

# **Air-Conditioners**

## **PCA-A·KA4**

## **PCA-A·KA5**

### **INSTALLATION MANUAL**

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

**FOR INSTALLER**

### **MANUEL D'INSTALLATION**

Avant d'installer le climatiseur, lire attentivement ce manuel, ainsi que le manuel d'installation de l'appareil extérieur pour une utilisation sûre et correcte.

**POUR L'INSTALLATEUR**

### **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**

**English**

**Français**

**Español**

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## 1. Safety precautions

- ▶ Before installing the unit, make sure you read all the “Safety precautions”.
- ▶ Please report to your supply authority or obtain their consent before connecting this equipment to the power supply system.

**⚠ 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:**
- 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.

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.

- 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.
- When installing or relocating, or servicing the air conditioner, use only the specified refrigerant (R410A) to charge the refrigerant lines. Do not mix it with any other refrigerant and do not allow air to remain in the lines. If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards.  
The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

### 1.1. Before installation (Environment)

- ⚠ Caution:**
- 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.
  - Do not keep food, plants, caged pets, artwork, or precision instruments in the direct airflow of the indoor unit or too close to the unit, as these items can be damaged by temperature changes or dripping water.

- When the room humidity exceeds 80% or when the drainpipe is clogged, water may drip from the indoor unit. Do not install the indoor unit where such dripping can cause damage.
- 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.

### 1.2. Before installation or relocation

- ⚠ Caution:**
- Be extremely careful when transporting the units. Two or more persons are needed to handle the unit, as it weighs 20 kg, 44 lbs or more. Do not grasp the packaging bands. Wear protective gloves as you can injure your hands on the fins or other parts.
  - Be sure to safely dispose of the packaging materials. Packaging materials, such as nails and other metal or wooden parts may cause stabs or other injuries.
  - 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 drainpipe 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.

### 1.3. Before electric work

- ⚠ Caution:**
- 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.
  - Be sure to ground the unit. If the unit is not properly grounded, electric shock may result.

- Use circuit breakers (ground fault interrupter, isolating switch (+B fuse), and molded case circuit breaker) with the specified capacity. If the circuit breaker capacity is larger than the specified capacity, breakdown or fire may result.

### 1.4. Before starting the test run

- ⚠ Caution:**
- Turn on the main power switch more than 12 hours before starting operation. Starting operation just after turning on the power switch can severely damage the internal parts.
  - Before starting operation, check that all panels, guards and other protective parts are correctly installed. Rotating, hot, or high voltage parts can cause injuries.

- Do not operate the air conditioner without the air filter set in place. If the air filter is not installed, dust may accumulate and breakdown may result.
- Do not touch any switch with wet hands. Electric shock may result.
- Do not touch the refrigerant pipes with bare hands during operation.
- After stopping operation, be sure to wait at least five minutes before turning off the main power switch. Otherwise, water leakage or breakdown may result.

## 2. Installation location

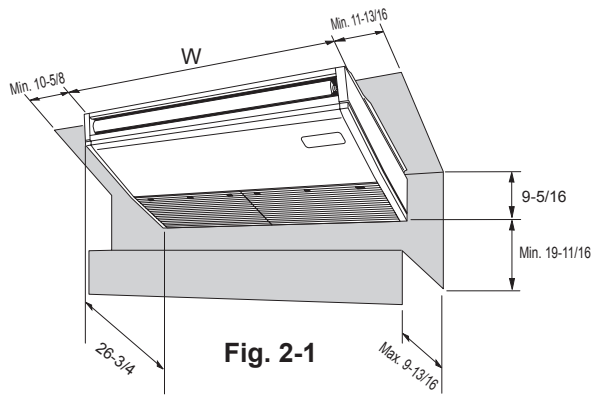


Fig. 2-1

### 2.1. Outline dimensions (Indoor unit) (Fig. 2-1)

Select a proper position allowing the following clearances for installation and maintenance. (inch)

Models	W
A24, 30	50-3/8
A36, 42	63

#### ⚠ Warning:

Mount the indoor unit on a ceiling strong enough to withstand the weight of the unit.

### 2.2. Outline dimensions (Outdoor unit)

Refer to the outdoor unit installation manual.

## 3. Installing the indoor unit

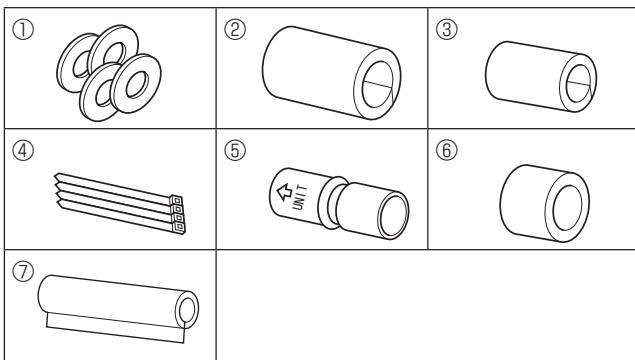


Fig. 3-1

### 3.1. Check the indoor unit accessories (Fig. 3-1)

The indoor unit should be supplied with the following accessories (contained in the inside of the intake grille).

	Accessory name	Q'ty
①	Washer	4 pcs
②	Pipe cover	1 pc Large size (For gas tubing)
③	Pipe cover	1 pc Small size (For liquid tubing)
④	Band	4 pcs
⑤	Joint socket	1 pc Marked with "UNIT"
⑥	Socket cover	1 pc
⑦	Drain tubing cover	1 pc

### 3.2. Preparation for installation (Fig. 3-2)

#### 3.2.1. Suspension bolt installing spacing

(inch)

Models	A	B
A24,30	48-11/16	50-3/8
A36,42	61-5/16	63

#### 3.2.2. Refrigerant and drain tubing location

- Ⓐ Front side outlet
- Ⓑ Left side outlet
- Ⓒ Right side outlet
- Ⓓ Independent piece (Removable)
- Ⓔ Right drain tubing
- Ⓕ Left drain tubing
- Ⓖ Gas tubing
- Ⓗ Liquid tubing
- Ⓚ Rubber plug
- Ⓛ with Joint socket ⑤

In case of the rear pipe arrangement, make sure to remove the shaded portions from the Ⓓ independent piece. Then put the Ⓓ independent piece back in initial position.

(The heat exchanger might be clogged because of dust)

#### 3.2.3. Selection of suspension bolts and tubing positions (Fig. 3-3)

#### ⚠ Caution:

Install the indoor unit at least 8 ft. (2.4 m) above floor or grade level. These appliances are not accessible to the general public.

Using the pattern paper provided for installation, select proper positions for suspension bolts and tubing and prepare relative holes.

- Ⓐ Pattern paper
- Ⓑ Suspension bolt hole
- Ⓒ Indoor unit width

Secure the suspension bolts or use angle stock braces or square timbers for bolt installation.

- Ⓓ Use inserts of 220-230 lbs. each.
- Ⓔ Use suspension bolts of W 3/8 or M10 in size.

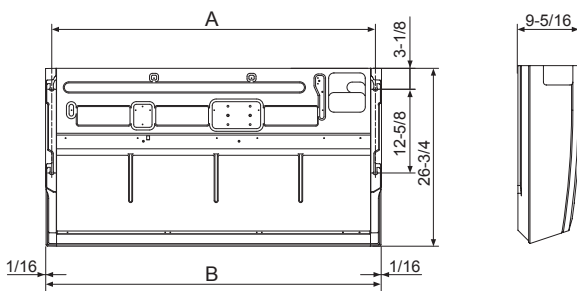


Fig. 3-2

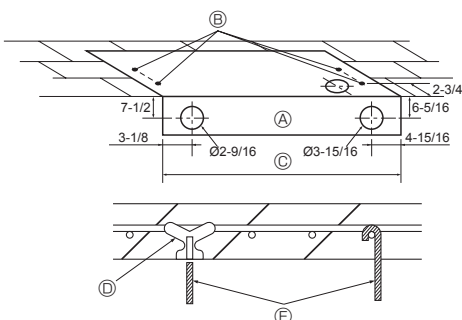
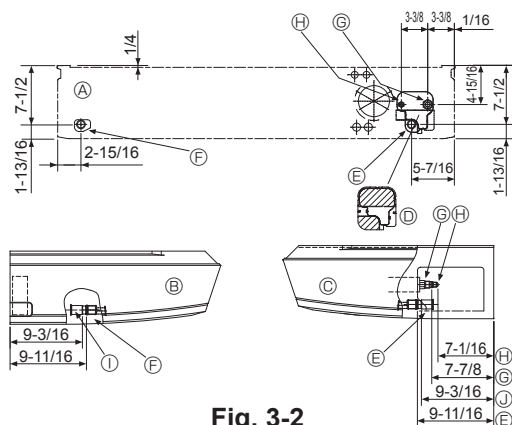


Fig. 3-3

### 3. Installing the indoor unit

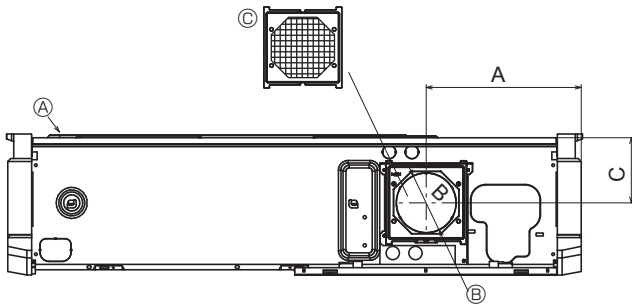


Fig. 3-4

#### 3.2.4. Fresh air intake hole (Fig. 3-4)

At the time of installation, use the duct holes (knock out) located at the positions shown in following diagram, as and when required.

- Ⓐ Indoor unit
- Ⓑ Fresh air intake hole (knock out hole)
- Ⓒ Filter

in. (mm)		
A	B	C
10-3/16 (259.5)	ø 3-15/16 (ø 100)	4-5/16 (109)

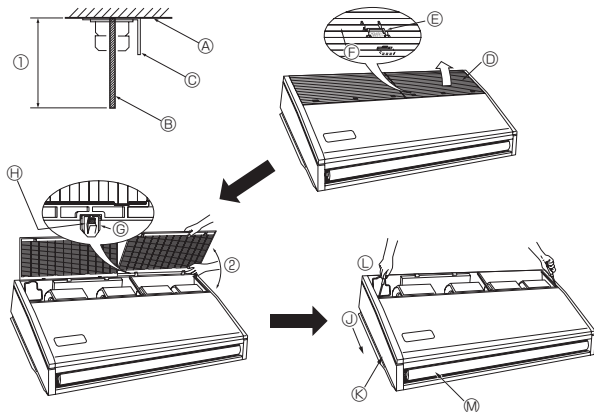


Fig. 3-5

#### 3.2.5. Indoor unit preparation (Fig. 3-5)

- Install the suspending bolts. (Procure the W 3/8 or M10 bolts locally.)  
Predetermine the length from the ceiling (① within 3-15/16 in. (100 mm)).  
Ⓐ Ceiling surface Ⓑ Suspending bolt Ⓒ Suspending bracket
- Remove the intake grille.  
Slide the intake grille holding knobs (at 2 or 3 locations) backward to open the intake grille.
- Remove the side panel.  
Remove the side panel holding screws (1 in each side, right and left) then slide the side panel forward for removal.  
Ⓓ Intake grille Ⓔ Slide the side panel forward.  
Ⓔ Intake grille holding knob Ⓕ Side panel  
Ⓕ Slide Ⓖ Remove the side panel holding screws.  
Ⓖ Hinge Ⓗ Remove the protective vinyl of vane.  
Ⓗ Pushing the hinge, pull out the intake grille.  
Ⓘ Forcing open the intake grille or opening it to an angle of more than 120° may damage the hinges.

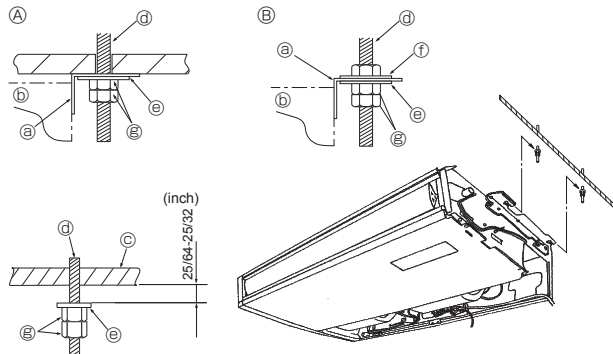


Fig. 3-6

### 3.3. Installing the indoor unit (Fig. 3-6)

Use a proper suspending method depending on the presence or absence of ceiling materials as follows.

- Ⓐ In the presence of ceiling materials Ⓒ Ceiling
- Ⓑ In the absence of ceiling materials Ⓓ Suspending bolt
- Ⓒ Suspending bracket Ⓔ Washer ①
- Ⓓ Unit Ⓕ Washer (Local procurement)
- Ⓔ Double nuts

#### 1) Directly suspending the unit

Installing procedures

- Install the washer ① (supplied with the unit) and the nuts (to be locally procured).
- Set (hook) the unit through the suspending bolts.
- Tighten the nuts.

Check the unit installing condition.

- Check that the unit is horizontal between the right and left sides.
- Check that the front and the rear of suspending brackets are horizontal.  
(To keep drainage, the unit is inclined to the suspending brackets. The unit slopes continuously downward from the front to the rear is the right installation position.)

#### 2) Installing the suspending bracket first onto the ceiling (Fig. 3-7)

Installing procedures

- Remove the suspending brackets and U-shaped washers from the unit.
- Adjust the suspending bracket holding bolts on the unit.
- Attach the suspending brackets to the suspending bolts.
- Check that the suspending brackets are horizontal (front and rear/right and left).
- Set (hook) the unit to the suspending brackets.
- Tighten fixed bolts of the suspending brackets.

※ Be sure to install the U-shaped washers.

- Ⓐ Suspending bracket holding bolt
  - Ⓑ Unit
  - Ⓒ U-shaped washer
  - Ⓓ Suspending bolt
  - Ⓔ Washer ①
  - Ⓕ Double nuts
- | (inch)   |           |
|----------|-----------|
| Ⓒ A24,30 | 47 - 5/16 |
| A36,42   | 59 - 7/8  |

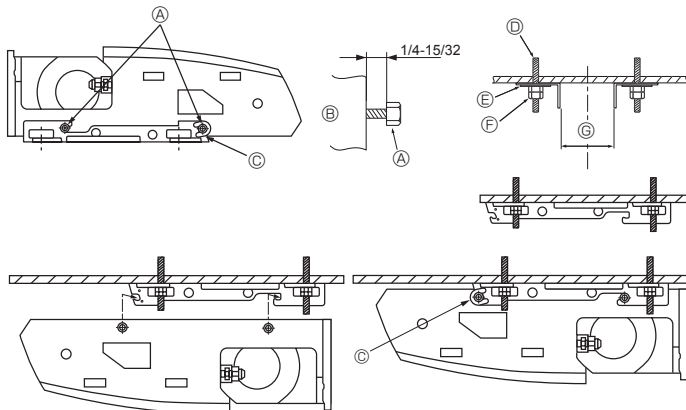


Fig. 3-7

## 4. Installing the refrigerant piping

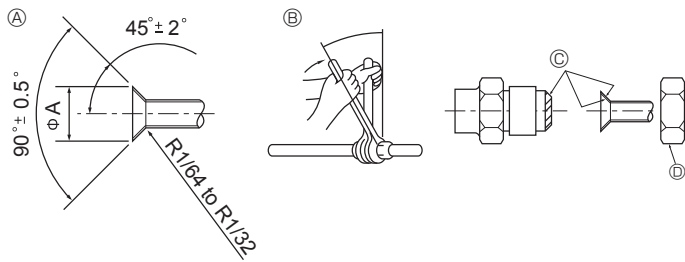


Fig. 4-1

Ⓐ Flare cutting dimensions in. (mm)

Copper pipe O.D.	Flare dimensions φA dimensions
1/4" (ø6.35)	11/32-23/64 (8.7 - 9.1)
3/8" (ø9.52)	1/2-33/64 (12.8 - 13.2)
1/2" (ø12.7)	41/64-21/32 (16.2 - 16.6)
5/8" (ø15.88)	49/64-25/32 (19.3 - 19.7)
3/4" (ø19.05)	29/32-59/64 (22.9 - 23.3)

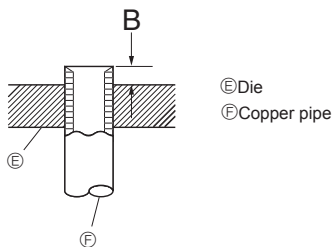


Fig. 4-2

in. (mm)

Copper pipe O.D.	B
	Flare tool for R410A Clutch type
1/4" (ø6.35)	0-1/64 (0 - 0.5)
3/8" (ø9.52)	0-1/64 (0 - 0.5)
1/2" (ø12.7)	0-1/64 (0 - 0.5)
5/8" (ø15.88)	0-1/64 (0 - 0.5)
3/4" (ø19.05)	0-1/64 (0 - 0.5)

### 4.1. Precautions

For devices that use R410A refrigerant

- Use ester oil, ether oil or alkylbenzene oil (small amount) as the refrigeration oil applied to the flared sections.
- Use C1220 copper phosphorus for copper and copper alloy seamless pipes, to connect the refrigerant pipes. Use refrigerant pipes with the thicknesses specified in the table below. Make sure the insides of the pipes are clean and do not contain any harmful contaminants such as sulfuric compounds, oxidants, debris, or dust.

#### ⚠ Warning:

When installing or relocating, or servicing the air conditioner, use only the specified refrigerant (R410A) to charge the refrigerant lines. Do not mix it with any other refrigerant and do not allow air to remain in the lines. If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards.

The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

in. (mm)

	A24, 30, 36, 42
Liquid pipe	3/8" (ø9.52) thickness 1/32" (0.8)
Gas pipe	5/8" (ø15.88) thickness 3/64" (1.0)

- Do not use pipes thinner than those specified above.

### 4.2. Connecting pipes (Fig. 4-1)

- When commercially available copper pipes are used, wrap liquid and gas pipes with commercially available insulation materials (heat-resistant to 212 °F (100 °C) or more, thickness of 1/2 in. (12 mm) or more).
- The indoor parts of the drain pipe should be wrapped with polyethylene foam insulation materials (specific gravity of 0.03, thickness of 23/64 in. (9 mm) or more).
- Apply thin layer of refrigerant oil to pipe and joint seating surface before tightening flare nut.
- Use 2 wrenches to tighten piping connections.
- Use refrigerant piping insulation provided to insulate indoor unit connections. Insulate carefully.

#### Ⓑ Flare nut tightening torque

Copper pipe O.D. (mm, inch)	Flare nut O.D. (mm, inch)	Tightening torque (N-m, ft.lbs)
ø6.35, 1/4	17, 43/64	14-18, 10-13
ø6.35, 1/4	22, 7/8	34-42, 25-30
ø9.52, 3/8	22, 7/8	34-42, 25-30
ø12.7, 1/2	26, 1-3/64	49-61, 35-44
ø12.7, 1/2	29, 1-9/64	68-82, 49-59
ø15.88, 5/8	29, 1-9/64	68-82, 49-59
ø15.88, 5/8	36, 1-27/64	100-120, 71-86
ø19.05, 3/4	36, 1-27/64	100-120, 71-86

Ⓒ Apply refrigerating machine oil over the entire flare seat surface.

Ⓓ Use correct flare nuts meeting the pipe size of the outdoor unit.

### 4.3. Indoor unit (Fig. 4-3)

#### Installing procedures

1. Slide the supplied pipe cover ② over the gas tubing until it is pressed against the sheet metal inside the unit.
2. Slide the provided pipe cover ③ over the liquid tubing until it is pressed against the sheet metal inside the unit.
3. Tighten the pipe covers ② and ③ at the both ends 3/4 in. (20 mm) with the supplied bands ④.
  - Ⓐ Gas tubing
  - Ⓑ Pipe cover ③
  - Ⓒ Liquid tubing
  - Ⓓ Press the pipe cover against the sheet metal.
  - Ⓔ Band ④
  - Ⓔ Refrigerant tubing heat insulating material
  - Ⓕ Pipe cover ②

### 4.4. For twin combination

Refer to the outdoor unit installation manual.

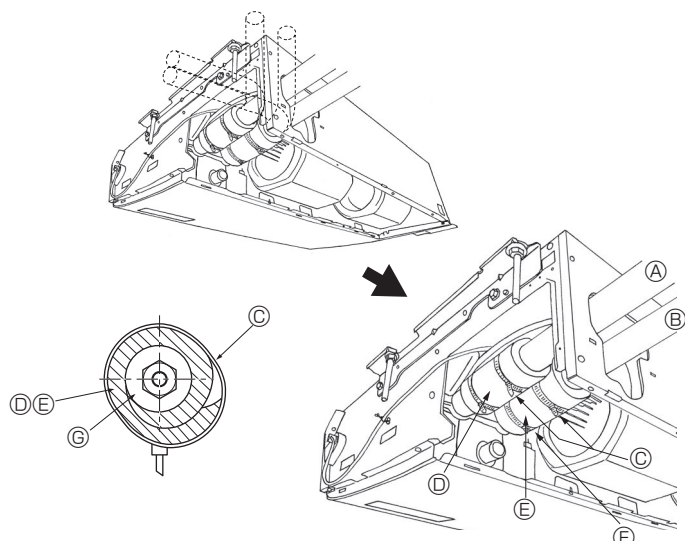


Fig. 4-3

## 5. Drainage piping work

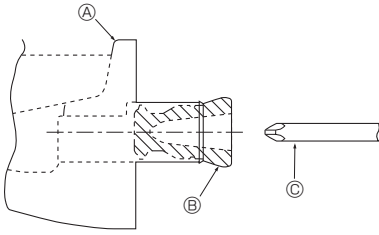


Fig. 5-1

- For left side tubing, be sure to insert the rubber plug into the right drain port. (Fig. 5-1)
- Use VP-20 (O.D.  $\varnothing 26$  (1") PVC TUBE) for drain piping and provide 1/100 or more downward slope.
- After completion of work, check that correct drain is available from the outflow port of the drain tubing.

- Ⓐ Drain pan
- Ⓑ Plug
- Ⓒ Insert the driver etc.in the plug deeply.

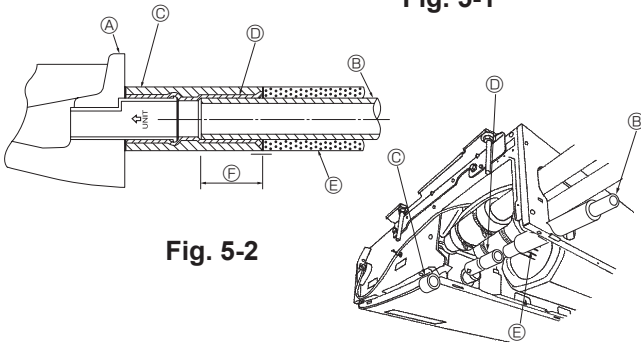


Fig. 5-2

### Installing procedures (Fig. 5-2)

1. Attach the joint socket ⑤ supplied with the unit to the drain port on the unit with a vinyl chloride adhesive.
2. Fasten the socket cover ⑥ supplied with the unit to the joint socket ⑤.
3. Attach the field drain tubing (VP-20) to the joint socket ⑤ with a vinyl chloride adhesive.
4. Wrap the drain tubing cover ⑦ supplied with the unit. (Seam taping)

- Ⓐ Drain pan
- Ⓑ Drain tubing
- Ⓒ Socket cover ⑥
- Ⓓ Joint socket ⑤
- Ⓔ Drain tubing cover ⑦
- Ⓕ Insertion length 1-15/32 in. (37mm)

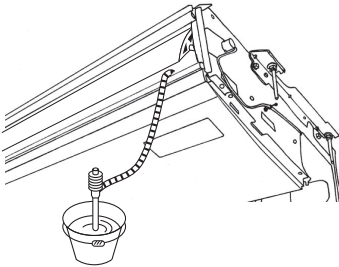


Fig. 5-3

5. Check for correct drainage. (Fig. 5-3)

\* Fill the drain pan with water of about 1/4 gal (1 L) from the air outlet.

## 6. Electrical work

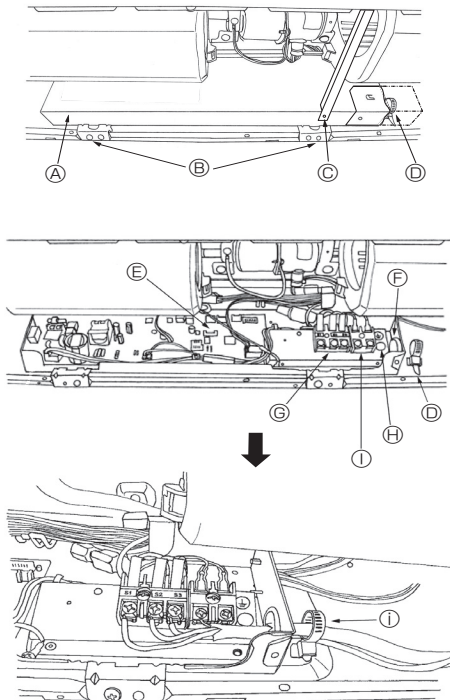


Fig. 6-1

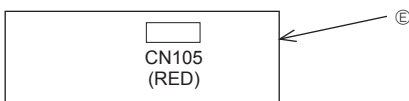


Fig. 6-2

### 6.1. Electric wiring

#### Wiring procedures

1. Remove the tapping screw ③ then remove the beam.
2. Remove the (2) tapping screws ② then remove the electric part cover ①.
3. <For radio frequency interface>  
Connect the electric cord of radio frequency interface securely to CN105 (RED) on indoor controller board.  
<For wired remote controller>  
Connect the electric wires securely to the corresponding terminals (Fig. 6-1)
4. Replace the removed parts.
5. Tie the electric wires with the local wiring clamp located in the right side of the electrical box.

- Ⓐ Cover
- Ⓑ Set screws (2 pcs)
- Ⓒ Set screws (Beam)
- Ⓓ Wiring clamp
- Ⓔ Indoor controller board
- Ⓕ Wire service entrance
- Ⓖ Terminal block for indoor and outdoor units connection
- Ⓖ Grounding cable connector
- Ⓗ Terminal block for wired remote controller
- Ⓖ Secure with the wiring clamp.

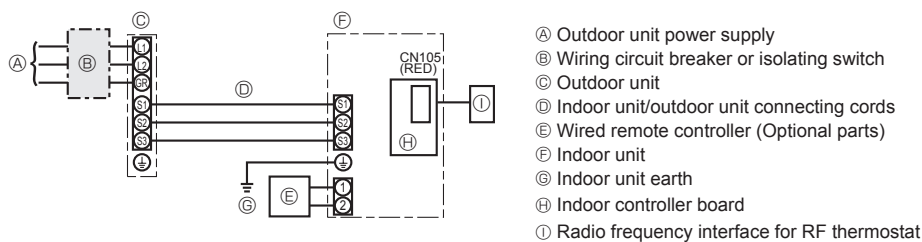
## 6. Electrical work

### 6.1.1. Indoor unit power supplied from outdoor unit

The following connection patterns are available.

The outdoor unit power supply patterns vary on models.

#### 1:1 System



\* Affix a label A that is included with the manuals near each wiring diagram for the indoor and outdoor units.

Indoor unit model		PCA-A24,30	PCA-A36, 42
Minimum circuit ampacity		1A	2A
Maximum rating of overcurrent protective device		15A	
Wiring Wire No. x size	Indoor unit-Outdoor unit	*1	3 × AWG16 (polar)
	Indoor unit earth		1 × Min. AWG16
	Wired remote controller-Indoor unit	*2	2 × AWG22 (Non-polar, unshielded)
Circuit rating	Indoor unit-Outdoor unit S1-S2	*3	AC 208/230 V
	Indoor unit-Outdoor unit S2-S3	*3	DC24 V
	Wired remote controller-Indoor unit	*3	DC12 V

\*1. Max. 50 m, 165 ft

\*2. The 10 m, 30 ft wire is attached in the wired remote controller accessory. Max. 500 m, 1500 ft

\*3. The figures are NOT always against the ground.

S3 terminal has DC 24 V against S2 terminal. However between S3 and S1, these terminals are not electrically insulated by the transformer or other device.

- Notes:**
1. Wiring size must comply with the applicable local and national code.
  2. Use copper supply wires.
  3. Use wires rated 600V or more for the power supply cables and the indoor unit/outdoor unit connecting cables.
  4. Install an earth longer than other cables.

## 6.2. Remote controller (Optional parts)

### 6.2.1. For wired remote controller

#### 1) 2 wired remote controllers setting

If 2 wired remote controllers are connected, set one to "Main" and the other to "Sub".

For setting procedures, refer to "Function selection of remote controller" in the operation manual for the indoor unit.

## 6. Electrical work

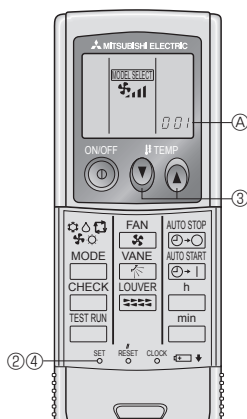


Fig. 6-3

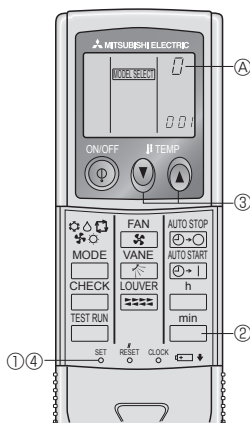


Fig. 6-4

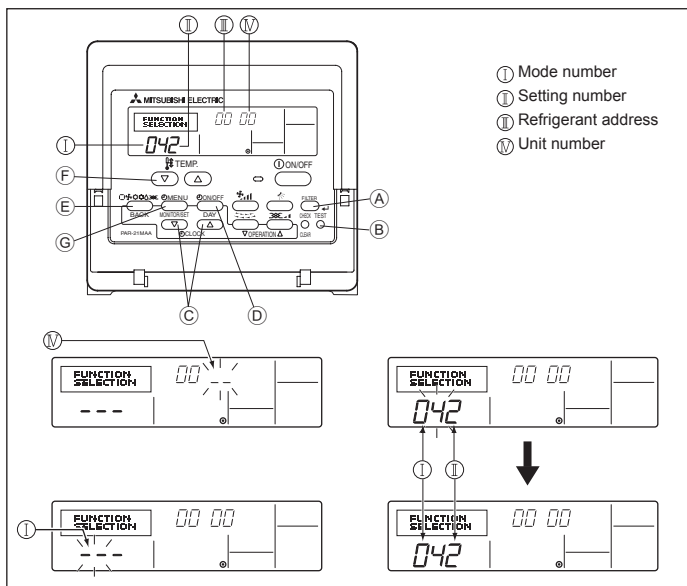


Fig. 6-5

### 6.2.2. For IR wireless remote controller

#### 1) Installation area

- Area in which the IR wireless remote controller is not exposed to direct sunshine.
- Area in which there is no nearby heating source.
- Area in which the IR wireless remote controller is not exposed to cold (or hot) winds.
- Area in which the IR wireless remote controller can be operated easily.
- Area in which the IR wireless remote controller is beyond the reach of children.

#### 2) Setting (Fig. 6-3)

- ① Insert batteries.
- ② Press the SET button with something sharp at the end. **MODEL SELECT** blinks and Model No. is lighted.
- ③ Press the temp  $\odot$   $\odot$  buttons to set the Model No. If you mistook the operation, press the ON/OFF  $\odot$  button and operate again from procedure ②.
- ④ Press the SET button with something sharp at the end. **MODEL SELECT** and Model No. are lighted for 3 seconds, then turned off.

Indoor	Outdoor	Ⓐ Model No.
PCA	PUZ	001
	PUY	033

#### 3) Assigning a IR wireless remote controller to each unit

Each unit can be operated only by the assigned IR wireless remote controller. Make sure each pair of an indoor unit PC board and a IR wireless remote controller is assigned to the same pair No.

#### 4) IR wireless remote controller pair number setting operation (Fig. 6-4)

- ① Press the SET button with something sharp at the end. Start this operation from the status of IR wireless remote controller display turned off. **MODEL SELECT** blinks and Model No. is lighted.
- ② Press the  $\min$  button twice continuously. Pair No. "0" blinks.
- ③ Press the temp  $\odot$   $\odot$  buttons to set the pair number you want to set. If you mistook the operation, press the ON/OFF  $\odot$  button and operate again from procedure ②.
- ④ Press the SET button with something sharp at the end. Set pair number is lighted for 3 seconds then turned off.

Ⓐ Pair No. of IR wireless remote controller	Indoor PC board
0	Initial setting
1	Cut J41
2	Cut J42
3-9	Cut J41, J42

## 6.3. Function settings

### 6.3.1 Function setting on the unit (Selecting the unit functions)

#### 1) For wired remote controller (Fig. 6-5)

Changing the power voltage setting

- Be sure to change the power voltage setting depending on the voltage used.
- ① Go to the function setting mode. Switch OFF the wired remote controller. Press the Ⓐ and Ⓑ buttons simultaneously and hold them for at least 2 seconds. **FUNCTION** will start to flash.
  - ② Use the Ⓒ button to set the refrigerant address (III) to 00.
  - ③ Press Ⓓ and [-] will start to flash in the unit number (IV) display.
  - ④ Use the Ⓒ button to set the unit number (IV) to 00.
  - ⑤ Press the Ⓔ MODE button to designate the refrigerant address/unit number. [-] will flash in the mode number (I) display momentarily.
  - ⑥ Press the Ⓕ buttons to set the mode number (I) to 04.
  - ⑦ Press the Ⓒ button and the current set setting number (II) will flash. Use the Ⓖ button to switch the setting number in response to the power supply voltage to be used.
 

Power supply voltage

230 V : setting number = 1

208 V : setting number = 2
  - ⑧ Press the MODE button Ⓔ and mode and the setting number (I) and (II) will change to being on constantly and the contents of the setting can be confirmed.
  - ⑨ Press the FILTER Ⓐ and TEST RUN Ⓖ buttons simultaneously for at least two seconds. The function selection screen will disappear momentarily and the air conditioner OFF display will appear.



## 6. Electrical work

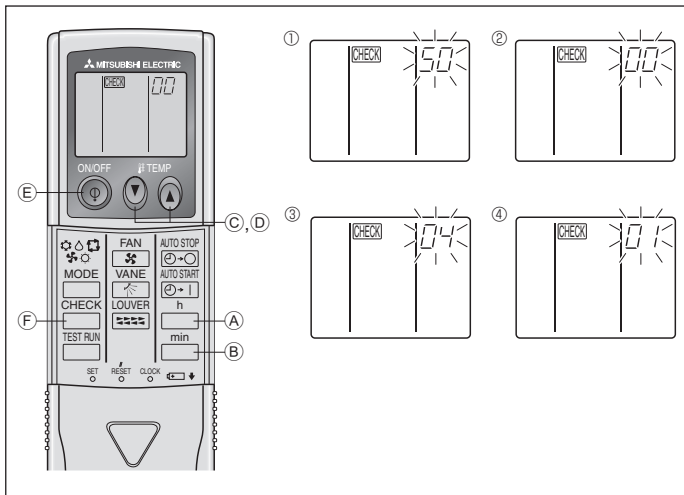


Fig. 6-6

### 2) For IR wireless remote controller (Fig. 6-6)

Changing the power voltage setting

- Be sure to change the power voltage setting depending on the voltage used.

- ① Go to the function select mode  
Press the **CHECK** button ⑥ twice continuously.  
(Start this operation from the status of IR wireless remote controller display turned off.)  
**CHECK** is lighted and "00" blinks.  
Press the temp **▼** button ③ once to set "50". Direct the IR wireless remote controller toward the receiver of the indoor unit and press the **h** button ④.
- ② Setting the unit number  
Press the temp **▼** button ③ and **▲** button ⑤ to set the unit number "00". Direct the IR wireless remote controller toward the receiver of the indoor unit and press the **min** button ⑥.
- ③ Selecting a mode  
Enter 04 to change the power voltage setting using the **▼** ③ and **▲** ⑤ buttons.  
Direct the IR wireless remote controller toward the receiver of the indoor unit and press the **h** button ④.  
Current setting number:      1 = 1 beep (one second)  
   2 = 2 beeps (one second each)  
   3 = 3 beeps (one second each)
- ④ Selecting the setting number  
Use the **▼** ③ and **▲** ⑤ buttons to change the power voltage setting to 01 (230 V). Direct the IR wireless remote controller toward the sensor of the indoor unit and press the **h** button ④.
- ⑤ To select multiple functions continuously  
Repeat steps ③ and ④ to change multiple function settings continuously.
- ⑥ Complete function selection  
Direct the IR wireless remote controller toward the sensor of the indoor unit and press the **⊕** button ⑥.

**Note:** Whenever changes are made to the function settings after installation or maintenance, be sure to record the changes with a mark in the "Setting" column of the Function table.

### 6.3.2 Function setting on the remote controller

For details on how to operate the remote controller, refer to the appropriate operation manual included with each remote controller.

#### Function table

Select unit number 00

Mode	Settings	Mode no.	Setting no.	Initial setting	setting
		Wired remote controller (RF thermostat)			
Power failure automatic recovery	Not available	01	1		
	Available *	(101)	2	O	
Indoor temperature detecting	Indoor unit operating average	02 (—)	1	O	
	Set by indoor unit's remote controller		2		
	Wired remote controller's internal sensor		3		
LOSSNAY connectivity	Not Supported	03 (103)	1	O	
	Supported (indoor unit is not equipped with outdoor-air intake)		2		
	Supported (indoor unit is equipped with outdoor-air intake)		3		
Power voltage	230 V	04 (104)	1		
	208 V		2	O	

Select unit numbers 01 to 03 or all units (AL [wired remote controller]/07 [wireless remote controller])

Mode	Settings	Mode no.	Setting no.	Initial setting	setting
		Wired remote controller (RF thermostat)			
Filter sign	100Hr	07 (107)	1		
	2500Hr		2	O	
	No filter sign indicator		3		
Fan speed	Silent	08 (108)	1		
	Standard		2	O	
	High ceiling		3		
Up/down vane setting	No vanes	11 (111)	1		
	Equipped with vanes (vaner angle setup ①)		2	O	
	Equipped with vanes (vaner angle setup ②)		3		

\* When the power supply returns, the air conditioner will start 3 minutes later.

## 7. Test run

### 7.1. Before test run

- ▶ After completing installation and the wiring and piping of the indoor and outdoor units, check for refrigerant leakage, looseness in the power supply or control wiring, wrong polarity, and no disconnection of one phase in the supply.
- ▶ Use a 500-volt megohmmeter to check that the resistance between the power supply terminals and ground is at least 1.0 MΩ.

- ▶ Do not carry out this test on the control wiring (low voltage circuit) terminals.

⚠ **Warning:**

Do not use the air conditioner if the insulation resistance is less than 1.0 MΩ.

### 7.2. Test run

- Refer to the installation manual that comes with each remote controller for details.

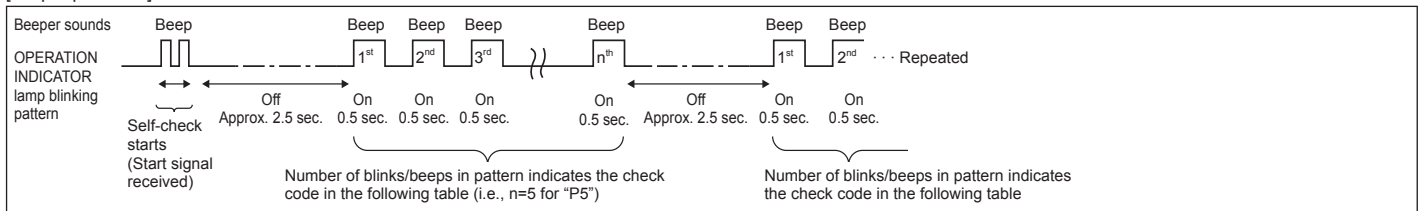
### 7.3. Self-check

- Refer to the installation manual that comes with each remote controller for details.

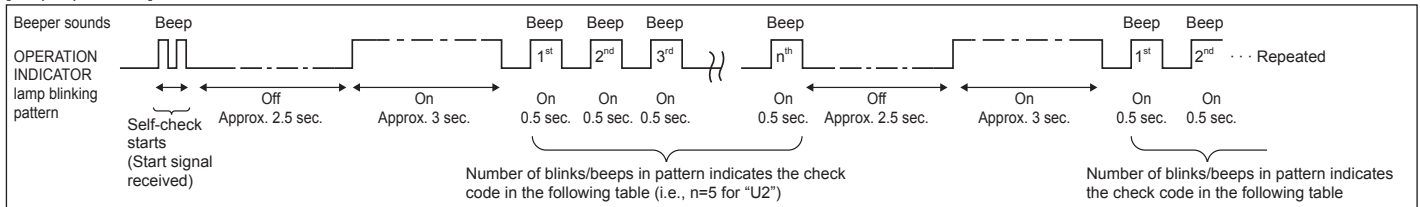
- RF thermostat is not established.

- Refer to the following tables for details on the check codes. (IR wireless remote controller)

[Output pattern A]



[Output pattern B]



[Output pattern A] Errors detected by indoor unit

IR wireless remote controller	Wired remote controller RF thermostat	Symptom	Remark
Beeper sounds/OPERATION INDICATOR lamp blinks (Number of times)	Check code		
1	P1	Intake sensor error	
2	P2	Pipe (TH2) sensor error	
	P9	Pipe (TH5) sensor error	
3	E6, E7	Indoor/outdoor unit communication error	
4	P4	Drain sensor error / Float switch connector open	
5	P5	Drain pump error	
	PA	Forced compressor error	
6	P6	Freezing/Overheating protection operation	
7	EE	Communication error between indoor and outdoor units	
8	P8	Pipe temperature error	
9	E4	Remote controller signal receiving error	
10	—	—	
11	—	—	
12	Fb	Indoor unit control system error (memory error, etc.)	
No sound	E0, E3	Remote controller transmission error	
No sound	E1, E2	Remote controller control board error	
No sound	— — — —	No corresponding	

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

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

**mitsubishi electric corporation**  
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