

Кондиционеры  
ВНУТРЕННИЙ БЛОК  
Air-Conditioners  
INDOOR UNIT

# PEA-RP200, 250WKA

## INSTALLATION MANUAL

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

**FOR INSTALLER****English**

## INSTALLATIONSHANDBUCH

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

**FÜR INSTALLATEURE****Deutsch**

## MANUEL D'INSTALLATION

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

**POUR L'INSTALLATEUR****Français**

## 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**

## INSTALLATIEHANDLEIDING

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

**VOOR DE INSTALLATEUR****Nederlands**

## INSTALLATIONSMANUAL

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

**FÖR INSTALLATÖREN****Svenska**

## INSTALLATIONSMANUAL

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

**TIL INSTALLATØREN****Dansk**

## 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**

## ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ ΕΓΚΑΤΑΣΤΑΣΗΣ

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

**ΓΙΑ ΑΥΤΟΝ ΠΟΥ ΚΑΝΕΙ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ****Ελληνικά**

## РУКОВОДСТВО ПО УСТАНОВКЕ

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

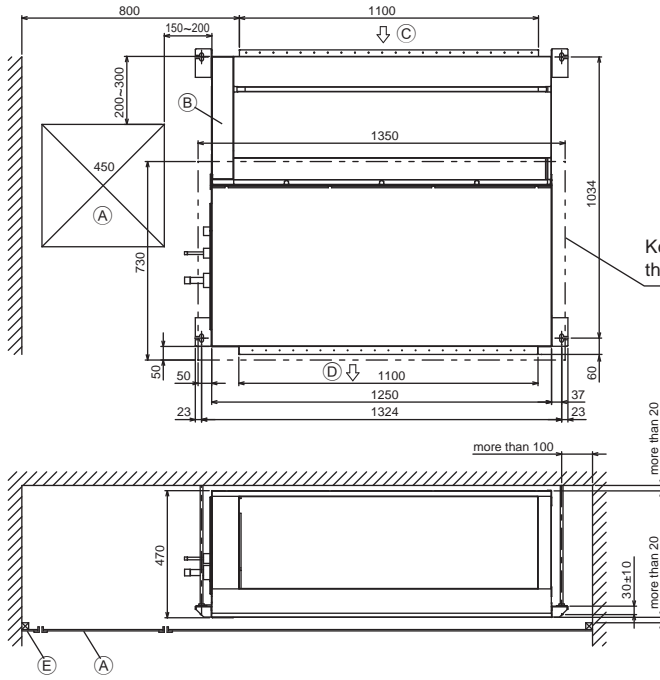
**ДЛЯ УСТАНОВИТЕЛЯ****Русский**

## MONTAJ ELKİTABI

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

**MONTÖR İÇİN****Türkçe**

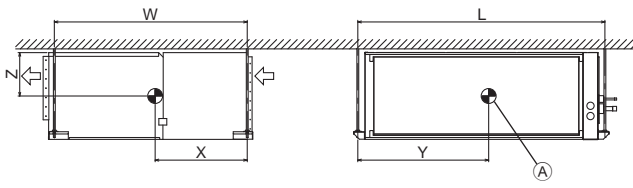
[Fig. 3.2.1]



Keep the service space for the maintenance from the bottom when the heat exchanger is cleaned.

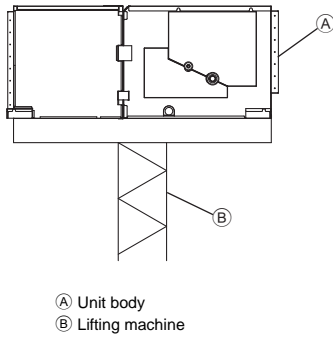
- (A) Access door
- (B) Electrical parts box
- (C) Air inlet
- (D) Air outlet
- (E) Ceiling surface

[Fig. 4.1.1]

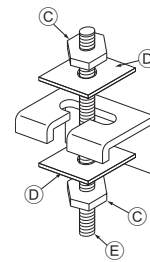


- (A) Center of gravity

[Fig. 5.1.1]

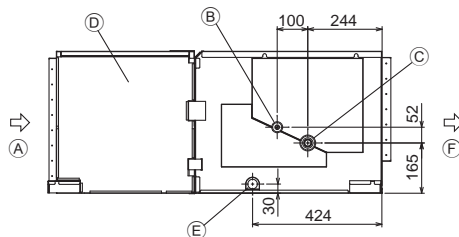


[Fig. 5.1.2]



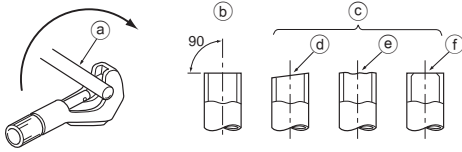
- (C) Nuts (field supply)
- (D) Washers (accessory)
- (E) M10 hanging bolt (field supply)

[Fig. 6.2.1]



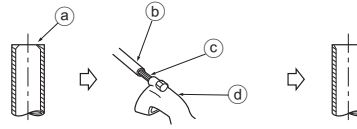
- (A) Air inlet
- (B) Refrigerant piping (liquid)
- (C) Refrigerant piping (gas)
- (D) Control box
- (E) Drain pipe
- (F) Air outlet

[Fig. 7.2.1]



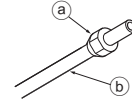
- a Copper tubes
- b Good
- c No good
- d Tilted
- e Uneven
- f Burred

[Fig. 7.2.2]



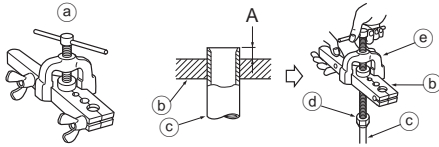
- a Burr
- b Copper tube/pipe
- c Spare reamer
- d Pipe cutter

[Fig. 7.2.3]



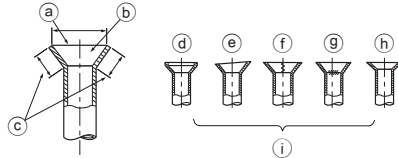
- a Flare nut
- b Copper tube

[Fig. 7.2.4]



- a Flaring tool
- b Die
- c Copper tube
- d Flare nut
- e Yoke

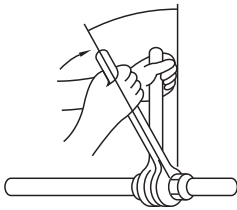
[Fig. 7.2.5]



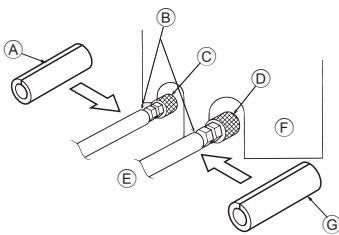
- a Smooth all around
- b Inside is shining without any scratches
- c Even length all around
- d Too much
- e Tilted
- f Scratch on flared plane
- g Cracked
- h Uneven
- i Bad examples

7.3

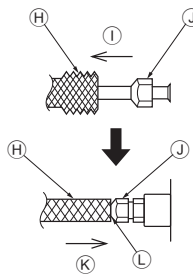
[Fig. 7.3.1]



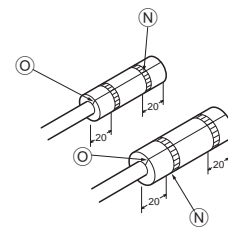
[Fig. 7.3.2]



- A Pipe cover (small) (accessory)
- B Caution:  
Pull out the thermal insulation on the refrigerant piping at the site, insert the flare nut to flare the end, and replace the insulation in its original position.  
Take care to ensure that condensation does not form on exposed copper piping.
- C Liquid end of refrigerant piping



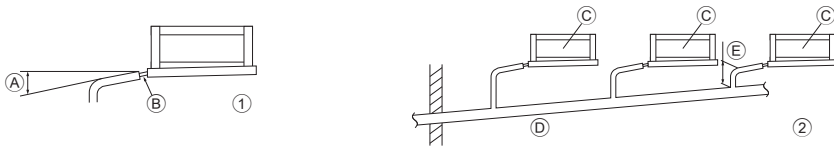
- D Gas end of refrigerant piping
- E Site refrigerant piping
- F Main body
- G Pipe cover (large) (accessory)
- H Thermal insulation (field supply)
- I Pull
- J Flare nut
- K Return to original position



- L Ensure that there is no gap here
- M Plate on main body
- N Band (accessory)
- O Ensure that there is no gap here. Place joint upwards.

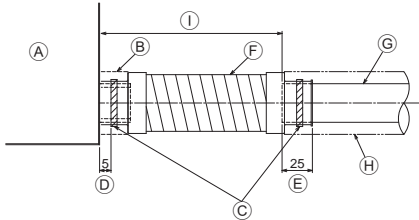
# 7.4

[Fig. 7.4.1]



- Ⓐ Downward slope 1/100 or more
- Ⓑ Drain hose (Accessory)
- Ⓒ Indoor unit
- Ⓓ Collective piping
- Ⓔ Maximize this length to approx. 10 cm

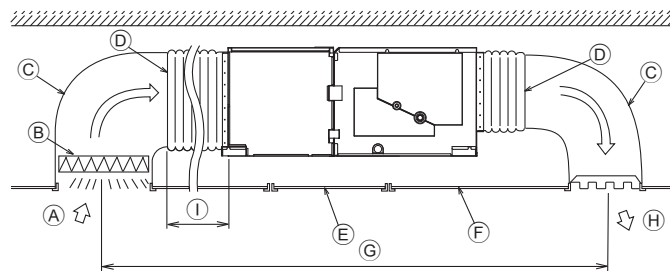
[Fig. 7.4.2]



- Ⓐ Indoor unit
- Ⓑ Insulation pipe (short) (accessory)
- Ⓒ Tie band (accessory)
- Ⓓ Band fixing part
- Ⓔ Insertion margin
- Ⓕ Drain hose (accessory)
- Ⓖ Drain pipe (O.D. ø32 PVC TUBE, field supply)
- Ⓗ Insulating material (field supply)
- Ⓘ Max. 145 ± 5 mm

# 8

[Fig. 8.0.1]



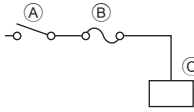
- Ⓐ Air inlet
- Ⓑ Air filter (supplied at site)
- Ⓒ Duct
- Ⓓ Canvas duct
- Ⓔ Access door
- Ⓕ Ceiling
- Ⓖ Ensure sufficient length to prevent short cycling
- Ⓗ Air outlet
- Ⓘ Keep duct-work length 850 mm or more

9

9.1

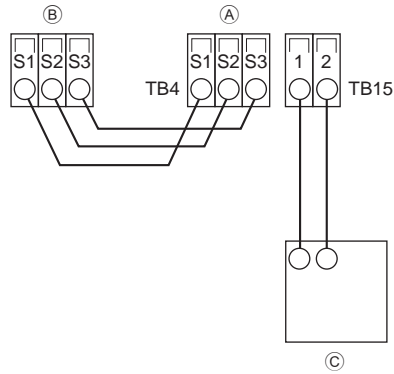
9.2

[Fig. 9.1.1]



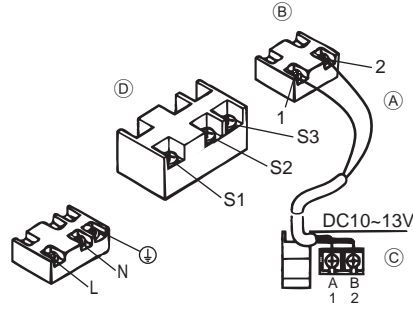
- A Switch 16 A
- B Overcurrent protection 16 A
- C Indoor unit

[Fig. 9.2.1]



- A Terminal block for indoor transmission cable
- B Terminal block for outdoor transmission cable
- C Remote controller

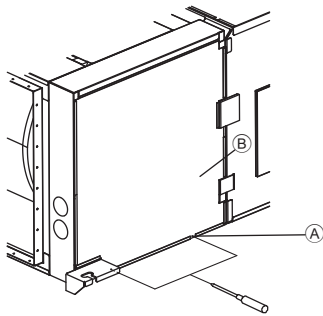
[Fig. 9.2.2]



- A Non-polarized
- B TB15
- C Remote Controller
- D TB4

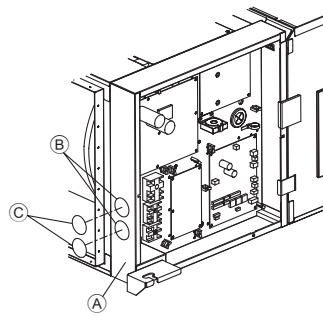
9.3

[Fig. 9.3.1]



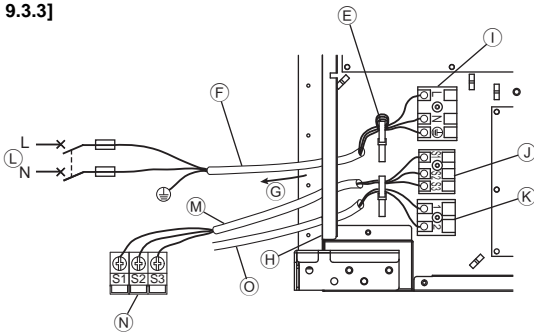
- A Screw holding cover (2pcs)
- B Cover

[Fig. 9.3.2]



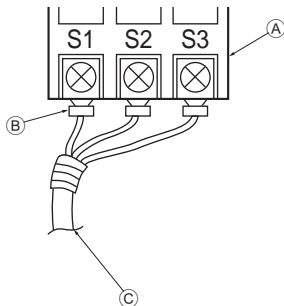
- A Control box
- B Knockout hole
- C Remove

[Fig. 9.3.3]



- E Use PG bushing to keep the weight of the cable and external force from being applied to the power supply terminal connector. Use a cable tie to secure the cable. Wind the wire around the cable strap once to keep it from being pulled out.
- F Power source wiring
- G Tensile force
- H Use ordinary bushing
- I Power source terminal bed
- J Terminal bed for indoor transmission
- K Terminal bed for remote controller
- L To 1-phase power source
- M Transmission line
- N Terminal bed for outdoor transmission line
- O Transmission line to the remote controller

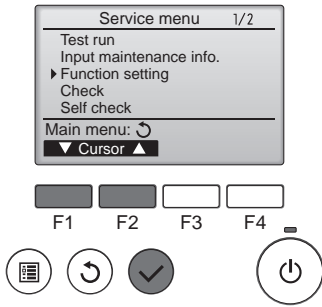
[Fig. 9.3.4]



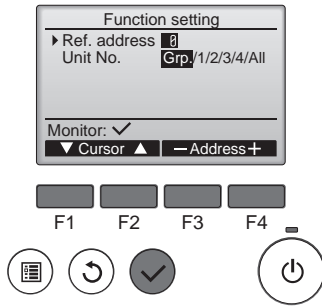
- A Terminal bed
- B Round terminal
- C Transmission cable (polar)

## 9.4

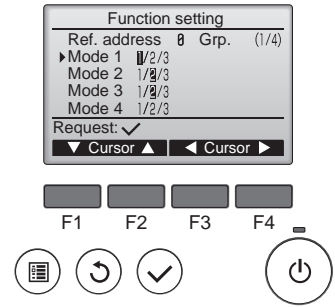
[Fig. 9.4.1]



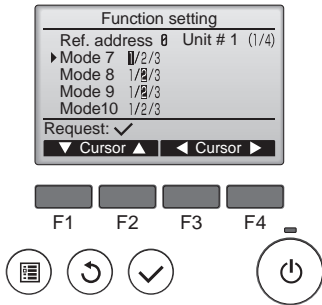
[Fig. 9.4.2]



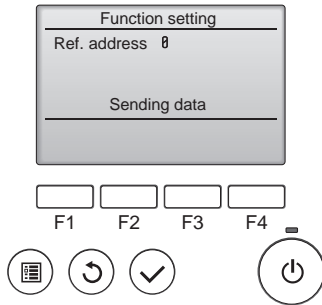
[Fig. 9.4.3]



[Fig. 9.4.4]

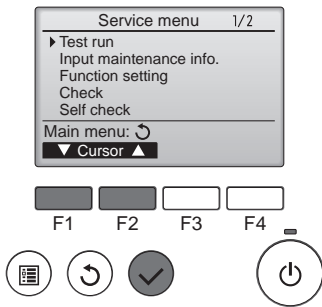


[Fig. 9.4.5]

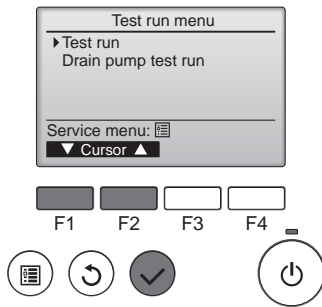


## 9.6

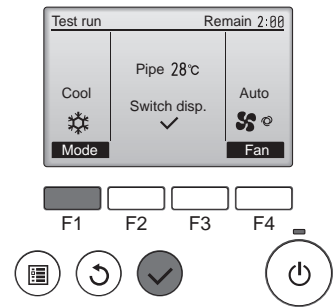
[Fig. 9.6.1]



[Fig. 9.6.2]



[Fig. 9.6.3]



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**Note:** The phrase "Wired remote controller" in this installation manual refers only to the PAR-32MAA. If you need any information for the other remote controller, please refer to either the installation manual or initial setting manual which are included in these boxes.

## 1. Safety precautions

### 1.1. Before installation and electric work

- ▶ **Before installing the unit, make sure you read all the "Safety precautions".**
- ▶ **The "Safety precautions" provide very important points regarding safety. Make sure you follow them.**

#### Symbols used in the text






##### **Warning:**

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

##### **Caution:**

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

#### Symbols used in the illustrations

-  : Indicates an action that must be avoided.
-  : Indicates that important instructions must be followed.
-  : Indicates a part which must be grounded.
-  : Indicates that caution should be taken with rotating parts. (This symbol is displayed on the main unit label.) <Color: yellow>
-  : Beware of electric shock (This symbol is displayed on the main unit label.) <Color: yellow>

##### **Warning:**

**Carefully read the labels affixed to the main unit.**

##### **Warning:**

- **Ask the dealer or an authorized technician to install the air conditioner.**
  - Improper installation by the user may result in water leakage, electric shock, or fire.
- **This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**
- **Install the air unit at a place that can withstand its weight.**
  - Inadequate strength may cause the unit to fall down, resulting in injuries.
- **Use the specified cables for wiring. Make the connections securely so that the outside force of the cable is not applied to the terminals.**
  - Inadequate connection and fastening may generate heat and cause a fire.
- **Prepare for typhoons and other strong winds and earthquakes and install the unit at the specified place.**
  - Improper installation may cause the unit to topple and result in injury.
- **Always use an air cleaner, humidifier, electric heater, and other accessories specified by Mitsubishi Electric.**
  - Ask an authorized technician to install the accessories. Improper installation by the user may result in water leakage, electric shock, or fire.
- **Never repair the unit. If the air conditioner must be repaired, consult the dealer.**
  - If the unit is repaired improperly, water leakage, electric shock, or fire may result.
- **If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**
- **Do not touch the heat exchanger fins.**
  - Improper handling may result in injury.

- **When handling this product, always wear protective equipment.**  
EG: Gloves, full arm protection namely boiler suit, and safety glasses.
  - Improper handling may result in injury.
- **If refrigerant gas leaks during installation work, ventilate the room.**
  - If the refrigerant gas comes into contact with a flame, poisonous gases will be released.
- **Install the air conditioner according to this Installation Manual.**
  - If the unit is installed improperly, water leakage, electric shock, or fire may result.
- **Have all electric work done by a licensed electrician according to "Electric Facility Engineering Standard" and "Interior Wire Regulations" and the instructions given in this manual and always use a special circuit.**
  - If the power source capacity is inadequate or electric work is performed improperly, electric shock and fire may result.
- **Keep the electric parts away from water (washing water etc.).**
  - It might result in electric shock, catching fire or smoke.
- **Securely install the outdoor unit terminal cover (panel).**
  - If the terminal cover (panel) is not installed properly, dust or water may enter the outdoor unit and fire or electric shock may result.
- **Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.**
  - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
  - It may also be in violation of applicable laws.
  - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- **If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.**
  - Consult the dealer regarding the appropriate measures to prevent the safety limit from being exceeded. Should the refrigerant leak and cause the safety limit to be exceeded, hazards due to lack of oxygen in the room could result.
- **When moving and reinstalling the air conditioner, consult the dealer or an authorized technician.**
  - If the air conditioner is installed improperly, water leakage, electric shock, or fire may result.
- **After completing installation work, make sure that refrigerant gas is not leaking.**
  - If the refrigerant gas leaks and is exposed to a fan heater, stove, oven, or other heat source, it may generate noxious gases.
- **Do not reconstruct or change the settings of the protection devices.**
  - If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Mitsubishi Electric are used, fire or explosion may result.
- **To dispose of this product, consult your dealer.**
- **Do not use a leak detection additive.**
- **The installer and system specialist shall secure safety against leakage according to local regulation or standards.**
  - The instructions in this manual may be applicable if local regulation are not available.
- **Pay a special attention to the place, such as a basement, etc. where refrigeration gas can stay, since refrigeration is heavier than the air.**
- **Children should be supervised to ensure that they do not play with the appliance.**
- **This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.**

## 1.2. Precautions for devices that use R410A refrigerant

### ⚠ Caution:

- **Do not use the existing refrigerant piping.**
  - The old refrigerant and refrigerant oil in the existing piping contains a large amount of chlorine which may cause the refrigerant oil of the new unit to deteriorate.
- **Use refrigerant piping made of C1220 (Cu-DHP) phosphorus deoxidized copper as specified in the JIS H3300 "Copper and copper alloy seamless pipes and tubes". In addition, be sure that the inner and outer surfaces of the pipes are clean and free of hazardous sulphur, oxides, dust/dirt, shaving particles, oils, moisture, or any other contaminant.**
  - Contaminants on the inside of the refrigerant piping may cause the refrigerant residual oil to deteriorate.
- **Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Store elbows and other joints in a plastic bag.)**
  - If dust, dirt, or water enters the refrigerant cycle, deterioration of the oil and compressor trouble may result.
- **Use ester oil, ether oil or alkylbenzene (small amount) as the refrigerant oil to coat flares and flange connections.**
  - The refrigerant oil will degrade if it is mixed with a large amount of mineral oil.
- **Use liquid refrigerant to fill the system.**
  - If gas refrigerant is used to seal the system, the composition of the refrigerant in the cylinder will change and performance may drop.
- **Do not use a refrigerant other than R410A.**
  - If another refrigerant (R22, etc.) is used, the chlorine in the refrigerant may cause the refrigerant oil to deteriorate.
- **Use a vacuum pump with a reverse flow check valve.**
  - The vacuum pump oil may flow back into the refrigerant cycle and cause the refrigerant oil to deteriorate.
- **Do not use the following tools that are used with conventional refrigerants. (Gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, refrigerant recovery equipment.)**
  - If the conventional refrigerant and refrigerant oil are mixed in the R410A, the refrigerant may deteriorate.
  - If water is mixed in the R410A, the refrigerant oil may deteriorate.
  - Since R410A does not contain any chlorine, gas leak detectors for conventional refrigerants will not react to it.
- **Do not use a charging cylinder.**
  - Using a charging cylinder may cause the refrigerant to deteriorate.
- **Be especially careful when managing the tools.**
  - If dust, dirt, or water gets in the refrigerant cycle, the refrigerant may deteriorate.

## 1.3. Before getting installed

### ⚠ Caution:

- **Do not install the unit where combustible gas may leak.**
  - If the gas leaks and accumulates around the unit, an explosion may result.
- **Do not use the air conditioner where food, pets, plants, precision instruments, or artwork are kept.**
  - The quality of the food, etc. may deteriorate.
- **Do not use the air conditioner in special environments.**
  - Oil, steam, sulfuric smoke, etc. can significantly reduce the performance of the air conditioner or damage its parts.
- **When installing the unit in a hospital, communication station, or similar place, provide sufficient protection against noise.**
  - The inverter equipment, private power generator, high-frequency medical equipment, or radio communication equipment may cause the air conditioner to operate erroneously, or fail to operate. On the other hand, the air conditioner may affect such equipment by creating noise that disturbs medical treatment or image broadcasting.
- **Do not install the unit on a structure that may cause leakage.**
  - When the room humidity exceeds 80% or when the drain pipe is clogged, condensation may drip from the indoor unit. Perform collective drainage work together with the outdoor unit, as required.
- **The indoor models should be installed the ceiling over than 2.5 m from floor.**

## 2. Indoor unit accessories

The unit is provided with the following accessories:

No.	Accessories	Quantity	No.	Accessories	Quantity
①	Insulation pipe 25 mm small diameter	1	②	Insulation pipe 125 mm small diameter	1
③	Insulation pipe 120 mm large diameter	1	④	Tie band (small)	2
⑤	Tie band (large)	5	⑥	Drain hose	1
⑦	Washer	8			

## 3. Selecting an installation site

- Select a site with sturdy fixed surface sufficiently durable against the weight of unit.
- Before installing unit, the routing to carry in unit to the installation site should be determined.
- Select a site where the unit is not affected by entering air.

## 1.4. Before getting installed (moved) - electrical work

### ⚠ Caution:

- **Ground the unit.**
  - Do not connect the ground wire to gas or water pipes, lightning rods, or telephone ground lines. Improper grounding may result in electric shock.
- **Install the power cable so that tension is not applied to the cable.**
  - Tension may cause the cable to break and generate heat and cause a fire.
- **Install an leak circuit breaker, as required.**
  - If an leak circuit breaker is not installed, electric shock may result.
- **Use power line cables of sufficient current carrying capacity and rating.**
  - Cables that are too small may leak, generate heat, and cause a fire.
- **Use only a circuit breaker and fuse of the specified capacity.**
  - A fuse or circuit breaker of a larger capacity or a steel or copper wire may result in a general unit failure or fire.
- **Do not wash the air conditioner units.**
  - Washing them may cause an electric shock.
- **Be careful that the installation base is not damaged by long use.**
  - If the damage is left uncorrected, the unit may fall and cause personal injury or property damage.
- **Install the drain piping according to this Installation Manual to ensure proper drainage. Wrap thermal insulation around the pipes to prevent condensation.**
  - Improper drain piping may cause water leakage and damage to furniture and other possessions.
- **Be very careful about product transportation.**
  - Only one person should not carry the product if it weighs more than 20 kg.
  - Some products use PP bands for packaging. Do not use any PP bands for a means of transportation. It is dangerous.
  - Do not touch the heat exchanger fins. Doing so may cut your fingers.
  - When transporting the outdoor unit, suspend it at the specified positions on the unit base. Also support the outdoor unit at four points so that it cannot slip sideways.
- **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. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

## 1.5. Before starting the test run

### ⚠ Caution:

- **Turn on the power at least 12 hours before starting operation.**
  - Starting operation immediately after turning on the main power switch can result in severe damage to internal parts. Keep the power switch turned on during the operational season.
- **Do not touch the switches with wet fingers.**
  - Touching a switch with wet fingers can cause electric shock.
- **Do not touch the refrigerant pipes during and immediately after operation.**
  - During and immediately after operation, the refrigerant pipes are may be hot and may be cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes.
- **Do not operate the air conditioner with the panels and guards removed.**
  - Rotating, hot, or high-voltage parts can cause injuries.
- **Do not turn off the power immediately after stopping operation.**
  - Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.



- Do not install unit at a site where combustible gas may generate, flow in, stagnate or leak.
- Do not install unit at a site where equipment generating high frequency waves (a high frequency wave welder for example) is provided.
- Do not install unit at a site where fire detector is located at the supply air side. (Fire detector may operate erroneously due to the heated air supplied during heating operation.)
- When special chemical product may scatter around such as site chemical plants and hospitals, full investigation is required before installing unit. (The plastic components may be damaged depending on the chemical product applied.)
- If the unit is run for long hours when the air above the ceiling is at high temperature/high humidity (dew point above 26 °C), dew condensation may be produced in the indoor unit. When operating the units in this condition, add insulation material (10-20 mm) to the entire surface of the indoor unit to avoid dew condensation.

### 3.1. Install the indoor unit on a ceiling strong enough to sustain its weight

**⚠ Warning:**  
The unit must be securely installed on a structure that can sustain its weight. If the unit is mounted on an unstable structure, it may fall down causing injuries.

## 4. Fixing hanging bolts

### 4.1. Fixing hanging bolts

[Fig. 4.1.1] (P.2)

- Ⓐ Center of gravity

(Give site of suspension strong structure.)

#### Center of gravity and Product Weight

Model name	W (mm)	L (mm)	X (mm)	Y (mm)	Z (mm)	Product Weight (kg)
PEA-RP200, 250	1034	1324	494	701	235	108

## 5. Installing the unit

### 5.1. Hanging the unit body

- ▶ Bring the indoor unit to an installation site as it is packed.
- ▶ To hang the indoor unit, use a lifting machine to lift and pass through the hanging bolts.

[Fig. 5.1.1] (P.2)

- Ⓐ Unit body
- Ⓑ Lifting machine

[Fig. 5.1.2] (P.2)

- Ⓒ Nuts (field supply)
- Ⓓ Washers (accessory)
- Ⓔ M10 hanging bolt (field supply)

### 5.2. Transporting the heat exchanger unit and the fan unit separately

- ▶ Refer to the "Manipulation Details" label on the unit for how to separate the heat exchanger unit and the fan unit.

**⚠ Caution:**  
Heat exchanger unit and the fan unit cannot be installed in separate locations. Doing so will cause water leakage.

## 6. Refrigerant pipe and drain pipe specifications

To avoid dew drops, provide sufficient antisweating and insulating work to the refrigerant and drain pipes.

When using commercially available refrigerant pipes, be sure to wind commercially available insulating material (with a heat-resisting temperature of more than 100 °C and thickness given below) onto both liquid and gas pipes.

Be also sure to wind commercially available insulating material (with a form polyethylene's specific gravity of 0.03 and thickness given below) onto all pipes which pass through rooms.

- ① Select the thickness of insulating material by pipe size.

Pipe size	Insulating material's thickness
6.4 mm to 25.4 mm	More than 10 mm
28.6 mm to 38.1 mm	More than 15 mm

- ② If the unit is used on the highest story of a building and under conditions of high temperature and humidity, it is necessary to use pipe size and insulating material's thickness more than those given in the table above.
- ③ If there are customer's specifications, simply follow them.

### 3.2. Securing installation and service space

- Select the optimum direction of supply airflow according to the configuration of the room and the installation position.
- As the piping and wiring are connected at the bottom and side surfaces, and the maintenance is made at the same surfaces, allow a proper space properly. For the efficient suspension work and safety, provide a space as much as possible.

[Fig. 3.2.1] (P.2)

- Ⓐ Access door
- Ⓑ Electrical parts box
- Ⓒ Air inlet
- Ⓓ Air outlet
- Ⓔ Ceiling surface

### 3.3. Combining indoor units with outdoor units

For combining indoor units with outdoor units, refer to the outdoor unit installation manual.

### Hanging structure

- Ceiling: The ceiling structure varies from building to one another. For detailed information, consult your construction company.
- If necessary, reinforce the hanging bolts with anti-quake supporting members as countermeasures against earthquakes.  
\* Use M10 for hanging bolts and anti-quake supporting members (field supply).

### 5.3. Confirming the unit's position and fixing hanging bolts

- ▶ Ensure that the hanging bolt nuts are tightened to fix the hanging bolts.
- ▶ To ensure that drain is discharged, be sure to hang the unit at level using a level.

**⚠ Caution:**  
Install the unit in horizontal position. If the side with drain port is installed higher, water leakage may be caused.

### 6.1. Refrigerant pipe and drain pipe specifications

Ⓐ Refrigerant pipe sizes

	R410A		Drain pipe
	Liquid pipe	Gas pipe	
P200	O.D. ø9.52 mm (3/8")	O.D. ø25.4 mm (1")	O.D. ø32 mm(1 5/16")
P250	O.D. ø12.7 mm (1/2")	O.D. ø25.4 mm (1")	

### 6.2. Refrigerant pipe, drain pipe and filling port

[Fig. 6.2.1] (P.2)

- Ⓐ Air inlet
- Ⓑ Refrigerant piping (liquid)
- Ⓒ Refrigerant piping (gas)
- Ⓓ Control box
- Ⓔ Drain pipe
- Ⓕ Air outlet

## 7. Connecting refrigerant pipes and drain pipes

### 7.1. Refrigerant piping work

This piping work must be done in accordance with the installation manuals for both outdoor unit.

- For constraints on pipe length and allowable difference of elevation, refer to the outdoor unit manual.

#### ⚠ Caution:

- Install the refrigerant piping for the indoor unit in accordance with the following.

### 7.2. Flaring work

- Main cause of gas leakage is defect in flaring work.  
Carry out correct flaring work in the following procedure.

#### 7.2.1. Pipe cutting

[Fig. 7.2.1] (P.3)

- Ⓐ Copper tubes
- Ⓑ Good
- Ⓒ No good
- Ⓓ Tilted
- Ⓔ Uneven
- Ⓕ Burred

- Using a pipe cutter cut the copper tube correctly.

#### 7.2.2. Burrs removal

[Fig. 7.2.2] (P.3)

- Ⓐ Burr
- Ⓑ Copper tube/pipe
- Ⓒ Spare reamer
- Ⓓ Pipe cutter

- Completely remove all burrs from the cut cross section of pipe/tube.
- Put the end of the copper tube/pipe to downward direction as you remove burrs in order to avoid burrs drop in the tubing.

#### 7.2.3. Putting nut on

[Fig. 7.2.3] (P.3)

- Ⓐ Flare nut
- Ⓑ Copper tube

- Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal.  
(not possible to put them on after flaring work)

#### 7.2.4. Flaring work

[Fig. 7.2.4] (P.3)

- Ⓐ Flaring tool
- Ⓑ Die
- Ⓒ Copper tube
- Ⓓ Flare nut
- Ⓔ Yoke

- Carry out flaring work using flaring tool as shown below.

Pipe diameter (mm)	Dimension	
	A (mm)	B <sup>+0</sup> <sub>-0.4</sub> (mm)
	When the tool for R410A is used Clutch type	
6.35	0 - 0.5	9.1
9.52	0 - 0.5	13.2
12.7	0 - 0.5	16.6
15.88	0 - 0.5	19.7

Firmly hold copper tube in a die in the dimension shown in the table at above.

#### 7.2.5. Check

[Fig. 7.2.5] (P.3)

- Ⓐ Smooth all around
- Ⓑ Inside is shining without any scratches
- Ⓒ Even length all around
- Ⓓ Too much
- Ⓔ Tilted
- Ⓕ Scratch on flared plane
- Ⓖ Cracked
- Ⓗ Uneven
- Ⓘ Bad examples

- Compare the flared work with a figure in right side hand.
- If flare is noted to be defective, cut off the flared section and do flaring work again.

### 7.3. Pipe connection

[Fig. 7.3.1] (P.3)

- Apply a thin coat of refrigeration oil on the seat surface of pipe.
- For connection first align the center, then tighten the first 3 to 4 turns of flare nut.
- Use tightening torque table below as a guideline for indoor unit side union joint section, and tighten using two wrenches. Excessive tightening damages the flare section.

Copper pipe O.D. (mm)	Flare nut O.D. (mm)	Tightening torque (N·m)
ø 6.35	17	14 - 18
ø 9.52	22	34 - 42
ø 12.7	26	49 - 61
ø 15.88	29	68 - 82

#### ⚠ Warning:

Be careful of flying flare nut! (Internally pressurized)

Remove the flare nut as follows:

- Loosen the nut until you hear a hissing noise.
- Do not remove the nut until the gas has been completely released (i.e., hissing noise stops).
- Check that the gas has been completely released, and then remove the nut.

#### Outdoor unit connection

Connect pipes to stop valve pipe joint of the outdoor unit in the same manner applied for indoor unit.

- For tightening use a torque wrench or spanner, and use the same tightening torque applied for indoor unit.

#### Refrigerant pipe insulation

- After connecting refrigerant piping, insulate the joints (flared joints) with thermal insulation tubing as shown below.

[Fig. 7.3.2] (P.3)

Ⓐ Pipe cover (small) (accessory)

Ⓑ Caution:

Pull out the thermal insulation on the refrigerant piping at the site, insert the flare nut to flare the end, and replace the insulation in its original position.

Take care to ensure that condensation does not form on exposed copper piping.

Ⓒ Liquid end of refrigerant piping

Ⓓ Gas end of refrigerant piping

Ⓔ Site refrigerant piping

Ⓕ Main body

Ⓖ Pipe cover (large) (accessory)

Ⓗ Thermal insulation (field supply)

Ⓘ Pull

Ⓙ Flare nut

Ⓚ Return to original position

Ⓛ Ensure that there is no gap here

Ⓜ Plate on main body

Ⓝ Band (accessory)

Ⓞ Ensure that there is no gap here. Place join upwards.

- Remove and discard the rubber bung which is inserted in the end of the unit piping.
- Flare the end of the site refrigerant piping.
- Pull out the thermal insulation on the site refrigerant piping and replace the insulation in its original position.

#### Cautions On Refrigerant Piping

- Be sure to use non-oxidative brazing for brazing to ensure that no foreign matter or moisture enter into the pipe.
- Be sure to apply refrigerating machine oil over the flare connection seating surface and tighten the connection using a double spanner.
- Provide a metal brace to support the refrigerant pipe so that no load is imparted to the indoor unit end pipe. This metal brace should be provided 50 cm away from the indoor unit's flare connection.

## 7.4. Drain piping work

- Ensure that the drain piping is downward (pitch of more than 1/100) to the outdoor (discharge) side. Do not provide any trap or irregularity on the way.
- Ensure that any cross-wise drain piping is less than 20 m (excluding the difference of elevation). If the drain piping is long, provide metal braces to prevent it from waving. Never provide any air vent pipe. Otherwise drain may be ejected.
- Use a hard vinyl chloride pipe VP-25 (with an external diameter of 32 mm) for drain piping.
- Ensure that collected pipes are 10 cm lower than the unit body's drain port.
- Do not provide any odor trap at the drain discharge port.
- Put the end of the drain piping in a position where no odor is generated.
- Do not put the end of the drain piping in any drain where ionic gases are generated.

[Fig. 7.4.1] (P.4)

- Ⓐ Downward slope 1/100 or more
- Ⓑ Drain hose (Accessory)
- Ⓒ Indoor unit
- Ⓓ Collective piping
- Ⓔ Maximize this length to approx. 10 cm

## 8. Duct work

- When connecting ducts, insert a canvas duct between the main body and the duct.
- Use non-combustible duct components.
- Install sufficient thermal insulation to prevent condensation forming on air inlet and air outlet duct flanges, and air outlet ducts.

[Fig. 8.0.1] (P.4)

- Ⓐ Air inlet
- Ⓑ Air filter (supplied at site)
- Ⓒ Duct
- Ⓓ Canvas duct
- Ⓔ Access door
- Ⓕ Ceiling
- Ⓖ Ensure sufficient length to prevent short cycling
- Ⓗ Air outlet
- Ⓘ Keep duct-work length 850 mm or more

**⚠ Caution:**  
Inlet duct is 850 mm or more necessary to construct.  
Always install horizontal.

## 9. Electrical wiring

### Precautions on electrical wiring

**⚠ Warning:**

Electrical work should be done by qualified electrical engineers in accordance with "Engineering Standards For Electrical Installation" and supplied installation manuals. Special circuits should also be used. If the power circuit lacks capacity or has an installation failure, it may cause a risk of electric shock or fire.

1. Be sure to install an earth leakage breaker to the power.
2. Install the unit to prevent that any of the control circuit cables (remote controller, transmission cables) is brought in direct contact with the power cable outside the unit.
3. Ensure that there is no slack on all wire connections.
4. Some cables (power, remote controller, transmission cables) above the ceiling may be bitten by mouses. Use as many metal pipes as possible to insert the cables into them for protection.
5. Never connect the power cable to leads for the transmission cables. Otherwise the cables would be broken.
6. Be sure to connect control cables to the indoor unit, remote controller, and the outdoor unit.
7. Put the unit to the ground on the outdoor unit side.

**⚠ Caution:**

- Be sure to put the unit to the ground on the outdoor unit side. Do not connect the earth cable to any gas pipe, water pipe, lightning rod, or telephone earth cable. Incomplete grounding may cause a risk of electric shock.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

### Types of control cables

#### 1. Wiring transmission cables

**Note:**

- Transmission cables shall not be lighter than polychloroprene sheathed flexible cord. (Design 245 IEC 57)
- Cable diameter  
More than 1.5 mm<sup>2</sup>
- Cable length  
Less than 80 m.
- Circuit rating  
S1 - S2: 230V AC  
S2 - S3: 24V DC

\* The figures are not always against the ground.

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

#### 2. Remote controller cables

	MA remote controller
Types of cables	Sheathed 2-core cable (unshielded) CVV
Cable diameter	0.3 to 1.25 mm <sup>2</sup>
Length	Less than 500 m

1. Insert the drain hose (accessory) into the drain port.  
(The drain hose must not be bent more than 45° to prevent the hose from breaking or clogging.)  
The connecting part between the indoor unit and the drain hose may be disconnected at the maintenance. Fix the part with the accessory band, not be adhered.
2. Attach the drain pipe (O.D. ø32 PVC TUBE, field supply).  
(Attach the pipe with glue for the hard vinyl chloride pipe, and fix it with the band (small, accessory).)
3. Perform insulation work on the drain pipe (O.D. ø32 PVC TUBE) and on the socket (including elbow).

[Fig. 7.4.2] (P.4)

- Ⓐ Indoor unit
- Ⓑ Insulation pipe (short) (accessory)
- Ⓒ Tie band (accessory)
- Ⓓ Band fixing part
- Ⓔ Insertion margin
- Ⓕ Drain hose (accessory)
- Ⓖ Drain pipe (O.D. ø32 PVC TUBE, field supply)
- Ⓗ Insulating material (field supply)
- Ⓘ Max.145 ± 5 mm

### 9.1. Power supply wiring

- Power supply cords of appliances shall not be lighter than design 245 IEC 57 or 227 IEC 57.
- A switch with at least 3 mm contact separation in each pole shall be provided by the Air conditioner installation.

**Power cable size: more than 1.6 mm<sup>2</sup>**

[Fig. 9.1.1] (P.5)

- Ⓐ Switch 16 A
- Ⓑ Overcurrent protection 16 A
- Ⓒ Indoor unit

**[Selecting non-fuse breaker (NF) or earth leakage breaker (NV)]**

To select NF or NV instead of a combination of Class B fuse with switch, use the following:

- In the case of Class B fuse rated 15 A or 20 A,  
**NF model name (MITSUBISHI): NF30-CS (15 A) (20 A)**  
**NV model name (MITSUBISHI): NV30-CA (15 A) (20 A)**  
Use an earth leakage breaker with a sensitivity of less than 30 mA 0.1 s.

**⚠ Caution:**

Do not use anything other than the correct capacity breaker and fuse. Using fuse, wire or copper wire with too large capacity may cause a risk of malfunction or fire.

### 9.2. Connecting remote controller, indoor and outdoor transmission cables

**⚠ Warning:**

- The compressor will not operate unless the indoor/outdoor transmission phase connection is correct.
- The connection wiring between the outdoor and indoor units can be extended up to a maximum of 50 meters, and the total extension including the crossover wiring between rooms is a maximum of 80 m.
- Connect indoor unit TB4 and terminal block for indoor-outdoor transmission line. (polar 3-core)  
Cable 3-core 1.5 mm<sup>2</sup>, in conformity with design 245 IEC 57.
- Install a remote controller following the manual supplied with the remote controller.
- Connect the "1" and "2" on indoor unit TB15 to a MA remote controller. (Non-polarized 2-wire)
- Connect the remote controller's transmission cable within 10 m using a 0.75 mm<sup>2</sup> core cable. If the distance is more than 10 m, use a 1.25 mm<sup>2</sup> junction cable.

[Fig. 9.2.1] (P.5) MA Remote controller

- Ⓐ Terminal block for indoor transmission cable
- Ⓑ Terminal block for outdoor transmission cable
- Ⓒ Remote controller

- DC 9 to 13 V between 1 and 2 (MA remote controller)

[Fig. 9.2.2] (P.5) MA Remote controller

- Ⓐ Non-polarized
- Ⓑ TB15
- Ⓒ Remote Controller
- Ⓓ TB4

**⚠ Caution:**

Install wiring so that it is not tight and under tension. Wiring under tension may break, or overheat and burn.

### 9.3. Connecting electrical connections

Verify that the model name on the operating instructions on the cover of the control box is the same as the model name on the nameplate.

- Remove the 2 screws holding the terminal box cover in place.

[Fig. 9.3.1] (P.5)

- Ⓐ Screw holding cover (2pcs)
- Ⓑ Cover

**Note:**

Ensure that the wiring is not pinched when fitting the terminal box cover. Pinching the wiring may cut it.

**⚠ Caution:**

Install wiring so that it is not tight and under tension. Wiring under tension may break, or overheat and burn.

- Open knockout holes  
(Recommend to use a screwdriver or the like for this work.)

[Fig. 9.3.2] (P.5)

- Ⓐ Control box
- Ⓑ Knockout hole
- Ⓒ Remove

- Fix power source wiring to control box by using buffer bushing for tensile force. (PG connection or the like.) Connect transmission wiring to transmission terminal block through the knockout hole of control box using ordinary bushing.

- Connect the power source, Earth, transmission and remote controller wiring. The dismounting of the terminal bed box is not needed.

[Fig. 9.3.3] (P.5)

- Ⓔ Use PG bushing to keep the weight of the cable and external force from being applied to the power supply terminal connector. Use a cable tie to secure the cable. Wind the wire around the cable strap once to keep it from being pulled out.
- Ⓕ Power source wiring
- Ⓖ Tensile force
- Ⓗ Use ordinary bushing
- Ⓘ Power source terminal bed
- Ⓙ Terminal bed for indoor transmission
- Ⓚ Terminal bed for remote controller
- Ⓛ To 1-phase power source
- Ⓜ Transmission line
- Ⓝ Terminal bed for outdoor transmission line
- Ⓞ Transmission line to the remote controller

[Transmission cable connection]

[Fig. 9.3.4] (P.5)

- Ⓐ Terminal bed
- Ⓑ Round terminal
- Ⓒ Transmission cable (polar)

- After wiring is complete, make sure again that there is no slack on the connections, and attach the cover onto the control box in the reverse order removal.

**Notes:**

- Do not pinch the cables or wires when attaching the terminal bed box cover. Doing so may cause a risk of disconnection.
- When accommodating the terminal bed box, make sure that the connectors on the box side are not removed. If removed, it cannot operate normally.

### 9.4. Function settings

#### 9.4.1. For wired remote controller

① [Fig. 9.4.1] (P.6)

- Select "Service" from the Main menu, and press the [SELECT] button.
- Select "Function setting" with the [F1] or [F2] button, and press the [SELECT] button.

② [Fig. 9.4.2] (P.6)

- Set the indoor unit refrigerant addresses and unit numbers with the [F1] through [F4] buttons, and then press the [SELECT] button to confirm the current setting.

**<Checking the Indoor unit No.>**

When the [SELECT] button is pressed, the target indoor unit will start fan operation. If the unit is common or when running all units, all indoor units for the selected refrigerant address will start fan operation.

③ [Fig. 9.4.3] (P.6)

- When data collection from the indoor units is completed, the current settings appears highlighted. Non-highlighted items indicate that no function settings are made. Screen appearance varies depending on the "Unit No." setting.

④ [Fig. 9.4.4] (P.6)

- Use the [F1] or [F2] button to move the cursor to select the mode number, and change the setting number with the [F3] or [F4] button.

⑤ [Fig. 9.4.5] (P.6)

- When the settings are completed, press the [SELECT] button to send the setting data from the remote controller to the indoor units.
- When the transmission is successfully completed, the screen will return to the Function setting screen.

**Function table 1**

Select unit number 00

Mode	Settings	Mode no.	Setting no.	Initial setting	Check
Power failure automatic recovery (AUTO RESTART FUNCTION)	Not available	01	1	*2	
	Available		*1	2	*2
Indoor temperature detecting	Indoor unit operating average	02	1	○	
	Set by indoor unit's remote controller		2		
	Remote controller's internal sensor		3		
LOSSNAY connectivity	Not Supported	03	1	○	
	Supported (indoor unit is not equipped with outdoor-air intake)		2		
	Supported (indoor unit is equipped with outdoor-air intake)		3		

**Function table 2**

Select unit numbers 01 to 04 or all units (AL [wired remote controller]/07 [wireless remote controller])

Mode	Settings	Mode no.	Setting no.	Initial setting	Check	
Filter sign	100 Hr	07	1			
	2500 Hr		2			
	No filter sign indicator		3	○		
External static pressure	External static pressure	08	1	○		
			Setting no. of mode no. 08	2		
			Setting no. of mode no. 10	3		
	60 Pa	1	2			
	75 Pa	2	2			
	100 Pa	3	2			
	150 Pa (before shipment)	1	1			
		10	1	○		
			2			
			3			

\*1 When the power supply returns, the air conditioner will start 3 minutes later.

\*2 Power failure automatic recovery initial setting depends on the connecting outdoor unit.

**Note:** When the function of an indoor unit were changed by function selection after the end of installation, always indicate the contents by entering a ○ or other mark in the appropriate check filed of the tables.

## 9.5. 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.  
Insulation resistance

After installation or after the power source to the unit has been cut for an extended period, the insulation resistance will drop below 1 MΩ due to refrigerant accumulating in the compressor. This is not a malfunction. Perform the following procedures.

1. Remove the wires from the compressor and measure the insulation resistance of the compressor.
2. If the insulation resistance is below 1 MΩ, the compressor is faulty or the resistance dropped due the accumulation of refrigerant in the compressor.

3. After connecting the wires to the compressor, the compressor will start to warm up after power is supplied. After supplying power for the times indicated below, measure the insulation resistance again.

- The insulation resistance drops due to accumulation of refrigerant in the compressor. The resistance will rise above 1 MΩ after the compressor is warmed up for two to three hours.  
(The time necessary to warm up the compressor varies according to atmospheric conditions and refrigerant accumulation.)
- To operate the compressor with refrigerant accumulated in the compressor, the compressor must be warmed up at least 12 hours to prevent breakdown.

### ⚠ Caution:

- The compressor will not operate unless the power supply phase connection is correct.
- Turn on the power at least 12 hours before starting operation.
- Starting operation immediately after turning on the main power switch can result in severe damage to internal parts. Keep the power switch turned on during the operational season.

## 9.6. Test run

### 9.6.1. Using wired remote controller

- Make sure to read operation manual before test run. (Especially items to secure safety)

#### Step 1 Turn on the power.

- Remote controller: The system will go into startup mode, and the remote controller power lamp (green) and "PLEASE WAIT" will blink. While the lamp and message are blinking, the remote controller cannot be operated. Wait until "PLEASE WAIT" is not displayed before operating the remote controller. After the power is turned on, "PLEASE WAIT" will be displayed for approximately 2 minutes.
  - Indoor controller board: LED 1 will be lit up, LED 2 will be lit up (if the address is 0) or off (if the address is not 0), and LED 3 will blink.
  - Outdoor controller board: LED 1 (green) and LED 2 (red) will be lit up. (After the startup mode of the system finishes, LED 2 will be turned off.) If the outdoor controller board uses a digital display, [-] and [-] will be displayed alternately every second.
- If the operations do not function correctly after the procedures in step 2 and thereafter are performed, the following causes should be considered and eliminated if they are found.  
(The symptoms below occur during the test run mode. "Startup" in the table means the LED display written above.)

Symptoms in test run mode		Cause
Remote Controller Display	OUTDOOR BOARD LED Display < > indicates digital display.	
Remote controller displays "PLEASE WAIT", and cannot be operated.	After "startup" is displayed, only green lights up. <00>	• After power is turned on, "PLEASE WAIT" is displayed for 2 minutes during system startup. (Normal)
After power is turned on, "PLEASE WAIT" is displayed for 3 minutes, then error code is displayed.	After "startup" is displayed, green(once) and red(once) blink alternately. <F1>	• Incorrect connection of outdoor terminal block. (R, S, T and S1, S2, S3)
	After "startup" is displayed, green(once) and red(twice) blink alternately. <F3, F5, F9>	• Outdoor unit's protection device connector is open.
No display appears even when remote controller operation switch is turned on. (Operation lamp does not light up.)	After "startup" is displayed, green(twice) and red(once) blink alternately. <EA, Eb>	• Incorrect wiring between the indoor and outdoor unit. (Polarity is wrong for S1, S2, S3) • Remote controller transmission wire short.
	After "startup" is displayed, only green lights up. <00>	• There is no outdoor unit of address 0. (Address is other than 0.) • Remote controller transmission wire open.
Display appears but soon disappears even when remote controller is operated.	After "startup" is displayed, only green lights up. <00>	• After canceling function selection, operation is not possible for about 30 seconds. (Normal)

#### Step 2 Switch the remote controller to "Test run".

- ① Select "Test run" from the Service menu, and press the [SELECT] button. [Fig. 9-6-1] (P.6)
- ② Select "Test run" from the Test run menu, and press the [SELECT] button. [Fig. 9-6-2] (P.6)
- ③ The test run operation starts, and the Test run operation screen is displayed.

#### Step 3 Perform the test run and check the airflow temperature.

- ① Press the [F1] button to change the operation mode. [Fig. 9-6-3] (P.6)
  - Cooling mode: Check that cool air blows from the unit.
  - Heating mode: Check that warm air blows from the unit.

#### Step 4 Confirm the operation of the outdoor unit fan.

The speed of the outdoor unit fan is controlled in order to control the performance of the unit. Depending on the ambient air, the fan will rotate at a slow speed and will keep rotating at that speed unless the performance is insufficient. Therefore, the outdoor wind may cause the fan to stop rotating or to rotate in the opposite direction, but this is not a problem.

#### Step 5 Stop the test run.

- ① Press the [ON/OFF] button to stop the test run. (The Test run menu will appear.)
- Note: If an error is displayed on the remote controller, see the table below.

- For description of each check code, refer to the following table.

① Check code	Symptom	Remark	
P1	Intake sensor error		
P2, P9	Pipe (Liquid or 2-phase pipe) sensor error		
E6, E7	Indoor/outdoor unit communication error		
P4	Drain sensor error		
P5	Drain pump error		
PA	Forced compressor error		
P6	Freezing/Overheating safeguard operation		
EE	Communication error between indoor and outdoor units		
P8	Pipe temperature error		
E4	Remote controller signal receiving error		
Fb	Indoor unit control system error (memory error, etc.)		
E0, E3	Remote controller transmission error		
E1, E2	Remote controller control board error		
E9	Indoor/outdoor unit communication error (Transmitting error) (Outdoor unit)		For details, check the LED display of the outdoor controller board.
UP	Compressor overcurrent interruption		
U3, U4	Open/short of outdoor unit thermistors		
UF	Compressor overcurrent interruption (When compressor locked)		
U2	Abnormal high discharging temperature/49C worked/insufficient refrigerant		
U1, Ud	Abnormal high pressure (63H worked)/Overheating safeguard operation		
U5	Abnormal temperature of heat sink		
U8	Outdoor unit fan safeguard stop		
U6	Compressor overcurrent interruption/Abnormal of power module		
U7	Abnormality of super heat due to low discharge temperature		
U9, UH	Abnormality such as overvoltage or voltage shortage and abnormal synchronous signal to main circuit/ Current sensor error		
Others	Other errors (Refer to the technical manual for the outdoor unit.)		

- On wired remote controller

① Check code displayed in the LCD.

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

The product at hand is  
based on the following  
EU regulations:

- Low Voltage Directive 2014/35/EU
- Electromagnetic Compatibility Directive  
2014/30/EU
- Machinery Directive 2006/42/EC

Не забудьте указать контактный адрес/номер телефона в данном  
руководстве, прежде чем передать его клиенту.

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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