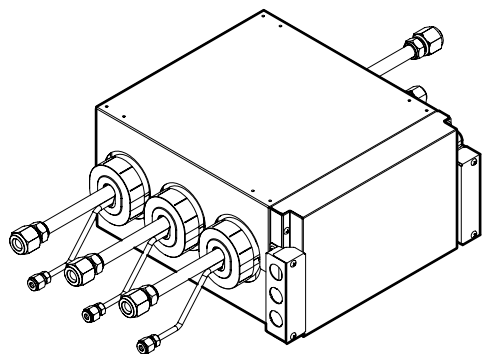


DAIKIN

INSTALLATION MANUAL

BP (Branch Provider) Unit

INVERTER



Models

BPMKS048A2U

BPMKS049A3U

Installation manual
BP (Branch Provider) Unit

English

Manuel d'installation
Unité BP (Fournisseur de branchement)

Français

Manual de instalación
Unidad BP (Proveedor de ramificaciones)

Español

Safety Precautions

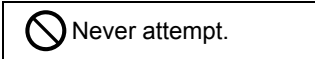
- Read these Safety Precautions carefully to ensure correct installation.
- This manual classifies the precautions into DANGER, WARNING and CAUTION.
Be sure to follow all the precautions below: they are all important for ensuring safety.

⚠ DANGERIndicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.

⚠ CAUTION Failure to follow any of CAUTION may in some cases result in grave consequences.

- The following safety symbol is used throughout this manual:



- After completing installation, test the unit to check for installation errors. Give the user adequate instructions concerning the use and cleaning of the unit according to the Operation Manual.

⚠ DANGER
<ul style="list-style-type: none"> • Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
<ul style="list-style-type: none"> • If the refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce a toxic gas if it comes in contact with fire such as from a fan heater, stove or cooking device. Exposure to this gas could cause severe injury or death.
<ul style="list-style-type: none"> • After completing the installation work, check that the refrigerant gas does not leak. Refrigerant gas may produce a toxic gas if it comes in contact with fire such as from a fan heater, stove or cooking device. Exposure to this gas could cause severe injury or death.
<ul style="list-style-type: none"> • Do not ground units to water pipes, telephone wires or lightning rods because incomplete grounding could cause a severe shock hazard resulting in severe injury or death, and to gas pipes because a gas leak could result in an explosion which could lead to severe injury or death.
<ul style="list-style-type: none"> • Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.
<ul style="list-style-type: none"> • Do not install unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
<ul style="list-style-type: none"> • Do not ground units to telephone wires or lightning rods because lightning strikes could cause a severe shock hazard resulting in severe injury or death, and to gas pipes because a gas leak could result in an explosion which could lead to severe injury or death.



⚠ WARNING
<ul style="list-style-type: none"> • Installation shall be left to the authorized dealer or another trained professional. Improper installation may cause water leakage, electrical shock, fire, or equipment damage.
<ul style="list-style-type: none"> • Install the air conditioner according to the instructions given in this manual. Incomplete installation may cause water leakage, electrical shock, fire or equipment damage.
<ul style="list-style-type: none"> • Be sure to use the supplied or exact specified installation parts. Use of other parts may cause the unit to come to fall, water leakage, electrical shock, fire or equipment damage.
<ul style="list-style-type: none"> • Install the air conditioner on a solid base that is level and can support the weight of the unit. An inadequate base or incomplete installation may cause injury or equipment damage in the event the unit falls off the base or comes loose.
<ul style="list-style-type: none"> • Electrical work shall be carried out in accordance with the installation manual and the national, state and local electrical wiring codes. Insufficient capacity or incomplete electrical work may cause electrical shock, fire or equipment damage.
<ul style="list-style-type: none"> • Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance. Follow all appropriate electrical codes.
<ul style="list-style-type: none"> • For wiring, use a wire or cable long enough to cover the entire distance with no splices if possible. Do not use an extension cord. Do not put other loads on the power supply. Use only a separate dedicated power circuit. (Failure to do so may cause abnormal heat, electric shock, fire or equipment damage.)
<ul style="list-style-type: none"> • Use the specified types of wires for electrical connections from the BP units to the indoor and outdoor units. Follow all state and local electrical codes. Firmly clamp the inter-unit wire so their terminals receive no external stresses. Incomplete connections or clamping may cause terminal overheating, fire or equipment damage.

Safety Precautions

WARNING

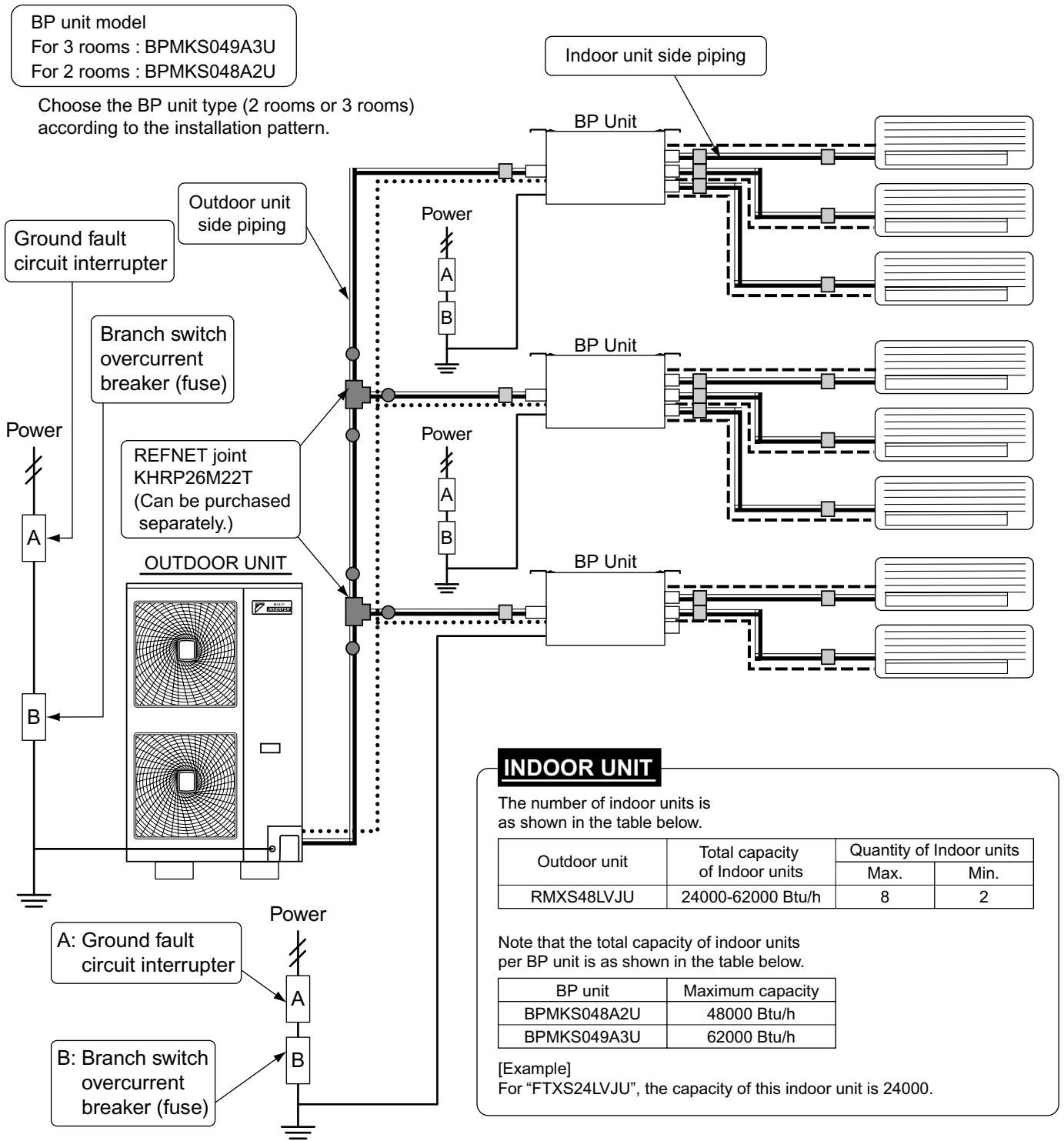
- After connecting all wires be sure to shape the cables so that they do not put undue stress on the electrical covers, panels or terminals.
Install covers over the wires. Incomplete cover installation may cause terminal overheating, electrical shock, fire or equipment damage.
- When installing or relocating the system, be sure to keep the refrigerant circuit free from all substances other than the specified refrigerant (R410A), such as air.
(Any presence of air or other foreign substance in the refrigerant circuit causes an abnormal pressure rise which may result in rupture, resulting in injury.)
- During pump-down, stop the compressor before removing the refrigerant piping.
If the compressor is still running and the stop valve is open during pump-down, air will be sucked in when the refrigerant piping is removed, causing abnormally high pressure which could lead to equipment damage or and personal injury.
- During installation, attach the refrigerant piping securely before running the compressor.
If the refrigerant pipes are not attached and the stop valve is open during installation, air will be sucked in when the compressor is run, causing abnormally high pressure which could lead to equipment damage and personal injury.
- Be sure to install a ground fault circuit interrupter.
Failure to install a ground fault circuit interrupter may result in electrically shocks, or fire personal injury.

CAUTION

- Do not install the air conditioner where gas leakage would be exposed to open flames.
If the gas leaks and builds up around the unit, it may catch fire. 
- Establish drain piping according to the instructions of this manual.
Inadequate piping may cause water damage.
- Tighten the flare nut according to the specified torque. A torque wrench should be used.
If the flare nut is tightened too much, the flare nut may crack over time and cause refrigerant leakage.
- Do not touch the heat exchanger fins.
Improper handling may result in injury. 
- Be very careful about product transportation.
Some products use PP bands for packaging. Do not use any PP bands for a means of transportation. It is dangerous.
- Make sure to provide for adequate measures in order to prevent that the outdoor unit be used as a shelter by small animals.
Small animals making contact with electrical parts can cause malfunctions, smoke or fire. Please instruct the customer to keep the area around the unit clean.
- The temperature of refrigerant circuit will be high, please keep the inter-unit wire away from copper pipes that are not thermally insulated.
- Electrical work must be performed in accordance with the NEC/CEC by authorized personnel only.

System Layout


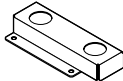
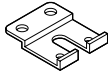
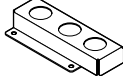

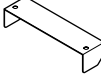


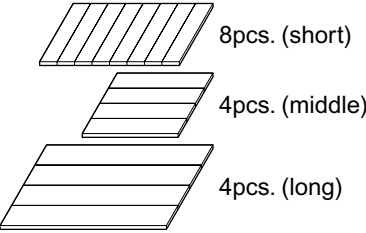

For installation of the indoor and outdoor units, follow the instructions in the Installation manual for each unit.



- Power supply line (3 wires) [60Hz 208/230V]
*Outdoor unit and all BP units require their own power supply.
- Transmission line (2 wires)
- Power supply and transmission line (4 wires)

- Piping
- Brazing connection
- Flare connection

Accessories

Ⓐ Installation Manual 	1pc.	Ⓔ Conduit mounting plate (A) 	1pc.
Ⓑ Hanger metal 	4pcs.	Ⓕ Conduit mounting plate (B) 	1pc.
Ⓒ Screws: M4 (length: 5/16 inch) 	16pcs.	Ⓖ Conduit mounting plate (cover) 	2pcs.
Ⓓ Reducer assembly 	1set	Ⓗ Binding band 	6pcs.
Ⓔ Heat insulation tape  <p>8pcs. (short) 4pcs. (middle) 4pcs. (long)</p> <p>Peel off each heat insulation tape from the release paper before use.</p>	Total 16pcs.	Ⓖ Heat insulation (2pcs. is 1set) 	BPMKS048A2U (for 2 rooms) : 3sets BPMKS049A3U (for 3 rooms) : 4sets

Items to be prepared in the field

- Intra-unit wires between BP unit and indoor unit (AWG16-14: 4 wires)
- Intra-unit wires for power supply (AWG16-14: 3 wires)
- Transmission wires (AWG18-16: sheathed two-core cables)
- Installation parts (hanging bolts: 4 × M8 or M10; nuts: 8; flat washers: 8)
- Screws for wall-mounting: 6 × M5
- Heat insulation (joint)
Thermal conductivity: **0.024 - 0.030Btu/ft·h°F (0.041 - 0.052W/mK) or more**
Thickness: **1/2 inch (13mm) or more**
Heat resistance: 212°F (100°C) or higher (only heat pump system)

Precautions for Selecting the Location

The BP unit is for indoor use.

Install in a location such as above a ceiling or behind a wall in accordance with the following conditions:

- That the unit is fully supported, and is in a location with little or no vibration.
- That the refrigerant pipes for the indoor and outdoor units can be repaired with ease, and that the units are placed well within the distance from each other allowed by the pipe length.
- That there is nothing nearby that produces heat or steam (gas).
- When installing, that there is enough room for servicing the unit.
- Do not install in location that is hot or humid for long periods of time.
A location where the dry-bulb (DB) temperature around the BP unit reaches 140°F (60°C) or higher.
- A well-ventilated area.
- Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible.
For restrictions on installation, refer to P6-7. "Installation".

Installation

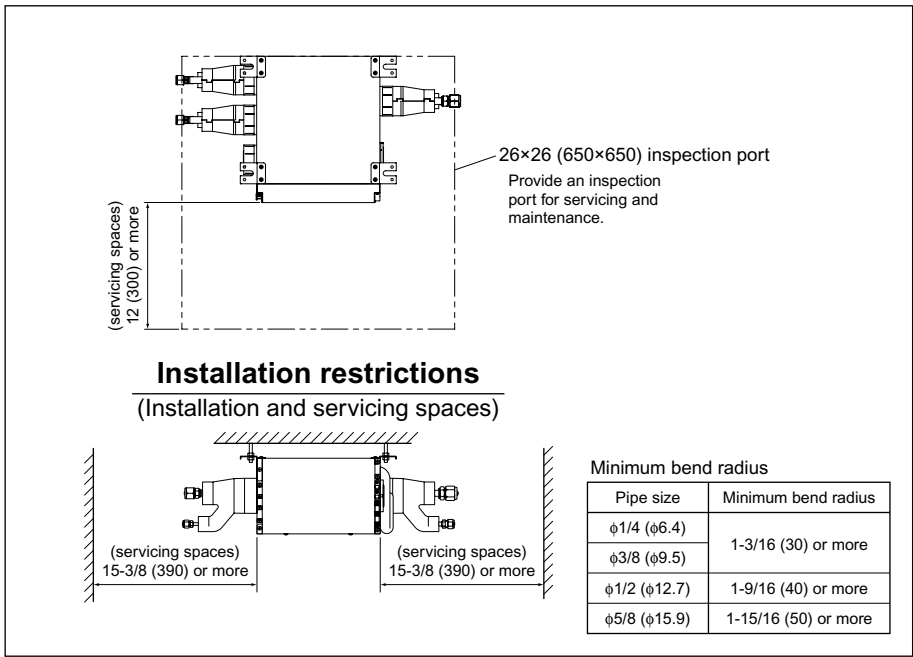
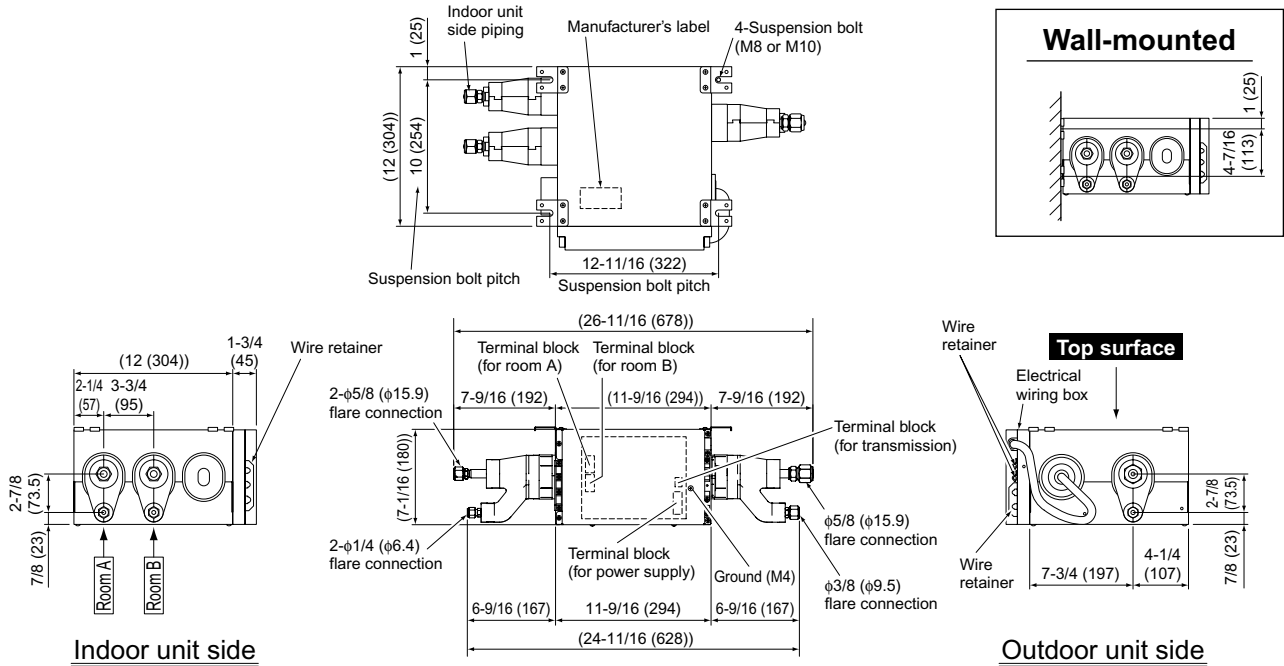
Example of connection (Connection of 7 units heat pump system)			Branch with refnet joint																											
<p>① indoor unit</p> <p>BP ① BP unit</p> <p>△ A refrigerant branch kit (refnet joint)</p>																														
Maximum allowable length	Between outdoor and BP units	Total piping length	Pipe length between outdoor and BP units $\leq 180\text{ft}$ (55m) [Example] $a+b+c+d+e \leq 180\text{ft}$ (55m)																											
	Between BP and indoor units	Total piping length	Piping length between BP and indoor units $\leq 262\text{ft}$ (80m) [Example] $f+g+h+i+j+k+l \leq 262\text{ft}$ (80m)																											
	Between BP and indoor unit	1 room length	Piping length between BP and indoor unit $\leq 49\text{ft}$ (15m) [Example] $f, g, h, i, j, k, l \leq 49\text{ft}$ (15m)																											
Allowable height	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units ($H1$) $\leq 98\text{ft}$ (30m)																											
	Between outdoor and BP units	Difference in height	Difference in height between outdoor and BP units ($H2$) $\leq 98\text{ft}$ (30m)																											
	Between BP and BP units	Difference in height	Difference in height between BP unit and BP units ($H3$) $\leq 49\text{ft}$ (15m)																											
	Between indoor and indoor units	Difference in height	Difference in height between indoor and indoor units ($H4$) $\leq 49\text{ft}$ (15m)																											
Minimum allowable length *1 Since the sound of refrigerant may be transferred from the outdoor unit to the indoor unit, make the pipe length from the outdoor unit to the first junction 16.4ft (5m) or longer.	Piping length	Piping length	Pipe length between outdoor unit and first refrigerant branch kit (refnet joint) $\geq 16.4\text{ft}$ (5m) [Example] $a \geq 16.4\text{ft}$ (5m)																											
Allowable length after the branch *2 Branch kit are recommended to set as possible as near the BP units. c, d, e are recommended to be as possible as short.	Piping length	Piping length	Piping length from first refrigerant branch kit (refnet joint) to indoor unit $\leq 131\text{ft}$ (40m) [Example] unit 6: $b+c+k \leq 131\text{ft}$ (40m) [Example] unit 5: $b+e+j \leq 131\text{ft}$ (40m) [Example] unit 3: $d+h \leq 131\text{ft}$ (40m)																											
Refrigerant branch kit selection (refrigerant branch kits can only be used with R410A)	Refrigerant branch kit (refnet joint) name: KHRP26M22T																													
Piping size selection	<p>• Piping size (Outer diameter × minimum thickness) unit: inch (mm)</p> <table border="1"> <thead> <tr> <th></th> <th>symbol</th> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>Between outdoor unit and first refrigerant branch kit</td> <td>a</td> <td>$\phi 3/4 \times 0.039$ ($\phi 19.1 \times 1.0$)</td> <td>$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)</td> </tr> <tr> <td>Between first refrigerant branch kit and the other branch kit</td> <td>b</td> <td>$\phi 5/8 \times 0.039$ ($\phi 15.9 \times 1.0$)</td> <td>$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)</td> </tr> <tr> <td>Between refrigerant branch kit and BP unit</td> <td>c, d, e</td> <td colspan="2">See the table A</td> </tr> </tbody> </table> <p>Table A</p> <table border="1"> <thead> <tr> <th>Total indoor capacity Q</th> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>$Q_c, Q_d, Q_e \leq 17000$ Btu/h</td> <td>$\phi 1/2 \times 0.031$ ($\phi 12.7 \times 0.8$)</td> <td>$\phi 1/4 \times 0.031$ ($\phi 6.4 \times 0.8$)</td> </tr> <tr> <td>$Q_c, Q_d, Q_e > 17000$ Btu/h</td> <td>$\phi 5/8 \times 0.039$ ($\phi 15.9 \times 1.0$)</td> <td>$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)</td> </tr> </tbody> </table> <p>*Q_c, Q_d, Q_e is total connected indoor capacity *Subscript c, d, e indicates the above symbol</p> <p>[Example] indoor 1: 9000 Btu/h indoor 2: 12000 Btu/h indoor 3: 18000 Btu/h } $Q_e = 39000$ Btu/h => (Gas pipe) $\phi 5/8 \times 0.039$ ($\phi 15.9 \times 1.0$) / (Liquid pipe) $\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)</p>						symbol	Gas pipe	Liquid pipe	Between outdoor unit and first refrigerant branch kit	a	$\phi 3/4 \times 0.039$ ($\phi 19.1 \times 1.0$)	$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)	Between first refrigerant branch kit and the other branch kit	b	$\phi 5/8 \times 0.039$ ($\phi 15.9 \times 1.0$)	$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)	Between refrigerant branch kit and BP unit	c, d, e	See the table A		Total indoor capacity Q	Gas pipe	Liquid pipe	$Q_c, Q_d, Q_e \leq 17000$ Btu/h	$\phi 1/2 \times 0.031$ ($\phi 12.7 \times 0.8$)	$\phi 1/4 \times 0.031$ ($\phi 6.4 \times 0.8$)	$Q_c, Q_d, Q_e > 17000$ Btu/h	$\phi 5/8 \times 0.039$ ($\phi 15.9 \times 1.0$)	$\phi 3/8 \times 0.031$ ($\phi 9.5 \times 0.8$)
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Installation

- This unit may be installed suspended from the ceiling or mounted on the wall.
- **Be sure to install the unit with the top surface facing upward as shown in the diagram.**
- Be sure to leave a **26 inch (650mm) square** opening for maintenance and inspection as shown in the diagram below, for both ceiling-suspended installation and wall-mounted installation.
- This unit **“does not require drain treatment”**.
- The inclination of top surface must be within ± 5 degrees forward or back or to the sides.

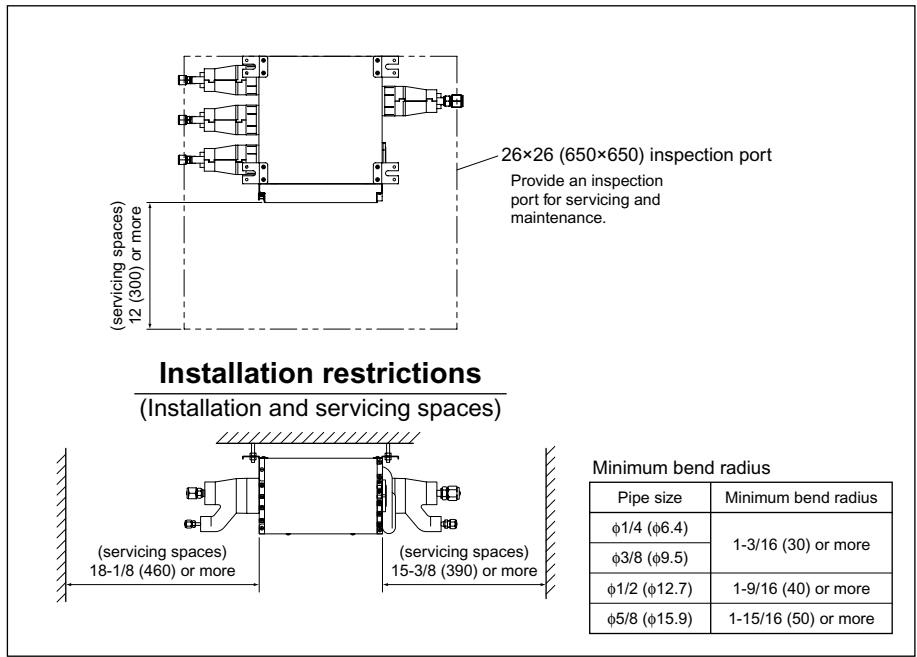
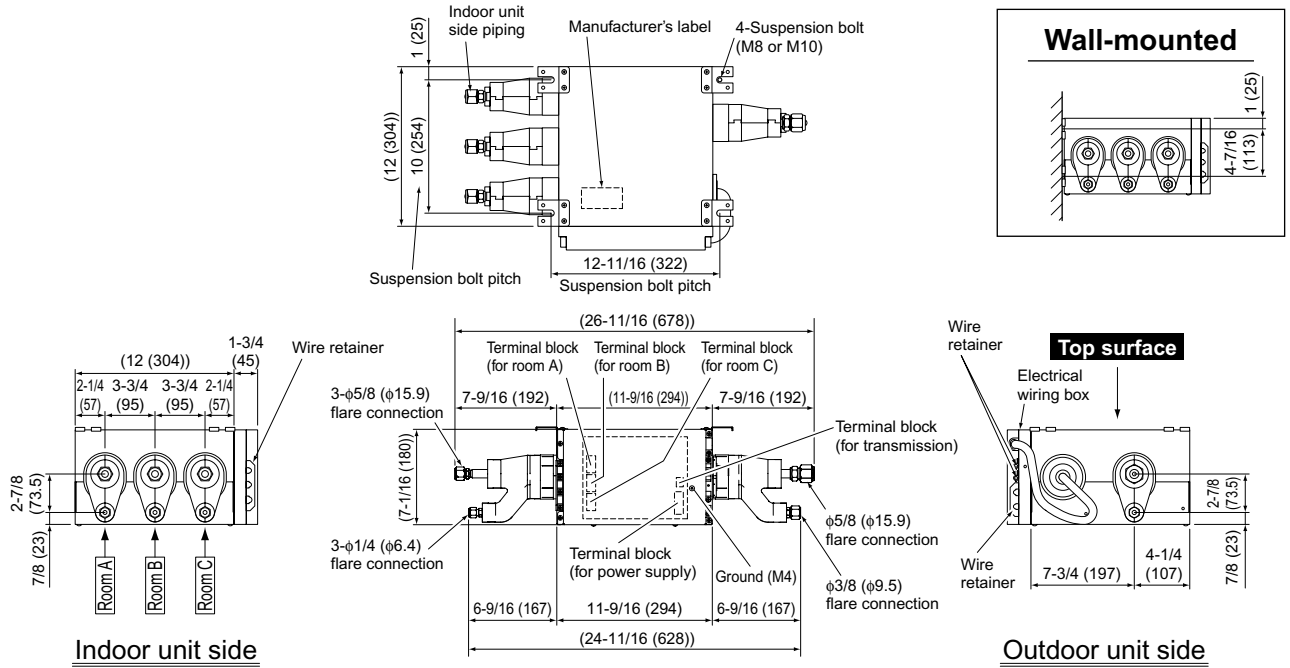
◆ For 2 rooms

(product dimensions and attachment bolt pitch)



◆ For 3 rooms

(product dimensions and attachment bolt pitch)



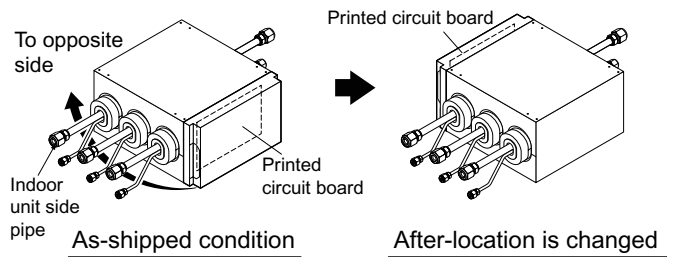
unit: inch (mm)

Installation of the Unit

1. Replacing the printed circuit board

- This unit has 2 different installation types: (1) ceiling-suspended type and (2) wall-mounted type.
- Choose the proper installation pattern according to the location of installation.
- The installation location for the printed circuit board can be changed.

If the installation location of the printed circuit board needs to be changed because of the installation conditions, perform the following:

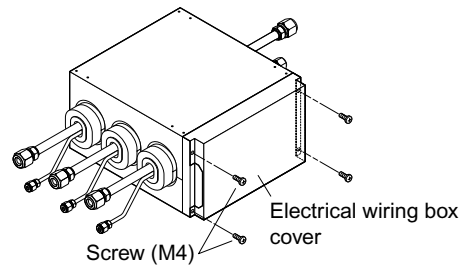


⚠ CAUTION

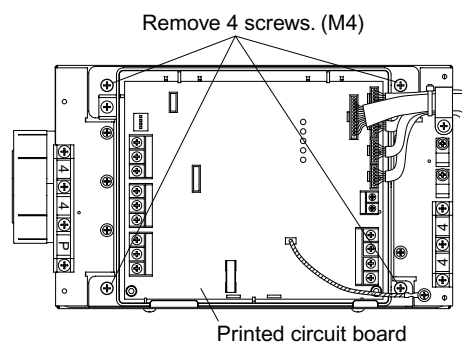
- Before doing any wiring on site, replace the printed circuit board.

Procedure for changing the installation location of the printed circuit board

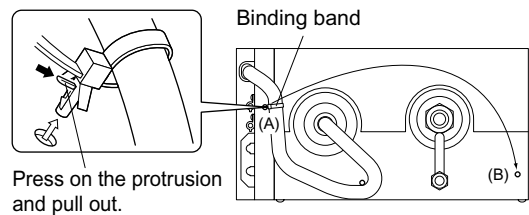
- 1) Remove the screws and pull off the electrical wiring box cover.



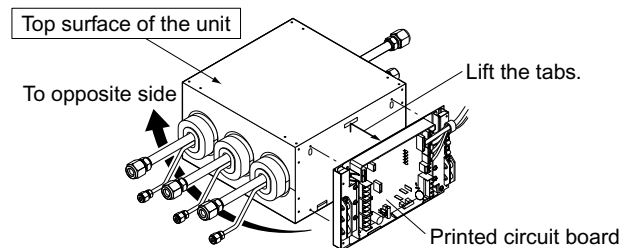
- 2) Remove 4 screws shown in the figure, remove the printed circuit board.



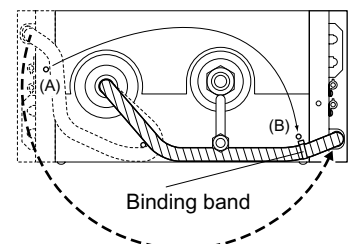
- 3) Remove the binding band (A) which holds the wires.



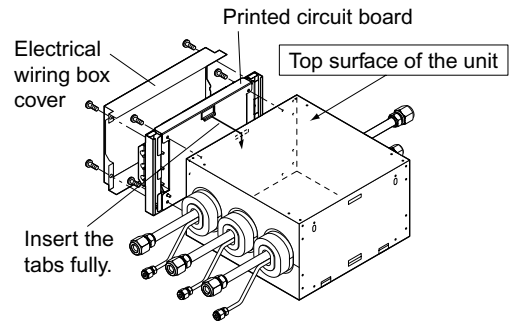
- 4) Remove the printed circuit board, and reattach as shown in the figure.



- 5) Reattach the binding band to position (B).



- 6) Attach the printed circuit board and electrical wiring box cover to the other side and secure with the screws.

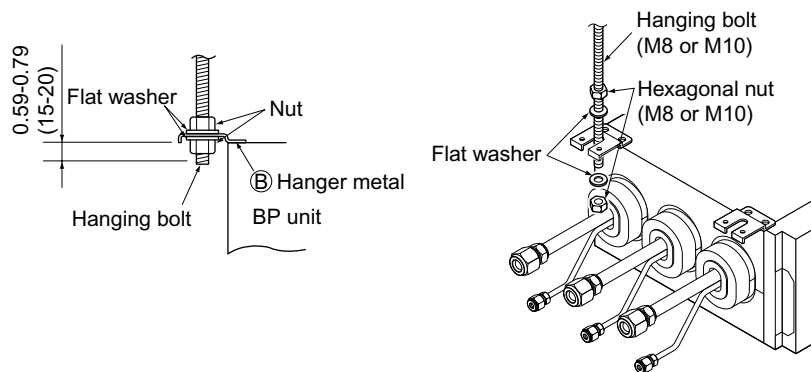
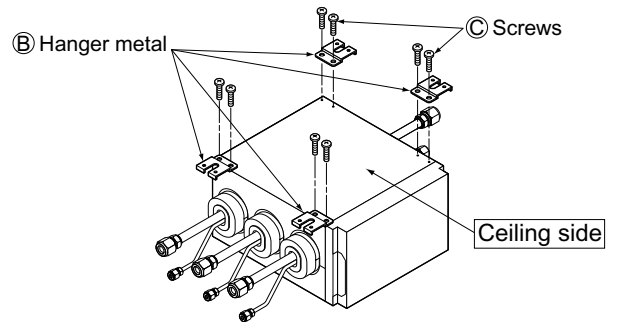


2. Ceiling-suspended type

Procedure:

- 1) Fix the furnished ② hanger metal with two ③ screws. (4 locations in total)
- 2) Using an insert-hole-in-anchor, hang the hanging bolt.
- 3) Install a hexagon nut and a flat washer (field supply) to the hanging bolt as shown in the figure in the below, and lift the unit to hang on the hanger metal.
- 4) After checking with a level that the unit is level, tighten the hexagon nut.

* The tilt of the unit should be within $\pm 5^\circ$ in front/ back and left/right.

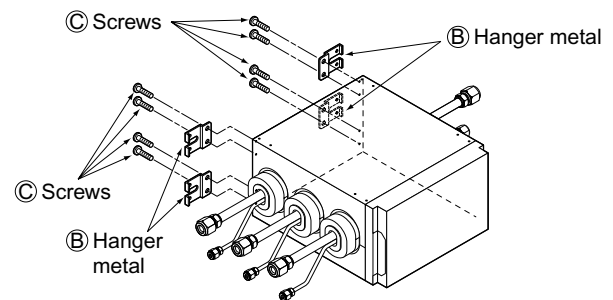


3. Wall-mounted type

Procedure:

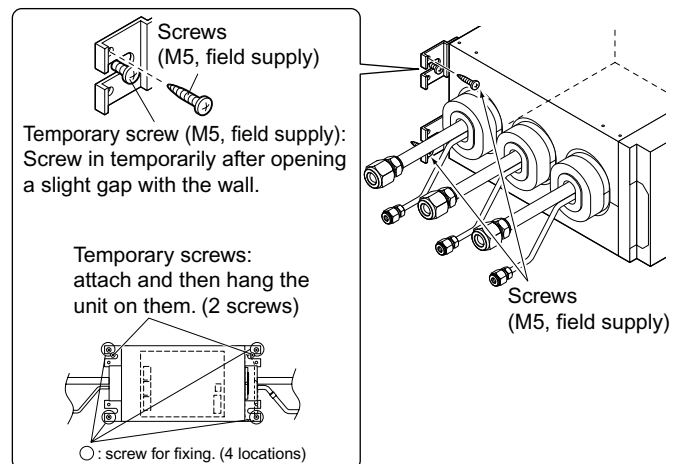
- 1) Fix the furnished ② hanger metal with two ③ screws. (4 locations in total)
- 2) Create a gap with the wall and screw in the temporary screws (M5, field supply), and hang the BP unit.
- 3) After checking with a level that the unit is level, fix the unit with screws (M5, field supply).

* The tilt of the unit should be within $\pm 5^\circ$ in front/ back and left/right.



CAUTION

- Be sure to install the unit with the top surface up.
- Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible.



Connection of Refrigerant Piping

<Make sure to perform heat insulation work for both gas piping and liquid piping. If not insulated, water leakage may occur. For gas piping, use a heat insulation material with a heat-resistant temperature of 212°F (100°C) or more. Condensation may be formed on the surface of the heat insulation material.>

<Before installation, make sure that the refrigerant type is R410A. (Wrong refrigerant types prevent normal operation.)>

- The refrigerant is filled in the outdoor unit.
- When connecting a pipe to the unit body or removing it, be sure to use a spanner and torque wrench. (See Fig. [1].)
- For the work dimension and the tightening torque of the flare section, see <Table-1>.
- When connecting a flare nut, apply the refrigerant oil used for the compressor of the outdoor unit (or similar product) to the flare section (only the inner surface), and screw the nut three or four times initially by hand. (See Fig. [2].)
- If the connecting piping is bent above the ceiling, it should be bent as loosely as possible.
If it is bent sharply, the heat insulation material may be compressed at the bent section, causing condensation.
- Be sure to use the flare nuts included with the unit body.

⚠ CAUTION

- Do not mix air or other gases than the specified refrigerant into the refrigeration cycle.
- If the refrigerant gas has leaked during the work, provide ventilation.
- Excessive tightening can cause a fracture of the flare nut and leakage of the refrigerant.
- Be sure to perform heat insulation for the field piping including the pipe connection in the unit.
Exposure of piping can cause condensation or burn injury.
- At the time of flare connection, apply the refrigerant oil used for the compressor of the outdoor unit (or similar product) to the flare section. (See Fig. [2].)
- To prevent dirt, water content, and dust from entering the pipes, provide protection for the pipes using pinches or tape.

<Table-1>

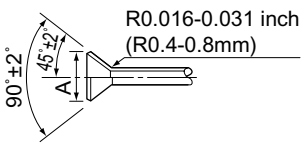
Pipe size	Tightening torque	Work dimension for flare section: A	Flare shape
φ1/4 inch (φ6.4mm)	10.4-12.7ft·lbf (14.2-17.2N·m)	0.343-0.358 inch (8.7-9.1mm)	
φ3/8 inch (φ9.5mm)	24.1-29.4ft·lbf (32.7-39.9N·m)	0.504-0.519 inch (12.8-13.2mm)	
φ1/2 inch (φ12.7mm)	36.5-44.5ft·lbf (49.5-60.3N·m)	0.638-0.653 inch (16.2-16.6mm)	
φ5/8 inch (φ15.9mm)	45.6-55.6ft·lbf (61.8-75.4N·m)	0.760-0.775 inch (19.3-19.7mm)	

Fig. [1]

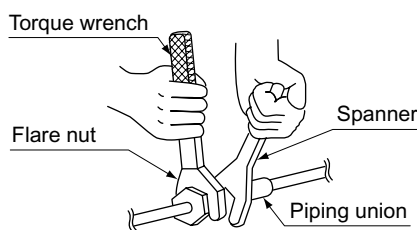
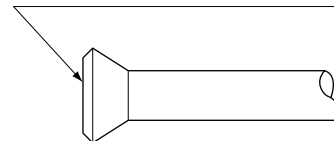


Fig. [2]

Refrigerant oil used for the compressor of the outdoor unit (or similar product)

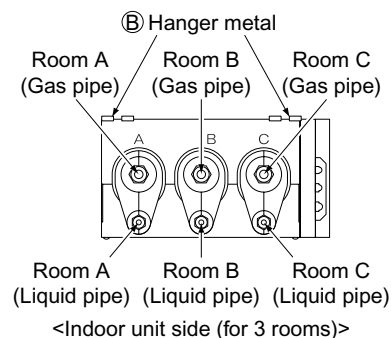


- Alphabets (A, B, and C) corresponding to the room to be connected with each indoor unit are inscribed on the main body of the BP unit. (Figure on the right)

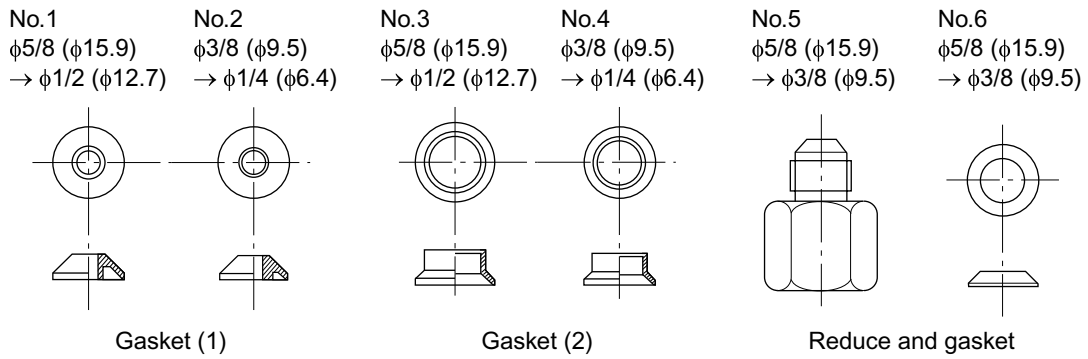
- A: Refrigerant pipe connection port for "Room A"
- B: Refrigerant pipe connection port for "Room B"
- C: Refrigerant pipe connection port for "Room C"

⚠ CAUTION

- Be sure to put a mark on every refrigerant piping (such as liquid pipe and gas pipe) so that to which room each indoor unit belongs can be known clearly. (Example: A, B, C)

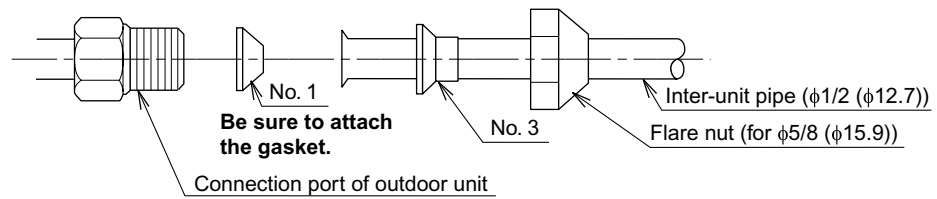


How to use reducer

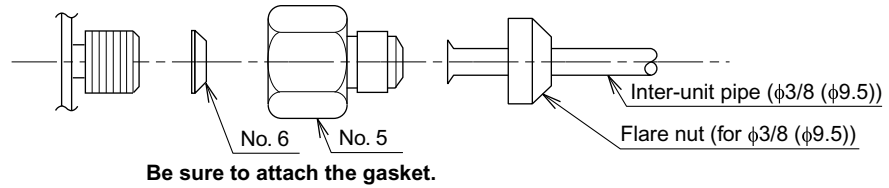


Use the reducers supplied with the unit as described below.

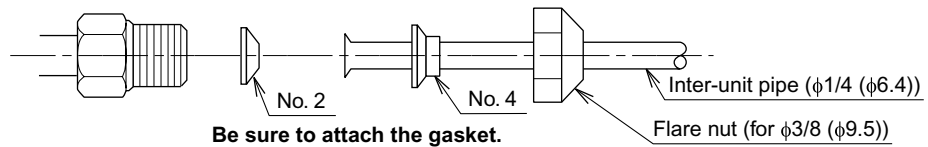
- 1) Connecting a pipe of φ1/2 (φ12.7) to a gas pipe connection port for φ5/8 (φ15.9):



- 2) Connecting a pipe of φ3/8 (φ9.5) to a gas pipe connection port for φ5/8 (φ15.9):



- 3) Connecting a pipe of φ1/4 (φ6.4) to a liquid pipe connection port for φ3/8 (φ9.5):



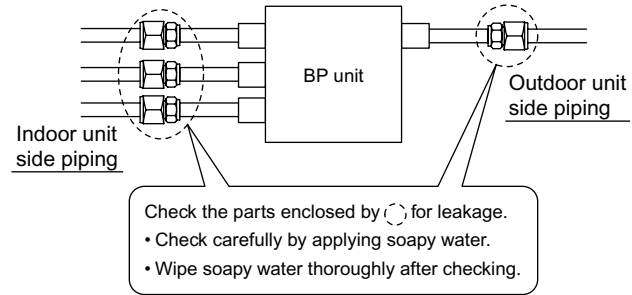
unit: inch (mm)

- When using the reducer packing shown above, be careful not to overtighten the nut. (See <Table-1>.)
- Apply refrigeration oil on the connection port where the flare nut is fitted.

Connection of Refrigerant Piping

Gas leakage check

- Perform gas leakage check after the completion of piping work.



- After the leakage check, attach heat insulation materials and wind the tape around the heat insulation materials so that no gap is made between them.

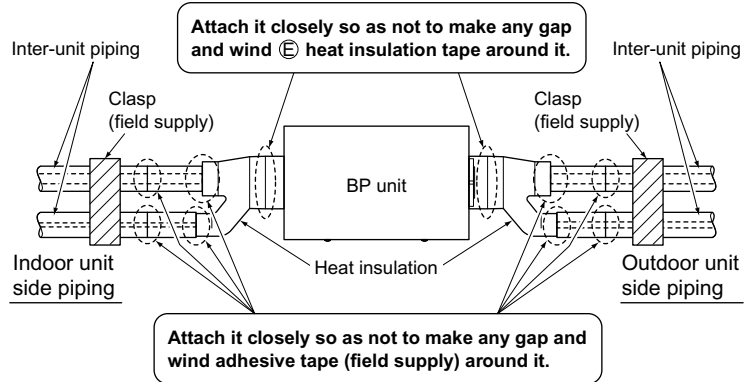
For the inter-unit piping, use the heat insulation materials in conformity with the following specifications.

Thermal conductivity: **0.024-0.030Btu/ft·h·°F**
(**0.041-0.052W/mK**)

Thickness: 1/2 inch (13mm) or more

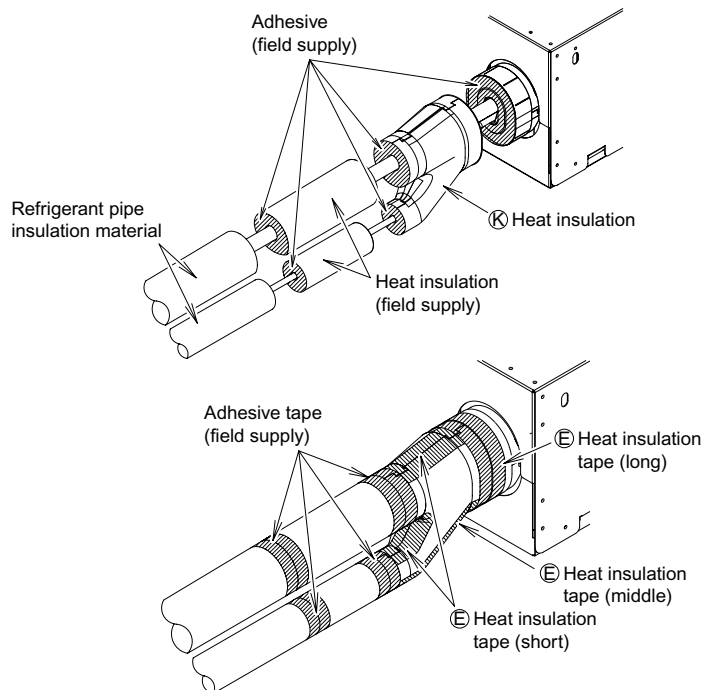
Heat resistance: 212°F (100°C) or more

- Secure the local inter-unit piping near the BP unit using clasps (field supply) so that the BP unit does not directly receive the weight of the inter-unit piping.



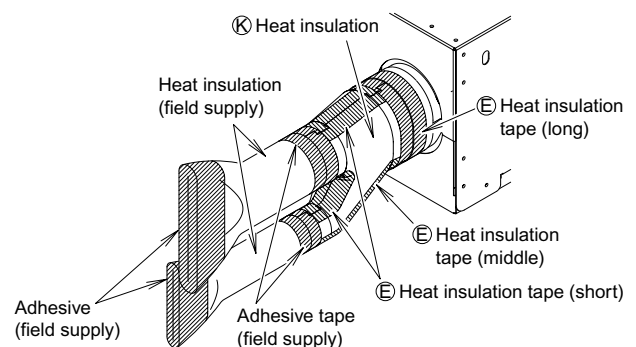
1. Insulation of pipes

- 1) Attach the (Ⓢ) heat insulation and the heat insulation (field supply) to each pipe.
- 2) To eliminate a gap between the heat insulation, secure the butting surfaces (shaded sections on the right figure) with a silicon resin type adhesive (field supply).
- 3) When insulating the pipes, attach the (Ⓢ) heat insulation tape and adhesive tape (field supply) to prevent air from entering into the heat insulation.



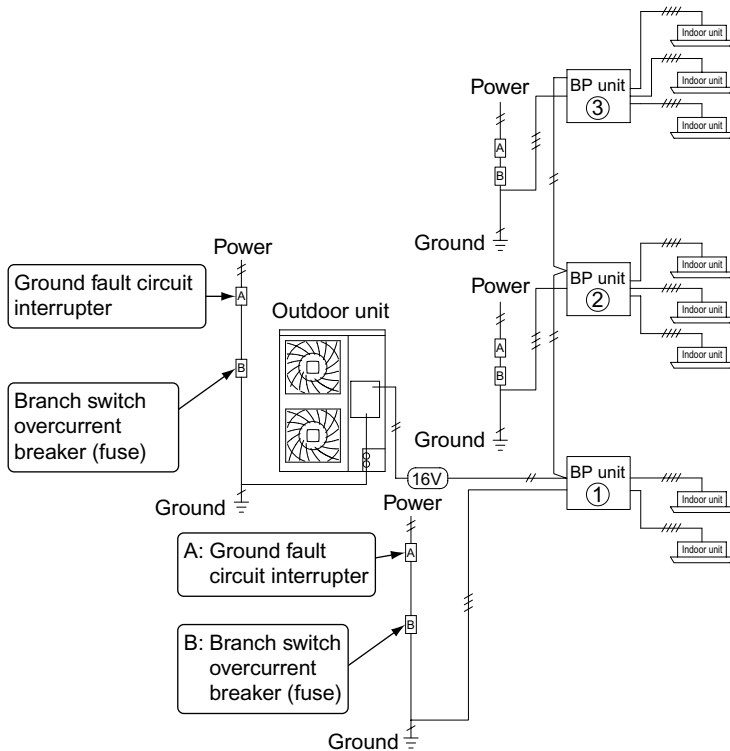
2. Unconnected pipes

- 1) Attach the heat insulation (field supply) and the (Ⓢ) heat insulation.
- 2) Attach the (Ⓢ) heat insulation tape and adhesive tape (field supply) to prevent air from entering into the heat insulation.

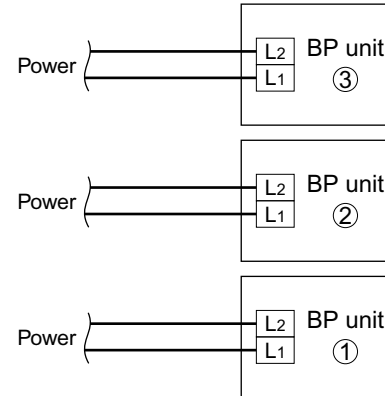


Connecting the Wiring

Connection example of total system wiring



Wiring method for the power line.



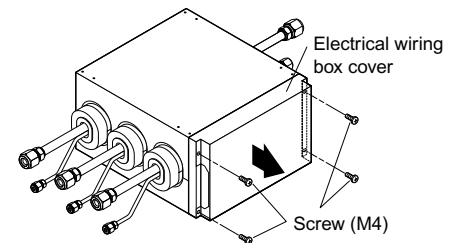
- Be sure to prepare a power supply for each BP unit.

⚠ CAUTION

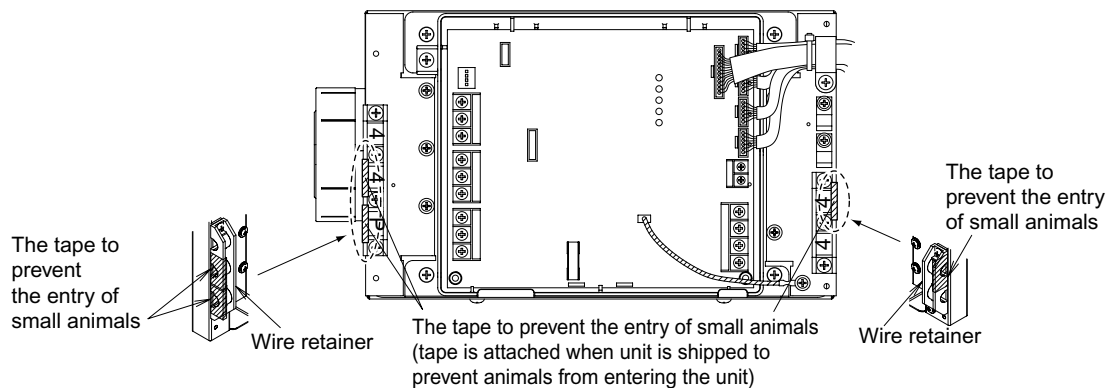
- Be sure to connect the power line to L1 and L2.

Work procedure

- 1) Remove the screws and pull off the electrical wiring box cover.



- 2) Tape is attached to the wire retainer. The purpose of the tape is to prevent small animals from entering the unit. Only remove the tape from places where wiring it to be passed through.

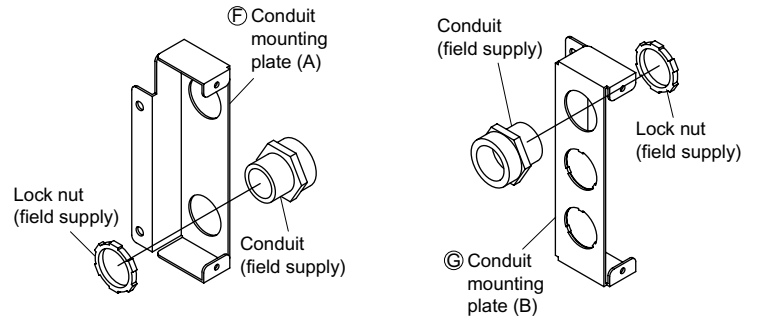


⚠ CAUTION

- If the tape is not replaced for places where wiring will not pass through, small animals may enter, causing product malfunction.

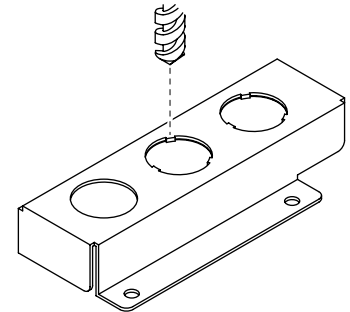
Connecting the Wiring

- 3) Install the conduit (field supply) and lock nut (field supply) to ⑥ conduit mounting plate (A) and ③ conduit mounting plate (B).

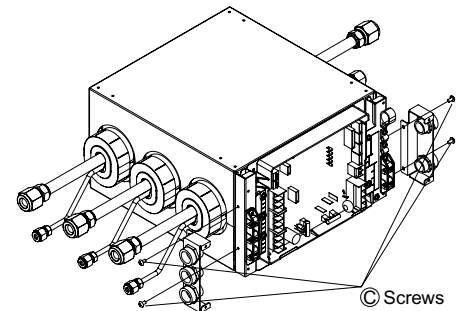


<When connecting indoor units for 2 or 3 rooms>

- 1) Open the knockout holes with a drill or the like without deforming ⑥ conduit mounting plate (A) and ③ conduit mounting plate (B).
- 2) After knocking out the holes, remove burrs in the knockout holes.

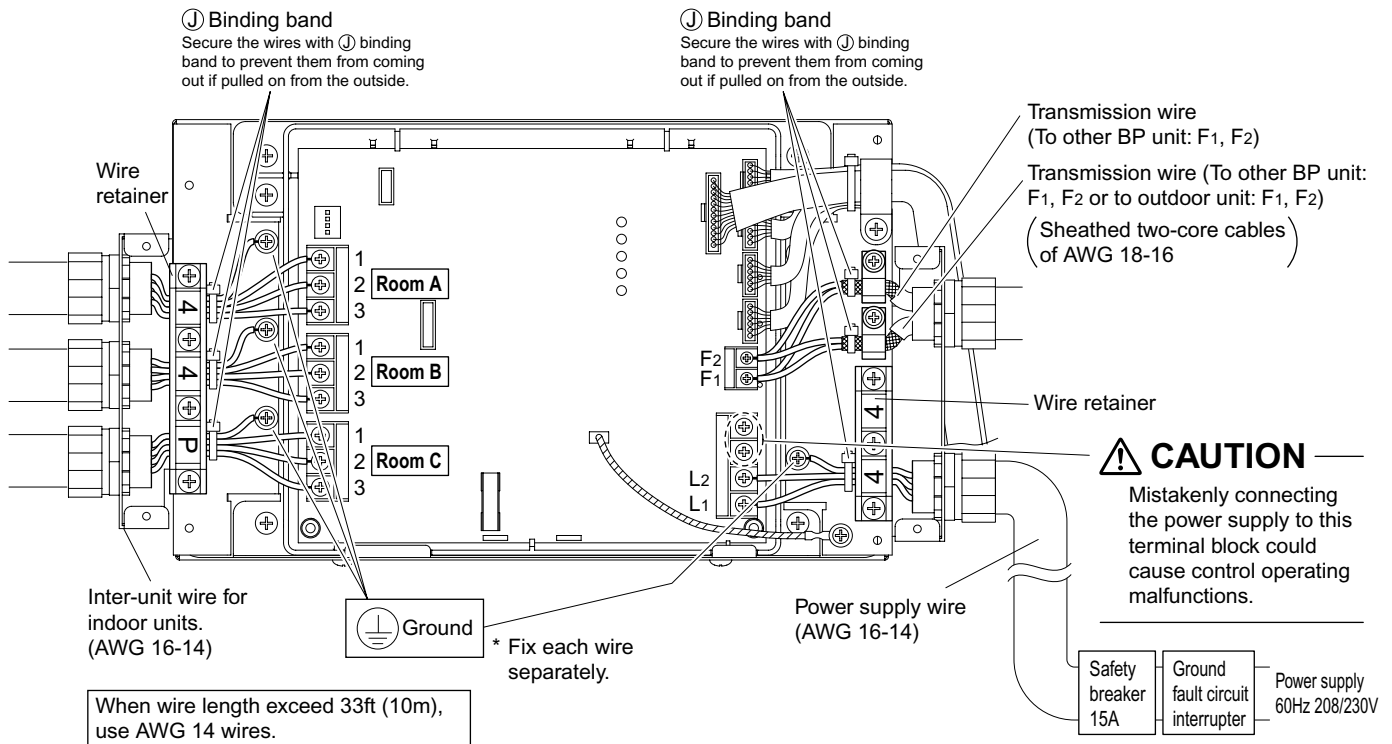


- 4) Fix the conduits with ③ screws.



- 5) Follow the instructions on the wiring nameplate to connect the connection wires of indoor/outdoor units to terminal block numbers (1, 2, 3, F1 and F2). Always fix each ground wire separately with a ground screw. (See the figure below.)

Example <For 3 rooms>

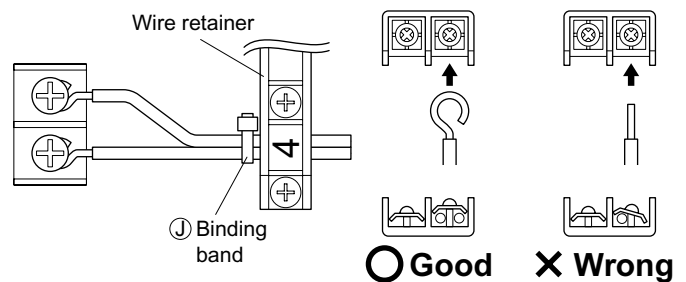


⚠ WARNING

- Do not use tapped wires, stranded wires, extension cords, or starburst connections, as they may cause overheating, electrical shock, or fire.

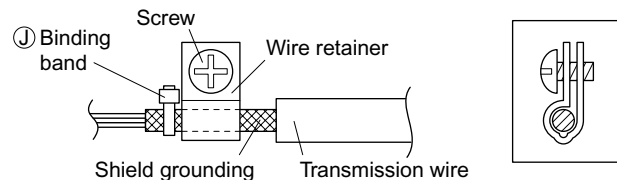
⚠ CAUTION

- Pass all inter-unit wires through wire retainers. In addition, secure the wires with ① binding band to prevent them from coming out if pulled on from the outside.
- When connecting the inter-unit wires to the terminal block using a single core wire, be sure to perform curling. Problems with the work may cause heat and fires.



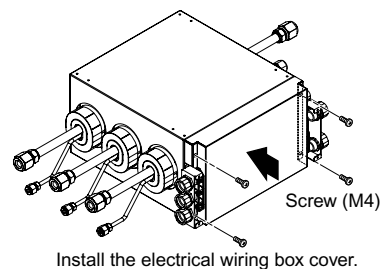
How to ground the shield for transmission wires

- Fold back the grounding section of the shield for the transmission wire and secure it with the copper foil section of the wire retainer.

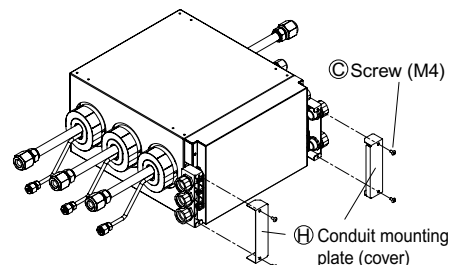


Connecting the Wiring

6) Return the electrical wiring box cover to its original position, and fix it with the screws.



7) Fix the ⊕ conduit mounting plate (cover) with the screw.



Operating Test

Follow the “Operating test” as described in the installation manual of the outdoor unit.

If the BP unit does not operate normally during the test run, the error can be checked on the remote controller display for the indoor unit.

Error codes displayed on the remote controller

Malfunction code	Nonconformity during installation	Remedial action
A9	Electric expansion valve connector not connected (BP unit)	Please contact your dealer.
E2	Printed circuit board faulty (BP unit)	
J0	Liquid and gas thermistor faulty (BP unit)	
U4	Transmission error between BP unit and indoor unit	Connect correctly the interconnections between BP unit and indoor unit.
U9	Transmission error between outdoor unit and other BP unit	Connect correctly the interconnections between outdoor and other BP unit.
UJ	Transmission error between outdoor unit and this BP unit connecting with the indoor unit of error code displayed	Connect correctly the interconnections between outdoor and this BP unit connecting with the indoor unit of error code displayed.

The BP Unit

Simple diagnosis can be done using the LEDs on the BP unit's circuit board.

For details, see the label on the inside of the BP unit's electrical wiring box cover.

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Two-dimensional bar code is a code for manufacturing.

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