



# Air-Conditioners Indispensable Optional Parts

## BRANCH BOX

### PAC-MK50BC PAC-MK30BC

ONLY FOR R410A OUTDOOR UNIT

ONLY FOR INDOOR USE



#### INSTALLATION MANUAL

For safe and correct use, please read this installation manual thoroughly before installing the air-conditioner unit.

FOR INSTALLER

English

#### INSTALLATONSHANDBUCH

Zum sicheren und ordnungsgemäßen Gebrauch der Klimaanlage das Installationshandbuch gründlich durchlesen.

FÜR INSTALLATEURE

Deutsch

#### MANUAL D'INSTALLATION

Veuillez lire le manual d'installation en entier avant d'installer ce climatiseur pour éviter tout accident et vous assurer d'une utilisation correcte.

POUR L'INSTALLATEUR

Français

#### INSTALLATIEHANDLEIDING

Voor een veilig en juist gebruik moet u deze installatiehandleiding grondig doorlezen voordat u de airconditioner installeert.

VOOR DE INSTALLATEUR

Nederlands

#### MANUAL DE INSTALACIÓN

Para un uso seguro y correcto, lea detalladamente este manual de instalación antes de montar la unidad de aire acondicionado.

PARA EL INSTALADOR

Español

#### MANUALE DI INSTALLAZIONE

Per un uso sicuro e corretto, leggere attentamente questo manuale di installazione prima di installare il condizionatore d'aria.

PER L'INSTALLATORE

Italiano

#### ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ ΕΓΚΑΤΑΣΤΑΣΗΣ

ΓΙΑ ΑΥΤΟΝ ΠΟΥ ΚΑΝΕΙ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ

Για ασφάλεια και σωστή χρήση, παρακαλείστε διαβάσετε προσεχτικά αυτό το εγχειρίδιο εγκατάστασης πριν αρχίσετε την εγκατάσταση της μονάδας κλιματισμού.

PARA O INSTALADOR

Ελληνικά

#### MANUAL DE INSTALAÇÃO

Para segurança e utilização correctas, leia atentamente este manual de instalação antes de instalar a unidade de ar condicionado.

PARA O INSTALADOR

Português

#### INSTALLATIONS手册

TIL INSTALLATØREN

Dansk

Læs venligst denne installationsmanual grundigt, før De installerer airconditionanlægget, af hensyn til sikker og korrekt anvendelse.

#### INSTALLATIONS手册

FÖR INSTALLATÖREN

Svenska

Läs denna installationsmanual noga för säkert och korrekt bruk innan luftkonditioneringen installeras.

#### MONTAJ ELKİTABI

MONTÖR İÇİN

Türkçe

Emniyetli ve doğru biçimde nasıl kullanılacağını öğrenmek için lütfen klima cihazını monte etmeden önce bu elkitabını dikkatle okuyunuz.

#### РУКОВОДСТВО ПО УСТАНОВКЕ

ДЛЯ УСТАНОВИТЕЛЯ

Русский

Для осторожного и правильного использования прибора необходимо тщательно ознакомиться с данным руководством по установке до выполнения установки кондиционера.

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This installation manual is only for the branch box installation. In installing the indoor units and outdoor units, refer to the installation manual attached to each unit.

## 1. Safety precautions

- ▶ Before installing the unit, make sure you read all the "Safety precautions".
- ▶ Please report to or take consent by the supply authority before connection to the system.
- ▶ PAC-MK•BC series are designed as professional equipment.
- ▶ When receiving electricity from the outdoor unit, applicable standards for the outdoor unit may not be satisfied depending on the indoor unit used.

### ⚠ Warning:

Describes precautions that must be observed to prevent danger of injury or death to the user.

### ⚠ Caution:

Describes precautions that must be observed to prevent damage to the unit.

### ⚠ Warning:

- The unit must not be installed by the user.
  - Ask a dealer or an authorized technician to install the unit.
  - For installation work, follow the instructions in the Installation Manual and use tools and pipe components specifically made for use with refrigerant specified in the outdoor unit installation manual
  - The unit must be installed according to the instructions in order to minimize the risk of damage from earthquakes, typhoons, or strong winds. An incorrectly installed unit may fall down and cause damage or injuries.
  - The unit must be securely installed on a structure that can sustain its weight.
  - If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of refrigerant leakage. Should the refrigerant leak and cause the concentration limit to be exceeded, hazards due to lack of oxygen in the room may result.
  - Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released
  - All electric work must be performed by a qualified technician according to local regulations and the instructions given in this manual.
  - Use only specified cables for wiring
  - The terminal block cover panel of the unit must be firmly attached.
  - Use only accessories authorized by Mitsubishi Electric and ask a dealer or an authorized technician to install them.
  - The user should never attempt to repair the unit or transfer it to another location.
  - After installation has been completed, check for refrigerant leaks. If refrigerant leaks into the room and comes into contact with the flame of a heater or portable cooking range, poisonous gases will be released.
  - Be sure to connect the power supply cords and the connecting wires for the indoor units, outdoor units, and branch boxes directly to the units (no intermediate connections).
- Intermediate connections can lead to communication errors if water enters the cords or wires and causes insufficient insulation to ground or a poor electrical contact at the intermediate connection point.  
(If an intermediate connection is necessary, be sure to take measures to prevent water from entering the cords and wires.)

After installation work has been completed, explain the "Safety Precautions," use, and maintenance of the unit to the customer according to the information in the Operation Manual and perform the test run to ensure normal operation. Both the Installation Manual and Operation Manual must be given to the user for keeping. These manuals must be passed on to subsequent users.

 : Indicates a part which must be grounded.

### ⚠ Warning:

Carefully read the labels affixed to the main unit

### ⚠ Caution:

- Make sure that the refrigerant pipes are well insulated to prevent condensation. Incomplete insulation may cause condensation on the surface of pipes, wetting of the ceiling, floor and other important properties
- Do not use the unit in an unusual environment. If the air conditioner is installed in areas exposed to steam, volatile oil (including machine oil), or sulfuric gas, areas exposed to high salt content such as the seaside, the performance can be significantly reduced and the internal parts can be damaged.
- Do not install the unit where combustible gases may leak, be produced, flow, or accumulate. If combustible gas accumulates around the unit, fire or explosion may result.
- When installing the unit in a hospital or communications office, be prepared for noise and electronic interference. Inverters, home appliances, high-frequency medical equipment, and radio communications equipment can cause the air conditioner to malfunction or breakdown. The air conditioner may also affect medical equipment, disturbing medical care, and communications equipment, harming the screen display quality.
- Thermal insulation of the refrigerant pipe is necessary to prevent condensation. If the refrigerant pipe is not properly insulated, condensation will be formed.
- Place thermal insulation on the pipes to prevent condensation. If the drain-pipe is installed incorrectly, water leakage and damage to the ceiling, floor, furniture, or other possessions may result.
- Do not clean the air conditioner unit with water. Electric shock may result.
- Tighten all flare nuts to specification using a torque wrench. If tightened too much, the flare nut can break after an extended period.
- Be sure to install circuit breakers, if not installed, electric shock may result.
- For the power lines, use standard cables of sufficient capacity. Otherwise, a short circuit, overheating, or fire may result.
- When installing the power lines, do not apply tension to the cables. If the connections are loosened, the cables can snap or break and overheating or fire may result.
- Do not connect the ground wire to gas or water pipes, lighting rods, or telephone grounding lines. If the unit is not properly grounded, electric shock may result.

## 2. Selecting a location for installation

### \* The branch box is only indoor use.

- Ensure that the branch box is installed in a location which facilitates servicing and maintenance. (ensure that the required maintenance hole or service space is available).
  - Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible.
  - Ensure that it is located where noise in operation will not be a problem. After power is supplied or after an operation stop for a while, a small clicking noise may be heard from the inside of the branch box. The electronic expansion valve is opening and closing. The unit is not faulty.
- Determine the route of refrigerant piping, and electrical wiring beforehand.

- Ensure that the location of the installation is such that the length of refrigerant piping is within the specified limits

### \* Do not install in location that is hot or humid for long periods of time.

- Ensure that the branch box is installed above the ceiling of corridor, bath room, etc., where persons are not regularly there (Avoid installing at around center of the room.) for maintenance.

### \* Ensure that the unit is installed in a location able to support its weight.

### ⚠ Warning:

Ensure that the unit is installed firmly in a location able to support its weight. If the installation is of insufficient strength the unit may fall, resulting in injury.



## 4. Dimensions and required servicing space of Branch Box

### ■ PAC-MK30BC (3-branches type)

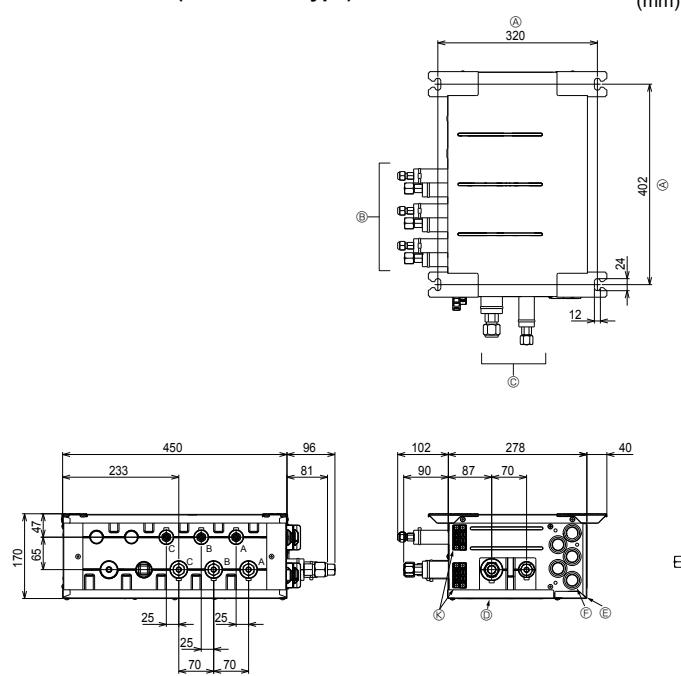


Fig. 4-3

### ■ PAC-MK30BC (Fig.4-3)

Suspension bolt: W3/8 (M10)  
Refrigerant pipe flared connectio

	A	B	C	To outdoor unit
Liquid pipe	ø6.35	ø6.35	ø6.35	ø9.52
Gas pipe	ø9.52	ø9.52	ø9.52	ø15.88

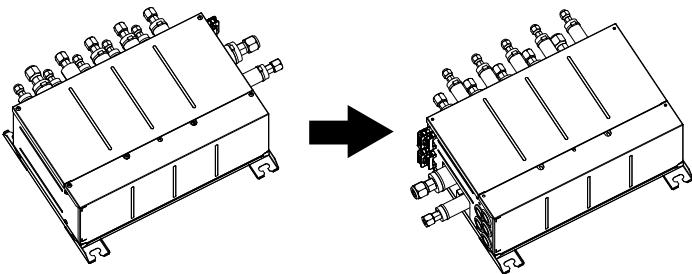
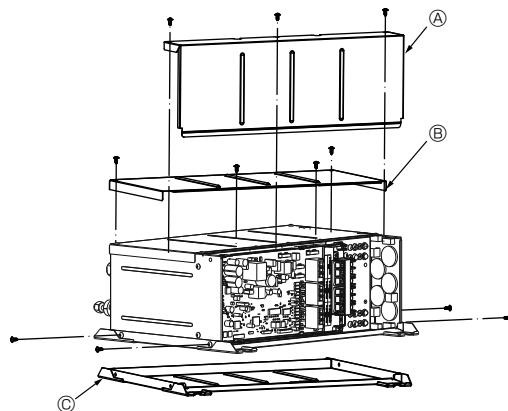


Fig. 4-4

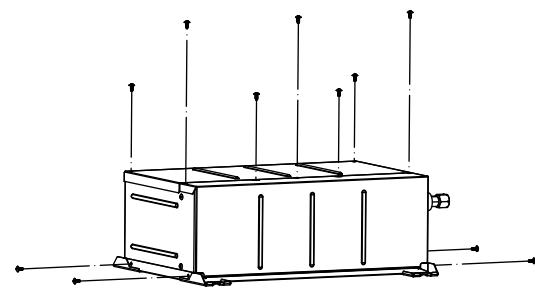
② Remove the electric cover, service panel, and top panel.

- Ⓐ Electric cover
- Ⓑ Service panel
- Ⓒ Top panel



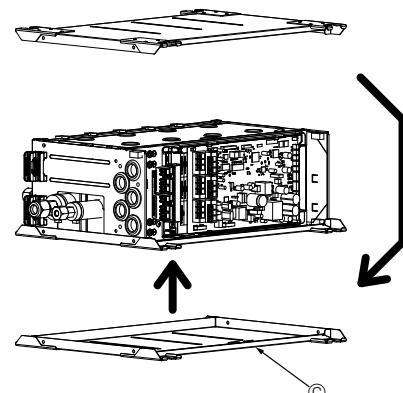
### 4.1. The direction of the piping can be changed. (Fig. 4-4). [Work Procedures] (Fig. 4-5)

① Remove the screws in each part.



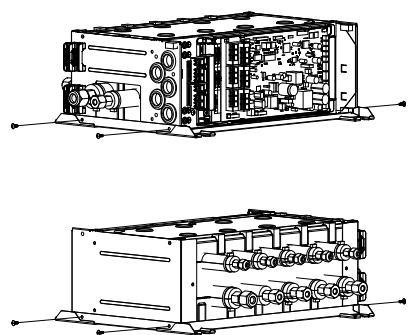
③ Install the top panel on the opposite surface.

- Ⓒ Top panel

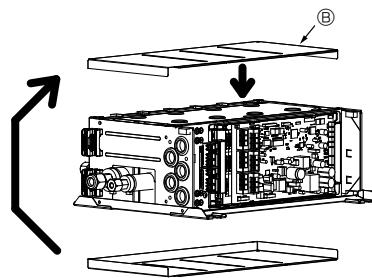


#### 4. Dimensions and required servicing space of Branch Box

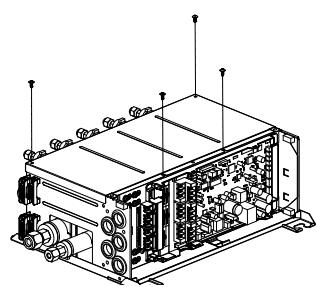
④ Fasten the screws in each part.



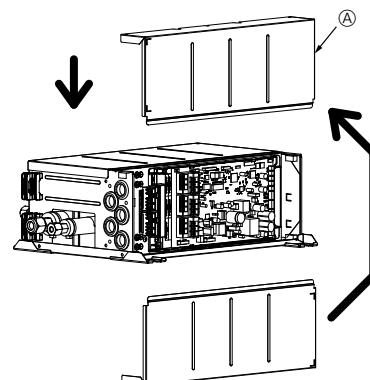
⑤ Install the service panel on the opposite surface.  
⑧ Service panel



⑥ Fasten the screws.



⑦ Install the electric cover on the opposite surface.  
⑨ Electric cover



⑧ Fasten the screws.

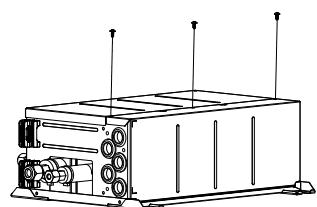


Fig. 4-5

## 4. Dimensions and required servicing space of Branch Box

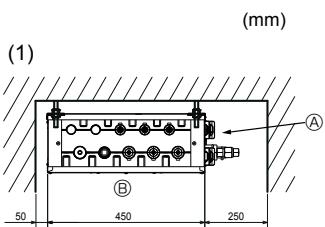


Fig. 4-6

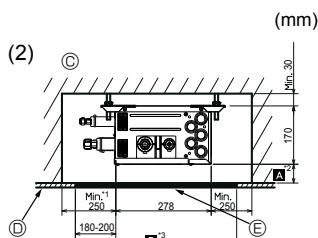


Fig. 4-7

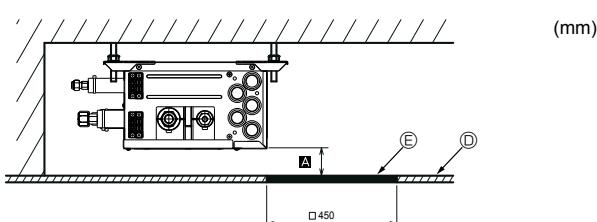


Fig. 4-8

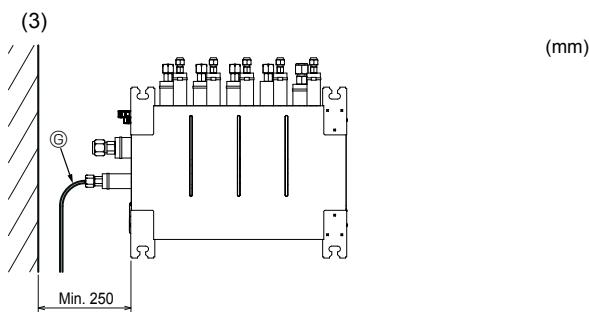


Fig. 4-9

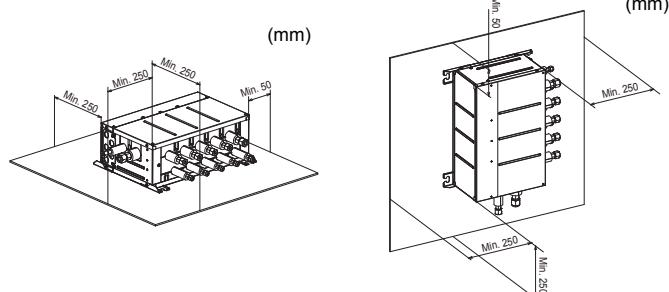


Fig. 4-10

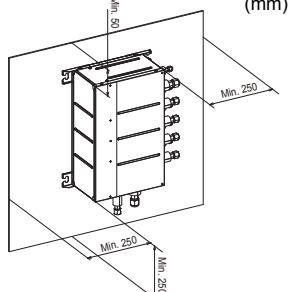


Fig. 4-11

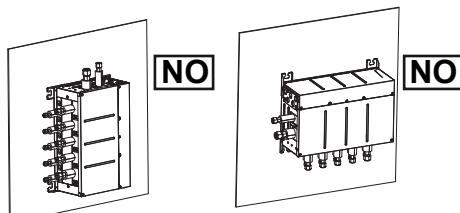


Fig. 4-12

## 4.2. Space required for installation and servicing

I . The space when installing with the suspension bolts.

(1) Front View (Fig. 4-6)

Ⓐ Branch box

Ⓑ On the side of piping

(2) Side View (Fig. 4-7, Fig. 4-8)

Ⓒ For indoor installations

Ⓓ Ceiling board

Ⓔ Maintenance hole

\*1: Minimum 350 mm is required for 90° bends in refrigerant piping.

\*2: Ⓛ is “Min. 200 mm” <recommendation>.

In the case of less than 200 mm (for example Ⓛ is 100 mm), the exchange work of Branch box from a maintenance hole becomes difficult (Only exchange work of a PCB, linear expansion valve coils and sensors are possible).

\*3: Ⓛ is “□ 600 mm” <recommendation>.

In the case of “□ 450 mm”, prepare a maintenance hole at a PCB side (as it is shown in Fig. 4-8), and “Min. 300 mm” is needed as distance Ⓛ.

In the case of less than 300 mm (for example Ⓛ is 100 mm), the exchange work of Branch box, linear expansion valve coils and sensors from a maintenance hole becomes difficult (Only exchange work of a PCB is possible).

(3) Top View (Fig. 4-9)

Ⓐ Refrigerant piping

II . The space when installing on the floor. (Fig. 4-10)

III . The space when installing on a wall. (Fig. 4-11)

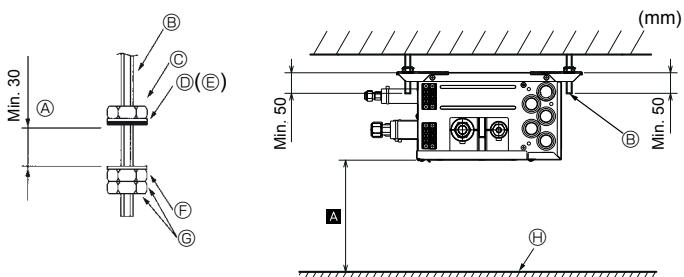
The installation direction is limited when installing on a wall. (Fig. 4-12)

When installing the unit on the wall, install the piping connected to the outdoor unit facing down. Other ways are not acceptable.

## 5. Refrigerant piping

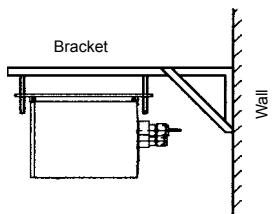
\* Always follow the specifications written in the installation manual of the outdoor unit. Exceeding these requirements may cause reduced performance of the equipment, and malfunctions.

## 6. Mounting the Branch Box



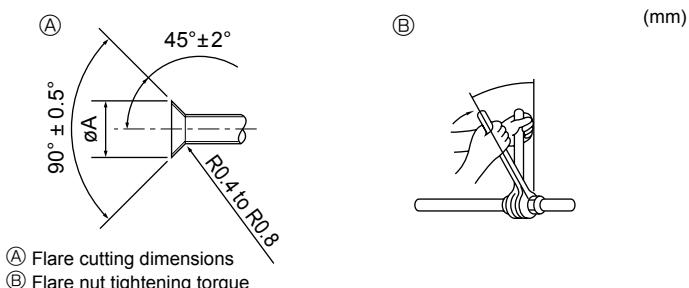
**Fig. 6-1**

- (1) Install the suspension bolts (procure locally) at the specified pitch (Fig. 4-2, 4-3).
  - (2) Fit the washers and nuts (①, ②, procure locally) to the suspension bolts. (Fig. 6-1)
  - (3) Hang the unit on the suspension bolts.
  - (4) Fully tighten the nuts (check ceiling height).
  - (5) Use a level to adjust the branch box to the horizontal.
- Ⓐ When unit is hung and nuts tightened  
 Ⓡ Suspension bolt  
 Ⓢ Nuts  
 Ⓣ Washer (with cushion) ①  
 Ⓤ Ensure that cushion faces downwards  
 Ⓥ Washer (without cushion) ②  
 Ⓦ Nut (procure locally)  
 Ⓧ Ceiling board



**Fig. 6-2**

## 7. Installing refrigerant piping



Ⓐ Flare cutting dimensions

Ⓑ Flare nut tightening torque

**Fig. 7-1**

Ⓐ Flare cutting dimensions

**Table 1**

Copper pipe O.D. (mm)	Flare dimensions øA dimensions (mm)
ø6.35	8.7-9.1
ø9.52	12.8-13.2
ø12.7	16.2-16.6
ø15.88	19.3-19.7

Ⓑ Flare nut tightening torque

**Table 2**

Copper pipe O.D. (mm)	Flare nut O.D. (mm)	Tightening torque (N·m)
ø6.35	17	14-18
ø6.35	22	34-42
ø9.52	22	34-42
ø12.7	26	49-61
ø12.7	29	68-82
ø15.88	29	68-82
ø15.88	36	100-120

- ▶ Connect the liquid and gas pipes of each indoor unit to the same end connection numbers as indicated on the indoor unit flare connection section of each Branch Box. If connected to wrong end connection numbers, it doesn't work normally.
- ▶ When connecting indoor units, make sure to connect refrigerant pipes and connection wires to the appropriate connection ports marked with matching alphabets. (Ex. A, B, C, D, E)

**Note:**

Be sure to mark all the local refrigerant piping (liquid pipes, gas pipes, etc.) for each indoor unit designating clearly which room it belongs in. (Ex. A, B, C, D, E)

- ▶ List indoor unit model names in the name plate on the control box of Branch Box (for identification purposes).

- Conduct sufficient anti-condensation and insulation work to prevent water dripping from the refrigerant piping. (liquid pipe/gas pipe)
- Increase insulation depending on the environment where the refrigerant piping is installed, or condensation may occur on the surface of the insulation material. (Insulation material Heat-resistant temperature: 120 °C, Thickness: 15 mm or more)
- \* When the refrigerant piping is used in locations subject to high temperature and humidity such as in the attic, further addition of insulation may be required.
- To insulate the refrigerant piping, apply heat-resistant polyethylene foam between the indoor unit and insulation material as well as to the net between the insulation material filling all gaps (Condensation forming on the piping may result in condensation in the room or burns when contacting the piping.)

- ▶ When using commercially available refrigerant piping, ensure that both liquid and gas piping are wrapped with commercially available thermal insulation materials (insulation materials at least 12 mm thick and able to withstand temperatures in excess of 100 °C).
- ▶ Refer to the installation manual of the outdoor unit when creating a vacuum and opening or closing valves.

- (1) Remove the flared nuts and caps from the branch box
- (2) Flare the ends of the liquid and gas piping, and apply refrigeration oil (procure locally) to the flared seat  
 Do not apply oil to the threaded portion.
- (3) Connect the refrigerant piping immediately. Always tighten the flared nuts to the torque specified in the table 2 using a torque wrench and double spanner.
- (4) Press the pipe covers ③ and ⑤ on the liquid piping against the unit and wrap to hold in place. (Fig. 7-3)
- (5) Press the pipe covers ④ and ⑥ on the gas piping against the unit and wrap to hold in place. (Fig. 7-3)
- (6) Apply the supplied bands ⑨ at a position 10 - 20 mm from each end of the pipe covers (③④⑤⑥).
- (7) If the indoor unit is not connected, fit the supplied pipe covers (with caps, ⑦ and ⑧) to the branch box refrigerant piping connections against the unit to prevent condensation dripping from the pipes. (Fig. 7-4)
- (8) Clamp the pipe covers (⑦⑧) in place with the supplied bands ⑩.

## 7. Installing refrigerant piping

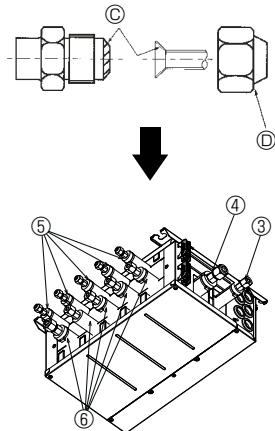


Fig. 7-2

**Note:**

A special flare nut (optional or attached to the indoor unit) is needed to some indoor units.  
Please refer to the installation manual of outdoor unit and indoor unit for details.

- ⑤ Band ⑨
- ⑥ Pipe covers ⑦⑧⑩
- ⑦ Tighten
- ⑧ Refrigerant piping
- ⑨ Thermal insulation for refrigerant piping

► Use the following procedures for indoor connection part which indoor unit is not connected. (Fig. 7-4)

- (1) In order to prevent refrigerant leaks, make sure that the flare nuts are tightened according to the specified torques\* in Table 3  
\* Refrigerant may also leak if the flare nuts are tightened more than the specified torques
- (2) In order to prevent condensation, install the pipe covers ⑦ ⑧ against the unit and fasten them with the supplied bands ⑨ .

Table 3

Diameters of branch box openings for connecting indoor units (mm)	Tightening torque (N·m)
ø6.35	13 ± 2
ø9.52	30 ± 2
ø12.7	50 ± 2

► Refrigerant charge:

Refer to the installation manual of the outdoor unit.  
Use only R410A refrigerant (use of other refrigerants may cause troubles).

**Caution:**  
Tighten the flare nut with a torque wrench in the specified method.  
Overtightening will cause the flare nut to crack and it will cause refrigerant leakage over a period of time.

- ① Apply refrigeration oil to the entire (Fig. 7-2) surface of the flared seat
- ② Basically use flared nuts fitted to the body (commercially available flared nuts may crack).

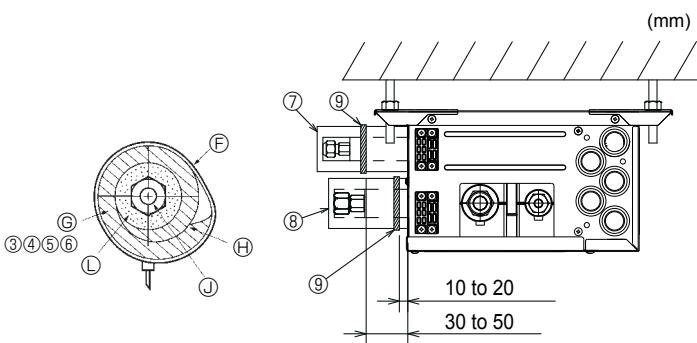


Fig. 7-3

Fig. 7-4

**Caution:**

To avoid excessive strain on the branch box, support the piping with one or more support(s) 1.5 m or less from the branch box.  
Refer to Fig. 7-5 as an example.

- ① Refrigerant piping
- ② Thermal insulation for refrigerant piping

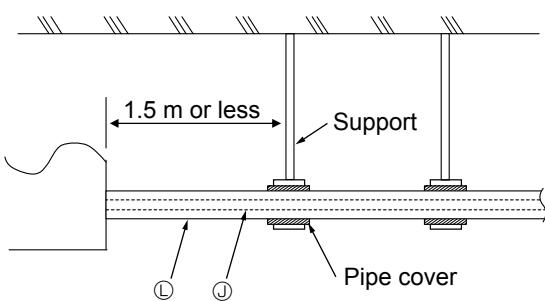


Fig. 7-5

## 8. Electrical work

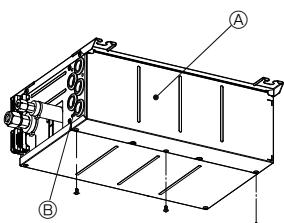


Fig. 8-1

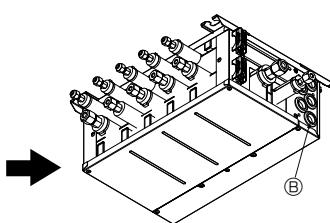


Fig. 8-2

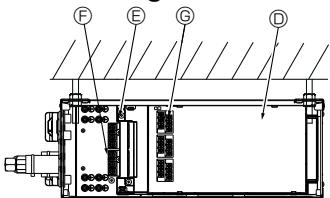


Fig. 8-3

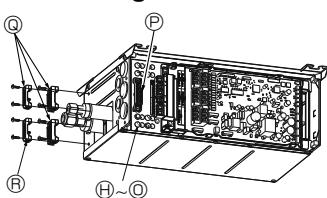


Fig. 8-4

- Ⓐ Electric cover
- Ⓑ Rubber bush
- Ⓒ Wiring
- Ⓓ Controller board
- Ⓔ Terminal block: TB5
- Ⓕ Terminal block: TB2B <To outdoor unit>
- Ⓖ Terminal block: TB3A-TB3E  
<To indoor unit>
- Ⓗ Earth Terminal <To outdoor unit>

- Ⓘ Earth Terminal <For TB3A>
- Ⓛ Earth Terminal <For TB3B>
- Ⓜ Earth Terminal <For TB3D>
- Ⓜ Earth Terminal <For TB3C>
- Ⓝ Earth Terminal <For TB3E>
- Ⓞ Earth Terminal <To other branch box>
- Ⓟ Cable clamp <For TB2B>
- Ⓡ Cable clamp <For TB3A-TB3E>
- Ⓢ Cable clamp <For TB5>

► Cautions for electrical work.

⚠ Warning:

• Always use dedicated circuits with breakers, and at the rated voltage. Power supply circuits with insufficient capacity, and bad workmanship during installation, may result in electric shock or fire

⚠ Caution:

- Be sure to establish an earth. Do not earth the unit to a utility pipe, arrester, or telephone earth. Incomplete earth may cause electrical shock. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Use the specified electrical wiring and ensure that it is connected properly, and that it is not under tension. Failure to follow these requirements may result in broken wiring, heating, or fire

► Before turning Branch Box on, be sure to set the switches.

- To turn the power on, turn on the Branch Box then the outdoor unit, in that order.

(In case power supplies for Branch Box and outdoor unit are separated)

► Wiring connecting branch box and outdoor unit, and branch box and indoor units, functions as both power supply and signal cable. Connect this wiring in accordance with the terminal block numbers to ensure correct polarity.

- Ensure that the appropriate refrigerant piping and electrical wiring are connected to each indoor unit. Incorrect wiring will interfere with the correct operation of the unit.

► Connect refrigerant pipes and connection wires to the appropriate ports marked with matching alphabets (Ex. A, B, C, D, E) on this unit.

- First, connect the power supply cable from the outdoor unit.

- Always fix each ground wire separately with a ground screw.

- To prevent that wiring installed in the ceiling is chewed by rats etc., it should be installed in wiring conduit.

1. Remove the electric cover. (Fig. 8-1)
2. Pass the wiring into the branch box each wire in place with a wiring clamp.
3. Firmly connect each wire to the appropriate terminal block. (Fig. 8-8)
4. Set dip sw. (Refer to 8.3)
5. Replace the electric cover.

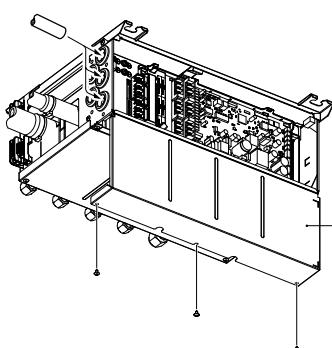


Fig. 8-5

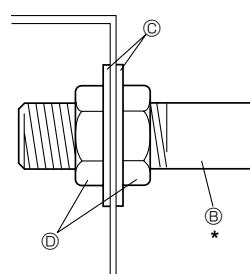


Fig. 8-6

### 8.1. When using wiring conduit (Fig. 8-5,6,7)

Replace the horizontal cover when the wiring conduit has been fixed in place

- Ⓐ Cover
- Ⓑ Wiring conduit
- Ⓒ Washer
- Ⓓ Nut

Wiring conduit of up to 1" OD may be used.

- (1) When using 1" OD wiring conduit, remove the bush and fix to the branch box. Remove the horizontal cover while fixing to the branch box

- (2) When using wiring conduit of 3/4" OD or smaller, notch the bush and insert the wiring conduit approximately 100 mm into the branch box.

\* Replace the horizontal cover when the wiring conduit has been fixed in place

⚠ Caution:

To avoid excessive strain on the branch box, support the wiring conduit Ⓑ with one or more support(s) 1.5 m or less from the branch box. Refer to Fig. 8-7 as an example.

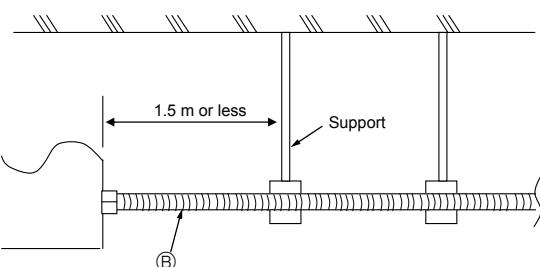
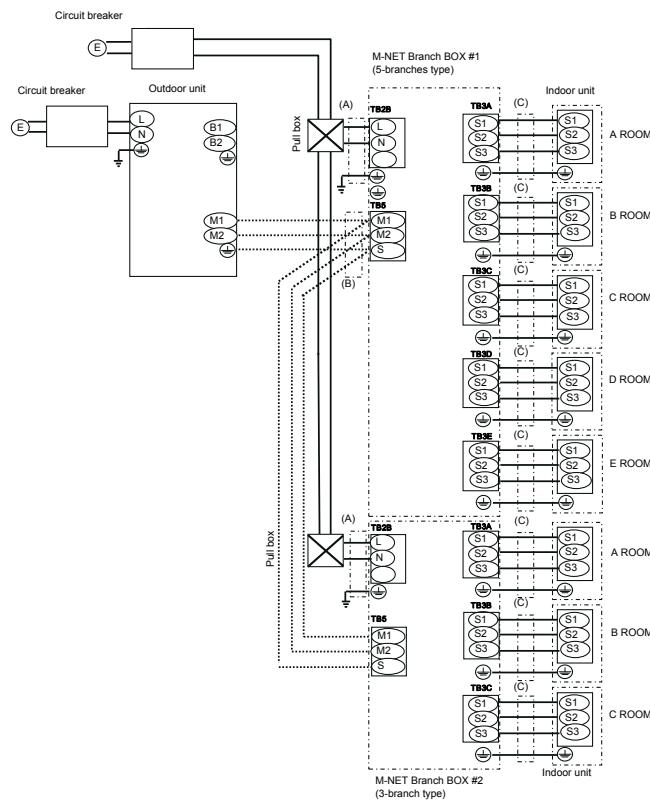


Fig. 8-7

## 8. Electrical work

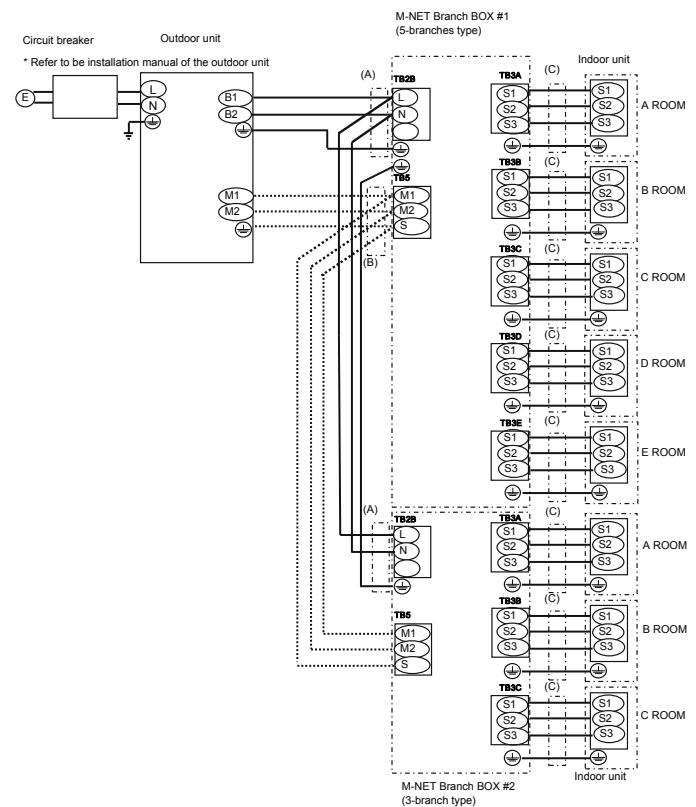
### ■ Supply power separately to branch box and outdoor unit



**Fig. 8-8**

### 8.2. External wiring procedure (Fig. 8-8, Fig 8-9)

#### ■ Power supply from Outdoor unit



⑤ Power supply: Single phase 220/230/240 V 50 Hz, 220 V 60 Hz

#### Note:

- ① Connect the lines (B), (C) in accordance with the terminal block names to ensure correct polarity.
- ② As for lines (C), S1 and S2 are for connecting the power source. And S2 and S3 are for signals. S2 is common cable for the power source and signal.

Wire diameter		
(A) Main power line/ Earth line	(B) M-NETcable Shielding wire CVVS, CPEVS or MVVS	(C) Signal line/ Earth line
3-core 2.5 mm <sup>2</sup>	2-core 1.25 mm <sup>2</sup> Less Than 200 m	4-core 1.5 mm <sup>2</sup> Less Than 25 m

When using twisted wire for the wiring, the use of round terminal is required.

Notes: 1. Wiring size must comply with the applicable local and national code.

2. Power supply cords and indoor unit/branch box/outdoor unit connecting cords shall not be lighter than polychloroprene sheathed flexible cord. (Design 60245 IEC 57)
3. Install an earth line longer than power cables.
4. Do not bundle the M-NET cable with the connection cable and power supply cable. It may cause erroneous operation.

#### ⚠ Warning:

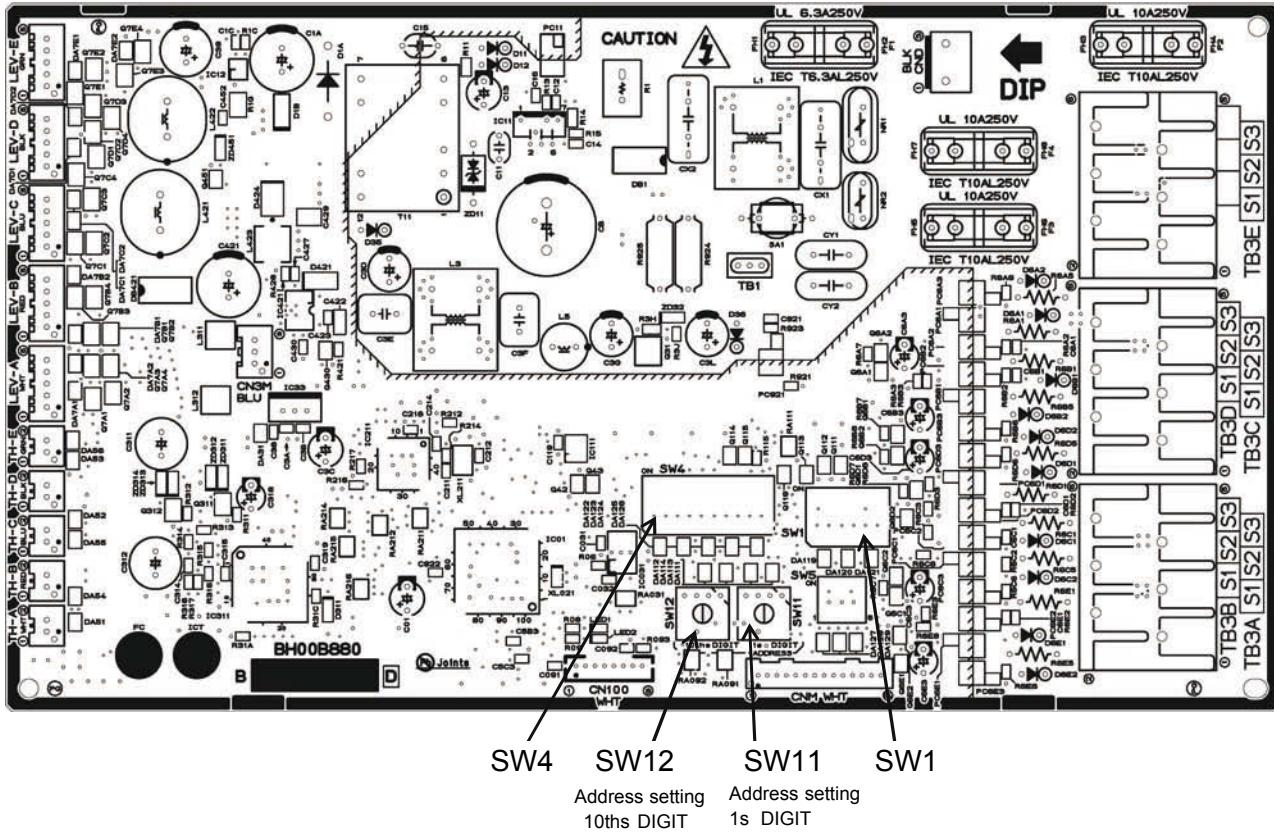
Never splice the cable, otherwise it may result in a smoke, a fire or communication failure.

- Recommended Connection Method
- When connecting one indoor unit to the branch box, connect it to TB3A. When connecting 2 indoor units, connect them to TB3A and TB3B. When connecting 3 indoor units, connect them to TB3A, TB3B, and TB3C. Connect indoor units in the order of A→B→C→D→E.



## 8. Electrical work

### 8.3. Switch setting



#### Dip switch setting (Effective only before turning on the power)

**SW1**

ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

1 2 3 4 5 6

Indoor Unit A  
Indoor Unit B  
Indoor Unit C  
Indoor Unit D  
Indoor Unit E  
Unassigned

Switch	OFF	ON
SW1-1	No	Yes
SW1-2	No	Yes
SW1-3	No	Yes
SW1-4	No	Yes
SW1-5	No	Yes
SW1-6		

#### Address switch (Effective only before turning on the power)

Actual indoor unit address setting varies in different systems. Refer to the installation manual for the outdoor unit for details on how to make the address setting. Each address is set with a combination of the settings for the 10ths digit and 1s digit.

(Example)

- When setting the address to "3", set the 1s digit to 3, and the 10ths digit to 0.
- When setting the address to "25", set the 1s digit to 5, and the 10ths digit to 2.

(Example)

- When setting the address of the branch BOX to "3", an address is assigned to each indoor unit starting with Unit A as shown below no matter if each indoor unit is connected. (SW1-1~5 ON)
 

Indoor Unit A	Address 3
Indoor Unit B	Address 4
Indoor Unit C	Address 5
Indoor Unit D	Address 6
Indoor Unit E	Address 7
- When the address is set to "25" and also 3 indoor units (Unit A, Unit C, and Unit E) are connected. (SW1-1, 1-3, 1-5 ON)
 

Indoor Unit A	Address 25
Indoor Unit C	Address 26
Indoor Unit E	Address 27

## 9. Test run

- Refer to the "Test run" section of the installation manual of the indoor units and outdoor unit.
  - When the branch box and outdoor power source are separate, turn on the power of the branch box first, and then turn on the outdoor unit power.
- After power is supplied or after an operation stop for a while, a small clicking noise may be heard from the inside of the branch box. The electronic expansion valve is opening and closing. The unit is not faulty.

- Be sure to perform the test run in cooling mode for each indoor unit. Make sure each indoor unit operates properly following the installation manual attached to the unit.
- If you perform the test run for all indoor units at once, you cannot detect any erroneous connection, if any, of the refrigerant pipes and the indoor/outdoor unit connecting wires.
- To check for improper wiring, perform the test run for each indoor unit individually.

 **Caution:**

- Use the remote controller to operate the indoor unit.
- The following symptoms are not malfunctions.

Symptom	Cause	Indoor unit LED display *
Indoor unit does not operate even if set to cooling (heating) operation	The cooling (heating) operation cannot be operated when the heating (cooling) operation of another indoor unit is operating.	Stand by (For Multi System)
Indoor unit fan stops during heating operation	The fan stops during defrosting operation. Fan stops when the refrigerant collecting mode ** is activated.	- Stand by (For Multi System)

\* See the operation manual of indoor units for details.

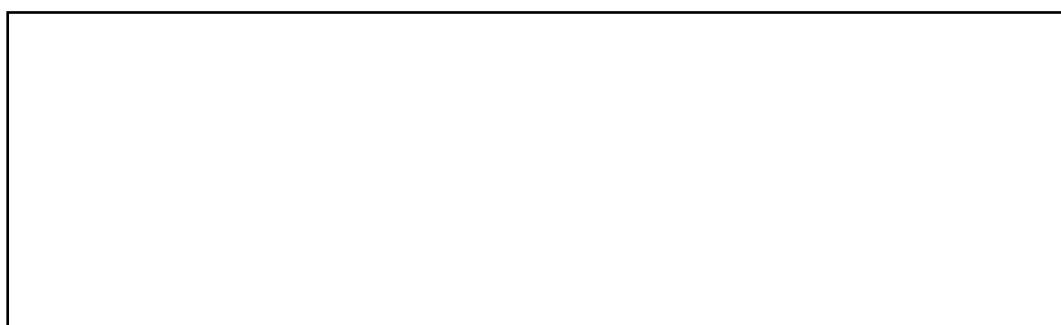
\*\* This mode is activated for approximately 1 minute to help avoid an insufficient supply of refrigerant during heating operation when refrigerant is stored in an indoor unit that has been turned off or thermo-off.



This product is designed and intended for use in the residential,  
commercial and light-industrial environment.

The product at hand is     • Low Voltage Directive 2006 / 95 / EC  
based on the following     • Electromagnetic Compatibility Directive 2004  
EU regulations:              /108 / EC

Please be sure to put the contact address/telephone number on  
this manual before handing it to the customer.



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