text{cm}$ ) until it stops turning.)
11. Firmly tighten the 2-way valve and 3-way valve blank cap and the charging port cap.

## 2. ADDITIONAL CHARGE

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

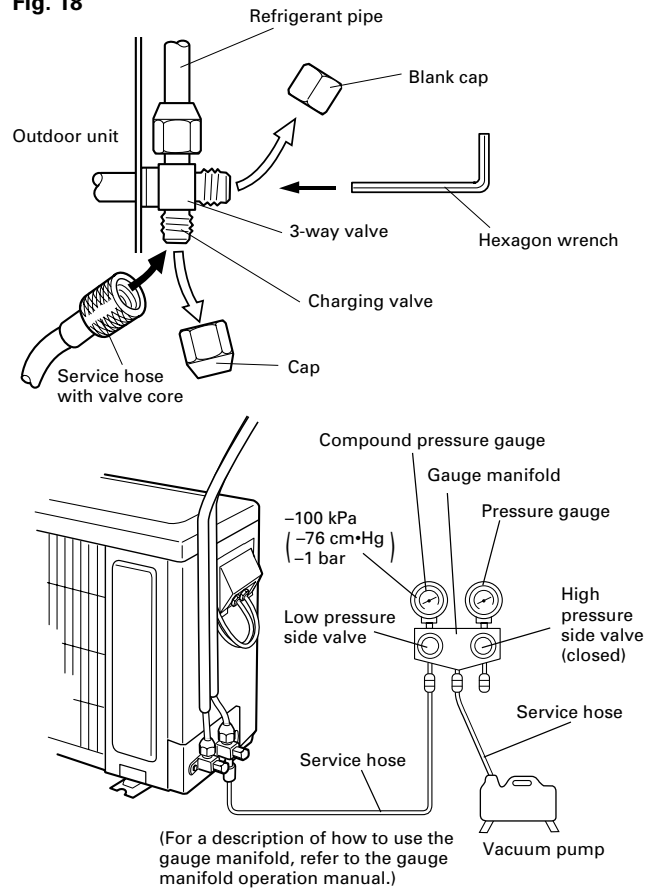
When the piping is longer than  $25\text{ ft}$  ( $7.5\text{ m}$ ), additional charging is necessary.

For the additional amount, see the table below.

**Table 5**

Pipe length	25 ft (7.5 m)	33 ft (10 m)	49 ft (15 m)
Additional refrigerant	None	1.4 oz (40 g)	4.2 oz (120 g)

**Fig. 18**



**Table 4**

	Tightening torque
Blank cap (2-way valve)	14.47 to 18.08 ft·lbs (200 to 250 kgf·cm)
Blank cap (3-way valve)	20.25 to 23.15 ft·lbs (280 to 320 kgf·cm)
Charging port cap	9.04 to 11.57 ft·lbs (125 to 160 kgf·cm)

### **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 with the use of a gas leakage detector when the pipes are connected.

# ELECTRICAL WIRING

## 2. OUTDOOR UNIT SIDE

- A. To take off the panel (top), remove the 2 screws.
- B. Remove the plugs on the conduit plate.
- C. Temporarily mount the conduit tubes on the conduit plate.
- D. Properly connect both the power supply and inter-unit wire harness to the corresponding terminals on the terminal board.  
Refer to the wiring diagram in Fig. 24 [Which also appears on the panel (top)]. (Cooling model)  
Refer to the wiring diagram in Fig. 26 [Which also appears on the panel (top)]. (Heat & Cool model)
- E. Ground the unit in accordance with local codes.
- F. Be sure to size each wire allowing several inches longer than the required length for wiring.
- G. Use lock nuts to secure the conduit tubes.

**⚠ 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.**

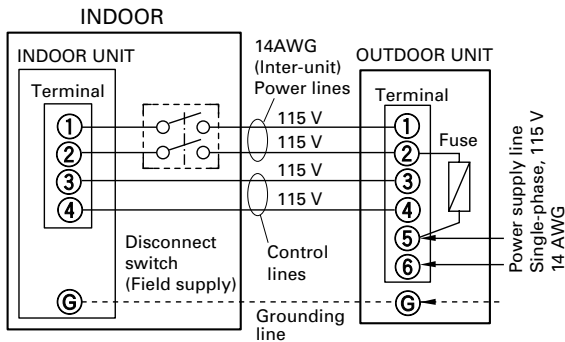
**Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Therefore, be sure all wiring is tightly connected.**

**Connect wires to the matching numbers of terminals.**

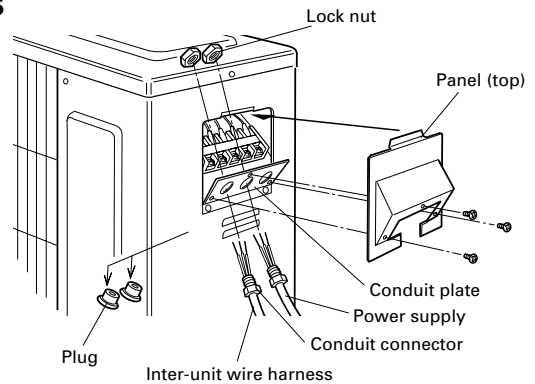
**NOTE:**

- Connector trade size for this unit is 1/2" (12.7 mm). 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. (Cooling model)

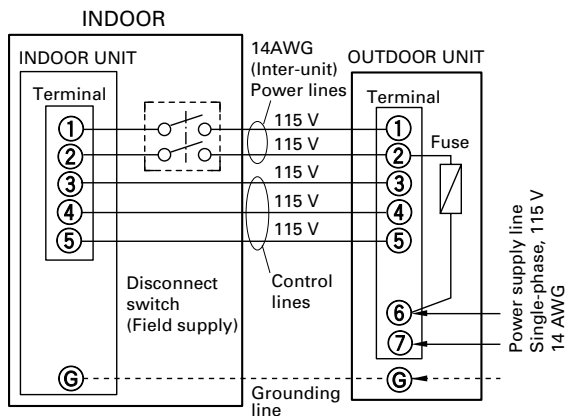
**[Cooling model]**  
**Fig. 24 WIRING SYSTEM DIAGRAM**



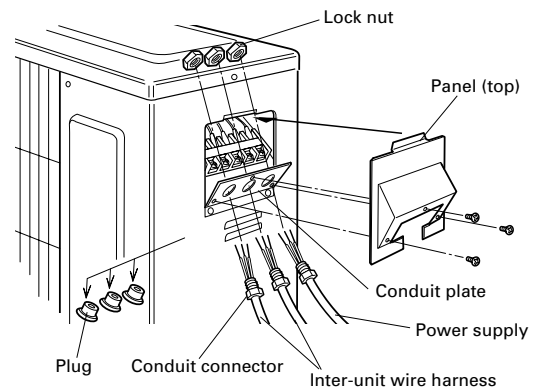
**[Cooling model]**  
**Fig. 25**



**[Heat & Cool model]**  
**Fig. 26 WIRING SYSTEM DIAGRAM**



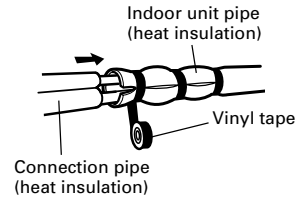
**[Heat & Cool model]**  
**Fig. 27**



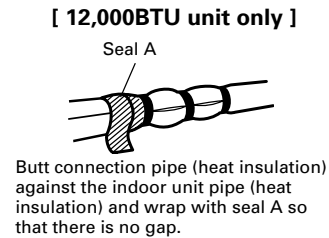
# FINISHING

- (1) Heat insulate the connections between pipes.
  - For rear, right, and bottom piping, butt the connection piping insulation material against the indoor unit piping and fasten it with seal A (12,000 BTU type only) and vinyl tape so there is no gap.
  - For left and left bottom piping wrap the piping with cloth tape within the range that encompasses the piping housing section at the rear of the indoor unit.
  
- (2) Push the bottom of the indoor unit against the wall and hook the two pawls at the bottom of the indoor unit to the mounting plate hooks. At this time, check the following:
  - Are the top and bottom hooks seated positively? Check by moving the indoor unit forward, backward, left and right.
  - Is the indoor unit installed level and perpendicular?
  - For left rear piping, is the drain hose at the bottom of the wall hole pipe?
  
- (3) Temporarily fasten the connection cable along the connection piping with vinyl tape and wrap decorative tape around the part that is visible from the body. For right, bottom, and left piping, securely wrap the part coming from the body with decorative tape so that the piping does not swell. (Overlap wrapping of outdoor parts about 1/3 of the width of the tape from the bottom of the piping so that water will not enter.)
  
- (4) Fasten the connection pipe to the outside wall with a saddle, etc.
  
- (5) Fill the gap between the outside wall pipe hole and the pipe with sealer so that rain water and wind cannot blow in.
  
- (6) Fasten the drain hose to the outside wall, etc.

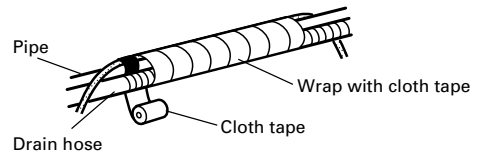
**Fig. 28**



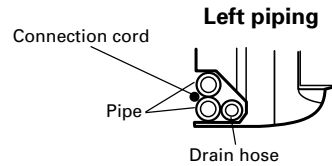
**Fig. 29**



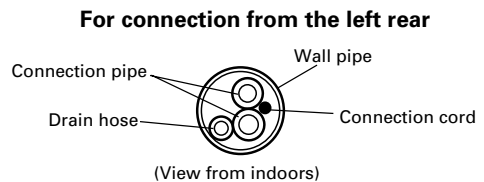
**Fig. 30**



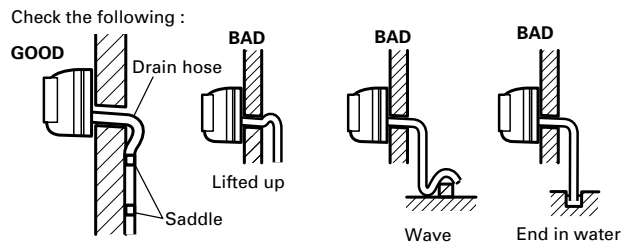
**Fig. 31**



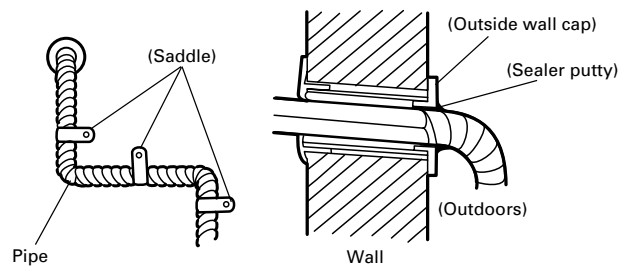
**Fig. 32**



**Fig. 33**



**Fig. 34**



## INSTALLING THE REMOTE CONTROL UNIT HOLDER

Install the remote control unit holder to a wall or pillar with the tapping screws (small).

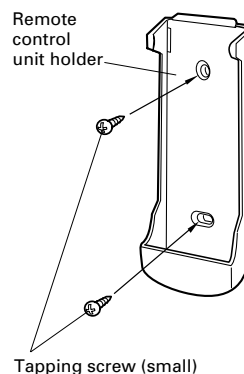
### CAUTION

When selecting the remote control unit installation site, pay careful attention to the following:

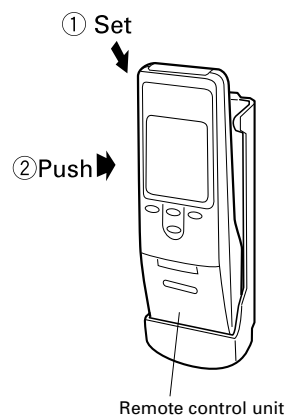
- Avoid places in direct sunlight.
- Select a place where the effect of heat from a stove, etc. is small.
- Select a place where the remote control unit is not exposed directly to the air discharged from the air conditioner.

Fig. 35

Remote control unit holder installing



Remote control unit mounting

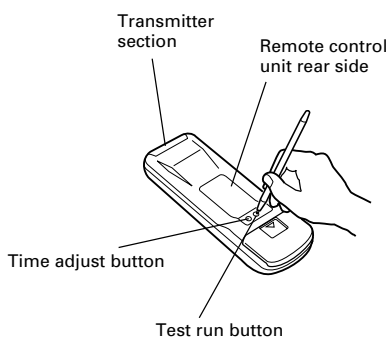


## TEST RUNNING

- Perform test operation and check items 1 and 2 to the right.
- For the test operation method, refer to the operating manual.
- The outdoor unit, may not operate, depending on the room temperature. In this case, press the test run button on the rear of the remote control unit while the air conditioner is running, (Point the transmitter section of the remote control unit toward the air conditioner and press the test run button with the tip of a ball-point pen, etc.)
- To end test operation, press the remote control unit START/STOP button.

(When the air conditioner is run by pressing the test run button, the OPERATION indicator lamp and TIMER indicator lamp will simultaneously flash slowly.)

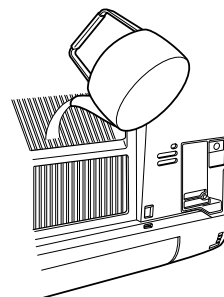
Fig. 36



### 1. INDOOR UNIT

- (1) Is operation of each button on the remote control unit normal?
- (2) Does each lamp light normally?
- (3) Do the air flow-direction louver operate normally?
- (4) Is the drain normal?

Fig. 37



### 2. OUTDOOR UNIT

- (1) Is there any abnormal noise and vibration during operation?
- (2) Will noise, wind, or drain water from the unit disturb the neighbors?
- (3) Is there any gas leakage?

## CUSTOMER GUIDANCE

Explain the following to the customer in accordance with the operating manual:

- (1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
- (2) Air filter removal and cleaning, and how to use the air louvers.
- (3) Give the operating and installation manuals to the customer.